

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-CLWG-UNV-L835-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-LD5-15HE-N-CLWG-UNV-L835-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**

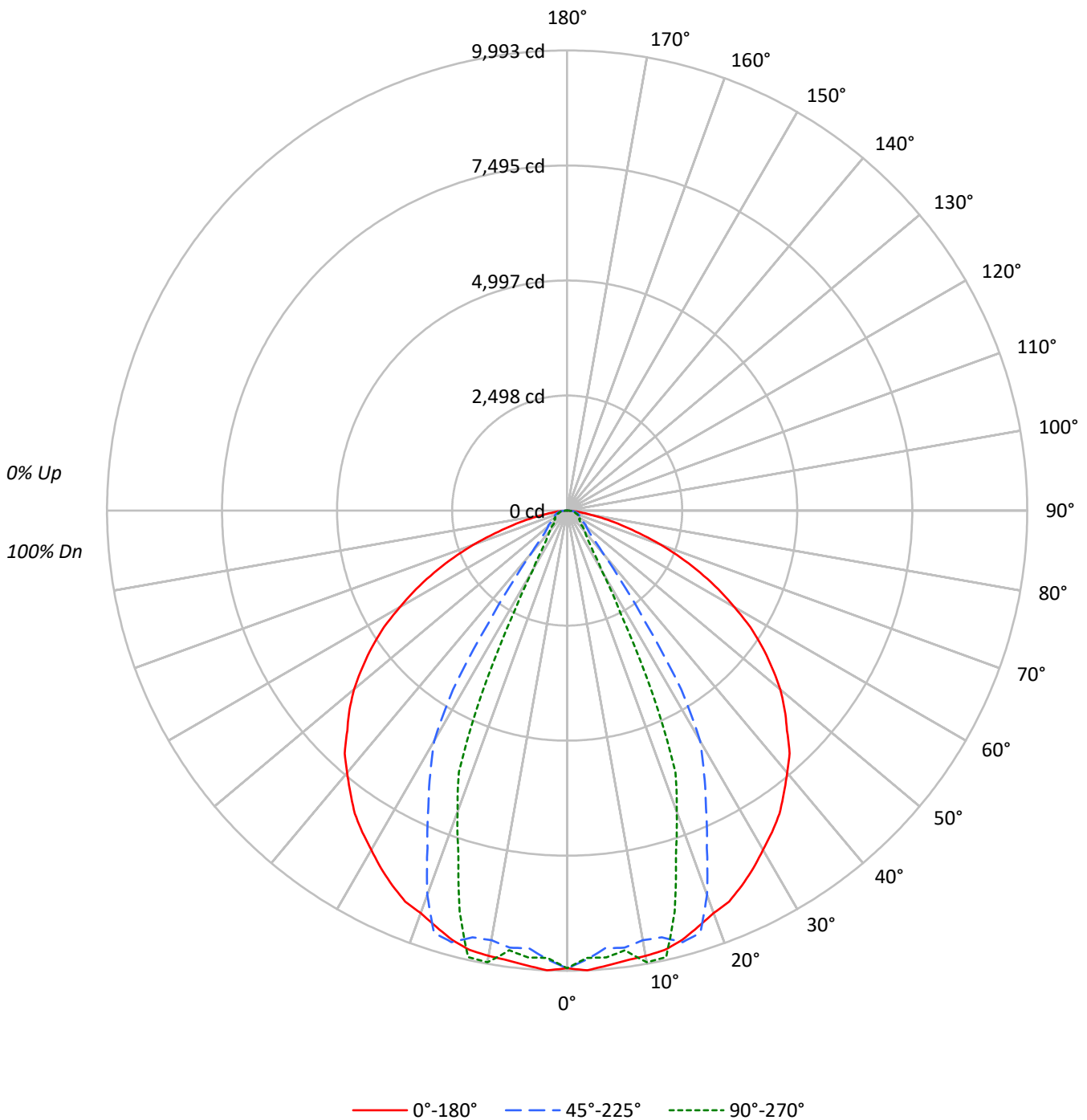
Lumens per Lamp: N/A  
Luminaire Lumens: 13361.0 lumens  
Efficiency: N/A  
Efficacy: 145.5 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.81 / 0.91  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 91.8  
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	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°	13372	13372	13372
5°	13394	12884	13156
10°	13414	12946	13611
15°	13444	13514	12560
20°	13317	12710	9969
25°	13336	10596	6512
30°	13216	8976	2339
35°	13202	4863	1316
40°	13053	2120	1031
45°	12851	1310	808
50°	12651	1141	763
55°	12153	990	746
60°	11276	887	802
65°	10136	1002	876
70°	8500	1078	904
75°	6355	1229	978
80°	3991	1427	1116
85°	2657	1789	1633



