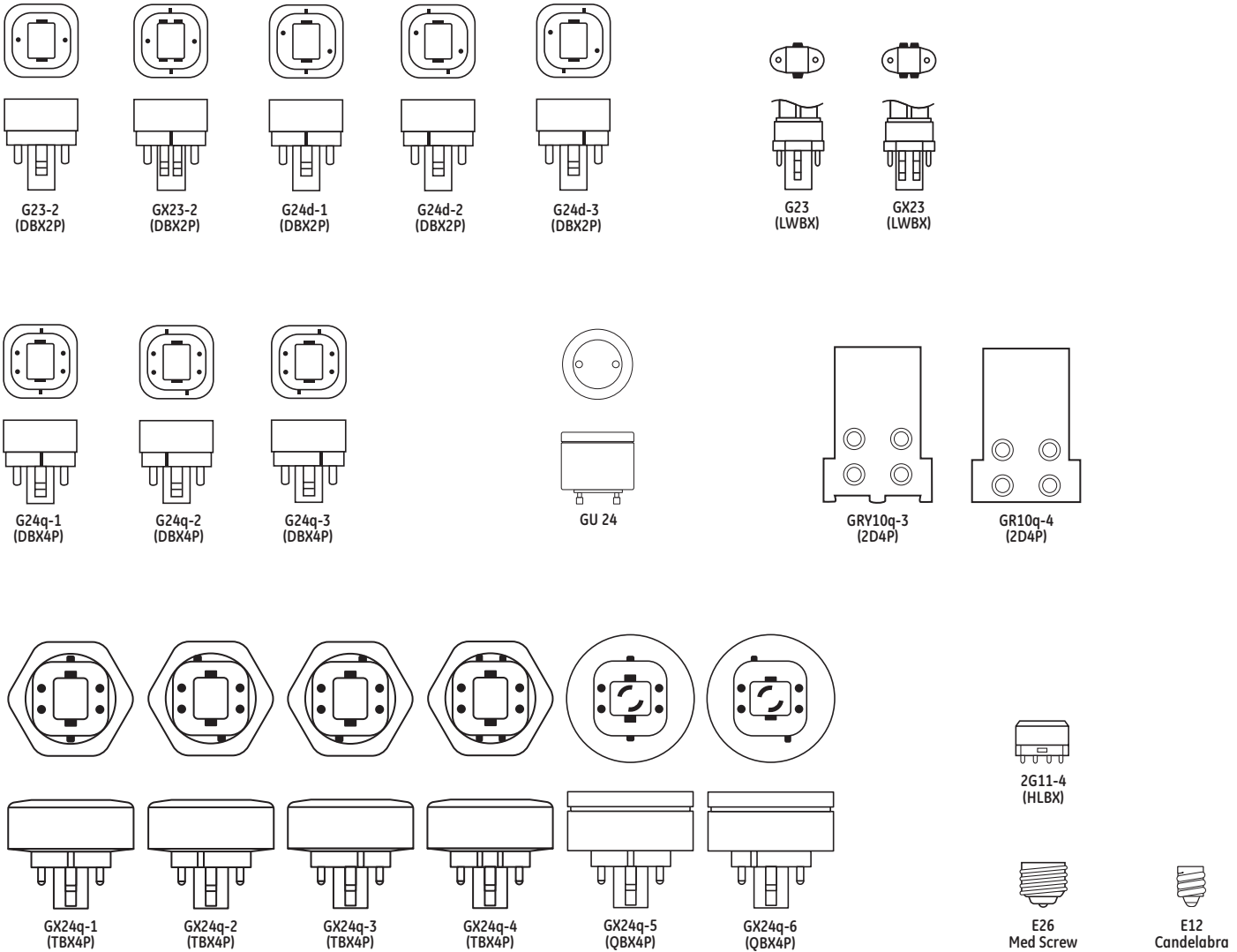


Compact Fluorescent Lamps

Base Identification



Introduction

GE Compact Fluorescent lamps offer many advantages:

- Dramatic energy cost savings...up to 77% vs. incandescent lamps of comparable light output
- Extra long life...most last 8 to 10 times longer, and some last up to 20 times longer, than standard incandescent lamps
- High light output comparable to, and in many cases exceeding, incandescent lamps replaced
- Excellent color rendering...rare earth tri-phosphor provides such high-quality color you won't believe it's fluorescent. Most types offer a choice of color options, from warm to cool, to let you select the tone and atmosphere you need.
- A choice of wattages, shapes and sizes to meet your lighting needs. Designed to fit everything from table lamps to wall sconces and ceiling fixtures.
- Many lamps use amalgam technology which provides stable lumen performance when operated in any position, over a wider range of ambient temperatures.

