



\* For list of qualified DLC fixture, please consult factory

7000 LUMENS	10000 LUMENS	12000 LUMENS	15000 LUMENS	20000 LUMENS	28000 LUMENS	31000 LUMENS	34000 LUMENS	40000 LUMENS
<b>48</b> WATT	<b>66</b> WATT	<b>99</b> WATT	<b>104</b> WATT	<b>145</b> WATT	<b>192</b> WATT	<b>227</b> WATT	<b>240</b> WATT	<b>283</b> WATT
According to DLC Test Results	According to DLC Test Results	According to DLC Test Results	According to DLC Test Results	According to DLC Test Results	According to DLC Test Results	According to DLC Test Results	According to DLC Test Results	According to DLC Test Results

The HD1B-LED is an enclosed LED powered high-lumen lighting fixture designed for use in food processing facilities, sports complexes, warehouses, outdoor canopies, cold storage facilities, and manufacturing facilities. The HD1B-LED is suitable for a wide range of high bay applications and an ideal and more efficient replacement for 150-400W metal halide, high pressure sodium, and fluorescent lighting systems.

#### PRODUCT FEATURES:

- Contoured component surfaces reduce the buildup of debris and permit easy cleaning
- Symmetrically hinged universal gear tray for trouble-free maintenance
- Stainless steel cam-action latches come standard, optional tamper-proof screws available
- Available with specular reflector as option
- Mounting bracket included for surface mount installation
- The back of the housing has a 10 degree slope to satisfy the requirements in the food industry which are more stringent than NSF standards
- LED reflectors are painted with an 87% reflective white coat to improve fixture efficacy
- Rated at 85+ CRI and available in multiple CCTs
- Life tested to ensure light output up to 50,000 hours of operation to L70
- Tested to LM-79 and LM-80 standards
- Dimmable down to 5%-10% with compatible dimming systems

- LED lighting technology offers the highest return on initial investment over the lifetime of the fixture
- Emergency battery back-up comes pre-installed on the fixture and emergency push button is installed on the fixture for easy access and aesthetics.
- UL and cUL recognized
- NSF Splash Zone 2
- Wet location listed: IP65 per IEC 60529 standard, IP67 per IEC 60529 standard, IP66
- NEMA 4X
- NSF International certified for NSF/ANSI Standard 2 – Food Equipment and Splash Zone 2
- UL 5VA flammability rated
- F1 weatherability rated
- Operating temperature: -40°C to 55°C (-40°F to 131°F), unless used in vandal area or where easily hit

**OPTICS** - The frosted lens of the HD1B-LED helps to deliver a volumetric light that helps fill an entire indoor space with light, giving it a larger, brighter, and more productive ambiance. The contoured high-impact resistance lens features molded linear ridges to diffuse the lamp image and minimize glare. HD1B is also available from a clear lens.

**ELECTRICAL** - Powered by high-quality constant-current power LED drivers which are rated for 50 to 60Hz at 120-277V input, produce less than 20% THD, and have a power factor of .90 to 1.00.

**DURABILITY** - The HD1B-LED housing is made of a solid piece of reinforced polyester rated to UL 5VA flammability and F1 weatherability standards. Housing and lens connecting channel are sealed with a continuous En-Seal™ poured gasket to ensure conformity to all weathering standards. Lens is made from an impact resistant polycarbonate material to ensure LED light engines are safe from dust, moisture and/or accidental impact.

**MAINTENANCE** - LED engines and driver can be accessed through the bottom by removing hinged door tray and reflector. LED engines are removable and upgradable even after fixture installation. Fixture can be regularly and safely wiped down to ensure optimal fixture performance.

**PERFORMANCE** - The HD1B-LED powered lighting technologies offer a higher return on investment than any other lighting technology. The light engines found in the HD1B-LED are rated at 85+ CRI and available in multiple CCTs: 3000K, 3500K, 4000K and 5000K. All LEDs and LED fixtures are rated and tested to LM-79 and LM-80 standards. The LEDs are also binned to a 3-step MacAdam ellipses to achieve consistent color from fixture to fixture.

