

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: P827131

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

Issue Date: 5/3/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P827131  
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-L840-CD-UPL24  
Description: 24000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND MEDIUM CLEAR LENS AND 2400 LUMEN UPLIGHT MODULE  
Light Source: -  
Ballast/Driver: -

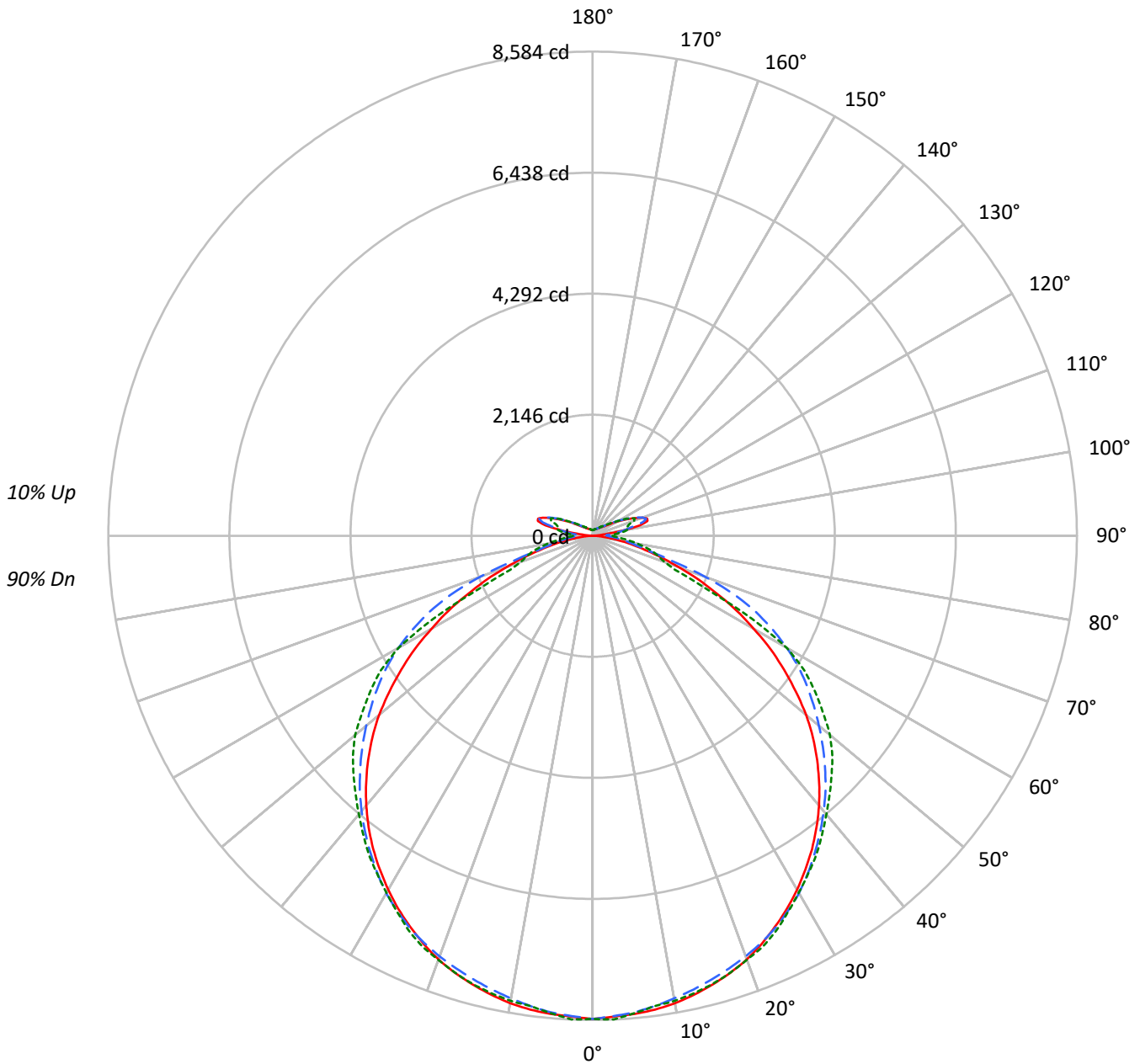
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26633.3 lumens  
Efficiency: N/A  
Efficacy: 177.1 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	93	93	93	90																
1	107	102	98	94	103	99	95	92	93	90	87	87	85	83	82	80	79	79	79	79	76																
2	97	89	83	77	94	87	81	76	82	77	72	77	73	69	72	69	66	66	66	66	64																
3	89	79	71	64	86	76	69	63	72	66	61	68	63	59	64	60	56	56	56	56	54																
4	81	70	61	55	78	68	60	54	64	57	52	60	55	50	57	52	48	48	48	48	46																
5	75	62	53	47	72	60	52	46	57	50	45	54	48	43	51	46	42	42	42	42	40																
6	69	56	47	41	66	54	46	40	52	45	39	49	43	38	47	41	37	37	37	37	35																
7	64	51	42	36	62	49	41	36	47	40	35	45	38	34	42	37	33	33	33	33	31																
8	59	46	38	32	57	45	37	32	43	36	31	41	35	30	39	33	29	29	29	29	27																
9	55	42	34	29	53	41	34	28	39	33	28	38	31	27	36	30	26	26	26	26	25																
10	52	39	31	26	50	38	31	26	36	30	25	35	29	25	33	28	24	24	24	24	22																

