LLHV





FEATURES

· Optical design provides one-for-one replacement of metal halide and fluorescent high bays with substantial energy savings

create**change**

- · Three LED color choices and 84 CRI
- High efficacy LEDs provide up to 119 Lumens Per Watt
- Available in narrow or wide distribution
- Long-life, 60,000 hour LEDs at L80 (projected over 100,000 hours) for reduced life cycle maintenance costs
- Easy center driver cover allows tool-less access to electrical components for modular replaceability
- Extremely low profile—only 2" overall height
- Quick and simple hanging systems include chain, tong or aircraft cable mounting
- Access cover in channel for easy wiring access
- "Plug and play" occupancy sensor, daylight sensor, cord and plug
- · Wire guard and/or lens option
- DesignLights Consortium® (DLC) qualified
- CSA listed and suitable for damp locations
- Up to 45°C ambient operation; see table provided for details
- 5 Year Warranty

CONSTRUCTION

Code gauge steel construction for durability to withstand shipping and job site handling. End caps include hemmed edges for ease of handling. Fixture provides easy access to electrical components via removal of 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

Narrow version features multi-faceted specular aluminum reflector for aisle lighting and areas where tighter lighting beam spread is desired. Wide distribution model provides maximum light distribution for open areas. Reflector removal is not required to gain access to electrical components.

PERFORMANCE

VersaBay® LED provides high efficacy, reduced input wattage compared to HID or fluorescent, and the excellent lighting quality needed for task visibility, material characteristic and color differentiation.

FINISH

All metal parts processed with a phase phosphate bonding treatment. Pre-painted with high gloss baked white enamel, 86% reflective. Polyester powder coat paint after fabrication (PAF) option available, reflectance 90%.

SHIELDING

Optional lens shielding is virgin acrylic or polycarbonate.

MOUNTING

Fixture to be suspended a minimum of 28" from solid surface. Mounting options include aircraft cable, tong hanger, pipe hanger, or chain.

CERTIFICATION

All luminaires are built to UL1598 and 2108 standard, and bear appropriate CSA labels. Damp location labeling is standard. Emergency equipped fixtures built to UL942. Adheres to LM79, LM80 and TM21 industry standards. . DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org.

WARRANTY

5 Year Warranty (Terms and Conditions apply).

ORDERING INFORMATION

LLHV	4			ST	-	<u>U</u> -
MODEL LLHV VersaBay® LED High Bay		COLOR TEMP 35 3500 40 4000 50 5000	REFLECT N Narrow Distribu W Wide Distribu	ution	DRIVER E Fixed Output ED 0-10V Dimming	
S	IZE 4'	L Low M Medi	OUTPUT Watt um Lumen Lumen	ST Solid Top (no uplig)		VOLTAGE U 120V-277V 347 347V

	ACCESSORIES (OKDER SEPAKATELY)	PKOD	PRODUCT AVAILA		
LHVTH	Tong Hanger (Pair)	LUMEN	NOMINAL		
LHVWG4-4	Wireguard, White	PACKAGE	LUMENS (35		
LHVQM5	Aircraft Cable, 5' (Pair)	L	12,000		
LHVQM10	Aircraft Cable, 10' (Pair)	M	18,000		
LHVSPM5	Single Point Mounting, Includes Pair of 5' Aircraft Cables	Н	24.000		
LHVSP	Side Panels (Pair)		,		
LHVOS1360 Occupancy/Daylight Sensor, with a 360° lens, 120/277/347V		Actual lumens will vary according to co and other factors. For exact lumens an			
LHV0S2360	Occupancy/Daylight Sensor, with a 360° lens, 120/277/347V	photometric test(s)	l.		
C6TL15-120	Cord and Plug Kit (white), 6 ft., Twist Lock NEMA L5–15P, 15 amp, 120V				
C6TL15-277	Cord and Plug Kit (white), 6 ft., Twist Lock NEMA				

EXAMPLE	LLHV4-50H-WST-EU

OPTIONS C6TL15_ 6' Cord and Twist-Lock™ Plug 15A (Add Voltage: 1=120, 2=277) **C6TL20**_ 6' Cord and Twist-Lock™ Plug 20A $(Add\ Voltage\ 1=120,\ 2=277)$ C6P151 6' Cord and Straight Blade Plug 15A, 120V

