

# HIGH EFFICIENCY TROFFER – LENSED

# HETL

## T5

CATALOG #:

TYPE:

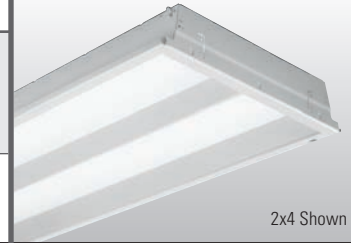
PROJECT:

NOTES:

EXAMPLE

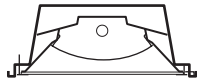
**HETL G - S 2 4 - 4 54T5H - F A - OPTIONS - EB2 - UNV**

SERIES	CEILING TYPE	FIX. STYLE	NOM. W.	NOM. L.	TOTAL LAMPS	WATTAGE/TYPE	DOOR SHIELD. FRAME	OPTIONS	BALLAST TYPE	VOLTAGE
HETL	G	S	2	4	4	54T5H	F	A	OPTIONS	EB2 - UNV

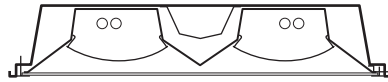


2x4 Shown

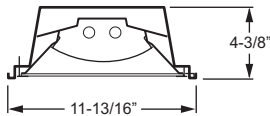
## CROSS SECTION



T5S or T5H lamp

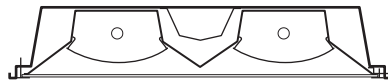


Twin Tube lamps

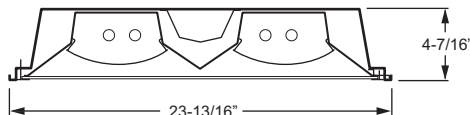


T5S lamps only

1x4 Shown



T5S or T5H lamps



T5S lamps only

2x2 | 2x4 Shown

## FEATURES

- ▶ Transparent lensed door provides a barrier between the room and the ribbed acrylic diffusers to discourage vandals and minimize contaminants. Double or triple gasketing options available.
- ▶ Hinged optical assembly swings down to allow easy lamp and ballast access from room side of fixture.
- ▶ Attractive and efficient architectural troffer delivers comfortable, uniform illumination.
- ▶ Frosted acrylic diffusers combined with highly reflective matte white paint provide high optical efficiencies and visual comfort.
- ▶ Integral T-bar clips quickly secure fixture to structure.
- ▶ This fixture is proudly made in the USA.

## ORDERING INFORMATION

### SERIES

**HETL** High Efficiency Troffer – Lensed

### DOOR FRAME

**F** Flat aluminum

### CEILING TYPE

**G** NEMA Type "G"  
**F** NEMA Type "F"

### SHIELDING

**A** Clear, non-prismatic acrylic, .080" thick  
**P** Clear, non-prismatic polycarbonate, .080" thick

### FIXTURE STYLE

**S** Static, no air capability, full door frame, no reveal

### OPTIONS

See Technical Info for [generic EM ballast options](#) (must specify voltage).  
**EQCLIPS** Earthquake clips (4 per fixture)  
**DG** Double gasket  
**TG** Triple gasket (field installed)  
**CP** Chicago Plenum (CCEA)

### NOMINAL WIDTH

**1** 1'  
**2** 2'

### BALLAST TYPE

See Technical Info for complete [ballast offering](#).  
**EB1** 1-lamp electronic ballast  
**EB2** 2-lamp electronic ballast  
**EB2/2** (2) 2-lamp electronic ballasts (T5S only)

### NOMINAL LENGTH

**2** 2' (2' width only)  
**4** 4'

### VOLTAGE

**120** 120V  
**277** 277V  
**UNV** 120-277V  
**347** 347V

### TOTAL LAMPS

**1 or 2** (1x4)  
**2 or 4** (2x2 and 2x4; 4-lamp available with T5S only)

### LAMP WATTAGE/TYPE

#### 2' LAMP OPTIONS:

**14T5S** 2', 14-watt T5  
**24T5H** 2', 24-watt T5HO (2-lamp cross-section only)  
**40TT** 2', 40-watt long twin tube (2-lamp cross-section only)

