

HIGH EFFICIENCY SURFACE MOUNT

HES

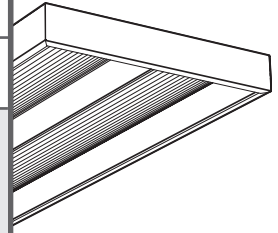
SUBMITTAL:

2x2 | 2x4

JOB:

TYPE:

VOLTAGE:



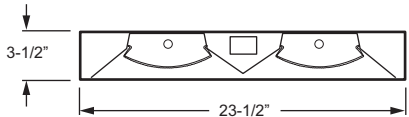
EXAMPLE **HES** - **2** **4** - **2** **28T5S** - **A** - **OPTIONS** - **EB2** - **UNV**

SERIES NOM. W. NOM. L. TOTAL LAMPS WATTAGE/TYPE SHIELDING OPTIONS BALLAST TYPE VOLTAGE



FEATURES

- ▶ Up to **89.2% optical efficiency.**
- ▶ Attractive, energy-efficient architectural fixture that delivers comfortable, uniform lighting.
- ▶ Frosted acrylic diffusers combined with highly reflective matte white paint provide high optical efficiencies and visual comfort.
- ▶ Tool-less access to electrical from room side of fixture.
- ▶ Companion HET products available in Recessed Architectural and Williams Downlighting Recessed Fluorescent sections.
- ▶ This fixture is proudly made in the USA.



SPECIFICATIONS

Housing – 22-gauge die-formed C.R.S.

Shielding – Frosted, ribbed acrylic diffuser.

Finish – Textured matte white polyester TGIC powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.

Electrical – Electronic ballast standard, instant start T8, program start T5, rated Class P.

Mounting – Surface.

Labels – UL/CUL listed as fluorescent luminaire suitable for dry or damp locations.

ORDERING INFORMATION

SERIES	HES High Efficiency Surface Mount
NOMINAL WIDTH	2 2'
NOMINAL LENGTH	2 2' 4 4'
TOTAL LAMPS	2
LAMP WATTAGE/TYPE	
2x2 LAMP OPTIONS	
14T5S	2', 14-watt T5
17	2', 17-watt T8
24T5H	2', 24-watt T5HO
2x4 LAMP OPTIONS	
28T5S	4', 28-watt T5
32	4', 32-watt T8
54T5H	4', 54-watt T5HO

SHIELDING	A Frosted, ribbed acrylic diffuser
OPTIONS	For generic EM ballast options (must specify voltage), see Fluorescent Information section.
BALLAST TYPE	
EB2(95)	2-lamp electronic ballast, .95 ballast factor (2x4, T5S only)
EBS2(95)	2-lamp electronic ballast, .95 ballast factor, step-dimming (2x4, T5S only)
EB2(115)	2-lamp electronic ballast, 1.15 ballast factor (2x4, T5S only)
EBS2(115)	2-lamp electronic ballast, 1.15 ballast factor, step-dimming (2x4, T5S only)
EB2	2-lamp electronic ballast, 1.0 ballast factor
VOLTAGE	
120	120V
277	277V
UNV	120-277V
347	347V

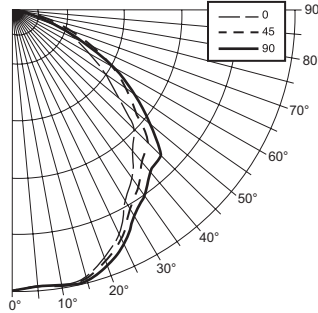
2x2 | 2x4

PHOTOMETRY INFORMATION

Catalog #: HES-24-228T5S-A

TEST REPORT INFORMATION

- ▶ Test Report #: 13351.1
- ▶ Date: 12/12/06
- ▶ Lamp Type: F28T5/835
- ▶ Lamp Quantity: 2



CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0°	1958.	1958.	1958.	
5°	1933.	1934.	1935.	184.6
15°	1925.	1940.	1957.	549.6
25°	1728.	1769.	1812.	818.7
35°	1431.	1510.	1583.	947.2
45°	1177.	1317.	1439.	1016.1
55°	778.	951.	1030.	833.2
65°	471.	607.	534.	546.8
75°	222.	239.	172.	236.7
85°	47.	31.	27.	38.5
90°	0.	0.	0.	

ZONAL CAVITY COEFFICIENTS

	Ceiling			Wall			Floor		
	.80	.70	.50	.70	.50	.30	.50	.30	.10
0	1.06	1.06	1.06	1.04	1.04	1.04	.99	.99	.99
1	.99	.95	.92	.96	.93	.90	.89	.87	.84
2	.91	.84	.79	.89	.83	.78	.80	.76	.72
3	.84	.75	.69	.82	.74	.68	.71	.66	.62
4	.77	.67	.60	.75	.66	.59	.64	.58	.53
5	.70	.60	.52	.69	.59	.52	.57	.51	.46
6	.65	.53	.46	.63	.53	.45	.51	.45	.40
7	.60	.48	.41	.58	.47	.40	.46	.40	.35
8	.55	.43	.36	.54	.42	.35	.41	.35	.30
9	.50	.39	.31	.49	.38	.31	.37	.31	.26
10	.47	.35	.28	.46	.35	.28	.34	.27	.23

Effective Floor Cavity Reflectance = .20

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	1553.	26.8	30.0
0 - 40	2500.	43.1	48.3
0 - 60	4350.	75.0	84.1
0 - 90	5172.	89.2	100.0
Total Luminaire:			
0 - 180	5172.	89.2	100.0

Total Luminaire Optical Efficiency: **89.2%**
 IES Spacing Criteria: End = 1.2
 Diagonal = 1.3
 Across = 1.3

FIXTURE DETAILS

BACK VIEW

