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GOLD LAMPS

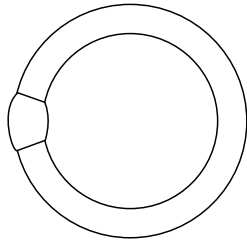
F25T8, F32T8	4-8
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SPECIAL APPLICATION LAMPS

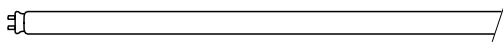
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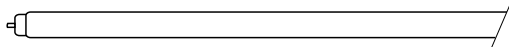
LAMP LOCATOR (Not Drawn to Scale)



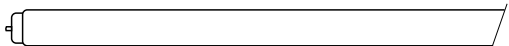
T9 Circline (1¹/₈" diameter) 4-Pin Base (G10q)



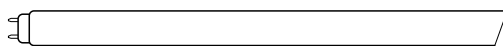
T5 (5/8" diameter) Miniature Bipin Base (G5)



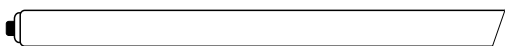
T6 (9/8" diameter) Single Pin Base (Fa8)



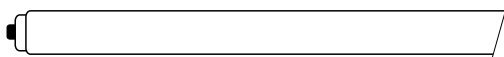
T8 (1" diameter) Single Pin Base (Fa8)



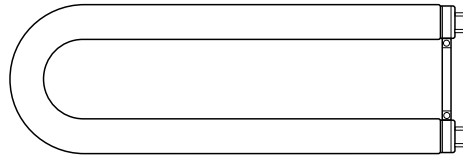
T8 (1" diameter) Medium Bipin Base (G13)



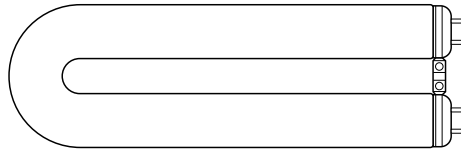
T8 (1" diameter) Recessed Double Contact Base (R17d)



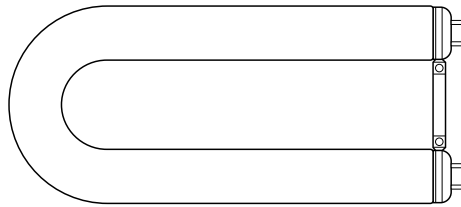
T10 (1¹/₄" diameter) Recessed Double Contact Base (R17d)



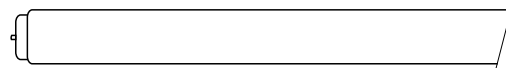
Mod-U-Line® T8/U6 (1" diameter) Medium Bipin Base (G13)



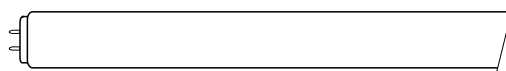
Mod-U-Line® T12/U3 (1¹/₂" diameter) Medium Bipin Base (G13)



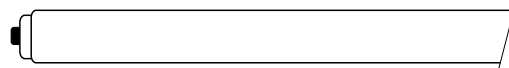
Mod-U-Line® T12/U6 (1¹/₂" diameter) Medium Bipin Base (G13)



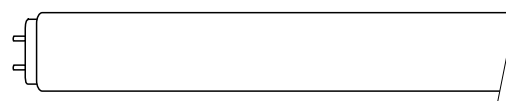
T12 (1¹/₂" diameter) Single Pin Base (Fa8)



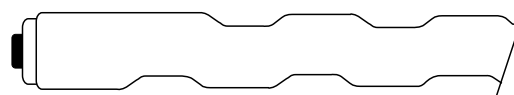
T12 (1¹/₂" diameter) Medium Bipin Base (G13)



T12 (1¹/₂" diameter) Recessed Double Contact Base (R17d)



T17 (2¹/₈" diameter) Mogul Bipin (G20)



Power Groove® (2¹/₈" diameter) Recessed Double Contact Base (R17d)

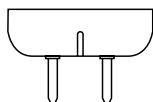
BASE IDENTIFICATION



**Min Bipin
G5**



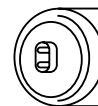
**Med Bipin
G13**



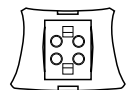
**Mog Bipin
G20**



**Single Pin
Fa8**



**Recessed Double
Contact
R17d**



**4-Pin
G10q
(Circline)**

COLOR SELECTION GUIDE

Better Color Rendering for Better Appearance

The color rendering of a light source describes that source's ability to accurately render the colors of perceived objects — people and things. As a general rule, the higher a light source's color rendering index (CRI or Ra) number, the better the lamp will make

things appear. SP lamps have CRIs of 70+ making them better color-rendering light sources than older, standard fluorescent lamps. SPX lamps have a CRI of 80+ for even higher color rendering with the same high efficiency.

Your Choice — "Warm" or "Cool"

A second consideration in light-source selection is the degree of visual "coolness" or "warmth" of the light source.

- Lamps at 3000K and lower are described as "warm"
- Lamps with values between 3000K and 4000K are moderate in tone
- Lamps with chromaticity values of 4000 Kelvin's (K) and higher are considered visually "cool"
- SP30 and SPX30 lamps produce a warm appearance, slightly enhancing reds and yellows
- SP35 and SPX35 lamps produce a balanced tone, midway between warm and cool
- SP41 and SPX41 lamps are cooler in tone, slightly biased toward blues and greens
- SPX50 is a very cool, high color rendering light source, designed to simulate natural outdoor daylight at high efficiency
- SP65 and SPX65 colors also provide very cool light similar to the "north sky" and are considered an ideal substitute for Daylight color lamps

Great Color — Without Giving Up Light

Specially developed rare-earth phosphors provide what conventional phosphors cannot — both high efficiency and good color rendering. Historically, good color rendering lamps, made with conventional phosphors, produced only 60% to 70% of the light of their standard counterparts. Now, in SP and SPX lamps technology has produced color-enhancing fluorescent lamps that actually deliver more light than older, standard lamp designs.

- SP lamps use a double coat of conventional and rare-earth phosphors for a moderately priced, good color rendering lamp
- SPX lamps use much more of the rare-earth phosphors for a premium-priced, very good color rendering lamp

SP and SPX Fluorescent Lamps

IF YOU NEED:	Better color emphasis than color white or warm white, plus higher light output...	Brighter, more vibrant colors than even the SP colors, plus the same high light output...
CHOOSE:	SP	SPX
IN A WARM TONE:	SP30—Especially good for low light levels. Use where you want people and furnishings to look good.	SPX30—Warm, but brings out high color contrast. Especially good for low light levels where colors must look very good - dining areas, exclusive stores, etc.
IN A MODERATE TONE*:	SP35—A tone acceptable to nearly everyone. Good for nearly any application where you want people and furnishings to look good.	SPX35—Moderate tone acceptable to nearly everyone. Brings out colors strongly. Especially good for all kinds of merchandising, and areas such as executive suites, conference rooms... Use wherever colors must look very good.
IN A COOL TONE:	SP41—A tone similar to cool white, but better color. Especially good for higher light levels wherever people and furnishings must look good.	SPX41—Cool tone and very good color. Renders all colors well, but emphasizes blues and greens. Use for offices, merchandising areas, and color-important industrial applications.
IN A VERY COOL TONE: (Daylight-simulating)	SP65—A tone similar to Daylight lamps, but more efficient.	SPX50 and SPX65—Provide a unique crisp clean look and blend well with outdoor daylight. Use for daylighted spaces, industrial clean rooms, special retailing and commercial areas. Renders all colors well, but emphasizes cool tones. May be too cool for some applications — especially at low light levels.

* The moderate color temperature of the SP35 and SPX35 is usually acceptable to both those who like warm and those who like cool environments. These colors are also useful for well-shielded lighting systems (wedge louvers, deep-cell parabolics) which tend to "cool off" the space visually.

Fluorescent Colors for Specific Applications

	Warm Tone	Moderate Tone	Cool Tone
RETAIL STORES			
Department, Specialty Discount, Mass Merchandiser	SP30, SPX30 —	SP35, SPX35 SP35, SPX35	— SP41, SPX41
OFFICES			
General Offices Private, Conference, Reception	— SP30, SPX30	SP35 SP35, SPX35	SP41 —
HOSPITALS			
(all but color-critical areas*)	SP30, SPX30	SP35, SPX35	SP41, SPX41
LODGING & FOOD SERVICE			
Meeting Rooms, Offices Living & Dining Areas	— SP30, SPX30	SP35 SPX35	— —
SCHOOLS, UNIVERSITIES	—	SP35	SP41
MUSEUMS, ART GALLERIES*	SPX30	SPX35	SPX50†
INDUSTRIAL*	SP30	SP35	SP41, SPX50†, SP65†, SPX65†

*Color-critical areas such as hospital nurseries, color matching booths, and art restoration rooms should use Chroma-50 (C50). The higher efficiency SPX50 color may also be suitable.
† High efficiency daylight-simulating color.

To learn more about B-I-A please visit us at our
WEB site: www.BiaGmbH.com



PRODUCT INFORMATION

T8 STARCOAT™ LAMPS (pg 4-7)

- More light over life – 95% lumen maintenance
- Enhanced color rendering... best in the industry
- High system efficiency delivers significant energy cost savings
- Long lamp life... 20,000 hours, 24,000 hour XL versions

STARCOAT™ XL AND ECOLUX® XL EXTRA-LIFE FLUORESCENT LAMPS (pg 4-7 and 4-8)

- Longer life... up to 20% longer than standard T8 lamps... provides an extra year of quality lighting
- Best color rendering of any standard T8
- Highest lumen maintenance (95%) in industry
- Ecolux® XL lamps are TCLP compliant and may reduce disposal costs

ECOLUX® T8 REDUCED MERCURY LAMPS WITH STARCOAT™ (pg 4-7)

- All the superior performance benefit of Starcoat™ (best color, more light over life) in a reduced mercury lamp
- TCLP compliant, substantially lowering disposal costs where applicable (state regulations vary, consult your state EPA)
- Also available... Ecolux® 4-foot and 8-foot T12 Watt-Miser®

F25T12 LAMPS FOR USE WITH T8 ELECTRONIC BALLASTS (pg 4-8)

- Maximum energy cost savings in a fluorescent system
 - Less energy than T8 or T12 Watt-Miser® with minimal reduction in light output
- 25-watt energy-saving replacement for 4' T8 fluorescent lamps
- Operates on T8 electronic ballast

GOLD LAMPS (pg 4-8, 4-11, 4-14, and 4-16)

- Block UV emissions
- Highly efficient
- Used in photo-sensitive applications, semi-conductor assembly, darkrooms

T8 MOD-U-LINE® U-SHAPED FLUORESCENT LAMPS (pg 4-8)

- Primarily used in 2x2 fixtures with prismatic or parabolic lenses
- Lower energy costs... 36% energy cost saving vs. F40T12 U-Tubes
- Longer lamp life than T12 Mod-U-Line®— 20,000 hours

8' T8 HIGH OUTPUT LAMPS (pg 4-8)

Cost efficient T8 lighting and long life

- High system efficiency delivers 38% cost energy savings
- 50% longer life than T12 high output lamps
- Wide choice of color options
- Operate at 400mA

PREHEAT FLUORESCENT LAMPS (pg 4-9 and 4-10)

- Require starters
- Available in various diameters (T5, T8, T12, and T17) and various lengths (6" to 60")
- Smaller sizes excellent for low-profile applications, including cabinet, display case lighting, emergency lighting, and transportation vehicles

FLUORESCENT T12 RAPID START LAMPS (pg 4-10 to 4-13)

- Popular for commercial lighting
- Upgrade new and existing facilities easily... change the lamp to SP/SPX color-improved lamps, available in standard and Watt-Miser® versions

T12 WATT-MISER® ENERGY-SAVING LAMPS (WM) (pg 4-10 and 4-11)

- Energy-saving replacement for standard T12 fluorescent lamps
- 12% to 20% savings in energy costs vs. standard fluorescent
- 83% to 89% of the light output of standard fluorescent

T12 MOD-U-LINE® U-SHAPED LAMPS (pg 4-12 and 4-13)

- Available in standard and Watt-Miser® versions
- Operate on standard or electronic rapid start ballasts

SLIMLINE LAMPS (pg 4-13)

- One of the most efficient fluorescent products available, up to 97 lumens per watt
- Single pin based lamps designed to operate on instant start ballast

8' SLIMLINE WATT-MISER® PLUS (pg 4-14)

- Maximum energy savings
- Same light output as standard Slimline lamps

8' SLIMLINE XL LAMPS (pg 4-15)

- Extra-life... lasts 25% longer than standard F96 lamps for reduced lamp replacement and maintenance costs
- Excellent color... color enhanced SP and SPX versions provide color so true and natural you won't believe it's fluorescent

HIGH OUTPUT LAMPS (pg 4-15 and 4-16)

- High light output and long life
- Produces about 45% more initial lumens than Slimline lamps of same size
- Usually operated at 800mA

PRODUCT INFORMATION (Continued)**VERY HIGH OUTPUT LAMPS (pg 4-17)**

- Where high light levels are required – factories, warehouses, gymnasiums, open areas
- Rapid start, operate at 1500mA

POWER GROOVE® LAMPS (pg 4-17)

