

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: P827154

Luminaire Tested: **OHBL-24SE-N-UNV-L840-CD-UPL12**

Issue Date: 5/3/2024



**Test Information**

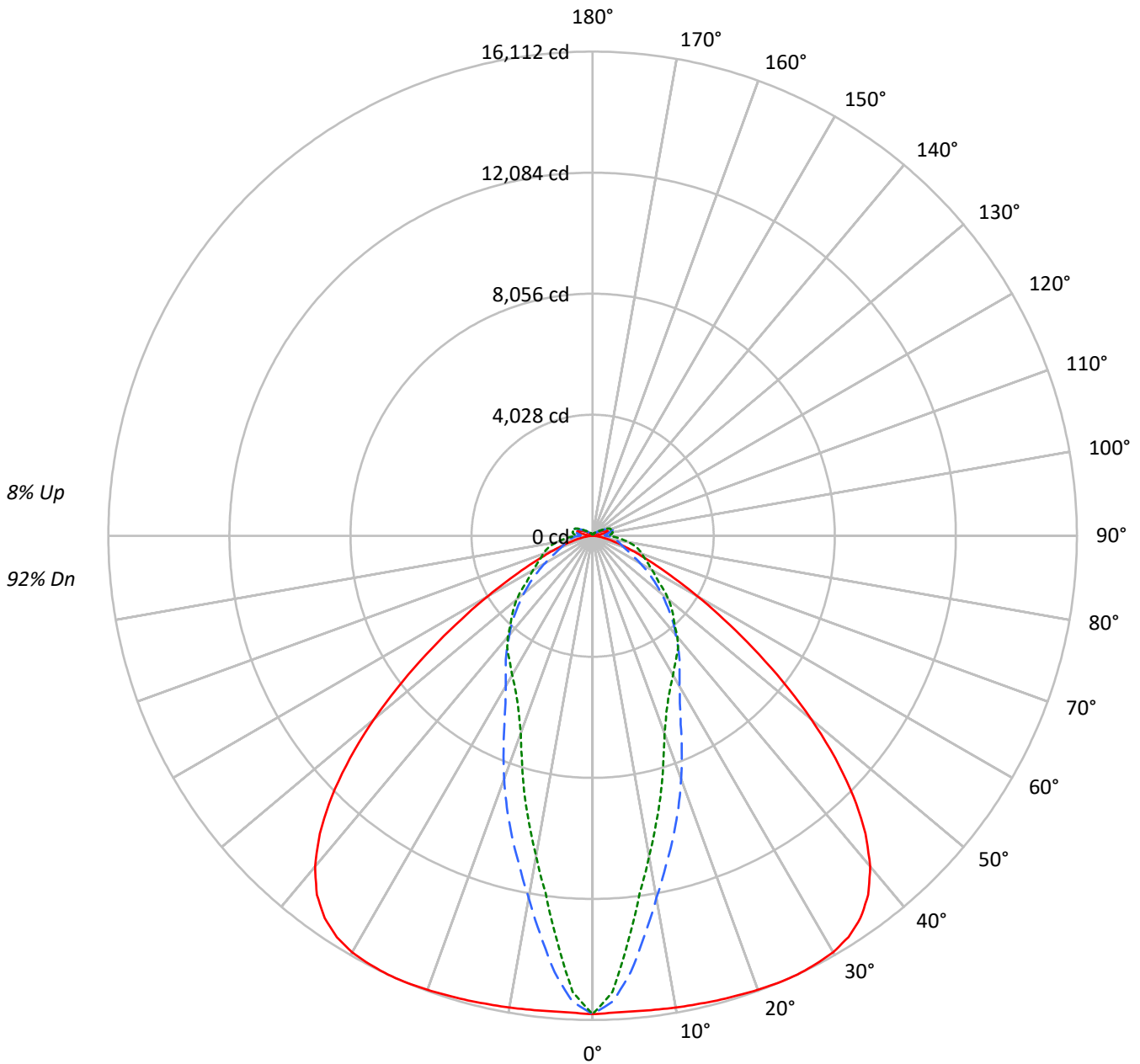
Test Method: LM-79-08  
Report Number: P827154  
REPORT IS A COMBINATION OF REPORTS P826080 AND G3-2310-221-12  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: OHBL-24SE-N-UNV-L840-CD-UPL12  
Description: 24000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND NARROW LENS AND 1200 LUMEN UPLIGHT MODULE  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24737.3 lumens  
Efficiency: N/A  
Efficacy: 169.0 lumens/watt  
Spacing Criteria (0/90/45): 1.47 / 0.53 / 0.78  
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 146.4  
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	107	107	107	100	100	100	94	94	94	92																			
1	108	103	99	96	104	100	97	93	94	92	89	89	87	85	84	83	81	78																			
2	99	92	85	80	96	89	83	79	84	80	76	80	76	73	76	73	70	67																			
3	91	82	74	68	88	80	73	67	75	70	65	72	67	63	68	64	61	59																			
4	84	73	66	59	82	72	64	59	68	62	57	65	60	55	62	58	54	52																			
5	78	67	58	52	76	65	57	52	62	55	50	59	54	49	57	52	48	46																			
6	73	61	52	47	70	59	52	46	57	50	45	54	49	44	52	47	43	41																			
7	68	56	48	42	66	54	47	41	52	45	41	50	44	40	48	43	39	37																			
8	64	51	43	38	62	50	43	38	48	42	37	46	41	36	45	39	36	34																			
9	60	47	40	35	58	46	39	34	45	38	34	43	37	33	42	36	33	31																			
10	56	44	37	32	55	43	36	32	42	35	31	40	35	31	39	34	30	28																			

