

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-LD5-12SE-N-CL-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 (P23768)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-12SE-N-CL-UNV-L835-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

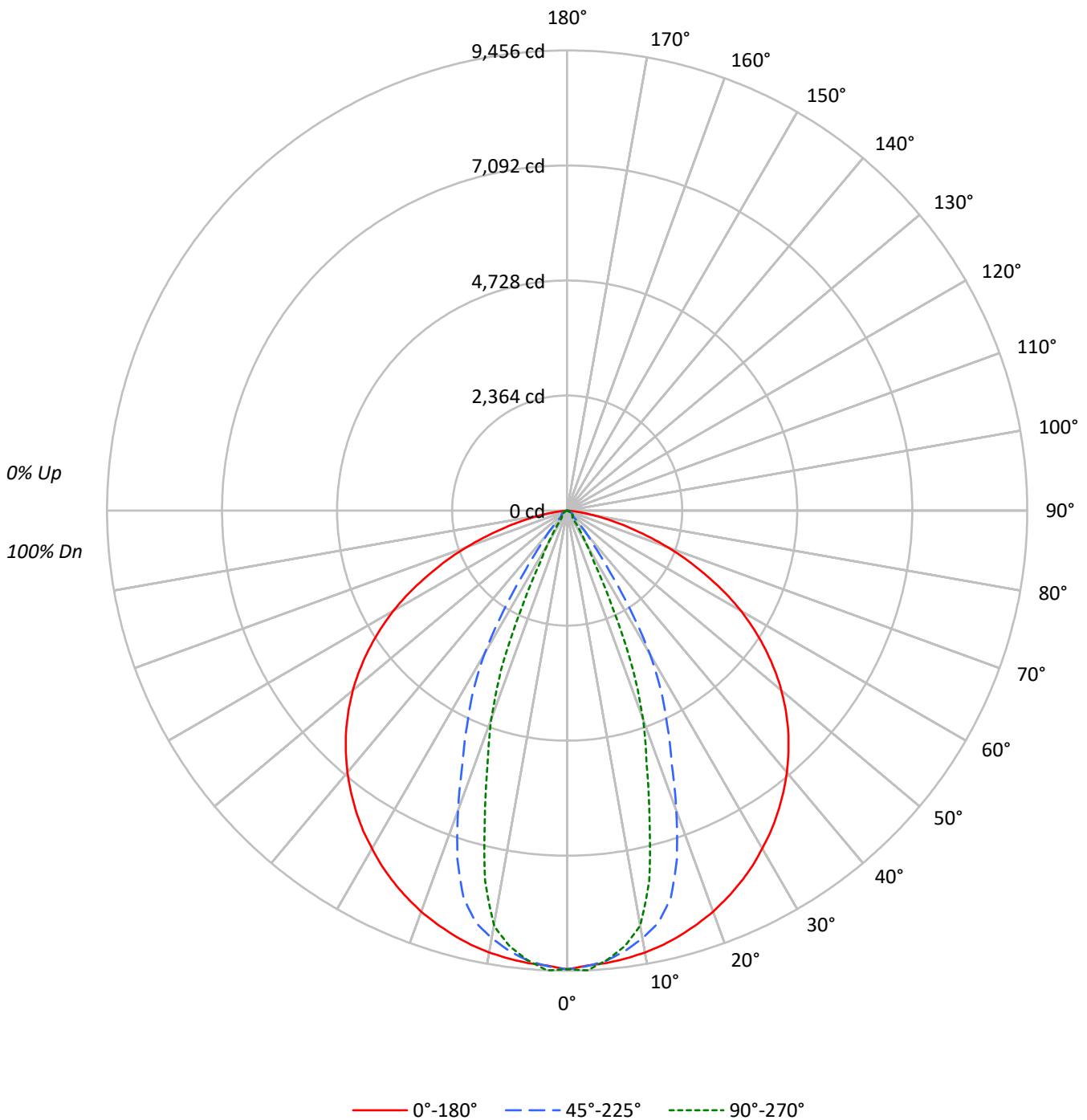
Lumens per Lamp: N/A  
Luminaire Lumens: 10080.0 lumens  
Efficiency: N/A  
Efficacy: 131.6 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.63 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 76.6  
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	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90					90			
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81					81			
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73					73			
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66					66			
5	86	76	69	64	85	75	69	64	73	68	63	72	67	63	70	66	62	60					60			
6	81	71	64	59	80	70	63	58	68	62	58	67	62	58	65	61	57	55					55			
7	77	66	59	54	75	65	58	54	64	58	53	62	57	53	61	56	53	51					51			
8	72	61	55	50	71	61	54	50	60	54	49	59	53	49	58	53	49	47					47			
9	69	58	51	46	67	57	51	46	56	50	46	55	50	46	54	49	46	44					44			
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41					41			