- Highest light output of any fluorescent lamp
- Grooved bulb actually increases the effective arc length by about 10%
- Rapid start, operate at 1500mA

COV-R-GUARD™ SHATTER PROTECTED FLUORESCENT LAMPS (pg 4-17 and 4-18)

- Protective shield effectively contains shattered glass particles if lamp is broken
- Protects people, food, etc. from broken glass
- Available in many types and wattages, including T12, T8 with Starcoat™ and Ecolux® lamps

ALL-WEATHER LAMPS (pg 4-18)

- Top performance for outdoor applications, freezers, low temperature display cases
- For severe or continued low temperatures (down to -20° F or -29° C) and/or high wind velocities use T10 or T10J (Jacketed) lamps for better light output than T12 or T12J
- In still air environments, T12 and T12J offer equal or superior lumen performance
- Rated nominal lamp watts and initial lumens are peak values. Actual watt and lumen values may be somewhat lower in service, depending on ambient conditions

CIRCLINE FLUORESCENT LAMPS (pg 4-19)

- Used in household, kitchen and bath applications... where significant levels of uniform light are desired
- Designed for operation on rapid start ballasts; will also operate on preheat or switch start ballasts

APPLIANCE LAMPS (pg 4-19)

- Designed for intermittent burning service in appliances, ovens and dryers
- Rated at 3 hrs per start; life and watts depend upon the ballast

BLACKLIGHT AND REPROGRAPHIC (pg 4-20)

- Blacklight (BL) lamps are commonly used in “bug zappers”
- Blacklight Blue (BLB) lamps are often used decoratively in disco lighting and theatrical applications. These lamps are made with a special dark blue glass that filters most visible light.
- The Diazo Reprographic lamp emits a blue light, peaking at approximately 417 nanometers... used primarily in reprographic equipment

GERMICIDAL LAMPS (pg 4-20)

- Clear lamps with special UV transmitting glass
- The 253.7 nanometer radiation from the mercury discharge is passed through the glass
- Used in water and air purification applications

ELECTRONIC BALLASTS

Energy efficiency and high performance make Electronic Ballasts and Fluorescent Lamps the perfect match for total performance.

- Energy efficient — the most efficient system on the market to dramatically reduce electricity costs
- Broadest selection of electronic ballasts on the market
- Outstanding quality
- Industry-leading technical hotline provides specification and application support

See **Electronic Ballast System Catalog** for more information.

HEADINGS IN THIS CATALOG SECTION

The following terms and descriptions can help you when checking 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.

Product Code:

It is important to use this five-digit code when ordering to ensure that you receive the exact product you require.

Ⓢ Means this lamp meets Federal Minimum Efficiency Standards.

↗ Indicates that this is a lamp with high color rendering, which helps objects and persons illuminated to appear more true to life.

Energy Used - Nominal Watts:

Energy used (as defined by FTC Lamp Label Rules). To estimate energy consumption (kWh), multiply watts x hours of use and divide by 1000.

↘ Indicates that this is a reduced wattage option for lamps normally used in this application. Be sure to check wattage, lumens and life to determine which lamp is best suited to your needs.

Lamp Description:

The lamp's identification code.

Case Quantity:

Number of product units packed in a case.

Additional Information:

Typical application and/or other important information including footnotes ()*.

Initial Lumens:

Lamp light output after the initial 100 hours of operation.

Nominal Length:

Lamp length including base and/or pins.

Color Rendering Index (CRI or R_a):

An indication of the ability of the lamp to render object colors in a normal, natural way. The higher the number (0-100), the better the color appearance.

Color Temperature Kelvins (K):

A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears.

Rated Average Life - Hours:

Lamp burning hours to median life expectancy.

Mean Lumens:

Lamp light output at 40% of rated lamp life.

Nominal Product Watts	Product Code	Lamp Description	Case Qty.	Additional Information	Nominal Length in.	Lumens		Rated Avg. Life Hours	Color Temp. K	CRI
						Initial	Mean			
T8 LAMPS (Medium Bipin Unless Otherwise Noted)										
STARCOAT™ T8 LAMPS										
32	22656	Ⓢ ↗ F32T8/SPX35	36	RE 835 Phosphor, Starcoat™	48	2950	2800	20000	3500	86

F 32 T8 / SPX35

Identifies as Fluorescent lamp.

Identifies either the lamp's wattage or its length in inches.

Identifies the lamp shape and the bulb diameter in eighths of an inch.

Identifies the lamp finish or color.

WHEN YOU DON'T KNOW THE LAMP DESCRIPTION

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

WATT-MISER® ENERGY-SAVING REPLACEMENTS

Standard Lamp	40-watt F40 U Tube	40-watt F40 Rapid Start	40-watt F40 Rapid Start	75-watt F96 Slimline	110-watt F96 High Output	215-watt F96 Power Groove®	215-watt F96 1500 ma T12	
Energy Saving	Replace w/ 35-watt F40	Replace w/ 34-watt F40	Replace w/ 32-watt F40	Replace w/ 60-watt F96	Replace w/ 95-watt F96HO	Replace w/ 185-watt F96PG	Replace w/ 185-watt F96	Replace w/ 185-watt F96PG
Replacement	Watt-Miser® U Tube	Watt-Miser®	Watt-Miser® Plus	Watt-Miser®	Watt-Miser®	Watt-Miser®	Watt-Miser®	Watt-Miser®
Energy Savings*	\$7.00	\$12.00	\$16.00	\$18.00	\$18.00	\$36.00	\$27.00	\$27.00

* 10 ¢ per KWH over lamp life.

Nominal Watts	Product Code	Lamp Description	Case Qty.	Additional Information	Nominal Length in.	Lumens Initial	Lumens Mean	Rated Avg. Life Hours	Color Temp. K	CRI
T8 LAMPS (Medium Bipin Unless Otherwise Noted)										
STARCOAT™ T8 LAMPS										
17	22642	➤ / F17T8/SPX30	24	RE 830 Phosphor, Starcoat™	24	1350	1280	20000	3000	86
	22646	➤ / F17T8/SPX35	24	RE 835 Phosphor, Starcoat™	24	1350	1280	20000	3500	86
	22647	➤ / F17T8/SPX41	24	RE 841 Phosphor, Starcoat™	24	1350	1280	20000	4100	86
	17033	➤ / F17T8/SP30	24	RE 730 Phosphor, Starcoat™	24	1325	1260	20000	3000	78
	17035	➤ / F17T8/SP35	24	RE 735 Phosphor, Starcoat™	24	1325	1260	20000	3500	78
	17036	➤ / F17T8/SP41	24	RE 741 Phosphor, Starcoat™	24	1325	1260	20000	4100	78
25	22648	➤ / F25T8/SPX30	24	RE 830 Phosphor, Starcoat™	36	2150	2040	20000	3000	86
	22650	➤ / F25T8/SPX35	24	RE 835 Phosphor, Starcoat™	36	2150	2040	20000	3500	86
	22651	➤ / F25T8/SPX41	24	RE 841 Phosphor, Starcoat™	36	2150	2040	20000	4100	86
	15943	➤ / F25T8/SP30	24	RE 730 Phosphor, Starcoat™	36	2080	1970	20000	3000	78
	15944	➤ / F25T8/SP35	24	RE 735 Phosphor, Starcoat™	36	2080	1970	20000	3500	78
	15945	➤ / F25T8/SP41	24	RE 741 Phosphor, Starcoat™	36	2080	1970	20000	4100	78
32	22655	Ⓢ ➤ / F32T8/SPX30	36	RE 830 Phosphor, Starcoat™	48	2950	2800	20000	3000	86
	22656	Ⓢ ➤ / F32T8/SPX35	36	RE 835 Phosphor, Starcoat™	48	2950	2800	20000	3500	86
	22657	Ⓢ ➤ / F32T8/SPX41	36	RE 841 Phosphor, Starcoat™	48	2950	2800	20000	4100	86
	23460	Ⓢ ➤ / F32T8/SPX50	36	RE 850 Phosphor, Starcoat™	48	2800	2660	20000	5000	86
	15946	Ⓢ ➤ / F32T8/SP30	36	RE 730 Phosphor, Starcoat™	48	2850	2710	20000	3000	78
	25396	Ⓢ ➤ / F32T8/SP30/UPC	36	RE 730 Phosphor, Starcoat™, UPC Code	48	2850	2710	20000	3000	78
	15947	Ⓢ ➤ / F32T8/SP35	36	RE 735 Phosphor, Starcoat™	48	2850	2710	20000	3500	78
	25392	Ⓢ ➤ / F32T8/SP35/UPC	36	RE 735 Phosphor, Starcoat™, UPC Code	48	2850	2710	20000	3500	78
	15949	Ⓢ ➤ / F32T8/SP41	36	RE 741 Phosphor, Starcoat™	48	2850	2710	20000	4100	78
	25394	Ⓢ ➤ / F32T8/SP41/UPC	36	RE 741 Phosphor, Starcoat™, UPC Code	48	2850	2710	20000	4100	78
	23384	Ⓢ ➤ / F32T8/SP41/C	12	RE 741 Phosphor, Starcoat™, Pro-line™ Commercial Pack	48	2850	2710	20000	4100	78
	14613	Ⓢ ➤ / F32T8/SP50	36	RE 750 Phosphor, Starcoat™	48	2750	2610	20000	5000	78
	12132	Ⓢ ➤ / F32T8/SP65	36	RE 765 Phosphor, Starcoat™	48	2700	2565	20000	6500	75
40	22660	➤ / F40T8/SPX30	24	RE 830 Phosphor	60	3725	3350	20000	3000	84
	22661	➤ / F40T8/SPX35	24	RE 835 Phosphor	60	3725	3350	20000	3500	84
	22662	➤ / F40T8/SPX41	24	RE 841 Phosphor	60	3725	3350	20000	4100	80
	15950	➤ / F40T8/SP30	24	RE 730 Phosphor	60	3600	3240	20000	3000	75
	15951	➤ / F40T8/SP35	24	RE 735 Phosphor	60	3600	3240	20000	3500	75
	15952	➤ / F40T8/SP41	24	RE 741 Phosphor	60	3600	3240	20000	4100	75
STARCOAT XL™ EXTRA-LIFE LAMPS										
32	12528	Ⓢ ➤ / F32T8/XL/SPX30	36	RE 830 Phosphor, Starcoat™ XL (7)*	48	2950	2800	24000	3000	86
	12529	Ⓢ ➤ / F32T8/XL/SPX35	36	RE 835 Phosphor, Starcoat™ XL (7)*	48	2950	2800	24000	3500	86
	12530	Ⓢ ➤ / F32T8/XL/SPX41	36	RE 841 Phosphor, Starcoat™ XL (7)*	48	2950	2800	24000	4100	86
	12539	Ⓢ ➤ / F32T8/XL/SPX50	36	RE 850 Phosphor, Starcoat™ XL (7)*	48	2800	2660	24000	5000	86
	25359	Ⓢ ➤ / F32T8/XL/SP30	36	RE 730 Phosphor, Starcoat™ XL	48	2850	2710	24000	3000	78
	25360	Ⓢ ➤ / F32T8/XL/SP35	36	RE 735 Phosphor, Starcoat™ XL	48	2850	2710	24000	3500	78
	25363	Ⓢ ➤ / F32T8/XL/SP41	36	RE 741 Phosphor, Starcoat™ XL	48	2850	2710	24000	4100	78
ECOLUX® LAMPS – TCLP COMPLIANT										
32	25611	Ⓢ ➤ / F32T8/SPX30/ECO	36	RE 830 Phosphor, Ecolux® with Starcoat™	48	2950	2800	20000	3000	86
	25612	Ⓢ ➤ / F32T8/SPX35/ECO	36	RE 835 Phosphor, Ecolux® with Starcoat™	48	2950	2800	20000	3500	86
	25613	Ⓢ ➤ / F32T8/SPX41/ECO	36	RE 841 Phosphor, Ecolux® with Starcoat™	48	2950	2800	20000	4100	86
	26666	Ⓢ ➤ / F32T8/SP30/ECO	36	RE 730 Phosphor, Ecolux® with Starcoat™	48	2850	2710	20000	3000	78
	26667	Ⓢ ➤ / F32T8/SP35/ECO	36	RE 735 Phosphor, Ecolux® with Starcoat™	48	2850	2710	20000	3500	78
	26668	Ⓢ ➤ / F32T8/SP41/ECO	36	RE 741 Phosphor, Ecolux® with Starcoat™	48	2850	2710	20000	4100	78