**OPTIONS** - Fixtures can be shipped pre-installed with daylight harvesting controls, occupancy sensors, and/or power pack. Available manufacturer options include Leviton, Hubble Automation, and others. The Wattstopper - **MS-FM105** Super High Frequency Occupancy Sensor is a line voltage sensor that turns lighting on and off based on occupancy, and can hold lights off when sufficient daylight is available. Include two stainless steel mounting brackets for surface, stem, suspended chain, aircraft cable, and other mounting options. Consult factory for details.

**THERMAL MANAGEMENT** - LED light engines are attached directly to aluminum reflector housing which keeps the engines cool. Our advanced thermal management system allows the light output of the LED engines to be maintained at 70% of initial lumens at 50,000 hours of operation.

**QUALITY CONTROL** - Every fixture is turned on and rigorously tested by our QC Department before shipping.

**DIMMING** - The HD1B-LED comes standard with 0-10V dimming on either 120 or 277V. Dimmable down to 5%-10% of initial lumens. Consult factory for dimmer compatibility.

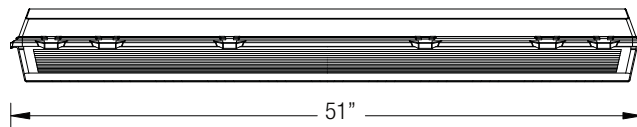
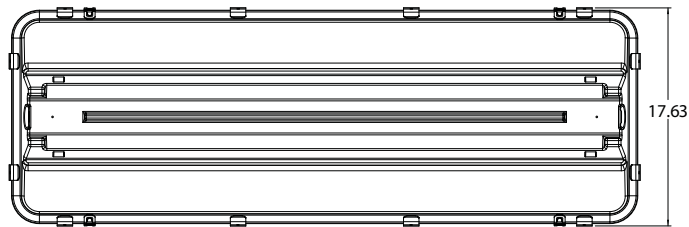
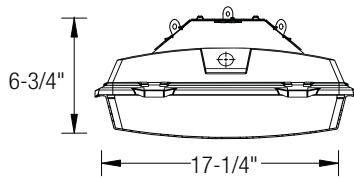
**WARRANTY** - Limited 5 Year Warranty\*

#### Ordering Information: Example: HD1B-LED-5000L-DIM10-120-30K

SERIES	DIMMING	VOLTAGE	CCT	CRI	EMERGENCY	DISTRIBUTION	OTHER OPTIONS
HD1B-LED- Oracle LED High Beam Hose Down High Bay	DIM10 - 1-10V Dimming	MVOLT 347* 480	30K - (3000K) 35K - (3500K) 40K - (4000K) 50K - (5000K)	85	EMG-LED-G3-CP-10W EMG-LED-G3-CP-20W	Blank - General ND - Narrow Distribution MD - Medium Distribution WD - Wide Batwing Distribution AD - Aisle Distribution	INMS - Internal Motion Sensor MSPH - Motion Sensor W/ Photocell WLMS - Wet Location Motion Sensor TPS - Tamper Proof Screws USA - Made in America Compliance FSP-311-B-D - 0-10V continuous dimming PIR photo/motion sensor with bluetooth control option.
<b>LENS AND REFLECTOR OPTIONS</b>							
(blank) - Frosted Lens w/ White Reflector Standard							
HD1BCL - Clear Lens w/ White Reflector Standard							
4HD1BSR - Specular Reflector							
<b>SUSPENSION MOUNTING</b>							
GSS - Gripple Suspension System							
VH - V Hook							
CH - Heavy-duty Chain							
<b>WIRING OPTIONS</b>							
PCSB120 - 10' Nema 5-15R 120V Straight Blade Plug				IPTL120 - 10' 120V IP Rated Twist lock Plug			
PCSB277 - 10' Nema 7-15R 277V Straight Blade Plug				IPTL277 - 10' 277V IP Rated Twist lock Plug			
PCTL120 - 10' Nema L5-15R 120V Twist Lock Plug				S01 - 10' 120V/277V SO Cord			
PCTL277 - 10' Nema L5-15R 277V Twist Lock Plug				S02 - 10' 480V SO Cord			

