

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-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-LD5-48SE-W-UNV-L850-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

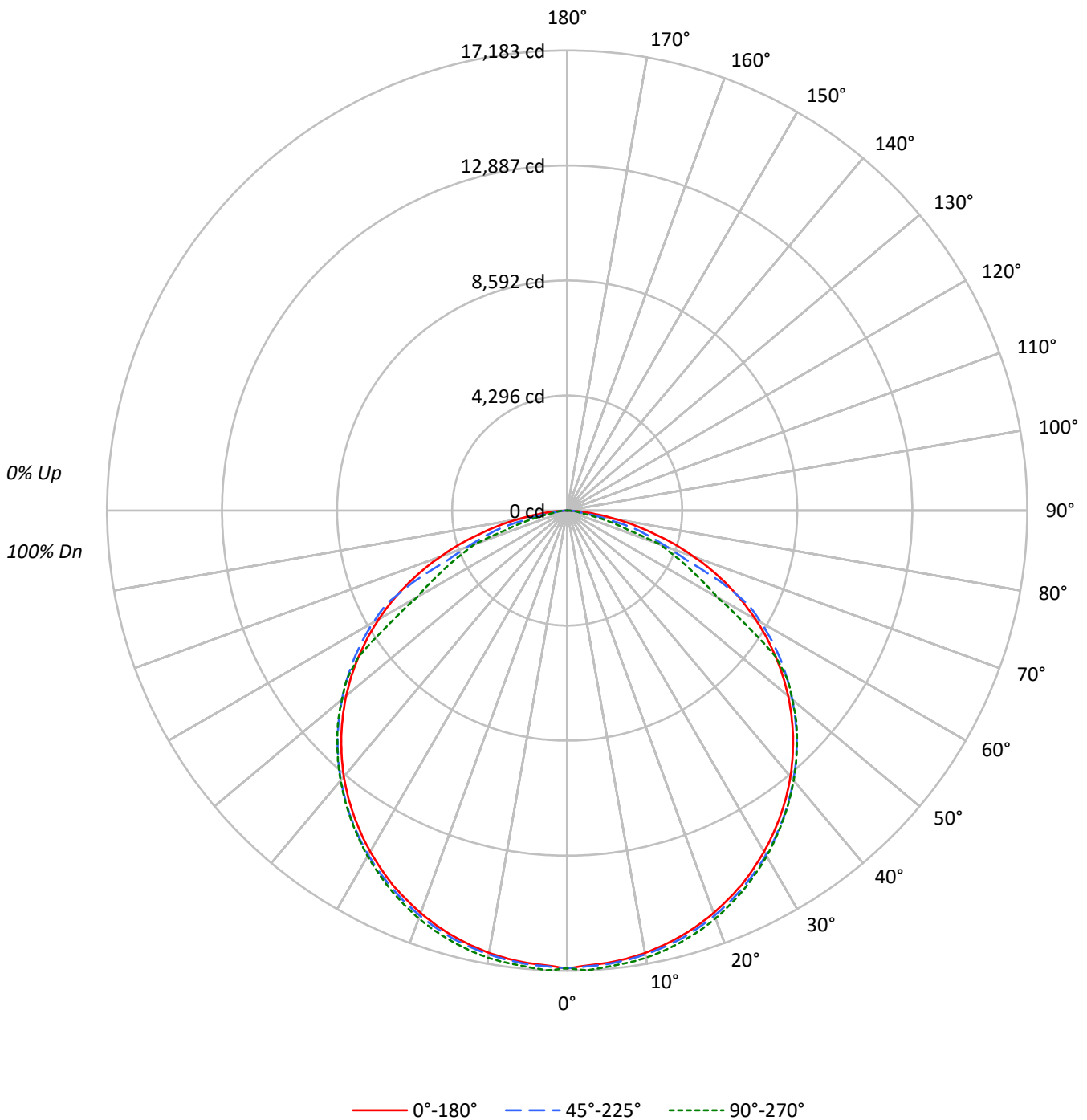
Lumens per Lamp: N/A  
Luminaire Lumens: 49346.0 lumens  
Efficiency: N/A  
Efficacy: 165.0 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	22998	22998	22998
5°	22904	22967	23097
10°	22916	22998	23171
15°	22911	23033	23193
20°	22899	23045	23207
25°	22890	23055	23183
30°	22850	23073	23159
35°	22822	23084	23114
40°	22780	23083	23119
45°	22694	23073	23100
50°	22559	22975	22971
55°	22296	22853	22286
60°	21882	22516	17437
65°	21152	20264	15711
70°	19816	15591	14479
75°	17546	13594	9023
80°	14449	8003	4033
85°	9522	4903	5283



