

GE Ecolux® Lamps

# Ecolux

LOW MERCURY, TCLP COMPLIANT LAMPS THAT FEATURE OUTSTANDING PERFORMANCE AND RELIABILITY

> Ecolux XL Startion F32T8-XL-SPX41-ECO 4100K Ecoluxwarrauser

SP41

F40SP41-RS-WM-ECO

USA WATT

# Ecolux

LOW MERCURY, TCLP COMPLIANT LAMPS WITH **TOP PERFORMANCE** FEATURES DESIGNED TO MEET GE'S STRINGENT SIX SIGMA QUALITY STANDARDS. WITH GE'S ECOLUX<sup>®</sup> LAMPS, YOU'LL HAVE THE POTENTIAL TO SUBSTANTIALLY LOWER DISPOSAL COSTS, WHILE GETTING THE FULL BENEFITS OF QUALITY LIGHTING.

FOR EXCELLENT PERFORMANCE AND ECOLOGICAL BENEFITS... GE ECOLUX TRULY OFFERS YOU THE BEST OF BOTH WORLDS.

## Ecolux<sup>®</sup> T8 with Starcoat<sup>™</sup> T8 and T8 Watt-Miser<sup>®</sup> Fluorescent Lamps

All the benefits of Starcoat<sup>™</sup> technology in an environmentally preferable reduced mercury design.

#### Reduce disposal costs.

• Passes the EPA's Toxicity Characteristic Leaching Procedure (TCLP) test.\*

#### Lower energy costs.

- Get up to 40% energy cost savings. You save up to \$134.00<sup>†</sup> over lamp life while maintaining 98% of the light output.
- T8 Watt-Miser saves an additional 6% energy costs over a standard T8 system with the same light output and lamp life.

#### More light over life.

• Starcoat provides the highest lumen maintenance (94+%) and the highest mean lumens of any reduced mercury lamp.

#### Best color.

• Starcoat delivers the best color rendering in the industry, giving furnishings, decor and merchandise a truer, natural look. Available in popular SP color (78+ CRI), and even better SPX

color (86+ CRI) for superior lumen output and color rendering.



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3218 XL-SPX41-EOO

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Ecolux XL

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\* State regulations vary. Consult your state EPA.

† At 10¢ per KWH on electronic ballast. 4-foot 4-lamp system vs. standard F40CW T12 system.



## Ecolux<sup>®</sup> T8 XL & SXL with Starcoat<sup>™</sup> Extra Life T8 Fluorescent Lamps

# The long life reduced mercury lamp with all the benefits of Starcoat.

#### **25% longer life** than standard T8 lamps.

- 30,000 hours life for XL.\*\*
- 36,000 hours life for SXL.\*\*
- Provides an extra year of quality lighting.
- Extends relamp cycle.
- Reduces lamp maintenance and labor costs.

#### Starcoat advantages.

- More light over life.
- Best color.
- **Lower disposal costs** through TCLP compliance.

## Ecolux<sup>®</sup> T12 4-foot & 8-foot Watt-Miser<sup>®</sup> Fluorescent Lamps

#### The ecological choice for T12 lamp users.

#### Economical and ecological.

- Lower disposal costs through TCLP compliance.
- Energy efficient 15% to 20% energy cost savings versus standard full wattage T12 lamps, while maintaining 86% to 88% of the light output.
- Extra color options...available in popular SP color (70 to 73 CRI), or even better SPX color (80 to 82 CRI) for superior lumen output and color rendering. Economical cool white color also available.



# Ecolux<sup>®</sup> HPS

Low-Mercury HPS Lamps

# TCLP compliant low-mercury HPS lamps lower disposal and maintenance costs.

#### Reduced mercury for lower disposal costs.

- Passes EPA Toxicity Characteristic Leaching Procedure (TCLP) test\*, substantially lowering disposal costs, where applicable.
- Lead-free base.
- Direct replacement of existing HPS lamps.No new ballasts or fixtures needed.
- Same **long life** and **outstanding efficiency** as standard HPS lamps.