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	921.2	6.9
10°-20°	2601.2	19.5
20°-30°	3185.2	23.8
30°-40°	2501.4	18.7
40°-50°	1854.9	13.9
50°-60°	1129.2	8.5
60°-70°	676.4	5.1
70°-80°	371.1	2.8
80°-90°	120.4	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°	6707.6	50.2
0°-40°	9208.9	68.9
0°-60°	12193.1	91.3
0°-90°	13361.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13361.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9939	9939	9939	9939	9939	
5°	9917	9647	9539	9644	9740	943
15°	9651	9387	9702	9310	9017	2717
25°	8983	9011	7138	5598	4387	4135
35°	8038	7312	2960	991	801	5015
45°	6754	4849	689	522	425	5223
55°	5181	1336	422	357	318	4611
65°	3184	394	315	296	275	3145
75°	1222	248	236	206	188	1324
85°	172	135	116	106	106	210
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9938.6	9938.6	9938.6	9938.6	9938.6
2.5°	9992.8	9858.2	9755.1	9697.5	9720.9
5°	9917.1	9647.2	9539.4	9644.5	9740.3
7.5°	9851.5	9450.3	9572.2	9581.6	9631.8
10°	9818.0	9431.5	9475.7	9684.1	9962.0
12.5°	9773.8	9475.1	9490.5	9774.5	9931.2
15°	9651.2	9386.7	9701.5	9309.6	9016.9
17.5°	9472.4	9180.4	9613.1	8247.3	7849.5
20°	9300.3	8956.0	8876.9	7346.4	6962.6
22.5°	9189.1	8921.8	7929.8	6546.0	6149.5
25°	8982.8	9010.9	7137.5	5598.2	4386.6
27.5°	8755.7	8801.3	6436.8	3733.5	2513.1
30°	8506.5	8558.8	5777.7	2206.3	1505.7
32.5°	8280.8	7986.1	4614.3	1376.5	1046.9
35°	8037.7	7311.6	2960.5	990.6	801.1
37.5°	7731.6	6602.9	1874.1	783.7	672.5
40°	7431.5	5966.6	1207.0	669.1	586.8
42.5°	7150.8	5442.2	878.1	584.7	529.8
45°	6753.7	4849.4	688.6	521.8	424.7
47.5°	6410.0	4154.1	602.2	441.4	366.4
50°	6043.7	3176.2	545.2	392.5	364.4
52.5°	5609.0	2077.7	503.7	375.8	340.3
55°	5180.9	1336.3	422.0	357.0	318.2
57.5°	4718.8	847.3	372.4	346.3	332.2
60°	4190.3	571.3	329.5	328.2	298.1
62.5°	3701.3	469.5	318.2	314.8	282.0
65°	3183.6	393.8	314.8	296.1	275.3
67.5°	2666.5	337.6	284.7	270.6	252.5
70°	2160.8	308.8	274.0	267.9	229.7
72.5°	1641.0	254.5	243.1	227.1	190.9
75°	1222.4	248.5	236.4	205.6	188.2
77.5°	827.2	229.1	215.0	184.2	170.1
80°	515.1	210.3	184.2	161.4	144.0
82.5°	306.1	175.5	151.4	133.3	121.9
85°	172.1	135.3	115.9	106.5	105.8
87.5°	36.8	48.9	38.8	36.8	26.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)