

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: P730789

Luminaire Tested: **HBLED-LD5-24SE-W-FLI-UNV-L850**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P730789
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-LD5-24SE-W-FLI-UNV-L850
Description: 24000 LUMEN, SE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22117.0 lumens
Efficiency: N/A
Efficacy: 147.4 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

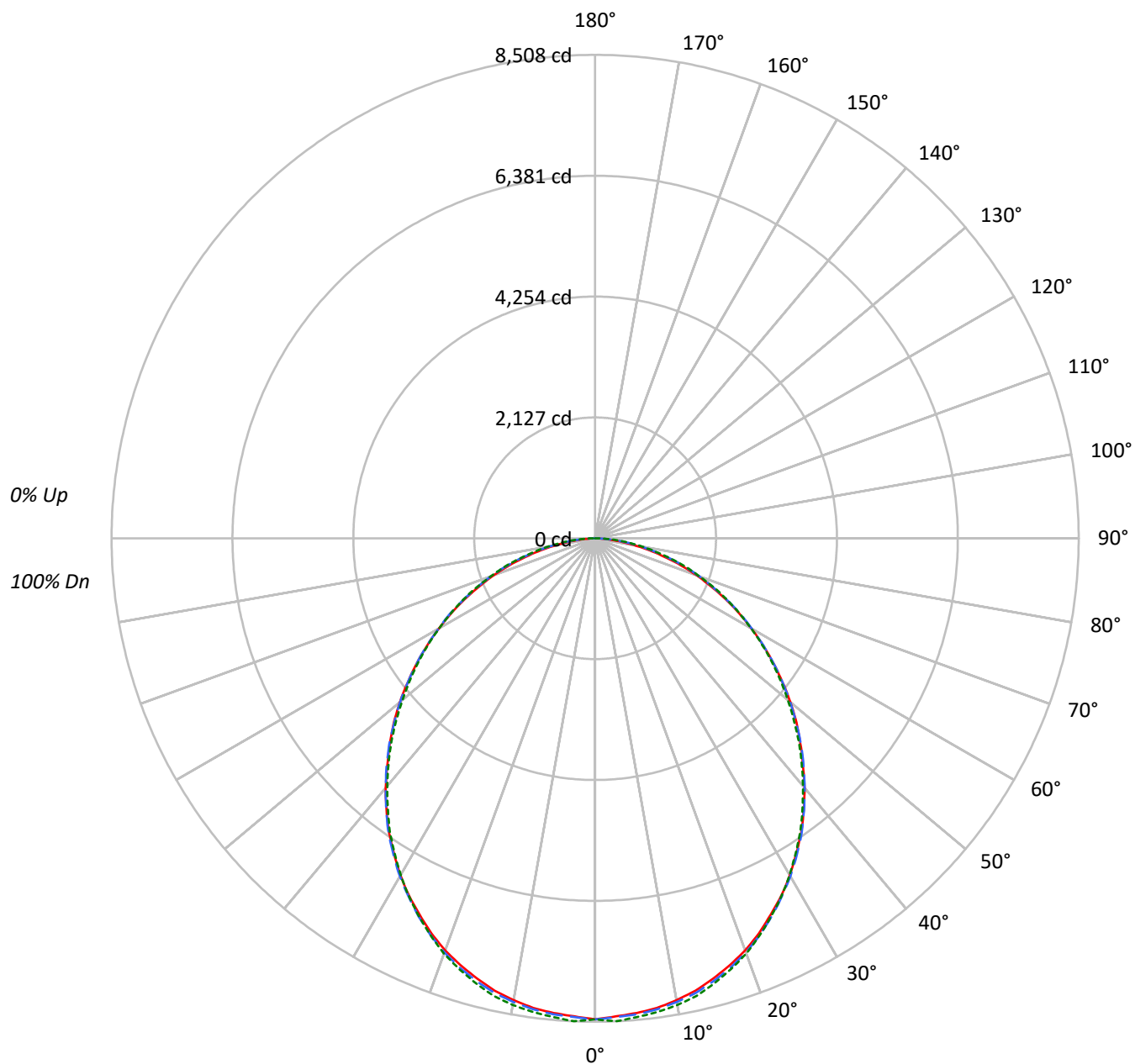
Input Watts (W): 150
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	13671	13671	13671
5°	13593	13631	13709
10°	13531	13586	13674
15°	13412	13485	13551
20°	13260	13324	13363
25°	13015	13089	13070
30°	12775	12809	12757
35°	12459	12491	12411
40°	12084	12084	11991
45°	11662	11694	11574
50°	11261	11242	11101
55°	10773	10775	10678
60°	10252	10264	10224
65°	9662	9759	9783
70°	8924	9169	9179
75°	7887	8397	8528
80°	6469	7355	7770
85°	4489	6174	6982



