

OCTRON® FBO32 CURVALUME® ECOLOGIC® Fluorescent Lamps



- OCTRON 32W U-Shaped lamps with 6" leg spacing
- Designed to pass Federal TCLP¹ 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™ **EX**tended **P**erformance 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™ **EX**tended **P**erformance **S**uper lamps offer:
 - Longest average rated life
 - 30,000 hours on **P**rogrammed **S**tart **EX**treme (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 QUICK-TRONIC® ballasts

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 **P**erformance **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 **P**erformance **S**uper **CURVALUME ECOLOGIC** lamps deliver the longest average rated life, highest light output, highest CRI and best lumen maintenance of the OCTRON CURVALUME ECOLOGIC family.

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 states².



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.) |
|--------------------|-------------------|-----|------------------------|
| FB032/730/6/ECO | 3000K | 75 | 20,000 |
| FB032/735/6/ECO | 3500K | 75 | 20,000 |
| FB032/741/6/ECO | 4100K | 75 | 20,000 |
| FB032/750/6/ECO | 5000K | 75 | 20,000 |
| FB032/830/6/ECO | 3000K | 82 | 20,000 |
| FB032/835/6/ECO | 3500K | 82 | 20,000 |
| FB032/841/6/ECO | 4100K | 82 | 20,000 |
| FB032/830XP/6/ECO | 3000K | 85 | 24,000 |
| FB032/835XP/6/ECO | 3500K | 85 | 24,000 |
| FB032/841XP/6/ECO | 4100K | 85 | 24,000 |
| FB032/830XPS/6/ECO | 3000K | 85 | 30,000 |
| FB032/835XPS/6/ECO | 3500K | 85 | 30,000 |
| FB032/841XPS/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

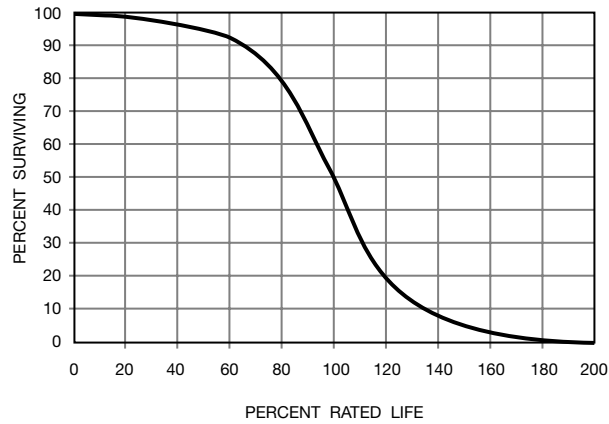
2' x 2' Luminaire with 2 lamps

| Lamp Type | Ballast | System Wattage | Ballast Factor | Initial System Lumens | System Lumens @ 8000 Hrs. | Relative Light Output | Energy Savings @ 12 Hrs./start | Relative Lamp Life |
|--------------------|---------------|----------------|----------------|-----------------------|---------------------------|-----------------------|--------------------------------|--------------------|
| 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% |
| FB032/741/6/ECO | QT2X32/ISL | 51 | .77 | 4235 | 3812 | 97% | 29% | 92% |
| FB032/841/6/ECO | QT2X32/ISL | 51 | .77 | 4389 | 4038 | 103% | 29% | 92% |
| FB032/841XP/6/ECO | QT2X32/ISL | 51 | .77 | 4466 | 4243 | 108% | 29% | 100% |
| FB032/841XPS/6/ECO | QTPX32/PSX | 45 | .71 | 4260 | 4047 | 103% | 37% | 130% |
| FB032/841XPS/6/ECO | QT2X32/ISL | 51 | .77 | 4620 | 4389 | 112% | 29% | 100% |
| FB032/841XPS/6/ECO | QT2X32/ISN | 59 | .90 | 5400 | 5130 | 130% | 18% | 100% |
| FB032/841XPS/6/ECO | QT2X32/ISH | 78 | 1.20 | 7200 | 6840 | 174% | -8% | 100% |

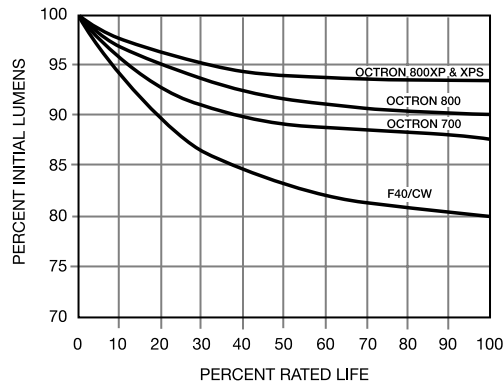
E.S. Magnetic = Energy Saving magnetic rapid start
 ISL = Instant Start, Low ballast factor (77%)
 ISN = Instant Start, Normal ballast factor (90%)
 ISH = Instant Start, High ballast factor (120%)

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 | EXtended Performance Super | | 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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