## Ecolux<sup>®</sup> NC<sup>™</sup>

Non-cycling, Low-Mercury HPS Lamps

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#### All the benefits of low-mercury HPS lamps, plus a non-cycling feature.

- Reduced mercury for lower disposal costs.
  - Mercury reduction of 56% up to 93% versus standard HPS lamps.
  - Passes EPA Toxicity Characteristic Leaching Procedure (TCLP) test;\* substantially lowering disposal costs, where applicable.
  - Lead-free base.
- Non-cycling makes end-of-life replacement quick and easy.
  - Light color changes from yellow to white near end of life, making lamps easy to spot and replace.
  - This can reduce lamp replacement labor and maintenance costs, while keeping facilities bright and productive...and roadways well lit.

#### More light.

• Popular 100- and 400watt types feature 6% and 11% higher initial lumens, respectively, than standard lamps. Other wattages deliver the same high light output as standard HPS lamps.



- Direct replacement of existing HPS lamps.
   No new ballasts or fixtures needed.
- Same long life and outstanding efficiency as standard HPS lamps.

#### WHAT IS THE TCLP TEST AND WHAT DOES IT MEASURE?

**TCLP** is one of the Federal EPA test methods that are used to characterize waste as either hazardous or non-hazardous for the purpose of disposal. TCLP is an acronym for Toxicity Characteristic Leaching Procedure. It is performed by environmental testing labs. The TCLP test does not measure total mercury content; rather, it measures the potential for mercury to seep or "leach" into groundwater if a waste is landfill disposed. In the TCLP test, lamps are crushed into small pieces and mixed with an acidic solution. The acidic solution is then filtered from the lamp pieces. If less than 0.2 mg of mercury are found per liter of acidic test solution, the waste is characterized as non-hazardous waste under federal law. In most states, there are no special disposal requirements for non-hazardous waste lamps.\*

#### WHY DO FLUORESCENT LAMPS CONTAIN MERCURY?

Mercury is used to generate light in all fluorescent lamps. When electric current passes through mercury vapor, the mercury emits ultraviolet energy. When this ultraviolet energy passes through the phosphor coating, it produces light very efficiently. Today, there are no known energy efficient substitutes for mercury in fluorescent lamps. As the lamp operates, the mercury is slowly absorbed by the various internal parts of the lamp. Because mercury is consumed during lamp operation, a certain amount of mercury is necessary to achieve a long lamp life. The significantly reduced amount of mercury in Ecolux lamps is designed to optimize the balance between long lamp life and environmental concerns.

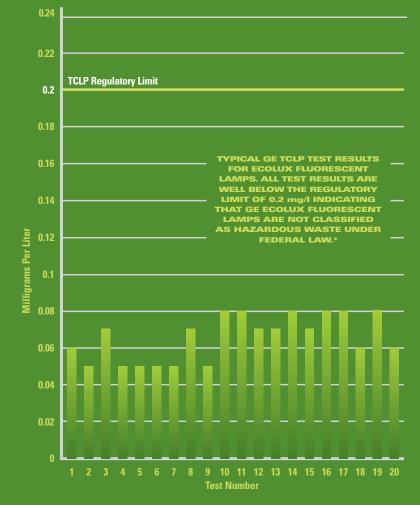
#### HOW IS THE ECOLUX FLUORESCENT LAMP DESIGN DIFFERENT FROM TRADITIONAL FLUORESCENT LAMP DESIGNS?

The mercury content of GE Ecolux lamps has been reduced by over 80% versus traditional fluorescent lamp designs. Ecolux lamps contain approximately 1/3000 oz of mercury or approximately 1-2% of the mercury found in a common oral thermometer. To assure long life, advanced coating technologies have been developed to minimize the absorption of mercury within the lamp.

