

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: P830493

Luminaire Tested: **OHBL-48HE-N-UNV-L840-CD**

Issue Date: 5/3/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P830493  
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-L840-CD  
Description: 48000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND NARROW LENS  
Light Source: -  
Ballast/Driver: -

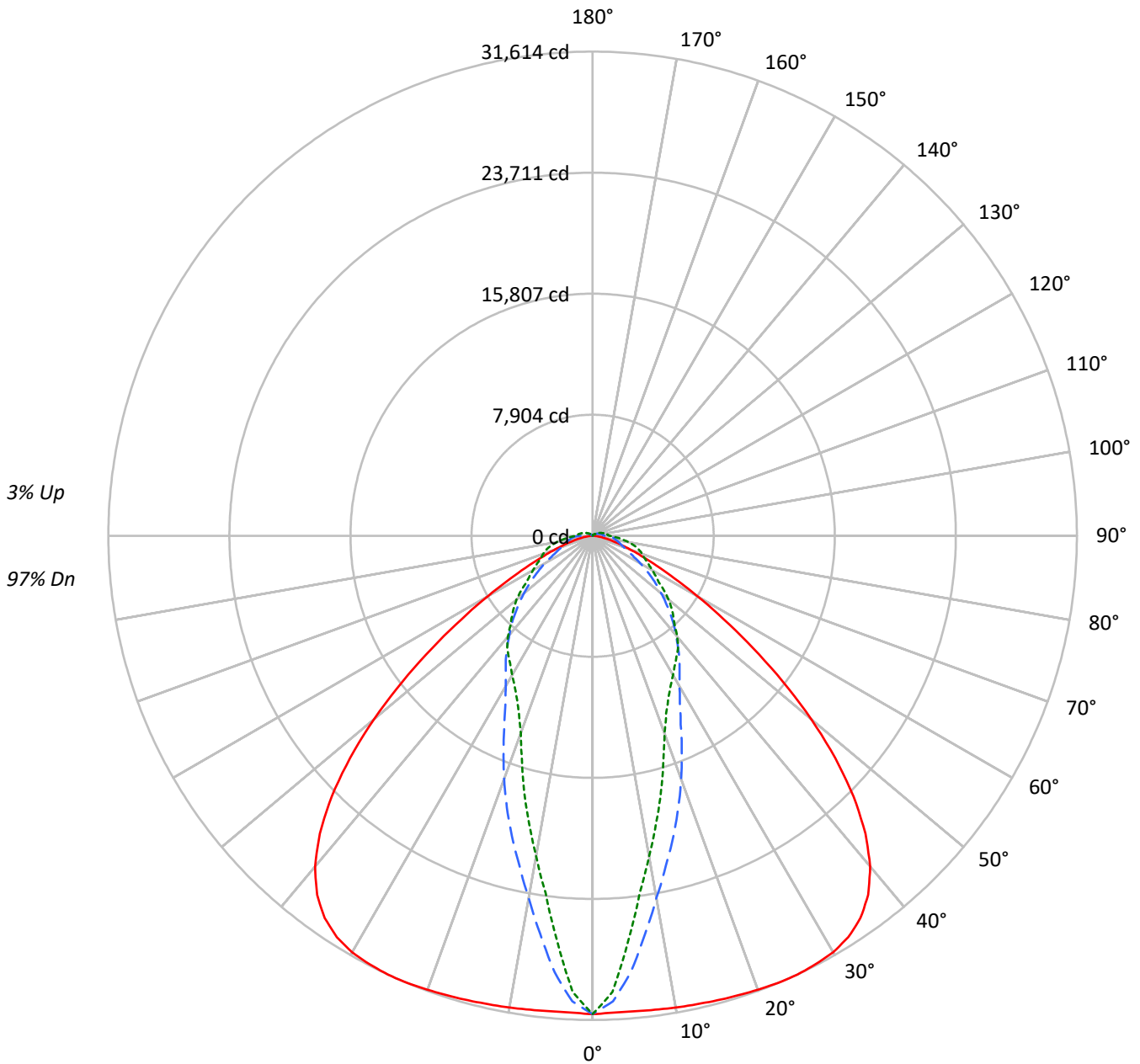
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 46093.0 lumens  
Efficiency: N/A  
Efficacy: 173.3 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	0
RCR																					
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	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	82
2	100	93	86	81	97	90	85	80	86	82	78	83	79	75	79	76	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	62
4	85	74	66	60	83	73	66	60	70	64	59	67	62	57	65	60	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	48
6	74	62	53	47	72	60	53	47	58	52	46	56	50	46	55	49	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	39
8	65	52	44	39	63	51	44	39	50	43	38	48	42	38	47	41	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	32
10	57	45	37	33	56	44	37	32	43	37	32	42	36	32	41	35	32	32	32	32	30

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

	0°	45°	90°
0°	49390	49390	49390
5°	49290	44999	41846
10°	49846	37921	33575
15°	50819	32447	27576
20°	52247	27448	22319
25°	54054	22730	19570
30°	55922	19592	18193
35°	57086	17866	17347
40°	56109	16148	16472
45°	51618	14603	15265
50°	43550	12912	14345
55°	33091	11320	12783
60°	23190	9720	12258
65°	15599	8384	12027
70°	10653	7884	12654
75°	7393	8155	13578
80°	5089	9075	14075
85°	2977	11454	14960



