

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-L740-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-L740-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

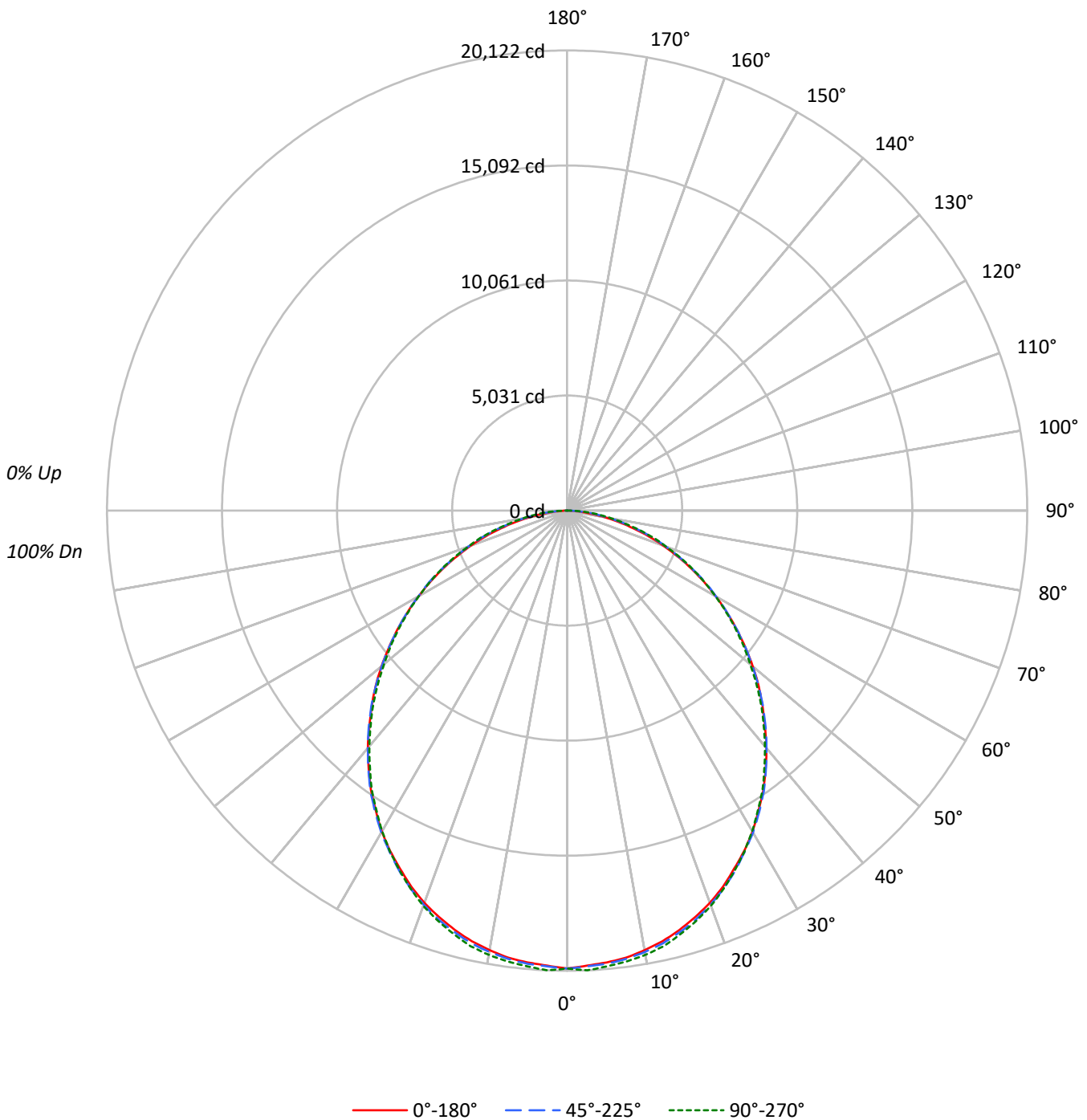
Lumens per Lamp: N/A
Luminaire Lumens: 52309.0 lumens
Efficiency: N/A
Efficacy: 141.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	26944	26944	26944
5°	26791	26866	27019
10°	26669	26777	26951
15°	26434	26578	26708
20°	26135	26261	26337
25°	25651	25797	25759
30°	25179	25246	25143
35°	24555	24618	24461
40°	23817	23817	23633
45°	22984	23047	22812
50°	22194	22157	21880
55°	21234	21237	21045
60°	20205	20229	20150
65°	19043	19234	19282
70°	17589	18070	18090
75°	15544	16551	16809
80°	12748	14495	15314
85°	8847	12170	13761



