

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-LD5-60SE-W-UNV-L840-ED4-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-LD5-60SE-W-UNV-L840-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

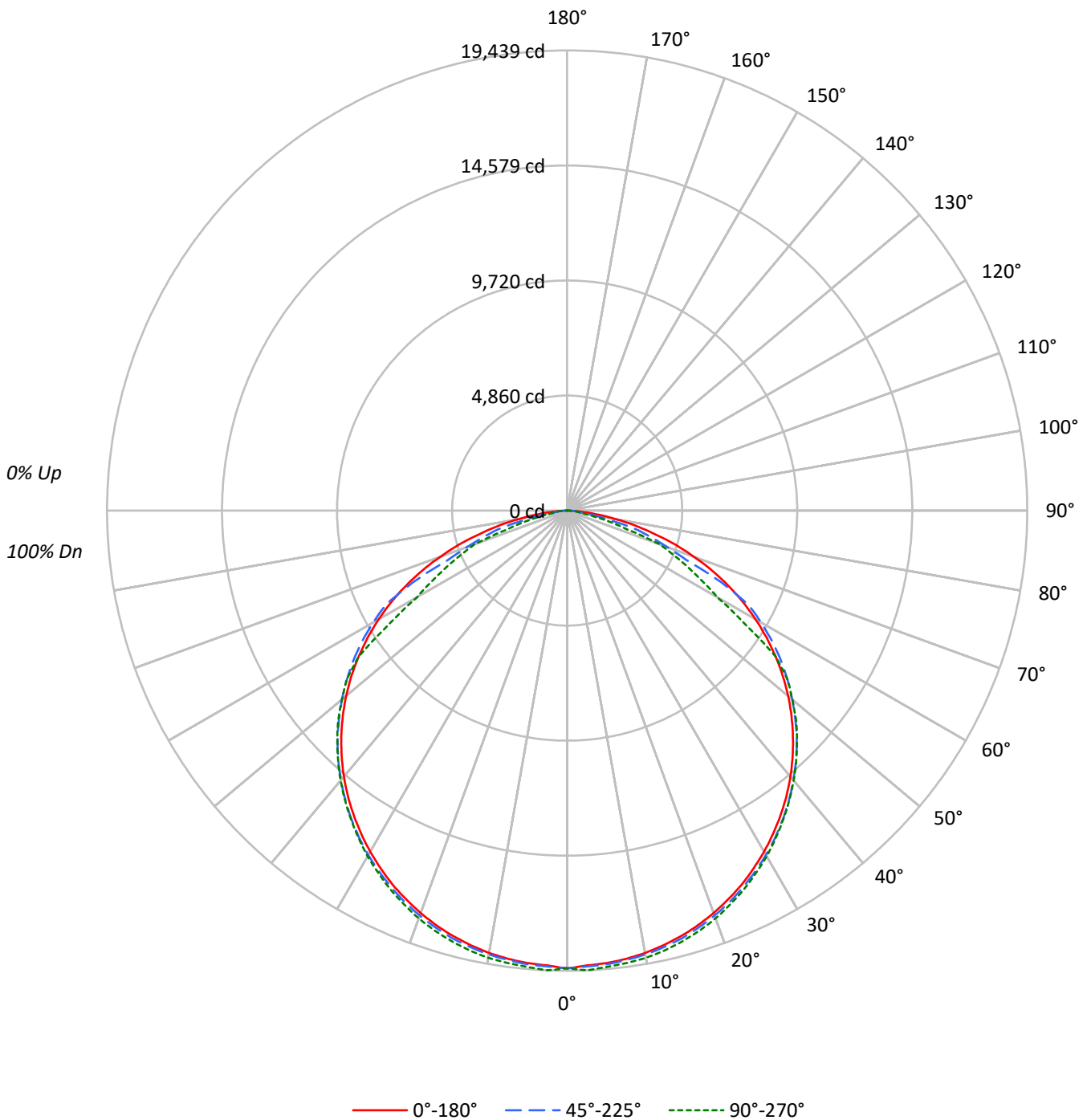
Lumens per Lamp: N/A  
Luminaire Lumens: 55823.0 lumens  
Efficiency: N/A  
Efficacy: 144.6 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 386  
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°	26017	26017	26017
5°	25910	25982	26129
10°	25924	26016	26213
15°	25918	26057	26237
20°	25904	26070	26253
25°	25895	26081	26225
30°	25850	26102	26199
35°	25817	26114	26148
40°	25770	26113	26153
45°	25673	26101	26132
50°	25520	25991	25986
55°	25222	25853	25211
60°	24754	25471	19726
65°	23928	22924	17773
70°	22417	17638	16379
75°	19849	15378	10208
80°	16346	9053	4562
85°	10772	5547	5976



