

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: P730674

Luminaire Tested: **HBLED-LD5-24HE-N-CLI-UNV-L840**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P730674
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23769)
Test Lab: INNOVATION CENTER
Issue Date: 11/13/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-24HE-N-CLI-UNV-L840
Description: 24000 LUMEN, HE HBLED WITH NARROW DISTRIBUTION AND CLEAR ACRYLIC LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21895.0 lumens
Efficiency: N/A
Efficacy: 153.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')
CIE Type: Direct

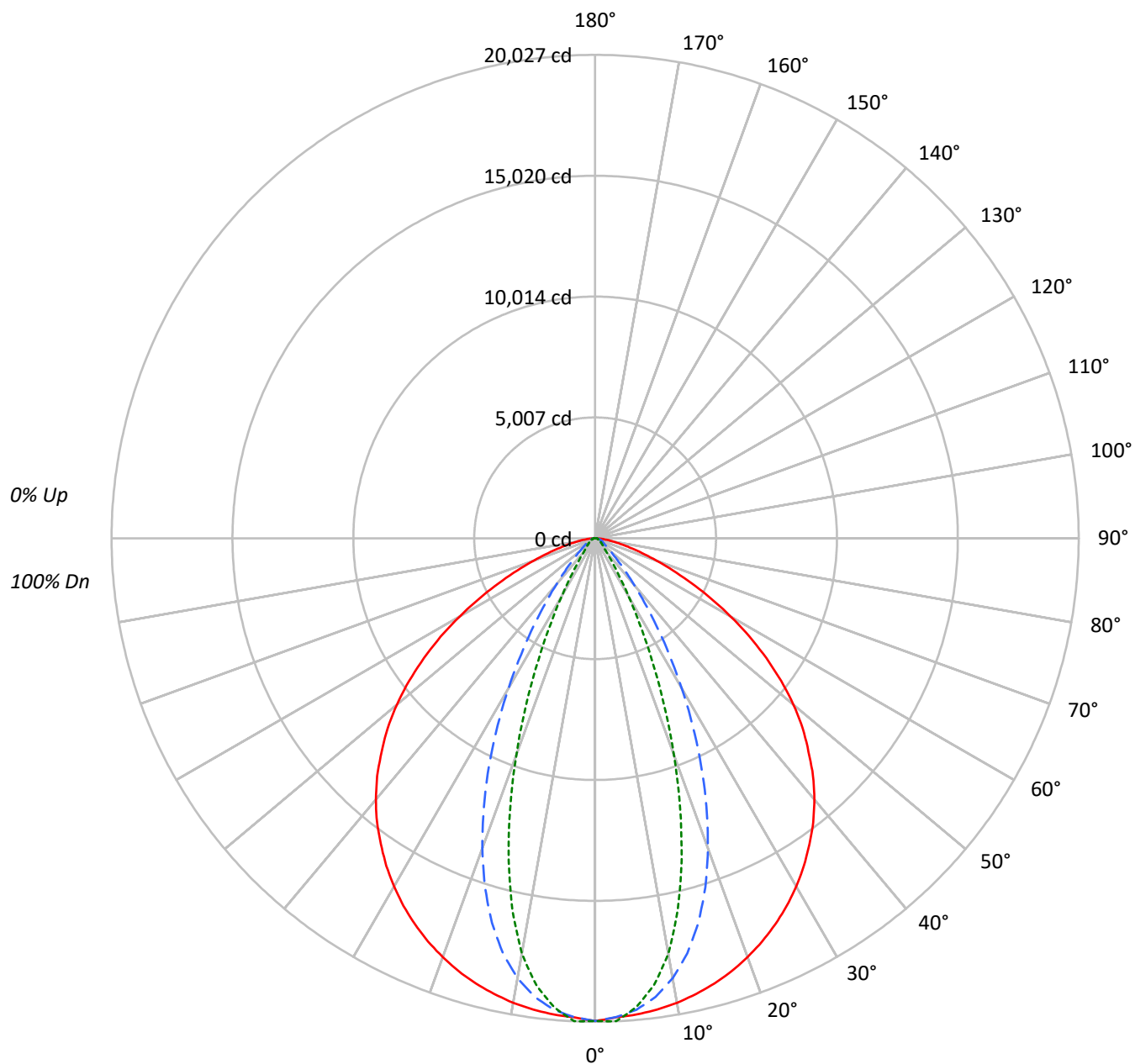
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90		
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81		
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72		
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65		
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	60		
6	81	70	63	58	79	69	62	57	68	62	57	66	61	57	65	60	56	55		
7	76	65	58	53	75	64	58	53	63	57	52	62	56	52	60	56	52	50		
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46		
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43		
10	64	53	47	42	63	53	46	42	52	46	42	51	46	42	50	45	42	40		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	32291	32291	32291
5°	32097	31777	31610
10°	32043	30338	28629
15°	31914	27577	23121
20°	31723	23466	16387
25°	31439	18503	9901
30°	31057	13354	5088
35°	30496	8731	2541
40°	29773	5244	1483
45°	28536	3132	1109
50°	26914	2048	931
55°	24359	1554	812
60°	20933	1323	741
65°	16838	1207	700
70°	12685	1293	696
75°	9331	1229	716
80°	6827	1224	784
85°	5113	1484	1013



