

LUMALUX PLUS® XL ECO®

Double the Life, Non-Cycling, Hot Restrike, Lead-Free and Reduced Mercury High Pressure Sodium Lamps



The 80,000 hour eXtended Life SYLVANIA LUMALUX PLUS XL ECO lamps combine the non-cycling technology of the LUMALUX PLUS ECO lamps with the hot restrike technology of the LUMALUX Standby lamps into one lamp with double the life. The PLUS XL leads the industry with a rated life of 80,000 hours. The extra long life provides up to 20 years of reduced maintenance cost by simply replacing the current HPS* lamp with the PLUS XL. These lamps are an American made product, constructed with a lead-free welded base and are TCLP compliant (eliminating or reducing disposal fees).

The PLUS XL combines two key features, the non-cycling feature of the PLUS lamp and the instant hot restrike of the standby lamp. The non-cycling means the lamp remains OFF at end of life minimizing unnecessary trips to the pole and allows for earlier outage detection. The instant restrike provides instant illumination after a power interruption. These lamps are ideal for applications where lighting is critical and safety is a concern.

OSRAM SYLVANIA offers the most comprehensive lamp and ballast solutions. For compatible SYLVANIA ballast, please refer to our Lamp and Ballast Catalog or contact your local SYLVANIA representative.

*Same ANSI code

Application Information

Applications

- Manufacturing facilities
- Parking lots and garages
- Prisons/Security
- Street and roadway lighting
- Tunnels
- Warehouses

Fixtures

- High bay
- Low bay
- Parking lot
- Roadway fixture-Cobra head
- Wall mount

Key Features & Benefits

- Average rated lamp life is 80,000 hours
 - 85% survival at 48,000 hours
 - 50% survival at 80,000 hours
- Combined technology of PLUS and STANDBY for non-cycling and instant hot restrike
- 3 times the life of standard HPS
- 100% longer life than comparable HPS PLUS and Standby lamps
- Similar initial lumens to a standard HPS lamp with a 15% higher lumen maintenance at end of rated life
- Instant hot restrike after power interruption
- Non-cycling lamps mean quicker identification of outages, fewer repeat trips and provides less stress to the ignitor*
- Lamp design eliminates voltage rise (standard high pressure sodium lamps may exhibit voltage rise of 30 or 60 Volts)
- High efficacy
- Passes Federal TCLP test. Lead-free and up to 90% less mercury than standard HPS lamps
- Lead-free base allows a higher maximum base temperature of 250°C; 40°C higher than ANSI specification for lead soldered bases
- Direct replacements for HPS standard, PLUS and STANDBY; operates on ballasts of similar wattage
- New 6 digit code showing the month, day and year the lamp was manufactured

ECOLOGIC® is a comprehensive program of OSRAM SYLVANIA focused on addressing environmental issues at all stages of lamp life.

*Less stress compared to the ignitor continuously restarting a cycling lamp.



Product Offering

Watts	Base	Bulb Finish
50, 70, 100, 150, 200, 250, 310 and 400	Mogul	Clear

System Maintenance Benefits

1. Three times the rated life of standard high pressure sodium lamps, reducing maintenance costs
2. Easier identification of lamp outages
3. Eliminates repeat trips due to lamp cycling, saving the cost of additional service trips