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2629.0	5.7
10°-20°	6184.4	13.4
20°-30°	7752.1	16.8
30°-40°	8225.9	17.8
40°-50°	7437.5	16.1
50°-60°	5392.7	11.7
60°-70°	3384.2	7.3
70°-80°	2239.5	4.9
80°-90°	1290.2	2.8
90°-100°	625.1	1.4
100°-110°	431.4	0.9
110°-120°	266.2	0.6
120°-130°	128.9	0.3
130°-140°	59.3	0.1
140°-150°	32.4	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°	16565.5	35.9
0°-40°	24791.4	53.8
0°-60°	37621.6	81.6
0°-90°	44535.6	96.6
90°-120°	1322.7	2.9
90°-150°	1543.4	3.3
90°-180°	1557.0	3.4
0°-180°	46093.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	31230	31230	31230	31230	31230	
5°	31168	30368	28585	27259	26573	###
15°	31406	25598	20331	18081	17260	8906
25°	31614	19793	13613	12083	11699	14605
35°	30481	13159	9880	9571	9568	18949
45°	24097	8334	7160	7333	7458	18357
55°	12757	5166	4672	5068	5249	11527
65°	4563	2996	2705	3466	3852	4748
75°	1409	1614	1816	2821	2990	1571
85°	247	669	1329	1849	1697	296
90°	0	279	770	1085	1094	16
95°	12	196	678	921	963	11
105°	24	131	493	654	672	24
115°	33	92	333	416	425	32
125°	36	48	169	214	211	31
135°	30	36	74	116	116	23
145°	36	39	45	68	65	21
155°	36	45	48	50	45	11
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



TEST NUMBER: P830493

CATALOG NUMBER: OHBL-48HE-N-UNV-L840-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	31230.5	31230.5	31230.5	31230.5	31230.5
2.5°	31165.1	30986.7	30430.9	30092.1	29806.7
5°	31168.0	30368.5	28585.1	27259.4	26572.8
7.5°	31212.6	29435.2	26222.1	24287.1	23532.1
10°	31281.0	28278.9	24016.6	21953.8	21249.3
12.5°	31331.5	26977.0	22075.6	19956.3	19183.5
15°	31405.8	25597.9	20330.9	18080.8	17260.4
17.5°	31474.2	24298.9	18606.9	16255.8	15343.3
20°	31542.6	22899.0	16882.9	14460.5	13708.5
22.5°	31608.0	21421.7	15200.6	13066.4	12552.2
25°	31613.9	19792.9	13613.4	12082.6	11699.2
27.5°	31536.6	18104.6	12326.3	11259.3	11021.5
30°	31402.9	16466.8	11327.6	10664.8	10495.4
32.5°	31070.0	14796.4	10554.8	10091.1	9993.0
35°	30481.4	13158.6	9880.1	9571.0	9568.0
37.5°	29554.1	11705.1	9148.9	9095.4	9160.8
40°	28183.8	10432.9	8456.3	8599.0	8599.0
42.5°	26355.8	9327.2	7829.2	7974.8	7936.2
45°	24096.8	8334.5	7160.4	7332.8	7457.6
47.5°	21478.2	7460.6	6476.7	6809.7	6982.0
50°	18630.7	6628.3	5852.6	6277.6	6473.8
52.5°	15646.4	5858.5	5243.2	5730.7	5888.2
55°	12757.3	5165.9	4672.5	5067.9	5249.2
57.5°	10141.7	4506.1	4113.7	4488.2	4862.8
60°	7891.6	3938.4	3587.6	4122.6	4497.2
62.5°	6027.9	3433.1	3094.2	3780.8	4155.3
65°	4562.6	2996.1	2704.8	3465.8	3852.2
67.5°	3439.0	2618.6	2401.7	3236.9	3614.4
70°	2583.0	2253.0	2157.9	3094.2	3433.1
72.5°	1908.2	1917.2	1964.7	2969.4	3228.0
75°	1408.9	1614.0	1816.1	2820.8	2990.2
77.5°	1007.6	1337.6	1682.3	2642.4	2701.9
80°	698.5	1090.9	1542.6	2407.6	2357.1
82.5°	436.9	873.9	1417.8	2149.0	2009.3
85°	246.7	668.8	1328.6	1848.8	1697.2
87.5°	110.0	499.4	1162.2	1441.6	1346.5
90°	0.0	279.4	769.8	1084.9	1093.8
92.5°	5.9	231.8	710.4	992.8	1022.5
95°	11.9	196.2	677.7	921.4	963.0
97.5°	14.9	172.4	636.1	856.0	891.7
100°	17.8	154.6	585.6	787.7	817.4
102.5°	20.8	142.7	538.0	716.3	740.1
105°	23.8	130.8	493.4	653.9	671.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	29.7	101.1	371.5	469.6	484.5
115°	32.7	92.1	332.9	416.1	425.0
117.5°	35.7	80.3	291.3	365.6	368.6
120°	35.7	71.3	249.7	312.1	312.1
122.5°	35.7	59.4	208.1	258.6	255.6
125°	35.7	47.6	169.4	214.0	211.0
127.5°	32.7	38.6	136.7	178.3	175.4
130°	32.7	38.6	110.0	151.6	151.6
132.5°	29.7	35.7	89.2	130.8	130.8
135°	29.7	35.7	74.3	115.9	115.9
137.5°	29.7	38.6	62.4	101.1	101.1
140°	29.7	35.7	53.5	89.2	89.2
142.5°	32.7	35.7	47.6	77.3	77.3
145°	35.7	38.6	44.6	68.4	65.4
147.5°	35.7	41.6	44.6	59.4	56.5
150°	35.7	44.6	44.6	53.5	50.5
152.5°	35.7	44.6	44.6	50.5	47.6
155°	35.7	44.6	47.6	50.5	44.6
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	121.9	451.8	585.6	606.4
110°	26.8	110.0	413.2	523.1	543.9



(END OF REPORT)