



Lighting catalog

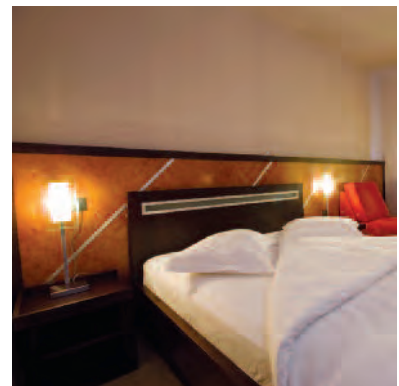
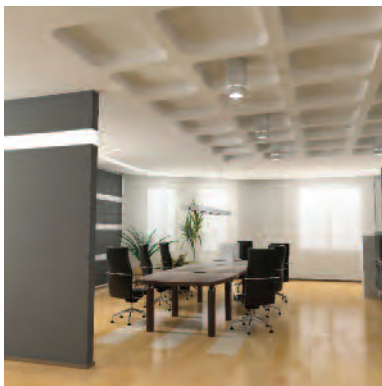
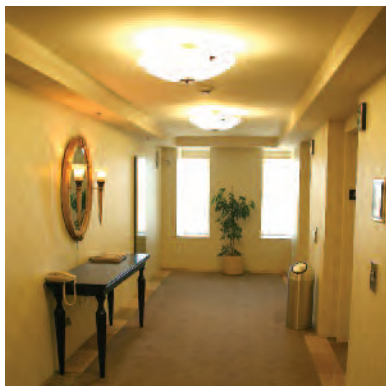
Lamp Specification and Application Guide 2008–2009

PHILIPS

sense and simplicity

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Who is Philips?

As a leader in healthcare and consumer lifestyle and as the global leader in the lighting, Philips is spearheading innovative and environmentally progressive solutions for today's ever-changing demands.

For a century and counting, Philips has been one of the foremost providers of lighting technologies, enabling new and more efficient uses of light that can transform our world both visually and practically.

We're proud to be a global leader in sustainability, too—we strive toward the ideal of meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. We believe that every entity, from a consumer residence to a national healthcare system, can benefit by being greener, too. Sustainability contributes to better everyday care and better long-range planning.

Philips takes end-user needs as the starting point for our lighting solutions. Our longstanding commitment to improving people's lives means providing flexibility to meet the specific needs of the user.

The Philips family of products delivers complete lighting solutions, from components and lamps to luminaires and integrated systems, providing you with quality, simplicity and innovation.



Lighting the future

“... We are convinced that those companies that combine the principles of economic growth and environmental stewardship will be the winners of the future.”

Philips CEO Gerard Kleisterlee

Sustainability starts with a switch. Not just the changing of a light bulb, but a fundamental shift in our stewardship of the earth's resources—and how we regard our obligation to all life on the planet, now and for future generations.

When a family, a school, small business or global corporation builds the ethic of sustainability into its culture, it creates a sense of solidarity, a feeling that all of us are working toward a common and noble goal. It infuses the vision of leaders and energizes productivity at every level.



Toward a brighter future

Changing a light bulb does make a difference. Worldwide, lighting consumes 19% of electricity.¹ Every incandescent lamp we replace with an ENERGY STAR®-qualified bulb saves approximately 75% in energy consumption.² They can last up to 10 times as long as traditional incandescents,² so resources are also conserved in manufacturing, transportation and building maintenance.

Conserving energy through this simple act can create ripples affecting our community, nation and the entire earth. We're reducing the pressure to build new power plants and generating less waste for our landfills. And most important of all, we're cutting the greenhouse gas emissions that contribute to global warming.

Visit www.philips.com to learn more about Philips sustainability leadership.

To see the difference Philips sustainable products can make, go to asimpleswitch.com

Sustainability policy at Philips Lighting

Philips Lighting is committed to providing lighting solutions that improve people's lives and are environmentally sound. This philosophy is a cornerstone of our sustainability policy, which balances social, environmental and economic action.

- **Social responsibility.** We put people at the center, focusing on the needs of our customers and consumers, employees and the people in the communities we serve around the world.
- **Environmental responsibility.** With a tradition of sound environmental policy, Philips is guided by the basic principle that prevention is better than cure. We work continuously to minimize the impact of products, processes and services.
- **Economic responsibility.** We have long been integrating economic prosperity, environmental quality and social equity—balancing these sometimes-competing demands with a clear view on sustainable value creation.

1) "Let there be light—for the next 35 years: the green gift that keeps on giving" Dec. 4, 2007, www.enn.com, Environmental News Network
2) www.energystar.gov "Compact Fluorescent Light Bulbs"



Lighting the Task

How much light you need depends on the visibility of the task (its size and contrast), the speed and accuracy of the task and the age of the person performing the task. Requirements can vary widely so choosing the right light source is critical.

The colors of the walls, ceilings and furniture also affect lighting since darker finishes can absorb more light than more reflective surfaces.

Lighting People

To read people's expressions, you need lighting that renders facial tones well. Lighting that reveals a healthy skin tone also makes people feel better and more motivated. Most people feel that better color aids visual acuity and productivity.

Older lighting systems are particularly poor with respect to color but can be easily upgraded with today's systems, which have better color rendering and are more energy efficient.

What is Color Rendering?

Color rendering is the ability of a light source to represent colors in objects. Commonly called CRI or color rendering index, it is a relative measurement which rates light sources on a scale of 0–100, the higher the CRI, the more vibrant colors appear.

Light from lamps with good (80 CRI) and excellent (80+ CRI) color rendering properties is said to be “high quality light” because objects and people look more appealing and the light level itself appears to be higher.

Excellent CRI is critical in settings where it is important that people appear natural, such as in retail applications where merchandise must look appealing and in restaurant applications where food must look appetizing. In office and factory applications, high color rendering can increase visual clarity and create a more pleasing and productive work environment.

Lighting can change your environment

Color Temperature

The overall color appearance of the light that comes from a light source is called color temperature or chromaticity. Also referred to as Correlated Color Temperature (CCT) and measured in degrees Kelvin or “K”, color temperature creates the mood or ambience of the space you are lighting and can influence shopping behavior or work performance.

To help visualize color temperature in lamp types designated as “warm” or “cool,” imagine a piece of iron (or a horseshoe, for instance) in a fire. At first, the iron becomes “red-hot” and will be reddish-yellow in color. The reddish-yellow color corresponds to a warm color temperature. It would be equivalent to incandescent lamps operating at 2700K.

As you continue to heat the iron, it will become “white-hot” and will be white in color. This corresponds to cool white fluorescent lamps operating at 4100K.

Heating the iron further causes it to become “blue-hot” or blue in appearance (like flash bulbs or stars), such as in metal halide sources operating at 5000K.

Luminous Efficacy

Luminous efficacy is the rate at which a lamp is able to convert electrical power (watts) into light (lumens), expressed in terms of lumens per watt (LPW). Put simply, a watt of electricity is the amount of power into a lighting system and a lumen or light is the amount of power out of a lighting system. Luminous efficacy is key when evaluating a lamp because lighting represents a large portion of the total operating cost of a typical installation and can affect related costs such as air conditioning. By investing in energy efficient lighting upgrades, you can leverage the energy cost savings to achieve significant reductions in your operating costs. In addition, an energy efficient system benefits the environment.

The Influence of Color Temperature on Mood and Lighting Applications

Color Temperature	Warm	White	Neutral	Cool	Daylight
Kelvin Range	2700K	3000K	3500K	4100K	5000K
Associated Effects and Moods	Warm Cozy Open	Friendly Intimate Personal Exclusive	Friendly Inviting Non-threatening	Neat Clean Efficient	Bright Alert Exact coloration
Appropriate Applications	Restaurants Hotel lobbies Boutiques Homes	Libraries Office areas Retail stores	Public reception areas Showrooms Bookstores Office areas	Office areas Conference rooms Classrooms Mass merchandisers Hospitals	Galleries Museums Jewelry stores Medical examination areas Printing companies

Tips on Color Temperature

Tip: Cooler light, in the 4100K range, communicates neatness and efficiency. It's appropriate for the work areas in most offices. Philips T8 lamps are perfect for creating a cooler atmosphere.



Tip: A warm atmosphere, achieved with compact fluorescent lighting, can create a friendly, intimate or inviting surrounding. Philips Energy Saver compact fluorescents create a warm atmosphere.







Brighten the shopping experience

Effective retail lighting can drive traffic into a store by illuminating enticing storefront displays. The right scene setting lighting can also create an environment inside the store that highlights the merchandise and makes customers feel comfortable. If a customer can focus on merchandise that is well lit, they may spend more time browsing.

Retail Lighting

Today's shoppers aspire for more—and they have more discretionary dollars. Consumers are demanding more choice, and more unique experiences from the stores they visit. They seek the hottest brands and products while enjoying entertaining, exciting retail environments that match their lifestyle expectations. It's not just great products at great prices anymore. Shoppers want great experiences too.

The Philips Halogen lamp family is perfect for retail lighting. Lamps are available in three simple categories for decorative, focal and ambient lighting. Designed to appeal visually, they also save on energy and maintenance costs.

Philips MasterColor® CDM Elite lamps are the next generation of MasterColor CDM lamps featuring improved design lumen output and improved color quality. The Philips MasterColor CDM Elite lamps are available as tubular single-ended T4 and T6 lamps in both 39W and 70W. The MasterColor CDM Elite T6 150W will be available in early 2009.



Philips Halogen
Energy Advantage
IR Lamps



Philips Mini
MasterColor® Lamps



Philips MasterColor®
CDM Elite
T4 and T6 Lamps



Philips MasterColor®
Integrated PAR Lamps



Philips MasterColor®
PAR Lamps



Creating a productive workplace



What are the most challenging visual tasks in the office? Reading material on computer screens? Reading the fine print of photocopied documents? Or perhaps evaluating the facial expressions of people in sensitive discussions or sales situations? Whatever tasks are the most critical in your office, lighting can play a crucial role in achieving a productive and appealing visual environment.

Office Lighting

New lighting technologies are re-shaping the office environment. More efficient, more adaptable lamps support the varied office settings.

In fluorescent lighting, which dominates office spaces, Philips sets the standard in cost-effective, energy saving, long life performance. Philips innovative ALTO II™ Technology gives modern fluorescent lamps both long life and energy efficiency and is the pre-eminent low-mercury technology. Our slim SILHOUETTE™ T5 lamps have made indirect office lighting more efficient and more attractive.

Replacing standard 32W T8 fluorescent lamps with Philips Energy Advantage Long Life 25W T8 lamps can save you 7 watts per lamp instantly.



Philips SILHOUETTE™
T5 Lamps



Philips Energy
Advantage Long Life
25W T8 Lamps



Philips MasterColor®
Integrated PAR Lamps



Philips Energy Saver
CFL 32W Twister





Make your guests feel at home

Hospitality is all about creating memorable travel experiences, with top-tier services and surroundings winning guest loyalty. Good lighting is a key component in creating those surroundings. From the welcoming atmosphere of a lobby to flexible guestroom lighting to the subdued glow of an intimate restaurant, the right light creates a backdrop for a pleasant stay.

Hospitality Lighting

Hotel properties encompass a variety of spaces under one roof—and the lighting requirements vary as much as the venues.

In addition to creating a unique atmosphere, lighting can significantly improve your bottom line. The largest cost when considering lighting comes from the energy used to operate lamps over time, not the initial cost of the lamp. A simple upgrade to long lasting Philips Energy Saver compact fluorescents provide energy savings and reduce operating costs, without sacrificing guest comfort.

Philips Halogená® Energy Advantage bulbs provide a bright white light and save energy without sacrificing the qualities of traditional bulbs.



Philips Halogen
PAR38 IRC



Philips Halogená®
Energy Advantage T60



Philips Energy Saver
CFL 32W Twister



Philips PL Lamps



Philips Energy
Advantage 25W
T8 Lamps





Improve lighting in industrial and warehouse spaces

Industrial and warehousing facilities face increasingly complex challenges: An aging workforce, concerns for health and safety, volatile energy markets, and environmental mandates. Lighting plays a crucial role in responding to industrial demand for productivity, cost control, and environmental responsibility.

Industrial and Warehouse Lighting

Effective, efficient lighting can be a major contributor to ensuring a productive facility. Whether you are changing your space from yellow to white light by switching to Philips MasterColor® Ceramic Metal Halide HPS-RetroWhite™ replacing HID with fluorescent using our energy efficient SILHOUETTE™ T5 HO lamps, or upgrading to the latest HID technology available, Philips Lighting products can provide the visual requirements for your space and workforce.

If long life is what you are looking for, consider QL lamps which have a rated average life of 100,000 hours.

Fluorescent, HID (mostly metal halide) and QL Induction Lighting all compete in the industrial arena. Each light source has its strengths and weaknesses. Analyzing your needs and knowing your applications will guide you to the best lighting choices.



Philips SILHOUETTE™
T5 HO & T5 VHO
Fluorescent Lamps



Philips Advantage
Long Life T8 Lamps



Philips MasterColor®
HPS-RetroWhite™
Lamps



Philips MasterColor®
Pulse Start



Philips QL
Lighting System





Improving the patient experience

Patients are changing, and with them the character of hospitals is changing too. Rising costs of care, the role of insurers, and more patient options for treatment are forcing healthcare organizations to become more competitive. More and more patients are deciding themselves where to spend their healthcare dollars. What once seemed like minute differences between medical facilities are now the factors leading patients and medical professionals to choose one facility over another.

Healthcare Lighting

To compete in this high-stakes, high stress reality of today's healthcare market, facilities must be designed around the needs of patients, visitors, healthcare providers and administrators. Lighting is essential to creating a welcoming, efficient facility that can contribute to patient comfort and improve staff motivation, enhance your brand and be an influential factor in achieving your financial goals.

The Philips MasterColor® Integrated 25W PAR38 Ceramic Metal Halide is an all-in-one lamp and ballast in a PAR38 reflector. It features 3x less energy consumption than a standard 75W PAR38 halogen lamp with comparable light output.

Philips Energy Advantage T8 lamps offer a CRI of 85 and provide a high light quality ideally suited for patient examination and comfort.



Philips T8
Fluorescent Lamps
featuring ALTO II™
Technology



Philips Halogen
PAR38 IRC



Philips MasterColor®
Integrated PAR38



Philips MasterColor®
CDM ED 23½





Bringing the city to life

Lighting plays an important role in transforming the look of an outdoor space. Whether you are looking to create a unique identity for your city, add a sense of safety and security to public outdoor spaces, or looking to light a local sports stadium Philips has a solution for you.

Outdoor Lighting

As cities continue to grow and reinvent themselves, the use of light in urban design is becoming a key driver in creating a visual identity and experience for a city and its residents. The use of light in outdoor areas allows a city to enhance public spaces and public life, creating a more livable community that residents are proud of and can relate to. The Philips line of outdoor lighting products can light up city neighborhoods and help to bring people back into the city at night.



Philips MasterColor®
CDM ED 23½



Philips MasterColor®
HPS-RetroWhite



Philips CosmoWhite™
Lamps



Philips QL
Lighting System



Philips MasterColor®
CDM Elite T9 MW



Incandescent Lighting

Create a brighter standard

Bad lighting can make people and objects look washed out. **Philips Natural Light Bulbs** help you see things the way they should be. Natural Light's distinctive blue coating reduces dull light effects to provide light that is more vibrant and natural. Natural Light brings out the true colors of people and the décor.

Philips DuraMax® Long Life Light Bulbs reduce the hassle of replacing light bulbs every few months, since all DuraMax products last longer than standard incandescent light bulbs. A wide assortment of shapes, sizes and wattages ensures that there is a DuraMax product to meet most basic lighting needs.

Philips Family of Specialty Incandescents provide the perfect light for dramatic accents and display lighting as well as general lighting in a variety of applications. From tubular shapes and appliance bulbs, to colored lamps made specifically for holiday, party or special effects lighting, this family of lamps has everything needed for professional and consumer applications.

Feature Products



NATURAL LIGHT A19
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DURAMAX® R20
MEDIUM
page 25



DURAMAX G16½
MEDIUM
page 27



Dramatically changing the look of a room can be as easy as changing a light bulb.

Incandescent Lighting

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IDEAL FOR WHEREVER YOU WANT
TO BRING OUT THE **TRUE, VIBRANT**
COLORS IN YOUR HOME.



PHILIPS NATURAL LIGHT AND NATURAL LIGHT PLUS BULBS

provide vibrant light similar to natural daylight and
enhance true colors by reducing dull light effects.

INCANDESCENT LAMPS

DuraMax® Long Life Bulbs

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP* Lumens
DURAMAX® LONG LIFE SOFT WHITE													
15	A15	Med.	16860-9	▲	15A/WL 12/2	120	24	Soft White Long Life	B, C-9		3½	3000	115
25	A19	Med.	16868-2	▲	25A/WL 12/2	120	24	Soft White Long Life	C, CC-6		4⅞	3000	235
30	A21	3 Ct. Med.	16947-4	▲ (8)	30/100A/WL 12/1	120	12	Soft White Long Life 3-Way	C, 2CC-8		5⅞	1750	285
70													920
100													1205
40	A19	Med. ++	16869-0	▲	40A/WL 12/4	120	48	Soft White Long Life	C, CC-6		4⅞	1500	475
			16737-9	▲	40A/WL 24/4	120	96	Soft White Long Life	C, CC-6		4⅞	1500	475
50	A21	3 Ct. Med.	16948-2	▲ (8)	50/150A/WL 12/1	120	12	Soft White Long Life 3-Way	C, 2CC-8		5⅞	1750	575
100													1440
150													2015
50	A21	3 Ct. Med.	16949-0	▲ (8)	50/250A/WL 12/1	120	12	Soft White Long Life	C, 2CC-8		5⅞	1750	575
200													3120
250													3695
60	A19	Med. ++	16874-0	▲	60A/WL 12/4	120	48	Soft White Long Life	C, CC-6		4⅞	1500	830
			16738-7	▲	60A/WL 24/4	120	96	Soft White Long Life	C, CC-6		4⅞	1500	830
		Med.	16877-3	▲	60A/WL 120/4	120	480	Soft White Long Life	C, CC-6		4⅞	1500	830
75	A19	Med. ++	16879-9	▲	75A/WL 12/4	120	48	Soft White Long Life	C, CC-6		4⅞	1500	1060
			16739-5	▲	75A/WL 24/4	120	96	Soft White Long Life	C, CC-6		4⅞	1500	1060
100	A19	Med. ++	16862-5	▲	100A/WL 12/4	120	48	Soft White Long Life	C, CC-6		4⅞	1500	1440
			16740-3	▲	100A/WL 24/4	120	96	Soft White Long Life	C, CC-8		4⅞	1500	1440
150	A21	Med.	16866-6	▲	150A/WL 12/1	120	12	Soft White Long Life	C, CC-8		5⅞	2000	2310
200	A21	Med.	16867-4	▲	200A/WL 6/1	120	6	Soft White Long Life	C, CC-8		5⅞	1500	3100

For the most current product information, go to the e-catalog on www.philips.com

Incandescent symbols and footnotes located on page 51



INCANDESCENT LAMPS

DuraMax® Long Life Bulbs

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP* Lumens
DURAMAX® LONG LIFE GLOBES													
25	G25	Med.	16748-6	▲	25G25/W/LL 12/1	120	12	White Long Life Globe	C, CC-6		4 7/8	2000	210
			16887-2	▲	25G25/CL/LL 12/1	120	12	Clear Long Life Globe	C, CC-6		4 7/8	2000	235
			16901-1	▲	25G25/CL/LL 4/3	120	12	Clear Long Life Globe	C, CC-6		4 7/8	2000	235
			16902-9	▲	25G25/W/LL 4/3	120	12	White Long Life Globe	C, CC-6		4 7/8	2000	210
40	G25	Med.	16903-7	▲	40G25/CL/LL 4/3	120	12	Clear Long Life Globe	C, CC-6		4 7/8	2000	460
			16904-5	▲	40G25/W/LL 4/3	120	12	White Long Life Globe	C, CC-6		4 7/8	2000	415
			16746-0	▲	40G25/W/LL 12/1	120	12	White Long Life Globe	C, CC-6		4 7/8	2000	415
			16747-8	▲	40G25/CL/LL 12/1	120	12	Clear Long Life Globe	C, CC-6		4 7/8	2000	460
			16702-3	▲	40G25/CT 6/1	120	6	Clear Long Life Chrome Top	C, C-9		4 7/8	2000	200
	G40	Med.	16857-5	▲	40G40/CL/LL 6/1	120	6	Clear Long Life Globe	C, C-9		6 1/8	3000	372
			16858-3	▲	40G40/W/LL 6/1	120	6	White Long Life Globe	C, C-9		6 1/8	3000	335
60	G25	Med.	16749-4	▲	60G25/W/LL 12/1	120	12	White Long Life Globe	C, CC-6		4 7/8	2000	700
			16896-2	▲	60G25/CL/LL 12/1	120	12	Clear Long Life Globe	C, CC-6		4 7/8	2000	775
			16899-6	▲	60G25/CL/LL 4/3	120	12	Clear Long Life Globe	C, CC-6		4 7/8	2000	775
			16900-3	▲	60G25/W/LL 4/3	120	12	White Long Life Globe	C, CC-6		4 7/8	2000	700
	G30	Med.	16849-2	▲	60G30/W/LL 6/1	120	6	White Long Life Globe	C, C-9		5 1/2	3000	580
	G40	Med.	16851-8	▲	60G40/W/LL 6/1	120	6	White Long Life Globe	C, C-9		6 1/8	3000	595
			16852-6	▲	60G40/CL/LL 6/1	120	6	Clear Long Life Globe	C, C-9		6 1/8	3000	665
100	G25	Med.	13423-9	▲	100G25/W/LL 12/1	120	12	White Long Life Globe	C, CC-6		4 7/8	2000	1180
	G30	Med.	16850-0	▲	100G30/W/LL 6/1	120	6	White Long Life Globe	C, C-9		5 1/2	3000	945
	G40	Med.	16853-4	▲	100G40/W/LL 6/1	120	6	White Long Life Globe	C, C-9		6 1/8	3000	985
			16859-1	▲	100G40/CL/LL 6/1	120	6	Clear Long Life Globe	C, C-9		6 1/8	3000	1100
150	G40	Med.	16854-2	▲	150G40/W/LL 6/1	120	6	White Long Life Globe	C, C-9		6 1/8	3000	1770

DURAMAX® LONG LIFE REFLECTORS (87)

30	R20	Med.	16753-6	▲	30R20/LL 12/1	120	12	Frost Long Life Reflector	C, CC-6		3 1/8	2500	350	205
45	R20	Med.	20323-2	▲	45R20/LL 12/1	120	12	Long Life Reflector Flood	C, CC-6		3 1/8	2500		385
	BR30	Med.	16751-0	▲	45BR30/FL55/LL 12/1	120	12	Long Life Reflector Flood	C, CC-6		5 3/8	2500		340
50	BR19	Med. +++	16750-2	✕ ▲ \$ □	50BR19/25/SP/LL 12/1	120	12	Long Life Spotline Reflector	C, CC-11		4 1/8	2500	700	385
	R20	Med. +++	16755-1	✕ ▲	50R20/LL 12/1	120	12	Frost Long Life Reflector	C, CC-6		3 1/8	2500	600	385
65	BR30	Med.	16768-4	▲	65BR30/FL55/LL 12/1	120	12	Long Life Reflector Flood	C, CC-6		5 3/8	2500	510	595
			16769-2	▲	65BR30/SP20/LL 12/1	120	12	Long Life Reflector Spot	C, CC-6		5 3/8	2500	530	610
	BR40	Med.	16741-1	▲	65BR/FL60/LL 8/1	120	8	Long Life Reflector Flood	C, CC-6		6 1/8	2500	500	630
75	R20	Med. +++	16763-5	✕ ▲	75R20/LL 12/1	120	12	Frost Long Life Reflector	C, CC-6		3 1/8	2500	1250	570
85	BR30	Med. +++	16766-8	✕ ▲	85BR30/FL55/LL 6/1	120	6	Long Life Reflector Flood	C, CC-6		5 3/8	2500	700	855
			16767-6	✕ ▲	85BR30/SP20/LL 6/1	120	6	Long Life Reflector Spot	C, CC-6		5 3/8	2500	3100	865
	BR40	Med. +++	16785-8	✕ ▲	85BR/FL60/LL 8/1	120	8	Long Life Reflector Flood	C, CC-6		6 1/8	2500	700	900
			16788-2	✕ ▲	85BR/SP20/LL 8/1	120	8	Long Life Reflector Spot	C, CC-6		6 1/8	2500	3100	900
100	R20	Med. +++	16701-5	✕ ▲	100R20/LL 12/1	120	12	Frost Long Life Reflector	C, CC-6		3 1/8	2500		935
120	BR40	Med. +++	16779-1	✕ ▲	120BR/FL60/LL 8/1	120	8	Long Life Reflector Flood	C, CC-6		6 1/8	2500	1000	1285
			16781-7	✕ ▲	120BR/SP20/LL 8/1	120	8	Long Life Reflector Flood	C, CC-6		6 1/8	2500		1225

For the most current product information, go to the e-catalog on www.philips.com
Incandescent symbols and footnotes located on page 51



INCANDESCENT LAMPS

DuraMax® Long Life Bulbs

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP* Lumens
40	A19	Med. ++	16797-2	▲	40A/CL/LL 12/2	120	24	Clear Long Life	C, CC-6		4%	1500	505
60	A19	Med. ++	16794-0	▲	60A/CL/LL 12/2	120	24	Clear Long Life	C, CC-6		4%	1500	900
75	A19	Med. ++	16801-3	▲	75A/CL/LL 12/2	120	24	Clear Long Life	C, CC-6		4%	1500	1080
100	A19	Med. ++	15008-6	▲	100A/CL/LL 12/2	120	24	Clear Long Life	C, CC-6		4%	1500	1440
150	A21	Med.	15009-4	▲	150A/CL/LL 12/1 TP	120	12	Clear Long Life	C, CC-8		5%	1500	2000
200	A23	Med.	16798-0	▲	200A/CL/LL 6/1	120	6	Clear Long Life	C, CC-8		6%	1500	3400

DURAMAX® LONG LIFE FAN LIGHTS

40	A15	Med.	16934-2	▲	BC40A15/FAN/CL/LL 6/2	120	12	Clear Long Life Fan	C, C-9		3½	2000	395
			16935-9	▲	BC40A15/FAN/W/LL 6/2	120	12	White Long Life Fan	C, C-9		3½	2000	365
60	A15	Med.	16945-8	▲	BC60A15/FAN/W/LL 6/2	120	12	White Long Life Fan	C, C-9		3½	2000	570
			16946-6	▲	BC60A15/FAN/CL/LL 6/2	120	12	Clear Long Life Fan	C, C-9		3½	2000	630

DURAMAX® LONG LIFE DECORATIVES (12)

3	CA10	Cand.	16698-2	▲	BC3CA10C/CL/LL 6/1	120	6	Clear Long Life Flicker Flame	B, C-7A		4%	2000	
15	BA9	Cand.	16811-2	▲	BC15BA9C/CL/LL 6/2	120	12	Clear Long Life Bent Tip	B, CC-2V, C-7A		4%	2000	110
			16696-6	▲	BC15BA9C/CL/LL 6/4	120	24	Clear Long Life Bent Tip	B, CC-2V, C-7A		3%	2000	110
	F10	Cand.	16830-2	▲	BC15F10C/CL/LL 6/2	120	12	Clear Long Life Flame	B, C-7A		3%	2000	95
			16831-0	▲	BC15F10C/A/LL 6/2	120	12	Amber Long Life Flame	B, C-7A		3%	2000	85
25	BA9	Cand.	16719-7	▲	BC25BA9C/CL/LL 6/4	120	24	Clear Long Life Bent Tip	C, CC-2V, C-7A		4%	2000	150
			16806-2	▲	BC25BA9C/CL/LL 6/2	120	12	Clear Long Life Bent Tip	C, CC-2V, C-7A		4%	2000	150
			16810-4	▲	BC25BA9C/F/LL 6/2	120	12	Frost Long Life Bent Tip	C, CC-2V, C-7A		4%	2000	145
	BA9½	Med.	16819-5	▲	BC25BA9½/CL/LL 6/2	120	12	Clear Long Life Bent Tip	C, CC-2V, C-7A		4%	2000	150
	B10½	Cand.	16824-5	▲	BC25B10½C/CL/LL 6/2	120	12	Clear Long Life Blunt Tip	C, CC-2V, C-7A		4%	2000	150
	B13	Med.	16827-8	▲	BC25B13/CL/LL 6/2	120	12	Clear Long Life Blunt Tip	C, C-7A		4%	2000	150
	CA8	Cand.	13568-1	▲	BC25CA8C/CL/LL 6/2	120	12	Clear Petite Long Life Bent Tip	C, CC-2V		3½	2000	220

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INCANDESCENT LAMPS

DuraMax® Long Life Bulbs

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
DURAMAX® LONG LIFE DECORATIVES CONTINUED														
25	F10	Cand.	16832-8	▲	BC25F10C/CL/LL 6/2	120	12	Clear Long Life Flame	B, C-7A		3 1/8	2000		105
	F15	Med.	16833-6	▲	BC25F15/CL/LL 6/2	120	12	Clear Long Life Flame	B, C-9		4 1/8	2000		150
			16839-3	▲	BC25F15/IR/LL 6/2	120	12	Incandescent Long Life Flame	C, C-9		4 1/8	2000		150
			16841-9	▲	BC25F15/A/LL 6/2	120	12	Amber Long Life Flame	B, C-9		4 1/8	2000		130
	G16 1/2	Cand.	16845-0	▲	BC25G16 1/2 C/CL/LL 6/2	120	12	Clear Long Life Globe	B, C-7A		3	2000		200
			16847-6	▲	BC25G16 1/2 CW/LL 6/2	120	12	White Long Life Globe	B, C-7A		3	2000		165
			13535-0	▲	BC25G16 1/2 CL/LL 6/2	120	12	Clear Long Life Globe	C, CC-2V		2 3/4	2000		180
			13534-3	▲	BC25G16 1/2 W/LL 6/2	120	12	White Long Life Globe	C, CC-2V		2 3/4	2000		160
	40	BA9	16720-5	▲	BC40BA9C/CL/LL 6/4	120	24	Clear Long Life Bent Tip	C, CC-2V, C-7A		4 3/8	2000		300
			16807-0	▲	BC40BA9C/CL/LL 6/2	120	12	Clear Long Life Bent Tip	C, CC-2V, C-7A		4 3/8	2000		300
40			16809-6	▲	BC40BA9C/F/LL 6/2	120	12	Frost Long Life Bent Tip	C, CC-2V, C-7A		4 3/8	2000		295
	BA9 1/2	Med.	16760-1	▲	BC40BA9 1/2 CL/LL 6/4	120	24	Clear Long Life Bent Tip	C, CC-2V, C-7A		4 1/8	2000		300
			16820-3	▲	BC40BA9 1/2 CL/LL 6/2	120	12	Clear Long Life Bent Tip	C, CC-2V, C-7A		4 1/8	2000		300
			16821-1	▲	BC40BA9 1/2 F/LL 6/2	120	12	Frost Long Life Bent Tip	C, CC-2V, C-7A		4 1/8	2000		295
	B10 1/2	Cand.	16825-2	▲	BC40B10 1/2 C/CL/LL 6/2	120	12	Clear Long Life Blunt Tip	C, CC-2V		4 1/8	2000		300
	B13	Med.	16828-6	▲	BC40B13/CL/LL 6/2	120	12	Clear Long Life Blunt Tip	C, C-7A		4 1/8	2000		300
	F15	Med.	16835-1	▲	BC40F15/CL/LL 6/2	120	12	Clear Long Life Flame	C, C-9		4 1/8	2000		385
			16837-7	▲	BC40F15/IR/LL 6/2	120	12	Incandescent Long Life Flame	C, C-9		4 1/8	2000		370
			16838-5	▲	BC40F15/W/LL 6/2	120	12	White Long Life Flame	C, C-9		4 1/8	2000		300
	G16 1/2	Cand.	16846-8	▲	BC40G16 1/2 C/CL/LL 6/2	120	12	Clear Long Life Globe	C, CC-2V, C-7A		3	2000		300
			16848-4	▲	BC40G16 1/2 CW/LL 6/2	120	12	White Long Life Globe	C, CC-2V, C-7A		3	2000		245
	G16 1/2	Med.	13537-6	▲	BC40G16 1/2 CL/LL 6/2	120	12	Clear Long Life Globe	C, CC-2V		2 3/4	2000		300
			13536-8	▲	BC40G16 1/2 W/LL 6/2	120	12	White Long Life Globe	C, CC-2V		2 3/4	2000		270
	60	BA9	16808-8	▲	BC60BA9C/CL/LL 6/2	120	12	Clear Long Life Bent Tip	C, CC-2V, C-7A		4 3/8	2000		550
			16721-3	▲	BC60BA9C/CL/LL 6/4	120	24	Clear Long Life Bent Tip	C, CC-2V, C-7A		4 3/8	2000		550
60			16805-4	▲	BC60BA9C/F/LL 6/2	120	12	Frost Long Life Bent Tip	C, CC-2V, C-7A		4 3/8	2000		545
	BA9 1/2	Med.	16822-9	▲	BC60BA9 1/2 CL/LL 6/2	120	12	Clear Long Life Bent Tip	C, CC-2V, C-7A		4 1/8	2000		550
			16823-7	▲	BC60BA9 1/2 F/LL 6/2	120	12	Frost Long Life Bent Tip	C, CC-2V, C-7A		4 1/8	2000		545
	B10 1/2	Cand.	16826-0	▲	BC60B10 1/2 C/CL/LL 6/2	120	12	Clear Long Life Blunt Tip	C, CC-2V		4 1/8	2000		550
	B13	Med.	16829-4	▲	BC60B13/CL/LL 6/2	120	12	Clear Long Life Blunt Tip	C, C-7A		4 1/8	2000		550
	F15	Med.	16842-7	▲	BC60F15/CL/LL 6/2	120	12	Clear Long Life Flame	C, C-9		4 1/8	2000		630
	G16 1/2	Cand.	16699-0	▲	BC60G16 1/2 C/CL/LL 6/2	120	12	Clear Long Life Globe	C, CC-2V		3	2000		540
			16700-7	▲	BC60G16 1/2 CW/LL 6/2	120	12	White Long Life Globe	C, CC-2V		3	2000		450
	G16 1/2	Med.	13538-4	▲	BC60G16 1/2 CL/LL 6/2	120	12	Clear Long Life Globe	C, CC-2V		2 3/4	2000		540
			13530-1	▲	BC60G16 1/2 W/LL 6/2	120	12	White Long Life Globe	C, CC-2V		2 3/4	2000		420
	100	F20	16844-3	▲	100F20/POSTLT/CL/LL 6/1	120	6	Clear Long Life PostLight	C, C-9		5 1/8	4000		1250

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INCANDESCENT LAMPS

Natural Light

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP* Lumens
NATURAL LIGHT STANDARD													
40	A19	Med.	13558-2	▲	40A/NTL 12/4	120	48	Natural Light Standard	C, CC-6		4%	1000	400
60	A19	Med.	13559-0	▲	60A/NTL 12/4	120	48	Natural Light Standard	C, CC-6		4%	1000	680
75	A19	Med.	13560-8	▲	75A/NTL 12/4	120	48	Natural Light Standard	C, CC-6		4%	750	950
100	A19	Med.	13561-6	▲	100A/NTL 12/4	120	48	Natural Light Standard	C, CC-6		4%	750	1350
NATURAL LIGHT STANDARD LONG LIFE													
75	A19	Med.	15129-0		75A/NTL/2X 12/4	120	48	Natural Light Standard Long Life	C, CC-6		4%	1500	790
100	A19	Med.	15130-8		100A/NTL/2X 12/4	120	48	Natural Light Standard Long Life	C, CC-6		4%	1500	1210
NATURAL LIGHT 3-WAY													
50 100 150	A21	3 Ct. Med.	13564-0	▲ (8)	50/150A/NTL 12/1	120	12	Natural Light 3-Way	C, 2CC-6		5%	1200	490 1250 1740
NATURAL LIGHT GLOBE													
40	G25	Med.	13563-3	▲	40G25/NTL 6/1	120	6	Natural Light Globe	C, CC-6		4%	1500	320
60	G25	Med.	13562-4	▲	60G25/NTL 6/1	120	6	Natural Light Globe	C, CC-6		4%	1500	560
NATURAL LIGHT FAN													
40	A15	Med.	13565-7	▲	BC40A15/FAN/NTL 6/2	120	12	Natural Light Fan	C, C-9		3½%	1500	340
NATURAL LIGHT REFLECTOR													
50	R20	Med.	13797-5	▲ (87)	50R20/FL/NTL 12/1	120	12	Natural Light Reflector	C, CC-6		3½%	2000	265
65	BR30	Med.	13785-1	▲ (87)	65BR30/FL/NTL 12/1	120	12	Natural Light Reflector	C, CC-6		5%	2000	500
NATURAL LIGHT DECORATIVE													
40	G16½	Cand.	14129-1	▲ (12)	BC40G16½/C/NTL 6/2	120	12	Natural Light Decorative	C, CC-2V, C-7A		3	2000	270
	B10½	Cand.	14125-9	▲ (12)	BC40B10½/C/NTL 6/2	120	12	Natural Light Decorative	C, CC-2V, C-7A		4%	2000	270
	B13	Med.	14127-5	▲ (12)	BC40B13/NTL 6/2	120	12	Natural Light Decorative	C, C-7A, CC-2V		4%	2000	270
60	G16½	Cand.	14130-9	▲ (12)	BC60G16½/C/NTL 6/2	120	12	Natural Light Decorative	C, C-7A, CC-2V		3	2000	510
	B10½	Cand.	14126-7	▲ (12)	BC60B10½/C/NTL 6/2	120	12	Natural Light Decorative	C, C-7A, CC-2V		4%	2000	510
	B13	Med.	14128-3	▲ (12)	BC60B13/NTL 6/2	120	12	Natural Light Decorative	C, C-7A, CC-2V		4%	2000	510

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INCANDESCENT LAMPS

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
INCANDESCENT LAMPS (BY WATTAGE)														
3	S6	Cand.	37374-6	▲	3S6/5	120-130	48	Clear Indicator	B, C-7A		1 7/8	3000		12
4	C-7	Cand.	25706-3	▲	BC4C7 12/2	120	24	Clear Night Light	B, C-7A		2 1/8	3000		16
			24741-1	▲	BC4C7/4 12/4	120	48	Clear Night Light	B, C-7A		2 1/8	3000		16
			25708-9	▲	BC4C7/W 12/2	120	24	White Night Light	B, C-7A		2 1/8	3000		14
6	S6	Cand.	24835-1		6S6	120-130	48	Clear Indicator	B, C-7A		1 7/8	1500		39
			23462-5		6S6	145	48	Clear Indicator	B, C-7A		1 7/8	1500		37
			23476-5		6S6	155	48	Clear Indicator	B, C-7A		1 7/8	1500		37
			23477-3		6S6/3	130	48	Clear/Vibration	B, C-7A		1 7/8	1500		18
	S6	Inter. D.C. Bay	37376-1		6S6DC	120-130	48	Clear Indicator	B, C-7A	1 1/8	1 9/8	1500		39
7	C-7	Cand.	37378-7	▲	7C7	120-130	24	Clear Indicator	B, C-7A		2 1/8	3000		45
			25714-7	▲	BC7C7/W 12/2	120	24	White Night Light	B, C-7A		2 1/8	3000		35
7 1/2	S11	Med.	24811-2	▲	7 1/2 S	120-130	24	Clear	B, C-7A		2 1/8	1400		45
			37380-3	▲	7 1/2 S/W	120-130	24	White Night Light	B, C-7A		2 1/8	1400		35
10	S6	Cand.	23485-6	▲	10S6/10	230	48	Clear Indicator	B, C-7A		1 7/8	1500		65
			23488-0	▲	10S6/10	250	48	Clear Indicator	B, C-7A		1 7/8	1500		65
	S11	Inter.	37381-1	▲	10S11N	120-130	24	Clear	B, C-7A	1 1/8	2 1/8	1500		70
	S14	Med.	13828-9		10S14/IF	130	24	Frost Sign	B, C-9		3 1/8	1500		82
			13829-7		10S14	120-130	24	Clear Sign	B, C-9		3 1/8	1500		82
11	S14	Med.	13822-2		BC11S14/W 120V 6/1 TP	120	6	White Sign	B, C-9		3 1/8	3000		
			16706-4		BC-11S14/F 130V 6/1 PK	130	6		B, C-9		3 1/8	3000		70
			16705-6		BC-11S14/CL 130V 6/1 PK	130	6	Clear Sign	B, C-9		3 1/8	3000		70
			13830-5		11S14 120/130V 24/1	120-130	24		B, C-9		3 1/8	3000		75
15	A15	Med.	14587-0	▲	15A15/CL	120-130	60	Clear	B, C-9	2 1/8	3 1/8	2500		110
			16860-9	▲	15A/WL 12/2	120	24	Soft White Long Life	B, C-9		3 1/8	3000		115
			14585-4	□	15A15/35	130	60	Frost Industrial Service	B, C-9		3 1/8	3500		123
	T6	Cand.	23582-0	▲	15T6	120	24	Clear Switchboard	B, C-7A		3 1/8	2000		110
			24815-3	▲ (63)	15T6	140-150	24	Clear Switchboard	B, C-7A		3 1/8	2000		100
	T7	D.C. Bay	22307-3	(4)	15T7DC	120	24	Clear Appliance	B, C-7A		2 1/8	1000		104
	T7	Cand.	22308-1	▲ (4)	15T7C	120	24	Clear Appliance	B, C-7A		2 1/8	1000		104
			24816-1	▲ (4)	15T7N	120	24	Clear Appliance	B, C-7A		2 1/8	1000		104
	T8	Inter.	23594-5	▲	15T8N	120	24	Clear Appliance	B, C-7A		2 1/8	1000		110
	T10	Med.	39041-9	▲	BC15T10 6/1	120	6	Clear Showcase	B, C-9		5 1/8	2500		120

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INCANDESCENT LAMPS

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP* Lumens
INCANDESCENT LAMPS (BY WATTAGE) CONTINUED													
20	T6½	Inter.	24853-4	(3)	20T6-½IF	120	24	Frost Exit Sign	B, C-8		5½	5000	150
	T6½	D.C. Bay	24839-3	(3)	20T6-½DC/IF	120	24	Frost Exit Sign	B, C-8		5½	5000	150
			24838-5	(3)	20T6-½DC	120	24	Clear Exit Sign	B, C-8		5½	5000	160
25	A15	Med.	14584-7	▲	25A15/I	120	60	Frost Refrigerator	B, C-9		3½	1000	210
			16710-6	▲	BC25A15/IF 12/I	120	12	Frost Appliance	B, C-9		3½	1000	210
			16868-2	▲	25A/WL 12/2	120	24	Soft White Long Life	C, CC-6		4⅞	3000	235
			14421-2	▲	25A/TG 6/I	120	6	Transparent Green	B, C-9		3⅝	3000	
			14422-0	▲	25A/TR 6/I	120	6	Transparent Red	B, C-9		3⅝	3000	
			14423-8	▲	25A/TY 6/I	120	6	Transparent Yellow	B, C-9		3⅝	3000	
			14420-4	▲	25A/TB 6/I	120	6	Transparent Blue	B, C-9		3⅝	3000	
			14152-3	▲	25A	24	60	Frost	C, C-6		4⅞	1000	345
			14153-1	▲	25A	34	60	Frost Train	C, C-6		4⅞	1000	325
			25564-6	▲	25A/IF	120	48	Frost	C, CC-6		4⅞	2500	232
	A19	Med.	20178-0		25A/IF/TG 24/2	130	48	TuffGuard Coated Lamp	C, CC-6		4⅞	2500	
			25566-1	▲	25A/IF	130	48	Frost	C, CC-6		4⅞	2500	232
			25569-5	▲	25A/CL 24/2	120–130	48	Clear	C, CC-6		4⅞	2500	220
			14973-2	▲	25A/TF	120	120	Frost Silicone Coated	B, C-9		3⅝	2500	
			14160-6	▲	25A/R	120	60	Red	B, C-9		3⅝	2500	
			14158-0	▲	25A/Y	120	60	Yellow	B, C-9		3⅝	2500	
			37386-0	▲	25A/RS	120–130	120	Frost Rough Service	R, C-9		3⅝	1000	235
			37387-8	□	25A19/35	120–130	60	Frost Industrial Service	B, C-9		3⅝	3500	220
	R14	Inter.	24828-6	■	R14N	120	24	Mini Refl. Lt. Fr. Actual Bulb Dia. 1¼"	C, CC-2V		2½	1500	200
			13336-3	■	BC25R14N 120V 6/I TP	120	6	Mini Refl. Lt. Fr.	C, CC-2V		3½	1500	150
	T6½	Inter.	37388-6	▲	25T6-½IF	120–130	24	Frost Appliance	B, C-8		5½	1000	210
			37389-4	▲	25T6-½	120–130	24	Clear Appliance	B, C-8		5½	1000	220
	T6½	D.C. Bay	37392-8		25T6-½DC	120–130	24	Clear Appliance	B, C-8		5½	1000	220
	T8	D.C. Bay	24827-8	(4)	25T8DC	120	24	Clear Appliance	B, C-7A		2½	1000	210
	T8	Inter.	23593-7	▲ (4)	25T8N	120	24	Clear Appliance	B, C-7A		2½	1000	220
	T10	Med.	39040-1	▲	BC25T10/IF/TP 6/I	120	6	Frost Showcase	B, C-8		5½	1000	245
			13812-3	▲	25T10/IF 24/I	120–130	24	Frost Showcase	B, C-8		5½	1000	255
			38985-8	▲	BC25T10/TP 6/I	120	6	Clear Showcase	B, C-8		5½	1000	250
			13813-1	▲	25T10 24/I	120–130	24	Clear Showcase	B, C-8		5½	1000	260
			20179-8	▲	25T10/TG	120–130	24	TuffGuard Coated Clear Showcase	B, C-8		5½	1000	260

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INCANDESCENT LAMPS

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
INCANDESCENT LAMPS (BY WATTAGE) CONTINUED														
30	R20	Med.	22078-0	▲ (87)	30R20 12/I	130	12	Lt. Frost Reflector	C, CC-6		3 1/8	2000		205
			20181-4	▲ (87)	30R20/TG 120V 12/I	120	12	TuffGuard Coated Reflector Lamp	C, CC-6		3 1/8	2000		205
			20165-7	▲ (87)	30R20 12/I	120	12	Lt. Frost Reflector	C, CC-6		3 1/8	2000		205
			145978	□ (66)	30R20/SFL/TF	130	60	Frost Silicone Coated Reflector Sign	C, CC-6		3 1/8	6000		210
			16753-6	▲ (87)	30R20/LL 12/I	120	12	Frost Long Life Reflector	C, CC-6		3 1/8	2500	335	205
30 70 100	A21	3 Ct. Med.	16947-4	▲ (8)	30/100A/WL 12/I	120	12	Soft White Long Life 3-Way	C, 2CC-8		5 1/8	1750		285 920 1205
			36662-5	▲ (8)	30/100A/W 12/I	120	12	Soft White 3-Way	C, 2CC-8		5 1/8	1200		310 945 1255
34	A19	Med.	22234-9	▲ ✓ \$	40A-34A/EW	120	48	Frost Econ-o-watt	C, CC-6		4 1/8	1500		410
			22235-6	▲ \$	40A-34A/EW	130	48	Frost Econ-o-watt Ratings @ 120V = 30W	C, CC-6		4 1/8	1500		400 305
38	A19	Med. *	21446-0		38A/CL/LL 12-2 W/PTP	120	24	Clear Longer Life	C, CC-6		4 1/8	1500		420
			21443-7		38A/W/TP 12/4	120	48	Soft White	C, CC-6		4 1/8	1000		415
			21462-7		38A/W/TP 24/4	120	96	Soft White	C, CC-6		4 1/8	1000		415
			21444-5		38A/CL	130	48	Clear	C, CC-6		4 1/8	1500		420
			21447-8		38A/WL/TP 12/4	120	48	Soft White Longer Life	C, CC-6		4 1/8	1500		385
			21495-7		38A/WL 24/4	120	96	Soft White Longer Life	C, CC-6		4 1/8	1500		385
40	A15	Med.	29999-0	▲	BC40A15/CL/LL	120	12	Clear Longer Life Home Appliance	C, C-9		3 1/2	1750		400
			37398-5	▲	40A15	120-130	120	Frost Home Appliance	C, C-9		3 1/2	1000		415
			20182-2	▲	40A15/TG	120-130	120	TuffGuard Coated Frost Home Appliance	C, C-9		3 1/2	1000		415
			14073-1	▲	40A15/CL PRO	130	24	ProPack Clear	C, C-9		3 1/2	1000		415
			149633	▲ □ (66)	40A15/TF	120-130	120	Frost Refrigerator Silicone Coated	C, C-9		3 1/2	1000		
			16934-2	▲	BC40A15/FAN/CL/LL 6/2	120	12	Clear Long Life Fan	C, C-9		3 1/2	2000		395
			16935-9	▲	BC40A15/FAN/WL/LL 6/2	120	12	White Long Life Fan	C, C-9		3 1/2	2000		365
			20002-2	▲	40A15/22	120	120	Clear Home Oven	C, C-9		3 1/2	1000		420
			13565-7	▲	BC40A15/FAN/NTL 6/2	120	12	Natural Light Fan	C, C-9		3 1/2	1500		340
	A19	Med. ++	27081-9	▲	40A 12/4	120	48	Frost	C, CC-6		4 1/8	1500		495
		Med. ++	16797-2	▲	40A/CL/LL 12/2	120	24	Clear Long Life	C, CC-6		4 1/8	1500		505
		Med ++	16737-9	▲	40A/WL 24/4	120	96	Soft White Long Life	C, CC-6		4 1/8	1500		475
			16869-0	▲	40A/WL 12/4	120	48	Soft White Long Life	C, CC-6		4 1/8	1500		475
		Med ++	13558-2	▲	40A/NTL 12/4	120	48	Natural Light Standard	C, CC-6		4 1/8	1000		400
		Med ++	37465-2	▲	40A	120	48	Frost	C, CC-6		4 1/8	1500		495
			37466-0	▲	40A	130	48	Frost Ratings @ 120V = 35W	C, CC-6		4 1/8	1500		490 375
		Med ++	13993-1	▲	40A 120/I PRO	130	120	Frost ProPack	C, CC-6		4 1/8	1500		490
		Med ++	37399-3	▲	40A/CL	120-130	48	Clear Ratings @ 120V = 37W	C, CC-6	3 1/8	4 1/8	1500		500 435
		Med	20183-0	▲	40A/CL/TG	120-130	48	TuffGuard Coated Clear	C, CC-6		4 1/8	1500		500

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Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.‡	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP* Lumens	
INCANDESCENT LAMPS (BY WATTAGE) CONTINUED														
40	K19	Med.	30728-0	▲	40K19/DL 6/2	120	12	Director®	C, C-9		4%	1150	500	
	R14	Med.	35454-8		40R14/SP	120	24	Light Fr. Mini. Refl.	C, CC-2V		2%	1500	250	
			13355-3		BC40R14N 6/1 TP	120	6	Light Fr. Mini. Refl.	C, CC-2V		2%	1500		
			16704-9		BC-40R14/SP 120V 6/1 PKTP	120	6	Surge Proof Light Mini. Refl.	C, CC-2V		2%	1500	250	
			13337-1		BC40R16/SP 6/1 TP	120	6	Surge Proof Light Mini. Refl.	C, CC-2V		3%	1500	250	
	S11	Inter.	21216-7	▲	BC40S11/N TP 16/1	120	16	Clear High Intensity	C, CC-2V		2½	500	440	
			14075-6		40S11N/IF PRO	130	24	ProPack Clear High Intensity	C, CC-2V		2½	500	420	
			24830-2	▲	40S11N/IF	120	24	Frost High Intensity	C, CC-2V		2½	500	420	
	T6½	Inter.	20491-7	▲	BC40T6-½/2 12/1	120	12	Clear Refrigerator	B, C-8		5½	1000	350	
	T10	Med.	38989-0	▲	BC40T10/IF/TP 6/1	120	6	Frost Showcase	B, C-8		5%	1000	250	
			13814-9	▲	40T10/IF 24/1	120-130	24	Frost Showcase	B, C-8		5%	1000	435	
			38988-2	▲	BC40T10/TP 6/1	120	6	Clear Showcase	B, C-8		5%	1000	435	
			13815-6	▲	40T10 24/1	120-130	24	Clear Showcase	B, C-8		5%	1000	440	
			20184-8	▲	40T10/TG	120-130	24	TuffGuard Coated Clear Showcase	B, C-8		5%	1000	440	
45	BR30	Med.	16751-0	▲ (87)	45BR30/FL55/LL 12/1	120	12	Long Life Reflector Flood	C, CC-6		5%	2500	340	
	R20	Med.	20323-2	▲ (87)	45R20/LL 12/1	120	12	Long Life Reflector Flood	C, CC-6		3½%	2500	385	
			20322-4	▲ (87)	45R20 12/1	130	12	Reflector Flood	C, CC-6		3½%	2000	380	
			20324-0	(87)	45R20 12/1 PRO	130	12	ProPack Reflector Flood	C, CC-6		3½%	2000	380	
50	A19	Med.	14154-9	▲	50A	24	60	Frost Train	C, C-6		4%	1000	825	
			24569-6	▲	50A	250	120	Frost	C, RC-9		3½%	1000		
			21952-7	▲	50A19/31	120	120	Clear Commercial Oven	B, C-9	2½	3½%	1000	500	
			37403-3	▲	50A/RS	120-130	120	Frost Rough Service Ratings @ 120V =47W	B, RC-9		3½%	1000	500	
												1700	440	
			20163-2	▲	50A/RS 12/2	120	24	Frost Rough Service	B, RC-9		3½%	1000	480	
			24572-0	▲	50A/RS	250	120	Frost Rough Service	C, RC-9		3½%	1000	355	
			14977-3	▲ (66)	50A/RS/TF	120-130	120	Frost Rough Service Silicone Coated	B, C-17A		3½%	1000		
	BR19	Med. +++	16750-2	▲\$X(66)	50BR19/25/SP/LL	120	12	Long Life Spotline Reflector	C, CC-11		4%	2500	635	385
	BR30	Med.	24889-8	▲ (87)	50BR30/FL	120	12	Reflector Flood	C, CC-6		5%	2000		

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INCANDESCENT LAMPS (BY WATTAGE) CONTINUED													
50	ER30	Med.	14355-2	▲ \$ (87)	50ER30	120–130	24	Elliptical Reflector	C, CC-6		6 3/8	2000	360
	PAR36	M.P.	29603-8		50PAR36/WFL	12	12	Compact Wide Flood	C, C-6		2 3/4	2000	
			22859-3		50PAR36/NSP	12	12	Compact Narrow Spot	C, C-6		2 3/4	2000	
	R20	Med. +++	22082-2	▲ X (87)	50R20 12/I	130	12	Lt. Frost Reflector	C, CC-6		3 1/8	2000	380
		Med.	20187-1	▲ (87)	50R20/TG 12/I	120	12	TuffGuard Coated Reflector Lamp	C, CC-6		3 1/8	2000	380
		Med.	26635-3	▲ X (19,87)	50R20/PK	120	60	Pink Reflector	C, CC-6		3 1/8	2000	
		Med. +++	16755-1	▲ X (87)	50R20/LL 12/I	120	12	Frost Long Life Reflector	C, CC-6		3 1/8	2500	385
		Med. +++	14019-4	X (87)	50R20/FL 12/I PRO	130	12	Frost ProPack Reflector	C, CC-6		3 1/8	2000	385
		Med.	13797-5	▲ (87)	50R20/FL/NTL 12/I	120	12	Natural Light Reflector	C, CC-6		3 1/8	2000	265
		Med.	16709-8	▲ (19,87)	50R20/Agro 12/I	120	12	Agro-Lite Plant Light	C, CC-6		3 1/8	2000	
	A21	3 Ct. Med.	36671-6	▲ (8)	50/150A/W 12/I	120	12	Soft White 3-Way	C, 2CC-8		5 1/8	1200	610 1510 2120
			31739-6	▲ (8)	50/150A/STP/PK 8/I	120	8	Pink Softone Pastel®	C, 2CC-8		5 1/8	1200	550 1310 1860
			13564-0	▲ (8)	50/150A/NTL 12/I	120	12	Natural Light Reflector	C, 2CC-6		5 1/8	1200	490 1250 1740
			16948-2	▲ (8)	50/150A/WL 12/I	120	12	Soft White Long Life 3-Way	C, 2CC-8		5 1/8	1750	575 1440 2015
			32359-2	▲ □ (8)	50/150A/DL 12/I	120	12	Director® 3-Way	C, 2CC-8		5 1/8	1200	530 1260 1790
			16949-0	▲ (8)	50/250A/WL 12/I	120	12	Soft White Long Life 3-Way	C, 2CC-8		5 1/8	1750	575 3120 3695
			22237-2	▲ ✓	60A-52A/EW	120	48	Frost Econ-o-watt	C, CC-6		4 1/8	1000	700
52	A19	Med.	22239-8	▲ \$	60A-52A/EW	130	48	Frost Econ-o-watt	C, CC-6		4 1/8	1000	680
			14999-6	▲ \$	60A-52A/99/EW	120–130	48	Frost Econ-o-watt Extended Service Ratings @ 120V = 49W	C, CC-6		4 1/8	2000 3400	660 570
			21497-3	▲	57A 12/4	120	48	Frost	C, CC-6		4 1/8	1000	850
57	A19	Med.*	21464-3		57A 120/I PRO	130	120	Frost ProPack	C, CC-6		4 1/8	1000	850
			21448-6	▲	57A	120	48	Frost	C, CC-6		4 1/8	1000	850
			21466-8	▲	57A	130	48	Frost	C, CC-6		4 1/8	1000	850
			21463-5	▲	57A/CL	130	48	Clear	C, CC-6		4 1/8	1000	850
			21465-0		57A/CL 120/I PRO	130	120	Clear ProPack	C, CC-6		4 1/8	1000	920
			21452-8	▲	57A/CL/LL/TP 12/2	120	24	Clear Long Life	C, CC-6		4 1/8	1500	810
			21449-4	▲	57A/W/TP 24/4	120	96	Soft White	C, CC-6		4 1/8	1000	780
			21498-1	▲	57A/W/TP 12/4	120	48	Soft White	C, CC-6		4 1/8	1000	780
			21451-0	▲	57A/WL 24/4	120	96	Soft White Longer Life	C, CC-6		4 1/8	1500	750
			21499-9	▲	57A/WL 12/4 TP	120	48	Soft White Longer Life	C, CC-6		4 1/8	1500	750
			21500-4	▲	57A/WL 120/4 TP	120	480	Soft White Longer Life	C, CC-6		4 1/8	1500	750

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INCANDESCENT LAMPS (BY WATTAGE) CONTINUED													
60	A15	Med.	16945-8	▲	BC60A15/FAN/W/LL 6/2	120	12	White Long Life Fan	C, C-9		3½	2000	570
			16946-6	▲	BC60A15/FAN/CL/LL 6/2	120	12	Clear Long Life Fan	C, C-9		3½	2000	630
			14072-3		60A15/FAN/CL 130V 24/I PRO	130	24	ProPack Clear Fan	C, C-9		3½	2000	630
A19	Med. ++		16794-0	▲	60A/CL/LL 12/2	120	24	Clear Long Life	C, CC-6		4⅞	1500	900
			16738-7	▲	60A/WL 24/4	120	96	Soft White Long Life	C, CC-6		4⅞	1500	830
			16874-0	▲	60A/WL 12/4	120	48	Soft White Long Life	C, CC-6		4⅞	1500	830
			16877-3	▲	60A/WL 120/4	120	480	Soft White Long Life	C, CC-6		4⅞	1500	830
			13559-0	▲	60A/NTL 12/4	120	48	Natural Light Standard	C, CC-6		4⅞	1000	680
			27082-7	▲✓	60A 12/4	120	48	Frost	C, CC-6		4⅞	1000	890
			37469-4	▲✓	60A	120	48	Frost	C, CC-6		4⅞	1000	890
			37471-0	▲✓	60A	130	48	Frost	C, CC-6		4⅞	1000	850
								Ratings @ 120V =53W				2830	650
			14979-9	▲ (66)	60A/TF	120	120	Frost Silicone Coated	C, CC-6		4⅞	1000	
			22245-5	▲✓	60A/99	120	48	Frost Extended Service	C, CC-6		4⅞	2500	800
			22246-3	▲✓	60A/99	130	48	Frost Extended Service	C, CC-6		4⅞	2500	790
								Ratings @ 120V =53W				7075	595
			37522-0	▲	60A/CL	130	48	Clear	C, CC-6	3⅞	4⅞	1000	880
								Ratings @ 120V =53W				2830	665
			13995-5		60A 120/I PRO	130	120	Frost ProPack	C, CC-6	3⅞	4⅞	1000	850
			14424-6	▲	60A/AGRO 12/I	120	12	Agro-Lite Plant Light	C, C-9		4⅞	1000	
			16703-1	▲	BC60A/CL/GDO 6/2	120	6	Garage Door Opener	C, C-9		4⅞	3500	630
			37517-0	▲	60A/Y	120–130	48	Bug-A-Way®	C, CC-6		4⅞	1350	
			14074-9		60A/Y PRO	130	24	ProPack Bug-A-Way®	C, CC-6		4⅞	1000	
			14164 8	▲	60A19/B	120	60	Blue	C, C-9		4⅞	1000	
			14162 2	▲	60A19/R	120	60	Red	C, C-9		4⅞	1000	
			14399-9	▲	60A/IF/SB	120	120	Frost Silvered Bowl	C, CC-6		4⅞	1000	720
			37483-5	▲✓	60A/W 12/4	120	48	Soft White	C, CC-6		4⅞	1000	860
			37484-3	▲	60A/W/TP 24/4	120	96	Soft White Tra-Pak	C, CC-6		4⅞	1000	860
			34822-7	▲□	60A/STP/PK 12/2	120	24	Pink Softone Pastel®	C, CC-6		4⅞	1000	
			22573-0	▲✓□	60A/YL 12/2	120	24	Bug-A-Way® Yellow Longer Life	C, CC-6		4⅞	1350	
			22247-1	□	60A19/35	120	48	Frost Industrial Service	C, C-9		4⅞	3500	600
			22248-9	□	60A19/35	130	48	Frost Industrial Service	C, C-9		4⅞	3500	585
								Ratings @ 120V =53W				9987	446
			20188-9	□	60A19/35/TG	120	48	TuffGuard Coated Lamp	C, C-9		4⅞	3500	600
			15925-1	□	60A19/35/TG	130	48	TuffGuard Coated Lamp	C, C-9		4⅞	3500	585
			14965-8	□ (66)	60A/35/TF	120	60	Frost Silicone Coated Industrial Service	C, C-9		4⅞	3500	
			21056-7	(12)	K60A19/TS/EW	120–125	120	Clear Krypton Econ-o-watt Traffic Signal	C, C-11V	2⅞	4⅞	8000	610
			37167-4	(12)	K60A19/TS/EW	130	120	Clear Krypton Econ-o-watt Traffic Signal	C, C-11V	2⅞	4⅞	8000	610
K19	Med.		22486-5	▲□	60K19/DL 6/2	120	12	Director®	C, CC-6		4⅞	1150	770
T10	Med.		13811-5	▲	60T10/64IF 24/I	120	24	Frost	B, C-8		5⅞	1000	660
			13810-7	▲	60T10/64 24/I	120	24	Clear	B, C-8		5⅞	1000	665

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INCANDESCENT LAMPS (BY WATTAGE) CONTINUED														
65	BR30	Med.	24876-5	▲✓ (87)	65BR30/FL55 12/I	120	12	Reflector Flood	C, CC-6		5½	2000		635
			24884-9	▲✓ (87)	65BR30/FL55	130	12	Reflector Flood	C, CC-6		5½	2000		635
			20191-3	▲✓ (87)	65BR30/FL55/TG 12/I	130	12	TuffGuard Coated Reflector Flood	C, CC-6		5½	2000		635
			20190-5	▲✓ (87)	65BR30/FL55/TG 12/I	120	12	TuffGuard Coated Reflector Flood	C, CC-6		5½	2000		635
			24880-7	▲ (87)	65BR30/SP20	130	12	Reflector Spot	C, CC-6		5½	2000		655
			24452-5	(87)	65BR30/SFL	120	12	Reflector Sign Frost	C, C-17A		5½	5000		635
			13785-1	▲ (87)	65BR30/FL/NTL 12/I	120	12	Natural Light Reflector	C, CC-6		5½	2000		500
			16768-4	▲ (87)	65BR30/FL55/LL 12/I	120	12	Long Life Reflector Flood	C, CC-6		5½	2500	510	595
			16769-2	▲ (87)	65BR30/SP20/LL 12/I	120	12	Long Life Reflector Spot	C, CC-6		5½	2500	530	610
			14007-9	(87)	65BR30/FL 12/I PRO	130	12	ProPack Reflector	C, CC-6		5½	2000		635
65	BR30	Med.	29380-3		65BR30/FL55 SP 12/I	120–130	12	Surge Proof Reflector Ratings @ 130V = 69W	C, CC-6		5½	3000 2000		570 660
	BR40	Med.	22537-5	▲✓ (87)	65BR/FL60	130	24	Reflector Flood	C, CC-6		6½	2000		685
			14008-7	(87)	65BR40/FL 12/I PRO	130	12	ProPack Reflector	C, CC-6		6½	2000		600
			16741-1	▲ (87)	65BR/FL60/LL 8/I	120	8	Long Life Reflector Flood	C, CC-6		6½	2500	500	630
			38913-0	▲ (87)	65BR/FL60 24/I	120	24	Long Life Reflector Flood	C, CC-6		6½	2000	500	630
	A19	Med.	22240-6	▲✓\$	75A-67A/EW	120	48	Frost Econ-o-watt	C, CC-6		4⅞	750		1010
			22241-4	▲✓\$	75A-67A/EW	130	48	Frost Econ-o-watt Ratings @ 120V = 59W	C, CC-6		4⅞	750 2120		990 805
			15000-3	▲\$	75A-67A/99/EW	120–130	48	Frost Econ-o-watt Extended Service Ratings @ 120V = 63W	C, CC-6		4⅞	2000 3400		970 840
	A21	Med.+	22192-9	✓ (12)	67A21/99TS	120	120	Clear Traffic Signal	C, C-11V		4⅞	8000		610
			22197-8	✓ (12)	67A21/99TS	130	120	Clear Traffic Signal	C, C-11V	2⅞	4⅞	8000		610
69	A21	Med.+	22199-4	✓ (12)	69A21/TS	120	120	Clear Traffic Signal	C, C-9	2⅞	4⅞	8000		660
			22204-2	✓ (12)	69A21/TS	130	120	Clear Traffic Signal	C, C-9	2⅞	4⅞	8000		660
71	A19	Med.*	21469-2	▲	71A	130	48	Frost	C, CC-6		4⅞	750		1135
			21454-4	▲	71A	120	48	Frost	C, CC-6		4⅞	750		1135
			21470-0	▲	71A/CL	130	48	Clear	C, CC-6		4⅞	750		1135
			21455-1	▲	71A/CL/LL 120V 12/2/WPTP	120	48	Clear Long Life	C, CC-6		4⅞	1125		1050
			21453-6	▲	71A/W/TP 24/4	120	96	Soft White	C, CC-6		4⅞	750		1050
			21501-2	▲	71A/W/TP 12/4	120	48	Soft White	C, CC-6		4⅞	750		1050
			21502-0	▲	71A/W/LL 24/4	120	96	Soft White Long Life	C, CC-6		4⅞	1125		
			21503-8	▲	71A/W/LL /TP 12/4	120	48	Soft White Long Life	C, CC-6		4⅞	1125		

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INCANDESCENT LAMPS

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg Qty.‡	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP* Lumens
INCANDESCENT LAMPS (BY WATTAGE) CONTINUED													
75	A19	Med. ++	37472-8	▲✓	75A	120	48	Frost	C, CC-6		4⅞	750	1220
		Med.	20195-4	▲✓	75A/TG	120	48	TuffGuard Coated Lamp	C, CC-6		4⅞	750	1220
		Med.	15933-5	▲✓	75A/TG	130	48	TuffGuard Coated Lamp	C, CC-6		4⅞	750	1220
		Med. ++	13997-1		75A 120/I PRO	130	120	Frost ProPack Lamp	C, CC-6		4⅞	750	1150
		Med. ++	16801-3	▲	75A/CL/LL 12/2	120	24	Clear Long Life	C, CC-6		4⅞	1500	1080
		Med. ++	13996-3		75A/CL 120/I PRO	130	120	Clear ProPack Lamp	C, CC-6		4⅞	750	1195
		Med. ++	16879-9	▲	75A/WL 12/4	120	48	Soft White Long Life	C, CC-6		4⅞	1500	1060
		Med. ++	16739-5	▲	75A/WL 24/4	120	96	Soft White Long Life	C, CC-6		4⅞	1500	1060
		Med.	13560-8	▲	75A/NL 12/4	120	48	Natural Light Standard	C, CC-6		4⅞	750	950
		Med. ++	27083-5	▲✓	75A 12/4	120	48	Frost	C, CC-6		4⅞	750	1220
		Med. ++	37473-6	▲	75A	130	48	Frost	C, CC-6		4⅞	750	1150
								Ratings @ 120V =66W				2120	860
		Med. ++	37406-6	▲✓	75A/99	120–130	48	Frost Extended Svc.	C, CC-6		4⅞	2500	1070
								Ratings @ 120V =70W				4250	930
		Med.	29360-5	▲	75A/RS/VS	120–130	12	Frost Rough & Vib. Svc.	R, C-9	2½	3⅝	1000	712
								Ratings @ 120V =70W				1700	660
		Med.	20192-1	▲	75A/RS/V/TG	120–130	12	TuffGuard Frost Rough & Vib. Svc.	R, C-9	2½	3⅝	1000	712
								Ratings @ 120V =70W				1700	660
		Med. ++	37525-3	▲	75A/CL	130	48	Clear	C, CC-6	3⅞	4⅞	750	1195
							Ratings @ 120V =66W				2140	885	
	Med. ++	37485-0	▲✓	75A/W 12/4	120	48	Soft White	C, CC-6		4⅞	750	1180	
	Med. ++	14997-0	▲✓	75A/W 12/4	130	48	Soft White	C, CC-6		4⅞	1000	1100	
	Med. ++	37486-8	▲	75A/W/TP 24/4	120	96	Soft White Tra-Pak	C, CC-6		4⅞	750	1180	
A21	Med. ++	31305-6	▲	75A21	120–130	120	Frost	C, C-9		5%	1000	1110	
							Ratings @ 120V =66W				2854	858	
	Med.	20922-1	▲ (66)	75A/RH/TF 12/1	120–130	12	Frost Silicone Coated Tough Bulb	C, RC-9		5%	1000		
	Med.	20470-1	▲	75A/RH 12/1	120–130	12	Frost Rough House	C, RC-9		5%	1000	750	
							Ratings @ 120V =70W				1700	730	
BR30	Med.	20018-8	▲	75A/RH/TG	120–130	12	TuffGuard Frost Rough House	C, RC-9		5%	1000	750	
							Ratings @ 120V =70W				1700	730	
	Med.	14345-3	▲	75A21	12	60	Frost	C, C-6		5%	1000	1100	
	Med.	24903-7	▲ (66,87)	75BR30/FL/TF	120	12	Frost Silicone Coated Reflector	C, CC-6		5%	2000		
			24905-2	▲ (87)	75BR30/AGRO 6/I	120	6	Agro-Lite Plant Light	C, CC-6		5%	2000	700
			24902-9	▲ (87)	75BR30/PK 8/I	120	8	Pink	C, CC-6		5%	2000	
	ER30	Med. +++	14353-7	▲sX(19,37,87)	75ER30	120	24	Elliptical Reflector	C, CC-6		6%	2000	570
	+++	14354-5	▲sX(19,37,87)	75ER30	130	24	Elliptical Reflector	C, CC-6		6%	2000	570	
BR38	Med. +++	14009-5	X(87)	75BR38/FL 6/I PRO	130	6	Clear ProPack Lamp	C, CC-6		5½	2000	650	
	+++	15050-8	X(87)	75BR38/CLEAR 6/2	120	12	Clear	C, CC-6		5½	2000		
K19	Med.		22487-3	▲□	75K19/DL 6/2	120	12	Director®	C, CC-6		4%	1150	1000
R20	Med. +++		16763-5	▲X□ (87)	75R20/LL 12/1	120	12	Frost Long Life Reflector	C, CC-6		3⅝	2500	800
												570	

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INCANDESCENT LAMPS

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
INCANDESCENT LAMPS (BY WATTAGE) CONTINUED														
85	BR30	Med. +++	16766-8	▲ X(87)	85BR30/FL55/LL 6/I	120	6	Long Life Reflector Flood	C, CC-6		5½	2500	700	855
			16767-6	▲ X(87)	85BR30/SP20/LL 6/I	120	6	Long Life Reflector Spot	C, CC-6		5½	2500	3100	865
	BR40	Med. +++	22527-6	▲ X ✓(87)	85BR/FL60	120	24	Reflector Flood	C, CC-6		6½	2000		925
			22528-4	▲ X ✓(87)	85BR/FL60	130	24	Reflector Flood	C, CC-6		6½	2000		925
			16785-8	▲ X(87)	85BR/FL60/LL 8/I	120	8	Long Life Reflector Flood	C, CC-6		6½	2500	700	900
90	A19	Med.	22243-0	▲ ✓ \$	100A-90A/EW	120	48	Frost Econ-o-watt	C, CC-6		4⅞	750		1445
			22244-8	▲ ✓ \$	100A-90A/EW	130	48	Frost Econ-o-watt	C, CC-6		4⅞	750		1525
			15001-1	▲ \$	100A-90A/99EW	120–130	48	Frost Econ-o-watt Extended Service Ratings @ 120V =84W	C, CC-6		4⅞	1500 2550		1400 1220
95	A19	Med. *	21459-3	▲	95A	120	48	Frost	C, CC-6		4⅞	750		1600
			21474-2	▲	95A	130	48	Frost	C, CC-6		4⅞	750		1600
			21473-4	▲	95A/CL	130	48	Frost	C, CC-6		4⅞	750		1600
			21504-6	▲	95A/W/TP 12/4	120	48	Soft White	C, CC-6		4⅞	750		1550
			21460-1	▲	95A/W 24/4	120	96	Soft White	C, CC-6		4⅞	750		1550
			21818-0	▲	95A/WL 12/4	120	48	Soft White Long Life	C, CC-6		4⅞	1125		1500
			21461-9	▲	95A/WL 24/4	120	96	Soft White Long Life	C, CC-6		4⅞	1125		1500
100	A19	Med. ++	37474-4	▲ ✓	100A	120	48	Frost	C, CC-6		4⅞	750		1600
			13684-6	▲ ✓	100A	120	48	Frost	C, CC-8		4⅞	750		1710
			37476-9	▲ ✓	100A	130	48	Frost	C, CC-6		4⅞	750		1590
								Ratings @ 120V =88W				2120		1205
			15934-3	▲ ✓	100A/TG	130	48	Frost	C, CC-6		4⅞	750		1590
			13999-7	✓	100A 120/I PRO	130	120	Frost ProPack Lamp	C, CC-6		4⅞	750		1590
			22979-9	▲ ✓	100A/99	130	48	Frost Extended Service Ratings @ 120V =88W	C, CC-6		4⅞	2500 7075		1470 1110
			37527-9	▲	100A/CL	130	48	Clear	C, CC-6	3½	4⅞	750		1590
								Ratings @ 120V =88W				2120		1205
			13998-9		100A/CL 120/I PRO	130	120	Clear ProPack Lamp	C, CC-6	3½	4⅞	750		1615
			13254-8	▲ ✓	100A/W 12/4	120	48	Soft White	C, CC-6		4⅞	750		1620
			13561-6	▲	100A/NTL 12/4	120	48	Natural Light Standard	C, CC-6		4⅞	750		1350
			15130-8		100A/NTL/2XL 12/4	120	48	Natural Light Standard	C, CC-6		4⅞	1500		1,210
			15008-6	▲	100A/CL/LL 12/2	120	24	Clear Long Life	C, CC-6		4⅞	1500		1440
			16740-3	▲	100A/WL 24/4	120	96	Soft White Long Life	C, CC-8		4⅞	1500		1440
			13255-5	▲	100A/W/TP 24/4	120	96	Soft White Tra-Pak	C, CC-6		4⅞	750		1620
			22581-3	▲ ✓ □	100A/YL 12/2	120	24	Bug-A-Way® Yellow Longer Life	C, CC-6		4⅞	1350		
			16862-5	▲	100A/WL 12/4	120	48	Soft White Long Life	C, CC-6		4⅞	1500		1440
	A19	Med. LHT	37414-0	(18)	100A/LHT	120–130	48	Frost	C, CC-6		4⅞	750		1560

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INCANDESCENT LAMPS

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg Qty.‡	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP* Lumens
INCANDESCENT LAMPS (BY WATTAGE) CONTINUED													
100	A21	Med.	14346-1	▲	100A	12	60	Frost	C, C-6		5%	1000	2050
		Med. ++	28171-7	▲	100A21	120-130	120	Frost Ratings @ 120V =94W	C, CC-8		5%	750 1280	1680 1463
		Med.	20197-0	▲	100A21/TG 120/I	120-130	120	TuffGuard Coated Lamp	C, CC-8		5%	750	1680
		Med.	14981-5	▲ (66)	100A21/TF	120	120	Frost Silicone Coated	C, CC-8		5%	750	
		Med.	29955-2	▲	100A	250	120	Frost	C, C-9		5%	1000	1180
		Med.	24661-1	▲	100A	277	120	Frost Mine	C, C-9		5%	1000	1070
		Med. ++	37460-3	▲	100A21/99	120-130	60	Frost Extended Service Ratings @ 120V =94W	C, C-9		5%	2500 4250	1410 1225
		Med.	20198-8	▲	100A21/99/TG 60/I	120-130	60	TuffGuard Coated Lamp	C, CC-8		5%	2500	1475
		Med.	14340-4	▲	100A/D	120	60	Frost Daylight	C, C-9		5%	750	900
		Med.	14400-6	▲ (43,64)	100A/ISBIF	120	120	Frost Silvered Bowl	C, C-9		5%	1000	1150
		Med.	14971-6	▲ (66)	100A/RS/TF	120-130	60	Frost Silicone Coated Rough Service	C, RC-9		5%	1000	
		Med.	27550-3	▲	100A/RS	250	60	Frost Rough Service	C, RC-9		5%	1000	1030
		Med. ++	37411-6	□	100A21/35	120-130	60	Frost Industrial Service Ratings @ 120V =94W	C, C-9		5%	3500 5975	1175 1015
		Med.	14967-4	□ (14, 66)	100A21/35/TF	120	60	Frost Silicone Coated Industrial Svc.	C, C-9		5%	3500	
		Med.	15927-7		100A/RS/VS/BR/TG	120-130	60	TuffGuard Frost Rough & Vibration Svc. Ratings @ 120V =94W	C, RC-9		5%	1000 1700	1230 945
		Med.	22390-9	(12)	100A21/TS	130	120	Clear Traffic Signal	C, C-9	2 7/8	4%	2000	1180
	A23	Med. ++	22430-3	▲	100A23	120	120	Frost	C, CC-6		6%	750	1730
	F20	Med.	16844-3		100F20/POSTLT/CL/LL 6/I	120	6	Clear Long Life PostLight	C, C-9		5%	4000	1250
	BR38	Med.	385328	(29, 82)	100PAR11/B 6/I	120	6	Blue PAR	C, CC-6		5%	2000	
			385302	(29, 82)	100PAR11/G 6/I	120	6	Green PAR	C, CC-6		5%	2000	
			385294	(29, 82)	100PAR11/R 6/I	120	6	Red PAR	C, CC-6		5%	2000	
			387662	(29, 82)	100PAR11/Y 6/I	120	6	Yellow PAR	C, CC-6		5%	2000	
			13127-6		100PAR11/CL SRS 12/I	130	12	Clear PAR	C, CC-6		5%	2000	
			15923-6		100PAR11/CL/TG 12/I	130	12	TuffGuard Coated Lamp	C, CC-6		5%	2000	
	PAR38	Med. Skt.	14550-8	(29, 82)	100PAR38/HEAT/CL	120	12	Clear PAR Infrared	C, C-9		5%	5000	
	K19	Med.	22491-5	▲ □	100K19/DL 6/2	120	12	Director®	C, CC-6		4%	1150	1450
	R20	Med.	14174-7	■	100R20/FL/S	12	60	Clear Reflector Flood Swimming Pool	C, C-6		3 1/8	2000	1000
			Med. +++	16701-5	▲ □ X (82)	100R20/LL 12/I	120	12	Frost Long Life Reflector	C, CC-6		3 1/8	2500
100 200 300	PS25	3 Ct. Mog.	36734-2	▲ (8)	100/300/W 12/I	120	12	Soft White 3-Way	C, 2CC-6		6 1/8	1200	1320 3300 4620
116	A21	Med. +	22483-2	(12)	116A21/TS	120	120	Traffic Signal Clear	C, C-9	2 7/8	4%	8000	1180
			22485-7	(12)	116A21/TS	130	120	Traffic Signal Clear	C, C-9	2 7/8	4%	8000	1180

