

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: P827149

Luminaire Tested: **OHBL-24SE-MCL-UNV-L840-CD-UPL24**

Issue Date: 5/3/2024

Test Information

Test Method: LM-79-08
Report Number: P827149
REPORT IS A COMBINATION OF REPORTS P826246 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-24SE-MCL-UNV-L840-CD-UPL24
Description: 24000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND MEDIUM CLEAR LENS AND 2400 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

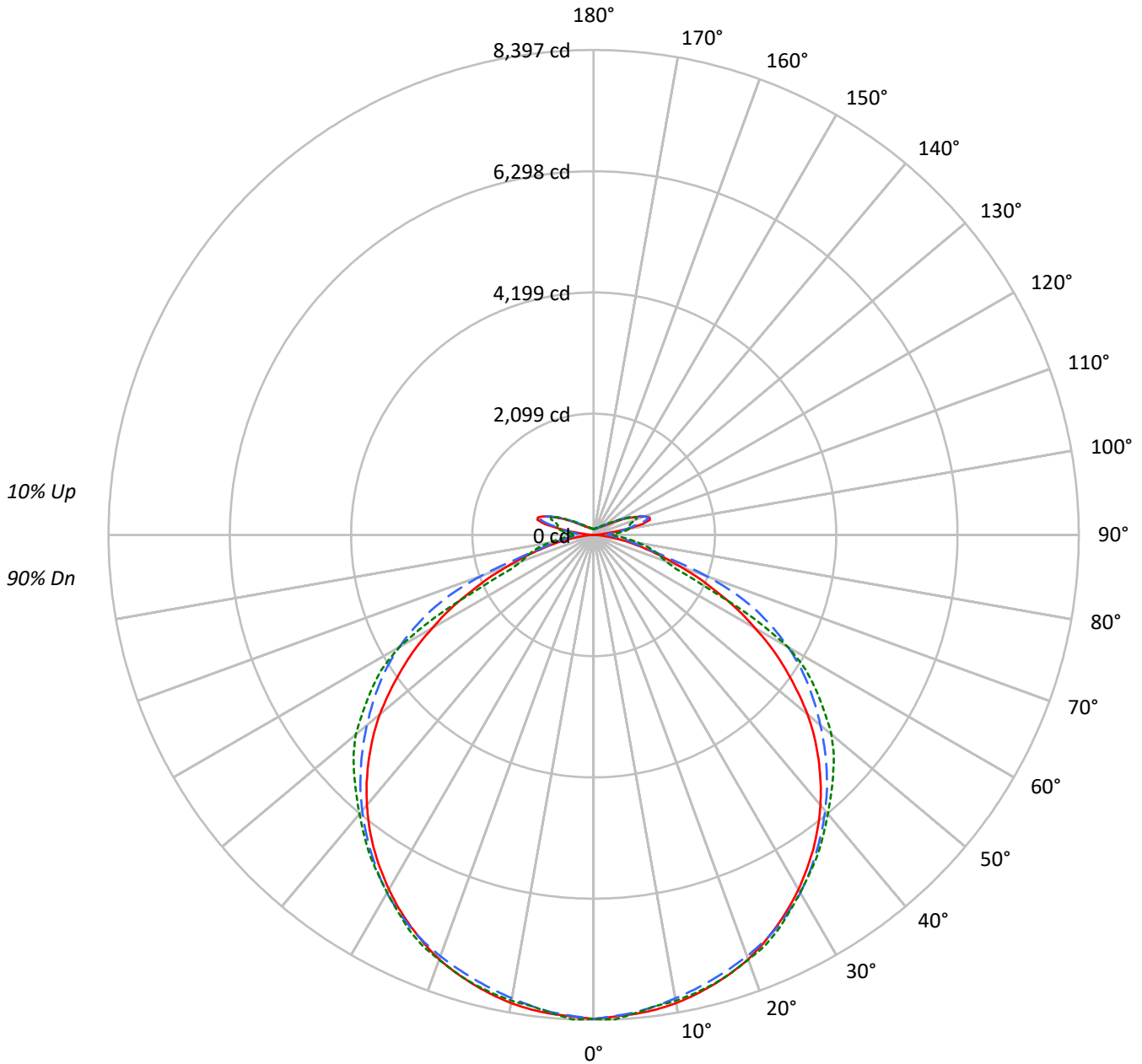
Lumens per Lamp: N/A
Luminaire Lumens: 26106.3 lumens
Efficiency: N/A
Efficacy: 168.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.27 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 155.4
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									
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	105	105	105	99	99	99	93	93	93	90																			
1	107	102	98	94	103	99	95	92	93	90	87	87	85	83	82	80	78	76																			
2	97	89	83	77	94	87	81	76	81	77	72	77	73	69	72	69	66	63																			
3	89	79	71	64	85	76	69	63	72	66	61	68	63	58	64	60	56	54																			
4	81	70	61	55	78	68	60	54	64	57	52	60	55	50	57	52	48	46																			
5	75	62	53	47	72	60	52	46	57	50	45	54	48	43	51	46	42	40																			
6	69	56	47	41	66	54	46	40	52	44	39	49	43	38	46	41	37	35																			
7	64	51	42	36	62	49	41	36	47	40	35	45	38	34	42	37	33	31																			
8	59	46	38	32	57	45	37	32	43	36	31	41	35	30	39	33	29	27																			
9	55	42	34	29	53	41	34	28	39	33	28	38	31	27	36	30	26	24																			
10	52	39	31	26	50	38	31	26	36	30	25	35	29	25	33	28	24	22																			