Compact Fluorescent Brand Name Cross-Reference

GE	OSRAM/SYLVANIA	PHILIPS
2D®	—	—
Biax®	Dulux® S	PL-S
High Lumen Biax®	Dulux® L	PL-L
Double Biax®	Dulux® D, D/E	PL-C
Triple Biax®	Dulux® T/E	PL-T
Quad Biax®	—	—
High Output Biax®	—	PL-H
Spiral®	Dulux® EL Twist	EL Twist

ATTENTION: This brand-name cross-reference chart is provided only as a quick reference. Other lamp company brand listings may only represent a near equivalent, versus an identical match to GE Lighting brands. Individual lamp manufacturers' performance specifications should be consulted. Lamp performance may be affected by environmental conditions, ballast type and/or other auxiliary equipment.

Product Information

Plug-in Lamps

2-Pin Low Wattage Biax® (pg 5-7)

- Compact size offers fixture and design flexibility
- GX23 and G23 bases are preheat lamps with internal starters
- 13-watt version also available with internal electronic starter, providing flicker-free instant on
- Available in warm and cool color temperatures
- TCLP Compliant

4-Pin High Lumen Biax® (pg 5-7)

- Available in a range of sizes and wattages for innovative compact luminaires
- High efficiency and outstanding performance in fixtures make them ideal for 2X2, 1X1 and indirect fixtures
- Available in warm to cool color temperatures; excellent color rendering

2-Pin Double Biax® (pg 5-8)

- More compact than low-wattage Biax® CFLs with higher lumen output—suitable for a broad range of applications
- Preheat lamps with starters; not suitable for use with dimming ballasts
- 26-watt version also available with internal electronic starter, providing flicker-free instant on
- Available in warm to cool color temperatures
- TCLP Compliant

4-Pin Double Biax® (pg 5-8)

- More compact than low-wattage Biax® CFLs with higher lumen output—suitable for a broad range of applications
- Dimmable and compatible with electronic ballasts
- Available in warm to cool color temperatures
- TCLP Compliant

4-Pin Triple Biax® (pg 5-8)

- GE's shortest, most compact Biax® lamp. 17-31% shorter than similar wattage Double Biax® lamps.
- 4-Pin, dimmable and compatible with electronic ballasts
- Available in a wide range of wattages: from 13 to 42 watts
- Available in warm to cool color temperatures
- TCLP Compliant

4-Pin High Output Biax® (pg 5-9)

- GE's highest light output compact fluorescent lamps
- High efficacy 72-75 LPW
- Dimmable, available in 5 colors (2,700 to 5,000K)
- Suitable for high-bay lighting
- TCLP Compliant

4-Pin 2D® (pg 5-9)

- Unique shape suitable for broad range of applications
- Uniform light distribution
- High light output – up to 200W incandescent equivalent

Self-Ballasted Lamps

Spiral® (pg 5-12)

- Long life – up to 12,000 hours or more
- One-piece unit screws directly into incandescent sockets
- Wide variety of wattages to meet application needs
- T2 & T3 Spiral® CFLs provide economical solution with small overall size
- The 42-watt T4 Spiral® CFL provides a 150W incandescent replacement in the smallest possible size (fits an 8.5" harp)
- Color-enhanced CFL Reveal® mimics the color of incandescent and halogen Reveal® lamps

3-Way (pg 5-15)

- T3 and T4 lamps available

GU 24 (pg 5-15)

- Long life – 10,000 hour rating
- Simple twist and lock design allows quick and easy lamp change
- Fits all fixtures with GU 24 base

Reflectors/Indoor PAR (pg 5-15)

- R20, R30, R40 and PAR38 glass reflectors available to meet application needs
- Medium based; fits most incandescent reflector applications
- R30 and R40 lamps available with dimming functionality

