HML4

LED High-Performance High Bay

Project

Catalog

Type

Date

Product Description

Introducing NICOR's latest breakthrough in lighting innovation: the HML4 high bay product line. Experience brilliance beyond measure as its compact form yields an extraordinary light output. DLC 5.1 Premium certification attests to its excellence, offering adjustable wattage, CCT (3500/4000/5000K), and selectable optical distibution. Crafted from single-piece, robust cast aluminum, its durability withstands even the harshest conditions, rendering it ideal for warehouses, gymnasiums, and assorted industrial or commercial settings. With an integrated cooling system and a top-mounted wire-way cover for effortless wire access, the HML4 emerges as the embodiment of streamlined functionality. A polyester powder coat finish crowns its aesthetic, culminating in a luminary masterpiece that seamlessly merges innovation and endurance.

Construction
- Fully cast aluminum body with integrated cooling features
- Top mounted wireway cover for easy wire access
- Polyester powder coat finish

Optical System
- Distribution selectable 90x90º, 65x95º, 45x100º
- Selectable CCTs of 3500K, 4000K and 5000K with >80 CRI

Electrical
- Selectable power levels: (160/140/120/100/80W), (240/220/200/180/160W), (320/300/280/260/240W)
- Operating temperature of fixture only: -40ºF to 122ºF (-40ºC to 50ºC)
- Operating temperature with motion sensor: -22ºF to 122ºF (-30ºC to 50ºC)
- Operating temperature with emergency power supply: 32ºF to 122ºF (0ºC to 50ºC)
- Input voltage of 120-347V
- Dimming: 0-10V standard
- Luminaire surge protection level: designed to withstand up to 6kV ring wave and 6kV/3kA combination wave per ANSI C82.77-5-2017 requirements for high bay luminaires

Controls
- Pre-installed 3.5mm sensor socket
- Field installable multifunction MW or PIR sensor available
- Standard full-range dimming with compatible 0-10VDC dimmers
- 12VDC output provides power to off-board sensors or controls

NLC (Network Lighting Controls)
- Bluetooth Low Energy (BLE) mesh network providing Luminaire Level Lighting Control
- Field installable BLE PIR/Daylight sensor (NLCSPEJ1WH-LHW) available
- Configurable with the NICOR NLC app available on iOS and Android devices
- Provides full dimming control with occupancy and daylight harvesting functions

Mounting and Installation
- V-hook and 3' chain mounting system included
- Wireguard option available for increased fixture protection
- Pendant mount and surface mount kits available
- For installations where power surge may be possible, NICOR recommends installing additional surge protection at the fixture or electrical distribution panel

Listings
- cULus1598 Listed for damp locations
- cULus 8750 Listed LEDs
- DLC 5.1 Premium
- IP20 environmental rating
- Helps meet ASHRAE 90.1 compliance when specified with sensor option
- RoHS Compliant: Free from harmful and hazardous materials
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- TM-21 Reported L70(10k) life >60,000 hours
- LM-79, LM-80 testing performed in accordance with IESNA standards

Warranty
- 5-year limited system warranty standard
- Warranty does not cover product failure due to an overvoltage event (power surge)





HML4

LED High-Performance High Bay

Wattage Selectable

CCT Selectable

Optical Distribution Selectable

CERTIFIED · DLC LISTED PREMIUM · DAMP LOCATION RATED · PATENT PENDING · RoHS COMPLIANT · 5 YEAR WARRANTY

HML4

LED High-Performance High Bay

Ordering Information

Example: HML4160SUS8S

Series	Version	Wattage Selectable	Input Voltage	CCT Selectable	CRI	Sensor Socket	Emergency	Wiring Option
HML	**4**	☐ **160S** (160/140/120/100/80W)	**U** (120-347V)	**S** (35K,40K,50K)	**8** (80 CRI)	**S** (with socket)	☐ ***_Blank*** (none)	☐ ***_Blank*** (none)
		☐ **240S** (240/220/200/180/160W)					☐ **E18** (18W)[1,6]	☐ **C** (Cord-3-wire, 6ft)[3,6]
		☐ **320S** (320/300/280/260/240W)					☐ **E40** (40W)[2,6]	☐ **C4** (Cord-4-wire, 6ft)[4,6]
								☐ **F** (Flex conduit - 6ft)[5,6]

