

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: P730715

Luminaire Tested: **HBLED-LD5-24HE-W-FLI-UNV-L835**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P730715
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-L835
Description: 24000 LUMEN, HE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21210.0 lumens
Efficiency: N/A
Efficacy: 148.3 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

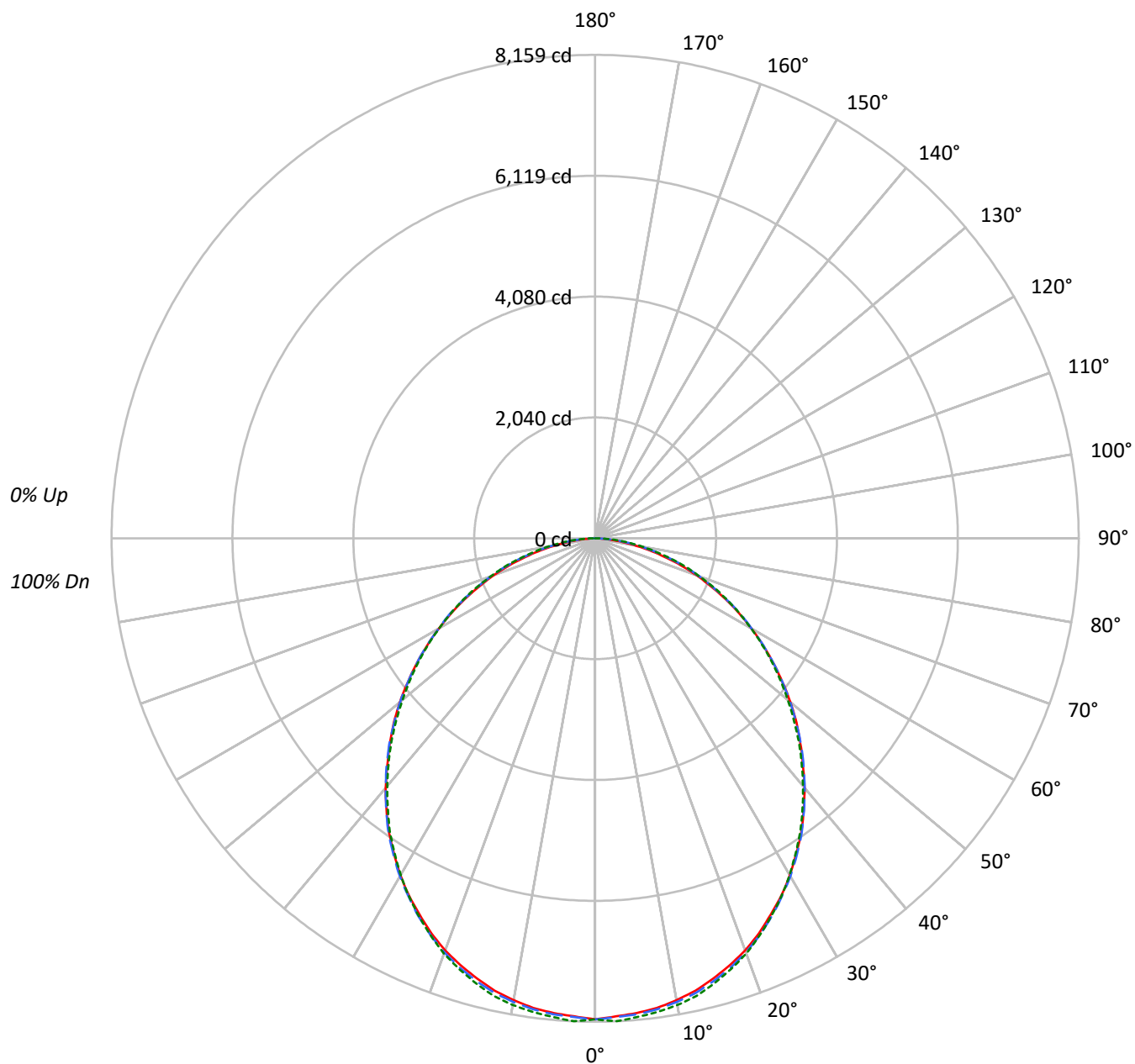
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	13110	13110	13110
5°	13036	13072	13147
10°	12976	13029	13113
15°	12862	12932	12995
20°	12717	12778	12815
25°	12481	12552	12534
30°	12251	12284	12234
35°	11948	11978	11902
40°	11589	11589	11499
45°	11183	11214	11099
50°	10799	10781	10646
55°	10332	10333	10240
60°	9831	9843	9805
65°	9266	9359	9382
70°	8558	8793	8802
75°	7563	8053	8178
80°	6204	7053	7451
85°	4305	5921	6695



