

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: P731118

Luminaire Tested: **HBLED-LD5-48SE-W-FLI-UNV-L840**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P731118
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-LD5-48SE-W-FLI-UNV-L840
Description: 48000 LUMEN, SE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 41978.0 lumens
Efficiency: N/A
Efficacy: 147.0 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

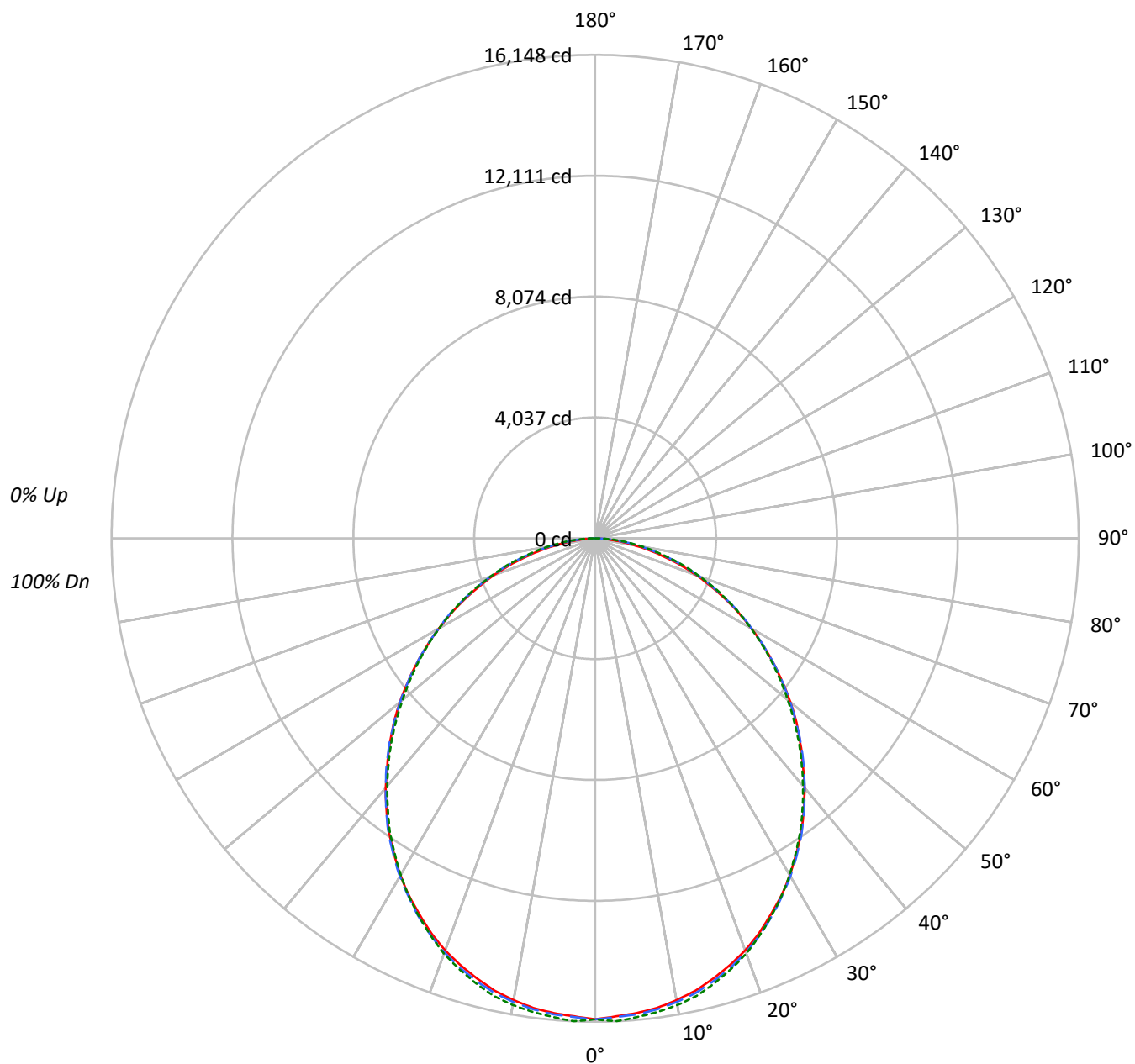
Input Watts (W): 285.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	25947	25947	25947
5°	25799	25872	26020
10°	25682	25786	25954
15°	25456	25595	25720
20°	25168	25289	25363
25°	24702	24843	24806
30°	24247	24312	24213
35°	23646	23707	23556
40°	22936	22936	22759
45°	22134	22194	21968
50°	21373	21337	21070
55°	20448	20451	20267
60°	19458	19481	19405
65°	18338	18522	18569
70°	16938	17402	17420
75°	14969	15939	16187
80°	12277	13958	14748
85°	8520	11719	13253