Specifications and dimensions subject to change without notice.
(Note: End user is reponsible for proper selection of battery pack to meet NFPA requirements)

1. *Emergency Pack is for 160W models only*
2. *Emergency Pack is for 240W and 320W model only*
3. *C Cord is 18/3 wire, 6' long, black. Other lengths available upon request*
4. *C4 cord is 18/4 wire, 6' long, black, for use with Emergency enabled fixtures. Other lengths available upon request*
5. *Flexible metal conduit is 6' long, 18/3 wire configuration. Other lengths available upon request*
6. *Contact factory for lead-time*

Accessories

Motion Sensors

Passive Infrared Motion Sensors	☐ H12V3SENSORPIR1PWH
Microwave Motion Sensors	☐ H12V3SENSORMW1PWH
Remote Control for PIR Sensor	☐ H12V2REMOTE
NICOR Lighting Controls PIR Sensor	☐ NLCSPEJ1WH-LHW



PIR Sensor



Microwave Sensor


H12V2REMOTE



NLCSPEJ1WH-LHW

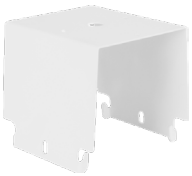
Mounting Accessory Kits

Aircraft Cable Kit (10ft)	☐ ACMK110
Pendant Kit	☐ HML4PENDKIT1WH
Surface Mount Kit	☐ HML4SURFKIT1WH

Pendant and surface mount kits compatible to all HML4 models


ACMK110


HML4SURFKIT1WH


HML4PENDKIT1WH

Emergency Battery Accessories

18W Battery Pack (120-347V)	☐ HML1EM18WRVWH
40W Battery Pack (120-347V)	☐ HML1EM40WRVWH

- *For installation in the field by the end user*
- *18W Emergency Packs are for 160W models only*
- *40W Emergency Pack is for 240W and 320W models only*
- *End user is reponsible for proper selection of battery pack to meet NFPA requirements*


HML1EM18WRVWH


HML1EM40WRVWH

Field Installed Plug Accessories

15A 125V Straight Bladed Plug	☐ 515P
15A 125V Twist Lock Plug	☐ L515P
15A 250V Twist Lock Plug	☐ L615P
15A 277V Twist Lock Plug	☐ L715P
20A 277V Twist Lock Plug	☐ L720P
20A 347V Twist Lock Plug	☐ L2320P
20A 480V Twist Lock Plug	☐ L820P

Plugs not available for C4 (4-wire cord) or F (flex conduit) options

High Volt Transformer *(see specsheet for full information)*

High Voltage (277-480V) Transformer	☐ NST1375HVWH

HML4

LED High-Performance High Bay

Performance Data

160W					
Model Number	CCT	Lumens	Watts	Lumens/Watt	EM Lumens
HML4160SUS8S (90x90)	3500	11274	79.0	142.7	2569
	4000	11915	76.5	155.8	2804
	5000	11688	80.0	146.1	2630
	3500	14280	98.8	144.6	2603
	4000	15093	95.6	157.8	2841
	5000	14805	100.0	148.1	2665
	3500	16967	118.5	143.2	2577
	4000	17933	114.8	156.3	2813
	5000	17592	120.0	146.6	2639
	3500	20019	138.3	144.8	2606
	4000	21158	133.9	158.0	2845
	5000	20756	140.0	148.3	2669
	3500	22775	158.0	144.1	2595
	4000	24071	153.0	157.3	2832
	5000	23613	160.0	147.6	2656
HML4160SUS8S (65x95)	3500	11582	75.5	153.4	2761
	4000	12127	73.3	165.3	2976
	5000	11736	76.5	153.5	2763
	3500	14671	94.4	155.4	2798
	4000	15361	91.7	167.5	3016
	5000	14865	95.6	155.5	2800
	3500	17432	113.3	153.9	2771
	4000	18252	110.0	165.9	2986
	5000	17663	114.7	154.0	2772
	3500	20567	132.1	155.7	2802
	4000	21535	128.4	167.8	3020
	5000	20840	133.8	155.8	2804
	3500	23398	151.0	155.0	2789
	4000	24499	146.7	167.0	3006
	5000	23709	152.9	155.0	2791
HML4160SUS8S (45x100)	3500	10893	79.0	137.9	2482
	4000	11303	77.0	146.8	2642
	5000	10793	80.0	134.9	2428
	3500	13798	98.8	139.7	2515
	4000	14318	96.3	148.8	2678
	5000	13671	100.0	136.7	2461
	3500	16394	118.5	138.3	2490
	4000	17012	115.5	147.3	2651
	5000	16244	120.0	135.4	2437
	3500	19343	138.3	139.9	2518
	4000	20072	134.8	149.0	2681
	5000	19166	140.0	136.9	2464
	3500	22006	158.0	139.3	2507
	4000	22835	154.0	148.3	2669
	5000	21804	160.0	136.3	2453

