

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: P730645

Luminaire Tested: **HBLED-LD5-18SE-W-FLI-UNV-L850**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P730645
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26703)
Test Lab: INNOVATION CENTER
Issue Date: 11/13/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-18SE-W-FLI-UNV-L850
Description: 18000 LUMEN, SE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16961.0 lumens
Efficiency: N/A
Efficacy: 147.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')
CIE Type: Direct

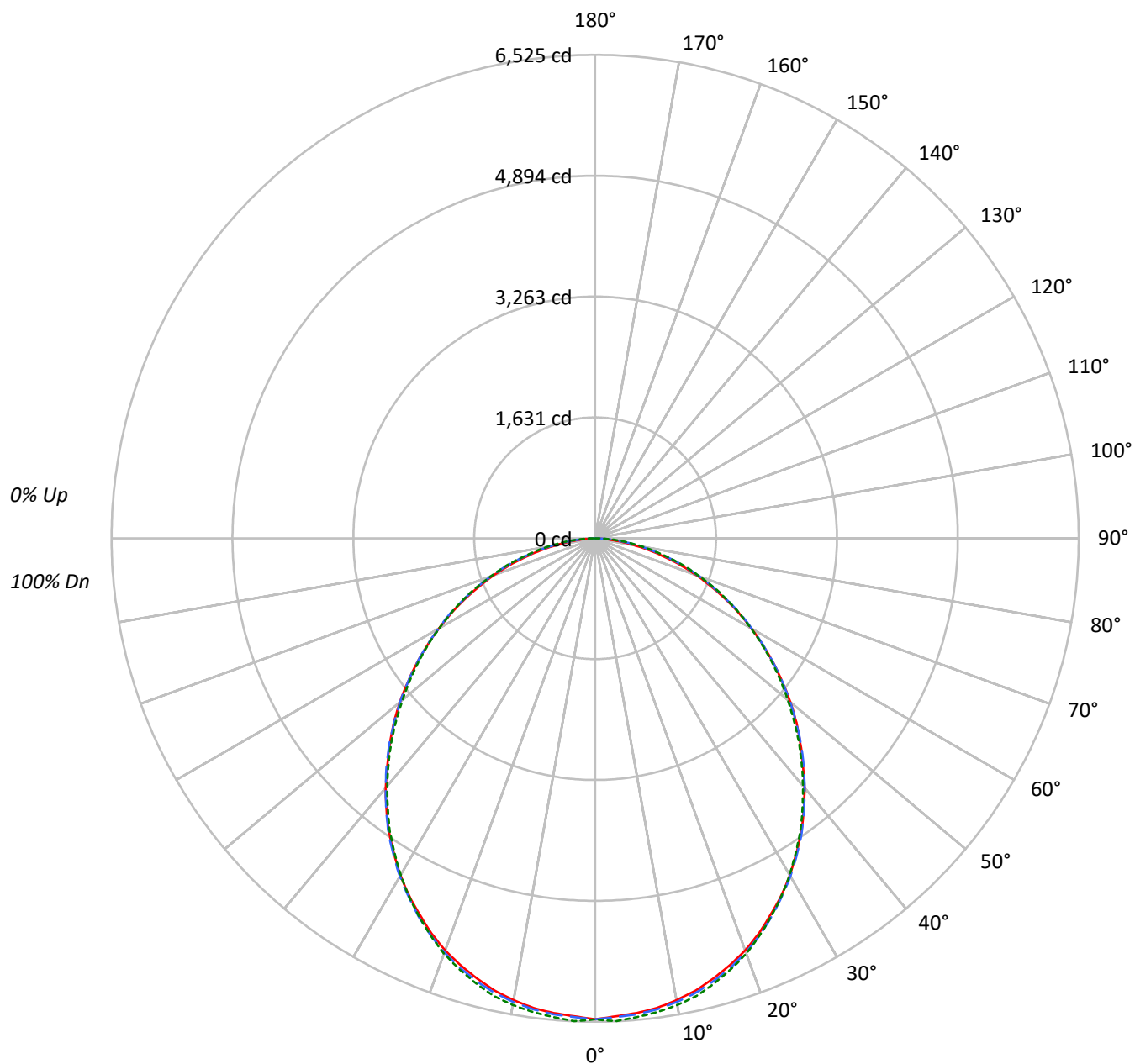
Input Watts (W): 114.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	10484	10484	10484
5°	10424	10454	10513
10°	10377	10419	10486
15°	10286	10342	10392
20°	10169	10218	10248
25°	9981	10038	10023
30°	9797	9823	9783
35°	9554	9579	9518
40°	9267	9267	9196
45°	8943	8967	8876
50°	8636	8621	8513
55°	8262	8263	8189
60°	7862	7871	7840
65°	7410	7484	7503
70°	6844	7031	7039
75°	6048	6440	6540
80°	4961	5640	5959
85°	3442	4735	5354



