

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-W-UNV-L840-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 (P23760)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-15HE-W-UNV-L840-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

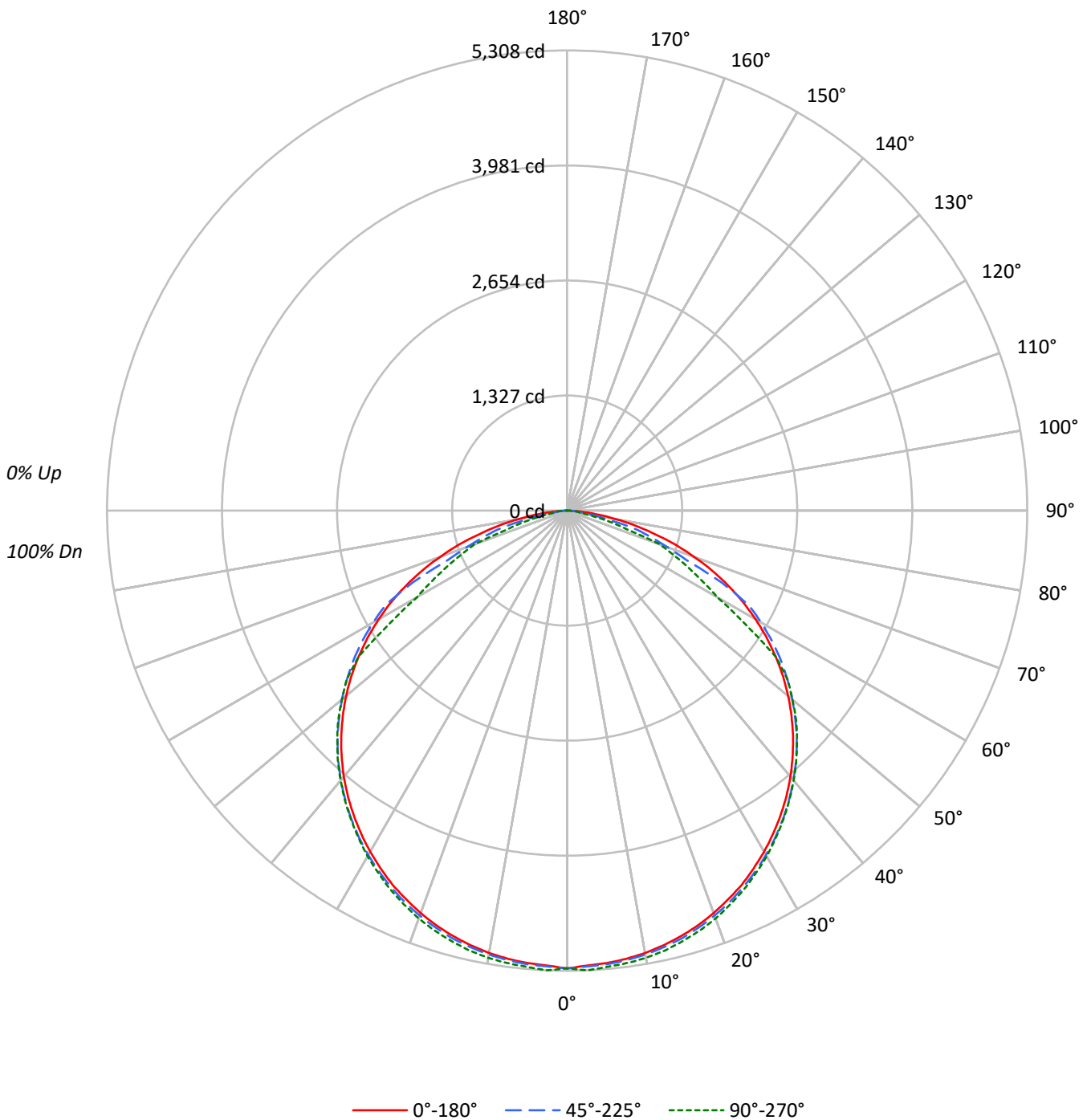
Lumens per Lamp: N/A  
Luminaire Lumens: 15244.0 lumens  
Efficiency: N/A  
Efficacy: 166.1 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	7105	7105	7105
5°	7075	7095	7135
10°	7079	7104	7158
15°	7078	7115	7165
20°	7074	7119	7169
25°	7071	7122	7161
30°	7059	7128	7154
35°	7050	7131	7140
40°	7037	7131	7142
45°	7011	7128	7136
50°	6969	7097	7096
55°	6887	7060	6885
60°	6760	6956	5387
65°	6534	6260	4853
70°	6122	4816	4473
75°	5421	4199	2787
80°	4464	2473	1246
85°	2942	1514	1632



