

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-LD5-48HE-W-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 (P23760)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-48HE-W-UNV-L850-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

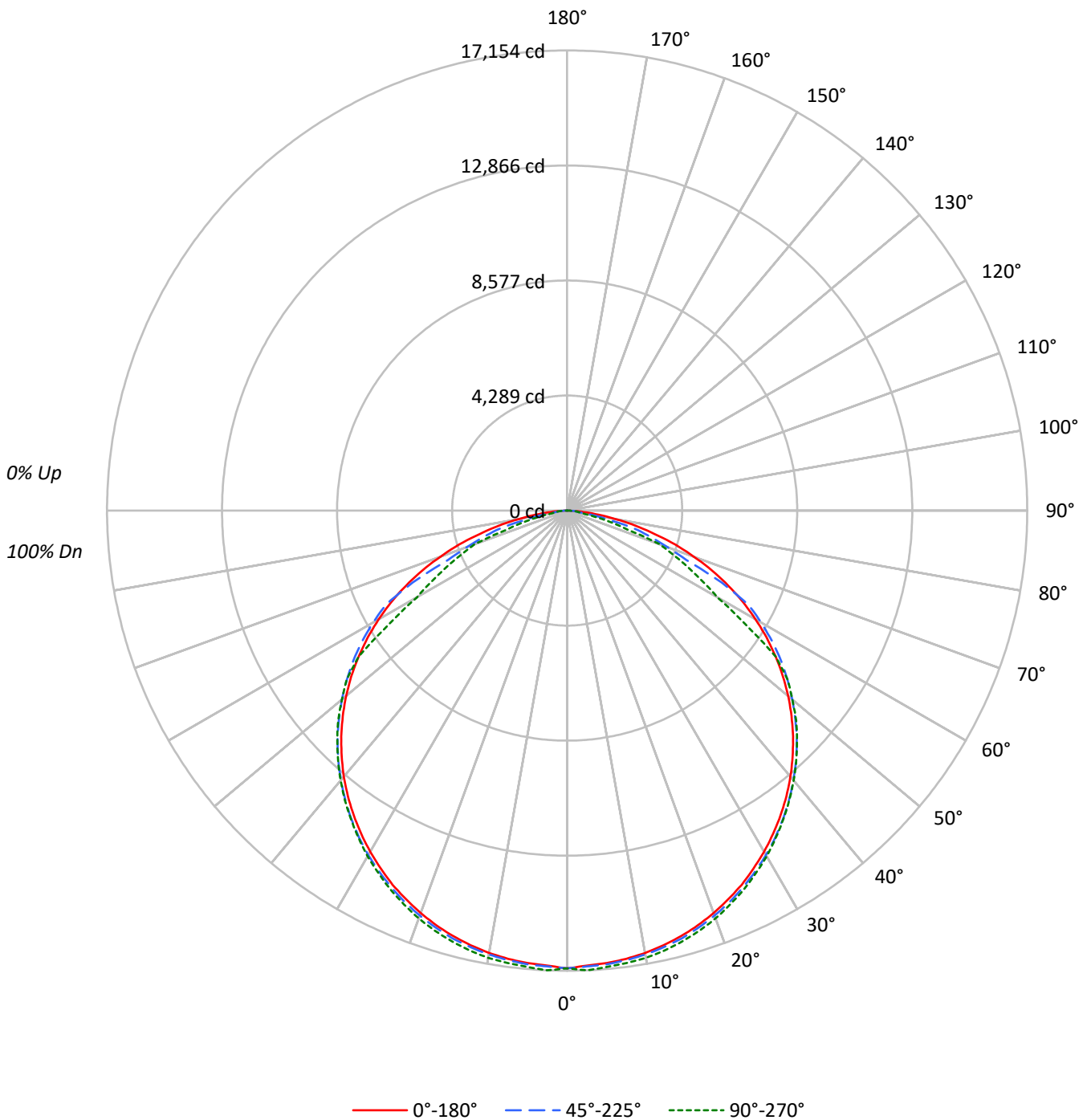
Lumens per Lamp: N/A
Luminaire Lumens: 49262.0 lumens
Efficiency: N/A
Efficacy: 172.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 286.2
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	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					100			
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85					85			
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60					60			
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51					51			
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44					44			
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38					38			
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	46	40	36	34					34			
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30					30			
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27					27			
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22959	22959	22959
5°	22865	22928	23058
10°	22878	22959	23132
15°	22872	22994	23154
20°	22860	23006	23167
25°	22851	23015	23143
30°	22811	23034	23120
35°	22783	23045	23075
40°	22742	23043	23079
45°	22656	23033	23061
50°	22520	22936	22932
55°	22258	22814	22248
60°	21845	22477	17407
65°	21116	20230	15684
70°	19782	15565	14454
75°	17516	13570	9008
80°	14425	7989	4026
85°	9507	4895	5274



