

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-LD5-15SE-N-CLWG-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 (P33344)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-15SE-N-CLWG-UNV-L850-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
NARROW DISTRIBUTION WITH CLEAR LENS, WIREGUARD & DOORFRAME  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

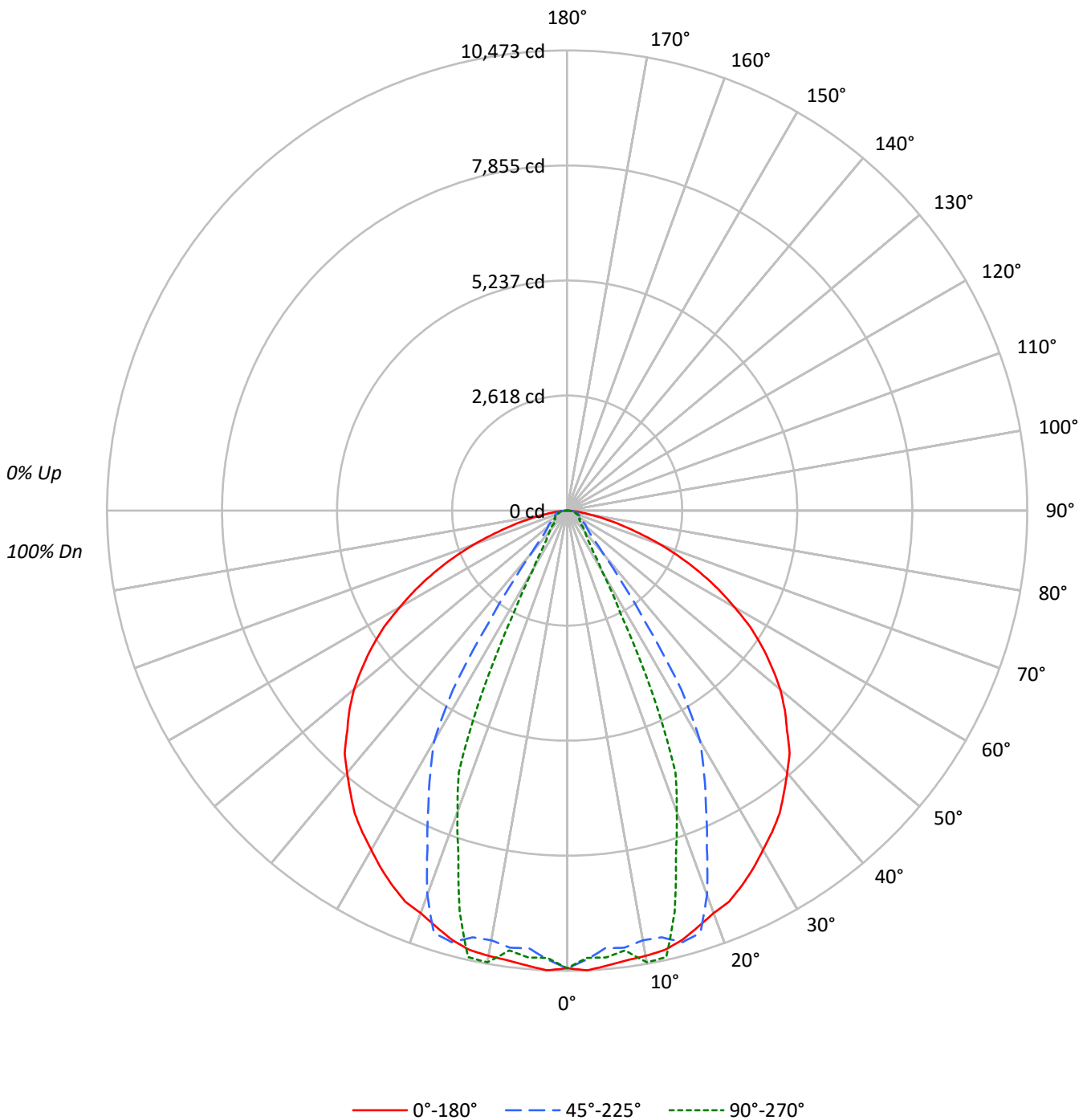
Lumens per Lamp: N/A  
Luminaire Lumens: 14003.0 lumens  
Efficiency: N/A  
Efficacy: 147.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.81 / 0.91  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 95.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89					89			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	89	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71					71			
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64					64			
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	58					58			
6	79	68	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53					53			
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48					48			
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44					44			
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	52	46	43	41					41			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	48	43	40	38					38			