240W					
Model Number	CCT	Lumens	Watts	Lumens/Watt	EM Lumens
HML4240SUS8S (90x90)	3500	23153	156.0	148.4	5937
	4000	24030	153.3	156.7	6269
	5000	23522	160.0	147.0	5881
	3500	26152	175.5	149.0	5961
	4000	27143	172.5	157.3	6294
	5000	26569	180.0	147.6	5904
	3500	29185	195.0	149.7	5987
	4000	30291	191.7	158.0	6322
	5000	29651	200.0	148.3	5930
	3500	32114	214.5	149.7	5989
	4000	33331	210.8	158.1	6324
	5000	32626	220.0	148.3	5932
	3500	34869	234.0	149.0	5961
	4000	36190	230.0	157.3	6294
	5000	35425	240.0	147.6	5904
HML4240SUS8S (65x95)	3500	24191	150.0	161.3	6451
	4000	24995	150.6	166.0	6638
	5000	24291	152.1	159.7	6386
	3500	27324	168.8	161.9	6477
	4000	28233	169.4	166.6	6665
	5000	27437	171.2	160.3	6412
	3500	30494	187.5	162.6	6505
	4000	31508	188.3	167.4	6694
	5000	30620	190.2	161.0	6440
	3500	33554	206.3	162.7	6507
	4000	34670	207.1	167.4	6696
	5000	33693	209.2	161.1	6442
	3500	36432	225.0	161.9	6477
	4000	37644	225.9	166.6	6665
	5000	36583	228.2	160.3	6412
HML4240SUS8S (45x100)	3500	23336	158.0	147.7	5908
	4000	24006	153.6	156.3	6252
	5000	23164	159.9	144.9	5796
	3500	26358	177.8	148.3	5931
	4000	27116	172.8	156.9	6277
	5000	26164	179.9	145.5	5819
	3500	29416	197.5	148.9	5958
	4000	30261	192.0	157.6	6304
	5000	29199	199.8	146.1	5845
	3500	32368	217.3	149.0	5960
	4000	33298	211.2	157.7	6306
	5000	32129	219.8	146.2	5847
	3500	35144	237.0	148.3	5931
	4000	36154	230.4	156.9	6277
	5000	34885	239.8	145.5	5819

Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture.
Results may vary in the field.

