

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-A-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 (P23761)  
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-A-UNV-L835-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

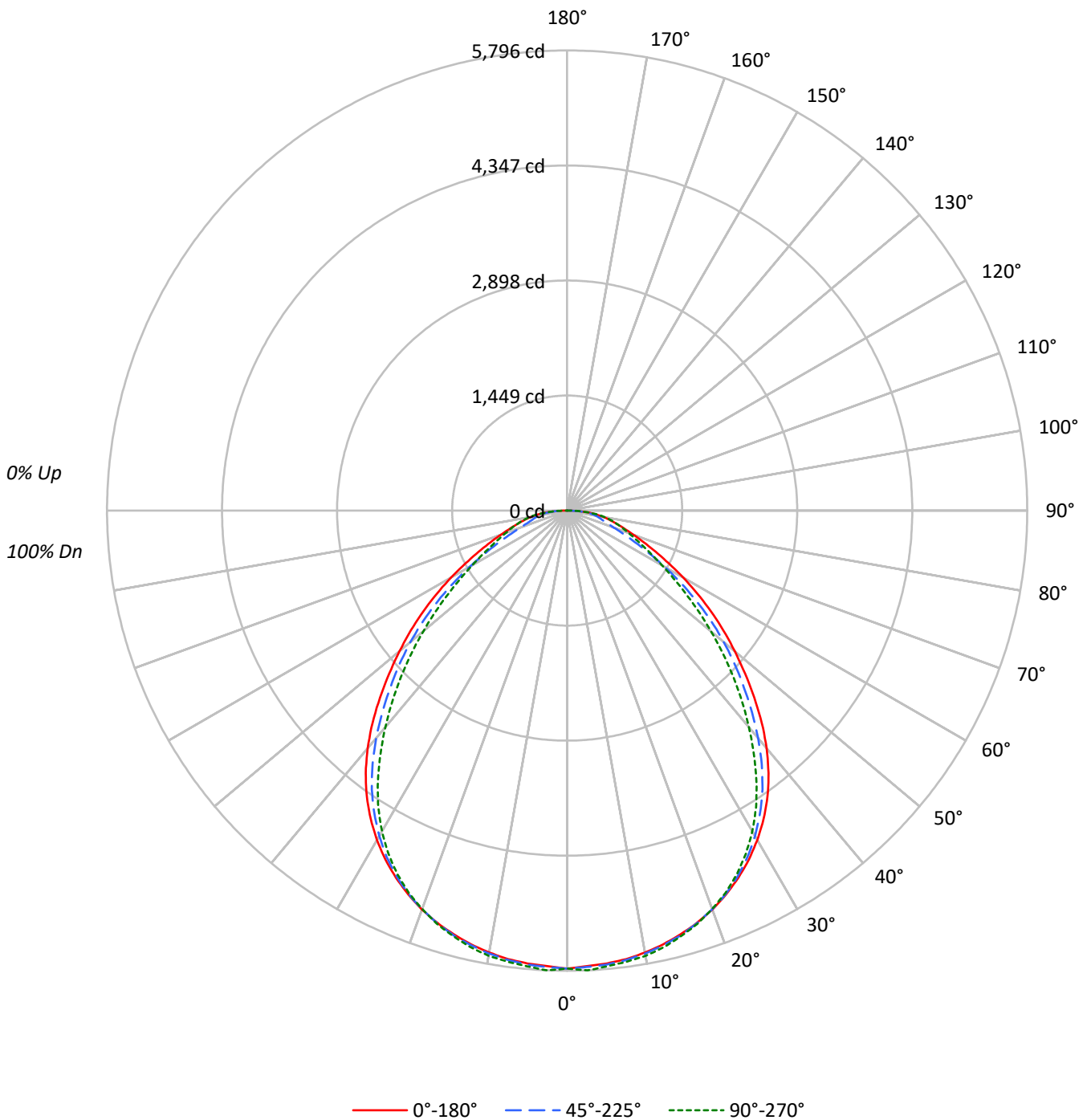
Lumens per Lamp: N/A  
Luminaire Lumens: 13251.0 lumens  
Efficiency: N/A  
Efficacy: 144.3 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.2 / 1.27  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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



TEST NUMBER: P#  
CATALOG NUMBER: HBLED-LD5-15HE-W-A-UNV-L835-ED1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-15HE-W-A-UNV-L835-ED1-U

