

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: P827213

Luminaire Tested: **OHBL-48HE-MFL-UNV-L840-CD-UPL24**

Issue Date: 5/3/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P827213  
REPORT IS A COMBINATION OF REPORTS P826253 AND G3-2310-221-6  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: OHBL-48HE-MFL-UNV-L840-CD-UPL24  
Description: 48000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND MEDIUM FROSTED LENS AND 2400 LUMEN UPLIGHT MODULE  
Light Source: -  
Ballast/Driver: -

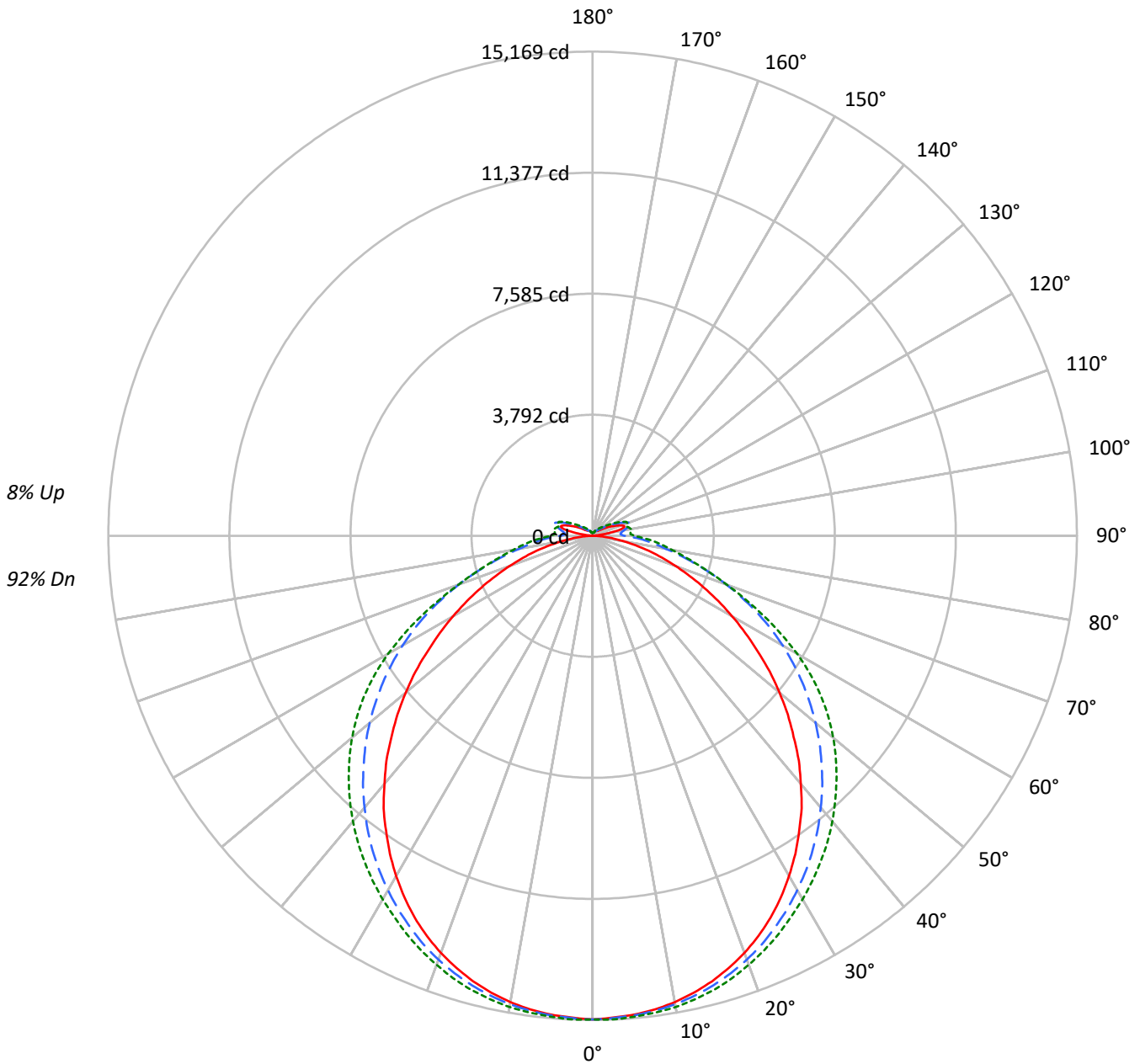
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 47775.3 lumens  
Efficiency: N/A  
Efficacy: 168.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.8' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 283.4  
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