2-relay, Aisle lens, 120/277

NYC NYC Compliant WIH wiHUBB Enabled^{5,6}

	U	120V-277V	CA	Clear Acrylic Lens ^{1,2}
	347	347V	CP	Clear Polycarbonate Lens ^{1,2}
		3.7.	CAWG	Clear Acrylic Lens and Flat Wire Guard ^{1,2}
			CPWG	Clear Polycarbonate Lens and Flat Wire Guard ^{1,2}
PROD	DUCT AVAILABILI	TY	SP	Side Panels Installed ^{1,3}
MEN	NOMINAL	NOMINAL	WG	Flat Wire Guard ¹
KAGE	LUMENS (35K)	WATTS	ELL14	Emergency Battery Pack, 1400 Lumens ⁴
L	12,000	109	F4C5	4-Conductor Cord
M	18,000	155	GLR	Fast Blow Fuse
	24,000 vary according to color to		OS1360	Factory Installed Occupancy/Daylight, Sensor, 1-relay, 360° lens 120/277
er factors. I etric test(s	For exact lumens and wat).	tts see specific	0S2360	Factory Installed Occupancy/Daylight, Sensor, 2-relay, 360° lens 120/277
			OS1A	Factory Installed Occupancy/Daylight Sensor, 1-relay, Aisle lens, 120/277
			OS2A	Factory Installed Occupancy/Daylight Sensor,

CGP15-120 Cord and Plug Kit (white), 6 ft., Straight Blade NEMA 5-15P, 15 amp, 120V

CCCCODICC (ODDED CEDADATELY)

17-15P. 15 amp. 277V

Page 1/3 Rev. 09/30/14 Protected by US Patent 8,092,041. Specifications subject to change without notice.

LED / LI HV



¹ Side panels increase height to 21/8".

² Lens reduces max ambient operating temperature to 40°C; if combined with ELL14 max is 30°C.

³ Side panels only; does not include lens or wire guard options.

⁴ ELL14 reduces max ambient temperature to 40°C. If combined with lens max is 30°C.

⁵ In-Fixture Module Antenna adds 2" to overall fixture height at specific location.

⁶ Not compatible if surface mounting



Test #8065 Test Date 11/07/13

PHOTOMETRIC DATA

LUMINAIRE DATA

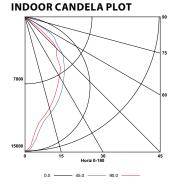
Luminaire	LLHV4-50H-NST-EDU LLHV VersaBay LED High Bay, Industrial 16" x 48" LED with specular reflector
Ballast	(3) PLED96W-046-C2100-D
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	25,556
Watts	236.10
Mounting	Surface
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.27 90° = 0.78
Luminous Opening	Length: 4.00
in Feet	Width: 1.31
	Height: 0.00

ENERGY DATA

lotal Luminaire Efficiency	100.0%
Total Lumens per Watt	108
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$2.22 based on 3000 hrs. and \$0.08 per KWH

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.		
0-30	9519	37.2	37.2		
0-40	14880	58.2	58.2		
0-60	23225	90.9	90.9		
0-90	25556	100.0	100.0		
0-180	25556	100.0	100.0		



Test #8064 Test Date 11/07/13

LUMINAIRE DATA

Luminaire	LLHV4-50H-WST-EDU LLHV VersaBay LED High Bay, Industrial 16" x 48" LED with gloss white reflector
Ballast	(3) PLED96W-046-C2100-D
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	24,763
Watts	236.10
Mounting	Surface
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.29 90° = 1.31
Luminous Opening in Feet	Length: 4.00 Width: 1.31 Height: 0.00

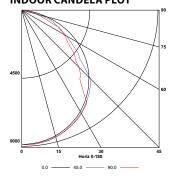
ENERGY DATA

Total Luminaire Efficiency	100.0%
Total Lumens per Watt	105
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$2.29 based on 3000 hrs. and \$0.08 per KWH

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	7064	28.5	28.5
0-40	11678	47.2	47.2
0-60	20204	81.6	81.6
0-90	24763	100.0	100.0
0-180	24763	100.0	100.0

INDOOR CANDELA PLOT



Test #7833 Test Date 10/08/13

LUMINAIRE DATA

Luminaire	LLHV4-50M-NST-EDU LLHV VersaBay LED High Bay, Industrial 16" x 48" LED with specular reflector
Ballast	(2) PLED75W-036-C2100-D
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	17,466
Watts	155.10
Mounting	Surface
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.27 90° = 0.74
Luminous Opening	Length: 4.00
in Feet	Width: 1.42
	Height: 0.00

