

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-LD5-15HE-N-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 (P23767)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-15HE-N-UNV-L850-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

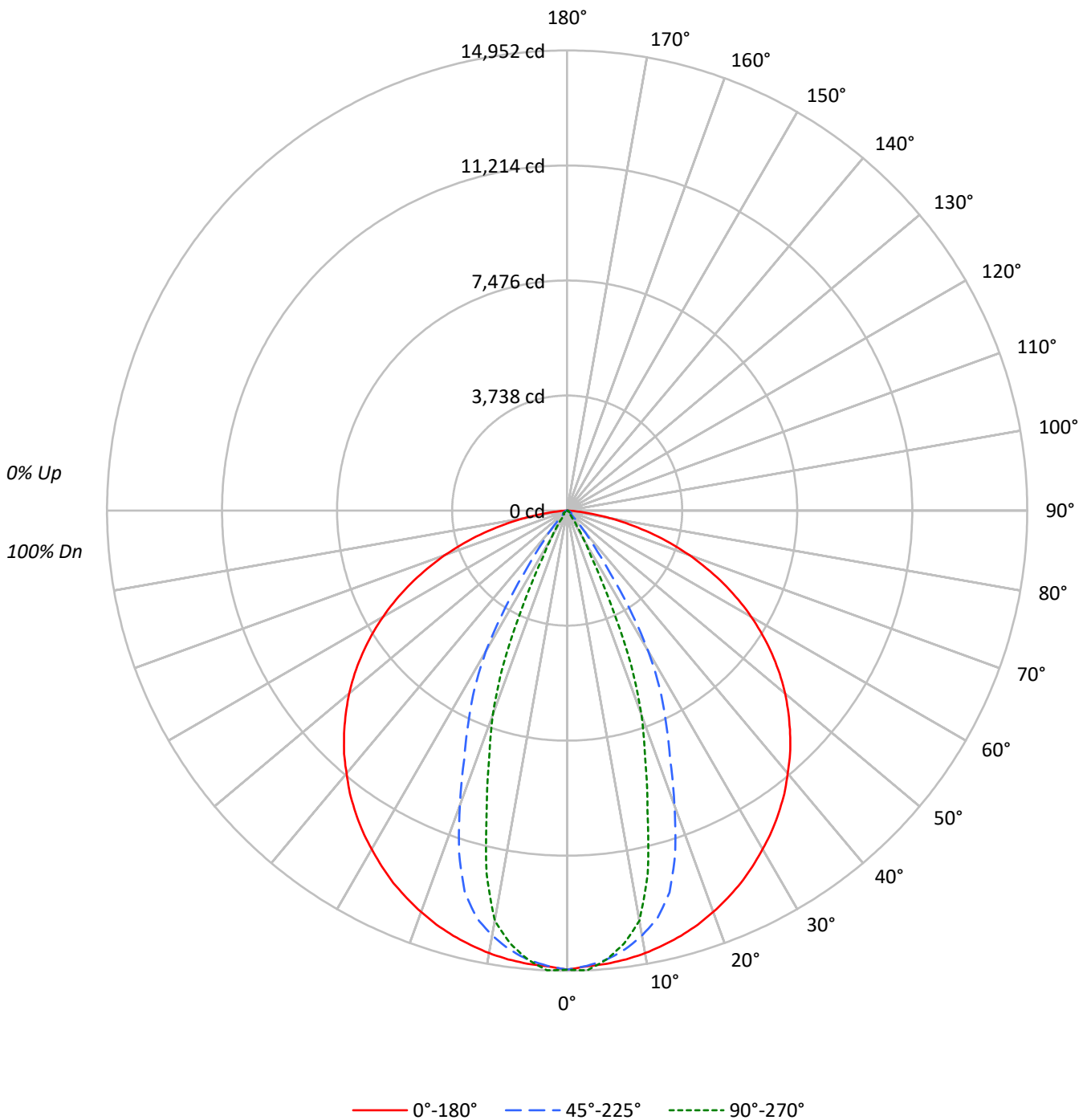
Lumens per Lamp: N/A  
Luminaire Lumens: 15854.0 lumens  
Efficiency: N/A  
Efficacy: 172.7 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.62 / 0.77  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 91.8  
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73					73			
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55					55			
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51					51			
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47					47			
9	68	57	51	46	67	57	50	46	56	50	46	55	49	46	54	49	45	44					44			
10	65	54	47	43	64	53	47	43	53	47	43	52	46	43	51	46	42	41					41			