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	614.1	3.6
10°-20°	1747.0	10.3
20°-30°	2596.1	15.3
30°-40°	3035.5	17.9
40°-50°	3026.5	17.8
50°-60°	2625.9	15.5
60°-70°	1939.5	11.4
70°-80°	1085.9	6.4
80°-90°	289.7	1.7
90°-100°	0.9	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°	4957.1	29.2
0°-40°	7992.6	47.1
0°-60°	13645.0	80.4
0°-90°	16960.1	100.0
90°-120°	0.9	0.0
90°-150°	0.9	0.0
90°-180°	1.0	0.0
0°-180°	16961.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6493	6493	6493	6493	6493	
5°	6432	6472	6450	6478	6486	611
15°	6153	6196	6187	6216	6217	1735
25°	5602	5648	5634	5647	5626	2583
35°	4847	4890	4860	4859	4829	3028
45°	3917	3958	3927	3911	3887	3023
55°	2935	2955	2935	2930	2909	2625
65°	1940	1958	1959	1969	1964	1918
75°	970	998	1032	1040	1048	1033
85°	186	225	256	278	289	226
90°	0	4	5	11	10	8
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6493.1	6493.1	6493.1	6493.1	6493.1
2.5°	6457.7	6496.1	6469.2	6494.8	6524.6
5°	6431.6	6472.1	6449.8	6478.3	6486.5
7.5°	6393.7	6432.9	6411.4	6439.9	6448.6
10°	6329.2	6371.8	6354.8	6387.1	6396.1
12.5°	6254.1	6294.1	6283.0	6320.5	6326.7
15°	6153.3	6196.3	6186.8	6216.5	6216.9
17.5°	6041.8	6082.3	6075.3	6098.4	6097.6
20°	5918.4	5961.7	5946.9	5972.1	5964.2
22.5°	5772.2	5818.5	5799.8	5820.9	5801.1
25°	5602.5	5647.5	5634.3	5646.6	5626.0
27.5°	5438.1	5479.4	5452.2	5467.0	5445.1
30°	5254.8	5289.9	5268.9	5273.8	5247.4
32.5°	5048.8	5090.5	5064.8	5064.0	5035.9
35°	4847.3	4889.8	4859.7	4858.8	4828.7
37.5°	4624.3	4663.9	4628.4	4630.5	4595.4
40°	4396.8	4431.1	4396.8	4395.1	4362.9
42.5°	4149.8	4195.3	4163.9	4167.6	4124.7
45°	3916.6	3958.3	3927.3	3911.2	3887.2
47.5°	3684.1	3702.3	3676.6	3672.5	3638.7
50°	3438.0	3451.6	3432.2	3427.2	3389.3
52.5°	3183.6	3207.2	3182.4	3175.7	3150.6
55°	2935.0	2955.2	2935.4	2930.5	2909.0
57.5°	2684.8	2711.2	2691.0	2686.0	2668.7
60°	2434.6	2442.4	2437.5	2444.9	2428.0
62.5°	2186.0	2204.1	2210.0	2207.9	2194.7
65°	1939.5	1958.5	1958.9	1968.8	1963.8
67.5°	1687.2	1711.9	1719.0	1729.3	1733.8
70°	1449.7	1468.7	1489.4	1495.6	1491.0
72.5°	1210.7	1241.2	1264.4	1269.7	1289.1
75°	969.5	998.4	1032.3	1039.7	1048.4
77.5°	745.8	784.1	814.7	824.6	835.4
80°	533.5	576.0	606.6	620.2	640.9
82.5°	350.2	393.5	424.5	438.1	463.3
85°	185.8	224.7	255.6	278.3	289.0
87.5°	54.9	87.9	105.7	112.3	121.8
90°	0.0	4.1	4.9	11.1	10.3
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



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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



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - 90°-270°







107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)