

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: P830494

Luminaire Tested: **OHBL-48HE-N-UNV-L850-CD**

Issue Date: 5/3/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P830494  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-285-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: OHBL-48HE-N-UNV-L850-CD  
Description: 48000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 5000K LEDS AND NARROW LENS  
Light Source: -  
Ballast/Driver: -

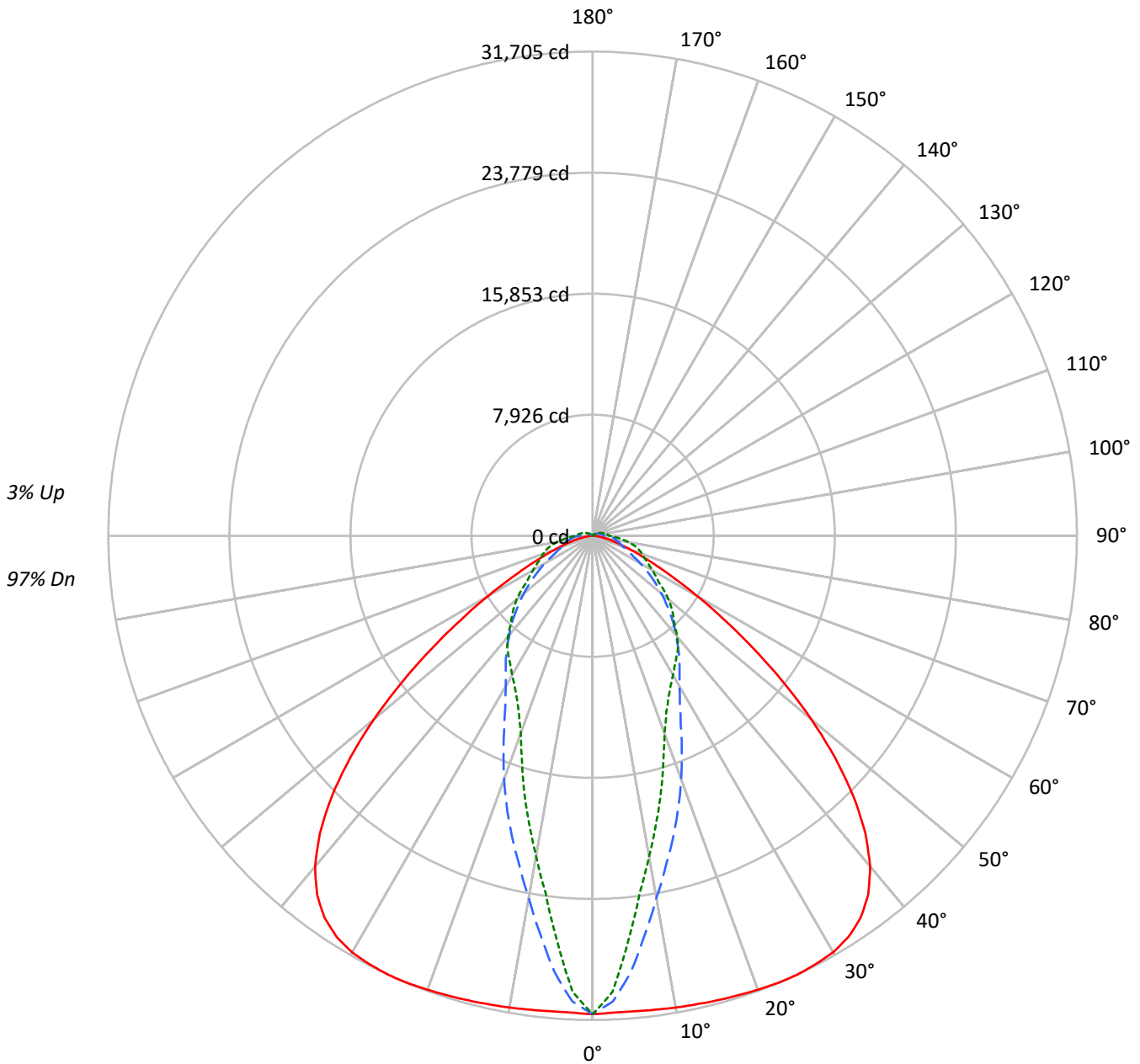
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 46226.0 lumens  
Efficiency: N/A  
Efficacy: 173.8 lumens/watt  
Spacing Criteria (0/90/45): 1.47 / 0.53 / 0.78  
Luminous Opening: Rectangular w/ Sides (W: 1.8' x L: 3.78' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 266  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	99	99	99	99	97		
1	109	104	100	97	106	102	98	95	97	94	91	92	90	88	88	86	85	85	85	85	85	85	85	82		
2	100	93	86	81	97	90	85	80	86	82	78	83	79	75	79	76	73	73	73	73	73	73	73	71		
3	92	83	75	69	90	81	74	69	78	72	67	74	70	65	72	67	64	64	64	64	64	64	64	62		
4	85	74	66	60	83	73	66	60	70	64	59	67	62	57	65	60	56	56	56	56	56	56	56	54		
5	79	67	59	53	77	66	59	53	64	57	52	62	56	51	59	54	50	50	50	50	50	50	50	48		
6	74	62	53	47	72	60	53	47	58	52	46	56	50	46	55	49	45	45	45	45	45	45	45	43		
7	69	56	48	43	67	55	48	42	54	47	42	52	46	41	50	45	41	41	41	41	41	41	41	39		
8	65	52	44	39	63	51	44	39	50	43	38	48	42	38	47	41	37	37	37	37	37	37	37	35		
9	61	48	41	35	59	47	40	35	46	40	35	45	39	35	44	38	34	34	34	34	34	34	34	32		
10	57	45	37	33	56	44	37	32	43	37	32	42	36	32	41	35	32	32	32	32	32	32	32	30		

