

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: P827117

Luminaire Tested: **OHBL-18SE-MFL-UNV-L840-CD-UPL24**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P827117
REPORT IS A COMBINATION OF REPORTS P826235 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-18SE-MFL-UNV-L840-CD-UPL24
Description: 18000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND MEDIUM FROSTED LENS AND 2400 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

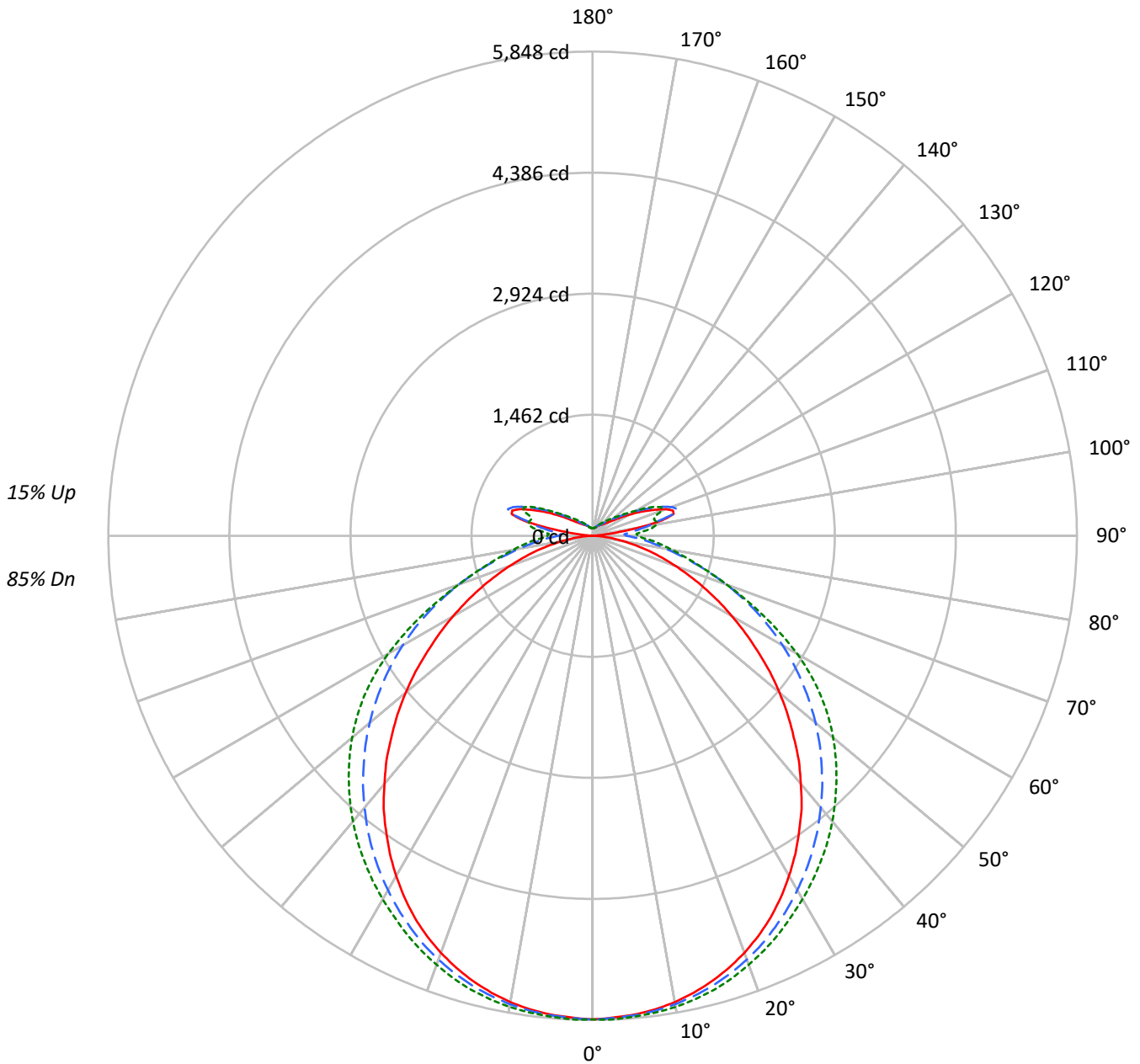
Lumens per Lamp: N/A
Luminaire Lumens: 19904.3 lumens
Efficiency: N/A
Efficacy: 162.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 122.4
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: P827117

