

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-LD5-12SE-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-LD5-12SE-W-FLI-UNV-L850-ED1-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

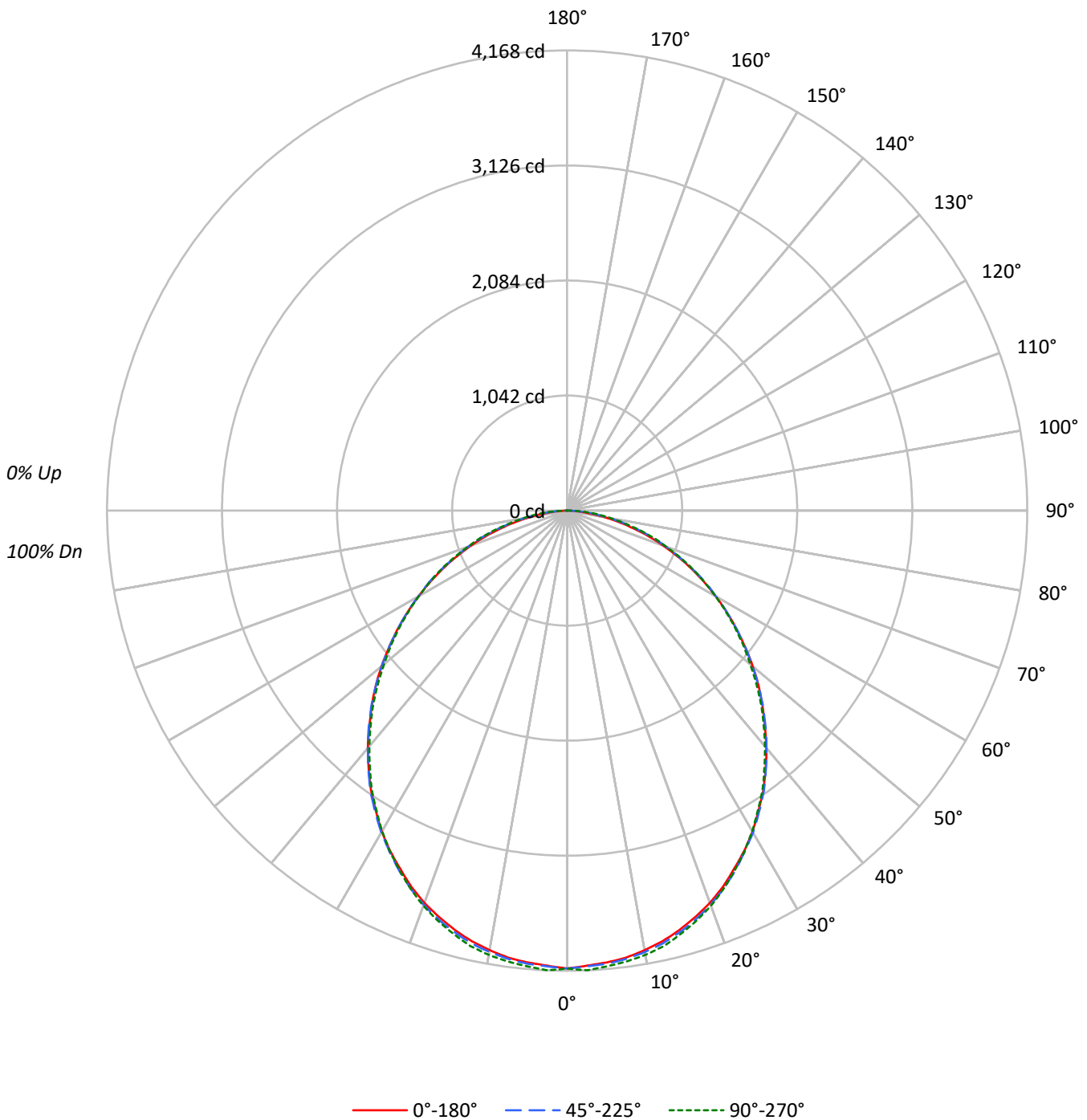
Lumens per Lamp: N/A
Luminaire Lumens: 10835.0 lumens
Efficiency: N/A
Efficacy: 141.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 76.6
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



TEST NUMBER: P#
CATALOG NUMBER: HBLED-LD5-12SE-W-FLI-UNV-L850-ED1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-12SE-W-FLI-UNV-L850-ED1-U