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

	0°	45°	90°
0°	12681	12681	12681
5°	12603	12538	12528
10°	12595	12191	11831
15°	12580	11464	9097
20°	12556	9381	6525
25°	12517	7228	3316
30°	12457	5275	1206
35°	12413	2423	420
40°	12337	1100	290
45°	12227	410	294
50°	12032	298	309
55°	11676	313	235
60°	11095	335	208
65°	10062	255	169
70°	8627	184	155
75°	6594	163	148
80°	4126	153	160
85°	1303	179	216



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	877.5	8.7
10°-20°	2210.4	21.9
20°-30°	2407.2	23.9
30°-40°	1800.7	17.9
40°-50°	1294.8	12.8
50°-60°	795.2	7.9
60°-70°	457.6	4.5
70°-80°	204.2	2.0
80°-90°	32.4	0.3
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°	5495.1	54.5
0°-40°	7295.9	72.4
0°-60°	9385.8	93.1
0°-90°	10080.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10080.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9425	9425	9425	9425	9425	
5°	9332	9375	9283	9292	9276	887
15°	9032	8858	8230	7068	6531	2549
25°	8431	7826	4869	3124	2234	3886
35°	7557	5420	1475	434	256	4727
45°	6426	3045	216	160	154	4950
55°	4977	633	134	129	100	4438
65°	3160	70	80	67	53	3128
75°	1268	42	31	32	28	1376
85°	84	8	12	15	14	168
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9425.1	9425.1	9425.1	9425.1	9425.1
2.5°	9359.5	9420.7	9369.1	9415.4	9456.4
5°	9331.5	9375.4	9282.8	9291.5	9276.0
7.5°	9283.3	9293.9	9126.5	9061.9	9030.5
10°	9218.6	9190.2	8923.0	8769.1	8659.7
12.5°	9137.1	9043.1	8669.8	8120.5	7793.0
15°	9031.5	8858.4	8229.9	7068.1	6530.8
17.5°	8905.6	8665.4	7501.7	5890.8	5425.9
20°	8769.1	8452.3	6552.0	5008.7	4557.2
22.5°	8608.1	8179.8	5615.4	4165.6	3545.9
25°	8431.1	7826.2	4868.8	3123.8	2233.5
27.5°	8240.1	7359.9	4177.7	1915.7	1207.7
30°	8018.2	6792.2	3395.4	1075.0	776.5
32.5°	7801.7	6130.5	2425.5	716.2	496.3
35°	7557.1	5420.1	1474.9	433.6	255.6
37.5°	7298.1	4774.3	923.1	235.8	176.5
40°	7023.7	4161.7	626.0	167.4	164.9
42.5°	6730.5	3607.6	392.1	159.2	164.5
45°	6425.7	3045.2	215.6	159.6	154.3
47.5°	6094.8	2434.6	150.5	151.0	150.5
50°	5748.0	1746.4	142.3	149.0	147.6
52.5°	5374.2	1084.2	142.8	145.7	130.7
55°	4977.3	632.8	133.6	129.3	100.3
57.5°	4560.1	394.5	130.7	106.6	90.2
60°	4123.2	208.4	124.4	96.0	77.2
62.5°	3657.7	102.7	99.8	82.0	63.2
65°	3160.5	69.5	80.1	66.6	53.1
67.5°	2680.1	62.7	60.3	54.5	46.3
70°	2193.0	57.4	46.8	47.7	39.5
72.5°	1715.1	52.1	37.6	41.0	33.3
75°	1268.4	42.0	31.3	32.3	28.5
77.5°	882.6	32.8	24.6	27.5	26.5
80°	532.5	20.7	19.8	22.7	20.7
82.5°	258.0	13.5	15.4	17.8	16.4
85°	84.4	8.2	11.6	15.0	14.0
87.5°	10.6	4.8	9.6	13.0	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)