Product Information Bulletin

DULUX® D/E EOL ECOLOGIC®

4-Pin Compact Fluorescent Lamps With End-Of-Life Protection

- Compact fluorescent lamps for use on dimming and electronic ballasts
- End-of-Life (EOL) shut down protection
- Pass Federal TCLP tests
  - Pair with linear ECOLOGIC lamps for TCLP compliant installations
- Uses about 1/4 the energy of an incandescent lamp with similar lumen output
- Long 12,000 hour average rated life
  - Typically 12-16 times longer than standard incandescents
  - Reduces relamping requirements and related costs
- Rare earth phosphors – 82 CRI
- 2700K, 3000K, 3500K and 4100K color temperatures
- 86% lumen maintenance

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

SYLVANIA DULUX D/E EOL ECOLOGIC lamps are long-life, energy-saving alternatives for incandescent lamps. When paired with SYLVANIA linear ECOLOGIC lamps, all the fluorescent lamps in an installation will be TCLP compliant. Each lamp has a built in feature that will safely shut the lamp down at end of lamp life.

NEMA[1] has expressed concern regarding the end-of-life operation of small diameter (T5 or less), 4-pin, compact fluorescent lamps. When operated on high frequency, electronic ballasts, these lamps may experience an abnormal end-of-life phenomenon – bulb wall cracking near the lamp base and/or overheating in the base area and possibly melting the lamp base and socket. NEMA recommends that high frequency, electronic ballasts have an end-of-life shutdown circuit which will reliably shut down the system in the rare event of abnormal end-of-life.

1. NEMA: National Electrical Manufacturers Association

The DULUX D/E EOL ECOLOGIC lamps provide protection for existing ballasts with no end-of-life protection. DULUX D/E EOL ECOLOGIC lamps can also be used with ballasts with end-of-life protection to provide additional protection.

Product Availability

Lamp Type	Wattage	Rated Lumens
CF13DD/E/827	13	900
CF13DD/E/830	13	900
CF13DD/E/835	13	900
CF13DD/E/841	13	900
CF18DD/E/827	18	1150
CF18DD/E/830	18	1150
CF18DD/E/835	18	1150
CF18DD/E/841	18	1150
CF26DD/E/827	26	1710
CF26DD/E/830	26	1710
CF26DD/E/835	26	1710
CF26DD/E/841	26	1710

Application Information

Applications

Recessed ceiling fixtures
Wall sconces
Exit signs
Showcase lighting
Task lighting
Garden and walkway lighting

Fixtures

Contact your local fixture agent for available fixtures

Ballast Information

Contact your OSRAM SYLVANIA representative for information about compatible electronic operating systems

Application Notes

1. 4-Pin, lamps designed for dimming and electronic ballast operation.
2. Minimum starting temperature depends on ballast.
3. Rule of thumb: to estimate the appropriate compact fluorescent lamp wattage, divide the incandescent wattage by 4.
4. Lamps manufactured to prevent abnormal end-of-life lamp failures.
5. Equipment manufacturers are advised to consult ANSI and IEC standards for the maximum allowable dimensions and temperature to insure compatibility with similar products.

Sample Specification

Lamp(s) shall be (a) DULUX D/E ECOLOGIC (CF13DD/E, CF18DD/E or CF26DD/E) lamps with internal end-of-life shut down feature and pass existing Federal TCLP limits. Lamps shall have an average rated life of 12,000 hours, a correlated color temperature of (2700K, 3000K, 3500K or 4100K), and a CRI of 82. Lamps shall have a (G24q-1, G24q-2, G24q-3) plug-in, 4-pin base and be suitable for use on electronic and dimming ballasts. Lamps shall be operated by QUICKTRONIC® Professional ballasts. Both lamps and ballasts covered by the QUICK 60+® system warranty.

Ordering and Specification Information

Item Number	Ordering Abbreviation	NEMA Generic Description	Watts	Base	Initial Lumens	Mean Lumens[1]	Color Temp.	CRI	Avg. Rated Life (hrs.)[2]	Amps[3]	Volts[3]
20682	CF13DD/E/827	CFQ13W/G24q/27	13	G24q-1	900	774	2700K	82	12,000	0.165	77
20721	CF13DD/E/830	CFQ13W/G24q/30	13	G24q-1	900	774	3000K	82	12,000	0.165	77
20671	CF13DD/E/835	CFQ13W/G24q/35	13	G24q-1	900	774	3500K	82	12,000	0.165	77
20667	CF13DD/E/841	CFQ13W/G24q/41	13	G24q-1	900	774	4100K	82	12,000	0.165	77
20683	CF18DD/E/827	CFQ18W/G24q/27	18	G24q-2	1150	989	2700K	82	12,000	0.210	80
20724	CF18DD/E/830	CFQ18W/G24q/30	18	G24q-2	1150	989	3000K	82	12,000	0.210	80
20672	CF18DD/E/835	CFQ18W/G24q/35	18	G24q-2	1150	989	3500K	82	12,000	0.210	80
20668	CF18DD/E/841	CFQ18W/G24q/41	18	G24q-2	1150	989	4100K	82	12,000	0.210	80
20684	CF26DD/E/827	CFQ26W/G24q/27	26	G24q-3	1710	1470	2700K	82	12,000	0.300	80
20722	CF26DD/E/830	CFQ26W/G24q/30	26	G24q-3	1710	1470	3000K	82	12,000	0.300	80
20673	CF26DD/E/835	CFQ26W/G24q/35	26	G24q-3	1710	1470	3500K	82	12,000	0.300	80
20669	CF26DD/E/841	CFQ26W/G24q/41	26	G24q-3	1710	1470	4100K	82	12,000	0.300	80

