

**FEATURES**

- Optical design to provide one-for-one replacement for 400 Watt metal halide high bays
- Advanced Thermal Management (ATM) provides optimized electrical component heat dissipation system for cool running ballast operation in unconditioned ambient spaces, your choice of T8 or T5HO—suspension mounting only
- LHV includes industry leading 5-year warranty at 65°C ambient operation for T5HO and 5-year warranty for T8 at 55°C for 277V and 50°C for 120V.
- Easy center-ballast cover allows tool-less access to electrical components without the removal of lamps, reflectors or hardware.
- Extremely low profile—only 2" overall height allows fixture to be installed without concern about obstructions
- Reflector options include uplight (recommended) or solid top with either narrow or wide distribution
- Product design accommodates quick and simple hanging systems including chain, tong, pipe hanger, or aircraft mounting
- Rotary locking lampholders secure lamp in position and conceal contacts
- Access cover in channel for easy wiring access
- UL listed, suitable for damp locations
- NEC/CEC-compliant ballast disconnect standard (not available with EL option)

**PROJECT INFORMATION**

Project Name \_\_\_\_\_

Type \_\_\_\_\_

Catalog No. \_\_\_\_\_

Date \_\_\_\_\_

**HEAT DISSIPATION SYSTEM (ATM)**

The installation of fluorescent fixtures with temperature sensitive electronic ballasts in unconditioned spaces creates the risk of premature ballast failures unless the fixture is equipped with a heat dissipation system to quickly remove heat that is harmful to ballasts. ATM (Advanced Thermal Management) was exclusively developed for VersaBay to provide the ultimate solution to ballast overheating and thermal issues.

**CONSTRUCTION**

Code gauge steel construction for a durable construction to withstand shipping and job site handling. End caps include hemmed edges for ease of handling. Fixture includes easy access to electrical components via removal channel cover. Tool-less access with one quarter-turn fastener. Oversized access plate conveniently mounted on back of channel for easy access to wiring compartment.

**REFLECTOR**

Your choice of multi-faceted specular aluminum which provides precise control for aisle lighting, high mounting heights, white aluminum for general area, or lower mounting heights. Includes a 25-year reflector warranty. Reflectors are available in solid top or with uplight component. Reflectors are securely mounted to fixture housing with screws. Reflector removal is not required to gain access to electrical components.

**PERFORMANCE**

With an optical system custom designed for maximum performance when using T5HO lamps, VersaBay provides excellent distribution with fixture efficiencies in excess of 99% and spacing criteria of 0.8 for narrow distribution, and 1.3 for wide distribution.

**ELECTRICAL**

Standard class "P", thermally protected, auto-resetting HPF ballast, sound rated A. All ballast leads extend a minimum of 6" through access location. NEC/CEC-compliant ballast disconnect is standard.

**FINISH**

Steel surfaces are painted with high gloss baked white enamel, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

**MOUNTING**

Fixture to be suspended a minimum of 6" from solid surface. Mounting options include aircraft cable, tong hanger, pipe hanger, or chain.

**CERTIFICATION**

All luminaires are built to UL 1598 standards and bear appropriate UL and cUL or CSA labels. Damp location labeling is standard. Emergency-equipped fixtures labeled UL 924. Fixtures bear UL damp location listing for 65°C.