HML4

LED High-Performance High Bay

Performance Data

320W					
Model Number	CCT	Lumens	Watts	Lumens/Watt	EM Lumens
HML4320SUS8S (90x90)	3500	34050	236.8	143.8	5752
	4000	36151	229.8	157.3	6293
	5000	33965	242.0	140.4	5615
	3500	37055	256.5	144.5	5778
	4000	39341	249.0	158.0	6321
	5000	36962	262.1	141.0	5641
	3500	39832	276.2	144.2	5768
	4000	42289	268.1	157.7	6309
	5000	39732	282.3	140.8	5630
	3500	42472	296.0	143.5	5740
	4000	45092	287.3	157.0	6279
	5000	42366	302.4	140.1	5603
	3500	45522	315.7	144.2	5768
	4000	48330	306.4	157.7	6309
	5000	45408	322.6	140.8	5630
HML4320SUS8S (65x95)	3500	35688	227.3	157.0	6282
	4000	36875	228.2	161.6	6464
	5000	36875	230.5	160.0	6399
	3500	38837	246.2	157.8	6310
	4000	40128	247.2	162.3	6493
	5000	40128	249.7	160.7	6428
	3500	41747	265.1	157.5	6298
	4000	43136	266.2	162.0	6481
	5000	43136	268.9	160.4	6416
	3500	44514	284.1	156.7	6268
	4000	45995	285.2	161.3	6450
	5000	45995	288.1	159.6	6385
	3500	47711	303.0	157.5	6298
	4000	49298	304.2	162.0	6481
	5000	49298	307.3	160.4	6416
HML4320SUS8S (45x100)	3500	33688	237.8	141.6	5666
	4000	34638	229.6	150.9	6035
	5000	33133	242.3	136.8	5471
	3500	36660	257.6	142.3	5692
	4000	37695	248.7	151.6	6063
	5000	36056	262.4	137.4	5496
	3500	39407	277.5	142.0	5681
	4000	40520	267.8	151.3	6051
	5000	38758	282.6	137.1	5485
	3500	42020	297.3	141.3	5654
	4000	43205	287.0	150.6	6022
	5000	41327	302.8	136.5	5459
	3500	45037	317.1	142.0	5681
	4000	46308	306.1	151.3	6051
	5000	44295	323.0	137.1	5485

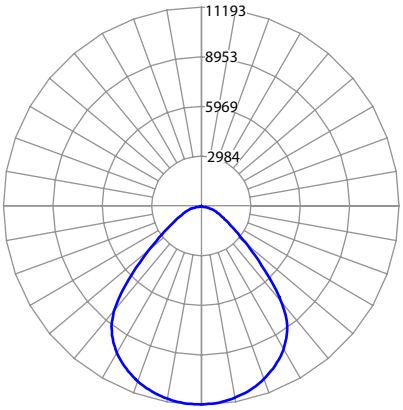
HML4

LED High-Performance High Bay

Photometric Data

HML4 160W 5K 90x90

Input Voltage (VAC)	120-347
System Level Power (W)	160.0
Delivered Lumens (Lm)	23612
System Efficacy (Lm/W)	147.6
Correlated Color Temp (K)	4967
Color Rendering Index (CRI)	84
Horizontal Beam Angle (°)	89.2
Vetical Beam Angle (°)	89.0
Spacing Criteria (0-180)	1.24
Spacing Criterion (90-270)	1.22



Cone of Light Tabulation

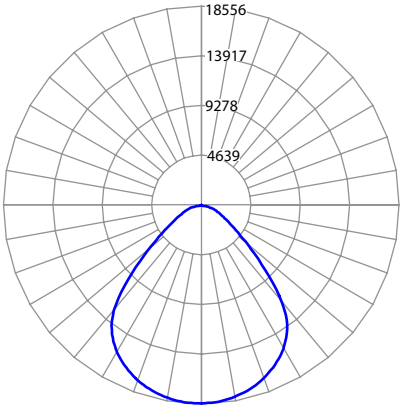
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	52.9	29.6
17	41.2	33.5
20	29.7	39.4
23	22.4	45.4
25	19.0	49.3
28	15.1	55.2
30	13.1	59.2

Data Multipliers

	3500K	4000K	5000K
60W	0.362	0.382	0.375
80W	0.527	0.557	0.547
100W	0.723	0.844	0.965
120W	0.765	0.892	1.019
160W	0.750	0.875	1.000

HML4 240W 5K 90X90

Input Voltage (VAC)	120-347
System Level Power (W)	240.0
Delivered Lumens (Lm)	35425
System Efficacy (Lm/W)	147.6
Correlated Color Temp (K)	4967
Color Rendering Index (CRI)	83
Horizontal Beam Angle (°)	88.8
Vetical Beam Angle (°)	88.2
Spacing Criteria (0-180)	1.30
Spacing Criterion (90-270)	1.30



