

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: P828331

Luminaire Tested: **OHBL-24HE-MCL-UNV-L940-CD-UPL24**

Issue Date: 5/3/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P828331  
REPORT IS A COMBINATION OF REPORTS P826240 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-24HE-MCL-UNV-L940-CD-UPL24  
Description:  
Light Source: -  
Ballast/Driver: -

**Summary**

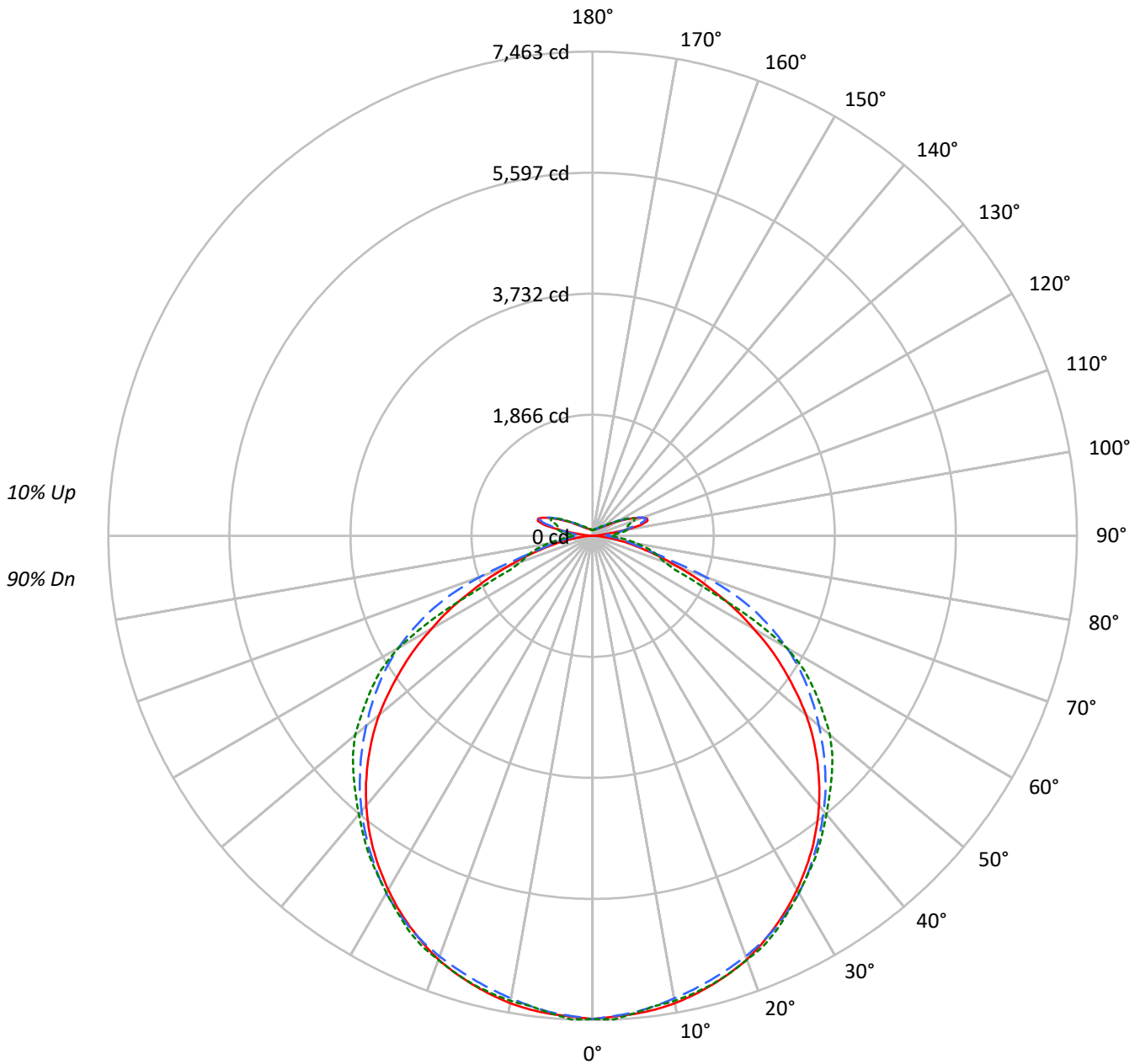
Lumens per Lamp: N/A  
Luminaire Lumens: 23156.1 lumens  
Efficiency: N/A  
Efficacy: 154.0 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.27 / 1.39  
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.8' x H: 0.17')  
CIE Type: Semi-Direct