Additionally, Ecolux lamps use an exclusive material design that helps to prevent the small amount of mercury in the lamp from forming mercury compounds which may leach into groundwater after lamp disposal.

GE's innovative, patented design gives Ecolux users "the best of both worlds" for exceptional performance and environmental responsibility.

#### GE F40CW/WM/ECO TCLP TEST RESULTS



\*All facilities must characterize their waste streams as either hazardous or non-hazardous through knowledge or testing. (Small facilities, generating less than 100 kg (360 4-foot T12 lamps weigh 100 kg) of hazardous waste per month, and homeowners, are exempt from federal regulations. State regulations vary and may be more stringent than federal regulations.) The Toxicity Characteristic Leaching Procedure (TCLP) test, specified in the Resource Conservation and Recovery Act (RCRA) of 1990, is used to characterize fluorescent lamp waste as hazardous or non-hazardous waste.

# GE LIGHTING'S ENVIRONMENTAL COMMITMENT

# GE Lighting is committed to meeting the environmental needs of our customers.

Recognizing that environmental regulations vary by Country, State and Province and individual customer environmental concerns vary, GE Lighting is committed to offering a variety of lamp products to meet those needs.

To assist our customers in managing increasing environmental disposal regulations, GE Lighting developed a new family of products, marketed as Ecolux<sup>®</sup>, which consistently pass the TCLP test. Products which pass TCLP are not considered hazardous waste under federal regulations. The current products in the Ecolux family are included in this brochure.

## GE Lighting Receives "Green Lights Ally of Year Award for 2000" from the US EPA.

On March 23, 2000, the Environmental Protection Agency (EPA), in cooperation with the Department of Energy, presented GE Lighting with the Ally of the Year Award as part of the EPA's Green Lights<sup>®</sup> Partnership program. Each year, this award is granted to a company that has excelled in achieving the highest standard for energy-efficiency and has incorporated strategic energy management into its business plan. This award honors GE's commitment to delivering energy efficient lighting solutions.

GE Lighting has been a strong partner of the Green Lights program since its inception in 1991. Green Lights is now a part of the EPA Energy Star Buildings program.



### Performance Data GE Ecolux<sup>®</sup> Fluorescent and HPS Lamps

#### Ecolux<sup>®</sup> T8 with Starcoat<sup>™</sup>

PRODUCT CODE	DESCRIPTION	NOMINAL WATTS	MOL IN.	CRI/COLOR TEMPERATURE	LUMENS INITIAL MEAN†	LIFE 3 HRS/ Start	LIFE 12 HRS/ Start	CASE QTY.
45742	F17T8/SPX30/EC0	17	24	86 @ 3000K	1350 1280	20,000	24,000	24
45747	F17T8/SPX35/EC0	17	24	86 @ 3500K	1350 1280	20,000	24,000	24
45749	F17T8/SPX41/EC0	17	24	86 @ 4100K	1350 1280	20,000	24,000	24
45741	F17T8/SP30/EC0	17	24	78 @ 3000K	1325 1260	20,000	24,000	24
45743	F17T8/SP35/EC0	17	24	78 @ 3500K	1325 1260	20,000	24,000	24
45748	F17T8/SP41/EC0	17	24	78@4100K	1325 1260	20,000	24,000	24
45753	F25T8/SPX30/EC0	25	36	86 @ 3000K	2150 2040	20,000	24,000	24
45755	F25T8/SPX35/EC0	25	36	86 @ 3500K	2150 2040	20,000	24,000	24
45757	F25T8/SPX41/EC0	25	36	86 @ 4100K	2150 2040	20,000	24,000	24
45750	F25T8/SP30/EC0	25	36	78 @ 3000K	2080 1970	20,000	24,000	24
45754	F25T8/SP35/EC0	25	36	78 @ 3500K	2080 1970	20,000	24,000	24
45756	F25T8/SP41/EC0	25	36	78@4100K	2080 1970	20,000	24,000	24
25611	F32T8/SPX30/EC0	32	48	<b>86</b> @ 3000K	2950 2800	20,000	24,000	36
25612	F32T8/SPX35/EC0	32	48	86 @ 3500K	2950 2800	20,000	24,000	36
25613	F32T8/SPX41/EC0	32	48	86 @ 4100K	2950 2800	20,000	24,000	36
42064	F32T8/SPX50/EC0	32	48	<b>86</b> @ 5000K	2950 2800	20,000	24,000	36
26666	F32T8/SP30/EC0	32	48	78@3000K	2850 2710	20,000	24,000	36
26667	F32T8/SP35/EC0	32	48	78 @ 3500K	2850 2710	20,000	24,000	36
26668	F32T8/SP41/EC0	32	48	78@4100K	2850 2710	20,000	24,000	36

