

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: P730717

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

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P730717
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-LD5-24HE-W-FLI-UNV-L850
Description: 24000 LUMEN, HE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22250.0 lumens
Efficiency: N/A
Efficacy: 155.6 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

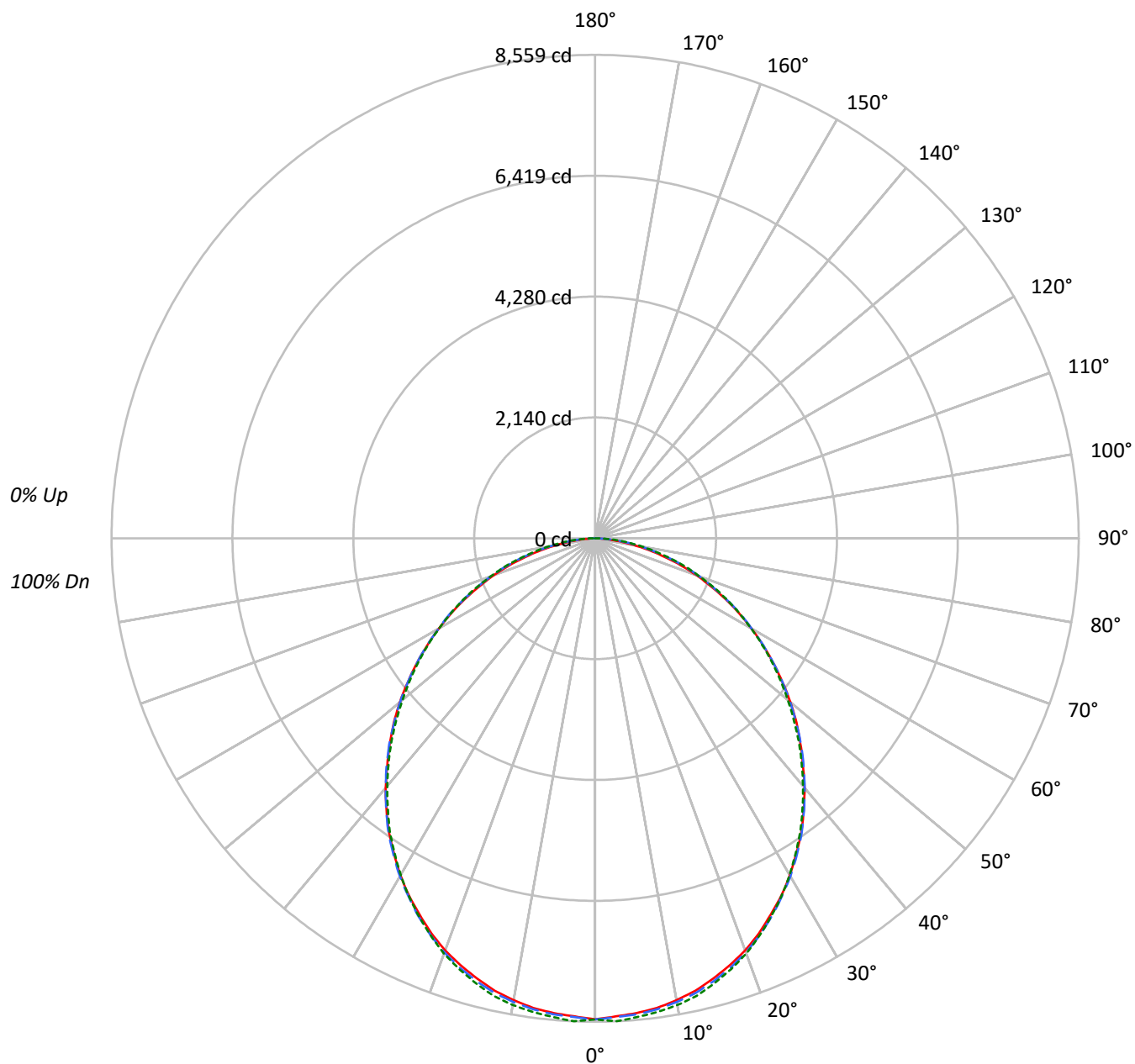
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	13753	13753	13753
5°	13675	13713	13791
10°	13613	13668	13757
15°	13493	13566	13632
20°	13340	13404	13443
25°	13093	13168	13148
30°	12852	12886	12834
35°	12533	12566	12486
40°	12157	12157	12063
45°	11732	11764	11644
50°	11328	11309	11168
55°	10838	10840	10742
60°	10313	10326	10285
65°	9720	9817	9842
70°	8978	9224	9234
75°	7934	8448	8580
80°	6508	7398	7817
85°	4516	6212	7025



