

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: P731064

Luminaire Tested: **HBLED-LD5-48HE-N-UNV-L840**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P731064
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-LD5-48HE-N-UNV-L840
Description: 48000 LUMEN, HE HBLED WITH NARROW DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 46057.0 lumens
Efficiency: N/A
Efficacy: 175.1 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

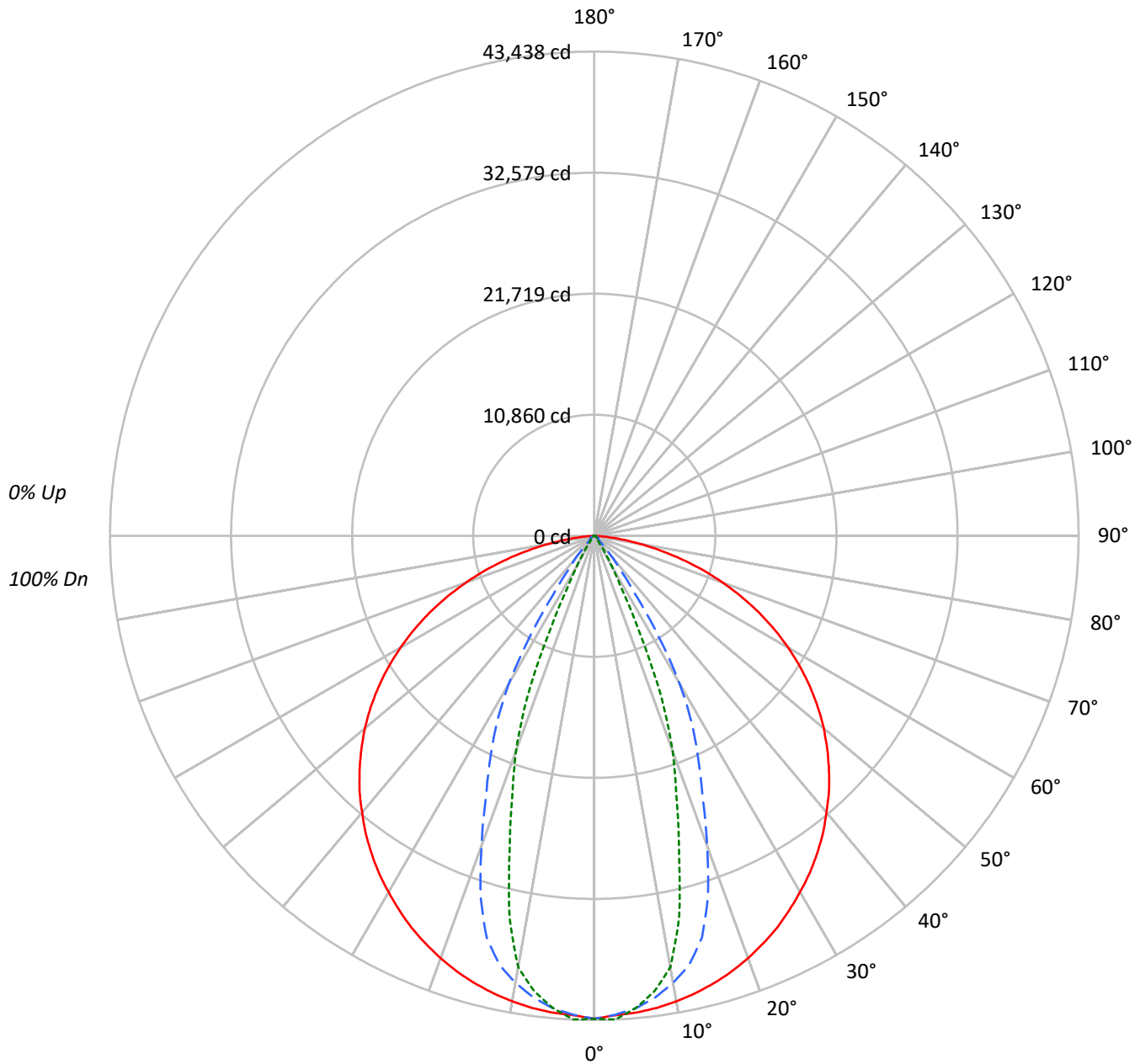
Input Watts (W): 263
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	76	81	77	74	73		
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66		
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60		
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55		
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51		
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47		
9	68	57	51	46	67	57	50	46	56	50	46	55	49	46	54	49	45	44		
10	65	54	47	43	64	53	47	43	53	47	43	52	46	43	51	46	42	41		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	69964	69964	69964
5°	69590	68975	68945
10°	69546	66765	64423
15°	69448	62374	49029
20°	69287	50847	35292
25°	69110	39316	17385
30°	68805	28574	5638
35°	68642	12677	1451
40°	68283	5148	977
45°	67977	1445	1040
50°	67448	1025	1155
55°	66476	1218	493
60°	64835	1358	300
65°	62168	866	355
70°	57755	769	438
75°	50525	579	604
80°	37777	709	863
85°	18712	915	1143