Input Watts (W): 150.4  
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	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	79	76																			
2	97	89	83	77	94	87	81	76	82	77	72	77	73	69	72	69	66	64																			
3	89	79	71	64	86	76	69	63	72	66	61	68	63	59	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	45	39	49	43	38	47	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	25																			
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°	11779	11779	11779
5°	11653	11608	11682
10°	11561	11432	11601
15°	11438	11301	11573
20°	11315	11218	11522
25°	11126	11134	11474
30°	10923	11003	11313
35°	10688	10794	11254
40°	10398	10579	11157
45°	10015	10329	11161
50°	9517	10046	11162
55°	8767	9766	10850
60°	7811	9358	10152
65°	6597	8599	6535
70°	5200	6713	4841
75°	3775	3985	5074
80°	2489	3313	5116
85°	1262	3035	5380



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	702.3	3.0
10°-20°	2013.8	8.7
20°-30°	3075.8	13.3
30°-40°	3732.0	16.1
40°-50°	3911.5	16.9
50°-60°	3544.4	15.3
60°-70°	2376.4	10.3
70°-80°	1067.1	4.6
80°-90°	392.6	1.7
90°-100°	318.1	1.4
100°-110°	754.8	3.3
110°-120°	627.9	2.7
120°-130°	303.2	1.3
130°-140°	154.6	0.7
140°-150°	90.5	0.4
150°-160°	53.9	0.2
160°-170°	28.6	0.1
170°-180°	8.7	0.0
0°-30°	5791.9	25.0
0°-40°	9523.9	41.1
0°-60°	16979.7	73.3
0°-90°	20815.8	89.9
90°-120°	1700.8	7.3
90°-150°	2249.1	9.7
90°-180°	2340.0	10.1
0°-180°	23156.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7448	7448	7448	7448	7448	
5°	7400	7426	7374	7396	7387	704
15°	7160	7132	7081	7143	7152	2021
25°	6651	6622	6668	6730	6710	3066
35°	5895	5909	5970	6033	6009	3685
45°	4892	4972	5065	5194	5210	3769
55°	3600	3774	4031	4192	4183	3214
65°	2113	2444	2774	2341	1912	2105
75°	831	1206	887	908	967	909
85°	143	275	352	425	446	175
90°	5	121	223	282	299	12
95°	47	154	274	350	380	145
105°	876	887	795	597	558	832
115°	610	621	639	646	643	615
125°	301	318	335	337	336	283
135°	184	188	195	202	205	145
145°	136	140	143	145	147	87
155°	112	114	116	117	116	52
165°	99	100	100	100	100	28
175°	90	91	90	90	90	9
180°	89	89	89	89	89	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7448.2	7448.2	7448.2	7448.2	7448.2
2.5°	7418.0	7449.2	7410.4	7452.4	7463.2
5°	7399.7	7425.6	7373.8	7396.5	7386.8
7.5°	7366.3	7375.0	7313.5	7331.9	7312.5
10°	7316.8	7312.5	7240.3	7275.9	7280.1
12.5°	7243.5	7230.6	7166.0	7219.9	7220.9
15°	7159.5	7131.5	7080.9	7143.4	7152.0
17.5°	7062.6	7026.0	6992.6	7073.4	7060.5
20°	6949.6	6906.4	6900.0	6988.3	6956.0