#### 4' LAMP OPTIONS:

**28T5S** 4', 28-watt T5  
**54T5H** 4', 54-watt T5HO (2-lamp cross-section only)



## T5

## PHOTOMETRY – 2x4

Catalog #: **HETLG-S24-254T5H**

### SPECIFICATIONS

**Housing** – 22-gauge die-formed C.R.S.  
**Door Frame & Lens** – Transparent acrylic lens, .080" thick, mounted in .050" thick extruded aluminum door frame, flat with mitered corners.

**Reflector** – Precision die-formed C.R.S. with highly reflective, non-glare matte white polyester powder coated finish.

**Diffuser** – Ribbed acrylic.

**Finish** – 92% minimum average reflective 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, rated Class P. Default offering shown in chart below.

Lamp	Instant Start	Program Start
T5		•
40TT	•	

**Mounting** – NEMA Type "G" standard. NEMA Type "F" available.

#### Labels –

- UL/CUL listed as recessed fluorescent luminaire suitable for dry or damp locations.
- City of Chicago Environmental Air approved when specified with CP option.

#### ZONAL CAVITY COEFFICIENTS – 2x2

	Ceiling			.80			.70			.50		
	Wall	.70	.50	.30	.70	.50	.30	.50	.30	.10		
Room Cavity Ratio	0	.93	.93	.93	.90	.90	.90	.86	.86	.86		
	1	.86	.83	.80	.84	.81	.79	.78	.76	.74		
	2	.80	.74	.70	.78	.73	.68	.70	.67	.63		
	3	.73	.66	.61	.72	.65	.60	.63	.58	.55		
	4	.68	.59	.53	.66	.58	.52	.56	.51	.47		
	5	.62	.53	.46	.60	.52	.46	.50	.45	.41		
	6	.57	.47	.41	.56	.47	.40	.45	.40	.36		
	7	.53	.43	.36	.51	.42	.36	.41	.35	.31		
	8	.48	.38	.32	.47	.38	.31	.37	.31	.27		
	9	.44	.34	.28	.43	.34	.28	.33	.27	.23		
	10	.41	.31	.25	.40	.31	.25	.30	.24	.21		

Effective Floor Cavity Reflectance = .20

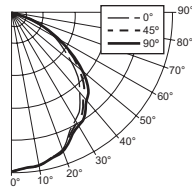
#### ZONAL CAVITY COEFFICIENTS – 1x4

	Ceiling			.80			.70			.50		
	Wall	.70	.50	.30	.70	.50	.30	.50	.30	.10		
Room Cavity Ratio	0	.93	.93	.93	.91	.91	.91	.87	.87	.87		
	1	.87	.84	.81	.85	.82	.80	.79	.77	.75		
	2	.81	.75	.71	.79	.74	.70	.71	.68	.65		
	3	.74	.67	.62	.73	.66	.61	.64	.60	.56		
	4	.69	.60	.54	.67	.59	.54	.57	.53	.49		
	5	.63	.54	.47	.61	.53	.47	.51	.46	.42		
	6	.58	.48	.42	.57	.48	.42	.46	.41	.37		
	7	.54	.44	.37	.52	.43	.37	.42	.36	.32		
	8	.49	.39	.33	.48	.39	.32	.37	.32	.28		
	9	.45	.35	.29	.44	.35	.29	.34	.28	.24		
	10	.42	.32	.26	.41	.31	.26	.31	.25	.21		

Effective Floor Cavity Reflectance = .20

### TEST REPORT INFORMATION

- Test Report #: 16717.0
- Date: 06/12/12
- Lamp Type: F54T5/841
- Lamp Quantity: 2