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INCANDESCENT LAMPS

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
INCANDESCENT LAMPS (BY WATTAGE) CONTINUED														
120	BR40	Med. +++	22541-7	▲ X ✓ (87)	I20BR/FL60	120	24	Reflector Flood	C, CC-6		6½	2000		1300
		Med. +++	22532-6	▲ X ✓ (87)	I20BR/FL60	130	24	Reflector Flood	C, CC-6		6½	2000		1300
		Med.	20199-6	▲ ✓ (87)	I20BR/FL60/TG 24/I	130	24	TuffGuard Coated Reflector Flood	C, CC-6		6½	2000		1300
		Med.	20200-2	▲ ✓ (87)	I20BR/FL60/TG CDA 24/I	120	24	TuffGuard Coated Reflector Flood	C, CC-6		6½	2000		1300
		Med. +++	22544-1	▲ X (87)	I20BR/SP20	120-130	24	Reflector Spot	C, CC-6		6½	2000		1300
		Med. +++	16779-1	▲ X (87)	I20BR/FL60/LL 8/I	120	8	Long Life Reflector Flood	C, CC-6		6½	2500	1000	1285
		Med. +++	16781-7	▲ X (87)	I20BR/SP20/LL 8/I	120	8	Long Life Reflector Spot	C, CC-6		6½	2500	4600	1225
		Med.	16715-5	▲ (87)	I20BR/Agro 6/I	120	6	Agro-Lite Plant Light	C, CC-6		6½	2000		
		Med. +++	14012-9	X (87)	I20BR/FL 12/I PRO	130	12	ProPack Reflector	C, CC-6		6½	2000		1300
	ER40	Med. +++	13928-7	▲ X \$	I20ER40	120-130	24	Elliptical Reflector	C, CC-6		7½	2000		1190
125	BR40	Med.	38931-2	▲ (27,87,89)	I25BR40/I 4/I	120	4	Clear Reflector Infrared	C, C-9		6½	5000		
			15930-1	▲ (27,87,89)	I25BR40/I/TG 4/I	120	4	TuffGuard Coated Clear Reflector Infrared	C, C-9		6½	5000		
135	A21	Med.	28175-8	▲ \$	I50A-I35A/EW	120-130	60	Frost Econ-o-watt Ratings @ 120V=127W	C, CC-8		5%	750		2490
			15002-9	▲ \$	I50A-I35A/99/EW	120-130	60	Frost Econ-o-watt Ratings @ 120V=119W	C, CC-8		5%	1000		2300
			37616-0	(12)	K135A21/TS/EW	120-125	120	Clear Krypton Econ-o-watt Traffic Signal	C, C-11V	3	4½	8000		1750
	A25	Med.	26836-7	X \$ □	I35A25/35	130	60	Frost Econ-o-watt Industrial Svc. Ratings @ 120V=119W	C, C-9		6½	3500		1865
												9987		1423
150	A21	Med.	27003-3	▲ ✓	I50A	120	48	Frost	C, C-9		5%	750		2700
		Med.	27069-4	▲ ✓	I50A	130	48	Frost Ratings @ 120V=133W	C, CC-8		5%	750		2700
												2120		2050
		Med. +++	37417-3	▲ ✓ (82)	I50A/99	120-130	60	Frost Extended Service Ratings @ 120V=141W	C, C-9		5%	2500		2200
												4250		1930
		Med.	37418-1	▲ (82)	I50A/CL	120-130	60	Clear Ratings @ 120V=141W	C, CC-8	3½	5%	750		2700
												1275		2300
		Med.	14969-0	▲ (66)	I50A21/RS/TF	120-130	60	High-Temp. Coating	C, RC-9		5%	1000		
		Med.	15009-4	▲	I50A/CL/LL 12/I TP	120	12	Clear Long Life	C, CC-8		5%	1500		2000
		Med.	16866-6	▲	I50A/WL 12/I	120	12	Soft White Long Life	C, CC-8		5%	2000		2310
		Med.	27578-4	▲	I50A21/RS/BR	120-130	60	Frost Rough & Vibration Service Ratings @ 120V=141W	C, RC-9		5%	1000		2205
												1700		1915
		Med.	27586-7	▲	I50A21/CL/RS/VS	120-130	60	Clear Rough & Vibration Service Ratings @ 120V=141W	C, RC-9	3½	5%	1000		2200
												1700		1915
		Med.	27588-3	▲	I50A/35/RS/BR	120-130	60	Frost Industrial Rough Service Ratings @ 120V=141W	C, RC-9	3½	5%	3500		1640
												5900		1425
		Med.	15931-9	▲	I50A/35RS/BR/TG	120-130	60	Frost Industrial Rough Service Ratings @ 120V=141W	C, RC-9	3½	5%	3500		1640
												5900		1425

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INCANDESCENT LAMPS

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.‡	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP* Lumens	
INCANDESCENT LAMPS (BY WATTAGE) CONTINUED														
150	A23	Med. LHT	28170-9	(18) X	150A23/LHT	120–130	60	Frost	C, CC-8		6%	750	2700	
	A23	Med.	28172-5	▲	150A23	120–130	60	Frost	C, CC-8	4%	6%	750	2700	
			37419-9	▲	150A23/CL	120–130	60	Clear Ratings @120V=141W	C, CC-8	4%	6%	750 1275	2700 2300	
	A25	Med.	37421-5	□	150A25/35	120–130	60	Frost Industrial Service Ratings @120V=141W	C, C-9		6%	3500 5975	1715 1500	
			14961-7	□ (14,66)	150A25/35/TF	120	60	Frost Silicone Coated Industrial Svc.	C, C-9		6½%	3500		
	BR40	Med.	22725-6	▲ (87)	150BR/AGRO 6/I	120	6	Agro-Lite Plant Light	C, CC-6		6½%	2000		
	BR38	Med.	38568-2		150BR38/5FL	130	12	Flood Anti-Vibration	C, C-11V		5½%	5000		
		Med. +++	14010-3	X (87)	150BR38/FL 6/I PRO	130	6	Clear ProPack Lamp	C,CC-6		5½%	2000	1650	
		Med. +++	15051-6	X	150BR38/CL 6/2	120	6	Clear	C,CC-6		5½%	2000		
		Med.	20203-6		150BR38/FL/TG 6/I	130	6	TuffGuard Coated Lamp	C,CC-6		5½%	2000	1650	
	PS25	Med.	28173-3	▲	150	120–130	60	Frost Ratings @120V=141W	C, C-9		6½%	750 1280	2460 2143	
			28174-1	▲	150PS25/99	120–130	60	Frost Extended Service Ratings @120V=141W	C, C-9		6½%	2500 4250	1950 1690	
			14983-1	▲ (66)	150PS25/TF	120	60	Frost Silicone Coated	C, C-9		6½%	1000		
			24684-3	▲	150PS25/99CL	250	60	Clear Extended Service	C, CC-9		6½%	2500	1840	
175	PAR38	Med. Skt.	14551-6	(27,89)	175PAR38/HEAT/CL	120	12	Clear Infrared	C, C-9		5%	5000		
			36403-4	(27,89)	IR175PAR	120	15	Clear Infrared	C, C-9		5%	5000		
			20838-9	(27,89)	IR175PAR	120	12	Clear Infrared	C, C-9		5%	5000		
189	PS25	Med.	39423-9		189PS25/64	125	60	Clear—Street Lighting	C, C-9	5%	6½%	3000	2900	

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INCANDESCENT LAMPS

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP* Lumens
INCANDESCENT LAMPS (BY WATTAGE) CONTINUED													
200	A21	Med.	16867-4	▲	200A/WL 6/I	120	6	Soft White Long Life	C, CC-2V		5%	1500	3100
	A23	Med.	16798-0	▲	200A/CL/LL 6/I	120	6	Clear Long Life	C, CC-8		6%	1500	3665
			36289-7	▲	200A	120	60	Frost	C, CC-8		6%	750	3800
			36291-3	▲	200A	130	60	Frost	C, CC-2V		6%	750	3600
								Ratings @ 120V=176W				2120	2700
			37427-2	▲	200A/CL	120-130	60	Clear	C, CC-2V	4%	6%	750	3600
								Ratings @ 120V=187W				1275	3130
			28176-6	▲	200A/99	120-130	60	Frost Extended Service	C, CC-2V		6%	2500	3250
								Ratings @ 120V=187W				4250	2830
			20204-4	▲	200A/99/TG 60/I	120-130	60	TuffGuard Coated Lamp Frost	C, CC-8		6%	2500	3500
			32383-2	▲	200A/99/CL	130	60	Clear	C, CC-8		6%	2500	3100
	A25	Med.	39813-1	□	200A25/35	130	60	Frost Industrial Service	C, C-9		6 1/8%	3500	2690
								Ratings @ 120V=177W				9987	2052
	BR40	Med.+++	14341-2	▲ X (87)	200BR/FL	120	24	Reflector Flood	C, C-9		6 1/2%	2000	2200
	PAR56	Mog. End Prong	28956-1	(9,59,90)	200PAR56/MFL	120	8	PAR Med. Flood	C, CC-13		5	2000	
	PS25	Med.	34974-6	▲	200/IF	250	60	Frost	C, CC-9		6 1/8%	1000	2900
			34976-1	▲	200	277	60	Clear—Mine	C, CC-9	5 1/4	6 1/8%	1000	2540
	PS30	Med.	14301-6	▲	200	120-130	60	Clear	C, C-9		8%	750	3250
								Ratings @ 120V=177W				2120	2470
			14299-1	▲	200/IF	120-130	12	Clear	C, C-9		8%	750	3200
								Ratings @ 120V=177W				2120	2430
			14298-3	▲ (66)	200/TF	120	60	Frost Silicone Coated	C, C-9		8%	750	2980
			14297-5	▲	200/99IF	120-130	60	Frost	C, C-9		8%	750	2600
								Ratings @ 120V=177W				2140	1975
			14304-0	▲	200PS30/23	120-130	60	Frost	C, C-9		8%	1000	2800
								Ratings @ 120V=177W				2830	2130
			14303-2	▲	200PS30/24	120-130	60	Clear Rough Service	C, C-9		8%	1000	2900
								Ratings @ 120V=177W				2830	2205
			14305-7	▲ (66)	200PS30/RS/TF	120-130	60	Frost Rough Service Silicone Coated	C, C-9		8%	1000	2715
												2830	2065
			20472-7	▲ (66)	200PS30/RS/TG	120-130	60	TuffGuard Frost Rough Service	C, C-9		8%	1000	
			14302-4	▲	200PS30/RS	250	60	Clear Rough Service	C, C-9		8%	1000	2600
			14300-8		200/35/TF	120	60	Frost Silicone Coated Industrial Svc.	C, C-9		8%	3500	2570
	PS30	Mog.	14296-7		200PS30/12	130	60	Clear	C, C-9	6 1/8	8%	750	3250
								Ratings @ 120V=177W				2140	2785

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INCANDESCENT LAMPS

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP* Lumens	
INCANDESCENT LAMPS (BY WATTAGE) CONTINUED														
250	BR40	Med.	38932-0	▲ (27, 87)	250BR40/I 4/I	120	4	Clear Reflector Infrared	C, C-9		6½	5000		
			20205-1	▲ (27, 87)	250BR40/I/TG 4/I	120	4	TuffGuard Coated Clr. Ref. Infrared	C, C-9		6½	5000		
			14011-1	▲ (27, 87)	250BR40/I 12/I PRO	130	12	ProPack Clear Reflector Infrared	C, C-9		6½	5000	1600	
	PAR38	Med. Skt.	37432-2	□ (53, 82)	K250PAR38/FL	120–130	12	PAR Floodlight (Krypton)	C, CC-6		5%	4000	5000 3100	
			37433-0	□ (53, 82)	K250PAR38/SP	120–130	12	PAR Spotlight (Krypton)	C, CC-6		5%	4000		3100
	R40	Med.	38933-8	▲\$ (27, 87, 89)	250R40/HR 4/I	120	4	Red Bowl Heat Ray	C, C-9		6%	5000		
300	BR40	Med.	15932-7	▲\$ (27, 87, 89)	250R40/HR/TG 4/I	120	4	TuffGuard Ctd. Red Bowl Heat Ray	C, C-9		6%	5000		
			14343-8	▲\$ (87)	300BR/FL	120–130	24	Reflector Flood	C, CC-11		6½	2000		2480
	PAR56	Mog. End Prong	23382-5		300PAR56/MFL	120	8	PAR Med. Flood	C, CC-13		5	2000		
			23405-4	(9, 55)	300PAR56/MFL	130	8	PAR Med. Flood	C, CC-13		5	2000		
			23388-2	(9, 55)	300PAR56/WFL	120	8	PAR Wide Flood	C, CC-13		5	2000		
			23410-4	(9, 55)	300PAR56/WFL	130	8	PAR Wide Flood	C, CC-13		5	2000		
			23378-3	(9, 46, 55)	300PAR56/NSP	120	8	PAR Narrow Spotlight	C, CC-13		5	2000		
	PS25	Med.	28177-4	▲	300M/IF	120–130	60	Frost	C, CC-8		6½%	750		6230
								Ratings @120V=282W				1280		5471
			38941-1	▲	300M/IF	120	6	Frost	C, CC-8		6½%	750		6300
			20206-9	▲	300M/99IF/TG	120/130	60	TuffGuard Frost Coated Lamp	C, CC-8		6½%	2500		5060
			13391-8	▲	300M	120–130	12	Clear	C, CC-8	5¼	6½%	750		6280
								Ratings @120V=265W				2120		4625
			35008-2	▲	300M/99IF	120	60	Frost Extended Service	C, CC-8		6½%	2500		4044
			35009-0	▲	300M/99IF	130	60	Frost Extended Service	C, CC-8		6½%	2500		506
								Ratings @120V=265W				7130		4044
			35007-4	▲	300M/99	130	60	Clear Extended Service	C, CC-8	5¼	6½%	2500		5300
								Ratings @120V=265W				7134		4044
	PS30	Med.	14307-3	▲	300M/PS30IF	120–130	60	Frost	C, C-9		8½%	750		5000
								Ratings @120V=265W				2120		3800
			14306-5	▲	300M/PS30	120–130	60	Clear	C, C-9		8½%	750		5000
								Ratings @120V=265W				2120		3800
			20207-7	▲	300M/PS30/IF/TG	120–130	60	TuffGuard Coated Lamp Frost	C, C-9		8½%	750		5000
						Ratings @120V=265W				2120		3800		
				14294-3		300M/PS30/35	120–130	60	Frost Industrial Service	C, C-9		8½%	3500	
											9900		2885	

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INCANDESCENT LAMPS

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
INCANDESCENT LAMPS (BY WATTAGE) CONTINUED														
300	PS35	Mog.	I4320-6		300/RSIF	120	24	Frost Rough Service	C, C-9			9%	1000	5150
			I4309-9		300/99IF	120–130	24	Frost Extended Service Ratings @ 120V=265W	C, C-9			9%	1000 2830	4500 3420
			I4321-4		300/99	120–130	24	Clear Extended Service Ratings @ 120V=265W	C, C-9			9%	2500 7134	4600 3495
			I4316-4		300/IF	120–130	12	Frost Ratings @ 120V=265W	C, C-9			9%	1000 2854	4,600 3495
			I4314-9		300	120–130	24	Clear Ratings @ 120V=265W	C, C-9	7		9%	1000 2854	4600 3495
			I4317-2		300	277	24	Clear	C, C-9	7		9%	1000	4000
			20474-3		300/IF/TG	120–130	12	TuffGuard Coated Lamp	C, C-9			9%	1000	
375	R40	Med.	I4432-9	■ ▲ (31,37,51,53)	300R/FL/I	12	24	Reflector Flood Frost—Swimming Pool	C, C-2V			6%	2000	2960
			I4429-5	■ ▲ (31,37,51,53)	300R/FL/I	120–130	24	Reflector Flood—Swimming Pool	C, CC-1 I			6%	2000	2480
	R40	Mog.	I4433-7	▲ (31,37,51,53)	300R/3FL	120–130	24	Reflector Flood	CC-1 I			7%	2000	3600
375	BR40	Med. Skt.	I4342-0	(19,31,37,87)	375BR40	120	24	Reflector Infrared Lt. Frost Industrial	C, C-7A			7%	5000	
	R40	Med. Skt.	I4574-8	(19,31,37,87)	375R40/I	120	24	Clear Reflector Infrared Industrial	C, C-7A			7%	5000	

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INCANDESCENT LAMPS

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP* Lumens
INCANDESCENT LAMPS (BY WATTAGE) CONTINUED													
400	G30	Med.	14461-8	(12, 22)	400G/FL	120–130	60	Clear Floodlight	C, C-7A	3	5½	800	6645
500	PAR64	Ext. Mog. End Prong	23417-9	(9, 55)	500PAR64/MFL	120	8	PAR Med. Flood	C, CC-13		6	2000	
			23416-1		500PAR64/NSP	120	8	PAR Narrow Spot	C, CC-13		6	2000	
	PS35	Mog.	14407-1		500	120–130	24	Clear Ratings @120V=442W	C, C-9	7	9½	1000 2830	8900 6755
			14313-1		500/IF	120–130	24	Frost Ratings @120V=442W	C, C-9		9½	1000 2830	8700 6600
			14319-8		500/99	120–130	24	Clear Extended Service Ratings @120V=442W	C, C-9	7	9½	2500 7134	8100 6145
			14318-0		500/99IF	120–130	24	Frost Extended Service Ratings @120V=442W	C, C-9		9½	2500 7134	8000 6080
	PS40	Mog.	14327-1		500		277	Clear	C, C-9		9½	1000	7000
	R40	Med.	14430-3	■▲X (31, 37, 51, 53, 12)	500R/3FL/2S	130	24	Swimming Pool Ratings @120V=442W	C, C-7A		6½	2000 5707	6120 4669
	R40	Mog.	14434-5	▲ (51, 53)	500R/3FL	120–130	24	Frost Reflector Flood	CC-11		7½	2000	5000
			14435-2	▲ (51, 53)	500R/3FL	250	24	Frost Reflector Flood Special Svc.	C, C-7A		7½	2000	4700

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INCANDESCENT LAMPS

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP* Lumens
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INCANDESCENT LAMPS (BY WATTAGE) CONTINUED

620	PS40	Mog. Pf.	14323-0		620PS40P	120	24	Code Beacon	C, C-7A	5 1/8	10 1/8	3000	9000
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PHILINEA LAMPS

60	T10	2XS14s	34589-2		60T10/White	120–130	25	White Philinea	B, C-8		19 1/8	1500	400
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LAMPS LISTED BY LUMENS

1950L	P25	Med. +	14572 2		1950L/P25/TS	120	60	Traffic Signal	C, C-9	3	4 3/4	8000	1950
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SPECIAL LIGHTING

Night Light Plug In			25139-7	(94)	BCPNL 4C7 12/1	120	12	Night Light Plug In	B, C-7A		2 1/8	3000	16
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STREET LIGHTING LAMPS, MULTIPLE

189	PS25	Med.	39423-9		189PS25/64	125	60	Clear	C, C-9	5 1/4	6 15/16	3000	2900
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STREET LIGHTING LAMPS, SERIES

6.6A	PS35	Mog.	14311-5		2500/66R	22.8	24	Clear Extended Service	C, C-2V	7	9 3/8	3000	
			14310-7		4M/66R	34	24	Clear Extended Service	C, C-2V	7	9 3/8	3000	

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INCANDESCENT LAMPS

Decoratives

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
DECORATIVES, BLISTER-CARDED (12)														
3	CA10	Cand.	16698-2	▲	BC3CA10C/CL/LL 6/1	120	6	Clear Long Life Flicker Flame	B, C-7A		4 $\frac{1}{16}$	2000		
15	BA9	Cand.	16696-6	▲	BC15BA9C/CL/LL 6/4	120	24	Clear Long Life Bent Tip	B, CC-2V, C-7A		3 $\frac{1}{8}$	2000		110
			16811-2	▲	BC15BA9C/CL/LL 6/2	120	12	Clear Long Life Bent Tip	B, CC-2V, C-7A		4 $\frac{1}{16}$	2000		110
	F10	Cand.	16830-2	▲	BC15F10C/CL/LL 6/2	120	12	Clear Long Life Flame	B, C-7A		3 $\frac{1}{16}$	2000		95
			16831-0	▲	BC15F10C/A/LL 6/2	120	12	Amber Long Life Flame	B, C-7A		3 $\frac{1}{16}$	2000		85
25	BA9	Cand.	16719-7	▲	BC25BA9C/CL/LL 6/4	120	24	Clear Long Life Bent Tip	C, CC-2V, C-7A		4 $\frac{1}{16}$	2000		150
			16806-2	▲	BC25BA9C/CL/LL 6/2	120	12	Clear Long Life Bent Tip	C, CC-2V, C-7A		4 $\frac{1}{16}$	2000		150
			16810-4	▲	BC25BA9C/F/LL 6/2	120	12	Frost Long Life Bent Tip	C, CC-2V, C-7A		4 $\frac{1}{16}$	2000		145
			13823-0	▲	BC25BA9C/CL 6/1 TP	120	6	Clear Bent Tip	C, CC-2V, C-7A		4 $\frac{1}{16}$	2000		
	BA9 $\frac{1}{2}$	Med.	16819-5	▲	BC25BA9 $\frac{1}{2}$ /CL/LL 6/2	120	12	Clear Long Life Bent Tip	C, CC-2V, C-7A		4 $\frac{1}{16}$	2000		150
	B10 $\frac{1}{2}$	Cand.	16824-5	▲	BC25B10 $\frac{1}{2}$ /C/CL/LL 6/2	120	12	Clear Long Life Blunt Tip	C, CC-2V, C-7A		4 $\frac{1}{16}$	2000		150
	B13	Med.	16827-8	▲	BC25B13/CL/LL 6/2	120	12	Clear Long Life Blunt Tip	C, C-7A		4 $\frac{1}{16}$	2000		150
	CA8	Cand.	13568-1	▲	BC25CA8C/CL/LL 6/2	120	12	Clear Petite Long Life Bent Tip	C, CC-2V		3 $\frac{1}{8}$	2000		220
	F10	Cand.	16832-8	▲	BC25F10C/CL/LL 6/2	120	12	Clear Long Life Flame	B, C-7A		3 $\frac{1}{16}$	2000		105
	F15	Med.	16833-6	▲	BC25F15/CL/LL 6/2	120	12	Clear Long Life Flame	B, C-9		4 $\frac{1}{8}$	2000		150
			16839-3	▲	BC25F15/IR/LL 6/2	120	12	Iridescent Long Life Flame	C, C-9		4 $\frac{1}{8}$	2000		150
			16841-9	▲	BC25F15/A/LL 6/2	120	12	Amber Long Life Flame	B, C-9		4 $\frac{1}{8}$	2000		130
35	G16 $\frac{1}{2}$	Cand.	16845-0	▲	BC25G16 $\frac{1}{2}$ /C/CL/LL 6/2	120	12	Clear Long Life Globe	B, C-7A		3	2000		200
			16847-6	▲	BC25G16 $\frac{1}{2}$ /C/W/LL 6/2	120	12	White Long Life Globe	B, C-7A		3	2000		165
	G16 $\frac{1}{2}$	Med.	13535-0	▲	BC25G16 $\frac{1}{2}$ /CL/LL 6/2	120	12	Clear Long Life Globe	C, CC-2V		2 $\frac{3}{8}$	2000		180
			13534-3	▲	BC25G16 $\frac{1}{2}$ /W/LL 6/2	120	12	White Long Life Globe	C, CC-2V		2 $\frac{3}{8}$	2000		160
40	BA9	Cand.	16720-5	▲	BC40BA9C/CL/LL 6/4	120	24	Clear Long Life Bent Tip	C, CC-2V, C-7A		4 $\frac{1}{16}$	2000		300
			16807-0	▲	BC40BA9C/CL/LL 6/2	120	12	Clear Long Life Bent Tip	C, CC-2V, C-7A		4 $\frac{1}{16}$	2000		300
			16809-6	▲	BC40BA9C/F/LL 6/2	120	12	Frost Long Life Bent Tip	C, CC-2V, C-7A		4 $\frac{1}{16}$	2000		295
	BA9 $\frac{1}{2}$	Med.	16760-1	▲	BC40BA9 $\frac{1}{2}$ /CL/LL 6/4	120	24	Clear Long Life Bent Tip	C, CC-2V, C-7A		4 $\frac{1}{16}$	2000		300
			16820-3	▲	BC40BA9 $\frac{1}{2}$ /CL/LL	120	12	Clear Long Life Bent Tip	C, CC-2V, C-7A		4 $\frac{1}{16}$	2000		300
			16821-1	▲	BC40BA9 $\frac{1}{2}$ /F/	120	12	Frost Long Life Bent Tip	C, CC-2V, C-7A		4 $\frac{1}{16}$	2000		295
	B10 $\frac{1}{2}$	Cand.	16825-2	▲	BC40B10 $\frac{1}{2}$ /C/CL/LL 6/2	120	12	Clear Long Life Blunt Tip	C, CC-2V		4 $\frac{1}{16}$	2000		300
			14125-9	▲	BC40B10 $\frac{1}{2}$ /C/N/LL 6/2	120	12	Natural Light Blunt Tip	C, CC-2V, C-7A		4 $\frac{1}{16}$	2000		270
	B13	Med.	16828-6	▲	BC40B13/CL/LL 6/2	120	12	Clear Long Life Blunt Tip	C, C-7A		4 $\frac{1}{16}$	2000		300
			14127-5	▲	BC40B13/N/LL 6/2	120	12	Natural Light Blunt Tip	C, CC-2V, C-7A		4 $\frac{1}{16}$	2000		270

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CA10
Cand.



BA9
Cand.



F10
Cand.



BA9 $\frac{1}{2}$
Med.



B10 $\frac{1}{2}$
Cand.



B13
Med.



CA8
Cand.



F15
Med.



G16 $\frac{1}{2}$
Cand.



G16 $\frac{1}{2}$
Med.

INCANDESCENT LAMPS

Decoratives

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.‡	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
DECORATIVES, BLISTER-CARDED CONTINUED (12)														
40	F15	Med.	16835-1	▲	BC40F15/CL/LL 6/2	120	12	Clear Long Life Flame	C, C-9		4½	2000		385
			16837-7	▲	BC40F15/IR/LL 6/2	120	12	Indescent Long Life Flame	C, C-9		4½	2000		370
			16838-5	▲	BC40F15/W/LL 6/2	120	12	White Long Life Flame	C, C-9		4½	2000		300
	G16½	Cand.	16846-8	▲	BC40G16½/C/CL/LL 6/2	120	12	Clear Long Life Globe	C, CC-2V, C-7A		3	2000		300
			16848-4	▲	BC40G16½/CW/LL 6/2	120	12	White Long Life Globe	C, CC-2V, C-7A		3	2000		245
			14129-1	▲	BC40G16½/C/NL 6/2	120	12	Natural Light Globe	C, CC-2V, C-7A		3	2000		270
	G16½	Med.	13537-6	▲	BC40G16½/CL/LL 6/2	120	12	Clear Long Life Globe	C, CC-2V, C-7A		2¾	2000		300
			13536-8	▲	BC40G16½/W/LL 6/2	120	12	White Long Life Globe	C, CC-2V, C-7A		2¾	2000		270
			14875-9	▲	BC40G16½/NL 6/2 TP	120	12	Natural Light Globe	C, CC-2V, C-7A		2¾	2000		270
			14876-7	▲	BC40G16½/IR/LL 6/2 TP	120	12	Indescent Long Life Globe	C, CC-2V, C-7A		2¾	2000		270
60	BA9	Cand.	16808-8	▲	BC60BA9C/CL 6/2	120	12	Clear Long Life Bent Tip	C, CC-2V, C-7A		4¾	2000		550
			16721-3	▲	BC60BA9C/CL/LL 6/4	120	24	Clear Long Life Bent Tip	C, CC-2V, C-7A		4¾	2000		550
			16805-4	▲	BC60BA9C/F/LL 6/2	120	12	Frost Long Life Bent Tip	C, CC-2V, C-7A		4¾	2000		545
	BA9½	Med.	16822-9	▲	BC60BA9½/CL/LL 6/2	120	12	Clear Long Life Bent Tip	C, CC-2V, C-7A		4¾	2000		550
			16823-7	▲	BC60BA9½/F/LL 6/2	120	12	Frost Long Life Bent Tip	C, CC-2V, C-7A		4¾	2000		545
	B10½	Cand.	16826-0	▲	BC60B10½/C/CL/LL 6/2	120	12	Clear Long Life Blunt Tip	C, CC-2V		4¾	2000		550
			14126-7	▲	BC60B10½/C/NL 6/2	120	12	Natural Light Blunt Tip	C, C-7A, CC-2V		4¾	2000		510
	B13	Med.	16829-4	▲	BC60B13/CL/LL 6/2	120	12	Clear Long Life Blunt Tip	C, C-7A		4¾	2000		550
			14006-1		60B13/CL PRO	130	25	ProPack Clear Blunt Tip	C, C-7A		4¾	2000		550
			14128-3	▲	BC60B13/NL 6/2	120	12	Natural Light Blunt Tip	C, C-7A, CC-2V		4¾	2000		510
	F15	Med.	16842-7	▲	BC60F15/CL/LL 6/2	120	12	Clear Long Life Flame	C, C-9		4½	2000		630
			20471-9	▲	60F15/CL/TG 24/1	120	24	TuffGuard Coated Flame	C, C-9		4½	2000		
	G16½	Cand.	16699-0	▲	BC60G16½/C/CL/LL 6/2	120	12	Clear Long Life Globe	C, CC-2V		3	2000		540
			16700-7	▲	BC60G16½/CW/LL 6/2	120	12	White Long Life Globe	C, CC-2V		3	2000		450
			14130-9	▲	BC60G16½/C/NL 6/2	120	12	Natural Light Globe	C, C-7A, CC-2V		3	2000		510
	G16½	Med.	13538-4	▲	BC60G16½/CL/LL 6/2	120	12	Clear Long Life Globe	C, CC-2V		2¾	2000		540
			13530-1	▲	BC60G16½/W/LL 6/2	120	12	White Long Life Globe	C, CC-2V		2¾	2000		420
100	F20	Med.	16844-3	▲	100F20/POSTLT/CL/LL 6/1	120	6	Clear Long Life PostLight	C, C-9		5½	4000		1250

For the most current product information, go to the e-catalog on www.philips.com
Incandescent symbols and footnotes located on page 51



INCANDESCENT LAMPS

Decoratives

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.‡	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP* Lumens	
DECORATIVES, BOXED (12)														
25	B10½	Cand.	14000-4		25B10-½C/CL PRO	130	25	ProPack Clear Blunt Tip	C, C-7A, CC-2V		4⅜	2000	150	
	BA9	Cand.	14003-8		25BA9C/CL PRO	130	25	ProPack Clear Bent Tip	C, C-7A, CC-2V		4⅜	2000	150	
			31090-4	▲	25BA9C	120	25	Clear Bent Tip	C, C-7A, CC-2V		4⅜	4000	135	
	G16½	Cand.	31133-2	▲	25G16-½C/4M	120	25	Clear Globe	C, C-7A		3	4000	170	
			14013-7		25G16-½C/CL PRO	130	25	ProPack Clear Globe	C, C-7A		3	2000	200	
40	BA9	Cand.	31093-8	▲	40BA9C/4M	120	25	Clear Bent Tip	C, C-7A, CC-2V		4⅜	4000	270	
			14004-6		40BA9C/CL PRO	130	25	ProPack Clear Bent Tip	C, C-7A, CC-2V		4⅜	2000	300	
	BA9½	Med.	14070-7		40BA9-½/CL PRO	130	25	ProPack Clear Bent Tip	C, C-7A, CC-2V		4⅜	2000	300	
	B10½	Cand.	31115-9	▲	40B10-½C/4M	120	25	Clear Blunt Tip	C, C-7A		4⅜	4000	270	
			14001-2		40B10-½C/CL PRO	130	25	ProPack Clear Blunt Tip	C, C-7A, CC-2V		4⅜	2000	300	
	G16½	Cand.	31134-0	▲	40G16-½C/4M	120	25	Clear Globe	C, C-7A, CC-2V		3	4000	250	
			14068-1		40G16-½C/CL PRO	130	25	ProPack Clear Globe	C, C-7A		3	2000	300	
	60	BA9	Cand.	31095-3	▲	60BA9C/4M	120	25	Clear Bent Tip	C, C-7A, CC-2V		4⅜	4000	530
14005-3					60BA9C/CL PRO	120	25	ProPack Clear Bent Tip	C, C-7A, CC-2V		4⅜	2000	550	
BA9½		Med.	31099-5	▲	60BA9-½/4M	120	25	Clear Bent Tip	C, C-7A		4⅜	4000	530	
B10½		Cand.	31116-7	▲	60B10-½C/4M	120	25	Clear Blunt Tip	C, C-7A		4⅜	4000	530	
			14002-0		60B10-½C/CL PRO	130	25	ProPack Clear Blunt Tip	C, C-7A		4⅜	2000	550	

DECORATIVES, ALL OTHERS

25	G25	Med.	16887-2	▲	25G25/CL/LL 12/1	120	12	Clear Long Life Globe	C, CC-6		4⅜	2000	235
			16748-6	▲	25G25/W/LL 12/1	120	12	White Long Life Globe	C, CC-6		4⅜	2000	210
			16901-1	▲	25G25/CL/LL 4/3	120	12	Clear Long Life Globe	C, CC-6		4⅜	2000	235
			16902-9	▲	25G25/W/LL 4/3	120	12	White Long Life Globe	C, CC-6		4⅜	2000	210
			14014-5		25G25/CL PRO	130	12	ProPack Clear Globe	C, CC-6		4⅜	2000	200
40	G25	Med.	16702-3	▲	40G25/CT	120	6	Clear Chrome-Top Long Life Globe	C, C-9		4⅜	2000	200
			16747-8	▲	40G25/CL/LL 12/1	120	12	Clear Long Life Globe	C, CC-6		4⅜	2000	460
			25001-9	▲	40G25/W 120V 12/1	120	12	White Globe	C, CC-6		4⅜	1500	370
			16746-0	▲	40G25/W/LL 12/1	120	12	White Long Life Globe	C, CC-6		4⅜	2000	415
			16903-7	▲	40G25/CL/LL 4/3	120	12	Clear Long Life Globe	C, CC-6		4⅜	2000	460
			16904-5	▲	40G25/W/LL 4/3	120	12	White Long Life Globe	C, CC-6		4⅜	2000	415
			13563-3	▲	40G25/NTL 6/1	120	12	Natural Light Globe	C, CC-6		4⅜	1500	320
			14016-0		40G25/W PRO	130	12	ProPack White Globe	C, CC-6		4⅜	2000	420
			14015-2		40G25/CL PRO	130	12	ProPack Clear Globe	C, CC-6		4⅜	2000	455
	G40	Med.	16857-5	▲	40G40/CL/LL 6/1	120	6	Clear Long Life Globe	C, C-9		6⅝	3000	372
			16858-3	▲	40G40/W/LL 6/1	120	6	White Long Life Globe	C, C-9		6⅝	3000	335

For the most current product information, go to the e-catalog on www.philips.com
Incandescent symbols and footnotes located on page 51



INCANDESCENT LAMPS

Decoratives

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class Filament	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
DECORATIVES, ALL OTHERS CONTINUED														
60	G25	Med.	I6896-2	▲	60G25/CL/LL 12/I	120	12	Clear Long Life Globe	C, CC-6		4 ⁷ / ₁₆	2000		775
			I6749-4	▲	60G25/W/LL 12/I	120	12	White Long Life Globe	C, CC-6		4 ⁷ / ₁₆	2000		700
			I6899-6	▲	60G25/CL/LL 4/3	120	12	Clear Long Life Globe	C, CC-6		4 ⁷ / ₁₆	2000		775
			I6900-3	▲	60G25W/LL 4/3	120	12	White Long Life Globe	C, CC-6		4 ⁷ / ₁₆	2000		700
			I4018-6	▲	60G25/W PRO	130	12	ProPack White Globe	C, CC-6		4 ⁷ / ₁₆	2000		715
			I4017-8		60G25/CL PRO	130	12	ProPack Clear Globe	C, CC-6		4 ⁷ / ₁₆	2000		780
	G30	Med.	I3562-4	▲	60G25/NTL 6/I	120	12	Natural Light Globe	C, CC-6		4 ⁷ / ₁₆	1500		560
			I6849-2	▲	60G30/W/LL 6/I	120	6	White Long Life Globe	C, C-9		5 ¹ / ₂	3000		580
	G40	Med.	I6851-8	▲	60G40/W/LL 6/I	120	6	White Long Life Globe	C, C-9		6 ¹ / ₁₆	3000		595
			I6852-6	▲	60G40/CL/LL 6/I	120	6	Clear Long Life Globe	C, C-9		6 ¹ / ₁₆	3000		665
			I4077-2		60G40/W 6/I PRO	130	6	ProPack White Globe	C, C-9		6 ¹ / ₁₆	1500		570
			I4078-0		60G40/CL 6/I PRO	130	6	ProPack Clear Globe	C, C-9		6 ¹ / ₁₆	1500		610
100	G25	Med.	I3423-9	▲	100G25/W/LL 12/I	120	12	White Long Life Globe	C, CC-6		4 ⁷ / ₁₆	2000		1180
	G30	Med.	I6850-0	▲	100G30/W/LL 6/I	120	6	White Long Life Globe	C, C-9		5 ¹ / ₂	3000		945
	G40	Med.	I6853-4	▲	100G40/W/LL 6/I	120	6	White Long Life Globe	C, C-9		6 ¹ / ₁₆	3000		985
			I6859-1	▲	100G40/CL/LL 6/I	120	6	Clear Long Life Globe	C, C-9		6 ¹ / ₁₆	3000		1100

For the most current product information, go to the e-catalog on www.philips.com

Incandescent symbols and footnotes located on page 51

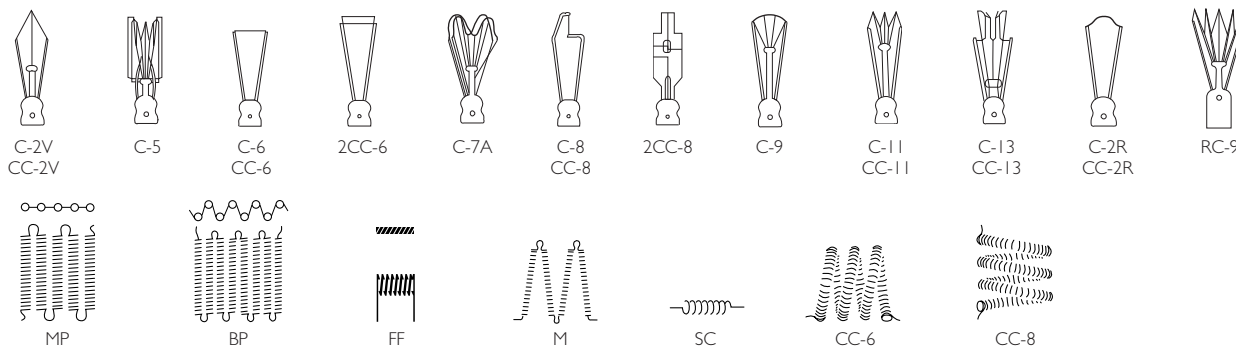


INCANDESCENT LAMPS

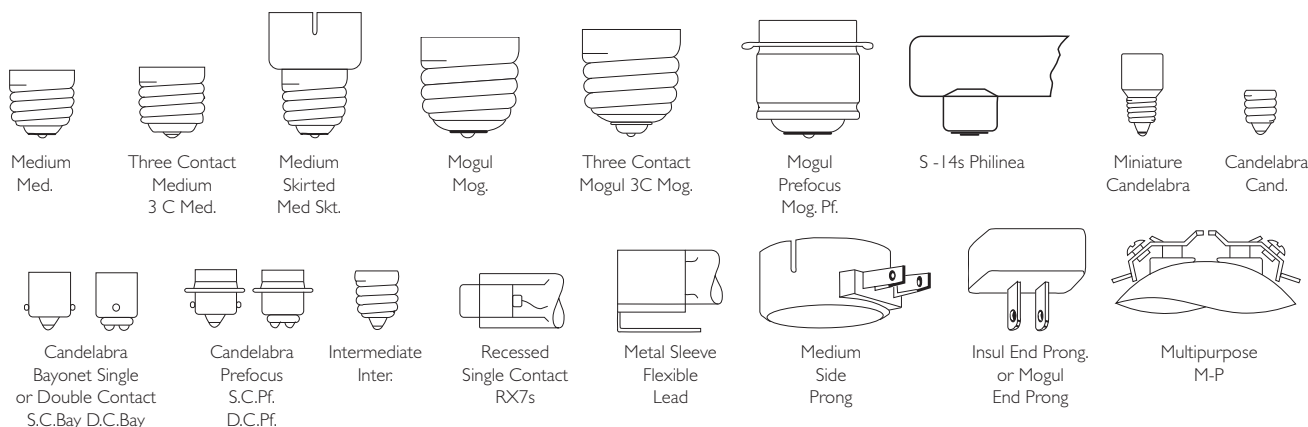
Filament Designations, Base Types and Bulb Shapes

Filament Designations (Not Actual Sizes)

Filament designations consist of a letter or letters to indicate how the wire is coiled and an arbitrary number sometimes followed by a letter to indicate the arrangement of the filament on the supports. Prefix letters include C (coil) — wire is wound into a helical coil or it may be deeply fluted; CC (coiled coil) — wire is wound into a helical coil and this coiled wire again wound into a helical coil. Some of the more commonly used types of filament arrangements are illustrated.

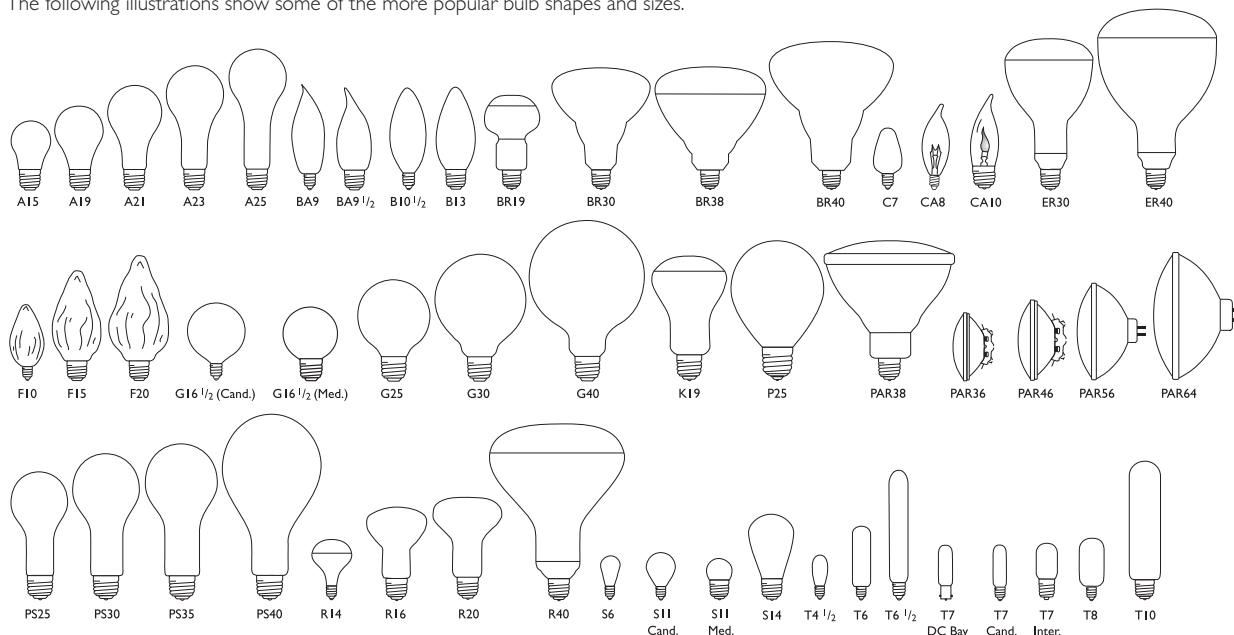


Base Types (Not Actual Sizes)



Bulb Shapes (Not Actual Sizes)

The size and shape of a bulb is designated by a letter or letters followed by a number. The letter indicates the shape of the bulb while the number indicates the diameter of the bulb in eighths of an inch. For example, "T10" indicates a tubular shaped bulb having a diameter of $\frac{10}{8}$ or $1\frac{1}{4}$ inches. The following illustrations show some of the more popular bulb shapes and sizes.



For the most current product information, go to the e-catalog on www.philips.com

□ Exclusive to Philips Lighting Company

■ Nickel plated brass base

§ Energy Saving Product

▲ Aluminum base

★ Heat resisting glass bulb

♦ Maximum Beam Candlepower

● This lamp is better for the environment because of its reduced mercury content. All Philips ALTO® lamps give you end-of-life options which can simplify and reduce your lamp disposal costs depending on your state and local regulations.

■ ENERGY STAR® Bulb: As an ENERGY STAR® Partner, Philips has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

✕ Orders will be shipped until inventory is depleted; no longer manufactured

© This Bulb Meets US Federal Minimum Efficiency Standard

† New since last printing

* Two Lamp Carded Pack.

◇ Designed for instant start operation.

‡ Quantity shown is minimum shipping container—refer to Net Price Schedule for number of lamps to qualify as a standard case.

✓ Consider the compact fluorescent lamps listed on pages 74–77 for energy savings

G = General Lighting

S = Street Lighting

▼ PAR38 (one piece)

+ Pursuant to California law, these incandescent lamps cannot be used or offered for sale for use in traffic signals in the State of California.

++ Pursuant to California law, these incandescent lamps cannot be used or offered for sale in the State of California.

+++ Effective 6/17/08, these incandescent reflectors cannot be sold or offered for sale in the United States. For more information, visit <http://www.nema.org/gov/energy/upload/NEMA-Summary-and-Analysis-of-the-Energy-Independence-and-Security-Act-of-2007.pdf>. Product manufactured prior to the effective date will be shipped until inventory is depleted.

(3) Indefinite-long life.

(4) Average laboratory life is 200 hours for vacuum cleaner and 600 hours for sewing machine service. Design life 1000 hours.

(8) Operate base down.

(9) This lamp should be shielded from moisture to prevent breakage.

(10) Operating position—horizontal.

(12) Operate base down to horizontal.

(14) Operate base up.

(18) Base is medium left hand thread.

(19) May not give satisfactory performance if any accessory equipment is attached to or touches the glass bulb.

(22) Unsatisfactory lamp operation is likely to occur in operating positions between horizontal and base up, particularly between 45° from base up and base up.

(27) Average laboratory life in excess of 5000 hours. In-service life depends upon service conditions.

(29) Suitable for indoor and outdoor service.

(31) Operate only in porcelain sockets.

(37) Should not be used in equipment where the base temperature will exceed 500°F.

(43) Unless otherwise noted, may be operated in any position, but lumen maintenance is best when operated vertically base up.

(46) Stippled, rounded cover.

(51) Light output is maintained best when operated within 45° of vertically base up.

(53) The bulb, though made of heat-resistant glass, may break if moisture falls on it. Not recommended for use in enclosed, close-fitting housings.

(55) For use only with heat resistant connector and with lamp supported by bulb rim.

(59) Life dependent upon service conditions.

(63) Design volts 145.

(64) For use only in equipment specially designed to maintain bulb and base temperature within safe limits.

(66) Silicone Coating reduces lumen output from Standard Values less than 3%.

(82) **CAUTION:** To avoid deterioration of lampholder by heat, use only heat resistant lampholders or fixtures listed by a nationally recognized electrical testing organization for use with reflector or PAR lamps.

(87) Do not allow hot bulb to come in contact with liquid or metal parts of the fixture, as glass may shatter. Do not use outdoors. Do not operate in close proximity to flammable materials or those adversely affected by heat or drying. Operate only in heat resistant sockets.

(89) **CAUTION:** Do not operate in close proximity to flammable materials or those adversely affected by heat or drying. Operate only in heat resistant sockets. **WARNING:** Use carefully. May cause serious burns. Do not use over insensitive skin areas or in the presence of poor circulation. The unattended use of infrared heat by children or incapacitated persons may be dangerous.

—Lamp should not be placed closer than 18" to the surface being irradiated.

—Do not use for therapeutic or topical applications unless recommended by a physician.

—For food warming, use only lamps with heat resisting glass.

(90) Since there is considerable heat radiation in the beam of this lamp, care should be taken against using it without suitable protection, in close proximity to combustible materials or those adversely affected by drying action.

(93) Rated average life is the length of operation (in hours) at which point an average of 50% of the lamps will still be operational and 50% will not.

(94) To prevent electrical shock, match wide blade of plug to wide slot of outlet, fully insert. Do not cover night light; overheating may occur. Do not plug in near radiator or source of heat. **WARNING:** For indoor use only.



Halogen Lighting

Put people in the best light

Halogen Lamps provide bright, white light across the product line, offer a rated average life* ranging from 2000 to 3000 hours depending upon the product, and feature excellent beam qualities for accent or ambient lighting.

Halogen Long Life Lamps feature 6000 hour rated average life*, which is double the life of comparable standard halogen lamps. These lamps are ideal for places where maintenance is expensive and disruptive. Longer life lamps also delay replacement frequency which will save on re-lamping costs.

Halogen Energy Advantage IR Lamps provide the most enhanced features of our halogen lamp line. The double-ended burner with an IR coating optimizes lumen output. Therefore you can use a lower

wattage lamp to achieve energy savings and also get a longer rated average life* than standard halogen equivalents.

Philips Halogená® Lamps, the elegant, long life alternative to ordinary household light. Halogená provides bright, white light that lasts two years.† Their long life makes them great for hard-to-reach fixtures. Fewer replacements means less hassle. But that's not all, Halogená light bulbs are also fully dimmable, which can save energy. From Decorative to PARs, from the Classic to easy grip Reflectors, Halogená light bulbs provide bright, white light, indoors or out.

* Rated average life is the length of operation (in hours) at which point an average of 50% of the lamps will still be operational and 50% will not.

† Lasts 2 years based on 4 hours average usage per day/7 days per week.

Feature Products



HALOGENÁ® ENERGY ADVANTAGE T60

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HALOGENÁ® ENERGY ADVANTAGE R20

page 56



HALOGENÁ® ENERGY ADVANTAGE BR30

page 56



HALOGEN PAR20 ELECTRONIC

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Philips halogen lamps are designed to appeal visually and save on energy costs.

Halogen Lighting

56–59	Halogená® Family
59–60	PAR16, 20, 30L
60–61	PAR30S
61	Energy Advantage IR PAR30S
62	Long Life IR PAR30S
62–63	PAR36, PAR38
63	Energy Advantage IR PAR38
64	Long Life IR PAR38
64	PAR38 Side Prong
64	PAR38 Cool Beam Reflector
64–65	MRC11, MRC16, MR16
65	MR Long Life
66	MR Energy Advantage IR
66	MR Aluminum
66	ALR, ALUline Pro III, Twistline GU10
67	Single- and Double-Ended Linear
68	Low-Voltage Capsule
69	Filament Designations
69	Base Types and Bulb Shapes
70	Footnotes

Philips halogen lamps provide
bright, crisp light
that is perfect for retail lighting.





SAVINGS WITHOUT SACRIFICE

Halogená® Energy Advantage Lamps save energy and provide longer life than standard incandescent lamps without sacrificing the qualities of traditional lamps.

HALOGEN LAMPS

Halogená® Decorative Lamps, Halogená® Natural Light Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.‡	Description	Class, Filament	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
HALOGENÁ DECORATIVE BLISTER-CARDED (96)													
25	F10½	Cand.	38903-1		BC25F10½C/HAL/CL	120	4	Clear, Blister Card	C, CC-8	4%	3000	—	300
			14450-1		BC25F10½C/HAL/CL	120	12	Clear, Blister Card	C, CC-8	4%	3000	—	300
	F10½	Med.	38906-4		BC25F10½HAL/CL	120	4	Clear, Blister Card	C, CC-8	4%	3000	—	300
			14453-5		BC25F10½HAL/CLTP	120	12	Clear, Blister Card	C, CC-8	4%	3000	—	300
	F15	Med.	38904-9		BC25F15/HAL/CL	120	4	Clear, Blister Card	C, CC-8	4½%	3000	—	300
40	CP19	Med.	36485-1	□	BC40CP19/HAL/CL	120	6	Clear, Blister Card	C, CC-8	4%	3000	—	540
	F10½	Cand.	38901-5		BC40F10½C/HAL/CL	120	4	Clear, Blister Card	C, CC-8	4%	3000	—	540
			14451-9		BC40F10½C/HAL/CL	120	12	Clear, Blister Card	C, CC-8	4%	3000	—	540
	F10½	Med.	38895-9		BC40F10½HAL/CL	120	4	Clear, Blister Card	C, CC-8	4%	3000	—	540
			14454-3		BC40F10½HAL/CLTP	120	12	Clear, Blister Card	C, CC-8	4%	3000	—	540
60	CP19	Med.	36411-7	□	BC60CP19/HAL/CL	120	6	Clear, Blister Card	C, CC-8	4%	3000	—	900
	F10½	Cand.	39029-4		BC60F10½C/HAL/CL	120	4	Clear, Blister Card	C, CC-8	4%	3000	—	900
			14452-7		BC60F10½C/HAL/CL	120	12	Clear, Blister Card	C, CC-8	4%	3000	—	900
	F10½	Med.	14455-0		BC60F10½HAL/CLTP	120	12	Clear, Blister Card	C, CC-8	4%	3000	—	900
	F15	Med.	38551-8		BC60F15/HAL/POST TOP	120	4	Clear, Blister Card	C, CC-8	4½%	3000	—	900

HALOGENÁ® CLASSIC DECORATIVES BOXED

40	G25	Med.	15024-3		40G25/CL/HAL	120	6	Clear	C, CC-8	4%	3000	—	500
			15023-5		40G25/W/HAL	120	6	White	C, CC-8	4%	3000	—	475
60	G25	Med.	15026-8		60G25/CL/HAL	120	6	Clear	C, CC-8	4%	3000	—	990
			15025-0		60G25/W/HAL	120	6	White	C, CC-8	4%	3000	—	870

HALOGENÁ® NATURAL LIGHT PLUS BLISTER-CARDED (96)

60	PAR16	Med.	14729-8		BC60PAR16/NLP/FL	120	6	Blister Card, Flood	C, CC-8	3½%	3000	1500	560
	BT15	Med.	14530-0		BC60BT15/HAL/NLP/CL	120	4	Natural Light Plus	C, CC-8	4	3000	—	650
			13958-4		BC60BT15/HAL/NLP/CL	120	10	Natural Light Plus	C, CC-8	4	3000	—	650

HALOGENÁ NATURAL LIGHT PLUS INDOOR FLOODLIGHT (97, 103, 104)

45	R20	Med.	20571-6	□	45R20/HAL/NLP/FL	120	12	Flood	C, CC-8	3½%	3000	330	415
60	BR30	Med.	20257-2	□	60BR30/HAL/NLP/FL	120	6	Flood	C, CC-8	5%	3000	380	500
	BR40	Med.	20573-2	□	60BR40/HAL/NLP/FL	120	6	Flood	C, CC-8	6%	3000	360	600

HALOGENÁ NATURAL LIGHT PLUS PAR20 LAMPS (82, 86)

50	PAR20	Med.	14728-0	\$	50PAR20/NLP/FL	120	6	Flood	C, CC-8	3%	3000	850	480
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For the most current product information, go to the e-catalog on www.philips.com
Halogen symbols and footnotes located on page 70



HALOGEN LAMPS

Halogená® Reflector Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.‡	Description	Class, Filament	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
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HALOGENÁ INDOOR FLOODLIGHT, SPOTLIGHT (97, 103, 104)

45	R20	Med.	14727-2	□	45R20/HAL/FL	120	12	Flood	C, CC-8	3 5/8	3000	450	420
60	BR30	Med.	38875-1	□	60BR30/HAL/SP	120	6	Spot	C, CC-8	5 3/8	3000	2250	700
			38849-6	□	60BR30/HAL/FL	120	6	Flood	C, CC-8	5 3/8	3000	500	700
			15879-0	□	60BR30/HAL/FL	120	20	Flood	C, CC-8	5 3/8	3000	500	700
	BR40	Med.	39174-8	□	60BR40/HAL/FL	120	6	Flood	C, CC-8	6 1/2	3000	325	750

HALOGENÁ LONG LIFE INDOOR FLOODLIGHT (97, 103, 104)

60	BR30	Med.	20579-9	□	60BR30/HAL/FL/LL	120	6	Flood	C, CC-8	5 3/8	4400	2250	700
	BR40	Med.	20580-7	□	60BR40/HAL/FL/LL	120	6	Flood	C, CC-8	6 1/2	4400	325	750

HALOGENÁ PAR16 LAMPS BLISTER-CARDED (82, 86)

45	PAR16	Med.	13412-2		BC45PAR16/HAL/FL/LL	120	6	Blister Card, Flood	C, CC-8	3 1/8	3000	1250	420
60	PAR16	Med.	13413-0		BC60PAR16/HAL/FL/LL	120	6	Blister Card, Flood	C, CC-8	3 1/8	3000	1800	580

HALOGENÁ PAR20 ELECTRONIC LAMPS (82, 86)

20	PAR20	Med.	40494-7	\$ □ †	20PAR20E/SP10	120	12	Spot	C, C-8	3 3/8	5000	6600	—
			15216-5	\$ □ †	20PAR20E/FL25	120	12	Flood	C, C-8	3 3/8	5000	1200	—

HALOGENÁ LONG LIFE PAR20 LAMPS (82, 86)

50	PAR20	Med.	13411-4		50PAR20/HAL/SP/LL	120	6	Spot	C, CC-8	3 3/8	3000	4000	520
			13410-6		50PAR20/HAL/FL/LL	120	6	Flood	C, CC-8	3 3/8	3000	900	520

HALOGENÁ PAR30 LONG LAMPS (82, 86)

50	PAR30L	Med.	13407-2	Ⓢ	50PAR30L/HAL/FL/LL	120	6	Flood	C, CC-8	4 1/8	3000	2350	590
75	PAR30L	Med.	13409-8	Ⓢ	75PAR30L/HAL/SP/LL	120	6	Spot	C, CC-8	4 1/8	3000	12,300	1000
			13408-0	Ⓢ	75PAR30L/HAL/FL/LL	120	6	Flood	C, CC-8	4 1/8	3000	4100	1000
			14719-9	Ⓢ	75PAR30L/NLP/FL	120	6	Flood	C, CC-8	4 1/8	3000	3750	940

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Halogen symbols and footnotes located on page 70



HALOGEN LAMPS

Halogená®, Halogen PAR38, PAR16, PAR20 Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.±	Description	Class, Filament	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
HALOGENÁ PAR38 LAMPS (82, 86)													
45	PAR38 Standard Reflector	Med.Skt.	13404-9	Ⓢ	45PAR38/HAL/SP/LL	120	6	Spot	C, CC-8	5%	3000	5800	530
			13401-5	Ⓢ	45PAR38/HAL/FL/LL	120	6	Flood	C, CC-8	5%	3000	2000	530
60	PAR38 Standard Reflector	Med.Skt.	14022-8	Ⓢ	60PAR38/HAL/FL/LL	120	6	Flood	C, CC-8	5%	3000	3000	800
75	PAR38 Standard Reflector	Med.Skt.	14720-7	Ⓢ	75PAR38/NLP/FL	120	6	Flood	C, CC-8	5%	3000	3600	960
90	PAR38 Standard Reflector	Med.Skt.	13405-6	Ⓢ	90PAR38/HAL/SP/LL	120	6	Spot	C, CC-8	5%	3000	14,500	1350
			13402-3	Ⓢ	90PAR38/HAL/FL/LL	120	6	Flood	C, CC-8	5%	3000	4500	1350

HALOGEN PAR38 LAMPS (82, 86)

45	PAR38	Med.Skt.	26883-9	Ⓢ	45PAR38/HAL/FL	120	6	Flood	C, CC-8	5%	2000	2000	560
90	PAR38	Med.Skt.	26877-1	Ⓢ	90PAR38/HAL/FL	120	6	Flood	C, CC-8	5%	2000	4500	1370
			13403-1	Ⓢ	90PAR38/HAL/FL/LL	120	36	Flood	C, CC-8	5%	3000	4500	1350

HALOGEN PAR16 LAMPS (82, 86)

45	PAR16	Med.	26335-0		45PAR16/HAL/SP10	120	15	Spot 10°	C, CC-8	3%	3000	3850	420
			26345-9		45PAR16/HAL/FL27	120	15	Flood 27°	C, CC-8	3%	3000	1275	420
60	PAR16	Med.	33004-3		60PAR16/HAL/SP10	120	15	Spot 10°	C, CC-8	3%	3000	5075	580
			33006-8		60PAR16/HAL/FL27	120	15	Flood 27°	C, CC-8	3%	3000	1900	580

HALOGEN PAR16 LAMPS 130V (82, 86)

45	PAR16	Med.	26348-3	\$	45PAR16/HAL/FL27	130	15	Flood 27°	C, CC-8	3%	2500	1275	450
								Ratings @ 120V=40W			5000	1040	340
60	PAR16	Med.	33005-0	\$	60PAR16/HAL/SP10	130	15	Spot 10°	C, CC-8	3%	3000	5075	580
								Ratings @ 120V=53W			6000	4000	450
			33007-6	\$	60PAR16/HAL/FL27	130	15	Flood 27°	C, CC-8	3%	3000	1900	580
								Ratings @ 120V=53W			6000	1440	450

HALOGEN PAR20 LAMPS WISO REFLECTOR (82, 86)

50	PAR20	Med.	22906-2		50PAR20/HAL/SP10	120	15	Spot 10°	C, CC-8	3%	3000	4000	530
			22911-2		50PAR20/HAL/FL25	120	15	Flood 25°	C, CC-8	3%	3000	1100	530

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Halogen symbols and footnotes located on page 70



HALOGEN LAMPS

PAR20, PAR30L, PAR30S Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.‡	Description	Class, Filament	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
HALOGEN PAR20 LAMPS 130V WISO REFLECTOR (82, 86)													
50	PAR20	Med.	13846-1	\$	50PAR20/HAL/SP10	130	15	Spot 10° Ratings @ 120V=44W	C, CC-8	3%	2000 4000	4000 3320	550 420
			22921-1	\$	50PAR20/HAL/FL25	130	15	Flood 25° Ratings @ 120V=44W	C, CC-8	3%	2000 4000	1100 880	550 420
HALOGEN PAR30L LONG NECK LAMPS WISO REFLECTOR (82, 86)													
50	PAR30L	Med.	22922-9	ⓔ	50PAR30L/HAL/SP10	120	15	Spot 10°	C, CC-8	4½	3000	5500	590
			22923-7	ⓔ	50PAR30L/HAL/WSP16	120	15	Wide Spot 16°	C, CC-8	4½	3000	3500	590
			22925-2	ⓔ	50PAR30L/HAL/FL25	120	15	Flood 25°	C, CC-8	4½	3000	2100	590
			22927-8	ⓔ	50PAR30L/HAL/WFL40	120	15	Wide Flood 40°	C, CC-8	4½	3000	950	590
75	PAR30L	Med.	22930-2	ⓔ	75PAR30L/HAL/SP10	120	15	Spot 10°	C, CC-8	4½	3000	12,300	1000
			22934-4	ⓔ	75PAR30L/HAL/WSP16	120	15	Wide Spot 16°	C, CC-8	4½	3000	6700	1000
			22941-9	ⓔ	75PAR30L/HAL/FL25	120	15	Flood 25°	C, CC-8	4½	3000	4100	1000
			22944-3	ⓔ	75PAR30L/HAL/WFL40	120	15	Wide Flood 40°	C, CC-8	4½	3000	1650	1000
HALOGEN PAR30L LONG NECK LAMPS 130V WISO REFLECTOR (82, 86)													
50	PAR30L	Med.	22926-0	\$ ⓔ	50PAR30L/HAL/FL25	130	15	Flood 25° Ratings @ 120V=44W	C, CC-8	4½	2000 4000	2300 1960	630 470
			22928-6	\$ ⓔ	50PAR30L/HAL/WFL40	130	15	Wide Flood 40° Ratings @ 120V=44W	C, CC-8	4½	2000 4000	1050 840	630 470
75	PAR30L	Med.	13848-7	\$ ⓔ	75PAR30L/HAL/SP10	130	15	Spot 10° Ratings @ 120V=66W	C, CC-8	4½	2500 5000	13,000 10,400	1050 780
			22943-5	\$ ⓔ	75PAR30L/HAL/FL25	130	15	Flood 25° Ratings @ 120V=66W	C, CC-8	4½	2500 5000	4200 3360	1050 780
			22945-0	\$ ⓔ	75PAR30L/HAL/WFL40	130	15	Wide Flood 40° Ratings @ 120V=66W	C, CC-8	4½	2500 5000	1750 1400	1050 780
HALOGEN PAR30S SHORT LAMPS WISO REFLECTOR (82, 86)													
50	PAR30S	Med.	26349-1	ⓔ	50PAR30S/HAL/SP10	120	15	Spot 10°	C, CC-8	3%	3500	5800	610
			26358-2	ⓔ	50PAR30S/HAL/FL25	120	15	Flood 25°	C, CC-8	3%	3500	1800	610
			26364-0	ⓔ	50PAR30S/HAL/WFL40	120	15	Wide Flood 40°	C, CC-8	3%	3500	900	610
60	PAR30S	Med.	35751-7	ⓔ	60PAR30S/HAL/SP10	120	15	Spot 10°	C, CC-8	3%	3000	8000	800
			35753-3	ⓔ	60PAR30S/HAL/FL25	120	15	Flood 25°	C, CC-8	3%	3000	2500	800
			35758-2	ⓔ	60PAR30S/HAL/WFL40	120	15	Wide Flood 40°	C, CC-8	3%	3000	1250	800
75	PAR30S	Med.	28479-4	ⓔ	75PAR30S/HAL/SP10	120	15	Spot 10°	C, CC-8	3%	3500	9600	1050
			28488-5	ⓔ	75PAR30S/HAL/FL25	120	15	Flood 25°	C, CC-8	3%	3500	3850	1050
			28491-9	ⓔ	75PAR30S/HAL/WFL40	120	15	Wide Flood 40°	C, CC-8	3%	3500	1650	1050

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HALOGEN LAMPS

PAR30S, Energy Advantage IR Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class, Filament	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
HALOGEN PAR30S SHORT LAMPS 130V WISO REFLECTOR (82, 86)													
50	PAR30S	Med.	26357-4	\$ ②	50PAR30S/HAL/SP10	130	15	Spot 10° Ratings @ 120V=44W	C, CC-8	3%	2000 4000	6000 5680	630 480
			26362-4	\$ ②	50PAR30S/HAL/FL25	130	15	Flood 25° Ratings @ 120V=44W	C, CC-8	3%	2000 4000	2000 1840	630 480
			26384-8	\$ ②	50PAR30S/HAL/WFL40	130	15	Wide Flood 40° Ratings @ 120V=44W	C, CC-8	3%	2000 4000	1050 816	630 480
60	PAR30S	Med.	35752-5	\$ ②	60PAR30S/HAL/SP10	130	15	Spot 10° Ratings @ 120V=53W	C, CC-8	3%	3000 6000	8000 7720	800 610
			35788-9	\$ ②	60PAR30S/HAL/FL25	130	15	Flood 25° Ratings @ 120V=53W	C, CC-8	3%	3000 6000	2500 2320	800 610
			35762-4	\$ ②	60PAR30S/HAL/WFL40	130	15	Wide Flood 40° Ratings @ 120V=53W	C, CC-8	3%	3000 6000	1250 1040	800 610
75	PAR30S	Med.	13849-5	\$ ②	75PAR30S/HAL/SP10	130	15	Spot 10° Ratings @ 120V=66W	C, CC-8	3%	2500 5000	11,700 10,320	1050 800
			13467-6	\$ ②	75PAR30S/HAL/FL25	130	15	Flood 25° Ratings @ 120V=66W	C, CC-8	3%	2500 5000	3900 3280	1050 800
			28492-7	\$ ②	75PAR30S/HAL/WFL40	130	15	Wide Flood 40° Ratings @ 120V=66W	C, CC-8	3%	2500 5000	1750 1320	1050 800

HALOGEN ENERGY ADVANTAGE IR PAR30S SHORT LAMPS FEATURING HALOGEN INFRARED TECHNOLOGY AND WISO REFLECTOR (82, 86)

LOWER WATTAGE ENERGY SAVING LAMPS													
40	PAR30S	Med.	14496-3	\$ ②	40PAR30S/IRC/HAL/SP10	120	15	Spot 10°	C, CC-8	3%	4200	8240	720
			14497-1	\$ ②	40PAR30S/IRC/HAL/FL25	120	15	Flood 25°	C, CC-8	3%	4200	2420	720
			14498-9	\$ ②	40PAR30S/IRC/HAL/WFL40	120	15	Wide Flood 40°	C, CC-8	3%	4200	1000	720
50	PAR30S	Med.	14499-7	\$ ②	50PAR30S/IRC/HAL/SP10	120	15	Spot 10°	C, CC-8	3%	4200	12,000	970
			14500-3	\$ ②	50PAR30S/IRC/HAL/FL25	120	15	Flood 25°	C, CC-8	3%	4200	3850	970
			14501-1	\$ ②	50PAR30S/IRC/HAL/WFL40	120	15	Wide Flood 40°	C, CC-8	3%	4200	1420	970
60	PAR30S	Med.	15004-5	\$ ②	60PAR30S/IRC/HAL/SP10	120	15	Spot 10°	C, CC-8	3%	4200	15,100	1140
			15007-8	\$ ②	60PAR30S/IRC/HAL/FL25	120	15	Flood 25°	C, CC-8	3%	4200	4300	1140
			14989-8	\$ ②	60PAR30S/IRC/HAL/WFL40	120	15	Wide Flood 40°	C, CC-8	3%	4200	1800	1140

HALOGEN ENERGY ADVANTAGE IR PAR30S SHORT LAMPS 130V FEATURING HALOGEN INFRARED TECHNOLOGY AND WISO REFLECTOR (82, 86)

50	PAR30S	Med.	13853-7	\$ ②	50PAR30S/IRC/HAL/SP10	130	15	Spot 10° Ratings @ 120V=44W	C, CC-8	3%	3000 6000	11,000 —	840 650
			13854-5	\$ ②	50PAR30S/IRC/HAL/FL25	130	15	Flood 25° Ratings @ 120V=44W	C, CC-8	3%	3000 6000	2800 —	840 650
			13855-2	\$ ②	50PAR30S/IRC/HAL/WFL40	130	15	Wide Flood 40° Ratings @ 120V=44W	C, CC-8	3%	3000 6000	1400 —	840 650

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HALOGEN LAMPS

Long Life IR, PAR36, PAR38 Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.‡	Description	Class, Filament	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
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HALOGEN LONG LIFE IR PAR30S SHORT LAMPS FEATURING HALOGEN INFRARED TECHNOLOGY AND WISO REFLECTOR (82, 86)

These lamps are 130V lamps run on 120V.

