

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: P827150

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

Issue Date: 5/3/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P827150  
REPORT IS A COMBINATION OF REPORTS P826306 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-MCL-UNV-L840-CD-UPL36  
Description: 24000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND MEDIUM CLEAR LENS AND 3600 LUMEN UPLIGHT MODULE  
Light Source: -  
Ballast/Driver: -

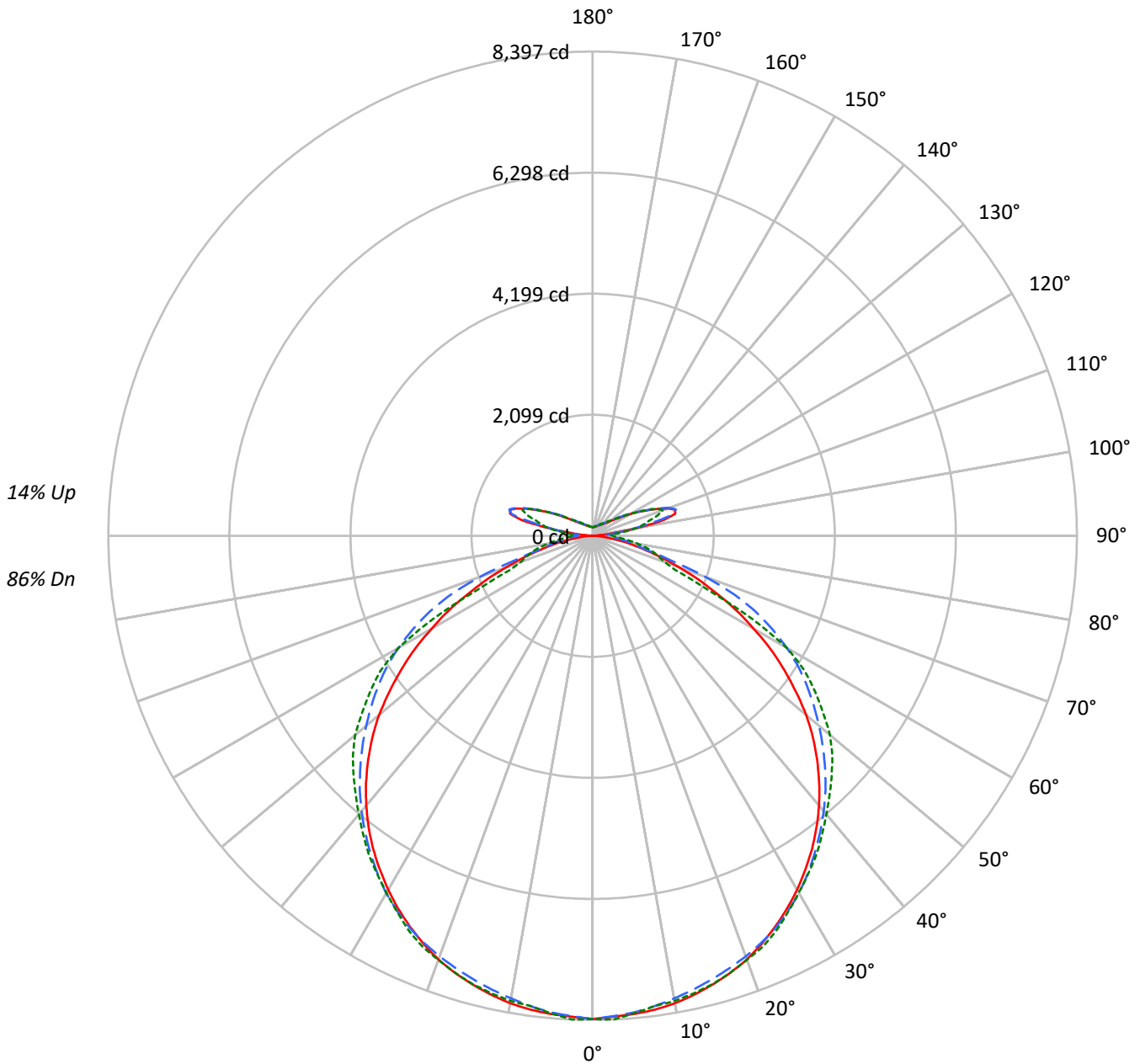
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27268.1 lumens  
Efficiency: N/A  
Efficacy: 163.5 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): 166.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	116	116	116	116	111	111	111	111	103	103	103	96	96	96	89	89	89	86				86
1	106	101	97	94	102	98	94	91	91	88	85	85	82	80	79	77	75	72				72
2	97	89	82	77	93	86	80	75	80	75	71	74	71	67	70	66	64	61				61
3	88	78	70	64	84	75	68	62	70	64	60	66	61	57	62	58	54	51				51
4	81	69	61	54	77	67	59	53	63	56	51	59	53	49	55	50	47	44				44
5	74	62	53	46	71	60	52	46	56	49	44	53	47	42	49	44	40	38				38
6	68	55	47	40	66	54	46	40	51	44	38	48	41	37	45	40	36	33				33
7	63	50	42	36	61	49	41	35	46	39	34	43	37	33	41	36	31	29				29
8	59	46	37	32	56	44	37	31	42	35	30	40	34	29	37	32	28	26				26
9	55	42	34	28	53	41	33	28	38	32	27	36	30	26	34	29	25	23				23
10	51	38	31	26	49	37	30	25	36	29	25	34	28	24	32	27	23	21				21

