

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: P731116

Luminaire Tested: **HBLED-LD5-48SE-W-FLI-UNV-L750**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P731116
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-L750
Description: 48000 LUMEN, SE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 45036.0 lumens
Efficiency: N/A
Efficacy: 157.7 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

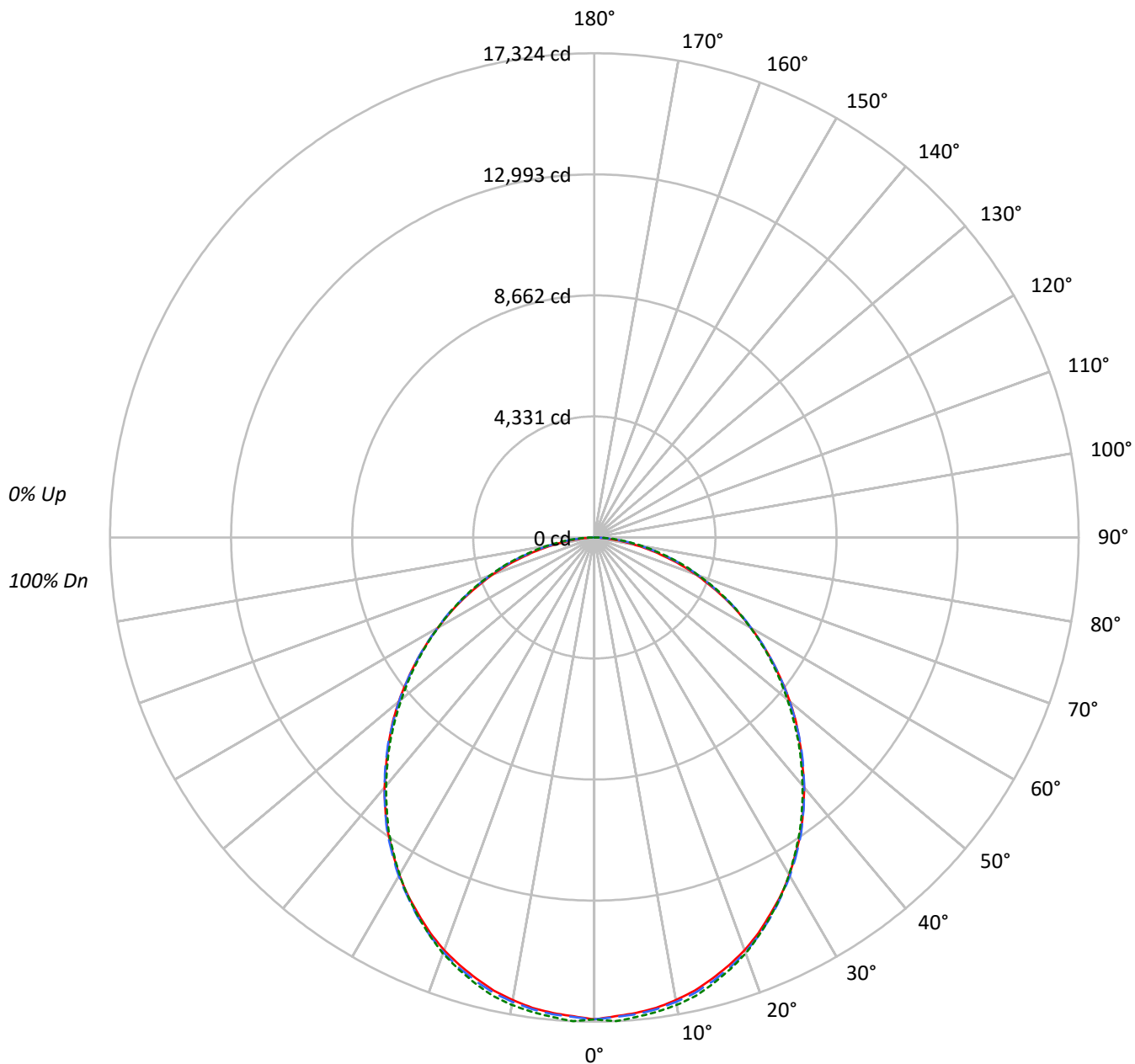
Input Watts (W): 285.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	27837	27837	27837
5°	27679	27757	27915
10°	27553	27665	27844
15°	27311	27459	27593
20°	27002	27132	27210
25°	26502	26652	26613
30°	26013	26083	25977
35°	25369	25434	25272
40°	24606	24606	24417
45°	23746	23811	23568
50°	22930	22891	22605
55°	21938	21941	21743
60°	20875	20900	20818
65°	19674	19871	19921
70°	18172	18670	18690
75°	16060	17100	17366
80°	13172	14975	15822
85°	9140	12573	14218