45	PAR30S	Med.	13850-3	\$ ⑥	45PAR30S/IRC/HAL/SP10	120	15	Spot 10°	C, CC-8	3%	6000	10,000	650
			13851-1	\$ ⑥	45PAR30S/IRC/HAL/FL25	120	15	Flood 25°	C, CC-8	3%	6000	2340	650
			13852-9	\$ ⑥	45PAR30S/IRC/HAL/WFL40	120	15	Wide Flood 40°	C, CC-8	3%	6000	1050	650

HALOGEN PAR36 LAMPS

11	PAR36	MP	15683-6		11PAR36Q/FL30	12	6	PAR, Flood	C, C-6	2%	2000	—	60
36	PAR36	MP	15685-1		36OAR36Q/FL30	12	6	PAR, Flood	C, C-6	2%	4000	—	450
50	PAR36	MP	15684-4		50PAR36Q/FL30	12	6	PAR, Flood	C, C-6	2%	4000	—	650
			13082-3		50PAR36Q/VNSP6	12	12	PAR, Narrow Spot	C, C-6	2%	4000	35,000	400

HALOGEN PAR38 LAMPS (82, 86)

45	PAR38	Med.Skt. Standard Reflector	22946-8	⑥	45PAR38/HAL/SP10	120	12	Spot 10°	C, CC-8	5%	3000	5800	530
			20231-7	⑥	45PAR38/HAL/FL25	120	12	Flood 25°	C, CC-8	5%	3000	2000	530
60	PAR38	Med.Skt. Standard Reflector	14482-4	⑥	60PAR38/HAL/SP10	120	12	Spot 10°	C, CC-8	5%	3000	10,500	800
			14483-2	⑥	60PAR38/HAL/FL25	120	12	Flood 25°	C, CC-8	5%	3000	3200	800
			14484-0	⑥	60PAR38/HAL/WFL40	120	12	W. Flood 40°	C, CC-8	5%	3000	1300	800
75	PAR38	Med.Skt. Standard Reflector	14485-7	⑥	75PAR38/HAL/SP10	120	12	Spot 10°	C, CC-8	5%	3000	13,000	1050
			14486-5	⑥	75PAR38/HAL/FL25	120	12	Flood 25°	C, CC-8	5%	3000	3800	1050
90	PAR38	Med.Skt. Standard Reflector	23069-8	⑥	90PAR38/HAL/SP10	120	12	Spot 10°	C, CC-8	5%	3000	14,500	1350
			20234-1	⑥	90PAR38/HAL/FL25	120	12	Flood 25°	C, CC-8	5%	3000	4500	1350
			27429-0	⑥	90PAR38/HAL/FL	120	15	Flood 28°	C, CC-8	5%	2000	4500	1370
			38925-4	⑥	90PAR38/HAL/FL	120	18	Flood 28°	C, CC-8	5%	2000	4500	1370
			14487-3	⑥	90PAR38/HAL/WFL40	120	12	Wide Flood 40°	C, CC-8	5%	3000	2200	1350

HALOGEN PAR38 LAMPS 130V (82, 86)

45	PAR38	Med.Skt. Standard Reflector	22947-6	\$ ⑥	45PAR38/HAL/SP10	130	12	Spot 10° Ratings @ 120V=40W	C, CC-8	5%	2500 5000	5800 4960	530 410
			22949-2	\$ ⑥	45PAR38/HAL/FL25	130	12	Flood 25° Ratings @ 120V=40W	C, CC-8	5%	2500 5000	2000 1600	530 410
60	PAR38	Med.Skt. Standard Reflector	14488-1	\$ ⑥	60PAR38/HAL/SP10	130	12	Spot 10° Ratings @ 120V=53W	C, CC-8	5%	3000 6000	10,500 8400	800 610
			14490-7	\$ ⑥	60PAR38/HAL/FL25	130	12	Flood 25° Ratings @ 120V=53W	C, CC-8	5%	3000 6000	3200 2560	800 610
			14489-9	\$ ⑥	60PAR38/HAL/FL25	130	36	Flood 25° Ratings @ 120V=53W	C, CC-8	5%	3000 6000	3200 2560	800 610
			14491-5	\$ ⑥	60PAR38/HAL/WFL40	130	12	W. Flood 40° Ratings @ 120V=53W	C, CC-8	5%	3000 6000	1300 1040	800 610

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HALOGEN LAMPS

PAR38, Energy Advantage IR PAR38 Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.†	Description	Class, Filament	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
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HALOGEN PAR38 LAMPS 130V (82, 86) CONTINUED

75	PAR38 Standard Reflector	Med.Skt.	14493-1	\$ ⑥	75PAR38/HAL/SP10	130	12	Spot 10° Ratings @ 120V=66W	C, CC-8	5%	2500 5000	14,000 11,200	1100 840
			14494-9	\$ ⑥	75PAR38/HAL/FL25	130	12	Flood 25° Ratings @ 120V=66W	C, CC-8	5%	2500 5000	4350 3480	1100 840
90	PAR38 Standard Reflector	Med.Skt.	23650-5	\$ ⑥	90PAR38/HAL/SP10	130	12	Spot 10° Ratings @ 120V=79W	C, CC-8	5%	2500 5000	14,500 13,120	1350 1020
			23651-3	\$ ⑥	90PAR38/HAL/FL25	130	12	Flood 25° Ratings @ 120V=79W	C, CC-8	5%	2500 5000	4500 3600	1350 1020
			14495-5	\$ ⑥	90PAR38/HAL/WFL40	130	12	Wide Flood 40° Ratings @ 120V=79W	C, CC-8	5%	2500 5000	2200 1760	1350 1020

HALOGEN ENERGY ADVANTAGE IR PAR38 LAMPS FEATURING HALOGEN INFRARED TECHNOLOGY AND DIOPTIC REFLECTOR (82, 86)

LOWER WATTAGE ENERGY SAVING LAMPS

40	PAR38 Dioptic Reflector	Med.Skt.	14502-9	\$ ⑥	40PAR38/IRC/HAL/SP10	120	12	Spot 10°	C, CC-8	5%	4200	11,000	720
			14503-7	\$ ⑥	40PAR38/IRC/HAL/FL25	120	12	Flood 25°	C, CC-8	5%	4200	3000	720
			14504-5	\$ ⑥	40PAR38/IRC/HAL/WFL40	120	12	Wide Flood 40°	C, CC-8	5%	4200	1050	720
50	PAR38 Dioptic Reflector	Med.Skt.	14505-2	\$ ⑥	50PAR38/IRC/HAL/SP10	120	12	Spot 10°	C, CC-8	5%	4200	15,500	970
			14506-0	\$ ⑥	50PAR38/IRC/HAL/FL25	120	12	Flood 25°	C, CC-8	5%	4200	4000	970
			14507-8	\$ ⑥	50PAR38/IRC/HAL/WFL40	120	12	Wide Flood 40°	C, CC-8	5%	4200	1500	970
60	PAR38 Dioptic Reflector	Med.Skt.	13873-5	\$ ⑥	60PAR38/IRC/HAL/SP10	120	12	Spot 10°	C, CC-8	5%	4200	15,500	1120
			13874-3	\$ ⑥	60PAR38/IRC/HAL/FL25	120	12	Flood 25°	C, CC-8	5%	4200	5100	1120
			13875-0	\$ ⑥	60PAR38/IRC/HAL/WFL40	120	12	W. Flood 40°	C, CC-8	5%	4200	1800	1120
70	PAR38 Dioptic Reflector	Med.Skt.	13861-0	\$ ⑥	70PAR38/IRC/HAL/SP10	120	12	Spot 10°	C, CC-8	5%	4200	17,800	1550
			13862-8	\$ ⑥	70PAR38/IRC/HAL/FL25	120	12	Flood 25°	C, CC-8	5%	4200	6170	1550
			13863-6	\$ ⑥	70PAR38/IRC/HAL/WFL40	120	12	W. Flood 40°	C, CC-8	5%	4200	2320	1550
100	PAR38 Dioptic Reflector	Med.Skt.	13876-8	\$ ⑥	100PAR38/IRC/HAL/SP10	120	12	Spot 10°	C, CC-8	5%	4200	26,400	2200
			13877-6	\$ ⑥	100PAR38/IRC/HAL/FL25	120	12	Flood 25°	C, CC-8	5%	4200	8500	2200
			13878-4	\$ ⑥	100PAR38/IRC/HAL/WFL40	120	12	W. Flood 40°	C, CC-8	5%	4200	3500	2200

HALOGEN ENERGY ADVANTAGE IR PAR38 LAMPS 130V FEATURING HALOGEN INFRARED TECHNOLOGY AND DIOPTIC REFLECTOR (82, 86)

60	PAR38 Dioptic Reflector	Med.Skt.	13920-4	\$ ⑥	60PAR38/IRC/HAL/SP10	130	12	Spot 10° Ratings @ 120V=53W	C, CC-8	5%	4200 8400	15,500 —	1120 880
			13879-2	\$ ⑥	60PAR38/IRC/HAL/FL25	130	12	Flood 25° Ratings @ 120V=53W	C, CC-8	5%	4200 8400	5100 —	1120 880
			13918-8	\$ ⑥	60PAR38/IRC/HAL/WFL40	130	12	W. Flood Ratings @ 120V=53W	C, CC-8	5%	4200 8400	1800 —	1120 880

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HALOGEN LAMPS

Long Life IR PAR38, PAR38, MRC11 Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.‡	Description	Class, Filament	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
HALOGEN LONG LIFE IR PAR38 FEATURING HALOGEN INFRARED TECHNOLOGY AND DIOPTIC REFLECTOR (82, 86)													
These lamps are 130V lamps run on 120V.													
45	PAR38	Med.Skt.	13919-6	\$ ⑤	45PAR38/IRC/HAL/SP10	120	12	Spot 10°	C, CC-8	5 $\frac{1}{16}$	6000	8750	675
			13856-0	\$ ⑤	45PAR38/IRC/HAL/FL25	120	12	Flood 25°	C, CC-8	5 $\frac{1}{16}$	6000	3000	675
			13857-8	\$ ⑤	45PAR38/IRC/HAL/WFL40	120	12	Wide Flood 40°	C, CC-8	5 $\frac{1}{16}$	6000	1140	675
55	PAR38	Med.Skt.	13858-6	\$ ⑤	55PAR38/IRC/HAL/SP10	120	12	Spot 10°	C, CC-8	5 $\frac{1}{16}$	6000	10,700	880
			13859-4	\$ ⑤	55PAR38/IRC/HAL/FL25	120	12	Flood 25°	C, CC-8	5 $\frac{1}{16}$	6000	3730	880
			13860-2	\$ ⑤	55PAR38/IRC/HAL/WFL40	120	12	Wide Flood 40°	C, CC-8	5 $\frac{1}{16}$	6000	1488	880
90	PAR38	Med.Skt.	13864-4	\$ ⑤	90PAR38/IRC/HAL/SP10	120	12	Spot 10°	C, CC-8	5 $\frac{1}{16}$	6000	19,500	1650
			13865-1	\$ ⑤	90PAR38/IRC/HAL/FL25	120	12	Flood 25°	C, CC-8	5 $\frac{1}{16}$	6000	7200	1650
			13866-9	\$ ⑤	90PAR38/IRC/HAL/WFL40	120	12	Wide Flood 40°	C, CC-8	5 $\frac{1}{16}$	6000	2500	1650

HALOGEN PAR38 LAMPS, MEDIUM SIDE PRONG BASE (82, 86)

60	PAR38	Med. Standard Reflector Side Prong	38887-6		60PAR38/HAL/3FL	120	12	Flood 25°	C, CC-8	4 $\frac{1}{16}$	3000	3000	770
90	PAR38	Med. Standard Reflector Side Prong	38890-0		90PAR38/HAL/3FL	130	12	Flood 25° Ratings @ 120V=79W	C, CC-8	4 $\frac{1}{16}$	2500 5000	4500 3600	1350 1020

HALOGEN PAR38 LAMPS, COOL BEAM REFLECTOR

60	PAR38	Med.Skt. Standard Reflector	38884-3	\$ ⑤	60PAR38/HAL/2FL	130	12	Flood 25° Ratings @ 120V=53W	C, CC-8	5 $\frac{1}{16}$	3000 6000	2500 2200	770 590
90	PAR38	Med.Skt. Standard Reflector	38886-8	\$ ⑤	90PAR38/HAL/2FL	130	12	Flood 25° Ratings @ 120V=79W	C, CC-8	5 $\frac{1}{16}$	2500 5000	4500 3600	1350 1020

HALOGEN MRC11 BLISTER-CARDED (92)

20	MRC11	GU4	20333-1		BC20MRC11/FL30 FTD	12	12	Blister Card, Flood 30°	C, CC-8	1 $\frac{1}{8}$	2000	500	230
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HALOGEN MRC11 (FORMERLY BRILLIANTLINE PRO) (92)

20	MRC11	GU4	37821-6		20MRC11/SP10 PRO FTB	12	50	Spot 10°	C, CC-8	1 $\frac{1}{8}$	4000	4800	310
			37822-4		20MRC11/FL30 PRO FTD	12	50	Flood 30°	C, CC-8	1 $\frac{1}{8}$	4000	690	320
35	MRC11	GU4	15219-9		35MRC11/FL30 PRO FTH	12	50	Flood 30°	C, CC-8	1 $\frac{1}{8}$	4000	1500	550

HALOGEN MRC11 LANDSCAPE (92)

10	MRC11	GU4	15675-2		10MRC11/FL30/LAND/TP	12	6	Flood 30°	C, CC-8	1 $\frac{1}{8}$	2000	550	230
20	MRC11	GU4	15676-0		20MRC11/FL30/LAND/TP	12	6	Flood 30°	C, CC-8	1 $\frac{1}{8}$	2000	500	230

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HALOGEN LAMPS

MRC16, MR16 Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.‡	Description	Class, Filament	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
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HALOGEN MRC16 DISPLAY LAMPS BLISTER-CARDED (FORMERLY ACCENTLINE) DICHROIC REFLECTOR WITH LENS (92)

20	MRC16	GU5.3	15527-5		BC20MRC16/SP10	12	18	Blister Card, Flood 36°	C, C-8	1¼	3000	550	200
			20357-0		BC20MRC16/FL36 BAB	12	12	Blister Card, Flood 36°	C, C-8	1¼	3000	550	240
			15528-3		BC20MRC16/FL36	12	18	Blister Card, Flood 36°	C, C-8	1¼	3000	—	200
35	MRC16	GU5.3	20364-6		BC35MRC16/FL36 FMW	12	12	Blister Card, Flood 36°	C, C-8	1¼	3000	1000	540
50	MRC16	GU5.3	20366-1		BC50MRC16/SP10 EXT	12	12	Blister Card, Spot 10°	C, C-8	1¼	3000	8800	790
			15529-1		BC50MRC16/SP10	12	18	Blister Card, Spot 10°	C, C-8	1¼	3000	—	600
			20365-3		BC50MRC16/FL36 EXN	12	12	Blister Card, Flood 36°	C, C-8	1¼	3000	1600	850
			14111-9		BC50MRC16/FL	12	18	Blister Card, Flood 36°	C, C-8	1¼	2000	1200	400
			20575-7		BC50MRC16/NTL/FL	12	12	Blister Card, Flood 36°	C, C-8	1¼	3000	1000	—

HALOGEN MRC16 DISPLAY LAMPS BLISTER-CARDED REFLECTOR WITH LENS (92)

20	MRC16	GU5.3	15527-5		BC20MRC16/SP10	12	18	Blister Card, Spot 10°	C, C-8	1¼	3000	550	200
			15528-3		BC20MRC16/FL36	12	18	Blister Card, Flood 36°	C, C-8	1¼	3000	—	200
50	MRC16	GU5.3	15529-1		BC50MRC16/SP10	12	18	Blister Card, Spot 10°	C, C-8	1¼	3000	—	600

HALOGEN MRC16 LANDSCAPE LAMPS BLISTER-CARDED (FORMERLY ACCENTLINE) DICHROIC REFLECTOR WITH LENS (92)

20	MRC16	GU5.3	15677-8		BC20MRC16/FL36/LAND	12	6	Blister Card, Flood 36°	C, C-8	1¼	3000	—	240
35	MRC16	GU5.3	15678-6		BC35MRC16/FL36/LAND	12	6	Blister Card, Flood 36°	C, C-8	1¼	3000	—	400
50	MRC16	GU5.3	15679-4		BC50MRC16/FL36/LAND	12	6	Blister Card, Flood 36°	C, C-8	1¼	3000	—	600

HALOGEN MR (FORMERLY ACCENTLINE) (91)

20	MR16	GU5.3	37802-6		20MR16/SP10 ESX	12	50	Spot 10°	C, C-8	1¼	3000	3400	240
			37803-4		20MR16/FL36 BAB	12	50	Flood 36°	C, C-8	1¼	3000	550	240
35	MR16	GU5.3	14055-8		35MR16/SP10	12	50	Spot 10°	C, C-8	1¼	3000	6000	510
			14056-6		35MR16/FL36	12	50	Flood 36°	C, C-8	1¼	3000	1000	540
50	MR16	GU5.3	37804-2		50MR16/SP10 EXT	12	50	Spot 10°	C, C-8	1¼	3000	8800	790
			37807-5		50MR16/NFL24 EXZ	12	50	Narrow Flood 24°	C, C-8	1¼	3000	2500	800
			37805-9		50MR16/FL36 EXN	12	50	Flood 36°	C, C-8	1¼	3000	1600	850

HALOGEN MR LONG LIFE (FORMERLY BRILLIANTLINE PRO AND CONTINUUM COLOR) (91, 92)

20	MRC16	GU5.3	37814-1		20MRC16/SP10 ESX	12	50	Spot 10°	C, C-8	1¼	6000	5000	310
			26966-2		20MRC16/NFL24 BBF	12	50	Narrow Flood 24°	C, C-8	1¼	6000	1700	320
			37815-8		20MRC16/FL36 BAB	12	50	Flood 36°	C, C-8	1¼	6000	780	320
35	MRC16	GU5.3	14054-1		35MRC16/SP10	12	50	Spot 10°	C, C-8	1¼	6000	8000	680
			14052-5		35MRC16/NFL24	12	50	Narrow Flood 24°	C, C-8	1¼	6000	3100	690
			14053-3		35MRC16/FL36	12	50	Flood 36°	C, C-8	1¼	6000	1500	710
50	MRC16	GU5.3	37816-6		50MRC16/SP10 EXT	12	50	Spot 10°	C, C-8	1¼	6000	13,000	920
			14061-6		50MRC16/SP15	12	50	Spot 15°	C, C-8	1¼	6000	8000	920
			37817-4		50MRC16/NFL24 EXZ	12	50	Narrow Flood 24°	C, C-8	1¼	6000	4400	960
			37818-2		50MRC16/FL36 EXN	12	50	Flood 36°	C, C-8	1¼	6000	2200	970
75	MR16	GU5.3	37808-3		75MR16/SP10 EYF	12	50	Spot 10°	C, C-8	1¼	6000	14,000	1320
			37809-1		75MR16/FL36 EYC	12	50	Flood 36°	C, C-8	1¼	6000	2500	1410

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HALOGEN LAMPS

MRC16, ALR, ALUline Pro III, Twistline GU10 Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.‡	Description	Class, Filament	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
HALOGEN MR ENERGY ADVANTAGE IR (FORMERLY MASTERLINE® ES IRC) (92)													
20	MRC16	GU5.3	20258-0	\$	20MRC16/IRC/ALU/SP8	12	20	Spot 8°	C, C-8	1½	5000	6000	320
			20259-8	\$	20MRC16/IRC/ALU/FL36	12	20	Flood 36°	C, C-8	1½	5000	925	325
30	MRC16	GU5.3	20260-6	\$	30MRC16/IRC/ALU/SP8	12	20	Spot 8°	C, C-8	1½	5000	10,000	560
			20261-4	\$	30MRC16/IRC/ALU/NFL24	12	20	Narrow Flood 24°	C, C-8	1½	5000	3000	570
			20262-2	\$	30MRC16/IRC/ALU/FL36	12	20	Flood 36°	C, C-8	1½	5000	1500	580
35	MRC16	GU5.3	21031-0	\$	35MRC16/IRC/SP8	12	20	Spot 8°	C, C-8	1½	5000	13,500	770
			20263-0	\$	35MRC16/IRC/ALU/SP8	12	20	Spot 8°	C, C-8	1½	5000	12,500	720
			21030-2	\$	35MRC16/IRC/NFL24	12	20	Narrow Flood 24°	C, C-8	1½	5000	4400	780
			20267-1	\$	35MRC16/IRC/ALU/NFL24	12	20	Narrow Flood 24°	C, C-8	1½	5000	4000	730
			20268-9	\$	35MRC16/IRC/ALU/FL36	12	20	Flood 36°	C, C-8	1½	5000	2000	740
			20269-7	\$	35MRC16/IRC/ALU/WFL60	12	20	Wide Flood 60°	C, C-8	1½	5000	975	750
45	MRC16	GU5.3	20271-3	\$	45MRC16/IRC/SP8	12	20	Spot 8°	C, C-8	1½	5000	14,000	1030
			20272-1	\$	45MRC16/IRC/NFL24	12	20	Narrow Flood 24°	C, C-8	1½	5000	5400	1040
			20273-9	\$	45MRC16/IRC/FL36	12	20	Flood 36°	C, C-8	1½	5000	2600	1050
			20274-7	\$	45MRC16/IRC/WFL60	12	20	Wide Flood 60°	C, C-8	1½	5000	1250	1180

HALOGEN MR ALUMINUM (FORMERLY CONTINUUM PRO) (92)

50	MRC16	GU5.3	13981-6		50 MRC16/NFL24/A	12	50	Narrow Flood 24°	C, C-8	1½	5000	3300	940
			13982-4		50 MRC16/FL36/A	12	50	Flood 36°	C, C-8	1½	5000	2100	950

CLOSED ALUMINUM REFLECTOR (ALR) LAMPS ALUMINUM REFLECTOR WITH LENS (92)

20	37mm	BA15d	32840-1		20ALR12/NSP6 GBD Clear	12	50	Clear, Narrow Spot 6°	C, C-8	1½	2000	7000	250
			34002-6		20ALR12/SP18 GBE Frost	12	50	Frost, Spot 18°	C, C-8	1½	2000	1500	250
			34003-4		20ALR12/FL32 GBF Frost	12	50	Frost, Flood 32°	C, C-8	1½	2000	750	250
50	56mm	B15d	32826-0		50ALR18/SP10 GBJ Clear	12	50	Clear, Spot 10°	C, C-8	2¼	2000	13,000	820
			34091-9		50ALR18/NFL25 GBK Frost	12	50	Frost, Narrow Flood 25°	C, C-8	2¼	2000	2500	820

ALUline Pro III

50	ALU	GU5.3	13396-6		ALU111MM 50W GU5.3 12V 8D	12	6	Spot 8°	C, C-8	2¾	3000	23,000	950
			13397-4		ALU111MM 50W GU5.3 12V 24D	12	6	Flood 24°	C, C-8	2¾	3000	4000	950
75	ALU	GU5.3	13398-2		ALU111MM 75W GU5.3 12V 8D	12	6	Spot 8°	C, C-8	2¾	3000	30,000	1575

HALOGEN MRC16 GU7 BASE (92)

35	MRC16	GU7	14851-0		35MRC16/SP10/GU7	12	20	Spot 10°	C, C-8	2	4000	8000	500
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TWISTLINE GU10 BLISTER-CARDED (98)

25	Twistline	GU10	21129-2		BC25TWISTLINE GU10/FL25	120	6	Blister Card, Flood 25°	C, C-6	2	2000	345	160
35	Twistline	GU10	20335-6		BC35TWISTLINE GU10/FL25	120	6	Blister Card, Flood 25°	C, C-6	2	2000	480	265
50	Twistline	GU10	14112-7		BC50GU10/HAL/TL	120	6	Blister Card, Flood 25°	C, C-6	2	2000	700	430
			20331-5		BC50TWISTLINE GU10/FL25	120	6	Blister Card, Flood 25°	C, C-6	2	2000	700	430
			20576-5		BC50TWISTLINE GU10/NTL/FL	120	6	Blister Card, Flood 25°	C, C-6	2	2000	1200	—

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HALOGEN LAMPS

Single-Ended Linear, Double-Ended Linear, Low-Voltage Capsule Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.‡	Description	Class, Filament	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
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HALOGEN SINGLE-ENDED LINEAR LAMPS BLISTER-CARDED (95)

50	T4	Mini-Can	20347-1		BC50Q/CL	120	12	Blister Card	C, CC-8	2¼	1000	—	500
75	T4	Mini-Can	20359-6		BC75Q/CL	120	12	Blister Card	C, CC-8	3	1000	—	1050
100	T4	Mini-Can	20350-5		BC100Q/CL ESN	120	12	Blister Card	C, CC-8	2½	1000	—	1600
150	T4	Mini-Can	20354-7		BC150Q/CL ETG	120	12	Blister Card	C, CC-8	3	1000	—	2800

HALOGEN SINGLE-ENDED LINEAR LAMPS (95)

100	T4	D.C. Bay	44278-0		100Q/CL/DC ESR	120	12	Clear	C, CC-8	2½	1000	—	1600
150	T4	Mini-Can	29856-2		150Q ETH	120	12	Frost	C, CC-8	3	1000	—	2700
			20049-3		150Q/CL	130	12	Clear	C, CC-8	3	1000	—	2800
	T4	D.C. Bay	26676-7		150Q/CL/DC ETC	120	12	Clear	C, CC-8	2½	1000	—	2800
			29850-5		150Q/DC ETF	120	12	Frost	C, CC-8	2½	1000	—	2700
250	T4	Mini-Can	14668-8		250Q/CL EHT	120	12	Clear	C, CC-8	3½	1000	—	5000
			14667-0		250Q/CL	130	12	Clear	C, CC-8	3½	1000	—	5000
	T4	D.C. Bay	14666-2		250Q/CL/DC ESS	120	12	Clear	C, CC-8	3	1000	—	5000
			14669-6		250Q/CL/DC	130	12	Clear	C, CC-8	3	1000	—	5000
500	T4	Mini-Can	38079-0		500Q/CL EVR	120	12	Clear	C, C-8	3½	2000	—	10,000
750	T5	Med. 2-Pin	26972-0		750Q/CL EHG	120	24	Clear	C, CC-8	4¼	2000	—	15,000

HALOGEN DOUBLE-ENDED LINEAR LAMP BLISTER-CARDED (99)

100	T3	RSC	20352-1		BC100T3Q/CL	120	12	Blister Card	C, C-8	3½	2000	—	1400
150	T3	RSC	20353-9		BC150T3Q/CL	120	12	Blister Card	C, C-8	3½	2000	—	2400
			20343-0		BC150T3Q/CL LONG	120	12	Blister Card	C, C-8	4½	1500	—	2400
250	T3	RSC	20360-4		BC250T3Q/CL	120	12	Blister Card	C, C-8	3½	1500	—	4000
300	T3	RSC	20355-4		BC300T3Q/CL	120	12	Blister Card	C, C-8	4½	2000	—	5200
			20336-4		BC300T3Q/CL/TP	120	12	Blister Card	C, C-8	4½	2000	—	5200
500	T3	RSC	20356-2		BC500T3Q/CL	120	12	Blister Card	C, C-8	4½	2000	—	9500
			20341-4		BC500T3Q/CL/TP	120	12	Blister Card	C, C-8	4½	2000	—	9500

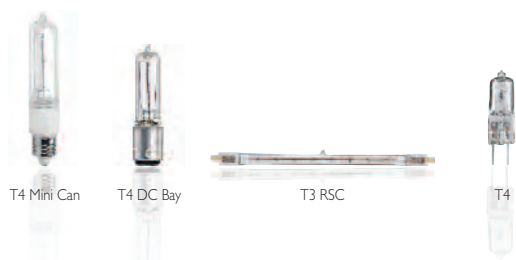
HALOGEN DOUBLE-ENDED LINEAR LAMP (99)

300	T3	RSC	39282-9		300T3Q/CL EHM	120	12	Clear	C, C-8	4½	2000	—	5200
500	T3	RSC	13223-3		500T3Q/CL	125–130	12	Clear	C, C-8	4½	2000	—	9200
			20010-5		500T3Q/CL FCL	120	12	Clear	C, C-8	4½	2000	—	9500
1000	T3	RSC	15040-9		1000T3Q/CL	240	12	Clear	C, C-8	10½	2000	—	21,500
1500	T3	RSC	15039-1		1500T3Q/CL	277	12	Clear	C, C-8	10½	2000	—	33,000
			13226-6		1500T3Q/CL	240	12	Clear	C, C-8	10½	2000	—	32,250

HALOGEN MAINS-VOLTAGE CAPSULE LAMP BLISTER-CARDED (95)

35	T4	GY8.6	20345-5		BC35W/T4/120V/CAPSULE	120	12	Blister Card	C, CC2V	1½	2500	—	400
50	T4	GY8.6	20348-9		BC50W/T4/120V/CAPSULE	120	12	Blister Card	C, C-8	2¼	2500	—	600
75	T4	GY8.6	20349-7		BC75W/T4/120V/CAPSULE	120	12	Blister Card	C, C-8	2¼	2000	—	1200
100	T4	GY8.6	20346-3		BC100W/T4/120V/CAPSULE	120	12	Blister Card	C, C-8	2¼	2500	—	1650

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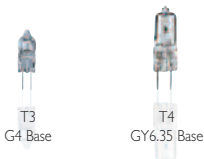


HALOGEN LAMPS

Low-Voltage Capsule Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Volts	Pkg. Qty.‡	Description	Class, Filament	MOL (In.)	Rated Avg. Life (Hrs.)(93)	Approx. MBCP*	Lumens
HALOGEN LOW-VOLTAGE CAPSULE LAMP BLISTER-CARDED (95)													
10	T3	G4	20361-2		BC10W/T3/12V	12	12	Blister Card	C, C-8	1¼	2000	—	100
20	T3	G4	20329-9		BC20W/T3/12V	12	12	Blister Card	C, C-8	1¼	2000	—	250
35	T4	GY6.35	20324-9		BC35W/T4/12V	12	12	Blister Card	C, C-8	1¾	2000	—	465
50	T4	GY6.35	20330-7		BC50W/T4/12V	12	12	Blister Card	C, C-8	1¾	2000	—	700
75	T4	GY6.35	20342-2		BC75W/T4/12V	12	12	Blister Card	C, C-8	1¾	2000	—	1100
HALOGEN LOW-VOLTAGE LANDSCAPE CAPSULE LAMP BLISTER-CARDED (95)													
10	T3	G4	20361-2		BC10W/T3/LAND/TP	12	12	Blister Card	C, C-8	1¼	2000	—	100
20	T3	G4	15681-0		BC20W/T3/LAND/TP	12	12	Blister Card	C, C-8	1¼	2000	—	250
50	T4	GY6.35	15682-8		BC50W/T4/12V	12	12	Blister Card	C, C-8	1¾	2000	—	465
HALOGEN LOW-VOLTAGE CAPSULE LAMP ALL LAMPS CONTAIN UV BLOCK AND ARE LOW PRESSURE (95)													
10	T3	G4	23262-9		10W/T3/12V	12	100	Capsule Type 13284	C, C-8	1¼	2000	—	140
20	T3	G4	23264-5		20W/T3/12V	12	100	Capsule Type 13078	C, C-8	1¼	2000	—	320
35	T4	GY6.35	29553-5		35W/T4/12V	12	100	Capsule Type 13103	C, C-8	1¾	2000	—	600
50	T4	GY6.35	23265-2		50W/T4/12V	12	100	Capsule Type 13079	C, C-8	1¾	2000	—	800

For the most current product information, go to the e-catalog on www.philips.com
 Halogen symbols and footnotes located on page 70

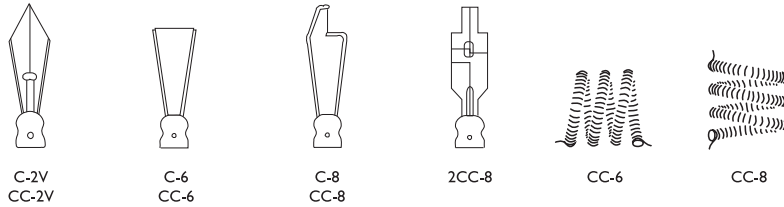


HALOGEN LAMPS

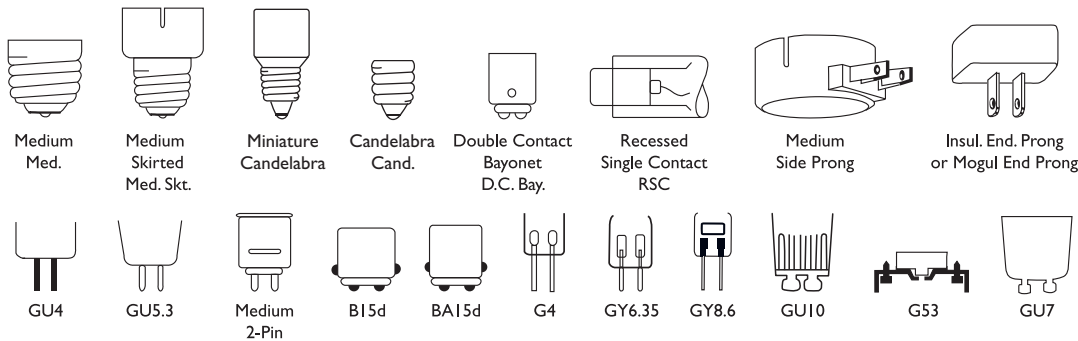
Filament Designations, Base Types and Bulb Shapes

FILAMENT DESIGNATIONS (NOT ACTUAL SIZES)

Filament Designations consist of a letter or letters to indicate how the wire is coiled and an arbitrary number sometimes followed by a letter to indicate the arrangement of the filament on the supports. Prefix letters include C (coil) — wire is wound into a helical coil or it may be deeply fluted; CC (coiled coil) — wire is wound into a helical coil and this coiled wire again wound into a helical coil. Some of the more commonly used types of filament arrangements are illustrated.



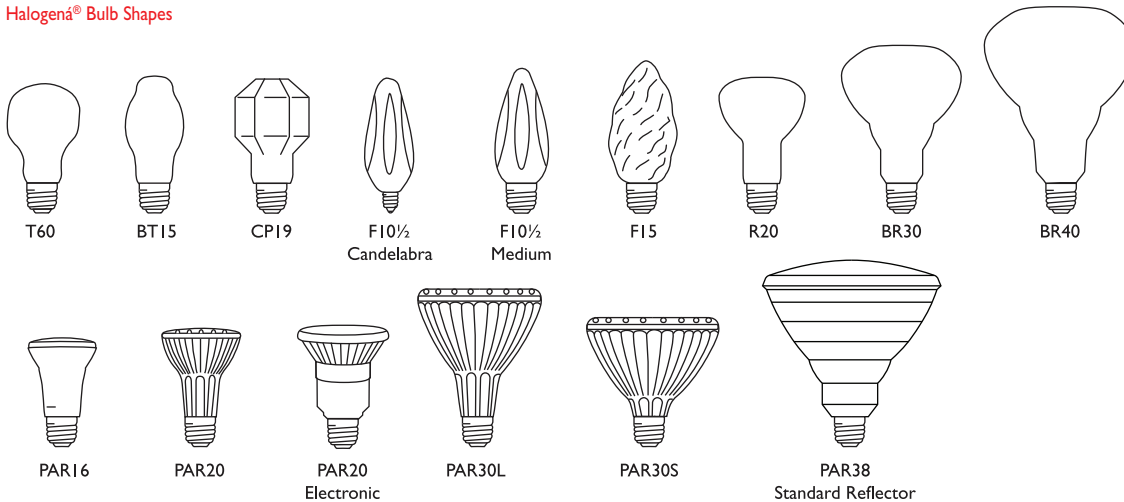
BASE TYPES (NOT ACTUAL SIZES)



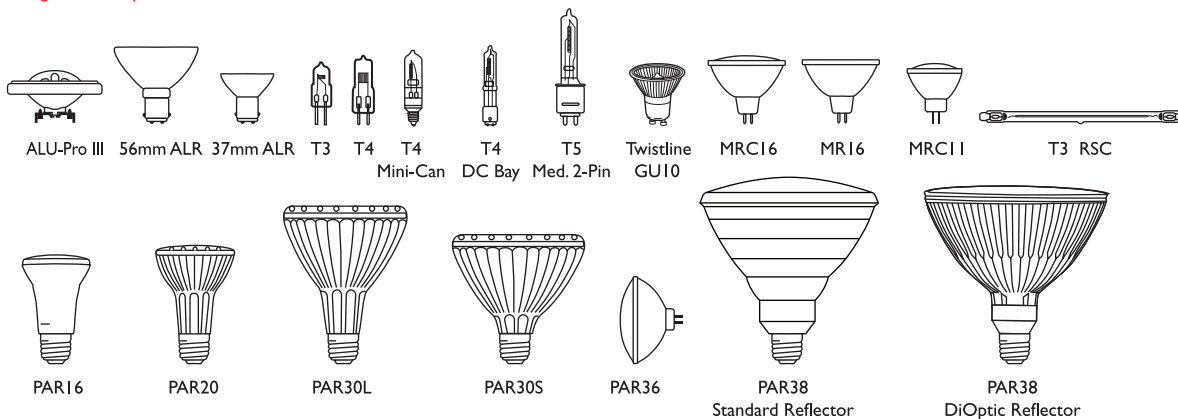
BULB SHAPES (NOT ACTUAL SIZES)

The size and shape of a bulb is designated by a letter or letters followed by a number. The letter indicates the shape of the bulb while the number indicates the diameter of the bulb in eighths of an inch. For example, "T10" indicates a tubular shaped bulb having a diameter of $\frac{10}{8}$ or $1\frac{1}{4}$ inches. The following illustrations show some of the more popular bulb shapes and sizes.

Halogen® Bulb Shapes



Halogen Bulb Shapes



HALOGEN LAMPS

For the most current product information, go to the e-catalog on www.philips.com

□ Exclusive to Philips Lighting Company

💰 Energy Saving Product

♦ Maximum Beam Candlepower

© This Bulb Meets US Federal Minimum Efficiency Standards

† New since last printing

* Two Lamp Carded Pack.

‡ Quantity shown is minimum shipping container—refer to Net Price Schedule for number of lamps to qualify as a standard case.

(82) CAUTION: To avoid deterioration of lampholder by heat, use only heat resistant lampholders or fixtures listed by a nationally recognized electrical testing organization for use with reflector or PAR lamps.

(86) PAR Halogen Caution Notice: Before using bulb, see operating instructions on inside flap. Adherence to the operating instructions will reduce the risk of personal injury or fire. The filament capsule contained inside this glass bulb is pressurized, operates at high temperature and could unexpectedly shatter. Should the outer bulb break, particles of extremely hot glass could be discharged into the fixture and/or the surrounding environment, thereby creating a risk of personal injury or fire. **Operating Instructions:** Before replacing, turn off power and let lamp cool to avoid electrical shock or burn.

- For indoor or outdoor use. A weather-protected fixture is recommended for wet locations.
- Suitable for use in open fixtures.
- Do not exceed the maximum wattage rating of the fixture.
- Do not use if outer glass is scratched or broken since it may break during operation or removal.
- If outer glass breaks the lamp may continue to light, however, immediately discontinue use.
- Due to the heat that radiates from the bulb, do not use in close proximity to combustible materials or objects susceptible to drying or fading.
- Manage in accord with disposal laws.

(91) CAUTION: Do not touch inner capsule with bare hands. Fingerprints may result in shorter life. Remove fingerprints with alcohol. **THIS LAMP IS PRESSURIZED AND COULD SHATTER** so to avoid injury and to avoid exposure to ultraviolet radiation, use only in fixtures that provide a protective shield of tempered glass. Provide adequate ventilation to ensure that seal temperature does not exceed 350°C and use only in fixtures rated for the wattage stated on this package. To avoid risks of burns or other injury, turn power off and allow lamp to fully cool before attempting to replace. Socket condition may affect lamp life. Inspect and replace socket if deterioration has occurred.

(92) CAUTION: THIS LAMP IS PRESSURIZED AND COULD SHATTER so to avoid injury and to avoid exposure to ultraviolet radiation, this lamp should be used in a fixture that provides a protective shield of tempered glass. Provide adequate ventilation to ensure that seal temperature does not exceed 350°C and use only in fixtures rated for the wattage stated on this package. To avoid risks of burns or other injury, turn power off and allow lamp to fully cool before attempting to replace. Socket condition may affect lamp life. Inspect and replace socket if deterioration has occurred.

(93) Rated average life is the length of operation (in hours) at which point an average of 50% of the lamps will still be operational and 50% will not.

(95) NOTICE: Do not touch bulb with bare hands. Fingerprints may result in shorter life. Remove fingerprints with alcohol. **CAUTION: THIS LAMP IS PRESSURIZED AND COULD SHATTER** so to avoid injury and to avoid exposure to ultraviolet radiation, use only in fixtures that provide a protective shield of tempered glass. Provide adequate ventilation to ensure that seal temperature does not exceed 350°C and use only in fixtures rated for the wattage stated on this package. To avoid risks of burns or other injury, turn power off and allow lamp to fully cool before attempting to replace. Socket condition may affect lamp life. Inspect and replace socket if deterioration has occurred.

(96) Operating Instructions: Do not use lamp in close proximity to combustible materials. If used outdoors, use in an enclosed fixture only. If used indoors, no additional shield is required. Can be operated in all positions. **CAUTION:** Read operating instructions before use. If outer glass breaks, turn power off immediately and avoid touching any metal components. To avoid potential burn and electrical shock during lamp replacement, always turn power off and let lamp cool before replacing bulb. Lasts 2 years based on 4 hours average usage per day/7 days per week.

(97) Operating Instructions: Before replacing, turn off power and let lamp cool to avoid electrical shock or burn. For indoor use only. Do not allow hot bulb to come in contact with liquid or metal parts of the fixture as glass may shatter. Do not exceed the maximum wattage rating of the fixture. Do not use if outer glass is scratched or broken since it may break during operation or removal. If outer glass breaks the lamp

may continue to light, however, immediately discontinue use. Due to the heat that radiates from the bulb, do not use in close proximity to combustible materials or objects susceptible to drying or fading. Manage in accord with disposal laws.

CAUTION: Adherence to the operating instructions will reduce the risk of personal injury or fire. The filament capsule contained inside this glass bulb is pressurized, operates at high temperature and could unexpectedly shatter. Should the outer bulb break, particles of extremely hot glass could be discharged into the fixture and/or the surrounding environment, thereby creating a risk of personal injury or fire.

(98) Note: This twistline has a GU10 base and may be used in fixtures that have either GU10 or GZ10 sockets. **Operating Instructions:** Do not use in close proximity to combustible materials or objects adversely affected by drying or fading. Can be operated in all positions. **CAUTION: THIS LAMP IS PRESSURIZED AND COULD SHATTER** so to avoid injury and to avoid exposure to ultraviolet radiation, this lamp should be used in a fixture that provides a protective shield of tempered glass. If outer glass breaks, immediately discontinue use. Always turn power off and let lamp cool before removal to avoid potential burn or electric shock.

(99) WARNING: BULB OPERATES AT VERY HIGH TEMPERATURES AND MUST BE USED PROPERLY TO AVOID/REDUCE RISK OF FIRE. Do not use bulbs greater than 300 watts in indoor residential fixtures. Use only in fixtures specifying this bulb type and that meet revised UL 153 standard for tungsten-halogen torchiere lamps. Bulb is pressurized and could shatter and should only be used in fixtures that provide a protective shield of tempered glass. To avoid exposure to ultraviolet radiation which could cause skin and eye irritation use only in fixtures that provide a protective shield of tempered glass. **NOTICE:** Do not touch bulb with bare hands. Fingerprints may result in reduced performance unless they are removed with alcohol. When operating, bulb is hot. To avoid risks of burns or injury, turn power off and allow bulb to cool before replacing. Socket conditions may affect bulb life. Inspect and replace socket if deterioration has occurred. Provide adequate ventilation to ensure that seal temperature does not exceed 350°C.

TO AVOID/REDUCE RISK OF FIRE, DO NOT USE NEAR COMBUSTIBLE MATERIALS.

(100) Product available Oct. 1, 2008

(101) Available for sale only in the state of CA

(102) Complies with CEC-140-2008-001, Part 1605.2 State Standards for Federally Regulated Appliances, Table K-3. For more information go to www.energy.ca.gov/siting/title20/.

(103) Complies with the Energy Independence and Security Act of 2007 (Public Law 110-140), Section 321—Efficient Light Bulbs.

(104) Complies with the Energy Independence and Security Act of 2007 (Public Law 110-140), Section 322—Incandescent Reflector Lamp Efficiency Standards.

Compact Fluorescent Lighting

Simply switch and save

Reliability

Did you know Philips has been making energy saving compact fluorescent lamps for over 20 years? This experience has led us to meaningful innovations that expand our product offerings. As times have changed, we continue to evolve. However, one thing remains constant: Philips Reliability.

Quality

Philips compact fluorescent lamps combine the economies of fluorescent lighting with quality light output and versatility of standard incandescent lamps. Featuring soft light and high color rendering of 82, they provide excellent light quality.

ENERGY STAR®

When you choose a Philips Energy Saver compact fluorescent that has earned the ENERGY STAR® label, you know that it meets strict energy efficiency guidelines and testing set by the Department of Energy. ENERGY STAR-qualified compact fluorescents ensure you will be doing your part in helping to promote energy efficiency. Go to www.energystar.gov for more information about ENERGY STAR.

Visit www.philips.com to learn more about Philips sustainability leadership.

To see the difference compact fluorescents can make, go to

asimpleswitch.com

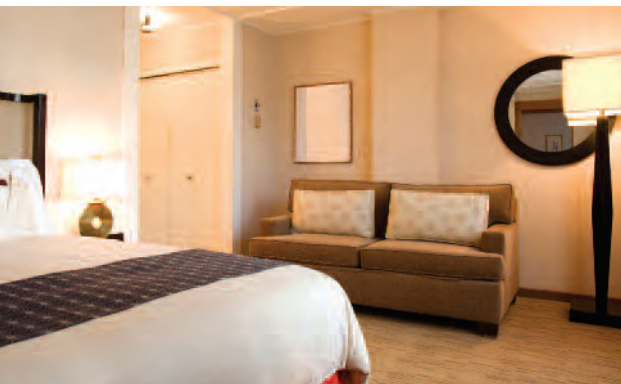
Feature Products



3-WAY TWISTER
page 74



R30, R40 AND PAR38
DIMMABLES
page 75



A SIMPLE ACT

LIKE SWITCHING TO AN ENERGY SAVING LAMP, CAN HAVE A POWERFUL IMPACT ON OUR EFFORTS TO STEM GLOBAL WARMING.

Compact Fluorescent Lighting

Energy Saver CFLi Lamps

74	Energy Saver Twisters
74	Energy Saver 3-Ways
75	Energy Saver Genies
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Non-Integrated, Low Mercury, Energy Saving Lamps

80	PL-S Lamps
81	PL-C Cluster 2-Pin Lamps
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83	PL-L Long
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86	Footnotes

SAVING ON ENERGY COSTS IS AS EASY AS
**CHANGING A
LIGHT BULB**





Sustainability policy at Philips Lighting:

Philips Lighting is committed to providing lighting solutions that improve people's lives and are environmentally sound. This philosophy is a cornerstone of our sustainability policy, which balances social, environmental and economic action.

COMPACT FLUORESCENT LAMPS

Energy Saver Twisters

Watts	Inc. Equiv. Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Type	Case Qty.	MOL (In.)	Rated Avg. Life (Hrs.) (230)	Approx. Initial Lumens (231)	CRI
ENERGY SAVER TWISTER												
5	25	Twister	Med.	14792-6	\$ ■	EL/mdT 5W	Box	6	4	12,000	315	82
9	40	Twister	Med.	14793-4	\$ ■	EL/mdT 9W	Box	6	3½	12,000	550	82
11	40	Twister	Med.	13804-0	\$ ■	EL/mdT 11W	Box	6	4¼	10,000	700	82
				13991-5	\$ ■	BC-EL/mdT 11W	Blister	6	4⅝	8000	675	82
13	60	Twister	Med.	15638-0	\$ ■ †	EL/mdT 13W	Box	6	4¼	10,000	900	82
				22492-3	±	EL/mdT 13W 3.5K	Box	6	4¼	10,000	900	82
				21758-8	\$ T	EL/mdT 13W 4K	Box	6	4¼	12,000	900	82
				21759-6	\$ T	EL/mdT 13W 5K	Box	6	4¼	12,000	900	82
				22496-4	±	EL/mdT 13W 6.5K	Box	6	4¼	10,000	900	82
				20907-2	\$ ■ †	BC-EL/mdT 13W	Blister	6	4¼	10,000	900	82
				21929-5	\$ ■ †	BC-EL/mdT 13W 3PK	Blister	6	4¼	10,000	900	82
18	75	Twister	Med.	20286-1	\$ ■ †	EL/mdT 18W	Box	6	5¼	12,000	1250	82
19	75	Twister	Med.	20909-8	\$ ■ †	BC-EL/mdT 19W	Blister	6	4¼	10,000	1200	82
23	100	Twister	Med.	15697-5	\$ ■ †	EL/mdT 23W	Box	6	4¼	10,000	1600	82
				22497-2	± §	EL/mdT 23W 3.5K	Box	6	4¼	10,000	1600	82
				22498-8	± §	EL/mdT 23W 4.1K	Box	6	4¼	10,000	1500	82
				22501-1	± §	EL/mdT 23W 5K	Box	6	4¼	10,000	1500	82
				22404-5	± §	EL/mdT 23W 6.5K	Box	6	4¼	10,000	1500	82
				20910-6	\$ ■ †	BC-EL/mdT 23W	Blister	6	4¼	10,000	1600	82
				20587-2	\$ ■ †	BC-EL/mdT 23W 3PK	Blister	6	4¼	10,000	1600	82
27	100	Twister	Med.	13715-8	\$ ■	EL/mdT 27W	Box	6	5¼	10,000	1750	82
				14788-4	\$ ■	EL/mdT 27W 4K	Box	6	5¼	12,000	1930	82
				14789-2	\$ ■	EL/mdT 27W 5K	Box	6	5¼	12,000	1850	82
32	100	Twister	Med.	15639-8	\$ ■ †	EL/mdT 32W	Box	5	5¼	12,000	2400	82
42	150	Twister	Med.	13948-5	\$ ■	EL/dT42W	Box	6	6¼	12,000	2800	82
				13947-7	\$ T	BC-EL/dT 42W	Blister	6	7½	10,000	2800	82

ENERGY SAVER THREE-WAY

11-23-34	50-100-150	Twister	Med.	21486-6	\$ T †	BC-Helix Twist EL/3W 11-23-34	Blister	6	7	10,000	700-1500-2200	82
				21193-8	\$ ■ †	Helix Twister EL/3W 11-23-34	Box	6	6¼	10,000	700-1500-2200	82

For the most current product information, go to the e-catalog on www.philips.com
Compact fluorescent symbols and footnotes located on page 86



COMPACT FLUORESCENT LAMPS

Energy Saver GU24, Genie, Soft White and Reflectors

Watts	Inc. Equiv. Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Type	Case Qty.	MOL (In.)	Rated Avg. Life (Hrs.) (230)	Approx. Initial Lumens (231)	CRI
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ENERGY SAVER UNIVERSAL GENIE

14	60	SLS Genie Med.		21053-4	\$ T †	14W Genie Pro Pack 6PK	Box	4	5 1/2	8000	800	82
18	75	SLS Genie Med.		21055-9	\$ †	18W Genie Pro Pack 6PK	Box	4	5 1/2	8000	1100	82

ENERGY SAVER GU24 BASE TWISTER *AVAILABLE AUGUST 2008

13	60	GU24 Twist. GU24		22285-1	\$ † ■	EL/mdT 13W GU24	Box	6	3 3/4	10,000	900	82
18	75	GU24 Twist. GU24		22286-9	\$ † ■	EL/mdT 18W GU24	Box	6	3 3/4	10,000	1200	82
23	100	GU24 Twist. GU24		22287-7	\$ † ■	EL/mdT 23W GU24	Box	6	4 1/4	10,000	1600	82

ENERGY SAVER SOFT WHITE PLUS

9	40	SWP Med.		15699-1	\$ ■ †	EL/A SWP 9W	Box	6	4	8000	450	82
				21207-6	\$ ■ †	BC-EL/A SWP 9W	Blister	4	4 1/4	8000	450	82
14	60	SWP Med.		15700-8	\$ ■ †	EL/A SWP 14W	Box	6	4 1/4	8000	800	82
				22523-5	±	EL/A SWP 14W 3.5K	Box	6	4 1/4	8000	800	82
				22562-8	± §	EL/A SWP 14W 4.1K	Box	6	4 1/4	8000	800	82
				22530-0	± §	EL/A SWP 14W 5K	Box	6	4 1/4	8000	760	82
				22531-8	± §	EL/A SWP 14W 6.5K	Box	6	4 1/4	8000	800	82
				21208-4	\$ ■ †	BC-EL/A SWP 14W	Blister	4	4 1/4	8000	800	82
				21209-2	\$ ■ †	BC-EL/A SWP 14W 3PK	Blister	4	4 1/4	8000	800	82
				21214-2	\$ †	BC-EL/A SWP 14W Bug-A-Way®	Blister	4	4 1/4	8000	600	N/A
				20371-1	\$ †	EL/A SWP 14W Bug-A-Way	Box	6	4 1/4	8000	600	N/A
20	75	SWP Med.		20080-8	\$ T †	EL/A SWP 20W	Box	6	5 1/2	8000	1100	82

ENERGY SAVER REFLECTOR FLOOD

14	50	R20 Med.		15701-6	\$ ■ †	EL/A R20 14W	Box	6	4 1/4	8000	500	82
				21215-9	\$ ■ †	BC-EL/A R20 14W	Blister	3	4 1/4	8000	500	82
				21219-1	\$ ■ †	BC-EL/A R20 14W 2PK	Blister	3	4 1/4	8000	500	82
15	75	R30 Med.		15703-2	\$ ■ †	EL/A R30 15W	Box	6	5 1/2	10,000	750	82
16	75	R30 Med.		21220-9	\$ ■	BC-EL/A R30 16W	Blister	2	5 1/2	8000	750	82
				15279-3	\$ ■	BC-EL/A R30 16W 2PK	Blister	2	5 1/2	8000	750	82
				22513-6	±	EL/A R30 16W 3.5K	Box	6	5 1/2	8000	750	82
				22515-1	±	EL/A R30 16W 4.1K	Box	6	5 1/2	8000	700	82
				22516-9	±	EL/A R30 16W 5K	Box	6	5 1/2	8000	700	82
				22521-9	± §	EL/A R30 16W 6.5K	Box	6	5 1/2	8000	750	82
23	120	R40 Med.		15702-4	\$ ■ †	EL/A R40 23W	Box	6	6 1/2	8000	1300	82
				21223-3	\$ ■ †	BC-EL/A R40 23W	Blister	2	6 1/2	8000	1250	82
	90	PAR38 Med.		15715-6	\$ ■ †	EL/A PAR38 23W	Box	6	6 1/2	8000	1300	82
				21240-7	\$ ■ †	BC-EL/A PAR38 23W	Blister	2	6 1/2	8000	1250	82

ENERGY SAVER DIMMABLE REFLECTOR FLOOD

16	65	R30 Dim Med.		13707-5	\$ ■ ●	EL/A R30 16W DIMM	Box	6	5 1/2	8000	630	82
20	75	R40 Dim Med.		13708-3	\$ ■ ●	EL/A R40 20W DIMM	Box	6	6 1/2	8000	900	82
		PAR38 Dim Med.		14644-9	\$ ■ ●	EL/A PAR38 20W DIMM	Box	6	6 1/2	8000	850	82

For the most current product information, go to the e-catalog on www.philips.com
Compact fluorescent symbols and footnotes located on page 86



COMPACT FLUORESCENT LAMPS

Energy Saver Decorative

Watts	Inc. Equiv. Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Type	Case Qty.	MOL (In.)	Rated Avg. Life (Hrs.) (230)	Approx. Initial Lumens (231)	CRI
ENERGY SAVER FAN												
5	25	Fan	Med.	15698-3	\$T†	EL/A FAN 5W	Box	6	3%	8000	250	82
				21251-4	\$■†	BC-EL/A FAN 5W	Blister	4	3%	8000	215	82
				21252-2	\$■†	BC-EL/A FAN 5W 3PK	Blister	4	3%	8000	215	82
9	40	Fan	Med.	21248-0	\$■†	BC-EL/A FAN 9W	Blister	4	4%	8000	450	82
				21250-6	\$■†	BC-EL/A FAN 9W 3PK	Blister	4	4%	8000	450	82

ENERGY SAVER CANDLE

5	25	mCan	Cand.	14791-8	\$T	EL/A mCan 5W mCan	Box	6	5%	8000	200	82
		Can	Med.	14790-0	\$■	EL/A mCan 5W Can	Box	6	4%	8000	200	82
9	40	mCan	Cand.	20284-6	\$T	EL/A mCan 9W	Box	6	4%	8000	425	82
				21243-1	\$	BC-EL/A mCan 9W	Blister	4	4%	8000	425	82
				21783-6	\$	BC-EL/A mCan 9W 3PK	Blister	4	4%	8000	425	82
		Can	Med.	20280-4	\$†	EL/A Can 9W	Box	6	4%	8000	425	82
				21244-9	\$†	BC-EL/A Can 9W	Blister	4	4%	8000	425	82
				21245-6	\$†	BC-EL/A Can 9W 3PK	Blister	4	4%	8000	425	82

ENERGY SAVER GLOBE

9	40	G16½	Med.	15717-2	\$■†	EL/A G18 9W	Box	6	3%	8000	380	82
				21237-3	\$■†	BC-EL/A G18 9W	Blister	4	3%	8000	400	82
				21238-1	\$■†	BC-EL/A G18 9W 3PK	Blister	4	4%	8000	400	82
		G25	Med.	15718-0	\$■†	EL/A G25 9W	Box	6	4%	8000	500	82
				21232-4	\$■†	BC-EL/A G25 9W 3PK	Blister	4	4%	8000	500	82
				21224-1	\$■†	BC-EL/A G25 9W	Blister	4	4%	8000	500	82
16	60	G30	Med.	21106-0	\$■†	EL/A G30 16W	Box	6	5%	10,000	980	82
23	75	G40	Med.	21107-8	\$■†	EL/A G40 23W	Box	6	6%	8000	1560	82

For the most current product information, go to the e-catalog on www.philips.com
Compact fluorescent symbols and footnotes located on page 86



COMPACT FLUORESCENT LAMPS

Energy Saver Outdoor, Universal and Circline

Watts	Inc. Equiv. Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Type	Case Qty.	MOL (In.)	Rated Avg. Life (Hrs.) (230)	Approx. Initial Lumens (231)	CRI
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ENERGY SAVER OUTDOOR

14	60	Outdoor	Med.	21246-4	\$ ■ †	BC-EL/O Outdoor Post 14W	Blister	4	5%	8000	720	82
				20285-3	\$ ■ †	EL/O Outdoor Post 14W	Box	6	5%	8000	800	82
23	90	PAR38	Med.	15716-4	\$ ■ †	EL/A PAR38 23W 2-piece	Box	6	5%	10,000	1300	82

ENERGY SAVER UNIVERSAL

14	60	SLS	Med.	14691-0	\$ ■ ●	Universal 14W ALTO	Box	6	4 ⁵ / ₁₆	12,000	860	82
20	75	SLS	Med.	13077-3	\$ T ●	Universal 20W ALTO	Box	6	5%	15,000	1200	82
25	100	SLS	Med.	13574-9	\$ T ●	Universal 25W ALTO	Box	6	6 ³ / ₁₆	15,000	1750	82
34	120	SLS	Med.	37082-5	\$ ■ ●	Universal 34W Table ALTO	Box	6	6 ³ / ₁₆	7000	2100	82

ENERGY SAVER CIRCLINE ADAPTER SYSTEM

32	135	FC7T5	Med.	15719-8	\$ T †	32W Two Piece Circline	Box	4	5 ¹ / ₂	12,000	2200	82
40	150	FC9T5	Med.	15720-6	\$ T †	40W Two Piece Circline	Box	4	7 ¹ / ₂	12,000	2800	82

For the most current product information, go to the e-catalog on www.philips.com
Compact fluorescent symbols and footnotes located on page 86



COMPACT FLUORESCENT LAMPS

Energy Saver Base Types and Bulb Shapes

Energy Saver Compact Fluorescent Base Types (Not Actual Sizes)



Med.
Medium



Cand.
Candelabra



GU24

Energy Saver Compact Fluorescent Bulb Shapes (Not Actual Sizes)



EL/mdT



EL/DT



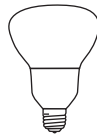
EL/3W



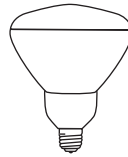
GU24



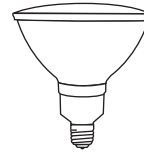
EL/A R20



EL/A R30



EL/A R40



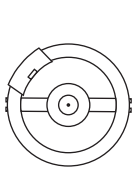
EL/A PAR38



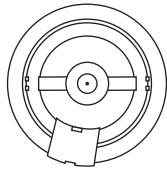
EL/A FAN



EL/A SWP



FC7T5



FC9T5



EL/A
Can



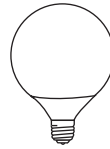
EL/A
mCan



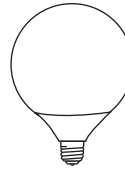
EL/A G16½



EL/A G25



EL/A G30



EL/A G40



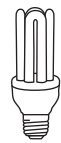
EL/O



EL/A
SWP BAW



SLS
EL/T



Genie

Compact Fluorescent Lighting

Non-integrated, low mercury, energy saving lamps

Philips Linear Compact Fluorescent

Lamps offer designers, specifiers and end-users new levels of efficiencies and versatility in sizes, configurations and application possibilities. With so many elegant fixtures available to complement their small size, high light output and advanced technology, Philips Energy Advantage lamps are fast becoming the preferred choice when maximum efficiency and sleek design solutions are required.

Feature Products



PL-T 4-PIN ENERGY
ADVANTAGE LAMP

page 82

PL-L LAMP

page 83



Sustainability is all about performance—

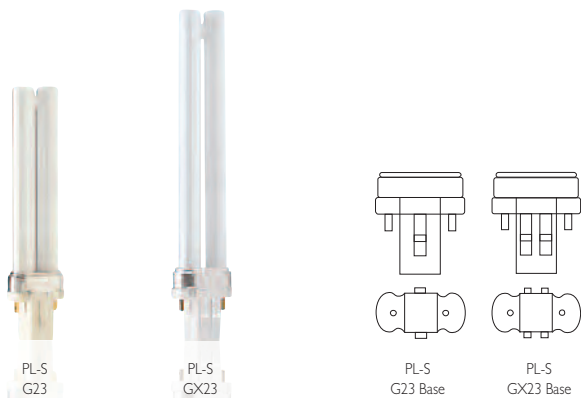
in energy efficiency, lighting levels, user comfort, environmental impact and more. It means achieving the best output with the fewest resources.

COMPACT FLUORESCENT LAMPS

PL-S Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Generic Designation	Pkg. Qty.	Desc.	MOL (In.)	Rated Avg. Life (Hrs.) (230)	Approx. Initial Lumens (231)	Design Lumens (208)	CRI
PL-S (SHORT) FLUORESCENT LAMPS													
5	PL-S	G23	I4671-2	\$ ●	PL-S 5W/827/2P/ALTO	CFT5W/G23/827	10	2700K	4 $\frac{5}{32}$	10,000	250	210	82
			I4868-4	\$ ●	PL-S 5W/841/2P/ALTO	CFT5W/G23/841	10	4100K	4 $\frac{5}{32}$	10,000	250	210	82
7	PL-S	G23	I4871-8	\$ ●	PL-S 7W/827/2P/ALTO	CFT7W/G23/827	10	2700K	5 $\frac{1}{32}$	10,000	400	360	82
			I4872-6	\$ ●	PL-S 7W/835/2P/ALTO	CFT7W/G23/835	10	3500K	5 $\frac{1}{32}$	10,000	400	360	82
			I4873-4	\$ ●	PL-S 7W/841/2P/ALTO	CFT7W/G23/841	10	4100K	5 $\frac{1}{32}$	10,000	400	360	82
			I4874-2	\$ ● X	PL-S 7W/850/2P/ALTO	CFT7W/G23/850	10	5000K	5 $\frac{1}{32}$	10,000	380	340	82
			I4874-2	\$ ●	PL-S 7W/827/2P/ALTO	CFT7W/G23/827	10	2700K	6 $\frac{1}{32}$	10,000	600	540	82
9	PL-S	G23	I4867-6	\$ ●	PL-S 9W/827/2P/ALTO	CFT9W/G23/827	10	2700K	6 $\frac{1}{32}$	10,000	600	540	82
			I4869-2	\$ ●	PL-S 9W/835/2P/ALTO	CFT9W/G23/835	10	3500K	6 $\frac{1}{32}$	10,000	600	540	82
			I4870-0	\$ ●	PL-S 9W/841/2P/ALTO	CFT9W/G23/841	10	4100K	6 $\frac{1}{32}$	10,000	600	540	82
			I4680-3	\$ ● X	PL-S 9W/850/2P/ALTO	CFT9W/G23/850	10	5000K	6 $\frac{1}{32}$	10,000	570	510	82
13	PL-S	GX23	I4681-1	\$ ●	PL-S 13W/827/2P/ALTO	CFT13W/GX23/827	10	2700K	7 $\frac{1}{64}$	10,000	825	740	82
			I4682-9	\$ ●	PL-S 13W/827/2P/ALTO/BULK	CFT13W/GX23/827	50	2700K	7 $\frac{1}{64}$	10,000	825	740	82
			I4683-7	\$ ●	PL-S 13W/830/2P/ALTO	CFT13W/GX23/830	10	3000K	7 $\frac{1}{64}$	10,000	825	740	82
			I4684-5	\$ ●	PL-S 13W/835/2P/ALTO	CFT13W/GX23/835	10	3500K	7 $\frac{1}{64}$	10,000	825	740	82
			I4685-2	\$ ●	PL-S 13W/841/2P/ALTO	CFT13W/GX23/841	10	4100K	7 $\frac{1}{64}$	10,000	825	740	82
			I4686-0	\$ ●	PL-S 13W/841/2P/ALTO/BULK	CFT13W/GX23/841	50	4100K	7 $\frac{1}{64}$	10,000	825	740	82
			I4687-8	\$ ●	PL-S 13W/850/2P/ALTO	CFT13W/GX23/850	10	5000K	7 $\frac{1}{64}$	10,000	800	720	82
			I4688-6	\$ ●	PL-S 13W/850/2P/ALTO/BULK	CFT13W/GX23/850	50	5000K	7 $\frac{1}{64}$	10,000	800	720	82

For the most current product information, go to the e-catalog on www.philips.com
 Compact fluorescent symbols and footnotes located on page 86



COMPACT FLUORESCENT LAMPS

PL-C Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Generic Designation	Pkg. Qty.	Desc.	MOL (In.)	Rated Avg. Life (Hrs.) (230)	Approx. Initial Lumens (231)	Design Lumens (208)	CRI
PL-C (CLUSTER) 2-PIN FLUORESCENT LAMPS													
13	PL-C	GX23-2	38310-9	\$ ●	PL-C 13W/827/USA/ALTO	CFQ13W/GX23/827	10	2700K	4%	10,000	860	735	82
			38311-7	\$ ●	PL-C 13W/830/USA/ALTO	CFQ13W/GX23/830	10	3000K	4%	10,000	860	735	82
			38312-5	\$ ●	PL-C 13W/835/USA/ALTO	CFQ13W/GX23/835	10	3500K	4%	10,000	860	735	82
			38313-3	\$ ●	PL-C 13W/841/USA/ALTO	CFQ13W/GX23/841	10	4100K	4%	10,000	860	735	82
18	PL-C	G24d-2	38314-1	\$ ●	PL-C 13W/827/ALTO	CFQ13W/G24d/827	10	2700K	5%	10,000	900	770	82
			38315-8	\$ ●	PL-C 13W/830/ALTO	CFQ13W/G24d/830	10	3000K	5%	10,000	900	770	82
			38316-6	\$ ●	PL-C 18W/827/ALTO	CFQ18W/G24d/827	10	2700K	6	10,000	1250	1070	82
			38317-4	\$ ●	PL-C 18W/830/ALTO	CFQ18W/G24d/830	10	3000K	6	10,000	1250	1070	82
26	PL-C	G24d-3	38318-2	\$ ●	PL-C 18W/835/ALTO	CFQ18W/G24d/835	10	3500K	6	10,000	1250	1070	82
			38319-0	\$ ●	PL-C 18W/841/ALTO	CFQ18W/G24d/841	10	4100K	6	10,000	1250	1070	82
			38321-6	\$ ●	PL-C 26W/827/ALTO	CFQ26W/G24d/827	10	2700K	6 1/2	10,000	1800	1545	82
			38322-4	\$ ●	PL-C 26W/830/ALTO	CFQ26W/G24d/830	10	3000K	6 1/2	10,000	1800	1545	82
			38323-2	\$ ●	PL-C 26W/835/ALTO	CFQ26W/G24d/835	10	3500K	6 1/2	10,000	1800	1545	82
			38324-0	\$ ●	PL-C 26W/841/ALTO	CFQ26W/G24d/841	10	4100K	6 1/2	10,000	1800	1545	82

PL-C (CLUSTER) 2-PIN FLUORESCENT LAMPS, 15MM TUBE DIAMETER (222)

20	PL-C	GX32d-2	20478-4	\$	PL-C 15mm/22W/827	CFQ20W/GX32d/827	40	2700K	6	10,000	1200	995	82
27	PL-C	GX32d-3	20479-2	\$	PL-C 15mm/28W/827	CFQ27W/GX32d/827	40	2700K	6 1/2	10,000	1600	1325	82

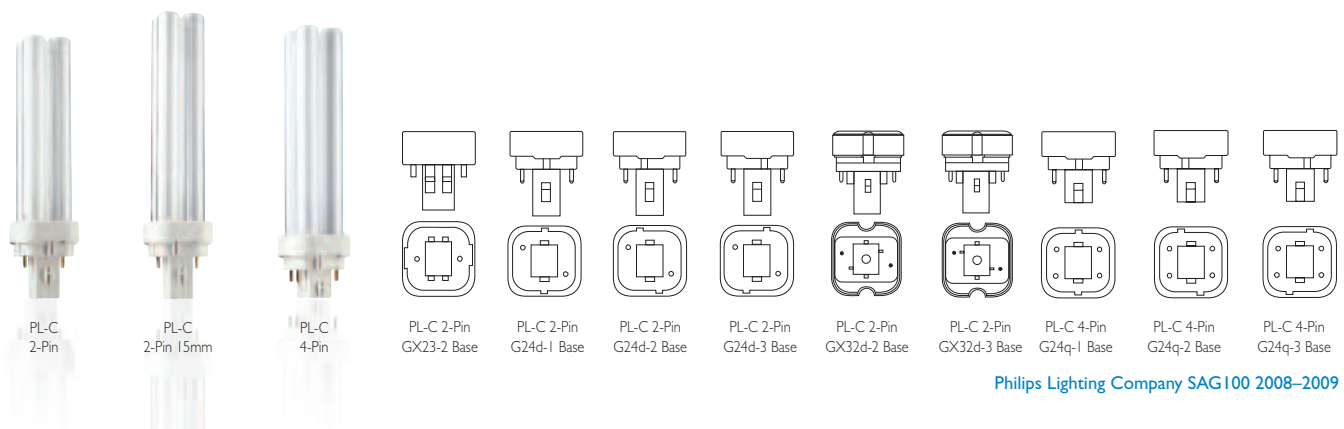
PL-C (CLUSTER) 4-PIN FLUORESCENT LAMPS, ELECTRONIC OPERATION—ENERGY ADVANTAGE * AVAILABLE Q3, 2008

14	PL-C	G24q-2	22034-3	\$ ● †	PL-C 18W/827/XEW/4P/ALTO 14W	CFQ18W/G24q/827	10	2700K	5 1/2	12,000	1100	1010	82
			22040-0	\$ ● †	PL-C 18W/835/XEW/4P/ALTO 14W	CFQ18W/G24q/835	10	3500K	5 1/2	12,000	1100	1010	82
			22041-8	\$ ● †	PL-C 18W/841/XEW/4P/ALTO 14W	CFQ18W/G24q/841	10	4100K	5 1/2	12,000	1100	1010	82
21	PL-C	G24q-3	22042-6	\$ ● †	PL-C 26W/827/XEW/4P/ALTO 21W	CFQ26W/G24q/827	10	2700K	6 1/2	12,000	1525	1400	82
			22047-5	\$ ● †	PL-C 26W/835/XEW/4P/ALTO 21W	CFQ26W/G24q/835	10	3500K	6 1/2	12,000	1525	1400	82
			22048-3	\$ ● †	PL-C 26W/841/XEW/4P/ALTO 21W	CFQ26W/G24q/841	10	4100K	6 1/2	12,000	1525	1400	82

PL-C (CLUSTER) 4-PIN FLUORESCENT LAMPS, ELECTRONIC OPERATION

13	PL-C	G24q-1	38325-7	\$ ●	PL-C 13W/827/4P/ALTO	CFQ13W/G24q/827	10	2700K	5%	12,000	900	775	82
			38326-5	\$ ●	PL-C 13W/830/4P/ALTO	CFQ13W/G24q/830	10	3000K	5%	12,000	900	775	82
			38327-3	\$ ●	PL-C 13W/835/4P/ALTO	CFQ13W/G24q/835	10	3500K	5%	12,000	900	775	82
			38328-1	\$ ●	PL-C 13W/841/4P/ALTO	CFQ13W/G24q/841	10	4100K	5%	12,000	900	775	82
18	PL-C	G24q-2	38329-9	\$ ●	PL-C 18W/827/4P/ALTO	CFQ18W/G24q/827	10	2700K	5 1/2	12,000	1250	1075	82
			38330-7	\$ ●	PL-C 18W/830/4P/ALTO	CFQ18W/G24q/830	10	3000K	5 1/2	12,000	1250	1075	82
			38332-3	\$ ●	PL-C 18W/835/4P/ALTO	CFQ18W/G24q/835	10	3500K	5 1/2	12,000	1250	1075	82
			38333-1	\$ ●	PL-C 18W/841/4P/ALTO	CFQ18W/G24q/841	10	4100K	5 1/2	12,000	1250	1075	82
26	PL-C	G24q-3	38334-9	\$ ●	PL-C 26W/827/4P/ALTO	CFQ26W/G24q/827	10	2700K	6 1/2	12,000	1800	1550	82
			38335-6	\$ ●	PL-C 26W/830/4P/ALTO	CFQ26W/G24q/830	10	3000K	6 1/2	12,000	1800	1550	82
			38336-4	\$ ●	PL-C 26W/835/4P/ALTO	CFQ26W/G24q/835	10	3500K	6 1/2	12,000	1800	1550	82
			38337-2	\$ ●	PL-C 26W/841/4P/ALTO	CFQ26W/G24q/841	10	4100K	6 1/2	12,000	1800	1550	82

For the most current product information, go to the e-catalog on www.philips.com
Compact fluorescent symbols and footnotes located on page 86



COMPACT FLUORESCENT LAMPS

PL-T Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Generic Designation	Pkg. Qty.	Desc.	MOL (In.)	Rated Avg. Life (Hrs.) (230)	Approx. Initial Lumens (231)	Design Lumens (208)	CRI
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PL-T (TRIPLE) 4-PIN FLUORESCENT LAMPS—ENERGY ADVANTAGE * AVAILABLE Q3, 2008

27	PL-T	GX24q-3	22021-0	\$ ● †	PL-T 32W/830/XEW/4P/ALTO 27W	CFTR32W/GX24q/830	10	3000K	5½	16,000	1875	1725	82
			22022-8	\$ ● †	PL-T 32W/835/XEW/4P/ALTO 27W	CFTR32W/GX24q/835	10	3500K	5½	16,000	1875	1725	82
			22024-4	\$ ● †	PL-T 32W/841/XEW/4P/ALTO 27W	CFTR32W/GX24q/841	10	4100K	5½	16,000	1875	1725	82
33	PL-T	GX24q-4	22026-9	\$ ● †	PL-T 42W/830/XEW/4P/ALTO 33W	CFTR42W/GX24q/830	10	3000K	6½	16,000	2615	2400	82
			22028-5	\$ ● †	PL-T 42W/835/XEW/4P/ALTO 33W	CFTR42W/GX24q/835	10	3500K	6½	16,000	2615	2400	82
			22029-3	\$ ● †	PL-T 42W/841/XEW/4P/ALTO 33W	CFTR42W/GX24q/841	10	4100K	6½	16,000	2615	2400	82

PL-T (TRIPLE) 4-PIN FLUORESCENT LAMPS—INSTANT ON TECHNOLOGY * AVAILABLE Q4, 2008

13	PL-T	GX24q-1	14992-2	\$ ● †	PL-T 13W/827/X/4P/ALTO	CFTR13W/GX240/827	10	2700K	4¾	16,000	900	825	82
			14995-4	\$ ● †	PL-T 13W/841/X/4P/ALTO	CFTR13W/GX240/841	10	4100K	4¾	16,000	900	825	82
18	PL-T	GX24q-2	14923-7	\$ ● †	PL-T 18W/827/X/4P/ALTO	CFTR18W/GX240/827	10	2700K	4¾	16,000	1200	1020	82
			14926-0	\$ ● †	PL-T 18W/841/X/4P/ALTO	CFTR18W/GX240/841	10	4100K	4¾	16,000	1200	1020	82
26	PL-T	GX24q-3	14928-6	\$ ● †	PL-T 26W/827/X/4P/ALTO	CFTR26W/GX240/827	10	2700K	5	16,000	1800	1530	82
			14931-0	\$ ● †	PL-T 26W/841/X/4P/ALTO	CFTR26W/GX240/841	10	4100K	5	16,000	1800	1530	82

PL-T (TRIPLE) 4-PIN FLUORESCENT LAMPS

18	PL-T	GX24q-2	38437-0	X \$ ●	PL-T 18W/827/4P/ALTO	CFTR18W/GX24q/827	12	2700K	4¾	16,000	1200	1020	82
			26802-9	\$ ●	PL-T 18W/830/4P/ALTO	CFTR18W/GX24q/830	12	3000K	4¾	16,000	1200	1020	82
			26820-1	\$ ●	PL-T 18W/835/4P/ALTO	CFTR18W/GX24q/835	12	3500K	4¾	16,000	1200	1020	82
			26822-7	\$ ●	PL-T 18W/841/4P/ALTO	CFTR18W/GX24q/841	12	4100K	4¾	16,000	1200	1020	82
26	PL-T	GX24q-3	38440-4	\$ ●	PL-T 26W/827/4P/ALTO	CFTR26W/GX24q/827	12	2700K	5	16,000	1800	1530	82
			26823-5	\$ ●	PL-T 26W/830/4P/ALTO	CFTR26W/GX24q/830	12	3000K	5	16,000	1800	1530	82
			26824-3	\$ ●	PL-T 26W/835/4P/ALTO	CFTR26W/GX24q/835	12	3500K	5	16,000	1800	1530	82
			26825-0	\$ ●	PL-T 26W/841/4P/ALTO	CFTR26W/GX24q/841	12	4100K	5	16,000	1800	1530	82
32	PL-T	GX24q-3	38443-8	\$ ●	PL-T 32W/827/4P/ALTO	CFTR32W/GX24q/827	12	2700K	5¾	16,000	2400	2040	82
			26832-6	\$ ●	PL-T 32W/830/4P/ALTO	CFTR32W/GX24q/830	12	3000K	5¾	16,000	2400	2040	82
			26833-4	\$ ●	PL-T 32W/835/4P/ALTO	CFTR32W/GX24q/835	12	3500K	5¾	16,000	2400	2040	82
			26872-2	\$ ●	PL-T 32W/841/4P/ALTO	CFTR32W/GX24q/841	12	4100K	5¾	16,000	2400	2040	82
42	PL-T	GX24q-4	38450-3	\$ ●	PL-T 42W/827/4P/ALTO	CFTR42W/GX24q/827	12	2700K	6¾	16,000	3200	2720	82
			26873-0	\$ ●	PL-T 42W/830/4P/ALTO	CFTR42W/GX24q/830	12	3000K	6¾	16,000	3200	2720	82
			26875-5	\$ ●	PL-T 42W/835/4P/ALTO	CFTR42W/GX24q/835	12	3500K	6¾	16,000	3200	2720	82
			26876-3	\$ ●	PL-T 42W/841/4P/ALTO	CFTR42W/GX24q/841	12	4100K	6¾	16,000	3200	2720	82
			13488-2	X \$ ● (242)	PL-T 42W/835/4P/HTA ALTO	CFTR42W/GX24q/835	12	3500K	6¾	16,000	3200	2720	82
			13659-8	X \$ ● (242)	PL-T 42W/841/4P/HTA ALTO	CFTR42W/GX24q/841	12	4100K	6¾	16,000	3200	2720	82
57	PL-T	GX24q-5	14631-6	\$	PL-T 57W/830/4P/A	CFTR57W/GX24q/830	10	3000K	7¾	16,000	4300	3741	82
			14632-4	\$	PL-T 57W/835/4P/A	CFTR57W/GX24q/835	10	3500K	7¾	16,000	4300	3741	82
			14633-2	\$	PL-T 57W/841/4P/A	CFTR57W/GX24q/841	10	4100K	7¾	16,000	4300	3741	82

For the most current product information, go to the e-catalog on www.philips.com
Compact fluorescent symbols and footnotes located on page 86



PL-T 4-Pin
Energy Advantage



PL-T 4-Pin
Instant-On



PL-T 4-Pin



PL-T 4-Pin
GX24q-2 Base



PL-T 4-Pin
GX24q-3 Base



PL-T 4-Pin
GX24q-4 Base



PL-T 4-Pin
GX24q-5 Base

COMPACT FLUORESCENT LAMPS

PL-L Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Generic Designation	Pkg. Qty.	Desc.	MOL (In.)	Rated Avg. Life (Hrs.) (230)	Approx. Initial Lumens (231)	Design Lumens (208)	CRI
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PL-L (LONG) FLUORESCENT LAMPS—ENERGY ADVANTAGE—CONVERSION TO ALTO® IN Q4, 2008

25	PL-L	2G11	20913-0	\$ †	PL-L 40W/830/XEW/4P/IS 25W	FT40W/2G11/RS/830	25	3000K	22½	20,000	2600	2470	82
			20914-8	\$ †	PL-L 40W/835/XEW/4P/IS 25W	FT40W/2G11/RS/835	25	3500K	22½	20,000	2600	2470	82
			20915-5	\$ †	PL-L 40W/841/XEW/4P/IS 25W	FT40W/2G11/RS/841	25	4100K	22½	20,000	2600	2470	82

PL-L (LONG) FLUORESCENT LAMPS

18	PL-L	2G11	34500-9	\$	PL-L 18W/830/4P	FT18W/2G11/830	25	3000K	8½	15,000	1250	1125	82
			35932-3	\$	PL-L 18W/835/4P	FT18W/2G11/835	25	3500K	8½	15,000	1250	1125	82
			34501-7	\$	PL-L 18W/841/4P	FT18W/2G11/841	25	4100K	8½	15,000	1250	1125	82
24	PL-L	2G11	34505-8	\$	PL-L 24W/830/4P	FT24W/2G11/830	25	3000K	12½	15,000	1800	1620	82
			35933-1	\$	PL-L 24W/835/4P	FT24W/2G11/835	25	3500K	12½	15,000	1800	1620	82
			34508-2	\$	PL-L 24W/841/4P	FT24W/2G11/841	25	4100K	12½	15,000	1800	1620	82
36	PL-L	2G11	34511-6	\$	PL-L 36W/830/4P	FT36W/2G11/830	25	3000K	16½	15,000	2900	2610	82
			34942-3	\$	PL-L 36W/835/4P	FT36W/2G11/835	25	3500K	16½	15,000	2900	2610	82
			34513-2	\$	PL-L 36W/841/4P	FT36W/2G11/841	25	4100K	16½	15,000	2900	2610	82
40	PL-L	2G11	30042-6	\$	PL-L 40W/830/4P/RS/IS	FT40W/2G11/RS/830	25	3000K	22½	20,000	3300	2970	82
			30043-4	\$	PL-L 40W/835/4P/RS/IS	FT40W/2G11/RS/835	25	3500K	22½	20,000	3300	2970	82
			30044-2	\$	PL-L 40W/841/4P/RS/IS	FT40W/2G11/RS/841	25	4100K	22½	20,000	3300	2970	82
50	PL-L	2G11	34747-6	\$	PL-L 50W/830/4P/RS	FT50W/2G11/RS/830	25	3000K	22½	20,000	4300	3870	82
			34753-4	\$	PL-L 50W/835/4P/RS	FT50W/2G11/RS/835	25	3500K	22½	20,000	4300	3870	82
			34770-8	\$	PL-L 50W/841/4P/RS	FT50W/2G11/RS/841	25	4100K	22½	20,000	4300	3870	82
55	PL-L	2G11	50962-0	\$	PL-L 55W/841/4P/RS	FT55W/2G11/RS/841	25	4100K	22½				
			13844-6	\$	PL-L 55W/950/4P/RS	FT55W/2G11/RS/950	25	5000K	21½	20,000	3650	3358	91
80	PL-L	2G11	38697-9	\$	PL-L 80W/830/4P	FT80W/2G11/830	25	3000K	22½	20,000	6000	5400	82
			38698-7	\$	PL-L 80W/835/4P	FT80W/2G11/835	25	3500K	22½	20,000	6000	5400	82
			38699-5	\$	PL-L 80W/841/4P	FT80W/2G11/841	25	4100K	22½	20,000	6000	5400	82

For the most current product information, go to the e-catalog on www.philips.com
Compact fluorescent symbols and footnotes located on page 86



PL-L
2G11 Base

COMPACT FLUORESCENT LAMPS

PL-H, PL-Q Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	Generic Designation	Pkg. Qty.	Desc.	MOL (In.)	Rated Avg. Life (Hrs.) (230)	Approx. Initial Lumens (231)	Design Lumens (208)	CRI
PL-H® (HIGH) FLUORESCENT LAMPS													
60	PL-H	2G8-I	I 3368-6	\$ ●	PL-H 60W/830/4P/ALTO	TBD	10	3000K	7 ¹ / ₄	20,000	4000	3440	82
			I 3369-4	\$ ●	PL-H 60W/841/4P/ALTO	TBD	10	4100K	7 ¹ / ₄	20,000	4000	3440	82
85	PL-H	2G8-I	I 3370-2	\$ ●	PL-H 85W/830/4P/ALTO	TBD	10	3000K	8 ³ / ₂	20,000	6000	5160	82
			I 3371-0	\$ ●	PL-H 85W/841/4P/ALTO	TBD	10	4100K	8 ³ / ₂	20,000	6000	5160	82
120	PL-H	2G8-I	I 3372-8	\$ ●	PL-H 120W/830/4P/ALTO	TBD	10	3000K	11 ³ / ₁₆	20,000	9000	7740	82
			I 3373-6	\$ ●	PL-H 120W/841/4P/ALTO	TBD	10	4100K	11 ³ / ₁₆	20,000	9000	7740	82

PL-Q SQUARE SHAPE FLUORESCENT LAMPS—4 PIN

28	PL-Q		I 5939-2		PL-Q 28W/827/4P	CFS28W/GRI0q/827	10	2700K	8 ⁵ / ₈	10,000	2050	1720	82
38	PL-Q		I 5941-8		PL-Q 38W/827/4P	CFS38W/GRI0q/827	10	2700K	8 ⁵ / ₈	10,000	2850	2395	82

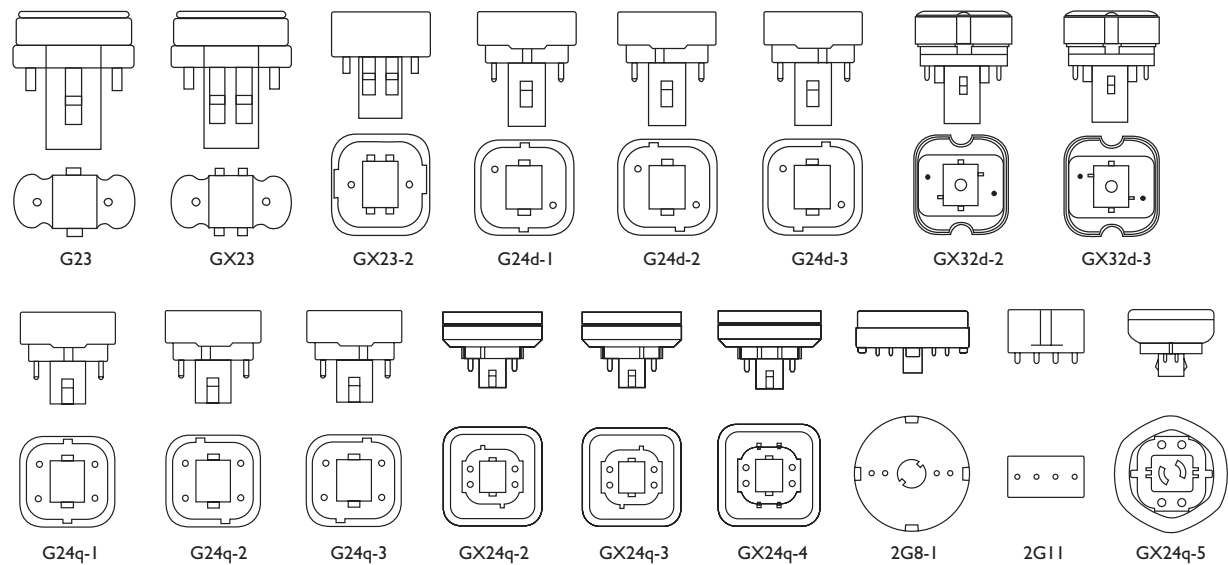
For the most current product information, go to the e-catalog on www.philips.com
Compact fluorescent symbols and footnotes located on page 86



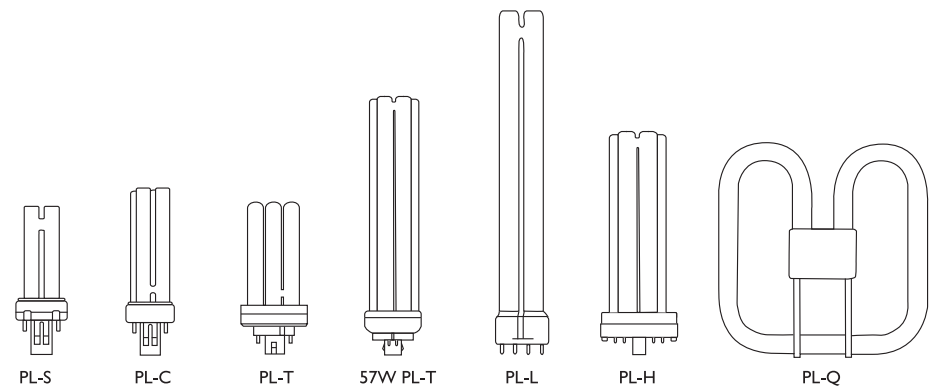
COMPACT FLUORESCENT LAMPS

PL Base Types and Bulb Shapes

PL Base Types (Not Actual Sizes)



PL Bulb Shapes (Not Actual Sizes)



COMPACT FLUORESCENT LAMPS

For the most current product information, go to the e-catalog on www.philips.com

□ Exclusive to Philips Lighting Company

■ Nickel plated brass base

\$ Energy Saving Product

▲ Aluminum base

★ Heat resisting glass bulb

◆ Maximum Beam Candlepower

● This lamp is better for the environment because of its reduced mercury content. All Philips ALTO® lamps give you end-of-life options which can simplify and reduce your lamp disposal costs depending on your state and local regulations.

