

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: P827156

Luminaire Tested: **OHBL-24SE-N-UNV-L840-CD-UPL36**

Issue Date: 5/3/2024

Test Information

Test Method: LM-79-08
Report Number: P827156
REPORT IS A COMBINATION OF REPORTS P826308 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-24SE-N-UNV-L840-CD-UPL36
Description: 24000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND NARROW LENS AND 3600 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

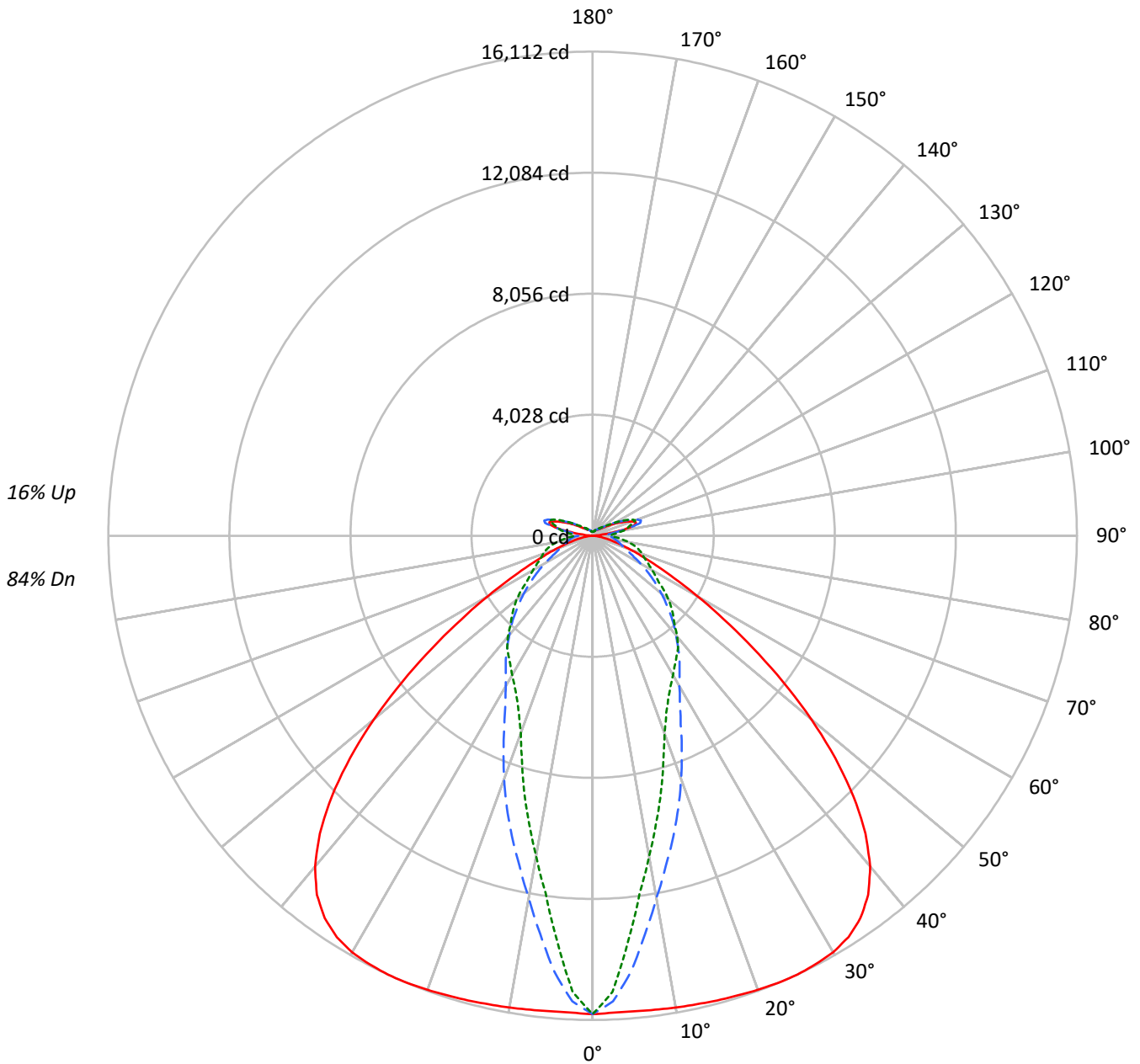
Lumens per Lamp: N/A
Luminaire Lumens: 27074.1 lumens
Efficiency: N/A
Efficacy: 162.3 lumens/watt
Spacing Criteria (0/90/45): 1.47 / 0.53 / 0.78
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 166.8
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	115	115	115	115	111	111	111	111	102	102	102	94	94	94	87	87	87	84																			
1	106	101	97	94	102	98	94	91	90	88	85	84	82	80	78	76	75	72																			
2	97	90	84	79	93	87	81	76	81	76	72	75	71	68	70	67	64	62																			
3	90	80	73	67	86	77	71	65	72	67	62	67	63	59	63	59	56	54																			
4	83	72	64	58	79	70	62	57	65	59	54	61	56	52	57	53	50	47																			
5	77	65	57	51	74	63	56	50	59	53	48	56	50	46	52	48	44	42																			
6	71	59	51	45	68	57	50	44	54	48	43	51	45	41	48	43	40	37																			
7	66	54	46	41	64	53	45	40	50	43	39	47	41	37	44	40	36	34																			
8	62	50	42	37	60	48	41	36	46	39	35	43	38	34	41	36	33	31																			
9	58	46	38	33	56	45	38	33	43	36	32	40	35	31	38	34	30	28																			
10	55	43	35	31	53	42	35	30	40	34	29	38	32	29	36	31	28	26																			