CATALOG NUMBER: OHBL-18SE-MFL-UNV-L840-CD-UPL24

Luminous Intensity Polar Plot





TEST NUMBER: P827117

CATALOG NUMBER: OHBL-18SE-MFL-UNV-L840-CD-UPL24

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				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	103	103	103	95	95	95	88	88	88	85			
1	105	100	96	92	101	96	92	89	89	86	83	83	80	78	77	75	73	70			
2	95	87	80	74	91	84	78	72	78	73	68	72	68	65	67	64	61	58			
3	87	76	68	62	83	74	66	60	68	62	57	64	59	54	59	55	52	49			
4	79	67	59	52	76	65	57	51	61	54	49	57	51	46	53	48	44	42			
5	73	60	51	45	70	58	50	44	54	47	42	51	45	40	48	43	38	36			
6	67	54	45	39	64	52	44	38	49	42	37	46	40	35	43	38	34	31			
7	62	49	40	34	60	47	39	34	45	38	32	42	36	31	39	34	30	28			
8	58	45	36	30	56	43	35	30	41	34	29	38	32	28	36	31	27	25			
9	54	41	33	27	52	40	32	27	37	31	26	35	29	25	33	28	24	22			
10	51	38	30	25	49	37	29	24	35	28	24	33	27	23	31	26	22	20			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9978	9978	9978
5°	9866	9879	9956
10°	9749	9787	9946
15°	9593	9679	9920
20°	9400	9547	9862
25°	9160	9383	9806
30°	8845	9206	9751
35°	8475	9018	9714
40°	8041	8801	9683
45°	7538	8566	9635
50°	6993	8327	9572
55°	6337	8035	9425
60°	5666	7692	9052
65°	4939	7255	8383
70°	4156	6699	7668
75°	3359	6057	7292
80°	2396	5579	7639
85°	1333	5747	9576



TEST NUMBER: P827117

CATALOG NUMBER: OHBL-18SE-MFL-UNV-L840-CD-UPL24

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	553.6	2.8
10°-20°	1588.1	8.0
20°-30°	2401.7	12.1
30°-40°	2883.2	14.5
40°-50°	2977.9	15.0
50°-60°	2679.2	13.5
60°-70°	2018.2	10.1
70°-80°	1218.7	6.1
80°-90°	602.2	3.0
90°-100°	482.7	2.4
100°-110°	948.1	4.8
110°-120°	774.5	3.9
120°-130°	378.8	1.9
130°-140°	190.8	1.0
140°-150°	108.2	0.5
150°-160°	60.5	0.3
160°-170°	29.0	0.1
170°-180°	8.8	0.0
0°-30°	4543.3	22.8
0°-40°	7426.6	37.3
0°-60°	13083.7	65.7
0°-90°	16922.7	85.0
90°-120°	2205.4	11.1
90°-150°	2883.2	14.5
90°-180°	2982.0	15.0
0°-180°	19904.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5842	5842	5842	5842	5842	
5°	5805	5820	5813	5836	5829	551
15°	5570	5598	5623	5670	5676	1570
25°	5087	5143	5216	5297	5310	2340
35°	4349	4451	4634	4774	4802	2719
45°	3433	3606	3908	4120	4165	2650
55°	2432	2684	3091	3324	3364	2180
65°	1484	1787	2188	2296	2270	1474
75°	699	1004	1267	1300	1287	746
85°	146	385	635	722	735	168
90°	5	184	410	520	545	13
95°	60	212	444	574	617	171
105°	1013	1051	1001	807	766	962
115°	703	732	796	827	827	710
125°	349	372	422	446	448	327
135°	210	217	241	264	272	166
145°	159	162	166	179	184	101
155°	130	134	134	134	135	59
165°	100	101	102	102	102	29
175°	90	91	91	92	92	9
180°	90	90	90	90	90	