Decorative Shapes (pg 5-16)

- Variety of shapes (A-Line, Bullet, Candle, Globe, and Post) and wattages to meet all needs
- One-piece unit screws directly into incandescent sockets
- Candle-shaped CFLs available in both medium base and candelabra base

Specialty (pg 5-17)

- T3 13-watt Spiral® CFLs are available in green, red, blacklight, orange, yellow and blue

Incandescent

Halogen

High Intensity
Discharge

Fluorescent

Compact
FluorescentLED Lamps,
Tubes and Modules

Stage and Studio

Miniature, Sealed
Beam and Automotive

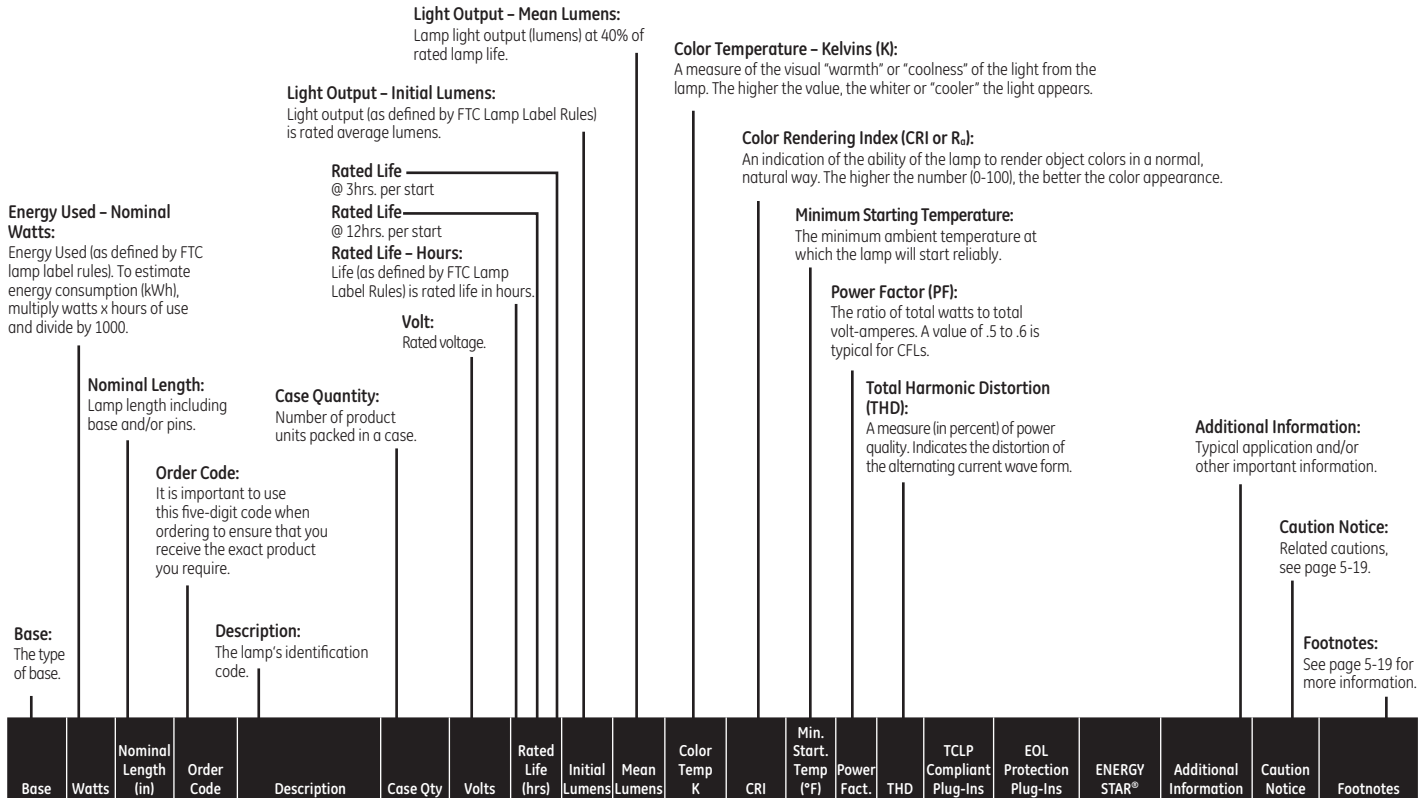
Projection

Compact Fluorescent Lamps

Headings in this catalog section

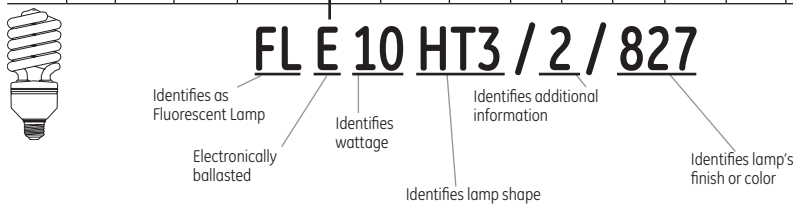
The following terms and descriptions can help you when checking Compact Fluorescent lamp specifications and when ordering

products. Within each product line, lamps are divided into families, within these families, lamps are then listed by wattage.







Self-Ballasted Lamps

Base	Watts	Nominal Length (in)	Order Code	Description	Case Qty	Volts	Rated Life (hrs)	Initial Lumens	Mean Lumens	Color Temp K	CRI	Min. Start. Temp (°F)	Power Fact.	THD	TCLP Compliant Plug-Ins	EOL Protection Plug-Ins	ENERGY STAR®	Additional Information	Caution Notice	Footnotes
Med	10	4.4	15829	FLE10HT3/2/827	10	120	8000	520	420	2700	82	5	0.6	120			★	T3 Spiral®, Boxed	153	1,7,8,9,10

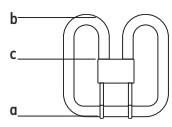


WHEN YOU DON'T KNOW THE LAMP DESCRIPTION

1. Identify bulb shape next to lamp information.
2. Measure bulb diameter using ruler in appendix section page D-1 to determine width in eighths of an inch.
3. Identify base type using table on page 5-4.
4. Find your lamp in the table containing the bulb shape, size and base.