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	767.9	3.6
10°-20°	2184.6	10.3
20°-30°	3246.4	15.3
30°-40°	3796.0	17.9
40°-50°	3784.7	17.8
50°-60°	3283.7	15.5
60°-70°	2425.4	11.4
70°-80°	1357.9	6.4
80°-90°	362.3	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°	6199.0	29.2
0°-40°	9994.9	47.1
0°-60°	17063.3	80.4
0°-90°	21208.9	100.0
90°-120°	1.1	0.0
90°-150°	1.1	0.0
90°-180°	1.0	0.0
0°-180°	21210.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8120	8120	8120	8120	8120	
5°	8043	8094	8066	8101	8112	764
15°	7695	7749	7737	7774	7774	2170
25°	7006	7062	7046	7061	7035	3230
35°	6062	6115	6077	6076	6038	3786
45°	4898	4950	4911	4891	4861	3781
55°	3670	3696	3671	3665	3638	3282
65°	2425	2449	2450	2462	2456	2399
75°	1212	1248	1291	1300	1311	1291
85°	232	281	320	348	361	282
90°	0	5	6	14	13	9
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°	8119.8	8119.8	8119.8	8119.8	8119.8
2.5°	8075.4	8123.5	8089.8	8121.9	8159.1
5°	8042.9	8093.5	8065.5	8101.2	8111.5
7.5°	7995.4	8044.4	8017.6	8053.2	8064.1
10°	7914.8	7968.0	7946.8	7987.1	7998.5
12.5°	7820.8	7870.9	7857.0	7903.9	7911.7
15°	7694.8	7748.6	7736.6	7773.9	7774.4
17.5°	7555.4	7606.0	7597.2	7626.2	7625.1
20°	7401.1	7455.2	7436.7	7468.1	7458.3
22.5°	7218.3	7276.1	7252.8	7279.2	7254.4
25°	7006.0	7062.3	7045.8	7061.2	7035.4
27.5°	6800.5	6852.1	6818.0	6836.6	6809.2
30°	6571.2	6615.1	6588.8	6595.0	6561.9
32.5°	6313.6	6365.7	6333.7	6332.7	6297.5
35°	6061.6	6114.7	6077.1	6076.0	6038.4
37.5°	5782.7	5832.3	5787.9	5790.5	5746.6
40°	5498.2	5541.1	5498.2	5496.1	5455.9
42.5°	5189.4	5246.2	5207.0	5211.6	5158.0
45°	4897.7	4949.9	4911.2	4891.0	4861.0
47.5°	4607.0	4629.7	4597.7	4592.5	4550.2
50°	4299.2	4316.2	4292.0	4285.8	4238.3
52.5°	3981.2	4010.6	3979.6	3971.3	3939.9
55°	3670.3	3695.6	3670.8	3664.6	3637.7
57.5°	3357.4	3390.4	3365.2	3358.9	3337.3
60°	3044.5	3054.3	3048.1	3057.4	3036.3
62.5°	2733.6	2756.3	2763.6	2761.0	2744.5
65°	2425.3	2449.1	2449.6	2462.0	2455.8
67.5°	2109.9	2140.8	2149.7	2162.5	2168.2
70°	1812.9	1836.7	1862.6	1870.2	1864.5
72.5°	1514.0	1552.2	1581.1	1587.8	1612.1
75°	1212.4	1248.5	1290.9	1300.2	1311.0
77.5°	932.6	980.5	1018.8	1031.2	1044.6
80°	667.2	720.3	758.5	775.5	801.4
82.5°	437.9	492.1	530.8	547.8	579.4
85°	232.4	280.9	319.6	348.0	361.4
87.5°	68.7	110.0	132.2	140.4	152.4
90°	0.0	5.2	6.2	13.9	12.9
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)