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1619.3	3.3
10°-20°	4671.8	9.5
20°-30°	7162.4	14.5
30°-40°	8783.9	17.8
40°-50°	9327.1	18.9
50°-60°	8519.1	17.3
60°-70°	5932.7	12.0
70°-80°	2767.0	5.6
80°-90°	478.7	1.0
90°-100°	0.0	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°	13453.4	27.3
0°-40°	22237.3	45.1
0°-60°	40083.6	81.4
0°-90°	49262.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	49262.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	17064	17064	17064	17064	17064	
5°	16929	17048	16976	17058	17072	###
15°	16420	16534	16508	16608	16622	4636
25°	15392	15528	15503	15618	15589	7093
35°	13870	14030	14030	14124	14048	8680
45°	11906	12086	12105	12183	12119	9183
55°	9488	9679	9726	9742	9484	8474
65°	6632	6837	6354	5053	4926	6544
75°	3369	3582	2610	1808	1733	3602
85°	616	405	317	340	342	795
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	17063.9	17063.9	17063.9	17063.9	17063.9
2.5°	16973.9	17082.3	17010.7	17088.5	17153.9
5°	16928.9	17047.5	16975.9	17057.8	17072.1
7.5°	16855.2	16967.8	16902.3	16992.3	17014.8
10°	16744.8	16855.2	16804.1	16910.5	16930.9
12.5°	16595.4	16707.9	16669.1	16785.7	16800.0
15°	16419.5	16534.0	16507.5	16607.7	16622.0
17.5°	16212.9	16331.5	16300.8	16407.2	16417.4
20°	15965.3	16094.2	16067.6	16192.4	16180.1
22.5°	15687.1	15824.2	15803.7	15928.5	15891.7
25°	15392.5	15527.5	15503.0	15617.5	15588.9
27.5°	15046.8	15196.1	15173.6	15284.1	15239.1
30°	14682.6	14834.0	14825.8	14926.1	14881.1
32.5°	14289.8	14451.4	14443.3	14541.5	14471.9
35°	13870.4	14030.0	14030.0	14124.1	14048.4
37.5°	13426.5	13588.1	13590.2	13680.2	13608.6
40°	12947.8	13109.4	13119.6	13205.6	13140.1
42.5°	12444.5	12620.5	12628.6	12706.4	12645.0
45°	11906.5	12086.5	12104.9	12182.7	12119.2
47.5°	11343.9	11526.0	11542.3	11626.2	11581.2
50°	10758.8	10934.7	10957.2	11026.8	10955.2
52.5°	10141.0	10321.0	10351.7	10394.6	10361.9
55°	9488.4	9678.6	9725.7	9742.0	9484.3
57.5°	8813.2	9007.6	9052.6	8676.2	7847.6
60°	8117.7	8310.0	8352.9	7058.0	6468.8
62.5°	7393.5	7581.7	7628.7	5848.9	5660.7
65°	6632.4	6837.0	6354.2	5053.1	4926.3
67.5°	5851.0	6061.7	4805.6	4330.9	4255.2
70°	5028.5	5241.3	3956.6	3692.6	3674.2
72.5°	4238.9	4396.4	3246.7	2798.6	2356.7
75°	3369.4	3582.2	2610.4	1808.5	1732.8
77.5°	2612.5	2258.5	1575.3	1325.7	1045.4
80°	1861.7	1509.8	1031.1	550.3	519.6
82.5°	1180.4	986.1	405.1	415.3	433.7
85°	615.8	405.1	317.1	339.6	341.6
87.5°	198.4	173.9	190.3	188.2	186.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)