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

	0°	45°	90°
0°	13548	13548	13548
5°	13402	13351	13436
10°	13297	13149	13343
15°	13156	12998	13311
20°	13013	12902	13252
25°	12796	12806	13197
30°	12563	12655	13012
35°	12293	12415	12944
40°	11959	12167	12833
45°	11519	11880	12837
50°	10946	11554	12838
55°	10083	11233	12479
60°	8984	10763	11677
65°	7587	9890	7517
70°	5981	7721	5568
75°	4342	4583	5836
80°	2863	3811	5884
85°	1452	3491	6187



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	807.7	3.0
10°-20°	2316.2	8.7
20°-30°	3537.6	13.3
30°-40°	4292.4	16.1
40°-50°	4498.8	16.9
50°-60°	4076.6	15.3
60°-70°	2733.2	10.3
70°-80°	1227.3	4.6
80°-90°	451.5	1.7
90°-100°	365.9	1.4
100°-110°	868.2	3.3
110°-120°	722.2	2.7
120°-130°	348.7	1.3
130°-140°	177.8	0.7
140°-150°	104.2	0.4
150°-160°	62.0	0.2
160°-170°	32.9	0.1
170°-180°	10.1	0.0
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0°-30°	6661.6	25.0
0°-40°	10954.0	41.1
0°-60°	19529.4	73.3
0°-90°	23941.5	89.9
90°-120°	1956.2	7.3
90°-150°	2586.9	9.7
90°-180°	2692.0	10.1
0°-180°	26633.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8567	8567	8567	8567	8567	
5°	8511	8541	8481	8507	8496	809
15°	8235	8202	8144	8216	8226	2325
25°	7650	7616	7670	7740	7718	3526
35°	6780	6796	6866	6939	6912	4238
45°	5627	5719	5825	5974	5993	4335
55°	4141	4340	4636	4822	4811	3696
65°	2430	2810	3191	2693	2199	2421
75°	956	1387	1021	1044	1112	1045
85°	165	316	405	489	513	201
90°	6	139	256	325	344	14
95°	54	177	316	403	438	166
105°	1008	1020	915	686	641	958
115°	702	714	735	743	739	707
125°	347	366	385	388	386	326
135°	211	216	225	233	236	167
145°	156	161	164	167	169	100
155°	128	132	134	135	133	60
165°	114	115	116	116	116	32
175°	104	105	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°	8566.6	8566.6	8566.6	8566.6	8566.6
2.5°	8531.9	8567.8	8523.2	8571.5	8583.9
5°	8510.8	8540.6	8481.1	8507.1	8496.0
7.5°	8472.4	8482.4	8411.7	8432.8	8410.5
10°	8415.5	8410.5	8327.5	8368.4	8373.3
12.5°	8331.2	8316.4	8242.1	8304.0	8305.2
15°	8234.6	8202.4	8144.2	8216.0	8225.9
17.5°	8123.1	8081.0	8042.6	8135.5	8120.7
20°	7993.1	7943.5	7936.1	8037.7	8000.5
22.5°	7832.1	7793.7	7811.0	7907.6	7884.1
25°	7650.0	7616.5	7669.8	7740.4	7718.1
27.5°	7458.0	7438.2	7498.9	7553.4	7510.0
30°	7247.4	7236.3	7316.8	7361.4	7306.9
32.5°	7018.3	7022.0	7098.8	7159.5	7108.7