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

	0°	45°	90°
0°	27186	27186	27186
5°	26999	24758	23131
10°	27171	20854	18638
15°	27565	17835	15374
20°	28194	15080	12499
25°	29012	12483	11011
30°	29842	10754	10288
35°	30272	9800	9863
40°	29547	8853	9423
45°	26968	8000	8793
50°	22544	7068	8330
55°	16942	6190	7495
60°	11711	5309	7274
65°	7738	4572	7249
70°	5157	4291	7794
75°	3451	4425	8636
80°	2234	4901	9453
85°	1149	6131	11272



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1339.9	5.4
10°-20°	3152.0	12.7
20°-30°	3951.0	16.0
30°-40°	4192.5	16.9
40°-50°	3790.6	15.3
50°-60°	2748.5	11.1
60°-70°	1724.8	7.0
70°-80°	1141.4	4.6
80°-90°	660.7	2.7
90°-100°	437.6	1.8
100°-110°	633.8	2.6
110°-120°	491.2	2.0
120°-130°	236.1	1.0
130°-140°	115.5	0.5
140°-150°	66.1	0.3
150°-160°	36.1	0.1
160°-170°	15.0	0.1
170°-180°	4.6	0.0
0°-30°	8442.9	34.1
0°-40°	12635.3	51.1
0°-60°	19174.4	77.5
0°-90°	22701.4	91.8
90°-120°	1562.6	6.3
90°-150°	1980.3	8.0
90°-180°	2036.0	8.2
0°-180°	24737.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	15917	15917	15917	15917	15917	
5°	15885	15478	14569	13893	13543	###
15°	16006	13046	10362	9215	8797	4539
25°	16112	10088	6938	6158	5963	7444
35°	15535	6706	5036	4878	4876	9658
45°	12281	4248	3649	3737	3801	9356
55°	6502	2633	2381	2583	2675	5875
65°	2325	1527	1379	1766	1963	2420
75°	718	823	926	1438	1524	800
85°	126	341	677	942	865	151
90°	3	160	416	584	592	10
95°	31	158	431	586	625	88
105°	529	578	688	642	626	501
115°	377	407	531	570	569	376
125°	194	207	273	294	294	180
135°	117	123	147	169	169	93
145°	93	97	101	114	113	59
155°	78	84	86	89	86	34
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°	15917.1	15917.1	15917.1	15917.1	15917.1
2.5°	15883.8	15792.9	15509.6	15336.9	15191.4
5°	15885.3	15477.8	14568.8	13893.2	13543.2
7.5°	15908.0	15002.1	13364.5	12378.3	11993.5
10°	15942.8	14412.8	12240.4	11189.1	10830.0
12.5°	15968.6	13749.3	11251.2	10171.1	9777.2
15°	16006.5	13046.3	10361.9	9215.2	8797.0
17.5°	16041.3	12384.3	9483.3	8285.0	7819.9
20°	16076.1	11670.8	8604.6	7370.0	6986.7
22.5°	16109.5	10917.9	7747.2	6659.5	6397.4
