

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: P827212

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

Issue Date: 5/3/2024

Test Information

Test Method: LM-79-08
Report Number: P827212
REPORT IS A COMBINATION OF REPORTS P826252 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-MCL-UNV-L840-CD-UPL24
Description: 48000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND MEDIUM CLEAR LENS AND 2400 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

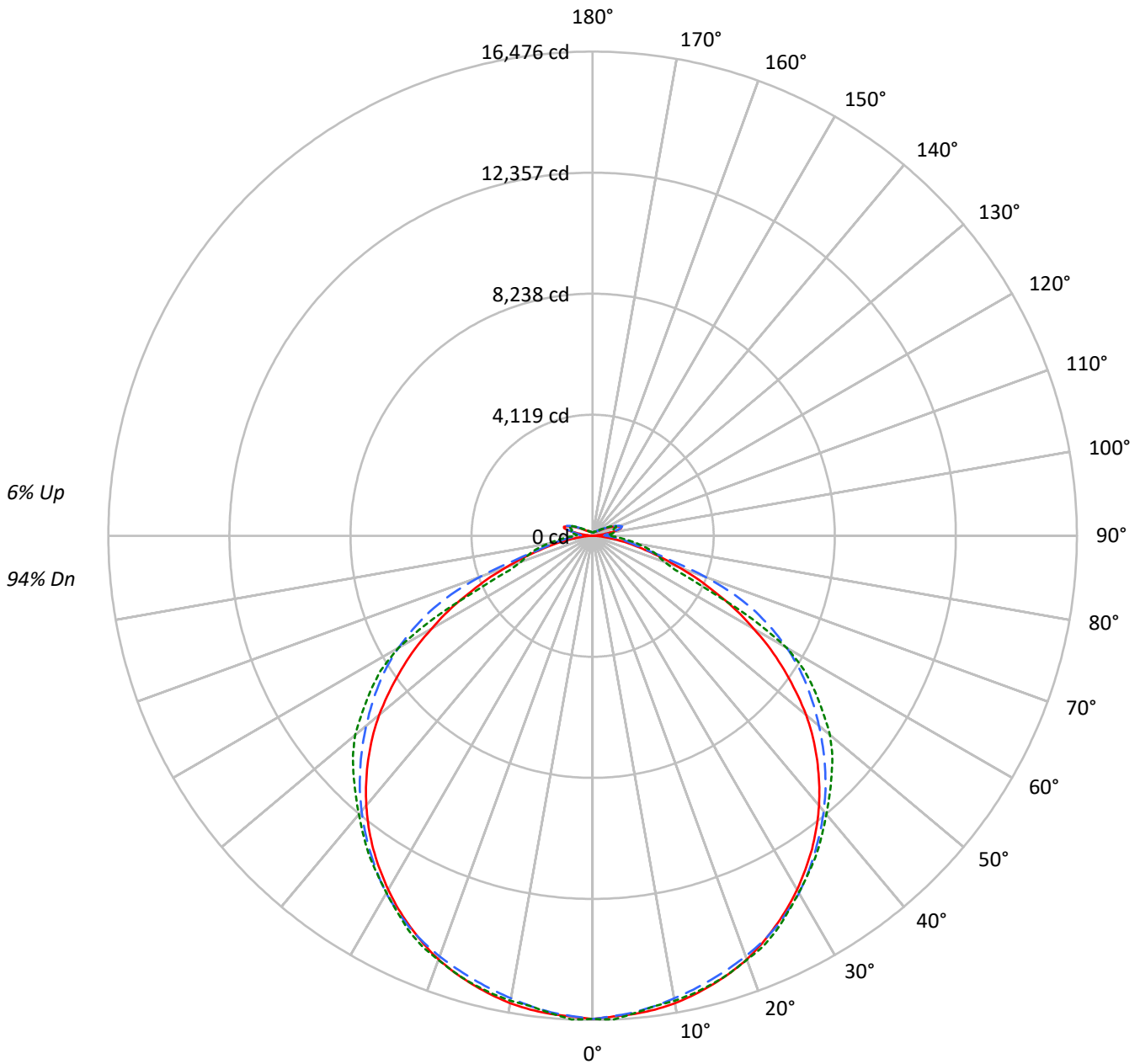
Lumens per Lamp: N/A
Luminaire Lumens: 48893.3 lumens
Efficiency: N/A
Efficacy: 172.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.27 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.8' x H: 0.17')
CIE Type: Direct

