

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: P827147

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

Issue Date: 5/3/2024

Test Information

Test Method: LM-79-08
Report Number: P827147
REPORT IS A COMBINATION OF REPORTS P826305 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-A-UNV-L840-CD-UPL36
Description: 24000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND AISLE LENS AND 3600 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

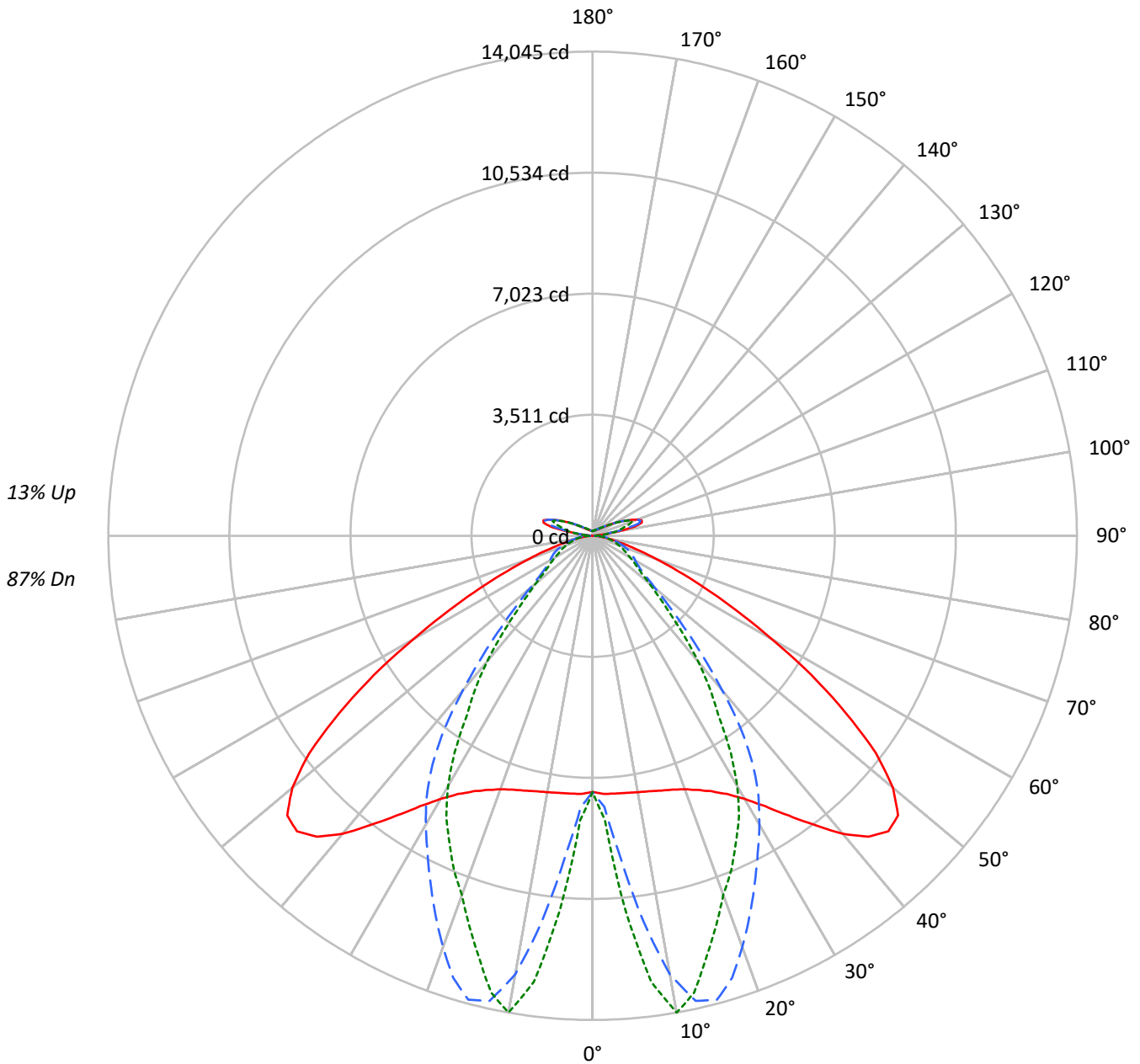
Lumens per Lamp: N/A
Luminaire Lumens: 27432.1 lumens
Efficiency: N/A
Efficacy: 164.5 lumens/watt
Spacing Criteria (0/90/45): 2.18 / 1.37 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')
CIE Type: Semi-Direct