**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	2.9
10°-20°	2265.8	8.3
20°-30°	3460.6	12.7
30°-40°	4198.9	15.4
40°-50°	4400.9	16.1
50°-60°	3987.9	14.6
60°-70°	2673.7	9.8
70°-80°	1200.6	4.4
80°-90°	443.4	1.6
90°-100°	406.2	1.5
100°-110°	1308.0	4.8
110°-120°	1062.3	3.9
120°-130°	505.2	1.9
130°-140°	258.9	0.9
140°-150°	152.4	0.6
150°-160°	90.6	0.3
160°-170°	47.8	0.2
170°-180°	14.6	0.1
0°-30°	6516.6	23.9
0°-40°	10715.6	39.3
0°-60°	19104.3	70.1
0°-90°	23422.0	85.9
90°-120°	2776.5	10.2
90°-150°	3693.0	13.5
90°-180°	3846.0	14.1
0°-180°	27268.1	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°	9	152	268	329	342	15
95°	63	188	306	381	402	232
105°	1482	1502	1455	1115	1018	1409
115°	1040	1030	1059	1076	1068	1050
125°	516	535	559	553	545	486
135°	311	319	328	337	340	246
145°	229	235	240	244	246	146
155°	188	192	195	197	196	88
165°	164	166	167	168	169	47
175°	151	151	151	150	151	15
180°	148	148	148	148	148	



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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°	9.2	152.0	267.8	328.9	<i>342.0</i>
92.5°	26.2	138.8	244.2	303.2	<i>317.7</i>
95°	63.2	188.2	305.6	380.8	<i>401.7</i>
97.5°	376.4	452.9	466.5	558.8	<i>587.6</i>
100°	806.6	866.4	737.1	762.7	<i>786.4</i>
102.5°	1262.8	1308.9	1090.4	933.4	<i>907.0</i>
105°	1481.8	1501.9	1455.1	1114.6	<i>1018.2</i>



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1218.5	1230.0	1243.2	1250.1	1220.5
115°	1039.7	1030.5	1059.1	1075.8	1068.3
117.5°	890.7	883.1	909.3	912.6	904.0
120°	750.7	751.9	777.7	769.7	762.9
122.5°	623.7	637.7	658.0	654.1	642.3
125°	515.5	534.7	558.8	553.4	544.7
127.5°	444.7	450.7	474.4	473.0	474.2
130°	383.7	392.9	410.0	416.8	414.8
132.5°	342.9	352.1	365.8	373.6	376.6
135°	310.9	319.1	328.3	337.4	339.6
137.5°	286.1	292.1	298.1	309.2	311.4
140°	264.1	270.1	274.9	283.8	285.0
142.5°	244.9	252.1	255.9	262.5	263.8
145°	228.9	235.1	240.1	244.3	246.5
147.5°	218.1	222.1	227.1	228.1	230.3
150°	207.1	210.1	214.1	216.1	217.1
152.5°	197.1	200.1	204.1	205.1	206.1
155°	188.1	192.3	195.3	197.3	196.1
157.5°	180.1	184.3	187.3	188.3	188.3
160°	174.1	177.3	180.3	180.3	181.3
162.5°	169.3	171.3	173.3	174.3	175.3
165°	164.3	166.3	167.3	168.3	169.3
167.5°	160.3	162.5	162.3	163.3	163.3
170°	156.3	157.3	158.3	157.1	158.1
172.5°	153.3	154.3	155.3	154.1	154.1
175°	151.3	151.3	151.1	149.9	150.9
177.5°	150.5	150.3	149.1	147.9	147.7
180°	148.1	148.1	148.1	148.1	148.1



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	1497.1	1517.0	1517.4	1355.5	<i>1183.9</i>
110°	1383.3	1408.4	1415.7	1369.6	<i>1293.0</i>



(END OF REPORT)