■ ENERGY STAR® Bulb: As an ENERGY STAR® Partner, Philips has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

✕ Orders will be shipped until inventory is depleted; no longer manufactured.

Ⓢ This Bulb Meets US Federal Minimum Efficiency Standard

† New since last printing

* Two Lamp Carded Pack

◇ Designed for instant start operation.

‡ Quantity shown is minimum shipping container—refer to Net Price Schedule for number of lamps to qualify as a standard case.

✓ Consider the compact fluorescent lamps listed on pages 74–77 for energy savings

G = General Lighting

S = Street Lighting

▼ PAR38 (one piece)

T– ENERGY STAR® testing in progress

± Available March 2009

§ "Made-To-Order". Product is not kept in inventory. Minimum quantities will apply.

(208) Design lumens are the approximate lamp lumen output at 40% of the lamp's rated average life. This output is based upon measurements obtained during lamp operation on a reference ballast under standard laboratory conditions.

(222) Low temperature starting down to -20°F at nominal line voltage.

(230) Average life under specified test conditions with lamps turned off and restarted no more frequently than once every 3 operating hours.

(231) Approximate initial lumens. The lamp lumen output is based upon lamp performance after 100 hours of operating life under standard laboratory conditions.

(242) HTA (High Temperature Application) HTA lamps are designed to achieve optimum light output in higher temperature applications (approx. 140–150°F). HTA lamps are not recommended for dimming.

Fluorescent Lighting

High performance, energy efficient, long life lamps

Philips T5 Fluorescent Lamps are incredibly powerful, environmentally-responsible, long life lamps with an ultra-slim profile. This translates into reduced maintenance and disposal costs and also allows the use of smaller fixtures—which reduces ceiling clutter. Philips SILHOUETTE™ T5 lamps have a rated average life of 35,000 hours based on 12 hours per start!¹

Philips T8 Fluorescent Lamps featuring ALTO II™ Technology

Philips ALTO II™ fluorescent lamps combine low mercury with long life and energy efficiency—which together help achieve sustainability:

- Philips leads the industry with the lowest level mercury technology. Reducing the mercury level (source reduction) during the manufacturing phase is essential to creating products that are less harmful to the environment.

- Philips has the longest life T8 lamp portfolio in the industry. For example, the Philips T8 32W Extra Long Life lamp and the Philips Energy Advantage T8 25W Extra Long Life lamp will last 67% longer than an industry standard 4' T8 32W lamp².
- Energy efficient lighting not only reduces operating costs; it also supports a clean and sustainable environment.

Philips T12 Fluorescent Lamps

provide high-performance and long life in a wide range of sizes, shapes, and types. The Advantage 4' T12 series of lamps provide ultimate performance with long life (24,000 hour rated average life), 85 CRI, and the Advantage 4' T12 lamps have the highest lumen output (3600 initial lumens) of any 40W 4' T12 lamp available.

- 1) Average life under engineering data with lamps turned off and restarted once every 12 operating hours.
- 2) Philips 4' T8 32W Extra Long Life lamp and Philips Energy Advantage 4' T8 25W Extra Long Life lamp each have a rated average life of 40,000 hours (12 hours per start on an instant start ballast). An industry standard 4' T8 32W lamp has a rated average life of 24,000 hours (12 hours per start on an instant start ballast).

Feature Products



SILHOUETTE T5 HO
page 90



**T8 FEATURING
ALTO II™ TECHNOLOGY**
page 94



**ADVANTAGE T12
FEATURING ALTO®
LAMP TECHNOLOGY**
page 103



Reduce your maintenance costs

by adding long life lamps to your fixtures. Philips Lighting now has the longest life T8 portfolio in the industry. The Philips T8 32W Extra Long Life lamp and the Philips Energy Advantage T8 25W Extra Long Life lamp will last 67% longer than an industry standard 4' T8 32W lamp² and provide a cost saving solution that is better for the environment.

Fluorescent Lighting

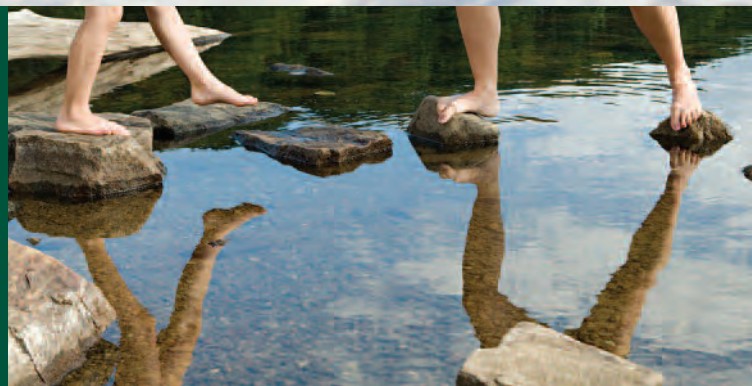
90–113	Professional Lamps
90	High Output and Very High Output T5
91	High Efficiency and Colored T5
92	Circular and Preheat Fluorescent T5
93	ALTO II™ Technology
94	Energy Advantage T8
95	Extra Long Life T8
96	Advantage T8
97	PLUS T8
98	700 Series and 800 Series T8
99	U-Bent T8
100	900 Series, European (TL-D) and Preheat T8
101	PLUS Slimline T8 8-Foot
102	PLUS High Output T8 and Very High Output T8 with Amalgam Technology
103–109	Professional T12
110	GOLD, Appliance and Circline Fluorescent Lamps (Professional)
111–113	TuffGuard™ Fluorescent Lamps
114–118	Consumer Lamps
114	Consumer Family T5 and T8
115	Consumer Family T12
116–118	Consumer Family Large Packs
119	Base Types and Bulb Shapes
120	Footnotes

DID YOU KNOW?

- ALTO II™ T8 lamps have warranty periods ranging from 2½–4 years³.
- ALTO II™ T8 lamps require no burn-in before dimming.
- ALTO II™ T8 lamps can contribute to LEED-EB certification.

For more information go to www.usgbc.org

3) Warranties: Universal T8–30 months; Energy Advantage T8–30 months; PLUS T8–36 months; and Advantage T8–36 months; Extra Long Life T8–48 months; Energy Advantage Extra Long Life T8–48 months.





FACT: All fluorescent lamps contain mercury. However, Philips ALTO II™ Technology lamps have 50% less mercury than the previous generation of ALTO® T8 lamps. The Philips T8 portfolio, as a family, offers the lowest mercury and the longest life in the industry.

FLUORESCENT LAMPS

SILHOUETTE™ T5 Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.†	Description	Nom. Length (In.)	Rated Average Life		Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
							3 Hr. Start (202)	12 Hr. Start (241)			

SILHOUETTE™ T5 HIGH OUTPUT (HO) ENERGY ADVANTAGE LAMPS * AVAILABLE Q4, 2008

T5 Miniature Bipin; Programmed Start

49	22049-1	\$ ⑥ ● †	F54T5/830/HO/EA/ALTO 49W	40	TL 830, 3000K	46	25,000	35,000	5000	4750	85
	22050-9	\$ ⑥ ● †	F54T5/835/HO/EA/ALTO 49W	40	TL 835, 3500K	46	25,000	35,000	5000	4750	85
	22052-5	\$ ⑥ ● †	F54T5/841/HO/EA/ALTO 49W	40	TL 841, 4100K	46	25,000	35,000	5000	4750	85
	40649-6	\$ ⑥ ● †	F54T5/850/HO/EA/ALTO 49W	40	TL 850, 5000K	46	25,000	35,000	4850	4625	82

SILHOUETTE™ T5 HIGH OUTPUT (HO) LAMPS "EXTREME TEMPERATURE" WITH AMALGAM TECHNOLOGY

T5 Miniature Bipin; Programmed Start

54	21766-1	\$ ⑥ ● †	F54T5/835/HO/A/ALTO	40	TL 835, 3500K	46	25,000	35,000	5000	4750	85
	21769-5	\$ ⑥ ● †	F54T5/841/HO/A/ALTO	40	TL 841, 4100K	46	25,000	35,000	5000	4750	85
	22807-2*	\$ ⑥ ● †	F54T5/850/HO/A/ALTO	40	TL 850, 5000K	46	25,000	35,000	4850	4625	82

SILHOUETTE™ T5 VERY HIGH OUTPUT (VHO) LAMPS "EXTREME TEMPERATURE" WITH AMALGAM TECHNOLOGY

T5 Miniature Bipin; Programmed Start

95	21771-1	● †	F95T5/835/VHO/A/ALTO	40	TL 835, 3500K	46	25,000	35,000	7200	6500	85
	21772-3	● †	F95T5/841/VHO/A/ALTO	40	TL 841, 4100K	46	25,000	35,000	7200	6500	85
	22809-8*	● †	F95T5/850/VHO/A/ALTO	40	TL 850, 5000K	46	25,000	35,000	6985	6285	82

SILHOUETTE™ LONG LIFE T5 HIGH OUTPUT (HO) LAMPS—(2FT–5 FT)

T5 Miniature Bipin; Programmed Start

24	29019-7	\$ ●	F24T5/830/HO/ALTO	40	TL 830, 3000K	22	25,000	35,000	2000	1900	85
	29020-5	\$ ●	F24T5/835/HO/ALTO	40	TL 835, 3500K	22	25,000	35,000	2000	1900	85
	29021-3	\$ ●	F24T5/841/HO/ALTO	40	TL 841, 4100K	22	25,000	35,000	2000	1900	85
39	29022-1	\$ ●	F39T5/835/HO/ALTO	40	TL 830, 3000K	34	25,000	35,000	3500	3325	85
	29023-9	\$ ●	F39T5/835/HO/ALTO	40	TL 835, 3500K	34	25,000	35,000	3500	3325	85
	29025-4	\$ ●	F39T5/841/HO/ALTO	40	TL 841, 4100K	34	25,000	35,000	3500	3325	85
54	29026-2	\$ ● ⑥	F54T5/830/HO/ALTO	40	TL 830, 3000K	46	25,000	35,000	5000	4750	85
	29028-8	\$ ● ⑥	F54T5/835/HO/ALTO	40	TL 835, 3500K	46	25,000	35,000	5000	4750	85
	29083-3	\$ ● ⑥	F54T5/841/HO/ALTO	40	TL 841, 4100K	46	25,000	35,000	5000	4750	85
	13510-3	\$ ● ⑥	F54T5/850/HO/ALTO	40	TL 850, 5000K	46	25,000	35,000	4850	4625	82
	14745-4	\$ ● ⑥	F54T5/865/HO/ALTO	40	TL 865, 6500K	46	25,000	35,000	4750	4500	82
80	29084-1	\$ ●	F80T5/830/HO/ALTO	40	TL 830, 3000K	58	25,000	35,000	7000	6650	85
	14744-7	\$ ●	F80T5/835/HO/ALTO	40	TL 835, 3000K	58	25,000	35,000	7000	6650	85
	29088-2	\$ ●	F80T5/841/HO/ALTO	40	TL 841, 4100K	58	25,000	35,000	7000	6650	85

* Available Q2 2009

For the most current product information, go to the e-catalog on www.philips.com

Fluorescent symbols and footnotes located on page 120

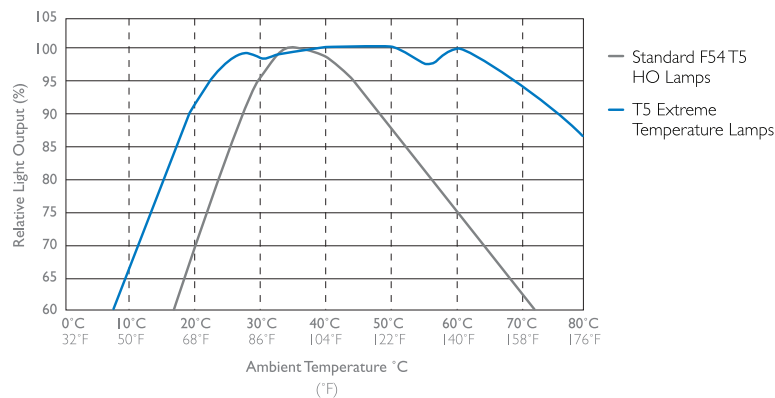
SILHOUETTE T5 & LONG LIFE T5

Warranty Period: 36 months*

* Certain limitations and conditions apply.
See Philips for further warranty details.

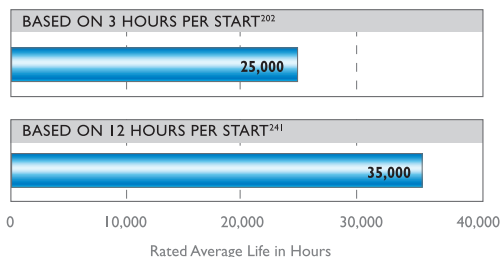
PERFORMANCE (RELATIVE LIGHT OUTPUT VS. TEMPERATURE)

Philips T5 Extreme Temperature Lamps vs. Standard F54T5 Lamps



RATED AVERAGE LIFE

Philips SILHOUETTE™ T5



T5 Miniature Bipin

Rated Average Life in Hours

FLUORESCENT LAMPS

SILHOUETTE™ T5, Colored Linear Fluorescent Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.‡	Description	Nom. Length (In.)	Rated Average Life 3 Hr. Start (202)	12 Hr. Start (241)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
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SILHOUETTE™ LONG LIFE T5 LAMPS—(2FT–5 FT)

T5 Miniature Bipin; Programmed Start

14	23077-1	\$ ●	F14T5/830/ALTO	40	TL 830, 3000K	22	25,000	35,000	1350	1275	85
	23079-7	\$ ●	F14T5/835/ALTO	40	TL 835, 3500K	22	25,000	35,000	1350	1275	85
	23080-5	\$ ●	F14T5/841/ALTO	40	TL 841, 4100K	22	25,000	35,000	1350	1275	85
21	23081-3	\$ ●	F21T5/830/ALTO	40	TL 830, 3000K	34	25,000	35,000	2100	2000	85
	23082-1	\$ ●	F21T5/835/ALTO	40	TL 835, 3500K	34	25,000	35,000	2100	2000	85
	23083-9	\$ ●	F21T5/841/ALTO	40	TL 841, 4100K	34	25,000	35,000	2100	2000	85
28	23084-7	\$ ● ⑥	F28T5/830/ALTO	40	TL 830, 3000K	46	25,000	35,000	2900	2750	85
	23085-4	\$ ● ⑥	F28T5/835/ALTO	40	TL 835, 3500K	46	25,000	35,000	2900	2750	85
	23086-2	\$ ● ⑥	F28T5/841/ALTO	40	TL 841, 4100K	46	25,000	35,000	2900	2750	85
35	23088-8	\$ ●	F35T5/830/ALTO	40	TL 830, 3000K	58	25,000	35,000	3650	3450	85
	23091-2	\$ ●	F35T5/835/ALTO	40	TL 835, 3500K	58	25,000	35,000	3650	3450	85
	23095-3	\$ ●	F35T5/841/ALTO	40	TL 841, 4100K	58	25,000	35,000	3650	3450	85

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.‡	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
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COLORED—LINEAR FLUORESCENT LAMPS—T5 HIGH OUTPUT

24	I4637-3	\$	F24T5/RED/HO	15	TL5HO Colored Pro 24W/150 Red	22	12,000	1400	1330	N/A
	I4638-1	\$	F24T5/GREEN/HO	15	TL5HO Colored Pro 24W/170 Green	22	12,000	2750	2475	N/A
	I4639-9	\$	F24T5/BLUE/HO	15	TL5HO Colored Pro 24W/180 Blue	22	12,000	550	440	N/A
54	I4640-7	\$	F54T5/RED/HO	15	TL5HO Colored Pro 54W/150 Red	46	12,000	3450	3280	N/A
	I4641-5	\$	F54T5/GREEN/HO	15	TL5HO Colored Pro 54W/170 Green	46	12,000	6900	6210	N/A
	I4642-3	\$	F54T5/BLUE/HO	15	TL5HO Colored Pro 54W/180 Blue	46	12,000	1500	1200	N/A

For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120

T5 LUMENS AT 35°C AND 25°C



T5 Miniature Bipin

Lamp Type	Approx. Initial Lumens at 35°C (203, 204)	Approx. Initial Lumens at 25°C (203, 204)
F14T5	1350	1200
F21T5	2100	1900
F28T5	2900	2600
F35T5	3650	3300
F24T5/HO	2000	1800
F39T5/HO	3500	3150
F54T5/HO	5000	4500
F80T5/HO	7000	6300

FLUORESCENT LAMPS

SILHOUETTE™ T5 Circular Lamps, Preheat Fluorescent Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.‡	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
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SILHOUETTE™ SERIES T5 CIRCULAR FLUORESCENT LAMPS

2GX13 Base; Programmed Start

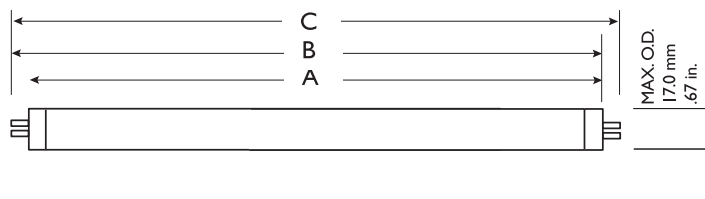
22	16601-7	\$	TL5C 22W/830	10	Formerly FC9T5/830	9 OD	16,000	1800	1530	85
	14856-9	\$	TL5C 22W/835	10	Formerly FC9T5/835	9 OD	16,000	1800	1530	85
	16600-9	\$	TL5C 22W/840	10	Formerly FC9T5/841	9 OD	16,000	1800	1530	85
40	16596-8	\$	TL5C 40W/830	10	Formerly FC12T5/830	12 OD	16,000	3300	2805	85
	14859-3	\$	TL5C 40W/835	10	Formerly FC12T5/835	12 OD	16,000	3300	2805	85
	16598-4	\$	TL5C 40W/840	10	Formerly FC12T5/841	12 OD	16,000	3300	2805	85
55	16593-6	\$	TL5C 55W/830	10	Formerly FC12T5/830/HO	12 OD	16,000	4200	3580	85
	14862-7	\$	TL5C 55W/835	10	Formerly FC12T5/835/HO	12 OD	16,000	4200	3580	85
	16592-8	\$	TL5C 55W/840	10	Formerly FC12T5/841/HO	12 OD	16,000	4200	3580	85

PREHEAT FLUORESCENT LAMPS

T5 Miniature Bipin; Requires Use of Starters

4	33236-1		F4T5/CW	25	Cool White, 4100K	6	6000	135	95	62
	33241-1		F6T5/CW	25	Cool White, 4100K	9	7500	295	230	62
6	33242-9		F6T5/D	25	Daylight, 6500K	9	7500	230	180	79
	33252-8		F8T5/WW	25	Warm White, 3000K	12	7500	400	300	53
	33247-8		F8T5/CW	25	Cool White, 4100K	12	7500	400	300	62
8	20702-7		F8T5/30U	25	Ultralume, 3000K	12	7500	450	360	85
	33249-4		F8T5/D	25	Daylight, 6500K	12	7500	330	265	79
	33253-6		F13T5/CW	25	Cool White, 4100K	21	7500	820	655	62
13	20703-5		F13T5/30U	25	Ultralume, 3000K	21	7500	1000	800	85

For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120



SILHOUETTE AND SILHOUETTE HIGH OUTPUT DIMENSIONS (226)

Type	A Max. (Width)		B Min. (Width)		B Max. (Width)		C Max. (Width)	
	inches	mm	inches	mm	inches	mm	inches	mm
T5 14W/24W	21.61	549.0	21.80	553.7	21.89	556.1	22.17	563.2
T5 21W/39W	33.42	849.0	33.61	853.7	33.70	856.1	33.98	863.2
T5 28W/54W	45.24	1149.0	45.42	1153.7	45.52	1156.1	45.80	1163.2
T5 35W/80W	57.05	1449.0	57.23	1453.7	57.33	1456.1	57.61	1463.2



T5 Circular



T5 Miniature Bipin

Philips ALTO II™ Technology

Philips T8 Fluorescent Lamps featuring ALTO II™ Technology

Better for your business, better for the environment



ALTO® with green endcaps has become synonymous with environmental responsibility and low mercury. Since the launch of ALTO Lamp Technology in 1995, 1.5 billion Philips fluorescent lamps with ALTO Lamp Technology have been produced with over 20 tons less mercury than previous non-ALTO lamps¹.

Now... ten years after introducing ALTO Lamp Technology, Philips is launching ALTO II™ Technology. Lamps with ALTO II™ technology have 50% less mercury than prior T8 lamps featuring ALTO technology, making these lamps the most sustainable linear fluorescents available. Best of all, these lamps offer the same performance levels as ALTO lamps (life, energy, and light output).

1) [(1994 industry average (22.8mg)—PLC average (4.0mg))] x 1.5 billion lamps. Convert to pounds by dividing by 464. Convert to tons by dividing by 2000.

PHILIPS T8 LAMP WARRANTY PERIODS

PHILIPS LAMP	WARRANTY PERIOD*
T8 17W, 25W and 32W, 700 and 800 Series	30 Months
Energy Advantage 25W, 28W, and 30W	36 Months
PLUS T8 17W, 25W, and 32W	36 Months
Advantage T8 32W	36 Months
T8 32W Extra Long Life	48 Months
Energy Advantage T8 25W Extra Long Life	48 Months

* Certain limitations and conditions apply. See Philips for further warranty details.

DID YOU KNOW?

- ALTO II™ T8 lamps have warranty periods ranging from 2½–4 years³.
- ALTO II™ T8 lamps require no burn in before dimming.
- ALTO II™ T8 lamps can contribute to LEED-EB certification. For more information go to www.usgbc.org

3) Warranty Periods: Universal T8–36 months; Energy Advantage T8–36 months; PLUS T8–36 months; and Advantage T8–36 months; Extra Long Life T8–48 months; Energy Advantage Extra Long Life T8–48 months.

PHILIPS T8 LAMP FAMILY—LIFE RATINGS

Products	INSTANT START ¹		PROGRAMMED START ²	
	Rated Average Life (Hrs.)		Rated Average Life (Hrs.)	
	3 hour start	12 hour start	3 hour start	12 hour start
700 and 800 Series T8	24,000	30,000	30,000	36,000
PLUS T8	30,000	36,000	36,000	42,000
Advantage T8	24,000	30,000	30,000	36,000
Energy Advantage T8 25W, 28W, and 30W	24,000	30,000	30,000	36,000
32W Extra Long Life	36,000	40,000	40,000	46,000
Energy Advantage T8 25W Extra Long Life	36,000	40,000	40,000	46,000

1) Average life under engineering data on instant start ballast with lamps turned off and restarted once every 3 or 12 operating hours as indicated.

2) Average life under engineering data on programmed start ballast with lamps turned off and restarted once every 3 or 12 operating hours as noted.

FLUORESCENT LAMPS

Energy Advantage T8 Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.†	Description	Nom. Length (In.)	Rated Average Life		Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
							3 Hr. Start (202)	12 Hr. Start (241)			

ENERGY ADVANTAGE T8 25 WATT FLUORESCENT LAMPS**

T8 Medium Bipin Featuring ALTO II™ Technology and HI-VISION® Phosphor

25	I3781-0	\$ ⑥ ●	F32T8/ADV830/XEW/ALTO 25 WATT	25	Advantage 830, 3000K	48	24,000	30,000	2500	2425	85
	I3782-8	\$ ⑥ ●	F32T8/ADV835/XEW/ALTO 25 WATT	25	Advantage 835, 3500K	48	24,000	30,000	2500	2425	85
	I3783-6	\$ ⑥ ●	F32T8/ADV841/XEW/ALTO 25 WATT	25	Advantage 841, 4100K	48	24,000	30,000	2500	2425	85
	I3784-4	\$ ⑥ ●	F32T8/ADV850/XEW/ALTO 25 WATT	25	Advantage 850, 5000K	48	24,000	30,000	2400	2330	82

ENERGY ADVANTAGE T8 28 WATT FLUORESCENT LAMPS**

T8 Medium Bipin Featuring ALTO II™ Technology and HI-VISION® Phosphor

28	I4732-2	\$ ⑥ ●	F32T8/ADV830/EW/ALTO 28 WATT	25	Advantage 830, 3000K	48	24,000	30,000	2725	2645	85
	I4733-0	\$ ⑥ ●	F32T8/ADV835/EW/ALTO 28 WATT	25	Advantage 835, 3500K	48	24,000	30,000	2725	2645	85
	I4734-8	\$ ⑥ ●	F32T8/ADV841/EW/ALTO 28 WATT	25	Advantage 841, 4100K	48	24,000	30,000	2725	2645	85
	I4735-5	\$ ⑥ ●	F32T8/ADV850/EW/ALTO 28 WATT	25	Advantage 850, 5000K	48	24,000	30,000	2675	2595	82

ENERGY ADVANTAGE T8 30 WATT FLUORESCENT LAMPS**

T8 Medium Bipin Featuring ALTO II™ Technology and HI-VISION® Phosphor

30	I4771-0	\$ ⑥ ● †	F32T8/ADV830/EW/ALTO 30 WATT	25	Advantage 830, 3000K	48	24,000	30,000	2850	2765	85
	I4772-8	\$ ⑥ ● †	F32T8/ADV835/EW/ALTO 30 WATT	25	Advantage 835, 3500K	48	24,000	30,000	2850	2765	85
	I4773-6	\$ ⑥ ● †	F32T8/ADV841/EW/ALTO 30 WATT	25	Advantage 841, 4100K	48	24,000	30,000	2850	2765	85
	I4774-4	\$ ⑥ ● †	F32T8/ADV850/EW/ALTO 30 WATT	25	Advantage 850, 5000K	48	24,000	30,000	2800	2715	82

** These lamps are dimmable

For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120

PHILIPS ENERGY ADVANTAGE T8
Warranty Period: 36 months*

* Certain limitations and conditions apply.
See Philips for further warranty details.

ENERGY ADVANTAGE 25W T8 SAVINGS

Save 7 Watts Instantly			
7 watts per lamp saved	Energy Savings Calculator		
	Annual Operating Hours*	Savings Over Lamp Life	
KWH Rate	4380	8760	30,000 hrs.
\$0.06	\$1.84	\$3.68	\$12.60
\$0.08	\$2.45	\$4.90	\$16.80
\$0.10	\$3.07	\$6.13	\$21.00
\$0.12	\$3.68	\$7.36	\$25.20
\$0.20	\$6.13	\$12.26	\$42.00

*4380 hours are based on operating the lamps 12 hours per day/7 days per week.
8760 hours are based on operating the lamps 24 hours per day/7 days per week.

Cost of Ownership Savings

Energy Advantage T8 Fluorescent Lamps vs. Standard T8 Lamps.

General Overview

Energy Advantage 25W T8 fluorescent lamps provide energy savings of up to 25% versus standard 32W T8, so the benefits and financial impact can be significant.

Benefits

By using Energy Advantage 25W T8 lamps the energy savings of 7 watts per lamp can be achieved instantly by simply changing the lamp.

Financial Impact

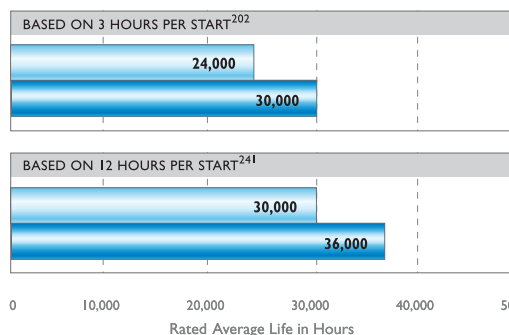
Energy Savings per Lamp	7 Watts
Operating Hours per Year	8760 hours, continuous burn
Cost per KWH	\$.10

Cost of Ownership Savings = \$6.13 per lamp per year



RATED AVERAGE LIFE

Instant Start Ballast Programmed Start Ballast



FLUORESCENT LAMPS

Extra Long Life (XLL) T8 Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.†	Description	Nom. Length (In.)	Rated Average Life		Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
							3 Hr.	12 Hr.			
							Start (202)	Start (241)			

EXTRA LONG LIFE ENERGY ADVANTAGE 25 WATT T8 FLUORESCENT LAMP**

T8 Medium Bipin Featuring ALTO II™ Technology and HI-VISION® Phosphor

25	I5206-6	\$ ● †	F32T8/ADV830/XLL/ALTO 25 WATT	25	Advantage 830, 3000K	48	36,000	40,000	2400	2330	85
	I5207-4	\$ ● †	F32T8/ADV835/XLL/ALTO 25 WATT	25	Advantage 835, 3500K	48	36,000	40,000	2400	2330	85
	I5208-2	\$ ● †	F32T8/ADV841/XLL/ALTO 25 WATT	25	Advantage 841, 4100K	48	36,000	40,000	2400	2330	85
	I5209-0	\$ ● †	F32T8/ADV850/XLL/ALTO 25 WATT	25	Advantage 850, 5000K	48	36,000	40,000	2350	2280	82

EXTRA LONG LIFE 32 WATT T8 FLUORESCENT LAMPS**

T8 Medium Bipin Featuring ALTO II™ Technology and HI-VISION® Phosphor

32	I5202-5	\$ @ ● †	F32T8/TL830/XLL/ALTO	25	TL 830, 3000K	48	36,000	40,000	2950	2800	85
	I5203-3	\$ @ ● †	F32T8/TL835/XLL/ALTO	25	TL 835, 3500K	48	36,000	40,000	2950	2800	85
	I5204-1	\$ @ ● †	F32T8/TL841/XLL/ALTO	25	TL 841, 4100K	48	36,000	40,000	2950	2800	85
	I5205-8	\$ @ ● †	F32T8/TL850/XLL/ALTO	25	TL 850, 5000K	48	36,000	40,000	2850	2700	82

** These lamps are dimmable

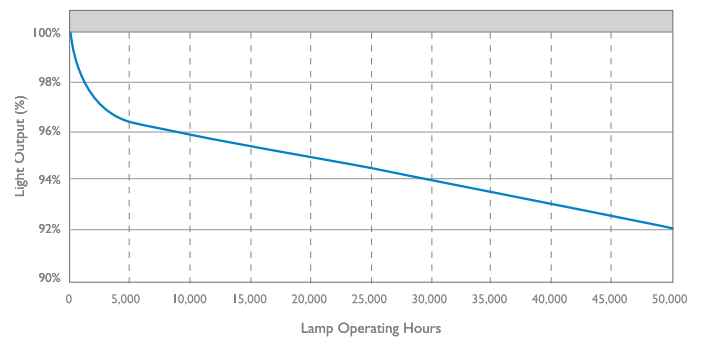
For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120

**PHILIPS EXTRA LONG LIFE
ENERGY ADVANTAGE 25W
AND EXTRA LONG LIFE 32W T8**
Warranty Period: 48 months*

* Certain limitations and conditions apply.
See Philips for further warranty details.

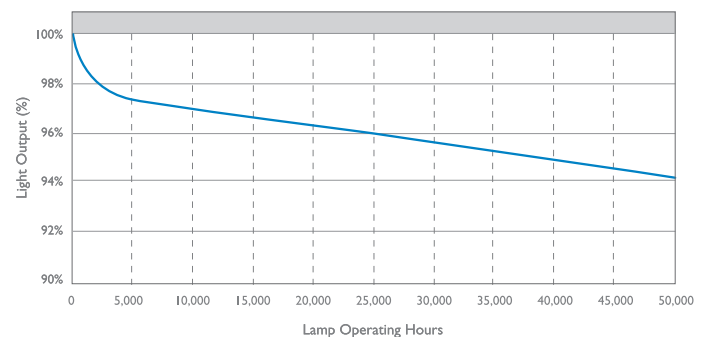
95% LUMEN MAINTENANCE

Philips T8 32W XLL Lamps



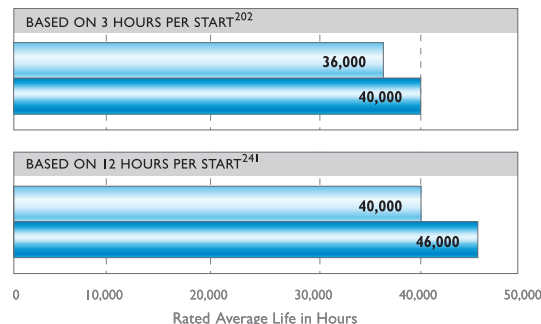
97% LUMEN MAINTENANCE

Philips Energy Advantage T8 25W XLL Lamps



RATED AVERAGE LIFE

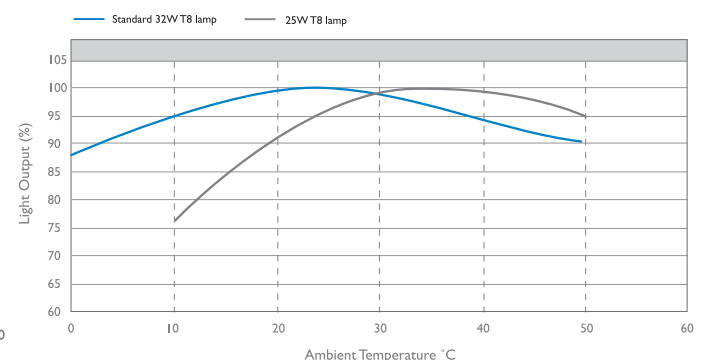
Instant Start Ballast Programmed Start Ballast



T8 Medium Bipin

25W VS. 32W T8 LIGHT OUTPUT VS TEMPERATURE

Light Output vs. Ambient Temp. 4' T8 Lamps—
Advance REL-2P32 HF/IS Ballast



FLUORESCENT LAMPS

Advantage T8 Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.±	Description	Nom. Length (In.)	Rated Average Life		Approx. Initial Lumens (203,204)	Design Lumens (208,239)	CRI
							3 Hr. Start (202)	12 Hr. Start (241)			
ADVANTAGE T8 HIGH LUMEN FLUORESCENT LAMPS											
T8 Medium Bipin Featuring ALTO II™ Technology and HI-VISION® Phosphor											
17	20483-4	\$ ⑥ ●	F17T8/ADV830/ALTO	25	Advantage 830, 3000K	24	24,000	30,000	1500	1450	85
	20484-2	\$ ⑥ ●	F17T8/ADV835/ALTO	25	Advantage 835, 3500K	24	24,000	30,000	1500	1450	85
	20485-9	\$ ⑥ ●	F17T8/ADV841/ALTO	25	Advantage 841, 4100K	24	24,000	30,000	1500	1450	85
	20487-5	\$ ⑥ ●	F17T8/ADV850/ALTO	25	Advantage 850, 5000K	24	24,000	30,000	1425	1380	82
25	20488-3	\$ ⑥ ●	F25T8/ADV830/ALTO	25	Advantage 830, 3000K	36	24,000	30,000	2380	2300	85
	20490-9	\$ ⑥ ●	F25T8/ADV835/ALTO	25	Advantage 835, 3500K	36	24,000	30,000	2380	2300	85
	20495-8	\$ ⑥ ●	F25T8/ADV841/ALTO	25	Advantage 841, 4100K	36	24,000	30,000	2380	2300	85
	20498-2	\$ ⑥ ●	F25T8/ADV850/ALTO	25	Advantage 850, 5000K	36	24,000	30,000	2275	2210	82
32	13987-3	□ \$ ⑥ ●	F32T8/ADV830/ALTO	25	Advantage 830, 3000K	48	24,000	30,000	3100	3000	85
	13988-1	□ \$ ⑥ ●	F32T8/ADV835/ALTO	25	Advantage 835, 3500K	48	24,000	30,000	3100	3000	85
	13989-9	□ \$ ⑥ ●	F32T8/ADV841/ALTO	25	Advantage 841, 4100K	48	24,000	30,000	3100	3000	85
	13990-7	□ \$ ⑥ ●	F32T8/ADV850/ALTO	25	Advantage 850, 5000K	48	24,000	30,000	3025	2935	82

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Fluorescent symbols and footnotes located on page 120

PHILIPS ADVANTAGE T8

Warranty Period: 36 months*

* Certain limitations and conditions apply.
See Philips for further warranty details.

ENERGY SAVINGS: 2 LAMP VS. 2 LAMP SYSTEM

Electronic Ballast	Ballast Factor	No. of Lamps	Lamp Watts	Standard T8 Lumens	Advantage T8 Lumens	System Watts	Savings
Standard T8	0.87	2	32	2850		58	
Reduced Light Output T8	0.75	2	32		3100	51	\$2.80/yr

Combine Advantage T8 lamps with Reduced Light Output Electronic Ballasts, with these Results:

- Produce comparable light output
- Save 7 system watts vs. standard T8 system
- Save \$2.80 per fixture per year
- Energy savings based on 4000 hrs/yr @ \$.10 kw/hr

ENERGY SAVINGS: 2 LAMP VS. 3 LAMP SYSTEM

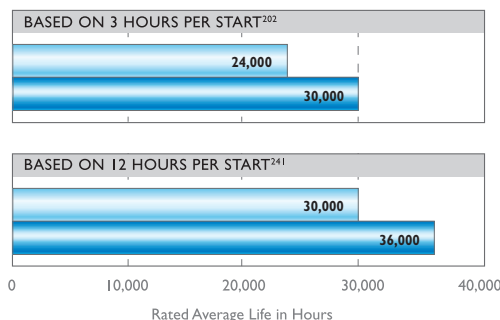
Electronic Ballast	Ballast Factor	No. of Lamps	Lamp Watts	Standard T8 Lumens	Advantage T8 Lumens	System Watts	Savings
Standard T8	0.87	3	32	2850		88	
Increased Light Output T8	1.20	2	32		3100	78	\$4.00/yr

Combine Advantage T8 Lamps with Increased Light Output Ballasts. A 2 Lamp Advantage T8 System vs. a 3 Lamp Standard T8 System will:

- Produce comparable light output
- Save 10 system watts
- Save \$4.00 per fixture per year
- Energy savings based on 4000 hrs/yr @ \$.10 kw/hr
- Reduce lighting installation costs (lamps, ballasts, fixtures and labor)
- Philips Advantage T8 lamps operate on ballast with ballast factors up to 1.32 with warranty intact

RATED AVERAGE LIFE

- Philips Advantage Instant Start Ballast
- Philips Advantage Programmed Start Ballast



FLUORESCENT LAMPS

PLUS 800 Series T8 Lamps, PLUS 700 Series T8 Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.†	Description	Nom. Length (In.)	Rated Average Life		Approx. Initial Lumens (203,204)	Design Lumens (208, 239)	CRI
							3 Hr. Start (202)	12 Hr. Start (241)			

PLUS 800 SERIES LONG LIFE T8 FLUORESCENT LAMPS

T8 Medium Bipin Featuring ALTO II™ Technology and HI-VISION® Phosphor

15	38419-8	◆ □ \$ ⑥ ●	F15T8/TL865/PLUS/ALTO	24	TL 865, 6500K	18	30,000	36,000	975	925	85
17	14552-4	\$ ⑥ ●	F17T8/TL830/PLUS/ALTO	25	TL 830, 3000K	24	30,000	36,000	1400	1300	85
	14553-2	\$ ⑥ ●	F17T8/TL835/PLUS/ALTO	25	TL 835, 3500K	24	30,000	36,000	1400	1300	85
	14554-0	\$ ⑥ ●	F17T8/TL841/PLUS/ALTO	25	TL 841, 4100K	24	30,000	36,000	1400	1300	85
	14555-7	\$ ⑥ ●	F17T8/TL850/PLUS/ALTO	25	TL 850, 5000K	24	30,000	36,000	1300	1235	82
	38215-0	\$ ⑥ ●	F17T8/TL865/PLUS/ALTO	25	TL 865, 6500K	24	30,000	36,000	1275	1210	85
25	14556-5	\$ ⑥ ●	F25T8/TL830/PLUS/ALTO	25	TL 830, 3000K	36	30,000	36,000	2225	2050	85
	14557-3	\$ ⑥ ●	F25T8/TL835/PLUS/ALTO	25	TL 835, 3500K	36	30,000	36,000	2225	2050	85
	14558-1	\$ ⑥ ●	F25T8/TL841/PLUS/ALTO	25	TL 841, 4100K	36	30,000	36,000	2225	2050	85
	14559-9	\$ ⑥ ●	F25T8/TL850/PLUS/ALTO	25	TL 850, 5000K	36	30,000	36,000	2150	2020	82
	38258-0	\$ ⑥ ●	F25T8/TL865/PLUS/ALTO	25	TL 865, 6500K	36	30,000	36,000	2125	2000	85
32	36000-8	\$ ⑥ ●	F32T8/TL830/PLUS/ALTO	25	TL 830, 3000K	48	30,000	36,000	2950	2800	85
	36001-6	\$ ⑥ ●	F32T8/TL835/PLUS/ALTO	25	TL 835, 3500K	48	30,000	36,000	2950	2800	85
	36002-4	\$ ⑥ ●	F32T8/TL841/PLUS/ALTO	25	TL 841, 4100K	48	30,000	36,000	2950	2800	85
	13686-1	\$ ⑥ ●	F32T8/TL841/PLUS/ALTO PLZ	1350	TL 841, 4100K	48	30,000	36,000	2950	2800	85
	36003-2	\$ ⑥ ●	F32T8/TL850/PLUS/ALTO	25	TL 850, 5000K	48	30,000	36,000	2850	2710	82
	38261-4	\$ ⑥ ●	F32T8/TL865/PLUS/ALTO	25	TL 865, 6500K	48	30,000	36,000	2750	2610	82

PLUS 700 SERIES LONG LIFE T8 FLUORESCENT LAMPS

T8 Medium Bipin Featuring ALTO II™ Technology and HI-VISION® Phosphor

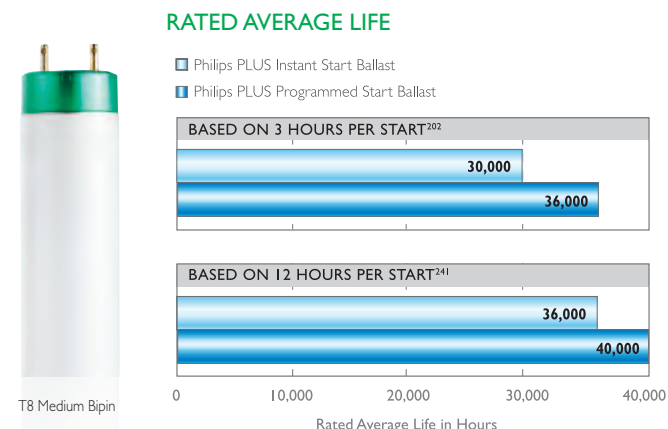
32	36004-0	\$ ⑥ ●	F32T8/TL730/PLUS/ALTO	25	TL 730, 3000K	48	30,000	36,000	2800	2660	78
	36005-7	\$ ⑥ ●	F32T8/TL735/PLUS/ALTO	25	TL 735, 3500K	48	30,000	36,000	2800	2660	78
	38383-6	\$ ⑥ ●	F32T8/TL735/PLUS/ALTO PLZ	1350	TL 735, 3500K	48	30,000	36,000	2800	2660	78
	36013-1	\$ ⑥ ●	F32T8/TL741/PLUS/ALTO	25	TL 741, 4100K	48	30,000	36,000	2800	2660	78
	38384-4	\$ ⑥ ●	F32T8/TL741/PLUS/ALTO PLZ	1350	TL 741, 4100K	48	30,000	36,000	2800	2660	78
	36014-9	\$ ⑥ ●	F32T8/TL750/PLUS/ALTO	25	TL 750, 5000K	48	30,000	36,000	2700	2550	78

For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120

PHILIPS PLUS T8

Warranty Period: 36 months*

* Certain limitations and conditions apply.
See Philips for further warranty details.



FLUORESCENT LAMPS

800 Series T8 Lamps, 700 Series T8 Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.‡	Description	Nom. Length (In.)	Rated Average Life		Approx. Initial Lumens (203,204)	Design Lumens (208, 239)	CRI
							3 Hr. Start (202)	12 Hr. Start (241)			
800 SERIES T8 FLUORESCENT LAMPS											
T8 Medium Bipin Featuring ALTO II™ Technology											
17	36787-0	\$ ● X	F17T8/TL830/ALTO	25	TL 830, 3000K	24	24,000	30,000	1400	1300	85
	36791-2	\$ ●	F17T8/TL835/ALTO	25	TL 835, 3500K	24	24,000	30,000	1400	1300	85
	36793-8	\$ ●	F17T8/TL841/ALTO	25	TL 841, 4100K	24	24,000	30,000	1400	1300	85
	14123-4	\$ ●	F17T8/TL850/ALTO	25	TL 850, 5000K	24	24,000	30,000	1325	1225	82
25	36813-4	\$ ● X	F25T8/TL830/ALTO	25	TL 830, 3000K	36	24,000	30,000	2225	2050	85
	36814-2	\$ ●	F25T8/TL835/ALTO	25	TL 835, 3500K	36	24,000	30,000	2225	2050	85
	36825-8	\$ ●	F25T8/TL841/ALTO	25	TL 841, 4100K	36	24,000	30,000	2225	2050	85
	14124-2	\$ ●	F25T8/TL850/ALTO	25	TL 850, 5000K	36	24,000	30,000	2150	2040	82
32	24667-8	\$ ④ ●	F32T8/TL830/ALTO	25	TL 830, 3000K	48	24,000	30,000	2950	2800	85
	27236-9	\$ ④ ●	F32T8/TL830/ALTO PLZ	1350	TL 830, 3000K	48	24,000	30,000	2950	2800	85
	24670-2	\$ ④ ●	F32T8/TL835/ALTO	25	TL 835, 3500K	48	24,000	30,000	2950	2800	85
	27233-6	\$ ④ ●	F32T8/TL835/ALTO PLZ	1350	TL 835, 3500K	48	24,000	30,000	2950	2800	85
	24671-0	\$ ④ ●	F32T8/TL841/ALTO	25	TL 841, 4100K	48	24,000	30,000	2950	2800	85
	27235-1	\$ ④ ●	F32T8/TL841/ALTO PLZ	1350	TL 841, 4100K	48	24,000	30,000	2950	2800	85
	27229-4	\$ ④ ●	F32T8/TL850/ALTO	25	TL 850, 5000K	48	24,000	30,000	2850	2710	82
40	36831-6	\$ ● †	F40T8/TL830/ALTO	25	TL 830, 3000K	60	24,000	30,000	3775	3500	86
	36834-0	\$ ● †	F40T8/TL835/ALTO	25	TL 835, 3500K	60	24,000	30,000	3775	3500	86
	36847-2	\$ ● †	F40T8/TL841/ALTO	25	TL 841, 4100K	60	24,000	30,000	3775	3500	86
	20698-7	\$ ● †	F40T8/TL850/ALTO	25	TL 850, 5000K	60	24,000	30,000	3600	3250	86

700 SERIES T8 FLUORESCENT LAMPS

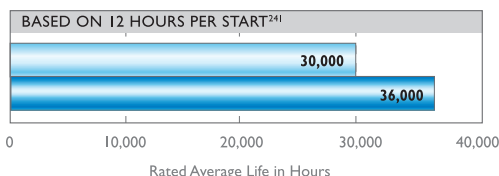
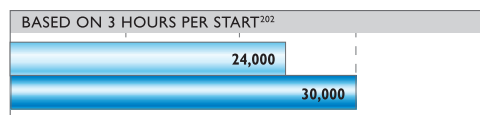
T8 Medium Bipin Featuring ALTO II™ Technology

17	36807-6	\$ ●	F17T8/TL730/ALTO	25	TL 730, 3000K	24	24,000	30,000	1325	1200	78
	36808-4	\$ ●	F17T8/TL735/ALTO	25	TL 735, 3500K	24	24,000	30,000	1325	1200	78
	36812-6	\$ ●	F17T8/TL741/ALTO	25	TL 741, 4100K	24	24,000	30,000	1325	1200	78
25	36826-6	\$ ●	F25T8/TL730/ALTO	25	TL 730, 3000K	36	24,000	30,000	2125	1925	78
	36828-2	\$ ●	F25T8/TL735/ALTO	25	TL 735, 3500K	36	24,000	30,000	2125	1925	78
	36829-0	\$ ●	F25T8/TL741/ALTO	25	TL 741, 4100K	36	24,000	30,000	2125	1925	78
32	27252-6	\$ ④ ●	F32T8/TL730/ALTO	25	TL 730, 3000K	48	24,000	30,000	2800	2660	78
	27282-3	\$ ④ ●	F32T8/TL730/ALTO PLZ	1350	TL 730, 3000K	48	24,000	30,000	2800	2660	78
	27249-2	\$ ④ ●	F32T8/TL735/ALTO	25	TL 735, 3500K	48	24,000	30,000	2800	2660	78
	27259-1	\$ ④ ●	F32T8/TL735/ALTO PLZ	1350	TL 735, 3500K	48	24,000	30,000	2800	2660	78
	27248-4	\$ ④ ●	F32T8/TL741/ALTO	25	TL 741, 4100K	48	24,000	30,000	2800	2660	78
	38351-3	\$ ④ ●	F32T8/TL741/ALTO	10	TL 741, 4100K, 10PK	48	24,000	30,000	2800	2660	78
	27255-9	\$ ④ ●	F32T8/TL741/ALTO PLZ	1350	TL 741, 4100K	48	24,000	30,000	2800	2660	78
	27268-2	\$ ④ ●	F32T8/TL750/ALTO	25	TL 750, 5000K	48	24,000	30,000	2700	2550	78
40	36851-4	\$ ● X	F40T8/TL730/ALTO	25	TL 730, 3000K	60	24,000	30,000	3600	3250	78
	36852-2	\$ ● X	F40T8/TL735/ALTO	25	TL 735, 3500K	60	24,000	30,000	3600	3250	78
	36853-0	\$ ● X	F40T8/TL741/ALTO	25	TL 741, 4100K	60	24,000	30,000	3600	3250	78

For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120

RATED AVERAGE LIFE

- Philips Universal Instant Start Ballast
- Philips Universal Programmed Start Ballast



T8 Medium Bipin

Rated Average Life in Hours

PHILIPS 700 SERIES AND 800 SERIES T8

Warranty Period: 30 months*

* Certain limitations and conditions apply.
See Philips for further warranty details.

FLUORESCENT LAMPS

T8 U-Bent Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.†	Description	Nom. Length (In.)	Rated Average Life 3 Hr. Start (202) 12 Hr. Start (241)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
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800 SERIES U-BENT ENERGY ADVANTAGE FLUORESCENT LAMPS

T8 Medium Bipin with 6" Wide Spacing (212)

25	20420-6	\$●†	FB32T8/TL830/6/EA/ALTO 25 WATT	20	TL 830, 3000K	22½	20,000	24,000	2400	2330	85
	20421-4	\$●†	FB32T8/TL835/6/EA/ALTO 25 WATT	20	TL 835, 3500K	22½	20,000	24,000	2400	2330	85
	20423-0	\$●†	FB32T8/TL841/6/EA/ALTO 25 WATT	20	TL 841, 4100K	22½	20,000	24,000	2400	2330	85
	20424-8	\$●†	FB32T8/TL850/6/EA/ALTO 25 WATT	20	TL 850, 5000K	22½	20,000	24,000	2350	2280	82

800 SERIES U-BENT PLUS LONG LIFE FLUORESCENT LAMPS

T8 Medium Bipin with 6" Wide Spacing (212)

32	21977-4	\$●†	FB32T8/TL830/PLUS/6/ALTO	20	TL 830, 3000K	22½	24,000	30,000	2800	2535	85
	21978-2	\$●†	FB32T8/TL835/PLUS/6/ALTO	20	TL 835, 3500K	22½	24,000	30,000	2800	2535	85
	21983-2	\$●†	FB32T8/TL841/PLUS/6/ALTO	20	TL 841, 4100K	22½	24,000	30,000	2800	2535	85
	21987-3	\$●†	FB32T8/TL850/PLUS/6/ALTO	20	TL 850, 5000K	22½	24,000	30,000	2750	2500	82

800 SERIES U-BENT RAPID START FLUORESCENT LAMPS

T8 Medium Bipin with 6" Wide Spacing (212)

32	37897-6	\$●	FB32T8/TL830/6/ALTO	20	TL 830, 3000K	22½	20,000	24,000	2800	2535	85
	37900-8	\$●	FB32T8/TL835/6/ALTO	20	TL 835, 3500K	22½	20,000	24,000	2800	2535	85
	37902-4	\$●	FB32T8/TL841/6/ALTO	20	TL 841, 4100K	22½	20,000	24,000	2800	2535	85
	37880-2	\$●	FB32T8/TL850/6/ALTO	20	TL 850, 5000K	22½	20,000	24,000	2750	2500	82

700 SERIES U-BENT RAPID START FLUORESCENT LAMPS

T8 Medium Bipin with 6" Wide Spacing (212)

32	37892-7	\$●	FB32T8/TL730/6/ALTO	20	TL 730, 3000K	22½	20,000	24,000	2650	2370	78
	37893-5	\$●	FB32T8/TL735/6/ALTO	20	TL 735, 3500K	22½	20,000	24,000	2650	2370	78
	37894-3	\$●	FB32T8/TL741/6/ALTO	20	TL 741, 4100K	22½	20,000	24,000	2650	2370	78
	37882-8	\$●	FB32T8/TL750/6/ALTO	20	TL 750, 5000K	22½	20,000	24,000	2600	2325	78

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.†	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
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NEW 800 SERIES U-BENT 1½" FLUORESCENT LAMPS * AVAILABLE IN Q4 2008

T8 Medium Bipin with 1½" Wide Spacing (212)

29	22675-3	●†	FB29T8/TL830/EA/ALTO	15	TL 830, 3000K	22½	24,000	2600	2470	85
	22676-1	●†	FB29T8/TL835/EA/ALTO	15	TL 835, 3500K	22½	24,000	2600	2470	85
	22677-9	●†	FB29T8/TL841/EA/ALTO	15	TL 841, 4100K	22½	24,000	2600	2470	85
31	22671-2	●†	FB31T8/TL830/ALTO	15	TL 830, 3000K	22½	24,000	2775	2636	85
	22672-0	●†	FB31T8/TL835/ALTO	15	TL 835, 3500K	22½	24,000	2775	2636	85
	22674-6	●†	FB31T8/TL841/ALTO	15	TL 841, 4100K	22½	24,000	2775	2636	85

For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120



**PHILIPS STANDARD AND
1½" U-BENT T8**

Warranty Period: 24 months*

**PHILIPS PLUS AND
ENERGY ADVANTAGE T8**

Warranty Period: 36 months*

* Certain limitations and conditions apply.
See Philips for further warranty details.

FLUORESCENT LAMPS

Rapid Start T8 Lamps, Preheat T8 Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.‡	Description	Nom. Length (In.)	Rated Average Life		Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
							3 Hr. Start (202)	12 Hr. Start (241)			
RAPID START FLUORESCENT LAMPS											
T8 Medium Bipin; High CRI											
17	22154-9	\$	F17T8/TL950	25	TL 950,5000K	24	20,000	20,000	910	850	98
25	22159-8	\$	F25T8/TL950	25	TL 950,5000K	36	20,000	20,000	1550	1450	98
32	20904-9	\$	F32T8/TL930	25	TL 930,3000K	48	20,000	20,000	2000	1860	95
	20905-6	\$	F32T8/TL950	25	TL 950,5000K	48	20,000	20,000	2000	1860	98

TL-D RAPID START FLUORESCENT LAMPS—FOR OPERATION ON EUROPEAN BALLAST

T8 Medium Bipin; High CRI

36	29189-8	†	TLD36W/840NG	25	TL840, 4000K	48	20,000		3350	3100	82
58	29184-9	†	TLD58W/840NG	25	TL840, 4000K	60	20,000		5200	4300	82
70	29186-4	†	TLD70W/840NG	25	TL840, 4000K	72	20,000		6200	5100	82

PREHEAT FLUORESCENT LAMPS

T8 Medium Bipin Linear Fluorescent Lamps; Requires Use of Starters (202)

15	37823-2	●	F15T8D/ALTO	24	Daylight, 6500K	18	7500		750	660	79
	38298-6	●	F15T8/WW/ALTO	24	Warm White, 3000K	18	7500		870	740	53
	36720-1	●	F15T8/CW/ALTO	24	Cool White, 4100K	18	7500		870	765	62
	36436-4		F15T8/CW BULK	96	Cool White, 4100K	18	7500		850	750	62
	39226-6		F15T8/PLANT	6	Plant Lite, Sleeved	18	7500		410	NA	NA
30	26063-8	●	F30T8/D/ALTO	24	Daylight, 6500K	36	7500		1500	1350	79
	38691-2	●	F30T8/CW/ALTO	24	Cool White, 4100K	36	7500		2200	2000	62

For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120



T8 Medium Bipin

FLUORESCENT LAMPS

Slimline T8 Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.†	Description	Nom. Length (In.)	Rated Average Life		Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
							3 Hr. Start (202)	12 Hr. Start (241)			

ENERGY ADVANTAGE T8 SLIMLINE 8-FOOT FLUORESCENT LAMPS * AVAILABLE IN Q4 2008

T8 Single Pin; Featuring ALTO® Lamp Technology; Instant Start

51	23235-5	□ \$ @ ● †	F96T8/ADV835/XEW/ALTO 51W	24	TL 835, 3500K	96	24,000	30,000	5300	4940	86
	23236-3	□ \$ @ ● †	F96T8/ADV841/XEW/ALTO 51W	24	TL 841, 4100K	96	24,000	30,000	5300	4940	86
	23237-1	□ \$ @ ● †	F96T8/ADV850/XEW/ALTO 51W	24	TL 850, 5000K	96	24,000	30,000	5200	4840	86

PLUS SLIMLINE T8 8-FOOT FLUORESCENT LAMPS

T8 Single Pin; Featuring ALTO® Lamp Technology; Instant Start

59	38800-9	□ \$ @ ●	F96T8/TL830/PLUS/ALTO	24	TL 830, 3000K	96	24,000	30,000	5900	5490	86
	38801-7	□ \$ @ ●	F96T8/TL835/PLUS/ALTO	24	TL 835, 3500K	96	24,000	30,000	5900	5490	86
	38802-5	□ \$ @ ●	F96T8/TL841/PLUS/ALTO	24	TL 841, 4100K	96	24,000	30,000	5900	5490	86
	38803-3	□ \$ @ ●	F96T8/TL850/PLUS/ALTO	24	TL 850, 5000K	96	24,000	30,000	5780	5375	86
	38805-8	□ \$ @ ●	F96T8/TL735/PLUS/ALTO	24	TL 735, 3500K	96	24,000	30,000	5700	5190	78
	38806-6	□ \$ @ ●	F96T8/TL741/PLUS/ALTO	24	TL 741, 4100K	96	24,000	30,000	5700	5190	78

For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120

PHILIPS PLUS SLIMLINE T8

Warranty Period: 24 months*

* Certain limitations and conditions apply.
See Philips for further warranty details.

PLUS SLIMLINE T8 8-FOOT COST OF OWNERSHIP SAVINGS

PLUS Slimline 8-foot T8 Fluorescent Lamps vs. Standard 8-foot T8 Lamps

General Overview

PLUS Slimline 8-foot T8 fluorescent lamps may provide up to 60% longer life than standard 8-foot T8 products. With an incremental cost as little as \$1.00 per lamp, benefits and financial impact can be significant.

Benefits

By using PLUS Slimline 8-foot T8 lamps the lamp replacement and labor costs are extended by an extra 2 years on a facility that operates an average of 4000 hours per year. For example, a standard 8-foot T8 product, with a rated average life expectancy of 15,000 hours, will last nearly 4 years (15,000 hours rated average life/4000 hours per year = 3¾ years).

Conversely, PLUS Slimline 8-foot T8 lamps will operate for 6 years due to their rated average life expectancy of 24,000 hours (24,000 hours rated average life/4000 hours per year = 6 years).

Financial Impact

With the extended life expectancy of 2 years and the benefits of Philips exclusive TCLP-compliant low mercury technology, the positive financial impact of installing PLUS Slimline 8-foot T8 lamps may provide cost of ownership savings per lamp as follows:

Incremental Cost	\$ (1.00)
Material Cost Avoidance ^A	\$ 4.00
Labor Cost Avoidance ^B	\$ 3.72
Disposal Cost Avoidance ^C	\$ 0.72
Cost of Ownership Savings	\$ 7.44

A Material Cost Avoidance is the annualized acquisition cost per lamp (average cost per lamp of \$7.50 for standard 8-foot T8 product / 3 ¾ years = \$2.00 per year). By installing PLUS Slimline 8-Foot T8 lamps, a material cost per lamp of \$4.00 is avoided due to the extra 2 years of life expectancy. Note that the average cost per lamp may vary.

B Labor Cost Avoidance is the annualized labor replacement cost per lamp (labor replacement cost per lamp of \$7.00 / 3 years = \$1.86 per year). By installing PLUS Slimline 8-Foot T8 lamps, a labor replacement cost per lamp of \$3.72 is avoided due to the extra 2 years life expectancy. Note that the labor replacement cost per lamp may vary.

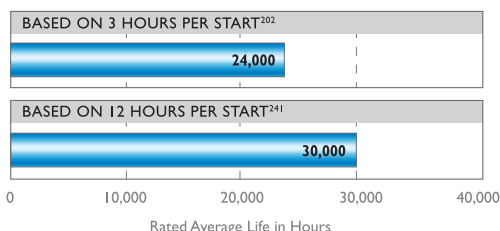
C Disposal Cost Avoidance is based on an average of \$.09 per foot for lamp recycling or \$.72 per 8-foot lamp. Philips Lighting Company encourages the recycling of all fluorescent lamps.



T8 Single Pin

RATED AVERAGE LIFE

■ Philips PLUS Slimline T8



FLUORESCENT LAMPS

High Output T8 Lamps, Very High Output T8 Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.±	Description	Nom. Length (In.)	Rated Average Life 3 Hr. Start (202) 12 Hr. Start (241)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
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PLUS HIGH OUTPUT (HO) T8 8-FOOT FLUORESCENT LAMPS

T8 Recessed D.C.; Featuring ALTO® Lamp Technology

86	38826-4	□ \$ ⑥ ●	F96T8/TL830/HO/PLUS/ALTO	24	TL 830, 3000K	96	24,000	30,000	8200	7625	86
	38827-2	□ \$ ⑥ ●	F96T8/TL835/HO/PLUS/ALTO	24	TL 835, 3500K	96	24,000	30,000	8200	7625	86
	38828-0	□ \$ ⑥ ●	F96T8/TL841/HO/PLUS/ALTO	24	TL 841, 4100K	96	24,000	30,000	8200	7625	86
	38831-4	□ \$ ⑥ ●	F96T8/TL741/HO/PLUS/ALTO	24	TL 741 4100K	96	24,000	30,000	7900	7100	78
	13470-0	□ \$ ⑥ ●	F96T8/TL850/HO/PLUS/ALTO	24	TL 850 5000K	96	24,000	30,000	8100	7550	85

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.±	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
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HIGH OUTPUT (HO) T8 FLUORESCENT LAMPS - 4 FOOT, 5 FOOT & 6 FOOT

T8 Recessed D.C.; Featuring ALTO® Lamp Technology

44	38808-2	□ \$ ●	F48T8/TL830/HO/ALTO	24	TL 830, 3000K	48	18,000	4000	3600	86
	38809-0	□ \$ ●	F48T8/TL835/HO/ALTO	24	TL 835, 3500K	48	18,000	4000	3600	86
	38810-8	□ \$ ●	F48T8/TL841/HO/ALTO	24	TL 841, 4100K	48	18,000	4000	3600	86
55	38816-5	□ \$ ●	F60T8/TL841/HO/ALTO	24	TL 841, 4100K	60	18,000	5050	4545	86
65	38821-5	□ \$ ●	F72T8/TL835/HO/ALTO	24	TL 835, 3500K	72	18,000	6100	5490	86
	38822-3	□ \$ ●	F72T8/TL841/HO/ALTO	24	TL 841, 4100K	72	18,000	6100	5490	86

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.±	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
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VERY HIGH OUTPUT (VHO) T8 FLUORESCENT LAMPS EXTREME TEMPERATURE WITH AMALGAM TECHNOLOGY

T8 Medium Bipin; Featuring ALTO® Lamp Technology

84	21069-0	●	F48T8/TL835/VHO/A/ALTO	25	TL 835, 3500K	48	25,000	7200	6840	85
	21071-6	●	F48T8/TL841/VHO/A/ALTO	25	TL 841, 4100K	48	25,000	7200	6840	85
	21072-4	●	F48T8/TL850/VHO/A/ALTO	25	TL 850, 5000K	48	25,000	6900	6550	82

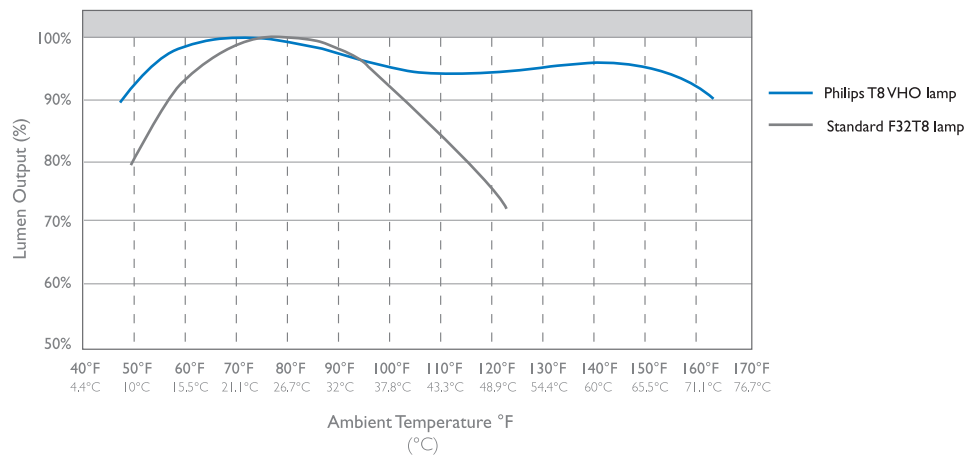
For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120

**PHILIPS PLUS HIGH OUTPUT,
HIGH OUTPUT AND
VERY HIGH OUTPUT T8**
Warranty Period: 24 months*

* Certain limitations and conditions apply.
See Philips for further warranty details.

PERFORMANCE (RELATIVE LIGHT OUTPUT VS. TEMPERATURE)

Philips T8 VHO Extreme Temperature Lamps vs. Standard F32T8 Lamps



FLUORESCENT LAMPS

Rapid Start T12 Lamps, T12 U-Bent Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.‡	Description	Nom. Length (In.)	Rated Average Life		Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
							3 Hr. Start (202)	12 Hr. Start (241)			

ADVANTAGE RAPID START ULTIMATE PERFORMANCE FLUORESCENT LAMPS

T12 Medium Bipin

34	I4257-0	●	F34T12/ADV30/EW/ALTO	30	Advantage 30, T12, 3000K	48	24,000	30,000	3100	2945	85
	I4258-8	●	F34T12/ADV35/EW/ALTO	30	Advantage 35, T12, 3500K	48	24,000	30,000	3100	2945	85
	I4259-6	●	F34T12/ADV41/EW/ALTO	30	Advantage 41, T12, 4100K	48	24,000	30,000	3100	2945	85
	I4260-4	●	F34T12/ADV50/EW/ALTO	30	Advantage 50, T12, 5000K	48	24,000	30,000	3000	2845	85

RAPID START “LONG LIFE” FLUORESCENT LAMPS

T12 Medium Bipin

34	I4251-3	●	F34/CW/RS/EW/LL/ALTO	30	Cool White, 4100K	48	24,000	30,000	2650	2300	62
	I4252-1	●	F34/VW/RS/EW/LL/ALTO	30	Warm White, 3000K	48	24,000	30,000	2700	2350	53

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.‡	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
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RAPID START 800 SERIES FLUORESCENT LAMPS

T12 Medium Bipin

34	I4253-9	●	F34T12/830/EW/ALTO	30	TL 830, 3000K	48	20,000	2800	2660	82
	I4254-7	●	F34T12/835/EW/ALTO	30	TL 835, 3500K	48	20,000	2800	2660	82
	I4255-4	●	F34T12/841/EW/ALTO	30	TL 841, 4100K	48	20,000	2800	2660	82
	I4256-2	●	F34T12/850/EW/ALTO	30	TL 850, 5000K	48	20,000	2800	2660	82

RAPID START FLUORESCENT LAMPS

T12 Medium Bipin

34	26659-3	\$●	F34/DX/RS/EW/ALTO	30	Daylight Deluxe, 6500K	48	20,000	2025	1775	84
	24470-7	\$●	F34/CW/RS/EW/ALTO	30	Cool White, 4100K	48	20,000	2650	2300	62
	22046-7	\$●	F34/CW/RS/EW/ALTO	10	Cool White, 4100K, 10PK	48	20,000	2650	2300	62
	24472-3	\$●	F34/CW/RS/EW/ALTO PLZ	650	Cool White, 4100K	48	20,000	2650	2650	62
	25686-7	\$●	F34/VW/RS/EW/ALTO	30	Warm White, 3000K	48	20,000	2700	2350	53

U-BENT FLUORESCENT LAMPS

T12 Medium Bipin

34	37872-9	\$●	FB34/SPEC35/6/EW/ALTO	12	SPEC35, 3500K	22 ⁷ / ₁₆	18,000	2760	2500	73
	37874-5	\$●	FB34/SPEC41/6/EW/ALTO	12	SPEC41, 4100K	22 ⁷ / ₁₆	18,000	2760	2500	70
	37863-8	●	FB34/CW/6/EW/ALTO	12	Cool White, 4100K	22 ⁷ / ₁₆	18,000	2400	2050	62
	37862-0	●	FB34/VW/6/EW/ALTO	12	Warm White, 3000K	22 ⁷ / ₁₆	18,000	2400	2050	53
	20704-3		FB34/CW/3/EW	12	Cool White, 4100K	22 ⁷ / ₁₆	18,000	2350	2050	62
	20705-0		FB34/VW/3/EW	12	Warm White, 3000K	22 ⁷ / ₁₆	18,000	2425	2125	51

For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120



FLUORESCENT LAMPS

Rapid Start T12 Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.‡	Description	Nom. Length (In.)	Rated Average Life		Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
							3 Hr. Start (202)	12 Hr. Start (241)			

ADVANTAGE RAPID START ULTIMATE PERFORMANCE FLUORESCENT LAMPS

T12 Medium Bipin

40	26604-9	□ ●	F40T12/ADV830/ALTO	30	Advantage 30, T12, 3000K	48	24,000	30,000	3600	3250	85
	26631-2	□ ●	F40T12/ADV835/ALTO	30	Advantage 35, T12, 3500K	48	24,000	30,000	3600	3250	85
	26640-3	□ ●	F40T12/ADV841/ALTO	30	Advantage 41, T12, 4100K	48	24,000	30,000	3600	3250	85
	26643-7	□ ●	F40T12/ADV850/ALTO	30	Advantage 50, T12, 5000K	48	24,000	30,000	3600	3250	85

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.‡	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI

RAPID START 800 SERIES FLUORESCENT LAMPS

T12 Medium Bipin

40	14261-2	●	F40T12/830/ALTO	30	TL 830, 3000K	48	20,000	3200	3040	82
	14262-0	●	F40T12/835/ALTO	30	TL 835, 3500K	48	20,000	3200	3040	82
	14263-8	●	F40T12/841/ALTO	30	TL 841, 4100K	48	20,000	3200	3040	82
	14264-6	●	F40T12/850/ALTO	30	TL 850, 5000K	48	20,000	2700	2900	82

RAPID START FLUORESCENT LAMPS

T12 Medium Bipin

40	33464-9		F40/C75	30	Colortone 75, 7500K	48	20,000	2000	1720	95
	30203-4		F40/C50	30	Colortone 50, 5000K	48	20,000	2200	1915	92
	27359-9	●	F40/DX/ALTO	30	Daylight Deluxe, 6500K	48	20,000	2325	2025	84
	36765-6	●	F40/CWX ALTO	30	Cool White Deluxe, 4200K	48	20,000	2200	1800	89
	39228-2		F40/PLANT	6	Plant Light, Sleeved	48	20,000	1600	1360	—

U-BENT FLUORESCENT LAMPS

T12 Medium Bipin

40	37879-4	●	FB40/30U/6/ALTO	12	Ultralume, 3000K	22 $\frac{1}{8}$	18,000	3100	2850	85
	37840-6	●	FB40/35U/6/ALTO	12	Ultralume, 3500K	22 $\frac{1}{8}$	18,000	3100	2850	85
	37876-0	●	FB40/41U/6/ALTO	12	Ultralume, 4100K	22 $\frac{1}{8}$	18,000	3100	2850	85
	37866-1	●	FB40/SPEC30/6/ALTO	12	SPEC30, 3000K	22 $\frac{1}{8}$	18,000	3050	2775	70
	37854-7	●	FB40/SPEC35/6/ALTO	12	SPEC35, 3500K	22 $\frac{1}{8}$	18,000	3050	2775	73
	37868-7	●	FB40/SPEC41/6/ALTO	12	SPEC41, 4100K	22 $\frac{1}{8}$	18,000	3050	2775	70
	21993-1		FB40/DX/6	12	Daylight Deluxe, 6500K	22 $\frac{1}{8}$	18,000	2250	1950	84

For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120



T12 Medium Bipin

T12 Medium Bipin

FLUORESCENT LAMPS

T12 U-Bent Lamps, Rapid Start T12 Lamps, Preheat T12 Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.‡	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
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RAPID START FLUORESCENT LAMPS

T12 Medium Bipin

25	27247-6	\$ ●	F25T12/CW/RS/EW/ALTO	30	Cool White, 4100K	36	18,000	1950	1650	62
30	31377-5		F30T12/30U/RS	30	Ultralume, 3000K	36	18,000	2400	2160	85
	31381-7	□	F30T12/50U/RS	30	Ultralume, 5000K	36	18,000	2380	2140	85
	31369-2		F30T12/SPEC30/RS	30	SPEC30, 3000K	36	18,000	2350	2080	70
	31371-8	✕	F30T12/SPEC35/RS	30	SPEC35, 3500K	36	18,000	2350	2080	73
	31372-6	✕	F30T12/SPEC41/RS	30	SPEC41, 4100K	36	18,000	2350	2080	70
	31376-7		F30T12/C50/RS	30	Colortone 50, 5000K	36	18,000	1550	1300	92
	37649-1	●	F30T12/D/RS/ALTO	30	Daylight, 6500K	36	18,000	1950	1700	79
	27242-7	●	F30T12/CW/RS/ALTO	30	Cool White, 4100K	36	18,000	2250	1900	62
	13221-7	●	F30T12/WW/RS/ALTO	30	Warm White, 3000K	36	18,000	2300	1950	53

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.‡	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
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PREHEAT FLUORESCENT LAMPS

T12 Medium Bipin Linear Fluorescent Lamps

14	14151-5		F14T12/CW	30	Cool White, 4100K	15	9000	710	590	62
15	14147-3	✕	F15T12/D	30	Daylight, 6500K	18	9000	650	535	79
	14149-9		F15T12/CW	30	Cool White, 4100K	18	9000	800	695	62
20	31399-9		F20T12/30U	30	Ultralume, 3000K	24	9000	1350	1270	85
	31401-3		F20T12/41U	30	Ultralume, 4100K	24	9000	1350	1270	85
	31396-5		F20T12/C50	30	Colortone 50, 5000K	24	9000	850	755	92
	27328-4	●	F20T12/D/ALTO	30	Daylight, 6500K	24	9000	960	960	79
	27332-6	●	F20T12/CW/ALTO	30	Cool White, 4100K	24	9000	1200	1050	62
	27349-0	●	F20T12/WW/ALTO	30	Warm White, 3000K	24	9000	1250	1100	53
	39227-4		F20T12/PLANT	6	Plant Lite, Sleeved	24	9000	600	500	—

For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120



T12 Medium Bipin

FLUORESCENT LAMPS

Slimline T12 Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.‡	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
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SLIMLINE “LONG LIFE” FLUORESCENT LAMPS

T12 Single Pin Linear Fluorescent Lamps; Instant Start

60	14747-0	X ●	F96T12/CW/EW/LL/ALTO	15	Cool White, 4100K	96	18,000	5400	4750	62
	14748-8	X ●	F96T12/841/EW/LL/ALTO	15	TL841, 4100K	96	18,000	5900	5550	85
75	14749-6	●	F96T12/841/LL/ALTO	15	TL841, 4100K	96	18,000	6600	6225	85

SLIMLINE 800 SERIES FLUORESCENT LAMPS

T12 Single Pin Linear Fluorescent Lamps; Instant Start

60	14269-5	●	F96T12/830/EW/ALTO	15	TL830, 3000K	96	12,000	5900	5550	85
	14270-3	●	F96T12/835/EW/ALTO	15	TL835, 3500K	96	12,000	5900	5550	85
	14271-1	●	F96T12/841/EW/ALTO	15	TL841, 4100K	96	12,000	5900	5550	85
	14272-9	●	F96T12/850/EW/ALTO	15	TL850, 5000K	96	12,000	5800	5450	85
75	14273-7	●	F96T12/830/ALTO	15	TL830, 3000K	96	12,000	6600	6225	85
	14274-5	●	F96T12/835/ALTO	15	TL835, 3500K	96	12,000	6600	6225	85
	14275-2	●	F96T12/841/ALTO	15	TL841, 4100K	96	12,000	6600	6225	85
	14276-0	●	F96T12/850/ALTO	15	TL850, 5000K	96	12,000	6500	6125	85

SLIMLINE FLUORESCENT LAMPS

T12 Single Pin Linear Fluorescent Lamps; Instant Start

30	14140-8	\$	F36T12/CW	30	Cool White, 4100K	36	7500	1850	1630	62
	36609-6	X ●	F48T12/SPEC41/EW/ALTO	15	SPEC41, 4100K	48	9000	2575	2350	70
39	36219-4	●	F48T12/D/ALTO	15	Daylight, 6500K	48	9000	2500	220	79
	36660-9	●	F48T12/WW/ALTO	15	Warm White, 3000K	48	9000	2950	2650	53
50	35564-4		F60T12/D	15	Daylight, 6500K	60	12,000	3150	2850	79
	35563-6		F60T12/CW	15	Cool White, 4100K	60	12,000	3450	3050	62
51	35577-6		F64T12/D	15	Daylight, 6500K	64	12,000	3200	2800	79
56	36623-7	X ●	F72T12/SPEC35/ALTO	15	SPEC35, 3500K	72	12,000	4700	4400	73
	36985-0	●	F72T12/D/ALTO	15	Daylight, 6500K	72	12,000	3800	3350	79
	36989-2	●	F72T12/CW/ALTO	15	Cool White, 4100K	72	12,000	4450	3900	62
	36661-7	●	F72T12/WW/ALTO	15	Warm White, 3000K	72	12,000	4550	4000	53
60	36624-5	X \$ ●	F96T12/30U/EW/ALTO	15	Ultralume, 3000K	96	12,000	5900	5550	85
	36630-2	X \$ ●	F96T12/SPEC30/EW/ALTO	15	SPEC30, 3000K	96	12,000	5750	5400	70
	36654-2	●	F96T12/DX/EW/ALTO	15	Daylight Deluxe, 6500K	96	12,000	4200	3675	84
	25840-0	●	F96T12/CW/EW/ALTO	15	Cool White, 4100K	96	12,000	5400	4750	62
	36656-7	●	F96T12/WW/EW/ALTO	15	Warm White, 3000K	96	12,000	5500	4850	53
75	36650-0	X ●	F96T12/SPEC41/ALTO	15	SPEC41, 4100K	96	12,000	6425	6050	70
	34170-1		F96T12/C50	15	Colortone 50, 5000K	96	12,000	4650	4200	92
	37282-1	●	F96T12/DX/ALTO	15	Daylight Deluxe, 6500K	96	12,000	4500	3950	84

For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120



T12 Single Pin

FLUORESCENT LAMPS

High Output T12 Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.‡	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
HIGH OUTPUT FLUORESCENT LAMPS (800MA)										
T12 Recessed D.C. Linear Fluorescent Lamps (207, 214)										
35	14144-0	●	F24T12/D/HO	30	Daylight, 6500K	24	9000	1400	1180	79
	14145-7		F24T12/CW/HO	30	Cool White, 4100K	24	9000	1650	1390	62
40	14141-6		F30T12/D/HO	30	Daylight, 6500K	30	9000	1920	1590	79
	14142-4		F30T12/CW/HO	30	Cool White, 4100K	30	9000	2290	1900	62
50	14138-2		F36T12/D/HO	30	Daylight, 6500K	36	9000	2500	2150	79
	14139-0		F36T12/CW/HO	30	Cool White, 4100K	36	9000	2800	2450	62
55	14136-6		F42T12/D/HO	30	Daylight, 6500K	42	9000	3000	2610	79
	14137-4		F42T12/CW/HO	30	Cool White, 4100K	42	9000	3400	2950	62
60	21897-4		F48T12/SPEC35/HO	15	SPEC35, 3500K	48	12,000	4250	3830	73
	36984-3	●	F48T12/D/HO/ALTO	15	Daylight, 6500K	48	12,000	3400	3000	79
	36978-5	●	F48T12/CW/HO/ALTO	15	Cool White, 4100K	48	12,000	4050	3500	62
75	35567-7		F60T12/D/HO	15	Daylight, 6500K	60	12,000	4400	3800	79
	35566-9		F60T12/CW/HO	15	Cool White, 4100K	60	12,000	5150	4500	62
80	35584-2		F64T12/D/HO	15	Daylight, 6500K	64	12,000	4900	4250	79
	35578-4		F64T12/CW/HO	15	Cool White, 4100K	64	12,000	5600	4850	62
85	27305-2		F72T12/30U/HO	15	Ultralume, 3000K	72	12,000	6800	6200	85
	36653-4	●	F72T12/D/HO/ALTO	15	Daylight, 6500K	72	12,000	5600	4850	79
	36651-8	●	F72T12/CW/HO/ALTO	15	Cool White, 4100K	72	12,000	6350	5500	62
100	21206-8		F84T12/D/HO	15	Daylight, 6500K	84	12,000	6900	6000	79
	21205-0		F84T12/CW/HO	15	Cool White, 4100K	84	12,000	7800	6800	62