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					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	116	116	116	116	112	112	112	112	104	104	104	97	97	97	90	90	90	87				87				
1	107	103	100	97	104	100	97	94	93	91	89	87	85	84	82	80	79	76				76				
2	99	92	87	82	96	89	84	80	84	80	76	79	75	72	74	71	69	66				66				
3	92	83	76	70	88	80	74	69	76	70	66	71	67	63	67	64	61	58				58				
4	85	75	67	61	82	72	65	60	68	63	58	65	60	56	61	57	54	51				51				
5	79	67	60	54	76	66	58	53	62	56	51	59	54	50	56	52	48	46				46				
6	73	61	54	48	71	60	52	47	57	50	46	54	49	44	51	47	43	41				41				
7	68	56	48	43	66	55	47	42	52	46	41	50	44	40	47	43	39	37				37				
8	64	52	44	39	62	50	43	38	48	42	37	46	40	36	44	39	35	33				33				
9	60	48	40	35	58	47	40	35	44	38	34	43	37	33	41	36	32	31				31				
10	56	44	37	32	54	43	36	32	41	35	31	40	34	30	38	33	30	28				28				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12694	12694	12694
5°	12759	15966	18609
10°	12873	22012	24171
15°	13179	23979	22184
20°	13724	22249	19826
25°	14725	20009	18135
30°	16420	18017	16126
35°	19303	15769	12850
40°	23210	12009	10227
45°	26624	8182	7279
50°	26991	5612	5384
55°	23363	4417	4398
60°	17452	4133	3957
65°	11962	4146	3748
70°	7648	3999	3630
75°	4599	3701	3473
80°	2706	3252	3583
85°	1303	2793	3323