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Nominal Watts	Product Code	Lamp Description	Case Qty.	Additional Information	Nominal Length in.	Lumens Initial	Lumens Mean	Rated Avg. Life Hours	Color Temp. K	CRI
T8 LAMPS (Medium Bipin Unless Otherwise Noted) (Continued)										
ECOLUX® XL EXTRA-LIFE LAMPS – TCLP COMPLIANT										
32	27619	Ⓢ ⚡ / F32T8/XL/SPX30/ECO	36	RE 830 Phosphor, Ecolux® XL with Starcoat™	48	2950	2800	24000	3000	86
	27620	Ⓢ ⚡ / F32T8/XL/SPX35/ECO	36	RE 835 Phosphor, Ecolux® XL with Starcoat™	48	2950	2800	24000	3500	86
	27621	Ⓢ ⚡ / F32T8/XL/SPX41/ECO	36	RE 841 Phosphor, Ecolux® XL with Starcoat™	48	2950	2800	24000	4100	86
	27616	Ⓢ ⚡ / F32T8/XL/SP30/ECO	36	RE 730 Phosphor, Ecolux® XL with Starcoat™	48	2850	2710	24000	3000	78
	27617	Ⓢ ⚡ / F32T8/XL/SP35/ECO	36	RE 735 Phosphor, Ecolux® XL with Starcoat™	48	2850	2710	24000	3500	78
	27618	Ⓢ ⚡ / F32T8/XL/SP41/ECO	36	RE 741 Phosphor, Ecolux® XL with Starcoat™	48	2850	2710	24000	4100	78
F25T12 ENERGY-SAVING LAMPS (Use On T8 Electronic Ballasts)										
25	11439	⚡ / F25T12/SP30	30	RE 730 Phosphor	48	2300	2140	20000	3000	70
	11440	⚡ / F25T12/SP35	30	RE 735 Phosphor	48	2300	2140	20000	3500	73
	11442	⚡ / F25T12/SP41	30	RE 741 Phosphor	48	2300	2140	20000	4100	72
GOLD LAMPS										
25	23008	⚡ / F25T8/GO	24	Gold	36	1360	1140	20000	-	-
32	23009	⚡ / F32T8/GO	36	Gold	48	1750	1470	20000	-	-
MOD-U-LINE® U-SHAPED LAMPS										
32	10483	Ⓢ ⚡ / F32T8/SPX30/U/6	12	RE 830 Phosphor, 6" Spacing Between Legs	22½	2800	2630	20000	3000	84
	10485	Ⓢ ⚡ / F32T8/SPX35/U/6	12	RE 835 Phosphor, 6" Spacing Between Legs	22½	2800	2630	20000	3500	84
	10488	Ⓢ ⚡ / F32T8/SPX41/U/6	12	RE 841 Phosphor, 6" Spacing Between Legs	22½	2800	2630	20000	4100	80
	10489	Ⓢ ⚡ / F32T8/SPX50/U/6	12	RE 850 Phosphor, 6" Spacing Between Legs	22½	2660	2510	20000	5000	80
	10479	Ⓢ ⚡ / F32T8/SP30/U/6	12	RE 730 Phosphor, 6" Spacing Between Legs	22½	2700	2565	20000	3000	75
	23585	Ⓢ ⚡ / F32T8/SP35/U/6	12	RE 735 Phosphor, 6" Spacing Between Legs	22½	2700	2565	20000	3500	75
	10480	Ⓢ ⚡ / F32T8/SP41/U/6	12	RE 741 Phosphor, 6" Spacing Between Legs	22½	2700	2565	20000	4100	75
8' LAMPS (Single Pin)										
59	23414	Ⓢ ⚡ / F96T8/SPX30	24	RE 830 Phosphor	96	5950	5440	15000	3000	84
	23415	Ⓢ ⚡ / F96T8/SPX35	24	RE 835 Phosphor	96	5950	5440	15000	3500	84
	23416	Ⓢ ⚡ / F96T8/SPX41	24	RE 841 Phosphor	96	5950	5440	15000	4100	80
	23575	Ⓢ ⚡ / F96T8/SPX50	24	RE 850 Phosphor	96	5650	5300	15000	5000	80
	23407	Ⓢ ⚡ / F96T8/SP30	24	RE 730 Phosphor	96	5800	5310	15000	3000	75
	23411	Ⓢ ⚡ / F96T8/SP35	24	RE 735 Phosphor	96	5800	5310	15000	3500	75
	23412	Ⓢ ⚡ / F96T8/SP41	24	RE 741 Phosphor	96	5800	5310	15000	4100	75
8' HIGH OUTPUT LAMPS (400mA, Recessed Double Contact Base)										
86	12532	Ⓢ ⚡ / F96T8/SPX30/HO	24	RE 830 Phosphor (7)*	96	8200	7380	18000	3000	84
	12533	Ⓢ ⚡ / F96T8/SPX35/HO	24	RE 835 Phosphor (7)*	96	8200	7380	18000	3500	84
	12534	Ⓢ ⚡ / F96T8/SPX41/HO	24	RE 841 Phosphor (7)*	96	8200	7380	18000	4100	80
	12535	Ⓢ ⚡ / F96T8/SPX50/HO	24	RE 850 Phosphor (7)*	96	8200	7380	18000	5000	80
	12536	Ⓢ ⚡ / F96T8/SP30/HO	24	RE 730 Phosphor (7)*	96	8000	7200	18000	3000	75
	12537	Ⓢ ⚡ / F96T8/SP35/HO	24	RE 735 Phosphor (7)*	96	8000	7200	18000	3500	75
	12538	Ⓢ ⚡ / F96T8/SP41/HO	24	RE 741 Phosphor (7)*	96	8000	7200	18000	4100	75

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PREHEAT LAMPS (Starter Required)										
T5 LAMPS (Miniature Bipin)										
4	10004	F4T5/CW	24	Cool White	6	135	100	6000	4100	60
	15983	F4T5/CW CARD	10	Cool White, Carded	6	135	100	6000	4100	60
6	10032	F6T5/CW	24	Cool White	9	295	235	7500	4100	60
	15986	F6T5/CW CARD	10	Cool White, Carded	9	295	235	7500	4100	60
	10028	F6T5/D	24	Daylight	9	230	185	7500	6500	75
8	10059	F8T5/CW	24	Cool White	12	400	320	7500	4100	60
	15987	F8T5/CW CARD	10	Cool White, Carded	12	400	320	7500	4100	60
	10064	F8T5/WW	24	Warm White	12	410	330	7500	3000	52
	25425	F8T5/WW CARD	10	Warm White, Carded	12	410	330	7500	3000	52
	10055	F8T5/D	24	Daylight	12	330	265	7500	6500	75
13	10086	F13T5/CW	24	Cool White	21	850	705	7500	4100	60
	10089	F13T5/WW	24	Warm White	21	870	720	7500	3000	52
	25426	F13T5/WW CARD	10	Warm White, Carded	21	870	720	7500	3000	52
T8 LAMPS (Medium Bipin)										
13	10098	F13T8/CW	24	Cool White	12	565	480	7500	4100	60
14	10104	F14T8/CW	24	Cool White	15	685	580	7500	4100	60
15	19644 /	F15T8/SPX30	24	RE 830 Phosphor	18	1000	900	7500	3000	82
	19645 /	F15T8/SPX35	24	RE 835 Phosphor	18	1000	900	7500	3500	82
	17911 /	F15T8/SP35	24	RE 735 Phosphor	18	940	850	7500	3500	75
	19643 /	F15T8/SP41	24	RE 741 Phosphor	18	940	850	7500	4100	72
	21326 /	F15T8/KB 6PK	24	Kitchen and Bath ULTRA™	18	940	850	7500	3000	70
	10142	F15T8/CW	24	Cool White	18	825	725	7500	4100	60
	10143	F15T8/CW 6PK	24	Cool White	18	825	725	7500	4100	60
	10147	F15T8/WW	24	Warm White	18	845	745	7500	3000	52
	10134	F15T8/D	24	Daylight	18	700	615	7500	6500	75
30	13968 /	F15T8/SUN 6PK	24	Sunshine	18	620	525	7500	5000	90
	16323 /	F30T8/SPX30	24	RE 830 Phosphor	36	2300	2140	7500	3000	82
	22747 /	F30T8/KB 6PK	24	Kitchen and Bath ULTRA™	36	2125	1910	7500	3000	70
	10316	F30T8/CW 6PK	24	Cool White	36	2175	1980	7500	4100	60
	10318	F30T8/WW 24PK	24	Warm White	36	2250	1980	7500	3000	52
	10310	F30T8/D 24PK	24	Daylight	36	1850	1625	7500	6500	75
T12 LAMPS (Medium Bipin)										
14	10116	F14T12/CW	24	Cool White	15	650	550	9000	4100	60
	10117	F14T12/CW 6PK	24	Cool White	15	650	550	9000	4100	60
	22979 /	F14T12/KB 6PK	24	Kitchen and Bath ULTRA™	15	700	650	9000	3000	70
15	10183	F15T12/CW 6PK	24	Cool White	18	760	685	9000	4100	60
	10185	F15T12/WW	24	Warm White	18	780	700	9000	3000	52
	22745 /	F15T12/KB 6PK	24	Kitchen and Bath ULTRA™	18	785	730	9000	3000	70

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PREHEAT LAMPS (Starter Required) (Continued)										
T12 LAMPS (Medium Bipin) (Continued)										
20	15109 /	F20T12/SPX30	24	RE 830 Phosphor	24	1300	1220	9000	3000	82
	15354 /	F20T12/SPX35	24	RE 835 Phosphor	24	1300	1220	9000	3500	82
	14423 /	F20T12/SP35	24	RE 735 Phosphor	24	1275	1200	9000	3500	73
	15353 /	F20T12/SP41	24	RE 741 Phosphor	24	1275	1200	9000	4100	72
	21325 /	F20T12/KB 6PK	24	Kitchen and Bath ULTRA™	24	1275	1200	9000	3000	70
	10213	F20T12/CW	24	Cool White	24	1200	1150	9000	4100	60
	10214	F20T12/CW 6PK	24	Cool White	24	1200	1150	9000	4100	60
	10217	F20T12/WW	24	Warm White	24	1250	1150	9000	3000	52
	25577	F20T12/WW/UPC	24	Warm White, UPC Code	24	1250	1150	9000	3000	52
	10205	F20T12/D	24	Daylight	24	1025	945	9000	6500	75
	25575	F20T12/D/UPC	24	Daylight, UPC Code	24	1025	945	9000	6500	75
	38114 /	F20T12/C50	24	Chroma 50	24	875	790	9000	5000	90
	14419 /	F20T12/SUN	24	Sunshine	24	875	790	9000	5000	90
	10231	F20T12/B 6PK	24	Blue	24	450	330	9000	-	-
	10233	F20T12/G 6PK	24	Green	24	1575	975	9000	-	-
T17 LAMPS (Mogul Bipin)										
82	43443 ↗	F90T17/CW/WM	12	Cool White, Watt-Miser® (1)*	60	5750	5060	9000	4100	60
90	10643	F90T17/CW	12	Cool White	60	6000	5280	9000	4100	60
T12 RAPID START LAMPS (Medium Bipin)										
F30T12 LAMPS										
25	14425 ↗ /	F30T12/SP35/RS/WM	24	RE 735 Phosphor, Watt-Miser® (1)*	36	2025	1780	18000	3500	73
	44599 ↗	F30T12/CW/RS/WM	24	Cool White, Watt-Miser® (1)*	36	1925	1640	18000	4100	60
	44600 ↗	F30T12/WW/RS/WM	24	Warm White, Watt-Miser® (1)*	36	1975	1680	18000	3000	52
30	15108 /	F30T12/SPX30/RS	24	RE 830 Phosphor	36	2375	2140	18000	3000	82
	15355 /	F30T12/SPX35/RS	24	RE 835 Phosphor	36	2375	2140	18000	3500	82
	15085 /	F30T12/SP35/RS	24	RE 735 Phosphor	36	2350	2120	18000	3500	73
	15267 /	F30T12/SP41/RS	24	RE 741 Phosphor	36	2350	2120	18000	4100	72
	10357	F30T12/CW/RS	24	Cool White	36	2200	1910	18000	4100	60
	39176	F30T12/CW/RS 6PK	24	Cool White	36	2200	1910	18000	4100	60
	10359	F30T12/WW/RS	24	Warm White	36	2275	1980	18000	3000	52
	10365	F30T12/D/RS	24	Daylight	36	1900	1650	18000	6500	75
	38115 /	F30T12/C50/RS	24	Chroma 50	36	1650	1350	18000	5000	90
F40T12 LAMPS										
32	14225 © ↗ /	F40SP35/RS/WMP 30PK	30	RE 735 Phosphor, Watt-Miser® Plus (1, 7)*	48	2650	2400	20000	3500	80
	14221 © ↗	F40CW/RS/WMP 30PK	30	Cool White, Watt-Miser® Plus (1, 7)*	48	2500	2200	20000	4100	70