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°	5581	5581	5581
5°	5549	5565	5597
10°	5524	5546	5582
15°	5476	5505	5532
20°	5414	5440	5455
25°	5313	5343	5336
30°	5215	5229	5208
35°	5086	5099	5067
40°	4933	4933	4895
45°	4761	4774	4725
50°	4597	4589	4532
55°	4398	4399	4359
60°	4185	4190	4174
65°	3945	3984	3994
70°	3643	3743	3747
75°	3220	3428	3481
80°	2641	3002	3172
85°	1832	2521	2850



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-12SE-W-FLI-UNV-L850-ED1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	392.3	3.6
10°-20°	1116.0	10.3
20°-30°	1658.4	15.3
30°-40°	1939.1	17.9
40°-50°	1933.4	17.8
50°-60°	1677.4	15.5
60°-70°	1239.0	11.4
70°-80°	693.7	6.4
80°-90°	185.1	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°	3166.7	29.2
0°-40°	5105.8	47.1
0°-60°	8716.7	80.4
0°-90°	10834.4	100.0
90°-120°	0.6	0.0
90°-150°	0.6	0.0
90°-180°	1.0	0.0
0°-180°	10835.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4148	4148	4148	4148	4148	
5°	4109	4134	4120	4138	4144	390
15°	3931	3958	3952	3971	3972	1109
25°	3579	3608	3599	3607	3594	1650
35°	3096	3124	3104	3104	3085	1934
45°	2502	2529	2509	2498	2483	1931
55°	1875	1888	1875	1872	1858	1677
65°	1239	1251	1251	1258	1254	1225
75°	619	638	660	664	670	660
85°	119	144	163	178	185	144
90°	0	3	3	7	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



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-12SE-W-FLI-UNV-L850-ED1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4147.9	4147.9	4147.9	4147.9	4147.9
2.5°	4125.3	4149.8	4132.6	4149.0	4168.0
5°	4108.6	4134.5	4120.2	4138.4	4143.7
7.5°	4084.4	4109.4	4095.7	4113.9	4119.5
10°	4043.2	4070.4	4059.6	4080.2	4086.0
12.5°	3995.2	4020.8	4013.7	4037.7	4041.6
15°	3930.9	3958.3	3952.2	3971.2	3971.5
17.5°	3859.6	3885.5	3881.0	3895.8	3895.2
20°	3780.8	3808.5	3799.0	3815.1	3810.0
22.5°	3687.4	3716.9	3705.1	3718.5	3705.8
25°	3579.0	3607.7	3599.3	3607.2	3594.0
27.5°	3474.0	3500.4	3483.0	3492.5	3478.5
30°	3356.9	3379.3	3365.8	3369.0	3352.1
32.5°	3225.2	3251.9	3235.5	3235.0	3217.1
35°	3096.5	3123.7	3104.4	3103.9	3084.6
37.5°	2954.1	2979.4	2956.7	2958.0	2935.6
40°	2808.7	2830.6	2808.7	2807.7	2787.1
42.5°	2651.0	2680.0	2660.0	2662.3	2634.9
45°	2502.0	2528.6	2508.8	2498.5	2483.2
47.5°	2353.4	2365.1	2348.7	2346.1	2324.4
50°	2196.2	2204.9	2192.5	2189.4	2165.1
52.5°	2033.7	2048.8	2033.0	2028.7	2012.6
55°	1874.9	1887.9	1875.2	1872.0	1858.3
57.5°	1715.1	1732.0	1719.1	1715.9	1704.8
60°	1555.2	1560.3	1557.1	1561.8	1551.0
62.5°	1396.5	1408.1	1411.8	1410.4	1402.0
65°	1239.0	1251.1	1251.4	1257.7	1254.5
67.5°	1077.8	1093.6	1098.1	1104.7	1107.6
70°	926.1	938.3	951.5	955.4	952.5
72.5°	773.4	792.9	807.7	811.1	823.5
75°	619.4	637.8	659.5	664.2	669.7
77.5°	476.4	500.9	520.4	526.8	533.6
80°	340.8	368.0	387.5	396.2	409.4
82.5°	223.7	251.4	271.2	279.9	296.0
85°	118.7	143.5	163.3	177.8	184.6
87.5°	35.1	56.2	67.5	71.7	77.8
90°	0.0	2.6	3.2	7.1	6.6
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



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-12SE-W-FLI-UNV-L850-ED1-U

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)