

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: P731115

Luminaire Tested: **HBLED-LD5-48SE-W-FLI-UNV-L740**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P731115
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-LD5-48SE-W-FLI-UNV-L740
Description: 48000 LUMEN, SE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43977.0 lumens
Efficiency: N/A
Efficacy: 154.0 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

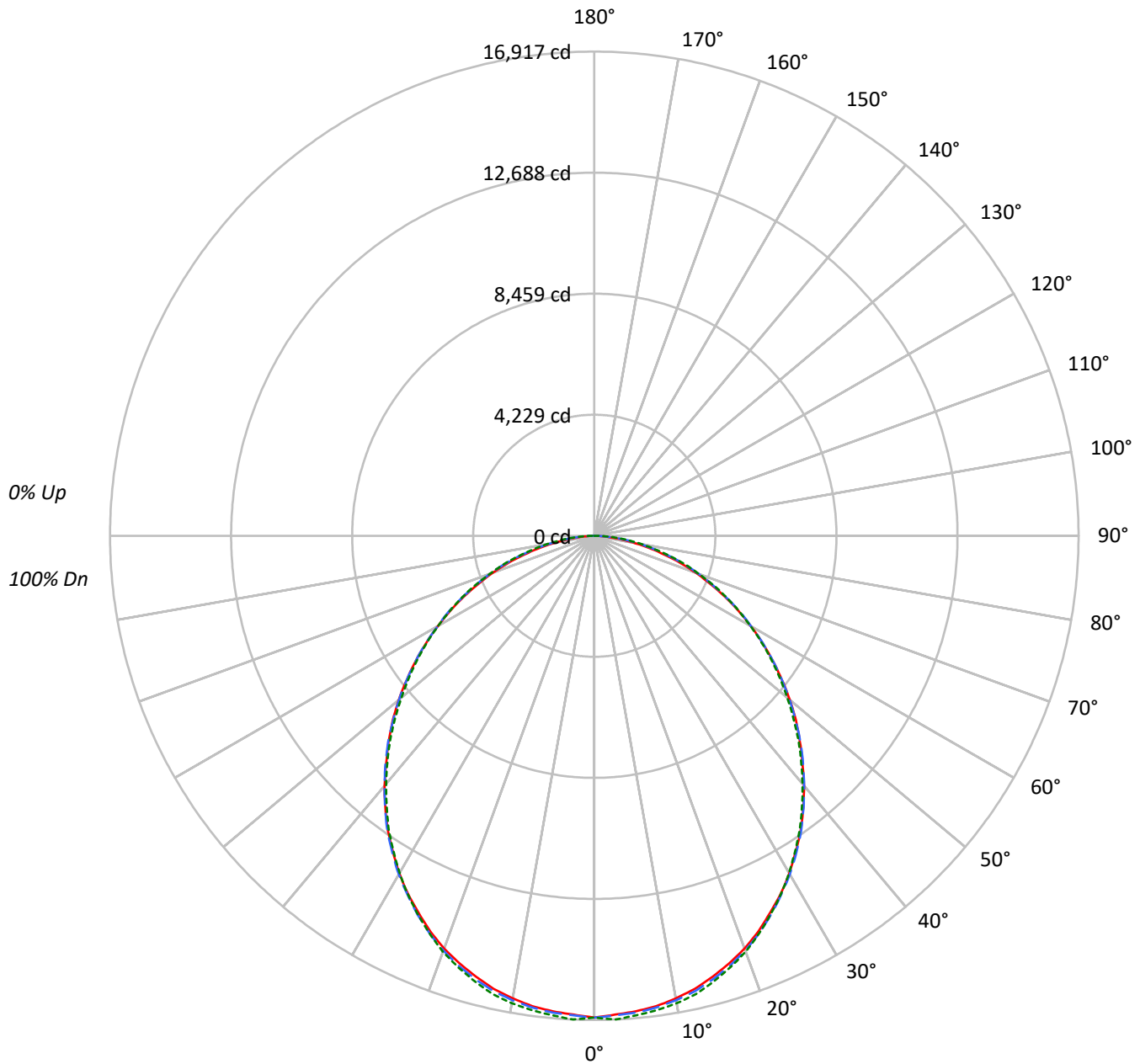
Input Watts (W): 285.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P731115