Base	Watts	Nominal Length (in)	Order Code	Description	Case/Std. Pkg Qty	Volts	Initial Lumens	Mean Lumens	Color Temp K	CRI	Min. Start. Temp (°F)	Power Factor	THD	Rated Life (hrs)	Life In Years	Energy Cost \$/Year	ENERGY STAR® Ver. 1.0	Additional Information	Caution Notice	Footnotes
Self-Ballasted Lamps (continued)																				
Decorative Candle Candelabra Base (continued)																				
	9	4.3	60295	FLE9/3/CAC/SSBX3	4	120	380	304	5000K	82	-10	0.5	<85	8000	7.3	\$1.08		Candle Shape, Candelabra Base	GE2000-2946	19,20,21
	14	5.2	60300	FLE14/3/CACSWBX3	4	120	650	520	2700K	82	-10	0.5	<85	8000	7.3	\$1.69		Candle Shape, Candelabra Base	GE2000-2946	19,20,21
	14	5.2	60296	FLE14/3/CACSSBX3	4	120	650	520	5000K	82	-10	0.5	<85	8000	7.3	\$1.69		Candle Shape, Candelabra Base	GE2000-2946	19,20,21
Decorative Candle Medium Base																				
	9	5.4	47488	FLE9/2/CAM/XL/CD	12	120	430	344	2700K	80	-15	0.6	<85	10000	9.1	\$1.08		Candle Shape, Med Base	GE2000-2946	1,8,10,12,19,20,21
	9	5.4	16106	FLE9/2/CAM/827	10	120	430	344	2700K	82	-15	0.6	<85	6000	5.5	\$1.08		Candle Shape, Med Base	GE2000-2946	1,8,10,12,19,20,21
	9	4.8	60297	FLE9/3/CAM/SWBX3	4	120	380	304	2700K	82	-10	0.5	<85	8000	7.3	\$1.08		Candle Shape, Med Base	GE2000-2946	19,20,21
	9	4.8	60292	FLE9/3/CAM/SSBX3	4	120	380	304	5000K	82	-10	0.5	<85	8000	7.3	\$1.08		Candle Shape, Med Base	GE2000-2946	19,20,21
	9	5.4	24692	FLE9/2/CAM/SW/CD	12	120	430	344	2700K	82	-15	0.5	<85	6000	5.5	\$1.08		Candle Shape, Med Base	GE2000-2946	19,20,21
	9	5.5	79068	FLE9/2/CAC/XL2PK	3	120	430	344	2700K	82	-15	0.5	<85	10000	9.1	\$1.08		Candle Shape, Med Base	GE2000-2946	19,20,21
	9	5.4	49688	FLE9/2/CAM/XL2PK	3	120	430	344	2700K	80	-15	0.5	<85	10000	9.1	\$1.08		Candle Shape, Med Base	GE2000-2946	19,20,21
	14	5.4	60298	FLE14/3/CAMSWBX3	4	120	650	520	2700K	82	-10	0.5	<85	8000	7.3	\$1.69		Candle Shape, Med Base	GE2000-2946	19,20,21
	14	5.4	60294	FLE14/3/CAMSSBX3	4	120	650	520	5000K	82	-10	0.5	<85	8000	7.3	\$1.69		Candle Shape, Med Base	GE2000-2946	19,20,21
Decorative Globes																				
	9	3.2	74587	FLE9/3/G18/3PK	3	120	360	288	2700K	80	0	0.5	<85	8000	7.3	\$1.08		Globe G18	GE2000-2946	19,20,21
	9	3.2	74586	FLE9/3/G18/CD	3	120	360	288	2700K	80	0	0.5	<85	8000	7.3	\$1.08		Globe G18	GE2000-2946	19,20,21
