

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: P827151

Luminaire Tested: **OHBL-24SE-MFL-UNV-L840-CD-UPL12**

Issue Date: 5/3/2024

Test Information

Test Method: LM-79-08
Report Number: P827151
REPORT IS A COMBINATION OF REPORTS P826079 AND G3-2310-221-12
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-UPL12
Description: 24000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND MEDIUM FROSTED LENS AND 1200 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

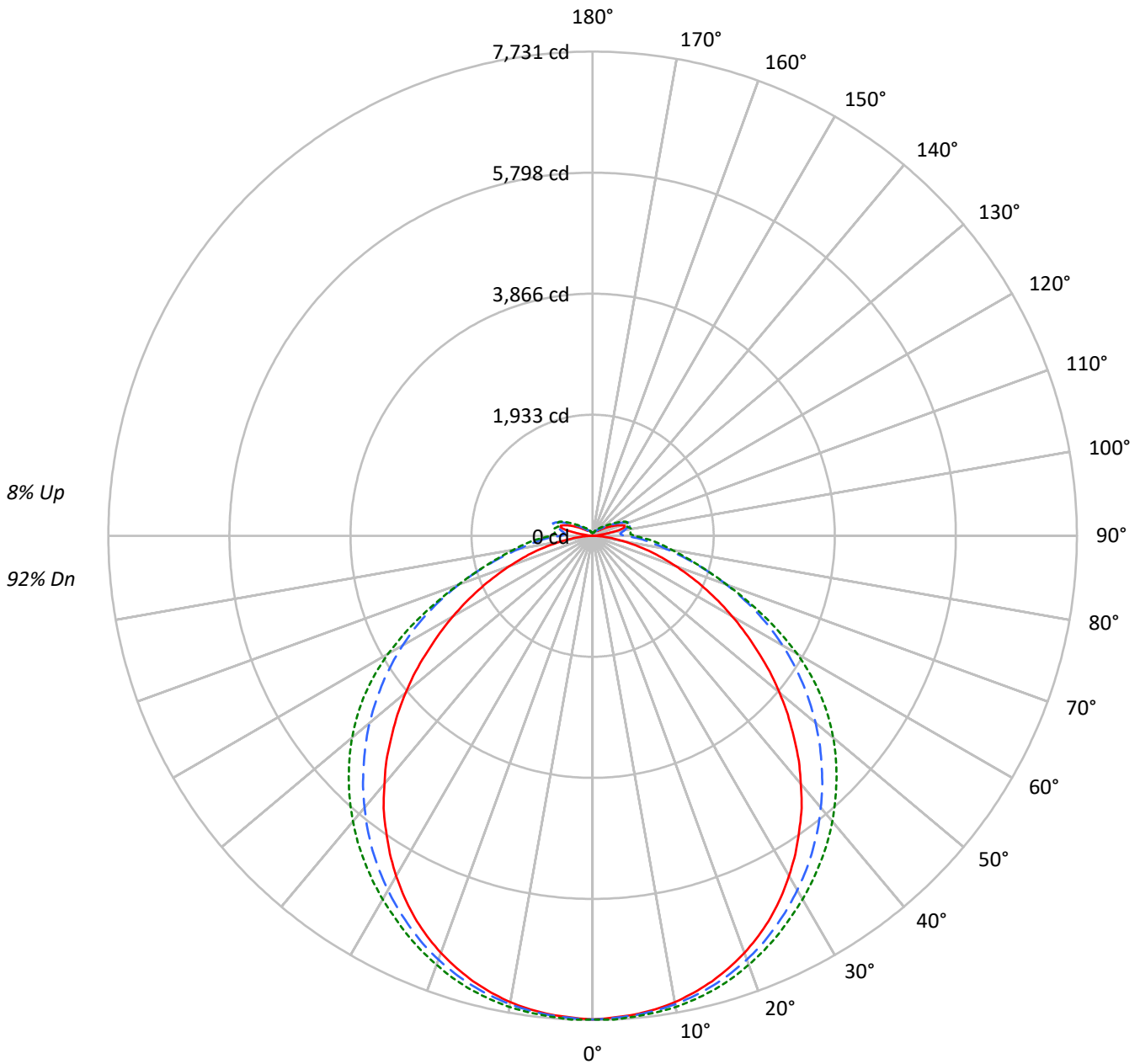
Lumens per Lamp: N/A
Luminaire Lumens: 24361.3 lumens
Efficiency: N/A
Efficacy: 166.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')
CIE Type: Direct