#### Ecolux<sup>®</sup> XL T8 with Starcoat<sup>™</sup>

PRODUCT CODE	DESCRIPTION	NOMINAL WATTS	MOL IN.	CRI/COLOR TEMPERATURE	LUMENS INITIAL MEAN†	LIFE 3 HRS/ Start	LIFE 12 HRS/ Start	CASE QTY.
27619	F32T8/XL/SPX30/ECO	32	48	86 @ 3000K	2950 2800	24,000	30,000	36
27620	F32T8/XL/SPX35/ECO	32	48	86 @ 3500K	2950 2800	24,000	30,000	36
27621	F32T8/XL/SPX41/ECO	32	48	86@4100K	2950 2800	24,000	30,000	36
27616	F32T8/XL/SP30/EC0	32	48	78 @ 3000K	2850 2710	24,000	30,000	36
27617	F32T8/XL/SP35/EC0	32	48	78 @ 3500K	2850 2710	24,000	30,000	36
27618	F32T8/XL/SP41/ECO	32	48	78@4100K	2850 2710	24,000	30,000	36

#### Ecolux<sup>®</sup> SXL T8 with Starcoat<sup>™</sup>

PRODUCT CODE	DESCRIPTION	NOMINAL Watts	MOL IN.	CRI/COLOR Temperature	LUMENS INITIAL MEAN†	LIFE 3 HRS/ Start ††	LIFE 12 HRS/ Start ††	CASE QTY.
49702	F32T8/SXL/SP30/ECO	32	48	82 @ 3000K	2850 2675	30,000	36,000	36
49778	F32T8/SXL/SP35/ECO	32	48	82@3500K	2850 2675	30,000	36,000	36
49779	F32T8/SXL/SP41/ECO	32	48	81@4100K	2850 2675	30,000	36,000	36

#### Ecolux<sup>®</sup> T8 Watt-Miser<sup>®</sup> with Starcoat<sup>™</sup>

PRODUC CODE	CT DESCRIPTION	NOMINAL WATTS	. Mol In.	CRI/COLOR TEMPERATURE	LUMENS INITIAL MEAN†	LIFE 3 HRS/ Start	LIFE 12 HRS/ Start	CASE QTY.
48277	F32T8/SP30/IS/WM/EC0	30	48	82 @ 3000K	2875 2700	15,000	20,000	36
48278	F32T8/SP35/IS/WM/ECO	30	48	82@3500K	2850 2675	15,000	20,000	36
48279	F32T8/SP41/IS/WM/ECO	30	48	81@4100K	2825 2650	15,000	20,000	36

#### Ecolux<sup>®</sup> XL T8 Watt-Miser<sup>®</sup> with Starcoat<sup>™</sup>

 PRODUCT CODE	DESCRIPTION		Nominal Watts	MOL IN.	CRI/COLOR TEMPERATURE	lum Initial		LIFE 3 HRS/ Start	LIFE 12 HRS/ START	CASE QTY.
48521	F32T8/XL/S	P30/IS/WM/EC	) 30	48	82@3000K	2825	2650	20,000	25,000	36
48522	F32T8/XL/S	P35/IS/WM/EC	) 30	48	82 @ 3500K	2800	2625	20,000	25,000	36
48523	F32T8/XL/S	P41/IS/WM/EC	D 30	48	81@4100K	2775	2600	20,000	25,000	36

<sup>\* - 20%</sup> extra life at 3 hours/start, 25% extra life at 12 hours/start.