	11	4.6	89629	FLE11/2/G25XL	10	120	500	400	2700K	82	-15	0.6	<85	10000	9.1	\$1.32		Globe G25	GE2000-2946	1,8,10,12,19,20,21
	11	4.6	47484	FLE11/2/G25XL/CD	12	120	500	400	2700K	82	-15	0.6	<85	10000	9.1	\$1.32		Globe G25	GE2000-2946	1,8,10,12,19,20,21
	11	4.6	78946	FLE11/2/G25/D/CD	3	120	450	360	6500K	82	-15	0.6	<85	10000	9.1	\$1.32		Globe G25	GE2000-2946	1,8,10,12,19,20,21
	11	4.6	78947	FLE11/2/G25/D/3P	3	120	450	360	6500K	82	-15	0.6	<85	10000	9.1	\$1.32		Globe G25	GE2000-2946	1,8,10,12,19,20,21
	11	4.6	85392	FLE11/2/G25XL3PK	3	120	500	400	2700K	82	-15	0.5	<85	10000	9.1	\$1.32		Globe G25	GE2000-2946	19,20,21
	11	4.6	89096	FLE11/2/G25XL2PK	3	120	500	400	2700K	82	-15	0.5	<85	10000	9.1	\$1.32		Globe G25	GE2000-2946	19,20,21
	15	4.6	89633	FLE15/2/G25XL	10	120	800	640	2700K	82	-15	0.5	<85	10000	9.1	\$1.81		Globe G25	GE2000-2946	1,8,10,12,19,20,21
	15	4.6	47485	FLE15/2/G25XL/CD	12	120	800	640	2700K	82	-15	0.6	<85	10000	9.1	\$1.81		Globe G25	GE2000-2946	1,8,10,12,19,20,21
	15	4.6	69633	FLE15/2/G25XLCD2	3	120	800	640	2700K	82	-15	0.5	<85	10000	9.1	\$1.81		Globe G25	GE2000-2946	19,20,21
	15	4.6	76132	FLE15/2/G25XL3P	3	120	800	640	2700K	82	-15	0.5	<85	10000	9.1	\$1.81		Globe G25	GE2000-2946	19,20,21
	Specialty																			
Colored Spiral®																				
	13	4.9	78955	FLE13HT3/2/GREEN	6	120	NA	NA	NA	NA	5	0.6	<85	8000	7.3	\$1.57		T3, Green, Boxed	GE2000-0948	1,8,9,10
	13	4.9	78956	FLE13HT3/2/RED	6	120	NA	NA	NA	NA	5	0.6	<85	8000	7.3	\$1.57		T3, Red, Boxed	GE2000-0948	1,8,9,10
	13	4.9	78957	FLE13HT3/2/BL	6	120	NA	NA	NA	NA	5	0.6	<85	8000	7.3	\$1.57		T3, Blacklight, Boxed	GE2000-0948	1,8,9,10
	13	4.9	78958	FLE13HT3/2/ORANGE	6	120	NA	NA	NA	NA	5	0.6	<85	8000	7.3	\$1.57		T3, Orange, Boxed	GE2000-0948	1,8,9,10
	13	4.9	78959	FLE13HT3/2/YELLOW	6	120	NA	NA	NA	NA	5	0.6	<85	8000	7.3	\$1.57		T3, Yellow, Boxed	GE2000-0948	1,8,9,10
	13	4.9	78960	FLE13HT3/2/BLUE	6	120	NA	NA	NA	NA	5	0.6	<85	8000	7.3	\$1.57		T3, Blue, Boxed	GE2000-0948	1,8,9,10
Germicidal																				
2G11	60	16.3	72301	GBX60/UVC	25									8000				Clear, 4-Pin UVC Source. WARNING: Risk group 3 (High Risk): UV emitted from this lamp. Avoid exposure of eyes and skin to unshielded lamp. Skin or eye injury will result. Life rating is based on UV maintenance curve and is measured at 80% of initial (100 hr) UVC output.		