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	501.1	3.3
10°-20°	1445.7	9.5
20°-30°	2216.4	14.5
30°-40°	2718.2	17.8
40°-50°	2886.2	18.9
50°-60°	2636.2	17.3
60°-70°	1835.9	12.0
70°-80°	856.3	5.6
80°-90°	148.1	1.0
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°	4163.1	27.3
0°-40°	6881.3	45.1
0°-60°	12403.7	81.4
0°-90°	15244.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15244.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5280	5280	5280	5280	5280	
5°	5239	5275	5253	5278	5283	498
15°	5081	5116	5108	5139	5144	1435
25°	4763	4805	4797	4833	4824	2195
35°	4292	4342	4342	4371	4347	2686
45°	3684	3740	3746	3770	3750	2842
55°	2936	2995	3010	3015	2935	2622
65°	2052	2116	1966	1564	1524	2025
75°	1043	1108	808	560	536	1115
85°	191	125	98	105	106	246
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5280.4	5280.4	5280.4	5280.4	5280.4
2.5°	5252.5	5286.1	5263.9	5288.0	5308.2
5°	5238.6	5275.3	5253.2	5278.5	5282.9
7.5°	5215.8	5250.6	5230.4	5258.2	5265.2
10°	5181.6	5215.8	5200.0	5232.9	5239.2
12.5°	5135.4	5170.2	5158.2	5194.3	5198.7
15°	5081.0	5116.4	5108.2	5139.2	5143.6
17.5°	5017.0	5053.7	5044.3	5077.2	5080.3
20°	4940.4	4980.3	4972.1	5010.7	5006.9
22.5°	4854.3	4896.7	4890.4	4929.0	4917.6
25°	4763.2	4805.0	4797.4	4832.8	4823.9
27.5°	4656.2	4702.4	4695.4	4729.6	4715.7
30°	4543.5	4590.3	4587.8	4618.8	4604.9
32.5°	4421.9	4472.0	4469.4	4499.8	4478.3
35°	4292.2	4341.5	4341.5	4370.7	4347.2
37.5°	4154.8	4204.8	4205.4	4233.3	4211.1
40°	4006.7	4056.7	4059.8	4086.4	4066.2
42.5°	3850.9	3905.4	3907.9	3932.0	3913.0
45°	3684.4	3740.1	3745.8	3769.9	3750.3
47.5°	3510.3	3566.7	3571.7	3597.7	3583.8
50°	3329.3	3383.7	3390.7	3412.2	3390.1
52.5°	3138.1	3193.8	3203.3	3216.6	3206.5
55°	2936.1	2995.0	3009.6	3014.6	2934.9
57.5°	2727.2	2787.4	2801.3	2684.8	2428.4
60°	2512.0	2571.5	2584.8	2184.1	2001.7
62.5°	2287.9	2346.1	2360.7	1809.9	1751.7
65°	2052.4	2115.7	1966.3	1563.7	1524.4
67.5°	1810.6	1875.8	1487.1	1340.2	1316.8
70°	1556.1	1621.9	1224.3	1142.7	1137.0
72.5°	1311.7	1360.5	1004.7	866.0	729.3
75°	1042.7	1108.5	807.8	559.6	536.2
77.5°	808.4	698.9	487.5	410.2	323.5
80°	576.1	467.2	319.1	170.3	160.8
82.5°	365.3	305.1	125.3	128.5	134.2
85°	190.6	125.3	98.1	105.1	105.7
87.5°	61.4	53.8	58.9	58.2	57.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)