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1519.9	3.6
10°-20°	4323.7	10.3
20°-30°	6425.2	15.3
30°-40°	7512.8	17.9
40°-50°	7490.4	17.8
50°-60°	6498.9	15.5
60°-70°	4800.2	11.4
70°-80°	2687.6	6.4
80°-90°	717.1	1.7
90°-100°	2.2	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°	12268.8	29.2
0°-40°	19781.5	47.1
0°-60°	33770.9	80.4
0°-90°	41975.9	100.0
90°-120°	2.2	0.0
90°-150°	2.2	0.0
90°-180°	2.0	0.0
0°-180°	41978.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16070	16070	16070	16070	16070	
5°	15918	16018	15963	16034	16054	###
15°	15229	15336	15312	15386	15387	4295
25°	13866	13978	13945	13975	13924	6393
35°	11997	12102	12028	12025	11951	7494
45°	9693	9797	9720	9680	9621	7483
55°	7264	7314	7265	7253	7200	6496
65°	4800	4847	4848	4873	4860	4747
75°	2400	2471	2555	2573	2595	2556
85°	460	556	633	689	715	559
90°	0	10	12	28	26	19
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°	16070.4	16070.4	16070.4	16070.4	16070.4
2.5°	15982.5	16077.6	16011.1	16074.5	16148.2
5°	15918.1	16018.4	15963.0	16033.5	16054.0
7.5°	15824.2	15921.3	15868.1	15938.6	15960.1
10°	15664.6	15770.0	15728.0	15807.8	15830.3
12.5°	15478.7	15577.8	15550.2	15643.1	15658.5
15°	15229.3	15335.7	15312.1	15385.7	15386.7
17.5°	14953.4	15053.5	15036.1	15093.4	15091.3
20°	14647.9	14755.1	14718.4	14780.7	14761.2
22.5°	14286.1	14400.5	14354.4	14406.6	14357.6
25°	13866.0	13977.5	13944.8	13975.3	13924.3
27.5°	13459.3	13561.5	13493.9	13530.8	13476.6
30°	13005.5	13092.3	13040.3	13052.5	12987.1
32.5°	12495.5	12598.7	12535.3	12533.3	12463.8
35°	11996.8	12102.0	12027.6	12025.4	11950.9
37.5°	11444.9	11543.0	11455.2	11460.3	11373.5
40°	10881.8	10966.7	10881.8	10877.7	10798.1
42.5°	10270.7	10383.1	10305.5	10314.6	10208.4
45°	9693.4	9796.6	9720.0	9680.0	9620.7
47.5°	9118.1	9163.0	9099.5	9089.3	9005.6
50°	8508.9	8542.5	8494.5	8482.3	8388.3
52.5°	7879.4	7937.7	7876.2	7859.9	7797.6
55°	7264.1	7314.1	7265.1	7252.9	7199.7
57.5°	6644.8	6710.2	6660.2	6647.8	6605.1
60°	6025.6	6044.9	6032.7	6051.0	6009.2
62.5°	5410.3	5455.2	5469.6	5464.5	5431.8
65°	4800.1	4847.2	4848.2	4872.8	4860.4
67.5°	4175.7	4237.0	4254.5	4279.9	4291.2
70°	3588.0	3635.1	3686.3	3701.5	3690.2
72.5°	2996.4	3072.0	3129.3	3142.5	3190.6
75°	2399.6	2471.1	2555.0	2573.3	2594.8
77.5°	1845.7	1940.6	2016.3	2040.9	2067.5
80°	1320.4	1425.6	1501.2	1534.9	1586.1
82.5°	866.6	974.0	1050.6	1084.3	1146.7
85°	459.9	556.0	632.6	688.8	715.4
87.5°	135.9	217.6	261.6	277.9	301.5
90°	0.0	10.2	12.2	27.6	25.6
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



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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)