

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-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-LD5-15HE-N-CL-UNV-L835-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

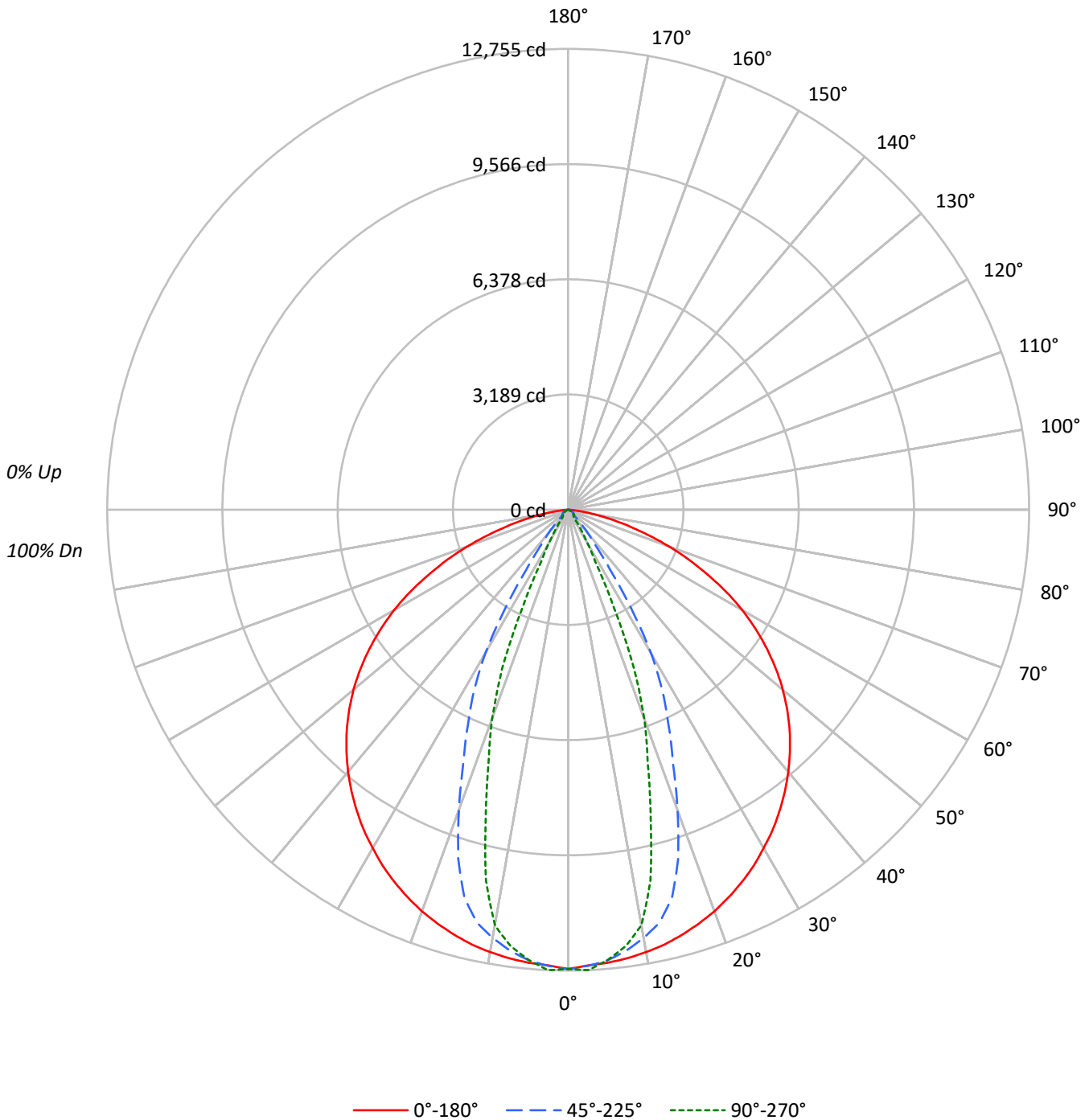
Lumens per Lamp: N/A  
Luminaire Lumens: 13596.0 lumens  
Efficiency: N/A  
Efficacy: 148.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.63 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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	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°	17105	17105	17105
5°	17000	16911	16899
10°	16988	16443	15958
15°	16969	15463	12270
20°	16936	12654	8801
25°	16883	9749	4472
30°	16803	7115	1627
35°	16743	3268	566
40°	16640	1483	391
45°	16492	553	396
50°	16229	402	417
55°	15748	423	317
60°	14966	452	280
65°	13572	344	228
70°	11637	248	210
75°	8894	220	200
80°	5565	207	217
85°	1757	241	292



