Product Information Bulletin

OCTRON® FBO32 CURVALUME® ECOLOGIC®

Fluorescent Lamps

SYLVANIA OCTRON FBO32 CURVALUME ECOLOGIC lamps are designed to pass the Federal TCLP test criteria for classification as non-hazardous waste in most states. When paired with QUICKTRONIC® high frequency electronic ballasts, they provide an energy efficient, environmentally friendly system for 2x2 luminaires.

OCTRON FBO32 700 Series CURVALUME ECOLOGIC lamps, with CRI of 75 and 20,000 hours average rated life, deliver T8 efficiency at a more affordable price.

OCTRON FBO32 800 Series CURVALUME ECOLOGIC lamps with CRI of 82, 100 more lumens per lamp and improved lumen maintenance are suitable for areas where improved color and brightness are important.

OCTRON 800XP™ EXtended Performance CURVALUME ECOLOGIC lamps offer 20% longer lamp life, 85 CRI, and 150 more lumens compared to standard OCTRON Curvalume lamps. The excellent lumen maintenance of the XP lamps assures high light levels over the life of the lamps.

OCTRON 800XPS™ EXtended Performance Super CURVALUME ECOLOGIC lamps deliver the longest average rated life, highest light output, highest CRI and best lumen maintenance of the OCTRON CURVALUME ECOLOGIC family.

- OCTRON 32W U-Shaped lamps with 6" leg spacing
- Designed to pass Federal TCLP[1] test
- OCTRON 700 and 800 Series lamps offer:
  - 20,000 hours average rated life on rapid or programmed rapid start
  - 15,000 hours average rated life on instant start
  - 700 Series – 75 CRI, 800 Series 82 CRI
- OCTRON XP™ EXtended Performance lamps offer:
  - 20% longer average rated lamp life
    - 24,000 hours on rapid or programmed rapid start
    - 18,000 hours on instant start
  - Higher initial and maintained lumens
  - Improved CRI: 85 CRI vs. 75 or 82
- OCTRON XPS™ EXtended Performance Super lamps offer:
  - Longest average rated life
    - 30,000 hours on Programmed Start EXtreme (PSX)
    - 24,000 hours on rapid or programmed rapid start
    - 18,000 hours on instant start
  - Highest initial and maintained lumens
  - 85 CRI
  - XPS/PSX system compatibility with occupancy sensors
- QUICK 60+® system warranty when operated by QUICKTRONIC® ballasts

SYLVANIA OCTRON T8 ECOLOGIC fluorescent lamps are designed to pass the Federal Toxic Characteristic Leaching Procedure (TCLP) criteria for classification as non-hazardous waste in most states[2].

ECOLOGIC®

[1] TCLP test results are based on NEMA LL Series standards and are available on request.

[2] Lamp disposal regulations may vary; check your local & state regulations.

Product Availability

Lamp	Color Temperature	CRI	Avg. Rated Life (hrs.)
FBO32/730/6/ECO	3000K	75	20,000
FBO32/735/6/ECO	3500K	75	20,000
FBO32/741/6/ECO	4100K	75	20,000
FBO32/750/6/ECO	5000K	75	20,000
FBO32/830/6/ECO	3000K	82	20,000
FBO32/835/6/ECO	3500K	82	20,000
FBO32/841/6/ECO	4100K	82	20,000
FBO32/830XP/6/ECO	3000K	85	24,000
FBO32/835XP/6/ECO	3500K	85	24,000
FBO32/841XP/6/ECO	4100K	85	24,000
FBO32/830XPS/6/ECO	3000K	85	30,000
FBO32/835XPS/6/ECO	3500K	85	30,000
FBO32/841XPS/6/ECO	4100K	85	30,000

Sample Specification

Lamp(s) shall be OCTRON FBO32 CURVALUME ECOLOGIC lamps with 6-inch leg spacing. Lamps(s) shall be designed to pass the Federal TCLP test criteria. Lamp(s) shall have medium bi-pin bases. Lamp(s) shall have a color temperature of (3000K, 3500K, 4100K, or 5000K) and a CRI of (75, 82, or 85). Lamps shall have an average rated life of (15,000, 18,000, 20,000, 24,000, or 30,000) hours when operated 3 hours/start on (instant start, rapid start, programmed rapid start or PSX) ballasts. Lamps shall be operated on QUICKTRONIC or QUICKTRONIC Professional electronic ballasts. Both lamp(s) and ballast(s) shall be covered by the QUICK 60+ warranty program.