Specification Data

Catalog #	Type
Project	
Comments	
Prepared by	

Lamp Comparison

System Description	System Wattage	Initial System Lumens	Mean System Lumens	System Efficacy (LPW)	Rated Life (hrs)	Maintenance Schedule (Trip to Pole)	Cost to Replace a Lamp
LU50/PLUS/XL/ECO	50W	3,850	3,075	77	80,000	1x	\$100
LU70/PLUS/XL/ECO	70W	6,200	4,950	89	80,000	1x	\$100
LU70/ECO	70W	6,300	5,500	90	30,000	2.7x	\$270
LU70/SBY	70W	6,050	4,950	86	40,000	2x	\$200
LU70/PLUS/ECO	70W	6,300	5,020	90	40,000	2x	\$200
LU100/PLUS/XL/ECO	100W	9,800	7,800	98	80,000	1x	\$100
LU100/ECO	100W	9,500	7,150	95	30,000	2.7x	\$270
LU100/SBY	100W	9,500	7,150	95	40,000	2x	\$200
LU100/PLUS/ECO	100W	1,0000	7,940	100	40,000	2x	\$200
LU150/PLUS/XL/ECO	150W	15,200	12,150	101	80,000	1x	\$100
LU150/55/ECO	150W	16,000	12,230	107	30,000	2.7x	\$270
LU150/55/SBY	150W	16,000	12,100	107	40,000	2x	\$200
LU150/55/PLUS/ECO	150W	16,000	14,010	107	40,000	2x	\$200
LU200/PLUS/XL/ECO	200W	21,500	18,000	108	80,000	1x	\$100
LU200/ECO	200W	22,000	19,600	110	30,000	2.7x	\$270
LU200/SBY	200W	21,500	18,000	108	40,000	2x	\$200
LU200/PLUS/ECO	200W	22,000	19,030	110	40,000	2x	\$200
LU250/PLUS/XL/ECO	250W	27,500	23,200	110	80,000	1x	\$100
LU250/ECO	250W	29,000	24,700	116	30,000	2.7x	\$270
LU250/SBY	250W	27,500	23,200	110	40,000	2x	\$200
LU250/PLUS/ECO	250W	29,000	26,200	116	40,000	2x	\$200
LU310/PLUS/XL/ECO	310W	35,500	32,700	115	80,000	1x	\$100
LU400/PLUS/XL/ECO	400W	49,000	39,200	123	80,000	1x	\$100
LU400/ECO	400W	50,000	40,300	125	30,000	2.7x	\$270
LU400/SBY	400W	50,000	40,000	125	40,000	2x	\$200
LU400/PLUS/ECO	400W	50,000	42,700	125	40,000	2x	\$200

Ordering Information

Item Number	Ordering Abbreviation ^{1, 4}	Bulb	Base	ANSI Spec. Number	Avg. Rated Life ^{2, 5} (hrs)	Initial Lumens	Mean Lumens ³	CCT	CRI
67698	LU50/PLUS/XL/ECO	ET23.5	E39	S68/S	80,000	3,850	3,075	1900K	22
67699	LU70/PLUS/XL/ECO	ET23.5	E39	S62/O	80,000	6,200	4,950	1900K	22
67800	LU100/PLUS/XL/ECO	ET23.5	E39	S54/O	80,000	9,800	7,800	2100K	22
67801	LU150/PLUS/XL/ECO	ET23.5	E39	S55/O	80,000	15,200	12,150	2100K	22
67808	LU200/PLUS/XL/ECO	ET18	E39	S66/O	80,000	21,500	18,000	2100K	22
67809	LU250/PLUS/XL/ECO	ET18	E39	S50/O	80,000	27,500	23,200	2100K	22
67810	LU310/PLUS/XL/ECO	ET18	E39	S67/S	80,000	35,500	32,700	2100K	22
67811	LU400/PLUS/XL/ECO	ET18	E39	S51/O	80,000	49,000	39,200	2100K	22

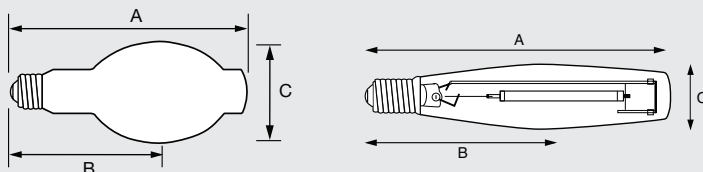
1. TCLP claims based on OSRAM SYLVANIA's TCLP test protocol. Some states and localities have lower limits than the Federal TCLP standard and have different disposal regulations for mercury containing lamps.
Data available upon request.
2. Average rated life based on 10 hours per start.
3. Mean lumens are measured on ANSI reference circuits at rated wattage and 50% of average rated life.
4. CRI for LUMALUX PLUS/XL/ECO lamps is approximately 22.
5. Lamp lumen maintenance is 90% at 50,000 hours.

