

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-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 (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-L840-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**

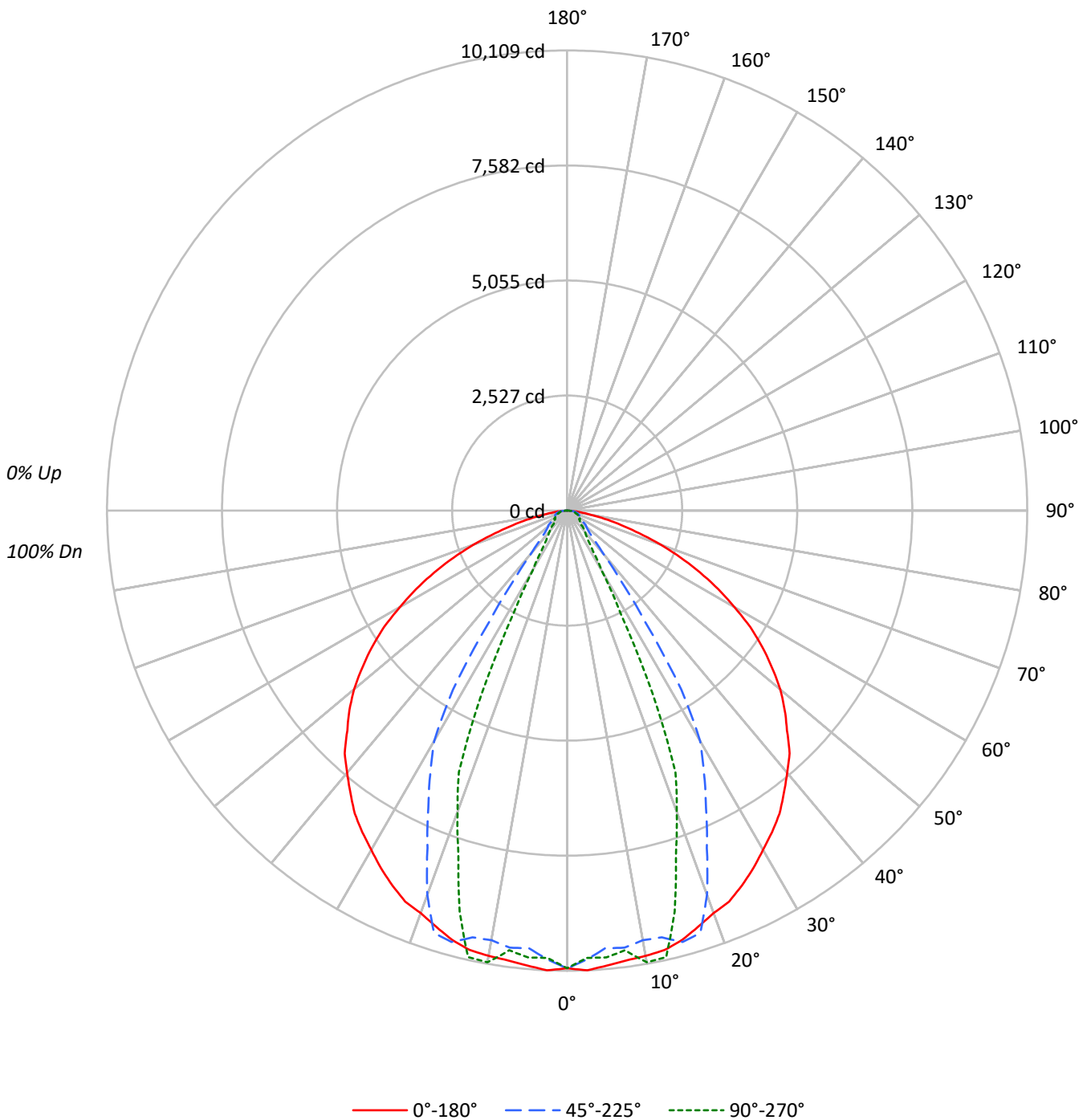
Lumens per Lamp: N/A  
Luminaire Lumens: 13516.0 lumens  
Efficiency: N/A  
Efficacy: 147.2 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.81 / 0.91  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	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°	13527	13527	13527
5°	13550	13034	13308
10°	13569	13096	13768
15°	13600	13670	12706
20°	13471	12858	10085
25°	13490	10719	6588
30°	13369	9081	2367
35°	13355	4919	1331
40°	13204	2145	1043
45°	13000	1325	817
50°	12797	1154	772
55°	12295	1001	755
60°	11407	897	811
65°	10253	1014	887
70°	8599	1090	914
75°	6429	1243	990
80°	4038	1444	1129
85°	2688	1809	1653



