

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: P827138

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

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P827138
REPORT IS A COMBINATION OF REPORTS P826302 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-N-UNV-L840-CD-UPL36
Description: 24000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND NARROW LENSAND 3600 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

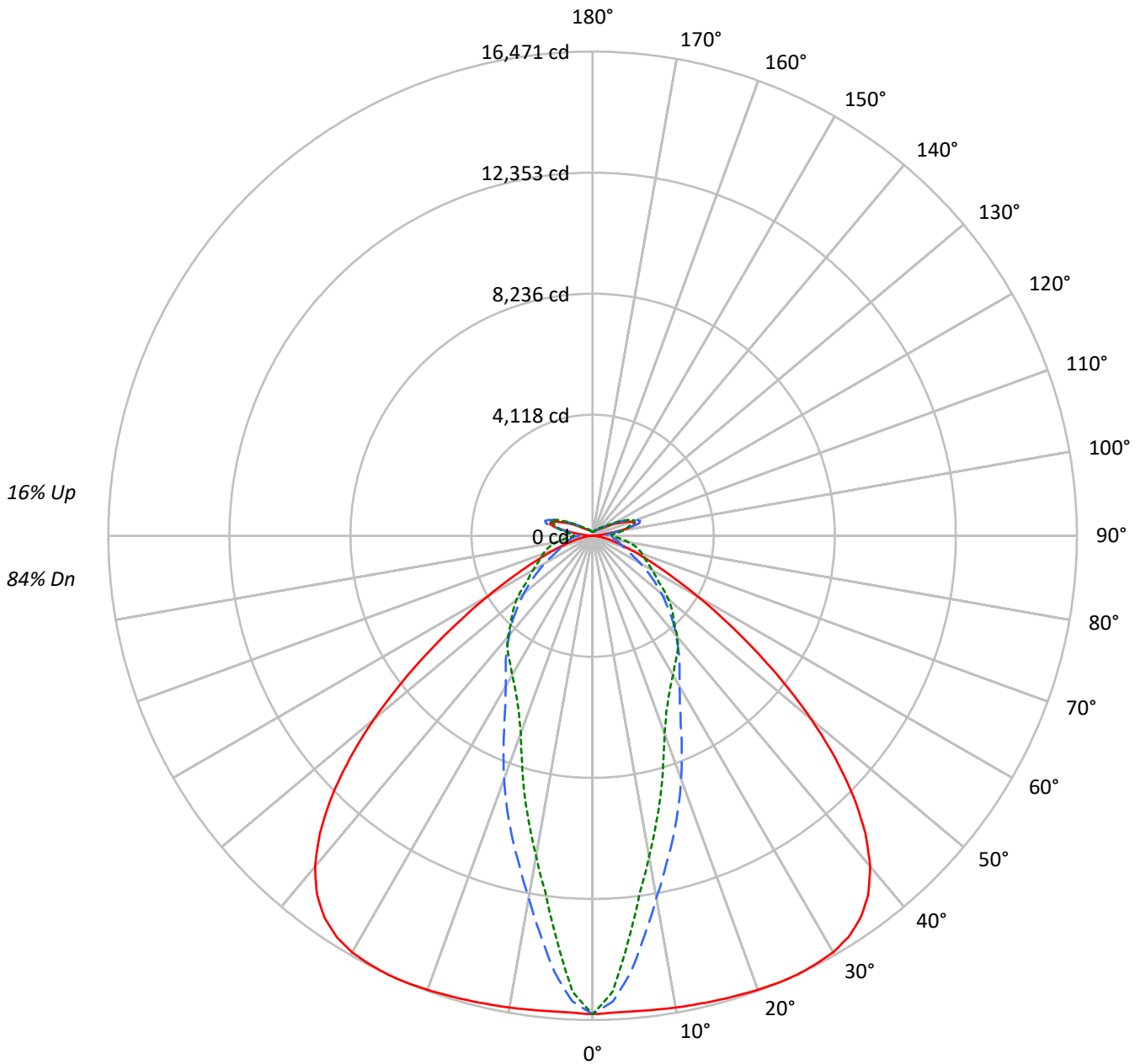
Lumens per Lamp: N/A
Luminaire Lumens: 27597.1 lumens
Efficiency: N/A
Efficacy: 170.6 lumens/watt
Spacing Criteria (0/90/45): 1.47 / 0.53 / 0.78
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.8' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 161.8
Input Voltage (V): NR
Input Current (Ain): 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	95	95	95	87	87	87	84																			
1	106	101	98	94	102	98	94	91	91	88	85	84	82	80	78	76	75	72																			
2	97	90	84	79	93	87	81	76	81	76	72	75	72	68	70	67	65	62																			
3	90	80	73	67	86	77	71	65	72	67	62	68	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	46	41	48	43	40	38																			
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	40	35	44	38	34	41	36	33	31																			
9	58	46	39	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°	25733	25733	25733
5°	25572	23445	21894
10°	25752	19757	17642
15°	26142	16905	14552
20°	26756	14301	11830
25°	27552	11843	10422
30°	28361	10208	9738
35°	28793	9308	9336
40°	28129	8413	8919
45°	25699	7608	8323
50°	21508	6727	7884
55°	16186	5898	7094
60°	11207	5064	6885
65°	7421	4368	6862
70°	4961	4108	7377
75°	3333	4249	8174
80°	2173	4728	8948
85°	1133	5967	10670