Ordering Guide

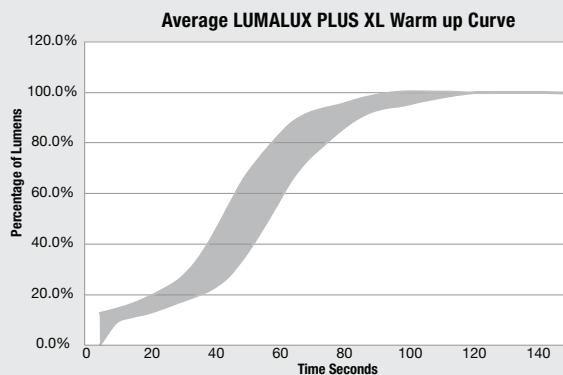
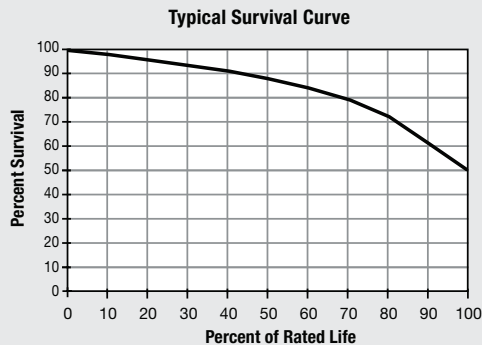
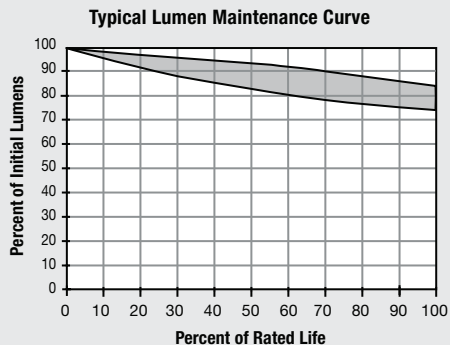
LU	100	/	PLUS	/	XL	/	ECO
LUMALUX® High Pressure	Wattage: 50, 70, 100, 150, 200, 250, 310 and 400 watts		Non-Cycling		EXTended Life		ECOLOGIC® (Passes TCLP)

Lamp Dimensions

Ordering Abbreviation	(A) MOL [in. (mm)]	(B) LCL [in. (mm)]	(C) Bulb Diameter [in. (mm)]
LU50/PLUS/ECO	7.75(196)	5.0(127)	2.20 (74)
LU70/PLUS/XL/ECO	7.75 (196)	5.0 (127)	2.94 (74)
LU100/PLUS/XL/ECO	7.75 (196)	5.0 (127)	2.94 (74)
LU150/55/PLUS/XL/ECO	7.75 (196)	5.0 (127)	2.94 (74)
LU200/PLUS/XL/ECO	9.76 (248)	5.75 (146)	2.20 (56)
LU250/PLUS/XL/ECO	9.76 (248)	5.75 (146)	2.20 (56)
LU310/PLUS/ECO	9.76(248)	5.75 (146)	2.20(56)
LU400/PLUS/XL/ECO	9.76 (248)	5.75 (146)	2.20 (56)



Technical Information



Sample Specification

Lamp(s) shall be (a) LUMALUX PLUS®/XL/ECO® non-cycling, high pressure sodium lamp(s) and shall contain up to 90% less mercury than a standard high-pressure sodium lamp. Lamp(s) shall include a lead-free brass base, shall pass the existing Federal TCLP limits and be rated for 80,000 hours life. Lamp(s) shall be a direct retrofit on existing ANSI designated ballasts of similar wattage of standard high-pressure sodium lamps and shall meet existing ANSI specifications for those corresponding wattages. Due to a gap in the tolerances between the ANSI lamp specification and the ANSI ballast/starter specification, the Cooper 220C1/3G11 (G11) starter is not compatible with LUMALUX PLUS XL lamps. Lamp(s) shall remain off at the end of life and shall not cycle. For more information please contact your OSRAM SYLVANIA representative.

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