

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: P827153

Luminaire Tested: **OHBL-24SE-MFL-UNV-L840-CD-UPL36**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P827153
REPORT IS A COMBINATION OF REPORTS P826307 AND G3-2310-221-2
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-24SE-MFL-UNV-L840-CD-UPL36
Description: 24000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND MEDIUM FROSTED LENS AND 3600 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

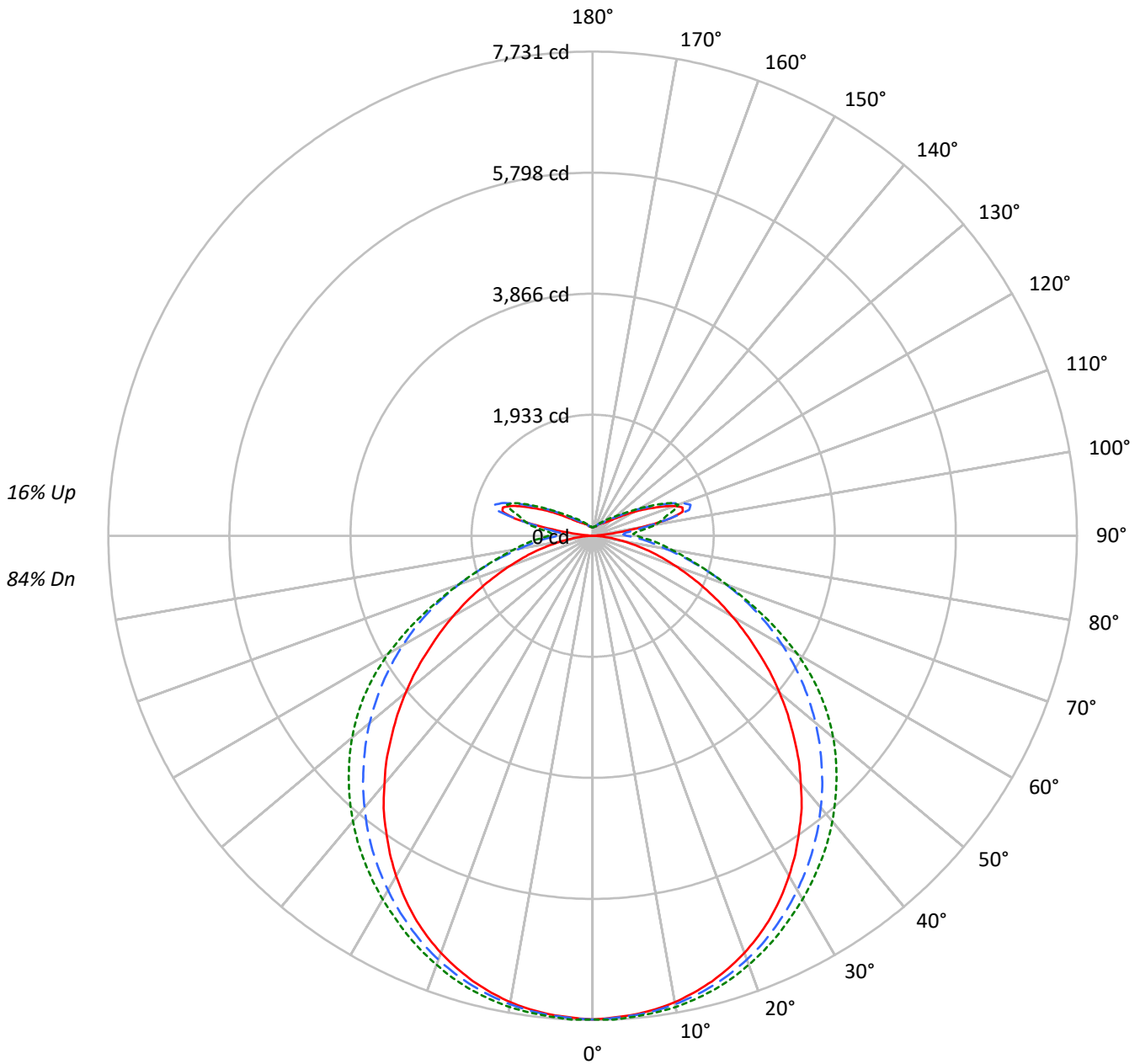
Lumens per Lamp: N/A
Luminaire Lumens: 26698.1 lumens
Efficiency: N/A
Efficacy: 160.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 166.8
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