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1369.7	5.0
10°-20°	3222.2	11.7
20°-30°	4039.0	14.6
30°-40°	4285.8	15.5
40°-50°	3875.0	14.0
50°-60°	2809.6	10.2
60°-70°	1763.2	6.4
70°-80°	1166.8	4.2
80°-90°	679.9	2.5
90°-100°	600.8	2.2
100°-110°	1470.9	5.3
110°-120°	1170.0	4.2
120°-130°	555.3	2.0
130°-140°	278.0	1.0
140°-150°	161.3	0.6
150°-160°	92.1	0.3
160°-170°	44.1	0.2
170°-180°	13.4	0.0
0°-30°	8630.8	31.3
0°-40°	12916.6	46.8
0°-60°	19601.3	71.0
0°-90°	23211.2	84.1
90°-120°	3241.6	11.7
90°-150°	4236.3	15.4
90°-180°	4386.0	15.9
0°-180°	27597.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16271	16271	16271	16271	16271	
5°	16239	15822	14893	14202	13845	###
15°	16363	13337	10593	9420	8993	4640
25°	16471	10312	7093	6295	6095	7609
35°	15881	6856	5148	4987	4985	9873
45°	12555	4342	3731	3820	3886	9564
55°	6647	2692	2434	2640	2735	6006
65°	2377	1561	1409	1806	2007	2474
75°	734	841	946	1470	1558	818
85°	128	348	692	963	884	154
90°	8	195	464	637	643	14
95°	68	226	518	690	728	236
105°	1489	1542	1643	1372	1281	1416
115°	1047	1064	1197	1248	1242	1058
125°	526	550	625	640	628	493
135°	316	326	354	378	379	249
145°	237	243	251	267	266	150
155°	195	202	207	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°	16271.4	16271.4	16271.4	16271.4	16271.4
2.5°	16237.4	16144.5	15854.9	15678.3	15529.7
5°	16238.9	15822.3	14893.2	14202.5	13844.7
7.5°	16262.2	15336.1	13662.0	12653.8	12260.5
10°	16297.8	14733.7	12512.9	11438.2	11071.1
12.5°	16324.1	14055.4	11501.7	10397.5	9994.9
15°	16362.8	13336.8	10592.6	9420.3	8992.9
17.5°	16398.4	12660.0	9694.4	8469.5	7994.0
20°	16434.0	11930.6	8796.2	7534.1	7142.3
22.5°	16468.1	11161.0	7919.7	6807.8	6539.9
25°	16471.2	10312.3	7092.7	6295.2	6095.4
27.5°	16431.0	9432.7	6422.2	5866.2	5742.3
30°	16361.3	8579.4	5901.8	5556.5	5468.2
32.5°	16187.8	7709.1	5499.2	5257.6	5206.5
35°	15881.2	6855.8	5147.6	4986.6	4985.0
37.5°	15398.0	6098.5	4766.7	4738.8	4772.9
40°	14684.1	5435.7	4405.8	4480.2	4480.2
42.5°	13731.7	4859.6	4079.1	4155.0	4134.8
45°	12554.7	4342.4	3730.6	3820.5	3885.5
47.5°	11190.4	3887.1	3374.5	3547.9	3637.7
50°	9706.8	3453.4	3049.3	3270.7	3372.9
52.5°	8152.0	3052.3	2731.8	2985.8	3067.8
55°	6646.7	2691.5	2434.4	2640.4	2734.9
57.5°	5283.9	2347.7	2143.3	2338.4	2533.6
60°	4111.6	2051.9	1869.2	2147.9	2343.1
62.5°	3140.6	1788.7	1612.1	1969.9	2165.0
65°	2377.1	1561.0	1409.3	1805.7	2007.0
67.5°	1791.8	1364.3	1251.3	1686.5	1883.1
70°	1345.8	1173.9	1124.3	1612.1	1788.7
72.5°	994.2	998.9	1023.6	1547.1	1681.8
75°	734.1	840.9	946.2	1469.6	1557.9
77.5°	525.0	696.9	876.5	1376.7	1407.7
80°	363.9	568.3	803.7	1254.4	1228.1
82.5°	227.6	455.3	738.7	1119.7	1046.9
85°	128.5	348.4	692.2	963.2	884.3
87.5°	57.3	260.2	605.5	751.1	701.5
90°	8.0	194.6	464.1	637.2	642.9
92.5°	28.1	180.8	447.1	613.2	634.7
95°	68.2	226.2	518.1	690.1	727.8
97.5°	381.7	491.8	680.4	863.0	905.6
100°	812.3	904.5	944.1	1054.4	1089.9
102.5°	1268.8	1349.3	1288.3	1207.2	1189.6
105°	1489.4	1542.1	1643.1	1371.7	1281.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1225.5	1265.7	1395.6	1442.7	1418.4
115°	1047.0	1064.0	1197.4	1247.8	1242.5
117.5°	899.6	912.8	1030.8	1065.5	1056.0
120°	759.6	778.2	881.1	899.6	891.6
122.5°	632.6	659.0	743.4	759.7	745.2
125°	525.6	549.8	625.3	639.5	628.0
127.5°	452.0	461.1	526.2	542.9	541.4
130°	391.0	402.1	450.3	474.0	472.0
132.5°	347.5	358.6	396.5	421.1	424.1
135°	315.5	325.6	353.7	378.4	379.4
137.5°	289.5	300.1	318.5	343.7	344.7
140°	267.5	276.6	291.9	314.5	314.5
142.5°	251.0	258.6	269.8	288.3	288.3
145°	236.6	243.1	251.2	266.6	266.1
147.5°	224.6	231.7	238.2	247.0	246.4
150°	213.6	221.2	225.2	231.9	231.3
152.5°	203.6	211.2	215.2	219.3	218.8
155°	194.6	202.2	206.8	210.3	207.2
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°	1503.4	1557.5	1693.4	1589.1	1425.9
110°	1389.9	1446.3	1581.3	1581.6	1513.4



(END OF REPORT)