

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: P730752

Luminaire Tested: **HBLED-LD5-24SE-N-UNV-L840**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P730752
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23767)
Test Lab: INNOVATION CENTER
Issue Date: 11/13/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-24SE-N-UNV-L840
Description: 24000 LUMEN, SE HBLED WITH NARROW DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23524.0 lumens
Efficiency: N/A
Efficacy: 156.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 0.62 / 0.77
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')
CIE Type: Direct

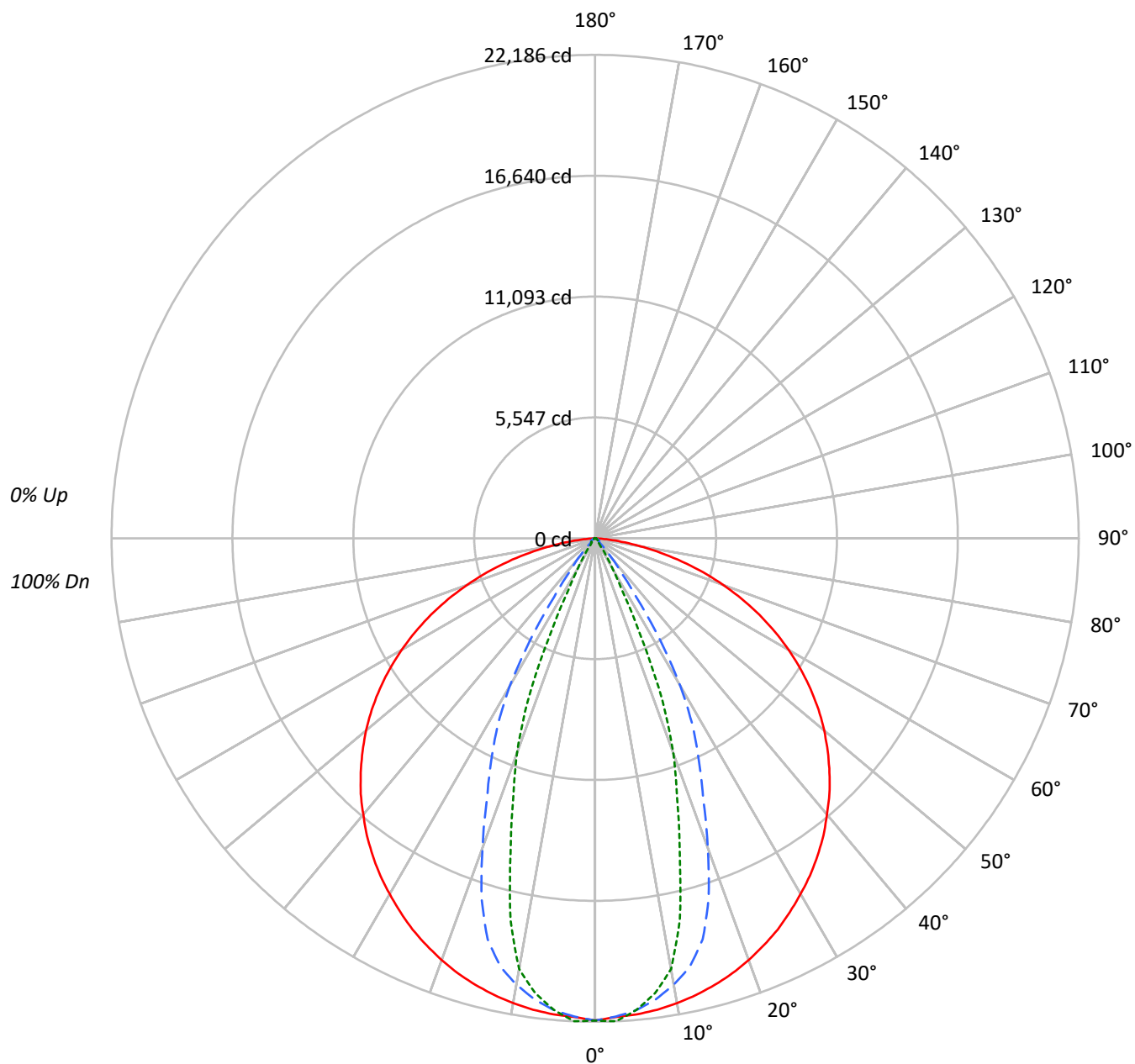
Input Watts (W): 150
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																					
0	119	119	119	119		116	116	116	116		111	111	111		106	106	106		102	102	102
1	112	108	105	102		109	106	103	101		102	100	98		98	96	95		95	93	92
2	105	98	93	89		102	97	92	88		93	89	86		90	87	84		87	85	82
3	98	90	84	79		96	88	83	78		86	81	77		83	79	76		81	77	74
4	92	82	76	70		90	81	75	70		79	73	69		77	72	68		75	71	67
5	86	76	69	64		84	75	68	63		73	67	63		71	66	62		70	65	62
6	81	70	63	58		79	70	63	58		68	62	58		66	61	57		65	60	57
7	76	66	58	54		75	65	58	53		63	57	53		62	57	53		61	56	52
8	72	61	54	49		71	61	54	49		59	53	49		58	53	49		57	52	49
9	68	57	51	46		67	57	50	46		56	50	46		55	49	46		54	49	45
10	65	54	47	43		64	53	47	43		53	47	43		52	46	43		51	46	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	35735	35735	35735
5°	35544	35230	35214
10°	35521	34101	32904
15°	35471	31858	25042
20°	35389	25971	18026
25°	35299	20081	8880
30°	35143	14594	2880
35°	35060	6475	741
40°	34876	2630	499
45°	34720	738	531
50°	34450	524	590
55°	33953	622	252
60°	33115	694	153
65°	31753	442	181
70°	29499	393	224
75°	25806	296	308
80°	19295	363	441
85°	9557	467	584



