

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: P827219

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

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P827219
REPORT IS A COMBINATION OF REPORTS P826259 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-48SE-MFL-UNV-L840-CD-UPL24
Description: 48000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND MEDIUM FROSTED LENS AND 2400 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

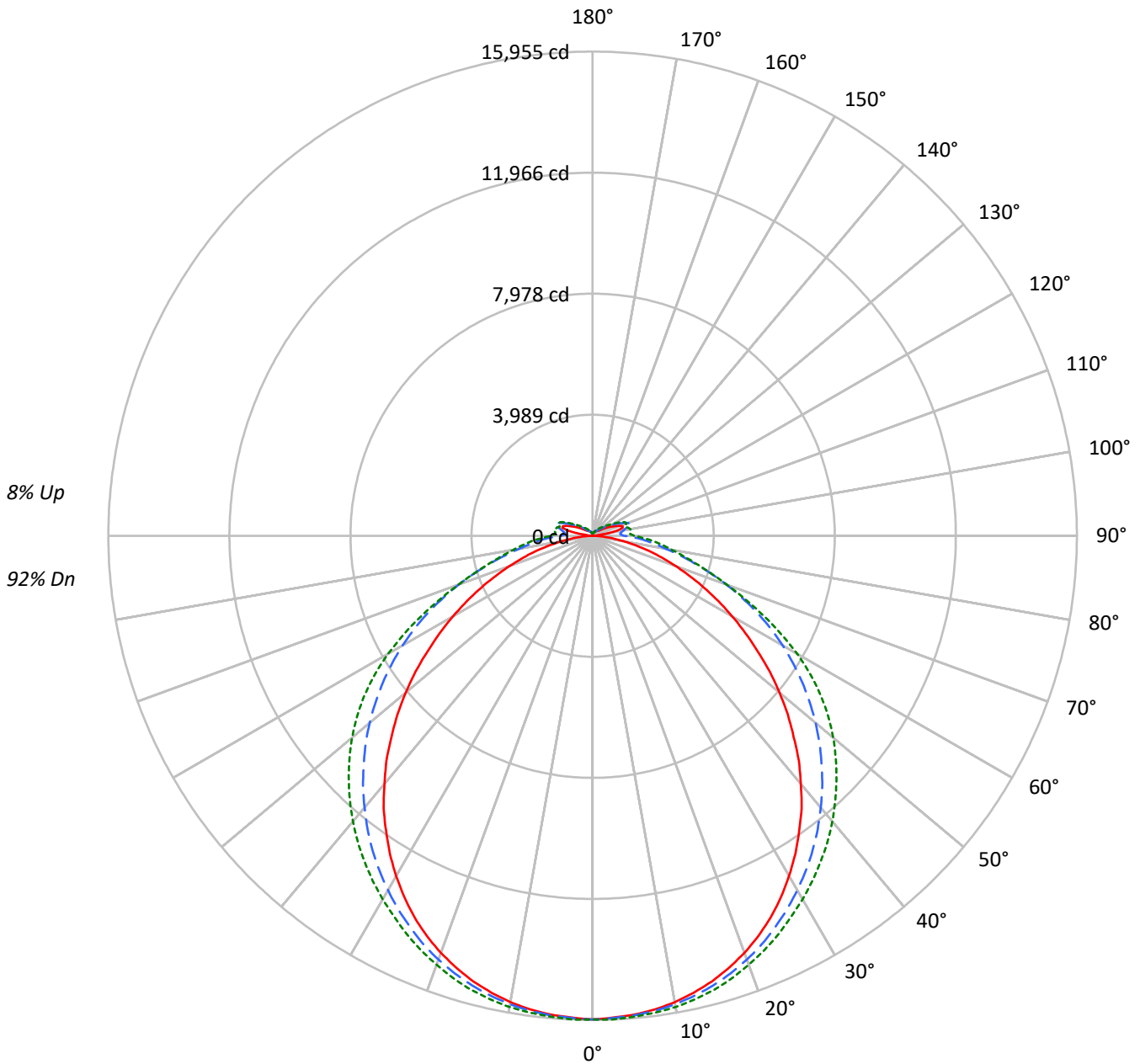
Lumens per Lamp: N/A
Luminaire Lumens: 50123.2 lumens
Efficiency: N/A
Efficacy: 163.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')
CIE Type: Direct

