

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: P827144

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

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P827144
REPORT IS A COMBINATION OF REPORTS P826304 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-W-UNV-L840-CD-UPL36
Description: 24000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND WIDE LENS AND 3600 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

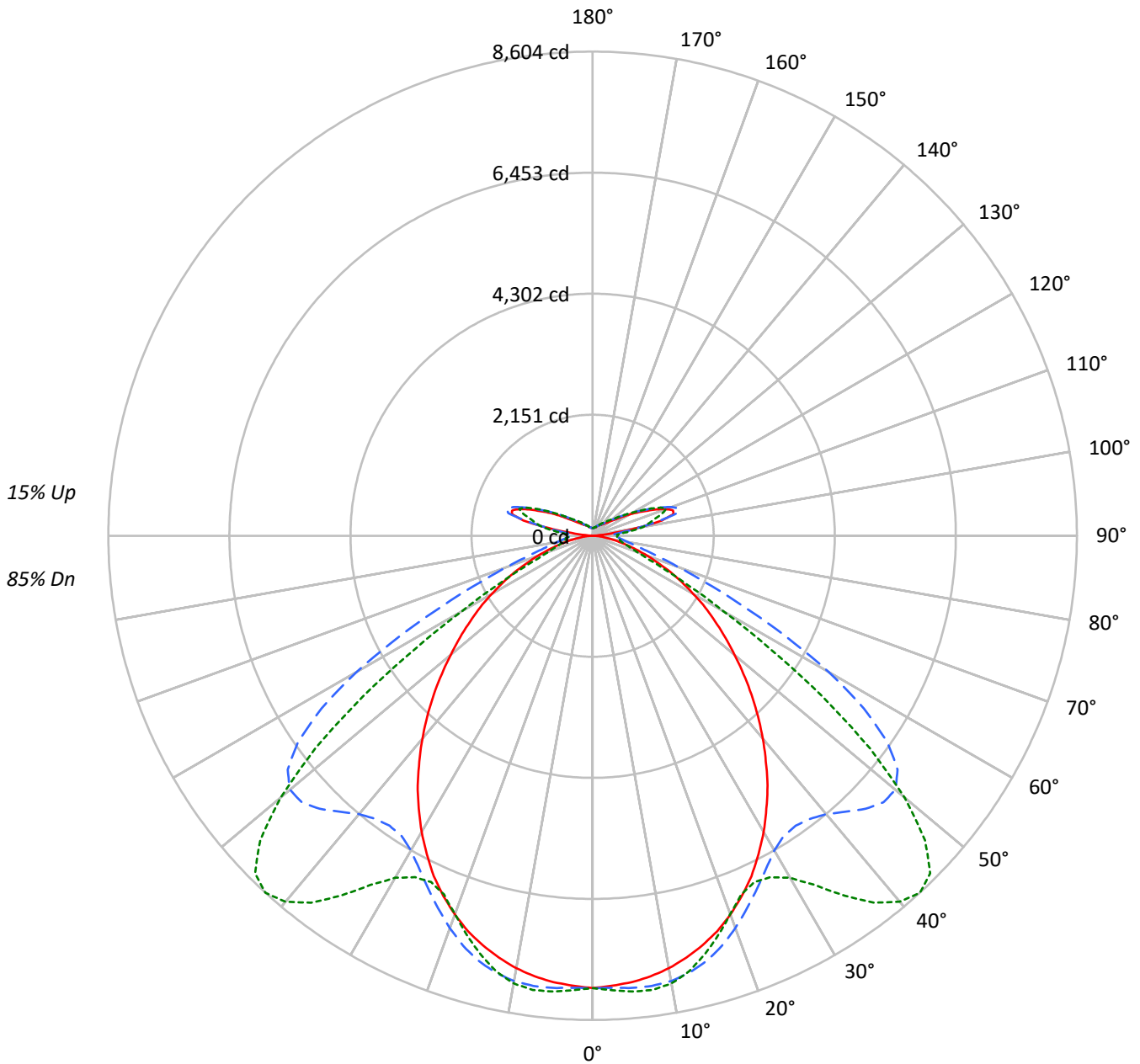
Lumens per Lamp: N/A
Luminaire Lumens: 27647.1 lumens
Efficiency: N/A
Efficacy: 170.9 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.58 / 1.62
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.8' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 161.8
Input Voltage (V): NR
Input Current (A_{in}): 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	116	116	116	116	111	111	111	111	103	103	103	95	95	95	88	88	88	85																			
1	106	101	97	94	102	98	94	91	91	88	85	84	82	80	78	77	75	72																			
2	96	89	82	77	93	86	80	75	80	75	71	74	70	67	69	66	63	61																			
3	88	78	70	64	84	75	68	62	70	64	59	66	61	57	61	57	54	51																			
4	80	69	61	54	77	67	59	53	62	56	51	58	53	48	55	50	46	44																			
5	74	61	53	46	71	59	51	45	56	49	44	52	46	42	49	44	40	38																			
6	68	55	46	40	65	53	45	39	50	43	38	47	41	36	44	39	35	33																			
7	63	50	41	35	60	48	40	35	45	38	33	43	37	32	40	35	31	29																			
8	58	45	37	31	56	44	36	31	41	34	30	39	33	29	37	31	27	25																			
9	54	41	33	28	52	40	33	27	38	31	26	36	30	26	34	29	25	23																			
10	51	38	30	25	49	37	30	25	35	28	24	33	27	23	31	26	22	20																			