**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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88					86				
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75					73				
3	93	83	75	70	90	81	75	69	79	73	68	76	71	67	73	69	65					63				
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57					55				
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51					49				
6	73	61	52	46	72	60	52	46	58	51	46	56	50	45	55	49	45					43				
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40					38				
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	47	41	36					35				
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33					31				
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30					29				

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

	0°	45°	90°
0°	7761	7761	7761
5°	7734	7751	7783
10°	7723	7741	7780
15°	7697	7713	7731
20°	7657	7651	7646
25°	7574	7548	7505
30°	7443	7353	7246
35°	7227	7045	6828
40°	6867	6572	6257
45°	6344	5990	5627
50°	5767	5394	4950
55°	5186	4670	4279
60°	4538	3816	3713
65°	3912	3001	3351
70°	3488	2449	3230
75°	3341	2391	3375
80°	3614	2828	3760
85°	4057	3404	4097



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-15HE-W-A-UNV-L835-ED1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	546.7	4.1
10°-20°	1564.6	11.8
20°-30°	2340.5	17.7
30°-40°	2670.3	20.2
40°-50°	2430.7	18.3
50°-60°	1784.9	13.5
60°-70°	1053.9	8.0
70°-80°	603.9	4.6
80°-90°	255.4	1.9
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°	4451.8	33.6
0°-40°	7122.2	53.7
0°-60°	11337.8	85.6
0°-90°	13251.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13251.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5768	5768	5768	5768	5768	
5°	5726	5762	5739	5762	5762	544
15°	5526	5556	5537	5556	5550	1559
25°	5102	5120	5084	5082	5055	2348
35°	4400	4378	4289	4216	4157	2741
45°	3334	3314	3148	3007	2957	2569
55°	2211	2108	1991	1846	1824	1977
65°	1229	1073	943	1008	1053	1237
75°	643	551	460	600	649	693
85°	263	243	220	260	265	275
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-15HE-W-A-UNV-L835-ED1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5768.4	5768.4	5768.4	5768.4	5768.4
2.5°	5741.7	5774.9	5754.1	5776.8	5796.4
5°	5726.1	5761.9	5739.1	5761.9	5762.5
7.5°	5697.5	5730.7	5708.5	5733.3	5730.7
10°	5652.6	5685.8	5665.6	5692.3	5694.2
12.5°	5595.3	5627.2	5606.4	5637.0	5631.8
15°	5525.7	5556.3	5536.8	5556.3	5549.8
17.5°	5443.8	5471.7	5446.4	5467.8	5456.8
20°	5347.5	5370.9	5343.6	5363.7	5339.7
22.5°	5232.3	5253.2	5224.5	5235.6	5210.9
25°	5101.6	5119.8	5084.0	5082.1	5055.4
27.5°	4955.9	4965.6	4920.1	4904.5	4873.9
30°	4790.6	4793.2	4732.7	4703.4	4663.8
32.5°	4605.2	4598.7	4521.3	4477.7	4428.9
35°	4399.6	4378.2	4289.0	4215.5	4157.0
37.5°	4167.4	4133.6	4026.9	3918.2	3862.3
40°	3909.8	3870.1	3741.9	3607.3	3562.4
42.5°	3629.4	3595.6	3444.6	3304.1	3259.9
45°	3334.0	3314.5	3148.0	3006.8	2957.4
47.5°	3038.7	3024.4	2861.7	2718.0	2658.1
50°	2755.1	2723.8	2576.8	2419.4	2364.7
52.5°	2479.9	2416.1	2286.7	2125.3	2085.0
55°	2210.6	2108.4	1990.7	1846.2	1824.1
57.5°	1943.8	1811.8	1697.3	1589.3	1588.6
60°	1686.2	1535.3	1418.2	1361.6	1379.8
62.5°	1444.9	1290.0	1163.2	1167.1	1200.3
65°	1228.9	1072.7	942.6	1008.3	1052.6
67.5°	1043.5	894.5	762.4	884.7	927.0
70°	886.7	752.0	622.6	775.4	821.0
72.5°	754.6	641.4	525.0	684.4	730.6
75°	642.7	551.0	459.9	599.8	649.2
77.5°	551.7	470.3	412.4	519.1	570.5
80°	466.4	394.9	365.0	441.1	485.3
82.5°	369.5	320.1	302.5	358.5	381.2
85°	262.8	242.7	220.5	260.2	265.4
87.5°	144.4	149.6	123.6	149.6	150.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)