22.5°	6809.6	6776.2	6791.2	6875.2	6854.8
25°	6651.2	6622.1	6668.5	6729.8	6710.5
27.5°	6484.3	6467.1	6519.9	6567.3	6529.5
30°	6301.2	6291.6	6361.6	6400.3	6352.9
32.5°	6102.0	6105.2	6172.0	6224.8	6180.6
35°	5895.2	5909.2	5969.5	6033.1	6009.3
37.5°	5668.0	5699.2	5759.5	5831.6	5806.9
40°	5427.9	5473.1	5539.8	5627.0	5604.4
42.5°	5168.2	5225.4	5311.5	5408.5	5406.3
45°	4892.5	4972.3	5064.9	5194.1	5210.2
47.5°	4606.1	4695.5	4812.9	4985.2	5010.0
50°	4294.9	4406.9	4553.4	4760.1	4775.2
52.5°	3948.1	4101.0	4294.9	4493.0	4474.7
55°	3600.2	3773.6	4031.0	4192.5	4182.9
57.5°	3253.5	3448.4	3760.7	3875.9	3874.9
60°	2865.8	3112.4	3453.8	3541.0	3454.8
62.5°	2507.1	2772.0	3126.3	3062.9	2767.8
65°	2113.0	2443.6	2774.2	2341.2	1911.6
67.5°	1763.0	2107.6	2356.4	1603.6	1373.1
70°	1410.8	1791.0	1837.3	1190.0	1173.8
72.5°	1098.5	1503.4	1267.6	1018.8	1070.5
75°	831.4	1206.2	887.4	907.9	967.1
77.5°	606.4	926.1	690.3	795.9	844.3
80°	416.8	655.8	563.2	668.8	702.2
82.5°	261.7	432.9	451.2	538.4	573.0
85°	143.2	274.7	352.1	425.4	445.9
87.5°	59.2	165.9	269.3	328.5	345.7
90°	5.4	121.1	222.8	282.2	299.1
92.5°	15.8	109.1	211.2	272.8	291.7
95°	47.1	153.5	274.5	350.1	380.5
97.5°	236.1	298.2	376.6	455.5	488.5
100°	483.2	547.2	498.5	540.3	551.3
102.5°	746.0	767.5	610.5	570.0	566.3
105°	876.4	887.3	795.2	596.9	557.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	710.1	728.0	735.6	725.4	699.6
115°	610.3	620.7	639.0	645.8	642.8
117.5°	523.3	526.4	546.0	551.6	554.6
120°	434.6	445.2	467.2	468.1	464.0
122.5°	365.9	376.4	393.4	397.1	393.0
125°	301.4	318.1	335.0	337.3	335.9
127.5°	257.3	268.6	285.9	290.0	290.2
130°	225.1	233.1	247.2	252.4	253.3
132.5°	201.8	209.0	218.3	226.1	225.3
135°	183.5	188.1	195.3	202.4	205.3
137.5°	169.9	172.5	177.7	185.7	186.8
140°	156.8	160.3	163.5	169.6	171.5
142.5°	144.4	149.0	151.4	156.4	157.5
145°	135.7	140.3	142.9	144.8	146.8
147.5°	129.0	132.5	134.2	136.0	137.0
150°	122.9	124.7	127.3	128.2	129.0
152.5°	116.9	118.6	121.2	122.1	122.1
155°	111.6	114.4	116.2	117.0	116.0
157.5°	107.3	110.1	111.8	112.7	112.7
160°	103.8	105.7	107.5	108.3	108.3
162.5°	101.4	102.2	103.1	104.0	104.0
165°	98.8	99.6	100.5	100.5	100.5
167.5°	96.2	97.3	97.0	97.9	97.9
170°	93.6	94.4	94.4	94.2	94.2
172.5°	91.8	92.7	92.7	91.6	92.5
175°	90.1	90.9	89.9	89.6	89.6
177.5°	91.2	90.1	89.0	87.9	86.9
180°	89.0	89.0	89.0	89.0	89.0



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	880.9	899.4	864.0	697.4	593.5
110°	814.1	832.8	820.6	763.3	680.3



(END OF REPORT)