

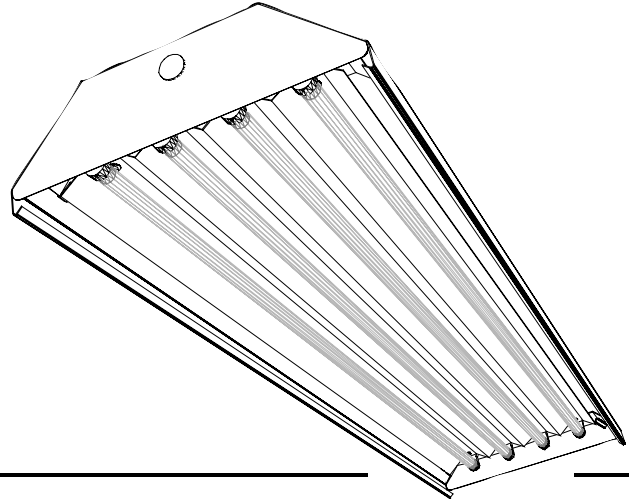
Features

A Breakthrough Alternative to HID High-Bay Systems

Superior Light Quality, Maximum Photometric Efficiency

Available in T8 and T5 lamp configurations

Hinged reflector allows tool-free ballast maintenance with lamps installed



Technical Data

Housing: 20ga. (0.032") pre-painted steel die formed with sufficient knockouts for mounting and electrical supply.

Finish: All cold rolled steel parts are painted with a smooth, glossy, highly reflective white paint.

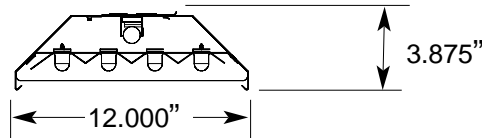
Reflector: Can be ordered with a 95% specular, a 85% specular, or a 92% diffuse white enamel. Substrate is 0.020" high quality aluminum. The reflector profile is optimized using computer analysis and manufactured using state of the art CNC equipment. A protective premask is applied to all reflective surfaces prior to manufacture.

Construction: The solid body provides added rigidity. The socket bars attach to the body with a locking tab and quarter-turn fastener. Reflector is secured to the socket-bars with screws.

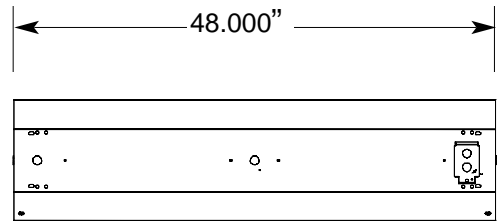
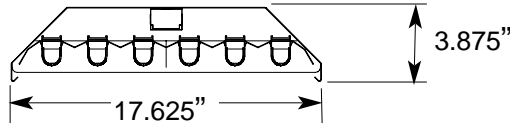
Mounting: Fixture is designed for surface, pendant mount, or suspended applications

Installation

1x4 Profile
(2 - 4 Lamps)

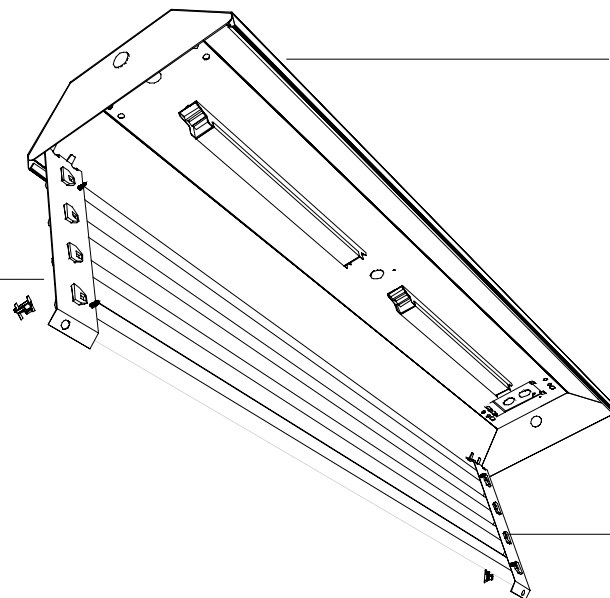


2x4 Profile
(4 - 6 Lamps)



Highlights

Hinged design allows ballast access with lamps installed



Solid, 0.032" steel body provides superior rigidity and durability

Quality, cam-lock lampholders

Photometrics



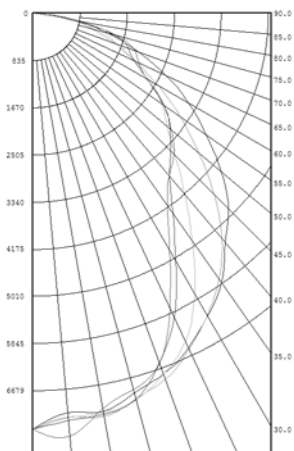
Energy Solutions
Premium Lighting without the Premium Price

Energy Solutions International, Inc.
1385 Mendota Heights Road
Saint Paul, MN 55120

