

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-LD5-30SE-W-FLI-UNV-L850-ED3-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-LD5-30SE-W-FLI-UNV-L850-ED3-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

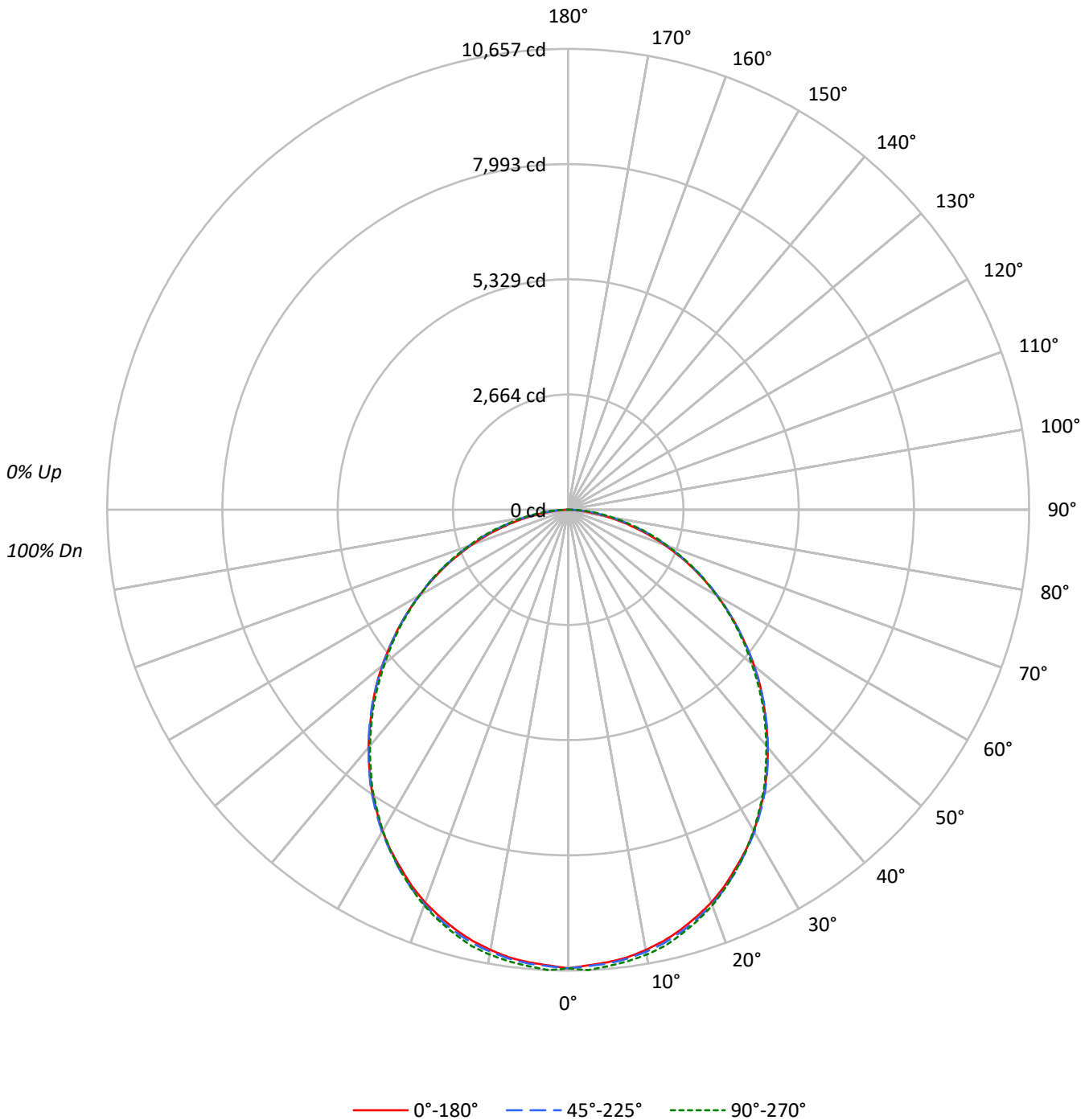
Lumens per Lamp: N/A
Luminaire Lumens: 27703.0 lumens
Efficiency: N/A
Efficacy: 143.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 193
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°	14270	14270	14270
5°	14188	14228	14310
10°	14124	14181	14273
15°	14000	14076	14144
20°	13841	13908	13948
25°	13585	13662	13642
30°	13335	13370	13316
35°	13004	13037	12954
40°	12613	12613	12516
45°	12172	12206	12081
50°	11754	11734	11588
55°	11245	11247	11146
60°	10701	10713	10672
65°	10085	10186	10212
70°	9315	9570	9581
75°	8232	8765	8902
80°	6752	7676	8110
85°	4685	6445	7288



