

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-LD5-12HE-W-FLI-UNV-L840-ED1-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-LD5-12HE-W-FLI-UNV-L840-ED1-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

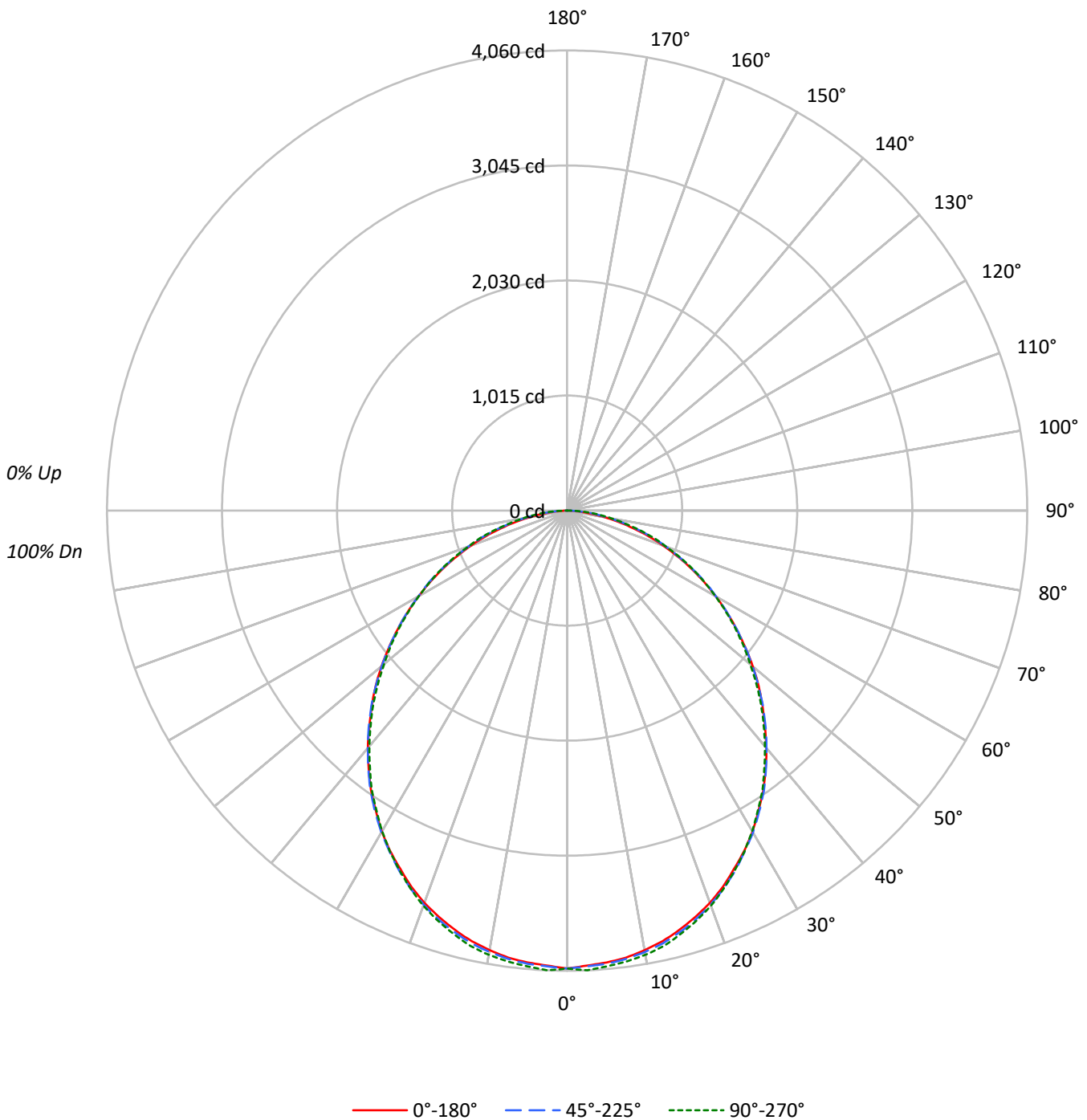
Lumens per Lamp: N/A
Luminaire Lumens: 10554.0 lumens
Efficiency: N/A
Efficacy: 145.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 72.6
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°	5436	5436	5436
5°	5405	5421	5452
10°	5381	5403	5438
15°	5333	5362	5389
20°	5273	5298	5314
25°	5176	5205	5197
30°	5080	5094	5073
35°	4954	4967	4935
40°	4805	4805	4768
45°	4637	4650	4603
50°	4478	4470	4415
55°	4284	4285	4246
60°	4077	4081	4066
65°	3842	3881	3890
70°	3549	3646	3650
75°	3136	3339	3392
80°	2572	2924	3090
85°	1785	2455	2777



