

ESTE – Hi/Lo Controls Area Lighting

- ▶ Fully integrated proximity controls for outdoor lighting.
 - IP67 rated proximity sensor is fully integrated into the fixture.
 - Maximizes potential energy savings.
 - Offered in a full range of custom colors.
- ▶ Environmentally Friendly
 - Energy Efficient
 - Dark Sky Compliant
 - Complies with pending Title 24 Controls updates.
- ▶ Don't Guess
 - Thermal curves and photometric information are on file give you the RLO information required to properly model your system.
- ▶ Why P2? It's Simple, Our Experience.
 - We monitor developing energy codes to stay ahead of the curve. Future updates to California's Title 24 Energy codes will very likely call for automatic controls on outdoor lighting as well as indoor.
 - Hi-Lo configuration, 2-lamps on, 2-lamps controlled by proximity sensor, is a proven indoor application. We've taking our experience outdoors. Proximity controls set on a twenty minute delay hold the system 100% on during high traffic hours and put it to "sleep" at 50% light and 50% wattage for the remainder of the night.

▶ ESTE – Hi/Lo Outdoor Area Lighting with Proximity Sensor



▶ Application

- The ESTE 1x4 provides energy efficient choices for 20-35' Site Lighting.
- The ESTE 1x2 provides energy efficient choices for 12-20' Site Lighting.
- Standard 4-Lamp T5HO cross section.
- See the EST, ESW, and EWB for additional T5HO outdoor applications.

ESTE – 1x4 – 4L – T5HO – UL1 – MN – PS – ST – TG – BZ – WH2 – LSP

ESTE	1x4	4L	T5HO	UL1	MN	PS	ST	TG	BZ	WH2	LSP		
Model	Fixt Size	Lamp Qty	Lamp Type	Voltage	Ballast Factor	Ballast Starting	Ballast Grade	Lens	Fixture Finish	Sensor	Other	Other	

Fixture Model
ESTE = T5HO Hi/Lo Site Lighter

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

Lamp Qty
4L = 4 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)

Numeric Footnotes
(1) Numeral indicates number ballasts per fixture.
(2) Ballast factors outside ranges shown to be called out numerically.
(3) Numeral indicates number of lamps controlled by sensor.

Proximity Sensor (3)
WH2 = Wet Location 360 View Hi-Bay Sensor
WL2 = Wet Location 360 View Lo-Bay Sensor

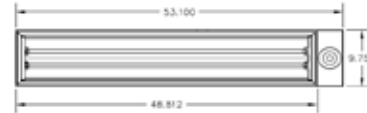
Other
LF = Factory Lamps (Lamp spec elsewhere)
LSP = Lighting Surge Protector
PC = Locking Photocontrol Base and Photocell
BP = Button Photocell
SF = Single Fuse 120-277
DF = Double Fuse 208/240/480
SS = Stainless Bird Spikes
HSS - House Side Shield

ESTE – Hi/Lo Controls Area Lighting

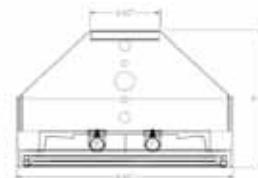
Fixture Construction

- Heavy duty single piece aluminum body. EPA = 2.48. 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.

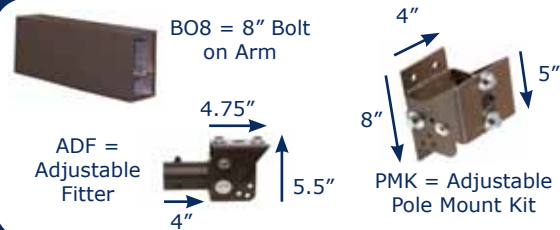
Plan View with Proximity Sensor



2L-T5HO Cross Section



Common Mounting Options



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.