Cone of Light Tabulation

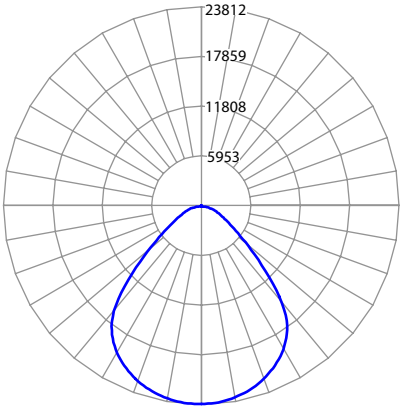
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	82.4	29.4
17	64.2	33.3
20	46.3	39.2
23	35.0	45.0
25	29.6	49.0
28	23.6	54.8
30	20.5	58.8

Data Multipliers

	3500K	4000K	5000K
160W	0.547	0.568	0.556
180W	0.677	0.702	0.688
200W	0.820	0.902	0.984
220W	0.851	0.936	1.022
240W	0.833	0.917	1.000

HML4 320W 5K 90X90

Input Voltage (VAC)	120-347
System Level Power (W)	323.0
Delivered Lumens (Lm)	45408
System Efficacy (Lm/W)	140.6
Correlated Color Temp (K)	4967
Color Rendering Index (CRI)	83
Horizontal Beam Angle (°)	88.2
Vetical Beam Angle (°)	89.3
Spacing Criteria (0-180)	1.30
Spacing Criterion (90-270)	1.32



Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	105.7	29.1
17	82.3	32.9
20	59.5	38.8
23	44.9	44.6
25	38.0	48.5
28	30.3	54.3
30	26.4	58.1

Data Multipliers

	3500K	4000K	5000K
240W	0.658	0.698	0.656
260W	0.764	0.811	0.762
280W	0.877	0.940	1.003
300W	0.931	0.998	1.064
320W	0.875	0.938	1.000

Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture. Results may vary in the field.

HML4

LED High-Performance High Bay

Sensors and Dimmers

PIR Sensors

See the individual spec sheet for further information

- Field installed 12VDC sensor
- Infrared motion detector with built in daylight sensor
- Remote control programmable
- Highly configurable:
  - Detection area
  - Hold time
  - Dimming level
  - Stand-by period
  - Stand-by dimming
  - Daylight harvesting threshold
- Max mounting height: 40ft (12m)
- IP65 Rated



H12V3SENSORPIR1PWH

Microwave Sensors

See the individual spec sheet for further information

- Field installed 12VDC sensor
- Microwave motion detector with built in daylight sensor
- Remote control programmable
- Highly configurable:
  - Detection area
  - Hold time
  - Dimming level
  - Stand-by period
  - Stand-by dimming
  - Daylight harvesting threshold
- Max mounting height: 40ft (15m)
- IP65 Rated



H12V3SENSORMW1PWH

H12V Remotes

See the individual spec sheet for further information

- Allows programming of MW or PIR sensors
- Allows adjustment of:
  - Brightness
  - Hold time
  - Sensor Sensitivity
  - Daylight harvesting threshold
  - Stand-by dimming level
  - Stand-by time
  - Stand-by dimming



H12V2REMOTE

NLC Bluetooth PIR/Daylight Sensor (NLCSPEJ1WH-LHW)

See the individual spec sheet for further information

- Field installed 12VDC sensor
- Infrared motion detector with built in daylight sensor
- Commissioned with NLC App
- Highly configurable:
  - Occupancy/Vacancy Detection
  - Daylight Harvesting
  - High-End Trim
  - Full Range Dimming (0-10V)
  - Scene Control
  - Full Networking
- Max mounting height: 40ft (12m)
- IP65 Rated





Recommended Dimmers*
Lutron NTSTV
Lutron DVSTV
Cooper SF10P
Legrand RH4FBL3PW

**Not a complete list. Check compatibility before installation.*

12VDC Output

There is an additional 12VDC output on the driver. This output can be used to provide power to external low voltage sensors or controls. Do not use the 12VDC output if a sensor is installed in the socket.

Note: When using H12V sensors, set the fixture Wattage Selection Switch to the highest wattage. Lower wattages can then be set via the H12V Remote Control.

HML4

LED High-Performance High Bay

Dimensions

Product Measurements			
	160W	**240W**	**320W**
Length:	15 in. (381mm)	20.1 in. (510mm)	22.0 in. (560mm)
Width:	11.2 in. (285mm)		12.4 in. (315mm)
Height:	1.9 in. (48mm)		

