

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P731083

Luminaire Tested: **HBLED-LD5-48HE-W-FLI-UNV-L850**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P731083
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26703)
Test Lab: INNOVATION CENTER
Issue Date: 11/13/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-48HE-W-FLI-UNV-L850
Description: 48000 LUMEN, HE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43303.0 lumens
Efficiency: N/A
Efficacy: 164.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')
CIE Type: Direct

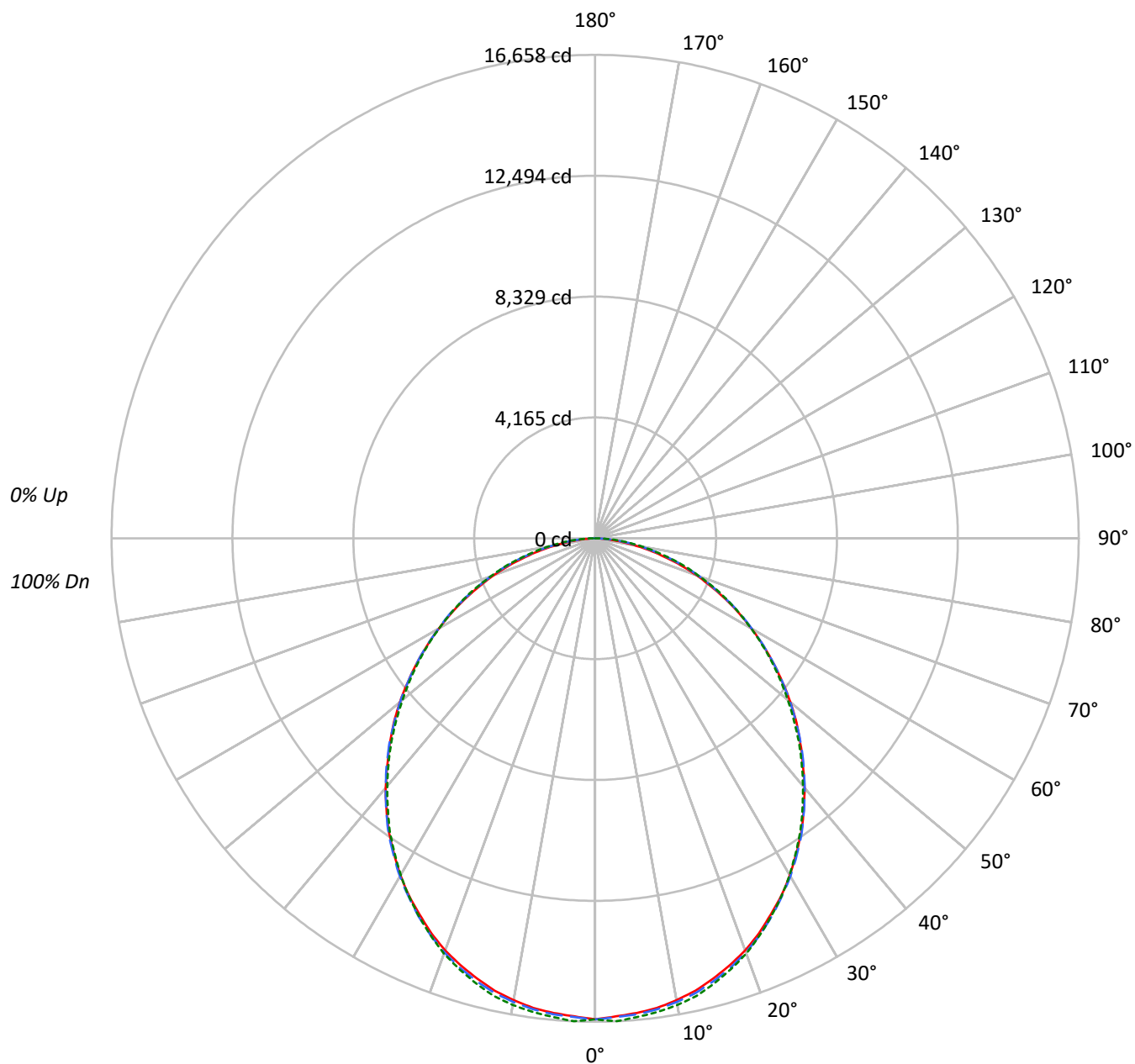
Input Watts (W): 263
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84		
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71		
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60		
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51		
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45		
6	71	58	49	42	69	57	48	42	55	47	42	53	47	42	52	46	41	39		
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35		
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31		
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28		
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26766	26766	26766
5°	26614	26689	26841
10°	26493	26600	26773
15°	26260	26403	26531
20°	25963	26088	26163
25°	25482	25627	25589
30°	25012	25079	24977
35°	24393	24455	24299
40°	23659	23659	23478
45°	22832	22895	22661
50°	22048	22010	21735
55°	21094	21096	20906
60°	20072	20095	20017
65°	18917	19107	19155
70°	17473	17952	17970
75°	15442	16442	16698
80°	12665	14399	15213
85°	8788	12090	13670



