

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: P731119

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

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P731119
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-LD5-48SE-W-FLI-UNV-L850
Description: 48000 LUMEN, SE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42802.0 lumens
Efficiency: N/A
Efficacy: 149.9 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

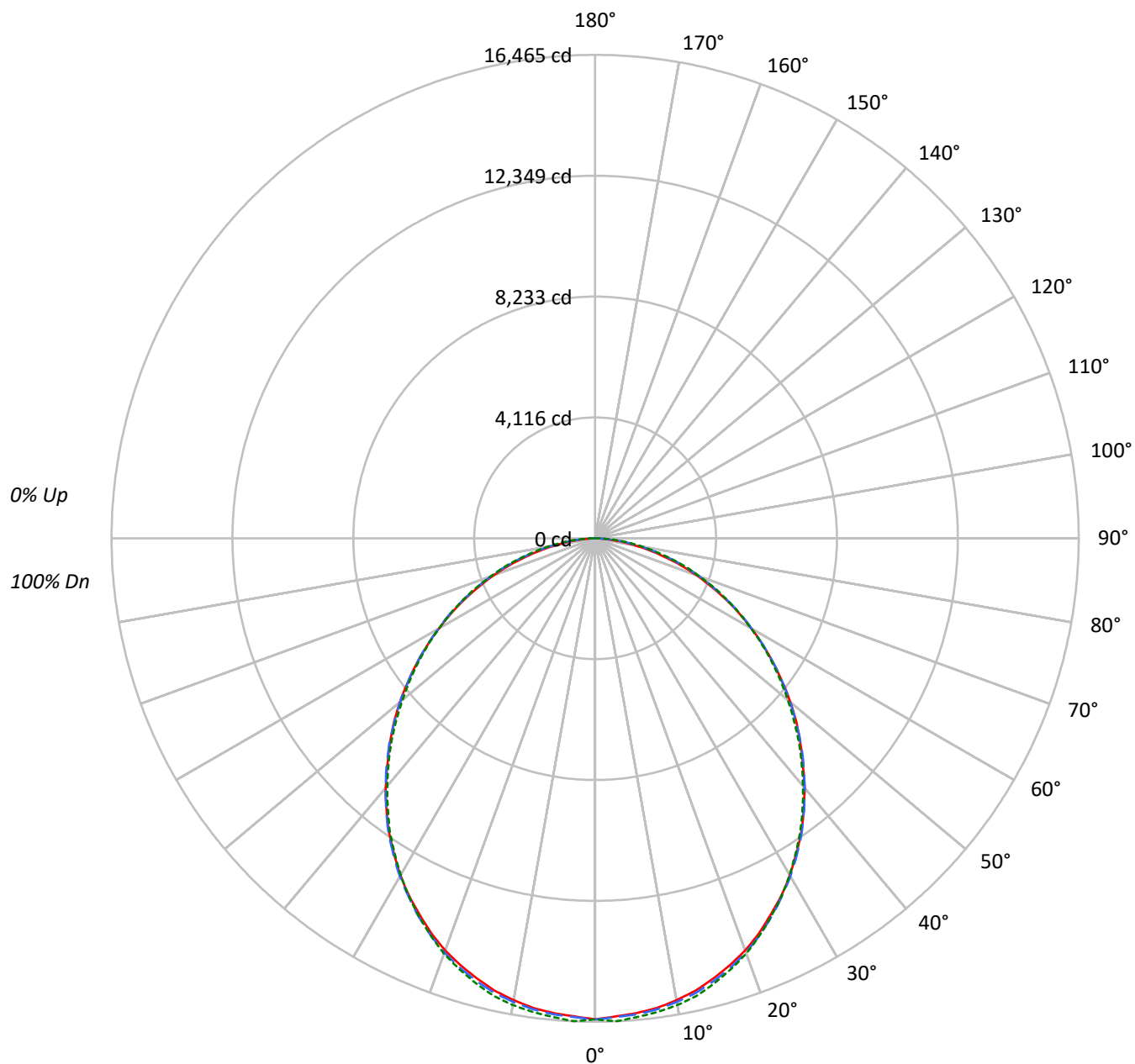
Input Watts (W): 285.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	26456	26456	26456
5°	26306	26380	26530
10°	26186	26292	26463
15°	25956	26097	26224
20°	25662	25786	25861
25°	25187	25330	25293
30°	24723	24789	24688
35°	24110	24172	24018
40°	23386	23386	23206
45°	22568	22630	22399
50°	21793	21756	21484
55°	20849	20852	20665
60°	19840	19863	19786
65°	18698	18886	18933
70°	17270	17744	17763
75°	15263	16251	16505
80°	12518	14233	15038
85°	8687	11951	13512