35°	6780.4	6796.5	6865.9	6939.0	6911.7
37.5°	6519.1	6555.0	6624.4	6707.3	6678.9
40°	6242.9	6294.9	6371.7	6472.0	6446.0
42.5°	5944.3	6010.0	6109.1	6220.6	6218.1
45°	5627.2	5718.9	5825.4	5974.1	5992.6
47.5°	5297.8	5400.6	5535.6	5733.8	5762.3
50°	4939.8	5068.6	5237.1	5474.9	5492.2
52.5°	4540.9	4716.8	4939.8	5167.7	5146.6
55°	4140.8	4340.3	4636.3	4822.1	4811.0
57.5°	3742.0	3966.2	4325.4	4457.9	4456.7
60°	3296.1	3579.7	3972.4	4072.7	3973.6
62.5°	2883.6	3188.3	3595.8	3522.8	3183.4
65°	2430.3	2810.5	3190.8	2692.8	2198.6
67.5°	2027.7	2424.1	2710.2	1844.4	1579.3
70°	1622.6	2059.9	2113.2	1368.7	1350.1
72.5°	1263.4	1729.2	1457.9	1171.8	1231.2
75°	956.2	1387.3	1020.7	1044.2	1112.3
77.5°	697.4	1065.2	794.0	915.4	971.1
80°	479.4	754.3	647.8	769.2	807.6
82.5°	301.0	497.9	519.0	619.3	659.0
85°	164.7	315.9	405.0	489.3	512.8
87.5°	68.1	190.8	309.7	377.8	397.6
90°	6.2	139.3	256.3	324.6	344.0
92.5°	18.2	125.5	242.9	313.8	335.5
95°	54.2	176.6	315.7	402.7	437.6
97.5°	271.5	343.0	433.2	523.9	561.9
100°	555.7	629.4	573.3	621.4	634.1
102.5°	858.0	882.7	702.2	655.6	651.3
105°	1008.0	1020.5	914.6	686.5	641.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	816.7	837.3	846.1	834.3	804.7
115°	701.9	713.9	734.9	742.8	739.3
117.5°	601.9	605.4	628.0	634.4	637.9
120°	499.9	512.1	537.3	538.4	533.7
122.5°	420.9	432.9	452.5	456.7	452.0
125°	346.7	365.9	385.3	388.0	386.3
127.5°	295.9	308.9	328.8	333.5	333.8
130°	258.9	268.1	284.3	290.3	291.3
132.5°	232.1	240.4	251.1	260.1	259.1
135°	211.1	216.4	224.6	232.8	236.1
137.5°	195.4	198.4	204.4	213.6	214.8
140°	180.4	184.4	188.1	195.1	197.3
142.5°	166.1	171.4	174.1	179.9	181.1
145°	156.1	161.4	164.4	166.6	168.9
147.5°	148.4	152.4	154.4	156.4	157.6
150°	141.4	143.4	146.4	147.4	148.4
152.5°	134.4	136.4	139.4	140.4	140.4
155°	128.4	131.6	133.6	134.6	133.4
157.5°	123.4	126.6	128.6	129.6	129.6
160°	119.4	121.6	123.6	124.6	124.6
162.5°	116.6	117.6	118.6	119.6	119.6
165°	113.6	114.6	115.6	115.6	115.6
167.5°	110.6	111.9	111.6	112.6	112.6
170°	107.6	108.6	108.6	108.4	108.4
172.5°	105.6	106.6	106.6	105.4	106.4
175°	103.6	104.6	103.4	103.1	103.1
177.5°	104.9	103.6	102.4	101.1	99.9
180°	102.4	102.4	102.4	102.4	102.4



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	1013.2	1034.5	993.7	802.1	682.6
110°	936.4	957.8	943.8	877.9	782.4



(END OF REPORT)