

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: P731100

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

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P731100
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-LD5-48SE-N-UNV-L840
Description: 48000 LUMEN, SE HBLED WITH NARROW DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 45524.0 lumens
Efficiency: N/A
Efficacy: 159.5 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

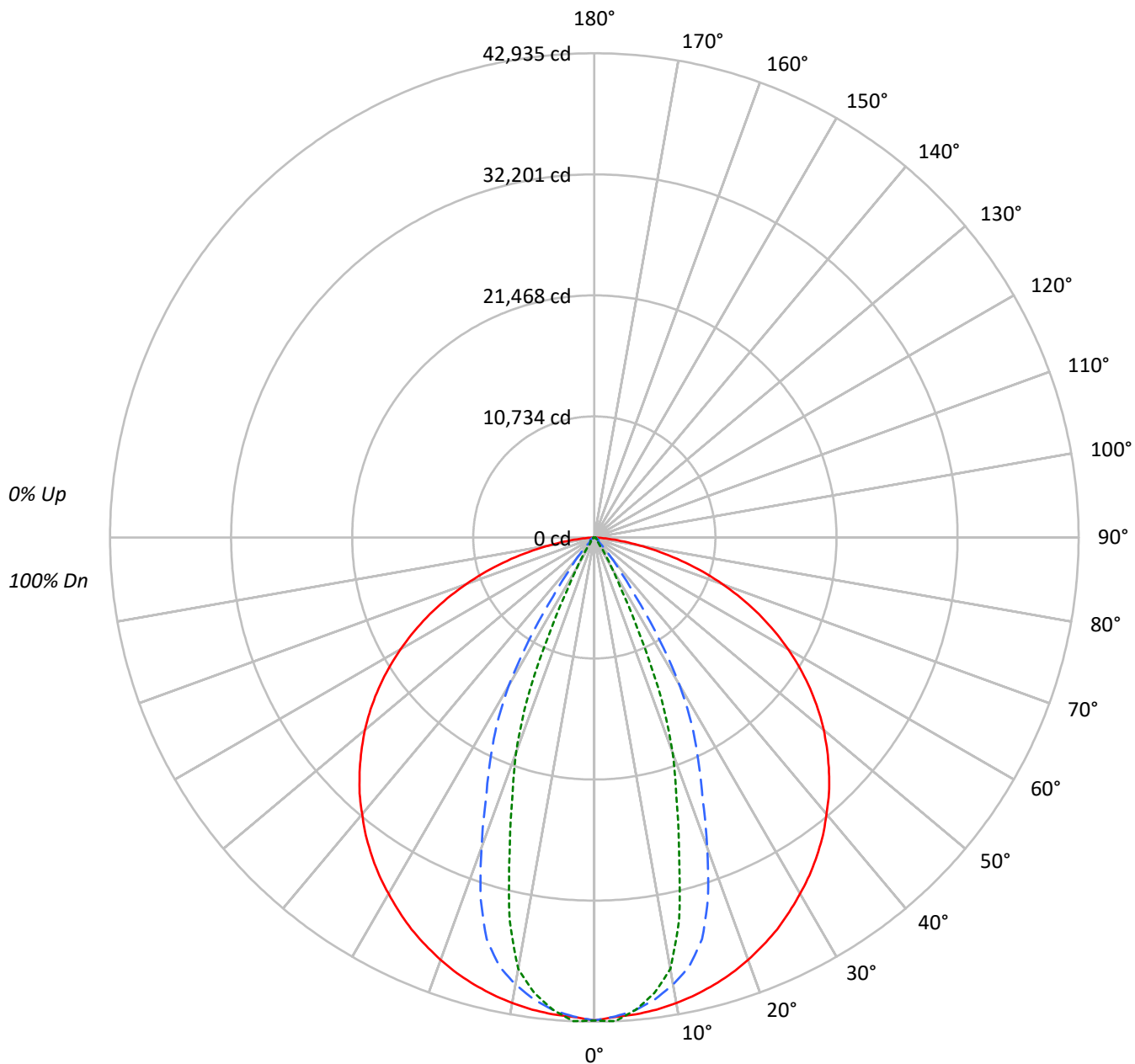
Input Watts (W): 285.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P731100