Warranty Information

QUICK 60+® warranty for SYLVANIA lamp and ballast combinations. Limited 30 or 36 month lamp warranty and 5 year ballast warranty is available if both lamps and ballasts are provided by OSRAM SYLVANIA. The QUICK 60+ warranty for the OCTRON XPS lamp and QUICKTRONIC PSX ballast system applies when occupancy sensors are used. See the QUICK 60+ warranty for details and restrictions.

System Comparison

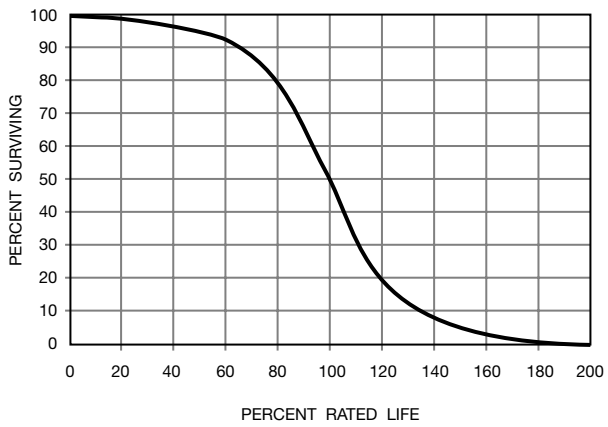
2' x 2' Luminaire with 2 lamps

Lamp Type	Ballast	System Wattage	Ballast Factor	Initial System Lumens	System Lumens @ 8000 Hrs.	Relative Light Output	Energy Savings	Relative Lamp Life @ 12 Hrs./start
FB40/CW/6/SS	E.S. Magnetic	72	.88	4576	3935	100%	-0-	100%
FB40/D41/6/SS	E.S. Magnetic	72	.88	4805	4325	110%	-0-	100%
FBO32/741/6/ECO	QT2X32/ISL	51	.77	4235	3812	97%	29%	92%
FBO32/841/6/ECO	QT2X32/ISL	51	.77	4389	4038	103%	29%	92%
FBO32/841XP/6/ECO	QT2X32/ISL	51	.77	4466	4243	108%	29%	100%
FBO32/841XPS/6/ECO	QTPX32/PSX	45	.71	4260	4047	103%	37%	130%
FBO32/841XPS/6/ECO	QT2X32/ISL	51	.77	4620	4389	112%	29%	100%
FBO32/841XPS/6/ECO	QT2X32/ISN	59	.90	5400	5130	130%	18%	100%
FBO32/841XPS/6/ECO	QT2X32/ISH	78	1.20	7200	6840	174%	-8%	100%

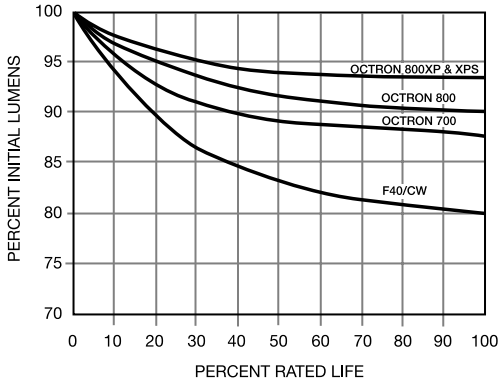
E.S. Magnetic = Energy Saving magnetic rapid start
ISL = Instant Start, Low ballast factor (77%)
ISN = Instant Start, Normal ballast factor (90%)
ISH = Instant Start, High ballast factor (120%)

Technical Information

Typical Fluorescent Lamp Mortality



Lumen Maintenance
OCTRON XP, OCTRON & F40/CW



Source: IES Handbook

Application Information

Applications

Retail
Offices
Schools
Hospitals
General Lighting
Wherever TCLP passing FBO32 lamps are needed.

Fixtures

Contact your local fixture agent for available fixtures.

Ballast Information

Contact your OSRAM SYLVANIA representative for a list of compatible electronic operating systems.

Application Notes

1. Lamps can start at temperatures as low as 0°F (dependent on ballast). Operation below 50°F may affect lumen output or lamp operation.
2. For cold temperature applications, use in enclosed luminaires to maximize lumen output.
3. For rapid start operation, check with ballast manufacturer for ground plane requirement.
4. Average rated life based on operation on rapid start ballast. If operated on instant ballasts for OCTRON lamps, lamp life will be reduced.
5. Actual lamp life dependent on ballast, switching cycle and hours of operation per start.