1. Measured at 40% (4,000 hours) of rated life.
2. Based on 3 hours per start. Number of operating hours when half have failed and half are still operating.
3. At 25 KHz

Lamp Comparison

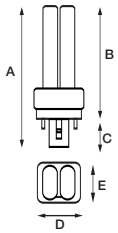
Compact Fluorescent vs Incandescent

Lamp Type	Rated Lamp Life	Ballast Factor	System Lumens	System Wattage	System LPW	Energy Savings
2 - 26 Watt DULUX D ECOLOGIC	12,000 hours	1.0	3600	48	51	76%
1 - 200A Watt Incandescent	750 hours	1.0	3800	200	75	–

Ordering Guide

CF	26	DD	/	E	/	8	27
Compact Fluorescent	Wattage: 13, 18, or 26 Watts	DULUX Double		for electronic and dimming ballasts		8=82 CRI	27=2700K 30=3000K 35=3500K 41=4100K

Dimensions

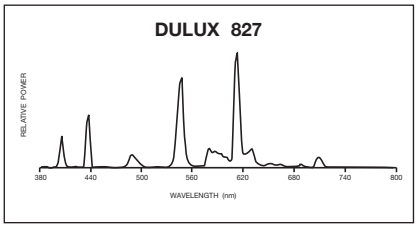


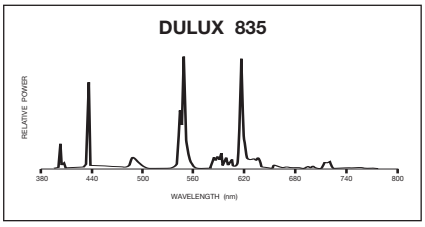
Ordering Abbreviation	(A) Max. Overall Length [in (mm)]	(B) Base Face to Top of Lamp [in (mm)]	(C) Guide Post Length [in (mm)]	(D) Max. Base Width [in (mm)]
CF13DD/E	5.2 (132)	4.5 (114)	0.62 (16)	1.4 (35)
CF18DD/E	5.8 (147)	5.1 (130)	0.62 (16)	1.4 (35)
CF26DD/E	6.6 (168)	5.9 (150)	0.62 (16)	1.4 (35)

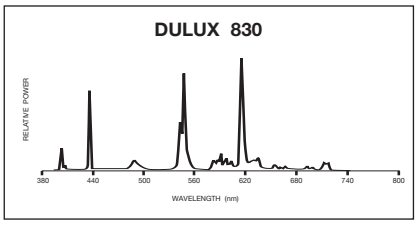
T4 diameter glass tubing = 0.5 inches (12.7 mm)

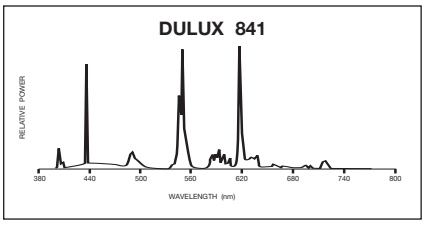
Technical Information

Spectral Power Distributions









OSRAM SYLVANIA
National Customer
Service and Sales Center
18725 N. Union Street
Westfield, IN 46074

Industrial & Commercial

Phone: 1-800-255-5042
Fax: 1-800-255-5043

National Accounts

Phone: 1-800-562-4671
Fax: 1-800-562-4674

OEM/Specialty Markets

Phone: 1-800-762-7191
Fax: 1-800-762-7192

Photo-Optic

Phone: 1-888-677-2627
Fax: 1-800-762-7192

OSRAM SYLVANIA
Ballast Division
800 N. Church Street
Lake Zurich, IL 60047

Phone: 1-800-654-0089
Fax: 1-847-726-6424

In Canada
OSRAM SYLVANIA LTD.
Headquarters
2001 Drew Road
Mississauga, ON L5S 1S4

Industrial & Commercial

Phone: 1-800-263-2852
Fax: 1-800-667-6772

Special Markets

Phone: 1-800-265-2852
Fax: 1-800-667-6772

Visit our website: www.sylvania.com

SYLVANIA, ECOLOGIC and QUICK 60+ are registered trademarks of OSRAM SYLVANIA, Inc.
DULUX and QUICKTRONIC are registered trademarks of OSRAM GmbH, Germany, used under license.

© 2004 OSRAM SYLVANIA Printed on recycled paper. 02/04