

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: P827142

Luminaire Tested: **OHBL-24HE-W-UNV-L840-CD-UPL12**

Issue Date: 5/3/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P827142  
REPORT IS A COMBINATION OF REPORTS P826076 AND G3-2310-221-12  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: OHBL-24HE-W-UNV-L840-CD-UPL12  
Description: 24000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND WIDE LENS AND 1200 LUMEN UPLIGHT MODULE  
Light Source: -  
Ballast/Driver: -

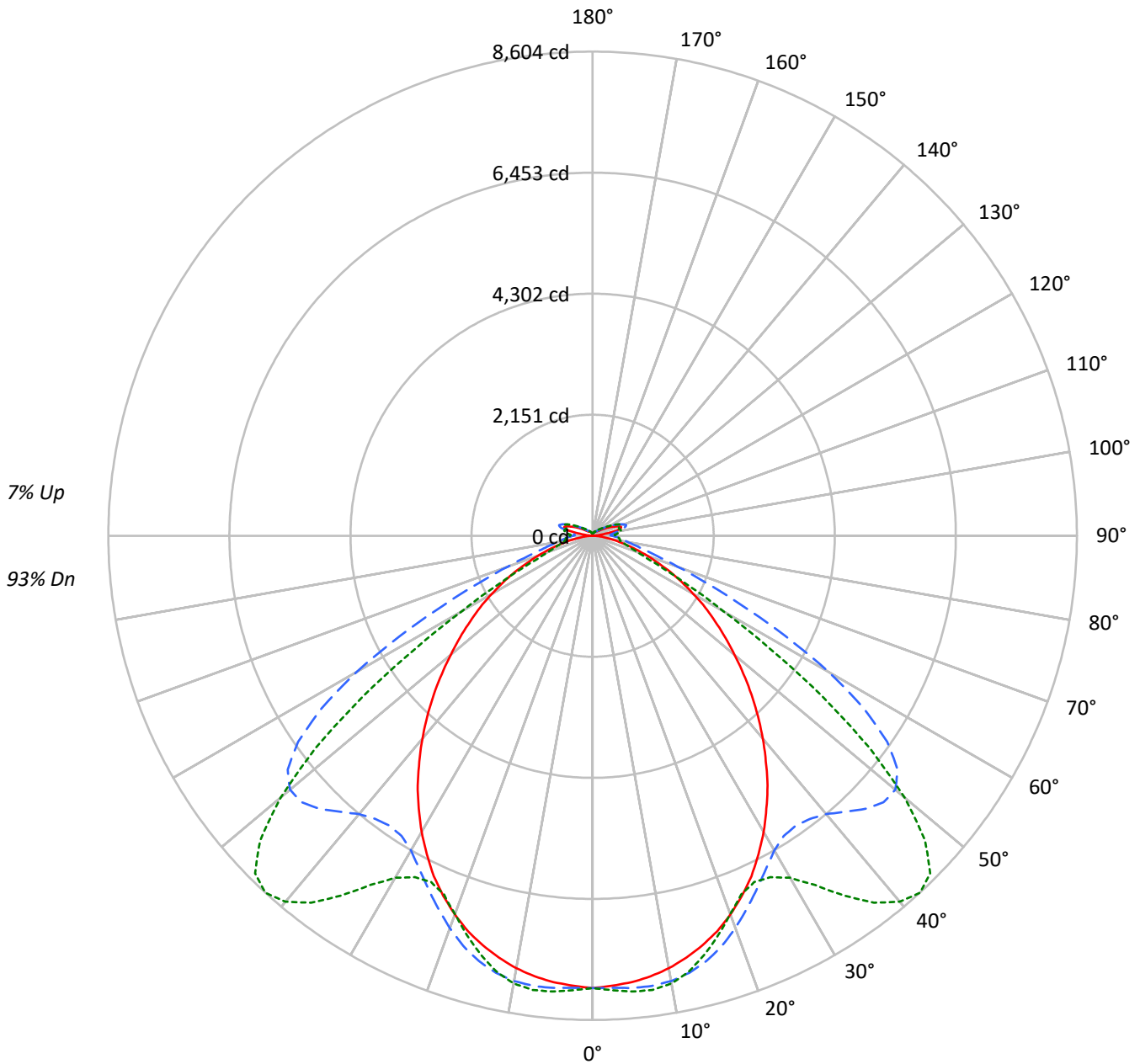
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25310.3 lumens  
Efficiency: N/A  
Efficacy: 179.0 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.58 / 1.62  
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.8' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 141.4  
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				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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	96	96	96	93
1	108	103	99	95	104	100	96	93	95	92	89	90	87	85	85	83	81	81	81	81	79
2	98	90	84	78	95	88	82	77	83	78	74	79	75	71	75	72	69	69	69	69	66
3	90	79	71	65	86	77	70	64	73	67	62	70	64	60	66	62	58	58	58	58	56
4	82	70	62	55	79	68	60	54	65	58	53	62	56	51	59	54	50	50	50	50	48
5	75	63	54	47	73	61	53	47	58	51	45	55	49	44	53	48	43	43	43	43	41
6	69	56	47	41	67	55	47	41	52	45	40	50	44	39	48	42	38	38	38	38	36
7	64	51	42	36	62	50	41	36	47	40	35	45	39	34	43	38	33	33	33	33	31
8	59	46	38	32	58	45	37	32	43	36	31	41	35	30	40	34	30	30	30	30	28
9	55	42	34	28	54	41	34	28	40	33	28	38	32	27	37	31	27	27	27	27	25
10	52	39	31	26	50	38	30	25	37	30	25	35	29	25	34	28	24	24	24	24	22