25°	16112.5	10087.7	6938.3	6158.1	5962.7
27.5°	16073.1	9227.3	6282.3	5738.5	5617.3
30°	16004.9	8392.6	5773.3	5435.5	5349.1
32.5°	15835.3	7541.2	5379.4	5143.1	5093.1
35°	15535.3	6706.5	5035.5	4878.0	4876.5
37.5°	15062.7	5965.7	4662.9	4635.6	4668.9
40°	14364.3	5317.3	4309.9	4382.6	4382.6
42.5°	13432.6	4753.8	3990.3	4064.5	4044.8
45°	12281.3	4247.8	3649.4	3737.3	3800.9
47.5°	10946.7	3802.4	3301.0	3470.6	3558.5
50°	9495.4	3378.2	2982.8	3199.5	3299.5
52.5°	7974.4	2985.9	2672.3	2920.7	3001.0
55°	6502.0	2632.9	2381.4	2582.9	2675.3
57.5°	5168.8	2296.6	2096.6	2287.5	2478.4
60°	4022.1	2007.2	1828.5	2101.2	2292.0
62.5°	3072.2	1749.7	1577.0	1927.0	2117.8
65°	2325.4	1527.0	1378.6	1766.4	1963.3
67.5°	1752.7	1334.6	1224.0	1649.7	1842.1
70°	1316.5	1148.3	1099.8	1577.0	1749.7
72.5°	972.6	977.1	1001.4	1513.4	1645.2
75°	718.1	822.6	925.6	1437.6	1524.0
77.5°	513.6	681.7	857.4	1346.7	1377.0
80°	356.0	556.0	786.2	1227.1	1201.3
82.5°	222.7	445.4	722.6	1095.3	1024.1
85°	125.7	340.9	677.2	942.3	865.0
87.5°	56.1	254.5	592.3	734.7	686.3
90°	3.0	160.4	416.4	583.9	592.5
92.5°	12.0	141.2	400.1	560.0	580.1
95°	31.1	158.0	431.4	585.6	624.8
97.5°	142.6	234.9	490.2	632.3	660.5
100°	285.1	375.8	545.4	659.4	679.6
102.5°	449.6	505.7	590.2	651.1	658.2
105°	529.1	577.7	687.5	642.3	626.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	433.1	472.5	607.4	641.4	631.9
115°	376.7	407.0	530.7	570.1	568.6
117.5°	320.2	346.9	457.5	492.3	491.8
120°	271.2	295.4	388.3	416.1	416.1
122.5°	231.2	248.3	327.0	349.8	349.3
125°	194.2	207.2	273.3	294.1	293.6
127.5°	163.7	172.7	229.7	249.9	248.4
130°	144.7	151.7	193.1	215.3	215.3
132.5°	129.1	135.2	166.4	188.7	189.7
135°	117.1	123.2	146.9	169.1	169.1
137.5°	109.1	115.7	130.8	151.5	152.5
140°	101.1	107.2	118.3	137.4	137.4
142.5°	96.7	100.2	108.2	124.4	125.4
145°	93.2	96.7	100.7	113.8	113.3
147.5°	88.2	93.2	96.7	104.3	103.8
150°	85.2	90.7	91.7	97.3	95.8
152.5°	81.2	86.7	87.7	91.8	90.2
155°	78.2	83.7	86.2	88.8	85.7
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°	532.1	584.1	711.3	671.4	618.0
110°	489.6	539.1	671.6	686.6	646.2



(END OF REPORT)