

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-W-FLI-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 (P26703)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-60HE-W-FLI-UNV-L835-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

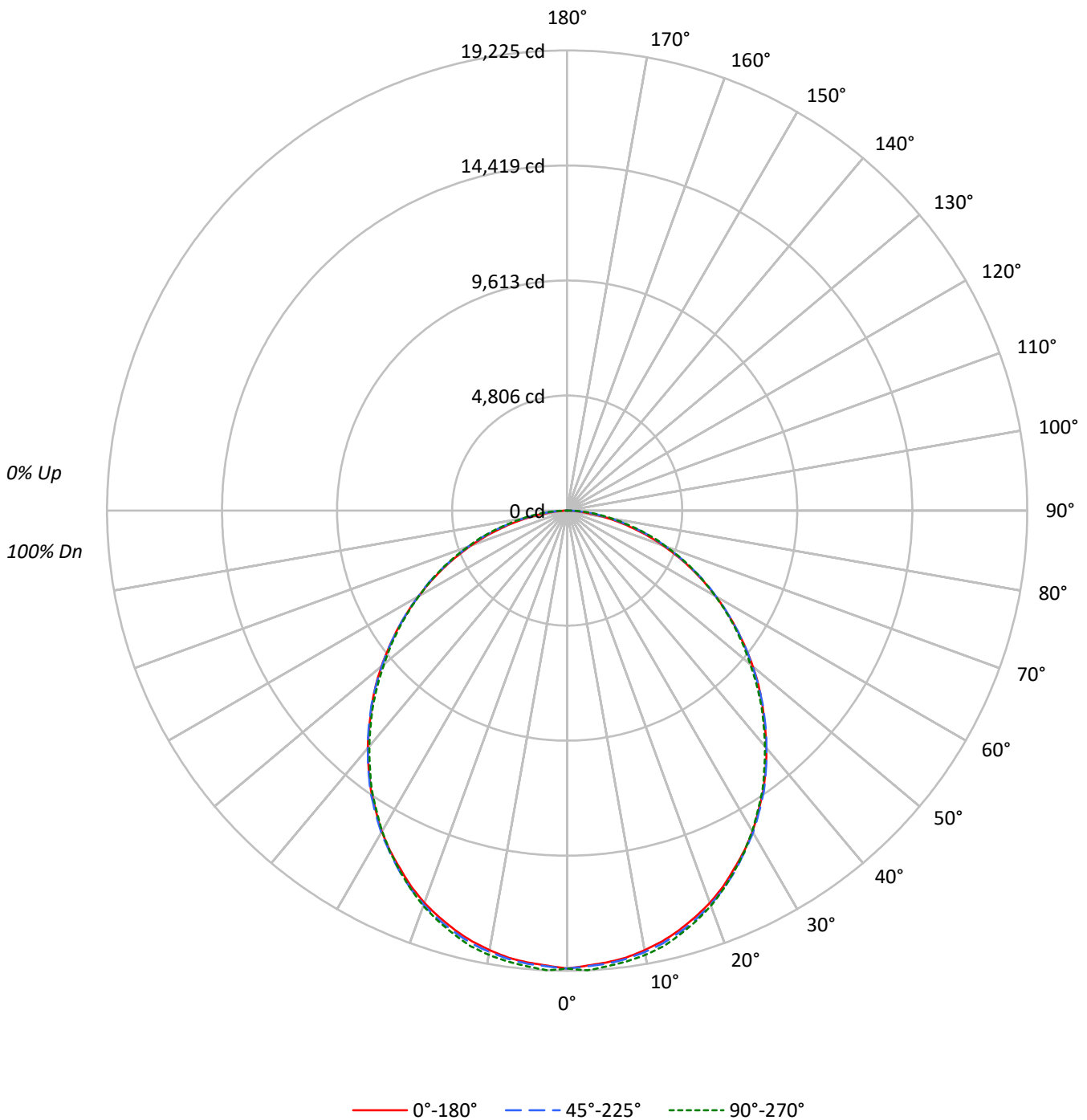
Lumens per Lamp: N/A
Luminaire Lumens: 49977.0 lumens
Efficiency: N/A
Efficacy: 135.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25743	25743	25743
5°	25596	25669	25815
10°	25480	25583	25749
15°	25256	25393	25517
20°	24970	25090	25163
25°	24508	24647	24611
30°	24056	24120	24022
35°	23460	23520	23370
40°	22755	22755	22580
45°	21959	22019	21795
50°	21205	21169	20904
55°	20287	20290	20107
60°	19304	19327	19252
65°	18194	18376	18423
70°	16805	17265	17284
75°	14851	15812	16059
80°	12180	13849	14631
85°	8452	11626	13148