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T12 RAPID START LAMPS (Medium Bipin) (Continued)									
F40T12 LAMPS (Continued)									
34	14627	Ⓢ ⚡ / F40SPX30/RS/WM	30	RE 830 Phosphor, Watt-Miser® (1)*	48	2900 2610	20000	3000	82
	14628	Ⓢ ⚡ / F40SPX35/RS/WM	30	RE 835 Phosphor, Watt-Miser® (1)*	48	2900 2610	20000	3500	82
	14811	Ⓢ ⚡ / F40SPX41/RS/WM	30	RE 841 Phosphor, Watt-Miser® (1)*	48	2900 2610	20000	4100	80
	23459	Ⓢ ⚡ / F40SPX50/RS/WM	30	RE 850 Phosphor, Watt-Miser® (1)*	48	2700 2430	20000	5000	80
	14200	Ⓢ ⚡ / F40SP30/RS/WM	30	RE 730 Phosphor, Watt-Miser® (1)*	48	2750 2475	20000	3000	70
	25401	Ⓢ ⚡ / F40SP30/RS/WM/UPC	30	RE 730 Phosphor, Watt-Miser®, UPC Code (1)*	48	2750 2475	20000	3000	70
	13807	Ⓢ ⚡ / F40SP35/RS/WM	30	RE 735 Phosphor, Watt-Miser® (1)*	48	2750 2475	20000	3500	73
	23486	Ⓢ ⚡ / F40SP35/WM/C 10PK	10	RE 735 Phosphor, Watt-Miser®, Pro-line™ Commercial Pack (1)*	48	2750 2475	20000	3500	73
	21858	Ⓢ ⚡ / F40SP35/RS/WM/UPC 6PK	24	RE 735 Phosphor, Watt-Miser®, UPC Code (1)*	48	2750 2475	20000	3500	73
	13809	Ⓢ ⚡ / F40SP41/RS/WM	30	RE 741 Phosphor, Watt-Miser® (1)*	48	2750 2475	20000	4100	72
	25397	Ⓢ ⚡ / F40SP41/RS/WM/UPC	30	RE 741 Phosphor, Watt-Miser®, UPC Code (1)*	48	2750 2475	20000	4100	72
	12134	Ⓢ ⚡ / F40SP65/RS/WM	30	RE 765 Phosphor, Watt-Miser® (1)*	48	2650 2430	20000	6500	75
	13803	Ⓢ ⚡ / F40CW/RS/WM 30PK	30	Cool White, Watt-Miser® (1)*	48	2650 2280	20000	4100	60
	25391	Ⓢ ⚡ / F40CW/RS/WM/UPC	30	Cool White, Watt-Miser®, UPC Code (1)*	48	2650 2280	20000	4100	60
	23485	Ⓢ ⚡ / F40CW/RS/WM/C 10PK	10	Cool White, Watt-Miser®, Pro-line™ Commercial Pack (1)*	48	2650 2280	20000	4100	60
	13822	Ⓢ ⚡ / F40LW/RS/WM 30PK	30	Lite White, Watt-Miser® (1)*	48	2825 2430	20000	4200	49
	13821	Ⓢ ⚡ / F40WW/RS/WM 30PK	30	Warm White, Watt-Miser® (1)*	48	2700 2320	20000	3000	52
	25398	Ⓢ ⚡ / F40WW/RS/WM/UPC	30	Warm White, Watt-Miser®, UPC Code (1)*	48	2700 2320	20000	3000	52
	14655	Ⓢ ⚡ / F40DX/RS/WM	30	Deluxe Daylight, Watt-Miser® (1)*	48	1950 1620	20000	6500	84
	19217	⚡ / F40/C50/RS/WM	30	Chroma 50, Watt-Miser® (1)*	48	2000 1720	20000	5000	90
40	15079	Ⓢ / F40SPX30 30PK	30	RE 830 Phosphor	48	3400 3090	20000	3000	82
	15083	Ⓢ / F40SPX35 30PK	30	RE 835 Phosphor	48	3400 3090	20000	3500	82
	15084	Ⓢ / F40SPX41 30PK	30	RE 841 Phosphor	48	3350 3050	20000	4100	80
	23457	Ⓢ / F40SPX50	30	RE 850 Phosphor	48	3200 2860	20000	5000	80
	15075	Ⓢ / F40SP30 30PK	30	RE 730 Phosphor	48	3250 2950	20000	3000	70
	15077	Ⓢ / F40SP35 30PK	30	RE 735 Phosphor	48	3200 2910	20000	3500	73
	20463	Ⓢ / F40SP35/UPC	30	RE 735 Phosphor, UPC Code	48	3200 2910	20000	3500	73
	15078	Ⓢ / F40SP41 30PK	30	RE 741 Phosphor	48	3200 2910	20000	4100	72
	23382	Ⓢ / F40SP41/C	10	RE 741 Phosphor, Pro-line™ Commercial Pack	48	3200 2910	20000	4100	72
	12133	Ⓢ / F40SP65	30	RE 765 Phosphor	48	3050 2775	20000	6500	75
	25400	Ⓢ / F40SP65/UPC	30	RE 765 Phosphor, UPC Code	48	3050 2775	20000	6500	75
	13969	Ⓢ / F40D/ULTRA 6PK	24	Daylight ULTRA™, Retail Pack	48	3050 2775	20000	6500	75
	14654	Ⓢ / F40DX	30	Deluxe Daylight	48	2250 1910	20000	6500	84
	27385	Ⓢ / F40DX 10PK	10	Deluxe Daylight	48	2250 1910	20000	6500	84
	21323	Ⓢ / F40KB 6PK	24	Kitchen and Bath ULTRA™	48	3400 3090	20000	3000	82
	40333	Ⓢ / F40KB/TWIN	9	Kitchen and Bath ULTRA™, Twin Pack	48	3400 3090	20000	3000	82
	14440	Ⓢ / F40/RES/SLV	30	Residential Light, Sleeved	48	3150 2860	15000	4100	72
	14433	Ⓢ / F40/RES/SLV 6PK	24	Residential Light, Sleeved 6-pack	48	3150 2860	15000	4100	72
	14441	Ⓢ / F40/RES/TWIN	9	Residential Light, Twin Pack	48	3150 2860	15000	4100	72
	13797	Ⓢ / F40N 30PK	30	Natural	48	2100 1740	20000	3700	90
	13794	Ⓢ / F40/C50 30PK	30	Chroma 50	48	2250 1870	20000	5000	90
	25399	Ⓢ / F40C50/UPC	30	Chroma 50, UPC Code	48	2250 1870	20000	5000	90
	12224	Ⓢ / F40/SUN 6PK	24	Sunshine	48	2250 1870	20000	5000	90
	13795	Ⓢ / F40/C75 30PK	30	Chroma 75	48	1950 1680	20000	7500	92
	10535	Ⓢ / F40CG 6PK	24	Cool Green	48	2850 2450	20000	-	-
	10514	Ⓢ / F40B 6PK	24	Blue	48	1200 720	20000	-	-
	10517	Ⓢ / F40G 6PK	24	Green	48	4000 2000	20000	-	-
	10522	Ⓢ / F40GO 6PK	24	Gold	48	2150 1830	20000	-	-

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Nominal Watts	Product Code	Lamp Description	Case Qty.	Additional Information	Nominal Length in.	Lumens Initial	Lumens Mean	Rated Avg. Life Hours	Color Temp. K	CRI
T12 RAPID START LAMPS (Medium Bipin) (Continued)										
F40T12 XL EXTRA-LIFE LAMPS										
40	18331	F40XL/SPX30	30	RE 830 Phosphor, Extra-Life (7)*	48	3400	3060	24000	3000	82
	18332	F40XL/SPX35	30	RE 835 Phosphor, Extra-Life (7)*	48	3400	3060	24000	3500	82
	18333	F40XL/SPX41	30	RE 841 Phosphor, Extra-Life (7)*	48	3400	3060	24000	4100	80
	23471	F40XL/SPX50	30	RE 850 Phosphor, Extra-Life (7)*	48	3350	3050	24000	5000	80
	18337	F40XL/SP30	30	RE 730 Phosphor, Extra-Life (7)*	48	3300	2970	24000	3000	75
	18338	F40XL/SP35	30	RE 735 Phosphor, Extra-Life (7)*	48	3300	2970	24000	3500	75
	18342	F40XL/SP41	30	RE 741 Phosphor, Extra-Life (7)*	48	3300	2970	24000	4100	73
F40T12 ECOLUX® LAMPS – TCLP COMPLIANT										
34	23157	F40SPX30/RS/WM/ECO	30	RE 830 Phosphor, Watt-Miser®, Ecolux® (1)*	48	2900	2610	20000	3000	82
	23158	F40SPX35/RS/WM/ECO	30	RE 835 Phosphor, Watt-Miser®, Ecolux® (1)*	48	2900	2610	20000	3500	82
	23159	F40SPX41/RS/WM/ECO	30	RE 841 Phosphor, Watt-Miser®, Ecolux® (1)*	48	2900	2610	20000	4100	80
	23163	F40SP30/RS/WM/ECO	30	RE 730 Phosphor, Watt-Miser®, Ecolux® (1)*	48	2750	2475	20000	3000	70
	23165	F40SP35/RS/WM/ECO	30	RE 735 Phosphor, Watt-Miser®, Ecolux® (1)*	48	2750	2475	20000	3500	73
	23166	F40SP41/RS/WM/ECO	30	RE 741 Phosphor, Watt-Miser®, Ecolux® (1)*	48	2750	2475	20000	4100	72
	23010	F40CW/RS/WM/ECO	30	Cool White, Watt-Miser®, Ecolux® (1)*	48	2650	2280	20000	4100	60
F48" UTILITY SHOPLIGHT LAMPS (T12)										
25	14445	F48"/25W/UTSL/UPC	30	Utility Shoplite, UPC Code (10)*	48	1860	1675	12000	4100	60
	14450	F48"/25W/UTSL/SLV	30	Utility Shoplite, Sleeved (10)*	48	1860	1675	12000	4100	60
	14456	F48"/25W/UTSL/TWIN	9	Utility Shoplite, Twin Pack (10)*	48	1860	1675	12000	4100	60
MOD-U-LINE® U-SHAPED LAMPS										
35	12199	F40CW/U/3/WM	12	Cool White, Watt-Miser®, 3 ⁵ / ₈ " Spacing Between Legs (1)*	22 ¹ / ₂	2200	2050	14000	4100	60
	12200	F40WW/U/3/WM	12	Warm White, Watt-Miser®, 3 ⁵ / ₈ " Spacing Between Legs (1)*	22 ¹ / ₂	2300	2100	14000	3000	52
40	14814	F40SPX30/U/3	12	RE 830 Phosphor, 3 ⁵ / ₈ " Spacing Between Legs (7)*	22 ¹ / ₂	3000	2730	14000	3000	82
	14813	F40SPX35/U/3	12	RE 835 Phosphor, 3 ⁵ / ₈ " Spacing Between Legs (7)*	22 ¹ / ₂	3000	2730	14000	3500	82
	15259	F40SP30/U/3	12	RE 730 Phosphor, 3 ⁵ / ₈ " Spacing Between Legs (7)*	22 ¹ / ₂	2925	2660	14000	3000	70
	14228	F40SP35/U/3	12	RE 735 Phosphor, 3 ⁵ / ₈ " Spacing Between Legs (7)*	22 ¹ / ₂	2925	2660	14000	3500	73
	15260	F40SP41/U/3	12	RE 741 Phosphor, 3 ⁵ / ₈ " Spacing Between Legs (7)*	22 ¹ / ₂	2925	2660	14000	4100	72
	14649	F40SCW/U/3	12	Super Cool White, 3 ⁵ / ₈ " Spacing Between Legs (7)*	22 ¹ / ₂	2725	2400	14000	4100	75
	14610	F40SWW/U/3	12	Super Warm White, 3 ⁵ / ₈ " Spacing Between Legs (7)*	22 ¹ / ₂	2725	2400	14000	3000	75
35	12203	F40CW/U/6/WM	12	Cool White, Watt-Miser®, 6" Spacing Between Legs (1)*	22 ¹ / ₂	2300	2100	14000	4100	60
	14471	F40CW/U/6/WM/UPC	12	Cool White, Watt-Miser®, 6" Spacing Between Legs, UPC Code (1)*	22 ¹ / ₂	2300	2100	14000	4100	60
	23383	F40CW/U/6/WM/C	6	Cool White, Watt-Miser®, 6" Spacing Between Legs, Commercial Pack (1)*	22 ¹ / ₂	2300	2100	14000	4100	60
	12207	F40WW/U/6/WM	12	Warm White, Watt-Miser®, 6" Spacing Between Legs (1)*	22 ¹ / ₂	2350	2150	14000	3000	52