Ordering and Specification Information

FBO32/700/6/ECOLOGIC – 75 CRI, 20,000 hours average rated life

Item Number	Ordering Abbreviation	Watts	Bulb	Base	Leg Spacing	Avg. Rated Life (hrs.)[1]	Initial Lumens[2]	Mean Lumens[3]	CCT	CRI
22046	FBO32/730/6/ECO	32	T8	Medium bi-pin	6"	20,000	2750	2475	3000K	75
22051	FBO32/735/6/ECO	32	T8	Medium bi-pin	6"	20,000	2750	2475	3500K	75
22052	FBO32/741/6/ECO	32	T8	Medium bi-pin	6"	20,000	2750	2475	4100K	75
22053	FBO32/750/6/ECO	32	T8	Medium bi-pin	6"	20,000	2750	2475	5000K	75

FBO32/800/6 ECOLOGIC – 82 CRI, 20,000 hours average rated life

Item Number	Ordering Abbreviation	Watts	Bulb	Base	Leg Spacing	Avg. Rated Life (hrs.)[1]	Initial Lumens[2]	Mean Lumens[3]	CCT	CRI
21663	FBO32/830/6/ECO	32	T8	Medium bi-pin	6"	20,000	2850	2622	3000K	82
21670	FBO32/835/6/ECO	32	T8	Medium bi-pin	6"	20,000	2850	2622	3500K	82
21671	FBO32/841/6/ECO	32	T8	Medium bi-pin	6"	20,000	2850	2622	4100K	82

FBO32/800XP/6/ECOLOGIC – 85 CRI, 24,000 hours average rated life

Item Number	Ordering Abbreviation	Watts	Bulb	Base	Leg Spacing	Avg. Rated Life (hrs.)[1]	Initial Lumens[2]	Mean Lumens[4]	CCT	CRI
22054	FBO32/830XP/6/ECO	32	T8	Medium bi-pin	6"	24,000	2900	2755	3000K	85
22055	FBO32/835XP/6/ECO	32	T8	Medium bi-pin	6"	24,000	2900	2755	3500K	85
22057	FBO32/841XP/6/ECO	32	T8	Medium bi-pin	6"	24,000	2900	2755	4100K	85

FBO32/800XPSECOLOGIC – 85 CRI, 30,000 hours average rated life

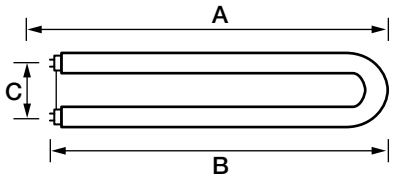
Item Number	Ordering Abbreviation	Watts	Bulb	Base	Leg Spacing	Avg. Rated Life (hrs.)[1]	Initial Lumens[2]	Mean Lumens[5]	CCT	CRI
22094	FBO32/830XPS/6/ECO	32	T8	Medium bi-pin	6"	30,000	3000	2850	3000K	85
22095	FBO32/835XPS/6/ECO	32	T8	Medium bi-pin	6"	30,000	3000	2850	3500K	85
22096	FBO32/841XPS/6/ECO	32	T8	Medium bi-pin	6"	30,000	3000	2850	4100K	85

1. Lamp Life base on operation at 3 hours per start on rapid start ballast. Lamp life on instant start ballast will be less. (15,000 hours for FBO32700 and 800, and 18,000 hours for FBO32/800XP and FO32/800XPS lamps at 3 hours/start)
2. Initial lumens measure at 100 hours of operation.
3. Mean lumens measured at 8000 hours, 40% of 20,000 hours.
4. Mean lumens measured at 8000 hours. Mean lumens at 40% of 24,000 hours (9600 hours) = 2726.
5. Mean lumens measured at 8000 hours. Mean lumens at 40% of 24,000 hours (9600 hours) = 2820 and 40% of 30,000 hours (12,000 hours) = 2790.

Ordering Guide

FBO	32	/	8	35	XPS	/	6	/	ECO
Fluorescent Bent OCTRON	Wattage: 32 Watts		8 = 82 or 85 CRI 7= 75 CRI	35 = 3500K 30 = 3000K 41 = 4100K 50 = 5000K	E**X**tended **P**erformance **S**uper		6" leg spacing		ECOLOGIC

Dimensions



Lamp Type	(A) Maximum Overall Length (in.)	(B) Max. Base to Top of Lamp (in.)	(C) Leg Spacing Pin to Opposite Pin (in.)
FBO32	23	22.6	6.0

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