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

	0°	45°	90°
0°	20070	20070	20070
5°	19962	19786	19777
10°	19950	19152	18480
15°	19922	17892	14064
20°	19875	14586	10124
25°	19825	11278	4987
30°	19737	8197	1617
35°	19690	3636	416
40°	19587	1477	280
45°	19500	414	298
50°	19348	294	331
55°	19069	350	141
60°	18598	390	86
65°	17833	249	102
70°	16567	221	125
75°	14494	166	174
80°	10837	204	247
85°	5368	262	329



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1384.2	8.7
10°-20°	3461.3	21.8
20°-30°	3749.1	23.6
30°-40°	2776.4	17.5
40°-50°	1999.7	12.6
50°-60°	1238.2	7.8
60°-70°	761.5	4.8
70°-80°	401.4	2.5
80°-90°	82.1	0.5
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°	8594.6	54.2
0°-40°	11371.0	71.7
0°-60°	14608.9	92.1
0°-90°	15854.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15854.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	14916	14916	14916	14916	14916	
5°	14780	14835	14649	14660	14643	###
15°	14302	13970	12845	10923	10097	4037
25°	13354	12232	7597	4779	3359	6153
35°	11988	8451	2214	521	253	7500
45°	10248	4761	218	158	157	7903
55°	8129	981	149	135	60	7257
65°	5602	104	78	50	32	5527
75°	2788	24	32	42	33	2945
85°	348	9	17	26	21	525
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	14916.2	14916.2	14916.2	14916.2	14916.2
2.5°	14820.4	14914.7	14803.3	14886.4	14952.4
5°	14779.9	14834.6	14649.4	14660.0	14643.0
7.5°	14709.0	14696.2	14384.7	14248.4	14188.8
10°	14601.8	14517.4	14017.8	13733.3	13526.1
12.5°	14463.4	14274.7	13560.1	12655.4	12093.4
15°	14301.7	13969.6	12844.9	10923.3	10096.7
17.5°	14108.7	13638.2	11675.5	9155.1	8417.1
20°	13880.9	13268.5	10186.8	7789.1	7070.3
22.5°	13626.8	12818.6	8740.7	6473.5	5448.2
25°	13353.7	12231.8	7596.8	4779.0	3359.2
27.5°	13037.9	11477.5	6523.9	2814.9	1714.4
30°	12703.7	10569.3	5275.8	1514.3	1041.0
32.5°	12366.6	9539.6	3733.1	945.9	590.4
35°	11987.7	8451.1	2213.9	520.8	253.3
37.5°	11592.5	7453.5	1308.5	237.0	162.5
40°	11151.8	6541.7	840.9	157.5	159.7
42.5°	10726.1	5691.6	473.3	155.4	158.2
45°	10247.8	4761.3	217.8	157.5	156.8
47.5°	9753.2	3797.0	141.2	158.9	158.9
50°	9243.0	2714.9	140.5	162.5	158.2
52.5°	8704.5	1693.8	146.2	161.8	129.9
55°	8129.0	980.6	149.0	134.8	60.3
57.5°	7532.9	578.3	150.4	77.3	34.1
60°	6911.3	320.0	144.8	57.5	31.9
62.5°	6270.6	152.6	114.2	53.9	31.2
65°	5601.5	103.6	78.1	49.7	31.9
67.5°	4906.8	80.2	61.7	46.8	32.6
70°	4211.4	59.6	56.1	46.8	31.9
72.5°	3504.6	40.4	46.8	47.5	31.9
75°	2788.0	24.1	31.9	41.9	33.4
77.5°	2077.7	14.9	24.8	43.3	40.4
80°	1398.6	12.8	26.3	40.4	31.9
82.5°	821.0	11.4	25.5	31.2	25.5
85°	347.7	9.2	17.0	25.5	21.3
87.5°	65.3	7.8	13.5	20.6	18.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)