

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-L735-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-L735-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

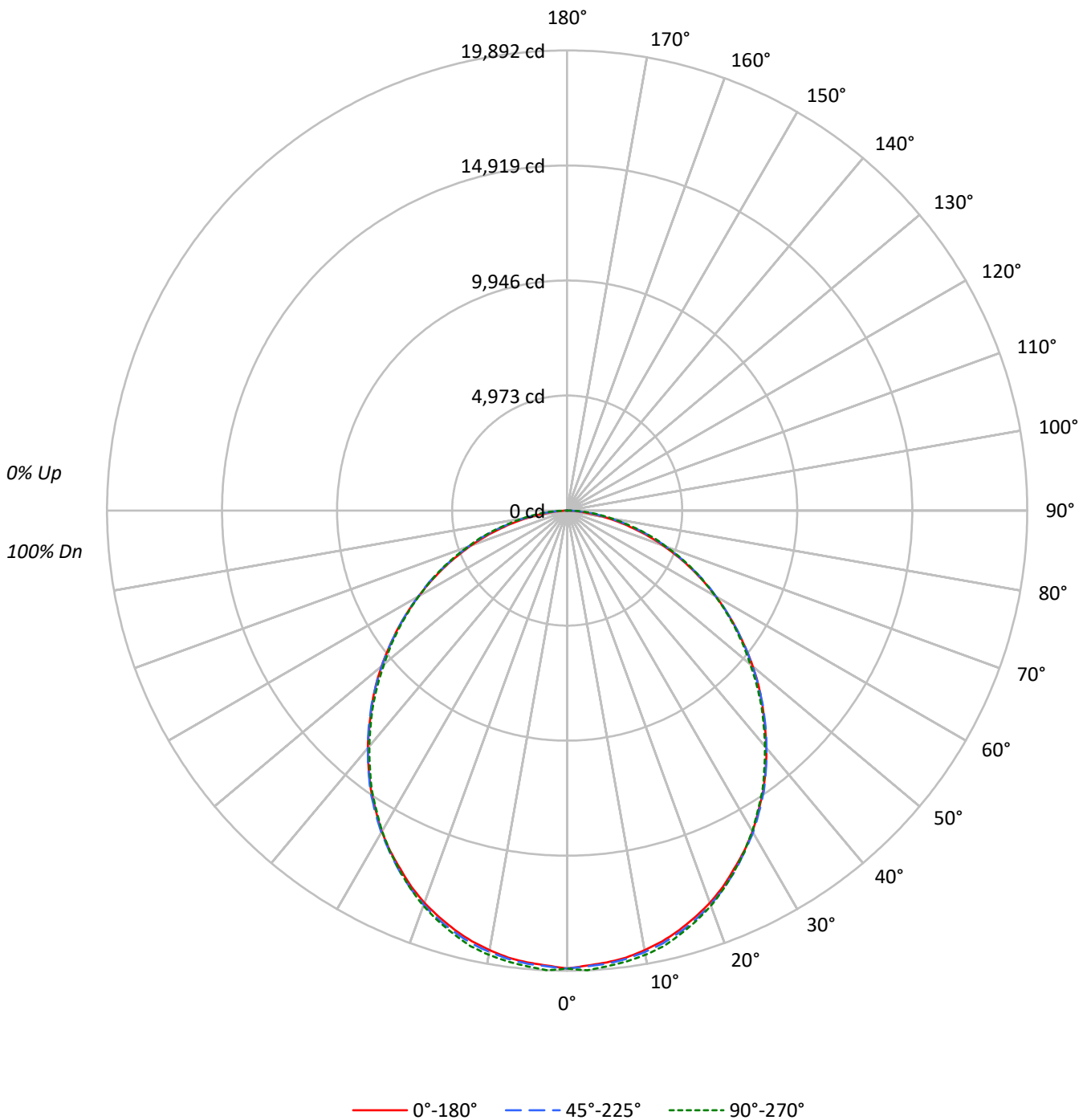
Lumens per Lamp: N/A
Luminaire Lumens: 51710.0 lumens
Efficiency: N/A
Efficacy: 140.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	26635	26635	26635
5°	26484	26559	26710
10°	26363	26470	26642
15°	26132	26274	26402
20°	25836	25960	26036
25°	25358	25502	25464
30°	24890	24957	24855
35°	24274	24336	24181
40°	23544	23544	23363
45°	22721	22783	22551
50°	21940	21903	21629
55°	20991	20994	20805
60°	19974	19997	19919
65°	18825	19014	19062
70°	17388	17863	17883
75°	15366	16361	16616
80°	12603	14329	15139
85°	8745	12031	13604