Wattstopper Lens options

FSP-L2-W	White	360° lens, maximum coverage 48' diameter from 8' height
FSP-L2-B	Black	
FSP-L2-BR	Bronze	
FSP-L2-G	Grey	
FSP-L2-S-W	White	360° lens, maximum coverage 48' diameter from 8' height, with shroud; Minimizes high-angle light contribution to photocell
FSP-L3-W	White	360° lens, maximum coverage 40' diameter from 20' height
FSP-L3-B	Black	
FSP-L3-BR	Bronze	
FSP-L3-G	Grey	
FSP-L3-S-W	White	360° lens, maximum coverage 40' diameter from 20' height, with shroud; Minimizes high-angle light contribution to photocell
FSP-L7-W	White	360° lens, maximum coverage 100' diameter from 40' height
FSP-L7-B	Black	
FSP-L7-BR	Bronze	
FSP-L7-G	Grey	
FSP-L7-S-W	White	360° lens, maximum coverage 100' diameter from 40' height, with shroud; Minimizes high-angle light contribution to photocell
FSP-C1-W	White	Small collar, for use with FSP-L2 and FSP-L3 lenses (Optional aesthetic collar to transition from fixture housing to lens) Note: Not used with lenses that include shroud
FSP-C2-W	White	Large collar, for use with FSP-L7 lens (Optional aesthetic collar to transition from fixture housing to lens) Note: Not used with lens that includes shroud



**\*Warranty is contingent on the correct application and installation of fixture.**

**HD1B-LED-5000L-DIM10-MVOLT-40K-85**

TEST NO.: **EL09101962**

INPUT WATTS: **35.6**

LUMENS: **5146**

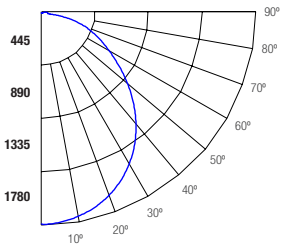
CRI: **85**

EFFICACY: **145**

CCT: **4000K**

SPACING CRITERIA: **1.36**

**Candle Power Distribution (Candelas)**



**Zonal Lumens Summary**

Zone	Lumens	%Lamp	%Fixt
0-20	649.45	12.60	12.60
0-30	1377.38	26.80	26.80
0-40	2243.3	43.60	43.60
0-60	3870.36	75.20	75.20
0-80	4801.96	93.30	93.30
0-90	4963.76	96.50	96.50

**Luminance (Average candela/M<sup>2</sup>)**

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	3518	3543	3502
55	3231	3237	3159
65	3061	2933	2798
75	3241	2841	2472
85	4343	3573	2435

**Lumens Per Zone**

Zone	Lumens
0-10	168.03
10-20	481.43
20-30	727.93
30-40	865.91
40-50	870.39
50-60	756.68
60-70	569.39
70-80	362.21
80-90	161.80

**Candela Tabulation**

0	
0.0	1776.722
5.0	1769.630
15.0	1700.140
25.0	1567.310
35.0	1367.860
45.0	1110.450
55.0	827.100
65.0	577.470
75.0	374.360
85.0	168.970
90.0	96.970