Input Watts (W): 283.4
Input Voltage (V): NR
Input Current (A_{in}): 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: P827212

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

Luminous Intensity Polar Plot





TEST NUMBER: P827212

CATALOG NUMBER: OHBL-48HE-MCL-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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	97	97	97	94																			
1	108	103	99	95	104	100	97	93	95	92	89	90	88	85	86	84	82	79																			
2	98	90	84	78	95	88	82	77	83	78	74	79	75	71	75	72	69	67																			
3	90	79	71	65	87	77	70	64	73	67	62	70	65	60	67	62	59	56																			
4	82	70	62	55	79	69	61	54	65	58	53	62	56	52	60	55	50	48																			
5	75	63	54	47	73	61	53	47	59	51	46	56	50	45	54	48	44	42																			
6	70	56	48	41	67	55	47	41	53	46	40	51	44	39	48	43	38	36																			
7	64	51	43	36	62	50	42	36	48	41	35	46	40	35	44	38	34	32																			
8	60	47	38	32	58	46	38	32	44	37	32	42	36	31	41	35	31	29																			
9	56	43	35	29	54	42	34	29	40	33	28	39	33	28	37	32	28	26																			
10	52	39	32	26	51	39	31	26	37	30	26	36	30	25	35	29	25	23																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26003	26003	26003
5°	25724	25625	25788
10°	25521	25237	25609
15°	25250	24947	25548
20°	24977	24764	25435
25°	24560	24580	25329
30°	24113	24290	24975
35°	23595	23829	24845
40°	22953	23353	24631
45°	22109	22803	24638
50°	21008	22176	24641
55°	19354	21559	23952
60°	17244	20657	22412
65°	14563	18982	14427
70°	11480	14819	10688
75°	8334	8797	11202
80°	5494	7314	11294
85°	2787	6702	11875



TEST NUMBER: P827212

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1550.3	3.2
10°-20°	4445.7	9.1
20°-30°	6789.9	13.9
30°-40°	8238.5	16.8
40°-50°	8634.7	17.7
50°-60°	7824.4	16.0
60°-70°	5245.9	10.7
70°-80°	2355.7	4.8
80°-90°	861.0	1.8
90°-100°	489.2	1.0
100°-110°	926.3	1.9
110°-120°	751.3	1.5
120°-130°	364.8	0.7
130°-140°	188.8	0.4
140°-150°	111.6	0.2
150°-160°	67.5	0.1
160°-170°	36.5	0.1
170°-180°	11.2	0.0
0°-30°	12785.9	26.2
0°-40°	21024.4	43.0
0°-60°	37483.6	76.7
0°-90°	45946.2	94.0
90°-120°	2166.8	4.4
90°-150°	2832.0	5.8
90°-180°	2947.0	6.0
0°-180°	48893.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16442	16442	16442	16442	16442	
5°	16335	16392	16278	16328	16307	###
15°	15805	15743	15632	15769	15788	4462
25°	14683	14619	14721	14856	14814	6768
35°	13014	13045	13178	13318	13266	8134
45°	10801	10976	11181	11466	11502	8320
55°	7948	8330	8899	9255	9234	7094
65°	4664	5394	6124	5168	4220	4648
75°	1835	2663	1959	2004	2135	2006
85°	316	606	777	939	984	386
90°	7	236	449	566	597	23
95°	55	237	448	563	603	168
105°	1012	1047	980	765	723	963
115°	711	728	768	785	784	716
125°	355	375	406	412	411	334
135°	221	228	237	251	255	175
145°	166	173	176	179	182	106
155°	140	144	146	147	145	65
165°	126	127	128	128	128	36
175°	116	117	115	113	113	11
180°	114	114	114	114	114	



