

# PENTRON PREMIER™ ECOLOGIC® LAMPS

## T5 Linear Fluorescent Lamps



- Improved phosphor blend yields brighter PENTRON lamps
  - 3050 lumens at 35°C for FP28/PM lamps
- QUICK 60+® system warranty when operated on OSRAM SYLVANIA QUICKTRONIC® ballasts including the .95BF, 1.15BF and QUICKSTEP® T5 ballasts
- Multiple ballast factor choices, including a stepped switching ballast provide design flexibility as well as extreme system efficiency (as high as 100 LPW)
- Passes the Federal TCLP test
- 3000K, 3500K, 4100K and 85 CRI
- 95% lumen maintenance
- 20,000 hours average rated life

SYLVANIA PENTRON PREMIER T5 ECOLOGIC fluorescent lamps pass the Federal Toxicity Characteristic Leaching Procedure (TCLP) criteria<sup>1</sup> for classification as non-hazardous waste in most states<sup>2</sup>.



**A dramatic improvement in the developing line of slender, 5/8" diameter, T5 linear fluorescent sources, the PENTRON PREMIER™ ECO® lamps provide increased lumen output, the highest in the industry, with an astonishing 109 lamp lumens per watt**

Greater system flexibility is achieved when PENTRON PREMIER lamps are combined with the new series of OSRAM SYLVANIA QUICKTRONIC PENTRON ballasts achieving a varied lumen package depending upon the application.

PENTRON PREMIER T5 lamps also present the greatest opportunity for luminaire efficiency. The 5/8" diameter affords superior optical control achieving precision distribution in a well designed luminaire.

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

NAED Code	Ordering Description
20948	FP28/830/PM/ECO
20943	FP28/835/PM/ECO
20944	FP28/841/PM/ECO

### Application Information

#### Applications

Office  
Schools  
Commercial  
Retail  
Hospitality  
Institutional  
New Construction  
Renovation

#### Application Notes

1. PENTRON PREMIER lamps are about 2" shorter than T8 and T12 bi-pin lamps.
2. Miniature bi-pin (T-5) base will not install into T8 and T12 sockets.
3. Miniature bi-pin (T-5) base requires UL listed 600 Volt rated sockets.
4. Requires high-frequency programmed rapid start electronic ballasts equipped with end-of-life sensing circuit.
5. Apply thermal factor in calculations for exterior or unheated applications.



### Sample Specification

Lamp(s) shall be PENTRON PREMIER™ ECO® T5 lamps having 2730 rated lumens at 25°C, 3050 lumens at 35°C and 95% lumen maintenance. Lamps shall have a correlated color temperature of (3000K, 3500K, 4100K) and a color rendering index of 85. Lamps shall be operated on OSRAM SYLVANIA QUICKTRONIC® ballast and a complete system warranty from a single manufacturer shall cover both lamps and ballasts.

### Lamp System Comparison

Lamp	Ballast	Input Watts	Initial System Lumens	Initial System LPW	Avg. Rated Life
F34T12	ES Magnetic	72	4660	65	20,000
F32T8/700 - 3 lamps	3 Lamp IS	88	7525	86	15,000
FP28PM/ECO	QTP2X28/UNV PS95SC	60/58*	5795	97/100*	20,000
FP28PM/ECO	QTP2X28/UNV PS115SC	73/71*	7015	96/99*	20,000

\*operated at 120V/operated at 277V

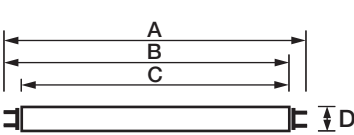
### Ordering and Specification Information

NAED Number	Ordering Abbreviation	Base	Watts	Initial Lumens @25°C	Initial Lumens @35°C	Bulb	Nominal Length (mm)	Avg. Rated Life	Color Temp	CRI
20948	FP28/830/PM/ECO	Min Bi-pin	28	2730	3050	T5	1149	20,000	3000K	85
20943	FP28/835/PM/ECO	Min Bi-pin	28	2730	3050	T5	1149	20,000	3500K	85
20944	FP28/841/PM/ECO	Min Bi-pin	28	2730	3050	T5	1149	20,000	4100K	85

### Ordering Guide

FP	28	/	8	35	/	PM	/	ECO
Fluorescent	Wattage		CRI	Color Temperature		PENTRON		ECOLOGIC®
PENTRON T5	28 watts		8 = 85	30 = 3000K 35 = 3500K 41 = 4100K		PREMIER™		

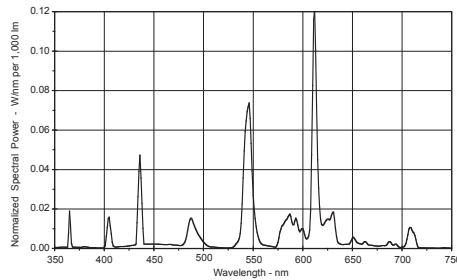
### Dimensions



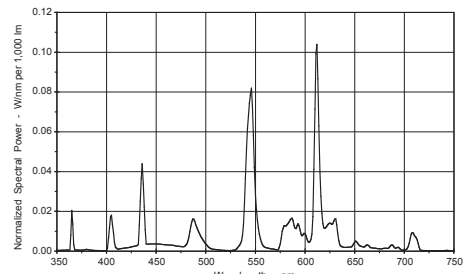
Lamp	(A) Maximum Overall Length in. (mm)	(B) Max. Base Face to Opposite Pin in. (mm)	(C) Max. Base Face to Base Face in. (mm)	(D) Max. Outside Diameter in. (mm)
FP28	45.80" (1163.2)	45.52" (1156.1)	45.24" (1149.0)	0.67" (17.0)

### Technical Information

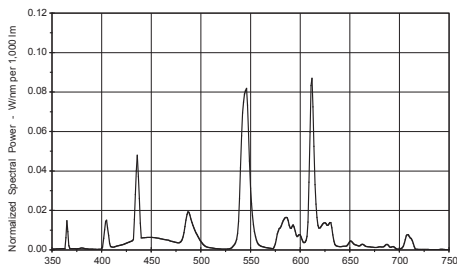
PENTRON 830



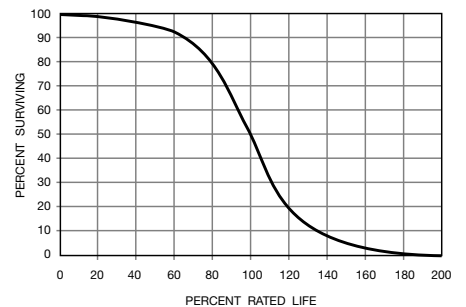
PENTRON 835



PENTRON 841



Typical Fluorescent Lamp Mortality



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