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2053.9	8.7
10°-20°	5135.8	21.8
20°-30°	5562.9	23.6
30°-40°	4119.6	17.5
40°-50°	2967.1	12.6
50°-60°	1837.2	7.8
60°-70°	1129.9	4.8
70°-80°	595.6	2.5
80°-90°	121.9	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°	12752.6	54.2
0°-40°	16872.2	71.7
0°-60°	21676.6	92.1
0°-90°	23524.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	23524.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	22132	22132	22132	22132	22132	
5°	21930	22011	21737	21752	21727	###
15°	21221	20728	19059	16208	14981	5990
25°	19814	18150	11272	7091	4984	9130
35°	17787	12540	3285	773	376	11128
45°	15206	7065	323	234	233	11727
55°	12062	1455	221	200	90	10768
65°	8311	154	116	74	47	8200
75°	4137	36	47	62	49	4369
85°	516	14	25	38	32	780
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	22132.4	22132.4	22132.4	22132.4	22132.4
2.5°	21990.3	22130.4	21965.1	22088.3	22186.2
5°	21930.3	22011.4	21736.6	21752.3	21727.1
7.5°	21825.0	21806.1	21343.9	21141.7	21053.3
10°	21666.1	21540.7	20799.6	20377.3	20069.9
12.5°	21460.8	21180.7	20120.5	18778.0	17944.2
15°	21220.7	20727.9	19059.1	16208.0	14981.3
17.5°	20934.3	20236.2	17324.0	13584.1	12489.2
20°	20596.3	19687.7	15115.0	11557.4	10490.9
22.5°	20219.3	19020.1	12969.3	9605.4	8084.0
25°	19814.0	18149.5	11272.0	7091.1	4984.3
27.5°	19345.5	17030.2	9680.1	4176.8	2543.8
30°	18849.6	15682.5	7828.1	2246.8	1544.6
32.5°	18349.5	14154.8	5539.2	1403.5	876.0
35°	17787.3	12539.7	3284.9	772.8	375.9
37.5°	17200.8	11059.4	1941.5	351.7	241.1
40°	16547.0	9706.5	1247.6	233.7	236.8
42.5°	15915.3	8445.1	702.3	230.5	234.8
45°	15205.6	7064.7	323.2	233.7	232.7
47.5°	14471.7	5633.9	209.5	235.8	235.8
50°	13714.8	4028.3	208.5	241.1	234.8
52.5°	12915.6	2513.3	216.9	240.1	192.7
55°	12061.7	1455.1	221.1	200.0	89.5
57.5°	11177.3	858.1	223.2	114.8	50.6
60°	10255.0	474.8	214.8	85.3	47.4
62.5°	9304.2	226.4	169.5	80.1	46.3
65°	8311.3	153.7	115.8	73.7	47.4
67.5°	7280.6	118.9	91.6	69.5	48.4
70°	6248.8	88.4	83.2	69.5	47.4
72.5°	5200.2	60.0	69.5	70.5	47.4
75°	4136.7	35.8	47.4	62.2	49.4
77.5°	3082.8	22.1	36.8	64.2	60.0
80°	2075.2	18.9	39.0	60.0	47.4
82.5°	1218.2	16.9	37.9	46.3	37.9
85°	515.9	13.7	25.2	37.9	31.5
87.5°	96.9	11.6	20.0	30.5	27.4
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)