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Nominal Watts	Product Code	Lamp Description	Case Qty.	Additional Information	Nominal Length in.	Lumens Initial	Lumens Mean	Rated Avg. Life Hours	Color Temp. K	CRI
T12 RAPID START LAMPS (Medium Bipin) (Continued)										
MOD-U-LINE® U-SHAPED LAMPS (Continued)										
40	14816 © /	F40SPX30/U/6	12	RE 830 Phosphor, 6" Spacing Between Legs (7)*	22½	3100	2820	14000	3000	82
	14815 © /	F40SPX35/U/6	12	RE 835 Phosphor, 6" Spacing Between Legs (7)*	22½	3100	2820	14000	3500	82
	15263 © /	F40SP30/U/6	12	RE 730 Phosphor, 6" Spacing Between Legs (7)*	22½	3050	2780	14000	3000	70
	14227 © /	F40SP35/U/6	12	RE 735 Phosphor, 6" Spacing Between Legs (7)*	22½	3050	2780	14000	3500	73
	22050 © /	F40SP35/U/6/UPC	12	RE 735 Phosphor, 6" Spacing Between Legs, UPC Code (7)*	22½	3050	2780	14000	3500	73
	15265 © /	F40SP41/U/6	12	RE 741 Phosphor, 6" Spacing Between Legs (7)*	22½	3050	2780	14000	4100	72
	14648 ©	F40SCW/U/6	12	Super Cool White, 6" Spacing Between Legs (7)*	22½	2800	2460	14000	4100	75
	12520 ©	F40SCW/U/6/UPC	12	Super Cool White, 6" Spacing Between Legs, UPC Code (7)*	22½	2800	2460	14000	4100	75
	25374 ©	F40SCW/U6/UPC 6PK	6	Super Cool White, 6" Spacing Between Legs, UPC Code, 6 Pack (7)*	22½	2800	2460	14000	4100	75
	14632 ©	F40SWW/U/6	12	Super Warm White, 6" Spacing Between Legs (7)*	22½	2800	2460	14000	3000	75
INSTANT START LAMPS (SLIMLINE, Single Pin Unless Otherwise Noted)										
T6 SLIMLINE LAMPS										
25	12221 /	F42T6/SP35	24	RE 735 Phosphor	42	1830	1700	7500	3500	73
	10720	F42T6/CW	24	Cool White	42	1750	1580	7500	4100	60
	10721	F42T6/WW	24	Warm White	42	1825	1640	7500	3000	52
40	12223 /	F64T6/SP35	24	RE 735 Phosphor	64	2930	2720	7500	3500	73
	10805	F64T6/CW	24	Cool White	64	2800	2520	7500	4100	60
	10807	F64T6/WW	24	Warm White	64	2900	2610	7500	3000	52
T8 SLIMLINE LAMPS										
35	10829	F72T8/CW	24	Cool White	72	3000	2730	7500	4100	60
	10835	F72T8/WW 6PK	6	Warm White	72	3100	2820	7500	3000	52
50	10912	F96T8/CW	24	Cool White	96	4050	3730	7500	4100	60
T12 SLIMLINE LAMPS										
20	10691	F24T12/CW	24	Cool White	24	900	1050	7500	4100	60
30	10709	F36T12/CW	24	Cool White	36	2000	1800	7500	4100	60
35	10735	F42T12/CW	24	Cool White	42	2400	2210	7500	4100	60
30	15183 ↗ /	F48T12/SP30/WM	24	RE 730 Phosphor, Watt-Miser® (1)*	48	2575	2420	9000	3000	70
	14319 ↗ /	F48T12/SP35/WM	24	RE 735 Phosphor, Watt-Miser® (1)*	48	2575	2420	9000	3500	73
	13048 ↗ /	F48T12/SP41/WM	24	RE 741 Phosphor, Watt-Miser® (1)*	48	2575	2420	9000	4100	72
	44967 ↗	F48T12/CW/WM	24	Cool White, Watt-Miser® (1)*	48	2475	2280	9000	4100	60
	44971 ↗	F48T12/LW/WM	24	Lite White, Watt-Miser® (1)*	48	2650	2440	9000	4200	49
40	15088 /	F48T12/SPX30	24	RE 830 Phosphor	48	3050	2870	9000	3000	82
	15116 /	F48T12/SPX35	24	RE 835 Phosphor	48	3050	2870	9000	3500	82
	15262 /	F48T12/SP35	24	RE 735 Phosphor	48	3000	2820	9000	3500	73
	10748	F48T12/CW	24	Cool White	48	2875	2650	9000	4100	60
	20461	F48T12/CW/UPC 6PK	24	Cool White, UPC Code	48	2875	2650	9000	4100	60
	10761	F48T12/D	24	Daylight	48	2450	2250	9000	6500	75
50	12446 /	F60T12/SP41	24	RE 741 Phosphor	60	3750	3520	12000	4100	72
	23073	F60T12/CW 15PK	15	Cool White	60	3600	3310	12000	4100	60
	23076	F60T12/D 15PK	15	Daylight	60	3000	2760	12000	6500	75
	23082	F64T12/CW 15PK	15	Cool White	64	3850	3540	10000	4100	60
	23085	F64T12/D 15PK	15	Daylight	64	3300	3040	10000	6500	75

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INSTANT START LAMPS (SLIMLINE, Single Pin Unless Otherwise Noted) (Continued)									
T12 SLIMLINE LAMPS (Continued)									
55	15117 /	F72T12/SPX30 15PK	15	RE 830 Phosphor	72	4800 4510	12000	3000	82
	15098 /	F72T12/SPX35 15PK	15	RE 835 Phosphor	72	4800 4510	12000	3500	82
	15286 /	F72T12/SP35 15PK	15	RE 735 Phosphor	72	4700 4420	12000	3500	73
	15097 /	F72T12/SP41 15PK	15	RE 741 Phosphor	72	4700 4420	12000	4100	72
	13743	F72T12/CW 15PK	15	Cool White	72	4500 4140	12000	4100	60
	23385	F72T12/CW/C	10	Cool White, Pro-line™ Commercial Pack	72	4500 4140	12000	4100	60
	12525	F72T12/CW/UPC 10PK	10	Cool White, UPC Code	72	4500 4140	12000	4100	60
	13751	F72T12/WW 15PK	15	Warm White	72	4650 4280	12000	3000	52
	13748	F72T12/D 15PK	15	Daylight	72	3800 3500	12000	6500	75
	12524	F72T12/GO 10PK	10	Gold	72	3200 2840	12000	-	-
65	13764	F84T12/CW 15PK	15	Cool White	84	5300 4880	12000	4100	60
8' T12 SLIMLINE LAMPS									
58	40511 ↗ /	F96T12/SP35/WMP	15	RE 735 Phosphor, Watt-Miser®, Plus (1)*	96	5700 5360	12000	3500	75
	41163 ↗ /	F96T12/SP41/WMP	15	RE 741 Phosphor, Watt-Miser®, Plus (1)*	96	5700 5360	12000	4100	75
60	14629 © ↗ /	F96T12/SPX30/WM 15PK	15	RE 830 Phosphor, Watt-Miser® (1)*	96	6000 5640	12000	3000	82
	14630 © ↗ /	F96T12/SPX35/WM 15PK	15	RE 835 Phosphor, Watt-Miser® (1)*	96	6000 5640	12000	3500	82
	15340 © ↗ /	F96T12/SPX41/WM 15PK	15	RE 841 Phosphor, Watt-Miser® (1)*	96	6000 5640	12000	4100	80
	14201 © ↗ /	F96T12/SP30/WM 15PK	15	RE 730 Phosphor, Watt-Miser® (1)*	96	5700 5360	12000	3000	70
	13849 © ↗ /	F96T12/SP35/WM 15PK	15	RE 735 Phosphor, Watt-Miser® (1)*	96	5700 5360	12000	3500	73
	21856 © ↗ /	F96T12/SP35/WM/UPC	15	RE 735 Phosphor, Watt-Miser®, UPC Code (1)*	96	5700 5360	12000	3500	73
	11217 © ↗ /	F96T12/SP35/WM/C 10PK	10	RE 735 Phosphor, Watt-Miser®, Pro-line™ Commercial Pack (1)*	96	5700 5360	12000	3500	73
	13758 © ↗ /	F96T12/SP41/WM 15PK	15	RE 741 Phosphor, Watt-Miser® (1)*	96	5700 5360	12000	4100	72
	25395 © ↗ /	F96T12/SP41/WM/UPC	15	RE 741 Phosphor, Watt-Miser®, UPC Code (1)*	96	5700 5360	12000	4100	72
	12128 © ↗ /	F96T12/SP65/WM	15	RE 765 Phosphor, Watt-Miser® (1)*	96	5100 4800	12000	6500	75
	13729 © ↗ /	F96T12/CW/WM 15PK	15	Cool White, Watt-Miser® (1)*	96	5500 5060	12000	4100	60
	25171 © ↗ /	F96T12/UTCW/EE/C	10	Cool White, Energy Efficient, Pro-line™ Commercial Pack (1)*	96	5500 5060	12000	4100	60
	21713 © ↗ /	F96T12/CW/WM/UPC 10PK	10	Cool White, Watt-Miser®, UPC Code (1)*	96	5500 5060	12000	4100	60
	17892 © ↗ /	F96T12/CW/WM 10PK	10	Cool White, Watt-Miser® (1)*	96	5500 5060	12000	4100	60
	13742 © ↗ /	F96T12/LW/WM 15PK	15	Lite White, Watt-Miser® (1)*	96	5800 5340	12000	4200	49
	13736 © ↗ /	F96T12/WW/WM 15PK	15	Warm White, Watt-Miser® (1)*	96	5700 5240	12000	3000	52
	13756 ↗ /	F96T12/C50/WM 15PK	15	Chroma 50, Watt-Miser® (1)*	96	4000 3520	12000	5000	90
75	15110 © /	F96T12/SPX30 15PK	15	RE 830 Phosphor	96	6800 6390	12000	3000	82
	15101 © /	F96T12/SPX35 15PK	15	RE 835 Phosphor	96	6800 6390	12000	3500	82
	15335 © /	F96T12/SPX41 15PK	15	RE 841 Phosphor	96	6800 6390	12000	4100	80
	23466 © /	F96T12/SPX50	15	RE 850 Phosphor	96	6250 5880	12000	5000	80
	15357 © /	F96T12/SP30 15PK	15	RE 730 Phosphor	96	6500 6110	12000	3000	70
	14067 © /	F96T12/SP35 15PK	15	RE 735 Phosphor	96	6500 6110	12000	3500	73
	15358 © /	F96T12/SP41 15PK	15	RE 741 Phosphor	96	6500 6110	12000	4100	72
	12127 © /	F96T12/SP65	15	RE 765 Phosphor	96	6125 5760	12000	6500	75
	13970 © /	F96T12/SP65/C	10	RE 765 Phosphor, Pro-line™ Commercial Pack	96	6125 5760	12000	6500	75
	13725 /	F96T12/N 15PK	15	Natural	96	4250 3740	12000	3700	90
	13752 /	F96T12/C50 15PK	15	Chroma 50	96	4600 4050	12000	5000	90
	25387 /	F96T12/C50/UPC	15	Chroma 50, UPC Code	96	4600 4050	12000	5000	90
	14652 /	F96T12/DX	15	Deluxe Daylight (7)*	96	4500 4050	12000	6500	84
	17897	F96T12/GO 10PK	10	Gold	96	4350 3870	12000	-	-

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INSTANT START LAMPS (SLIMLINE, Single Pin Unless Otherwise Noted) (Continued)										
8' T12 SLIMLINE XL EXTRA-LIFE LAMPS										
60	12404	Ⓢ ⚡ / F96T12/XL/SP30/WM	15	RE 830 Phosphor, Watt-Miser® (1)*	96	5900	5480	15000	3000	75
	12406	Ⓢ ⚡ / F96T12/XL/SP35/WM	15	RE 835 Phosphor, Watt-Miser® (1)*	96	5900	5480	15000	3500	75
	12408	Ⓢ ⚡ / F96T12/XL/SP41/WM	15	RE 841 Phosphor, Watt-Miser® (1)*	96	5900	5480	15000	4100	73
75	11662	Ⓢ / F96T12/XL/SPX30	15	RE 830 Phosphor	96	6900	6370	15000	3000	82
	11663	Ⓢ / F96T12/XL/SPX35	15	RE 835 Phosphor	96	6900	6370	15000	3500	82
	11664	Ⓢ / F96T12/XL/SPX41	15	RE 841 Phosphor	96	6900	6370	15000	4100	80
	11665	Ⓢ / F96T12/XL/SPX50	15	RE 850 Phosphor	96	6425	5930	15000	5000	80
	11659	Ⓢ / F96T12/XL/SP30	15	RE 730 Phosphor	96	6700	6180	15000	3000	75
	23576	Ⓢ / F96T12/XL/SP35	15	RE 735 Phosphor	96	6700	6180	15000	3500	75
	11661	Ⓢ / F96T12/XL/SP41	15	RE 741 Phosphor	96	6700	6180	15000	4100	73
8' T12 ECOLUX® SLIMLINE LAMPS – TCLP COMPLIANT										
60	27237	Ⓢ ⚡ / F96T12/SPX30/WM/ECO	15	RE 830 Phosphor, Watt-Miser®, Ecolux® (1)*	96	6000	5640	12000	3000	82
	27238	Ⓢ ⚡ / F96T12/SPX35/WM/ECO	15	RE 835 Phosphor, Watt-Miser®, Ecolux® (1)*	96	6000	5640	12000	3500	82
	27239	Ⓢ ⚡ / F96T12/SPX41/WM/ECO	15	RE 841 Phosphor, Watt-Miser®, Ecolux® (1)*	96	6000	5640	12000	4100	80
	27232	Ⓢ ⚡ / F96T12/SP30/WM/ECO	15	RE 730 Phosphor, Watt-Miser®, Ecolux® (1)*	96	5700	5360	12000	3000	70
	27233	Ⓢ ⚡ / F96T12/SP35/WM/ECO	15	RE 735 Phosphor, Watt-Miser®, Ecolux® (1)*	96	5700	5360	12000	3500	73
	27235	Ⓢ ⚡ / F96T12/SP41/WM/ECO	15	RE 741 Phosphor, Watt-Miser®, Ecolux® (1)*	96	5700	5360	12000	4100	72
	40373	Ⓢ ⚡ / F96T12/SP65/WM/ECO	15	RE 765 Phosphor, Watt-Miser®, Ecolux® (1)*	96	5100	4800	12000	6500	75
	27186	Ⓢ ⚡ / F96T12/CW/WM/ECO	15	Cool White, Watt-Miser®, Ecolux® (1)*	96	5500	5060	12000	4100	60
F40T17 INSTANT START LAMP (Mogul Bipin)										
40	10575	F40T17/CW/IS	12	Cool White (3)*	60	2850	2620	7500	4100	60
T12 HIGH OUTPUT RAPID START LAMPS (800mA, Recessed Double Contact)										
25	10204	F18T12/CW/HO	24	Cool White	18	1000	750	9000	4100	60
35	13051	/ F24T12/SP41/HO	24	RE 741 Phosphor	24	1700	1460	9000	4100	72
	10261	F24T12/CW/HO	24	Cool White	24	1620	1345	9000	4100	60
	10275	F24T12/D/HO	24	Daylight	24	1400	1160	9000	6500	75
40	33707	F30T12/CW/HO	24	Cool White	30	2250	1950	9000	4100	60
45	10374	F36T12/CW/HO	24	Cool White	36	2800	2440	9000	4100	60
	10380	F36T12/D/HO	24	Daylight	36	2350	2040	9000	6500	75
	10388	/ F36T12/SGN/HO	24	Sign White	36	2150	1830	9000	5400	82
55	10559	F42T12/CW/HO	24	Cool White	42	3400	2960	9000	4100	60
	10560	F42T12/D/HO	24	Daylight	42	2900	2520	9000	6500	75
	10562	/ F42T12/SGN/HO	24	Sign White	42	2600	2215	9000	5400	82
	15341	⚡ / F48T12/SP30/HO/WM	24	RE 730 Phosphor, Watt-Miser® (1)*	48	3850	3465	12000	3000	70
	15342	⚡ / F48T12/SP35/HO/WM	24	RE 735 Phosphor, Watt-Miser® (1)*	48	3850	3465	12000	3500	73
	11179	⚡ / F48T12/LW/HO/WM	24	Lite White, Watt-Miser® (1)*	48	3900	3390	12000	4200	49
60	15114	/ F48T12/SPX30/HO	24	RE 830 Phosphor	48	4350	3920	12000	3000	82
	15115	/ F48T12/SPX35/HO	24	RE 835 Phosphor	48	4350	3920	12000	3500	82
	15359	/ F48T12/SP30/HO	24	RE 730 Phosphor	48	4250	3830	12000	3000	70
	15360	/ F48T12/SP35/HO	24	RE 735 Phosphor	48	4250	3830	12000	3500	73
	15361	/ F48T12/SP41/HO	24	RE 741 Phosphor	48	4250	3830	12000	4100	72
	10773	F48T12/CW/HO	24	Cool White	48	4050	3520	12000	4100	60
	27313	F48T12/CW/HO/UPC	24	Cool White, UPC Code	48	4050	3520	12000	4100	60
	10778	F48T12/D/HO	24	Daylight	48	3400	2960	12000	6500	75
	10573	/ F48T12/SGN/HO	24	Sign White	48	3100	2640	12000	5400	82