TEST NUMBER: P827213

CATALOG NUMBER: OHBL-48HE-MFL-UNV-L840-CD-UPL24

### Luminous Intensity Polar Plot





TEST NUMBER: P827213

CATALOG NUMBER: OHBL-48HE-MFL-UNV-L840-CD-UPL24

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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	117	117	117	117	113	113	113	113	107	107	107	100	100	100	95	95	95	92																			
1	106	101	97	93	103	98	94	91	93	89	86	87	85	82	82	80	78	76																			
2	97	88	81	75	93	86	79	74	81	75	71	76	72	68	72	68	65	63																			
3	88	77	69	63	85	75	68	61	71	65	59	67	62	57	64	59	55	53																			
4	80	68	60	53	78	67	58	52	63	56	50	60	54	49	57	52	47	45																			
5	74	61	52	45	71	59	51	45	56	49	44	54	47	42	51	46	41	39																			
6	68	55	46	40	66	54	45	39	51	44	38	48	42	37	46	41	36	34																			
7	63	50	41	35	61	49	40	34	46	39	34	44	38	33	42	36	32	30																			
8	59	45	37	31	57	44	36	31	42	35	30	40	34	29	39	33	29	27																			
9	55	42	33	28	53	41	33	28	39	32	27	37	31	26	36	30	26	24																			
10	51	38	30	25	50	38	30	25	36	29	25	35	28	24	33	28	24	22																			

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

	0°	45°	90°
0°	23966	23966	23966
5°	23713	23740	23913
10°	23447	23530	23889
15°	23085	23280	23826
20°	22638	22974	23689
25°	22074	22591	23552
30°	21332	22177	23421
35°	20456	21736	23332
40°	19424	21226	23259
45°	18228	20672	23143
50°	16929	20113	22992
55°	15363	19427	22637
60°	13759	18620	21743
65°	12019	17589	20136
70°	10144	16275	18417
75°	8236	14756	17515
80°	5913	13658	18348
85°	3335	14196	23002



TEST NUMBER: P827213

CATALOG NUMBER: OHBL-48HE-MFL-UNV-L840-CD-UPL24

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1436.0	3.0
10°-20°	4119.6	8.6
20°-30°	6230.2	13.0
30°-40°	7479.4	15.7
40°-50°	7725.0	16.2
50°-60°	6950.1	14.5
60°-70°	5235.4	11.0
70°-80°	3161.3	6.6
80°-90°	1552.3	3.2
90°-100°	882.6	1.8
100°-110°	1176.4	2.5
110°-120°	908.5	1.9
120°-130°	454.6	1.0
130°-140°	230.7	0.5
140°-150°	127.6	0.3
150°-160°	67.7	0.1
160°-170°	29.0	0.1
170°-180°	8.8	0.0
0°-30°	11785.8	24.7
0°-40°	19265.1	40.3
0°-60°	33940.2	71.0
0°-90°	43889.2	91.9
90°-120°	2967.6	6.2
90°-150°	3780.5	7.9
90°-180°	3886.0	8.1
0°-180°	47775.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	15154	15154	15154	15154	15154	
5°	15058	15099	15080	15140	15121	###
15°	14450	14520	14587	14710	14724	4074
25°	13196	13341	13530	13742	13775	6070
35°	11282	11546	12020	12384	12458	7053
45°	8905	9354	10136	10689	10804	6875
55°	6309	6962	8019	8623	8727	5656
65°	3850	4636	5675	5956	5890	3825
75°	1814	2604	3286	3371	3338	1935
85°	378	998	1647	1873	1906	437
90°	5	423	989	1249	1304	28
95°	72	374	877	1126	1189	180
105°	1029	1144	1252	1135	1108	978
115°	722	784	951	1034	1043	728
125°	368	397	515	581	589	344
135°	226	237	289	346	363	179
145°	182	182	189	220	232	114
155°	153	159	157	154	158	66
165°	100	101	102	102	102	29
175°	90	91	91	92	92	9
180°	90	90	90	90	90	