**ORDERING INFORMATION**

**EXAMPLE LHV4-654-M4RU-24EPU**

LHV		4	-	6	54	-	-	-	-	-	
MODEL	NO. OF LAMPS IN CROSS SECTION	REFLECTOR	BALLAST	LAMPS INSTALLED	OPTIONS						
LHV VersaBay® Fluorescent High Bay	6 Six	<b>M4R</b> Aluminum, 95% Reflective, Specular Silver (Narrow Beam) <b>GW</b> Gloss White (Wide Beam)	<b>24EP</b> (1) 2-Lamp & (1) 4-Lamp Electronic T5HO, Programmed Start <b>3EP</b> (2) 3-Lamp Electronic T5HO, Programmed Start	<b>F835</b> 78+ CRI, 3500K <b>F841</b> 78+ CRI, 4100K <b>F850</b> 78+ CRI, 5000K <b>F0835</b> 82 CRI, 3500K <b>F0841</b> 82 CRI, 4100K <b>F0850</b> 82 CRI, 5000K <b>F5830</b> 85 CRI, 3000K <b>F5835</b> 85 CRI, 3500K <b>F5841</b> 85 CRI, 4100K <b>F5850</b> 85 CRI, 5000K <b>F5865</b> 85 CRI, 6500K <b>F51830</b> 3000K 85CRI 51W <b>F51835</b> 3500K 85CRI 51W <b>F51841</b> 4100K 85CRI 51W <b>F51850</b> 5000K 85CRI 51W <b>F51865</b> 6500K 85CRI 51W <b>F49830</b> 3000K 85CRI 49W <b>F49835</b> 3500K 85CRI 49W <b>F49841</b> 4100K 85CRI 49W <b>F49850</b> 5000K 85CRI 49W <b>F49865</b> 6500K 85CRI 49W	<b>GLR</b> Fast Blow Fuse <b>F3C5</b> 3-Conductor Cord <b>F4C5</b> 4-Conductor Cord <b>C6TL15</b> 6' Cord and Twist-Lock™ Plug 15A (Add Voltage: 1=120, 2=277) <b>C6TL20</b> 6' Cord and Twist-Lock™ Plug 20A (Specify Voltage 1=120, 2=277) <b>C6P151</b> 6' Cord and Straight Blade Plug 15A, 120V <b>SP</b> Side Panels Installed¹ <b>EL5H</b> 725-1250 Lumens, T5HO 1-Lamp <b>WG</b> Flat Wire Guard¹ <b>CA</b> Clear Acrylic Lens¹ <b>CP</b> Clear Polycarbonate Lens¹ <b>CAWG</b> Clear Acrylic Lens and Flat Wire Guard¹ <b>CPWG</b> Clear Polycarbonate Lens and Flat Wire Guard¹ <b>OS1360</b> Factory Installed Occupancy/Daylight Sensor, with 360° lens, 120/277/347V, 1 Relay <b>OS2360</b> Factory Installed Occupancy/Daylight Sensor, with 360° lens, 120/277/347V, 2 Relay <b>OS1A</b> Factory Installed Occupancy/Daylight Sensor, with Aisle lens, 120/277/347V, 1 Relay <b>OS2A</b> Factory Installed Occupancy/Daylight Sensor, with Aisle lens, 120/277/347V, 2 Relay <b>OS480360</b> Factory Installed Occupancy/Daylight Sensor, with 360° lens, 480V, 1 Relay <b>OS480A</b> Factory Installed Occupancy/Daylight Sensor, with a Aisle lens, 480V, 2 Relay						
SIZE	LAMP TYPE	UPLIGHT	ACCESSORIES (ORDER SEPARATELY)								
4 4'	54 4', T5HO: 54, 51 or 49 Watt	<b>ST</b> Solid Top <b>U</b> Uplight	<b>LHVTH</b> Tong Hanger (Pair) <b>LHVWG4-6</b> Wire Guard, 6-Lamp, White <b>LHVQM5</b> Aircraft Cable, 5' (Pair) <b>LHVQM10</b> Aircraft Cable, 10' (Pair) <b>LHVSPM5</b> Single Point Mounting, includes pair of 5' aircraft cables <b>LHVSP</b> Side Panels (Pair) <b>LHVOS1360</b> Occupancy/Daylight Sensor, with a 360° lens, 120/277/347V <b>LHVOS2360</b> Occupancy/Daylight Sensor, with a 360° lens, 120/277/347V <b>LHVOS480360</b> Occupancy/Daylight Sensor, with a 360° lens, 480V <b>C6TL15-120</b> Cord and Plug Kit (white), 6 ft., Twist Lock NEMA L5-15P, 15 amp, 120V <b>C6TL15-277</b> Cord and Plug Kit (white), 6 ft., Twist Lock NEMA L7-15P, 15 amp, 277V <b>C6P15-120</b> Cord and Plug Kit (white), 6 ft., Straight Blade NEMA 5-15P, 15 amp, 120V								
			VOLTAGE								
			<b>U</b> 120V-277V 347 347V 480 480V								

¹ Side panels or shielding options increase height to 28".

² For more occupancy/daylight harvesting sensor accessories contact your Columbia Lighting representative.

Test 14541 Test Date 3/2/07

## PHOTOMETRIC DATA

### LUMINAIRE DATA

Luminaire	LHV4-654-M4RU VersaBay Industrial 21" x 48" 6-Lamp T5HO with MIRO®-4 Reflector and Uplight
Ballast	B254PUNVHT-D & B454PUNVHT-E
Ballast Factor	1.00
Lamp	F54T5HO
Lumens per Lamp	4450
Watts	343
Mounting	Pendant
Shielding Angle	0° = 0 90° = 0
Spacing Criterion	0° = 1.23 90° = 0.85
Luminous Opening in Feet	Length: 4.00 Width: 1.79 Height: 0.00

### ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	7913	29.6	29.7
0-40	12123	45.4	45.5
0-60	19702	73.8	73.9
0-90	24931	93.4	93.5
0-180	26662	99.9	100.0