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1841.8	8.4
10°-20°	4582.1	20.9
20°-30°	5075.4	23.2
30°-40°	4066.3	18.6
40°-50°	2902.8	13.3
50°-60°	1864.5	8.5
60°-70°	1010.4	4.6
70°-80°	431.9	2.0
80°-90°	119.8	0.5
90°-100°	0.0	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°	11499.3	52.5
0°-40°	15565.6	71.1
0°-60°	20332.9	92.9
0°-90°	21895.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	21895.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	20000	20000	20000	20000	20000	
5°	19804	19877	19606	19544	19503	###
15°	19092	18495	16498	14580	13832	5387
25°	17647	15560	10386	6767	5558	8130
35°	15472	11191	4429	1786	1289	9674
45°	12497	6460	1372	584	486	9633
55°	8654	2888	552	339	289	7712
65°	4407	1186	316	218	183	4414
75°	1496	434	197	137	115	1662
85°	276	115	80	66	55	337
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	19999.5	19999.5	19999.5	19999.5	19999.5
2.5°	19867.8	19992.1	19858.3	19941.5	20026.8
5°	19803.6	19877.4	19606.5	19544.4	19503.4
7.5°	19691.9	19670.8	19162.1	18832.4	18673.2
10°	19544.4	19373.7	18504.7	17780.0	17461.9
12.5°	19333.7	18981.9	17614.6	16342.1	15802.8
15°	19092.5	18495.3	16498.0	14579.9	13832.0
17.5°	18803.9	17926.4	15163.4	12690.1	11703.1
20°	18462.6	17239.6	13657.1	10682.3	9537.3
22.5°	18081.3	16447.5	12044.4	8680.9	7452.7
25°	17647.3	15560.5	10386.4	6766.9	5557.6
27.5°	17178.6	14575.7	8737.8	5056.2	3953.3
30°	16658.1	13509.6	7163.0	3645.8	2729.3
32.5°	16090.4	12376.2	5699.9	2563.9	1866.6
35°	15472.1	11191.2	4429.4	1786.5	1289.3
37.5°	14839.0	9981.8	3345.5	1263.0	924.9
40°	14125.8	8776.7	2488.1	924.9	703.6
42.5°	13360.0	7594.9	1841.4	712.0	569.9
45°	12497.3	6460.4	1371.5	583.6	485.7
47.5°	11661.0	5402.8	1041.8	497.2	422.4
50°	10715.0	4448.5	815.3	434.0	370.8
52.5°	9711.1	3608.9	661.5	382.4	326.5
55°	8653.5	2888.3	551.9	339.2	288.6
57.5°	7582.2	2287.9	471.9	302.3	257.1
60°	6482.5	1829.7	409.8	270.7	229.6
62.5°	5409.1	1463.2	358.1	243.3	205.4
65°	4407.4	1186.1	316.0	218.1	183.3
67.5°	3481.4	937.5	295.0	195.9	165.4
70°	2687.1	730.0	273.9	174.8	147.5
72.5°	2036.1	560.4	242.3	155.9	130.6
75°	1495.8	434.0	197.0	137.0	114.8
77.5°	1070.3	334.0	160.1	119.0	99.1
80°	734.2	248.6	131.6	102.2	84.3
82.5°	477.2	176.0	106.4	84.3	69.5
85°	276.0	114.8	80.1	66.4	54.7
87.5°	119.0	63.2	54.7	49.5	42.1
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - 90°-270°







(END OF REPORT)