For the most current product information, go to the e-catalog on www.philips.com
 Fluorescent symbols and footnotes located on page 120



T12 Recessed DC

FLUORESCENT LAMPS

High Output T12 Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.†	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
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HIGH OUTPUT 800 SERIES FLUORESCENT LAMPS (800MA)

T12 Recessed D.C. Linear Fluorescent Lamps (207, 214)

95	14277-8	✕ ●	F96T12/830/HO/EW/ALTO	15	TL830, 3000K	86	12,000	8625	7750	85
	14278-6	●	F96T12/835/HO/EW/ALTO	15	TL835, 3500K	96	12,000	8625	7750	85
	14279-4	●	F96T12/841/HO/EW/ALTO	15	TL841, 4100K	96	12,000	8625	7750	85
	14280-2	●	F96T12/850/HO/EW/ALTO	15	TL850, 5000K	96	12,000	8520	7675	85
110	14281-0	●	F96T12/830/HO/ALTO	15	TL830, 3000K	96	12,000	9500	8550	85
	14282-8	●	F96T12/835/HO/ALTO	15	TL835, 3500K	96	12,000	9500	8550	85
	14283-6	●	F96T12/841/HO/ALTO	15	TL841, 4100K	96	12,000	9500	8550	85
	14284-4	●	F96T12/850/HO/ALTO	15	TL850, 5000K	96	12,000	9350	8350	85

HIGH OUTPUT FLUORESCENT LAMPS (800MA)

T12 Recessed D.C. Linear Fluorescent Lamps (207, 214)

95	27319-3	✕ \$	F96T12/30U/HO/EW	15	Ultralume, 3000K	96	12,000	8625	7750	85
	21471-8	\$	F96T12/DX/HO/EW	15	Daylight Deluxe, 6500K	96	12,000	5850	5000	84
	26660-1	\$ ●	F96T12/CW/HO/EW/ALTO	15	Cool White, 4100K	96	12,000	8000	6950	62
	34219-6	✕ \$	F96T12/WW/HO/EW	15	Warm White, 3000K	96	12,000	8100	7050	53
110	34226-1		F96T12/C50/HO	15	Colortone 50, 5000K	96	12,000	6300	5400	92
	34222-0		F96T12/CWX/HO	15	Cool White Deluxe, 5000K	96	12,000	6600	5500	89
	21489-0		F96T12/DX/HO	15	Daylight Deluxe, 6500K	96	12,000	6750	5800	84

HIGH OUTPUT 800 SERIES FLUORESCENT LAMPS (800MA)

T12 Recessed D.C. Linear Fluorescent Lamps; For Low Temperature Applications (223)

110	38177-4	●	F96T12/D/HO-O/ALTO	15	Daylight, 6500K	96	12,000	7800	6800	79
	38176-4	●	F96T12/CW/HO-O/ALTO	15	Cool White, 4100K	96	12,000	8800	7650	62

For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120



T12 Recessed DC

FLUORESCENT LAMPS

Very High Output T12 Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.‡	Description	Nom. Length (In.)	Rated Average Life		Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
							3 Hr. Start (202)	12 Hr. Start (241)			

VERY HIGH OUTPUT FLUORESCENT LAMPS (1500MA)

T12 Recessed D.C. Linear Fluorescent Lamps (214)

110	21819-8		F48T12/CW/VHO	15	Cool White, 4100K	48	12,000	12,000	7050	4950	62
135	21785-1		F60T12/CW/VHO	15	Cool White, 4100K	60	12,000	12,000	9000	6300	62
160	33054-8	✕	F72T12/D/VHO	15	Daylight, 6500K	72	12,000	12,000	12,000	6400	79
	21210-0		F72T12/CW/VHO	15	Cool White, 4100K	72	12,000	12,000	11,000	7600	62
185	34232-9	\$	F96T12/CW/VHO/EW	15	Cool White, 4100K	96	12,000	12,000	13,000	9000	62
215	38213-5	□●	F96T12/4IU/VHO/ALTO	15	Ultralume, 4100K	96	12,000	12,000	17,500	16,100	85
	34237-8		F96T12/D/VHO	15	Daylight, 6500K	96	12,000	12,000	12,505	8750	79
	34234-5		F96T12/CW/VHO	15	Cool White, 4100K	96	12,000	12,000	15,200	10,700	62

OUTDOOR VERY HIGH OUTPUT FLUORESCENT LAMPS (1500MA)

T12 Recessed D.C. Linear Fluorescent Lamps

140	21786-9		F60T12/CW/VHO-O	12	Cool White, 4100K	60	10,000	10,000	8900	8250	62
162	21211-8		F72T12/CW/VHO-O	8	Cool White, 4100K	72	10,000	10,000	11,250	7750	62

For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120



T12 Recessed DC

FLUORESCENT LAMPS

Gold Fluorescent Lamps, Appliance Lamps, T9 Circline Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.†	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
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GOLD FLUORESCENT LAMPS

Blocks UV Emissions

32	14746-2		F32T8/GOLD PLUS	25	Gold Sleeved	48	24,000	1750	1480	—
40	14750-4		F40T12/GOLD	30	Gold Sleeved	48	20,000	1700	1465	—

APPLIANCE FLUORESCENT LAMPS

T8 and T12 Medium Bipin Linear Fluorescent Lamps; For Use With Starters

14	25914-3		F14T8/CW/15	24	Cool White, 4100K	15	7500	700	595	62
16	25989-5		F16T8/CW/26	24	Cool White, 4100K	26	7500	1275	1020	62
17	25990-3		F17T8/CW/28	24	Cool White, 4100K	28	7500	1300	1030	62
18	38302-6	●	F18T8/CW/30/ALTO	24	Cool White, 4100K	30	7500	1350	1070	62
	36520-5		F18T8/CW/24	24	Cool White, 4100K	24	7500	1175	940	62
25	14135-8		F25T12/CW/28	30	Cool White, 4100K	28	7500	1600	1280	62

CIRCLINE FLUORESCENT LAMPS

T9 4-Pin Circular Fluorescent Lamps

20	24982-1		FC6T9/COOL WHITE PLUS	12	Cool White, 4100K	6 1/4 OD	12,000	800	590	62
22	39222-5		FC8T9/SOFT WHITE	12	3000K	8 OD	12,000	1150	875	85
	26234-5		FC8T9/D	12	Daylight, 6500K	8 1/4 OD	12,000	910	675	79
	39235-7		FC8T9/DAYDLX	12	6500K	8 OD	12,000	910	675	79
	39116-9		FC8T9/COOL WHITE PLUS	12	Cool White, 4100K	8 OD	12,000	1050	775	62
32	39122-7		FC12T9/SOFT WHITE	12	3000K	12 OD	12,000	1900	1600	85
	26260-0		FC12T9/D	12	Daylight, 6500K	12 OD	12,000	1570	1300	79
	39117-7		FC12T9/COOL WHITE PLUS	12	Cool White, 4100K	12 OD	12,000	1800	1500	62
40	39118-5		FC16T9/COOL WHITE PLUS	12	Cool White, 4100K	16 OD	12,000	2500	1975	62

For the most current product information, go to the e-catalog on www.philips.com

Fluorescent symbols and footnotes located on page 120



GOLD Lamp



T8 Medium Bipin



T12 Medium Bipin



T9 4-Pin Circular

FLUORESCENT LAMPS

TuffGuard™ Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.‡	Color Temp. (K)	Nom. Length (In.)	Rated Avg. Life (Hrs.)(202)	Approx. Initial Lumens (203,204)	CRI	Availability
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TUFFGUARD™ T5 FLUORESCENT COATED LAMPS

T5 Medium Bipin Linear Fluorescent Lamps

8	I6691-8		F8T5/CW PHTG	25	4100	12	7500	400	62	Made to Order
13	I6757-7		F13T5/CW PHTG	25	4100	21	7500	820	62	Made to Order
14	I6690-0	●	F14T5/830/ALTO TG	40	3000	22	20,000	1350	85	Made to Order
	I6726-2	●	F14T5/841/ALTO TG	40	4100	22	20,000	1350	85	Made to Order
21	I6455-8	●	F21T5/830/ALTO TG	40	3000	34	20,000	2100	85	Stocked
	I6856-7	●	F21T5/835/ALTO TG	40	3500	34	20,000	2100	85	Made to Order
	I6669-4	●	F21T5/841/ALTO TG	40	4100	34	20,000	2100	85	Made to Order
24	I6913-6		F24T5/835/HO TG	40	3500	22	20,000	2000	85	Made to Order
28	I6417-8	●	F28T5/835/ALTO TG	40	3000	46	20,000	2900	85	Stocked
	I6775-9	●	F28T5/830/ALTO TG	40	3000	46	20,000	2900	85	Made to Order
	I6674-4	●	F28T5/841/ALTO TG	40	4100	46	20,000	2900	85	Stocked
35	I6733-8	●	F35T5/841/ALTO TG	40	4100	58	20,000	3650	85	Made to Order
54	I6298-2	●	F54T5/841/HO/ALTO TG	40	4000	46	25,000	5000	85	Stocked
	I6861-7	●	F54T5/830/HO/ALTO TG	40	3000	46	25,000	5000	85	Made to Order
	I6672-8	●	F54T5/835/HO/ALTO TG	40	3500	46	25,000	5000	85	Stocked
	I6686-8	●	F54T5/850/HO/ALTO TG	40	5000	46	25,000	5000	85	Stocked

TUFFGUARD™ T8 FLUORESCENT COATED LAMPS

T8 Medium Bipin Linear Fluorescent Lamps

15	I6313-9	●	F15T8/CW/ALTO TG	24	4100	18	10,000	870	62	Stocked
17	I6734-6	●	F17T8/TL830/ALTO TG	25	3000	24	30,000	1400	85	Made to Order
	I6731-2	●	F17T8/TL835/ALTO TG	25	3500	24	30,000	1400	85	Made to Order
	I6898-9	●	F17T8/TL841/ALTO TG	25	4100	24	30,000	1400	85	Made to Order
	I6906-0	●	F17T8/TL730/ALTO TG	25	3000	24	30,000	1325	78	Made to Order
	I6735-3	●	F17T8/TL735/ALTO TG	25	3500	24	30,000	1325	78	Made to Order
	I6438-4	●	F17T8/TL741/ALTO TG	25	4100	24	36,000	1325	78	Stocked
25	I6316-2	●	F25T8/TL830/PLUS/ALTO TG	25	3000	36	36,000	2225	85	Stocked
	I6306-3	●	F25T8/TL835/PLUS/ALTO TG	25	3500	36	36,000	2225	85	Stocked
	I6305-5	●	F25T8/TL841/PLUS/ALTO TG	25	4100	36	36,000	2225	85	Stocked
	I6675-1	●	F25T8/TL830/ALTO TG	25	3000	36	30,000	2225	85	Made to Order
	I6670-2	●	F25T8/TL835/ALTO TG	25	3500	36	30,000	2225	85	Made to Order
	I6787-4	●	F25T8/TL841/ALTO TG	25	4100	36	30,000	2225	85	Made to Order
	I6684-3	●	F25T8/TL735/ALTO TG	25	3500	36	30,000	2125	78	Made to Order
	I6673-6	●	F25T8/TL741/ALTO TG	25	4100	36	30,000	2125	78	Made to Order
30	I6752-8	●	F30T8/CW/ALTO TG	24	4100	36	10,000	2200	62	Made to Order
	I6927-6	●	F30T8/D/ALTO TG	24	6500	36	10,000	1500	79	Made to Order
32	I6975-5	●	F32T8/ADV841/XLL/ALTO TG 25W	25	4100	48	40,000	2400	85	Stocked
	I6294-1	●	F32T8/ADV835/XEW/ALTO TG 25W	25	3500	48	30,000	2500	85	Stocked
	I6293-3	●	F32T8/ADV841/XEW/ALTO TG 25W	25	4100	48	30,000	2500	85	Stocked
	I6682-7	●	F32T8/ADV850/XEW/ALTO TG	25	5000	48	30,000	2425	85	Made to Order
	I6863-3	●	F32T8/ADV830/ALTO TG	25	3000	48	30,000	3150	85	Made to Order
	I6308-9	●	F32T8/ADV841/ALTO TG	25	4100	48	30,000	3150	85	Stocked
	I6502-7	●	F32T8/ADV850/ALTO TG	25	5000	48	30,000	3050	85	Made to Order
	I6275-0	●	F32T8/TL830/PLUS/ALTO TG	25	3000	48	36,000	2950	85	Stocked
	I6238-8	●	F32T8/TL835/PLUS/ALTO TG	25	3500	48	36,000	2950	85	Stocked
	I6274-3	●	F32T8/TL841/PLUS/ALTO TG	25	4100	48	36,000	2950	85	Stocked

* Made to order products require a 3 week lead time.

For the most current product information, go to the e-catalog on www.philips.com

Fluorescent symbols and footnotes located on page 120



T5 Miniature Bipin

T8 Medium Bipin

FLUORESCENT LAMPS

TuffGuard™ Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.‡	Color Temp. (K)	Nom. Length (In.)	Rated Avg. Life (Hrs.)(202)	Approx. Initial Lumens (203,204)	CRI	Availability
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TUFFGUARD™ T8 FLUORESCENT COATED LAMPS CONTINUED

T8 Linear Fluorescent Lamps

32	I6292-5	●	F32T8/TL850/PLUS/ALTO TG	25	5000	48	36,000	2850	85	Stocked
	I6791-6	●	F32T8/TL865/PLUS/ALTO TG	25	6500	48	36,000	2750	85	Made to Order
	I6295-8	●	F32T8/TL841/XLL/ALTO TG	25	4100	48	40,000	2950	85	Stocked
	I6246-1	●	F32T8/TL730/PLUS/ALTO TG	25	3000	48	36,000	2800	78	Stocked
	I6239-6	●	F32T8/TL735/PLUS/ALTO TG	25	3500	48	36,000	2800	78	Stocked
	I6078-8	●	F32T8/TL741/PLUS/ALTO TG	25	4100	48	36,000	2800	78	Stocked
	I6318-8	●	F32T8/TL750/PLUS/ALTO TG	25	5000	48	36,000	2700	78	Stocked
	I6894-8		F32T8/TL950 TG	25	5000	48	30,000	2000	98	Made to Order
	I6541-5	●	F32T8/TL830/ALTO TG	25	3000	48	30,000	2950	85	Stocked
	I6488-9	●	F32T8/TL835/ALTO TG	25	3500	48	30,000	2950	85	Stocked
	I6487-1	●	F32T8/TL841/ALTO TG	25	4100	48	30,000	2950	85	Made to Order
	I6503-5	●	F32T8/TL850/ALTO TG	25	5000	48	30,000	2850	85	Made to Order
	I6508-4	●	F32T8/TL730/ALTO TG	25	3000	48	30,000	2800	78	Made to Order
	20428-9	●	F32T8/TL735/ALTO TG	25	3500	48	24000	2800	78	Stocked
	I6484-8	●	F32T8/TL741/ALTO TG	25	4100	48	30,000	2800	78	Stocked
	I6619-9	●	F32T8/TL750/ALTO TG	25	5000	48	30,000	2700	78	Made to Order
40	I6323-8	●	F40T8/TL835/ALTO TG	25	3500	60	24,000	3775	85	Stocked
	I6439-2	●	F40T8/TL841/ALTO TG	25	4100	60	24,000	3775	85	Stocked
	I6770-0	●	F40T8/TL735/ALTO TG 25PK	25	3500	60	24,000	3600	78	Made to Order
	I6695-9	●	F40T8/TL741/ALTO TG 25PK	25	4100	60	24,000	3600	78	Made to Order
48	I6784-1	●	F48T8/TL835/HO/ALTO TG 24PK	24	3500	48	24,000	4000	85	Made to Order
	I6772-6	●	F48T8/TL841/HO/ALTO TG 24PK	24	4100	48	24,000	4000	85	Made to Order
96	I6878-1	●	F96T8/TL841/PLUS/ALTO TG 24PK	24	4100	96	30,000	5900	85	Made to Order
	I6909-4	●	F96T8/TL835/PLUS/ALTO TG 24PK	24	3500	96	30,000	5900	85	Made to Order
	I6796-5	●	F96T8/TL850/PLUS/ALTO TG 24PK	24	5000	96	30,000	5780	85	Stocked
	I6685-0	●	F96T8/TL735/PLUS/ALTO TG 24PK	24	3500	96	30,000	5700	78	Stocked
	I6676-9	●	F96T8/TL741/PLUS/ALTO TG 24PK	24	4100	96	30,000	5700	78	Made to Order
	I6681-9	●	F96T8/TL835/HO/PLUS/ALTO TG 24PK	24	3500	96	30,000	8200	85	Made to Order
	I6683-5	●	F96T8/TL841/HO/PLUS/ALTO TG 24PK	24	4100	96	30,000	8200	85	Stocked
	I6671-0	●	F96T8/TL741/HO/PLUS/ALTO TG 24PK	24	4100	96	30,000	7900	78	Made to Order

TUFFGUARD™ T12 FLUORESCENT COATED LAMPS

T12 Linear Fluorescent Lamps

14	I6792-4		F14T12/CW TG	30	4100	15	9000	710	62	Made to Order
15	I6687-6		F15T12/CW TG	30	4100	18	9000	800	62	Made to Order
20	I6919-3		F20T12/D/ALTO TG	30	6500	24	9000	1075	79	Made to Order
	I6300-6	●	F20T12/CW/ALTO TG	30	4100	24	9000	1200	62	Stocked
25	I6729-6		F25T12/CW TG	30	4100	36	7500	1900	62	Made to Order
30	I6893-0	●	F30T12/D/RS/ALTO TG	30	6500	36	18,000	1950	79	Made to Order
	I6310-5	●	F30T12/CW/RS/ALTO TG	30	4100	36	18,000	2250	62	Stocked
34	I6743-7	●	F34T12/ADV850/EW/ALTO TG	30	5000	48	24,000	2950	85	Made to Order
	I6032-5	●	F34/CW/RS/EW/LL/ALTO TG	30	4100	48	24,000	2650	62	Stocked
	I6759-3	●	F34T12/835/EW/ALTO TG	30	3500	48	20,000	2800	82	Made to Order
	I6764-3	●	F34T12/841/EW/ALTO TG	30	4100	48	20,000	2800	82	Made to Order
	I6315-4	●	F34W/WW/RS/EW/ALTO TG	30	3000	48	20,000	2700	53	Stocked
	I6060-6	●	F34T12/CW/RS/EW/ALTO TG	30	4100	48	20,000	2650	62	Stocked
	I6693-4	●	F34T12/DX/RS/EW/ALTO TG	30	6500	48	20,000	2025	84	Made to Order

* Made to order products require a 3 week lead time.

For the most current product information, go to the e-catalog on www.philips.com

Fluorescent symbols and footnotes located on page 120



T8 Medium Bipin



T8 Single Pin



T8 Recessed DC



T12 Medium Bipin

FLUORESCENT LAMPS

TuffGuard™ Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.‡	Color Temp. (K)	Nom. Length (In.)	Rated Avg. Life (Hrs.)(202)	Approx. Initial Lumens (203,204)	CRI	Availability
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TUFFGUARD™ T12 FLUORESCENT COATED LAMPS CONTINUED

T12 Linear Fluorescent Lamps

40	I6744-5	●	F40T12/ADV835/ALTO TG	30	3500	48	24,000	3600	85	Made to Order
	I6918-5	●	F40T12/ADV841/ALTO TG	30	4100	48	24,000	3600	85	Made to Order
	I6886-4	●	F40T12/ADV850/ALTO TG	30	5000	48	24,000	3600	85	Made to Order
	I6736-1	●	F40T12/830/ALTO TG	30	3000	48	20,000	3200	82	Made to Order
	I6311-3	●	F40T12/835/ALTO TG	30	3500	48	20,000	3200	82	Stocked
	I6322-0	●	F40T12/841/ALTO TG	30	4100	48	20,000	3200	82	Stocked
	I6677-7	●	F40T12/CWX/ALTO TG	30	4200	48	20,000	2200	89	Made to Order
	I6314-7		F40C50 TG	30	5000	48	20,000	2200	92	Stocked
	I6890-6		F40T12/C75 TG	30	7500	48	20,000	2000	95	Made to Order
	20427-1	●	F40T12/CW/ALTO TG	30	4100	48	20000	2650	62	Stocked
	I6299-0	●	F40DX/ALTO TG	30	6500	48	20,000	2325	84	Stocked
48	I6742-9	●	F48T12/CW/EW/ALTO TG	15	4100	48	9000	2400	62	Made to Order
	I6309-7	●	F48T12/CW/ALTO TG	30	4100	48	9000	2950	62	Stocked
	I6307-1	●	F48T12/D/ALTO TG	15	6500	48	9000	2500	79	Stocked
	I6296-6	●	F48T12/CW/HO/ALTO TG	15	4100	48	12,000	4050	62	Stocked
	I6762-7	●	F48T12/D/HO/ALTO TG	15	6500	48	12,000	3400	79	Made to Order
60	I6728-8		F60T12/CW/HO TG	15	4100	60	12,000	5150	62	Made to Order
72	I6689-2	●	F72T12/CW/ALTO TG	15	4100	72	12,000	4450	62	Made to Order
	I6924-3	●	F72T12/D/ALTO TG	15	6500	72	12,000	3800	79	Made to Order
	I6312-1	●	F72T12/CW/HO/ALTO TG	15	4100	72	12,000	6350	62	Stocked
84	I6817-9		F84T12/CW/HO TG [†]	15	4100	84	12,000	7800	62	Made to Order
96	I6974-8	●	F96T12/CW/EW/LL/ALTO TG	15	4100	96	18,000	5400	62	Made to Order
	I6836-9	●	F96T12/830/EW/ALTO TG	15	3000	96	12,000	5900	85	Made to Order
	I6883-1	●	F96T12/841/EW/ALTO TG	15	4100	96	12,000	5900	85	Made to Order
	I6855-9	●	F96T12/WW/EW/ALTO TG	15	3000	96	12,000	5500	53	Made to Order
	I6124-0	●	F96T12/CW/EW/ALTO TG	15	4100	96	12,000	5400	62	Stocked
	I6324-6	●	F96T12/DX/EW/ALTO TG	15	6500	96	12,000	4200	84	Stocked
	I6319-6	●	F96T12/835/ALTO TG	15	3500	96	12,000	6425	85	Stocked
	I6777-5	●	F96T12/841/ALTO TG	15	4100	96	12,000	6425	85	Made to Order
	I6783-3	●	F96T12/850/ALTO TG	15	5000	96	12,000	6300	85	Made to Order
	I6320-4		F96T12/C50/HO TG	15	5000	96	12,000	6300	92	Stocked
	I6297-4	●	F96T12/D/ALTO TG	15	6500	96	12,000	4500	79	Stocked
	21916-2	●	F96T8/TL850/HO/PLUS/ALTO TG	24	5000	96	30000	8100	85	Stocked
	I6725-4	●	F96T12/841/HO/EW/ALTO TG	15	4100	96	12,000	8500	85	Made to Order
	I6694-2		F96T12/DX/HO/EW TG	15	6500	96	12,000	5850	84	Stocked
	I6216-4	●	F96T12/CW/HO/EW/ALTO TG	15	4100	96	12,000	8000	62	Stocked
	I6303-0	●	F96T12/835/HO/ALTO TG	15	3500	96	12,000	9500	85	Stocked
	I6730-4	●	F96T12/841/HO/ALTO TG	15	4100	96	12,000	9500	85	Made to Order
	I6582-9		F96T12/CWX/HO TG	15	4200	96	12,000	6600	89	Stocked
	I6123-2	●	F96T12/CW/ALTO TG	15	4100	96	12,000	6100	62	Stocked
	I6301-4	●	F96T12/CW/HO-O/ALTO TG	15	4100	96	12,000	8800	62	Stocked
	I6302-2	●	F96T12/D/HO-O/ALTO TG	15	6500	96	12,000	7800	79	Stocked

* Made to order products require a 3 week lead time.

For the most current product information, go to the e-catalog on www.philips.com

Fluorescent symbols and footnotes located on page 120



T12 Medium Bipin

T12 Single Pin

T12 Recessed DC

FLUORESCENT LAMPS

Consumer Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.±	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Rated Avg. Life (Yrs.) (240)	Initial Lumens (203,204)	Design Lumens (208)	CRI
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T5 FLUORESCENT LAMPS

Blister-Carded Linear Fluorescent Lamps; Miniature Bipin

4	39218-3		F4T5/SOFT WHITE	12/1	3000K	6	6000	3	150	120	85
6	39219-1		F6T5/SOFT WHITE	12/1	3000K	9	7500	3	325	260	85
8	39220-9		F8T5/SOFT WHITE	12/1	3000K	12	7500	3	450	360	85
	39114-4		F8T5/COOL WHITE PLUS	12/1	4100K	12	7500	3	400	300	62
13	39221-7		F13T5/SOFT WHITE	12/1	3000K	21	7500	3	1000	800	85

T8 FLUORESCENT LAMPS

T8 Medium Bipin Linear Fluorescent Lamps

15	39212-6	●	F15T8/SOFT WHITE	6/1	3000K Individually Sleeved	18	7500	3	1000	900	85
	39207-6	●	F15T8/COOL WHITE PLUS	6/1	4100K Individually Sleeved	18	7500	3	870	765	62
	39108-6	●	F15T8/COOL WHITE PLUS	6/1	4100K Individually Sleeved	24	7500	3	1175	1035	62
	39229-0		F15T8/NATURAL SUNSHINE	6/1	5000K Individually Sleeved	18	7500	3	590	475	92
	39232-4	●	F15T8/DAYDLX	6/1	6500K Individually Sleeved	18	7500	3	750	660	79
	39226-6		F15T8/PLANT	6/1	Individually Sleeved	18	7500	—	410	—	—
30	39216-7	●	F30T8/SOFT WHITE	6/1	3000K Individually Sleeved	36	7500	3	2500	2250	85
	39210-0	●X	F30T8/COOL WHITE PLUS	6/1	4100K Individually Sleeved	36	7500	3	2200	1760	62
32	13426-2	●X	F32T8/SOFT WHITE	6	3000K 6 Pk Case	48	20,000	7	2950	2800	86
	13427-0	●	F32T8/NATURAL SUNSHINE	6	5000K 6 Pk Case	48	20,000	7	2950	2800	86
	20545-0	●	F32T8/TL735 ALTO 10PK	10	3500K 10 Pk Case	48	20,000	7	2850	2710	78
	38351-3	●	F32T8/TL741 ALTO 10PK	10	4100K 10 Pk Case	48	20,000	7	2850	2710	78
	20277-0	●	F32T8/TL841 PLUS ALTO 10PK	10	4100K 10 Pk Case	48	24,000	7	2850	2710	85
	20278-8	●	F32T8/TL841/XLL/ALTO 10PK	10	4100K 10 Pk Case	48	36,000	7	2950	2800	85
	20504-7	●	F32T8/TL850 ALTO 10PK	10	5000K 10 Pk Case	48	20,000	7	2950	2800	86
	15235-5	●	F32T8/TL865/PLUS/ALTO 10PK	10	6500K 10 Pk Case	48	24,000	7	2850	2710	85
	20541-9	●	F32T8/TL735 ALTO 15/2	15/2	3500K 2 Pk	48	20,000	7	2850	2710	78
	20552-6	●	F32T8/TL741 ALTO 15/2	15/2	4100K 2 Pk	48	20,000	7	2850	2710	78
	20542-7	●	F32T8/TL850 ALTO 15/2PK	15/2	5000K 2 Pk	48	20,000	7	2950	2800	85
	22682-9	●	F32T8/SOFT WHITE /ALTO 36/2	36/2	3000K 2 Pk	48	20,000	7	2850	2710	78
	22679-5		F32T8/COOL WHITE PLUS 36/2	36/2	4100K 2 Pk	48	24,000	7	2850	2710	78
	22734-8		F32T8/NATURAL LIGHT 36/2	36/2	5000K 2 Pk	48	20,000	7	2150	1900	85
	22681-1	●	F32T8/DAYLIGHT DELX/ALTO 36/2	36/2	6500K 2 Pk	48	20,000	7	2800	2520	78
	13839-6	●X	F32T8/SOFT WHITE /ALTO 72/2	72/2	3000K 2 Pk	48	20,000	7	2850	2710	78
	13360-3	●X	F32T8/COOL WHITE PLUS/ALTO	72/2	4100K 2 Pk	48	20,000	7	2850	2710	78
	13838-8	●X	F32T8/DAY DLX/ALTO 72/2	72/2	6500K 2 Pk	48	20,000	7	2800	2520	78

For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120



T5 Miniature Bipin



T8 Medium Bipin

FLUORESCENT LAMPS

Consumer Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.†	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Rated Avg. Life (Yrs.) (240)	Initial Lumens (203,204)	Design Lumens (208)	CRI
T12 FLUORESCENT LAMPS											
Individually Sleeved Fluorescent Lamps; Medium Bipin											
14	14150-7		F14T12/SOFT WHITE	6/1	3000K Individually Sleeved	15	9000	4	700	560	85
15	14146-5		F15T12/SOFT WHITE	6/1	3000K Individually Sleeved	18	9000	4	800	720	85
	14148-1	✕	F15T12/COOL WHITE PLUS	6/1	4100K Individually Sleeved	18	9000	4	800	695	62
20	39120-1	●	F20T12/SOFT WHITE	6/1	3000K Individually Sleeved	24	9000	4	1350	1215	85
	39209-2	●	F20T12/COOL WHITE PLUS	6/1	4100K Individually Sleeved	24	9000	4	1200	1050	62
	39230-8		F20T12/NATURAL SUNSHINE	6/1	5000K Individually Sleeved	24	9000	4	850	755	92
	39233-2	●✕	F20T12/DAYDLX	6/1	6500K Individually Sleeved	24	9000	4	1075	960	79
	39227-4		F20T12/PLANT	6/1	Individually Sleeved	24	9000	—	600	—	—
	20550-0	●	F20T12/CW/ALTO 15/2	15/2	4100K 2 Pk	24	9000		1200	1050	62
	20554-2	●	F20T12/D/ALTO 15/2	15/2	6500K 2 Pk	24	9000		1075	960	79
25	22686-0	✕†	F40T12/COOL WHITE XEW 25W 36/2	36/2	4100K 2 Pk	48	12,000	7	2200	2090	85
30	39215-9	●	F30T12/SOFT WHITE	6/1	3000K Individually Sleeved	36	18,000	7	2400	2160	85
	20559-1	●	F30T12/CW/ALTO 15/2	15/2	4100K 2 Pk	36	18,000	7	2250	1900	62
	39109-4	●	F30T12/COOL WHITE PLUS	6/1	4100K Individually Sleeved	36	18,000	7	2250	1900	62
	39121-9	●	F40T12/SOFT WHITE	6/1	3000K Individually Sleeved	48	20,000	7	3300	2970	85
34	20562-5	●	F34T12CW/RS/EW/ALTO 15/2	15/2	Cool White, 4100K 2 Pk	48	20,000	7	2650	2300	62
	20506-2	●	F34T12/835/RS/EW/ALTO 15/2	15/2	SPEC, 4100K 2 Pk	48	20,000	7	2800	2520	73
40	39111-0	●	F40T12/COOL WHITE PLUS	6/1	4100K Individually Sleeved	48	20,000	7	3200	2880	70
	39231-6		F40T12/NATURAL SUNSHINE	6/1	5000K Individually Sleeved	48	20,000	7	2200	1915	92
	39234-0	●	F40T12/DAYDLX	6/1	6500K Individually Sleeved	48	20,000	7	2325	2025	84
	39228-2		F40T12/PLANT	6/1	Individually Sleeved	48	20,000	—	1600	—	—
	14751-2	●✕	F40T12/SOFT WHITE	6/1	3000K Individually Sleeved	48	20,000	7	3300	2970	85
	22606-8	●	F40T12/COOL WHITE PLUS	10	4100K 10 Pk	48	20,000	7	3200	2880	70
	38752-2	●	F40T12/DAYDLX	10	6500K 10 Pk	48	20,000	7	2325	2025	84
	39240-7	●	F40T12/SOFT WHITE/15/2PK	15/2	3000K 2 Pk	48	20,000	7	3300	2970	85
	39239-9	●✕	F40T12/COOL WHITE PLUS/15/2PK	15/2	4100K 2 Pk	48	20,000	7	3200	2880	70
	20500-5	●	F40T12/CW PLUS ALTO 15/2	15/2	4100K 2 Pk	48	20,000	7	3200	2880	70
	29491-8	●	F40/HL EVERYWHERE	15/2	5000K 2 Pk	48	20,000	7	2200	1800	89
	20561-7		F40T12/C50 15/2PK	15/2	5000K 2 Pk	48	20,000	7	2200	1915	70
	39241-5	●	F40T12/DAYDLX/15/2PK	15/2	6500K 2 Pk	48	20,000	7	2325	2025	84
	22685-2	●†	F40T12/SOFT WHITE ALTO 36/2	36/2	3000K 2 Pk	48	20,000	7	3300	2970	85
	22684-5	●†	F40T12/COOL WHITE PLUS/ALTO 36/2	36/2	4100K 2 Pk	48	20,000	7	3200	2880	70
	22728-0	●†	F40T12/NATURAL LIGHT ALTO 36/2	36/2	5000K 2 Pk	48	20,000	7	2350	2050	85
	22683-7	●†	F40T12/DAYDELUX ALTO 36/2PK	36/2	6500K 2 Pk	48	20,000	7	2325	2025	84
	39217-5	●✕	F40T12/SOFT WHITE/84/2PK	84/2	3000K 2 Pk	48	20,000	7	3300	2970	85
	39211-8	●✕	F40T12/COOL WHITE PLUS/84/2PK	84/2	4100K 2 Pk	48	20,000	7	3200	2880	70
60	39123-5	●✕	F40T12/DAYDLX/84/2PK	84/2	6500K 2 Pk	48	20,000	7	2325	2025	84
	20523-7	●	F96T12/CW/EW/ALTO 8/2PK	8/2	4100K 2 Pk	96	12,000	5	5400	4750	62
	13349-6	●†	F96T12/CW/EW/36/2PK	36/2	4100K 2 Pk	96	12,000	5	5400	4750	62
	20505-4	●	F96T12/835/EW ALTO 8/2	8/2	3500K 2 Pk	96	20,000	7	2800		85
75	37663-2	●	F96T12/DAYDLX/ALTO 8/2PK	8/2	6500K 2 Pk	96	12,000	5	4500	3950	84

For the most current product information, go to the e-catalog on www.philips.com
 Fluorescent symbols and footnotes located on page 120



T12 Medium Bipin

FLUORESCENT LAMPS

Consumer Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.±	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Rated Avg. Life (Yrs.) (240)	Initial Lumens (203,204)	Design Lumens (208)	CRI
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CIRCLINE FLUORESCENT LAMPS

T9 Circular 4-Pin Fluorescent Lamps

22	39222-5		FC8T9/SOFT WHITE	12/1	3000K Individually Sleeved	8 OD	12,000	4	1150	875	85
	39116-9		FC8T9/COOL WHITE PLUS	12/1	4100K Individually Sleeved	8 OD	12,000	4	1050	775	62
	39235-7		FC8T9/DAYDLX	12/1	6500K Individually Sleeved	8 OD	12,000	4	910	675	79
32	39122-7		FC12T9/SOFT WHITE	12/1	3000K Individually Sleeved	12 OD	12,000	4	1900	1600	85
	39117-7		FC12T9/COOL WHITE PLUS	12/1	4100K Individually Sleeved	12 OD	12,000	4	1800	1500	62
40	39118-5		FC16T9/COOL WHITE PLUS	12/1	4100K Individually Sleeved	16 OD	12,000	4	2500	1975	62

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.±	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
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T5 FLUORESCENT LAMP

28	20613-6	●	F28T5/TL835 ALTO UPC 15/1	15	TL835, 3500K	46	20,000	2900	2750	85
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T8 PREHEAT FLUORESCENT LAMP

T8 Medium Bipin Linear Fluorescent Lamps; Requires Use of Starters

30	13348-8	●	F30T8/COOL WHITE PLUS ALTO UPC	24	Cool White, 4100K	36	7500	2200	2000	62
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T8 FLUORESCENT LAMP

T8 Medium Bipin Linear Fluorescent Lamps

17	13599-5		F17T8/TL950 UPC	25	TL90, 5000K	24	20,000	910	850	98
	16069-0	●	F17T8/SOFT WHITE UPC	25	TL80, 3000K	24	20,000	1400	1300	85
25	15238-9	●	F32T8/ADV841/XEW/ALTO 25W 10PK	10	TL80, 4100K 10 Pk Case	48	24,000	2400	2160	85
	22910-4	●†	F32T8/ADV841/XEW/ALTO 25W 36/2PK	36/2	TL80, 4100K 2 Pk	48	24,000	2500	2160	85
32	13600-2		F32T8/TL950 UPC	25	TL90, 5000K	48	20,000	2000	1860	98
	13555-6	●X	F32T8/TL850 UPC	25	TL80, 5000K	48	20,000	2950	2800	86
	27278-1	●X	F32T8/TL730 UPC	25	TL70, 3000K	48	20,000	2850	2710	78
	27274-0	●X	F32T8/TL735 UPC	25	TL70, 3500K	48	20,000	2850	2710	78
	27269-0		F32T8/TL741 UPC	25	TL70, 4100K	48	20,000	2850	2710	78

For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120



T9 4-Pin Circular



T5 Miniature Bipin



T8 Medium Bipin

FLUORESCENT LAMPS

T8 U-Bent Lamps, Preheat and Rapid Start T12 Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.†	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
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U-BENT T8

T8 Medium Bipin

32	37888-5	● X	FB32T8/TL735/6 UPC	20	TL70, 3500K	22 ⁷ / ₁₆	20,000	2650	2370	75
	20549-2	●	FB32T8/TL735/6/ALTO UPC 10/I	10/I	TL70, 3500K Individually Sleeved	23 ⁷ / ₁₆	20,000	2650	2370	75
	37889-3	● X	FB32T8/TL741/6 UPC	20	TL70, 4100K	22 ⁷ / ₁₆	20,000	2650	2370	75
	20548-4	●	FB32T8/TL741/6/ALTO UPC 10/I	10/I	TL70, 4100K Individually Sleeved	22 ⁷ / ₁₆	20,000	2650	2370	75

PREHEAT T12

T12 Medium Bipin Linear Fluorescent Lamps

20	38693-8		F20T12/SPEC35 UPC	30	SPEC, 3500K	24	9000	1275	1190	73
	21331-4	● X	F20T12/D ALTO UPC	30	Daylight, 6500K	24	9000	1075	960	79
	33948-1	X	F20T12/COOL WHITE PLUS UPC	30	Cool White, 4100K	24	9000	1200	1050	62

RAPID START T12

T12 Medium Bipin Linear Fluorescent Lamps

30	38694-6		F30T12/SPEC35 UPC	30	SPEC, 3500K	36	18,000	2350	2080	73
	13579-8	X	F30T12/C50 UPC	30	Colortone 50, 5000K	36	18,000	1650	1400	92
	38692-0	●	F30T12/D UPC	30	Daylight, 6500K	36	18,000	1950	1700	79
	33949-9	●	F30T12/COOL WHITE PLUS/ALTO UPC	30	Cool White, 4100K	36	18,000	2250	1900	62
34	26793-0	● X	F34/SPEC35/EW UPC	30	SPEC, 3500K	48	20,000	2800	2520	73
	38695-3	●	F34/SPEC41/EW UPC	30	SPEC, 4100K	48	20,000	2800	2520	70
	22046-7		F34/CW/RS/EW	10	Cool White, 4100K 10 Pk Case	48	20,000	2650	2300	62
	14121-8	X	F34/CW/RS/EW	10	Cool White, 4100K 10 Pk Case	48	20,000	2650	2300	62
	24475-6		F34/CW/RS/EW UPC	30	Cool White, 4100K	48	20,000	2650	2300	62
	39088-0		F34/CW/RS/EW CONTRACTOR	30	Cool White, 4100K	48	20,000	2650	2300	62
40	37530-3	●	F40/DX UPC	30	Daylight, 6500K	48	20,000	2325	2025	84
	13096-2	X	F40/COOL WHITE PLUS UPC	30	Cool White Plus, 4100K	48	20,000	3200	2880	70
	26790-6	X	F40/C50 UPC	30	Colortone 50, 5000K	48	20,000	2200	1915	92

For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120



T8 U-Bent



T12 Medium Bipin

FLUORESCENT LAMPS

Rapid Start, Slimline and High Output T12 Lamps

Watts	Product Number	Symbols, Footnotes	Ordering Code	Pkg. Qty.‡	Description	Nom. Length (In.)	Rated Avg. Life (Hrs.) (202)	Approx. Initial Lumens (203,204)	Design Lumens (208)	CRI
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RAPID START U-BENT T12

T12 Medium Bipin

34	37839-8	● X	FB34/CW/6/EW UPC	12	Cool White, 4100K	22 $\frac{3}{4}$	18,000	2400	2050	62
40	37875-8	●	FB40/SPEC35/6 UPC	12	SPEC, 3500K	22 $\frac{3}{4}$	18,000	3050	2775	73

SLIMLINE T12

T12 Single Pin Linear Fluorescent Lamps; Instant Start

39	38703-5	●	F48T12/CW UPC	15	Cool White, 4100K	48	9000	2950	2600	62
56	36999-1	●	F72T12/CW UPC	15	Cool White, 4100K	72	12,000	4450	3900	62
60	36631-0	● X	F96T12/SPEC35/EW UPC	15	SPEC, 3500K	96	12,000	5750	5400	73
	33994-5	●	F96T12/CW/EW UPC	15	Cool White, 4100K	96	12,000	5400	4750	62
75	20574-0	X	F96T12/C50 UPC	15	Colortone 50, 5000K	96	12,000	4650	4200	92

HIGH OUTPUT T12

T12 Recessed D.C. Linear Fluorescent Lamps (207, 214)

60	36982-7	●	F48T12/CW/HO UPC	15	Cool White, 4100K	48	12,000	4050	3500	62
85	36652-6	●	F72T12/CW/HO UPC	15	Cool White, 4100K	72	12,000	6350	5500	62
110	38178-0	● X	F96T12/CW/HO-O UPC	15	Cool White, 4100K	96	12,000	8800	7650	62

For the most current product information, go to the e-catalog on www.philips.com
Fluorescent symbols and footnotes located on page 120



T12 Medium Bipin



T12 Single Pin

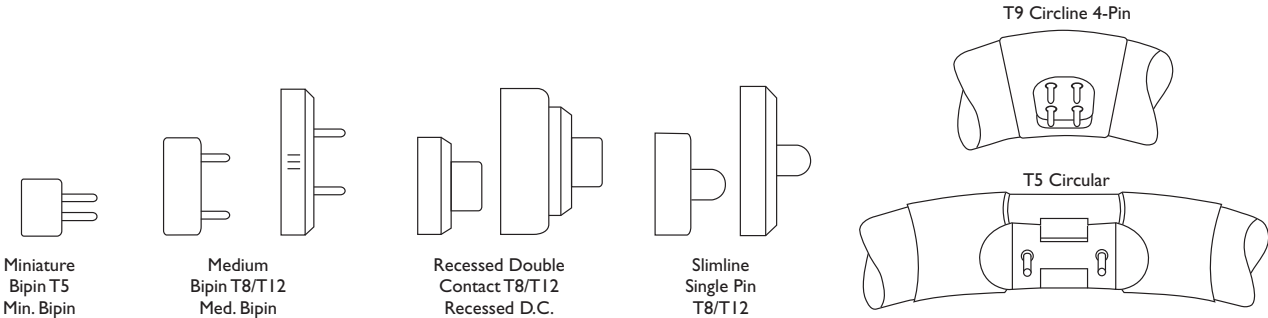


T12 Recessed DC

FLUORESCENT LAMPS

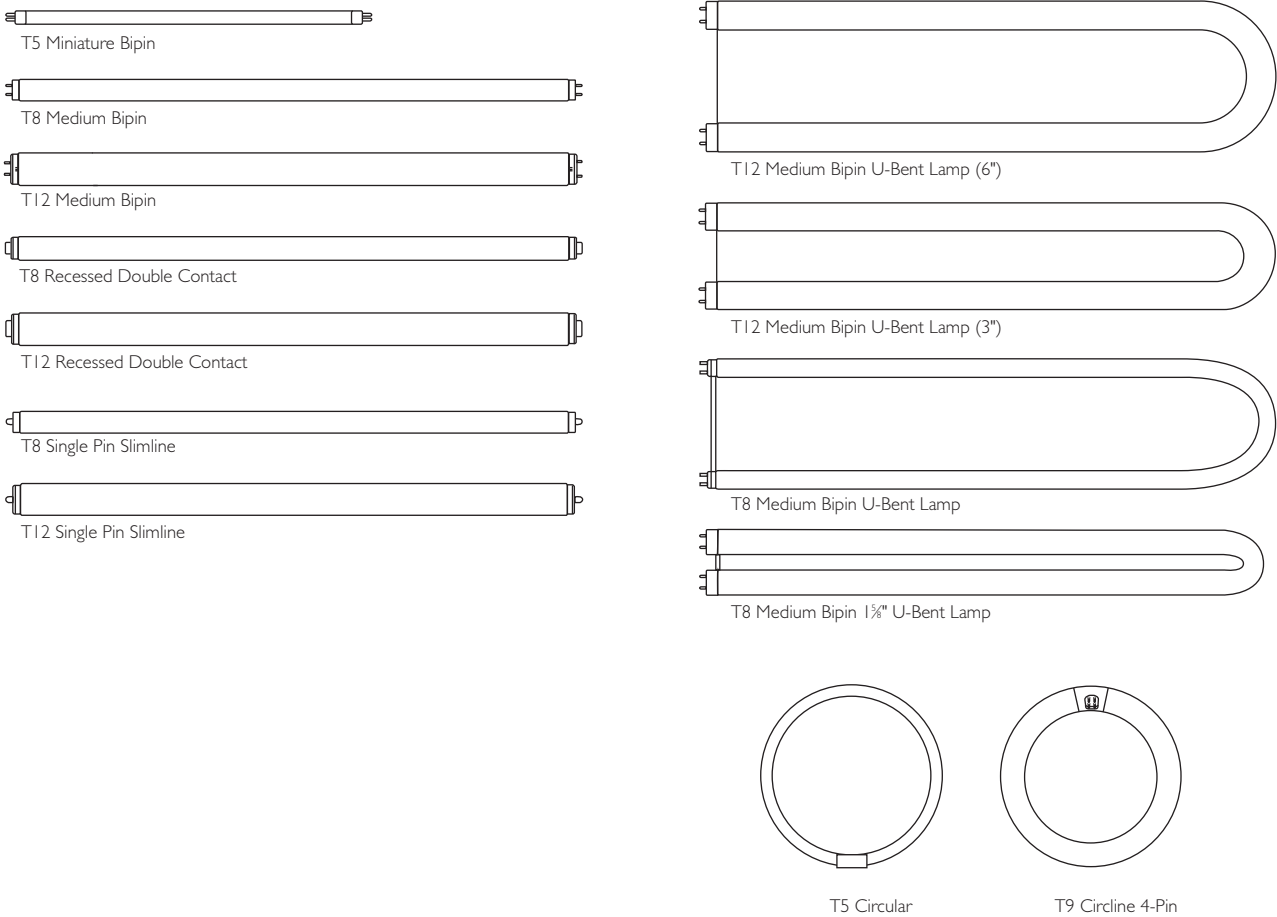
Base Types and Bulb Shapes

Base Types (Not Actual Sizes)



Bulb Shapes (Not Actual Sizes)

The size and shape of a bulb is designated by a letter or letters followed by a number. The letter indicates the shape of the bulb while the number indicates the diameter of the bulb in eighths of an inch. For example, “T12” indicates a tubular shaped bulb having a diameter of $1\frac{1}{2}$ or $1\frac{1}{2}$ inches. The following illustrations show some of the more popular bulb shapes and sizes.



FLUORESCENT LAMPS

For the most current product information, go to the e-catalog on www.philips.com

□ Exclusive to Philips Lighting Company

\$ Energy Saving Product

▲ Aluminum base

● This lamp is better for the environment because of its reduced mercury content. All Philips ALTO® lamps give you end-of-life options which can simplify and reduce your lamp disposal costs depending on your state and local regulations. ALTO II Lamps have only 1.7mg of mercury.

✕ Orders will be shipped until inventory is depleted; no longer manufactured.

© This Bulb Meets US Federal Minimum Efficiency Standard

† New since last printing

◇ Designed for instant start operation.

(202) Average life under specified test conditions with lamps turned off and restarted no more frequently than once every 3 operating hours. Lamp life is appreciably longer if lamps are started less frequently.

(203) Approximate initial lumens. The lamp lumen output is based upon lamp performance after 100 hours of operating life, when the output is measured during operation on a reference ballast under standard laboratory conditions.

(204) For expected lamp lumen output, commercial ballast manufacturers can advise the appropriate ballast factor for each of their ballasts when they are informed of the designated lamp. The ballast factor is a multiplier applied to the designated lamp lumen output.

(205) Approximate hours of life for F40 lamps operated by standard rapid start ballasts at three hours per start. When these lamps are operated on modified rapid start or preheat circuits the operating life will be reduced by approximately 25 percent. When employing dimming systems or energy-saving device systems, the device manufacturer can advise of the effect of their system upon lamp life.

(207) Approximate initial lumens are for 800 ma. operation. For 1000 ma. operation, lumens are approximately 10% higher and watts approximately 15% higher.

(208) Design lumens are the approximate lamp lumen output at 40% of the lamp's rated average life. This output is based upon measurements obtained during lamp operation on a reference ballast under standard laboratory conditions.

(212) Nominal length measured from face of base to maximum distant outside point of U. Measurement does not include base pins. Leg spacing center to center approximately 6", for /6 and 3 3/8" for /3 lamps.

(214) Econ-o-watt® lamps are only recommended for use on high power factor lead, indoor ballasts that meet ANSI standards. The lamps are not recommended for use in drafty areas, or locations where the ambient temperature is less than 60°F, except as noted. Also they should not be operated on low power factor ballasts, reduced light or reduced current ballasts, dimming ballasts or emergency system inverter ballasts.

(223) Meets the National Energy Policy Act of 1992 exemption for outdoor or cold temperature applications only.

(226) SILHOUETTE™ T5 nominal lamp lengths are shorter than standard sizes. See chart on page 92 for details.

(239) Design lumens rated at 3 hours per start on Instant Start ballast.

(240) Life is based upon household usage of 6 hours average usage per day, 7 days per week. See individual product packaging for details.

(241) Average life under engineering data with lamps turned off and restarted once every 12 operating hours.

High Intensity Discharge Lighting

High performance, energy efficient, long life lamps

Philips MasterColor® CDM Elite lamps are the next generation of MasterColor CDM lamps—improved design lumen output and improved color quality. The Philips MasterColor CDM Elite lamps are available as tubular single-ended T4 and T6 lamps in both 39W and 70W. The MasterColor CDM Elite T6 150W will be available in early 2009.

Philips MasterColor® CDM Elite MW lamps offer an unrivaled level of light quality and performance. The lamp's sparkling white light creates a more natural ambience and really brings out the best in all different types of color. This performance remains stable over the long life of the lamp.

Philips CosmoWhite™ lamps were developed to specifically meet the needs of the 21st century. The combination of energy efficiency and long, dependable service, not only reduce your lighting ownership costs but also address

environmental concerns as well. Lamp miniaturization also enables the possibility of exciting new luminaire designs.

Philips MasterColor® Integrated 25W PAR38 Lamps feature an integrated ballast that fits into existing PAR38 fixtures for instant retrofit. These long lasting lamps consume up to three times less energy compared to PAR38 halogen lamps with comparable light output.

Philips Mini MasterColor® Lamps The smallest 20W ceramic metal halide lamp, is visually pleasing and financially rewarding. This easy-to-install system uses up to 66% less energy and lasts three times longer than standard 90W halogen lamps.

Philips MasterColor Ceramic Metal Halide HPS-Retro White™ Lamps are optimized for operation on HPS ballasts and ideal for 24-hour a day, 7-day a week operations.

Philips QL Induction Lighting System Lamps are virtually maintenance free with 100,000 hours rated average life and the ability to operate in hot and cold environments.

Feature Products



**INTEGRATED 25W
PAR38 LAMPS**
page 125



**MASTERCOLOR CDM
ELITE T4 & T6 LAMPS**
page 124



**MASTERCOLOR CDM
ELITE MW LAMPS**
page 124



Lighting plays an important role in transforming the look of an outdoor space. Whether you are looking to create a unique identity for your city, add a sense of safety and security to an outdoor space, or looking to light a local sports stadium, Philips has a solution for you.

High Intensity Discharge Lighting

124–129	MasterColor® Ceramic Metal Halide
129	CosmoWhite™
129–132	Metal Halide
133–135	High Pressure Sodium Lamps
135	Horticulture Lamps
136	Low Pressure Sodium Lamps
136	QL Induction Lighting System
137	Mercury Vapor Lamps
138	Base Types and Bulb Shapes
139	Footnotes
140–141	Warnings, Cautions and Operating Instructions for MasterColor® Integrated PAR Lamps
142–148	Warnings, Cautions and Operating Instructions for all other HID Lamps

UPGRADE
TO BETTER
WHITE LIGHT





“Lighting is one of the most competitive elements of the city. It is very important how you handle it. It should have certain individuality—it can give a city a certain identity.”

—Hans Hollein, World Renowned Architect and Designer

HIGH INTENSITY DISCHARGE LAMPS

MasterColor® Ceramic Metal Halide Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	ANSI Code Ballast Ref.	Pkg. Qty.†	Description (401, 407)	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(351)	Approx. Initial Lumens(352)	Approx. Mean Lumens(353)	CRI	CCT (K)
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MINI MASTERCOLOR CERAMIC METAL HALIDE TUBULAR SINGLE-ENDED BT5 LAMPS (391, 392, 396, 397)

Enclosed luminaires only; lifetime color stability within ±200K

22	BT5	PGJ5	14040-0	★	CDM20/TM/830	C175/E	12	G, Clear, FadeBlock™	7/8	1 1/4	12,000	1650	1155	85	3000
39	BT5	PGJ5	21139-1	★ †	CDM35/TM/930	C179/E	12	G, Clear, FadeBlock™	7/8	1 1/4	12,000	3000	2400	90	3000

MASTERCOLOR ELITE CERAMIC METAL HALIDE TUBULAR SINGLE-ENDED T4 LAMPS (391, 392, 396, 397)

Enclosed luminaires only; lifetime color stability within ±200K; CDM Elite 39W T4 to be used in vertical position ± 60° only

39	T4	G8.5	40484-8	★	CDM Elite 35/TC/930	C130/E	12	G, Clear, FadeBlock™	2	3 1/2	12,000	3500	3150	90	3000
70	T4	G8.5	14837-9	★	CDM Elite 70/TC/930	C139/E	12	G, Clear, FadeBlock™	2	3 1/2	12,000	7300	6500	90	3000

MASTERCOLOR CERAMIC METAL HALIDE TUBULAR SINGLE-ENDED T4 LAMPS (391, 392, 396, 397)

Enclosed luminaires only; lifetime color stability within ±200K

39	T4	G8.5	37372-0	★	CDM35/TC/830	M130/E	12	G, Clear, FadeBlock™	2	3 1/2	12,000	3300	2300	81	3000
			20883-5	★	CDM35/TC/842	M130/E	12	G, Clear, FadeBlock™	2	3 1/2	12,000	3300	2640	85	4200
70	T4	G8.5	37373-8	★	CDM70/TC/830	M139/E	12	G, Clear, FadeBlock™	2	3 1/2	12,000	6400	4500	83	3000
			20885-0	★	CDM70/TC/942	M139/E	12	G, Clear, FadeBlock™	2	3 1/2	12,000	5900	3840	90	4200

MASTERCOLOR ELITE CERAMIC METAL HALIDE TUBULAR SINGLE-ENDED T6 LAMPS (391, 392, 396, 397)

Enclosed luminaires only; lifetime color stability within ±200K; CDM Elite 39W T6 to be used in vertical position ± 60° only

39	T6	G12	40483-0	★ †	CDM Elite 35/T6/930	C130/E	12	G, Clear, FadeBlock™	2 1/2	3 5/8	12,000	3500	3150	90	3000
70	T6	G12	14836-1	★ †	CDM Elite 70/T6/930	C139/E	12	G, Clear, FadeBlock™	2 1/2	3 5/8	12,000	7300	6500	90	3000

MASTERCOLOR CERAMIC METAL HALIDE TUBULAR SINGLE-ENDED T6 LAMPS (391, 392, 396, 397)

Enclosed luminaires only; lifetime color stability within ±200K

39	T6	G12	22328-9	★	CDM35/T6/830	M130/E	12	G, Clear, FadeBlock™	2 1/2	3 5/8	12,000	3300	2600	81	3000
			20886-8	★	CDM35/T6/842	M130/E	12	G, Clear, FadeBlock™	2 1/2	3 5/8	12,000	3300	2800	84	4200
70	T6	G12	22337-0	★	CDM70/T6/830	M139/E	12	G, Clear, FadeBlock™	2 1/2	3 5/8	12,000	6600	4950	81	3000
			28137-8	★	CDM70/T6/942	M139/E	12	G, Clear, FadeBlock™	2 1/2	3 5/8	12,000	6600	4620	92	4200
150	T6	G12	23272-8	★	CDM150/T6/830	M142/E	12	G, Clear, FadeBlock™, also ANSI M102	2 1/2	4 1/2	12,000	14,000	9800	85	3000
			37369-6	★	CDM150/T6/942	M142/E	12	G, Clear, FadeBlock™, also ANSI M102	2 1/2	4 1/2	12,000	12,700	8900	96	4200

MASTERCOLOR CDM ELITE MW (MEDIUM WATT) CERAMIC METAL HALIDE TUBULAR SINGLE-ENDED T9 LAMPS (391, 392, 396, 397)

Enclosed luminaires only

210	T9	PGZ18	22062-4	□ ★ †	CDM Elite MW 210/T9/930/U/E	TBD	12	G, Clear, FadeBlock™	3 1/2	7 1/2	20,000	24,100	21,600	90	3000
315	T9	PGZ18	21831-3	□ ★ †	CDM Elite MW 315/T9/930/U/E	C182	12	G, Clear, FadeBlock™	3 1/2	7 1/2	20,000	37,800	34,000	90	3000
210	T9	PGZ18	22063-2	□ ★ †	CDM Elite MW 210/T9/942/U/E	TBD	12	G, Clear, FadeBlock™	3 1/2	7 1/2	20,000	23,000	20,700	90	4200
315	T9	PGZ18	22064-0	□ ★ †	CDM Elite MW 315/T9/942/U/E	TBD	12	G, Clear, FadeBlock™	3 1/2	7 1/2	20,000	36,200	32,500	90	4200

Note: 3000K products available Q3/Q4 2008 and 4200K products available Q1/Q2 2009. Please refer to Philips website for the ANSI code.

For the most current product information, go to the e-catalog on www.philips.com
HID symbols and footnotes located on page 139



HIGH INTENSITY DISCHARGE LAMPS

MasterColor® Ceramic Metal Halide Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	ANSI Code Ballast Ref. or MBCP*	Pkg. Qty.†	Description (401, 407)	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.) (351)	Approx. Initial Lumens (352)	Approx. Mean Lumens (353)	CRI	CCT (K)
70	TD6	RX7s	23160-5	★	CDM70/TD/83	M139/M85/E	12	G, Clear, FadeBlock™, Hor. ± 45°	2¼	4¼	15,000	6500	5200	82	3000
			37370-4	★	CDM70/TD/942	M139/M85/E	12	G, Clear, FadeBlock™, Hor. ± 45°	2¼	4¼	15,000	6000	4500	92	4200
150	TD7	RX7s	23167-0	★	CDM150/TD/83	M142/M102/M81E	12	G, Clear, FadeBlock™, Hor. ± 45°	2½	5½	15,000	13,250	11,260	88	3000
			37371-2	★	CDM150/TD/942	M142/M102/M81E	12	G, Clear, FadeBlock™, Hor. ± 45°	2½	5½	15,000	14,200	12,070	96	4200

MASTERCOLOR CERAMIC METAL HALIDE TUBULAR DOUBLE-ENDED LAMPS (374, 391, 392, 396)

Double-Ended TD6 & TD7 Style; enclosed luminaires only; lifetime color stability within ±200K

MASTERCOLOR INTEGRATED PAR LAMPS (396, 406)

These lamps may be used in open fixtures; do not use in totally enclosed recessed fixtures

25	PAR38	Med.	14477-4	□★	CDM-i25W/830/ PAR38/10/ALTO	MBCP = 26,000	6	G, PAR Spot 10°	—	5½	15,000	1275	880	87	3000
			14478-2	□★	CDM-i25W/830/ PAR38/25/ALTO	MBCP = 5600	6	G, PAR Flood 25°	—	5½	15,000	1275	880	87	3000
			14479-0	□★	CDM-i25W/830/ PAR38/40/ALTO	MBCP = 2100	6	G, PAR W. Flood 40°	—	5½	15,000	1275	880	87	3000

PROTECTED MASTERCOLOR CERAMIC METAL HALIDE R111 LAMPS (391, 392, 396, 397)

Open or Enclosed luminaires; lifetime color stability within ±200K

22	R111	GX8.5	15297-4	†□★	CDM-R111/20W/ 830 10DG	C175/O MBCP = 20,000	6	G, R111, N. Spot 10°	—	3¾	9000	750	500	85	3000
			20882-7	†□★	CDM-R111/20W/ 830 24DG	C175/O MBCP = 4500	6	G, R111, N. Flood 24°	—	3¾	9000	750	500	85	3000
38	R111	GX8.5	13554-1	□★	CDM-R111/35W/ 830 10DG	M130/O MBCP = 35,000	6	G, R111, Spot 10°	—	3¾	11,000	1400	900	81	3000
			13556-6	□★	CDM-R111/35W/ 830 24DG	M130/O MBCP = 8500	6	G, R111, N. Flood 24°	—	3¾	11,000	1600	1040	81	3000
			13921-2	□★	CDM-R111/35W/ 830 40DG	M130/O MBCP 4000	6	G, R111, Flood 40°	—	3¾	11,000	1800	1170	81	3000
70	R111	GX8.5	14754-6	□★	CDM-R111/70W/ 830 10DG	M139/O MBCP = 50,000	6	G, R111, Spot 10°	—	3¾	9000	2850	1850	84	3000
			14755-3	□★	CDM-R111/70W/ 830 24DG	M139/O MBCP = 15,000	6	G, R111, N. Flood 24°	—	3¾	9000	2850	1850	84	3000
			14795-8	□★	CDM-R111/70W/ 830 40DG	M139/O MBCP = 9000	6	G, R111, Flood 40°	—	3¾	9000	2850	1850	84	3000

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HID symbols and footnotes located on page 139

HIGH INTENSITY DISCHARGE LAMPS

MasterColor® Ceramic Metal Halide Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	ANSI Code Ballast Ref. or MBCP*	Pkg. Qty.‡	Description (401.407)	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(351)	Approx. Initial Lumens(352)	Approx. Mean Lumens(353)	CRI	CCT (K)
PROTECTED MASTERCOLOR CERAMIC METAL HALIDE PAR LAMPS (391, 392, 396)															
Open or enclosed luminaires; lifetime color stability within ±200K															
22	PAR20	Med.	21151-6	★ ● †	CDM20/PAR20/M/SP/3K/ALTO	C156/C175/O MBCP=11,000	12	G, PAR WISO Spot 10° (397)	—	3%	9000	940	600	81	3000
			21152-4	★ ● †	CDM20/PAR20/M/FL/3K/ALTO	C156/C175/O MBCP=2800	12	G, PAR WISO Flood 30° (397)	—	3%	9000	980	615	81	3000
	PAR30L	Med.	21149-0	★ ● †	CDM20/PAR30L/M/SP/3K/ALTO	C156/C175/O MBCP=20,000	6	G, PAR WISO Spot 10° (397)	—	4%	9000	1200	750	81	3000
			21140-9	★ ● †	CDM20/PAR30L/M/FL/3K/ALTO	C156/C175/O MBCP=3300	6	G, PAR WISO Flood 30° (397)	—	4%	9000	1200	750	81	3000
39	PAR20	Med.	23365-0	★ ●	CDM35/PAR20/M/SP/3K/ALTO	M130/O MBCP=23,000	12	G, PAR WISO Spot 10° (397)	—	3%	9000	2000	1300	81	3000
			23364-3	★ ●	CDM35/PAR20/M/FL/3K/ALTO	M130/O MBCP=5000	12	G, PAR WISO Flood 30° (397)	—	3%	9000	2000	1300	81	3000
			15140-7	★	CDM35/PAR20/M/SP/4K	M130/O MBCP=21,500	12	G, PAR WISO Spot 10° (397)	—	3%	6000	1950	1650	92	4000
			15141-5	★	CDM35/PAR20/M/FL/4K	M130/O MBCP=5000	12	G, PAR WISO Flood 30° (397)	—	3%	6000	1950	1650	92	4000
	PAR30L	Med.	22329-7	★ ●	CDM35/PAR30L/M/SP/3K/ALTO	M130/O MBCP=44,000	6	G, PAR WISO Spot 10° (397)	—	4%	9000	2200	1430	81	3000
			22330-5	★ ●	CDM35/PAR30L/M/FL/3K/ALTO	M130/O MBCP=7400	6	G, PAR WISO Flood 30° (397)	—	4%	9000	2200	1430	81	3000
			23224-9	★ ●	CDM70/PAR30L/M/SP/3K/ALTO	M143/M98/O MBCP=68,000	6	G, PAR WISO Spot 10°	—	4%	11,000	5000	3050	83	3000
			23221-5	★ ●	CDM70/PAR30L/M/FL/3K/ALTO	M143/M98/O MBCP=10,000	6	G, PAR WISO Flood 40°	—	4%	11,000	5000	3050	83	3000
			15142-3	★ ●	CDM70/PAR30L/M/SP/4K/ALTO	M139/O MBCP=63,000	6	G, PAR WISO Spot 10°	—	4%	9000	4300	3010	94	4000
			15143-1	★ ●	CDM70/PAR30L/M/FL/4K/ALTO	M139/O MBCP=9000	6	G, PAR WISO Flood 40°	—	4%	9000	4300	3010	94	4000
	PAR38	Med.	22250-5	★ ●	CDM70/PAR38/SP/3K/ALTO	M143/M98/O MBCP=42,000	12	G, PAR WISO Spot 15° (399)	—	5%	12,500	4100	2870	85	3000
			22249-7	★ ●	CDM70/PAR38/FL/3K/ALTO	M143/M98/O MBCP=18,000	12	G, PAR WISO Flood 25° (399)	—	5%	12,500	4100	2870	85	3000
			28872-0	□ ★ ●	CDM70/PAR38/SP/4K/ALTO	M143/M98/O MBCP=40,000	12	G, PAR WISO Spot 15° (399)	—	5%	12,500	3700	2590	92	4000
			28873-8	□ ★ ●	CDM70/PAR38/FL/4K/ALTO	M143/M98/O MBCP=15,000	12	G, PAR WISO Flood 25° (399)	—	5%	12,500	3700	2590	92	4000
100	PAR38	Med.	24477-2	★ ●	CDM100/PAR38/SP/3K/ALTO	M140/M90/O MBCP=65,000	12	G, PAR WISO Spot 15° (399)	—	5%	12,500	6200	4340	85	3000
			24476-4	★ ●	CDM100/PAR38/FL/3K/ALTO	M140/M90/O MBCP=24,000	12	G, PAR WISO Flood 25° (399)	—	5%	12,500	6200	4340	85	3000
			28876-1	□ ★ ●	CDM100/PAR38/SP/4K/ALTO	M140/M90/O MBCP=52,000	12	G, PAR WISO Spot 15° (399)	—	5%	12,500	5700	3990	92	4000
			28878-7	□ ★ ●	CDM100/PAR38/FL/4K/ALTO	M140/M90/O MBCP=19,000	12	G, PAR WISO Flood 25° (399)	—	5%	12,500	5700	3990	92	4000

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HIGH INTENSITY DISCHARGE LAMPS

MasterColor® Ceramic Metal Halide Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	ANSI Code Ballast Ref.	Pkg. Qty.±	Description (401, 407)	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(351)	Approx. Initial Lumens(352)	Approx. Mean Lumens(353)	CRI	CCT (K)
PROTECTED MASTERCOLOR CERAMIC METAL HALIDE LAMPS (391, 392, 396, 399)															
ED17P sleeved arc tube; open or enclosed luminaires; lifetime color stability within ±200K; pulse start															
50	ED17P	Med.	36891-0	□ ★ ●	MHC50/U/MP/3K/ALTO	M148/M110/O	12	G, Clear, FadeBlock™	3 3/8	5 1/8	10,000	4000	2680	85	3000
			36893-6	□ ★ ●	MHC50/U/MP/4K/ALTO	M148/M110/O	12	G, Clear, FadeBlock™	3 3/8	5 1/8	20,000	3600	2450	92	4000
70	ED17P	Med.	23366-8	★ ●	MHC70/U/MP/3K/ALTO	M143/M98/O	12	G, Clear, FadeBlock™	3 3/8	5 1/8	20,000	5900	4365	85	3000
			23367-6	★ ●	MHC70/CU/MP/3K/ALTO	M143/M98/O	12	G, Coated, FadeBlock™	—	5 1/8	20,000	5400	3995	85	3000
			36057-8	□ ★ ●	MHC70/U/MP/4K/ALTO	M143/M98/O	12	G, Clear, FadeBlock™	3 3/8	5 1/8	24,000	5800	4060	92	4000
			36059-4	□ ★ ●	MHC70/CU/MP/4K/ALTO	M143/M98/O	12	G, Coated, FadeBlock™	—	5 1/8	24,000	5200	3640	92	4000
100	ED17P	Med.	23368-4	★ ●	MHC100/U/MP/3K/ALTO	M140/M90/O	12	G, Clear, FadeBlock™	3 3/8	5 1/8	20,000	8600	6450	85	3000
			23444-3	★ ●	MHC100/CU/MP/3K/ALTO	M140/M90/O	12	G, Coated, FadeBlock™	—	5 1/8	20,000	7900	5925	85	3000
			36060-2	□ ★ ●	MHC100/U/MP/4K/ALTO	M140/M90/O	12	G, Clear, FadeBlock™	3 3/8	5 1/8	24,000	8200	6150	92	4000
			36061-0	□ ★ ●	MHC100/CU/MP/4K/ALTO	M140/M90/O	12	G, Coated, FadeBlock™	—	5 1/8	24,000	7500	5625	92	4000
150	ED17P	Med.	13463-5	† ★ ●	MHC150/U/MP/3K/ALTO	M142/M102/O	12	G, Clear, FadeBlock™	3 3/8	5 1/8	20,000	12,900	9545	85	3000
			13464-3	† ★ ●	MHC150/CU/MP/3K/ALTO	M142/M102/O	12	G, Coated, FadeBlock™	—	5 1/8	20,000	11,900	8805	85	3000
			37724-2	□ ★ ●	MHC150/U/MP/4K/ALTO	M142/M102/O	12	G, Clear, FadeBlock™	3 3/8	5 1/8	24,000	12,000	9000	92	4000
			37726-7	□ ★ ●	MHC150/CU/MP/4K/ALTO	M142/M102/O	12	G, Coated, FadeBlock™	—	5 1/8	24,000	11,000	8250	92	4000

MASTERCOLOR CERAMIC METAL HALIDE ED17, ED28 LAMPS (391, 392, 399)

Enclosed luminaires only; lifetime color stability within ±200K; pulse start

50	ED17	Med.	36020-6	□ ★ ●	MHC50/U/M/3K/ALTO	M148/M110/E	12	G, Clear (391, 392, 399)	3 3/8	5 1/8	10,000	4100	2750	85	3000
			36022-2	□ ★ ●	MHC50/CU/M/3K/ALTO	M148/M110/E	12	G, Coated (391, 392, 399)	—	5 1/8	10,000	3800	2545	85	3000
			36023-0	□ ★ ●	MHC50/U/M/4K/ALTO	M148/M110/E	12	G, Clear (391, 392, 399)	3 3/8	5 1/8	20,000	3750	2550	92	4000
			36024-8	□ ★ ●	MHC50/CU/M/4K/ALTO	M148/M110/E	12	G, Coated (391, 392, 399)	—	5 1/8	20,000	3600	2450	92	4000
70	ED17	Med.	20884-3	★ ●	MHC70/U/M/3K/ALTO	M143/M98/E	12	G, Clear (391, 392, 399)	3 3/8	5 1/8	20,000	6200	4585	85	3000
			20887-6	★ ●	MHC70/CU/M/3K/ALTO	M143/M98/E	12	G, Coated (391, 392, 399)	—	5 1/8	20,000	5800	4290	85	3000
			28129-5	□ ★ ●	MHC70/U/M/4K/ALTO	M143/M98/E	12	G, Clear (391, 392, 399)	3 3/8	5 1/8	24,000	5900	4130	92	4000
			28133-7	□ ★ ●	MHC70/CU/M/4K/ALTO	M143/M98/E	12	G, Coated (391, 392, 399)	—	5 1/8	24,000	5500	3850	92	4000
100	ED17	Med.	20888-4	★ ●	MHC100/U/M/3K/ALTO	M140/M90/E	12	G, Clear (391, 392, 399)	3 3/8	5 1/8	20,000	9500	7125	85	3000
			20889-2	★ ●	MHC100/CU/M/3K/ALTO	M140/M90/E	12	G, Coated (391, 392, 399)	—	5 1/8	20,000	8800	6600	85	3000
			28135-2	□ ★ ●	MHC100/U/M/4K/ALTO	M140/M90/E	12	G, Clear (391, 392, 399)	3 3/8	5 1/8	24,000	9000	6750	92	4000
			28136-0	□ ★ ●	MHC100/CU/M/4K/ALTO	M140/M90/E	12	G, Coated (391, 392, 399)	—	5 1/8	24,000	8400	6300	92	4000
	ED28	Mog.	36543-7	□ ★	MHC100/U/ED28/HR/4K	M140/M90/E	12	G, Clear (372, 377, 378)	5	8 1/8	10,000	8500	6800	92	4100
150	ED17	Med.	13022-9	□ ★	MHC150/U/M/3K/ALTO	M142/M102/E	12	G, Clear (391, 392, 399)	3 1/2	5 1/8	20,000	14,000	10,500	85	3000
			13023-7	□ ★	MHC150/CU/M/3K/ALTO	M142/M102/E	12	G, Coated (391, 392, 399)	—	5 1/8	20,000	12,500	9375	85	3000
			37720-0	□ ★ ●	MHC150/U/M/4K/ALTO	M142/M102/E	12	G, Clear (391, 392, 399)	3 3/8	5 1/8	24,000	13,000	9750	92	4000
			37721-8	□ ★ ●	MHC150/CU/M/4K/ALTO	M142/M102/E	12	G, Coated (391, 392, 399)	—	5 1/8	24,000	12,000	9000	92	4000

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HIGH INTENSITY DISCHARGE LAMPS

MasterColor® Ceramic Metal Halide Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	ANSI Code Ballast Ref.	Pkg. Qty.‡	Description (401.407)	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(351)	Approx. Initial Lumens(352)	Approx. Mean Lumens(353)	CRI	CCT (K)
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MASTERCOLOR CERAMIC METAL HALIDE PULSE START ED23.5 LAMPS (391, 392, 399)

Enclosed luminaires only; lifetime color stability within ±200K; pulse start

70	ED23½	Mog.	21114-4	☐■●●†	CDM70/U/PS/3K ALTO	M143/M98/E	12	G, Clear	5	7¼	24,000	6200	4340	85	3000
			15492-2	☐■●●†	CDM70/U/PS/4K ALTO	M143/M98/E	12	G, Clear	5	7¼	24,000	5900	4150	85	4000
100	ED23½	Mog.	21115-1	☐■●●†	CDM100/U/PS/3K ALTO	M140/M90/E	12	G, Clear	5	7¼	17,000	9000	6750	85	3000
			15493-0	☐■●●†	CDM100/U/PS/4K ALTO	M140/M90/E	12	G, Clear	5	7¼	24,000	9000	6750	85	4000
150	ED23½	Mog.	21117-7	☐■●●†	CDM150/U/PS/3K ALTO	M142/M102/E	12	G, Clear	5	7¼	24,000	13000	9100	85	3000
			15494-8	☐■●●†	CDM150/U/PS/4K ALTO	M142/M102/E	12	G, Clear	5	7¼	24,000	13000	9100	85	4000

MASTERCOLOR CERAMIC METAL HALIDE PULSE START PROTECTED LAMPS (374, 391, 392, 399)

Satisfies the 2005 NEC for use in open luminaires.† Open or Enclosed luminaires; lifetime color stability within ±200K; (V = Vertical Operation ±15°)

250	ED28	EX39	20583-1	★●†	CDM250/V/O/PS/4K/ALTO	M153/O	12	G, Clear, Vertical ±15°	5	8½	24,000	22,500	18,000	90	4200
		Exd. Mog.	20584-9	★●†	CDM250/CV/O/PS/4K/ALTO	M153/O	12	G, Coated, Vertical ±15°	–	8½	24,000	21,300	17,000	90	4200
320	ED28	EX39	13291-0	★●	CDM320/V/O/PS/4K/ALTO	M170/M132/O	12	G, Clear, Vertical ±15°	5	8½	24,000	28,800	23,000	90	4200
		Exd. Mog.	13256-3	★●	CDM320/CV/O/PS/4K/ALTO	M170/M132/O	12	G, Coated, Vertical ±15°	–	8½	24,000	28,000	22,400	90	4200
350	ED37	EX39	13257-1	★●	CDM350/V/O/PS/4K/ALTO	M171/M131/O	6	G, Clear, Vertical ±15°	7	11½	24,000	31,500	25,200	90	4200
		Exd. Mog.	13292-8	★●	CDM350/CV/O/PS/4K/ALTO	M171/M131/O	6	G, Coated, Vertical ±15°	–	11½	24,000	30,600	24,500	90	4200
400	ED28	EX39	14598-6	★●	CDM400/V/O/PS/4K/ED28/ALTO	M172/M155/O	12	G, Clear, Vertical ±15°	5	8½	20,000	36,000	28,800	90	4200
		Exd. Mog.													
	ED37	EX39	13290-2	★●	CDM400/V/O/PS/4K/ALTO	M172/M155/O	6	G, Clear, Vertical ±15°	7	11½	24,000	36,000	28,800	90	4200
		Exd. Mog.	13293-6	★●	CDM400/CV/O/PS/4K/ALTO	M172/M155/O	6	G, Coated, Vertical ±15°	–	11½	24,000	35,000	27,900	90	4200

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HID symbols and footnotes located on page 139



HIGH INTENSITY DISCHARGE LAMPS

MasterColor Ceramic Metal Halide Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	ANSI Code Ballast Ref.	Pkg. Qty.±	Description (401, 407)	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.) (351)	Approx. Initial Lumens (352)	Approx. Mean Lumens (353)	CRI	CCT (K)
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MASTERCOLOR CERAMIC METAL HALIDE HPS-RETRO WHITE™ (374, 399, 403, 404)

Satisfies the 2005 NEC for use in open luminaires.[‡]

ED18, open or enclosed luminaires; lifetime color stability within ±200K HPS-Retro White™ Lamps Rated for Vertical Operation Only (V = Vertical Operation ± 15°)

250	ED18	Mog.	13093-0	★ ●	CDM250S50/V/O/4K/ALTO	M168/O/S50	12	G, Clear; Vertical ± 15°	5%	9%	20,000	20,500	16,400	85	4000
400	ED18	Mog.	13094-8	★ ●	CDM400S51/V/O/4K/ALTO	M169/O/S51	12	G, Clear; Vertical ± 15°	5%	9%	20,000	34,800	27,840	85	4000

HPS-Retro White™ Lamps Rated for Horizontal Operation Only (HOR = Horizontal Operation ± 15°)

250	ED18	Mog.	14649-8	★ ●	CDM250S50/HOR/4K/ALTO	M168/O/S50	12	G, Clear; Horizontal ± 15°	5%	9%	20,000	20,500	16,400	85	4000
400	ED18	Mog.	14650-6	★ ●	CDM400S51/HOR/4K/ALTO	M169/O/S51	12	G, Clear; Horizontal ± 15° (403)	5%	9%	15,000	34,800	29,600	85	4000

COSMOWHITE (391, 392, 396, 397)

Enclosed luminaires only; lifetime color stability within ±200K (HOR = Horizontal Operation ± 15°)

60	T6	PGZ12	15731-3	□ ★ †	CPO-TWHITE 60W/728	—	12	G, Clear; FadeBlock™, Horiz. ± 15°	2%	5%	20,000	6900	6200	70	2800
140	T6	PGZ12	15732-1	□ ★ †	CPO-TWHITE 140W/728	—	12	G, Clear; FadeBlock™, Horiz. ± 15°	2%	5%	20,000	16,500	15,840	70	2800

PROTECTED PULSE START METAL HALIDE “O” RATED LAMPS (372, 374, 391)

Satisfies the 2005 NEC for use in open luminaires.[‡]

Open or enclosed luminaires; pulse start metal halide is designed for operation on only specified ANSI compatible ballasts with metal halide pulse ignitors, offering

175	ED28	EX39	20755-5	■ ★ †	MP175/BU/PS	M152/M137/O	12	G, Clear; Base Up ± 15° Pulse Start	5	8%	14,000	16,000	11,200	62	3500
		Exd. Mog.													
250	ED28	EX39	20756-3	■ ★ †	MP250/BU/PS	M153/M138/O	12	G, Clear; Base Up ± 15° Pulse Start	5	8%	14,000	23,000	16,100	62	3800
		Exd. Mog.													
320	ED37	EX39	13039-3	■ ★	MP320/BU/PS	M154/M132/O	6	G, Clear; Base Up ± 15° Pulse Start	7	11½	20,000	29,500	20,650	65	3800
		Exd. Mog.	13040-1	■ ★	MP320/C/BU/PS	M154/M132/O	6	G, Coated; Base Up ± 15° Pulse Start	—	11½	20,000	27,200	19,040	65	3700
350	ED37	EX39	39101-1	■ ★	MP350/BU/PS	M131/O	6	G, Clear; Base Up ± 15° Pulse Start	7	11½	20,000	34,000	23,800	64	4000
		Exd. Mog.	39102-9	■ ★	MP350/C/BU/PS	M131/O	6	G, Coated; Base Up ± 15° Pulse Start	—	11½	20,000	31,000	21,700	67	3700
400	ED37	EX39	13334-8	■ ★	MP400/BU/PS	M155/M128/M135/O	6	G, Clear; Base Up ± 15° Pulse Start	7	11½	20,000	40,000	28,000	65	3800
		Excl. Mog.	13335-5	■ ★	MP400/C/BU/PS	M155/M128/M135/O	6	G, Coated; Base Up ± 15° Pulse Start	—	11½	20,000	36,000	23,400	68	3600
750	BT37	EX39	20757-1	■ ★ †	MP750/BU/PS	M149/O	6	G, Clear; Base Up ± 15° Pulse Start	7	11½	12,000	70,000	49,000	70	3800
		Exd. Mog.													