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4021.3	8.7
10°-20°	10055.3	21.8
20°-30°	10891.4	23.6
30°-40°	8065.6	17.5
40°-50°	5809.3	12.6
50°-60°	3597.1	7.8
60°-70°	2212.1	4.8
70°-80°	1166.1	2.5
80°-90°	238.7	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°	24968.1	54.2
0°-40°	33033.6	71.7
0°-60°	42440.0	92.1
0°-90°	46057.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	46057.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	43332	43332	43332	43332	43332	
5°	42937	43096	42557	42588	42539	###
15°	41547	40583	37315	31733	29332	11728
25°	38793	35534	22069	13883	9759	17875
35°	34825	24551	6432	1513	736	21787
45°	29770	13832	633	458	456	22959
55°	23615	2849	433	392	175	21081
65°	16272	301	227	144	93	16055
75°	8099	70	93	122	97	8554
85°	1010	27	49	74	62	###
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	43332.5	43332.5	43332.5	43332.5	43332.5
2.5°	43054.2	43328.5	43004.8	43246.0	43437.7
5°	42936.7	43095.5	42557.4	42588.3	42538.9
7.5°	42730.5	42693.5	41788.6	41392.8	41219.7
10°	42419.4	42174.0	40722.9	39896.2	39294.3
12.5°	42017.4	41469.1	39393.3	36765.0	35132.4
15°	41547.3	40582.7	37315.3	31733.2	29331.5
17.5°	40986.6	39620.0	33918.1	26596.0	24452.3
20°	40324.9	38545.9	29593.3	22627.9	20539.8
22.5°	39586.9	37239.0	25392.3	18806.1	15827.4
25°	38793.3	35534.4	22069.2	13883.4	9758.6
27.5°	37876.0	33343.0	18952.5	8177.6	4980.4
30°	36905.2	30704.4	15326.4	4398.9	3024.1
32.5°	35926.0	27713.3	10845.0	2747.8	1715.0
35°	34825.2	24551.1	6431.5	1513.1	736.0
37.5°	33676.9	21652.9	3801.2	688.6	472.1
40°	32396.9	19004.1	2442.7	457.5	463.7
42.5°	31160.1	16534.5	1375.0	451.4	459.7
45°	29770.5	13831.9	632.8	457.5	455.6
47.5°	28333.8	11030.4	410.1	461.7	461.7
50°	26851.8	7887.0	408.1	472.1	459.7
52.5°	25287.1	4920.6	424.7	470.1	377.3
55°	23615.3	2848.8	432.8	391.6	175.3
57.5°	21883.8	1680.0	437.0	224.7	99.0
60°	20077.9	929.6	420.5	166.9	92.8
62.5°	18216.5	443.2	331.9	156.8	90.6
65°	16272.5	301.0	226.7	144.2	92.8
67.5°	14254.5	232.9	179.3	136.0	94.8
70°	12234.3	173.1	162.9	136.0	92.8
72.5°	10181.3	117.5	136.0	138.0	92.8
75°	8099.1	70.1	92.8	121.7	96.8
77.5°	6035.7	43.2	72.1	125.7	117.5
80°	4062.9	37.0	76.3	117.5	92.8
82.5°	2385.1	33.1	74.3	90.6	74.3
85°	1010.1	26.9	49.4	74.3	61.7
87.5°	189.6	22.7	39.2	59.8	53.6
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)