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1834.9	3.3
10°-20°	5294.0	9.5
20°-30°	8116.3	14.5
30°-40°	9953.8	17.8
40°-50°	10569.3	18.9
50°-60°	9653.8	17.3
60°-70°	6722.9	12.0
70°-80°	3135.6	5.6
80°-90°	542.4	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°	15245.2	27.3
0°-40°	25199.0	45.1
0°-60°	45422.1	81.4
0°-90°	55823.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	55823.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	19337	19337	19337	19337	19337	
5°	19184	19318	19237	19330	19346	###
15°	18606	18736	18706	18820	18836	5254
25°	17443	17596	17568	17698	17665	8038
35°	15718	15899	15899	16005	15920	9836
45°	13492	13696	13717	13805	13733	10406
55°	10752	10968	11021	11040	10747	9602
65°	7516	7748	7200	5726	5582	7416
75°	3818	4059	2958	2049	1964	4082
85°	698	459	359	385	387	901
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	19336.6	19336.6	19336.6	19336.6	19336.6
2.5°	19234.6	19357.4	19276.3	19364.4	19438.6
5°	19183.6	19318.0	19236.9	19329.6	19345.9
7.5°	19100.1	19227.6	19153.4	19255.4	19280.9
10°	18974.9	19100.1	19042.2	19162.7	19185.9
12.5°	18805.7	18933.2	18889.2	19021.3	19037.5
15°	18606.3	18736.2	18706.0	18819.6	18835.8
17.5°	18372.2	18506.6	18471.9	18592.4	18604.0
20°	18091.7	18237.7	18207.6	18349.0	18335.1
22.5°	17776.4	17931.7	17908.5	18049.9	18008.2
25°	17442.6	17595.6	17567.7	17697.6	17665.1
27.5°	17050.8	17220.0	17194.5	17319.7	17268.7
30°	16638.1	16809.7	16800.4	16914.0	16863.0
32.5°	16193.0	16376.2	16366.9	16478.2	16399.3
35°	15717.8	15898.6	15898.6	16005.2	15919.5
37.5°	15214.7	15397.9	15400.2	15502.2	15421.0
40°	14672.2	14855.4	14867.0	14964.3	14890.2
42.5°	14102.0	14301.3	14310.6	14398.7	14329.1
45°	13492.3	13696.3	13717.1	13805.2	13733.4
47.5°	12854.7	13061.1	13079.6	13174.7	13123.7
50°	12191.7	12391.1	12416.6	12495.4	12414.3
52.5°	11491.6	11695.6	11730.4	11779.1	11742.0
55°	10752.1	10967.7	11021.0	11039.5	10747.4
57.5°	9987.0	10207.3	10258.3	9831.7	8892.8
60°	9198.8	9416.8	9465.4	7998.0	7330.3
62.5°	8378.2	8591.5	8644.8	6627.9	6414.6
65°	7515.8	7747.6	7200.5	5726.1	5582.4
67.5°	6630.2	6869.0	5445.6	4907.7	4822.0
70°	5698.3	5939.4	4483.5	4184.5	4163.6
72.5°	4803.4	4981.9	3679.1	3171.4	2670.6
75°	3818.2	4059.3	2958.1	2049.3	1963.6
77.5°	2960.4	2559.4	1785.1	1502.2	1184.6
80°	2109.6	1710.9	1168.4	623.6	588.8
82.5°	1337.6	1117.4	459.0	470.6	491.5
85°	697.8	459.0	359.3	384.8	387.1
87.5°	224.9	197.1	215.6	213.3	211.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)