[‡]The 2005 NEC states that luminaires that use a metal halide lamp shall be provided with either a containment barrier that encloses the lamp (historically referred to as an enclosed luminaire) or shall be provided with a means, typically a special lampholder, that will only accept ANSI Type-O metal halide lamp. (Exception—this requirement will not apply to open luminaires with thick-glass parabolic reflector PAR lamps.) For more information regarding use of Type-O, S, and E metal halide systems, please refer to the NEMA white paper on this subject that is freely available at www.nema.org

For the most current product information, go to the e-catalog on www.philips.com
HID symbols and footnotes located on page 139



HIGH INTENSITY DISCHARGE LAMPS

Metal Halide Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	ANSI Code Ballast Ref.	Pkg. Qty. Description (401.407)	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(351)	Approx. Initial Lumens(352)	Approx. Mean Lumens(353)	CRI	CCT (K)
PULSE START METAL HALIDE LAMPS (372, 374, 391)														
175	ED28	Mog.	27662-6	■ ★	MS175/BU/PS	M152/M137/E	12 G, Base Up ± 15°, Pulse Start	5	8 1/8	15,000	16,000	11,200	62	3700
			14913-8	□ ■ ★	MS175/C/BU/PS	M152/M137/E	12 G, Coated, Base Up ± 15°, Pulse Start	—	8 1/8	15,000	16,000	11,200	62	3900
			20751-4	□ ■ ★	MS175/HOR/PS	M152/M137/E	12 G, Clear, Horizontal, Pulse Start	5	8 1/8	11,500	12,800	8960	62	4200
250	ED28	Mog.	27661-8	■ ★	MS250/BU/PS	M153/M138/E	12 G, Base Up ± 15°, Pulse Start	5	8 1/8	15,000	23,750	16,625	65	4300
			20752-2	□ ■ ★	MS250/HOR/PS	M153/M138/E	12 G, Clear, Horizontal, Pulse Start	5	8 1/8	12,000	20,000	14,000	65	4000
320	ED28	Mog.	38381-0	■ ★	MS320/U/PS	M154/M132/E	12 G, Clear, Pulse Start (385)	5	8 1/8	20,000	30,000	21,000	62	4100
			38386-9	■ ★	MS320/C/U/PS	M154/M132/E	12 G, Coated, Pulse Start (385)	—	8 1/8	20,000	29,000	20,300	70	3600
350	ED37	Mog.	38387-7	■ ★	MS350/BU/PS	M131/E	12 G, Clear, Base Up ± 15°, Pulse Start	7	11 1/2	20,000	36,000	25,200	62	4000
			38388-5	■ ★	MS350/C/BU/PS	M131/E	6 G, Coated, Base Up ± 15°, Pulse Start	—	11 1/2	20,000	35,000	24,500	65	3600
			20753-0	□ ■ ★	MS350/HOR/PS	M131/E	6 G, Clear, Horizontal, Pulse Start	7	11 1/2	15,000	33,000	23,100	62	4000
400	ED37	Mog.	27816-8	□ ■ ★	MS400/BU/PS	M155/M128/M135/S	6 G, Clear, Base Up ± 15°, Pulse Start	7	11 1/2	20,000	42,600	29,820	62	4100
			28362-2	□ ■ ★	MS400/C/BU/PS	M155/M128/M135/S	6 G, Coated, Base Up ± 15°, Pulse Start	—	11 1/2	20,000	41,500	29,050	66	3700
			14475-8	■ ★	MS400/HOR/PS	M155/M135/M128/E	6 G, Clear, Horizontal, Pulse Start	7	11 1/2	15,000	36,800	25,760	62	4300
750	BT37	Mog.	13540-0	■ ★	MS750/BU/BT37/PS	M149/E	6 G, Clear, Base Up ± 15°, Pulse Start	7	11 1/2	16,000	82,000	61,500	65	4000
			20754-8	□ ■ ★	MS750/HOR/BT37/PS	M149/E	6 G, Clear, Horizontal, Pulse Start	7	11 1/2	12,000	68,000	47,600	65	4000
1000	BT37	Mog.	36019-8	■ ★	MS1000/BU/BT37/PS	M141/E	6 G, Clear, Base Up ± 15°, Pulse Start	7	11 1/2	15,000	120,000	96,000	65	3700

† The 2005 NEC states that luminaires that use a metal halide lamp shall be provided with either a containment barrier that encloses the lamp (historically referred to as an enclosed luminaire) or shall be provided with a means, typically a special lampholder, that will only accept ANSI Type-O metal halide lamp. (Exception—this requirement will not apply to open luminaires with thick-glass parabolic reflector PAR lamps.) For more information regarding use of Type-O, S, and E metal halide systems, please refer to the NEMA white paper on this subject that is freely available at www.nema.org

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HIGH INTENSITY DISCHARGE LAMPS

Metal Halide Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	ANSI Code Ballast Ref.	Pkg. Qty.†	Description (401, 407)	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.) (351)	Approx. Initial Lumens (352)	Approx. Mean Lumens (353)	CRI	CCT (K)
PROTECTED METAL HALIDE "O" RATED LAMPS (372, 374, 377)															
Satisfies the 2005 NEC for use in open luminaires.‡															
175	ED28	EX39	28119-6	■ ★	MP175/BU	M57/O	12	G, Clear, Base Up ±15°	5	8%	10,000	15,000	12,000	65	3800
		Excl. Mog.													
250	ED28	EX39	28124-6	■ ★	MP250/BU	M58/O	12	G, Clear, Base Up ±15°	5	8%	10,000	22,000	16,500	62	3800
		Excl. Mog.													
360	ED37	EX39	13067-4	■ ★ \$	MP360BU/EW	M165/M59/O	6	G, Clear, Base Up ±15°	7	11½	20,000	34,200	23,940	65	4000
		Excl. Mog.	13068-2	■ ★ \$	MP360/C/BU/EW	M165/M59/O	6	G, Coated, Base Up ±15°	—	11½	20,000	31,700	20,605	68	3600
400	ED37	EX39	13332-2	■ ★	MP400/BU	M59/O	6	G, Clear, Base Up ±15°	7	11½	20,000	38,000	26,600	65	4000
		Excl. Mog.	13333-0	■ ★	MP400/C/BU	M59/O	6	G, Coated, Base Up ±15°	—	11½	20,000	34,500	22,425	67	3700
1000	BT56	EX39	28118-8	■ ★	MP1000/BU	M47/O	6	G, Clear, Base Up ±15°	9½	15½	12,000	107,000	75,000	65	3900
		Excl. Mog.													

SAFETY LIFEGUARD METAL HALIDE LAMPS (372, 377, 385, 393)

Enclosed luminaires only unless otherwise noted

175	ED28	Mog.	21437-9	★ †	MHT175/U	M57/E	12	G, Clear	5	8%	10,000	13,500	8,775	65	4000
250	ED28	Mog.	21440-3	★ †	MHT250/U	M58/E	12	G, Clear	5	8%	10,000	20,500	13,500	65	4000
400	ED37	Mog.	34598-3	★	MHT400/U	M59PJ-T400/U/S	6	G, S, Clear	7	11½	20,000	34,200	27,400	65	4000
			34601-5	★	MHT400/C/U	M59PK-T400/U/S	6	G, S, Coated	—	11½	20,000	32,500	25,000	65	3700

DOUBLE-ENDED METAL HALIDE LAMPS (374, 387, 393)

Enclosed luminaires (387)

1800	TD	PSFc20-Special	31360-1		MHD1800W	—	4	Sports Ltg. Spot Horizontal ± 15°	4¼	14	4500	150,000	—	92	5600
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‡ The 2005 NEC states that luminaires that use a metal halide lamp shall be provided with either a containment barrier that encloses the lamp (historically referred to as an enclosed luminaire) or shall be provided with a means, typically a special lampholder, that will only accept ANSI Type-O metal halide lamp. (Exception—this requirement will not apply to open luminaires with thick-glass parabolic reflector PAR lamps.) For more information regarding use of Type-O, S, and E metal halide systems, please refer to the NEMA white paper on this subject that is freely available at www.nema.org

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HIGH INTENSITY DISCHARGE LAMPS

Metal Halide Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	ANSI Code Ballast Ref.	Pkg. Qty.‡	Description (401,407)	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(351)	Approx. Initial Lumens(352)	Approx. Mean Lumens(353)	CRI	CCT (K)
METAL HALIDE LAMPS (372)															
Enclosed luminaires only unless otherwise noted															
150	BD17	Med.	35462-1	★	MHI50/U/M	M107/E	12	G, Clear (385, 400)	3 7/8	5 7/8	10,000	12,500	8500	65	3700
			35463-9	★	MHI50/C/U/M	M107/E	12	G, Coated (385, 400)	—	5 7/8	10,000	12,000	7900	65	3400
175	BD17	Med.	31358-5	★	MHI75/U/M	M57/E	12	G, Clear (377, 385, 393)	3 7/8	5 7/8	10,000	13,500	9100	65	4000
			31359-3	★	MHI75/C/U/M	M57/E	12	G, Coated (377, 385)	—	5 7/8	10,000	13,000	8380	65	3700
	ED28	Mog.	28733-4	★	MHI75/U	M57/E	12	G, S, Clear (377, 385, 393)	5	8 7/8	10,000	13,500	8775	65	4000
			28728-4	★	MHI75/C/U	M57/E	12	G, S, Coated (374, 377, 385)	—	8 7/8	10,000	13,000	8200	70	3700
			31287-6	★	MHI75/3K/BU	M57/E	12	G, Base Up ± 15°, Coated (374, 377)	—	8 7/8	10,000	12,000	7560	70	3200
			24725-4	★	MS175/BU	M57/E	12	G, Base Up ± 15° (374, 377)	5	8 7/8	10,000	15,000	9400	65	4000
	PAR38	Med.	30858-5	▼★	MHI75/RFL	M57/E	6	G, Clear, 55° Beam (377)	—	5 9/8	7500	10,000	—	55	3700
250	ED-28	Mog.	27484-5	★	MH250/U	M58/E	12	G, S, Clear (377, 385, 393)	5	8 7/8	10,000	20,500	13,500	65	4000
			29169-0	★	MH250/C/U	M58/E	12	G, S, Coated (377, 385, 393)	—	8 7/8	10,000	19,475	12,500	70	3700
			31137-3	★	MH250/3K/BU	M58/E	12	G, Base Up ± 15°, Coated (377, 393)	—	8 7/8	10,000	18,000	11,300	70	3200
360	ED37	Mog.	39065-8	▶\$★	MS360/BU/EW	M165/	6	High Efficacy, Base Up ± 15°, Clear (374, 377)	7	11 1/2	20,000	36,000	24,500	60	4300
			39066-6	▶\$★	MS360/C/BU/EW	M165/	6	High Efficacy, Base Up ± 15°, Coated (374, 377)	—	11 1/2	20,000	34,200	22,600	65	4000
400	ED28	Mog.	27862-2	★	MH400/U/ED28	M59/E	12	G, Clear (377, 385, 393)	5	8 7/8	20,000	36,000	24,000	63	4000
			24673-6	★	MS400/BU/ED28	M59/E	12	G, Clear, Base Up ± 15° (374, 377)	5	8 7/8	20,000	40,000	26,000	62	4100
	ED37	Mog.	34415-0	▶★	MH400/U	M59/S	6	G, S, Clear (377, 385, 393)	7	11 1/2	20,000	36,000	24,000	65	4000
			34416-8	▶★	MH400/C/U	M59/S	6	G, S, Coated (377, 385, 393)	—	11 1/2	20,000	34,200	22,300	70	3700
			31285-0	▶★	MH400/3K/U	M59/S	6	G, Coated (377, 385)	—	11 1/2	20,000	34,400	22,360	63	3300
			30170-5	▶★	MS400/BU	M59/S	6	High Efficacy, Base Up ± 15° Clear (374, 377)	7	11 1/2	20,000	40,000	26,500	65	4000
			30172-1	▶★	MS400/C/BU	M59/S	6	High Efficacy, Base Up ± 15° Coated (374, 377)	—	11 1/2	20,000	39,200	27,440	65	3900
1000	BT37	Mog.	32150-5	★	MHI1000/U/BT37	M47/E	6	G, Clear (359, 377, 385, 393)	7	11 1/2	10,000	110,000	71,500	65	3700
	BT56	Mog.	29826-5	▶★	MHI1000/U	M47/S	6	G, S, Clear (377, 385, 393)	9 1/2	15 3/8	12,000	110,000	71,000	65	3700
			29827-3	▶★	MHI1000/C/U	M47/S	6	G, S, Coated (377, 385, 393)	—	15 3/8	12,000	104,500	65,800	70	3400
			25093-6	▶★	MS1000/BU	M47/S	6	High Efficacy, Base Up ± 15° Clear (374, 377)	9 1/2	15 3/8	10,000	120,000	78,000	65	3700
			25137-1	▶★	MS1000/C/BU	M47/S	6	High Efficacy, Base Up ± 15° Coated (374, 377)	—	15 3/8	10,000	115,000	72,500	70	3400
1500	BT56	Mog.	13162-3	★	MHI1500/U	M48/E	6	G, S, Clear (359, 374, 375, 377, 402)	9 1/2	15 3/8	3000	155,000	124,000	60	3700

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HID symbols and footnotes located on page 139



HIGH INTENSITY DISCHARGE LAMPS

Metal Halide Lamps, High Pressure Sodium Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	ANSI Code Ballast Ref.	Pkg. Qty.‡	Description (401, 407)	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.) (351)	Approx. Initial Lumens (352)	Approx. Mean Lumens (353)	Approx. CRI	CCT (K)
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MINI WHITESON® HIGH PRESSURE SODIUM LAMPS (360, 363, 376)

Incandescent color quality, GX12-I base compact high pressure sodium lamps to be operated on Advance eVision® IWSN100CLF and IWSN100CBLS electronic ballast only

100	T6	GX12-I	13425-4	□ ★	SDW-TG 100W/T6/825	S167	12	G	2 1/2	4 1/2	10,000	4900	4165	83	2550
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WHITE SON® HIGH PRESSURE SODIUM LAMPS (360, 373, 376, 394)

Incandescent color quality

50	T10	PG12	30229-9	□ ★	SDW-T 50W/LV	S104	12	G	3 3/8	5 1/8	10,000	2300	2070	83	2500
	BD17	Med.	31344-5	■ □ ★	SDW-50W/LV/D	S104	12	G	—	5 3/8	10,000	2350	2000	85	2700
100	T10	PG12	30228-1	□ ★	SDW-T 100W/LV	S105	12	G	3 3/8	5 1/8	10,000	5000	4250	83	2550
	BD17	Med.	31346-0	■ □ ★	SDW-100W/LV/D	S105	12	G	—	5 3/8	10,000	4900	4170	85	2700

CERAMALUX® COMFORT HIGH PRESSURE SODIUM LAMPS (360, 373, 376)

Improved color rendering

70	BD17	Med.	30617-5	★	C70S62/C/M	S62	12	G	3 3/8	5 1/8	15,000	4400	3960	60	2200
100	BD17	Med.	30635-7	★	C100S54/C/M	S54	12	G	3 3/8	5 1/8	15,000	7800	7020	60	2200
	ED23 1/2	Mog.	30637-3	★	C100S54/C	S54	12	G	5	7 1/8	15,000	7900	7110	60	2200
150	BD17	Med.	30647-2	★	C150S55/C/M	S55	12	G	3 3/8	5 1/8	15,000	12,000	10,800	60	2200
	ED23 1/2	Mog.	30643-1	★	C150S55/C	S55	12	G	5	7 1/8	15,000	12,000	10,800	60	2200
250	ED18	Mog.	30245-5	★	C250S50/C	S50	12	G	5 3/8	9 1/8	15,000	23,000	20,700	65	2200
400	ED18	Mog.	30652-2	★	C400S51/C	S51	12	G	5 3/8	9 1/8	15,000	37,500	33,750	65	2200

For the most current product information, go to the e-catalog on www.philips.com
HID symbols and footnotes located on page 139



HIGH INTENSITY DISCHARGE LAMPS

High Pressure Sodium Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	ANSI Code Ballast Ref.	Pkg. Qty.‡	Description (401, 407)	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(351)	Approx. Initial Lumens(352)	Approx. Mean Lumens(353)	CRI	CCT (K)
CERAMALUX® HIGH PRESSURE SODIUM LAMPS (360, 373)															
Featuring ALTO® Lamp Technology															
35	BF55	Med.	30632-4	★	C35S76/M	S76	12	G (376)	3 1/8	5 1/8	24,000+	2,250	2025	21	2100
			30633-2	★	C35S76/D/M	S76	12	G (376)	—	5 1/8	24,000+	2150	1935	21	2100
50	BF55	Med.	30336-2	★	C50S68/M	S68	12	G (376)	3 1/8	5 1/8	24,000+	4000	3600	21	2100
			30337-0	★	C50S68/D/M	S68	12	G (376)	—	5 1/8	24,000+	3800	3420	21	2100
	ED23 1/2	Mog.	36867-0	★ ●	C50S68/ALTO	S68	12	G, S (376)	5	7 1/4	24,000+	4000	3600	21	2100
			33154-6	★ ●	C50S68/D/ALTO	S68	12	G, S (376)	—	7 1/4	24,000+	3800	3420	21	2100
70	BD17	Med.	33192-6	★	C70S62/M	S62	12	G (376)	3 1/8	5 1/8	24,000+	6300	5850	21	2100
			33214-8	★	C70S62/D/M	S62	12	G (376)	—	5 1/8	24,000+	5860	5270	21	2100
	ED23 1/2	Mog.	36869-6	★ ●	C70S62/ALTO	S62	12	G, S (376)	5	7 1/4	24,000+	6500	5670	21	2100
	PAR38	Med.	30620-9	▼ ★	C70S62/RFL	S62	12	G, 125° Beam	—	5 1/8	16,000	5000	3960	21	2100
100	BD17	Med.	34446-5	★	C100S54/M	S54S	12	G (376)	3 1/8	5 1/8	24,000+	9500	8550	21	2100
			34448-1	★	C100S54/D/M	S54S	12	G (376)	—	5 1/8	24,000+	8800	7920	21	2100
	ED23 1/2	Mog.	36872-0	★ ●	C100S54/ALTO	S54	12	G, S (376)	5	7 1/4	24,000+	9400	8460	21	2100
			33227-0	★ ●	C100S54/D/ALTO	S54	12	G, S (376)	—	7 1/4	24,000+	8610	7750	21	2100
150	BD17	Med.	30347-9	★	C150S55/M	S55	12	G (376)	3 1/8	5 1/8	24,000+	16,000	14,400	21	2100
			30348-7	★	C150S55/D/M	S55	12	G (376)	—	5 1/8	24,000+	15,000	13,500	21	2100
	ED23 1/2	Mog.	36874-6	★ ●	C150S55/ALTO	S55	12	G, S (370, 376)	5	7 1/4	24,000+	15,800	14,220	21	2100
	ED28	Mog.	36876-1	★ ●	C150S56/ALTO	S56	12	G, S (370, 376)	5	8 3/8	24,000+	15,000	13,950	21	2100
200	ED18	Mog.	36877-9	★ ●	C200S66/ALTO	S66MN-200	12	G, S (376)	5 3/4	9 1/4	24,000+	21,400	19,260	21	2100
225	ED18	Mog.	32291-7	★	C225S50/EW	S50	12	EW, G, S (376)	5 3/4	9 1/4	24,000+	27,300	24,620	21	2100
250	ED18	Mog.	36879-5	★ ●	C250S50/ALTO	S50	12	G, S (376)	5 3/4	9 1/4	24,000+	27,000	24,300	21	2100
360	ED18	Mog.	32292-5	★	C360S51/EW	S51	12	EW, G, S (376)	5 3/4	9 1/4	24,000+	46,000	41,450	21	2100
400	ED18	Mog.	36881-1	★ ●	C400S51/ALTO	S51	12	G, S (376)	5 3/4	9 1/4	24,000+	50,000	45,000	21	2100
600	T14	Mog.	23982-2	■ ★	C600S106	S106	12	G (376)	6 1/8	11 1/8	24,000+	90,000	81,000	21	2100
1000	ED25	Mog.	36883-7	■ ★ ●	C1000S52/ALTO	S52XB-1000	6	G, S (359, 362, 376)	8 3/4	15 1/8	24,000	140,000	126,000	21	2100
	ED37	Mog.	32386-5	■ ★	C1000S52/ED37	S52	6	G, S (376)	7	11 1/2	24,000	125,000	112,000	21	2100

For the most current product information, go to the e-catalog on www.philips.com
 HID symbols and footnotes located on page 139



HIGH INTENSITY DISCHARGE LAMPS

High Pressure Sodium Lamps, Low Pressure Sodium Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	ANSI Code Ballast Ref.	Pkg. Qty.†	Description (401, 407)	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.) (351)	Approx. Initial Lumens (352)	Approx. Mean Lumens (353)	CRI	CCT (K)
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CERAMALUX® HIGH PRESSURE SODIUM NON-CYCLING LAMPS (360, 373, 376)

Featuring ALTO® Lamp Technology

50	ED23½	Mog.	20224-2	★●†	C50S68/ALTO NC HPS	S68	20	G, S	5	7%	30,000	4000	3600	21	2100
70	ED23½	Mog.	14739-7	★●†	C70S62/ALTO NC HPS	S62	12	G, S	5	7%	30,000	6300	5670	21	2100
100	ED23½	Mog.	14740-5	★●†	C100S54/ALTO NC HPS	S54	12	G, S	5	7%	30,000	10,000	9000	21	2100
150	ED23½	Mog.	14741-3	★●†	C150S55/ALTO NC HPS	S55	12	G, S	5	7%	30,000	16,000	14,400	21	2100
200	ED18	Mog.	15725-5	★●†	C200S66/ALTO NC HPS	S66	12	G, S	5½	9%	30,000	22,000	19,800	21	2100
250	ED18	Mog.	14742-1	★●†	C250S50/ALTO NC HPS	S50	12	G, S	5½	9%	30,000	28,500	25,650	21	2100
400	ED18	Mog.	14743-9	★●†	C400S51/ALTO NC HPS	S51	12	G, S	5½	9%	30,000	50,000	45,000	21	2100
1000	ED25	Mog.	15726-3	★●†	C1000S52/ALTO NC HPS	S52	6	G, S	8½	15%	30,000	130,000	117,000	21	2100

CERAMALUX® HIGH PRESSURE SODIUM INSTANT RESTRIKE LAMPS (360, 373, 376)

50	ED23½	Mog.	35467-0	■★	C50S68/2	S68	12	G, S	5	7%	24,000+	3800	3450	21	2100
70	ED23½	Mog.	26541-3	■★	C70S62/2	S62	12	G, S	5	7%	24,000+	5600	5050	21	2100
100	ED23½	Mog.	26560-3	■★	C100S54/2	S54	12	G, S	5	7%	24,000+	9100	8190	21	2100
150	ED23½	Mog.	26561-1	■★	C150S55/2	S55	12	G, S	5	7%	24,000+	15,600	14,000	21	2100
250	ED18	Mog.	37717-6	■★	C250S50/2	S50	12	G, S	5½	9%	24,000+	27,500	24,750	21	2100
400	ED18	Mog.	37688-9	■★	C400S51/2	S51	12	G, S	5½	9%	24,000+	49,000	44,000	21	2100
1000	ED25	Mog.	20412-3	■★	C1000S52/2	S52	6	G, S	8½	15%	24,000+	140,000	126,000	21	2100

HIGH PRESSURE SODIUM—HORTICULTURE LAMPS (360, 373)

- Enhanced spectrum Xtreme grow lamp
- Excellent lumen maintenance at 97% (405)
- Offers 22% more micromols**
- Features ALTO® Lamp Technology, environmentally responsible lamps.

Note: Best practice suggests grow lamps to be replaced at maximum 40% of their rated average life in order to maintain same level of growth-light on plants over time.

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	ANSI Code Ballast Ref. or MBCP*	Pkg. Qty.†	Description (401, 407)	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.) (351)	Approx. Initial Lumens (352)	Approx. Mean Lumens (353)	CRI	CCT (K)
1000	ED25	Mog.	14064-0	■★†	C1000S52/AGROLITE XT	S52	6	AGRO (359, 362, 376)	8½	15%	15,000	146,000	135,780	1850	2100
430	ED18	Mog.	31710-7	★	SON AGRO 430W	S145/S51	12	AGRO (389, 396)	5½	9%	16,000	54,000	48,600	670	2100

** The micromol value expresses the amount of light particles (photons) between 400 and 700 nm that are sent out by a light source (=Photosynthetic Photon Flux) per second. The amount that the plant absorbs determines the rate of photosynthesis and as a result the rate of plant growth. Therefore, the micromol value is also called "growth-light." In general, an increase of 22% in growth-light means an increase of 22% in plant growth.

For the most current product information, go to the e-catalog on www.philips.com
HID symbols and footnotes located on page 139



HIGH INTENSITY DISCHARGE LAMPS

Low Pressure Sodium Lamps, QL Induction Systems

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	ANSI Code Ballast Ref.	Pkg. Qty.‡	Description (401, 407)	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.)(351)	Approx. Initial Lumens(352)	Approx. Mean Lumens(353)	CRI	CCT (K)
18	T17	D.C. Bay	23404-7	□	SOX-E18	L69	12	Clear Base Up ± 110°	5½	8½	18,000	1800	1620	—	1700
35	T17	D.C. Bay	32781-7		SOX35	L70	12	Clear Base Up ± 110°	—	12¾	18,000	4550	4095	—	1700
55	T17	D.C. Bay	32151-3		SOX55	L71	12	Clear Base Up ± 110°	9½	16¾	18,000	7800	7800	—	1700
90	T21	D.C. Bay	32152-1		SOX90	L72	12	Clear Hor. ± 20°	—	20¾	18,000	14,300	12,155	—	1700
135	T21	D.C. Bay	32153-9		SOX135	L73	12	Clear Horizontal ± 20°	—	30¾	18,000	22,600	19,210	—	1700
180	T21	D.C. Bay	15116-7		SOX180	L74	6	Clear Horizontal ± 20°	—	44¾	18,000	32,000	22,400	—	1700

LOW PRESSURE SODIUM LAMPS—SOX

55	P26	Twist	13542-6	□	QL55W/GEN 100–120V	6	55W Generator 120V	—	—	100,000	—	—	—	—	—
			13543-4	□	QL55W/GEN 200–277V	6	55W Generator 277V	—	—	100,000	—	—	—	—	—
			13544-2	□	QL55W/PCTWIST BASE	6	55W Power Coupler	—	—	100,000	—	—	—	—	—
			13545-9	□	QL55W/830TWIST BASE	6	55W Lamp 3000K	—	5½	100,000	3500	2800	80	3000	—
			13546-7	□	QL55W/840TWIST BASE	6	55W Lamp 4000K	—	5½	100,000	3500	2800	80	4000	—
85	P35	Twist	20095-6	□†	QL55W/850TWIST BASE	6	55W Lamp 5000K	—	5½	100,000	3500	2800	80	5000	—
			13547-5	□	QL85W/GEN 100–120V	6	85W Generator, 120V	—	—	100,000	—	—	—	—	—
			13548-3	□	QL85W/GEN 200–277V	6	85W Generator 277V	—	—	100,000	—	—	—	—	—
			13549-1	□	QL85W/PCTWIST BASE	6	85W Power Coupler	—	—	100,000	—	—	—	—	—
			13550-9	□	QL85W/830TWIST BASE	6	85W Lamp 3000K	—	7¾	100,000	6000	4800	80	3000	—
165	P41	Twist	13551-7	□	QL85W/840TWIST BASE	6	85W Lamp 4000K	—	7¾	100,000	6000	4800	80	4000	—
			20096-4	□†	QL85W/850TWIST BASE	6	85W Lamp 5000K	—	7¾	100,000	6000	4800	80	5000	—
			14991-4	□†	QL165W/GEN 100–120V	6	165W Generator 120V	—	—	100,000	—	—	—	—	—
			14990-6	□†	QL165W/GEN 200–277V	6	165W Generator 277V	—	—	100,000	—	—	—	—	—
			36916-5	□	QL165W/PCTWIST BASE	6	165W Power Coupler	—	—	100,000	—	—	—	—	—
			36917-3	□	QL165W/830TWIST BASE	6	165W Lamp 3000K	—	8¾	100,000	12,000	9600	80	3000	—
			36918-1	□	QL165W/840TWIST BASE	6	165W Lamp 4000K	—	8¾	100,000	12,000	9600	80	4000	—
			20097-2	□†	QL165W/850TWIST BASE	6	165W Lamp 5000K	—	8¾	100,000	12,000	9600	80	5000	—

For the most current product information, go to the e-catalog on www.philips.com
HID symbols and footnotes located on page 139



QL Induction System

HIGH INTENSITY DISCHARGE LAMPS

Mercury Vapor Lamps

Watts	Bulb	Base	Product Number	Symbols, Footnotes	Ordering Code	ANSI Code Ballast Ref.	Pkg. Qty.±	Description (401, 407)	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.) (351)	Approx. Initial Lumens (352)	Approx. Mean Lumens (353)	CRI	CCT (K)
50	BD17	Med.	35664-2	★	H46DL-40-50/DX	H46	12	G, (379, 384)	—	5%	24,000+	1580	1260	45	3200
75	BD17	Med.	27524-8	★	H43AV-75/DX	H43	12	G, S, (379)	—	5%	24,000+	2800	2250	45	3200
100	A23	Med.	35658-4	★	H38MP-100/DX	H38	24	G, (379)	—	5%	24,000+	4300	3700	45	3700
	ED23½	Mog.	33713-9	★	H38JA-100/DX	H38	12	G, S (379)	—	7%	24,000+	4400	3400	45	3700
	R40	Med.	31947-5	★ X	H38BP-100/DX	H38	12	RF, FF, VV 145° Beam (379)	—	7%	24,000+	3300	2300	45	4400
175	ED28	Mog.	31965-7	★	H39KB-175	H39	12	G, S, B (355)	5	8%	24,000+	7900	7400	20	6800
			24805-4	★	H39KC-175/DX	H39	12	G, S (379)	—	8%	24,000+	7900	7600	45	3700
250	ED28	Mog.	31985-5	★	H37KB-250	H37	12	G, S, B (355)	5	8%	24,000+	12,100	10,500	20	6700
			24814-6	★	H37KC-250/DX	H37	12	G, S (379)	—	8%	24,000+	13,000	10,700	45	3700
400	ED37	Mog.	24842-7	★	H33GL-400/DX	H33	6	G, S (379)	—	11½	24,000+	23,000	19,100	45	3700
1000	BT56	Mog.	25107-4	★	H36GV-1000	H36	6	G, S (359)	9½	15%	24,000+	57,500	48,400	20	6300
			39707-5	★	H36GW-1000/DX	H36	6	G, S (359, 379)	—	15%	24,000+	63,000	47,500	45	3700

Descriptive symbols for Mercury Vapor Lamps:

BBlack Light

FFFrosted Face

GGeneral Lighting

RReflector Flood

SSStreet Lighting

VVVery Wide

For the most current product information, go to the e-catalog on www.philips.com

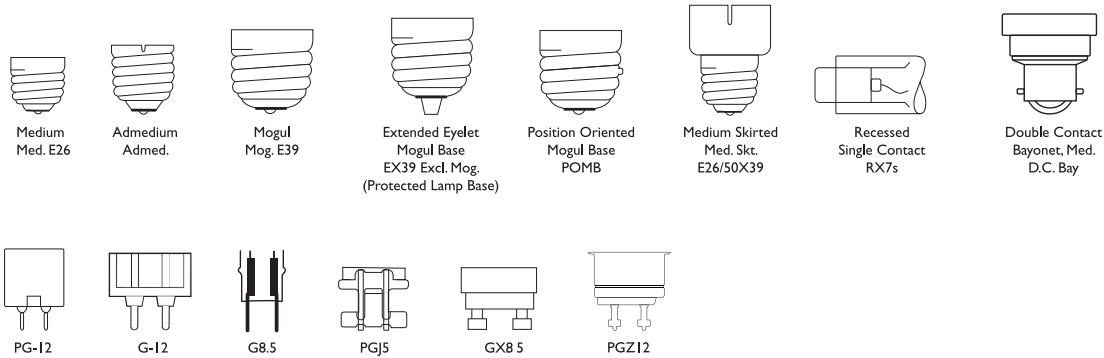
HID symbols and footnotes located on page 139



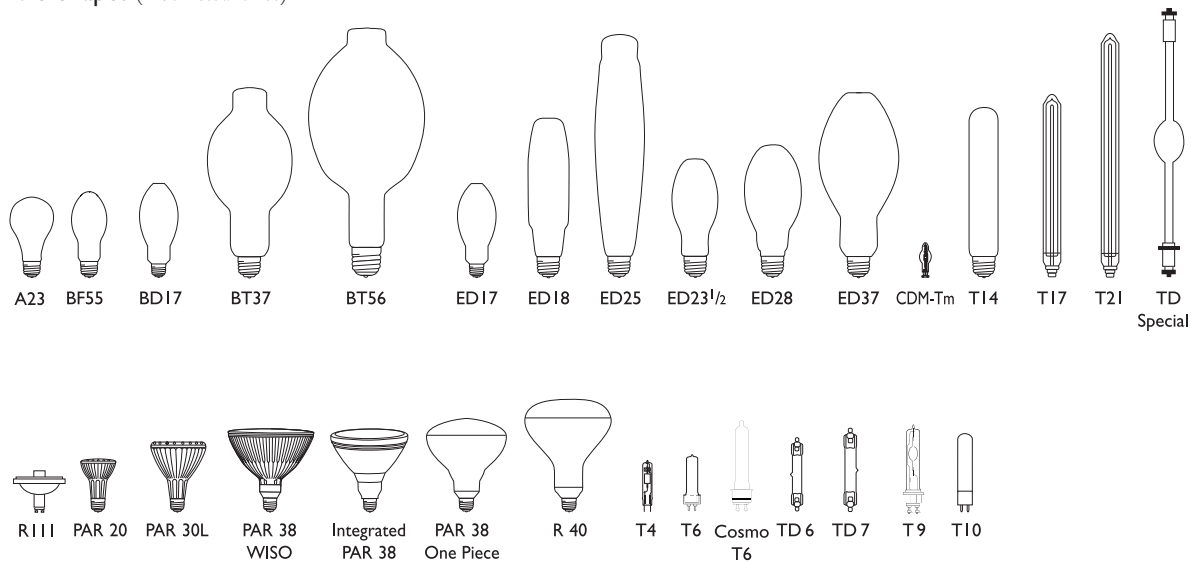
HIGH INTENSITY DISCHARGE LAMPS

Base Types and Bulb Shapes

Base Types (Not Actual Sizes)



Bulb Shapes (Not Actual Sizes)



HIGH INTENSITY DISCHARGE LAMPS

For the most current product information, go to the e-catalog on www.philips.com

□ Exclusive to Philips Lighting Company

■ Nickel plated brass base

⌘ Energy Saving Product

▲ Aluminum base

★ Heat resisting glass bulb

♦ Maximum Beam Candlepower

) Can be used in open luminaire, only if operated vertically $\pm 15^\circ$

● This lamp is better for the environment because of its reduced mercury content. All Philips ALTO® lamps give you end-of-life options which can simplify and reduce your lamp

disposal costs depending on your state and local regulations. ■ ENERGY STAR® Bulb: As an ENERGY STAR® Partner, Philips has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

✕ Orders will be shipped until inventory is depleted; no longer manufactured

© This Bulb Meets US Federal Minimum Efficiency Standard

† New since last printing

* Two Lamp Carded Pack.

◇ Designed for instant start operation.

‡ Quantity shown is minimum shipping container—refer to Net Price Schedule for number of lamps to qualify as a standard case.

✓ Consider the compact fluorescent lamps listed on pages 74–77 for energy savings

G = General Lighting

S = Street Lighting

▼ PAR38 (one piece)

(351) Rated average life is the life obtained, on the average, from large representative groups of lamps in laboratory tests under controlled conditions at 10 or more operating hours per start. It is based on survival of at least 50% of the lamps and allows for individual lamps or groups of lamps to vary considerably from the average. For HPS lamps with a rated average life of 24,000 hours, life is based on survival of 67% of the lamps.

(352) Measured at 100 hrs. life. Approximate lumen values listed are for vertical operation of the lamp.

(353) Approximate lumen output at 40% of lamp rated average life.

(355) Separate filter is required for black light application.

(359) Electrically insulated support for bulb may be required, especially in horizontal and nearly horizontal operating positions.

(360) Follow fixture manufacturer's recommendations regarding proximity of ballast to bulb.

(362) This lamp should be shielded from moisture to prevent breakage.

(364) Rated average life: vertical $\pm 30^\circ$ 20,000 hours; other positions, 15,000 hours.

(372) Color characteristics may vary somewhat from one lamp type to another. Time should be allowed for the lamp to stabilize in color when it is turned on for the first time or if for any reason its operating position is changed. This may require several hours' operation, with more than one start. Lamp color and output may change temporarily if the lamp is subjected to excess vibration or shock. Lamp color characteristics may change after long accumulate operating time.

(373) Fixtures should be designed so that sockets and wiring withstand starting pulse up to 5000 volts for 1000 watts and WHITE SON® types and 4000 volts for other sizes.

(374) Performance may not be satisfactory unless operated within specified operating positions.

(375) If specified operating position is base up or base down to horizontal, this permits 15° beyond the horizontal.

(376) For use in fixtures which do not redirect a substantial portion of the energy toward the arc tube; otherwise very early failure is anticipated.

(377) Requires a ballast specified or approved for Philips metal halide lamps, or one that is designed to operate all popular brands of metal halide lamps. 1000W types will operate from H36 conventional lag type ballast for Mercury Vapor lamps at ambient temperatures of 50°F or higher. 1000W types must not be operated at 1500W.

(378) Requires auxiliary 10KV pulse ignitor for instant restrike.

(379) It is a characteristic of phosphor-coated vapor lamps to require a few hundred hours of operation to gradually reach normal characteristic color. New lamps may have a slight pink appearance during this initial operating period.

(384) For 40W operation use H45 ballast.

Ordering Code	Approx. Lumens	
	Initial	Mean
H46DL-40-50/DX	1140	910

(385) Rated average life: vertical $\pm 15^\circ$. Other positions 75% of vertical life.

(387) This lamp can cause serious skin burns and eye inflammation from shortwave ultraviolet radiation and must be fully enclosed in a fixture with an appropriate UV filter. To protect against possible risk of property damage or personal injury due to an arc tube rupture, the fixture enclosure must be capable of withstanding particles of glass having temperatures up to 1000°C . **DO NOT USE THIS LAMP IF THE UV FILTER IS MISSING.**

(389) Operates at rated output on ANSI 430W S145 SON AGRO ballasts.

(391) Requires a ballast specified or approved for Philips Metal Halide lamp or one designed to the indicated ANSI Standard. A pulse ignitor is required. Sockets and wiring must withstand starting pulse.

(392) Supply volts must be $\pm 5\%$ of rated ballast line volts for reactor type and $\pm 10\%$ for CWA or electronic ballasts.

(393) Vertical lumens. Horizontal lumens 6%–10% lower:

(394) To maintain color consistency within 250K, group relamp at 7500 hours.

(396) UV filtered design (FadeBlock™).

(397) Operate only on thermally protected ballasts

(399) This product utilizes ALTO® Lamp Technology. ALTO products pass the US EPA's Toxicity Characteristic Leaching Procedure (TCLP) for non-hazardous waste status.

(400) Energy-saver retrofit for 175W, M107 ballast.

(401) MasterColor® Metal Halide Lamps are not recommended for use on dimmers and are not warranted if used on dimmer systems.

(402) Primarily used for sports-lighting applications. Life, initial and mean lumens are for horizontal operation. In vertical position and at 10 or more hours per start, lamp life is extended to 6000 hours, initial lumens are 170,000 and mean lumens are 136,000.

(403) Not to be used in compact Wall Pack or Flood Light type fixtures. Maximum temperature limit of outer bulb may be exceeded in these applications and can lead to premature lamp failure.

(404) Luminaire photometric distributions may be impacted due to difference in arc length vs. HPS lamp arc length.

(405) 97% Lumen maintenance at 10% of rated average life. 93% lumen maintenance at 40% of rated average life.

(406) **CAUTION:** Beware of inadvertent circuit overload in new construction. Because of power factor of 0.57 in the ballast of the lamp, the lamp uses 0.36 amps.

(407) Operating Position is Universal, unless otherwise indicated. See Warnings, Cautions and Operating Instructions for further information.

HIGH INTENSITY DISCHARGE LAMPS

Warnings, Cautions and Operating Instructions

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for MasterColor® Integrated PAR 38 Lamps

Warnings, Cautions and Operating Instructions

R“**WARNING:** These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.” This lamp complies with FDA radiation performance standard 21 CFR subchapter J. (USA:21CFR 1040.30 Canada:SOR/DORS/80-381)

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous short wave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000°C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

This lamp contains an arc tube with a filling gas containing less than 41 nCi of Kr-85 and is distributed by Philips Lighting Company, a division of Philips Electronics North America Corporation, Somerset, New Jersey, 08875.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC-TUBE RUPTURE THE FOLLOWING **LAMP OPERATING INSTRUCTIONS** MUST BE FOLLOWED.

LAMP OPERATING INSTRUCTIONS:

1. RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
2. At high lighting levels or when illuminating light-sensitive materials the use of an extra UV filter is recommended.
3. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.
4. Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock, and color appearance may vary between individual lamps.
5. Lamps may require up to 10 minutes to re-light if there is a power interruption.

6. Do not operate with an additional ballast, since a ballast is integrated in the lamp itself.

7. **Do not use in totally enclosed recessed fixtures.**

8. Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.

9. Lamp should not be used with dimmers.

10. Protect lamp, lamp socket and wiring against moisture, corrosive atmosphere and excessive heat. Lamp should be used in dry locations only.

These lamps may be used in open fixtures.

Hg - LAMP CONTAINS MERCURY Manage in Accord with Disposal Laws

See: www.lamprecycle.org or 1-800-555-0050

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for MasterColor® (Elite) Ceramic Metal Halide Lamps: Single Ended CDM-T G12, CDM-TC G8.5 and CDM-Tm PGJ5 (Universal); Double-Ended CDM-TD RX7 (Horizontal ± 45°, Enclosed Fixtures Only)

Warnings, Cautions and Operating Instructions

R“**WARNING:** These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.” This lamp complies with FDA radiation performance standard 21 CFR subchapter J. (USA:21CFR 1040.30 Canada:SOR/DORS/80-381)

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous short wave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000° C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

Certain lamps that will retain all the glass particles should inner arc-tube rupture occur are commercially available from Philips Lighting Company.

RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.

This lamp contains an arc tube with a filling gas containing Kr-85 and is distributed by Philips Lighting Company, a division of Philips Electronics North America Corporation, Somerset, New Jersey, 08875.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC-TUBE RUPTURE THE FOLLOWING **LAMP OPERATING INSTRUCTIONS** MUST BE FOLLOWED:

LAMP OPERATING INSTRUCTIONS:

1. RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
2. Use only in fully enclosed fixtures capable of withstanding particles of glass having temperatures up to 1000° C. Lens/diffuser material must be heat resistant. Consult fixture manufacturer regarding the suitability of the fixture for this lamp.
3. Do not operate a fixture with a missing or broken lens/diffuser. At high lighting levels or when illuminating light-sensitive materials the use of an extra UV filter is recommended.
4. Operate lamp only within specified limits of operating position.
5. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards. When inserting a new CDM-Tm lamp, twist the lamp 45° clockwise in the holder to ensure proper electrical and mechanical connection.
6. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer.

A. Operate lamp only within specified limits of operation.

B. For total supply load refer to ballast manufacturers electrical data.

C. Operate CDM-T (G12 base) lamps only on thermally protected ballasts.

D. Operate CDM-TC lamps (G8.5 base) and CDM-Tm (PGJ5 base) only on thermally protected electronic ballasts.

E. Operate CDM-T (G12 base) 39W/842 and CDM-T (G12 base) Elite only on thermally protected electronic ballasts.

7. Periodically inspect the outer envelope. Replace any lamps that show scratches, cracks or damage.

8. If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.

9. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.

10. Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock and color appearance may vary between individual lamps.

11. Lamps may require 4–8 minutes (10–15 minutes for CDM-Tm) to re-light if there is a power interruption.

12. Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.

HIGH INTENSITY DISCHARGE LAMPS

Warnings, Cautions and Operating Instructions

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for MasterColor® CDM Elite Medium Watt Ceramic Metal Halide Tubular Single-Ended T9 Lamps

Warnings, Cautions and Operating Instructions

R“**WARNING:** These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.” This lamp complies with FDA radiation performance standard 21 CFR subchapter J. (USA: 21CFR 1040.30 Canada:SOR/DORS/80-381)

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous short wave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000°C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

Certain lamps that will retain all the glass particles should inner arc-tube rupture occur are commercially available from Philips Lighting Company.

WARNING: If a lamp is burned in a horizontal position, a rotation of the lamp over more than 90° around the lamp axis in the sockets can increase the risk that the arc tube will rupture. This holds during operation as well as after a cooling period after switching off the lamp. If one wishes to rotate the lamp over more than 90° around the lamp axis, one should do so in steps of less than 90° and let the lamp burn for at least 2 hours between each step.

RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.

This lamp contains an arc tube with a filling gas containing less than 20 nCi of Kr-85 and is distributed by Philips Lighting Company, a division of Philips Electronics North American Corporation.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC-TUBE RUPTURE THE FOLLOWING LAMP OPERATING INSTRUCTIONS MUST BE FOLLOWED:

LAMP OPERATING INSTRUCTIONS:

1. Relamp fixtures at or before the end of rated life. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
2. Use only in an enclosed fixture capable of withstanding particles of glass having temperatures up to 1000°C.
3. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.

4. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer:

- A. Operate lamp only within specified limits of operation.
- B. For total supply load refer to ballast manufacturers electrical data.
- C. All Pulse Start lamps require a socket rated to withstand a 4,000 volt pulse

5. Periodically inspect the outer envelope. Replace any lamps that show scratches, cracks or damage.

6. If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.

7. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.

8. Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock, and color appearance may vary between individual lamps.

9. Lamps may require 10 minutes to re-light if there is a power interruption.

10. Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.

11. Use this lamp only in fixtures that contain a Pulse Start metal halide ballast and are specifically designed for use with Pulse Start metal halide lamps.

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for Protected MasterColor® Ceramic Metal Halide PAR and CDM-R111 Lamps (Open or Enclosed Fixtures)

Warnings, Cautions and Operating Instructions

R“**WARNING:** These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.” This lamp complies with FDA radiation performance standard 21 CFR subchapter J. (USA:21CFR 1040.30 Canada: SOR/DORS/80-381)

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous short wave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000° C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.** These lamps are designed to retain all the glass particles should an arc tube rupture occur. The following operating instructions are recommended to minimize these occurrences.

RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.

This lamp contains an arc tube with a filling gas containing Kr-85 and is distributed by Philips Lighting Company, a division of Philips Electronics North America Corporation, Somerset, New Jersey, 08875.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC-TUBE RUPTURE THE FOLLOWING **LAMP OPERATING INSTRUCTIONS** MUST BE FOLLOWED:

LAMP OPERATING INSTRUCTIONS:

1. RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
2. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.
3. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer:
 - A. Operate lamp only within specified limits of operation.
 - B. For total supply load refer to ballast manufacturers electrical data.
 - C. Operate PAR20 3000K and PAR30L 3000K lamps only on thermally protected ballast.

D. Operate 20W PAR20 3000K and 20W PAR30L 3000K lamps only on thermally protected electronic ballast.

E. Operate PAR20 4000K and PAR30L 4000K lamps only on thermally protected electronic ballast.

F. Operate CDM-R111 lamps only on thermally protected electronic ballast.

4. Periodically inspect the outer envelope. Replace any lamps that show scratches, cracks or damage.

5. If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.

6. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.

7. Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock, and color appearance may vary between individual lamps.

8. Lamps may require up to 10 minutes (4–8 minutes for CDM-R111) to re-light if there is a power interruption.

9. Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.

10. For proper installation and removal, lamp should be handled by the sides of the reflector and not by the aluminum front anti-glare cap.

HIGH INTENSITY DISCHARGE LAMPS

Warnings, Cautions and Operating Instructions

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for MasterColor® Ceramic Metal Halide Lamps ED17 (Enclosed Fixtures); Protected MasterColor® Ceramic Metal Halide Lamps ED17P (Open or Enclosed Fixtures)

Warnings, Cautions and Operating Instructions

R“**WARNING:** These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.” This lamp complies with FDA radiation performance standard 21 CFR subchapter J. (USA:21CFR 1040.30 Canada:SOR/DORS/80-381)

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous short wave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000° C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

Use ED17 lamps in enclosed luminaires ONLY that are capable of withstanding particles of glass having temperatures up to 1000° C. ED17P types are designed to retain all the glass particles should an arc tube rupture occur.

RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.

This lamp contains an arc tube with a filling gas containing Kr-85 and is distributed by Philips Lighting Company, a division of Philips Electronics North America Corporation, Somerset, New Jersey, 08875.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC-TUBE RUPTURE, THE FOLLOWING **LAMP OPERATING INSTRUCTIONS** MUST BE FOLLOWED:

LAMP OPERATING INSTRUCTIONS:

1. RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
2. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.

3. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer:

- A. Operate lamp only within specified limits of operation.
- B. For total supply load refer to ballast manufacturers electrical data.

4. Periodically inspect the outer envelope. Replace any lamps that show scratches, cracks or damage.
5. If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.
6. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.
7. Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock and color appearance may vary between individual lamps.
8. Lamps may require 4 to 8 minutes to re-light if there is a power interruption.
9. Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for Philips MasterColor® Ceramic Metal Halide Pulse Start ED 23½ Lamps featuring ALTO® Lamp Technology (For Enclosed Fixtures Only)

Warnings, Cautions and Operating Instructions

R“**WARNING:** These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.” This lamp complies with FDA radiation performance standard 21 CFR subchapter J. (USA:21CFR 1040.30 Canada:SOR/DORS/80-381)

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous short wave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb could cause glass to fly if the envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000° C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

This lamp contains an arc tube with a filling gas containing not less than 25nCi of Kr-85 and is distributed by Philips Lighting Company, a division of Philips Electronics North America Corporation, Somerset, New Jersey, 08875

RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE.

Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC-TUBE RUPTURE, THE FOLLOWING LAMP OPERATING INSTRUCTIONS MUST BE FOLLOWED.

LAMP OPERATING INSTRUCTIONS:

1. RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
2. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.
3. Use only in an enclosed fixture capable of withstanding particles of glass having temperatures up to 1000°C.
4. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer:
 - A. Operate lamp only within specified limits of operation.
 - B. For total supply load refer to ballast manufacturers electrical data.
 - C. All Pulse Start lamps require a socket rated to withstand a 4000 Volt pulse.
5. Periodically inspect the outer envelope. Replace any lamps that show scratches, cracks or damage.

6. If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.
7. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.
8. Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock, and color appearance may vary between individual lamps.
9. Lamps may require 10 to 15 minutes to re-light if there is a power interruption.
10. Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.
11. Use this lamp only in a fixture that contains a Pulse Start metal halide ballast and is specifically designed for use with Pulse Start metal halide lamps.

HIGH INTENSITY DISCHARGE LAMPS

Warnings, Cautions and Operating Instructions

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for Protected MasterColor® Pulse Start Ceramic Metal Halide Lamps ED37 and ED28 (Vertical Operation $\pm 15^\circ$, Open or Enclosed Fixtures)

Warnings, Cautions and Operating Instructions

R“**WARNING:** These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.” This lamp complies with FDA radiation performance standard 21 CFR subchapter J, (USA:21CFR 1040.30 Canada:SOR/DORS/80-381)

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous short wave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000° C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

These lamps are designed to retain all the glass particles should an arc tube rupture occur. The following operating instructions are recommended to minimize these occurrences.

RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.

This lamp contains an arc tube with a filling gas containing Kr-85 and is distributed by Philips Lighting Company, a division of Philips Electronics North America Corporation, Somerset, New Jersey, 08875.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC-TUBE RUPTURE THE FOLLOWING **LAMP OPERATING INSTRUCTIONS** MUST BE FOLLOWED:

LAMP OPERATING INSTRUCTIONS:

1. RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
2. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.
3. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer.

- A. Operate lamp only within specified limits of operation.
 - B. For total supply load refer to ballast manufacturers electrical data.
 - C. All Pulse Start mogul based lamps require a socket rated to withstand a 4000 volt pulse.
4. Periodically inspect the outer envelope. Replace any lamps that show scratches, cracks or damage
 5. If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.
 6. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.
 7. Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock, and color appearance may vary between individual lamps.
 8. Lamps may require 10 to 20 minutes to re-light if there is a power interruption.
 9. Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.
 10. Use this lamp only in fixtures that contain Pulse Start metal halide ballasts and are specifically designed for use with Pulse Start metal halide lamps.

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS CosmoWhite® Lamp (For Enclosed Fixtures Only)

Warnings, Cautions and Operating Instructions

R“**WARNING:** These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.” This lamp complies with FDA radiation performance standard 21 CFR subchapter J, (USA:21CFR 1040.30 Canada:SOR/DORS/80-381)

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous short wave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb could cause glass to fly if the envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000°C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

This lamp contains an arc tube with a filling gas containing less than 6.6nCi of Kr-85 and is distributed by Philips Lighting Company, a division of Philips Electronics North America Corporation, Somerset, New Jersey, 08875

RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE.

Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC-TUBE RUPTURE, THE FOLLOWING **LAMP OPERATING INSTRUCTIONS** MUST BE FOLLOWED.

LAMP OPERATING INSTRUCTIONS:

1. RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
2. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.
3. Use only in an enclosed fixture capable of withstanding particles of glass having temperatures up to 1000°C.
4. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer.

- A. Operate lamp only within specified limits of operation.
 - B. For total supply load refer to ballast manufacturer's electrical data.
 - C. All CosmoWhite lamps require a PGZ12 socket rated to withstand a 5000 Volt pulse.
5. Periodically inspect the outer envelope. Replace any broken lamps and lamps that show scratches, cracks or damage immediately.

6. If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.
7. Protect lamp, lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.
8. Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock, and color appearance may vary between individual lamps.
9. Lamps may require 10 to 15 minutes to re-light if there is a power interruption.
10. Take care in handling and disposing of lamps. Don't break the outer bulb of an end of life lamp. If an arc tube is broken, avoid skin contact with any of the contents or fragments.
11. Use this lamp only in a fixture that contains an Advance CosmoWhite® electronic low frequency square wave ballast.
12. When inserting a new lamp, hold it by the quartz bulb, not by the metal lamp base; twist the lamp 45° clockwise in the lamp holder to ensure proper electrical and mechanical connection.
13. Store the lamps in cool and dry conditions to prevent the oxidation of the exterior metal parts.
14. Consult your Philips Lighting or Advance representative if you have any questions.

HIGH INTENSITY DISCHARGE LAMPS

Warnings, Cautions and Operating Instructions

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for Protected MasterColor® Ceramic Metal Halide HPS-Retro White™ Lamps ED18 (Vertical Operation $\pm 15^\circ$, Open or Enclosed Fixtures or Horizontal Operation $\pm 15^\circ$)

Warnings, Cautions and Operating Instructions

R“**WARNING:** These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.” This lamp complies with FDA radiation performance standard 21 CFR subchapter J. (USA: 21 CFR 1040.30 Canada: SOR/DORS/80-381)

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous short wave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000° C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

These lamps are designed to retain all the glass particles should an arc tube rupture occur. The following operating instructions are recommended to minimize these occurrences.

RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.

This lamp contains an arc tube with a filling gas containing Kr-85 and is distributed by Philips Lighting Company, a division of Philips Electronics North America Corporation, Somerset, New Jersey, 08875.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC-TUBE RUPTURE THE FOLLOWING **LAMP OPERATING INSTRUCTIONS** MUST BE FOLLOWED:

LAMP OPERATING INSTRUCTIONS:

1. RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
2. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.
3. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer.

A. Operate lamp only within specified limits of operation.

B. For total supply load refer to ballast manufacturers electrical data.

4. Periodically inspect the outer envelope. Replace any lamps that show scratches, cracks or damage.
5. If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.
6. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.
7. Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock and color appearance may vary between individual lamps.
8. Lamps may require 10 to 20 minutes to re-light if there is a power interruption.
9. Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for Pulse Start Metal Halide Lamps (Base Up Operation $\pm 15^\circ$ Unless Otherwise Noted; Enclosed Fixtures Only Unless Otherwise Noted)

Warnings, Cautions and Operating Instructions

R“**WARNING:** These lamps can cause serious skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.” This lamp complies with FDA radiation performance standard 21 CFR subchapter J. (USA: 21 CFR 1040.30 Canada: SOR/DORS/80-381)

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous shortwave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000° C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

Certain lamps that will retain all the glass particles should inner arc-tube rupture occur are commercially available from Philips Lighting Company.

RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC-TUBE RUPTURE THE FOLLOWING **LAMP OPERATING INSTRUCTIONS** MUST BE FOLLOWED:

LAMP OPERATING INSTRUCTIONS:

1. Turn off lamps at least once a week for at least 15 minutes in systems which are operating on a continuous basis (24 hours/day-7 days/week). FAILURE TO TURN OFF LAMPS FOR THE MINIMUM RECOMMENDED TIME MAY INCREASE THE POSSIBILITY OF AN INNER ARC-TUBE RUPTURE.
2. RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
3. Use only in an enclosed fixture capable of withstanding particles of glass having temperatures up to 1000° C, unless otherwise noted.
4. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.

5. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer.

A. Operate lamp only within specified limits of operation.

B. For total supply load refer to ballast manufacturers electrical data.

C. All Pulse Start mogul based lamps require a socket rated to withstand a 4000 volt pulse.

6. Periodically inspect the outer envelope. Replace any lamps that show scratches, cracks or damage.
7. If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.
8. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.
9. Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock and color appearance may vary between individual lamps.
10. Lamps may require 2 to 4 minutes to relight if there is a power interruption.
11. Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.
12. Use this lamp only in fixtures that contain a Pulse Start metal halide ballast and are specifically designed for use with Pulse Start metal halide lamps.

HIGH INTENSITY DISCHARGE LAMPS

Warnings, Cautions and Operating Instructions

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for Protected Pulse Start Metal Halide Lamps (Base Up Operation $\pm 15^\circ$ Unless Noted; Open or Enclosed Fixtures)

Warnings, Cautions and Operating Instructions

R **“WARNING:** These lamps can cause serious skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.” This lamp complies with FDA radiation performance standard 21 CFR subchapter J, (USA: 21 CFR 1040.30 Canada: SOR/DORS/80-381)

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous shortwave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000° C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE,**

BURNS AND FIRE. These lamps are designed to retain all the glass particles should an arc tube rupture occur. The following operating instructions are recommended to minimize these occurrences.

RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC-TUBE RUPTURE THE FOLLOWING **LAMP OPERATING INSTRUCTIONS** MUST BE FOLLOWED:

LAMP OPERATING INSTRUCTIONS:

1. RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
2. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.
3. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer.

A. Operate lamp only within specified limits of operation.

B. For total supply load refer to ballast manufacturers electrical data.

C. All Pulse Start mogul based lamps require a socket rated to withstand a 4000 volt pulse.

4. Periodically inspect the outer envelope. Replace any lamps that show scratches, cracks or damage.
5. If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.
6. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.
7. Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock and color appearance may vary between individual lamps.
8. Lamps may require 2 to 4 minutes to re-light if there is a power interruption.
9. Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.
10. Use this lamp only in fixtures that contain a Pulse Start metal halide ballast and are specifically designed for use with Pulse Start metal halide lamps.

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for Protected Metal Halide Lamps (Base Up Operation $\pm 15^\circ$ Unless Noted; Open or Enclosed Fixtures)

Warnings, Cautions and Operating Instructions

R **“WARNING:** These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.” This lamp complies with FDA radiation performance standard 21 CFR subchapter J, (USA: 21 CFR 1040.30 Canada: SOR/DORS/80-381)

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous short wave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000° C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

These lamps are designed to retain all the glass particles should an arc tube rupture occur.

The following operating instructions are recommended to minimize these occurrences.

RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC-TUBE RUPTURE THE FOLLOWING **LAMP OPERATING INSTRUCTIONS** MUST BE FOLLOWED:

LAMP OPERATING INSTRUCTIONS:

1. RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
2. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.
3. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer.
 - A. Operate lamp only within specified limits of operation.
 - B. For total supply load refer to ballast manufacturers electrical data.
4. Periodically inspect the outer envelope. Replace any lamps that show scratches, cracks or damage.

5. If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.

6. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.

7. Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock and color appearance may vary between individual lamps.

8. Lamps may require 10 to 20 minutes to re-light if there is a power interruption.

9. Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.

10. Do not use this lamp:

A. In a fixture that contains a Pulse Start metal halide ballast.

B. In a fixture that is specifically designed for use with Pulse Start metal halide lamps. **Operation of these lamps on Pulse Start Metal Halide systems may increase the chance of an outer bulb rupture and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

HIGH INTENSITY DISCHARGE LAMPS

Warnings, Cautions and Operating Instructions

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for Standard Metal Halide Lamps (Enclosed Fixtures Only Unless Otherwise Noted)

Warnings, Cautions and Operating Instructions

R“**WARNING:** These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.” This lamp complies with FDA radiation performance standard 21 CFR subchapter J, (USA: 21 CFR 1040.30 Canada: SOR/DORS/80-381)

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous short wave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000° C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

Certain lamps that will retain all the glass particles should inner arc-tube rupture occur are commercially available from Philips Lighting Company.

RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC-TUBE RUPTURE THE FOLLOWING **LAMP OPERATING INSTRUCTIONS** MUST BE FOLLOWED:

LAMP OPERATING INSTRUCTIONS:

1. Turn off lamps at least once a week for at least 15 minutes in systems which are operating on a continuous basis (24 hours/day-7 days/week). FAILURE TO TURN OFF LAMPS FOR THE MINIMUM RECOMMENDED TIME MAY INCREASE THE POSSIBILITY OF AN INNER ARC-TUBE RUPTURE.
2. RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
3. Use only in an enclosed fixture capable of withstanding particles of glass having temperatures up to 1000° C.
4. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.
5. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer.
 - A. Operate lamp only within specified limits of operation.
 - B. For total supply load refer to ballast manufacturers electrical data.

6. Periodically inspect the outer envelope. Replace any lamps that show scratches, cracks or damage.
7. If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.
8. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.
9. Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock and color appearance may vary between individual lamps.
10. Lamps may require 10 to 20 minutes to re-light if there is a power interruption.
11. Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.
12. Do not use this lamp:
 - A. In a fixture that contains a Pulse Start metal halide ballast.
 - B. In a fixture that is specifically designed for use with Pulse Start metal halide lamps. **Operation of these lamps on Pulse Start Metal Halide systems may increase the chance of an outer bulb rupture and pieces of extremely hot glass might be discharged into the surrounding environment.** If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for Standard Metal Halide Lamps (Open or Enclosed Fixtures; S Rated Lamps; Open Fixture Use Restricted to Base Up ± 15° [Base Down, BD ± 15°])

Warnings, Cautions and Operating Instructions

R“**WARNING:** These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.” This lamp complies with FDA radiation performance standard 21 CFR subchapter J, (USA: 21 CFR 1040.30 Canada: SOR/DORS/80-381)

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous short wave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000° C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

Certain lamps that will retain all the glass particles should inner arc-tube rupture occur are commercially available from Philips Lighting Company.

RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC-TUBE RUPTURE THE FOLLOWING **LAMP OPERATING INSTRUCTIONS** MUST BE FOLLOWED:

LAMP OPERATING INSTRUCTIONS:

1. Turn off lamps at least once a week for at least 15 minutes in systems which are operating on a continuous basis (24 hours/day-7 days/week). FAILURE TO TURN OFF LAMPS FOR THE MINIMUM RECOMMENDED TIME MAY INCREASE THE POSSIBILITY OF AN INNER ARC-TUBE RUPTURE.
2. RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
3. **If operated other than vertical ± 15°, use only in an enclosed fixture capable of withstanding particles of glass having temperatures up to 1000° C.**
4. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.
5. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer.
 - A. Operate lamp only within specified limits of operation.
 - B. For total supply load refer to ballast manufacturers electrical data.

6. Periodically inspect the outer envelope. Replace any lamps that show scratches, cracks or damage.
7. If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.
8. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.
9. Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock and color appearance may vary between individual lamps.
10. Lamps may require 10 to 20 minutes to re-light if there is a power interruption.
11. Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.
12. Do not use this lamp:
 - A. In a fixture that contains a Pulse Start metal halide ballast.
 - B. In a fixture that is specifically designed for use with Pulse Start metal halide lamps. **Operation of these lamps on Pulse Start Metal Halide systems may increase the chance of an outer bulb rupture and pieces of extremely hot glass might be discharged into the surrounding environment.** If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

HIGH INTENSITY DISCHARGE LAMPS

Warnings, Cautions and Operating Instructions

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for Safety Lifeguard Metal Halide Lamps (Open or Enclosed Fixtures)

Warnings, Cautions and Operating Instructions

R“**WARNING:** This lamp should self extinguish within 15 minutes after outer envelope is broken or punctured. If such damage occurs, turn off and remove lamp to avoid possible injury from hazardous shortwave ultraviolet radiation.” This lamp complies with FDA radiation performance standard 21 CFR subchapter J. (USA:21 CFR 1040.30 Canada:SOR/DORS/80-381)

This lamp should not be used on dimmers and is not warranted if used on dimming systems.

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous short wave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000° C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

Certain lamps that will retain all the glass particles should inner arc-tube rupture occur are commercially available from Philips Lighting Company.

RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC-TUBE RUPTURE THE FOLLOWING **LAMP OPERATING INSTRUCTIONS** MUST BE FOLLOWED:

LAMP OPERATING INSTRUCTIONS:

1. Turn off lamps at least once a week for at least 15 minutes in systems which are operating on a continuous basis (24 hours/day-7 days/week). FAILURE TO TURN OFF LAMPS FOR THE MINIMUM RECOMMENDED TIME MAY INCREASE THE POSSIBILITY OF AN INNER ARC-TUBE RUPTURE.
2. RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
3. If operated other than vertical $\pm 15^\circ$, use only in an enclosed fixture capable of withstanding particles of glass having temperatures up to 1000° C.
4. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.
5. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer.
 - A. Operate lamp only within specified limits of operation.
 - B. For total supply load refer to ballast manufacturers electrical data.

6. Periodically inspect the outer envelope. Replace any lamps that show scratches, cracks or damage.
7. If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.
8. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.
9. Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock and color appearance may vary between individual lamps.
10. Lamps may require 10 to 20 minutes to re-light if there is a power interruption.
11. Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.
12. Do not use this lamp:
 - A. In a fixture that contains a Pulse Start metal halide ballast.
 - B. In a fixture that is specifically designed for use with Pulse Start metal halide lamps. **Operation of these lamps on Pulse Start Metal Halide systems may increase the chance of an outer bulb rupture and pieces of extremely hot glass might be discharged into the surrounding environment.** If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for Mini WhiteSON and WhiteSON High Pressure Sodium Lamps

Warnings, Cautions and Operating Instructions

“WARNING: These lamps must be operated in fixtures designed for use with High Pressure Sodium lamps. The fixture wattage rating must match the wattage indicated on the outer glass bulb. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the glass is struck. Operating the lamp improperly may result in **PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

1. If the outer glass bulb is broken, shut off power immediately and remove the lamp after it has cooled.
2. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer.
 - A. Operate lamp only within specified limits of operation.
 - B. For total supply load refer to ballast manufacturers electrical data.
 - C. Operate Mini WhiteSON lamps only on approved electronic ballasts.

3. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.
4. Replace the lamp if the outer glass bulb has been scratched, cracked or damaged in any way.
5. If a lamp bulb support is used, be sure to insulate the support electrically so as to avoid possible decomposition of the bulb glass.
6. Do not use this lamp in a fixture which redirects a substantial portion of the energy toward the arc tube and its immediate vicinity, as this may lead to very early lamp failure.
7. Take care in handling and disposing of lamps. If arc tube is broken, avoid skin contact with any of the contents or fragments.
8. The arc tube of this lamp contains sodium and mercury. Dispose of in accordance with federal, state and local requirements.
9. It is possible that the light color will suddenly change. After some time the lamp will regain its old color.

10. In order to prevent damage to the ballast, the lamp should be replaced as quickly as possible at the end of its lifetime (lamp color turns yellow, lamp flickers and fails to start).
11. For Mini WhiteSON lamps, after 10,000 hours of burning the light color will become yellow. The lamp must then be replaced.
12. For WhiteSON lamps, after 7,500 hours of burning the light color will become yellow. The lamp must then be replaced.

HIGH INTENSITY DISCHARGE LAMPS

Warnings, Cautions and Operating Instructions

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for Ceramalux® High Pressure Sodium Lamps

Warnings, Cautions and Operating Instructions

WARNING: These lamps must be operated in fixtures designed for use with High Pressure Sodium lamps. The fixture wattage rating must match the wattage indicated on the outer glass bulb. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the glass is struck. Operating the lamp improperly may result in **PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

1. If the outer glass bulb is broken, shut off power immediately and remove the lamp after it has cooled.

2. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer:
 - A. Operate lamp only within specified limits of operation.
 - B. For total supply load refer to ballast manufacturers electrical data.
3. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.
4. Replace the lamp if the outer glass bulb has been scratched, cracked or damaged in any way.
5. If a lamp bulb support is used, be sure to insulate the support electrically so as to avoid possible decomposition of the bulb glass.

6. Do not use this lamp in a fixture which redirects a substantial portion of the energy toward the arc tube and its immediate vicinity, as this may lead to very early lamp failure.
7. Take care in handling and disposing of lamps. If arc tube is broken, avoid skin contact with any of the contents or fragments.
8. The arc tube of this lamp contains sodium and mercury. Dispose of in accordance with federal, state and local requirements.

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for Low Pressure Sodium Lamps—SOX

Warnings, Cautions and Operating Instructions

WARNING: These lamps must be operated in fixtures designed for use with Low Pressure Sodium lamps. The fixture wattage rating must match the wattage indicated on the outer glass bulb. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter.

Operating the lamp improperly and not following operating instructions may result in **PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

1. If the outer glass bulb is broken, shut off power immediately and remove the lamp after it has cooled.

2. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer:
 - A. Operate lamp only within specified limits of operation.
 - B. For total supply load refer to ballast manufacturers electrical data.
3. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.
4. Replace the lamp if the outer glass bulb has been scratched, cracked or damaged in any way.

5. Take care in handling and disposing of lamps. If arc tube is broken, avoid skin contact with any of the contents or fragments.
6. The arc tube of this lamp contains sodium. Sodium can generate a high degree of heat when exposed to water. Dispose of in accordance with federal, state and local requirements.

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for Mercury Vapor Lamps

Warnings, Cautions and Operating Instructions

R**“WARNING:** This lamp can cause serious skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.” This lamp complies with FDA radiation performance standard 21 CFR subchapter J. (USA:21 CFR 1040.30 Canada:SOR/DORS/80-381)

WARNING: The following GOOD LAMP PRACTICES are recommended to reduce the possibility of an arc tube rupture and the associated risk of property damage or personal injury.

1. TURN LAMPS OFF AT LEAST ONCE PER WEEK FOR AT LEAST 15 MINUTES, in systems which are otherwise operating on a continuous basis (24 hours/day-7 days/week).
2. RELAMP FIXTURES AT OR BEFORE END OF RATED LIFE. Allowing such lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
3. OPERATE LAMP WITH PROPER CIRCUITS AND AUXILIARY EQUIPMENT.

CAUTION: Electric discharge lamp—use only with proper circuits and auxiliary equipment designed to produce established electrical values for this lamp. Operating the lamp improperly may result in damage to equipment or personal injury, for which the lamp manufacturer does not assume any responsibility.

If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass. Do not scratch the bulb or subject it to pressure, as it could fail violently. If the outer bulb is broken, turn off the lamp and replace it promptly.

Do not use this lamp in a fixture which redirects a substantial portion of the energy toward the arc tube and its immediate vicinity, as this may lead to very early lamp failure.

NOTICE: For total supply load, add auxiliary (ballast) watts to lamp watts.

Solid State Lighting

Create the perfect mood with solid state lighting

eW® Cove Powercore is a compact linear fixture that provides an energy-saving alternative to traditional cove lighting. This high performance fixture is designed to accommodate various applications, such as interior cove, accent and display lighting, light boxes and other tight spaces in retail, exhibit, hospitality and architectural settings.

eW® Profile Powercore is a low-profile, linear fixture ideal for commercial and residential surface illumination. Applications include work surfaces and work stations in offices, hospitals and other commercial locations. It is also ideal for display and showcases and under shelf installations for merchandising, exhibits and bars.

eW® MR is a compact LED lamp designed to fit into many MR16 fixtures and sockets and is well suited for use with tracks, rails, cables, and pendants in interior architectural, retail and display applications.

eW® Downlight SM Powercore is a sleek, surface-mounted downlight for general illumination.

Feature Products



EW® MR16 LAMPS
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**EW® PROFILE
POWERCORE LAMPS**
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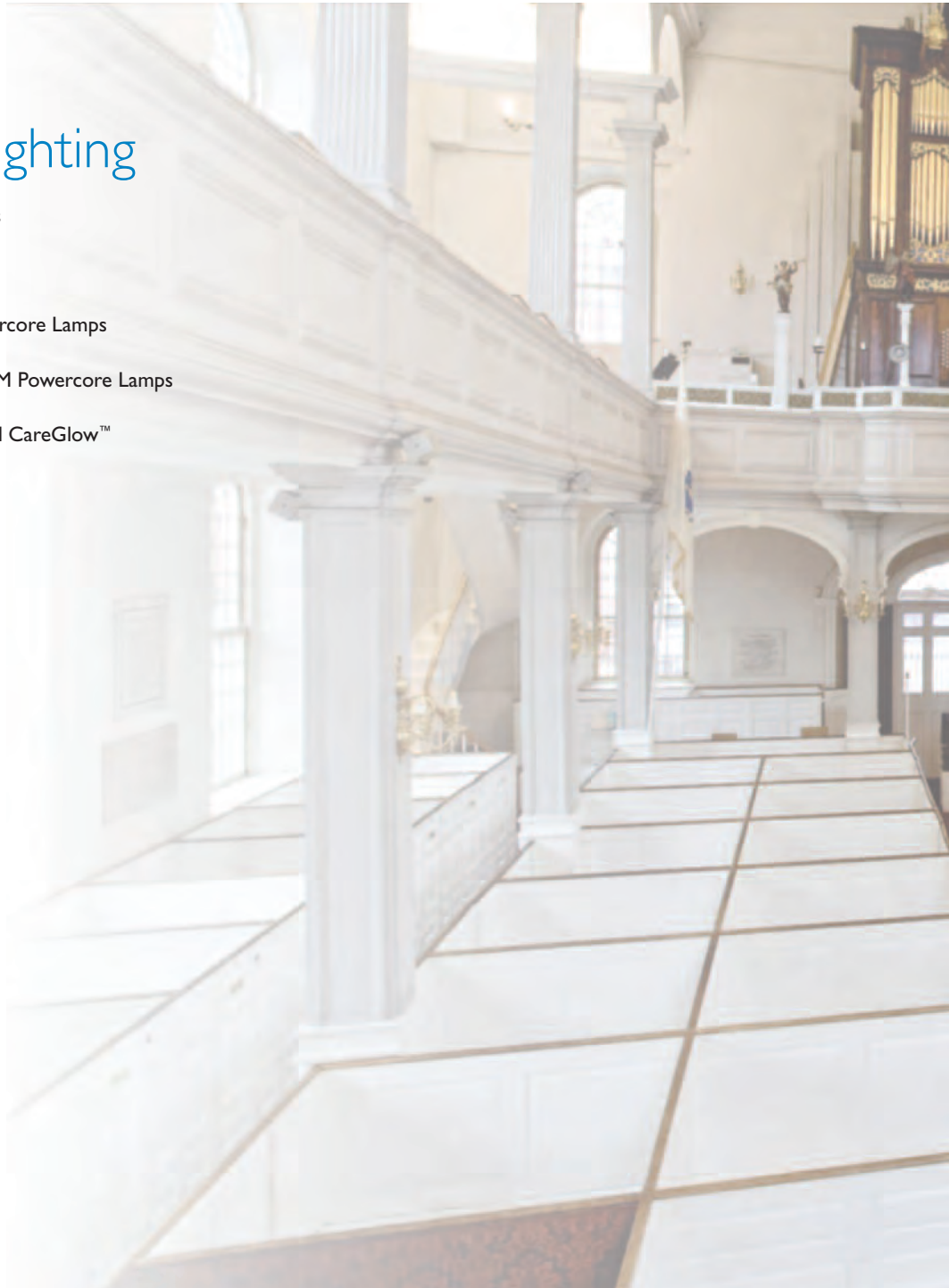


Lighting has long been a convenience we usually did not think much about—until now. Rapidly-advancing LED technology makes it possible to rethink the way we use light entirely: A 20-story façade becomes a customizable animated surface, a bridge changes color to indicate a passing train, a retail display seamlessly shifts from “cool” to “warm” white light to properly accentuate merchandise.

Philips solid state lighting systems make these applications possible today, while inspiring completely new and more efficient uses of light.

Solid State Lighting

- 152 eW® MR16 Lamps
- 153 eW® Cove Lamps
- 154 eW® Profile Powercore Lamps
- 155 eW® Downlight SM Powercore Lamps
- 156 StumbleLight™ and CareGlow™
- 156 SpotOn



PRACTICING
SUSTAINABLE
LIGHTING DESIGN





RETHINK LIGHT

LEDs are already much more efficient than incandescent and halogen sources, while rapidly gaining ground on fluorescent. LED sources have a long list of benefits—energy efficiency, low power consumption, long life, durability, no emitted heat, lack of infrared and ultraviolet emissions, mercury-free—that makes them an ideal choice for many common applications.

SSL LAMPS

eW® MR16

eW® MR16

eW® MR is a compact lamp for MR16 fixtures and sockets. It is well-suited for tracks, rails, cables, and pendant fixtures in interior architectural, retail, exhibit, and display applications. The eW MR lamp uses a standard GU5.3 base and MR16 two-pin connectors so it is a great LED replacement for less energy efficient, hotter, conventional lamps. Its high-intensity LED package and custom optics are an easy upgrade that fits most standard low-voltage MR16 light fixtures. The two beam angle variations make it well-suited for a wide variety of spot and narrow flood applications that require even distribution of light.