**Coefficients of Utilization - Zonal Cavity Method**

Effective Floor Cavity Reflectance 0.20

RC RW	80%				70%				50%			30%			10%			0%
	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	96
1	107	103	98	94	104	100	96	92	95	92	89	90	88	85	86	84	82	80
2	98	89	82	77	95	87	81	75	83	78	73	79	75	71	76	72	69	66
3	89	78	70	64	86	77	69	63	73	67	61	70	64	60	67	62	58	56
4	82	70	61	54	79	68	60	53	65	58	52	62	56	51	60	54	50	48
5	75	62	53	47	73	61	52	46	58	51	45	56	50	44	54	48	44	41
6	69	56	47	41	67	55	46	40	53	45	40	51	44	39	49	43	38	36
7	64	51	42	36	62	50	42	36	48	41	35	46	40	35	45	39	34	32
8	60	46	38	32	58	46	38	32	44	37	31	42	36	31	41	35	31	29
9	56	43	34	29	54	42	34	29	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	31	26	36	30	25	35	29	25	23

RC - Ceiling Cavity Reflectance

**HD1B-LED-7000L-DIM10-MVOLT-40K-85**

TEST NO.: **EL09101961**

INPUT WATTS: **49.8**

LUMENS: **6991**

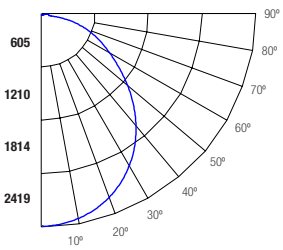
CRI: **85**

EFFICACY: **140**

CCT: **4000K**

SPACING CRITERIA: **1.36**

**Candle Power Distribution (Candelas)**



**Zonal Lumens Summary**

Zone	Lumens	%Lamp	%Fixt
0-20	883.08	12.60	12.60
0-30	1872.96	26.80	26.80
0-40	3050.59	43.60	43.60
0-60	5258.04	75.20	75.20
0-80	6523.73	93.30	93.30
0-90	6744.26	96.50	96.50

**Luminance (Average candela/M<sup>2</sup>)**

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	4782	4818	4775
55	4388	4399	4314
65	4161	3983	3821
75	4355	3818	3351
85	5910	4859	3368

**Lumens Per Zone**

Zone	Lumens
0-10	228.44
10-20	654.64
20-30	989.88
30-40	1177.63
40-50	1183.88
50-60	1023.57
60-70	773.68
70-80	492.00
80-90	220.54

**Candela Tabulation**

0	
0.0	2415.337
5.0	2405.040
15.0	2311.530
25.0	2129.920
35.0	1858.530
45.0	1509.360
55.0	1123.350
65.0	784.940
75.0	503.130
85.0	229.910
90.0	132.260

**Coefficients of Utilization - Zonal Cavity Method**

Effective Floor Cavity Reflectance 0.20

RC RW	80%				70%				50%			30%			10%			0%
	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	96
1	107	103	98	94	104	100	96	92	95	92	89	90	88	85	86	84	82	80
2	98	89	82	77	95	87	81	75	83	78	73	79	75	71	76	72	69	66
3	89	78	70	64	86	77	69	63	73	67	61	70	64	60	67	62	58	56
4	82	70	61	54	79	68	60	53	65	58	52	62	56	51	60	55	50	48
5	75	62	53	47	73	61	52	46	58	51	45	56	50	45	54	48	44	41
6	69	56	47	41	67	55	47	40	53	45	40	51	44	39	49	43	38	36
7	64	51	42	36	62	50	42	36	48	41	35	46	40	35	45	39	34	32
8	60	46	38	32	58	46	38	32	44	37	32	42	36	31	41	35	31	29
9	56	43	34	29	54	42	34	29	40	33	28	39	33	28	38	32	28	26
10	53	39	31	26	51	39	31	26	37	31	26	36	30	26	35	29	25	23

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

**\*Warranty is contingent on the correct application and installation of fixture.**

LED  
HD1B

LED Wet Location Vapor Tight

**HD1B-LED-10000L-DIM10-MVOLT-40K-85**

INPUT WATTS: **71.3**

LUMENS: **10195**

CRI: **85**

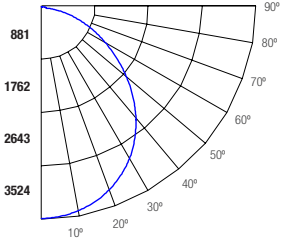
EFFICACY: **143**

CCT: **4000K**

TEST NO.: **EL09121971**

SPACING CRITERIA: **1.36**

**Candle Power Distribution (Candelas)**



**Zonal Lumens Summary**

Zone	Lumens	%Lamp	%Fixt
0-20	1285.13	12.60	12.60
0-30	2724.8	26.70	26.70
0-40	4436.42	43.50	43.50
0-60	7642.87	75.00	75.00
0-80	9510.87	93.30	93.30
0-90	9832.82	96.40	96.40