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1183.5	8.7
10°-20°	2981.4	21.9
20°-30°	3246.9	23.9
30°-40°	2428.8	17.9
40°-50°	1746.4	12.8
50°-60°	1072.6	7.9
60°-70°	617.2	4.5
70°-80°	275.5	2.0
80°-90°	43.7	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°	7411.9	54.5
0°-40°	9840.7	72.4
0°-60°	12659.7	93.1
0°-90°	13596.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13596.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	12713	12713	12713	12713	12713	
5°	12586	12646	12521	12532	12512	###
15°	12182	11948	11101	9534	8809	3439
25°	11372	10556	6567	4214	3013	5242
35°	10193	7311	1989	585	345	6376
45°	8667	4107	291	215	208	6677
55°	6713	854	180	174	135	5985
65°	4263	94	108	90	72	4220
75°	1711	57	42	44	38	1857
85°	114	11	16	20	19	227
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	12712.6	12712.6	12712.6	12712.6	12712.6
2.5°	12624.1	12706.8	12637.2	12699.6	12754.9
5°	12586.4	12645.6	12520.7	12532.4	12511.6
7.5°	12521.4	12535.7	12309.9	12222.8	12180.5
10°	12434.2	12395.8	12035.4	11827.9	11680.2
12.5°	12324.3	12197.4	11693.9	10952.9	10511.2
15°	12181.8	11948.2	11100.6	9533.5	8808.8
17.5°	12012.0	11688.0	10118.3	7945.6	7318.4
20°	11827.9	11400.5	8837.4	6755.7	6146.8
22.5°	11610.6	11033.0	7574.1	5618.6	4782.7
25°	11371.9	10556.1	6567.1	4213.5	3012.6
27.5°	11114.3	9927.1	5634.9	2583.9	1628.9
30°	10815.0	9161.4	4579.7	1450.0	1047.4
32.5°	10522.9	8268.9	3271.5	966.0	669.4
35°	10193.1	7310.6	1989.3	584.8	344.8
37.5°	9843.8	6439.6	1245.1	318.1	238.1
40°	9473.6	5613.4	844.4	225.7	222.5
42.5°	9078.1	4866.0	528.9	214.7	221.8
45°	8667.0	4107.4	290.8	215.3	208.2
47.5°	8220.7	3283.9	203.0	203.6	203.0
50°	7753.0	2355.6	191.9	201.0	199.1
52.5°	7248.8	1462.4	192.6	196.5	176.3
55°	6713.4	853.5	180.2	174.3	135.3
57.5°	6150.7	532.1	176.3	143.8	121.6
60°	5561.4	281.0	167.8	129.5	104.1
62.5°	4933.6	138.6	134.7	110.6	85.2
65°	4262.9	93.7	108.0	89.8	71.6
67.5°	3615.0	84.6	81.3	73.5	62.5
70°	2958.0	77.4	63.1	64.4	53.3
72.5°	2313.3	70.3	50.7	55.3	44.9
75°	1710.9	56.6	42.3	43.6	38.4
77.5°	1190.5	44.2	33.2	37.1	35.8
80°	718.2	28.0	26.7	30.6	28.0
82.5°	348.0	18.2	20.8	24.1	22.1
85°	113.8	11.1	15.6	20.2	18.9
87.5°	14.3	6.5	13.0	17.6	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)