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1549.7	3.6
10°-20°	4408.5	10.3
20°-30°	6551.4	15.3
30°-40°	7660.3	17.9
40°-50°	7637.5	17.8
50°-60°	6626.5	15.5
60°-70°	4894.4	11.4
70°-80°	2740.3	6.4
80°-90°	731.2	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°	12509.6	29.2
0°-40°	20169.8	47.1
0°-60°	34433.8	80.4
0°-90°	42799.8	100.0
90°-120°	2.2	0.0
90°-150°	2.2	0.0
90°-180°	2.0	0.0
0°-180°	42802.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16386	16386	16386	16386	16386	
5°	16231	16333	16276	16348	16369	###
15°	15528	15637	15613	15688	15689	4379
25°	14138	14252	14218	14250	14198	6518
35°	12232	12340	12264	12261	12186	7641
45°	9884	9989	9911	9870	9810	7630
55°	7407	7458	7408	7395	7341	6623
65°	4894	4942	4943	4968	4956	4841
75°	2447	2520	2605	2624	2646	2606
85°	469	567	645	702	729	569
90°	0	10	12	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°	16385.8	16385.8	16385.8	16385.8	16385.8
2.5°	16296.2	16393.2	16325.4	16390.0	16465.1
5°	16230.6	16332.8	16276.4	16348.3	16369.1
7.5°	16134.8	16233.8	16179.6	16251.5	16273.3
10°	15972.1	16079.5	16036.8	16118.1	16141.0
12.5°	15782.5	15883.5	15855.4	15950.2	15965.9
15°	15528.3	15636.7	15612.6	15687.7	15688.7
17.5°	15246.9	15348.9	15331.3	15389.7	15387.5
20°	14935.4	15044.7	15007.3	15070.8	15050.9
22.5°	14566.5	14683.2	14636.2	14689.4	14639.4
25°	14138.2	14251.8	14218.5	14249.6	14197.6
27.5°	13723.5	13827.7	13758.8	13796.4	13741.1
30°	13260.8	13349.3	13296.3	13308.7	13242.1
32.5°	12740.8	12846.0	12781.4	12779.4	12708.5
35°	12232.3	12339.6	12263.6	12261.4	12185.5
37.5°	11669.6	11769.6	11680.0	11685.3	11596.7
40°	11095.4	11182.0	11095.4	11091.2	11010.1
42.5°	10472.3	10587.0	10507.8	10517.1	10408.8
45°	9883.7	9988.9	9910.8	9870.0	9809.6
47.5°	9297.0	9342.8	9278.2	9267.7	9182.4
50°	8675.9	8710.2	8661.2	8648.8	8553.0
52.5°	8034.0	8093.5	8030.8	8014.2	7950.7
55°	7406.7	7457.7	7407.7	7395.2	7341.0
57.5°	6775.3	6841.9	6790.9	6778.3	6734.7
60°	6143.9	6163.6	6151.1	6169.8	6127.2
62.5°	5516.5	5562.3	5576.9	5571.7	5538.4
65°	4894.3	4942.3	4943.3	4968.4	4955.8
67.5°	4257.7	4320.2	4338.0	4364.0	4375.4
70°	3658.4	3706.4	3758.7	3774.1	3762.7
72.5°	3055.2	3132.3	3190.7	3204.2	3253.2
75°	2446.7	2519.6	2605.1	2623.8	2645.7
77.5°	1881.9	1978.7	2055.9	2081.0	2108.1
80°	1346.3	1453.6	1530.7	1565.0	1617.3
82.5°	883.6	993.1	1071.2	1105.5	1169.2
85°	468.9	566.9	645.1	702.3	729.4
87.5°	138.6	221.9	266.7	283.4	307.5
90°	0.0	10.4	12.5	28.1	26.1
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)