Footnotes

- Fluorescent lamp lumens decline during life.
- Based on 60Hz reference circuit.
- 

10-watt, 16-watt and 28-watt 2D® lamps may be operated in any position. 21-watt, 38-watt, 39-watt and 55-watt 2D® lamps must be used with the leg marked (a) in the diagram below the bend (b), in order to avoid overheating the end of the cap marked (c).
- Life ratings for the F18BX preheat lamps are based on operating the lamp at 3 hrs. per start on a preheat type circuit. Operation on rapid start and instant start ballasts is not recommended.
- Cold cathode resistance is approximately 6.0 Ohms.
- 4-Pin lamp minimum starting temperature is a function of the ballast. Most ballasts are rated with a minimum starting temperature of 50°F (10°C). Ballasts are also available that provide reliable starting to 0°F (-18°C) and -20°F (-29°C).
- Most one-piece self-ballasted lamps for incandescent sockets and plug-in lamps with screw-in adapters do not work with clip-on shades.
- Lumens on one-piece self-ballasted lamp systems are measured base up.
- Best performance if operated base up and at 77°F (25°C) ambient temperature.
- Use only on 120V, 60Hz circuits. Do not use on dimming circuits, photocells or timers. Do not use in wet locations.
- Adapters rated at 40,000 hours life.
- Amalgam products experience stable brightness over a wider temperature range and in various operating positions.
- Life ratings are based on operating the lamp at 3 hrs. per start on a rapid start type ballast. Life rating on a preheat or instant start ballast is 25% lower.
- Use only on 120V, 60Hz circuits. Do not use on with photocells or timers. Do not use in wet locations.
- These lamps are only recommended for use with single-lamp ballasts or parallel-wired 2-lamp ballasts.
- UL Listed for wet locations. Use only on 120V, 60Hz circuits. Do not use on dimming circuits, photocells or timers.
- Max. bulb wall temperature not to exceed 180°C. Consult GE sales representative for further information.
- Life ratings are based on operating the lamp on a high frequency electronic rapid start type ballast.
- This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45 - 30 MHz. Not intended for use with emergency exit fixtures or lights.
Use only on 120V 60 Hz circuits.
When using CFL with motion sensor, preset "on" time on the device as long as possible to avoid frequent switching. (Otherwise lamp life will be decreased significantly)
- Not intended for use with dimmers. Some electronic timer and photosensor devices contain dimming circuitry, so before using them, check with its manufacturer to ensure compatibility with CFL bulbs.

