

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: P731081

Luminaire Tested: **HBLED-LD5-48HE-W-FLI-UNV-L835**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P731081
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-LD5-48HE-W-FLI-UNV-L835
Description: 48000 LUMEN, HE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 41281.0 lumens
Efficiency: N/A
Efficacy: 157.0 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

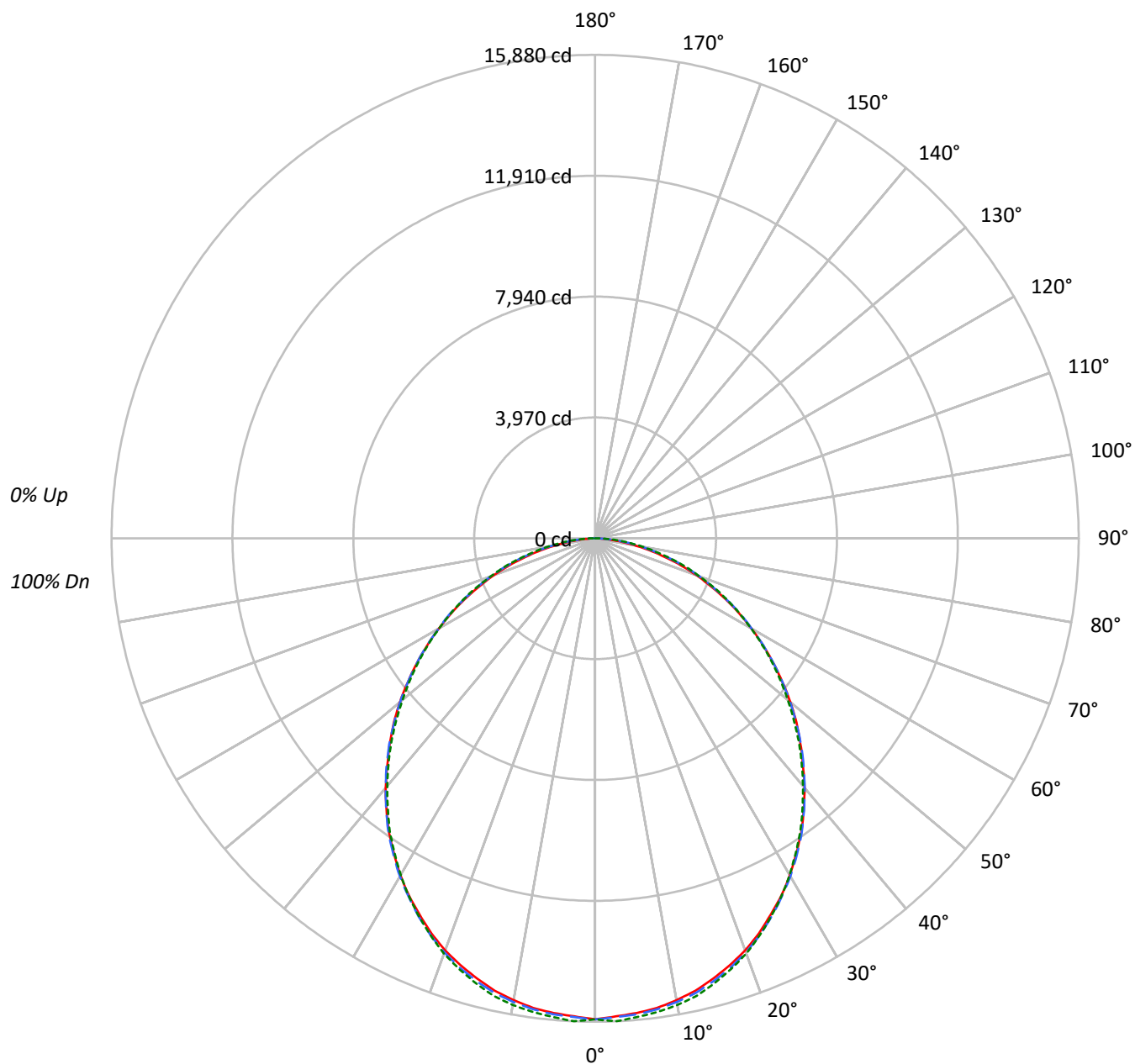
Input Watts (W): 263
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	25516	25516	25516
5°	25371	25443	25588
10°	25256	25358	25523
15°	25034	25170	25292
20°	24750	24869	24942
25°	24292	24430	24394
30°	23844	23908	23811
35°	23254	23313	23165
40°	22555	22555	22381
45°	21766	21826	21603
50°	21018	20983	20720
55°	20109	20111	19930
60°	19134	19157	19083
65°	18034	18215	18261
70°	16657	17113	17132
75°	14720	15674	15918
80°	12074	13727	14503
85°	8379	11525	13033