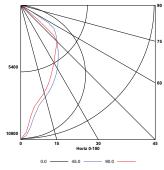
ENERGY DATA

Total Luminaire Efficiency	100.0%
Total Lumens per Watt	113
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$2.12 based on 3000 hrs. and \$0.08 per KWH

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	6397	36.6	36.6
0-40	10022	57.4	57.4
0-60	15929	91.2	91.2
0-90	17466	100.0	100.0
0-180	17466	100.0	100.0

INDOOR CANDELA PLOT



	PRODUCT	DIST.	LUMENS	WATTS	LPW	TYPICALLY REPLACES
	LLHV4-50L-NST-EDU	Narrow	12,967	109.0	119	
	LLHV4-40L-NST-EDU	Narrow	12,762	109.7	116	
	LLHV4-35L-NST-EDU	Narrow	11,400	109.1	104	150W - 250W Metal Halide,
	LLHV4-50L-WST-EDU	Wide	12,505	109.0	115	2T5 H0, 4 T8
	LLHV4-40L-WST-EDU	Wide	12,388	109.8	113	
	LLHV4-35L-WST-EDU	Wide	11,689	109.2	107	
	LLHV4-50M-NST-EDU	Narrow	17,466	155.1	113	
	LLHV4-40M-NST-EDU	Narrow	17,140	155.9	110	
	LLHV4-35M-NST-EDU	Narrow	16,057	154.8	104	250W - 400W Metal Halide, 4T5 HO.
ĺ	LLHV4-50M-WST-EDU	Wide	16,520	153.0	108	413110, 6T8
	LLHV4-40M-WST-EDU	Wide	16,687	155.9	107	
	LLHV4-35M-WST-FDU	Wide	15.506	154.8	100	

Replacement information provided for general purposes only. Each application should be evaluated with lighting calculation software to confirm light levels. LLHV photometry is available at www.columbialighting.com

PRODUCT	DIST.	LUMENS	WATTS	LPW	TYPICALLY REPLACES
LLHV4-50H-NST-I	EDU Narrow	25,556	236.1	108	
LLHV4-40H-NST-I	EDU Narrow	24,974	237.2	105	
LLHV4-35H-NST-E	DU Narrow	23,363	236.4	99	400W Metal Halide,
LLHV4-50H-WST-	EDU Wide	24,763	236.1	105	6T5 H0, 8T8
LLHV4-40H-WST-	EDU Wide	23,901	237.2	101	
LLHV4-35H-WST-	EDU Wide	22,544	236.2	95	

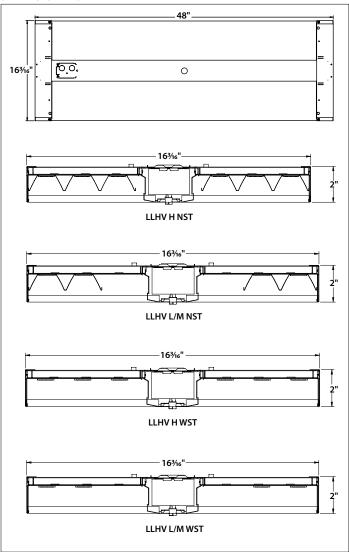
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Page 2/3 Rev. 09/30/14 LED / LLHV

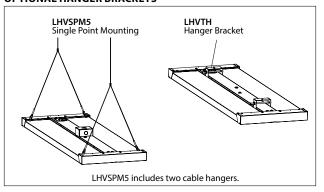




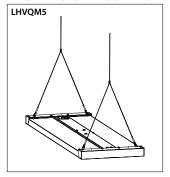
DIMENSIONAL DATA



OPTIONAL HANGER BRACKETS



AIRCRAFT CABLE MOUNTING



Additional mounting details available at www.columbialighting.com

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

MAX. AMBIENT OPERATING TEMP.					
NO L	ENS	LENS			
No ELL14	ELL14	No ELL14	ELL14		
45° C	40°C	40° C	30° C		

FLI 14: Factory	/ installed emergen	cy hattery nack	1400 lumens

Page 3/3 Rev. 09/30/14

	LLHV P	LUMEN MAINTENANCE			
	LUMEN PACKAGE		AMBIENT OPERATING TEMPERATURE	L80	L70
	L	12,000	25°C	94,000	153,000
CALCULATED		12,000	45°C	81,000	132,000
HOURS	М	18,000	25°C	60,000	97,000
			45°C	56,000	90,000
	Н 24,0	24.000	25°C	60,000	97,000
		24,000	45°C	56,000	90,000

Based on TM-21 calculated life.



LED / LLHV