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	4.9
10°-20°	3152.0	11.6
20°-30°	3951.0	14.6
30°-40°	4192.5	15.5
40°-50°	3790.6	14.0
50°-60°	2748.5	10.2
60°-70°	1724.8	6.4
70°-80°	1141.4	4.2
80°-90°	665.3	2.5
90°-100°	593.7	2.2
100°-110°	1466.0	5.4
110°-120°	1167.0	4.3
120°-130°	553.8	2.0
130°-140°	277.3	1.0
140°-150°	161.0	0.6
150°-160°	91.9	0.3
160°-170°	44.1	0.2
170°-180°	13.4	0.0
0°-30°	8442.9	31.2
0°-40°	12635.3	46.7
0°-60°	19174.4	70.8
0°-90°	22705.9	83.9
90°-120°	3226.7	11.9
90°-150°	4218.8	15.6
90°-180°	4368.0	16.1
0°-180°	27074.1	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°	8	191	455	625	630	14
95°	68	224	510	680	717	236
105°	1489	1541	1638	1364	1273	1416
115°	1047	1063	1194	1243	1238	1058
125°	525	549	623	637	626	493
135°	315	325	353	377	378	249
145°	236	243	251	266	265	150
155°	194	202	206	210	207	88
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°	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°	8.0	191.4	455.4	624.9	630.5
92.5°	28.0	178.2	439.1	602.0	623.1
95°	68.1	224.0	510.4	679.6	716.8
97.5°	381.6	489.9	673.2	853.3	895.5
100°	812.1	902.8	937.4	1045.4	1080.6
102.5°	1268.6	1347.7	1282.2	1199.1	1181.2
105°	1489.1	1540.7	1637.5	1364.3	1273.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1225.1	1264.5	1391.4	1437.4	1412.9
115°	1046.7	1063.0	1193.7	1243.1	1237.6
117.5°	899.2	911.9	1027.5	1061.3	1051.8
120°	759.2	777.4	878.3	896.1	888.1
122.5°	632.2	658.3	741.0	756.8	742.3
125°	525.2	549.2	623.3	637.1	625.6
127.5°	451.7	460.7	524.7	540.9	539.4
130°	390.7	401.7	449.1	472.3	470.3
132.5°	347.1	358.2	395.4	419.7	422.7
135°	315.1	325.2	352.9	377.1	378.1
137.5°	289.1	299.7	317.8	342.5	343.5
140°	267.1	276.2	291.3	313.4	313.4
142.5°	250.7	258.2	269.2	287.4	287.4
145°	236.2	242.7	250.7	265.8	265.3
147.5°	224.2	231.2	237.7	246.3	245.8
150°	213.2	220.7	224.7	231.3	230.8
152.5°	203.2	210.7	214.7	218.8	218.2
155°	194.2	201.7	206.2	209.8	206.7
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°	1503.1	1556.1	1688.3	1582.4	1419.0
110°	1389.6	1445.1	1576.6	1575.6	1507.2



(END OF REPORT)