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1630.6	3.6
10°-20°	4638.6	10.3
20°-30°	6893.3	15.3
30°-40°	8060.1	17.9
40°-50°	8036.1	17.8
50°-60°	6972.4	15.5
60°-70°	5149.9	11.4
70°-80°	2883.4	6.4
80°-90°	769.3	1.7
90°-100°	2.3	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°	13162.5	29.2
0°-40°	21222.6	47.1
0°-60°	36231.1	80.4
0°-90°	45033.7	100.0
90°-120°	2.3	0.0
90°-150°	2.3	0.0
90°-180°	2.0	0.0
0°-180°	45036.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	17241	17241	17241	17241	17241	
5°	17078	17185	17126	17202	17224	###
15°	16339	16453	16428	16506	16508	4608
25°	14876	14996	14961	14993	14939	6858
35°	12871	12984	12904	12901	12822	8040
45°	10400	10510	10428	10385	10322	8028
55°	7793	7847	7794	7781	7724	6969
65°	5150	5200	5201	5228	5214	5093
75°	2574	2651	2741	2761	2784	2742
85°	493	596	679	739	768	599
90°	0	11	13	30	28	20
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°	17241.0	17241.0	17241.0	17241.0	17241.0
2.5°	17146.8	17248.9	17177.4	17245.5	17324.5
5°	17077.7	17185.3	17125.9	17201.5	17223.5
7.5°	16976.9	17081.1	17024.0	17099.7	17122.7
10°	16805.7	16918.8	16873.8	16959.4	16983.5
12.5°	16606.3	16712.6	16683.0	16782.7	16799.2
15°	16338.8	16452.9	16427.5	16506.5	16507.6
17.5°	16042.7	16150.1	16131.5	16193.0	16190.6
20°	15715.0	15829.9	15790.6	15857.4	15836.5
22.5°	15326.8	15449.6	15400.1	15456.1	15403.5
25°	14876.1	14995.7	14960.6	14993.4	14938.6
27.5°	14439.7	14549.4	14476.9	14516.4	14458.3
30°	13952.9	14046.1	13990.3	14003.4	13933.2
32.5°	13405.8	13516.5	13448.5	13446.4	13371.8
35°	12870.8	12983.6	12903.7	12901.4	12821.5
37.5°	12278.7	12383.9	12289.7	12295.2	12202.0
40°	11674.6	11765.6	11674.6	11670.1	11584.8
42.5°	11018.9	11139.5	11056.3	11066.0	10952.1
45°	10399.5	10510.2	10428.1	10385.2	10321.6
47.5°	9782.3	9830.5	9762.4	9751.4	9661.6
50°	9128.7	9164.9	9113.3	9100.2	8999.4
52.5°	8453.4	8515.9	8450.0	8432.5	8365.7
55°	7793.3	7846.9	7794.3	7781.2	7724.2
57.5°	7128.9	7199.1	7145.4	7132.1	7086.2
60°	6464.5	6485.3	6472.2	6491.8	6447.0
62.5°	5804.4	5852.6	5868.0	5862.5	5827.5
65°	5149.8	5200.3	5201.3	5227.8	5214.4
67.5°	4479.9	4545.7	4564.5	4591.7	4603.8
70°	3849.4	3899.9	3954.8	3971.1	3959.1
72.5°	3214.6	3295.8	3357.3	3371.4	3423.0
75°	2574.4	2651.1	2741.1	2760.7	2783.8
77.5°	1980.2	2082.0	2163.2	2189.6	2218.1
80°	1416.6	1529.4	1610.6	1646.7	1701.7
82.5°	929.8	1044.9	1127.1	1163.3	1230.2
85°	493.4	596.5	678.7	738.9	767.5
87.5°	145.8	233.5	280.6	298.2	323.5
90°	0.0	11.0	13.1	29.6	27.5
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)