

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: P730644

Luminaire Tested: **HBLED-LD5-18SE-W-FLI-UNV-L840**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P730644
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-L840
Description: 18000 LUMEN, SE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16635.0 lumens
Efficiency: N/A
Efficacy: 144.9 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

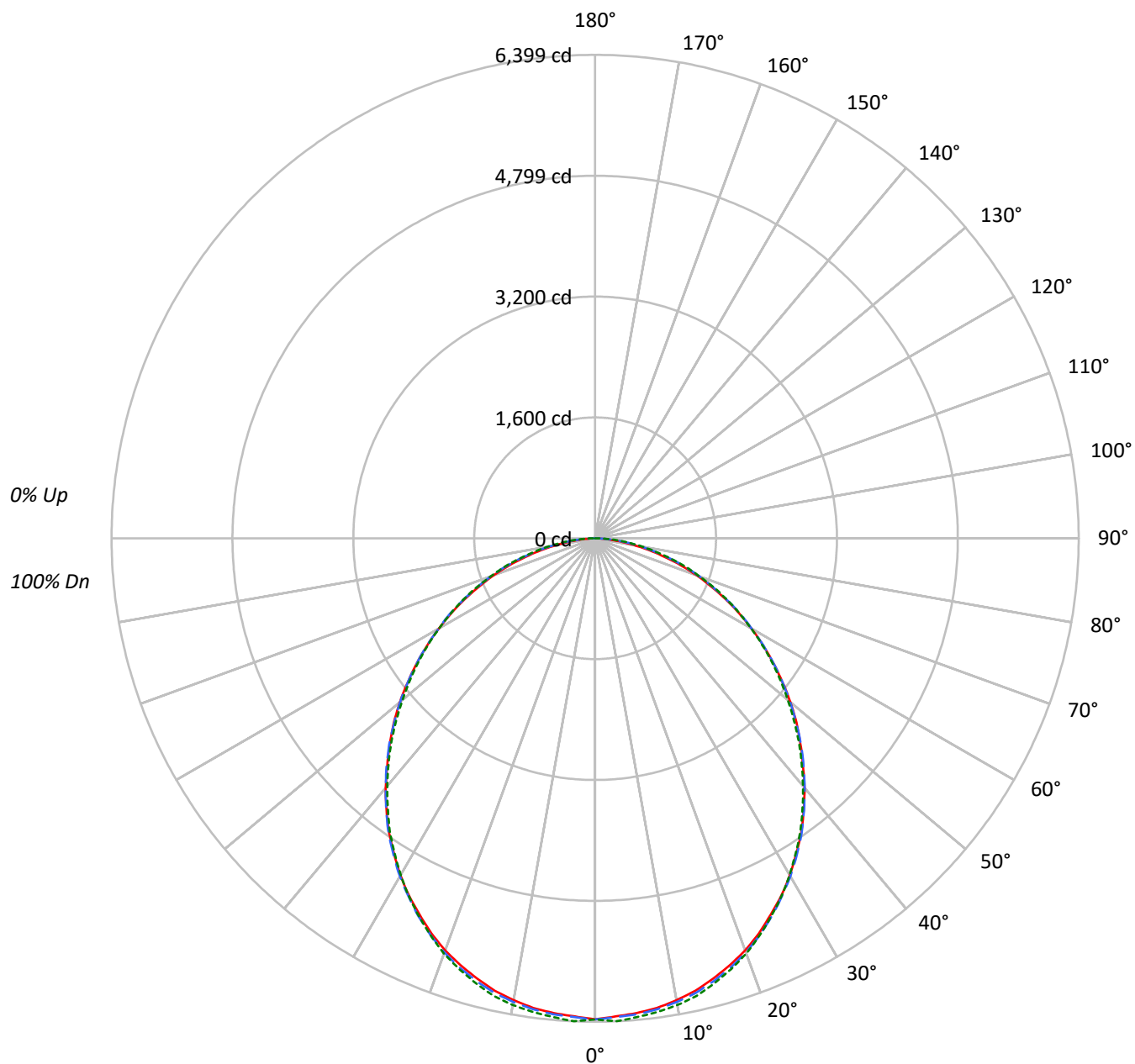
Input Watts (W): 114.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	10282	10282	10282
5°	10224	10253	10311
10°	10177	10218	10285
15°	10088	10143	10192
20°	9974	10022	10051
25°	9789	9845	9830
30°	9609	9634	9595
35°	9371	9395	9335
40°	9089	9089	9019
45°	8771	8795	8705
50°	8470	8455	8350
55°	8103	8104	8031
60°	7711	7720	7690
65°	7267	7340	7359
70°	6712	6896	6904
75°	5932	6316	6414
80°	4866	5531	5844
85°	3375	4644	5252