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

	0°	45°	90°
0°	14015	14015	14015
5°	14038	13503	13788
10°	14058	13568	14265
15°	14090	14163	13164
20°	13956	13321	10448
25°	13976	11105	6825
30°	13851	9408	2452
35°	13837	5096	1379
40°	13680	2222	1080
45°	13468	1373	847
50°	13259	1196	799
55°	12737	1038	782
60°	11818	929	841
65°	10623	1050	918
70°	8909	1129	947
75°	6660	1288	1026
80°	4183	1495	1169
85°	2785	1874	1712



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	965.4	6.9
10°-20°	2726.2	19.5
20°-30°	3338.3	23.8
30°-40°	2621.6	18.7
40°-50°	1944.0	13.9
50°-60°	1183.5	8.5
60°-70°	708.9	5.1
70°-80°	389.0	2.8
80°-90°	126.1	0.9
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°	7029.9	50.2
0°-40°	9651.4	68.9
0°-60°	12779.0	91.3
0°-90°	14003.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14003.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10416	10416	10416	10416	10416	
5°	10394	10111	9998	10108	10208	989
15°	10115	9838	10168	9757	9450	2848
25°	9414	9444	7480	5867	4597	4334
35°	8424	7663	3103	1038	840	5256
45°	7078	5082	722	547	445	5473
55°	5430	1400	442	374	333	4832
65°	3337	413	330	310	288	3296
75°	1281	260	248	216	197	1387
85°	180	142	121	112	111	220
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10416.1	10416.1	10416.1	10416.1	10416.1
2.5°	10473.0	10331.9	10223.8	10163.4	10188.0
5°	10393.7	10110.8	9997.7	10108.0	10208.3
7.5°	10324.9	9904.4	10032.1	10042.0	10094.6
10°	10289.8	9884.7	9931.1	10149.4	10440.7
12.5°	10243.4	9930.4	9946.5	10244.1	10408.4
15°	10115.0	9837.7	10167.6	9757.0	9450.2
17.5°	9927.5	9621.5	10075.0	8643.6	8226.6
20°	9747.1	9386.3	9303.5	7699.4	7297.2
22.5°	9630.6	9350.5	8310.9	6860.6	6445.0
25°	9414.4	9443.9	7480.4	5867.2	4597.3
27.5°	9176.4	9224.2	6746.1	3912.9	2633.9
30°	8915.3	8970.0	6055.4	2312.4	1578.1
32.5°	8678.7	8369.8	4836.0	1442.6	1097.2
35°	8423.9	7662.9	3102.8	1038.2	839.6
37.5°	8103.1	6920.2	1964.2	821.3	704.8
40°	7788.6	6253.3	1265.0	701.3	614.9
42.5°	7494.4	5703.7	920.3	612.8	555.3
45°	7078.2	5082.4	721.6	546.9	445.1
47.5°	6718.0	4353.7	631.1	462.6	384.0
50°	6334.1	3328.8	571.4	411.4	381.9
52.5°	5878.5	2177.6	527.9	393.8	356.6
55°	5429.9	1400.5	442.3	374.2	333.4
57.5°	4945.5	888.0	390.3	362.9	348.2
60°	4391.7	598.8	345.4	344.0	312.4
62.5°	3879.2	492.1	333.4	329.9	295.5
65°	3336.6	412.8	329.9	310.3	288.5
67.5°	2794.6	353.8	298.3	283.6	264.7
70°	2264.6	323.6	287.1	280.8	240.8
72.5°	1719.9	266.8	254.8	238.0	200.1
75°	1281.1	260.4	247.8	215.5	197.3
77.5°	867.0	240.1	225.3	193.0	178.3
80°	539.8	220.4	193.0	169.2	150.9
82.5°	320.8	183.9	158.6	139.7	127.8
85°	180.4	141.8	121.4	111.6	110.9
87.5°	38.6	51.2	40.7	38.6	27.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)