

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: P827148

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

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P827148
REPORT IS A COMBINATION OF REPORTS P826078 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-MCL-UNV-L840-CD-UPL12
Description: 24000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND MEDIUM CLEAR LENS AND 1200 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

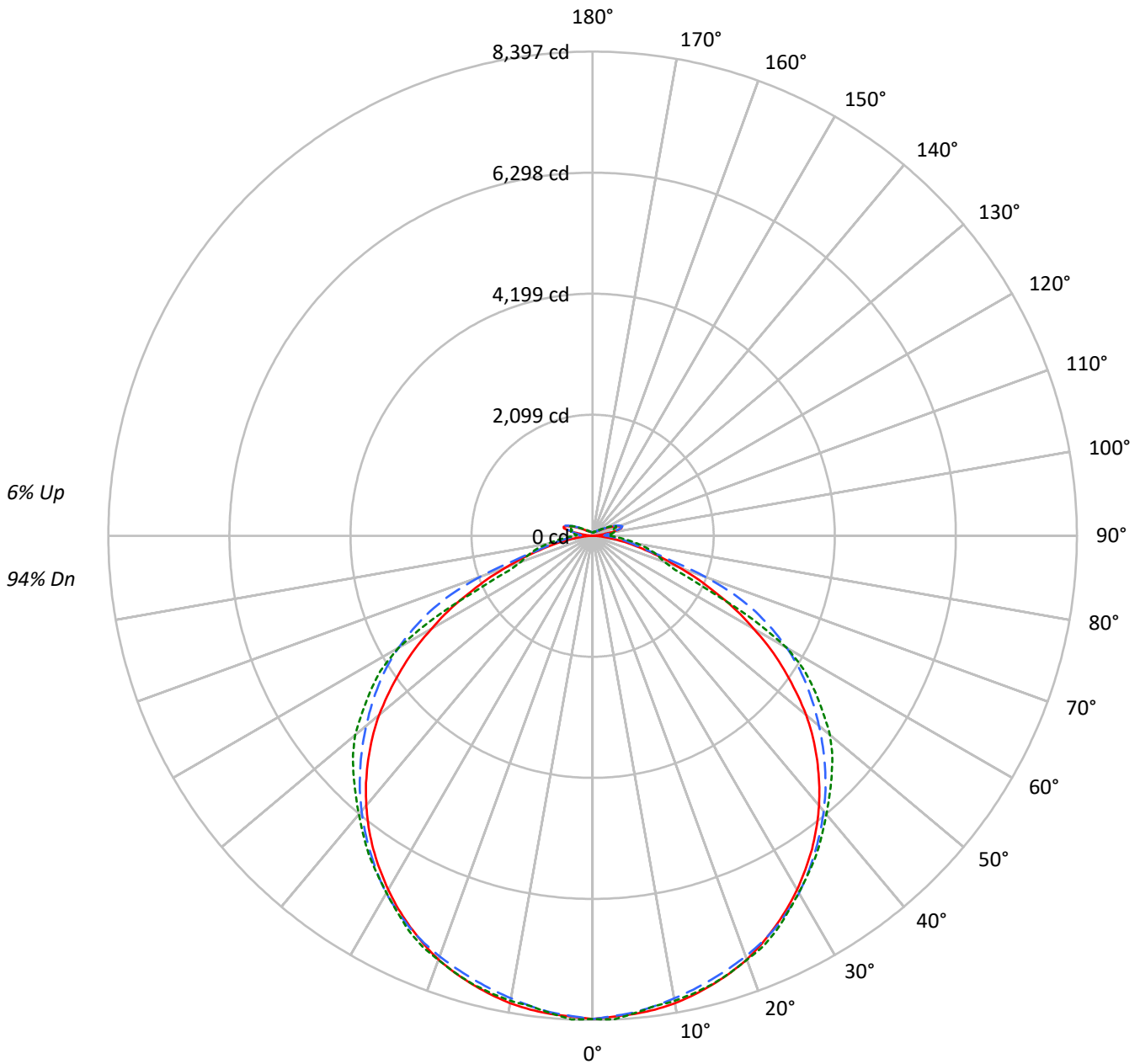
Lumens per Lamp: N/A
Luminaire Lumens: 24931.3 lumens
Efficiency: N/A
Efficacy: 170.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.27 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	96	96	96	94
1	108	103	99	95	104	100	97	93	95	92	89	90	88	85	85	84	82	82	82	82	79
2	98	90	84	78	95	88	82	77	83	78	74	79	75	71	75	72	69	69	69	69	66
3	90	79	71	65	87	77	70	64	73	67	62	70	65	60	67	62	59	59	59	59	56
4	82	70	62	55	79	69	61	54	65	58	53	62	56	52	59	55	50	50	50	50	48
5	75	63	54	47	73	61	53	47	59	51	46	56	50	45	53	48	44	44	44	44	42
6	70	56	48	41	67	55	47	41	53	46	40	51	44	39	48	43	38	38	38	38	36
7	64	51	43	36	62	50	42	36	48	41	35	46	40	35	44	38	34	34	34	34	32
8	60	47	38	32	58	46	38	32	44	37	32	42	36	31	41	35	31	31	31	31	29
9	56	43	35	29	54	42	34	29	40	33	28	39	32	28	37	32	28	28	28	28	26
10	52	39	32	26	51	39	31	26	37	30	26	36	30	25	35	29	25	25	25	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14313	14313	14313
5°	14151	14099	14195
10°	14030	13879	14097
15°	13872	13713	14063
20°	13713	13606	14001
25°	13475	13498	13942
30°	13219	13332	13747
35°	12925	13072	13676
40°	12562	12803	13558
45°	12088	12492	13562
50°	11473	12139	13564
55°	10554	11790	13184
60°	9388	11283	12336
65°	7911	10352	7942
70°	6218	8065	5883
75°	4495	4773	6166
80°	2943	3950	6216
85°	1474	3587	6536



