

# HIGH EFFICIENCY TROFFER – AIR RETURN

# HET

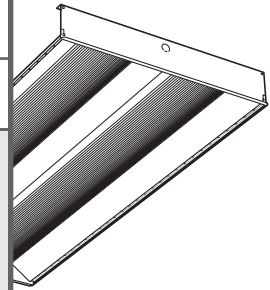
**SUBMITTAL:**

**2' WIDE T5**

**JOB:**

**TYPE:**

**VOLTAGE:**



EXAMPLE

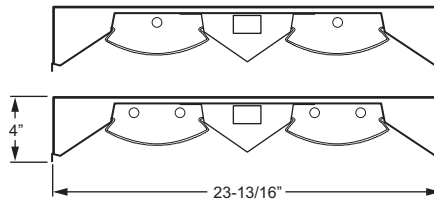
**HET G - AR 2 4 - 2 28T5S - A - OPTIONS - EB2 - UNV**

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



## FEATURES

- ▶ Black reveal minimizes appearance of dirt and dust resulting from air return function.
- ▶ Air return capability reduces number of unsightly ceiling vents for a cleaner appearance.
- ▶ Frosted acrylic diffusers combined with highly reflective matte white paint provides high optical efficiencies without sacrificing visual comfort.
- ▶ One-piece diffusers eliminate the need for separate overlays.
- ▶ Attractive, energy efficient architectural fixture delivers comfortable, uniform lighting.
- ▶ Shallow fixture depth allows for use in limited plenum applications.
- ▶ Optional anti-microbial powder coating available to prevent the spread of dangerous micro-organisms and suppress the growth of mold and bacteria.
- ▶ Tool-less access to electrical from room side of fixture.
- ▶ Integral T-bar clips quickly secure fixture to structure.
- ▶ This fixture is proudly made in the USA.



## SPECIFICATIONS

**Housing** – 22-gauge die-formed C.R.S.  
**Shielding** – Ribbed acrylic diffuser.  
**Finish** – Highly reflective non-glare matte white polyester 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, program start T5, rated Class P.  
**Mounting** – NEMA Type "G".  
**Labels** – UL/CUL listed as recessed fluorescent luminaire suitable for dry or damp locations.

## ORDERING INFORMATION

### SERIES

**HET** High Efficiency Troffer–Air Return

### CEILING TYPE

**G** NEMA Type "G"

### FIXTURE STYLE

**AR** Air return only (through side slots)

### NOMINAL WIDTH

**2** 2'

### NOMINAL LENGTH

**2** 2'

**4** 4'

### TOTAL LAMPS

**2 or 4**

### LAMP WATTAGE/TYPE

#### 2' LAMP OPTIONS

**14T5S** 2', 14-watt T5

**24T5H** 2', 24-watt T5HO (2-lamp cross-section only)

#### 4' LAMP OPTIONS

**28T5S** 4', 28-watt T5

**54T5H** 4', 54-watt T5HO (2-lamp cross-section only)

### SHIELDING

**A** Acrylic lens

### OPTIONS

For generic EM ballast options (must specify voltage), see Fluorescent Information section.

**AMW** Anti-microbial white finish

**EQCLIPS** Earthquake clips (4 per fixture)

### BALLAST TYPE

**EB2** 2-lamp electronic ballast

**EBSD(95)2** 2-lamp electronic ballast, step-dimming, .95 ballast factor (T5S only)

**EBSD(115)2** 2-lamp electronic ballast, step-dimming, 1.15 ballast factor (T5S only)

**EB4** 4-lamp electronic ballast

**EB2/2** (2) 2-lamp electronic ballasts

**EBSD(95)2/2** (2) 2-lamp electronic ballasts, step-dimming, .95 ballast factor (T5S only)

**EBSD(115)2/2** (2) 2-lamp electronic ballasts, step-dimming, 1.15 ballast factor (T5S only)

### VOLTAGE

**120** 120V

**277** 277V

**UNV** 120-277V

**347** 347V



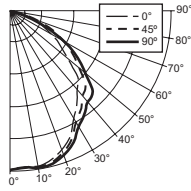
### 2' Wide T5

### PHOTOMETRY – HET 2x4 AIR RETURN

Catalog #: HETG-AR24-228T5S-A

#### TEST REPORT INFORMATION

- ▶ Test Report #: 15488.0
- ▶ Date: 12/12/06
- ▶ Lamp Type: FP28T5
- ▶ Lamp Quantity: 2