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	931.9	6.9
10°-20°	2631.4	19.5
20°-30°	3222.2	23.8
30°-40°	2530.4	18.7
40°-50°	1876.4	13.9
50°-60°	1142.3	8.5
60°-70°	684.3	5.1
70°-80°	375.4	2.8
80°-90°	121.8	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°	6785.4	50.2
0°-40°	9315.8	68.9
0°-60°	12334.5	91.3
0°-90°	13516.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13516.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10054	10054	10054	10054	10054	
5°	10032	9759	9650	9756	9853	954
15°	9763	9496	9814	9418	9122	2749
25°	9087	9115	7220	5663	4437	4183
35°	8131	7396	2995	1002	810	5074
45°	6832	4906	696	528	430	5283
55°	5241	1352	427	361	322	4664
65°	3220	398	318	300	278	3182
75°	1237	251	239	208	190	1339
85°	174	137	117	108	107	212
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10053.9	10053.9	10053.9	10053.9	10053.9
2.5°	10108.8	9972.6	9868.2	9810.0	9833.7
5°	10032.2	9759.1	9650.0	9756.4	9853.3
7.5°	9965.8	9559.9	9683.2	9692.7	9743.5
10°	9931.9	9541.0	9585.7	9796.4	10077.6
12.5°	9887.2	9585.0	9600.6	9887.9	10046.4
15°	9763.2	9495.6	9814.0	9417.6	9121.5
17.5°	9582.3	9286.9	9724.6	8343.0	7940.5
20°	9408.1	9059.9	8979.9	7431.7	7043.4
22.5°	9295.7	9025.3	8021.8	6622.0	6220.8
25°	9087.0	9115.4	7220.3	5663.2	4437.4
27.5°	8857.3	8903.4	6511.5	3776.8	2542.3
30°	8605.2	8658.1	5844.8	2231.9	1523.2
32.5°	8376.9	8078.7	4667.8	1392.4	1059.1
35°	8130.9	7396.4	2994.9	1002.1	810.4
37.5°	7821.3	6679.5	1895.9	792.8	680.3
40°	7517.7	6035.9	1221.0	676.9	593.6
42.5°	7233.8	5505.3	888.3	591.5	536.0
45°	6832.0	4905.7	696.5	527.8	429.6
47.5°	6484.4	4202.3	609.1	446.5	370.6
50°	6113.8	3213.1	551.5	397.1	368.6
52.5°	5674.0	2101.8	509.5	380.1	344.2
55°	5241.1	1351.8	426.9	361.1	321.8
57.5°	4773.5	857.1	376.7	350.3	336.1
60°	4238.9	578.0	333.4	332.0	301.5
62.5°	3744.3	475.0	321.8	318.5	285.3
65°	3220.5	398.4	318.5	299.5	278.5
67.5°	2697.4	341.5	288.0	273.7	255.4
70°	2185.9	312.4	277.1	271.0	232.4
72.5°	1660.1	257.5	246.0	229.7	193.1
75°	1236.6	251.4	239.2	208.0	190.4
77.5°	836.8	231.7	217.5	186.3	172.1
80°	521.1	212.8	186.3	163.3	145.7
82.5°	309.7	177.5	153.1	134.8	123.3
85°	174.1	136.9	117.2	107.7	107.1
87.5°	37.3	49.5	39.3	37.3	26.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)