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	790.2	3.2
10°-20°	2265.8	9.1
20°-30°	3460.6	13.9
30°-40°	4198.9	16.8
40°-50°	4400.9	17.7
50°-60°	3987.9	16.0
60°-70°	2673.7	10.7
70°-80°	1200.6	4.8
80°-90°	438.8	1.8
90°-100°	250.1	1.0
100°-110°	475.8	1.9
110°-120°	386.5	1.6
120°-130°	187.5	0.8
130°-140°	97.0	0.4
140°-150°	57.5	0.2
150°-160°	34.8	0.1
160°-170°	18.8	0.1
170°-180°	5.8	0.0
0°-30°	6516.6	26.1
0°-40°	10715.6	43.0
0°-60°	19104.3	76.6
0°-90°	23417.5	93.9
90°-120°	1112.5	4.5
90°-150°	1454.5	5.8
90°-180°	1514.0	6.1
0°-180°	24931.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8380	8380	8380	8380	8380	
5°	8326	8355	8296	8322	8311	792
15°	8055	8024	7967	8037	8047	2274
25°	7484	7451	7503	7572	7550	3449
35°	6633	6649	6716	6788	6761	4146
45°	5505	5594	5699	5844	5862	4241
55°	4051	4246	4535	4717	4706	3616
65°	2377	2749	3121	2634	2151	2369
75°	935	1357	998	1022	1088	1022
85°	161	309	396	479	502	197
90°	4	121	229	288	304	12
95°	26	122	227	287	310	84
105°	522	539	505	393	371	495
115°	370	374	396	403	399	369
125°	184	193	209	210	213	172
135°	113	117	122	129	131	90
145°	86	89	90	92	94	55
155°	72	74	75	76	75	34
165°	65	65	66	66	66	18
175°	60	60	59	58	58	6
180°	58	58	58	58	58	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8380.1	8380.1	8380.1	8380.1	<i>8380.1</i>
2.5°	<i>8346.2</i>	<i>8381.3</i>	<i>8337.7</i>	<i>8385.0</i>	<i>8397.1</i>
5°	8325.6	8354.7	8296.5	8322.0	<i>8311.1</i>
7.5°	8288.0	8297.7	8228.7	8249.3	<i>8227.5</i>
10°	8232.3	8227.5	8146.3	8186.3	<i>8191.1</i>
12.5°	8149.9	8135.4	8062.7	8123.2	<i>8124.5</i>
15°	8055.4	8023.9	7966.9	8037.2	<i>8046.9</i>
17.5°	7946.3	7905.1	7867.6	7958.5	<i>7943.9</i>
20°	7819.1	7770.6	7763.4	7862.7	<i>7826.4</i>
22.5°	7661.6	7624.0	7641.0	7735.5	<i>7712.5</i>
25°	7483.5	7450.8	7502.9	7571.9	<i>7550.1</i>
27.5°	7295.7	7276.3	7335.6	7389.0	<i>7346.5</i>
30°	7089.7	7078.8	7157.5	7201.1	<i>7147.8</i>
32.5°	6865.5	6869.1	6944.3	7003.6	<i>6954.0</i>
35°	6632.9	6648.6	6716.5	6788.0	<i>6761.3</i>
37.5°	6377.2	6412.3	6480.2	6561.4	<i>6533.5</i>
40°	6107.0	6157.9	6233.0	6331.1	<i>6305.7</i>
42.5°	5815.0	5879.2	5976.1	6085.2	<i>6082.7</i>
45°	5504.8	5594.4	5698.6	5844.0	<i>5862.2</i>
47.5°	5182.4	5283.0	5415.1	5609.0	<i>5636.8</i>
50°	4832.3	4958.3	5123.1	5355.7	<i>5372.7</i>
52.5°	4442.1	4614.2	4832.3	5055.2	<i>5034.6</i>
55°	4050.7	4245.8	4535.4	4717.2	<i>4706.2</i>
57.5°	3660.5	3879.9	4231.3	4360.9	<i>4359.7</i>
60°	3224.3	3501.8	3885.9	3984.1	<i>3887.1</i>
62.5°	2820.8	3118.9	3517.6	3446.1	<i>3114.1</i>
65°	2377.4	2749.4	3121.3	2634.2	<i>2150.8</i>
67.5°	1983.6	2371.3	2651.2	1804.2	<i>1544.9</i>
70°	1587.3	2015.1	2067.2	1338.9	<i>1320.8</i>
72.5°	1235.9	1691.5	1426.2	1146.3	<i>1204.4</i>
75°	935.4	1357.1	998.4	1021.5	<i>1088.1</i>
77.5°	682.2	1042.1	776.7	895.4	<i>950.0</i>
80°	468.9	737.9	633.7	752.5	<i>790.0</i>
82.5°	294.4	487.1	507.7	605.9	<i>644.6</i>
85°	161.2	309.0	396.2	478.6	<i>501.6</i>
87.5°	66.6	186.6	302.9	369.6	<i>389.0</i>
90°	4.2	121.0	228.8	287.9	<i>304.0</i>
92.5°	10.2	101.8	205.2	261.2	<i>274.7</i>
95°	26.2	122.2	226.6	286.8	<i>309.7</i>
97.5°	137.4	197.9	283.5	337.8	<i>352.6</i>
100°	279.6	339.4	345.1	376.7	<i>385.4</i>
102.5°	443.8	466.9	398.4	385.4	<i>384.0</i>
105°	521.8	538.9	505.1	392.6	<i>371.2</i>