Input Watts (W): 306.2
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: P827219

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

Luminous Intensity Polar Plot





TEST NUMBER: P827219

CATALOG NUMBER: OHBL-48SE-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	114	114	114	114	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	83	80	78	76																			
2	97	88	81	75	93	86	79	74	81	75	71	76	72	68	72	69	65	63																			
3	88	77	69	63	85	75	68	61	71	65	59	67	62	57	64	59	55	53																			
4	81	68	60	53	78	67	58	52	63	56	51	60	54	49	57	52	48	45																			
5	74	61	52	45	71	60	51	45	57	49	44	54	47	42	51	46	41	39																			
6	68	55	46	40	66	54	45	39	51	44	38	49	42	37	46	41	36	34																			
7	63	50	41	35	61	49	40	35	46	39	34	44	38	33	42	37	32	30																			
8	59	45	37	31	57	44	36	31	42	35	30	41	34	29	39	33	29	27																			
9	55	42	33	28	53	41	33	28	39	32	27	37	31	27	36	30	26	24																			
10	52	38	31	25	50	38	30	25	36	29	25	35	28	24	33	28	24	22																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27224	27224	27224
5°	26918	26954	27163
10°	26600	26704	27135
15°	26172	26408	27064
20°	25648	26048	26908
25°	24991	25602	26753
30°	24133	25118	26604
35°	23123	24606	26503
40°	21938	24013	26420
45°	20566	23370	26289
50°	19079	22719	26117
55°	17289	21924	25714
60°	15458	20988	24698
65°	13474	19795	22873
70°	11339	18279	20921
75°	9166	16524	19895
80°	6536	15222	20842
85°	3638	15680	26128



TEST NUMBER: P827219

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1510.3	3.0
10°-20°	4332.9	8.6
20°-30°	6552.7	13.1
30°-40°	7866.6	15.7
40°-50°	8124.9	16.2
50°-60°	7309.9	14.6
60°-70°	5506.4	11.0
70°-80°	3325.0	6.6
80°-90°	1632.3	3.3
90°-100°	916.3	1.8
100°-110°	1195.6	2.4
110°-120°	919.8	1.8
120°-130°	461.0	0.9
130°-140°	234.0	0.5
140°-150°	129.3	0.3
150°-160°	68.3	0.1
160°-170°	29.0	0.1
170°-180°	8.8	0.0
0°-30°	12395.9	24.7
0°-40°	20262.5	40.4
0°-60°	35697.3	71.2
0°-90°	46161.0	92.1
90°-120°	3031.8	6.0
90°-150°	3856.0	7.7
90°-180°	3962.0	7.9
0°-180°	50123.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15939	15939	15939	15939	15939	
5°	15838	15881	15861	15924	15904	###
15°	15198	15272	15342	15471	15487	4285
25°	13879	14032	14230	14453	14488	6384
35°	11866	12144	12643	13025	13103	7418
45°	9366	9838	10661	11242	11363	7231
55°	6635	7322	8434	9070	9179	5949
65°	4049	4876	5968	6265	6195	4023
75°	1908	2738	3456	3546	3511	2035
85°	398	1049	1732	1970	2005	460
90°	5	444	1038	1310	1368	29
95°	72	388	913	1172	1237	181
105°	1030	1152	1273	1163	1137	979
115°	723	789	964	1052	1062	730
125°	369	399	523	592	601	345
135°	227	239	293	353	371	180
145°	184	184	191	223	236	115
155°	155	161	159	156	160	66
165°	100	101	102	102	102	29
175°	90	91	91	92	92	9
180°	90	90	90	90	90	



