

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: P731059

Luminaire Tested: **HBLED-LD5-48HE-N-CLI-UNV-L850**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P731059
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-LD5-48HE-N-CLI-UNV-L850
Description: 48000 LUMEN, HE HBLED WITH NARROW DISTRIBUTION AND CLEAR ACRYLIC LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43449.0 lumens
Efficiency: N/A
Efficacy: 165.2 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

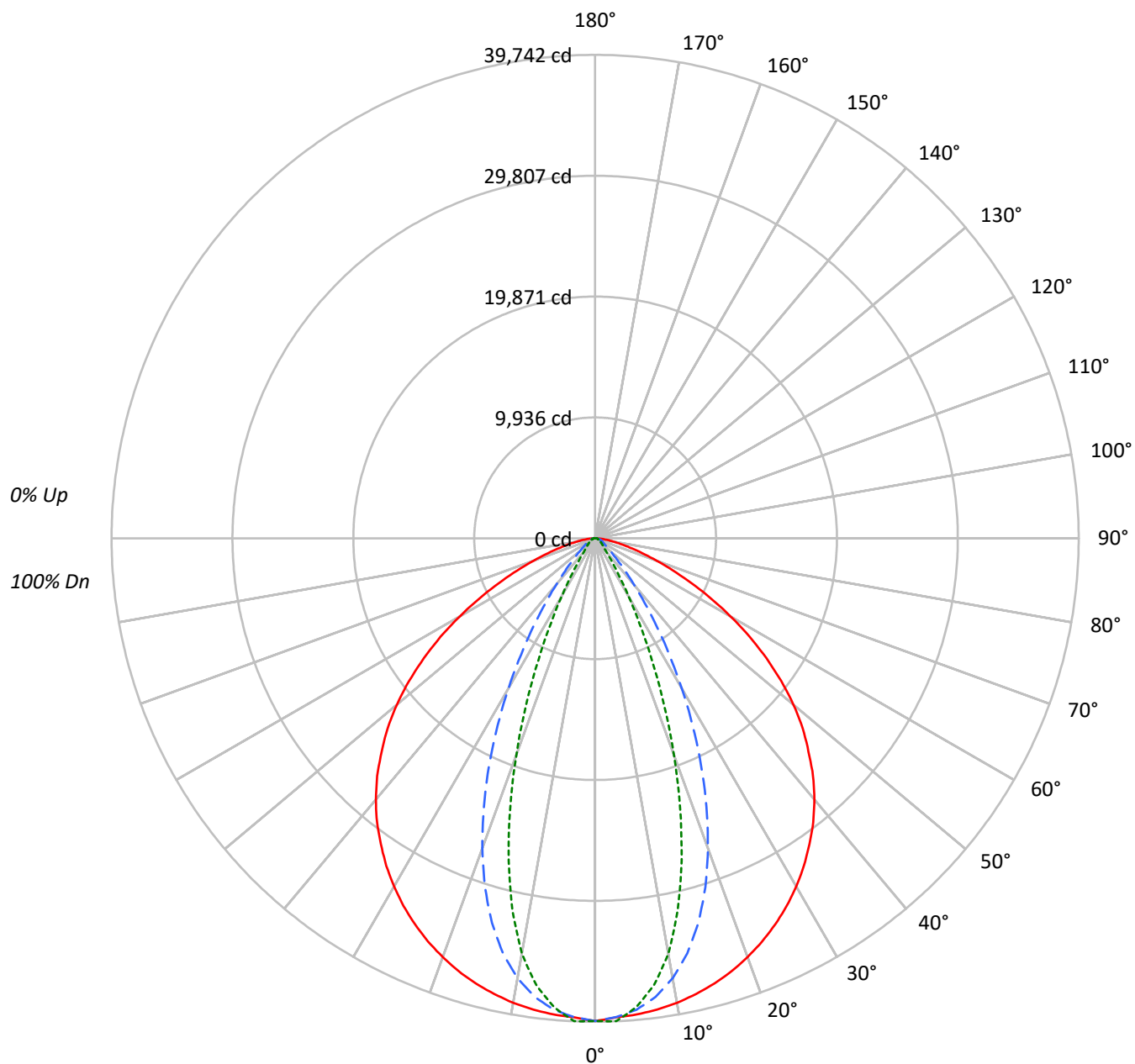
Input Watts (W): 263
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P731059