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	426.5	438.0	459.2	454.1	439.5
115°	369.7	374.5	396.1	402.8	399.3
117.5°	311.7	318.1	339.3	343.6	344.0
120°	262.7	269.9	287.7	289.7	290.9
122.5°	222.7	227.7	244.0	247.1	249.3
125°	184.5	192.7	208.8	210.4	212.7
127.5°	156.7	162.7	179.4	182.0	183.2
130°	137.7	142.9	154.0	159.8	159.8
132.5°	124.9	129.1	136.8	142.6	143.6
135°	112.9	117.1	122.3	129.4	130.6
137.5°	106.1	108.1	111.1	118.2	120.4
140°	98.1	101.1	101.9	107.8	109.0
142.5°	90.9	94.1	94.9	99.5	101.8
145°	85.9	89.1	90.1	92.3	94.5
147.5°	82.1	84.1	86.1	86.1	88.3
150°	79.1	80.1	81.1	82.1	82.1
152.5°	75.1	76.1	77.1	78.1	78.1
155°	72.1	74.3	75.3	76.3	75.1
157.5°	69.1	72.3	72.3	73.3	73.3
160°	67.1	69.3	70.3	70.3	70.3
162.5°	66.3	67.3	67.3	68.3	68.3
165°	65.3	65.3	66.3	66.3	66.3
167.5°	63.3	64.5	64.3	64.3	64.3
170°	62.3	62.3	62.3	62.1	62.1
172.5°	61.3	61.3	61.3	60.1	60.1
175°	60.3	60.3	59.1	57.9	57.9
177.5°	60.5	60.3	59.1	57.9	56.7
180°	58.1	58.1	58.1	58.1	58.1



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	526.1	545.0	540.4	444.5	382.9
110°	483.3	502.4	510.7	480.6	432.0



(END OF REPORT)