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	49533	49533	49533
5°	49432	45129	41966
10°	49990	38031	33672
15°	50966	32540	27655
20°	52398	27527	22383
25°	54210	22796	19626
30°	56084	19649	18246
35°	57251	17917	17397
40°	56271	16195	16520
45°	51767	14645	15310
50°	43675	12949	14386
55°	33187	11353	12819
60°	23257	9748	12293
65°	15644	8408	12061
70°	10684	7907	12691
75°	7414	8178	13617
80°	5104	9101	14115
85°	2985	11487	15003



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2636.5	5.7
10°-20°	6202.3	13.4
20°-30°	7774.5	16.8
30°-40°	8249.6	17.8
40°-50°	7459.0	16.1
50°-60°	5408.2	11.7
60°-70°	3393.9	7.3
70°-80°	2246.0	4.9
80°-90°	1293.9	2.8
90°-100°	626.9	1.4
100°-110°	432.7	0.9
110°-120°	267.0	0.6
120°-130°	129.3	0.3
130°-140°	59.5	0.1
140°-150°	32.5	0.1
150°-160°	14.1	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
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0°-30°	16613.3	35.9
0°-40°	24863.0	53.8
0°-60°	37730.2	81.6
0°-90°	44664.0	96.6
90°-120°	1326.5	2.9
90°-150°	1547.8	3.3
90°-180°	1562.0	3.4
0°-180°	46226.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	31321	31321	31321	31321	31321	
5°	31258	30456	28668	27338	26650	###
15°	31496	25672	20390	18133	17310	8932
25°	31705	19850	13653	12118	11733	14647
35°	30569	13197	9909	9599	9596	19003
45°	24166	8358	7181	7354	7479	18410
55°	12794	5181	4686	5082	5264	11560
65°	4576	3005	2713	3476	3863	4761
75°	1413	1619	1821	2829	2999	1575
85°	247	671	1332	1854	1702	297
90°	0	280	772	1088	1097	16
95°	12	197	680	924	966	11
105°	24	131	495	656	674	24
115°	33	92	334	417	426	32
125°	36	48	170	215	212	31
135°	30	36	74	116	116	23
145°	36	39	45	69	66	21
155°	36	45	48	51	45	11
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