TEST NUMBER: P827219

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	15939.1	15939.1	15939.1	15939.1	15939.1
2.5°	15892.3	15931.3	15907.9	15958.6	15954.7
5°	15837.7	15880.6	15861.1	15923.5	15904.0
7.5°	15744.0	15790.9	15787.0	15857.2	15849.4
10°	15607.5	15658.2	15673.8	15767.5	15767.5
12.5°	15420.3	15486.6	15525.6	15638.7	15642.6
15°	15197.9	15272.0	15342.3	15471.0	15486.6
17.5°	14928.8	15022.4	15119.9	15268.1	15287.6
20°	14624.5	14729.8	14862.4	15018.5	15041.9
22.5°	14273.4	14398.2	14569.9	14753.2	14780.5
25°	13879.4	14031.5	14230.5	14452.8	14488.0
27.5°	13430.8	13606.4	13875.5	14125.2	14156.4
30°	12943.2	13149.9	13485.4	13781.9	13832.6
32.5°	12428.3	12666.2	13079.7	13411.3	13481.5
35°	11866.5	12143.5	12642.8	13025.1	13103.1
37.5°	11312.6	11616.9	12182.5	12619.4	12713.0
40°	10665.1	11043.5	11691.0	12174.7	12287.8
42.5°	10056.5	10466.1	11199.5	11726.1	11835.3
45°	9366.1	9838.1	10661.2	11242.4	11363.3
47.5°	8718.5	9229.5	10142.3	10743.1	10867.9
50°	8035.9	8597.6	9588.4	10216.5	10345.2
52.5°	7353.2	7957.8	9015.0	9666.4	9787.4
55°	6635.4	7322.0	8433.8	9069.6	9178.8
57.5°	5968.4	6693.9	7836.9	8441.6	8507.9
60°	5309.1	6062.0	7228.4	7758.9	7782.3
62.5°	4665.5	5457.4	6604.2	7025.5	6994.3
65°	4049.1	4876.1	5968.4	6264.9	6194.6
67.5°	3456.2	4310.5	5316.9	5508.1	5414.5
70°	2894.5	3760.5	4685.0	4782.5	4696.7
72.5°	2399.1	3237.7	4045.2	4127.2	4064.7
75°	1907.5	2738.4	3456.2	3545.9	3510.8
77.5°	1447.2	2254.7	2914.0	3031.0	3038.8
80°	1041.5	1813.9	2442.0	2625.3	2648.7
82.5°	686.6	1408.2	2048.0	2282.0	2317.1
85°	397.9	1049.3	1732.0	1970.0	2005.1
87.5°	171.6	756.8	1392.6	1607.2	1650.1
90°	5.0	443.6	1037.8	1310.3	1368.0
92.5°	28.7	384.4	922.4	1186.5	1242.4
95°	72.5	388.0	913.2	1172.0	1237.1
97.5°	292.4	525.1	956.6	1202.1	1270.2
100°	575.4	788.8	1030.8	1221.7	1261.9
102.5°	876.4	1027.4	1105.6	1185.9	1205.3
105°	1030.3	1151.9	1273.1	1162.7	1137.1



TEST NUMBER: P827219

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	839.2	925.3	1100.5	1178.9	1162.5
115°	723.2	788.7	964.3	1052.0	1061.6
117.5°	627.1	671.0	831.1	915.9	928.6
120°	525.1	567.3	716.7	789.8	799.4
122.5°	446.1	477.6	612.3	684.5	690.2
125°	369.2	398.9	522.9	592.2	600.9
127.5°	313.3	334.1	445.5	516.7	527.5
130°	276.3	288.2	384.0	451.3	464.0
132.5°	248.3	263.1	332.5	398.9	413.5
135°	227.3	239.1	292.9	353.4	371.0
137.5°	210.3	221.1	258.3	315.9	331.5
140°	199.2	207.1	231.6	280.4	297.0
142.5°	190.1	194.1	205.9	250.8	262.5
145°	184.0	184.1	191.0	223.2	235.9
147.5°	175.0	179.0	181.0	198.6	210.3
150°	168.0	173.9	173.0	177.9	190.6
152.5°	161.0	166.9	166.0	163.1	170.9
155°	155.0	160.9	159.0	156.1	160.0
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°	1034.3	1151.4	1311.4	1228.3	1125.8
110°	956.3	1062.8	1228.5	1260.7	1182.2



(END OF REPORT)