CATALOG NUMBER: HBLED-LD5-48HE-N-CLI-UNV-L850

Luminous Intensity Polar Plot





TEST NUMBER: P731059

CATALOG NUMBER: HBLED-LD5-48HE-N-CLI-UNV-L850

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°	64079	64079	64079
5°	63694	63060	62728
10°	63587	60204	56812
15°	63331	54725	45881
20°	62951	46566	32519
25°	62388	36718	19648
30°	61630	26501	10098
35°	60517	17325	5043
40°	59082	10407	2943
45°	56628	6215	2200
50°	53410	4064	1848
55°	48339	3083	1612
60°	41540	2626	1471
65°	33414	2396	1389
70°	25173	2566	1382
75°	18516	2439	1421
80°	13546	2429	1556
85°	10146	2946	2012



TEST NUMBER: P731059

CATALOG NUMBER: HBLED-LD5-48HE-N-CLI-UNV-L850

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3655.0	8.4
10°-20°	9092.9	20.9
20°-30°	10071.7	23.2
30°-40°	8069.2	18.6
40°-50°	5760.4	13.3
50°-60°	3700.0	8.5
60°-70°	2005.1	4.6
70°-80°	857.1	2.0
80°-90°	237.7	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°	22819.6	52.5
0°-40°	30888.8	71.1
0°-60°	40349.1	92.9
0°-90°	43449.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	43449.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	39687	39687	39687	39687	39687	
5°	39299	39445	38908	38784	38703	###
15°	37888	36702	32739	28933	27448	10690
25°	35020	30879	20611	13428	11029	16133
35°	30703	22208	8790	3545	2559	19197
45°	24800	12820	2722	1158	964	19115
55°	17172	5732	1095	673	573	15304
65°	8746	2354	627	433	364	8758
75°	2968	861	391	272	228	3298
85°	548	228	159	132	109	669
90°	0	0	0	0	0	



TEST NUMBER: P731059

CATALOG NUMBER: HBLED-LD5-48HE-N-CLI-UNV-L850

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	39687.4	39687.4	39687.4	39687.4	39687.4
2.5°	39426.2	39672.9	39407.3	39572.4	39741.7
5°	39298.7	39445.1	38907.7	38784.4	38703.0
7.5°	39077.0	39035.3	38025.8	37371.4	37055.7
10°	38784.4	38445.8	36721.2	35283.2	34651.9
12.5°	38366.4	37668.2	34954.9	32429.7	31359.6
15°	37887.7	36702.5	32739.1	28932.7	27448.5
17.5°	37314.9	35573.6	30090.6	25182.6	23223.9
20°	36637.7	34210.8	27101.5	21198.3	18926.0
22.5°	35881.0	32638.9	23901.1	17226.6	14789.4
25°	35019.8	30878.7	20611.0	13428.5	11028.7
27.5°	34089.6	28924.4	17339.6	10033.7	7845.0
30°	33056.8	26808.9	14214.4	7234.8	5416.2
32.5°	31930.2	24559.7	11311.0	5087.9	3704.2
35°	30703.2	22208.0	8789.8	3545.2	2558.6
37.5°	29446.8	19808.2	6638.9	2506.2	1835.4
40°	28031.6	17416.8	4937.5	1835.4	1396.3
42.5°	26512.0	15071.5	3654.0	1413.0	1130.9
45°	24800.0	12820.1	2721.7	1158.1	963.7
47.5°	23140.3	10721.5	2067.3	986.6	838.2
50°	21263.2	8827.7	1617.9	861.3	735.7
52.5°	19271.0	7161.6	1312.7	758.8	648.0
55°	17172.2	5731.7	1095.2	673.1	572.8
57.5°	15046.4	4540.2	936.5	599.8	510.1
60°	12864.1	3630.9	813.1	537.2	455.6
62.5°	10734.1	2903.6	710.7	482.9	407.7
65°	8746.1	2353.6	627.1	432.7	363.7
67.5°	6908.5	1860.4	585.3	388.8	328.3
70°	5332.4	1448.6	543.6	347.0	292.7
72.5°	4040.6	1112.2	480.9	309.4	259.2
75°	2968.2	861.3	391.0	271.8	227.8
77.5°	2123.9	662.7	317.7	236.2	196.6
80°	1456.9	493.4	261.2	202.7	167.3
82.5°	947.0	349.2	211.1	167.3	137.9
85°	547.7	227.8	159.0	131.7	108.6
87.5°	236.2	125.3	108.6	98.3	83.6
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)