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	800.8	3.6
10°-20°	2278.0	10.3
20°-30°	3385.3	15.3
30°-40°	3958.3	17.9
40°-50°	3946.5	17.8
50°-60°	3424.1	15.5
60°-70°	2529.1	11.4
70°-80°	1416.0	6.4
80°-90°	377.8	1.7
90°-100°	1.1	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°	6464.1	29.2
0°-40°	10422.3	47.1
0°-60°	17792.9	80.4
0°-90°	22115.9	100.0
90°-120°	1.1	0.0
90°-150°	1.1	0.0
90°-180°	1.0	0.0
0°-180°	22117.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8467	8467	8467	8467	8467	
5°	8387	8440	8410	8448	8458	797
15°	8024	8080	8068	8106	8107	2263
25°	7306	7364	7347	7363	7336	3368
35°	6321	6376	6337	6336	6297	3948
45°	5107	5162	5121	5100	5069	3943
55°	3827	3854	3828	3821	3793	3422
65°	2529	2554	2554	2567	2561	2501
75°	1264	1302	1346	1356	1367	1346
85°	242	293	333	363	377	294
90°	0	5	6	14	14	10
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°	8467.0	8467.0	8467.0	8467.0	8467.0
2.5°	8420.7	8470.8	8435.8	8469.2	8508.0
5°	8386.8	8439.6	8410.5	8447.6	8458.4
7.5°	8337.3	8388.5	8360.4	8397.6	8408.9
10°	8253.2	8308.8	8286.7	8328.7	8340.5
12.5°	8155.3	8207.5	8192.9	8241.9	8250.0
15°	8023.9	8079.9	8067.5	8106.3	8106.8
17.5°	7878.5	7931.2	7922.1	7952.3	7951.2
20°	7717.6	7774.0	7754.7	7787.5	7777.2
22.5°	7526.9	7587.2	7562.9	7590.4	7564.6
25°	7305.6	7364.3	7347.1	7363.2	7336.3
27.5°	7091.3	7145.2	7109.6	7129.0	7100.4
30°	6852.2	6898.0	6870.6	6877.0	6842.6
32.5°	6583.5	6637.9	6604.5	6603.5	6566.8
35°	6320.8	6376.2	6337.0	6335.8	6296.6
37.5°	6030.0	6081.7	6035.4	6038.1	5992.3
40°	5733.3	5778.1	5733.3	5731.1	5689.2
42.5°	5411.3	5470.6	5429.7	5434.5	5378.5
45°	5107.2	5161.5	5121.2	5100.1	5068.9
47.5°	4804.0	4827.7	4794.3	4788.9	4744.8
50°	4483.1	4500.8	4475.5	4469.1	4419.6
52.5°	4151.4	4182.1	4149.8	4141.1	4108.4
55°	3827.2	3853.6	3827.8	3821.3	3793.3
57.5°	3501.0	3535.4	3509.1	3502.5	3480.0
60°	3174.7	3184.9	3178.4	3188.1	3166.1
62.5°	2850.5	2874.2	2881.8	2879.1	2861.8
65°	2529.0	2553.8	2554.4	2567.3	2560.8
67.5°	2200.1	2232.4	2241.6	2255.0	2260.9
70°	1890.4	1915.2	1942.2	1950.2	1944.3
72.5°	1578.7	1618.5	1648.7	1655.7	1681.0
75°	1264.3	1301.9	1346.1	1355.8	1367.1
77.5°	972.5	1022.5	1062.3	1075.3	1089.3
80°	695.7	751.1	791.0	808.7	835.7
82.5°	456.6	513.2	553.5	571.3	604.2
85°	242.3	292.9	333.3	362.9	376.9
87.5°	71.6	114.7	137.8	146.4	158.9
90°	0.0	5.4	6.4	14.5	13.5
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)