**Luminance (Average candela/M<sup>2</sup>)**

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	6838	6978	6986
55	6325	6366	6315
65	6233	5832	5584
75	6097	5648	4900
85	7833	7000	4935

**Lumens Per Zone**

Zone	Lumens
0-10	332.54
10-20	952.60
20-30	1439.66
30-40	1711.63
40-50	1718.23
50-60	1488.22
60-70	1138.64
70-80	729.35
80-90	321.95

**Candela Tabulation**

0	
0.0	3516.267
5.0	3499.220
15.0	3352.740
25.0	3078.210
35.0	2673.300
45.0	2158.220
55.0	1619.350
65.0	1175.840
75.0	704.300
85.0	304.730
90.0	177.470

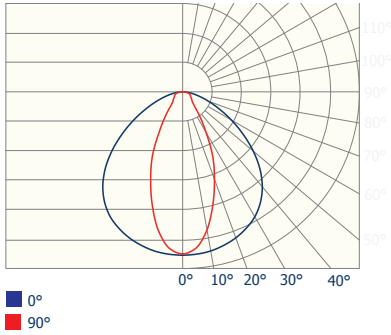
**Coefficients of Utilization - Zonal Cavity Method**

Effective Floor Cavity Reflectance 0.20

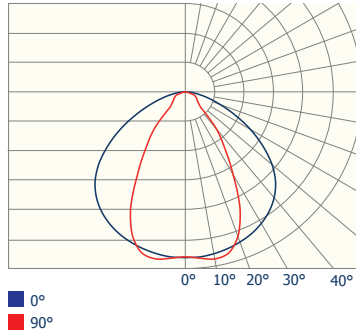
RC RW	80%				70%				50%			30%			10%			0%
	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	96
1	107	102	98	94	104	100	96	92	95	92	89	90	88	85	86	84	82	80
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RC - Ceiling Cavity Reflectance

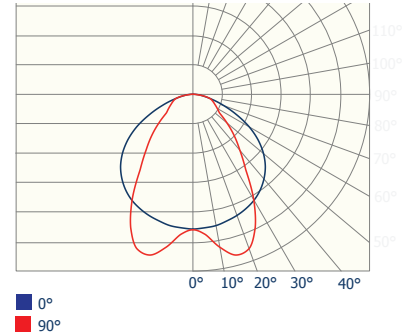
RW - Wall Reflectance



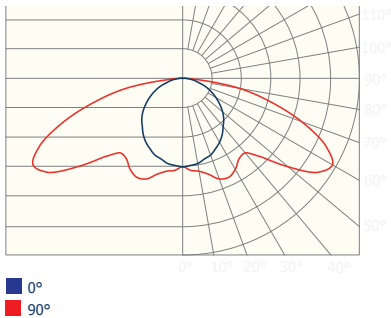
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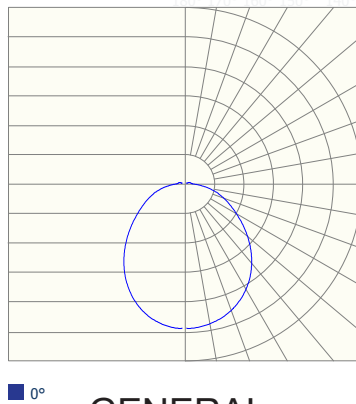
**MEDIUM 60 DEGREE**



**AISLE LIGHT 15 DEGREE**



**WIDE BATWING 120 /  
PARKING GARAGE**



**GENERAL**