### ZONAL CAVITY COEFFICIENTS

	Ceiling			.80			.70			.50		
	Wall	.70	.50	.30	.70	.50	.30	.50	.30	.10		
Room Cavity Ratio	0	.95	.95	.95	.93	.93	.93	.89	.89	.89		
	1	.88	.85	.82	.86	.83	.81	.80	.78	.76		
	2	.81	.76	.71	.79	.74	.70	.72	.68	.65		
	3	.75	.68	.62	.73	.67	.61	.64	.60	.56		
	4	.69	.61	.54	.67	.60	.54	.58	.52	.48		
	5	.63	.54	.47	.62	.53	.47	.51	.46	.42		
	6	.58	.48	.42	.57	.48	.41	.46	.40	.36		
	7	.54	.43	.37	.52	.43	.36	.42	.36	.32		
	8	.49	.39	.32	.48	.38	.32	.37	.32	.28		
	9	.45	.35	.28	.44	.34	.28	.33	.28	.24		
	10	.42	.32	.25	.41	.31	.25	.30	.25	.21		

Effective Floor Cavity Reflectance = .20

### CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0	3165.	3165.	3165.	
5	3116.	3112.	3113.	297.2
15	2985.	2998.	3013.	850.0
25	2697.	2731.	2776.	1265.2
35	2372.	2455.	2535.	1541.2
45	1902.	2040.	2169.	1577.6
55	1297.	1454.	1515.	1283.4
65	778.	867.	778.	813.7
75	301.	287.	239.	298.6
85	39.	34.	32.	38.6
90	0.	0.	0.	

### LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	2412.	24.1	30.3
0 - 40	3954.	39.5	49.6
0 - 60	6815.	68.1	85.6
0 - 90	7965.	79.7	100.0
<b>Total Luminaire:</b>			
0 - 180	7965.	79.7	100.0

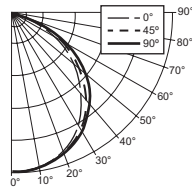
Total Luminaire Optical Efficiency: 79.7%  
 Spacing Criteria: Across: 1.3  
 Diagonal: 1.2  
 End: 1.2

## PHOTOMETRY – 2x2

Catalog #: **HETLG-S22-224T5H**

### TEST REPORT INFORMATION

- Test Report #: 16719.0
- Date: 06/13/12
- Lamp Type: F24T5/841
- Lamp Quantity: 2



### CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0	1220.	1220.	1220.	
5	1224.	1219.	1218.	116.4
15	1177.	1182.	1187.	335.1
25	1072.	1098.	1111.	507.4
35	917.	962.	993.	603.7
45	720.	776.	832.	602.1
55	495.	562.	615.	502.1
65	288.	329.	314.	312.8
75	107.	113.	97.	117.0
85	12.	11.	7.	11.5
90	0.	0.	0.	

### LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	959.	24.0	30.9
0 - 40	1563.	39.1	50.3
0 - 60	2667.	66.7	85.8
0 - 90	3108.	77.7	100.0
<b>Total Luminaire:</b>			
0 - 180	3108.	77.7	100.0

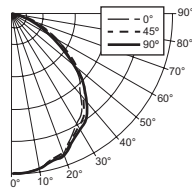
Total Luminaire Optical Efficiency: 77.7%  
 Spacing Criteria: Across: 1.3  
 Diagonal: 1.3  
 End: 1.2

## PHOTOMETRY – 1x4

Catalog #: **HETLG-S14-154T5H**

### TEST REPORT INFORMATION

- Test Report #: 16715.0
- Date: 06/12/12
- Lamp Type: F54T5H/841
- Lamp Quantity: 1



### CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0	1609.	1609.	1609.	
5	1604.	1603.	1604.	153.1
15	1518.	1525.	1533.	432.4
25	1391.	1413.	1433.	653.6
35	1220.	1266.	1300.	793.1
45	955.	1023.	1026.	779.6
55	661.	698.	627.	599.7
65	395.	376.	298.	361.7
75	154.	121.	96.	130.9
85	19.	15.	16.	17.5
90	0.	0.	0.	