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1003.0	3.6
10°-20°	2853.4	10.3
20°-30°	4240.3	15.3
30°-40°	4958.0	17.9
40°-50°	4943.2	17.8
50°-60°	4288.9	15.5
60°-70°	3167.9	11.4
70°-80°	1773.7	6.4
80°-90°	473.3	1.7
90°-100°	1.4	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°	8096.6	29.2
0°-40°	13054.6	47.1
0°-60°	22286.8	80.4
0°-90°	27701.6	100.0
90°-120°	1.4	0.0
90°-150°	1.4	0.0
90°-180°	1.0	0.0
0°-180°	27703.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10606	10606	10606	10606	10606	
5°	10505	10571	10535	10581	10595	998
15°	10050	10121	10105	10154	10154	2834
25°	9151	9224	9203	9223	9189	4219
35°	7917	7987	7937	7936	7887	4945
45°	6397	6465	6415	6388	6349	4938
55°	4794	4827	4795	4786	4751	4287
65°	3168	3199	3200	3216	3208	3133
75°	1584	1631	1686	1698	1712	1686
85°	304	367	418	455	472	369
90°	0	7	8	18	17	12
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-LD5-30SE-W-FLI-UNV-L850-ED3-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10605.5	10605.5	10605.5	10605.5	10605.5
2.5°	10547.5	10610.2	10566.4	10608.2	10656.7
5°	10505.0	10571.1	10534.7	10581.2	10594.7
7.5°	10443.0	10507.0	10472.0	10518.5	10532.7
10°	10337.7	10407.2	10379.6	10432.2	10447.0
12.5°	10215.0	10280.4	10262.2	10323.6	10333.7
15°	10050.4	10120.6	10105.1	10153.6	10154.3
17.5°	9868.3	9934.4	9923.0	9960.7	9959.4
20°	9666.7	9737.5	9713.2	9754.4	9741.5
22.5°	9427.9	9503.5	9473.1	9507.5	9475.1
25°	9150.7	9224.2	9202.7	9222.9	9189.2
27.5°	8882.3	8949.8	8905.2	8929.5	8893.8
30°	8582.9	8640.2	8605.8	8613.9	8570.7
32.5°	8246.3	8314.4	8272.6	8271.3	8225.4
35°	7917.2	7986.7	7937.4	7936.1	7886.8
37.5°	7553.0	7617.7	7559.7	7563.1	7505.8
40°	7181.4	7237.4	7181.4	7178.7	7126.1
42.5°	6778.1	6852.3	6801.0	6807.1	6736.9
45°	6397.0	6465.1	6414.6	6388.2	6349.1
47.5°	6017.3	6047.0	6005.2	5998.4	5943.1
50°	5615.3	5637.6	5605.9	5597.8	5535.8
52.5°	5199.9	5238.3	5197.9	5187.1	5145.9
55°	4793.9	4826.9	4794.6	4786.5	4751.4
57.5°	4385.2	4428.3	4395.3	4387.2	4358.9
60°	3976.5	3989.3	3981.2	3993.3	3965.7
62.5°	3570.5	3600.1	3609.6	3606.2	3584.6
65°	3167.8	3198.8	3199.5	3215.7	3207.6
67.5°	2755.7	2796.2	2807.7	2824.5	2832.0
70°	2367.9	2399.0	2432.7	2442.8	2435.4
72.5°	1977.4	2027.4	2065.1	2073.9	2105.6
75°	1583.6	1630.8	1686.1	1698.2	1712.4
77.5°	1218.0	1280.8	1330.7	1346.8	1364.4
80°	871.4	940.8	990.7	1013.0	1046.7
82.5°	571.9	642.7	693.3	715.6	756.7
85°	303.5	366.9	417.5	454.6	472.1
87.5°	89.7	143.7	172.7	183.4	199.0
90°	0.0	6.7	8.1	18.2	16.9
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)