### ENERGY DATA

Total Luminaire Efficiency	99.9%
Luminaire Efficacy Rating (LER)	78
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.08 based on 3000 hrs. and \$0.08 per KWH

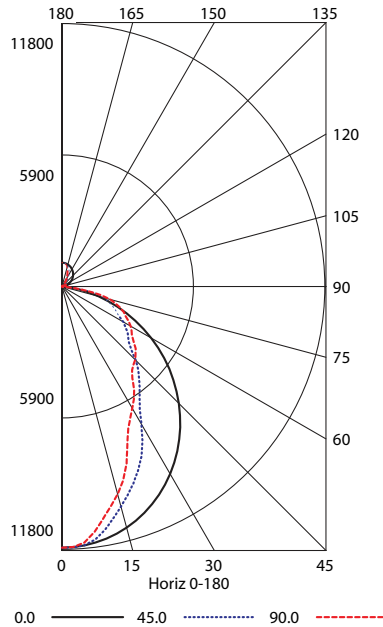
### COEFFICIENTS OF UTILIZATION (%)

RCR	RW	80				70				50				0			
		70	50	30	10	70	50	30	10	50	30	10	0	50	30	10	0
1	107	103	98	95	104	100	96	93	94	91	88	78					
2	98	90	83	78	95	87	81	76	83	78	73	66					
3	89	79	71	65	86	77	70	64	73	67	62	56					
4	82	71	62	56	79	69	61	55	65	59	53	48					
5	76	63	55	48	73	62	54	48	59	52	47	42					
6	70	57	49	42	68	56	48	42	54	46	41	37					
7	65	52	44	38	63	51	43	37	49	42	37	33					
8	61	48	40	34	59	47	39	34	45	38	33	30					
9	57	44	36	31	55	43	36	31	42	35	30	27					
10	54	41	33	28	52	40	33	28	39	32	28	25					

RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

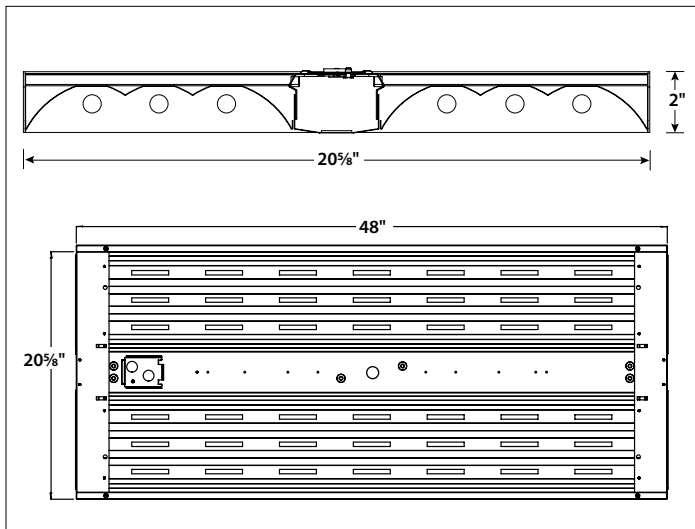
### INDOOR CANDELA PLOT



### AVG. LUMINANCE (Candela/Sq. M.)

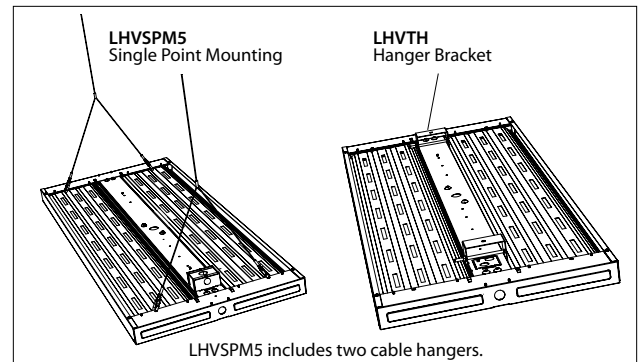
Average Luminance Angle	0.0	22.5	45.0	67.5	90.0
0	17615	17615	17615	17615	17615
30	16852	14946	12372	11146	10945
40	16194	13309	10568	9681	9604
45	15769	12021	9965	9633	9886
50	15263	10625	9180	9858	10104
55	14670	9805	9433	9824	10052
60	13906	9083	9567	10301	10704
65	12920	8050	9633	10832	11223
70	11631	8057	10255	11815	12220
75	9898	7905	11327	12686	13058
80	7402	8519	12112	10813	10536
85	3691	8573	5917	2570	2191

### DIMENSIONAL DATA



NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

### OPTIONAL HANGER BRACKETS



### LHV AIRCRAFT CABLE