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

	0°	45°	90°
0°	12711	12711	12711
5°	12539	12699	12856
10°	12330	12685	12871
15°	12037	12481	12458
20°	11657	12058	11848
25°	11167	11544	11610
30°	10536	11163	12494
35°	9825	11376	14620
40°	9012	12328	16902
45°	8167	13994	18168
50°	7293	15486	16907
55°	6469	15481	12918
60°	5634	13112	7898
65°	4759	9067	4784
70°	3784	5873	3454
75°	2787	4220	3203
80°	1895	3723	3613
85°	1147	4126	5712



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	768.1	3.0
10°-20°	2174.9	8.6
20°-30°	3182.6	12.6
30°-40°	4133.2	16.3
40°-50°	5047.2	19.9
50°-60°	4444.9	17.6
60°-70°	2316.2	9.2
70°-80°	993.3	3.9
80°-90°	480.2	1.9
90°-100°	343.1	1.4
100°-110°	553.2	2.2
110°-120°	437.9	1.7
120°-130°	215.2	0.9
130°-140°	107.7	0.4
140°-150°	60.4	0.2
150°-160°	32.7	0.1
160°-170°	15.0	0.1
170°-180°	4.6	0.0
0°-30°	6125.5	24.2
0°-40°	10258.8	40.5
0°-60°	19750.9	78.0
0°-90°	23540.6	93.0
90°-120°	1334.2	5.3
90°-150°	1717.4	6.8
90°-180°	1770.0	7.0
0°-180°	25310.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8037	8037	8037	8037	8037	
5°	7963	8023	8067	8138	8129	755
15°	7534	7746	7820	7762	7699	2121
25°	6676	7033	6914	6784	6790	3064
35°	5419	5991	6291	7337	7807	3377
45°	3990	5020	6862	8308	8481	3077
55°	2656	4398	6390	5603	4980	2384
65°	1524	3047	2925	1626	1399	1508
75°	614	1425	940	643	610	669
85°	130	508	479	468	473	145
90°	5	202	340	392	404	11
95°	28	166	337	411	438	85
105°	524	572	599	505	483	496
115°	370	395	462	481	479	371
125°	188	200	246	261	264	174
135°	112	115	137	157	159	89
145°	89	87	90	102	106	56
155°	74	75	72	73	73	32
165°	52	52	53	53	53	15
175°	47	47	47	47	47	5
180°	46	46	46	46	46	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8037.3	8037.3	8037.3	8037.3	8037.3
2.5°	8002.6	8037.3	8039.0	8087.6	8082.4
5°	7962.7	8023.4	8066.7	8137.8	8129.2
7.5°	7896.8	7992.2	8068.5	8146.5	8139.6
10°	7803.2	7933.2	8033.8	8098.0	8077.2
12.5°	7681.8	7853.5	7952.3	7966.2	7926.3
15°	7534.4	7746.0	7820.5	7761.6	7699.1
17.5°	7367.9	7615.9	7641.9	7513.6	7435.6
20°	7159.8	7442.5	7416.5	7239.6	7152.9
22.5°	6929.2	7251.8	7168.5	6983.0	6899.7
25°	6676.1	7033.3	6913.6	6783.6	6790.5
27.5°	6379.5	6785.3	6669.1	6728.1	6839.0
30°	6077.8	6525.2	6454.1	6797.4	7015.9