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	2.8
10°-20°	2174.9	7.9
20°-30°	3182.6	11.5
30°-40°	4133.2	15.0
40°-50°	5047.2	18.3
50°-60°	4444.9	16.1
60°-70°	2316.2	8.4
70°-80°	993.3	3.6
80°-90°	484.7	1.8
90°-100°	499.2	1.8
100°-110°	1385.4	5.0
110°-120°	1113.7	4.0
120°-130°	532.9	1.9
130°-140°	269.6	1.0
140°-150°	155.3	0.6
150°-160°	88.5	0.3
160°-170°	44.1	0.2
170°-180°	13.4	0.0
0°-30°	6125.5	22.2
0°-40°	10258.8	37.1
0°-60°	19750.9	71.4
0°-90°	23545.1	85.2
90°-120°	2998.2	10.8
90°-150°	3955.9	14.3
90°-180°	4102.0	14.8
0°-180°	27647.1	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°	10	233	379	433	442	15
95°	66	232	416	505	530	233
105°	1484	1535	1549	1227	1130	1411
115°	1040	1051	1125	1154	1148	1052
125°	519	542	596	604	596	487
135°	310	317	343	365	368	245
145°	232	233	240	254	258	147
155°	190	193	192	194	194	87
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°	8037.3	8037.3	8037.3	8037.3	<i>8037.3</i>
2.5°	8002.6	8037.3	8039.0	8087.6	<i>8082.4</i>
5°	7962.7	8023.4	8066.7	8137.8	<i>8129.2</i>
7.5°	7896.8	7992.2	8068.5	8146.5	<i>8139.6</i>
10°	7803.2	7933.2	8033.8	8098.0	<i>8077.2</i>
12.5°	7681.8	7853.5	7952.3	7966.2	<i>7926.3</i>
15°	7534.4	7746.0	7820.5	7761.6	<i>7699.1</i>
17.5°	7367.9	7615.9	7641.9	7513.6	<i>7435.6</i>
20°	7159.8	7442.5	7416.5	7239.6	<i>7152.9</i>
22.5°	6929.2	7251.8	7168.5	6983.0	<i>6899.7</i>
25°	6676.1	7033.3	6913.6	6783.6	<i>6790.5</i>
27.5°	6379.5	6785.3	6669.1	6728.1	<i>6839.0</i>
30°	6077.8	6525.2	6454.1	6797.4	<i>7015.9</i>
32.5°	5746.6	6258.1	6322.3	7000.3	<i>7357.5</i>
35°	5418.9	5991.1	6291.1	7336.7	<i>7806.6</i>
37.5°	5056.5	5720.6	6341.4	7725.1	<i>8217.6</i>
40°	4704.4	5457.0	6455.8	8073.7	<i>8489.9</i>
42.5°	<i>4345.5</i>	<i>5221.2</i>	<i>6648.3</i>	<i>8280.0</i>	<i>8604.3</i>
45°	3990.0	5020.0	6861.6	8307.8	<i>8481.2</i>
47.5°	3634.5	4850.1	7009.0	8087.6	<i>8007.8</i>
