

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-LD5-60HE-N-UNV-L835-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 (P23767)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-60HE-N-UNV-L835-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

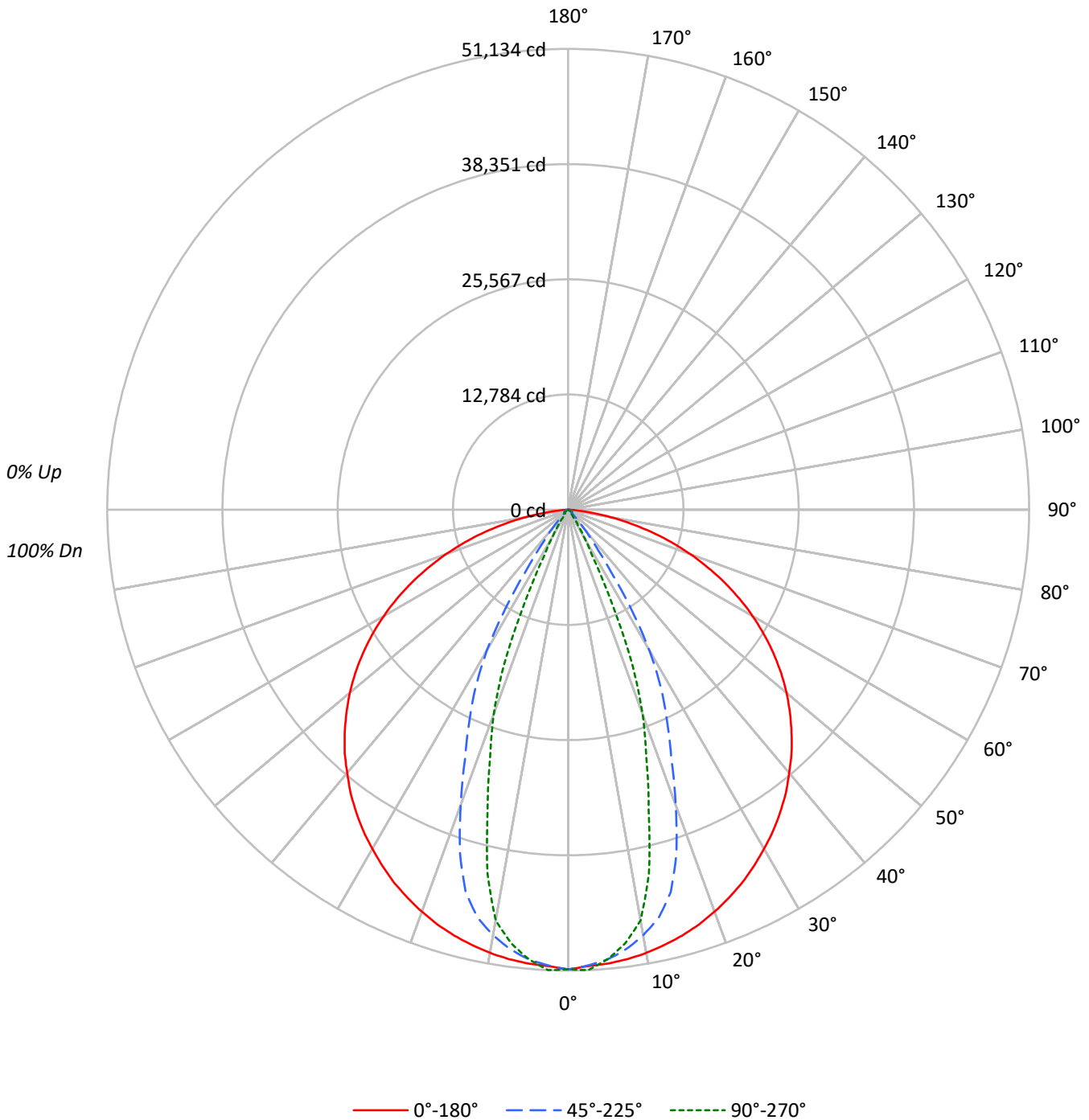
Lumens per Lamp: N/A
Luminaire Lumens: 54218.0 lumens
Efficiency: N/A
Efficacy: 146.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 0.62 / 0.77
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 369
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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73					73			
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55					55			
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51					51			
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47					47			
9	68	57	51	46	67	57	50	46	56	50	46	55	49	46	54	49	45	44					44			
10	65	54	47	43	64	53	47	43	53	47	43	52	46	43	51	46	42	41					41			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	68634	68634	68634
5°	68267	67664	67635
10°	68224	65496	63198
15°	68128	61189	48097
20°	67970	49881	34621
25°	67797	38569	17055
30°	67497	28031	5531
35°	67337	12436	1423
40°	66985	5051	959
45°	66685	1418	1020
50°	66166	1006	1133
55°	65212	1195	484
60°	63603	1332	294
65°	60987	850	348
70°	56658	754	430
75°	49565	568	593
80°	37060	696	846
85°	18357	898	1124



