HYDRO BEAM LED IP & NEMA RATED HIGH BAY WIDE BODY









28000



34000

31000

10000 | 12000

ROUDLY SSEMBLED in MERICA	NSI

15000

99 **227**WATT 240 WATT 66 104 145 192 WATT WATT WATT According to According to According to DLC Test Results DLC Test Results DLC Test Results According to According to According to DLC Test Results DLC Test Results According to DLC Test Results According to DLC Test Results 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.

LUMENS

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 that 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

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.

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-SealTM 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.

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.

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.

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.

(20200 lumens)

(26700 lumens)

(31600 lumens)

34000L- (33350 lumens)

200001 -

28000L

31000L

LED lighting technology offers the highest return on initial investment over the lifetime of

20000

LUMENS

- 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
- 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

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

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

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.

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

WARRANTY - Limited 5 Year Warranty*

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

DIMMING VOLTAGE **SERIES** CCT CRI **EMERGENCY** LENS AND REFLECTOR OPTIONS 0-EMG-LED HD1B-LED-**DIM10** - 1-10V Dimming MVOLT **30K** - (3000K) (blank) - Frosted Lens w/ White Reflector Standard 35K - (3500K) HD1BCL - Clear Lens w/ White Reflector Standard Oracle LED 347 (4000K) 480 40K 4HD1BSR - Specular Reflector High Beam **SERIES 50K** - (5000K) * Consult factory for details Hose Down 70001 *- (7715 lumens) High Bay (9200 lumens) 10000L-(13800 lumens) 120001 -WIRING OPTIONS SUSPENDED MOUNTING 15000L-

(14500 lumens)

PCTL277 10' Nema L5-15R 277V Twist Lock Plug

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 S02 - 10' 480V SO Cord

VH - V Hook CH - Heavy-duty Chain

GSS - Gripple Suspension System

USA - Made in America Compliance FSP-311-B-D - 0-10V continuous dimming PIR photo/ motion sensor with bluetooth control option.

OTHER OPTIONS

INMS - Internal Motion

Sensor

MSPH - Motion Sensor

Sensor

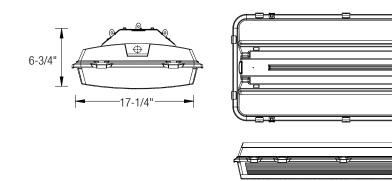
W/ Photocell

WLMS - Wet Location Motion

TPS - Tamper Proof Screws

HD1B

Hydro Beam LED Hose Down High Bay



HD1B-LED-5000L-DIM10-MV0LT-40K-85

CCT: 4000K SPACING CRITERIA: 1.36 INPUT WATTS: 35.6 LUMENS: **5146** CRI: **85** EFFICACY: 145 **Zonal Lumens Summary**

Candle Power Distribution (Candelas) 445 890 1335

Zonal Lur	nens Sumn	nary		Luminan	Luminance (Average candela/M ²				
Zone	Lumens	%Lamp	%Fixt	Angle in	Average 0°	Average	Ave		
0-20	649.45	12.60	12.60	Degrees	Avolugo o	45°	9		
0-30	1377.38	26.80	26.80	45	3518	3543	35		
0-40	2243.3	43.60	43.60	55	3231	3237	3		
0-60	3870.36	75.20	75.20	65	3061	2933	27		
0-80	4801.96	93.30	93.30	75	3241	2841	2		
0-90	4963.76	96.50	96.50	85	4343	3573	2		

Coefficients of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

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

51"

		_	
Zone	Lumens		0
		0.0	1776.722
0-10	168.03	5.0	1769.630
10-20	481.43	15.0	1700.140
20-30	727.93	25.0	1567.310
30-40	865.91	35.0	1367.860
40-50	870.39	45.0	1110.450
50-60	756.68	55.0	827.100
		65.0	577.470
60-70	569.39	75.0	374.360
70-80	362.21	85.0	168.970
80-90	161.80	90.0	96.970

Lumens Per Zone

TEST NO.: **EL09101962**

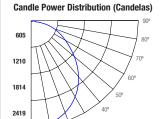
Candela Tabulation

17,63

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

HD1B-LED-7000L-DIM10-MV0LT-40K-85

TEST NO.: **EL09101961** CRI: **85** EFFICACY: 140 CCT: 4000K SPACING CRITERIA: 1.36 INPUT WATTS: 49.8 LUMENS: **6991**



20°

Zonal Lur	nens Sumn	nary	
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/M²)							
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 P	er Zone	Candela T	abulation
Zone	Lumens		0
		0.0	2415.337
0-10	228.44	5.0	2405.040
10-20	654.64	15.0	2311.530
20-30	989.88	25.0	2129.920
30-40	1177.63	35.0	1858.530
40-50	1183.88	45.0	1509.360
		55.0	1123.350
50-60	1023.57	65.0	784.940
60-70	773.68	75.0	503.130
70-80	492.00	85.0	229.910
80-90	220.54	90.0	132.260

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Poffectance 0.20

	RC		80	1%			70	1%			50%			30%			10%		0%
	RW	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
0	3	89	78	70	64	86	77	69	63	73	67	61	70	64	60	67	62	58	56
Ē	4	82	70	61	54	79	68	60	53	65	58	52	62	56	51	60	55	50	48
2	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
2	8	60	46	38	32	58	46	38	32	44	37	32	42	36	31	41	35	31	29
6	9	56	43	34	29	54	42	34	29	40	33	28	39	33	28	38	32	28	26
2	10	53	39	31	26	51	39	31	26	37	31	26	36	30	26	35	29	25	23

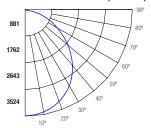
RC - Ceiling Cavity Reflectance

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

HD1B-LED-10000L-DIM10-MV0LT-40K-85

TEST NO.: **EL09121971** INPUT WATTS: 71.3 SPACING CRITERIA: 1.36 CRI: **85** EFFICACY: 143 CCT: **4000K** LUMENS: **10195**

Candle Power Distribution (Candelas)



Zonal Lumens Summary Lumens %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 ²)							
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				

umens P	er Zone	Candela T	abulation_
Zone	Lumens		0
_00		0.0	3516.267
0-10	332.54	5.0	3499.220
10-20	952.60	15.0	3352.740
20-30	1439.66	25.0	3078.210
30-40	1711.63	35.0	2673.300
40-50	1718.23	45.0	2158.220
		55.0	1619.350
50-60	1488.22	65.0	1175.840
60-70	1138.64	75.0	704.300
70-80	729.35	85.0	304.730
80-90	321.95	90.0	177.470

Coefficients of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

	RC	80%				70%				50%			30%			10%			0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
00M CAVITY RATIO	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
	2	98	89	82	76	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	69	61	54	79	68	60	53	65	58	52	62	56	51	60	54	50	48
	5	75	62	53	46	73	61	52	46	58	51	45	56	49	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	37	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
8 8	10	52	39	31	26	51	39	31	26	37	30	26	36	30	25	35	29	25	23

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance