

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: P827135

Luminaire Tested: **OHBL-24HE-MFL-UNV-L840-CD-UPL36**

Issue Date: 5/3/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P827135  
REPORT IS A COMBINATION OF REPORTS P826301 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-24HE-MFL-UNV-L840-CD-UPL36  
Description: 24000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND MEDIUM FROSTED LENS AND 3600 LUMEN UPLIGHT MODULE  
Light Source: -  
Ballast/Driver: -

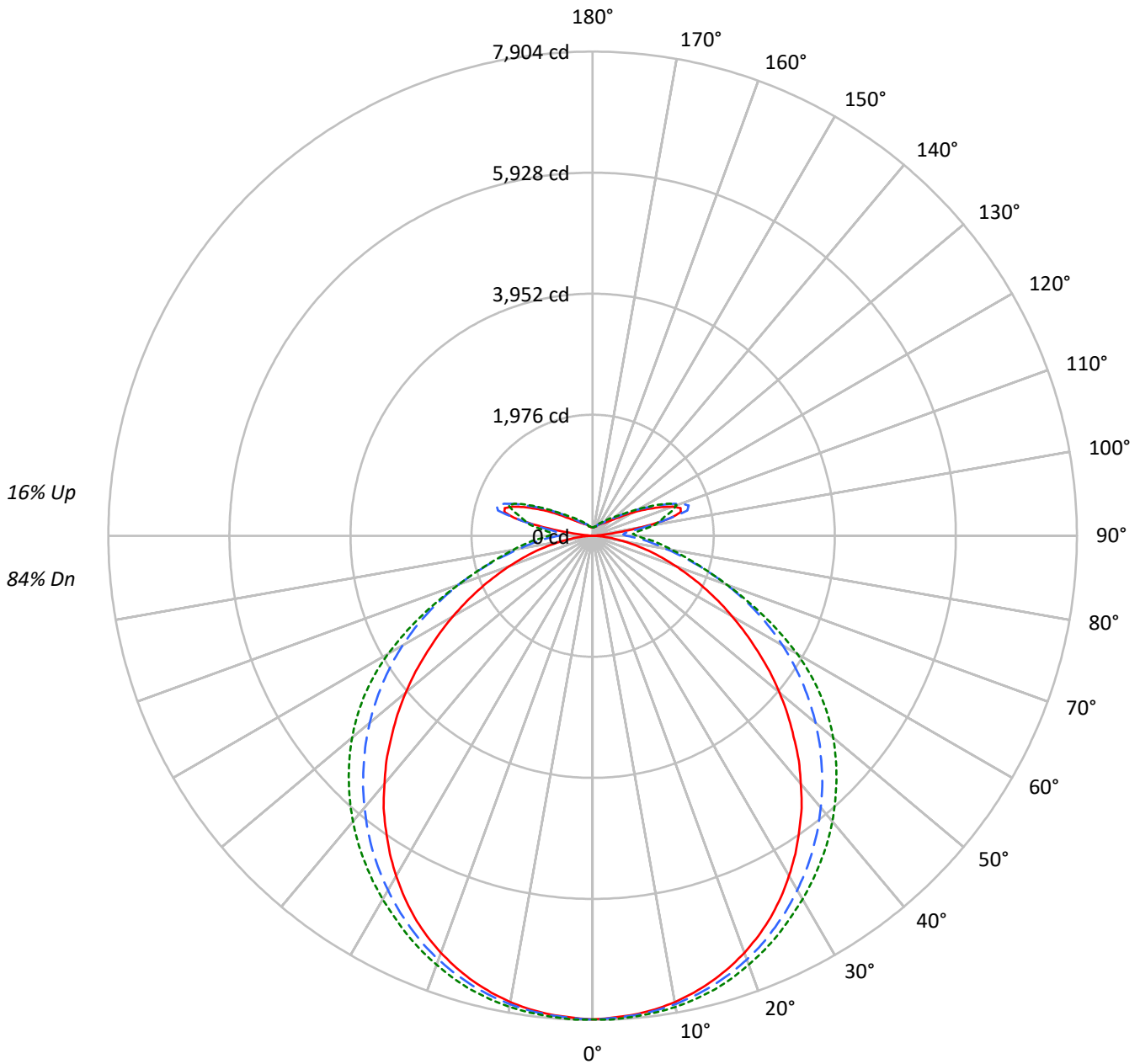
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27213.1 lumens  
Efficiency: N/A  
Efficacy: 168.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.8' x H: 0.17')  
CIE Type: Semi-Direct  
  
