

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-L850-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-L850-ED1-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

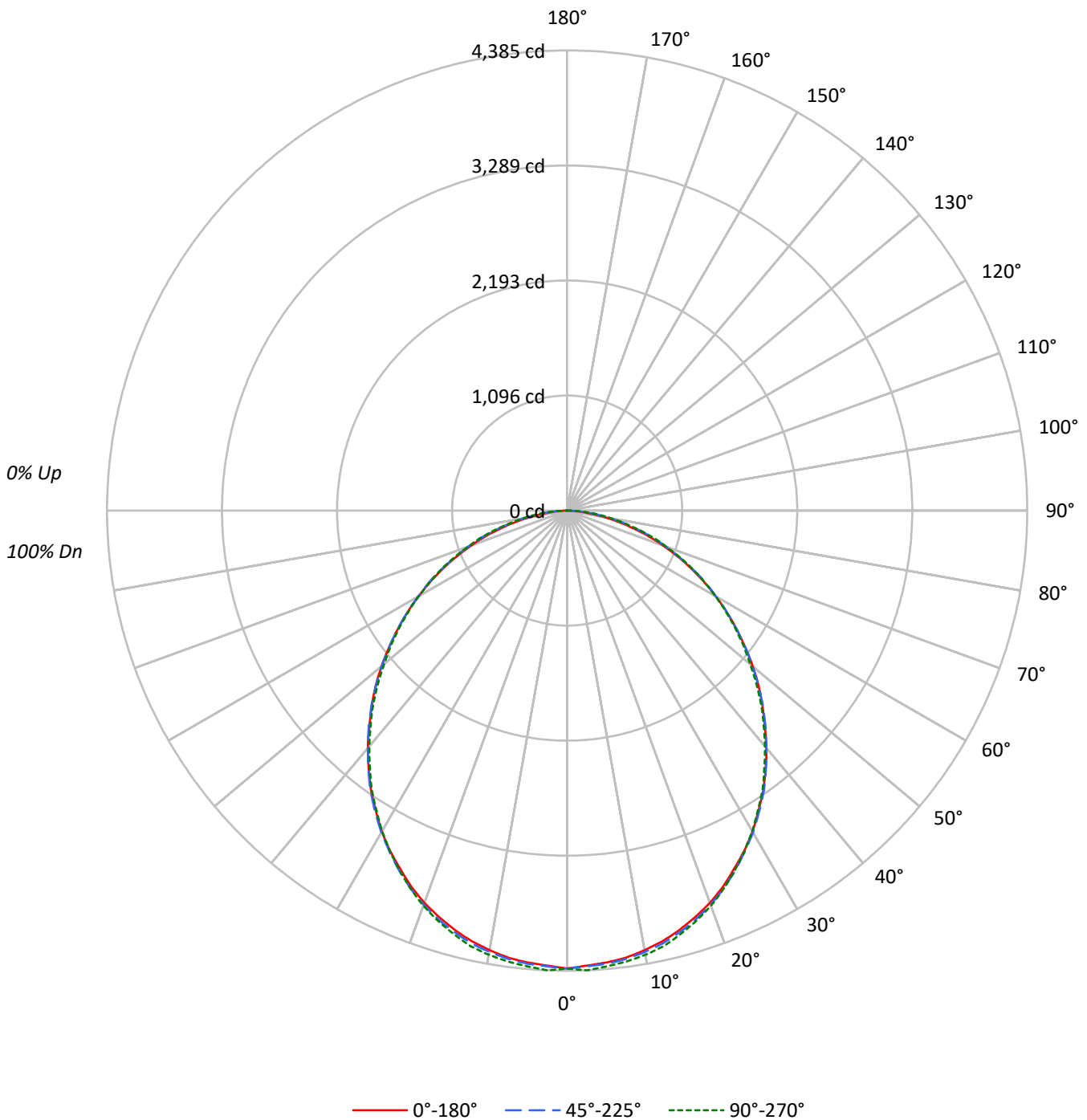
Lumens per Lamp: N/A
Luminaire Lumens: 11399.0 lumens
Efficiency: N/A
Efficacy: 157.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	5872	5872	5872
5°	5838	5855	5888
10°	5812	5835	5873
15°	5761	5792	5820
20°	5695	5723	5739
25°	5590	5622	5613
30°	5487	5501	5479
35°	5351	5365	5330
40°	5190	5190	5150
45°	5009	5022	4971
50°	4837	4828	4768
55°	4627	4628	4586
60°	4403	4408	4391
65°	4150	4191	4202
70°	3833	3938	3942
75°	3387	3607	3663
80°	2778	3159	3337
85°	1928	2652	3000