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Nominal Watts	Product Code	Lamp Description	Case Qty.	Additional Information	Nominal Length in.	Lumens Initial	Lumens Mean	Rated Avg. Life Hours	Color Temp. K	CRI
T12 HIGH OUTPUT RAPID START LAMPS (800mA, Recessed Double Contact) (Continued)										
75	13056 /	F60T12/SP41/HO	24	RE 741 Phosphor	60	5350	4820	12000	4100	72
	23075	F60T12/CW/HO 15PK	15	Cool White	60	5150	4480	12000	4100	60
	23077	F60T12/D/HO 15PK	15	Daylight	60	4400	3830	12000	6500	75
	23081 /	F60T12/SGN/HO 15PK	15	Sign White	60	4000	3400	12000	5400	82
80	23083	F64T12/CW/HO 15PK	15	Cool White	64	5600	4870	12000	4100	60
	23087	F64T12/D/HO 15PK	15	Daylight	64	4750	4130	12000	6500	75
	23089 /	F64T12/SGN/HO 15PK	15	Sign White	64	4300	3660	12000	5400	82
85	15137 /	F72T12/SPX30/HO 15PK	15	RE 830 Phosphor	72	6800	6120	12000	3000	82
	15351 /	F72T12/SPX35/HO 15PK	15	RE 835 Phosphor	72	6800	6120	12000	3500	82
	15343 /	F72T12/SP30/HO 15PK	15	RE 730 Phosphor	72	6650	5990	12000	3000	70
	15347 /	F72T12/SP35/HO 15PK	15	RE 735 Phosphor	72	6650	5990	12000	3500	73
	15348 /	F72T12/SP41/HO 15PK	15	RE 741 Phosphor	72	6650	5990	12000	4100	72
	13697	F72T12/CW/HO 15PK	15	Cool White	72	6350	5520	12000	4100	60
	13702	F72T12/WW/HO 15PK	15	Warm White	72	6550	5700	12000	3000	52
	13699	F72T12/D/HO 15PK	15	Daylight	72	5350	4650	12000	6500	75
	12527 /	F72T12/N/HO 10PK	10	Natural	72	4300	3610	12000	3700	90
	13701 /	F72T12/SGN/HO 15PK	15	Sign White	72	4900	4170	12000	5400	82
100	13766	F84T12/CW/HO 15PK	15	Cool White	84	7700	6700	12000	4100	60
	13767	F84T12/D/HO 15PK	15	Daylight	84	6500	5660	12000	6500	75
	13768 /	F84T12/SGN/HO 15PK	15	Sign White	84	6000	5100	12000	5400	82
95	15120 © ↗ /	F96T12/SPX30/HO/WM 15PK	15	RE 830 Phosphor, Watt-Miser® (1)*	96	8500	7650	12000	3000	82
	15122 © ↗ /	F96T12/SPX35/HO/WM 15PK	15	RE 835 Phosphor, Watt-Miser® (1)*	96	8500	7650	12000	3500	82
	23069 © ↗ /	F96T12/SPX41/HO/WM 15PK	15	RE 841 Phosphor, Watt-Miser® (1)*	96	8500	7650	12000	4100	80
	15268 © ↗ /	F96T12/SP30/HO/WM 15PK	15	RE 730 Phosphor, Watt-Miser® (1)*	96	8350	7520	12000	3000	70
	14069 © ↗ /	F96T12/SP35/HO/WM 15PK	15	RE 735 Phosphor, Watt-Miser® (1)*	96	8350	7520	12000	3500	73
	13721 © ↗ /	F96T12/SP41/HO/WM 15PK	15	RE 741 Phosphor, Watt-Miser® (1)*	96	8350	7520	12000	4100	72
	12131 © ↗ /	F96T12/SP65/HO/WM	15	RE 765 Phosphor, Watt-Miser® (1)*	96	7700	6930	12000	6500	75
	13716 © ↗	F96T12/CW/HO/WM 15PK	15	Cool White, Watt-Miser® (1)*	96	8000	6960	12000	4100	60
	21714 © ↗	F96T12/CW/HO/WM/UPC 15PK	15	Cool White, Watt-Miser®, UPC Code (1)*	96	8000	6960	12000	4100	60
	13720 © ↗	F96T12/LW/HO/WM 15PK	15	Lite White, Watt-Miser® (1)*	96	8500	7900	12000	4200	49
	13719 © ↗	F96T12/WW/HO/WM 15PK	15	Warm White, Watt-Miser® (1)*	96	8200	7130	12000	3000	52
110	15119 © /	F96T12/SPX30/HO 15PK	15	RE 830 Phosphor	96	9350	8420	12000	3000	82
	15352 © /	F96T12/SPX35/HO 15PK	15	RE 835 Phosphor	96	9350	8420	12000	3500	82
	23070 © /	F96T12/SPX41/HO 15PK	15	RE 841 Phosphor	96	9350	8420	12000	4100	80
	15362 © /	F96T12/SP30/HO 15PK	15	RE 730 Phosphor	96	9200	8280	12000	3000	70
	15363 © /	F96T12/SP35/HO 15PK	15	RE 735 Phosphor	96	9200	8280	12000	3500	73
	15364 © /	F96T12/SP41/HO 15PK	15	RE 741 Phosphor	96	9200	8280	12000	4100	72
	12130 © /	F96T12/SP65/HO	15	RE 765 Phosphor	96	8900	8010	12000	6500	75
	13709 /	F96T12/N/HO 15PK	15	Natural	96	6200	5210	12000	3700	90
	13707 /	F96T12/C50/HO 15PK	15	Chroma 50	96	6750	5670	12000	5000	90
	14653 /	F96T12/DX/HO	15	Deluxe Daylight (7)*	96	6600	5610	12000	6500	84
	35505	F96T12/GO/HO 10PK	10	Gold	96	6300	5300	12000	-	-
	11918	F96T12/CW/HO/CT	15	Cool White, For Cold Temperature Use (6)*	96	8900	7740	12000	4100	60
	11919	F96T12/D/HO/CT	15	Daylight, For Cold Temperature Use (6)*	96	7600	6610	12000	6500	75

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VERY HIGH OUTPUT RAPID START LAMPS (1500mA, Recessed Double Contact)										
110	10751	F48T12/CW/1500	24	Cool White (4)*	48	6200	4030	10000	4100	60
165	13760	F72T12/CW/1500 15PK	15	Cool White (4)*	72	9000	6300	10000	4100	60
185	13789	F96T12/CW/1500/WM 15PK	15	Cool White, Watt-Miser® (1, 4)*	96	12500	9380	9000	4100	60
	13790	F96T12/LW/1500/WM 15PK	15	Lite White, Watt-Miser® (1, 4)*	96	13250	9940	9000	4200	49
215	13781	F96T12/CW/1500 15PK	15	Cool White (4)*	96	13500	10125	10000	4100	60
	13785	F96T12/WW/1500 15PK	15	Warm White (4)*	96	14000	10500	10000	3000	52
	13783	F96T12/D/1500 15PK	15	Daylight (4)*	96	11500	8630	10000	6500	75
POWER GROOVE® RAPID START LAMPS (1500mA, Recessed Double Contact)										
95	47732	F48PG17/CW/WM	12	Cool White, Watt-Miser® (1, 4)*	48	5700	3990	12000	4100	60
110	10782	F48PG17/CW	12	Cool White (4)*	48	6000	4200	12000	4100	60
185	42666	F96PG17/CW/WM	8	Cool White, Watt-Miser® (1, 4)*	96	13500	10530	12000	4100	60
215	11009	F96PG17/CW	8	Cool White (4)*	96	14000	10915	10000	4100	60
	11018	F96PG17/D	8	Daylight (4)*	96	12700	9910	10000	6500	75
SPECIAL APPLICATION LAMPS										
COV-R-GUARD™ SHATTER-PROTECTED LAMPS										
T8 LAMPS (Medium Bipin)										
17	40799	F17T8/SP35/CVG	24	RE 735 Phosphor, Starcoat™, Cov-R-Guard™ (11)*	24	1285	1220	20000	3500	78
	40800	F17T8/SP41/CVG	24	RE 741 Phosphor, Starcoat™, Cov-R-Guard™ (11)*	24	1285	1220	20000	4100	78
25	40084	F25T8/SP35/CVG	24	RE 735 Phosphor, Starcoat™, Cov-R-Guard™ (11)*	36	2020	1920	20000	3500	78
	40085	F25T8/SP41/CVG	24	RE 741 Phosphor, Starcoat™, Cov-R-Guard™ (11)*	36	2020	1920	20000	4100	78
32	40091	F32T8/SPX30/CVG	36	RE 830 Phosphor, Starcoat™, Cov-R-Guard™ (11)*	48	2860	2715	20000	3000	86
	40093	F32T8/SPX35/CVG	36	RE 835 Phosphor, Starcoat™, Cov-R-Guard™ (11)*	48	2860	2715	20000	3500	86
	40089	F32T8/SPX41/CVG	36	RE 841 Phosphor, Starcoat™, Cov-R-Guard™ (11)*	48	2860	2715	20000	4100	86
	40086	F32T8/SP30/CVG	36	RE 730 Phosphor, Starcoat™, Cov-R-Guard™ (11)*	48	2765	2625	20000	3000	78
	40087	F32T8/SP35/CVG	36	RE 735 Phosphor, Starcoat™, Cov-R-Guard™ (11)*	48	2765	2625	20000	3500	78
	40088	F32T8/SP41/CVG	36	RE 741 Phosphor, Starcoat™, Cov-R-Guard™ (11)*	48	2765	2625	20000	4100	78
	40803	F32T8/SP30/ECO/CVG	36	RE 730 Phosphor, Starcoat™, Ecolux®, Cov-R-Guard™ (11)*	48	2765	2625	20000	3000	78
	40804	F32T8/SP35/ECO/CVG	36	RE 735 Phosphor, Starcoat™, Ecolux®, Cov-R-Guard™ (11)*	48	2765	2625	20000	3500	78
	40812	F32T8/SP41/ECO/CVG	36	RE 741 Phosphor, Starcoat™, Ecolux®, Cov-R-Guard™ (11)*	48	2765	2625	20000	4100	78
8' T8 LAMPS (Single Pin)										
59	40099	F96T8/SPX30/CVG	24	RE 830 Phosphor, Cov-R-Guard™ (11)*	96	5770	5275	15000	3000	84
	40105	F96T8/SPX35/CVG	24	RE 835 Phosphor, Cov-R-Guard™ (11)*	96	5770	5275	15000	3500	84
	40106	F96T8/SPX41/CVG	24	RE 841 Phosphor, Cov-R-Guard™ (11)*	96	5770	5275	15000	4100	80
	40094	F96T8/SP30/CVG	24	RE 730 Phosphor, Cov-R-Guard™ (11)*	96	5625	5150	15000	3000	75
	40095	F96T8/SP35/CVG	24	RE 735 Phosphor, Cov-R-Guard™ (11)*	96	5625	5150	15000	3500	75
	40096	F96T8/SP41/CVG	24	RE 741 Phosphor, Cov-R-Guard™ (11)*	96	5625	5150	15000	4100	75
8' T8 HIGH OUTPUT LAMPS (Recessed Double Contact)										
86	40107	F96T8/SP35/HO/CVG	24	RE 735 Phosphor, Cov-R-Guard™ (11)*	96	7760	6980	18000	3500	75
	40108	F96T8/SP41/HO/CVG	24	RE 741 Phosphor, Cov-R-Guard™ (11)*	96	7760	6980	18000	4100	75