- Two color temperatures: 2700K and 4200K
- Two beam angles: 10° and 25°
- Standard base and connectors
- Works with magnetic low-voltage (12 VAC) transformers
- Stylish, unobtrusive silver housing

Watts	Bulb	Base	Product Number	Ordering Code	Description	Volts	Case Qty.	MOL (In.)	Minimum Lumen Maint. (Hrs.)(1)	Approx. MBCP	SSL Fixture, Initial Lumens(2)
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eW® MR16

5.5	MR16	GU5.3	21851-1	BBH400 1xLED-HB/WW-2700 10NS	eW MR16 High Brightness LEDs 10° Spot 2700K	12	50	2.1	50,000	754	36
	MR16	GU5.4	21852-9	BBH400 1xLED-HB/WW-4200 10NS	eW MR16 High Brightness LEDs 10° Spot 4200K	12	50	2.1	50,000	877	47
	MR16	GU5.5	21854-5	BBH400 1xLED-HB/WW-2700 25NF	eW MR16 High Brightness LEDs 25° Spot 2700K	12	50	2.1	50,000	206	40
	MR16	GU5.6	21855-2	BBH400 1xLED-HB/WW-4200 25NF	eW MR16 High Brightness LEDs 25° Spot 4200K	12	50	2.1	50,000	348	66

1) Minimum Lumen Maintenance is the minimum number of hours after which the LED light output depreciates to 70% of its initial output. This value, L_{70} , is tested @ 25°C ambient temperature. (IES LM-80)

2) The SSL Fixture, Initial Lumens is determined as prescribed in IESNA LM-79, Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products, which specifies lumen measurements of the fixture be reported after the measurements have stabilized at 25 degrees Celsius.

For the most current product information, go to the e-catalog on www.philips.com



eW MR16 Lamps

SSL LAMPS

eW® Cove Powercore

EW® COVE POWERCORE

eW® Cove Powercore is a compact linear fixture that provides an energy-saving alternative to traditional cove lighting. This high performance fixture is designed to accommodate various applications, such as interior cove, accent and display lighting, light boxes and other tight spaces in retail, exhibit, hospitality and architectural settings.

- Available in two fixed color temperatures: 2800K, 4200K
- Runs of up to 100 12" units on a single circuit
- Mounts directly to any flat surface
- Line voltage—no external transformer

Watts(1)	Product Number	Ordering Code	Description	Case Qty.	MOL (In.)	Minimum Lumen Maint. (Hrs.)(2)	SSL Fixture, Initial Lumens(3)
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EW® COVE POWERCORE

<6	21845-3	BC X410 5xLED-HB/WW-2800 120V	eW Cove Powercore 12", 2800K 120V	25	12	50,000	135
	21846-1	BC X410 5xLED-HB/NW-4200 120V	eW Cove Powercore 12", 4200K 120V	25	12	50,000	177
<4	21847-9	BC X410 3xLED-HB/WW-2800 120V	eW Cove Powercore 6", 2800K 120V	50	6	50,000	64
	21848-7	BC X410 3xLED-HB/NW-4200 120V	eW Cove Powercore 6", 4200K 120V	50	6	50,000	72
<6	21865-1	BG X410 5xLED-HB/WW-2800 120V	eW Cove Powercore 12", 2800K 120V Portable Luminaire	25	12	50,000	135
	21867-7	BG X410 5xLED-HB/NW-4200 120V	eW Cove Powercore 12", 4200K 120V Portable Luminaire	25	12	50,000	177
<4	21868-5	BG X410 3xLED-HB/WW-2800 120V	eW Cove Powercore 6", 2800K 120V Portable Luminaire	50	6	50,000	64
	21870-1	BG X410 3xLED-HB/NW-4200 120V	eW Cove Powercore 6", 4200K 120V Portable Luminaire	50	6	50,000	72

1) Maximum power consumed at start-up. Steady state power consumption will be less.

2) Minimum Lumen Maintenance is the minimum number of hours after which the LED light output depreciates to 70% of its initial output. This value, L70, is tested @ 25°C ambient temperature. (IES LM-80)

3) The SSL Fixture, Initial Lumens is determined as prescribed in IESNA LM-79, Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products, which specifies lumen measurements of the fixture be reported after the measurements have stabilized at 25 degrees Celsius.

Product Number	Ordering Code	Description	Case Qty.
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EW® COVE POWERCORE ACCESSORIES

21841-2	ZCX410 C3050P UL	10' eW Cove Ldr Cble SR UL	25
21843-8	ZCX410 C305P-M-F UL	1' Jumper Cable eW Cove	100
21844-6	ZCX410 C1525P-M-M UL	5' Jumper Cable eW Cove	50
21877-6	ZCX410 C2440P UL	8' eW Cove Ldr Cble US pig	25
21850-3	ZCX410 RA L1220 (25PCS)	eW Cove 100' Mntng Trck Kt	1

For the most current product information, go to the e-catalog on www.philips.com



eW Cove Lamps

SSL LAMPS

eW® Profile Powercore

EW® PROFILE POWERCORE

The eW® Profile Powercore fixture illuminates work surfaces brightly and evenly, without glare or excessive heat. It lights kitchen counter tops (under kitchen cabinets), work stations (office desk tops), work benches (laboratories in commercial, research, or academic settings) and similar indoor environments. eW Profile Powercore also provides excellent light in display cases, show cases, and under shelves in retail stores, exhibits, and other venues. The eW Profile Powercore delivers high-quality illumination, low heat, and long life in low profile fixtures that are easy to install and to operate.

- Low power consumption
- UL Listed for both permanent and portable installations in North America
- End-to-end connections
- Available in two color temperatures: 2700K or 4000K
- Up to 50 feet (15.25 m) of fixtures may be used in a series
- 50,000 hour minimum lumen maintenance²
- Three installation lengths: 11 in (28 cm), 21 in (53.3 cm), and 41 in (104.1 cm)
- Powercore® technology supports direct line voltage input for simple installations and long runs
- DIMand™ technology provides smooth dimming capability with commercially available ELV-type dimmers

Watts(1)	Product Number	Ordering Code	Description	Case Qty.	Minimum Lumen Maint. (Hrs.) (2)
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EW® PROFILE POWERCORE

<6	22157-2	BCX411 5xLED-HB/WW 2700 120V	eW Profile 11", 2700K 120VAC	25	50,000
<13	22161-4	BCX411 10xLED-HB/WW 2700 120V	eW Profile 21", 2700K 120VAC	25	50,000
<25	22162-2	BCX411 20xLED-HB/WW 2700 120V	eW Profile 41", 2700K 120VAC	6	50,000
<6	22163-0	BCX411 5xLED-HB/NW 4000 120V	eW Profile 11", 4000K 120VAC	25	50,000
<13	22166-3	BCX411 10xLED-HB/NW 4000 120V	eW Profile 21", 4000K 120VAC	25	50,000
<25	22168-9	BCX411 20xLED-HB/NW 4000 120V	eW Profile 41", 4000K 120VAC	6	50,000

1) Maximum power consumed at start-up. Steady state power consumption will be less.

2) Minimum Lumen Maintenance is the minimum number of hours after which the LED light output depreciates to 70% of its initial output. This value, L_{70} , is tested @ 25°C ambient temperature. (IES LM-80)

Product Number	Ordering Code	Description	Case Qty.
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EW® PROFILE POWERCORE ACCESSORIES

22177-0	ZCX411 C3050P UL	eW Profile LDR, 10', WHT, US PLG	12
22180-4	ZCX411 C152P-M-F WH UL	eW Profile, 6", JMPR, UL, WHT	64
22181-2	ZCX411 C305P-M-F WH UL	eW Profile, 12", JMPR, UL, WHT	64
22182-0	ZCX411 C457P-M-F WH UL	eW Profile, 18", JMPR, UL, WHT	32
22184-6	ZCX411 C1525-M-F WH UL	eW Profile, 5' JMPR, UL, WHT	24
22186-1	ZCX411 C305-T WH UL	eW Profile, 12", YJMPR, UL, WHT	24
22195-2	ZCX411 JB UL	eW Profile, Wiring Compartment	80
22196-0	ZCX411 RA L559	eW Profile, Mounting Track for 21"	1
22198-6	ZCX411 RA L1118	eW Profile, Mounting Track for 41"	1
22200-0	ZCX411 RA L254	eW Profile, Mounting Track for 11"	1
22489-9	ZCX411 Terminator (10 PCS)	eW Profile Trmtrs Multipack 10 Pc/SKU	40*
22490-7	ZCX410 Terminator (10 PCS)	eW Profile Trmtrs One Bag 10 Pc/SKU	50*

*Case quantity in SKU's per case. Each SKU has bag of 10 terminators.

For the most current product information, go to the e-catalog on www.philips.com



eW Profile Powercore Lamps

SSL LAMPS

eW® Downlight SM Powercore

EW® DOWNLIGHT SM POWERCORE

eW® Downlight SM Powercore is a low-profile, surface-mounted downlight for basic white illumination. The eW Downlight SM Powercore fixture is ideally suited for lobbies, corridors, elevators, conference rooms, common spaces, kitchenettes, and interiors in commercial, hospitality, retail, and residential environments. It is especially appropriate for applications where recessed installation—in cement or in an area with limited space—is not possible, or where such a design element is desired.

- Two color temperatures: 2700K or 4000K
- Two beam angle options:
 - 30° for spot applications, high ceilings, or focusing a spot on an area or object
 - 65° for flood applications and low-ceiling environments such as corridors
- Metal bezel available in white, black, or brushed aluminum
- Custom bezel colors available
- Swivel bracket for 120 and 277 VAC units allows precise adjustment during installation

Watts(1)	Product Number	Ordering Code	Description	Case Qty.	Minimum Lumen Maint. (Hrs.) (2)	SSL Fixture, Initial Lumens(3)
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EW® DOWNLIGHT SM POWERCORE

16	22125-9	BCS401 9xLED-HB/WW 2700 65	eW Downlight, 65°, 2700K,Clr Len	6	70,000	500
	22132-5	BCS401 9xLED-HB/NW 4000 65	eW Downlight, 65°, 4000K,Clr Len	6	70,000	500
	22133-3	BCS401 9xLED-HB/WW 2700 30	eW Downlight, 30°, 2700K,Clr Len	6	70,000	500
	22134-1	BCS401 9xLED-HB/NW 4000 30	eW Downlight, 30°, 4000K,Clr Len	6	70,000	500

1) Maximum power consumed at start-up. Steady state power consumption will be less.

2) Minimum Lumen Maintenance is the minimum number of hours after which the LED light output depreciates to 70% of its initial output. This value, L₇₀, is tested @ 25°C ambient temperature. (IES LM-80)

3) The SSL Fixture, Initial Lumens is determined as prescribed in IESNA LM-79, Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products, which specifies lumen measurements of the fixture be reported after the measurements have stabilized at 25 degrees Celsius.

Product Number	Ordering Code	Description	Case Qty.
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EW® DOWNLIGHT SM POWERCORE ACCESSORIES

22136-6	ZCS401 PSU 120V	eW Downlight, Pwr Mod, 120V, Black	6
22137-4	ZCS401 PSU 277V	eW Downlight, Pwr Mod, 277V, Black	6
22141-6	ZCS401 DBZL WH	eW Downlight, Trim Bezel, White	6
22142-4	ZCS401 DBZL BK	eW Downlight, Trim Bezel, Black	6
22143-2	ZCS401 DBZL ALU	eW Downlight, Trim Bezel, Brshd Al	6

For the most current product information, go to the e-catalog on www.philips.com



eW Downlight SM Powercore Lamps

SSL LAMPS

Philips Stumblelight, CareGlow and SpotOn

STUMBLELIGHT AND CAREGLOW

The Philips StumbleLight™ and CareGlow™ are motion-activated guiding lights designed to provide soft white light when a person steps out of bed at night. It is designed to be placed underneath the nightstand or on a wall to illuminate the path at night. StumbleLight uses a warm white LED light source and a remote motion sensor unit with a photocell. CareGlow has an integrated photo cell.

- LED Technology:
 - only uses 2W of energy resulting in low operating cost
 - long life and little maintenance required
- Motion Detector: switches on when needed for 2 minutes
- Easy installation with velcro or screw mount possible for anti-theft
- Plug and position in any location i.e. nightstand, wall, or vanity

Product Number	Ordering Code	Description	Watts	SSL Fixture Initial Lumens(1)	Photocell	Transformer	Case Qty.
20093-1	BWVG756 4LED-HB/WW 120V UL	StumbleLight: Low voltage, wall mounted, motion-activated guiding light with remote sensor	2	55–65	Yes	Yes	4
20090-7	BWVG755 4LED-HB/WW 120V UL	CareGlow: Low voltage, wall mounted, motion-activated guiding light with integrated sensor	2	55–65	Yes	Yes	10

1) The SSL Fixture, Initial Lumens is determined as prescribed in IESNA LM-79, Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products, which specifies lumen measurements of the fixture be reported after the measurements have stabilized at 25 degrees Celsius.

SPOTON

Fun and easy light with the wave of your hand. Motion sensor LED technology provides light where you want it, when you want it.

- Ready to use out of the package
- No installation needed, self-adhesive to most surfaces
- Simple battery replacement with easy open magnetic slide
- Wireless—place anywhere
- Cool to the touch when lit
- Motion sensor with auto ON/OFF
- White, accent light
- 20 seconds of light after a simple move
- 3 white LED's (more than 1000 on/off times of life)
- 3 AAA battery operated (included)
- Long lasting LED technology
- Reduced battery consumption—switches on only when light is needed

Product Number	Description	Unit Color	Min. Order Qty.	Footnote	Case Qty.
21294-4	SpotOn White 10/I	White	N/A	1	10
21698-6	SpotOn White TP 6/I	White	N/A	2	6
21260-6	SpotOn Orange TP 6/I	Orange	486	3	6
21661-4	SpotOn Purple TP 6/I	Purple	486	3	6
21663-0	SpotOn Blue TP 6/I	Blue	486	3	6
21664-8	SpotOn Gold TP 6/I	Gold	486	3	6
21665-5	SpotOn Silver TP 6/I	Silver	486	3	6

1) 212944 is available in inventory.

2) 216986 (available after Sep 2008) will replace 212944 when inventory is depleted.

3) SpotOn Colors are available with minimum order quantities of 486 (1/2 pallet). Requires committed forecast and extra lead time. Call your Philips account representative for more details.

Above specifications are subject to change without notice.

For the most current product information, go to the e-catalog on www.philips.com



Stumblelight



Spot-On

Specialty Lighting

Reliable, high quality lamps provide ultimate performance

Philips HPL+ Lamps with P3 technology enable flexible burning positions to ensure accurate aiming and supply of light wherever it is needed. HPL+ lamps are now designed to last longer, making them ideal for theater, studio and event lighting.

Philips FastFit

Philips FastFit is a new lamp concept for Single Ended MSR Gold and Halogen Hi-Brite lamp types. The rear load base system enables easy lamp replacement and adjustments in seconds in difficult stage conditions. The overall lamp length is reduced making more compact and lighter fixture designs possible.

Philips Germicidal T5 Sterilamp featuring ALTO® Lamp Technology uses UV technology, which allows for the emission of UVC† energy to disinfect water. The Philips Germicidal T5 Sterilamp is a cost effective and environmentally responsible disinfection alternative to chemical treatment of waste water.

† UVC is a band of ultraviolet radiation with wavelengths shorter than 280 nanometers.

Feature Products



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RESTRIKE LAMPS**
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**BLACK LIGHT
BLUE LAMPS**
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**GERMICIDAL T5
STERILAMP**
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Specialty Lighting

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165–166	MSR Lamps
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167	Ceramic ST Lamps
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167–169	Specialty Lamps (By Wattage)
169	Black Light Blue Lamps
170	UVA 365nm Peak Lamps
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172	Starters
172–173	Quartz Infrared Heat Lamps
173	HeLeN Quartz Infrared Heat Lamps
174–177	Base Types and Bulb Shapes

**MAKE LIFE
SIMPLE:**
TRY PHILIPS FASTFIT





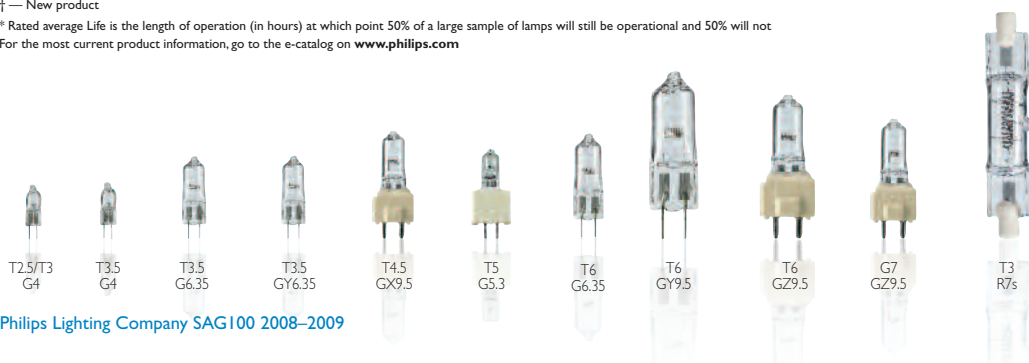
Philips FastFit lamps feature a rear loading base system which enables easy lamp replacement.

SPECIALTY LAMPS

ANSI Code	Product Number	Pkg. Qty.	Volts	Avg. Watts (Amps)	Bulb	Base	Rated Avg. Life (Hrs.)*	Coil Type	LCL (In.)	LCL (mm.)	MOL (In.)	MOL (mm.)	Rated Approx. Lumens	Color Temp (K)	Operating Position
PHOTO PROJECTION LAMPS															
BRL	31627-3	24	12	50	T3.5	G6.35	50	C-6	1 $\frac{1}{8}$	30	1 $\frac{7}{8}$	44	1500	3400	BDTH
BVE	23922-8	24	120	625	T6	GY9.5	75	C-13D	1 $\frac{1}{4}$	44.5	3 $\frac{1}{2}$	89	—	3350	BDTH
DDL	31509-3	24	20	150	MR16	GX5.3	500	CC-6	—	—	1 $\frac{1}{4}$	44.5	—	3150	BDTH
DDM	23937-6	24	19	80	MR16	GX5.3	50	CC-6	—	—	1 $\frac{1}{4}$	44.5	—	3350	BDTH
DDS	31510-1	24	21	80	MR16	GX5.3	1000	CC-6	—	—	1 $\frac{1}{4}$	44.5	—	3125	BDTH
DNF	25241-1	24	21	150	MR16	GX7.9	25	CC-6	—	—	1 $\frac{3}{8}$	45.24	—	3400	HORIZ.
DYS/DYV	31639-8	24	120	600	G7	GZ9.5	75	CC-6	1 $\frac{1}{8}$	36.5	2 $\frac{1}{4}$	63.5	17,000	3200	HORIZ.
DZA	28117-0	100	10.8	30	T5	G5.3	1000	—	—	—	1 $\frac{1}{8}$	47	570	3100	BDTH
EFM	31484-9	50	8	50	MR16	GZ6.35	50	C-6	—	—	1 $\frac{1}{8}$	42	—	3300	BDTH
EFN	31502-8	50	12	75	MR16	GZ6.35	50	C-6	—	—	1 $\frac{1}{8}$	42	—	3350	BDTH
EFP	31488-0	50	12	100	MR16	GZ6.35	50	C-6	—	—	1 $\frac{1}{8}$	42	—	3350	BDTH
EFP/8H	13657-2	50	12	100	MR16	GZ6.35	800	C-6	—	—	1 $\frac{1}{8}$	42	—	3100	BDTH
EFR	31490-6	50	15	150	MR16	GZ6.35	50	C-6	—	—	1 $\frac{1}{8}$	42	—	3350	BDTH
EHA	31641-4	24	120	500	T6	GZ9.5	50	C-13D	1 $\frac{1}{4}$	36.5	3	76.2	11,000	3250	BDTH
EHJ	31758-6	100	24	250	T4	G6.35	50	C-6F	1 $\frac{1}{8}$	33	2 $\frac{1}{8}$	55	9400	3400	BD
EHJ-5H	14169-7	100	24	250	T4	G6.35	500	C-6F	1 $\frac{1}{8}$	33	2 $\frac{1}{8}$	55	9400	3200	BD
EHJ-X	23175-3	200	24	250	T4	G6.35	50	C-6F	1 $\frac{1}{8}$	33	2 $\frac{1}{8}$	55	10,000	3400	BD
EJA	44142-8	24	21	150	MR16	GX5.3	40	CC-6	—	—	1 $\frac{1}{8}$	44.5	—	3350	BDTH
EJL	31508-5	24	24	200	MR16	GX5.3	50	CC-6	—	—	1 $\frac{1}{8}$	44.5	—	3400	BDTH
EJM	23942-6	24	21	150	MR16	GX5.3	40	CC-6	—	—	1 $\frac{1}{4}$	44.5	—	3400	BDTH
EJV	33744-4	24	21	150	MR16	GX5.3	40	CC-8	—	—	1 $\frac{1}{4}$	44.5	—	3400	BDTH
EKE	31592-9	24	21	150	MR16	GX5.3	200	CC-6	—	—	1 $\frac{1}{4}$	44.5	—	3400	BDTH
†EKE LL	14133-3	24	21	150	MR16	GX5.3	1000	CC-6	—	—	1 $\frac{1}{4}$	44.5	—	3400	BDTH
EKZ	23945-9	24	10.8	30	MR16	GX5.3	200	CC-6	—	—	1 $\frac{1}{4}$	44.5	—	3100	BDTH
ELC	23103-5	24	24	250	MR16	GX5.3	50	CC-6	—	—	1 $\frac{1}{4}$	44.5	—	3200	BDTH
ELC-5	38166-5	24	24	250	MR16	GX5.3	500	CC-6	—	—	1 $\frac{1}{4}$	44.5	—	3200	BDTH
ELD	31618-2	24	21	150	MR16	GX5.3	40	CC-6	—	—	1 $\frac{1}{8}$	44.5	—	3350	BDTH
ELH	31619-0	24	120	300	MR16	GY5.3	35	CC-8	—	—	1 $\frac{1}{8}$	44.5	—	3350	BDTH
ENG	23951-7	24	120	300	MR16	GY5.3	15	CC-8	—	—	1 $\frac{1}{4}$	44.5	—	3450	BDTH
ENH	31621-6	24	120	250	MR16	GV5.3	175	CC-8	—	—	1 $\frac{1}{4}$	44.5	—	3250	BDTH
ENX	31927-7	24	82	360	MR16	GY5.3	75	CC-8	—	—	1 $\frac{1}{4}$	44.5	—	3300	BDTH
ENX-5	20497-4	24	86	360	MR16	GY5.3	75	CC-8	—	—	1 $\frac{1}{4}$	44.5	—	3300	BDTH
ESA/EHD	26126-3	100	6	10	T2.5	G4	100	C-6	$\frac{7}{8}$	19.6	1 $\frac{1}{8}$	30	200	3200	ANY
ESB	25678-4	100	6	20	T3	G4	100	C-6	$\frac{7}{8}$	19.5	1 $\frac{1}{8}$	31	420	3200	ANY
EVA	25676-8	100	12	100	T3.5	GY6.35	1000	C-6F	1 $\frac{1}{8}$	30	1 $\frac{7}{8}$	44	2500	3200	ANY
EVC	31884-0	24	24	250	T5	G6.35	300	C-6F	1 $\frac{1}{8}$	33	2 $\frac{1}{8}$	57	8400	3200	ANY
EVC 10H	20982-5	100	24	250	T5	G6.35	1000	C-6F	1 $\frac{1}{8}$	33	2 $\frac{1}{8}$	57	8400	3200	ANY
EVD-X	23177-9	24	36	400	T6	G6.35	50	C-6F	1 $\frac{1}{2}$	36.1	2 $\frac{1}{8}$	59.9	16,625	3400	BDTH
EVW	25284-1	24	82	250	MR16	GX5.3	50	CC-8	—	—	1 $\frac{1}{4}$	44.45	—	3300	BD ± 22°
EXR	25286-6	24	82	300	MR13	GX5.3	35	CC-8	—	—	1 $\frac{1}{4}$	44.45	—	3350	BDTH
EXW	23971-5	24	82	300	MR13	GX5.3	15	CC-8	—	—	1 $\frac{1}{4}$	44.5	—	3400	BDTH
EXY	20493-3	24	82	250	MR13	GX5.3	250	CC-8	—	—	1 $\frac{1}{4}$	44.5	—	3250	BDTH
EYB	23257-9	24	82	360	T5	G5.3	75	CC-8	1 $\frac{1}{4}$	31	2 $\frac{1}{4}$	57	10,000	3250	BDTH
FCM	33269-2	12	120	1000	T3	R7s	300	C-8	—	—	4 $\frac{1}{8}$	119.9	27,000	3200	HORIZ.
FCR	26101-6	100	12	100	T3.5	GY6.35	50	C-6F	1 $\frac{1}{8}$	30	1 $\frac{7}{8}$	44	3400	3400	BDTH
FCS	20607-8	200	24	150	T4	G6.35	50	C-6F	1 $\frac{1}{8}$	30	2	50.8	6000	3400	BDTH
FCS-X	23174-6	100	24	150	T4	G6.35	50	C-6F	1 $\frac{1}{8}$	30	2	50.8	6000	3400	BDTH
FDS/DZE	31655-4	24	24	150	T4.5	GZ9.5	50	C-6F	1 $\frac{1}{8}$	33.4	2 $\frac{1}{4}$	57	5000	3400	BD

† — New product

* Rated average life is the length of operation (in hours) at which point 50% of a large sample of lamps will still be operational and 50% will not

For the most current product information, go to the e-catalog on www.philips.com

SPECIALTY LAMPS

ANSI Code	Product Number	Pkg. Qty.	Volts	Avg. Watts (Amps)	Bulb	Base	Rated Avg. Life (Hrs.)*	Coil Type	LCL (In.)	LCL (mm.)	MOL (In.)	MOL (mm.)	Rated Approx. Lumens	Color Temp (K)	Operating Position
PHOTO PROJECTION LAMPS CONTINUED															
FHS	25305-4	24	82	300	MR13	GX5.3	70	CC-8	—	—	1 3/4	44.45	—	3300	BDTH
FJX	31499-7	50	13.8	30	MR16	GX5.3	500	C-8	—	—	1 1/2	44.9	—	3150	ANY
FKY	31924-4	24	6	9	MR11	G3.9	250	C-6	—	—	1 1/20	42	—	—	BDTH
FLW	20492-5	24	24	300	T6	GY6.3	50	C-6F	1 1/10	33	2 1/10	55	10,450	3400	BD±15°
FNT	20463-6	200	24	275	T6	G6.35	75	C-6F	1 1/10	33	2 1/10	55	10,000	3400	BDTH
FXL	23030-0	24	82	410	MR16	GY5.3	50	CC-8	—	—	1 3/4	44.5	—	3300	BDTH
GDA	38684-7	100	120	500	T3.5	R7s	75	CC-8	—	—	5/4	133.3	11,000	3200	ANY
JCR 15v 150W	24923-5	24	15	150	MR16	GZ6.35	500	C-8	—	—	1 1/20	42	—	—	BDTH
5761	25713-9	100	6	30	T3.5	G4	100	C-6F	7/8	19.6	1 3/8	31	765	3200	ANY
6605	25684-2	100	6	10	T3	G4	2000	C-6	7/8	19.5	1 3/8	30	150	2700	ANY
6982P	13421-3	10	230	800	T6	G 9.5	300	Biplane	2 1/2	60.5	4 7/100	104	20,000	3200	ANY
7010	14664-7	20	120	300	T6	GX6.35	150	C-6	1 1/25	32.5	—	—	7500	3200	ANY
13117	37614-5	50	17	150	MR16	GX5.3	1000	CC-6	—	—	1 1/20	47	—	3200	ANY
13139	33545-5	50	12	75	MR16	GX5.3	1000	C-8	—	—	1 1/20	42	—	—	BD±105°
13165	44295-4	50	14	35	MR11	GZ4	50	—	—	—	1 1/2	38	—	—	BD±130°
13288	22146-5	50	13.8	85	MR16	GX5.3	1000	C-8	—	—	1 8/100	46	—	—	BDTH
13298	16094-5	50	10	52	MR11	GZ4	20	CC-8	—	—	1 1/2	44.9	—	—	HORIZ.±40°
13477R	31349-4	150	220	800	T3.5	R7s	150	—	—	—	4 18/25	120	21,600	3200	HORIZ.
13528	31504-4	360	6	15	MR11	GZ4	500	C-6	—	—	1 1/2	38	—	—	BD±105°
13529	31507-7	360	6	9	MR11	GZ4	250	C-6	—	—	1 1/2	38	—	—	BD±105°
13865	26423-4	50	12	75	MR11	G5.3	50	—	—	—	1 57/100	40	—	—	BD±105°
14553	26391-3	230	10	52	MR11	GZ4	20	—	—	—	1 57/100	40	—	—	BD±105°
†14623	15881-6	100	17	95	T4	GY6.35	2000	C-8	—	—	1 97/100	50	2150	3000	ANY

† — New product

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For the most current product information, go to the e-catalog on www.philips.comT3
R7sMR11
G3.9MR11
G5.3MR13
GX5.3MR16
GX5.3MR16
GX7.9

SPECIALTY LAMPS

ANSI Code	Product Number	Watts	Description	Volts	Base	MOL (In.)	LCL (In.)	Mean Lumens	Rated Avg. Life (Hrs.)*	Filament	Color Temp (K)	Envelope Finish
BTL	31891-5	500		120	Med. Pf.	4½	2½	11,000	500	C-13D	3050	Clear
BTN	20481-8	750		120	Med. Pf.	4½	2½	17,600	500	C-13D	3050	Clear
BTP	30514-4	750	750T7Q/4CL/2P	120	Med. Pf.	4½	2½	21,000	200	C-13D	3200	Clear
BTR	30533-4	1000	1000T7Q/4CL/2P	120	Med. Pf.	4½	2½	28,500	250	C-13D	3200	Clear
CYV	31892-3	1000		120	Mog. Bipost	7½	5	28,500	200	C-13D	3200	Clear
CYX	31893-1	2000		120	Mog. Bipost	8½	5	59,000	300	C-13D	3200	Clear
DWT	38295-2	1000	1000T6Q/CL	120	R7s	5½		23,400	2000	CC-8	3000	Clear
EGE	39069-0	500		120	Med. Pf.	5½	3½	10,450	2000	CC-8	3000	Clear
EGG	39067-4	750		120	Med. Pf.	6	3½	15,000	2000	CC-8	3000	Clear
EGR	22563-1	750		120	Med. Bipost	5½	2½	21,000	150	C-13D	3200	Clear
EGT	31896-4	1000		120	Med. Bipost	5½	2½	28,500	250	C-13D	3200	Clear
EHG	26972-0	750	750Q/CL	120	Med. 2-Pin	4¼	2½	15,000	2000	CC-8	3000	Clear
EHT	14668-8	250	250Q/CL	120	Mini-Can	3½	1½	5000	2000	CC-8	3000	Clear
ESN	20350-5	100	100Q/CL	120	Mini-Can	2¾	1½	1900	1000	CC-2V	3000	Clear
ESS	14666-2	250	250Q/CL/DC	120	D.C. Bay	3	1½	5000	2000	CC-8	3000	Clear
ETC	26676-7	150	150QCL/DC	120	D.C. Bay	2¾	1½	2800	200	CC-8	2900	Clear
ETF	29850-5	150	150Q/DC	120	D.C. Bay	2¾	1½	2700	2000	CC-8	2900	Frosted
ETG	20354-7	150	150Q/CL	120	Mini-Can	3	1½	2800	2000	CC-8	2900	Clear
ETH	29856-2	150	150Q	120	Mini-Can	3	1½	2700	2000	C-8	2900	Frosted
EVR	38079-0	500	500Q/CL	120	Mini-Can	3¼	2	10,000	2000	CC-8	3000	Clear
FCL	20010-5	500	500T3Q/CL	120	R7s	4¼		10,500	2600	C-8	3000	Clear
FCM	33269-2	1000	1000T3Q/CL	120	R7s	4¼	2½	28,000	300	C-8	3200	Clear
FEL	26979-5	1000	1000Q/CL	120	Med. 2-Pin	4	2½	27,500	300	CC-8	3200	Clear
FEV	13925-3	200	200Q/CL/DC	120	D.C. Bay	2¾	1½	5500	50	CC-2V	3200	Clear
FEY	13926-1	2000	2000T8Q/CL	120	RX7s	5½		57,000	400	CC-8	3200	Clear

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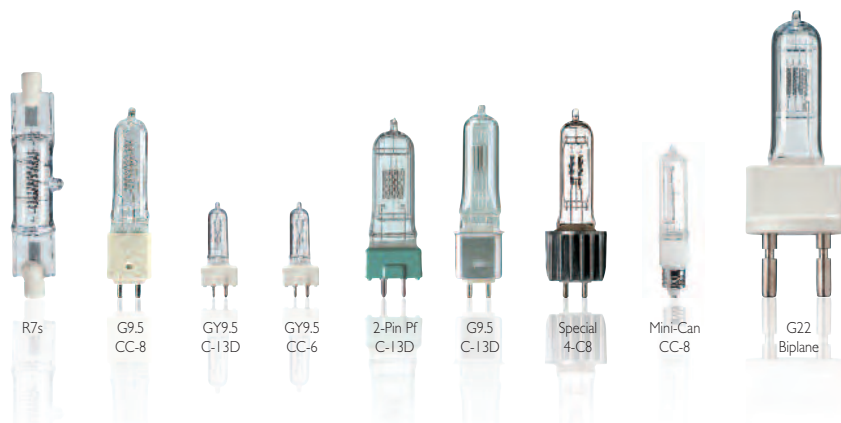
SPECIALTY LAMPS

ANSI Code	Product Number	Watts	Description	Volts	Base	MOL (In.)	LCL (In.)	Mean Lumens	Rated Avg. Life (Hrs.)*	Filament	Color Temp (K)	Envelope Finish
STAGE/STUDIO/TV LAMPS CONTINUED												
FFT	39070-8	1000	1000T4Q	120	R7s	6 $\frac{1}{8}$	2 $\frac{1}{4}$	27,000	300	C-8	3200	Clear
FHM	26130-5	1000	1000T3Q	120	R7s	4 $\frac{1}{16}$		27,300	400	C-8	3200	Frosted
FLK	24861-7	575		115	G9.5	4	2 $\frac{3}{8}$	16,500	300	CC-8	3200	Clear
FRK	14952-6	650	6638P	120	GY9.5	1 $\frac{1}{8}$		17,500	200	C-13D	3200	Clear
GAC	23667-9	1000	6995I/BP	120	2-Pin Pf.	3 $\frac{3}{4}$	1 $\frac{1}{8}$	27,000	250	C-13D	3200	Clear
GKV	36372-1	600	6986P	230	G9.5	4 $\frac{1}{8}$	2 $\frac{3}{8}$	15,000	400	C-13D	3200	Clear
GLA	29432-2	575	6992P	115	G9.5	4	2 $\frac{3}{8}$	13,000	1500	C-13D	3100	Clear
GLB	36373-9	575	6991P	230	G9.5	4	2 $\frac{3}{8}$	13,000	1500	C-13D	3100	Clear
GLC	28739-1	575	6989P	115	G9.5	4	2 $\frac{3}{8}$	15,500	400	C-13D	3200	Clear
GLD	13420-5	750	6981P	115	G9.5	4	2 $\frac{3}{8}$	18,600	300	C-13D	3200	Clear
HPL 575 115v	39170-6	575	7007	115	Special	4	2 $\frac{3}{8}$	16,520	300	4-C8	3250	Clear
HPL 575LL 115v	39167-2	575	7007 LL	115	Special	4	2 $\frac{3}{8}$	12,360	2000	4-C8	3050	Clear
HPL 750 115v	391714	750	7008	115	Special	4	2 $\frac{3}{8}$	21,900	300	4-C8	3250	Clear
250Q/CL 130v	14667-0	250	250Q/CL	130	Mini-Can	3 $\frac{1}{2}$	1 $\frac{1}{8}$	5000	2000	CC-8	3000	Clear
6980Z	38296-0	1200	6980Z	80	G22	5 $\frac{1}{2}$	2 $\frac{1}{4}$	37,500	300	C-13D	3300	Clear
6982P	13421-3	800	6982P	230	G9.5	4	2 $\frac{3}{8}$	20,000	250	C-13D	3200	Clear
7002Y 115v	382978	1000	7002Y 115v	115	G22	6	2 $\frac{1}{4}$	29,000	250	Biplane	3200	Clear
7010	14664-7	300	7010	120	GX6.35	2 $\frac{1}{32}$	1 $\frac{1}{32}$	7500	150	M	3200	Clear
†7015 TXO	15179-5	750	7015 TXO	100	GX9.5	3 $\frac{3}{4}$	1 $\frac{1}{8}$	18,600	300	C-13	3200	Clear

† — New product

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SPECIALTY LAMPS

ANSI Code	Product Number	Watts	Description	Volts	Base	MOL (In.)	LL (In.)	LCL (In.)	Mean Lumens	Rated Avg. Life (Hrs.)*	Filament (2)	Color Temp (K)	Burning Position	Pkg. Qty.	LIF	Monoplane Equiv. LIF
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HIGH VOLT SSTV HALOGEN LAMPS

Single-Ended

FSL	25813-7	300	6872P	230	GY9.5	3½		1½	7800	180	M Shape	3200	ANY	10	CP/81	
GCV/GVH	25796-4	500	6820P	230	GY9.5	3½		1½	11,000	360	Biplane	3000	BDTH	10	T/25	T/18
FRH	25806-1	500	6873P	230	GY9.5	3½		1½	13,500	180	M Shape	3200	ANY	10	CP/82	
7389	14104-4	500	7389	230	GY9.5	3		1½½	14,000	75	Biplane	3200	BDTH	10	A1/224	
HPL 575 230v	14564-9	575	7007	230	SPECIAL	4		2½	14,900	400	SPECIAL	3200	ANY	10		
HPL 575 LL 230v	14565-6	575	7007	230	SPECIAL	4		2½	11,780	1500	SPECIAL	3100	ANY	10		
GKV	36372-1	600	6986P	230	G9.5	4		2½	15,000	300	Biplane	3200	ANY	10		
6998P	14103-6	650	6998P	230	GX9.5	4½		2½	13,000	750	Biplane	3000	ANY	10	T 21	
GCK/GCT	25794-9	650	6823P	230	GY9.5	3½		1½	14,500	600	Biplane	3050	BDTH	10	T/27	T/26
FKH	25820-2	650	6993Z	230	G22	5½		2½	16,500	120	Biplane	3200	BDTH	10	CP/68	CP/39
HPL 750 230v	14566-4	750	7008	230	SPECIAL	4		2½	20,650	300	SPECIAL	3200	ANY	10		
6982P	13421-3	800	6982P	230	G9.5	4½		2½	20,000	300	Biplane	3200	ANY	10		
FEP	14107-7	1000	6983P	230	G9.5	4		2½	26,000	250	Biplane	3200	ANY	10	CP/77	
FVA	14108-5	1000	6995P	230	GX9.5	4½		2½	25,000	240	Biplane	3200	BDTH	10	CP/70	CP/24
FKD	25803-8	1000	6996C	230	P28s	5		2½	21,000	900	Biplane	3050	BDTH	10	T/20	T/14
7002Y 230v	13041-9	1000	7002Y	230	G22	5½		2½	29,000	250	Biplane	3200	ANY	10		
FKJ	14247-1	1000	6995Z	230	G22	5½		2½	25,000	240	Biplane	3200	ANY	10	T/20	
FWP	25804-6	1000	6996P	230	GX9.5	4		2½	21,000	750	Biplane	3050	ANY	10	T/19	
FWS	14105-1	1200	6897P	230	GX9.5	4½		2½	27,600	400	Biplane	3000	ANY	10	T/29	
6894Y	14106-9	2500	6894Y	230	G22	6½		3½	67,500	350	Biplane	3200	ANY	10	CP/91	
6963Z	29093-2	5000	6963Z	230	G38	11		6½	132,500	400	Biplane	3200	ANY	1	CP/85	CP/29

Double-Ended

13477R ⁽¹⁾	31349-4	800	13477 R	230	R7s	4½	2½		24,000	150	C-8	3200	HORIZ. ±15°	10	P2/11	
13704R	27085-0	1000	13704R	230	R7s	3½	1½		26,500	120	C-8	3200	ANY	10	P 2/35	
7786R	27072-8	1000	7786R	230	R7s	4½	2½		27,000	300	C-8	3200	HORIZ. ±15°			

1) These lamp types must be operated with a separate rapid acting High Breaking-Capacity fuse, either 415V AC or 500V DC working in accordance with the supply in use as per end of table.

2) C.C.=coiled coil, S.C.=single

* Rated average Life is the length of operation (in hours) at which point 50% of a large sample of lamps will still be operational and 50% will not

Unless otherwise noted all dimensions are in inches. To convert inches to millimeters multiply by 25.4001.

For the most current product information, go to the e-catalog on www.philips.com



SPECIALTY LAMPS

Description	Product Number	Watts	Volts	Lamp Current (Amps)	Initial Lumens	Rated Avg. Life (Hrs.)*	Arc Length (mm)	CRI	Color Temp (K)	Base
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MSR LAMPS SINGLE-ENDED GAS DISCHARGE

Hot Restrike^(1,2)

MSR 125 HR	35468-8	125	80	1.6	9400	200	4	92	6000	GZX9.5
MSR 200 HR	32466-5	200	70	3.3	15,000	200	5	92	6000	GZY9.5
†MSR 250 HR	14849-4	250	96	2.6	20,000	500	5	90	6000	GY9.5
MSR 400 HR	20477-6	400	70	6.9	32,000	750	6	92	6000	GZZ9.5
MSR 575 HR	31160-5	575	95	6.95	49,000	1000	7	95	6000	G22
MSR 1200 HR	30270-3	1200	100	13.8	110,000	1000	10	95	6000	G38
MSR 2500 HR	30265-3	2500	115	25.6	240,000	500	14	95	6000	G38
MSR 4000 HR	33579-4	4000	200	24.0	380,000	500	20	95	6000	G38
MSR 6000 HR	36042-0	6000	125	55.0	570,000	500	24	95	6000	GY38
MSR 12,000 HR	39071-6	12,000	160	86.0	1,200,000	300	30	95	6000	GY38
†MSR 18,000 HR	21823-0	18,000	225	77.6	1,650,000	300	35	95	6000	GX51

Standard⁽¹⁾

MSR 400	30268-7	400	70	6.9	32,000	1000	6	92	5900	GX9.5
MSR 575/2	24528-2	575	95	6.95	49,000	1000	7	80	7200	GX9.5
†MSR 700	14665-4	700	72	12.0	55,000	1000	7	80	5900	G22
MSR 700/2	28723-5	700	72	11.0	55,000	1000	8	80	7200	G 22/28x42
MSR 1200	30266-1	1200	100	13.8	110,000	800	10	95	5900	G 22/30x53
MSR 1200/2	28695-5	1200	90	13.8	110,000	800	10	85	7200	G 22/30x53

Short Arc⁽¹⁾

MSR 400 SA	35365-6	400	54	8.4	30,000	750	3	92	5500	GY9.5
MSR 700 SA	28718-5	700	72	11.0	45,000	750	4	80	5600	GY9.5
MSR 1200 SA	29135-1	1200	100	13.8	96,000	750	7	80	6000	GY22
†MSR 1200 SA/SE Gold	15052-4	1200	93	12.9	95,000	500	7	80	6300	PG950
MSR 2000 SA	38281-2	2000	110	20.0	155,000	750	7	80	6000	GY22

MSR LAMPS DOUBLE-ENDED GAS DISCHARGE

MSR 1800 DE	22058-2	1800			145,000	750	10	85	6000	SFC 15.5-6
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† — New product

1) Based on cycle 3.5 hours on/0.5 hour off, nominal wattage. Shorter life at short cycle operation.

2) Lamps must be used in fixtures designed for hot restrike.

* Rated average life is the length of operation (in hours) at which point 50% of a large sample of lamps will still be operational and 50% will not.

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SPECIALTY LAMPS

Description	Product Number	Watts	Volts	Lamp Current (Amps)	Initial Lumens	Rated Avg. Life (Hrs.)*	Arc Length (mm.)	CRI	Color Temp (K)	Base	MOL (mm)
MSR SA/DE GOLD (DOUBLE-ENDED) LAMPS											
MSR Gold 400 SA/DE	13617-6	400	48	8.4	27,000	1000	3	70	7500	SFC 10-4	I35
†MSR Gold 575 SA/2 DE	20303-4	575	94	7.1	43,000	750	5	75	7200	SFC 10-4	I35
†MSR Gold 700 SA/2 DE	13618-4	700	70	10.2	59,000	1000	4	80	6500	SFC 10-4	I35
MSR Gold 1200 SA/DE	13986-5	1200	100	13.6	110,000	1000	7	85	6000	SFC 10-4	I35
†MSR Gold 1200 SA/2 DE	14847-8	1200	207	13.6	103,000	750	7	80	7500	SFC 10-4	I35
†MSR Gold 1510 SA/DE	20784-5	1500	207	15	140,000	750	7	85	7000	SFC 10-4	I35
†MSR Gold 1510 SA/2 DE	20785-2	1500	207	15	126,000	750	7	85	7000	SFC 10-4	I35

Description	Product Number	Watts	Volts	Lamp Current (Amps)	Initial Lumens	Rated Avg. Life (Hrs.)*	Arc Length (mm)	CRI	Color Temp (K)	Base
MSD LAMPS ⁽¹⁾										
†MSD 150/2	21734-9	150	96	1.8	10,500	3000	5	65	8500	G12
MSD 200	34592-6	200	70	3.4	13,500	2000	5	80	6000	GY9.5
MSD 250	29152-6	250	90	3	17,000	3000	5	77	6700	GY9.5
MSD 250/2	27721-0	250	90	3	17,000	3000	5	65	8500	GY9.5
MSD 575	27479-5	575	95	6.95	45,000	3000	8	75	6000	GX9.5
MSD 575 HR ⁽²⁾	31160-5	575	95	6.95	46,000	2000	8	75	6000	G22
MSD 700	35364-9	700	72	11	55,000	3000	10	75	6000	G22
MSD 1200	29134-4	1200	115	13.8	92,000	3000	14	95	6000	G22

MHD LAMPS ⁽¹⁾										
MHD 200	20985-8	200	63	4.5	12,500	2000	4.5	75	6600	Special Prefocus
MHD 1800	31360-1	1800	120	17.3	155,000	4000	25	90	5600	SFC20-6

Description	Product Number	Watts	Volts	Lamp Current (Amps)	Initial Lumens	Rated Avg. Life (Hrs.)*	Arc Length (mm)	CRI	Color Temp (K)	Base	MOL (mm)
FASTFIT LAMPS											
Gas Discharge											
†MSR Gold 300/2 FastFit	21736-4	300	96	3.5	23,000	750	5	75	8000	PGJX28	I26
†MSR Gold 700 FastFit	15880-8	700	207	14	51,000	750	4	75	7500	PGJX50	I11
†MSR Gold 700/2 FastFit	21739-8	700	72	11	45,000	1000	4	80	7200	PGJX50	I11
†MSR Gold 1200 FastFit	15623-2	1200	207	13	95,000	750	5	75	6300	PGJX50	I28
†MSR Gold 2000/2 FastFit	21976-6	2000	110	19	150,000	750	8	80	7500	PGJX50	I34
†MSR Gold 2000 SA FastFit	20903-1	2000	110	19	150,000	750	8	80	6000	PGJX50	I34

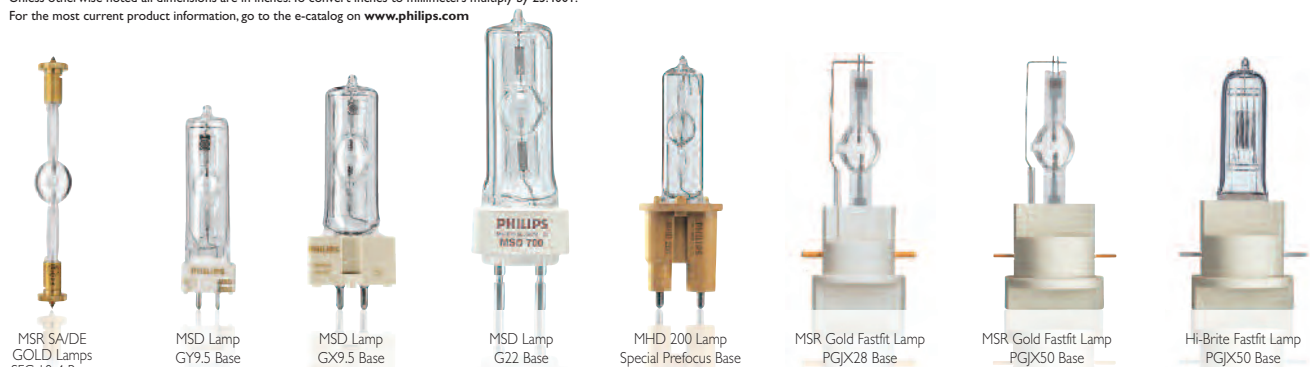
Hi-Brite											
†Hi-Brite 750 FastFit	20161-6	750	80	9.5	22,500	300		100	3250	PGJX50	I25
†Hi-Brite 1200 FastFit	20162-4	1200	80	15	36,000	200		100	3250	PGJX50	I40
†Hi-Brite 1200/115 FastFit	20171-5	1200	115	10.4	33,600	300		100	3200	PGJX50	I40
†Hi-Brite 1200/230 FastFit	20172-3	1200	230	5.2	29,000	300		100	3200	PGJX50	I40
†Hi-Brite 1200/240 FastFit	20173-1	1200	240	5	29,000	300		100	3200	PGJX50	I40

† — New product

1) These lamp types must be operated with a separate rapid acting High Breaking-Capacity fuse, either 415V AC or 500V DC working in accordance with the supply in use as per end of table.

2) C.C.=coiled coil, S.C.=single

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SPECIALTY LAMPS

Product Number	Watts	Description	Volts	Base	Diam. (In.)	Diam. (mm)	MOL (In.)	MOL (mm)	Lumens	Rated Avg. Life (Hrs.)*	Color Temp. (K)	Burning Position	Beam Shape
35619-6	500	500PAR56Q/NSP	120	Mog. End	7	179	5	127	88,000	4000	2950	Universal	Narrow Spot
35621-2	500	500PAR56Q/MFL	120	Mog. End	7	179	5	127	43,000	4000	2950	Universal	Med. Flood
35620-4	500	500PAR56Q/WFL	120	Mog. End	7	179	5	127	22,500	4000	2950	Universal	Wide Flood

SEALED BEAM

Description	Product Number	Watts	Volts	Lamp Current (Amps)	Initial Lumens	Rated Avg. Life (Hrs.)*	Arc Length (mm)	CRI	Color Temp. (K)	Base
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CERAMIC ST LAMPS

†Ceramic ST 250HR	13489-0	250	100	2.6	22,000	4000	8	>90	3200	GZY9.5
†Ceramic ST 500HR	20127-7	500	90	6.2	45,000	1000	14.5	>90	3200	GY22

Product Number	Description	Type	Watts	Rated Avg. Life (Hrs.)*	Lumens	Color Temp. (K)	CRI	Burning Position	MOL (In.)
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MICRO POWER LIGHT (MPXL)

14442-8	MPXL DL35	DL35	35	5000	3600	6500	90	Horizontal ±10°	3
14417-0	MPXL DL50	DL50	50	3000	5300	3900	75	Horizontal ±10°	3
14443-6	MPXL RP50	RP50	35	5000		3900	75	Horizontal ±10°	2.6
13474-2	MPXL DUV	DUV	35	500				Horizontal ±10°	3

Product Number	Description	Watts	Volts	Lumens	Base	LCL (In.)	MOL (In.)
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SHORT ARC LAMPS⁽¹⁾

31644-8	SAH250B	250	42	10,000	Med. Pf.	3	6
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1) DC operation only—should be operated on a control circuit which supplies direct current to the lamp.

† — New product

* Rated average Life is the length of operation (in hours) at which point 50% of a large sample of lamps will still be operational and 50% will not.

Unless otherwise noted all dimensions are in inches. To convert inches to millimeters multiply by 25.4001.

For the most current product information, go to the e-catalog on www.philips.com



PAR56
Mog. End Base



Ceramic ST 250 HR
GZY9.5 Base



Ceramic ST 500 HR
GY22 Base



MPXL DL35



MPXL DL50



MPXL RP50



MPXL DUV



SAH 250 B

SPECIALTY LAMPS

Product Number	Description	Watts	Volts	Nom. Length (mm)	Diameter (mm)
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MEDIUM PRESSURE METAL HALIDE LAMPS

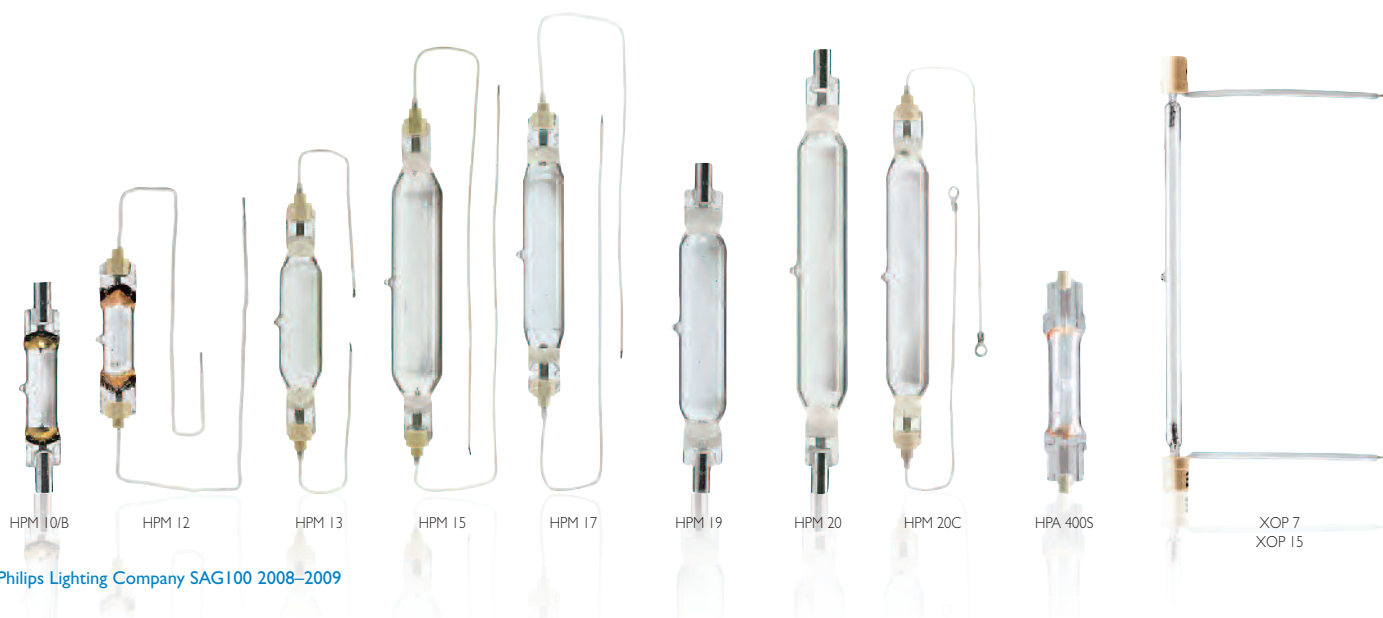
44431-5	HPM 10/B	400	125	112	17
30832-0	HPM 12	460	120	98	21
44440-6	HPM 13	1000	125	147	27
30831-2	HPM 15	1950	240	203	32
30829-6	HPM 17	2000	243	175	27
30828-8	HPM 19	2000	200	179	27
30827-0	HPM 20	2900	350	236	27
44439-8	HPM 20C	2900	350	210	27
44448-9	HPA 400S	400	125	118	18

Product Number	Description	Watts	Volts	Max. Length (mm)	Width or Diameter (mm)
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LOW PRESSURE PULSED XENON DISCHARGE LAMPS

30750-4	XOP 7 O/F	750	52	241	16.2
30749-6	XOP 15 O/F	1500	105	395	16.2

For the most current product information, go to the e-catalog on www.philips.com



SPECIALTY LAMPS

Product Number	Description	Watts	Current Amps	Bulb	Nom. Length (mm)	(In.)
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FLUORESCENT LAMPS WITH SUPER ACTINIC RADIATION—MEDIUM BIPIN BASE

29747-3	TLD15W/03	15	0.34	T8	452	18
30800-7	TL20W/03	20	0.37	T12	604	24
30805-6	TLDK30W/03	30	0.81	T8	452	18
30807-2	TLK40W/03	40	0.86	T12	604	24
30801-5	TL40W/03	40	0.86	T12	1214	48
30808-0	TL140W/03	140	1.46	T12	1514	60

Product Number	Ordering Code	Watts	Description	Nom. Length (In.)	Bulb	Base	Rated Avg. Life (Hrs.)*	UVA Watts
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BLACK LIGHT BLUE LAMPS⁽¹⁾

15753-7	Lead Free BLB F4T5 25PK	4	Black Light-Integral Filter	6	T5	Min. Bipin	6000	0.5
15755-2	Lead Free BLB F6T5 25PK	6	Black Light-Integral Filter	9	T5	Min. Bipin	7500	0.9
15756-0	Lead Free BLB F8T5 250PK	8	Black Light-Integral Filter	12	T5	Min. Bipin	7500	1.2
15760-2	Lead Free BLB F15 T8 6PK	15	Black Light-Integral Filter	18	T8	Med. Bipin	7500	3.1
15759-4	Lead Free BLB F15 T8 25PK	15	Black Light-Integral Filter	18	T8	Med. Bipin	7500	3.1
15761-0	Lead Free BLB F20T12 6PK	20	Black Light-Integral Filter	24	T12	Med. Bipin	9000	3.7
15757-8	Lead Free BLB F20T12 25PK	20	Black Light-Integral Filter	24	T12	Med. Bipin	9000	3.7
26271-7	F30T8/BLB 25PK	30	Black Light-Integral Filter	36	T8	Med. Bipin	7500	6
15762-8	Lead Free BLB F40T12 6Pk	40	Black Light-Integral Filter	48	T12	Med. Bipin	20,000	9
15758-6	Lead Free BLB F40T12 25PK	40	Black Light-Integral Filter	48	T12	Med. Bipin	20,000	9

Product Number	Ordering Code	Watts	Description	Nom Length (In.)	Rated Avg. Life (Hrs.)*	Approx. Initial Avg. Lumens	Design Lumens
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SPECIAL BLUE (THERAPEUTIC) LAMPS T12 BIPIN

31745-3	F20T12/BB	20	Special Blue	24	9000	192	154
20189-7	F40T12/BB	40	Special Blue	48	20,000	468	360

¹⁾ These lamps are not intended and should not be used for therapeutic or diagnostic purposes.

* Rated average Life is the length of operation (in hours) at which point 50% of a large sample of lamps will still be operational and 50% will not. For the most current product information, go to the e-catalog on www.philips.com



TLD 15W
TLD 30W

TL
TLK
TLI

T5 Black Light
Integral Filter
Min. Bipin

PL-S Black Light
Integral Filter
G23 Base

T8 Black Light
Integral Filter
Med. Bipin

T12 Black Light
Integral Filter
Med. Bipin

SPECIALTY LAMPS

Product Number	Ordering Code	Watts	Description	Nom. Length (In.)	Bulb	Base	Rated Avg. Life (Hrs.)*	UVA Watts
UVA 365NM PEAK LAMPS⁽¹⁾								
15752-9	PL-S 9W/08 (Lead Free)	9	UVA Lamp	6½	PL-S	G23	3000	
15766-9	PL-S 9W/10 (Lead Free)	9	UVA Lamp	6½	PL-S	G23	2000	1.9
15765-1	PL-S 9W/10/2P	9	UVA Lamp	6½	PL-S	G23	9000	
13036-9	F15T8/BL	15	Black Light	18	T8	Med. Bipin	5000	3.1
13034-4	PL-L 18W/10	18	UVA Lamp	9	PL-L	2G11	5000	3.4
19523-9	PL-L 36W/01/4P	36	UVA Lamp	16½	PL-L	2G11	5000	
39152-4	F20T12/BL	20	Black Light	24	T12	Med. Bipin	5000	3.7
39153-2	F40T12/BL	40	Black Light	48	T12	Med. Bipin	9000	9
15808-9	TL 40W/01	40	UVA Lamp	48	T12	Med. Bipin	3000	
24675-1	TLK 40W/10R	40	UVA Reflector Lamp	24	T12	Med. Bipin	3000	7.4
26169-3	TL 60W/10R	60	UVA Reflector Lamp	48	T12	Med. Bipin	1000	15.8
26885-4	TL 80W/10R	80	UVA Reflector Lamp	60	T12	Med. Bipin	1000	20.5
24694-2	TL 100W/10R	100	UVA Reflector Lamp	70	T12	Med. Bipin	1000	26.6
24696-7	TL 140W/10R	140	UVA Reflector Lamp	60	T12	Med. Bipin	1000	37
24697-5	TL 176D38/10	140	UVA Lamp	70	T12	Med. Bipin	1000	38.2
24698-3	TL 176D38/10R	140	UVA Reflector Lamp	70	T12	Med. Bipin	1000	31.7
†21513-7	Actinic BL 8W/10 250PK	8	UVA Lamp	20	T5	Min. Bipin	3000	
†21518-6	Actinic BL 15W/10 Secura 25PK	15	UVA Lamp	18	T8	Med. Bipin	3000	
†21520-2	Actinic BL 20W/10 Secura 25PK	20	UVA Lamp	24	T12	Med. Bipin	3000	
†21517-8	Actinic BL 30W/10 25PK	30	UVA Lamp	24	T8	Med. Bipin	2000	
†21514-5	Actinic BL TL-K 40W/10 25PK	40	UVA Lamp	24	T12	Med. Bipin	2000	
†21519-4	Actinic BL TL-K 40W/10 Secura 25PK	40	UVA Lamp	24	T12	Med. Bipin	2000	

* Rated average Life is the length of operation (in hours) at which point 50% of a large sample of lamps will still be operational and 50% will not

1) For graphic arts, lacquer curing and insect trap applications

† — New product

For the most current product information, go to the e-catalog on www.philips.com



SPECIALTY LAMPS

Product Number	Description	Watts (1)	UV-C Watts (2)	Bulb	Base	Rated Avg. Life (Hrs.)*	Nom. Length (In.)
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GERMICIDAL STERILAMP® 254NM LAMPS

Hot Cathode

36371-3	TUV 4T5	4	0.9	T5	Min. Bipin	6000	6
24485-5	TUV 6T5	6	1.5	T5	Min. Bipin	8000	9
29930-5	TUV 8T5	8	2.1	T5	Min. Bipin	8000	12 ⁽³⁾
30864-3	TUV 15T8	15	4.7	T8	Med. Bipin	8000	18 ⁽³⁾
29268-0	TUV 25T8	25	7	T8	Med. Bipin	8000	18 ⁽³⁾
36016-4	TUV 30T8	30	11.2	T8	Med. Bipin	8000	36 ⁽³⁾
26269-1	TUV 36W	36	15.3	T8	Med. Bipin	8000	48 ⁽³⁾
29090-8	TUV 75W HO	75	26	T8	Med. Bipin	8000	48 ⁽³⁾
23596-0	TUV 115W	115	38.8	T12	Med. Bipin	5000	48 ⁽³⁾

Amalgam

†21254-8	TUV 230W XPT 4PK	230		T10	4-Pin	12,000	
†21256-3	TUV 230W XPT 20PK	230		T10	4-Pin	12,000	
†21258-9	TUV 335W XPT 20PK	335		T10	4-Pin	12,000	
†15792-5	TUV 260W XPT DIM	260		T10	4-Pin	12,000	

Twin Tube PL-S / PL-L Hot Cathode

38186-3	PL-S 5W/TUV	5	1	PL-S	G23	8000	4
32512-6	PL-S 9W/TUV	9	2.4	PL-S	G23	9000	6½
21064-1	PL-L 18W/TUV	18	5.5	PL-L	2G11	9000	8¾
13726-5	PL-L 35W/TUV	35	11	PL-L	2G11	9000	8¾
26585-0	PL-L 36W/TUV	36	12	PL-L	2G11	9000	16¾
29464-5	PL-L 55W/TUV	55	17	PL-L	2G11	9000	22½
13035-1	PL-L 60W/TUV	60	18	PL-L	2G11	9000	16¾
13725-7	PL-L 95W/TUV	95	32	PL-L	2G11	9000	22½

Slimline T5

38542-7	TUV 11W 4P SE	11	2.2	T5	4-Pin	8000	10
38541-9	TUV 16W 4P SE	16	3.9	T5	4-Pin	8000	13
13341-3	TUV 25W 4P SE	16	7.2	T5	4-Pin	8000	20
29267-2	TUV 36T5/SP	39 ⁽⁴⁾	15	T5	Single Pin	9000	34
36209-5	TUV 36T5 4P SE	39 ⁽⁴⁾	15	T5	4-Pin	9000	34
13389-2	TUV 36T5 HO 4P SE	75	25	T5	4-Pin	9000	34
22201-8	TUV 36T5 HO 2P	75	25	T5	Bipin	8000	34
29269-8	TUV 64T5/SP	75	31	T5	Single Pin	9000	62
15782-6	TUV 64T5 2P SE ALTO	75	31	T5	Bipin	9000	62
38303-4	TUV 64T5 4P SE	75	31	T5	4-Pin	9000	62
36217-8	TUV 64T5 4P SE	75	31	T5	4-Pin	9000	62
39200-1	TUV 64T5 HO 4P SE	145	48	T5	4-Pin	9000	62

* Rated average life is the length of operation (in hours) at which point 50% of a large sample of lamps will still be operational and 50% will not.

† — New product

1) Wattages shown are for operation from a transformer or ballast, currently standard, under specified test conditions.
2) 100 Hour

3) Approximate overall length including two standard lamp holders.

4) Wattage shown is for lamp operating current of 420 ma. Wattage will vary at other operating currents as follows:
120 ma. — 17 watts; 200 ma. — 25 watts; 300 ma. — 32 watts.

For the most current product information, go to the e-catalog on www.philips.com



SPECIALTY LAMPS

Product Number	Description	Circuit	Pkg. Qty.
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STARTERS

33117-3	S2 Starter	Single 220-240V	25
14202-6	S10 Starter	Single 220-240V	500
24699-1	S12 Starter	Single 220-240V	500
51580-9	S16 Starter	Single 220-240V	200
15911-1	S20 Starter	Single 200-260V	500
21558-2	BodyTone Starter 25-100W	Single 220-240V	500
21563-2	BodyTone Starter 120-180W	Single 230-240V	500

Product Watts	Product Number	Desc.	Volts	Bulb	Base	Pkg. Qty.	Finish	Filament	LL (In.)	LL (mm)	MOL (In.)	MOL (mm)	Rated Avg. Life (Hrs.)*	Diam (mm)	W/cm	Color Temp. (K)	Burning Position
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QUARTZ INFRARED HEAT LAMPS

200	36043-8	13912R	230	T3	R7s	10	Clear	C-8	4%	120	7%	189	5000	11	16.7	2300	Universal
375	20997-3	375T3/7	120	T3	R7s	10	Clear	C-8	5	127	8%	217.6	5000	11	29.5	2450	Universal
500	21651-5	500T3	120	T3	U	10	Clear	C-8	5	127	8%	223.8	5000	11	39.4	2450	Horiz. ±15°
	20994-0	500T3/7	120	T3	R7s	10	Clear	C-8	5	127	8%	217.6	5000	11	39.4	2450	Horiz. ±15°
	31203-3	13169X	120	T3	X	10	Clear	C-8	5%	142	9%	241	5000	11	35.2	2450	Horiz. ±15°
	31205-8	13169X/98 ⁽¹⁾	120	T3	X	10	Reflector	C-8	5%	142	9%	241	5000	11	35.2	2450	Horiz. ±15°
1000	20995-7	1000T3	240	T3	U	10	Clear	C-8	10	254	13%	350.8	5000	11	39.4	2450	Horiz. ±15°
	21000-5	1000T3/CL	240	T3	U	10	Clear	C-8	10	254	13%	350.8	5000	11	39.4	2450	Horiz. ±15°
	31213-2	13195X	235	T3	X	10	Clear	C-8	10%	272	14%	370	5000	11	36.8	2450	Horiz. ±15°
	31267-8	13713Z/98 ⁽¹⁾	235	T3	Z	10	Reflector	C-8	10%	272	14	357.5	5000	11	36.8	2450	Horiz. ±15°
	31260-3	13713X	235	T3	X	10	Clear	C-8	10%	272	14%	370	5000	11	36.8	2450	Horiz. ±15°
	31216-5	13195X/98 ⁽¹⁾	235	T3	X	10	Reflector	C-8	10%	272	14%	360	5000	11	36.8	2450	Horiz. ±15°
	29107-0	6990P	120	T6	G9.5	10	Clear	CC-8	1%	60.3	4	101	450	20	60.0	3100	Universal
	1200	28853-0	13561Y/00	144	T3	Y	10	Clear	C-8	6%	155	9	228	5000	11	77.4	2450
1600	27063-7	13561Y/98 ⁽¹⁾	144	T3	Y	10	Reflector	C-8	6%	155	9	228	5000	11	77.4	2400	Horiz. ±15°
	†20718-3	13561Z/98	144	T3	Z	10	Reflector	C-8	6%	155	9	228	5000	11	77.4	2400	Horiz. ±15°
	21676-2	1600T3	208	T3	U	10	Clear	C-8	16	406	19%	503	5000	11	39.4	2450	Horiz. ±15°
	20996-5	1600T3	240	T3	U	10	Clear	C-8	16	406	19%	503	5000	11	39.4	2450	Horiz. ±15°
	21590-5	1600T3	277	T3	U	10	Clear	C-8	16	406	19%	503	5000	11	39.4	2450	Horiz. ±15°
	21003-9	1600T3/7	240	T3	R7s	10	Clear	C-8	16	406	19%	498.5	5000	11	39.4	2450	Horiz. ±15°
	21678-8	1600T3/CL	240	T3	U	10	Clear	C-8	16	406	19%	503	5000	11	39.4	2450	Horiz. ±15°
	28875-3	13568Y/00	144	T3	Y	10	Clear	C-8	6%	155	9	228	5000	11	103.2	2450	Horiz. ±15°
	27062-9	13568Y/98 ^(1,2)	144	T3	Y	10	Reflector	C-8	6%	155	9	228	5000	11	103.2	2500	Horiz. ±15°

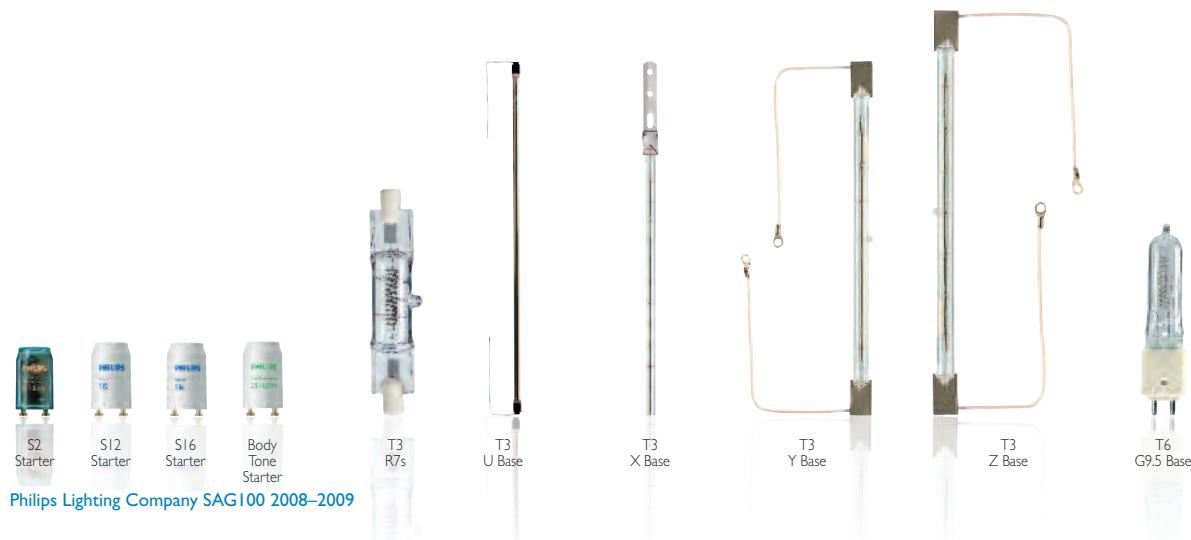
1) Lamps have white reflective coating on bulb

2) Lamps have fork terminals

* Rated average Life is the length of operation (in hours) at which point 50% of a large sample of lamps will still be operational and 50% will not

† — New product

For the most current product information, go to the e-catalog on www.philips.com



SPECIALTY LAMPS

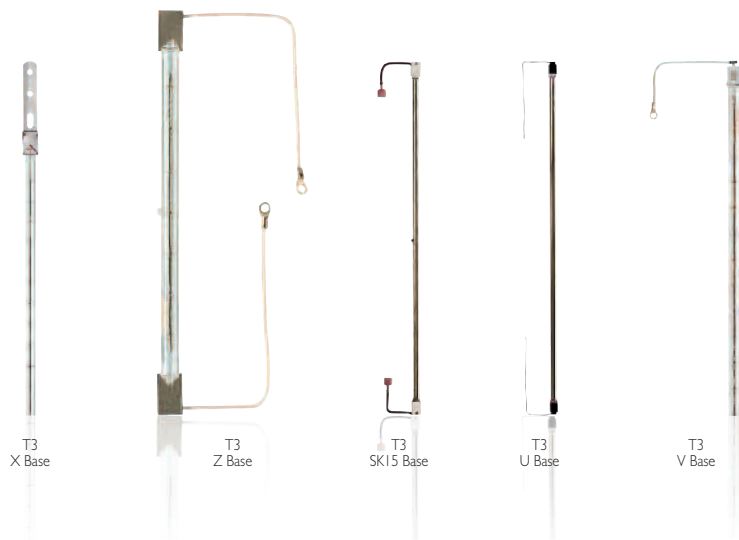
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QUARTZ INFRARED HEAT LAMPS CONTINUED																	
2000	31198-5	I3168X	235	T3	X	10	Clear	C-8	11 $\frac{1}{16}$	282	14 $\frac{3}{8}$	370	5000	11	71.4	2450	Horiz. $\pm 15^\circ$
	31200-9	I3168Z/98 ⁽¹⁾	235	T3	Z	10	Reflector	C-8	11	280	14	357.5	5000	11	71.4	2450	Horiz. $\pm 15^\circ$
	31252-0	I3245X/98 ⁽¹⁾	400	T3	X	10	Reflector	C-8	16 $\frac{1}{8}$	410	20	508	5000	11	48.8	2450	Horiz. $\pm 15^\circ$
	31269-4	I3765X	400	T3	X	10	Clear	C-8	16 $\frac{1}{8}$	410	20	508	5000	11	48.8	2450	Horiz. $\pm 15^\circ$
	21648-1	2000T3/1CL	240	T3	U	10	Clear	C-8	10	254	12	303	5000	11	78.8	2450	Universal
	36855-5	I3765X/98	400	T3	X	10	Reflector	C-8	16 $\frac{1}{16}$	410	20	508	5000	11	48.8	2450	Universal
	35703-8	I3168V	240	T3	V	10	Clear	C-8	11	280	13 $\frac{3}{8}$	350	5000	11	71.4	2450	Horiz. $\pm 15^\circ$
	37811-7	I3213Z/98	235	T3	Z	10	Reflector	C-8	11	280	14 $\frac{1}{16}$	358	5000	11	71.1	2450	Horiz. $\pm 15^\circ$
2500	20998-1	2500T3	480	T3	U	10	Clear	C-8	25	635	28 $\frac{1}{8}$	731	5000	11	39.4	2450	Horiz. $\pm 15^\circ$
	21689-5	2500T3/7	480	T3	R7s	10	Clear	C-8	25	635	28 $\frac{1}{16}$	730	5000	11	39.4	2450	Horiz. $\pm 15^\circ$
	23874-1	2500T3/CL	480	T3	U	10	Clear	C-8	25	635	28 $\frac{1}{8}$	731	5000	11	39.4	2450	Horiz. $\pm 15^\circ$
	28217-8	I4120R	480	T3	R7s	10	Clear	C-8	25	635	28 $\frac{1}{16}$	728	5000	11	39.4	2450	Horiz. $\pm 15^\circ$
3000	31244-7	I3230X	400	T3	X	10	Clear	C-8	27 $\frac{1}{8}$	700	31 $\frac{1}{8}$	798	5000	11	42.9	2450	Universal
	23648-9	I3230X/98 ⁽¹⁾	400	T3	X	10	Reflector	C-8	27 $\frac{1}{8}$	700	31 $\frac{1}{8}$	798	5000	11	42.9	2450	Horiz. $\pm 15^\circ$
	†13886-7	I3565V 235v	235	T4	V	10	Clear	C-8	10 $\frac{9}{16}$	277	13 $\frac{9}{16}$	350	5000	11	71.4	2400	Universal
	†20714-2	I4144Z/98	400	T3	Z	10	Reflector	C-8	27 $\frac{1}{8}$	700	31 $\frac{1}{8}$	798	5000	11	42.9	2450	Horiz. $\pm 15^\circ$
3800	22128-3	3800T3	575	T3	U	6	Clear	C-8	38	965	41 $\frac{1}{8}$	1062	5000	11	39.4	2450	Horiz. $\pm 15^\circ$
	22129-1	3800T3/CL/UB	575	T3	U	6	Clear	C-8	38	965	41 $\frac{1}{8}$	1062	5000	11	39.4	2450	Vertical
6000	29123-7	I3138V	480	T3	V	10	Clear	C-8	9 $\frac{1}{16}$	236	12	303	5000	11	194.7	3000	Horiz. $\pm 15^\circ$

HeLeN Quartz Infrared Heat Lamps

1000	36516-3	I5024Z	120	T3	SK15	10	HeLeN	C-8	11	280	14 $\frac{1}{16}$	360	5000	11	35.7	N/A	Horiz. $\pm 15^\circ$
	28050-3	I5007Z	235	T3	SK15	10	HeLeN	C-8	11	280	14 $\frac{1}{16}$	360	7000	11	35.7	N/A	Horiz. $\pm 15^\circ$
3000	249615	I5012U	235	T3	U	10	HeLeN	C-8	16 $\frac{1}{16}$	413	19 $\frac{1}{16}$	504	5000	11	72.6	N/A	Universal

1) Lamps have white reflective coating on bulb

† — New product

* Rated average life is the length of operation (in hours) at which point 50% of a large sample of lamps will still be operational and 50% will not
For the most current product information, go to the e-catalog on www.philips.com

SPECIALTY LAMPS

Base Types and Bulb Shapes

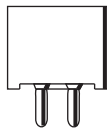
Base Types (Not Actual Sizes)



PG22-6.35
DIN: 4975 I
iec: 7004-48



RX7s
DIN: 49750
IEC: 7004-92
ANSI: Recessed
single contact base
C8.61-1990
sheet I-770-I



G5.3
IEC: 7004-73-2
ANSI: Miniature
2-pin
C81.61-1990
sheet I-20-I



BA 15s
DIN: 49720
IEC: 7004-I I A
ANSI: Single contact
candelabra
bayonet base
C81.61-1990
sheet I-20-I



BA 15d
DIN: 49720
IEC: 7004-I I A
ANSI: Candelabra
bayonet base
double contact
C81.61-1990
sheet I-20-I



B15d
DIN: 49721
IEC: 7004-I I



B22d/22
IEC: 7004-10



G3.9
ANSI:
C81.61-1990
sheet I-300-I



G4
IEC: 7004-72



GX5.3
(Round pin)
IEC: 7004-73
ANSI:
C61.61-1990
sheet I-321-I



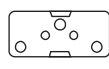
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GX6.35
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IEC: 7004-59
ANSI: C81.61-1990
sheet I-340-I



GZ6.35
DIN: 49754
IEC: 7004-59A



GZ4
IEC: 7004-67



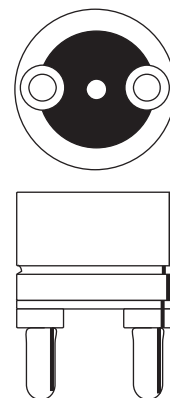
GX9.5
DIN: 49638
IEC: 7004-70A



GY9.5
IEC: 7004-70B
ANSI: C81.61-1990
sheet I-369-I

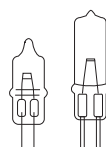


G22
IEC: 7004-75
ANSI: Medium
bipost
C81.61-1990
sheet I-466-I

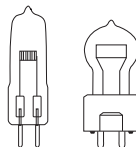


G38
IEC: 7004-76
ANSI: Mogul
bipost
C81.61-1990
sheet I-519-I

Bulb Shapes (Not Actual Sizes)



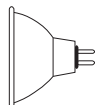
T-2.5
T-3
T-3.5
T-4
T-4.5



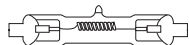
T-5
T-6



G-7



MR-11
MR-13
MR-16



R7s



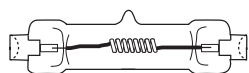
RX7s

SPECIALTY LAMPS

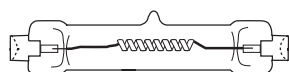
Bulb Shapes and Base Types

Bulb Shapes and Base Types (Not Actual Sizes)

Double-Ended Tungsten Halogen lamps
3%, 3½, 4%, 4½, 5% and 6% MOL
RX7s Base



DWY, DWZ, DXN, DXW, FBY

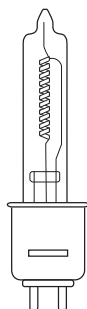


DWT, FER/EHS, FEY



EHM, EHZ, EJG, FCL, FCM, FFT, FHM

Medium 2-Pin
Tungsten Halogen Lamps (G9.5)

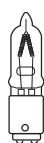


EHD
500Q/CL

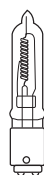


EHG
FEL

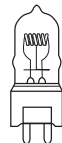
Double Contact Bayonet Bases (BA15d)
Tungsten Halogen-Miniature 2-Pin Base (G5.3)
Tungsten Halogen-2-Pin Prefocus Base (GZ9.5)



FEV
150/DC

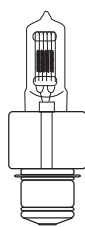


ESS
500Q/CL/DC

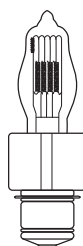


DYS/DYV/BHC
(GZ9.5)

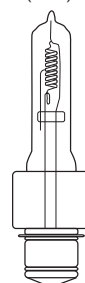
Medium Prefocus Lamps with 2¼" L.C.L. (P28s)
Medium Prefocus Lamps with 3½" L.C.L. (P28s)



BTL

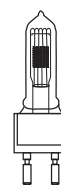


BTP
BTR

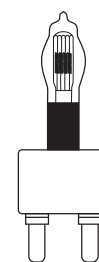


EGE, EGF,
EGG, EGJ

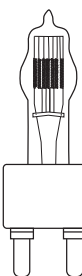
Medium Bipost Lamps with 2¼" L.C.L. (G22)
Medium Bipost Lamps with 5" and 6½" L.C.L. (G38)



EGR
EGT

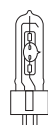


CYV

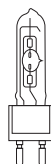


CYX
FKK (5" LCL)

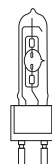
MSR Lamps
(Medium Source Rare Earth Lamps)



MSR 400



MSR 700

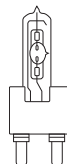


MSR 1200

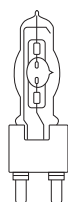
MSR/HR Lamps (Medium Source Rare Earth
Lamps Hot Restrike Version)



MSR
575/HR

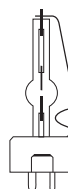


MSR
1200/HR



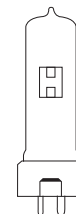
MSR
2500/HR

MSR Short
Arc Lamps



MSR
400W SA

MSD Lamps



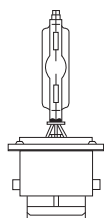
MSD
200W/2

MHD Lamps

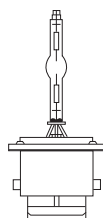


MHD
200

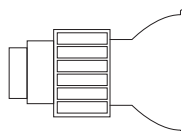
Micro Power Light (MPXL)



MPXL DL-35W
MPXL DL-50W



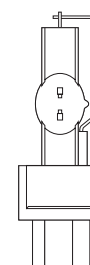
DUV-35W



MPXL RP50



MSR 400 SA/MSR 700 SA



MSR 1200 SA/MSR 2000 SA

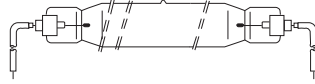
SPECIALTY LAMPS

Bulb Shapes and Base Types

Specialty Bulb Shapes (Not Actual Sizes)



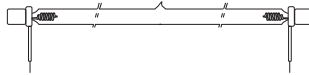
HPM 10/B, 13, 19, 20



HPM 12, 14, 15, 17, 19, 20C,



HPA 400S



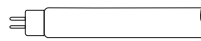
XOP 7, 15, 25, O/F



T12 Medium Bipin



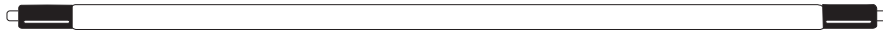
T8 Medium Bipin



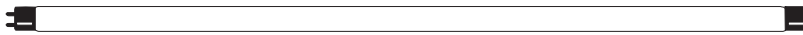
T5 Miniature Bipin



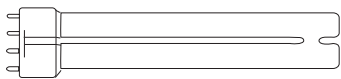
Hot Cathode Sterilamp



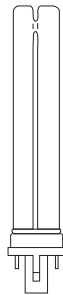
Cold Cathode and Slimline Sterilamp



Slimline Sterilamp

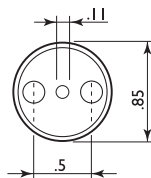
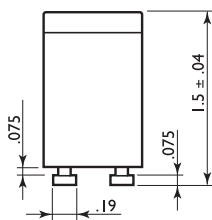


PL-L



PL-S

Starters



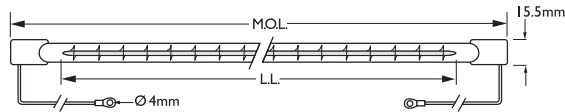
SPECIALTY LAMPS

Tubular Quartz Infrared Bulb Shapes

Tubular Quartz Infrared Bulb Shapes (Not Actual Sizes)

Tubular quartz infrared heat lamps are designed for service other than illumination. Unless otherwise noted,

1. Tubular quartz heat lamps should not be used in equipment where the seal temperatures exceed 350°F.
2. Operating position is HORIZONTAL.
3. RX7s Base = Recessed Single Contact



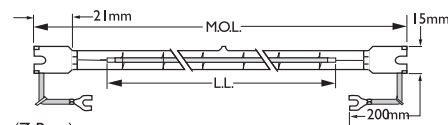
(Y Base)
Leads Are Approximately 6"



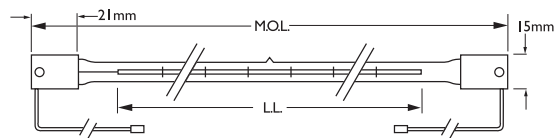
(RX7s Base)



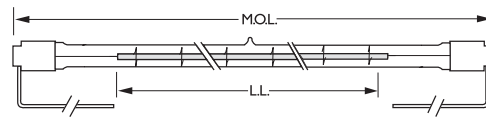
(X Base)



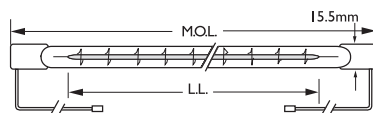
(Z Base)



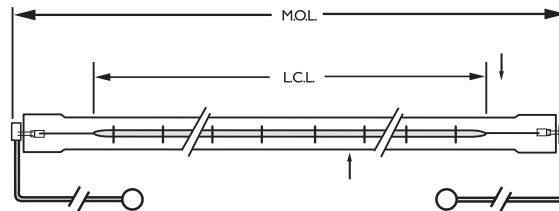
(SK15 Base)
13844Z/98—Lead is 15.7", 14103Z/98—Lead is 9"



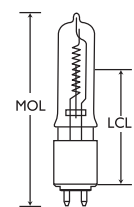
(U Base)
Leads Are Approximately 6"



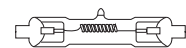
(Y Base)
13169Y—Lead is 6.3", 13195Y—Lead is 7.8"



(V Base)
13136V, 13170V, 13138V, 14118V lead is 1.5"
13168V leads are 4.7" and 5.5"



(G9.5 Base)



R7s

ADDITIONAL INFORMATION

Glossary

Accent Lighting

Concentrated light on a subject which highlights it and causes it to stand out from its surrounding. Depending on degree of drama desired, accent light should minimally be 10x the general light or ambient light.