### LUMEN SUMMARY

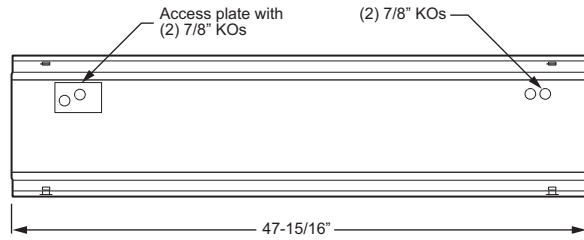
Zone	Lumens	% Lamp	% Fixture
0 - 30	1239.	24.8	31.6
0 - 40	2032.	40.6	51.8
0 - 60	3411.	68.2	87.0
0 - 90	3922.	78.4	100.0
<b>Total Luminaire:</b>			
0 - 180	3922.	78.4	100.0

Total Luminaire Optical Efficiency: 78.4%  
 Spacing Criteria: Across: 1.3  
 Diagonal: 1.2  
 End: 1.2

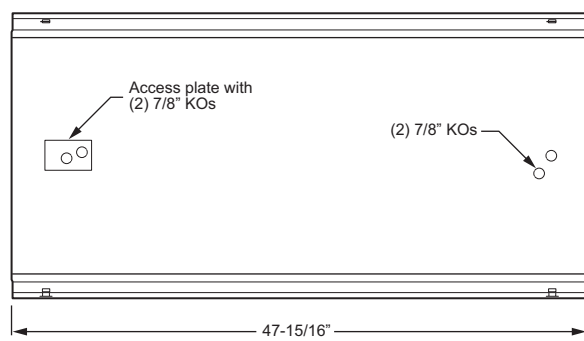
### FIXTURE DETAIL

#### BACK VIEW

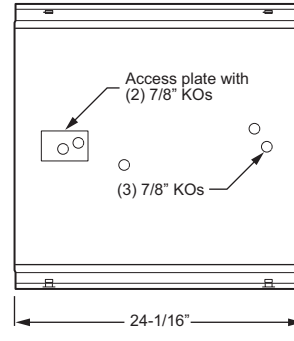
1x4



2x4

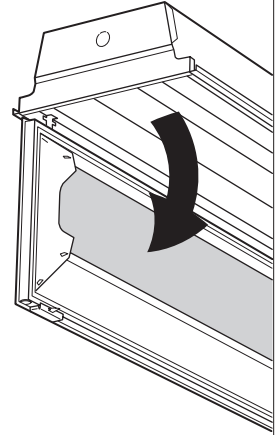


2x2

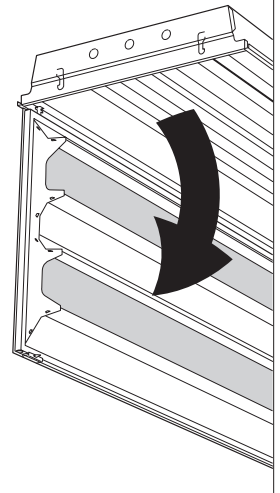


#### DOOR ASSEMBLY DETAILS

1x4

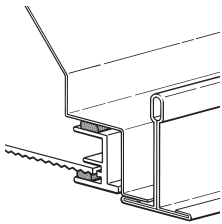


2x2 | 2x4



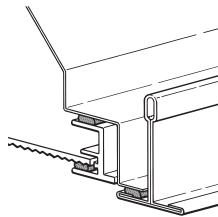
### GASKETING DETAILS

#### DOUBLE GASKETING (DG)



Gasketing is factory-installed continuously between door frame and luminaire housing; and between door frame and lens.

#### TRIPLE GASKETING (TG)



Gasketing is factory-installed continuously between door frame and luminaire housing; and between door frame and lens. Gasketing between bottom perimeter of unit (adjacent to T-bar or hardpan ceiling) is provided by factory and field installed.