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Luminous Intensity Polar Plot





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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	115	115	115	115	111	111	111	111	102	102	102	94	94	94	87	87	87	84																			
1	105	100	95	91	100	96	92	88	89	85	83	82	80	77	76	74	72	69																			
2	95	87	80	74	91	83	77	72	77	72	68	72	68	64	66	63	60	57																			
3	87	76	68	62	83	73	66	60	68	62	57	63	58	54	59	54	51	48																			
4	79	67	59	52	76	65	57	51	60	54	48	56	51	46	52	48	44	41																			
5	73	60	51	45	69	58	50	44	54	47	42	50	44	40	47	42	38	35																			
6	67	54	45	39	64	52	44	38	49	42	36	46	40	35	43	37	33	31																			
7	62	49	40	34	59	47	39	34	44	37	32	41	35	31	39	34	30	27																			
8	58	44	36	30	55	43	35	30	40	34	29	38	32	28	36	30	26	24																			
9	54	41	33	27	52	40	32	27	37	30	26	35	29	25	33	28	24	22																			
10	50	38	30	25	48	36	29	24	34	28	23	32	27	23	31	25	22	20																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13192	13192	13192
5°	13044	13061	13163
10°	12890	12940	13149
15°	12682	12797	13115
20°	12429	12622	13039
25°	12110	12406	12964
30°	11694	12172	12892
35°	11205	11923	12843
40°	10631	11636	12803
45°	9966	11325	12739
50°	9245	11009	12656
55°	8378	10624	12460
60°	7491	10170	11968
65°	6529	9593	11084
70°	5494	8858	10138
75°	4442	8007	9641
80°	3167	7376	10099
85°	1763	7598	12661