Input Watts (W): 161.8  
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									
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	115	115	115	115	111	111	111	111	102	102	102	95	95	95	87	87	87	84																			
1	105	100	95	91	100	96	92	88	89	86	83	82	80	77	76	74	72	69																			
2	95	87	80	74	91	84	77	72	77	72	68	72	68	64	67	63	60	57																			
3	87	76	68	62	83	73	66	60	68	62	57	63	58	54	59	55	51	48																			
4	79	67	59	52	76	65	57	51	60	54	48	56	51	46	52	48	44	41																			
5	73	60	51	45	70	58	50	44	54	47	42	50	45	40	47	42	38	36																			
6	67	54	45	39	64	52	44	38	49	42	36	46	40	35	43	37	33	31																			
7	62	49	40	34	59	47	39	34	44	37	32	42	35	31	39	34	30	27																			
8	58	45	36	30	55	43	35	30	41	34	29	38	32	28	36	30	27	24																			
9	54	41	33	27	52	40	32	27	37	31	26	35	29	25	33	28	24	22																			
10	51	38	30	25	48	36	29	24	34	28	23	32	27	23	31	25	22	20																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	12487	12487	12487
5°	12355	12369	12459
10°	12216	12260	12446
15°	12028	12129	12414
20°	11795	11970	12342
25°	11501	11771	12271
30°	11114	11554	12203
35°	10658	11325	12156
40°	10121	11059	12118
45°	9497	10771	12058
50°	8821	10479	11979
55°	8004	10122	11794
60°	7169	9702	11329
65°	6262	9164	10491
70°	5285	8479	9596
75°	4291	7688	9126
80°	3081	7116	9560
85°	1737	7397	11985



