

PENTRON® PREMIER™ ECOLOGIC®

T5 Linear Fluorescent Lamps



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

Greater system flexibility is achieved when PENTRON PREMIER lamps are combined with SYLVANIA QUICKTRONIC PROStart® T5 ballasts achieving a varied lumen package depending upon the application.

PENTRON PREMIER T5 lamps also present the greatest opportunity to maximize fluorescent luminaire efficiency. The 5/8" diameter affords superior optical control than larger diameter lamps, thus improving efficiency in a well designed luminaire.

Application Information

Applications

- Education
- Healthcare
- Hospitality
- Institutional
- Office
- Retail

Key Features & Benefits

- Highest lumen output T5 lamp in the industry
- Improved phosphor blend yields higher lumen output lamps
 - 3050 initial lumens at 35°C
 - 2900 mean lumens at 35°C
- Up to 36,000 rated life
- 109 lumens per Watt (LPW)
- 95% mean lumens
- 85 CRI
- TCLP and ROHS Compliant
- QUICK 60+® system warranty when operated on QUICKTRONIC® PROStart T5 ballasts

SYLVANIA PENTRON PREMIER T5 ECOLOGIC fluorescent lamps pass the Federal Toxicity Characteristic Leaching Procedure (TCLP) criteria¹ for classification as non-hazardous waste in most states.²

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 Offering

Ordering Abbreviation	Wattage	CCT
FP28/800/PM/ECO	28	3500K, 4100K

Application Notes

1. PENTRON PREMIER lamps are about 2" shorter than T8 and T12 bi-pin lamps.
2. These lamps may help facilitate compliance with National Energy Codes such as ASHRAE/IES 90.1 or IECC and State Energy Codes such as California Title 24. For more information contact your local building inspection office.
3. Miniature bi-pin (T-5) base will not install into T8 and T12 sockets.
4. Miniature bi-pin (T-5) base requires UL listed 600 Volt rated sockets.
5. Requires high-frequency programmed rapid start electronic ballasts equipped with end-of-life sensing circuit.
6. Apply thermal factor in calculations for exterior or unheated applications.



Lamp System Comparison

Lamp	Ballast	Input Watts	Initial System Lumens	Initial System LPW	Avg. Rated Life
F32T8/700 – 3 lamps	3 Lamp IS	88	7525	86	15,000
FP28PM/ECO	QHE2x28T5/UNV PSN	63/62*	6100	97/98*	36,000

*Operated at 120W/operated at 277V.

Ordering Information

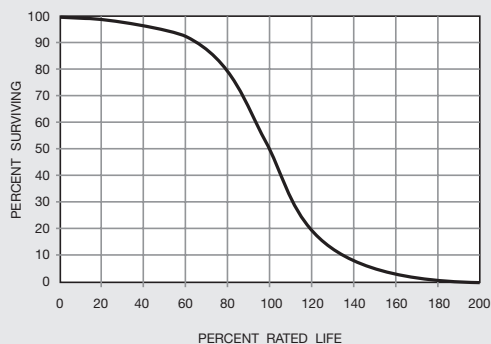
Item Number	Ordering Abbreviation	Base	Case qty.	Watts	Initial Lumens	Mean Lumens	Initial Lumens	Mean Lumens	Bulb	Avg. Rated Life		Color Temp	CRI
					@25°C	@25°C	@35°C	@35°C		@3hrs per start	@12hrs per start		
20943	FP28/835/PM/ECO	Min Bi-pin	40	28	2730	2590	3050	2900	T5	30,000	36,000	3500K	85
20944	FP28/841/PM/ECO	Min Bi-pin	40	28	2730	2590	3050	2900	T5	30,000	36,000	4100K	85

Ordering Guide

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

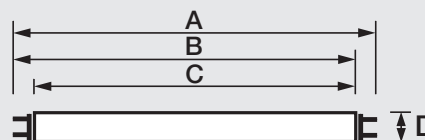
Technical Information

Typical Fluorescent Lamp Mortality



Lamp Dimensions

Ordering Abbreviation	(A) Max. Overall Length in (mm)	(B) Base Face to Opposite Pin in (mm)	(C) 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)



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 (3500K, 4100K) and a color rendering index of 85. Lamps shall be operated on QUICKTRONIC® ballast and a complete system warranty from a single manufacturer shall cover both lamps and ballasts.