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1893.9	3.6
10°-20°	5387.7	10.3
20°-30°	8006.5	15.3
30°-40°	9361.7	17.9
40°-50°	9333.9	17.8
50°-60°	8098.4	15.5
60°-70°	5981.6	11.4
70°-80°	3349.0	6.4
80°-90°	893.6	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°	15288.1	29.2
0°-40°	24649.9	47.1
0°-60°	42082.1	80.4
0°-90°	52306.3	100.0
90°-120°	2.7	0.0
90°-150°	2.7	0.0
90°-180°	3.0	0.0
0°-180°	52309.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	20025	20025	20025	20025	20025	
5°	19836	19960	19892	19980	20005	###
15°	18977	19110	19080	19172	19173	5352
25°	17278	17417	17376	17415	17351	7966
35°	14949	15080	14988	14985	14892	9338
45°	12079	12208	12112	12062	11988	9325
55°	9052	9114	9053	9038	8972	8094
65°	5982	6040	6041	6072	6057	5916
75°	2990	3079	3184	3207	3233	3184
85°	573	693	788	858	891	696
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#

CATALOG NUMBER: HBLED-LD5-60HE-W-FLI-UNV-L740-ED4-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	20025.4	20025.4	20025.4	20025.4	20025.4
2.5°	19915.8	20034.3	19951.5	20030.5	20122.1
5°	19835.6	19960.4	19891.6	19979.5	20005.0
7.5°	19718.5	19839.4	19773.2	19861.1	19887.8
10°	19519.8	19651.0	19598.7	19698.1	19726.1
12.5°	19288.0	19411.5	19377.2	19493.1	19512.2
15°	18977.3	19109.7	19080.4	19172.1	19173.4
17.5°	18633.5	18758.3	18736.6	18807.9	18805.4
20°	18252.7	18386.4	18340.6	18418.2	18394.0
22.5°	17801.9	17944.5	17887.2	17952.1	17891.0
25°	17278.5	17417.3	17376.5	17414.7	17351.1
27.5°	16771.6	16899.0	16814.9	16860.8	16793.3
30°	16206.2	16314.5	16249.5	16264.8	16183.3
32.5°	15570.8	15699.4	15620.4	15617.9	15531.3
35°	14949.3	15080.5	14987.5	14985.0	14892.0
37.5°	14261.6	14383.9	14274.4	14280.7	14172.5
40°	13559.9	13665.6	13559.9	13554.8	13455.5
42.5°	12798.4	12938.5	12841.7	12853.2	12720.7
45°	12078.9	12207.5	12112.0	12062.3	11988.5
47.5°	11361.9	11418.0	11339.0	11326.3	11221.8
50°	10602.9	10645.0	10585.1	10569.8	10452.7
52.5°	9818.5	9891.1	9814.7	9794.3	9716.6
55°	9051.8	9114.2	9053.1	9037.8	8971.6
57.5°	8280.1	8361.6	8299.2	8283.9	8230.5
60°	7508.4	7532.6	7517.3	7540.2	7488.0
62.5°	6741.8	6797.8	6815.6	6809.3	6768.5
65°	5981.5	6040.1	6041.4	6071.9	6056.6
67.5°	5203.4	5279.8	5301.5	5333.3	5347.3
70°	4471.2	4529.7	4593.4	4612.5	4598.5
72.5°	3733.8	3828.1	3899.4	3915.9	3975.8
75°	2990.1	3079.3	3183.7	3206.6	3233.3
77.5°	2299.9	2418.3	2512.6	2543.1	2576.2
80°	1645.3	1776.5	1870.7	1912.8	1976.4
82.5°	1079.9	1213.6	1309.1	1351.2	1428.8
85°	573.1	692.8	788.3	858.3	891.4
87.5°	169.4	271.2	326.0	346.4	375.7
90°	0.0	12.7	15.3	34.4	31.8
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)