

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: P#

Luminaire Tested: **HBLED-LD5-48SE-W-FLI-UNV-L850-ED4-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26703)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-48SE-W-FLI-UNV-L850-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

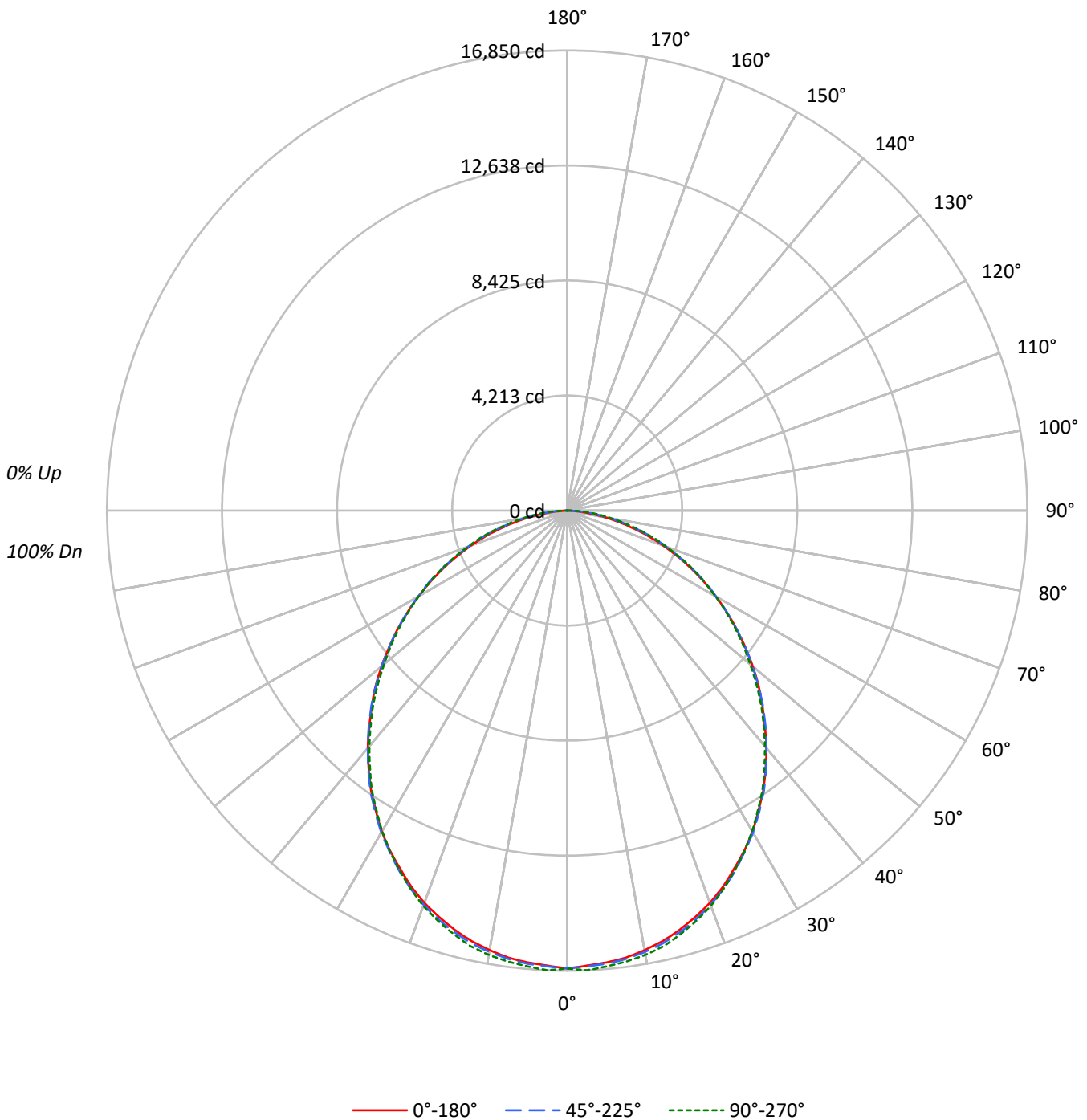
Lumens per Lamp: N/A
Luminaire Lumens: 43803.0 lumens
Efficiency: N/A
Efficacy: 146.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 299.1
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
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°	22563	22563	22563
5°	22434	22498	22626
10°	22332	22423	22568
15°	22136	22256	22365
20°	21885	21990	22055
25°	21480	21602	21570
30°	21084	21141	21054
35°	20562	20615	20483
40°	19944	19944	19790
45°	19246	19299	19102
50°	18585	18554	18322
55°	17781	17783	17623
60°	16920	16939	16874
65°	15947	16106	16147
70°	14729	15132	15148
75°	13017	13859	14076
80°	10676	12138	12824
85°	7409	10190	11524