TEST NUMBER: P827117

CATALOG NUMBER: OHBL-18SE-MFL-UNV-L840-CD-UPL24

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5842.0	5842.0	5842.0	5842.0	5842.0
2.5°	5824.8	5839.1	5830.5	5849.1	5847.7
5°	5804.8	5820.5	5813.4	5836.2	5829.1
7.5°	5770.5	5787.6	5786.2	5811.9	5809.1
10°	5720.4	5739.0	5744.7	5779.1	5779.1
12.5°	5651.8	5676.1	5690.4	5731.9	5733.3
15°	5570.3	5597.5	5623.2	5670.4	5676.1
17.5°	5471.7	5506.0	5541.7	5596.0	5603.2
20°	5360.1	5398.7	5447.3	5504.5	5513.1
22.5°	5231.5	5277.2	5340.1	5407.3	5417.3
25°	5087.1	5142.8	5215.7	5297.2	5310.1
27.5°	4922.6	4987.0	5085.6	5177.1	5188.6
30°	4743.9	4819.7	4942.6	5051.3	5069.9
32.5°	4555.2	4642.4	4794.0	4915.5	4941.2
35°	4349.3	4450.8	4633.8	4773.9	4802.5
37.5°	4146.3	4257.8	4465.1	4625.2	4659.6
40°	3908.9	4047.6	4285.0	4462.3	4503.7
42.5°	3685.9	3836.0	4104.8	4297.8	4337.9
45°	3432.8	3605.8	3907.5	4120.5	4164.9
47.5°	3195.5	3382.8	3717.4	3937.5	3983.3
50°	2945.3	3151.2	3514.3	3744.5	3791.7
52.5°	2695.1	2916.7	3304.2	3542.9	3587.2
55°	2432.0	2683.6	3091.1	3324.2	3364.2
57.5°	2187.5	2453.5	2872.4	3094.0	3118.3
60°	1945.9	2221.8	2649.3	2843.8	2852.4
62.5°	1710.0	2000.2	2420.6	2575.0	2563.5
65°	1484.1	1787.2	2187.5	2296.2	2270.4
67.5°	1266.8	1579.9	1948.7	2018.8	1984.5
70°	1060.9	1378.3	1717.1	1752.9	1721.4
72.5°	879.3	1186.7	1482.7	1512.7	1489.8
75°	699.1	1003.7	1266.8	1299.6	1286.8
77.5°	530.4	826.4	1068.0	1110.9	1113.8
80°	381.7	664.8	895.0	962.2	970.8
82.5°	251.6	516.1	750.6	836.4	849.3
85°	145.8	384.6	634.8	722.0	734.9
87.5°	62.9	277.4	510.4	589.1	604.8
90°	5.0	184.1	410.2	519.5	545.1
92.5°	21.3	169.4	383.7	499.5	528.2
95°	60.1	212.5	443.7	574.0	616.9
97.5°	277.6	376.8	548.9	680.7	726.5
100°	560.6	660.3	677.5	764.5	784.9
102.5°	861.6	913.8	796.7	785.6	787.6
105°	1013.0	1050.6	1001.3	806.9	766.5



TEST NUMBER: P827117

CATALOG NUMBER: OHBL-18SE-MFL-UNV-L840-CD-UPL24

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	819.4	858.6	912.7	926.8	900.6
115°	703.4	731.9	796.2	827.1	826.8
117.5°	604.9	621.6	682.8	713.2	718.5
120°	502.9	525.3	585.8	609.4	609.1
122.5°	423.9	443.0	496.2	521.4	519.7
125°	349.4	371.7	421.6	446.4	447.6
127.5°	296.0	311.9	359.0	385.8	389.1
130°	259.0	268.4	309.9	335.2	340.5
132.5°	231.0	240.9	270.7	297.6	302.3
135°	210.0	216.9	241.0	264.5	272.2
137.5°	193.0	198.9	216.3	239.3	245.0
140°	179.4	184.9	197.0	216.2	222.9
142.5°	167.9	171.9	178.7	196.5	200.7
145°	159.3	161.9	166.3	178.7	184.0
147.5°	150.3	154.3	156.3	164.0	168.3
150°	143.3	146.7	148.3	150.7	156.0
152.5°	136.3	139.7	141.3	140.9	143.7
155°	130.3	133.7	134.3	133.9	135.3
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°	1017.0	1062.5	1071.7	912.0	797.2
110°	939.0	983.8	1016.0	979.0	888.1



(END OF REPORT)