

# CHANNEL HIGH BAY INDUSTRIAL

# HL

**SUBMITTAL:**

**4-Lamp T5**

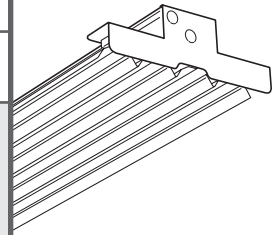
**JOB:**

**TYPE:**

**VOLTAGE:**

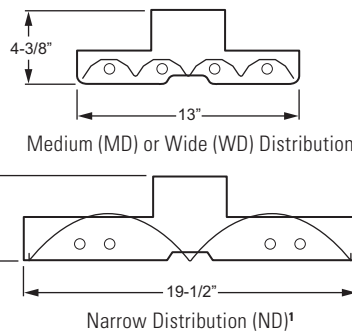
**EXAMPLE** HL - 4 - 4 54T5H - MD - OPTIONS - EB4 - UNV

SERIES    NOMINAL LENGTH    TOTAL LAMPS    WATTAGE/TYPE    DISTRIBUTION    OPTIONS/ACCESSORIES    BALLAST TYPE    VOLTAGE



## FEATURES

- ▶ Up to **97.6% optical efficiency**.
- ▶ Consumes less energy than metal halide or HPS and delivers comparable light levels when replaced one-for-one.
- ▶ Multiple distributions and uplight options available.
- ▶ Medium distribution using precision-formed highly reflective aluminum reflector is standard.
- ▶ Wide distribution option features a highly reflective white painted aluminum reflector.
- ▶ Quick-wire access plate in back of fixture housing for easy attachment of incoming power supply.
- ▶ Versatile mounting options available.
- ▶ This fixture is proudly made in the USA.



**NOTE:** HL ships without lamps. For lamp options please consult factory.

## SPECIFICATIONS

**Housing** – 20-gauge die-formed C.R.S.  
**Reflector** – Precision-formed 95% reflective highly specular aluminum.  
**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, program start T5, rated Class P.  
**Mounting** – Suspended (see options in ordering information).  
**Labels** – UL/CUL listed as fluorescent luminaire suitable for dry or damp locations.

## ORDERING INFORMATION

<b>SERIES</b>	HL	Channel High Bay Industrial
<b>NOMINAL LENGTH</b>	4	4'
<b>TOTAL LAMPS</b>	4	
<b>LAMP WATTAGE/TYPE</b>	54T5H	4', 54-watt T5HO
<b>DISTRIBUTION (Must specify)</b>	MD	Medium distribution, specular reflector (standard)
	ND <sup>1</sup>	Narrow distribution, specular reflector <sup>1</sup>
	WD	Wide distribution, white reflector
	MDUP	Medium distribution with uplight, specular reflector
	NDUP <sup>1</sup>	Narrow distribution with uplight, specular reflector <sup>1</sup>
	WDUP	Wide distribution with uplight, white reflector

### OPTIONS/ACCESSORIES

Due to limited ballast space, please consult factory for EM ballast options.

For **occupancy sensor** options (must specify voltage), see Fluorescent Information section.

- VBY** (2) Y-hangers
- VBY-2** (2) Y-hangers and (2) 2' chains
- GC2/Y18/5** Cable suspension kit, 5' length (1 pair)
- GC2/Y18/10** Cable suspension kit, 10' length (1 pair)

### OPTIONS/ACCESSORIES (Continued)

- HUB MT 3/4"** Cast iron hub and junction box for single 3/4" pendant mount (shipped not attached)
- HUB/HOOK MT** Cast iron hub with mounting hook (shipped not attached)
- HOOK/CABLE S7238/B** Hook and cable mounting kit, 10' 72" cord, 3 conductor, No. 18 AWG, black
- 6CPI/L5-15P/TWLK** 6' cord and NEMA twistlock 15 AMP plug, 120V
- 6CPI/L7-15P/TWLK** 6' cord and NEMA twistlock 15 AMP plug, 277V
- WG11** 11-gauge wireguard, white powder coated (not recommended for high abuse areas)

### BALLAST TYPE

Due to size restrictions, ballast options restricted **ONLY to combinations listed below.**

- EB4** 4-lamp electronic ballast
- EB2/2** (2) 2-lamp electronic ballasts

### VOLTAGE

Must specify voltage (not UNV) if using modular wiring, cord and plug, or occupancy sensor.

<b>120</b>	120V	<b>UNV</b>	120-277V
<b>208</b>	208V	<b>347</b>	347V
<b>240</b>	240V	<b>480</b>	480V
<b>277</b>	277V		

<sup>1</sup> 4-lamp fixture with ND option uses 6-lamp fixture housing.

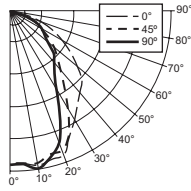
## 4-Lamp T5

### PHOTOMETRY – MD DISTRIBUTION

Catalog #: HL-4-454T5H-MD-EB4

#### TEST REPORT INFORMATION

- ▶ Test Report #: 13918.0
- ▶ Date: 01/15/08
- ▶ Lamp Type: FP54T5H0/835
- ▶ Lamp Quantity: 4



#### LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	6913.	34.6	36.2
0 - 40	10434.	52.2	54.7
0 - 60	16417.	82.1	86.0
0 - 90	19082.	95.4	100.0
<b>Total Luminaire:</b>			
0 - 180	19082.	95.4	100.0

Total Luminaire Optical Efficiency: **95.4%**  
IES Spacing Criteria: End = 1.2, Diagonal = 1.1, Across = 1.0

#### CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0°	8958.	8958.	8958.	
5°	8926.	8964.	9020.	855.9
15°	8647.	8983.	8864.	2512.1
25°	8031.	7937.	6730.	3545.4
35°	6687.	5424.	4404.	3520.2
45°	5841.	3807.	3514.	3407.1
55°	4230.	2587.	2413.	2576.5
65°	2712.	1642.	1642.	1802.6
75°	1244.	740.	472.	781.0
85°	174.	55.	31.	81.7
90°	0.	0.	0.	

