

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: P731082

Luminaire Tested: **HBLED-LD5-48HE-W-FLI-UNV-L840**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P731082
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-L840
Description: 48000 LUMEN, HE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42470.0 lumens
Efficiency: N/A
Efficacy: 161.5 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

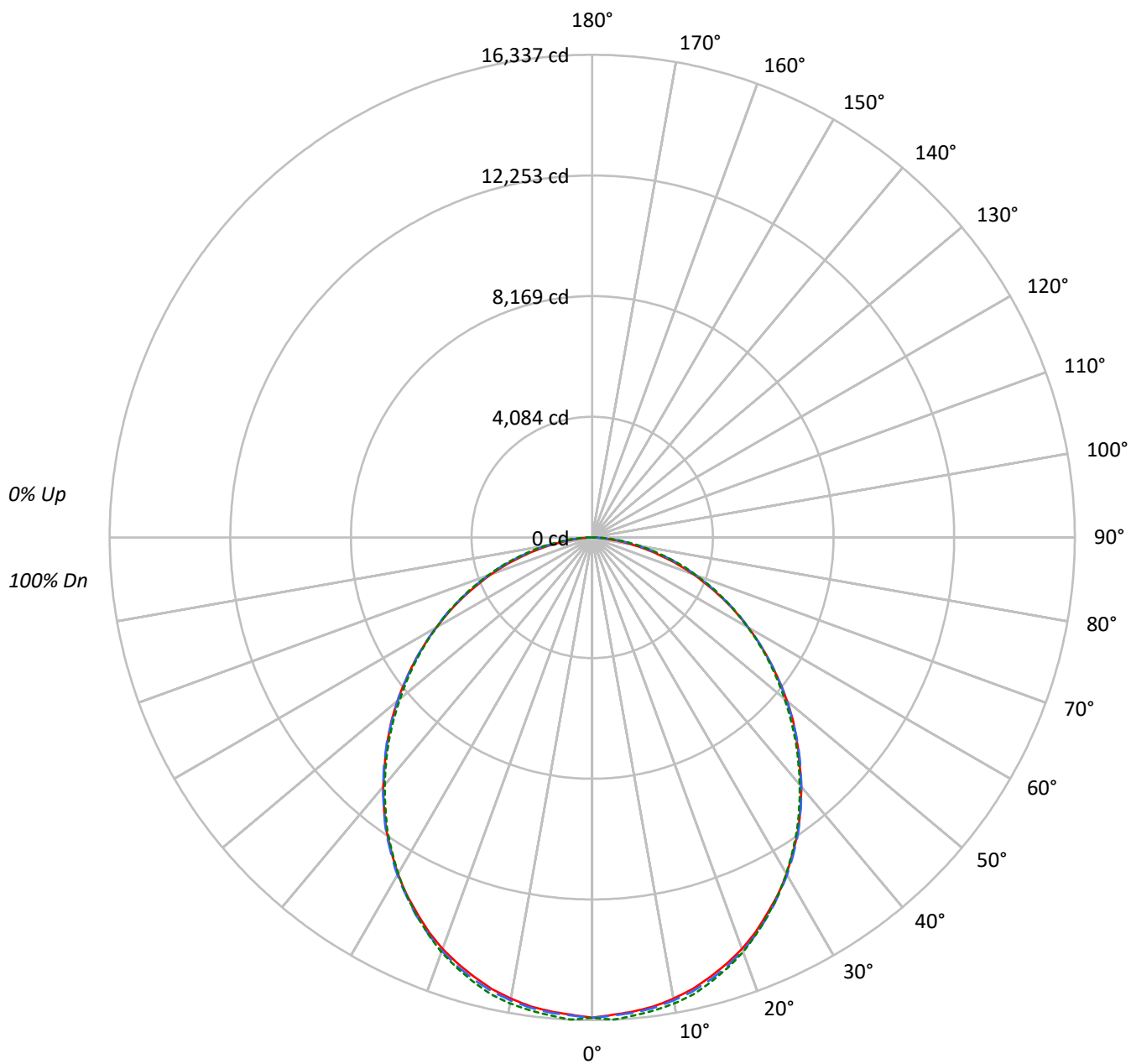
Input Watts (W): 263
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	26251	26251	26251
5°	26102	26175	26325
10°	25983	26088	26258
15°	25755	25895	26021
20°	25463	25586	25660
25°	24992	25134	25097
30°	24531	24597	24497
35°	23923	23985	23832
40°	23204	23204	23026
45°	22393	22454	22225
50°	21624	21587	21317
55°	20688	20690	20504
60°	19686	19709	19632
65°	18554	18739	18786
70°	17137	17606	17625
75°	15145	16125	16377
80°	12421	14122	14921
85°	8620	11858	13407