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	382.1	3.6
10°-20°	1087.0	10.3
20°-30°	1615.4	15.3
30°-40°	1888.8	17.9
40°-50°	1883.2	17.8
50°-60°	1633.9	15.5
60°-70°	1206.9	11.4
70°-80°	675.7	6.4
80°-90°	180.3	1.7
90°-100°	0.5	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°	3084.6	29.2
0°-40°	4973.4	47.1
0°-60°	8490.6	80.4
0°-90°	10553.4	100.0
90°-120°	0.5	0.0
90°-150°	0.5	0.0
90°-180°	1.0	0.0
0°-180°	10554.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4040	4040	4040	4040	4040	
5°	4002	4027	4013	4031	4036	380
15°	3829	3856	3850	3868	3868	1080
25°	3486	3514	3506	3514	3501	1607
35°	3016	3043	3024	3023	3005	1884
45°	2437	2463	2444	2434	2419	1881
55°	1826	1839	1827	1824	1810	1633
65°	1207	1219	1219	1225	1222	1194
75°	603	621	642	647	652	642
85°	116	140	159	173	180	140
90°	0	3	3	7	6	5
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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4040.4	4040.4	4040.4	4040.4	4040.4
2.5°	4018.3	4042.2	4025.5	4041.4	4059.9
5°	4002.1	4027.3	4013.4	4031.1	4036.3
7.5°	3978.4	4002.9	3989.5	4007.2	4012.6
10°	3938.4	3964.8	3954.3	3974.3	3980.0
12.5°	3891.6	3916.5	3909.6	3933.0	3936.8
15°	3828.9	3855.6	3849.7	3868.2	3868.5
17.5°	3759.5	3784.7	3780.3	3794.7	3794.2
20°	3682.7	3709.7	3700.4	3716.1	3711.2
22.5°	3591.8	3620.5	3609.0	3622.1	3609.7
25°	3486.2	3514.2	3505.9	3513.6	3500.8
27.5°	3383.9	3409.6	3392.6	3401.9	3388.3
30°	3269.8	3291.6	3278.5	3281.6	3265.2
32.5°	3141.6	3167.5	3151.6	3151.1	3133.6
35°	3016.2	3042.7	3023.9	3023.4	3004.6
37.5°	2877.5	2902.1	2880.0	2881.3	2859.5
40°	2735.9	2757.2	2735.9	2734.9	2714.8
42.5°	2582.2	2610.5	2591.0	2593.3	2566.6
45°	2437.1	2463.0	2443.7	2433.7	2418.8
47.5°	2292.4	2303.7	2287.8	2285.2	2264.1
50°	2139.3	2147.8	2135.7	2132.6	2109.0
52.5°	1981.0	1995.6	1980.2	1976.1	1960.4
55°	1826.3	1838.9	1826.6	1823.5	1810.1
57.5°	1670.6	1687.1	1674.5	1671.4	1660.6
60°	1514.9	1519.8	1516.7	1521.3	1510.8
62.5°	1360.2	1371.5	1375.1	1373.9	1365.6
65°	1206.8	1218.7	1218.9	1225.1	1222.0
67.5°	1049.9	1065.3	1069.6	1076.1	1078.9
70°	902.1	913.9	926.8	930.6	927.8
72.5°	753.3	772.4	786.7	790.1	802.2
75°	603.3	621.3	642.3	647.0	652.4
77.5°	464.0	487.9	506.9	513.1	519.8
80°	332.0	358.4	377.4	385.9	398.8
82.5°	217.9	244.9	264.1	272.6	288.3
85°	115.6	139.8	159.0	173.2	179.9
87.5°	34.2	54.7	65.8	69.9	75.8
90°	0.0	2.6	3.1	6.9	6.4
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)