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1585.9	3.6
10°-20°	4511.6	10.3
20°-30°	6704.6	15.3
30°-40°	7839.4	17.9
40°-50°	7816.1	17.8
50°-60°	6781.5	15.5
60°-70°	5008.9	11.4
70°-80°	2804.4	6.4
80°-90°	748.3	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°	12802.1	29.2
0°-40°	20641.5	47.1
0°-60°	35239.1	80.4
0°-90°	43800.8	100.0
90°-120°	2.2	0.0
90°-150°	2.2	0.0
90°-180°	2.0	0.0
0°-180°	43803.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16769	16769	16769	16769	16769	
5°	16610	16715	16657	16731	16752	###
15°	15891	16002	15978	16054	16056	4482
25°	14469	14585	14551	14583	14530	6671
35°	12518	12628	12550	12548	12470	7820
45°	10115	10222	10142	10101	10039	7808
55°	7580	7632	7581	7568	7513	6778
65°	5009	5058	5059	5085	5072	4954
75°	2504	2578	2666	2685	2708	2667
85°	480	580	660	719	746	583
90°	0	11	13	29	27	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	0



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-48SE-W-FLI-UNV-L850-ED4-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	16769.0	16769.0	16769.0	16769.0	16769.0
2.5°	16677.3	16776.5	16707.2	16773.3	16850.1
5°	16610.1	16714.6	16657.1	16730.6	16752.0
7.5°	16512.0	16613.3	16557.9	16631.5	16653.9
10°	16345.7	16455.5	16411.8	16495.0	16518.4
12.5°	16151.6	16255.0	16226.2	16323.3	16339.3
15°	15891.4	16002.3	15977.8	16054.5	16055.6
17.5°	15603.5	15708.0	15689.8	15749.6	15747.4
20°	15284.6	15396.6	15358.2	15423.2	15403.0
22.5°	14907.1	15026.5	14978.6	15032.9	14981.8
25°	14468.8	14585.1	14550.9	14582.9	14529.6
27.5°	14044.4	14151.0	14080.6	14119.0	14062.5
30°	13570.9	13661.6	13607.2	13620.0	13551.7
32.5°	13038.8	13146.5	13080.4	13078.2	13005.7
35°	12518.4	12628.2	12550.4	12548.2	12470.4
37.5°	11942.5	12044.9	11953.2	11958.5	11867.9
40°	11354.9	11443.5	11354.9	11350.7	11267.5
42.5°	10717.2	10834.6	10753.5	10763.1	10652.2
45°	10114.7	10222.4	10142.5	10100.9	10039.0
47.5°	9514.4	9561.3	9495.2	9484.5	9397.1
50°	8878.8	8914.0	8863.9	8851.1	8753.0
52.5°	8221.9	8282.7	8218.7	8201.6	8136.6
55°	7579.9	7632.2	7581.0	7568.2	7512.7
57.5°	6933.7	7001.9	6949.7	6936.9	6892.1
60°	6287.5	6307.7	6294.9	6314.1	6270.4
62.5°	5645.5	5692.4	5707.3	5702.0	5667.9
65°	5008.8	5057.9	5059.0	5084.6	5071.8
67.5°	4357.3	4421.3	4439.4	4466.1	4477.8
70°	3744.1	3793.2	3846.5	3862.5	3850.7
72.5°	3126.7	3205.6	3265.3	3279.2	3329.3
75°	2503.9	2578.5	2666.0	2685.2	2707.6
77.5°	1925.9	2025.1	2104.0	2129.6	2157.3
80°	1377.8	1487.6	1566.5	1601.7	1655.0
82.5°	904.3	1016.3	1096.3	1131.4	1196.5
85°	479.9	580.1	660.1	718.7	746.5
87.5°	141.8	227.1	273.0	290.1	314.6
90°	0.0	10.7	12.8	28.8	26.7
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
107.5°	0.0	0.0	0.0	0.0	0.0
110°	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

(END OF REPORT)