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4733.9	8.7
10°-20°	11837.0	21.8
20°-30°	12821.3	23.6
30°-40°	9494.7	17.5
40°-50°	6838.7	12.6
50°-60°	4234.4	7.8
60°-70°	2604.1	4.8
70°-80°	1372.8	2.5
80°-90°	281.0	0.5
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°	29392.2	54.2
0°-40°	38887.0	71.7
0°-60°	49960.1	92.1
0°-90°	54218.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	54218.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	51011	51011	51011	51011	51011	
5°	50545	50732	50098	50135	50076	###
15°	48909	47774	43927	37356	34529	13807
25°	45667	41831	25980	16344	11488	21042
35°	40996	28902	7571	1781	866	25648
45°	35046	16283	745	539	536	27027
55°	27800	3354	510	461	206	24817
65°	19156	354	267	170	109	18900
75°	9534	82	109	143	114	10070
85°	1189	32	58	87	73	###
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	51010.8	51010.8	51010.8	51010.8	51010.8
2.5°	50683.2	51005.9	50624.9	50908.8	51134.5
5°	50544.8	50731.7	50098.3	50134.7	50076.5
7.5°	50302.2	50258.5	49193.2	48727.3	48523.4
10°	49935.7	49647.0	47938.6	46965.5	46256.9
12.5°	49462.6	48817.1	46373.4	43279.4	41357.5
15°	48909.3	47773.6	43927.3	37356.0	34528.9
17.5°	48249.2	46640.3	39928.2	31308.7	28785.0
20°	47470.3	45376.1	34837.1	26637.4	24179.2
22.5°	46601.5	43837.6	29891.6	22138.4	18631.9
25°	45667.3	41830.7	25979.8	16343.5	11487.8
27.5°	44587.4	39251.2	22310.7	9626.5	5862.8
30°	43444.4	36145.1	18042.2	5178.5	3559.9
32.5°	42291.8	32624.0	12766.6	3234.7	2019.0
35°	40995.9	28901.5	7571.2	1781.2	866.3
37.5°	39644.3	25489.6	4474.8	810.5	555.7
40°	38137.3	22371.4	2875.6	538.7	546.0
42.5°	36681.3	19464.2	1618.6	531.4	541.1
45°	35045.8	16282.9	745.0	538.7	536.3
47.5°	33354.4	12985.0	482.9	543.6	543.6
50°	31609.6	9284.4	480.5	555.7	541.1
52.5°	29767.8	5792.4	499.9	553.3	444.1
55°	27799.8	3353.6	509.6	461.1	206.3
57.5°	25761.4	1977.7	514.5	264.5	116.5
60°	23635.6	1094.4	495.0	196.6	109.2
62.5°	21444.4	521.7	390.7	184.4	106.8
65°	19156.0	354.3	266.9	169.9	109.2
67.5°	16780.3	274.2	211.1	160.2	111.6
70°	14402.2	203.8	191.7	160.2	109.2
72.5°	11985.3	138.3	160.2	162.6	109.2
75°	9534.3	82.5	109.2	143.2	114.1
77.5°	7105.3	51.0	84.9	148.0	138.3
80°	4782.9	43.7	89.8	138.3	109.2
82.5°	2807.6	38.8	87.4	106.8	87.4
85°	1189.1	31.5	58.2	87.4	72.8
87.5°	223.3	26.7	46.1	70.4	63.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)