

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-LD5-18SE-W-A-UNV-L850-ED1-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 (P23761)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-18SE-W-A-UNV-L850-ED1-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

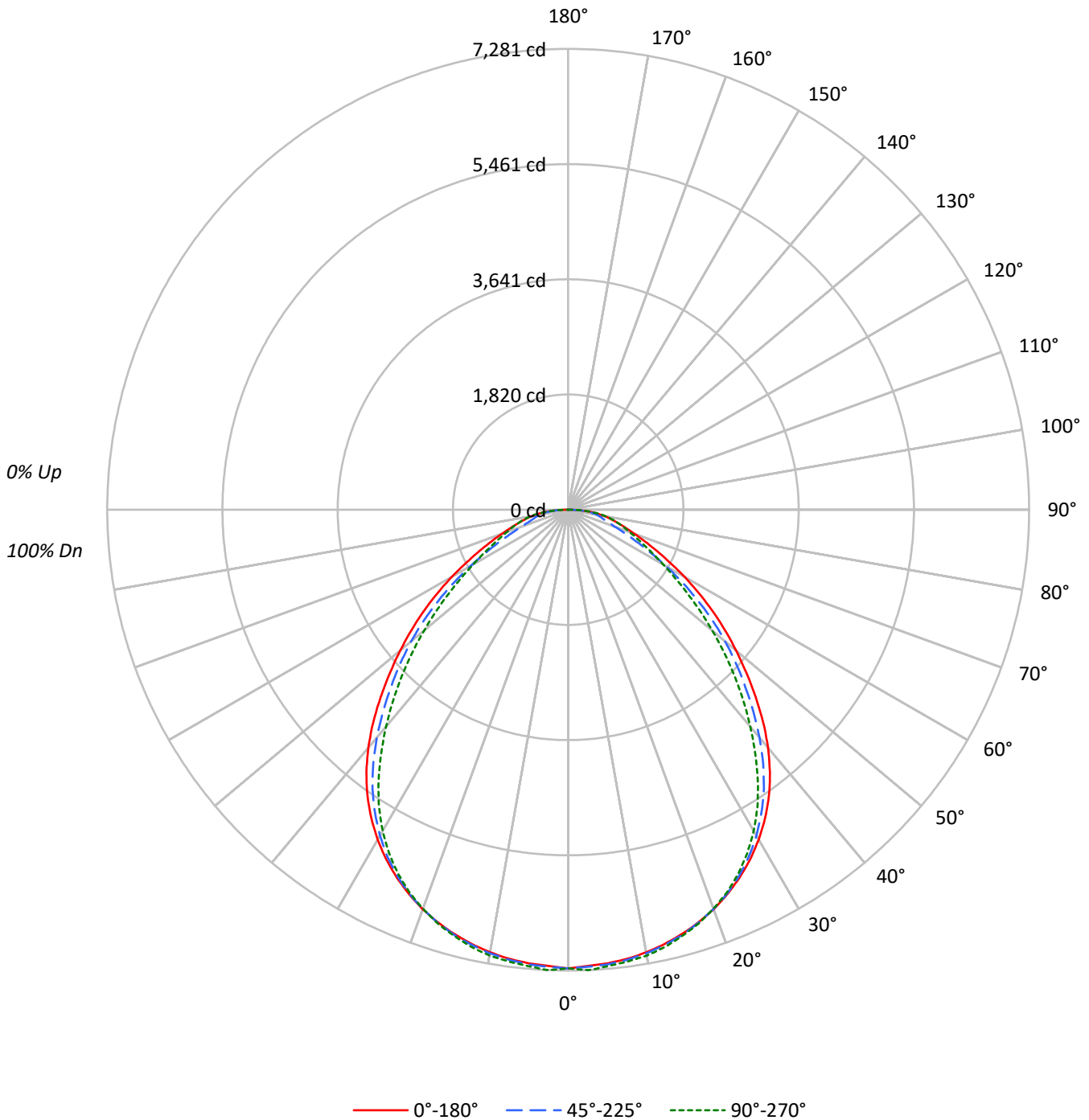
Lumens per Lamp: N/A
Luminaire Lumens: 16646.0 lumens
Efficiency: N/A
Efficacy: 136.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.2 / 1.27
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 121.76
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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	70	90	81	75	69	79	73	68	76	71	67	73	69	65	63
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	52	46	72	60	52	46	58	51	46	56	50	45	55	49	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	47	41	36	35
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9750	9750	9750
5°	9715	9737	9777
10°	9701	9724	9773
15°	9669	9689	9711
20°	9618	9611	9604
25°	9514	9481	9428
30°	9350	9237	9102
35°	9078	8850	8577
40°	8627	8256	7860
45°	7969	7525	7069
50°	7244	6776	6218
55°	6514	5866	5375
60°	5700	4794	4664
65°	4915	3770	4210
70°	4382	3077	4057
75°	4197	3004	4240
80°	4540	3553	4723
85°	5098	4276	5147