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SPECIAL APPLICATION LAMPS (Continued)										
COV-R-GUARD™ SHATTER-PROTECTED LAMPS (Continued)										
T12 RAPID START LAMPS (Medium Bipin)										
30	40126	F20T12/CW/RS/CVG	24	Cool White, Cov-R-Guard™ (11)*	24	2160	1880	18000	4100	60
40	40111	F40CW/CVG	30	Cool White, Cov-R-Guard™ (11)*	48	2930	2575	20000	4100	60
34	40114	F40SPX41/RS/WM/CVG	30	RE 841 Phosphor, Watt-Miser®, Cov-R-Guard™ (1, 11)*	48	2820	2535	20000	4100	80
	40112	F40SP35/RS/WM/CVG	30	RE 735 Phosphor, Watt-Miser®, Cov-R-Guard™ (1, 11)*	48	2665	2405	20000	3500	73
	40113	F40SP41/RS/WM/CVG	30	RE 741 Phosphor, Watt-Miser®, Cov-R-Guard™ (1, 11)*	48	2665	2405	20000	4100	72
	40109	F40CW/RS/WM/CVG	30	Cool White, Watt-Miser®, Cov-R-Guard™ (1, 11)*	48	2575	2210	20000	4100	60
	40805	F40CW/RS/WM/ECO/CVG	30	Cool White, Watt-Miser®, Ecolux®, Cov-R-Guard™ (1, 11)*	48	2575	2210	20000	4100	60
	40806	F40LW/RS/WM/CVG	30	Lite White, Watt-Miser®, Cov-R-Guard™ (1, 11)*	48	2735	2355	20000	4200	49
	40110	F40WW/RS/WM/CVG	30	Warm White, Watt-Miser®, Cov-R-Guard™ (1, 11)*	48	2625	2250	20000	3000	52
T12 PREHEAT LAMP (Medium Bipin)										
20	40125	F20T12/CW/CVG	24	Cool White, Cov-R-Guard™ (11)*	24	1160	1110	9000	4100	60
T12 INSTANT START LAMPS (Single Pin)										
40	40127	F48T12/CW/CVG	24	Cool White, Cov-R-Guard™ (11)*	48	2785	2565	9000	4100	60
75	40117	F96T12/CW/CVG	15	Cool White, Cov-R-Guard™ (11)*	96	5960	5485	12000	4100	60
60	40115	F96T12/CW/WM/CVG	15	Cool White, Watt-Miser®, Cov-R-Guard™ (1, 11)*	96	5335	4910	12000	4100	60
	40807	F96T12/CW/WM/ECO/CVG	15	Cool White, Watt-Miser®, Ecolux®, Cov-R-Guard™ (1, 11)*	96	5335	4910	12000	4100	60
	40124	F96T12/SP35/WM/CVG	15	RE 735 Phosphor, Watt-Miser®, Cov-R-Guard™ (1, 11)*	96	5525	5200	12000	3500	73
T12 HIGH OUTPUT LAMPS (Recessed Double Contact)										
60	40129	F48T12/CW/HO/CVG	24	Cool White, Cov-R-Guard™ (11)*	96	3930	3415	12000	4100	60
85	40811	F72T12/CW/HO/CVG	15	Cool White, Cov-R-Guard™ (11)*	72	6155	5355	12000	4100	60
95	40116	F96T12/CW/HO/WM/CVG	15	Cool White, Watt-Miser®, Cov-R-Guard™ (1, 11)*	96	7760	6750	12000	4100	60
	40118	F96T12/SP35/HO/WM/CVG	15	RE 735 Phosphor, Watt-Miser®, Cov-R-Guard™ (1, 11)*	96	8090	7295	12000	3500	73
	40123	F96T12/SP41/HO/WM/CVG	15	RE 741 Phosphor, Watt-Miser®, Cov-R-Guard™ (1, 11)*	96	8090	7295	12000	4100	72
110	40808	F96T12/CW/HO/CVG	15	Cool White, Cov-R-Guard™ (11)*	96	8630	7505	12000	4100	60
"ALL-WEATHER" 1500mA RAPID START LAMPS (Recessed Double Contact)										
T10 LAMPS										
110	10742	F48T10/CW	24	Cool White	48	6200	-	9000	4100	60
	10743	F48T10J/CW	12	Cool White, 1 ¹³ / ₁₆ " Diameter Clear Outer Jacket	48	6000	-	9000	4100	60
135	39157	F60T10/CW	24	Cool White	60	7000	-	6000	4100	60
	13002	F60T10/CW 6PK	6	Cool White	60	7000	-	6000	4100	60
	17135	F60T10/SP30	24	RE 730 Phosphor	60	8500	-	6000	3000	70
	40441	F60T10J/CW	12	Cool White, 1 ¹³ / ₁₆ " Diameter Clear Outer Jacket	60	8000	-	6000	4100	60
160	13776	F72T10/CW 15PK	15	Cool White	72	9700	-	9000	4100	60
	10858	F72T10J/CW	8	Cool White, 1 ¹³ / ₁₆ " Diameter Clear Outer Jacket	72	9600	-	9000	4100	60
205	13780	F96T10/CW 15PK	15	Cool White	96	13500	-	9000	4100	60
	10945	F96T10J/CW	8	Cool White, 1 ¹³ / ₁₆ " Diameter Clear Outer Jacket	96	13300	-	9000	4100	60
T12 LAMPS										
110	34206	F48T12/CW/1500/O	24	Cool White	48	7000	-	10000	4100	60
	41606	F48T12J/CW/1500/O	12	Cool White, 1 ¹³ / ₁₆ " Diameter Clear Outer Jacket	48	6800	-	10000	4100	60
170	13762	F72T12/CW/1500/O	15	Cool White	72	10800	-	10000	4100	60
	41612	F72T12J/CW/1500/O	8	Cool White, 1 ¹³ / ₁₆ " Diameter Clear Outer Jacket	72	10500	-	10000	4100	60
220	13788	F96T12/CW/1500/O	15	Cool White	96	14400	-	10000	4100	60
	41613	F96T12J/CW/1500/O	8	Cool White, 1 ¹³ / ₁₆ " Diameter Clear Outer Jacket	96	14000	-	10000	4100	60

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SPECIAL APPLICATION LAMPS (Continued)										
CIRCLINE T9 RAPID START LAMPS (Nominal Length=Diameter)										
20	42732	FC6T9/CW	12	Cool White	6 1/2	800	560	12000	4100	60
22	11084	FC8T9/KB	6	Kitchen and Bath ULTRA™	8 1/4	1400	1120	12000	3000	82
	33774	FC8T9/CW	12	Cool White	8 1/4	1100	825	12000	4100	60
	11026	FC8T9/D	12	Daylight	8 1/4	925	690	12000	6500	75
32	11085	FC12T9/KB	6	Kitchen and Bath ULTRA™	12	2400	1920	12000	3000	82
	33890	FC12T9/CW	12	Cool White	12	1950	1460	12000	4100	60
	11039	FC12T9/D	12	Daylight	12	1675	1260	12000	6500	75
40	33893	FC16T9/CW	12	Cool White	16	2700	2030	12000	4100	60
	11052	FC16T9/D	12	Daylight	16	2250	1690	12000	6500	75
APPLIANCE LAMPS (Started Required)										
T8 LAMPS										
18	10257	F22" T8/D/4	24	Daylight	22	925	790	7500	6500	75
	17705	F24" T8/CW/4 6PK	24	Cool White	24	1225	1040	7500	4100	60
19	10702	F26" T8/CW/4	24	Cool White	26	1275	1085	7500	4100	60
	38199	F26" T8/CW/4 6PK	24	Cool White	26	1275	1085	7500	4100	60
	17704	F28" T8/CW/4 6PK	24	Cool White	28	1350	1145	7500	4100	60
	10349	F30" T8/CW/4	24	Cool White	30	1375	1170	7500	4100	60
T12 LAMPS										
20	17735	F20T12/CW/26 6PK	24	Cool White	26	1175	1060	7500	4100	60
25	10281	F25T12/CW/28	24	Cool White	28	1665	1500	7500	4100	60
	10282	F25T12/CW/28 6PK	24	Cool White	28	1665	1500	7500	4100	60
	10286	F25T12/D/28	24	Daylight	28	1450	1310	7500	6500	75
21	10355	F30" T12/CW	24	Cool White	30	1350	1220	7500	4100	60
25	38201	F25T12/CW/33 6PK	24	Cool White	33	1860	1675	7500	4100	60
	10299	F25T12/D/33	24	Daylight	33	1600	1440	7500	6500	75
	10293	F25T12/WW/33	24	Warm White	33	1910	1720	7500	3000	52
PLANT AND AQUARIUM/TERRARIUM LAMPS (Medium Bipin)										
T8 LAMPS										
15	22907	F15T8/AR/FR6PK	24	Aquarium Lamp Freshwater	18	425	-	7500	-	77
	22910	F15T8/AR/FS6PK	24	Aquarium Lamp Fresh and Saltwater	18	675	-	7500	-	67
	22920	F15T8/AR/SA6PK	24	Aquarium Lamp Saltwater	18	210	-	7500	-	54
	49892	F15T8/PL/AQ 6PK	24	Plant & Aquarium Wide Spectrum	18	510	-	7500	-	90
	22904	F15T8/SR 6PK	24	Aquarium/Terrarium Lamp	18	620	525	7500	-	90
T12 LAMPS										
20	22908	F20T12/AR/FR6PK	24	Aquarium Lamp Freshwater	24	600	-	9000	-	77
	22911	F20T12/AR/FS6PK	24	Aquarium Lamp Fresh and Saltwater	24	950	-	9000	-	67
	22922	F20T12/AR/SA6PK	24	Aquarium Lamp Saltwater	24	270	-	9000	-	54
	49891	F20T12/PL/AQ 6PK	24	Plant & Aquarium Wide Spectrum	24	750	-	9000	-	90
	22905	F20T12/SR 6PK	24	Aquarium/Terrarium Lamp	24	875	790	9000	-	90
40	22909	F40T12/AR/FR6PK	24	Aquarium Lamp Freshwater	48	1425	-	9000	-	77
	22914	F40T12/AR/FS6PK	24	Aquarium Lamp Fresh and Saltwater	48	2350	-	9000	-	67
	22923	F40T12/AR/SA6PK	24	Aquarium Lamp Saltwater	48	700	-	9000	-	54
	22906	F40T12/SR 6PK	24	Aquarium/Terrarium Lamp	48	2250	1870	20000	-	90
	49893	F40PL/AQ 6PK	24	Plant & Aquarium Wide Spectrum	48	1900	-	20000	-	90

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SPECIAL APPLICATION LAMPS (Continued)									
BLACKLIGHT/BLACKLIGHT BLUE LAMPS (Peak Emission 365nm)									
T5 LAMPS – STARTER REQUIRED (Miniature Bipin)									
4	10017	F4T5/BL	24	Blacklight, UVA Source	6	- -	6000	- -	
	10019	F4T5/BLB	24	Blacklight Blue, UVA Source, Integral Dark Blue Filter	6	- -	6000	- -	
8	10077	F8T5/BLB	24	Blacklight Blue, UVA Source, Integral Dark Blue Filter	12	- -	7500	- -	
T8 LAMPS – STARTER REQUIRED (Medium Bipin)									
15	35884	F15T8/BL 6PK	24	Blacklight, UVA Source (8)*	18	- -	7500	- -	
	35885	F15T8/BLB 6PK	24	Blacklight Blue, UVA Source, Integral Dark Blue Filter	18	- -	7500	- -	
CIRCLINE T9 RAPID START LAMP									
22	25665	FC8T9/BLB	6	Blacklight Blue, UVA Source, Integral Dark Blue Filter	8 1/4	- -	10000	- -	
T12 LAMPS (MEDIUM BIPIN)									
20	10244	F20T12/BL 6PK	24	Blacklight, UVA Source (8)*	24	- -	9000	- -	
	34747	F20T12/BLB 6PK	24	Blacklight Blue, UVA Source, Integral Dark Blue Filter	24	- -	9000	- -	
40	10526	F40BL 6PK	24	Blacklight, UVA Source (8)*	48	- -	20000	- -	
	10531	F40BLB 6PK	24	Blacklight Blue, UVA Source, Integral Dark Blue Filter	48	- -	20000	- -	
	40537	F40BL/U/3	12	Blacklight, UVA Source, Mod-U-Line® 3 5/8" Spacing Between Legs (8)*	22 1/2	- -	12000	- -	
DIAZO REPROGRAPHIC 1500mA LAMP (Medium Bipin)									
125	39683	F59" T12/SPB	24	Reprographic, Peak emission 417 nm, 1000 Hours Useful Life; Actual Burning Hours Longer	60	- -	1000	- -	
GERMICIDAL LAMPS (Peak Emission 254nm)									
T5 LAMP (Miniature Bipin)									
8	11077	G8T5	24	Clear, Preheat, For Use With Starters, UVC source (9)*	12	- -	7500	- -	
T6 LAMP (Single Pin)									
65	11086	G64T6	24	Clear, Instant Start, 425mA (9)*	64	- -	7500	- -	
T8 LAMPS (Medium Bipin)									
15	11078	G15T8	24	Clear, Preheat, For Use With Starters, UVC source (9)*	18	- -	7500	- -	
25	11082	G25T8	24	Clear, Preheat, For Use With Starters, UVC source (9)*	18	- -	7500	- -	
30	11080	G30T8	24	Clear, Preheat, For Use With Starters, UVC source (9)*	36	- -	7500	- -	

To save energy costs, find the bulbs with the light output you need, then choose the one with the lowest watts.