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	805.6	3.6
10°-20°	2291.7	10.3
20°-30°	3405.6	15.3
30°-40°	3982.1	17.9
40°-50°	3970.2	17.8
50°-60°	3444.7	15.5
60°-70°	2544.3	11.4
70°-80°	1424.5	6.4
80°-90°	380.1	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°	6502.9	29.2
0°-40°	10485.0	47.1
0°-60°	17899.9	80.4
0°-90°	22248.9	100.0
90°-120°	1.1	0.0
90°-150°	1.1	0.0
90°-180°	1.0	0.0
0°-180°	22250.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8518	8518	8518	8518	8518	
5°	8437	8490	8461	8498	8509	801
15°	8072	8128	8116	8155	8156	2277
25°	7350	7409	7391	7408	7380	3388
35°	6359	6414	6375	6374	6334	3972
45°	5138	5193	5152	5131	5099	3966
55°	3850	3877	3851	3844	3816	3443
65°	2544	2569	2570	2583	2576	2516
75°	1272	1310	1354	1364	1375	1355
85°	244	295	335	365	379	296
90°	0	5	6	15	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°	8517.9	8517.9	8517.9	8517.9	8517.9
2.5°	8471.4	8521.8	8486.5	8520.1	8559.2
5°	8437.2	8490.4	8461.0	8498.4	8509.3
7.5°	8387.4	8438.9	8410.7	8448.1	8459.5
10°	8302.9	8358.7	8336.5	8378.8	8390.7
12.5°	8204.3	8256.8	8242.2	8291.5	8299.6
15°	8072.2	8128.5	8116.0	8155.0	8155.6
17.5°	7925.9	7978.9	7969.7	8000.1	7999.0
20°	7764.0	7820.8	7801.3	7834.3	7824.0
22.5°	7572.2	7632.9	7608.4	7636.1	7610.1
25°	7349.5	7408.6	7391.3	7407.5	7380.4
27.5°	7133.9	7188.1	7152.3	7171.8	7143.1
30°	6893.4	6939.4	6911.9	6918.4	6883.7
32.5°	6623.1	6677.8	6644.2	6643.2	6606.3
35°	6358.8	6414.5	6375.1	6373.9	6334.5
37.5°	6066.3	6118.3	6071.7	6074.4	6028.4
40°	5767.8	5812.8	5767.8	5765.6	5723.4
42.5°	5443.9	5503.5	5462.3	5467.1	5410.9
45°	5137.9	5192.6	5152.0	5130.8	5099.4
47.5°	4832.9	4856.7	4823.1	4817.7	4773.3
50°	4510.0	4527.9	4502.4	4495.9	4446.1
52.5°	4176.4	4207.3	4174.7	4166.0	4133.1
55°	3850.2	3876.8	3850.8	3844.3	3816.1
57.5°	3522.0	3556.7	3530.2	3523.6	3500.9
60°	3193.8	3204.0	3197.6	3207.3	3185.1
62.5°	2867.7	2891.5	2899.1	2896.4	2879.0
65°	2544.2	2569.2	2569.7	2582.8	2576.2
67.5°	2213.3	2245.8	2255.1	2268.5	2274.5
70°	1901.8	1926.7	1953.9	1961.9	1956.0
72.5°	1588.2	1628.3	1658.7	1665.6	1691.1
75°	1271.9	1309.8	1354.2	1363.9	1375.3
77.5°	978.3	1028.6	1068.7	1081.8	1095.9
80°	699.9	755.6	795.7	813.6	840.7
82.5°	459.3	516.2	556.9	574.7	607.8
85°	243.8	294.7	335.3	365.1	379.2
87.5°	72.0	115.4	138.6	147.3	159.8
90°	0.0	5.4	6.5	14.6	13.6
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)