32.5°	5746.6	6258.1	6322.3	7000.3	7357.5
35°	5418.9	5991.1	6291.1	7336.7	7806.6
37.5°	5056.5	5720.6	6341.4	7725.1	8217.6
40°	4704.4	5457.0	6455.8	8073.7	8489.9
42.5°	4345.5	5221.2	6648.3	8280.0	8604.3
45°	3990.0	5020.0	6861.6	8307.8	8481.2
47.5°	3634.5	4850.1	7009.0	8087.6	8007.8
50°	3291.2	4699.2	7019.4	7558.7	7232.7
52.5°	2970.4	4560.5	6828.6	6715.9	6209.6
55°	2656.5	4397.5	6389.9	5602.7	4980.2
57.5°	2370.4	4172.1	5713.7	4406.2	3726.4
60°	2067.0	3866.9	4839.7	3223.6	2687.8
62.5°	1787.8	3487.2	3860.0	2243.8	1931.7
65°	1524.2	3046.7	2925.3	1626.5	1399.4
67.5°	1245.0	2590.7	2158.9	1186.1	1040.4
70°	1026.6	2167.5	1607.5	922.5	837.5
72.5°	802.9	1765.3	1201.7	749.1	702.3
75°	613.8	1425.4	939.8	643.3	610.4
77.5°	452.6	1127.1	756.0	568.8	537.6
80°	317.3	887.8	632.9	508.1	495.9
82.5°	213.3	686.7	539.3	483.8	485.5
85°	130.1	508.1	478.6	468.2	473.4
87.5°	62.4	360.7	411.0	426.6	431.8
90°	4.7	201.8	339.6	391.7	404.4
92.5°	9.0	163.5	315.4	376.5	390.2
95°	28.5	165.5	337.4	410.8	437.5
97.5°	138.5	235.4	391.4	466.5	481.7
100°	281.2	373.3	448.1	502.5	512.7
102.5°	444.2	500.6	496.3	504.5	503.0
105°	523.9	571.7	599.0	504.9	483.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	428.4	462.6	532.4	540.7	527.2
115°	370.4	394.7	461.6	481.1	478.6
117.5°	314.1	337.2	397.4	415.2	415.0
120°	265.1	285.0	337.3	354.1	355.8
122.5°	225.1	238.8	288.6	304.7	307.4
125°	188.1	200.3	246.0	261.3	264.0
127.5°	157.4	165.1	210.3	226.6	228.4
130°	138.4	142.4	178.6	197.0	200.4
132.5°	124.4	127.4	155.7	174.0	178.5
135°	112.4	115.4	136.7	156.8	158.6
137.5°	104.4	106.4	121.5	139.9	144.4
140°	96.4	99.4	108.3	126.7	128.4
142.5°	92.1	92.4	99.6	114.5	117.2
145°	88.9	87.4	90.1	101.5	106.0
147.5°	83.9	84.1	86.1	93.1	95.8
150°	80.9	81.9	79.4	83.9	87.3
152.5°	76.9	77.9	75.4	76.4	79.9
155°	73.9	74.9	72.4	73.4	73.4
157.5°	57.0	59.0	59.0	60.0	60.0
160°	55.0	56.0	57.0	57.0	57.0
162.5°	53.0	54.0	54.0	55.0	55.0
165°	52.0	52.0	53.0	53.0	53.0
167.5°	50.0	50.0	51.0	51.0	51.0
170°	49.0	49.0	49.0	50.0	50.0
172.5°	48.0	48.0	48.0	48.0	48.0
175°	47.0	47.0	47.0	47.0	47.0
177.5°	46.0	47.0	47.0	47.0	47.0
180°	46.0	46.0	46.0	46.0	46.0



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	528.7	575.8	626.7	548.1	487.6
110°	484.7	529.8	589.3	576.1	528.5



(END OF REPORT)