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	731.9	2.7
10°-20°	2099.6	7.9
20°-30°	3175.3	11.9
30°-40°	3812.0	14.3
40°-50°	3937.2	14.7
50°-60°	3542.2	13.3
60°-70°	2668.3	10.0
70°-80°	1611.2	6.0
80°-90°	795.7	3.0
90°-100°	606.8	2.3
100°-110°	1435.4	5.4
110°-120°	1142.4	4.3
120°-130°	551.0	2.1
130°-140°	280.2	1.0
140°-150°	160.6	0.6
150°-160°	90.7	0.3
160°-170°	44.1	0.2
170°-180°	13.4	0.1
0°-30°	6006.8	22.5
0°-40°	9818.8	36.8
0°-60°	17298.2	64.8
0°-90°	22373.5	83.8
90°-120°	3184.7	11.9
90°-150°	4176.4	15.6
90°-180°	4325.0	16.2
0°-180°	26698.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7724	7724	7724	7724	7724	
5°	7675	7695	7686	7716	7707	729
15°	7365	7400	7435	7497	7504	2076
25°	6726	6799	6896	7004	7021	3094
35°	5750	5884	6126	6312	6350	3595
45°	4539	4767	5166	5448	5506	3504
55°	3215	3548	4087	4395	4448	2883
65°	1962	2363	2892	3036	3002	1949
75°	924	1327	1675	1718	1701	986
85°	193	508	839	955	972	223
90°	8	248	543	677	702	18
95°	72	258	524	668	700	239
105°	1490	1552	1594	1303	1214	1417
115°	1045	1060	1152	1203	1201	1057
125°	522	546	614	640	635	491
135°	313	324	355	386	395	248
145°	237	240	247	265	272	150
155°	195	200	201	201	203	88
165°	151	153	154	155	156	43
175°	138	138	139	139	140	13
180°	136	136	136	136	136	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7723.8	7723.8	7723.8	7723.8	7723.8
2.5°	7701.1	7720.0	7708.7	7733.2	7731.4
5°	7674.6	7695.4	7686.0	7716.2	7706.8
7.5°	7629.3	7652.0	7650.1	7684.1	7680.3
10°	7563.1	7587.7	7595.3	7640.6	7640.6
12.5°	7472.4	7504.5	7523.4	7578.2	7580.1
15°	7364.6	7400.5	7434.6	7497.0	7504.5
17.5°	7234.2	7279.6	7326.8	7398.7	7408.1
20°	7086.8	7137.8	7202.1	7277.7	7289.0
22.5°	6916.6	6977.1	7060.3	7149.1	7162.4
25°	6725.7	6799.4	6895.8	7003.6	7020.6
27.5°	6508.3	6593.4	6723.8	6844.8	6859.9
30°	6272.0	6372.2	6534.8	6678.5	6703.0
32.5°	6022.5	6137.8	6338.2	6498.9	6532.9
35°	5750.3	5884.5	6126.5	6311.7	6349.5
37.5°	5481.9	5629.3	5903.4	6115.1	6160.5
40°	5168.1	5351.5	5665.2	5899.6	5954.5
42.5°	4873.2	5071.7	5427.1	5682.3	5735.2
45°	4538.6	4767.4	5166.2	5447.9	5506.5
47.5°	4224.8	4472.5	4914.8	5205.9	5266.4
50°	3894.0	4166.2	4646.4	4950.7	5013.1
52.5°	3563.2	3856.2	4368.5	4684.2	4742.8
55°	3215.4	3548.1	4086.8	4395.0	4447.9
57.5°	2892.2	3243.8	3797.6	4090.6	4122.8
60°	2572.7	2937.5	3502.7	3759.8	3771.2
62.5°	2260.8	2644.5	3200.3	3404.4	3389.3
65°	1962.1	2362.9	2892.2	3035.8	3001.8
67.5°	1674.8	2088.8	2576.5	2669.1	2623.7
70°	1402.6	1822.3	2270.3	2317.5	2275.9
72.5°	1162.5	1569.0	1960.2	1999.9	1969.7
75°	924.4	1327.0	1674.8	1718.3	1701.3
77.5°	701.3	1092.6	1412.1	1468.8	1472.5
80°	504.7	879.0	1183.3	1272.2	1283.5
82.5°	332.7	682.4	992.4	1105.8	1122.8
85°	192.8	508.5	839.3	954.6	971.6
87.5°	83.2	366.7	674.8	778.8	799.6
90°	8.0	247.5	543.1	676.9	702.5
92.5°	30.7	224.5	489.1	621.5	648.3
95°	71.5	258.2	524.2	667.5	700.5
97.5°	385.3	515.4	660.9	815.9	856.9
100°	814.3	922.3	909.3	993.7	1028.8
102.5°	1269.3	1362.0	1244.3	1140.2	1123.5
105°	1490.2	1551.5	1593.9	1303.2	1214.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1225.1	1264.0	1345.7	1390.8	1366.4
115°	1045.1	1059.5	1152.5	1203.0	1200.6
117.5°	898.0	908.8	992.4	1030.0	1024.7
120°	758.0	773.1	851.2	875.0	874.6
122.5°	631.0	654.5	723.8	749.8	742.4
125°	522.1	545.8	614.5	639.5	635.2
127.5°	448.2	458.0	521.2	550.2	555.9
130°	387.2	397.1	449.7	483.8	487.5
132.5°	345.2	357.0	397.3	430.5	441.1
135°	313.2	324.0	354.7	386.1	394.6
137.5°	287.2	297.0	318.1	349.6	358.2
140°	267.1	275.0	290.5	317.1	324.7
142.5°	251.0	257.0	265.8	289.6	295.3
145°	236.9	240.0	246.9	265.0	271.7
147.5°	224.9	228.9	233.9	242.5	249.1
150°	213.9	218.8	220.9	224.8	231.5
152.5°	203.9	208.8	210.9	210.0	214.8
155°	194.9	199.8	200.9	201.0	202.9
157.5°	168.0	171.0	174.0	175.0	175.0
160°	162.0	164.0	167.0	167.0	168.0
162.5°	156.0	158.0	160.0	161.0	162.0
165°	151.0	153.0	154.0	155.0	156.0
167.5°	147.0	148.0	149.0	150.0	150.0
170°	143.0	144.0	145.0	145.0	146.0
172.5°	140.0	141.0	142.0	142.0	142.0
175°	138.0	138.0	139.0	139.0	140.0
177.5°	136.0	137.0	137.0	137.0	138.0
180°	136.0	136.0	136.0	136.0	136.0



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	1504.2	1562.1	1641.4	1526.0	1361.4
110°	1389.2	1449.5	1528.6	1524.5	1454.9



(END OF REPORT)