#### 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
<b>Total Luminaire:</b>			
0 - 180	5172.	89.2	100.0

Total Luminaire Optical Efficiency: **89.2%**  
IES Spacing Criteria: End = 1.2, Diagonal = 1.4, Across = 1.4

#### 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.	549.9
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

Room Cavity Ratio	Ceiling			Wall			Floor		
	.80	.70	.50	.80	.70	.50	.80	.70	.50
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

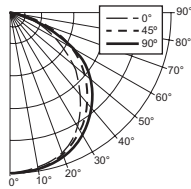
Effective Floor Cavity Reflectance = .20

### PHOTOMETRY – HET 2x2 AIR RETURN

Catalog #: HETG-AR22-224T5H-A

#### TEST REPORT INFORMATION

- ▶ Test Report #: 15489.0
- ▶ Date: 06/26/06
- ▶ Lamp Type: FP24T5H
- ▶ Lamp Quantity: 2



#### LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	972.	25.6	29.5
0 - 40	1591.	41.9	48.3
0 - 60	2772.	72.9	84.1
0 - 90	3296.	86.7	100.0
<b>Total Luminaire:</b>			
0 - 180	3296.	86.7	100.0

Total Luminaire Optical Efficiency: **86.7%**  
IES Spacing Criteria: End = 1.2, Diagonal = 1.2, Across = 1.1

#### CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0	1238.	1238.	1238.	
5	1240.	1228.	1236.	117.7
15	1189.	1190.	1203.	338.2
25	1091.	1115.	1139.	515.7
35	931.	990.	1028.	619.2
45	728.	817.	886.	629.8
55	498.	627.	698.	550.9
65	297.	411.	365.	364.0
75	130.	154.	112.	147.6
85	16.	11.	6.	12.5
90	0.	0.	0.	

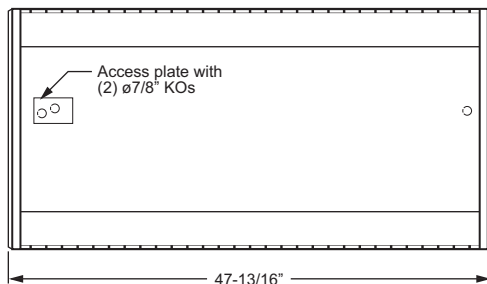
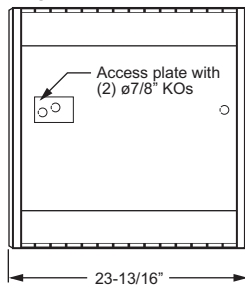
#### ZONAL CAVITY COEFFICIENTS

Room Cavity Ratio	Ceiling			Wall			Floor		
	.80	.70	.50	.80	.70	.50	.80	.70	.50
0	1.03	1.03	1.03	1.01	1.01	1.01	.96	.96	.96
1	.96	.92	.89	.94	.90	.88	.87	.84	.82
2	.88	.82	.77	.86	.81	.76	.78	.74	.70
3	.81	.73	.67	.79	.72	.66	.69	.64	.60
4	.75	.65	.58	.73	.64	.58	.62	.56	.52
5	.68	.58	.50	.67	.57	.50	.55	.49	.44
6	.63	.52	.44	.61	.51	.44	.49	.43	.39
7	.58	.47	.39	.56	.46	.39	.45	.38	.34
8	.53	.42	.34	.52	.41	.34	.40	.34	.29
9	.49	.37	.30	.48	.37	.30	.36	.30	.25
10	.45	.34	.27	.44	.33	.27	.33	.26	.22

Effective Floor Cavity Reflectance = .20

### FIXTURE DETAILS

#### BACKVIEW



#### AIR RETURN