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	412.7	3.6
10°-20°	1174.1	10.3
20°-30°	1744.8	15.3
30°-40°	2040.1	17.9
40°-50°	2034.0	17.8
50°-60°	1764.8	15.5
60°-70°	1303.5	11.4
70°-80°	729.8	6.4
80°-90°	194.7	1.7
90°-100°	0.6	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°	3331.5	29.2
0°-40°	5371.6	47.1
0°-60°	9170.4	80.4
0°-90°	11398.4	100.0
90°-120°	0.6	0.0
90°-150°	0.6	0.0
90°-180°	1.0	0.0
0°-180°	11399.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4364	4364	4364	4364	4364	
5°	4322	4350	4335	4354	4359	411
15°	4136	4164	4158	4178	4178	1166
25°	3765	3796	3787	3795	3781	1736
35°	3258	3286	3266	3266	3245	2035
45°	2632	2660	2639	2629	2612	2032
55°	1972	1986	1973	1970	1955	1764
65°	1304	1316	1316	1323	1320	1289
75°	652	671	694	699	705	694
85°	125	151	172	187	194	152
90°	0	3	3	8	7	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°	4363.9	4363.9	4363.9	4363.9	4363.9
2.5°	4340.0	4365.8	4347.8	4365.0	4385.0
5°	4322.5	4349.7	4334.7	4353.9	4359.4
7.5°	4297.0	4323.3	4308.9	4328.1	4333.9
10°	4253.7	4282.3	4270.9	4292.5	4298.6
12.5°	4203.2	4230.1	4222.6	4247.9	4252.0
15°	4135.5	4164.3	4157.9	4177.9	4178.2
17.5°	4060.5	4087.7	4083.0	4098.6	4098.0
20°	3977.6	4006.7	3996.7	4013.6	4008.4
22.5°	3879.3	3910.4	3897.9	3912.1	3898.8
25°	3765.3	3795.5	3786.6	3795.0	3781.1
27.5°	3654.8	3682.6	3664.3	3674.2	3659.5
30°	3531.6	3555.2	3541.0	3544.4	3526.6
32.5°	3393.1	3421.2	3403.9	3403.4	3384.5
35°	3257.7	3286.3	3266.0	3265.5	3245.2
37.5°	3107.8	3134.5	3110.6	3112.0	3088.4
40°	2954.9	2978.0	2954.9	2953.8	2932.2
42.5°	2789.0	2819.5	2798.4	2800.9	2772.1
45°	2632.2	2660.2	2639.4	2628.6	2612.5
47.5°	2476.0	2488.2	2471.0	2468.2	2445.4
50°	2310.6	2319.7	2306.7	2303.3	2277.8
52.5°	2139.6	2155.4	2138.8	2134.3	2117.4
55°	1972.5	1986.1	1972.8	1969.5	1955.1
57.5°	1804.4	1822.1	1808.5	1805.2	1793.6
60°	1636.2	1641.5	1638.1	1643.1	1631.8
62.5°	1469.1	1481.4	1485.2	1483.9	1475.0
65°	1303.5	1316.2	1316.5	1323.2	1319.8
67.5°	1133.9	1150.6	1155.3	1162.2	1165.3
70°	974.3	987.1	1001.0	1005.1	1002.1
72.5°	813.7	834.2	849.7	853.3	866.4
75°	651.6	671.0	693.8	698.8	704.6
77.5°	501.2	527.0	547.5	554.2	561.4
80°	358.5	387.1	407.7	416.8	430.7
82.5°	235.3	264.5	285.3	294.4	311.4
85°	124.9	151.0	171.8	187.0	194.3
87.5°	36.9	59.1	71.0	75.5	81.9
90°	0.0	2.8	3.3	7.5	6.9
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)