- RISK OF ELECTRICK SHOCK**
DO NOT USE WHERE DIRECTLY EXPOSED TO WATER
Do not open - no user serviceable parts inside
- Lamp may shatter and cause injury if broken
Remove and install by grasping only plastic portion of the lamp
- SUITABLE FOR WET LOCATION
- SUITABLE FOR USE IN ENCLOSED LUMINAIRES
- NOT FOR USE IN ENCLOSED FIXTURE

Caution Notices

151

⚠ CAUTION

Lamp may shatter and cause injury if broken

- Remove and install by grasping only plastic portion of the lamp

GE2000-0948

⚠ CAUTION

Risk of electric shock

- Do not use where directly exposed to water
- Do not open—no user serviceable parts inside

Lamp may shatter and cause injury if broken

- Remove and install by grasping only plastic portion of the lamp

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45 - 30 MHz. Not intended for use with emergency exit fixture or lights, electronic timers, photocells, or with dimmers

GE2000-0950

⚠ CAUTION

Risk of electric shock

- Do not use where directly exposed to water
- Do not open—no user serviceable parts inside

Lamp may shatter and cause injury if broken

- Remove and install by grasping only plastic portion of the lamp

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45 - 30 MHz. Not intended for use with emergency exit fixtures or lights, or with dimmers. Not for use in enclosed fixtures.

GE2000-0951

⚠ CAUTION

Risk of electric shock

- Do not use where directly exposed to water
- Do not open—no user serviceable parts inside

Lamp may shatter and cause injury if broken

- Remove and install by grasping only plastic portion of the lamp

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45 - 30 MHz. Not intended for use with emergency exit fixtures or lights, or with dimmers. Not for use in enclosed fixtures.

Compact Fluorescent Lamps

Caution Notices (continued)

GE2000-2709

⚠ CAUTION

Risk of electric shock

- Do not use where directly exposed to water
- Do not open - no user serviceable parts inside

Lamp may shatter and cause injury if broken

- Remove and install by grasping only plastic portion of the lamp

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45 - 30 MHz. Not intended for use with emergency exit fixtures or lights, or with dimmers. Not for use in enclosed fixtures.

GE2000-2946

⚠ CAUTION

Risk of electric shock

- Do not open—no user serviceable parts inside
- Do not use where directly exposed to water or outdoors without an enclosed fixture

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45-30 MHz. Not intended for use with emergency exit fixtures or lights, electronic timers, photocells, or with dimmers.

GE2010-3449

⚠ CAUTION

Risk of electric shock

- Do not use where directly exposed to water
- Do not open—no user serviceable parts inside
- Use indoors only

Lamp may shatter and cause injury if broken

- Remove and install by grasping only plastic portion of the lamp

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45-30 MHz. Not intended for use with emergency exit fixtures or lights, in totally enclosed recessed fixtures, or with dimmers. Added weight may cause instability of free-standing portable lamps. Use only with portable lamps in which the distance from the bottom of the base to the top of the lamp holder does not exceed three times the base width. Use only with portable lamps which are provided with lamp shades.

GE2010-9353

⚠ CAUTION

Risk of electric shock

- Do not use where directly exposed to water
- Do not open - no user serviceable parts inside

Lamp may shatter and cause injury if broken

- Remove and install by grasping only plastic portion of the lamp

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45 - 30 MHz. Not intended for use with emergency exit fixtures or lights, or with dimmers. Not for use in enclosed fixtures.

GE2023-6025

⚠ CAUTION

Risk of electric shock

- Do not use where directly exposed to water
- Do not open - no user serviceable parts inside

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45 - 30 MHz. Not intended for use with emergency exit fixtures or lights, or with dimmers. Not for use in enclosed fixtures.

GE2024-7455

⚠ CAUTION

Risk of electric shock

- Do not use where directly exposed to water
- Do not open - no user serviceable parts inside

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45 - 30 MHz. Not intended for use with emergency exit fixtures or lights, or with dimmers.

GE2024-7456

⚠ CAUTION

Risk of electric shock

- Do not open—no user serviceable parts inside
- Do not use where directly exposed to water or outdoors without an enclosed fixture

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45-30 MHz. Not intended for use with emergency exit fixtures or lights, electronic timers, photocells, dimmers, or in totally enclosed recessed fixtures.

GE2025-1509

⚠ CAUTION

Risk of electric shock

- Do not use where directly exposed to water
- Do not open - no user serviceable parts inside

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45 - 30 MHz. Not intended for use with emergency exit fixtures or lights. Performance ratings are based on base up orientation.

Do not operate this product in ambient temperatures exceeding xx°C