ENERGY SOLUTIONS 1 X 4 FLUORESCENT LUMINAIRE
WITH WHITE INTERIOR AND SPECULAR REFLECTOR

FOUR T5 LINEAR FLUORESCENT 64 WATT LAMPS, LUMEN RATING 5000 LMS. ONE SYLVANIA QTP
4x64T5HO BALLAST OPERATING AT 277 VAC AND 234 WATTS

CANDLEPOWER SUMMARY

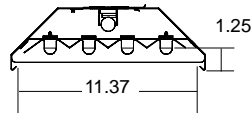


| | 0.00 | 22.50 | 45.00 | 67.50 | 90.00 |
|-------|------|-------|-------|-------|-------|
| 0.00 | 7361 | 7361 | 7361 | 7361 | 7361 |
| 5.00 | 7097 | 7170 | 7187 | 7236 | 7514 |
| 10.00 | 7155 | 7250 | 7183 | 7206 | 7106 |
| 15.00 | 6955 | 7058 | 7082 | 7069 | 6890 |
| 20.00 | 6788 | 6887 | 6783 | 6575 | 6568 |
| 25.00 | 6533 | 6560 | 6411 | 5918 | 5733 |
| 30.00 | 6196 | 6184 | 5749 | 5053 | 4836 |
| 35.00 | 5836 | 5758 | 4946 | 4320 | 4149 |
| 40.00 | 5306 | 5222 | 4199 | 3761 | 3747 |
| 45.00 | 4909 | 4551 | 3559 | 3447 | 3534 |
| 50.00 | 4365 | 3851 | 3095 | 3160 | 3197 |
| 55.00 | 3765 | 3184 | 2780 | 2841 | 2817 |
| 60.00 | 3203 | 2561 | 2403 | 2340 | 2326 |
| 65.00 | 2595 | 2001 | 1950 | 1981 | 2072 |
| 70.00 | 1974 | 1538 | 1564 | 1792 | 1912 |
| 75.00 | 1393 | 1107 | 1333 | 1505 | 1547 |
| 80.00 | 841 | 783 | 916 | 794 | 753 |
| 85.00 | 391 | 409 | 279 | 166 | 158 |
| 90.00 | 91.8 | 81.9 | 47.5 | 15.2 | 5.38 |

ZONAL LUMENS AND PERCENTAGES

| Zone | Lumens | %Lamp | %Fixt |
|--------|--------|-------|-------|
| 0- 30 | 5524 | 27.6 | 30.3 |
| 0- 40 | 8657 | 43.3 | 47.4 |
| 0- 60 | 14392 | 72.0 | 78.8 |
| 0- 90 | 18231 | 91.2 | 99.9 |
| 90-120 | 24 | 0.1 | 0.1 |
| 90-130 | 24 | 0.1 | 0.1 |
| 90-150 | 25 | 0.1 | 0.1 |
| 90-180 | 25 | 0.1 | 0.1 |
| 0-180 | 18256 | 91.3 | 100.0 |

** EFFICIENCY = 91.3% **



LUMINANCE SUMMARY - CD./SQ.M.

| | 0 | 45 | 90 |
|----|----------|----------|----------|
| 0 | 19808.82 | 19808.82 | 19808.82 |
| 45 | 17455.43 | 10852.00 | 10500.83 |
| 50 | 16843.53 | 10901.65 | 10028.42 |
| 55 | 16055.43 | 9630.38 | 9434.89 |
| 60 | 15371.43 | 9046.05 | 8422.17 |
| 65 | 14359.79 | 8104.20 | 8237.91 |
| 70 | 13024.45 | 7318.82 | 8495.03 |
| 75 | 11473.81 | 7199.17 | 7854.25 |
| 80 | 9921.75 | 5899.02 | 4502.10 |
| 85 | 6698.55 | 2242.51 | 1157.06 |

PAINT REFLECTANCE = 0.78 S/MH = 1.04
SC (ALONG) = 1.25 SC (ACROSS) = 1.04
PREPARED IN PHOTOPIA FOR
ENERGY SOLUTIONS
ST. PAUL, MN

Ordering Information

Part Number = Fixture Size + Reflector Material + # Lamps + Lamp Wattage + Voltage + Ballast Type + Options

(Example F-14HSEA454UNV = 1'x4' HS Series High Bay with an 95% alum. reflector, 4-54W lamps, and a universal voltage ballast)

| | | | | | |
|------------------|------------------------|---------|------------|---------|-------------------------|
| Size | Reflector | # Lamps | Lamp Watts | Voltage | Options |
| F-14HS - 1' x 4' | EA - 95% Enhanced Alum | 2 - 6 | 32 | 120 | N - Normal |
| F-24HS - 2' x 4' | AA - 85% Anodized Alum | | 54 | 277 | H - High Ballast Factor |
| | WR - 92% White Enamel | | | UNV | L - Low Ballast Factor |
| | | | | | WG - Wire Guard |
| | | | | | CL - Clear Lens |