#### ZONAL CAVITY COEFFICIENTS

	Ceiling			Wall			Floor			
	.80	.70	.50	.80	.70	.50	.80	.70	.50	
Room Cavity Ratio	0	1.14	1.14	1.14	1.11	1.11	1.11	1.06	1.06	1.06
	1	1.06	1.02	.99	1.03	1.00	.97	.96	.94	.91
	2	.98	.92	.86	.96	.90	.85	.87	.82	.79
	3	.91	.82	.76	.89	.81	.75	.78	.73	.69
	4	.84	.74	.67	.82	.73	.66	.71	.65	.60
	5	.77	.66	.59	.75	.65	.58	.63	.57	.52
	6	.72	.60	.52	.70	.59	.52	.58	.51	.46
	7	.66	.54	.47	.65	.54	.46	.52	.46	.41
	8	.61	.49	.42	.60	.49	.41	.47	.41	.36
	9	.57	.44	.37	.55	.44	.37	.43	.36	.32
	10	.53	.41	.33	.52	.40	.33	.39	.33	.28

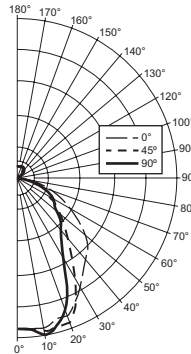
Effective Floor Cavity Reflectance = .20

### PHOTOMETRY – MDUP DISTRIBUTION

Catalog #: HL-4-454T5H-MDUP-EB4

#### TEST REPORT INFORMATION

- ▶ Test Report #: 13919.0
- ▶ Date: 01/15/08
- ▶ Lamp Type: FP54T5H0/835
- ▶ Lamp Quantity: 4



#### LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	6411.	32.1	32.8
0 - 40	9664.	48.3	49.5
0 - 60	15197.	76.0	77.8
0 - 90	17852.	89.3	91.4
90 - 120	248.	1.2	1.3
90 - 130	481.	2.4	2.5
90 - 150	1157.	5.8	5.9
90 - 180	1671.	8.4	8.6
<b>Total Luminaire:</b>			
0 - 180	19524.	97.6	100.0

Total Luminaire Optical Efficiency: **97.6%**  
IES Spacing Criteria: End = 1.2, Diagonal = 1.2, Across = 1.0

#### CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0°	8244.	8244.	8244.	
5°	8223.	8255.	8323.	789.0
15°	7993.	8373.	8305.	2337.2
25°	7390.	7384.	6189.	3284.9
35°	6164.	5001.	4055.	3253.4
45°	5356.	3471.	3253.	3121.5
55°	3881.	2395.	2376.	2410.8
65°	2475.	1629.	1716.	1759.0
75°	1150.	790.	522.	795.0
85°	167.	68.	68.	101.3
90°	12.	43.	49.	
95°	12.	18.	31.	20.6
105°	80.	68.	55.	70.0
115°	174.	136.	130.	157.6
125°	267.	279.	205.	232.6
135°	373.	485.	385.	330.9
145°	472.	553.	615.	345.0
155°	559.	597.	634.	276.3
165°	615.	634.	652.	179.6
175°	615.	615.	622.	59.0
180°	598.	598.	598.	

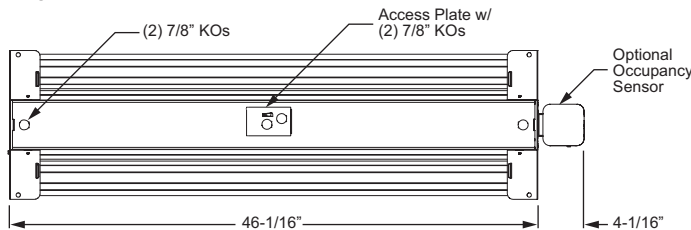
#### ZONAL CAVITY COEFFICIENTS

	Ceiling			Wall			Floor			
	.80	.70	.50	.80	.70	.50	.80	.70	.50	
Room Cavity Ratio	0	1.14	1.14	1.14	1.11	1.11	1.11	1.04	1.04	1.04
	1	1.06	1.02	.99	1.03	.99	.96	.94	.91	.89
	2	.98	.91	.86	.95	.89	.84	.84	.80	.76
	3	.91	.82	.75	.88	.80	.74	.76	.71	.66
	4	.84	.74	.66	.81	.72	.65	.68	.63	.58
	5	.77	.66	.58	.74	.64	.57	.61	.55	.50
	6	.71	.60	.52	.69	.58	.51	.56	.49	.44
	7	.66	.54	.46	.64	.53	.45	.51	.44	.39
	8	.61	.49	.41	.59	.48	.40	.46	.39	.35
	9	.56	.44	.37	.55	.43	.36	.41	.35	.31
	10	.53	.40	.33	.51	.39	.33	.38	.32	.27

Effective Floor Cavity Reflectance = .20

### FIXTURE DETAILS

#### BACK VIEW



#### FIXTURE INFORMATION

Distribution	Spacing Criteria		
	End	Diagonal	Across
Narrow	1.2	0.8	0.6
Medium	1.2	1.1	1.0
Wide	1.2	1.4	1.3