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	602.3	3.6
10°-20°	1713.4	10.3
20°-30°	2546.2	15.3
30°-40°	2977.2	17.9
40°-50°	2968.3	17.8
50°-60°	2575.4	15.5
60°-70°	1902.2	11.4
70°-80°	1065.0	6.4
80°-90°	284.2	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°	4861.9	29.2
0°-40°	7839.0	47.1
0°-60°	13382.7	80.4
0°-90°	16634.1	100.0
90°-120°	0.9	0.0
90°-150°	0.9	0.0
90°-180°	1.0	0.0
0°-180°	16635.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6368	6368	6368	6368	6368	
5°	6308	6348	6326	6354	6362	599
15°	6035	6077	6068	6097	6097	1702
25°	5495	5539	5526	5538	5518	2533
35°	4754	4796	4766	4765	4736	2970
45°	3841	3882	3852	3836	3812	2965
55°	2879	2898	2879	2874	2853	2574
65°	1902	1921	1921	1931	1926	1881
75°	951	979	1012	1020	1028	1013
85°	182	220	251	273	284	221
90°	0	4	5	11	10	7
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°	6368.3	6368.3	6368.3	6368.3	6368.3
2.5°	6333.5	6371.2	6344.9	6370.0	6399.2
5°	6308.0	6347.7	6325.8	6353.7	6361.9
7.5°	6270.8	6309.3	6288.2	6316.1	6324.6
10°	6207.6	6249.3	6232.7	6264.3	6273.2
12.5°	6133.9	6173.1	6162.2	6199.1	6205.1
15°	6035.1	6077.2	6067.8	6097.0	6097.4
17.5°	5925.7	5965.4	5958.5	5981.2	5980.4
20°	5804.7	5847.1	5832.6	5857.3	5849.5
22.5°	5661.3	5706.6	5688.4	5709.0	5689.6
25°	5494.8	5539.0	5526.0	5538.1	5517.9
27.5°	5333.6	5374.1	5347.4	5362.0	5340.5
30°	5153.8	5188.2	5167.6	5172.4	5146.5
32.5°	4951.7	4992.6	4967.5	4966.7	4939.2
35°	4754.1	4795.8	4766.3	4765.4	4735.9
37.5°	4535.4	4574.3	4539.5	4541.5	4507.1
40°	4312.2	4345.9	4312.2	4310.6	4279.1
42.5°	4070.1	4114.6	4083.9	4087.5	4045.4
45°	3841.3	3882.2	3851.8	3836.0	3812.5
47.5°	3613.3	3631.1	3606.0	3601.9	3568.7
50°	3371.9	3385.2	3366.2	3361.3	3324.1
52.5°	3122.4	3145.5	3121.2	3114.7	3090.0
55°	2878.6	2898.4	2879.0	2874.2	2853.1
57.5°	2633.2	2659.1	2639.3	2634.4	2617.4
60°	2387.8	2395.5	2390.6	2397.9	2381.3
62.5°	2144.0	2161.8	2167.5	2165.4	2152.5
65°	1902.2	1920.8	1921.2	1931.0	1926.1
67.5°	1654.8	1679.0	1686.0	1696.1	1700.5
70°	1421.9	1440.5	1460.8	1466.8	1462.4
72.5°	1187.4	1217.4	1240.1	1245.3	1264.3
75°	950.9	979.2	1012.5	1019.7	1028.2
77.5°	731.4	769.0	799.0	808.8	819.3
80°	523.3	564.9	594.9	608.3	628.5
82.5°	343.4	386.0	416.3	429.7	454.4
85°	182.2	220.3	250.7	272.9	283.5
87.5°	53.9	86.2	103.7	110.1	119.5
90°	0.0	4.1	4.8	10.9	10.1
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)