TEST NUMBER: P827212

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	16442.2	16442.2	16442.2	16442.2	16442.2
2.5°	16375.6	16444.6	16359.0	16451.7	16475.5
5°	16335.2	16392.3	16278.1	16328.1	16306.7
7.5°	16261.5	16280.5	16145.0	16185.4	16142.6
10°	16152.1	16142.6	15983.3	16061.8	16071.3
12.5°	15990.5	15961.9	15819.3	15938.2	15940.6
15°	15805.0	15743.2	15631.5	15769.4	15788.4
17.5°	15591.1	15510.2	15436.5	15614.8	15586.3
20°	15341.4	15246.3	15232.1	15427.0	15355.7
22.5°	15032.4	14958.7	14992.0	15177.4	15132.2
25°	14682.9	14618.7	14720.9	14856.5	14813.7
27.5°	14314.4	14276.4	14392.9	14497.5	14414.3
30°	13910.2	13888.8	14043.4	14129.0	14024.4
32.5°	13470.4	13477.6	13625.0	13741.4	13644.0
35°	13014.0	13044.9	13178.0	13318.3	13266.0
37.5°	12512.3	12581.3	12714.4	12873.7	12819.0
40°	11982.2	12082.0	12229.4	12422.0	12372.1
42.5°	11409.2	11535.2	11725.4	11939.4	11934.6
45°	10800.6	10976.5	11181.0	11466.3	11501.9
47.5°	10168.2	10365.5	10624.7	11005.0	11059.7
50°	9481.1	9728.4	10051.7	10508.2	10541.4
52.5°	8715.6	9053.2	9481.1	9918.6	9878.2
55°	7947.7	8330.5	8898.7	9255.3	9233.9
57.5°	7182.2	7612.5	8301.9	8556.3	8553.9
60°	6326.3	6870.7	7624.4	7816.9	7626.7
62.5°	5534.6	6119.5	6901.6	6761.4	6110.0
65°	4664.5	5394.3	6124.2	5168.5	4219.9
67.5°	3891.8	4652.6	5201.8	3540.0	3031.2
70°	3114.4	3953.6	4055.9	2627.0	2591.4
72.5°	2425.0	3318.9	2798.2	2249.0	2363.1
75°	1835.4	2662.7	1959.0	2004.2	2134.9
77.5°	1338.5	2044.6	1523.9	1756.9	1863.9
80°	920.1	1447.8	1243.4	1476.4	1550.1
82.5°	577.7	955.7	996.1	1188.7	1264.8
85°	316.2	606.2	777.4	939.1	984.2
87.5°	130.8	366.1	594.4	725.1	763.1
90°	7.4	236.1	448.8	566.0	596.8
92.5°	19.4	199.5	400.1	508.5	538.2
95°	55.4	237.0	447.8	563.2	602.7
97.5°	273.8	390.9	543.6	657.2	699.7
100°	559.1	669.2	665.6	733.0	749.1
102.5°	862.5	914.6	779.7	748.9	748.1
105°	1012.5	1046.7	979.5	765.0	723.2



TEST NUMBER: P827212

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	824.6	853.3	884.8	883.2	856.0
115°	711.0	727.5	767.9	785.0	783.7
117.5°	611.0	616.8	656.4	669.7	675.5
120°	509.0	522.4	562.3	569.2	565.6
122.5°	430.0	442.0	474.2	484.1	480.4
125°	354.6	375.0	405.8	411.9	411.3
127.5°	305.0	318.0	347.0	355.2	356.5
130°	268.0	278.4	300.3	310.8	311.8
132.5°	242.4	251.8	265.9	279.4	278.4
135°	221.4	227.8	237.2	251.0	255.4
137.5°	206.8	209.8	215.8	230.7	233.0
140°	191.8	195.8	198.4	209.9	213.3
142.5°	176.4	182.8	184.4	193.5	195.9
145°	166.4	172.8	175.8	179.2	182.5
147.5°	159.8	163.8	165.8	167.8	170.2
150°	152.8	154.8	157.8	158.8	159.8
152.5°	145.8	147.8	150.8	151.8	151.8
155°	139.8	144.2	146.2	147.2	144.8
157.5°	134.8	139.2	141.2	142.2	142.2
160°	130.8	134.2	136.2	137.2	137.2
162.5°	129.2	130.2	131.2	132.2	132.2
165°	126.2	127.2	128.2	128.2	128.2
167.5°	123.2	125.5	124.2	125.2	125.2
170°	120.2	121.2	121.2	119.8	119.8
172.5°	118.2	119.2	119.2	116.8	117.8
175°	116.2	117.2	114.8	113.4	113.4
177.5°	118.5	116.2	113.8	111.4	109.0
180°	113.8	113.8	113.8	113.8	113.8



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	1018.9	1056.2	1049.5	869.3	752.0
110°	943.3	976.0	990.5	934.9	841.6



(END OF REPORT)