50°	3291.2	4699.2	7019.4	7558.7	<i>7232.7</i>
52.5°	2970.4	4560.5	6828.6	6715.9	<i>6209.6</i>
55°	2656.5	4397.5	6389.9	5602.7	<i>4980.2</i>
57.5°	2370.4	4172.1	5713.7	4406.2	<i>3726.4</i>
60°	2067.0	3866.9	4839.7	3223.6	<i>2687.8</i>
62.5°	1787.8	3487.2	3860.0	2243.8	<i>1931.7</i>
65°	1524.2	3046.7	2925.3	1626.5	<i>1399.4</i>
67.5°	1245.0	2590.7	2158.9	1186.1	<i>1040.4</i>
70°	1026.6	2167.5	1607.5	922.5	<i>837.5</i>
72.5°	802.9	1765.3	1201.7	749.1	<i>702.3</i>
75°	613.8	1425.4	939.8	643.3	<i>610.4</i>
77.5°	452.6	1127.1	756.0	568.8	<i>537.6</i>
80°	317.3	887.8	632.9	508.1	<i>495.9</i>
82.5°	213.3	686.7	539.3	483.8	<i>485.5</i>
85°	130.1	508.1	478.6	468.2	<i>473.4</i>
87.5°	62.4	360.7	411.0	426.6	<i>431.8</i>
90°	9.7	232.8	378.6	432.7	<i>442.4</i>
92.5°	25.0	200.5	354.4	418.5	<i>433.2</i>
95°	65.5	231.5	416.4	504.8	<i>529.5</i>
97.5°	377.5	490.4	574.4	687.5	<i>716.7</i>
100°	808.2	900.3	840.1	888.5	<i>913.7</i>
102.5°	1263.2	1342.6	1188.3	1052.5	<i>1026.0</i>
105°	1483.9	1534.7	1549.0	1226.9	<i>1130.4</i>



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1220.4	1254.6	1316.4	1336.7	1308.2
115°	1040.4	1050.7	1124.6	1154.1	1147.6
117.5°	893.1	902.2	967.4	984.2	975.0
120°	753.1	767.0	827.3	834.1	827.8
122.5°	626.1	648.8	702.6	711.7	700.4
125°	519.1	542.3	596.0	604.3	596.0
127.5°	445.4	453.1	505.3	517.6	519.4
130°	384.4	392.4	434.6	454.0	455.4
132.5°	342.4	350.4	384.7	405.0	411.5
135°	310.4	317.4	342.7	364.8	367.6
137.5°	284.4	290.4	308.5	330.9	335.4
140°	262.4	268.4	281.3	302.7	304.4
142.5°	246.1	250.4	260.6	277.5	279.2
145°	231.9	233.4	240.1	253.5	258.0
147.5°	219.9	222.1	227.1	235.1	237.8
150°	208.9	211.9	212.4	217.9	222.3
152.5°	198.9	201.9	202.4	203.4	207.9
155°	189.9	192.9	192.4	194.4	194.4
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°	1499.7	1547.8	1603.7	1459.1	1288.6
110°	1384.7	1435.8	1494.3	1465.1	1389.5



(END OF REPORT)