CATALOG NUMBER: HBLED-LD5-48SE-W-FLI-UNV-L740

Luminous Intensity Polar Plot





TEST NUMBER: P731115

CATALOG NUMBER: HBLED-LD5-48SE-W-FLI-UNV-L740

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°	27183	27183	27183
5°	27028	27104	27259
10°	26905	27014	27190
15°	26669	26814	26944
20°	26367	26494	26571
25°	25879	26026	25987
30°	25402	25470	25366
35°	24772	24836	24678
40°	24028	24028	23843
45°	23188	23251	23014
50°	22391	22353	22074
55°	21422	21425	21232
60°	20384	20408	20329
65°	19212	19404	19453
70°	17745	18231	18250
75°	15682	16697	16958
80°	12862	14623	15450
85°	8925	12279	13883



TEST NUMBER: P731115

CATALOG NUMBER: HBLED-LD5-48SE-W-FLI-UNV-L740

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1592.2	3.6
10°-20°	4529.6	10.3
20°-30°	6731.2	15.3
30°-40°	7870.6	17.9
40°-50°	7847.1	17.8
50°-60°	6808.4	15.5
60°-70°	5028.8	11.4
70°-80°	2815.5	6.4
80°-90°	751.2	1.7
90°-100°	2.3	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°	12853.0	29.2
0°-40°	20723.6	47.1
0°-60°	35379.1	80.4
0°-90°	43974.7	100.0
90°-120°	2.3	0.0
90°-150°	2.3	0.0
90°-180°	2.0	0.0
0°-180°	43977.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16836	16836	16836	16836	16836	
5°	16676	16781	16723	16797	16818	###
15°	15955	16066	16041	16118	16119	4500
25°	14526	14643	14609	14641	14587	6697
35°	12568	12678	12600	12598	12520	7851
45°	10155	10263	10183	10141	10079	7839
55°	7610	7662	7611	7598	7542	6805
65°	5029	5078	5079	5105	5092	4973
75°	2514	2589	2677	2696	2718	2677
85°	482	582	663	722	749	585
90°	0	11	13	29	27	20
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	



TEST NUMBER: P731115

CATALOG NUMBER: HBLED-LD5-48SE-W-FLI-UNV-L740

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	16835.6	16835.6	16835.6	16835.6	16835.6
2.5°	16743.6	16843.3	16773.5	16840.0	16917.1
5°	16676.1	16781.2	16723.2	16797.0	16818.5
7.5°	16577.7	16679.4	16623.7	16697.6	16720.1
10°	16410.6	16521.0	16477.0	16560.6	16584.1
12.5°	16215.8	16319.6	16290.7	16388.1	16404.2
15°	15954.6	16066.0	16041.2	16118.4	16119.4
17.5°	15665.5	15770.3	15752.1	15812.2	15809.9
20°	15345.4	15457.7	15419.3	15484.5	15464.1
22.5°	14966.4	15086.3	15038.0	15092.7	15041.3
25°	14526.3	14643.1	14608.8	14640.8	14587.4
27.5°	14100.2	14207.3	14136.5	14175.1	14118.3
30°	13624.8	13715.8	13661.3	13674.1	13605.6
32.5°	13090.6	13198.7	13132.3	13130.2	13057.4
35°	12568.1	12678.3	12600.3	12598.0	12520.0
37.5°	11990.0	12092.7	12000.7	12006.1	11915.1
40°	11400.0	11489.0	11400.0	11395.7	11312.3
42.5°	10759.8	10877.6	10796.3	10805.8	10694.6
45°	10155.0	10263.1	10182.8	10141.0	10078.8
47.5°	9552.3	9599.3	9532.9	9522.1	9434.4
50°	8914.1	8949.3	8899.0	8886.2	8787.8
52.5°	8254.6	8315.7	8251.3	8234.2	8169.0
55°	7610.0	7662.4	7611.0	7598.2	7542.5
57.5°	6961.3	7029.8	6977.4	6964.4	6919.6
60°	6312.5	6332.8	6320.0	6339.2	6295.4
62.5°	5667.9	5715.0	5730.0	5724.7	5690.4
65°	5028.7	5078.0	5079.0	5104.8	5091.8
67.5°	4374.6	4438.8	4457.1	4483.8	4495.5
70°	3758.9	3808.2	3861.8	3877.7	3866.0
72.5°	3139.0	3218.3	3278.3	3292.1	3342.5
75°	2513.8	2588.7	2676.6	2695.8	2718.3
77.5°	1933.6	2033.1	2112.3	2138.1	2165.9
80°	1383.3	1493.5	1572.7	1608.0	1661.6
82.5°	907.9	1020.3	1100.6	1135.9	1201.3
85°	481.8	582.5	662.8	721.6	749.4
87.5°	142.4	228.0	274.0	291.1	315.9
90°	0.0	10.7	12.8	28.9	26.8
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



TEST NUMBER: P731115

CATALOG NUMBER: HBLED-LD5-48SE-W-FLI-UNV-L740

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)