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1809.5	3.6
10°-20°	5147.5	10.3
20°-30°	7649.6	15.3
30°-40°	8944.4	17.9
40°-50°	8917.8	17.8
50°-60°	7737.3	15.5
60°-70°	5714.9	11.4
70°-80°	3199.7	6.4
80°-90°	853.8	1.7
90°-100°	2.6	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°	14606.6	29.2
0°-40°	23551.0	47.1
0°-60°	40206.0	80.4
0°-90°	49974.4	100.0
90°-120°	2.6	0.0
90°-150°	2.6	0.0
90°-180°	3.0	0.0
0°-180°	49977.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	19133	19133	19133	19133	19133	
5°	18951	19071	19005	19089	19113	###
15°	18131	18258	18230	18317	18319	5114
25°	16508	16641	16602	16638	16578	7611
35°	14283	14408	14319	14317	14228	8922
45°	11540	11663	11572	11525	11454	8909
55°	8648	8708	8650	8635	8572	7733
65°	5715	5771	5772	5801	5787	5652
75°	2857	2942	3042	3064	3089	3042
85°	548	662	753	820	852	665
90°	0	12	15	33	30	22
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-60HE-W-FLI-UNV-L835-ED4-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	19132.6	19132.6	19132.6	19132.6	19132.6
2.5°	19028.0	19141.1	19062.0	19137.5	19225.1
5°	18951.3	19070.6	19004.9	19088.8	19113.1
7.5°	18839.4	18955.0	18891.7	18975.7	19001.2
10°	18649.6	18774.9	18725.0	18819.9	18846.7
12.5°	18428.1	18546.2	18513.3	18624.0	18642.3
15°	18131.3	18257.8	18229.8	18317.4	18318.6
17.5°	17802.8	17922.0	17901.3	17969.4	17967.0
20°	17439.0	17566.7	17522.9	17597.1	17574.0
22.5°	17008.2	17144.5	17089.8	17151.8	17093.4
25°	16508.2	16640.8	16601.9	16638.4	16577.5
27.5°	16023.9	16145.6	16065.3	16109.1	16044.6
30°	15483.7	15587.1	15525.1	15539.7	15461.8
32.5°	14876.6	14999.5	14924.0	14921.6	14838.9
35°	14282.8	14408.2	14319.3	14316.9	14228.1
37.5°	13625.8	13742.6	13638.0	13644.1	13540.7
40°	12955.4	13056.4	12955.4	12950.6	12855.7
42.5°	12227.8	12361.7	12269.2	12280.2	12153.6
45°	11540.4	11663.3	11572.0	11524.6	11454.0
47.5°	10855.4	10908.9	10833.5	10821.3	10721.6
50°	10130.2	10170.4	10113.2	10098.6	9986.7
52.5°	9380.8	9450.1	9377.1	9357.6	9283.4
55°	8648.3	8707.9	8649.5	8634.9	8571.7
57.5°	7911.0	7988.9	7929.2	7914.6	7863.5
60°	7173.7	7196.8	7182.2	7204.1	7154.2
62.5°	6441.2	6494.7	6511.8	6505.7	6466.8
65°	5714.8	5770.8	5772.0	5801.2	5786.6
67.5°	4971.4	5044.4	5065.1	5095.5	5108.9
70°	4271.8	4327.8	4388.6	4406.9	4393.5
72.5°	3567.4	3657.4	3725.5	3741.4	3798.5
75°	2856.8	2942.0	3041.7	3063.7	3089.2
77.5°	2197.4	2310.5	2400.5	2429.7	2461.4
80°	1572.0	1697.3	1787.3	1827.5	1888.3
82.5°	1031.8	1159.5	1250.8	1290.9	1365.1
85°	547.5	661.9	753.1	820.1	851.7
87.5°	161.8	259.2	311.5	330.9	358.9
90°	0.0	12.2	14.6	32.9	30.4
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)