CATALOG NUMBER: HBLED-LD5-48SE-N-UNV-L840

Luminous Intensity Polar Plot





TEST NUMBER: P731100

CATALOG NUMBER: HBLED-LD5-48SE-N-UNV-L840

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°	69154	69154	69154
5°	68785	68177	68147
10°	68742	65992	63677
15°	68644	61652	48462
20°	68485	50259	34883
25°	68311	38861	17184
30°	68008	28243	5573
35°	67848	12530	1434
40°	67493	5089	966
45°	67190	1428	1028
50°	66667	1013	1141
55°	65706	1204	488
60°	64085	1342	296
65°	61449	856	350
70°	57087	761	433
75°	49940	572	597
80°	37340	701	853
85°	18496	904	1130



TEST NUMBER: P731100

CATALOG NUMBER: HBLED-LD5-48SE-N-UNV-L840

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3974.8	8.7
10°-20°	9938.9	21.8
20°-30°	10765.4	23.6
30°-40°	7972.2	17.5
40°-50°	5742.1	12.6
50°-60°	3555.4	7.8
60°-70°	2186.5	4.8
70°-80°	1152.7	2.5
80°-90°	235.9	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°	24679.1	54.2
0°-40°	32651.3	71.7
0°-60°	41948.9	92.1
0°-90°	45524.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	45524.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	42831	42831	42831	42831	42831	
5°	42440	42597	42065	42096	42047	###
15°	41066	40113	36884	31366	28992	11593
25°	38344	35123	21814	13723	9646	17668
35°	34422	24267	6357	1496	728	21535
45°	29426	13672	626	452	450	22694
55°	23342	2816	428	387	173	20837
65°	16084	298	224	142	92	15870
75°	8005	69	92	120	96	8455
85°	998	27	49	73	61	###
90°	0	0	0	0	0	



TEST NUMBER: P731100

CATALOG NUMBER: HBLED-LD5-48SE-N-UNV-L840

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	42831.0	42831.0	42831.0	42831.0	42831.0
2.5°	42556.0	42827.1	42507.1	42745.6	42935.0
5°	42439.8	42596.7	42064.9	42095.5	42046.6
7.5°	42236.0	42199.4	41305.0	40913.7	40742.7
10°	41928.5	41685.9	40251.6	39434.5	38839.6
12.5°	41531.2	40989.2	38937.4	36339.5	34725.8
15°	41066.5	40113.0	36883.5	31365.9	28992.1
17.5°	40512.3	39161.5	33525.6	26288.3	24169.4
20°	39858.2	38099.9	29250.8	22366.1	20302.1
22.5°	39128.8	36808.1	25098.5	18588.4	15644.2
25°	38344.4	35123.1	21813.8	13722.8	9645.7
27.5°	37437.7	32957.2	18733.1	8083.0	4922.7
30°	36478.1	30349.0	15149.0	4348.0	2989.1
32.5°	35510.2	27392.6	10719.5	2716.0	1695.2
35°	34422.2	24267.0	6357.1	1495.5	727.5
37.5°	33287.2	21402.3	3757.2	680.6	466.6
40°	32022.0	18784.1	2414.4	452.2	458.4
42.5°	30799.5	16343.1	1359.1	446.1	454.4
45°	29426.0	13671.8	625.5	452.2	450.3
47.5°	28005.9	10902.8	405.4	456.4	456.4
50°	26541.1	7795.7	403.4	466.6	454.4
52.5°	24994.5	4863.7	419.8	464.7	372.9
55°	23342.0	2815.9	427.8	387.1	173.3
57.5°	21630.5	1660.5	432.0	222.1	97.9
60°	19845.5	918.9	415.6	165.0	91.7
62.5°	18005.6	438.1	328.0	154.9	89.6
65°	16084.2	297.5	224.1	142.5	91.7
67.5°	14089.6	230.2	177.2	134.5	93.7
70°	12092.8	171.1	161.1	134.5	91.7
72.5°	10063.4	116.2	134.5	136.4	91.7
75°	8005.4	69.3	91.7	120.3	95.7
77.5°	5965.8	42.7	71.3	124.2	116.2
80°	4015.9	36.6	75.4	116.2	91.7
82.5°	2357.5	32.7	73.4	89.6	73.4
85°	998.4	26.6	48.8	73.4	61.0
87.5°	187.4	22.4	38.8	59.1	53.0
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)