Input Watts (W): 146.4
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: P827151

CATALOG NUMBER: OHBL-24SE-MFL-UNV-L840-CD-UPL12

Luminous Intensity Polar Plot





TEST NUMBER: P827151

CATALOG NUMBER: OHBL-24SE-MFL-UNV-L840-CD-UPL12

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	92	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°	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



TEST NUMBER: P827151

CATALOG NUMBER: OHBL-24SE-MFL-UNV-L840-CD-UPL12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	731.9	3.0
10°-20°	2099.6	8.6
20°-30°	3175.3	13.0
30°-40°	3812.0	15.6
40°-50°	3937.2	16.2
50°-60°	3542.2	14.5
60°-70°	2668.3	11.0
70°-80°	1611.2	6.6
80°-90°	791.2	3.2
90°-100°	450.7	1.8
100°-110°	603.3	2.5
110°-120°	466.7	1.9
120°-130°	233.3	1.0
130°-140°	118.3	0.5
140°-150°	65.7	0.3
150°-160°	34.9	0.1
160°-170°	15.0	0.1
170°-180°	4.6	0.0
0°-30°	6006.8	24.7
0°-40°	9818.8	40.3
0°-60°	17298.2	71.0
0°-90°	22368.9	91.8
90°-120°	1520.6	6.2
90°-150°	1937.9	8.0
90°-180°	1992.0	8.2
0°-180°	24361.3	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°	3	216	504	636	664	14
95°	34	192	445	574	608	90
105°	530	588	644	581	568	502
115°	375	404	490	530	532	375
125°	191	204	264	296	303	178
135°	115	122	149	178	186	92
145°	94	94	97	113	120	59
155°	79	82	81	80	82	34
165°	52	52	53	53	53	15
175°	47	47	47	47	47	5
180°	46	46	46	46	46	



TEST NUMBER: P827151

CATALOG NUMBER: OHBL-24SE-MFL-UNV-L840-CD-UPL12

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°	3.0	216.5	504.1	635.9	664.5
92.5°	14.7	187.5	450.1	579.5	605.3
95°	34.5	192.2	445.2	573.5	608.5
97.5°	146.3	260.4	477.9	594.9	621.9
100°	287.3	395.3	517.3	607.7	627.8
102.5°	450.3	520.0	552.3	592.2	600.5
105°	530.2	588.5	643.9	581.2	567.5



TEST NUMBER: P827151

CATALOG NUMBER: OHBL-24SE-MFL-UNV-L840-CD-UPL12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	433.1	472.0	561.7	594.8	585.4
115°	375.1	403.5	489.5	530.0	531.6
117.5°	319.0	343.8	422.4	461.0	464.7
120°	270.0	291.1	361.2	395.0	402.6
122.5°	230.0	244.5	309.8	342.8	349.4
125°	191.1	203.8	264.5	296.5	303.2
127.5°	160.2	170.0	226.2	259.2	264.9
130°	141.2	147.1	193.7	226.8	232.5
132.5°	127.2	134.0	168.3	199.5	208.1
135°	115.2	122.0	148.7	178.1	185.6
137.5°	107.2	113.0	131.1	158.6	167.2
140°	101.1	106.0	117.5	141.1	148.7
142.5°	97.0	99.0	104.8	126.6	133.3
145°	93.9	94.0	96.9	113.0	119.7
147.5°	88.9	90.9	92.9	100.5	107.1
150°	85.9	88.8	87.9	90.8	96.5
152.5°	81.9	84.8	83.9	83.0	86.8
155°	78.9	81.8	80.9	80.0	81.9
157.5°	57.0	59.0	59.0	60.0	60.0
160°	55.0	56.0	57.0	57.0	57.0
162.5°	53.0	54.0	54.0	55.0	55.0
165°	52.0	52.0	53.0	53.0	53.0
167.5°	50.0	50.0	51.0	51.0	51.0
170°	49.0	49.0	49.0	50.0	50.0
172.5°	48.0	48.0	48.0	48.0	48.0
175°	47.0	47.0	47.0	47.0	47.0
177.5°	46.0	47.0	47.0	47.0	47.0
180°	46.0	46.0	46.0	46.0	46.0



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	533.2	590.1	664.4	615.0	560.4
110°	489.2	543.5	623.6	635.5	593.9



(END OF REPORT)