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	686.8	4.1
10°-20°	1965.5	11.8
20°-30°	2940.2	17.7
30°-40°	3354.5	20.2
40°-50°	3053.5	18.3
50°-60°	2242.2	13.5
60°-70°	1323.9	8.0
70°-80°	758.7	4.6
80°-90°	320.8	1.9
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°	5592.4	33.6
0°-40°	8946.9	53.7
0°-60°	14242.6	85.6
0°-90°	16646.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16646.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7246	7246	7246	7246	7246	
5°	7193	7238	7210	7238	7239	684
15°	6942	6980	6955	6980	6972	1959
25°	6409	6432	6387	6384	6351	2950
35°	5527	5500	5388	5296	5222	3443
45°	4188	4164	3954	3777	3715	3228
55°	2777	2649	2501	2319	2292	2483
65°	1544	1348	1184	1267	1322	1553
75°	807	692	578	754	816	870
85°	330	305	277	327	333	345
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7246.3	7246.3	7246.3	7246.3	7246.3
2.5°	7212.8	7254.5	7228.3	7256.9	7281.4
5°	7193.2	7238.1	7209.5	7238.1	7238.9
7.5°	7157.2	7198.9	7171.1	7202.2	7198.9
10°	7100.8	7142.5	7117.2	7150.7	7153.1
12.5°	7028.9	7068.9	7042.8	7081.2	7074.7
15°	6941.5	6979.9	6955.4	6979.9	6971.7
17.5°	6838.5	6873.6	6841.8	6868.7	6854.8
20°	6717.5	6747.0	6712.6	6738.0	6707.7
22.5°	6572.9	6599.0	6563.1	6577.0	6545.9
25°	6408.6	6431.5	6386.6	6384.1	6350.6
27.5°	6225.6	6237.8	6180.6	6161.0	6122.6
30°	6018.0	6021.3	5945.3	5908.5	5858.6
32.5°	5785.1	5776.9	5679.7	5624.9	5563.6
35°	5526.9	5499.9	5387.9	5295.6	5222.0
37.5°	5235.1	5192.6	5058.6	4922.1	4851.8
40°	4911.5	4861.6	4700.6	4531.5	4475.1
42.5°	4559.3	4516.8	4327.2	4150.7	4095.1
45°	4188.2	4163.7	3954.5	3777.2	3715.1
47.5°	3817.2	3799.3	3594.9	3414.3	3339.2
50°	3460.9	3421.7	3237.0	3039.2	2970.6
52.5°	3115.2	3035.2	2872.5	2669.9	2619.2
55°	2776.9	2648.6	2500.7	2319.3	2291.5
57.5°	2441.9	2276.0	2132.1	1996.5	1995.6
60°	2118.2	1928.6	1781.5	1710.4	1733.3
62.5°	1815.0	1620.5	1461.2	1466.1	1507.8
65°	1543.7	1347.6	1184.2	1266.7	1322.3
67.5°	1310.8	1123.7	957.8	1111.4	1164.5
70°	1113.9	944.7	782.1	974.1	1031.3
72.5°	948.0	805.8	659.5	859.7	917.7
75°	807.4	692.2	577.8	753.5	815.6
77.5°	693.0	590.8	518.1	652.1	716.7
80°	585.9	496.1	458.5	554.1	609.6
82.5°	464.2	402.1	380.0	450.3	478.9
85°	330.2	304.8	277.0	326.9	333.4
87.5°	181.4	188.0	155.3	188.0	188.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)