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CATALOG NUMBER: OHBL-48HE-N-UNV-L850-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	31320.6	31320.6	31320.6	31320.6	31320.6
2.5°	31255.0	31076.1	30518.7	30178.9	29892.7
5°	31258.0	30456.1	28667.6	27338.1	26649.5
7.5°	31302.7	29520.1	26297.7	24357.1	23600.0
10°	31371.3	28360.5	24085.9	22017.1	21310.6
12.5°	31421.9	27054.9	22139.3	20013.9	19238.9
15°	31496.5	25671.7	20389.5	18133.0	17310.2
17.5°	31565.0	24369.1	18660.6	16302.7	15387.5
20°	31633.6	22965.0	16931.7	14502.2	13748.0
22.5°	31699.2	21483.5	15244.5	13104.1	12588.4
25°	31705.1	19850.0	13652.6	12117.5	11732.9
27.5°	31627.6	18156.8	12361.9	11291.7	11053.3
30°	31493.5	16514.3	11360.3	10695.6	10525.6
32.5°	31159.6	14839.0	10585.3	10120.2	10021.9
35°	30569.4	13196.6	9908.6	9598.6	9595.6
37.5°	29639.3	11738.9	9175.3	9121.6	9187.2
40°	28265.1	10463.0	8480.7	8623.8	8623.8
42.5°	26431.9	9354.1	7851.8	7997.8	7959.1
45°	24166.4	8358.5	7181.0	7353.9	7479.1
47.5°	21540.2	7482.1	6495.4	6829.3	7002.2
50°	18684.4	6647.5	5869.4	6295.7	6492.5
52.5°	15691.6	5875.4	5258.4	5747.2	5905.2
55°	12794.1	5180.8	4686.0	5082.5	5264.3
57.5°	10170.9	4519.1	4125.6	4501.2	4876.8
60°	7914.4	3949.7	3598.0	4134.5	4510.1
62.5°	6045.3	3443.0	3103.1	3791.7	4167.3
65°	4575.7	3004.8	2712.6	3475.8	3863.3
67.5°	3448.9	2626.2	2408.6	3246.2	3624.8
70°	2590.4	2259.5	2164.2	3103.1	3443.0
72.5°	1913.8	1922.7	1970.4	2977.9	3237.3
75°	1413.0	1618.6	1821.3	2828.9	2998.8
77.5°	1010.5	1341.4	1687.2	2650.0	2709.7
80°	700.5	1094.0	1547.1	2414.5	2363.9
82.5°	438.2	876.4	1421.9	2155.2	2015.1
85°	247.4	670.7	1332.5	1854.1	1702.1
87.5°	110.3	500.8	1165.5	1445.7	1350.4
90°	0.0	280.2	772.1	1088.0	1097.0
92.5°	6.0	232.5	712.4	995.6	1025.4
95°	11.9	196.7	679.7	924.1	965.8
97.5°	14.9	172.9	637.9	858.5	894.3
100°	17.9	155.0	587.2	789.9	819.8
102.5°	20.9	143.1	539.5	718.4	742.3
105°	23.8	131.2	494.8	655.8	673.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	29.8	101.4	372.6	471.0	485.9
115°	32.8	92.4	333.9	417.3	426.3
117.5°	35.8	80.5	292.1	366.7	369.6
120°	35.8	71.5	250.4	313.0	313.0
122.5°	35.8	59.6	208.7	259.3	256.4
125°	35.8	47.7	169.9	214.6	211.6
127.5°	32.8	38.8	137.1	178.9	175.9
130°	32.8	38.8	110.3	152.0	152.0
132.5°	29.8	35.8	89.4	131.2	131.2
135°	29.8	35.8	74.5	116.3	116.3
137.5°	29.8	38.8	62.6	101.4	101.4
140°	29.8	35.8	53.7	89.4	89.4
142.5°	32.8	35.8	47.7	77.5	77.5
145°	35.8	38.8	44.7	68.6	65.6
147.5°	35.8	41.7	44.7	59.6	56.6
150°	35.8	44.7	44.7	53.7	50.7
152.5°	35.8	44.7	44.7	50.7	47.7
155°	35.8	44.7	47.7	50.7	44.7
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-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







107.5°	23.8	122.2	453.1	587.2	608.1
110°	26.8	110.3	414.3	524.6	545.5



(END OF REPORT)