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1494.6	3.6
10°-20°	4251.9	10.3
20°-30°	6318.6	15.3
30°-40°	7388.1	17.9
40°-50°	7366.1	17.8
50°-60°	6391.0	15.5
60°-70°	4720.5	11.4
70°-80°	2642.9	6.4
80°-90°	705.2	1.7
90°-100°	2.1	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°	12065.0	29.2
0°-40°	19453.1	47.1
0°-60°	33210.2	80.4
0°-90°	41278.9	100.0
90°-120°	2.1	0.0
90°-150°	2.1	0.0
90°-180°	2.0	0.0
0°-180°	41281.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15804	15804	15804	15804	15804	
5°	15654	15752	15698	15767	15787	###
15°	14976	15081	15058	15130	15131	4224
25°	13636	13745	13713	13743	13693	6287
35°	11798	11901	11828	11826	11752	7369
45°	9532	9634	9559	9519	9461	7359
55°	7144	7193	7144	7132	7080	6388
65°	4720	4767	4768	4792	4780	4669
75°	2360	2430	2512	2531	2552	2513
85°	452	547	622	677	704	549
90°	0	10	12	27	25	18
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	15803.5	15803.5	15803.5	15803.5	15803.5
2.5°	15717.1	15810.7	15745.2	15807.6	15880.0
5°	15653.8	15752.4	15698.0	15767.3	15787.4
7.5°	15561.4	15656.9	15604.6	15673.9	15695.1
10°	15404.5	15508.1	15466.9	15545.3	15567.4
12.5°	15221.7	15319.1	15292.0	15383.4	15398.5
15°	14976.5	15081.1	15057.8	15130.3	15131.2
17.5°	14705.1	14803.5	14786.5	14842.8	14840.7
20°	14404.7	14510.1	14474.0	14535.2	14516.1
22.5°	14048.9	14161.4	14116.1	14167.4	14119.2
25°	13635.8	13745.4	13713.2	13743.2	13693.1
27.5°	13235.8	13336.3	13269.9	13306.1	13252.8
30°	12789.5	12874.9	12823.8	12835.8	12771.5
32.5°	12288.1	12389.6	12327.2	12325.2	12256.9
35°	11797.6	11901.1	11827.9	11825.7	11752.5
37.5°	11254.9	11351.4	11265.0	11270.0	11184.6
40°	10701.2	10784.6	10701.2	10697.1	10618.8
42.5°	10100.1	10210.7	10134.4	10143.3	10038.9
45°	9532.4	9633.9	9558.6	9519.3	9461.0
47.5°	8966.7	9010.8	8948.5	8938.4	8856.1
50°	8367.6	8400.7	8353.4	8341.4	8249.0
52.5°	7748.6	7805.9	7745.5	7729.4	7668.2
55°	7143.5	7192.7	7144.4	7132.4	7080.1
57.5°	6534.5	6598.8	6549.6	6537.4	6495.4
60°	5925.5	5944.5	5932.5	5950.5	5909.5
62.5°	5320.5	5364.6	5378.8	5373.7	5341.6
65°	4720.4	4766.7	4767.7	4791.9	4779.7
67.5°	4106.4	4166.7	4183.9	4208.9	4219.9
70°	3528.4	3574.7	3625.1	3640.0	3629.0
72.5°	2946.6	3021.0	3077.3	3090.3	3137.6
75°	2359.7	2430.0	2512.5	2530.6	2551.7
77.5°	1815.1	1908.4	1982.8	2007.0	2033.2
80°	1298.5	1401.9	1476.3	1509.4	1559.8
82.5°	852.2	957.8	1033.1	1066.3	1127.7
85°	452.3	546.8	622.1	677.3	703.5
87.5°	133.6	214.0	257.2	273.3	296.5
90°	0.0	10.1	12.0	27.1	25.2
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



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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)