\*\* - Formerhy F40\*\*/RS/WM. New descriptive codes reflect industry standard change to indicate 34 watt consumption.
\*\*\* - covRguard available for all Ecolux lamp types.

† - Mean lumens calculated at 40% of rated life.

†† - Lamp life rated on Rapid Start ballast.

All fluorescent data is based on a reference ballast of 60Hz, except life, which is based on a high frequency electronic ballast. For more detailed information contact your local GE Lighting representative.

#### F34 Ecolux® Watt-Miser®\*\*

PRODUCT CODE	DESCRIPTION	Nominal Watts	MOL IN.	CRI/COLOR TEMPERATURE	LUMENS INITIAL MEAN†	LIFE 3 HRS/ Start	LIFE 12 HRS/ Start	CASE QTY.
45065	F34WW/RS/WM/EC0	34	48	75@3000K	2700 2320	20,000	24,000	30
23010	F34CW/RS/WM/EC0	34	48	62@4150K	2650 2280	20,000	24,000	30
23157	F34SPX30/RS/WM/EC0	34	48	82@3000K	2900 2610	20,000	24,000	30
23158	F34SPX35/RS/WM/ECO	34	48	82@3500K	2900 2610	20,000	24,000	30
23159	F34SPX41/RS/WM/ECO	34	48	80@4100K	2900 2610	20,000	24,000	30
23163	F34SP30/RS/WM/EC0	34	48	70@3000K	2750 2475	20,000	24,000	30
23165	F34SP35/RS/WM/ECO	34	48	73@3500K	2750 2475	20,000	24,000	30
23166	F34SP41/RS/WM/ECO	34	48	72@4100K	2750 2475	20,000	24,000	30
41563	F34SP65/RS/WM/EC0	34	48	75@6500K	2750 2475	20,000	24,000	30

#### F96 Ecolux<sup>®</sup> Watt-Miser<sup>®</sup>

PRODUCT CODE	DESCRIPTION	NOMINAL WATTS	MOL IN.	CRI/COLOR TEMPERATURE	LUMENS INITIAL MEAN†	LIFE 3 HRS/ Start	LIFE 12 HRS/ Start	CASE QTY.
27186	F96T12/CW/WM/ECO	60	96	62@4150K	5500 5060	12,000	15,000	15
27237	F96T12/SPX30/WM/EC0	60	96	82@3000K	6000 5640	12,000	15,000	15
27238	F96T12/SPX35/WM/ECO	60	96	82@3500K	6000 5640	12,000	15,000	15
27239	F96T12/SPX41/WM/ECO	60	96	80@4100K	6000 5640	12,000	15,000	15
27232	F96T12/SP30/WM/EC0	60	96	70 @ 3000K	5700 5360	12,000	15,000	15
27233	F96T12/SP35/WM/EC0	60	96	73 @ 3500K	5700 5360	12,000	15,000	15
27235	F96T12/SP41/WM/ECO	60	96	72@4100K	5700 5360	12,000	15,000	15
40373	F96T12/SP65/WM/EC0	60	96	75@6500K	5100 4800	12,000	15,000	15
40782	F96T12/SP35/WMP/ECO	58	96	75@3500K	5700 5360	12,000	15,000	15