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	970.3	3.5
10°-20°	3424.6	12.5
20°-30°	5046.4	18.4
30°-40°	5303.0	19.3
40°-50°	4057.7	14.8
50°-60°	2450.2	8.9
60°-70°	1495.2	5.5
70°-80°	816.1	3.0
80°-90°	294.2	1.1
90°-100°	275.1	1.0
100°-110°	1246.1	4.5
110°-120°	1031.3	3.8
120°-130°	488.1	1.8
130°-140°	247.1	0.9
140°-150°	144.5	0.5
150°-160°	84.7	0.3
160°-170°	44.1	0.2
170°-180°	13.4	0.0
0°-30°	9441.3	34.4
0°-40°	14744.3	53.7
0°-60°	21252.2	77.5
0°-90°	23857.7	87.0
90°-120°	2552.5	9.3
90°-150°	3432.2	12.5
90°-180°	3574.0	13.0
0°-180°	27432.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7432	7432	7432	7432	7432	
5°	7507	8054	9395	10491	10895	718
15°	7653	11920	13931	13000	12694	2176
25°	8178	13834	11122	10069	9821	3822
35°	9906	11079	8103	6748	6353	6284
45°	12125	6322	3732	3284	3146	9161
55°	8967	2144	1699	1575	1570	7923
65°	3595	1357	1250	1070	1015	3683
75°	957	844	774	639	613	1101
85°	142	262	308	281	255	176
90°	8	49	63	72	73	13
95°	62	124	165	210	226	231
105°	1477	1474	1386	1031	931	1404
115°	1030	1016	1024	1031	1021	1041
125°	507	525	537	528	518	477
135°	300	307	315	318	319	237
145°	218	223	228	231	232	139
155°	176	179	182	184	184	82
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°	7432.3	7432.3	7432.3	7432.3	7432.3
2.5°	7493.2	7569.7	7871.2	8184.1	8260.3
5°	7506.9	8053.8	9395.2	10490.6	10895.4
7.5°	7522.8	8838.1	11283.6	12624.7	13054.0
10°	7553.1	9830.0	12919.8	13882.7	14044.9
12.5°	7590.7	10880.7	13820.2	13785.1	13580.5
15°	7653.2	11920.1	13931.1	12999.8	12694.2
17.5°	7718.8	12799.4	13447.3	12145.1	11878.9
20°	7825.6	13452.1	12694.8	11385.3	11082.8
22.5°	7979.5	13811.0	11905.7	10698.1	10500.8
25°	8178.1	13834.2	11122.0	10069.3	9820.7
27.5°	8444.2	13513.3	10370.8	9453.2	9190.6
30°	8806.3	12898.8	9672.8	8710.3	8384.6
32.5°	9298.0	12014.4	8953.2	7813.5	7448.2
35°	9906.1	11078.7	8102.6	6747.7	6353.2
37.5°	10569.7	10039.7	7070.3	5804.0	5574.2
40°	11283.6	8969.1	5846.7	4920.9	4756.4
42.5°	11840.7	7805.2	4710.2	4089.4	3914.4
45°	12124.7	6321.6	3732.4	3284.3	3146.3
47.5°	12014.1	4907.2	2958.9	2609.6	2568.2
50°	11368.7	3623.4	2368.6	2149.7	2132.5
52.5°	10359.7	2700.7	1956.6	1821.1	1791.5
55°	8966.6	2143.6	1699.0	1574.7	1570.0
57.5°	7528.2	1821.1	1542.2	1446.0	1412.5
60°	5994.0	1623.8	1423.4	1314.7	1246.8
62.5°	4698.4	1485.8	1336.0	1188.5	1125.0
65°	3594.7	1357.1	1250.0	1069.6	1015.1
67.5°	2679.7	1234.4	1144.8	944.7	912.8
70°	1952.4	1108.5	1025.0	840.1	814.9
72.5°	1391.5	982.9	905.1	742.0	714.2
75°	957.1	843.9	774.1	638.7	612.9
77.5°	645.7	702.1	645.1	545.3	534.5
80°	431.2	556.8	521.7	462.1	455.4
82.5°	261.7	404.1	411.8	375.8	357.6
85°	142.5	261.7	308.5	281.1	255.0
87.5°	55.8	145.0	212.6	190.9	179.8
90°	8.0	49.0	63.0	72.0	73.0
92.5°	25.0	60.0	77.0	96.0	102.0
95°	62.0	124.0	165.0	210.0	226.0
97.5°	374.0	402.0	349.0	417.0	441.0
100°	803.0	824.0	639.0	644.0	664.0
102.5°	1258.0	1275.0	1008.0	834.0	804.0
105°	1477.0	1474.0	1386.0	1031.0	931.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1210.0	1213.0	1202.0	1198.0	1166.0
115°	1030.0	1016.0	1024.0	1031.0	1021.0
117.5°	881.0	871.0	879.0	875.0	864.0
120°	741.0	741.0	751.0	737.0	729.0
122.5°	614.0	628.0	635.0	625.0	612.0
125°	507.0	525.0	537.0	528.0	518.0
127.5°	435.0	441.0	455.0	450.0	450.0
130°	374.0	382.0	393.0	395.0	393.0
132.5°	332.0	340.0	350.0	353.0	356.0
135°	300.0	307.0	315.0	318.0	319.0
137.5°	274.0	280.0	286.0	291.0	292.0
140°	252.0	258.0	264.0	268.0	268.0
142.5°	234.0	240.0	245.0	248.0	248.0
145°	218.0	223.0	228.0	231.0	232.0
147.5°	206.0	210.0	215.0	216.0	217.0
150°	195.0	198.0	202.0	204.0	205.0
152.5°	185.0	188.0	192.0	193.0	194.0
155°	176.0	179.0	182.0	184.0	184.0
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°	1491.0	1494.0	1458.0	1284.0	<i>1110.0</i>
110°	1376.0	1389.0	1366.0	1309.0	<i>1230.0</i>



(END OF REPORT)