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	748.2	2.7
10°-20°	2146.4	7.9
20°-30°	3246.1	11.9
30°-40°	3896.9	14.3
40°-50°	4024.9	14.8
50°-60°	3621.2	13.3
60°-70°	2727.8	10.0
70°-80°	1647.1	6.1
80°-90°	813.3	3.0
90°-100°	614.2	2.3
100°-110°	1439.6	5.3
110°-120°	1144.9	4.2
120°-130°	552.4	2.0
130°-140°	281.0	1.0
140°-150°	160.9	0.6
150°-160°	90.9	0.3
160°-170°	44.1	0.2
170°-180°	13.4	0.0
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0°-30°	6140.6	22.6
0°-40°	10037.6	36.9
0°-60°	17683.6	65.0
0°-90°	22871.8	84.0
90°-120°	3198.7	11.8
90°-150°	4193.0	15.4
90°-180°	4341.0	16.0
0°-180°	27213.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7896	7896	7896	7896	7896	
5°	7846	7867	7857	7888	7878	745
15°	7529	7565	7600	7664	7672	2123
25°	6876	6951	7050	7160	7177	3163
35°	5878	6016	6263	6452	6491	3675
45°	4640	4874	5281	5569	5629	3582
55°	3287	3627	4178	4493	4547	2947
65°	2006	2416	2957	3104	3069	1993
75°	945	1357	1712	1757	1739	1008
85°	197	520	858	976	993	228
90°	8	252	554	690	716	18
95°	72	261	532	678	711	239
105°	1490	1553	1599	1309	1221	1417
115°	1046	1060	1155	1207	1205	1057
125°	522	546	616	642	638	491
135°	314	324	356	388	396	248
145°	237	240	247	266	273	151
155°	195	200	201	201	203	88
165°	151	153	154	155	156	43
175°	138	138	139	139	140	13
180°	136	136	136	136	136	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7895.9	7895.9	7895.9	7895.9	7895.9
2.5°	7872.7	7892.0	7880.4	7905.5	7903.6
5°	7845.6	7866.9	7857.2	7888.1	7878.5
7.5°	7799.2	7822.4	7820.5	7855.3	7851.4
10°	7731.6	7756.7	7764.5	7810.8	7810.8
12.5°	7638.9	7671.7	7691.0	7747.1	7749.0
15°	7528.7	7565.4	7600.2	7664.0	7671.7
17.5°	7395.4	7441.8	7490.1	7563.5	7573.2
20°	7244.6	7296.8	7362.5	7439.8	7451.4
22.5°	7070.7	7132.6	7217.6	7308.4	7321.9
25°	6875.6	6950.9	7049.5	7159.6	7177.0
27.5°	6653.3	6740.3	6873.6	6997.3	7012.8
30°	6411.8	6514.2	6680.4	6827.2	6852.4
32.5°	6156.7	6274.6	6479.4	6643.7	6678.4
35°	5878.4	6015.6	6263.0	6452.4	6491.0
37.5°	5604.0	5754.7	6034.9	6251.4	6297.8
40°	5283.2	5470.7	5791.5	6031.1	6087.1
42.5°	4981.8	5184.7	5548.0	5808.9	5863.0
45°	4639.7	4873.6	5281.3	5569.2	5629.1
47.5°	4319.0	4572.1	5024.3	5321.9	5383.7
50°	3980.8	4259.1	4749.9	5061.0	5124.8
52.5°	3642.6	3942.1	4465.8	4788.5	4848.4
55°	3287.0	3627.2	4177.9	4492.9	4547.0
57.5°	2956.6	3316.0	3882.2	4181.8	4214.6
60°	2630.0	3003.0	3580.8	3843.6	3855.2
62.5°	2311.2	2703.5	3271.6	3480.3	3464.8
65°	2005.9	2415.5	2956.6	3103.5	3068.7
67.5°	1712.1	2135.3	2633.9	2728.6	2682.2
70°	1433.9	1862.9	2320.8	2369.1	2326.6
72.5°	1188.4	1603.9	2003.9	2044.5	2013.6
75°	945.0	1356.6	1712.1	1756.6	1739.2
77.5°	716.9	1116.9	1443.5	1501.5	1505.4
80°	516.0	898.6	1209.7	1300.5	1312.1
82.5°	340.1	697.6	1014.5	1130.5	1147.9
85°	197.1	519.8	858.0	975.9	993.3
87.5°	85.0	374.9	689.9	796.2	817.4
90°	8.0	251.9	553.8	690.4	716.5
92.5°	30.8	228.1	498.3	633.2	660.5
95°	71.7	261.2	532.2	677.6	711.0
97.5°	385.6	517.9	667.8	824.7	866.1
100°	814.6	924.5	915.3	1001.5	1037.0
102.5°	1269.6	1363.9	1249.6	1147.1	1130.6
105°	1490.5	1553.2	1598.6	1309.3	1220.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1225.5	1265.2	1348.9	1395.1	1370.8
115°	1045.5	1060.4	1155.4	1206.9	1204.6
117.5°	898.4	909.6	994.9	1033.5	1028.3
120°	758.4	773.9	853.4	878.1	877.8
122.5°	631.4	655.1	725.8	752.5	745.3
125°	522.5	546.3	616.2	642.0	637.8
127.5°	448.5	458.4	522.6	552.4	558.2
130°	387.5	397.5	451.0	485.8	489.6
132.5°	345.5	357.4	398.3	432.2	443.0
135°	313.5	324.4	355.6	387.6	396.3
137.5°	287.5	297.4	318.9	350.9	359.6
140°	267.5	275.4	291.1	318.2	326.0
142.5°	251.4	257.4	266.3	290.5	296.3
145°	237.3	240.4	247.3	265.8	272.6
147.5°	225.3	229.3	234.3	243.1	249.9
150°	214.3	219.3	221.3	225.3	232.1
152.5°	204.3	209.3	211.3	210.4	215.3
155°	195.3	200.3	201.3	201.4	203.3
157.5°	168.0	171.0	174.0	175.0	175.0
160°	162.0	164.0	167.0	167.0	168.0
162.5°	156.0	158.0	160.0	161.0	162.0
165°	151.0	153.0	154.0	155.0	156.0
167.5°	147.0	148.0	149.0	150.0	150.0
170°	143.0	144.0	145.0	145.0	146.0
172.5°	140.0	141.0	142.0	142.0	142.0
175°	138.0	138.0	139.0	139.0	140.0
177.5°	136.0	137.0	137.0	137.0	138.0
180°	136.0	136.0	136.0	136.0	136.0



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	1504.5	1563.6	1645.4	1531.3	1367.0
110°	1389.5	1450.8	1532.2	1529.3	1460.0



(END OF REPORT)