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	3.0
10°-20°	2265.8	8.7
20°-30°	3460.6	13.3
30°-40°	4198.9	16.1
40°-50°	4400.9	16.9
50°-60°	3987.9	15.3
60°-70°	2673.7	10.2
70°-80°	1200.6	4.6
80°-90°	441.9	1.7
90°-100°	363.0	1.4
100°-110°	866.8	3.3
110°-120°	721.5	2.8
120°-130°	348.3	1.3
130°-140°	177.5	0.7
140°-150°	104.0	0.4
150°-160°	61.9	0.2
160°-170°	32.8	0.1
170°-180°	10.0	0.0
0°-30°	6516.6	25.0
0°-40°	10715.6	41.0
0°-60°	19104.3	73.2
0°-90°	23420.5	89.7
90°-120°	1951.2	7.5
90°-150°	2581.1	9.9
90°-180°	2686.0	10.3
0°-180°	26106.3	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°	6	137	252	319	338	13
95°	54	175	313	399	434	166
105°	1008	1020	913	685	639	957
115°	702	714	734	742	738	707
125°	346	366	385	387	386	326
135°	211	216	224	232	236	167
145°	156	161	164	166	168	99
155°	128	131	133	134	133	60
165°	113	114	115	115	115	32
175°	103	104	103	103	103	10
180°	102	102	102	102	102	



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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°	6.2	137.0	251.8	318.9	<i>338.0</i>
92.5°	18.2	123.8	239.2	309.2	<i>330.7</i>
95°	54.2	175.2	312.6	398.8	<i>433.7</i>
97.5°	271.4	341.9	430.5	520.8	<i>558.6</i>
100°	555.6	628.4	571.1	618.7	<i>631.4</i>
102.5°	857.8	881.9	700.4	653.4	<i>649.0</i>
105°	1007.8	1019.9	913.1	684.6	<i>639.2</i>



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	816.5	837.0	845.2	833.1	803.5
115°	701.7	713.5	734.1	741.8	738.3
117.5°	601.7	605.1	627.3	633.6	637.0
120°	499.7	511.9	536.7	537.7	532.9
122.5°	420.7	432.7	452.0	456.1	451.3
125°	346.5	365.7	384.8	387.4	385.7
127.5°	295.7	308.7	328.4	333.0	333.2
130°	258.7	267.9	284.0	289.8	290.8
132.5°	231.9	240.1	250.8	259.6	258.6
135°	210.9	216.1	224.3	232.4	235.6
137.5°	195.1	198.1	204.1	213.2	214.4
140°	180.1	184.1	187.9	194.8	197.0
142.5°	165.9	171.1	173.9	179.5	180.8
145°	155.9	161.1	164.1	166.3	168.5
147.5°	148.1	152.1	154.1	156.1	157.3
150°	141.1	143.1	146.1	147.1	148.1
152.5°	134.1	136.1	139.1	140.1	140.1
155°	128.1	131.3	133.3	134.3	133.1
157.5°	123.1	126.3	128.3	129.3	129.3
160°	119.1	121.3	123.3	124.3	124.3
162.5°	116.3	117.3	118.3	119.3	119.3
165°	113.3	114.3	115.3	115.3	115.3
167.5°	110.3	111.5	111.3	112.3	112.3
170°	107.3	108.3	108.3	108.1	108.1
172.5°	105.3	106.3	106.3	105.1	106.1
175°	103.3	104.3	103.1	102.9	102.9
177.5°	104.5	103.3	102.1	100.9	99.7
180°	102.1	102.1	102.1	102.1	102.1



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	1013.1	1034.0	992.4	800.5	680.9
110°	936.3	957.4	942.7	876.6	781.0



(END OF REPORT)