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1537.7	3.6
10°-20°	4374.3	10.3
20°-30°	6500.6	15.3
30°-40°	7600.8	17.9
40°-50°	7578.2	17.8
50°-60°	6575.1	15.5
60°-70°	4856.5	11.4
70°-80°	2719.1	6.4
80°-90°	725.5	1.7
90°-100°	2.2	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°	12412.6	29.2
0°-40°	20013.4	47.1
0°-60°	34166.7	80.4
0°-90°	42467.8	100.0
90°-120°	2.2	0.0
90°-150°	2.2	0.0
90°-180°	2.0	0.0
0°-180°	42470.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16259	16259	16259	16259	16259	
5°	16105	16206	16150	16221	16242	###
15°	15408	15515	15492	15566	15567	4345
25°	14028	14141	14108	14139	14088	6468
35°	12137	12244	12168	12166	12091	7582
45°	9807	9911	9834	9793	9734	7571
55°	7349	7400	7350	7338	7284	6572
65°	4856	4904	4905	4930	4917	4803
75°	2428	2500	2585	2603	2625	2585
85°	465	562	640	697	724	565
90°	0	10	12	28	26	19
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°	16258.7	16258.7	16258.7	16258.7	16258.7
2.5°	16169.8	16266.1	16198.7	16262.9	16337.4
5°	16104.7	16206.1	16150.1	16221.4	16242.2
7.5°	16009.6	16107.9	16054.1	16125.4	16147.1
10°	15848.2	15954.8	15912.4	15993.1	16015.8
12.5°	15660.1	15760.3	15732.4	15826.5	15842.0
15°	15407.8	15515.4	15491.5	15566.1	15567.0
17.5°	15128.7	15229.9	15212.3	15270.3	15268.1
20°	14819.6	14928.0	14890.9	14953.9	14934.2
22.5°	14453.5	14569.3	14522.7	14575.5	14525.9
25°	14028.5	14141.3	14108.2	14139.1	14087.5
27.5°	13617.0	13720.4	13652.1	13689.3	13634.5
30°	13157.9	13245.8	13193.2	13205.5	13139.4
32.5°	12642.0	12746.4	12682.2	12680.2	12609.9
35°	12137.4	12243.8	12168.5	12166.3	12091.0
37.5°	11579.1	11678.3	11589.5	11594.6	11506.8
40°	11009.4	11095.3	11009.4	11005.2	10924.7
42.5°	10391.1	10504.8	10426.3	10435.5	10328.1
45°	9807.0	9911.4	9833.9	9793.4	9733.5
47.5°	9224.9	9270.4	9206.2	9195.8	9111.1
50°	8608.6	8642.7	8594.0	8581.7	8486.6
52.5°	7971.7	8030.7	7968.5	7952.0	7889.0
55°	7349.2	7399.8	7350.2	7337.9	7284.1
57.5°	6722.7	6788.9	6738.3	6725.7	6682.5
60°	6096.2	6115.7	6103.4	6121.9	6079.7
62.5°	5473.7	5519.1	5533.7	5528.5	5495.4
65°	4856.4	4904.0	4905.0	4929.9	4917.3
67.5°	4224.7	4286.7	4304.4	4330.1	4341.5
70°	3630.1	3677.7	3729.5	3744.9	3733.5
72.5°	3031.5	3108.0	3166.0	3179.3	3227.9
75°	2427.7	2500.0	2584.9	2603.4	2625.2
77.5°	1867.3	1963.4	2039.9	2064.8	2091.7
80°	1335.9	1442.3	1518.8	1552.9	1604.7
82.5°	876.8	985.4	1062.9	1097.0	1160.1
85°	465.3	562.5	640.1	696.8	723.7
87.5°	137.5	220.2	264.6	281.2	305.1
90°	0.0	10.4	12.4	27.9	25.9
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)