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1622.0	3.3
10°-20°	4679.7	9.5
20°-30°	7174.6	14.5
30°-40°	8798.9	17.8
40°-50°	9343.0	18.9
50°-60°	8533.7	17.3
60°-70°	5942.8	12.0
70°-80°	2771.8	5.6
80°-90°	479.5	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°	13476.4	27.3
0°-40°	22275.2	45.1
0°-60°	40151.9	81.4
0°-90°	49346.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	49346.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	17093	17093	17093	17093	17093	
5°	16958	17077	17005	17087	17101	###
15°	16448	16562	16536	16636	16650	4644
25°	15419	15554	15529	15644	15616	7106
35°	13894	14054	14054	14148	14072	8694
45°	11927	12107	12126	12203	12140	9198
55°	9504	9695	9742	9759	9500	8488
65°	6644	6849	6365	5062	4935	6555
75°	3375	3588	2615	1812	1736	3608
85°	617	406	318	340	342	797
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	17093.0	17093.0	17093.0	17093.0	17093.0
2.5°	17002.8	17111.4	17039.7	17117.6	17183.2
5°	16957.8	17076.6	17004.9	17086.9	17101.2
7.5°	16884.0	16996.7	16931.1	17021.3	17043.8
10°	16773.3	16884.0	16832.7	16939.3	16959.8
12.5°	16623.7	16736.4	16697.5	16814.3	16828.6
15°	16447.5	16562.2	16535.6	16636.0	16650.4
17.5°	16240.5	16359.4	16328.6	16435.2	16445.4
20°	15992.5	16121.6	16095.0	16220.0	16207.7
22.5°	15713.8	15851.1	15830.7	15955.7	15918.8
25°	15418.7	15554.0	15529.4	15644.2	15615.5
27.5°	15072.4	15222.0	15199.5	15310.1	15265.1
30°	14707.6	14859.3	14851.1	14951.5	14906.4
32.5°	14314.2	14476.1	14467.9	14566.2	14496.6
35°	13894.1	14053.9	14053.9	14148.2	14072.4
37.5°	13449.4	13611.3	13613.3	13703.5	13631.8
40°	12969.9	13131.8	13142.0	13228.1	13162.5
42.5°	12465.7	12642.0	12650.2	12728.0	12666.6
45°	11926.8	12107.1	12125.6	12203.4	12139.9
47.5°	11363.2	11545.6	11562.0	11646.0	11600.9
50°	10777.1	10953.4	10975.9	11045.6	10973.9
52.5°	10158.3	10338.6	10369.3	10412.4	10379.6
55°	9504.5	9695.1	9742.3	9758.6	9500.4
57.5°	8828.3	9023.0	9068.0	8691.0	7861.0
60°	8131.5	8324.2	8367.2	7070.0	6479.8
62.5°	7406.1	7594.6	7641.7	5858.9	5670.3
65°	6643.8	6848.7	6365.0	5061.7	4934.7
67.5°	5860.9	6072.0	4813.7	4338.3	4262.5
70°	5037.1	5250.2	3963.3	3698.9	3680.5
72.5°	4246.1	4403.9	3252.2	2803.4	2360.8
75°	3375.2	3588.3	2614.9	1811.6	1735.7
77.5°	2616.9	2262.4	1577.9	1327.9	1047.2
80°	1864.8	1512.4	1032.8	551.3	520.5
82.5°	1182.4	987.8	405.8	416.0	434.4
85°	616.8	405.8	317.6	340.2	342.2
87.5°	198.8	174.2	190.6	188.5	186.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)