

## EST – Energy Efficient Area Lighting

- ▶ You can bring linear fluorescent energy efficiency to the outdoors.
  - The EST Series of Luminaires feature a sculpted look for architectural appeal.
  - Offered with a full range of custom colors to integrate into your projects color palette.
- ▶ Environmentally Friendly
  - Energy Efficient
  - Dark Sky Compliant
  - Controls Compatible
- ▶ Applications
  - Big Box Industrial and Retail
  - Auto Dealers
  - Strip Malls
- ▶ Don't Guess
  - Thermal curves and photometric information are on file give you the RLO information required to properly model your system.
  - Years of proven success in outdoor linear fluorescent applications.
- ▶ Why P2? It's Simple, Our Experience.
  - You can squeeze extra savings out of your 4-lamp T5HO project by switching 2 lamps on a separate circuit. Turn this circuit off after retail hours and leave the companion lamps on for security.

### EST – Outdoor Area Lighting



### Application

- EST and ESB provide energy efficient choices for 20-35' Site Lighting.
- See ESTE with controls, ESW wide body, and EWB forward throw wall pack for controls, 6L-T5HO, and wall mount applications.
- EST available in 2-Lamp and 4-Lamp T5HO cross sections.
- Suitable for Wet Locations.

### EST – 1x4 – 4L – T5HO – UL1 – MN – PS – ST – TG – BZ – LSP

EST	1x4	4L	T5HO	UL1	MN	PS	ST	TG	BZ	LSP		
Model	Fixt Size	Lamp Qty	Lamp Type	Voltage	Ballast Factor	Ballast Starting	Ballast Grade	Lens	Fixture Finish	Other	Other	Other

Fixture Model  
EST = T5HO Site Lighter

Fixture Size  
1x2 = 1x2 Nominal  
1x4 = 1x4 Nominal

Lamp Qty  
xL = x Indicates quantity of lamps

Lamp Type  
T5HO = Linear T5HO Lamps

Voltage (1)  
UHx = Universal 347-480  
ULx = Universal 120-277

Ballast Factor (2)  
MN = Neutral Power (.97 - 1.04)

Ballast Starting  
PS = Programmed Start

Ballast Grade  
ST = Standard Grade  
UE = Ultra Efficient

Lens  
TG = Tempered Glass

Other (Mounting)  
BO8 = 8" Bolt On Arm  
ADF = 2-3/8" Adjustable Fitter  
PMK = Adjustable Pole Mount Kit  
Consult Factory For More Mounting

Fixture Finish  
BB = Black  
BG = Green  
BW = White  
BY = Gray  
BZ = Bronze  
RAL = RALxxxx (RAL Specification)

Other  
LF = Factory Lamps (Lamp spec elsewhere)  
LSP = Lighting Surge Protector  
PC = Locking Photocontrol Base and Photocell  
BP = Button Photocell  
SF = Single Fuse 120-277  
DF = Double Fuse 208/240/480  
SS = Stainless Bird Spikes  
HSS = House Side Shield

Numeric Footnotes

- (1) Numeral indicates number ballasts per fixture.
- (2) Ballast factors outside ranges shown to be called out numerically.

## EST – Energy Efficient Area Lighting

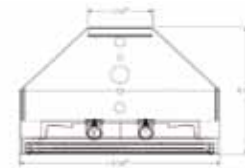
### Fixture Construction

- Heavy duty single piece aluminum body. EPA = 2.48, 20 lbs. All EPA values assume a horizontal mounting position.
- Post production powder coat minimum 3k hour salt spray.
- Extruded aluminum lens frame and tempered glass lens.
- Environmentally friendly and labor saving bulk project packaging.
- 100k cycle, 1.5g accelerometer test to ANSI Standard C136.31-2001.
- Made in the USA: Hudson WI, Gainesville FL, Orange County CA.

2L T5HO Plan View



2L-T5HO Cross Section

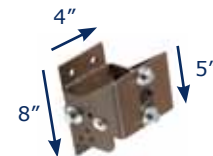


### HSS - House Side Shield



### Common Mounting Options

BO8 = 8" Bolt on Arm



PMK = Adjustable Pole Mount Kit

### Existing Systems

Existing Hi-Bay System	Lamp Qty & Type	Initial Lamp Lumens	Lumen Maintenance	EOL(1) Lumens All Lamps	Total Fixture Lumens	Ballast Factor	Fixture Efficiency	EOL(1) Lumens Per Fixt	S/P (2) Ratio	Net (3) EOL Lumens	Fixt Input Watts
MH250	1 Std MH250	20,500	58%	11,890	11,890	1.00	0.75	8,918	1.49	12,171	295
MH320PS	1 PS MH320	31,700	62%	19,654	19,654	1.00	0.75	14,741	1.49	20,119	368
MH400	1 Std MH400	38,000	58%	22,040	22,040	1.00	0.75	16,530	1.49	22,561	458
HPS400	1 Std HPS400	50,000	70%	35,000	35,000	1.00	0.75	26,250	0.62	18,080	464

### Re-Lighting Option

Proposed Hi-Bay System	Lamp Qty & Type	Initial Lamp Lumens	Lumen Maintenance	EOL(1) Lumens All Lamps	Total Fixture Lumens	Ballast Factor	Fixture Efficiency	EOL(1) Lumens Per Fixt	S/P (2) Ratio	Net (3) EOL Lumens	Fixt Input Watts
2L-T5HO	2 FP54T5HO	5,000	93%	4,650	9,300	1.00	0.82	7,626	1.62	11,110	117
4L-T5HO	4 FP54T5HO	5,000	93%	4,650	18,600	1.00	0.82	15,252	1.62	22,220	234

(1) EOL = End of Life (2) S/P Ratio = Scotopic to Photopic Lumens (3) Net EOL Lumens = EOL Lumens Per Fixture x (S/P).78 [.78 exponent]

### General Notes

- Lamp/ballast system values shown are a general reference intended to supply a quick comparison of several common lamp/ballast systems, the associated energy consumption, and net lumen output.
- Values shown are based on T5HO lamps operating at 35c ambient. Consult the ESW Relative Light Output curve from -30f to +150f ambient when designing your system.
- Fixture efficiency percentages are generally representative of each system type, actual values will vary.
- There are many operating variables that affect system output, in addition to rating variances from brand to brand.
- In addition to those shown there are a wide variety of systems to choose from, each with distinct features and cost points.
- Please consult the lamp/ballast manufacturer's catalogs for the detailed information required to model your system.
- Lumen maintenance percentages shown are at EOL (End of Life), except MH1000, which are at 4,000, 8,000, 12,000, or 16,000 hours of operation as noted in parentheses.