TEST NUMBER: P827213

CATALOG NUMBER: OHBL-48HE-MFL-UNV-L840-CD-UPL24

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	15154.5	15154.5	15154.5	15154.5	15154.5
2.5°	15110.0	15147.1	15124.9	15173.1	15169.4
5°	15058.1	15098.9	15080.4	15139.7	15121.2
7.5°	14969.1	15013.6	15009.9	15076.7	15069.2
10°	14839.3	14887.5	14902.3	14991.4	14991.4
12.5°	14661.3	14724.3	14761.4	14869.0	14872.7
15°	14449.9	14520.3	14587.1	14709.5	14724.3
17.5°	14193.9	14283.0	14375.7	14516.6	14535.2
20°	13904.7	14004.8	14130.9	14279.2	14301.5
22.5°	13570.9	13689.5	13852.7	14027.0	14053.0
25°	13196.3	13340.9	13530.1	13741.5	13774.8
27.5°	12769.7	12936.6	13192.5	13429.9	13459.6
30°	12306.1	12502.7	12821.7	13103.5	13151.7
32.5°	11816.5	12042.8	12435.9	12751.2	12817.9
35°	11282.5	11545.8	12020.5	12384.0	12458.2
37.5°	10755.8	11045.1	11582.9	11998.3	12087.3
40°	10140.1	10499.9	11115.6	11575.5	11683.0
42.5°	9561.5	9951.0	10648.2	11148.9	11252.8
45°	8905.1	9353.8	10136.4	10689.0	10804.0
47.5°	8289.4	8775.2	9643.1	10214.3	10333.0
50°	7640.3	8174.4	9116.5	9713.6	9836.0
52.5°	6991.3	7566.1	8571.3	9190.6	9305.6
55°	6308.8	6961.6	8018.6	8623.2	8727.0
57.5°	5674.6	6364.5	7451.2	8026.1	8089.1
60°	5047.8	5763.6	6872.6	7377.0	7399.2
62.5°	4435.8	5188.7	6279.2	6679.7	6650.1
65°	3849.8	4636.1	5674.6	5956.5	5889.7
67.5°	3286.1	4098.3	5055.2	5237.0	5147.9
70°	2752.0	3575.4	4454.4	4547.1	4465.5
72.5°	2281.0	3078.4	3846.1	3924.0	3864.7
75°	1813.7	2603.6	3286.1	3371.4	3338.0
77.5°	1376.0	2143.7	2770.5	2881.8	2889.2
80°	990.3	1724.6	2321.8	2496.1	2518.3
82.5°	652.8	1338.9	1947.2	2169.7	2203.1
85°	378.3	997.7	1646.7	1873.0	1906.4
87.5°	163.2	719.5	1324.1	1528.1	1568.9
90°	5.0	423.4	989.1	1248.8	1304.1
92.5°	28.1	367.7	880.5	1133.1	1186.9
95°	71.5	374.3	876.7	1125.6	1188.9
97.5°	291.3	513.5	925.0	1161.6	1228.0
100°	574.3	778.9	1003.4	1186.1	1224.8
102.5°	875.3	1018.6	1081.6	1154.8	1172.8
105°	1029.0	1144.1	1252.0	1135.1	1108.3



TEST NUMBER: P827213

CATALOG NUMBER: OHBL-48HE-MFL-UNV-L840-CD-UPL24

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	837.7	920.1	1085.9	1159.3	1142.1
115°	721.7	784.3	951.2	1034.5	1043.3
117.5°	625.4	667.2	819.5	900.1	912.3
120°	523.4	564.1	706.6	775.7	784.6
122.5°	444.4	474.9	603.3	671.8	676.9
125°	367.7	396.8	515.1	580.8	589.0
127.5°	312.0	332.4	438.8	506.6	516.7
130°	275.0	286.7	378.3	442.3	454.4
132.5°	247.0	261.4	327.7	391.1	404.9
135°	226.0	237.4	288.9	346.5	363.4
137.5°	209.0	219.4	255.1	310.0	324.8
140°	197.7	205.4	228.9	275.4	291.3
142.5°	188.4	192.4	203.8	246.6	257.7
145°	182.1	182.4	189.1	219.8	231.9
147.5°	173.1	177.1	179.1	195.9	207.1
150°	166.1	171.8	171.1	175.8	187.9
152.5°	159.1	164.8	164.1	161.4	168.8
155°	153.1	158.8	157.1	154.4	158.1
157.5°	111.0	113.0	115.0	116.0	116.0
160°	107.0	108.0	110.0	111.0	111.0
162.5°	103.0	104.0	105.0	106.0	106.0
165°	100.0	101.0	102.0	102.0	102.0
167.5°	97.0	97.0	98.0	99.0	99.0
170°	94.0	95.0	95.0	96.0	96.0
172.5°	92.0	93.0	93.0	93.0	94.0
175°	90.0	91.0	91.0	92.0	92.0
177.5°	90.0	90.0	90.0	90.0	90.0
180°	90.0	90.0	90.0	90.0	90.0



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	1033.0	1144.5	1292.8	1203.7	1100.3
110°	955.0	1056.7	1212.0	1238.8	1159.4



(END OF REPORT)