#### **Ecolux® HPS**

PRODUCT	DESCRIPTION	NOMINA WATTS		CRI/COLOR TEMPERATURE	LUMENS INITIAL MEAN†	LIFE 3 HRS/ Start	LIFE 12 HRS/ START	CASE QTY.
45760	LU70/ECO	70	<b>7</b> ¾	22@1900K	6400 5450	24,000+	_	12
45761	LU100/ECO	100	<b>7</b> ¾	22@1900K	9500 8550	24,000+	_	12
45762	LU150/55/ECO	150	<b>7</b> ¾	22@2100K	16000 14400	24,000+	_	12
45763	LU200/EC0	200	<b>9</b> ¾	22@1900K	22000 19800	24,000+	_	12
45764	LU250/ECO	250	<b>9</b> ¾	22@1900K	28000 25200	24,000+	_	12
45765	LU400/ECO	400	<b>9</b> ¾	22@2100K	51000 45000	24,000+	_	12
44058	LU1000/EC0	1000	151/16	22@2100K	140000126000	24,000+	_	12

#### **Ecolux®NC<sup>™</sup>HPS**

PRODUCT CODE	DESCRIPTION	NOMINAI WATTS	l Mol In.	CRI/COLOR TEMPERATURE	LUMENS INITIAL MEAN†	LIFE 3 HRS/ Start	LIFE 12 HRS/ Start	CASE QTY.
14672	LU70/ECO/NC	70	<b>7</b> ¾	23 @ 1900K	6300 5670	24,000	_	12
14673	LU100/ECO/NC	100	<b>7</b> ¾	23 @ 2000K	10500 8550	24,000	—	12
40390	LU150/ECO/NC	150	<b>7</b> ¾	23 @ 2000K	16000 14400	24,000	_	12
45059	LU200/ECO/NC	200	<b>9</b> ¾	22 @ 2100K	22000 19800	24,000	_	12
14674	LU250/ECO/NC	250	<b>7</b> ¾	30 @ 2000K	29000 26100	24,000	_	12
14675	LU400/ECO/NC	400	<b>7</b> ¾	30 @ 2100K	54000 45000	24,000	_	12

#### Ecolux<sup>®</sup> covRguard<sup>™</sup>— High Volume Types Shown\*\*\*

PRODUCT CODE	DESCRIPTION	NOMINAL WATTS	MOL IN.	CRI/COLOR TEMPERATURE	LUMENS INITIAL MEAN†	LIFE 3 HRS/ Start	LIFE 12 HRS/ Start	CASE QTY.
40803	F32T8/SP30/EC0/CVG	32	48	78 @ 3000K	2760 2620	20,000	24,000	36
40804	F32T8/SP35/EC0/CVG	32	48	78 @ 3500K	2760 2620	20,000	24,000	36
40805	F34CW/RS/WM/ECO/CVG	34	48	60@4100K	2570 2210	20,000	24,000	30
40807	F96T12/CWWM/ECO/CVG	60	96	60@4100K	5330 4910	12,000	15,000	15
40812	F32T8/SP41/ECO/CVG	32	48	78@4100K	2760 2620	20,000	24,000	36
41125	F32T8/SPX30/ECO/CVG	32	48	86 @ 3000K	2860 2710	20,000	24,000	36
41126	F32T8/SPX35/ECO/CVG	32	48	86 @ 3500K	2860 2710	20,000	24,000	36
41127	F32T8/SPX41ECO/CVG	32	48	86@4100K	2860 2710	20,000	24,000	36
41138	F34/SPX30/RS/WM/ECO/CV	'G 34	48	82 @ 3000K	2810 2530	20,000	24,000	30
41139	F34/SPX35/RS/WM/ECO/CV	'G 34	48	82 @ 3500K	2810 2530	20,000	24,000	30
41563	F34/SP65/RS/WM/EC0/CV	G 34	48	75@6500K	2650 2430	20,000	24,000	30
45994	F96/SP35/WMP/EC0/CVG	58	96	75 @ 3500K	5520 5190	12,000	15,000	15



For the most up-to-date, comprehensive product information, visit the GE Lighting Web site at

#### www.GELighting.com

Extra Life\*

Best Color