Accommodation

The involuntary muscular process by which the eye changes focus from one distance to another.

Adaptation

The involuntary process by which the visual system changes its sensitivity, depending on the luminances prevailing in the visual field. The process involves both the iris and the light sensitive cells of the retina.

ALTO® Lamp Technology

Philips ALTO® Lamp Technology is widely recognized as a leading low-mercury solution for fluorescent lighting. This technology uses capsule dosing to precisely control the amount of mercury in each ALTO lamp. Long-life ALTO lamps further reduce the need to replace lamps and, as a result, decrease the amount of mercury used over life of any lighting installation.

Ballast

The ballast is an electrical device that performs two basic functions: 1) provides the starting voltage and 2) limits the current to sustain lamp operation.

Ballast types for fluorescent lamps:

Instant Start: Instant start electronic ballasts are the most popular type of electronic ballast today because they provide maximum energy savings and they start lamps without delay or flashing. Since they do not provide lamp electrode heating, instant start ballasts consume less energy than comparable rapid start, program rapid start or programmed start ballasts. As a result, they provide the most energy efficient solution to fluorescent lamp ballasting. The instant start ballast uses 1.5 to 2 watts less energy per lamp than the rapid start alternative.

Instant-start electronic ballasts provide a high initial voltage (typically 600V for F32T8 lamps) to start the lamp. This high voltage is required to initiate discharge between the unheated electrodes of the lamp. However, the cold electrodes of lamps operated by an instant start ballast may deteriorate more quickly than the warmed electrodes of lamps operated by a rapid start, program rapid start or programmed start ballast. Lamps operated by instant start ballasts will typically withstand 10–15K switch cycles. Instant start ballasts are typically wired in *parallel*. This means that if one lamp fails, the other lamps in the circuit will remain lit.

Rapid Start: Rapid start ballasts have a separate set of windings which provide a low voltage (approx. 3.5 volts) to the electrodes for one second prior to lamp ignition. A starting voltage somewhat lower than that of instant ballast (typically 450–550V for F32T8 lamps) is applied, striking an electrical arc inside the lamp. Most rapid start electronic ballasts continue to heat the electrode even after the lamp has started, which results in a power loss of 1.5 to 2 watts per lamp. Lamps operated by a rapid start electronic ballast will typically withstand 15–20K switch cycles. Rapid start ballasts are typically wired in *series*. This means that if one lamp fails, all other lamps in the circuit will extinguish.

Programmed Start: Programmed start (PS) electronic ballasts provide maximum lamp life in frequent starting conditions (up to 50,000 starts). PS ballasts use a custom integrated circuit (IC) which monitors lamp and ballast conditions to ensure optimal system lighting performance. Life Program rapid start ballasts, PS ballasts also precisely heat the lamp cathodes.

However, PS ballasts heat the lamp cathodes to 700°C prior to lamp ignition. This puts the least amount of stress on the lamp electrodes, resulting in maximum lamp life regardless of the number of lamp starts. Programmed start ballasts are typically wired in *series*.

Ballast types for HID lamps:

Reactor: Single coil, very efficient, but poor voltage regulation to the lamp.

Constant Wattage Autotransformer (CWA):

Employing two coils, the ballast is less efficient than reactor types, but have better voltage regulation. Most popular type in use.

Magnetically Regulated (Mag Reg) or Regulated Lag (Reg Lag):

Three coils make for very effective voltage regulation but also not very efficient.

Electronic: Allows for both high efficiency and the best voltage regulation.

Beam Angle

The beam angle defines the light pattern around the beam's central axis for which the luminous intensity is half that of the maximum luminous intensity.

Candela (cd) (Luminous Intensity)

The intensity base unit for light. Intensity is the luminous flux emitted from a point per unit solid angle into a particular direction, regardless of distance.

Candlepower (cp)

Luminous intensity expressed in candelas.

Color Rendering Index (CRI)

A method for describing the effect of a light source on the color appearance of objects, compared to a reference source of the same color temperature (CCT). The highest CRI attainable is 100. Originally based on an eight standardized color comparisons, it was later extended to fourteen colors.

Color Temperature or Correlated Color Temperature (CCT)

The color temperature of a light emitter refers to the temperature to which one would have to heat a "blackbody" source (Planckian radiator) to produce light of similar overall appearance or chromaticity. A low color temperature implies warmer color (more yellow/red) light while high color temperature implies a cooler light (more blue). The standard unit for color temperature measurement is expressed in Kelvin (K).

Field Angle

The field angle defines the light pattern around the beam's central axis for which the luminous intensity is 10% that of the maximum luminous intensity.

Footcandle

The unit of measure for the density of light on a surface unique to the USA. One footcandle is equal to one lumen per foot (lm/ft²). One footcandle = 10.674 lux.

General Lighting (Ambient Lighting)

Lighting designed to deliver a predominately uniform level of light throughout an area.

Glare

Glare is an interference with visual perception caused by an uncomfortably bright light source or reflection within one's field of view; a form of visual noise. In its simplest form, glare (unwanted light) is a consequence of the human eye to adapt to different light levels. In the case of glare, the eye adapts to the high level of the glare source, which makes it difficult to perceive details in the now too dark work area.

Direct Glare: Glare resulting from high luminances in the visual environment that are directly visible from a viewers position; such as an insufficiently shielded luminaire.

Reflected Glare or Veiling Reflection: A reflection of incident light that partially or totally obscures the details to be seen on a surface by reducing the contrast.

Discomfort Glare: Glare which is distracting or uncomfortable (subjective), which interferes with the perception of visual information, but which does not significantly reduce visual performance.

Disability Glare: The effect of light which significantly reduces visual performance and perception; such as car high beams in your face on a dark country road.

Illuminance

The total density of visible light—from all directions — illuminating, falling on or incident to, a surface. Standard unit of measure for illuminance is LUX (lx) which is lumens per square meter (lm/m²). See [Footcandle](#).

Initial vs. Mean Lumens

The measured luminous output of a new light source versus the output at 40% of lamp life.

Inverse Square Law

This law says that the measured flux density from a light source decreases along any line from the source. It falls off in proportion to the square of the relative distance traversed. Thus the illuminance measurement 2 feet from the light source will be ¼ of the measurement 1 foot from the source—not ½.

Kelvin

The Kelvin unit is the basis of all temperature measurement. In lighting, Kelvin is the unit of measure for Color Temperature used to indicate the overall color of the light produced from a source. See [Color Temperature](#).

Kilowatt Hour (kWh)

The measure of electrical energy from which electricity billing is determined. For example, at the rate of \$0.10 per kWh, a 100 watt lamp operating for 2000 hours will cost \$20.00 (100x2000/1000 = 200 kWh x .10 = \$20.00)

Light

Radiant energy that stimulates the sense of sight. The "visible" part of the electromagnetic spectrum from 380–770 nm. Light is the energy which allows us to see.

Lumen (lm)

SI unit of luminous flux. Photometrically, it is the luminous flux emitted within a unit solid angle (lsr) by a point source having a uniform luminous intensity of 1 cd.—or— The SI unit for measuring the flux of light being produced by a light source or received by a surface.

ADDITIONAL INFORMATION

Glossary

Luminaire (light fixture)

A complete lighting unit which consists of lamp(s), ballast(s)—if applicable—as well as mechanism for light distribution, lamp protection and alignment and connection to power.

Luminaire Efficacy

The ratio of luminous flux emitted by the fixture to that emitted by the lamp(s) within the fixture. Expressed as a percentage.

Luminance (The physical measure of brightness)

Luminance is the amount of visible light leaving a point on a surface in a given direction. The light leaving the surface can be due to reflection, transmission and/or emission. Standard unit of luminance is candela per square meter (cd/m²).

Luminous Efficacy

The expression of efficiency in converting power (watts) into light (lumens). Expressed as lumens per watt or l/w.

Luminous Exitance

Refers to the total amount of visible light leaving a surface in all directions. Unit for luminous exitance is lumens per square meter (lm/m²).

Photocell

A transducer used to detect and measure light and other radiations.

Photometry

Photometry is the science of measuring visible light in units that are weighted according to the sensitivity of the human eye known as the Visual Wavelength (V_λ) factor. Photometric theory does not address how we perceive colors.

Radiometry

Radiometry is the science of quantifying the phenomena of electromagnetic radiation. In our context, we are interested in light, the limited range of electromagnetic radiation that is visible to the human eye, sometimes extended to the areas of infrared and ultraviolet.

Rated Average Life

The length of operation (in hours) at which point an average of 50% of a large sample of lamps will still be operational and 50% will not.

Task Lighting

Lighting designed for a specific visible operation which requires higher light levels; most often characterized by proximity to that task.

Transformer

An electrical device by which alternating current of one voltage is changed to another voltage

Voltage

A measure of electromotive force or simply said, the pressure of electricity. This is analogous to pressure in a water line. In this catalog, voltage refers to supply voltage required by the lamp (incandescent) or operating voltage required by the arc tube (discharge lamps).

Watt

Unit used to measure electric power consumed by a lamp or any electrical device.

TECHNICAL DESCRIPTIONS

Lamp Listing Sequence

Lamps are listed in wattage sequence except for special groupings such as Street Lighting, Tungsten Halogen, High Intensity and Silicone Coated Lamps.

Ordering Code

The complete information shown in the ordering code column together with the voltage, if applicable, should be used when placing orders. In a number of instances a lamp type may be available in different kinds of packaging such as 2 or 4 lamp wrappers. Some small lamp types which are generally multiple packed on a platform with an overwrap are also packaged as a blister-carded item for the retail market. Each of these items is shown as a separate listing. To identify them, additional information is included with the ordering code. The following examples illustrate this:

Ordering Code	BC-7T7/W 12/2
Pkg. Qty.*	12cds
Explanation	Carded pack—2 lamps per card. The number shown under "Pkg. Qty." is the number of cards per min. shipping case.
Ordering Code	60T/SW 12/4
Pkg. Qty.	48
Explanation	12-4 lamp wrappers = 48 lamps per min. shipping case.
Ordering Code	50/150T/ML/TP 96/1
Pkg. Qty.	96
Explanation	96-1 lamp wrappers = 96 lamps per min. shipping case.

* Quantity shown is minimum shipping container. Refer to Net Price Schedule for number of lamps required for qualification as a standard case.

Voltage

Lamps listed are available only in the voltage shown. Lamps listed in range voltages such as 115–125 or 230–250 are intended for use on circuits normally varying within these voltage limits and are designed for an average voltage suitable for operation on such circuits. Lamps intended for operation in range voltages have a design volt center as follows, unless otherwise noted by a footnote:

Range Voltage	Design Voltage
115–125.....	120
120–125.....	120
120–130.....	125
125–130.....	130
230–250.....	240

Class of Lamp

Incandescent lamps are classified as type B or type C. The type B lamp is one in which the filament operates in a vacuum. The type C lamp is one in which the filament operates in an atmosphere of inert gas. For gas-filled lamps which can be operated in any position the lumen maintenance is best when lamps are operated base up. For the vacuum type lamps which have no restrictions on operating position the lumen maintenance is the same in all operating positions.

Lamp Dimensions

Bulb designations consist of a letter or letters to indicate shape and a number to indicate the approximate diameter in eighths of an inch.

Maximum Overall Length (MOL)

Maximum Overall Length is measured from the top of the bulb to bottom of the base.

Nominal Length

A measurement of fluorescent lamp length based on the length of the lamp plus the proper allowance for standard lamp holders.

Light Center Length (LCL)

Light Center Length is the distance from a reference point on a lamp base (usually the eyelet) to the center of the light source. For high intensity discharge lamps, it is the distance from the center of the filament or center of the arc to the point shown below for the base indicated.

All Screw Bases: Bottom base contact

Medium and Mogul Prefocus: Top of base pin

Medium Bipost: Bottom of bulb

Bayonet Candelabra and Medium

Bayonet: Top of base pins

SC or DC Prefocus: Plane of locating bosses of prefocusing collar

Mini-Can: Intersection of 45° taper with max. diameter of base

Inches to Metric Conversion

To calculate the metric equivalent of inches in millimeters (mm) use the following formula: inches x 25.4001 = millimeters

Operating Position

Lamps may be operated in any position unless otherwise indicated.

Base Pin Position for Bayonet Candelabra-Based Lamps

When lamps are based with a bayonet candelabra base, the plane of the base pins will be approximately at right angles to the plane of the filament, unless otherwise indicated.

SC or DC Prefocus Based Lamps

The plane containing the base axis and the major locking eyelet which is the eyelet equidistant from the two other eyelets, will be at right angles to the plane of the filament or lead wires unless otherwise indicated. The letter (A) shown in the Base column after SC or DC Pref. based lamps indicates that the distance from the bottom of base contact or contacts to the bottom of the collar is .406". In the case of DC Pref. based lamps, the letter (A) also indicates that the plane containing the base axis and contacts is at right angles to the plane containing the base axis and the major locking eyelet.

ADDITIONAL INFORMATION

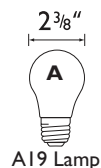
MEASURING LAMPS

Measuring Incandescent, Halogen, CFL and HID Lamps

Letters designate the shape of the glass bulb and numbers indicate the diameter of the bulb in eighths of an inch.

For example:

“A19” indicates a standard bulb having a diameter of $1\frac{9}{8}$ or $2\frac{3}{8}$ inches.



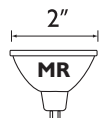
A19 Lamp

“T10” indicates a tubular shaped having a diameter of $1\frac{0}{8}$ or $1\frac{1}{4}$ inches.



T10 Lamp

“MR16” indicates mini reflector having a diameter of $1\frac{6}{8}$ or 2 inches.



MR16 Lamp

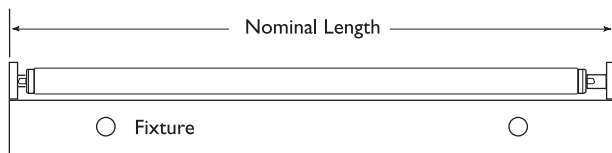
“ED37” indicates a large HID bulb having a diameter of $3\frac{7}{8}$ or $4\frac{5}{8}$ inches.



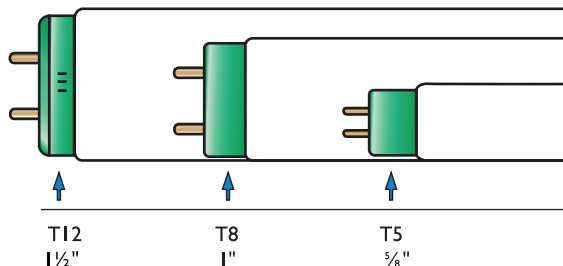
ED37 Lamp

Measuring Fluorescent Lamps

To determine the length of a fluorescent lamp, you do not measure the bulb. The Nominal Length of the bulb is the measurement from back of socket to back of socket on the fixture.



To determine the type of lamp you need, measure the endcap and use the illustration below as a guide.



UNDERSTANDING ORDERING CODES

Typical ordering codes can be understood with the examples below:

Incandescent ordering code: BC15BA9C/CL/LL

BC = Blister Carded Package
15 = Lamp Wattage
BA9 = Lamp Type
C = Candelabra Base (Blank = Medium)
CL = Clear (W = White, etc.)
LL = Long Life (Blank = Standard)

Halogen ordering code: 45PAR38/HAL/SP10

45 = Lamp Wattage
PAR38 = Lamp Type
Hal = Halogen
SP = Spot Lamp
10 = Beam Spread in Degrees

CFL ordering code: PL-C 13W/827/4P/ALTO

PL-C = Lamp Type
13W = Lamp Wattage
827 = Lamp Color
4P = Base has 4-Pins
ALTO = Low Mercury Content

Fluorescent ordering code: F32T8/ADV841/ALTO

F = Fluorescent
32 = Nominal Lamp Wattage
T8 = 1" Diameter Tube
ADV = Advantage
841 = CRI of 80+ and Color Temp. of 4100K
ALTO = Low Mercury Content

HID ordering code: MS320/C/U/PS

MS = High Output Arc Tube
320 = Lamp Wattage
C = Coated
U = Universal Burning Position
PS = Pulse Start

ADDITIONAL INFORMATION

Incandescent Cross Reference Guide

Philips	GE	OSI
BC4C7	4C7 CARD 2	4C7/BL/2PK
BC4C7/W	4C7/W CD 2	4C7/W/BL/2PK
10S11N	10S11N	10S11N/CL
BC15BA9C/CL/LL	15CAC/F-CD/2-12	15B10/BL/2PK
BC15T10	15T10	15T10/CL
20T61/2DC/IF	20T61/2DC/F	20T61/2DC/IF
25A/RS	25A/RS	25A/RS
BC25BA9-1/2/CL/LL	—	25B10/DL/BL
BC25BA9C/CL/LL	25CAC-CD/2-120	25B10C/BL/2PK
25G25/CL/LL	25G25	25G25
25S11/2C	25S11/5C	25S11C/P
BC25T10	25T10	25T10
30/100A/W	30/100	30/100A21/W/RP
30R20	30R20-120	30R20
BC40A15/FAN/CL/LL	40A15/CF CD2	40A15/CL/FAN
40A15/TF	40A15/CF/STG CD2	40A15/SL
40A	40A 48PK	40A
40A-34A/EW	40A/34WM	40A/34/SS
BC40BA9-1/2/CL/LL	40CAM CD/2	40B10/BL/2PK
BC40BA9C/CL/LL	40CAC-CD/2-120	40B10C/BL/2PK
40B101/2/4M	—	40B10C/DL/BL
BC40BA9-1/2/F/LL	40CAM/F CD/2	40B10/W/BL/2PK
BC40F15/CL/LL	40FM/L	40F/CL
BC40G16-1/2C/CL/LL	40GC-12PK-120	40G161/2C
BC40G16-1/2C/W/LL	40GC/W/CD/2	40G161/2C/w/bl
40G25/CL/LL	40G25/L	40G25
40G25/W/LL	40G25/W/L/24	40G25/DLSW/RP
40G40/CL/LL	40G40/CL	40G40
40G40/W/LL	40G40/W	40G40/W
BC40S11/NTP	40S11N/CARD	40S11N/BL
40S11N/IF	40S11N/1/F	40S11N/CF
BC40T10/IF	40T10/F	40T10/IF
45R20/LL	45R20/FL/LL	45R20
50/150A/W	50/150 12PK	50/150A21/W/RP
50/150A/DL	50/150 12PK	50/150/PS25
50A/RS/TF	50A/RS/CVG 24PK	50A/RS/SL
60A	60A	60A
60A-52A/EW	60A/52WM	60A/52/SS
60A19/B	60A21/B	60A/CB
60A/CL	60A/CL 24PK	60A/CL
60A/WL	60A/W/LL-24PK-120	60A/DLSW/2PK/RP
60A/AGRO	60A/PL 6PK	60A/GRO
60A/TF	60A/CVG 24PK	60A/SL
60A/W/TP	60A/W 48PK	60A/W/4RP
60A/Y	60A/Y 24PK	60A/Y/RP
K60A19/TS/EW	69A21/60WM/TS	60A19/TS/8M/SS
K60A19/TS/EW	—	60A21/TS
BC60BA9-1/2/C/LL	60CAM CD/2	60B10/BL/2PK
BC60BA9C/CL/LL	60CAC CD/2 6PK	60B10C/BL/2PK
60BA9C/4M	—	60B10C/DL/BL/2PK
BC60BA9-1/2/F/LL	—	60B10C/F/BL/2PK
BC60BA9C/F/LL	60CAM/F CD/2	60B10/W/BL/2PK
BC60F15/CL/LL	—	60F/BL
60G25/CL/LL	60G25 6PK 120V	60G25/RP
60G25/W/LL	—	60G25/DLSW/RP
60G40/CL/LL	60G40 6PK	60G40/RP

Philips	GE	OSI
60G40/W/LL	60G40/W 6PK	60G40/W
60K19/DL	—	60K19/DR
60T10/64/IF	60T10/F 24PK	60T10/CF
65BR30/FL/LL55	65BR30/FL/LL 6PK	65BR30/DL/FL/RP
65BR30/FL55	—	65BR30/FL
65BR30/FL55	75R30/FL/65WM	65BR30/FL/SS
65BR30/SP20/LL	65R30/SP/LL 6PK	65BR30/SP/RP
65BR30/SP20	75R30/SP/65WM	65BR30/SP/SS
65BR30/FL55/TG	65R30/FL/CUG	65BR30/FL/SL/RP
75A	75A	75A
75A/CL	75A/CL 24PK	75A/CL
75A/RS/VS	75A/RS	75A/RS/RP
75A/RH/TF	75A/RT 6PK	75A21/RS/SL
75A-67A/EW	75A/67WM	75A/67/SS
75A-67A/99/EW 120	75A/67WMP/99	75A/67/SS/XL
75ER30	75ER30	75ER30
75K19/DL	—	75K19/DR
75R20/LL	75R20 6PK	75R20/RP
100A/1SBIF	100A21/1SBIF 60 PK	100A21/1SB/IF
100A	100A	100A
100A/VV	100A/VV	100A/DLSW/2PK/RP
100A/RS/VS/BR	100A21/RS 12PK	100A/RS
100A21	100A21	100A21
100A/RS/TF	100A/RS/CVG	100A21/RS/SL/RP
100A/RS/VS	100A23/VS 24PK	100A21/V/S
100A-90A/EW	100A/90WM	100A/90/SS
100-90A/99EW	100A/90WMP/98	100A/90/SS/XL
100A/CL	100A/CL 24PK	100A/CL
100G40/CL/LL	—	100G40/RP
100G40/W/LL	100G40/W	100G40/W/RP
120BR/FL60	120R40/FL/M1-6PK	120BR/FL
120BR/SP20	120R40/SP/M1-6PK	120BR/SP
120ER40	120ER39	120ER40
120BR/AGRO	120R40/PL	120BR/GRO
120BR/FL60/TG	120R40/FL/CVG	120BR40/FL/SL
125BR40/I	125R40/I	125BR40
150A	150A	150A21
150A-135A/EW	150A/135WM	150A21/135/SS
150A/99	150Q21/99/IF	150A21/99/XL
150A/CL	150A/CL 12PK	150A21/CL
200A/VWL	—	200A21
200A/99	200/99	200CL/99/XL
200/IF	200/IF	200PS/IF
200/99IF	200/99IF	200PS/CL/99/XL
200PS30/RS/IF/TG	200PS30/RS/CVG	200PS/RS/SL
250BR40/I	250R40/I	250BR40/I
250BR40/I/TG	250R20/I/CVG	—
K250PAR38/FL	—	250KBR38/FL
K250PAR38/SP	—	250KR38/SP
300R/FL/1	300R/FL	300BR/FL
300M/99IF	300M/99/IF	300M/99/IF/XL
300M	300M	300/M/CL
300PAR56/MFL	300PAR56/MFL	300PAR56/MFL
300PAR56/NSP	300PAR56/NSP	300PAR56/NSP
300PAR56/WFL	300PAR56/WFL	300PAR56/WFL
300/99IF	300/99IF	300PS35/99/IF/XL

ADDITIONAL INFORMATION

Halogen Cross Reference Guide

Philips	GE	OSI
40R20/HEA/FL	—	—
40BR30/HEA/FL	—	—
40T60/HEA/WH	—	—
50T60/HEA/WH	—	—
70T60/HEA/WH	—	—
BC60BT15/HAL/CL	60BTT/CL	60BT15/HAL/CL
BC60BT15/HAL/W	60BTT/SW	60BT15/HAL/W
BC75BT15/HAL/W	75BTT/SW	75BT15/HAL/W
BC100BT15/HAL/W	100BTT/SW	100BT15/HAL/W
BC150BT15/HAL/W	150BTT/SW	150BT15/HAL/W
BC25F10-1/2C/HAL/CL	—	—
BC25F10-1/2/HAL/CL	—	—
BC40CP19/HAL/CL	—	—
BC40F10-1/2C/HAL/CL	—	—
BC40F10-1/2/HAL/CL	—	—
BC40F15/HAL/CL	—	—
BC60CP19/HAL/CL	—	—
BC60F10-1/2C/HAL/CL	—	—
BC60F10-1/2/HAL/CL	—	—
BC60F15/HAL/POST TOP	—	—
60BR30/HAL/SP	—	—
60BR30/HAL/FL	—	—
60BR40/HAL/FL	—	—
45PAR16/HAL/SP10	—	—
45PAR16/HAL/FL27	—	—
60PAR16/HAL/SP10	60PAR16/H/NSP10	60PAR16/CAP/NSP10
60PAR16/HAL/FL27	60PAR16/H/NFL30	60PAR16/CAP/NFL30
20PAR20E/SP/U	—	—
20PAR20E/FL25	—	—
50PAR20/HAL/SP10	50PAR20/H/NSP10	50PAR20/CAP/NSP10
50PAR20/HAL/FL25	50PAR20/H/FL25	50PAR20/HAL/SPL/NFL30
50PAR30L/HAL/SP10	50PAR30L/H/SP10	50PAR30L/CAP/SPL/NSP9
50PAR30L/HAL/WSP16	—	—
50PAR30L/HAL/FL25	—	50PAR30L/CAP/SPL/NFL25
50PAR30L/HAL/WFL40	50PAR30L/H/FL40	50PAR30L/CAP/SPL/WFL50
75PAR30L/HAL/SP10	75PAR30L/H/SP10	75PAR30L/CAP/SPL/NSP9
75PAR30L/HAL/WSP16	—	—
75PAR30L/HAL/FL25	75PAR30L/H/FL25	75PAR30L/CAP/SPL/NFL25
75PAR30L/HAL/WFL40	75PAR30L/H/WFL	75PAR30L/CAP/SPL/WFL50
50PAR30S/HAL/SP10	50PAR30S/H/SP10	50PAR30S/CAP/SPL/NSP9
50PAR30S/HAL/FL25	50PAR30S/H/NFL25	50PAR30S/CAP/SPL/NFL25
50PAR30S/HAL/WFL40	50PAR30S/H/FL35	50PAR30S/CAP/SPL/FL40
60PAR30S/HAL/NSP10	60PAR30S/H/NSP9	60PAR30S/CAP/SPL/NSP9
60PAR30S/HAL/FL25	60PAR30S/H/FL25	60PAR30S/CAP/SPL/NFL25
60PAR30S/HAL/WFL40	60PAR30S/H/FL35	60PAR30S/CAP/SPL/FL40
75PAR30S/HAL/NSP10	75PAR30S/H/SP10	75PAR30S/CAP/SPL/NSP9
75PAR30S/HAL/FL25	75PAR30S/H/FL25	75PAR30S/CAP/SPL/NFL25
75PAR30S/HAL/WFL40	75PAR30S/H/WFL35	75PAR30S/CAP/SPL/FL40
40PAR30S/IRC/HAL/SP10	—	—
40PAR30S/IRC/HAL/FL25	—	—
40PAR30S/IRC/HAL/WFL40	—	—
45PAR30S/IRC/HAL/SP10	45PAR30S/HIR/SP9XL	—
45PAR30S/IRC/HAL/FL25	45PAR30S/HIR/FL25X	—
45PAR30S/IRC/HAL/WFL40	45PAR30S/HIR/FL35X	—
50PAR30S/IRC/HAL/SP10	50PAR30S/HIR/SP9	50PAR30S/CAP/IR/NSP9
50PAR30S/IRC/HAL/FL25	50PAR30S/HIR/FL25	50PAR30S/CAP/IR/NFL25
50PAR30S/IRC/HAL/WFL40	50PAR30S/HIR/FL35	50PAR30S/CAP/IR/FL40
50PAR36Q/NSP5	50PAR36/H/SP5	50PAR36/CAP/NSP6
45PAR38/HAL/SP10	45PAR/H/SP10	45PAR/CAP/SPL/SP9
45PAR38/HAL/FL25	45PAR/H/FL25	45PAR/CAP/SPL/FL30
60PAR38/HAL/SP10	60PAR/H/SP10	60PAR/CAP/SPL/SP9
60PAR38/HAL/FL25	60PAR/H/FL25	60PAR/CAP/SPL/FL25
75PAR38/HAL/SP10	75PAR/H/SP9	75PAR/CAP/SPL/SP9
75PAR38/HAL/FL25	75PAR/H/FL25	75PAR/CAP/SPL/FL30
90PAR38/HAL/SP10	90PAR/H/SP10	90PAR/CAP/SPL/SP9
90PAR38/HAL/FL25	90PAR/H/FL25	90PAR/CAP/SPL/FL30
90PAR38/HAL/WFL40	90PAR/H/WFL	90PAR/CAP/SPL/WFL50
40PAR38/IRC/HAL/SP10	45PAR/HIR/SP10	—
40PAR38/IRC/HAL/FL25	45PAR/HIR/FL25	—
40PAR38/IRC/HAL/WFL40	—	—
50/45PAR38/IRC/HAL/SP10	45PAR/HIR/SP12SX	—
50/45PAR38/IRC/HAL/FL25	—	—
50/45PAR38/IRC/HAL/WFL40	45PAR/HIR/FL40SX	—
50PAR38/IRC/SP10	50PAR/HIR/SP10 & 55PAR/HIR/SP10	50PAR/CAP/IR/SP9
50PAR38/IRC/FL25	50PAR/HIR/FL25 & 55PAR/HIR/FL25	50PAR/CAP/IR/NFL25
50PAR38/IRC/WFL40	—	—
60/55PAR38/IRC/SP10	55PAR/HIR/SP12XL	53PAR38/CAP/IR/XP/SP9
60/55PAR38/IRC/FL25	—	53PAR38/CAP/IR/XP/FL30
60/55PAR38/IRC/WFL40	55PAR/HIR/FL40XL	—
60PAR38/IRC/SP10	60PAR/HIR/SP10	60PAR/CAP/IR/SP9

Philips	GE	OSI
60PAR38/IRC/FL25	60PAR/HIR/S/FL30	60PAR/CAP/IR/NFL25
60PAR38/IRC/WFL40	60PAR/HIR/FL40	—
70PAR38/IRC/HAL/SP10	70PAR38/HIR/SP10 & 80PAR38/HIR/SP10	80PAR38/CAP/IR/SP10
70PAR38/IRC/HAL/FL25	70PAR38/HIR/FL25 & 80PAR38/HIR/FL25	80PAR38/CAP/IR/FL25
70PAR38/IRC/HAL/WFL40	—	—
90PAR38/IRC/HAL/SP10	90PAR/HIR/SP12XL	—
90PAR38/IRC/HAL/FL25	—	—
90PAR38/IRC/HAL/WFL40	90PAR/HIR/FL40XL	—
100PAR38/IRC/SP10	100PAR/HIR/SP10	100PAR/CAP/IR/SP10
100PAR38/IRC/FL25	100PAR/HIR/FL25	100PAR/CAP/IR/NFL25
100PAR38/IRC/WFL40	100PAR/HIR/FL40	100PAR/CAP/IR/FL40
20MRC11/SP15	Q20MR11/SP15	—
20MRC11/FL35	Q20MR11/NFL30	20MR11/FL35
20MR16/SP10	Q20MR16/SP	20MR16/NSP8
20MR16/FL36	Q20MR16/FL	20MR16/FL40
35MR16/SP10	—	35MR16/NSP8
35MR16/FL36	—	35MR16/FL40
50MR16/SP10	Q50MR16/SP	50MR16/NSP12
50MR16/NFL24	—	50MR16/NFL25
50MR16/FL36	Q50MR16/FL	50MR16/FL40
20MRC16/SP10	Q20MR16C/CG15	20MR16/T/NSP10
20MRC16/FL36	Q20MR16C/CG40	20MR16/T/FL40
35MRC16/SP10	Q35MR16C/CG12	35MR16/T/NSP10
35MRC16/NFL24	Q35MR16C/CG20	35MR16/T/NFL25
35MRC16/FL36	Q35MR16C/CG40	35MR16/T/FL40
50MRC16/SP10	—	50MR16/T/NSP10
50MRC16/SP15	Q50MR16C/CG15	—
50MRC16/NFL24	Q50MR16C/CG25	50MR16/T/NFL25
50MRC16/FL36	Q50MR16C/CG40	50MR16/T/FL40
75MR16/SP10	Q71MR16C/NSP15	65MR16/T/NSP10
75MR16/FL36	Q71MR16C/FL40	65MR16/T/FL40
20MRC16/IRC/SP8	—	20MR16/IR/SP10/C
20MRC16/IRC/FL36	—	20MR16/IR/FL40/C
30MRC16/IRC/SP8	—	—
30MRC16/IRC/NFL24	—	—
30MRC16/IRC/FL36	—	—
35MRC16/IRC/SP8	Q37MR16/HIR/CG10	37MR16/IR/SP10/C
35MRC16/IRC/NFL24	Q37MR16/HIR/CG25	37MR16/IR/NFL25/C
35MRC16/IRC/FL36	Q37MR16/HIR/CG40	37MR16/IR/FL40/C
35MRC16/IRC/WFL60	—	37MR16/IR/WFL60/C
45MRC16/IRC/SP8	Q50MR16/HIR/CG10	50MR16/IR/SP10/C
45MRC16/IRC/NFL24	Q50MR16/HIR/CG25	50MR16/IR/NFL25/C
45MRC16/IRC/FL36	Q50MR16/HIR/CG40	50MR16/IR/FL40/C
45MRC16/IRC/WFL60	—	50MR16/IR/WFL60/C
50MRC16/NFL24/A	—	50MR16/B/NFL25
50MRC16/FL40/A	—	50MR16/B/FL35
50Q/CL	—	—
75Q/CL	Q75CL/MC	75Q/CL
100Q/CL	Q100CL/MC	100Q/CL/MC
100Q/CL/DC	Q100CL/DC	100Q/CL/DC
150Q/CL	Q150CL/MC	150Q/CL/MC
150Q	Q150MC	150Q/MC
150Q/CL/DC	Q150CL/DC	150Q/CL/DC
150Q/DC	Q150DC	150Q/DC
250Q/CL	Q250CL/MC	250Q/CL/MC
250Q/CL/DC	Q250CL/DC	250Q/CL/DC
500Q/CL	—	500Q/MC
500Q/CL	—	—
750Q/CL	—	—
100T3Q/CL	Q100T3/CL	100T3Q/S/CL
150T3Q/CL	Q150T3/CL	150T3Q/S/CL
150T3Q/CL LONG	Q150T3/117/CL	—
250T3Q/CL	Q250T3/CL	—
300T3Q/P/CL EHM	Q300T3/CL	300T3Q/CL
500T3Q/P/CL	Q500T3/CL	500T3Q/CL
1000T3Q/P/CL 240V	Q1000T3/CL 240V	1000T3Q/CL 240V
1500T3Q/P/CL 240V	Q1500T3/CL 240V	1500T3Q/CL 240V
1500T3Q/P/CL 277V	Q1500T3/CL 277V	1500T3Q/CL 277V
10W/T3/12V	Q10T3/CL	10T3Q/CL
20W/T3/12V	Q20T3/CL	20T3Q/CL
35W/T4/12V	Q35T3/CL	35T4Q/CL
50W/T4/12V	Q50T4/CL	50T4Q/CL
75W/T4/12V	Q75T4/CL	75T4Q/CL
ALU111MM 50W G53 12V 8D	—	50ARI111/SP8
ALU111MM 50W G53 12V 24D	—	50ARI111/FL25
ALU111MM 75W G53 12V 8D	—	75ARI111/SP8
ALU111MM 75W G53 12V 24D	—	75ARI111/FL25
BC25TWISTLINE GU10/FL25	Q20GU10/FL/CD	—
BC35TWISTLINE GU10/FL25	Q35GU10/FL/CD	—
BC50TWISTLINE GU10/NFL25	Q50GU10/FL/CD	50PAR16/CAP/GU10/FL40

ADDITIONAL INFORMATION

Compact Fluorescent Cross Reference Guide

	Philips	Generic Description	GE	OSI
PL-S	PL-S 5W/827	CFT5W/G23/827	F5BX/SPX27	CF5DS/827
	PL-S 7W/827	CFT7W/G23/827	F7BX/SPX27	CF7DS/827
	PL-S 7W/835	CFT7W/G23/835	F7BX/SPX35	CF7DS/835
	PL-S 7W/841	CFT7W/G23/841	F7BX/SPX41	CF7DS/841
	PL-S 7W/850	CFT7W/G23/850	F7BX/SPX50	CF7DS/850
	PL-S 9W/827	CFT9W/G23/827	F9BX/SPX27	CF9DS/827
	PL-S 9W/835	CFT9W/G23/835	F9BX/SPX35	CF9DS/835
	PL-S 9W/841	CFT9W/G23/841	F9BX/SPX41	CF9DS/841
	PL-S 9W/850	CFT9W/G23/850	F9BX/SPX50	CF9DS/850
	PL-S 13W/827	CFT13W/GX23/827	F13BX/SPX27	CF13DS/827
	PL-S 13W/830	CFT13W/GX23/830	F13BX/SPX30	CF13DS/830
	PL-S 13W/835	CFT13W/GX23/835	F13BX/SPX35	CF13DS/835
	PL-S 13W/841	CFT13W/GX23/841	F13BX/SPX41	CF13DS/841
	PL-S 13W/850	CFT13W/GX23/850	F13BX/SPX50	CF13DS/850
PL-C 2-PIN	PL-C 13W/827/USA/ALTO	CFQ13W/GX23/827	F13DBX23T4/SPX27	CF13DD/827
	PL-C 13W/830/USA/ALTO	CFQ13W/GX23/830	F13DBX23T4/SPX30	CF13DD/830
	PL-C 13W/835/USA/ALTO	CFQ13W/GX23/835	F13DBX23T4/SPX35	CF13DD/835
	PL-C 13W/841/USA/ALTO	CFQ13W/GX23/841	F13DBX23T4/SPX41	CF13DD/841
	PL-C 13W/827/ALTO	CFQ13W/G24d/827	F13DBXT4/SPX27	—
	PL-C 13W/830/ALTO	CFQ13W/G24d/830	F13DBXT4/SPX30	—
	PL-C 18W/827/ALTO	CFQ18W/G24d/827	F18DBXT4/SPX27	CF18DD/827
	PL-C 18W/830/ALTO	CFQ18W/G24d/830	F18DBXT4/SPX30	CF18DD/830
	PL-C 18W/835/ALTO	CFQ18W/G24d/835	F18DBXT4/SPX35	CF18DD/835
	PL-C 18W/841/ALTO	CFQ18W/G24d/841	F18DBXT4/SPX41	CF18DD/841
	PL-C 26W/827/ALTO	CFQ26W/G24d/827	F26DBXT4/SPX27	CF26DD/827
	PL-C 26W/830/ALTO	CFQ26W/G24d/830	F26DBXT4/SPX30	CF26DD/830
	PL-C 26W/835/ALTO	CFQ26W/G24d/835	F26DBXT4/SPX35	CF26DD/835
	PL-C 26W/841/ALTO	CFQ26W/G24d/841	F26DBXT4/SPX41	CF26DD/841
PL-C 2-PIN 15MM	PL-C 15MM/22W/827	CFQ20W/GX32d/827	—	—
	PL-C 15MM/28W/827	CFQ27W/GX32d/827	—	—
PL-C 4-PIN	PL-C 13W/827/4P/ALTO	CFQ13W/G24q/827	F13DBX/SPX27/4P	CF13DD/E/827
	PL-C 13W/830/4P/ALTO	CFQ13W/G24q/830	F13DBX/SPX30/4P	CF13DD/E/830
	PL-C 13W/835/4P/ALTO	CFQ13W/G24q/835	F13DBX/SPX35/4P	CF13DD/E/835
	PL-C 13W/841/4P/ALTO	CFQ13W/G24q/841	F13DBX/SPX41/4P	CF13DD/E/841
	PL-C 18W/827/4P/ALTO	CFQ18W/G24q/827	F18DBX/SPX27/4P	CF18DD/E/827
	PL-C 18W/830/4P/ALTO	CFQ18W/G24q/830	F18DBX/SPX30/4P	CF18DD/E/830
	PL-C 18W/835/4P/ALTO	CFQ18W/G24q/835	F18DBX/SPX35/4P	CF18DD/E/835
	PL-C 18W/841/4P/ALTO	CFQ18W/G24q/841	F18DBX/SPX41/4P	CF18DD/E/841
	PL-C 26W/827/4P/ALTO	CFQ26W/G24q/827	F26DBX/SPX27/4P	CF26DD/E/827
	PL-C 26W/830/4P/ALTO	CFQ26W/G24q/830	F26DBX/SPX30/4P	CF26DD/E/830
	PL-C 26W/835/4P/ALTO	CFQ26W/G24q/835	F26DBX/SPX35/4P	CF26DD/E/835
	PL-C 26W/841/4P/ALTO	CFQ26W/G24q/841	F26DBX/SPX41/4P	CF26DD/E/841
PL-L	PL-L 18W/830	FT18W/2G11/830	F18BX/SPX30	FT18DL/830
	PL-L 18W/835	FT18W/2G11/835	F18BX/SPX35	FT18DL/835
	PL-L 18W/841	FT18W/2G11/841	F18BX/SPX41	FT18DL/841
	PL-L 18W/830	FT18W/2G11/RS/830	F18BX/SPX30/RS	FT18DL/830/RS
	PL-L 18W/835	FT18W/2G11/RS/835	F18BX/SPX35/RS	FT18DL/835/RS
	PL-L 18W/841	FT18W/2G11/RS/841	F18BX/SPX41/RS	FT18DL/841/RS
	PL-L 24W/830	FT24W/2G11/830	F27/24BX/SPX30	FT24DL/830
	PL-L 24W/835	FT24W/2G11/835	F27/24BX/SPX35	FT24DL/835
	PL-L 24W/841	FT24W/2G11/841	F27/24BX/SPX41	FT24DL/841
	PL-L 36W/830	FT36W/2G11/830	F39/36BX/SPX30	FT36DL/830
	PL-L 36W/835	FT36W/2G11/835	F39/36BX/SPX35	FT36DL/835
	PL-L 36W/841	FT36W/2G11/841	F39/36BX/SPX41	FT36DL/841
	PL-L 40W/830/RS/IS	FT40W/2G11/RS/830	F40/30BX/SPX30	FT40DL/830/RS
	PL-L 40W/835/RS/IS	FT40W/2G11/RS/835	F40/30BX/SPX35	FT40DL/835/RS
	PL-L 40W/841/RS/IS	FT40W/2G11/RS/841	F40/30BX/SPX41	FT40DL/841/RS
	PL-L 50W/830/RS	FT50W/2G11/RS/830	F50BX/SPX30/RS	—
	PL-L 50W/835/RS	FT50W/2G11/RS/835	F50BX/SPX35/RS	—
	PL-L 50W/841/RS	FT50W/2G11/RS/841	F50BX/SPX41/RS	—
	PL-L 80W/830	FT80W/2G11/830	—	FT80DL/830
	PL-L 80W/835	FT80W/2G11/835	—	FT80DL/835
	PL-L 80W/841	FT80W/2G11/841	—	FT80DL/841
PL-T 4-PIN	PL-T 18W/827/4P/ALTO	CFTR18W/GX24q/827	F18TBX/SPX27/A/4P	CF18DT/E/IN/827
	PL-T 18W/830/4P/ALTO	CFTR18W/GX24q/830	F18TBX/SPX30/A/4P	CF18DT/E/IN/830
	PL-T 18W/835/4P/ALTO	CFTR18W/GX24q/835	F18TBX/SPX35/A/4P	CF18DT/E/IN/835

ADDITIONAL INFORMATION

Compact Fluorescent (Continued) Cross Reference Guide

	Philips	Generic Description	GE	OSI
PL-T 4-PIN, cont.	PL-T 18W/841/4P/ALTO	CFTR18W/GX24q/841	F18TBX/SPX41/A/4P	CF18DT/E/IN/841
	PL-T 26W/827/4P/ALTO	CFTR26W/GX24q/827	F26TBX/SPX27/A/4P	CF26DT/E/IN/827
	PL-T 26W/830/4P/ALTO	CFTR26W/GX24q/830	F26TBX/SPX30/A/4P	CF26DT/E/IN/830
	PL-T 26W/835/4P/ALTO	CFTR26W/GX24q/835	F26TBX/SPX35/A/4P	CF26DT/E/IN/835
	PL-T 26W/841/4P/ALTO	CFTR26W/GX24q/841	F26TBX/SPX41/A/4P	CF26DT/E/IN/841
	PL-T 32W/827/4P/ALTO	CFTR32W/GX24q/827	F32TBX/SPX27/A/4P	CF32DT/E/IN/827
	PL-T 32W/830/4P/ALTO	CFTR32W/GX24q/830	F32TBX/SPX30/A/4P	CF32DT/E/IN/830
	PL-T 32W/835/4P/ALTO	CFTR32W/GX24q/835	F32TBX/SPX35/A/4P	CF32DT/E/IN/835
	PL-T 32W/841/4P/ALTO	CFTR32W/GX24q/841	F32TBX/SPX41/A/4P	CF32DT/E/IN/841
	PL-T 42W/827/4P/ALTO	CFTR42W/GX24q/827	F42TBX/SPX27/A/4P	CF42DT/E/IN/827
	PL-T 42W/830/4P/ALTO	CFTR42W/GX24q/830	F42TBX/SPX30/A/4P	CF42DT/E/IN/830
	PL-T 42W/835/4P/ALTO	CFTR42W/GX24q/835	F42TBX/SPX35/A/4P	CF42DT/E/IN/835
	PL-T 42W/841/4P/ALTO	CFTR42W/GX24q/841	F42TBX/SPX41/A/4P	CF42DT/E/IN/841
	PL-T 42W/827/4P/ALTO	CFTR42W/GX24q/827	F42QBX/SPX27/A/4P	CF42DT/E/IN/827
	PL-T 42W/830/4P/ALTO	CFTR42W/GX24q/830	F42QBX/SPX30/A/4P	CF42DT/E/IN/830
	PL-T 42W/835/4P/ALTO	CFTR42W/GX24q/835	F42QBX/SPX35/A/4P	CF42DT/E/IN/835
	PL-T 42W/841/4P/ALTO	CFTR42W/GX24q/841	F42QBX/SPX41/A/4P	CF42DT/E/IN/841

Philips	GE	OSI
EL/mdT 5W	—	—
EL/mdT 9W	FLE10HT2/2/827	—
EL/mdT 11W	—	—
EL/mdT 13W	FLE13HT2/2/827	CF13EL/MINI/827
EL/mdT 13W 4K	—	CF13EL/MINI/841
EL/mdT 13W 5K	—	CF13EL/MINI/850/BL
EL/mdT 18W	FL20HT3/2/827	CF19EL/MINI/827
EL/mdT 23W	FLE23HT3/S/XL	CF23EL/MINI/827
EL/mdT 27W	—	—
EL/mdT 27W 4K	—	—
EL/mdT 27W 5K	—	—
EL/mdT 32W	—	CF30EL/TWIST/827
EL/dT 42W	FLE42HLX/2/XL	CF40EL/TWIT/827
EL/mdT 13W GU24	—	—
EL/mdT 18W GU24	—	—
EL/mdT 23W GU24	—	—
EL/A mCan 5W mCan	FLE/2/CAC/827	CF4EL/BI5/C/827
EL/A mCan 5W Can	FLE/2/CAM/827	—
EL/A mCan 9W	FLE9/2/CAC/SW/CD	—
EL/A Can 9W	FLE9/2/CAM/XL/CD	—
EL/A Fan 5W	—	—
EL/A G18 9W	—	—
EL/A G25 9W	FLE11/2/G25XL/CD	CF9EL/G25/827
EL/A G30 16W	FLE15/A3/G30	—
EL/A G40 23W	—	—
EL/A SWP 9W	—	CF9EL/A19/827
EL/A SWP 14W	FLE12/A19/827	CF14EL/A19/827
EL/A SWP 14W Bug-a-Way	FLE14/2/TC16/BUG	CF14EL/A19/Y/827
EL/A SWP 20W	FLE15/2/A21/SW/CD	—
EL/O OUTDOOR POST 14W	—	—
EL/A PAR38 23W 2-piece	—	—
EL/A R20 14W	FLE11/R20	CF14EL/R20/827
EL/A R30 15W	FLE15/A2/R30	CF16EL/BR30/827
EL/A R40 23W	FLE23/A4/R40	CF20EL/BR40/827
EL/A PAR38 23W	FLE26/2/PAR38/SW/CD	CF223EL/PAR38/827
EL/A R30 16W DIMM	—	CF15EL/BR30/DIM/827
EL/A R40 20W DIMM	—	—
EL/A PAR38 20W DIMM	—	CF15EL/BR30/DIM/8827
Universal 14W ALTO	—	—
Universal 20W ALTO	—	—
Universal 25W ALTO	—	—
Helix Twister EL/3W 11-23-34	FLE29HLX/2D3/827	CF28EL/3WAY/TWIST/827
32W Two Piece Circline	FEA30CIR/SW/CD	—
40W Two Piece Circline	—	—
14W Genie Pro Pack 6PK	FLE14TBX/2/SW/CD	—
18W Genie Pro Pack 6PK	—	—

ADDITIONAL INFORMATION

Fluorescent Cross Reference Guide

COLOR CROSS REFERENCE GUIDE

Philips		GE		OSI	
	SPEC 30 or 730		SP 30		D 30
	SPEC 35 or 735		SP 35		D 35
	SPEC 41 or 741		SP 41		D 41
Ultralume	27 or 27U	Designer 800	SPX 27		27K
	30U or 830		SPX 30		D 830
	35U or 835		SPX 35		D 835
	41U or 841		SPX 41		D 841
	C50		C50		DSGN50

LIGHT SOURCE COLOR CHART

Fluorescent Color	Color Abbreviation	Atmosphere	Light Output (%) In 4' Lamp	CCT	CRI	Lighted Appearance CIE Color Coordinates	
						X	Y
Cool White	CW	Cool	100	4100K	62	0.380	0.380
Deluxe Cool White	CWX	Cool	72	4100K	89	0.376	0.367
Daylight	D	Cool Daylight	85	6500K	79	0.313	0.337
Daylight Deluxe	DX	Cool Daylight	76	6500K	84	0.314	0.341
Lite White	LW	Cool	104	4200K	51	0.376	0.386
Natural	N	Neutral	69	3700K	90	0.384	0.357
3000K, SPEC30	SPEC30	Warm	105	3000K	70	0.444	0.409
3500K, SPEC35	SPEC35	Neutral	105	3500K	73	0.410	0.395
4100K, SPEC41	SPEC41	Cool	105	4100K	70	0.382	0.385
Advantage T12 30	ADV30	Warm	118	3000K	82	0.444	0.409
Advantage T12 35	ADV35	Neutral	118	3500K	82	0.410	0.395
Advantage T12 41	ADV41	Cool	118	4100K	82	0.382	0.385
Advantage T12 50	ADV50	Daylight	118	5000K	82	0.346	0.360
Warm White	VW	Warm	102	3000K	53	0.440	0.403
Colortone 50	C50	Daylight	72	5000K	92	0.345	0.359
Colortone 75	C75	Daylight Plus	66	7500K	95	0.299	0.316
3000K, Ultralume	30U	Warm	108	3000K	85	0.444	0.409
3500K, Ultralume	35U	Neutral	108	3500K	85	0.413	0.395
4100K, Ultralume	41U	Cool	108	4100K	85	0.382	0.385
5000K, Ultralume	50U	Daylight	93	5000K	85	0.346	0.356
3000K, TL 70	TL730	Warm	93	3000K	78	0.439	0.402
3500K, TL 70	TL735	Neutral	93	3500K	78	0.410	0.395
4100K, TL 70	TL741	Cool	93	4100K	78	0.382	0.385
5000K, TL 70	TL750	Daylight	90	5000K	76	0.346	0.356
3000K, TL 80	TL830	Warm	98	3000K	86	0.439	0.402
3500K, TL 80	TL835	Neutral	98	3500K	86	0.410	0.395
4100K, TL 80	TL841	Cool	98	4100K	86	0.382	0.385
5000K, TL 80	TL850	Daylight	97	5000K	86	0.346	0.356
3000K, TL 90	TL930	Warm	66	3000K	95	0.438	0.399
5000K, TL 90	TL950	Daylight	66	5000K	98	0.344	0.355
Advantage T8 830	ADV830	Warm	105	3000K	86	0.444	0.409
Advantage T8 835	ADV835	Neutral	105	3500K	86	0.410	0.395
Advantage T8 841	ADV841	Cool	105	4100K	86	0.382	0.385
Advantage T8 850	ADV850	Daylight	105	5000K	86	0.346	0.360

RESIDENTIAL APPLICATIONS LIGHT SOURCE COLOR CHART

Fluorescent Color	Light Output	Atmosphere	Light Output (%) In 4' Lamp	CCT	CRI	Lighted Appearance CIE Color Coordinates	
						X	Y
Homelight Cool White Plus®	Cool		105	4100K	62-70	0.382	0.385
Homelight Natural Sunshine®	Daylight		72	5000K	92	0.345	0.359
Homelight Soft White®	Warm		108	3000K	85	0.444	0.409

Correlated Color Temperature, CCT, describes the apparent color, or chromaticity, of a light source. Fluorescent light sources of 3000K, for example, Warm White or 3000K Ultralume, have a warm chromaticity, while 5000K lamps such as Colortone® 50 or 5000K Ultralume have a higher blue content and are considered to be cooler in color.

Color Rendering Index, CRI, is a relative value that indicates the color rendering quality of illumination provided by a light source. The higher the index number, the better the quality of illumination. While one lamp may have the same apparent color in CCT as another, its ability to render colors properly may be more or less than another light source. For example, Warm White 3000K 53 CRI lamps will not render colors of objects in an illuminated space as well as 3000K Ultralume 85 CRI lamps.

Both CCT and CRI should be cited together when properly describing light source color attributes.

ADDITIONAL INFORMATION

High Intensity Discharge Cross Reference Guide

METAL HALIDE ORDERING CODE CROSS REFERENCE GUIDE

Philips	GE	OSI	Venture	ANSI
<i>Metal Halide</i>	<i>Multi-Vapor</i>	<i>Metalarc</i>		
CDM35/T6/830	CMH39/T/U/830/G12	MC39T6/U/G12/830	N/C	M130/E
CDM35/TC/830	CMH39/TC/U/830/G8.5	MC39TC/U/G12/830	N/C	M130/E
CDM35/PAR20/M/SP(10°)	CMH39/PAR20/830/SP10(10°)	MCP39PAR20/U/830/SP(10°)	N/C	M130/O
CDM35/PAR20/M/FL(30°)	CMH39/PAR20/830/FL25(25°)	MCP39PAR20/U/830/FL(30°)	N/C	M130/O
CDM35/PAR30L/M/SP(10°)	CMH39PAR30L/SP10(10°)	MCP39PAR30LN/U/830/SP(10°)	N/C	M130/O
CDM35/PAR30L/M/FL(30°)	CMH39PAR30L/FL25(25°)	MCP39PAR30LN/U/830/FL(30°)	N/C	M130/O
MHC50/U/M/3K	N/C	N/C	N/C	M148/M110/E
MHC50/C/U/M/3K	N/C	N/C	N/C	M148/M110/E
MHC50/U/M/4K	N/C	N/C	N/C	M148/M110/E
MHC50/C/U/M/4K	N/C	N/C	N/C	M148/M110/E
MHC50/U/MP/3K	N/C	N/C	N/C	M148/M110/O
MHC50/U/MP/4K	N/C	N/C	N/C	M148/M110/O
CDM70/T6/830	CMH70/T/U/830/G12	MC70T6/U/G12/830	N/C	M98/M139/E
CDM70/T6/942	CMH70/T/U/942/G12	MC70T6/U/G12/940	N/C	M98/M139/E
CDM70/TC/830	CMH70/TC/U/830/G8.5	MC70TC/U/G8.5/930	N/C	M139/E
CDM70/PAR30L/M/SP(10°)	CMH70/U/PAR30L/15(15°)	MCP70PAR30LN/U/830/SP(12°)		M98/M143/O
CDM70PAR30L/M/FL(40°)	CMH70/U/PAR30L/40(40°)	MCP70PAR30LN/U/830/FL(30°)		M98/M143/O
CDM70/PAR38/SP/3K(15°)	CMH70/PAR38/830SP15	MCP70PAR38/U/830/SP(15°)	N/C	M98/M143/O
CDM70/PAR38/FL/3K(25°)	CMH70/PAR38/830FL25	MCP70PAR38/U/830/FL(25°)	N/C	M98/M143/O
CDM70/PAR38/SP/4K(15°)	N/C	N/C	N/C	M98/M143/O
CDM70/PAR38/FL/4K(25°)	N/C	N/C	N/C	M98/M143/O
MHC70/U/M/3K	CMH70/U/830/MED	N/C	N/C	M98/M143/E
MHC70/C/U/M/3K	CMH70/C/U/830/MED	N/C	N/C	M98/M143/E
MHC70/U/M/4K	N/C	N/C	N/C	M98/M143/E
MHC70/C/U/M/4K	N/C	N/C	N/C	M98/M143/E
MHC70/U/MP/3K	CMH70/U/830/MED/O	MCP70/U/MED/830	N/C	M98/M143/O
MHC70/C/U/MP/3K	CMH70/C/U/830/MED/O	MCP70/C/U/MED/830	N/C	M98/M143/O
MHC70/U/MP/4K	CMH70/U/942/MED/O	MCP70/U/MED/940	N/C	M98/M143/O
MHC70/C/U/MP/4K	CMH70/C/U/942/MED/O	MCP70/C/U/MED/940	N/C	M98/M143/O
CDM100/PAR38/SP/3K(15°)	CMH100/PAR38/830SP15	MCP100PAR38/U/830/SP(15°)	N/C	M90/M140/O
CDM100/PAR38/FL/3K(25°)	CMH100/PAR38/830FL25	MCP100PAR38/U/830/FL(25°)	N/C	M90/M140/O
CDM100/PAR38/SP/4K(15°)	N/C	N/C	N/C	M90/M140/O
CDM100/PAR38/FL/4K(25°)	N/C	N/C	N/C	M90/M140/O
MHC100/U/M/3K	CMH100/U/830/MED	N/C	N/C	M90/M140/E
MHC100/C/U/M/3K	CMH100/C/U/830/MED	N/C	N/C	M90/M140/E
MHC100/U/M/4K	N/C	N/C	N/C	M90/M140/E
MHC100/C/U/M/4K	N/C	N/C	N/C	M90/M140/E
MHC100/U/MP/3K	CMH100/U/830/MED/O	MPD100/U/MED/830	N/C	M90/M140/O
MHC100/C/U/MP/3K	CMH100/C/U/830/MED/O	MCP100/U/MED/830	N/C	M90/M140/O
MHC100/C/U/MP/3K	CMH100/C/U/830/MED/O	MPD100/C/U/MED/830	N/C	M90/M140/O
MHC100/C/U/MP/3K	CMH100/C/U/830/MED/O	MCP100/C/U/MED/830	N/C	M90/M140/O
MHC100/U/MP/4K	N/C	MPD100/U/MED/840	N/C	M90/M140/O
MHC100/C/U/MP/4K	N/C	MPD100/C/U/MED/840	N/C	M90/M140/O
CDM150/T6/830	CMH150/T/U/830/G12	MC150T6/U/G12/830	N/C	M142/E
CDM150/T6/942	CMH150/T/U/942/G12	N/C	N/C	M142/E
MHI150/U/M	MVR150/U/WM	N/C	MHI150W/U/EM	M107/E
MHI150/C/U/M	MVR150/C/U/WM	N/C	MHI150W/C/U/EM	M107/E
MHC150/U/M/3K	N/C	N/C	N/C	M102/M142/E
MHC150/C/U/M/3K	N/C	N/C	N/C	M102/M142/E
MHC150/U/M/4K	N/C	N/C	N/C	M102/M142/E
MHC150/C/U/M/4K	N/C	N/C	N/C	M102/M142/E
MHC150/U/MP/3K	CMH150/U/830/MED/O	MCP150/U/MED/830	N/C	M102/M142/O
MHC150/C/U/MP/3K	N/C	MCP150/C/U/MED/830	N/C	M102/M142/O
MHC150/U/MP/4K	N/C	N/C	N/C	M102/M142/O
MHC150/C/U/MP/4K	N/C	N/C	N/C	M102/M142/O
MSI75/BU/PS	MXR175/VBU/PA	MSI75/PS/BU-ONLY	MSI75W/BU/PS	M137/M152/E
MPI75/BU	MPR175/VBU/O	MP175/BU-ONLY	N/C	M57/O
MHI75/RFL(65°)	MVR175/PAR38FL/1(50°)	N/C	N/C	M57/E
MHI75/U/M	MVR175/U/MED	M175/U/MED	MHI75W/U/MED	M57/E
MHI75/C/U/M	MVR175/C/U/MED	M175/C/U/MED	MHI75W/C/U/MED	M57/E
MHI75/U	MVR175/U	M175/U	MHI75W/U	M57/E
MHI75/C/U	MVR175/C/U	M175/C/U	MHI75W/C/U	M57/E
MHI75/3K/BU	MVR175/SP30/U	M175/3K/BU-ONLY	N/C	M57/E
MSI75/BU	N/C	N/C	MSI75W/BU	M57/E
MS250/BU/PS	MVR250/VBU/PA	MS250/PS/BU-ONLY	MH250W/HBU/PS	M138/M153/E
MP250/BU	MPR250/VBU/O	MP250/BU-ONLY	N/C	M58/O
MH250/U	MVR250/U	M250/U	MH250W/U	M58/E
MH250/C/U	MVR250/C/U	M250/C/U	MH250W/C/U	M58/E
MH250/3K/BU	MVR250/SP30/U	M250/3K/BU-ONLY	MS250W/BU/3K	M58/E
CDM250S50V/O/4K	CMH250/U/830/R	N/C	N/C	S50/M168/O
MS320/U/PS	MVR320/VBU/HO/PA	MS320/PS/BU-ONLY	MH320W/U/ED28/PS	M132/M154/E
MS320/C/U/PS	MVR320/C/VBU/HO/PA	MS320/C/PS/BU-ONLY	MH320W/C/U/ED28/PS	M132/M154/E

ADDITIONAL INFORMATION

High Intensity Discharge Cross Reference Guide

METAL HALIDE ORDERING CODE CROSS REFERENCE GUIDE, CONTINUED

Philips	GE	OSI	Venture	ANSI
MP320/BU/PS	MPR320/VBU/XHO/PA	MP320/350/PS/BU-ONLY/BT28	N/C	M132/M154/O
MP320/C/BU/PS	MPR320/C/VBU/XHO/PA	MP320/350/C/PS/BU-ONLY/BT28	N/C	M132/M154/O
MS350/BU/PS	MVR/VBU/XHO/PA	N/C	N/C	M131/E
MS350/C/BU/PS	MVR/C/VBU/XHO/PA	N/C	N/C	M131/E
MP350/BU/PS	MPR350/VBU/PA	MP320/350/PS/BU-ONLY/BT28	MP350W/V/UVS/PS	M131/O
MP350/C/BU/PS	MPR350/C/VBU/PA	MP320/350/C/PS/BU-ONLY/BT28	MP350W/C/V/UVS/PS	M131/O
MS360/BU/EVW	MVR360/VBU/WM/HO	MS360/SS/BU-HOR	MS360W/BU/EM	M59/M165/S
MS360/C/BU/EVW	MVR360/C/VBU/WM/HO	MS360/C/SS/BU-HOR	MS360W/C/BU/EM	M59/M165/S
MP360/BU/EVW	MPR360/VBU/WM/O	MSP360/SS/BU-ONLY	N/C	M59/M165/O
MP360/C/BU/EVW	MPR360/C/VBU/WM/O	MSP360/C/SS/BU-ONLY	MP360W/C/BU/EM	M59/M165/O
CDM400551/V/O/4K	CMH400/U/830/R	N/C	N/C	S51/M169/O
MS400/BU/PS	MVR400/VBU/HO/PA	MS400/PS/BU-ONLY	MS400W/BU/PS	M135/M155/S
MS400/C/BU/PS	MVR400/C/VBU/HO/PA	MS400/C/PS/BU-ONLY	MS400W/C/BU/PS	M135/M155/S
MP400/BU	MPR400/VBU/HO/O	MP400/BU-ONLY	MP400W/BU	M59/O
MP400/C/BU	MPR400/C/VBU/HO/O	MP400/C/BU-ONLY	MP400W/C/BU	M59/O
MH400/U/ED28	MVR400/U/ED28	M400/U/BT28	MH400W/U/ED28	M59/E
MS400/BU/ED28	MVR400/VBU/BT28	MS400/BU-ONLY/BT28	MS400W/BU/ED28	M59/E
MS400/HOR	MVR400/HOR/MOG	MS400/HOR/BT28	N/C	M59/E
MS400/C/HOR	MVR400/C/HOR/MOG	MS400/C/HOR/BT28	N/C	M59/E
MH400/U	MVR400/U	M400/U	MH400W/U	M59/S
MH400/C/U	MVR400/C/U	M400/C/U	MH400W/C/U	M59/S
MH400/3K/U	MVR400/SP30/U	N/C	N/C	M59/S
MS400/BU	MVR400/VBU	MS400/BU-ONLY	MS400W/BU	M59/S
MS400/C/BU	MVR400/C/VBU	MS400/C/BU-ONLY	MS400W/C/BU	M59/S
MP400/BU/PS	MPR400/VBU/XHO/PA	MP350/400	N/C	M135/M155/O
MP400/C/BU/PS	MPR400/C/VBU/XHO/PA	N/C	N/C	M135/M155/O
MHT400/U	MVT400/VBU	MT400/BU-ONLY	N/C	M59/S
MHT400/C/U	MVT400/C/VBU	MT400/C/BU-ONLY	N/C	M59/S
MS1000/BU/BT37/PS	MVR1000/U/BT37/PA	M1000/PS/U/BT37	N/C	M141/E
MP1000/BU	MPR1000/VBU/O	MP1000/BU-ONLY	N/C	M47/O
MH1000/U/BT37	MVR1000/U/BT37	M1000/U/BT37	N/C	M47/E
MH1000/U	MVR1000/U	M1000/U	MH1000W/U	M47/S
MH1000/C/U	MVR1000/C/U	M1000/C/U	MH1000W/C/U	M47/S
MS1000/BU	MVR1000/VBU	MS1000/BU-ONLY	MS1000W/BU	M47/S
MS1000/C/BU	MVR1000/C/VBU	MS1000/C/BU-ONLY	MS1000W/C/BU	M47/S
MH1500/U	MVR1500/HBU	M1500/BU-HOR	MH1500W/HBU	M48/E
MH1500/U	MVR1500/HBD	M1500/BD	MH1500W/HBD	M48/E
MHD1800W	N/C	N/C	N/C	N/A
MHD1800/HV	N/C	N/C	N/C	N/A

CERAMALUX® HIGH PRESSURE SODIUM ORDERING CODE CROSS REFERENCE GUIDE

Philips	GE	OSI	ANSI
<i>Ceramalux</i>	<i>Lucalox</i>	<i>Lumalux</i>	
C35S76/M	LU35/MED	LU35/MED	S76
C35S76/D/M	LU35/D/MED	LU35/D/MED	S76
C50S68/M	LU50/MED	LU50/MED	S68
C50S68/D/M	LU50/D/MED	LU50/D/MED	S68
C50S68/ALTO	LU50	LU50/ECO	S68
C50S68/D/ALTO	LU50/D	LU50/D	S68
C70S62/M	LU70/MED	LU70/MED	S62
C70S62/D/M	LU70/D/MED	LU70/D/MED	S62
C70S62/ALTO	LU70/ECO	LU70/ECO	S62
C70S62/D/ALTO	LU70/D	LU70/D	S62
C70S62/RFL	N/C	N/C	S62
C100S54/M	LU100/MED	LU100/MED	S54
C100S54/D/M	LU100/D/MED	LU100/D/MED	S54
C100S54/ALTO	LU100/ECO	LU100/ECO	S54
C100S54/D/ALTO	LU100/D	LU100/D	S54
C150S55/M	LU150/MED	LU150/55/MED	S55
C150S55/D/M	LU150/D/MED	LU150/55/D/MED	S55
C150S55/ALTO	LU150/ECO	LU150/55/ECO	S55
C150S56/ALTO	LU150/100 (ED28)	LU150/100	S56
C200S66/ALTO	LU200/ECO	LU200/ECO	S66
C225S50/EW	N/C	N/C	S50
C250S50/ALTO	LU250/ECO	LU250/ECO	S50
C310S67	LU310	LU310/ECO	S67
C360S51/EW	N/C	N/C	S51
C400S51/ALTO	LU400/ECO	LU400/ECO	S51
C600S106	LU600/T	LU600/SUPER	S106
C1000S52/ED37	N/C	N/C	S52
C1000S52/ALTO	LU1000/ECO	LU1000	S52

ADDITIONAL INFORMATION

High Intensity Discharge Cross Reference Guide

CERAMALUX® COMFORT HIGH PRESSURE SODIUM ORDERING CODE CROSS REFERENCE GUIDE

Philips	GE	OSI	ANSI
<i>Ceramalux</i>	<i>Lucalox</i>	<i>Lumalux</i>	
C70S62/C/M	LU70/DX/MED	N/C	S62
C100S54/C/M	N/C	N/C	S54
C100S54/C	N/C	N/C	S54
C150S55/C/M	LU150/DX/MED	N/C	S55
C150S55/C	LU150/55/DX	N/C	S55
C250S50/C	LU250/DX	N/C	S50
C400S51/C	LU400/DX	N/C	S51

MERCURY VAPOR ORDERING CODE CROSS REFERENCE GUIDE

Philips	GE	OSI	ANSI
H46DL-40-50/DX	HR40/50DX45-46	H45/46DL-40/50/DX	H45/46
H43AV-75/DX	HR75DX43	H43AV-75/DX	H43
H38MP-100/DX	HR100DX38/A23	H38AV-100/DX	H38
H38HT-100	HR100A38	H38HT-100	H38
H38JA-100/DX	HR100DX38	H38JA-100/DX	H38
H39KB-175	HR175A39	H39KB-175	H39
H39KC-175/DX	HR175DX39	H39KC-175/DX	H39
H37KB-250	HR250A37	H37KB-250	H37
H37KC-250/DX	HR250DX37	H37KC-250/DX	H37
H33GL-400/DX	HR400DX33	H33GL-400/DX	H33
H33DN-400/DX	HR400RDX33	N/C	H33
H36GV-1000	HR1000A36	H36GV-1000	H36
H36GW-1000/DX	HR1000DX36	H36GW-1000/DX	H36

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Philips Lighting Company Locations

City	Address	Telephone No.	Fax No.
Somerset, NJ	200 Franklin Square Drive, P.O. Box 6800, Somerset, NJ 08875-6800	(732) 563-3000	(732) 563-3641
Markham, ON	281 Hillmount Road, Markham, ON, Canada L6C 2S3	(905) 201-4100	(905) 887-7938

Sales Offices—USA

City	Address	Telephone No.	Fax No.
Atlanta, GA	975 Cobb Place Blvd, NW, Suite 215, Kennesaw, GA 30144-4802	(770) 941-5946	(770) 941-5309
Boston, MA	3 Charlesview Road, Unit D, Hopedale, MA 01747-1552	(508) 966-5011	(508) 966-5120
Los Angeles, CA	P.O. Box 4377, Cerritos, CA 90703-4377	(562) 865-1007	(562) 860-3120
St. Louis, MO	10733 Sunset Office Drive, Suite 420, St. Louis, MO 63127	(314) 984 8788	(314) 984 0724

Sales Offices—Canada

City	Address	Telephone No.	Fax No.
Ancaster, ON		(905) 648-3756	(905) 648-5826
London, ON		(519) 433-7553	(519) 433-7637
Port Perry, ON		(905) 448-2877	(416) 915-6185
Sudbury, ON		(705) 670-1244	(705) 674-4402
Toronto, ON		(905) 201-4100	(905) 887-7938
Halifax, NS		(902) 455-9009	(902) 455-9009
Gatineau, QC		(819) 682-0215	(613) 321-3422
Quebec, QC		(418) 761-1239	(418) 761-1248
Montreal, QC		(514) 624-2521	(514) 626-2106
St. Clet, QC		(450) 456-3265	(514) 227-8191
St. Jean sur Richelieu, QC		(450) 741-1148	(450) 741-1149
Winnipeg, MB		(204) 669-3346	(204) 669-3350
Edmonton, AB		(780) 459-3353	(780) 459-3080
Calgary, AB		(403) 995-9557	(403) 995-9558
Burnaby, BC		(604) 272-3095	(604) 272-3531

Export, Business Group—Sales Offices and Lamp Technical Information, Export Sales

City	Address	Telephone No.	Fax No.
Somerset, NJ	200 Franklin Square Drive, P.O. Box 6800, Somerset, NJ 08875-6800	(732) 563-3033	(732) 563-3155

Customer Service Department/Order Entry Locations—USA

City	Address	Telephone No.	Fax No.
Somerset, NJ	200 Franklin Square Drive, P.O. Box 6800, Somerset, NJ 08875-6800		
	Industrial Commercial	1(800) 937-5483	1(800) 635-3818
	Consumer	1(800) 805-2517	1(800) 808-4899
	OEM	1(800) 832-2852	1(800) 937-8989
	Special Lighting	1(800) 437-2205	1(800) 616-0435
	TradeLink SM (www.tradelink.philips.com)	1(800) 238-0483	

Customer Service Department/Order Entry Locations—Canada

City	Address	Telephone No.	Fax No.
Markham, ON	281 Hillmount Road, Markham, ON, Canada L6C 2S3		
	Professional/Consumer/OEM	(905) 201-4100	(905) 887-9313
			1(800) 668-9020
	TradeLink SM (www.tradelink.philips.com)	1(800) 387-5393	
		1(800) 668-9009	

Customer Hotline/Technical Information

City	Address	End-users	Distributors
Somerset, NJ	200 Franklin Square Drive, P.O. Box 6800, Somerset, NJ 08875-6800	1(800) 555-0050	1(800) 752-2852



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