() * All footnote references found at the end of this section. ➤ Reduced Wattage ✎ High Color Rendering. To convert inches to millimeters, multiply by 25.4.

Nominal Watts	Product Code	Description	Case Qty.	Additional Information	Nominal Length in. (mm)	Lumens Initial Mean	Rated Avg. Life Hours	Color Temp. K	CRI
EXPORT-ONLY LAMPS (See restrictions on pg 4-21 under "General Information")									
34	14490 ↘	F40D/RS/WM/EX	30	Watt-Miser® (1)*	48 (1220)	2225 1910	20000	6500	75
40	14656	F40CW/EX	30	Cool White	48 (1220)	3050 2680	20000	4100	60
	14493	F40WW/EX	30	Warm White	48 (1220)	3150 2770	20000	3000	52
	14488	F40D/EX	30	Daylight	48 (1220)	2550 2240	20000	6500	75
	14496	F40CW/U/6/EX	12	Cool White, 6" Spacing Between Legs	22½ (570)	2800 2460	14000	4100	60
	14498	F40D/U/6/EX	12	Daylight, 6" Spacing Between Legs	22½ (570)	2350 2070	14000	6500	75
	14499	F40WW/U/3/EX	12	Warm White, 3⅝" Spacing Between Legs	22½ (570)	2825 2490	14000	3000	52
	14497	F40D/U/3/EX	12	Daylight, 3⅝" Spacing Between Legs	22½ (570)	2280 2020	14000	6500	75
75	12541	F96T12/CW /EX	15	Cool White	96 (2440)	6150 5660	12000	4100	60
	12543	F96T12/D/EX	15	Daylight	96 (2440)	5250 4330	12000	6500	75
110	12540	F96T12/CW/HO/EX	15	Cool White	96 (2440)	8900 7740	12000	4100	60
	12542	F96T12/D/HO/EX	15	Daylight	96 (2440)	7600 6610	12000	6500	75

To save energy costs, find the bulbs with the light output you need, then choose the one with the lowest watts.
 (*) * All footnote references found at the end of this section. ↘ Reduced Wattage ↗ High Color Rendering. To convert inches to millimeters, multiply by 25.4.

GENERAL INFORMATION**LUMENS**

Nominal Initial Lumens refer to the nominal light output of the lamp after 100 hours of operation at 25° C. **Nominal Mean Lumens** refer to the nominal light output of the lamp at 40% of its rated life. Some values are based on engineering calculations derived from extrapolation of initial measured lumens.

A self-ballasted lamp is measured using its integral ballast. Lamps without an integral ballast are measured using reference ballasts.

Lumens produced by lamps operated on commercial ballasts may not be equivalent to reference ballast ratings. For lighting design calculations, refer to the ballast manufacturer's published data for the appropriate "Ballast Factor".

NOMINAL WATTS

Wattage is classified in accordance with American National Standards Institute standards and may not be the same as the wattage run on a reference ballast. The nominal wattage as defined by ANSI may vary from the listed wattage. Watts consumed by lamps operated on commercial ballasts may not be equivalent to reference ballast ratings. The watts shown for self ballasted lamps are nominal system watts.

RATED AVERAGE LIFE

The rated life (hours) is the approximate median life when lamps are operated for three hours per start under laboratory conditions using ballasts which meet industry standards or specifications where no industry standards exist. Rated life for self-ballasted lamps is the approximate median life when operated for three hours per start under laboratory conditions. Some lamps are rated at 12 hours per start where noted.

Performance Notes:

T8 Lamps: Rated life for F17T8, F25T8, F32T8 and F40T8 lamps is rated average life on rapid start circuits. Rated average life on instant start electronic circuits is 15,000 hours.

T12 Lamps: Life of 4' T12 lamps on single-lamp, rapid start ballasts may be reduced.

COLOR TEMPERATURE / CHROMATICITY

Approximate color temperature of fluorescent is measured using industry standard methods and is based on a nominal 40-watt source. Fluorescent sources operating at different lamp currents will have slightly shifted color appearances when compared to the corresponding 40-watt sources.

OPERATING NOTES**GENERAL OPERATION**

Fluorescent lamps should be used only with auxiliary equipment designed to produce proper characteristics. Specifications for auxiliary equipment are covered by ANSI. Specifications for auxiliary equipment not included in ANSI Standards are available.

FACTORS AFFECTING LAMP PERFORMANCE**Ballasts**

The three basic types of ballasts for fluorescent lamps are Preheat (PH), Instant Start (IS), and Rapid Start (RS). In general, lamps identified as preheat, rapid start or instant start should be used only on the corresponding ballast type. Electronic ballasts are presently available in both instant start and rapid start designs. Ballasts that operate with output currents below recommended levels, either by design or poor performance, will reduce fluorescent lamp life.

Operating Characteristics - Fluorescent lamp life is strongly affected by the ballast. ANSI has set standards for fluorescent ballasts that will ensure proper operation of fluorescent lamps. Ballast characteristics that have a significant effect on lamp life are Current Crest Factor, Starting Time, Cathode Voltage and Open Circuit Voltage.

Ballast Factor - This is the percentage of a lamp's rated lumen output that can be expected when operated on a specific, commercially available ballast. For example, a ballast having a ballast factor of 0.93 will result in the lamp emitting 93% of its rated lumen output.

High Frequency - All fluorescent lamps operate more efficiently when driven at frequencies greater than 15 kHz. Four-foot fluorescent lamps operate approximately 10% more efficiently, while eight-foot lamps improve efficiency by about 5%. This efficiency improvement is one reason for the popularity of electronic ballasts.

Temperature

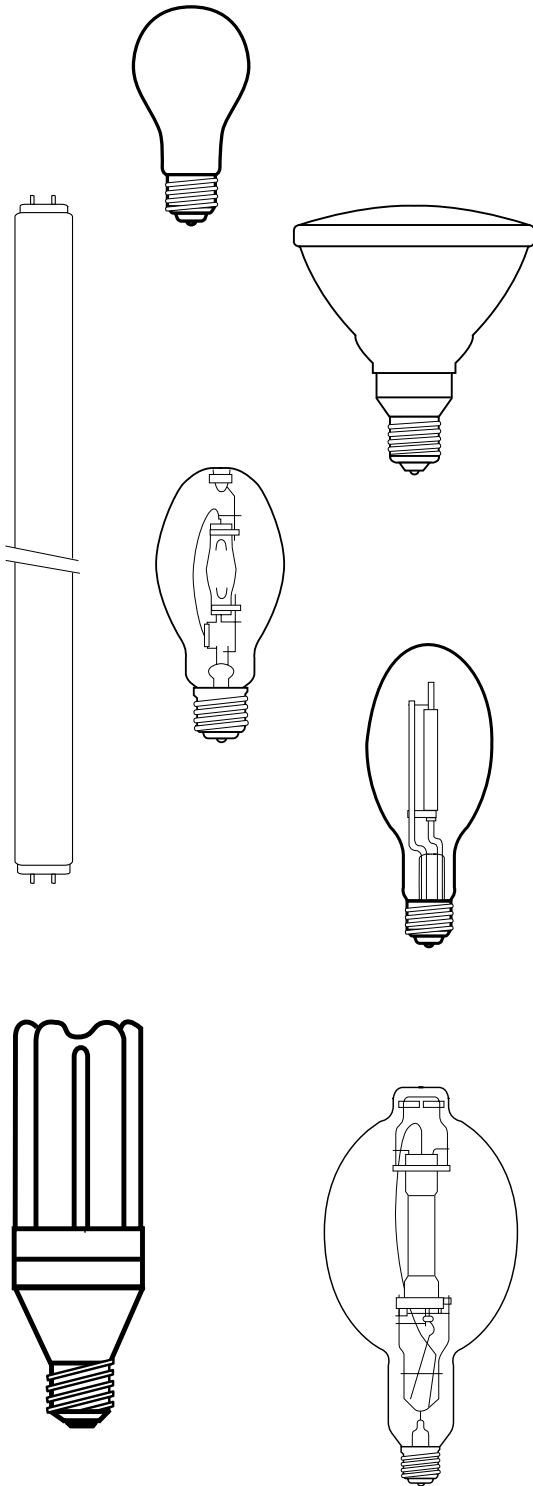
Light output and watts of a fluorescent lamp are affected by the ambient temperature, and by drafts. Most fluorescent lamps reach their maximum light output at room temperatures or at "luminaire temperatures." All-Weather fluorescent lamps are designed with jackets that improve performance in low temperature environments.

Luminaire

The design of the lighting fixture (luminaire) affects the ambient temperature in which the fluorescent lamps will be operating. A fixture that operates too cool or warm will result in lower light output from the lamps and reduce illumination levels.

Starting

The life of a fluorescent lamp is affected by the number of times the lamp is started. Starting results in shorter lamp life, while continuous operation will provide the longest lamp life. All fluorescent lamps, except where noted, have life ratings based on 3 hours per start.



WARNING AND CAUTION NOTICES

CAUTION NOTICES – ALL FLUORESCENT LAMPS

Caution:

- Turn power off and let lamp cool before removal to avoid potential burn and electrical shock hazard during lamp replacement.
- Handle and install with care. Fluorescent tubes may shatter with considerable force if broken. Store in safe place away from people.

CAUTION NOTICES – GENERAL APPLICATION

Caution:

- Do not use lamps in fixtures with worn sockets. Socket may not provide adequate support and lamp may fall.
- The use of add-on shatter containing sleeves on T8 and smaller diameter products using high frequency electronic ballasts is not recommended due to increased risk of sleeve failure at end of life. Cov-R-Guard™ products are designed to eliminate this risk.

CAUTION NOTICES – GERMICIDAL AND BLACKLIGHT LAMPS

Caution notices are provided in accordance with ANSI/IESNA RP-27.3-96 Recommended Practice for Photobiological Safety for Lamps - Risk Group Classification & Labeling. See specific products for footnoted caution notices below (8 and 9).

CAUTION NOTICE – MOD-U-LINE® U-SHAPED LAMPS

CAUTION: Spacing bracket is not a handle. Bracket may separate from lamp.

FOOTNOTES

Footnote

- 1 Watt-Miser®, Watt-Miser® Plus and Energy Efficient (EE) lamps are intended for use where ambient temperatures are 60° F (16° C) or higher and where the lamp surface is protected from strong air drafts. Failure to protect the lamp surface may result in reduced life, poor starting or erratic operation, such as flickering or spiraling. All Watt-Miser® lamps are intended for use on two-lamp, indoor, lead, high power factor ballasts and are not recommended for use with dimming or reduced current systems. The use of Watt-Miser® lamps on single lamp ballasts may shorten lamp life. Rapid Start Watt-Miser® lamps are intended for use only with rapid start ballasts. F40 Rapid Start Watt-Miser® lamps on high frequency electronic systems may display erratic starting before end of life.
- 3 F40T12/CW/IS and F40T17/CW/IS lamps are for use only in fixtures equipped with instant start ballasts.
- 4 Because Power Groove® and Very High Output lamps are most used in commercial applications, the life rating is based on 12 hrs. per start.
- 6 Cold Temperature lamps are designed for use where ambient temperatures drop below 60 F (16 C).
- 7 Performance data based on engineering estimates.
- 8 **CAUTION:** Risk Group 1 (Low Risk): UV emitted from this lamp. Skin or eye irritation could result. Minimize exposure.
- 9 **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.
- 10 Shoplites are not recommended to be used on F40 full light output ballasts. Life will be reduced by approximately 50%.
- 11 Cov-R-Guard™ light output is typically 3% less than the standard unguarded lamp.

To learn more about B-I-A please visit us at our
WEB site: www.BiaGmbH.com