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1567.8	3.6
10°-20°	4460.1	10.3
20°-30°	6628.0	15.3
30°-40°	7749.9	17.9
40°-50°	7726.9	17.8
50°-60°	6704.1	15.5
60°-70°	4951.7	11.4
70°-80°	2772.4	6.4
80°-90°	739.7	1.7
90°-100°	2.2	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	12656.0	29.2
0°-40°	20405.9	47.1
0°-60°	34836.9	80.4
0°-90°	43300.8	100.0
90°-120°	2.2	0.0
90°-150°	2.2	0.0
90°-180°	2.0	0.0
0°-180°	43303.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16578	16578	16578	16578	16578	
5°	16420	16524	16467	16540	16561	###
15°	15710	15820	15795	15871	15872	4431
25°	14304	14419	14385	14416	14364	6595
35°	12376	12484	12407	12405	12328	7730
45°	9999	10106	10027	9986	9924	7719
55°	7493	7545	7494	7482	7427	6701
65°	4952	5000	5001	5027	5014	4897
75°	2475	2549	2636	2654	2677	2636
85°	474	574	653	710	738	576
90°	0	11	13	28	26	19
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	16577.6	16577.6	16577.6	16577.6	16577.6
2.5°	16487.0	16585.1	16516.4	16581.9	16657.9
5°	16420.5	16524.0	16466.9	16539.6	16560.7
7.5°	16323.6	16423.8	16368.9	16441.7	16463.8
10°	16159.1	16267.8	16224.5	16306.8	16329.9
12.5°	15967.3	16069.5	16041.0	16136.9	16152.8
15°	15710.0	15819.8	15795.4	15871.4	15872.4
17.5°	15425.4	15528.6	15510.7	15569.8	15567.6
20°	15110.3	15220.8	15183.0	15247.2	15227.1
22.5°	14737.0	14855.1	14807.5	14861.4	14810.8
25°	14303.6	14418.6	14384.9	14416.4	14363.8
27.5°	13884.1	13989.5	13919.8	13957.8	13902.0
30°	13416.0	13505.6	13451.9	13464.5	13397.1
32.5°	12889.9	12996.4	12931.0	12929.0	12857.2
35°	12375.5	12484.0	12407.2	12405.0	12328.2
37.5°	11806.2	11907.4	11816.8	11822.0	11732.4
40°	11225.3	11312.9	11225.3	11221.0	11139.0
42.5°	10594.9	10710.9	10630.8	10640.2	10530.7
45°	9999.3	10105.8	10026.8	9985.5	9924.4
47.5°	9405.9	9452.2	9386.8	9376.2	9289.9
50°	8777.4	8812.2	8762.6	8750.0	8653.1
52.5°	8128.1	8188.2	8124.8	8108.0	8043.8
55°	7493.4	7545.0	7494.4	7481.8	7426.9
57.5°	6854.6	6922.0	6870.4	6857.6	6813.5
60°	6215.8	6235.7	6223.1	6242.0	6198.9
62.5°	5581.1	5627.4	5642.2	5636.9	5603.2
65°	4951.6	5000.2	5001.2	5026.6	5013.8
67.5°	4307.6	4370.7	4388.8	4415.0	4426.6
70°	3701.3	3749.8	3802.7	3818.3	3806.7
72.5°	3090.9	3168.9	3228.1	3241.7	3291.3
75°	2475.3	2549.1	2635.6	2654.5	2676.7
77.5°	1904.0	2001.9	2079.9	2105.3	2132.7
80°	1362.1	1470.6	1548.6	1583.4	1636.2
82.5°	894.0	1004.7	1083.7	1118.5	1182.9
85°	474.4	573.6	652.6	710.5	737.9
87.5°	140.2	224.5	269.8	286.7	311.1
90°	0.0	10.6	12.6	28.4	26.4
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - 90°-270°







107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)