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1872.2	3.6
10°-20°	5326.0	10.3
20°-30°	7914.8	15.3
30°-40°	9254.5	17.9
40°-50°	9227.0	17.8
50°-60°	8005.6	15.5
60°-70°	5913.1	11.4
70°-80°	3310.7	6.4
80°-90°	883.4	1.7
90°-100°	2.7	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°	15113.1	29.2
0°-40°	24367.6	47.1
0°-60°	41600.2	80.4
0°-90°	51707.4	100.0
90°-120°	2.7	0.0
90°-150°	2.7	0.0
90°-180°	3.0	0.0
0°-180°	51710.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	19796	19796	19796	19796	19796	
5°	19608	19732	19664	19751	19776	###
15°	18760	18891	18862	18953	18954	5291
25°	17081	17218	17178	17215	17152	7875
35°	14778	14908	14816	14813	14722	9231
45°	11941	12068	11973	11924	11851	9218
55°	8948	9010	8950	8934	8869	8002
65°	5913	5971	5972	6002	5987	5848
75°	2956	3044	3147	3170	3196	3148
85°	566	685	779	848	881	688
90°	0	13	15	34	32	23
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#

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	19796.0	19796.0	19796.0	19796.0	19796.0
2.5°	19687.8	19804.9	19723.0	19801.1	19891.7
5°	19608.5	19731.8	19663.9	19750.7	19775.9
7.5°	19492.7	19612.3	19546.8	19633.7	19660.1
10°	19296.3	19425.9	19374.3	19472.5	19500.2
12.5°	19067.2	19189.3	19155.3	19269.8	19288.7
15°	18760.0	18890.9	18862.0	18952.6	18953.9
17.5°	18420.1	18543.5	18522.1	18592.5	18590.0
20°	18043.7	18175.9	18130.5	18207.3	18183.4
22.5°	17598.0	17739.0	17682.4	17746.6	17686.1
25°	17080.6	17217.8	17177.6	17215.3	17152.4
27.5°	16579.6	16705.5	16622.4	16667.7	16601.0
30°	16020.6	16127.6	16063.4	16078.5	15998.0
32.5°	15392.5	15519.6	15441.5	15439.0	15353.4
35°	14778.1	14907.8	14815.9	14813.4	14721.5
37.5°	14098.3	14219.2	14110.9	14117.2	14010.2
40°	13404.7	13509.2	13404.7	13399.6	13301.4
42.5°	12651.8	12790.3	12694.6	12706.0	12575.1
45°	11940.6	12067.7	11973.3	11924.2	11851.2
47.5°	11231.8	11287.2	11209.2	11196.6	11093.3
50°	10481.5	10523.1	10463.9	10448.8	10333.0
52.5°	9706.0	9777.8	9702.3	9682.1	9605.3
55°	8948.2	9009.9	8949.5	8934.3	8868.9
57.5°	8185.3	8265.9	8204.2	8189.1	8136.2
60°	7422.4	7446.3	7431.2	7453.9	7402.3
62.5°	6664.6	6720.0	6737.6	6731.3	6691.0
65°	5913.0	5970.9	5972.2	6002.4	5987.3
67.5°	5143.8	5219.4	5240.8	5272.2	5286.1
70°	4420.0	4477.9	4540.8	4559.7	4545.9
72.5°	3691.1	3784.2	3854.7	3871.1	3930.3
75°	2955.9	3044.0	3147.2	3169.9	3196.3
77.5°	2273.6	2390.6	2483.8	2514.0	2546.7
80°	1626.5	1756.2	1849.3	1890.9	1953.8
82.5°	1067.5	1199.7	1294.1	1335.7	1412.5
85°	566.5	684.8	779.3	848.5	881.2
87.5°	167.4	268.1	322.3	342.4	371.4
90°	0.0	12.6	15.1	34.0	31.5
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)