

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: P827132

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

Issue Date: 5/3/2024

Test Information

Test Method: LM-79-08
Report Number: P827132
REPORT IS A COMBINATION OF REPORTS P826300 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-MCL-UNV-L840-CD-UPL36
Description: 24000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND MEDIUM CLEAR LENS AND 3600 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

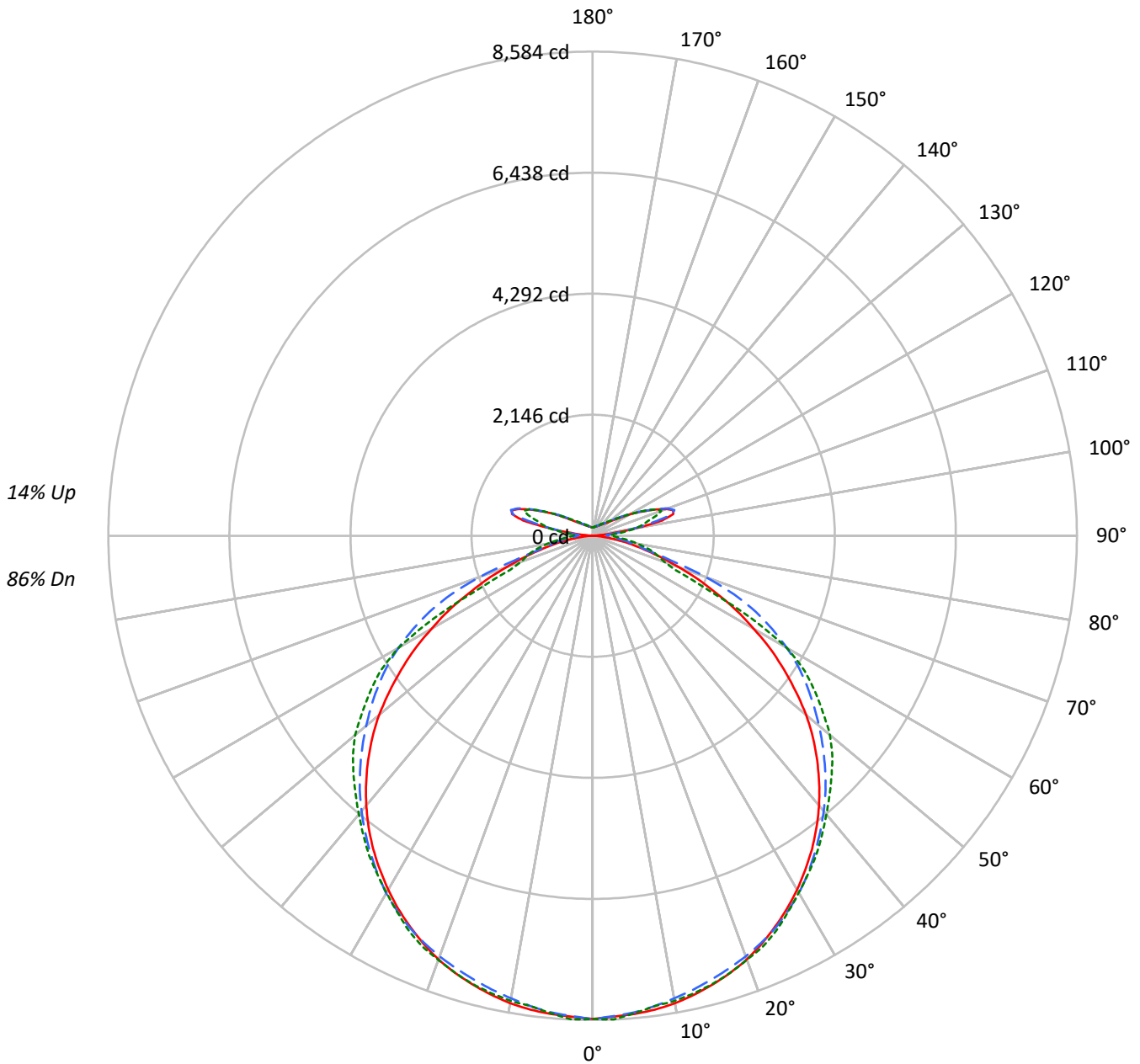
Lumens per Lamp: N/A
Luminaire Lumens: 27795.1 lumens
Efficiency: N/A
Efficacy: 171.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.27 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.8' x H: 0.17')
CIE Type: Semi-Direct

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	96	96	96	89	89	89	86																			
1	106	101	97	94	102	98	94	91	91	88	85	85	83	80	79	77	76	73																			
2	97	89	82	77	93	86	80	75	80	75	71	75	71	67	70	67	64	61																			
3	88	78	70	64	84	75	68	62	70	65	60	66	61	57	62	58	54	52																			
4	81	69	61	54	77	67	59	53	63	56	51	59	53	49	55	50	47	44																			
5	74	62	53	47	71	60	52	46	56	49	44	53	47	42	50	45	41	38																			
6	68	55	47	41	66	54	46	40	51	44	38	48	42	37	45	40	36	33																			
7	63	50	42	36	61	49	41	35	46	39	34	43	37	33	41	36	32	29																			
8	59	46	37	32	57	44	37	31	42	35	30	40	34	29	37	32	28	26																			
9	55	42	34	28	53	41	33	28	39	32	27	37	31	26	35	29	25	24																			
10	51	39	31	26	49	38	30	25	36	29	25	34	28	24	32	27	23	21																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13548	13548	13548
5°	13402	13351	13436
10°	13297	13149	13343
15°	13156	12998	13311
20°	13013	12902	13252
25°	12796	12806	13197
30°	12563	12655	13012
35°	12293	12415	12944
40°	11959	12167	12833
45°	11519	11880	12837
50°	10946	11554	12838
55°	10083	11233	12479
60°	8984	10763	11677
65°	7587	9890	7517
70°	5981	7721	5568
75°	4342	4583	5836
80°	2863	3811	5884
85°	1452	3491	6187



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	807.7	2.9
10°-20°	2316.2	8.3
20°-30°	3537.6	12.7
30°-40°	4292.4	15.4
40°-50°	4498.8	16.2
50°-60°	4076.6	14.7
60°-70°	2733.2	9.8
70°-80°	1227.3	4.4
80°-90°	453.1	1.6
90°-100°	409.2	1.5
100°-110°	1309.3	4.7
110°-120°	1063.0	3.8
120°-130°	505.6	1.8
130°-140°	259.1	0.9
140°-150°	152.6	0.5
150°-160°	90.7	0.3
160°-170°	47.9	0.2
170°-180°	14.7	0.1
0°-30°	6661.6	24.0
0°-40°	10954.0	39.4
0°-60°	19529.4	70.3
0°-90°	23943.0	86.1
90°-120°	2781.5	10.0
90°-150°	3698.8	13.3
90°-180°	3852.0	13.9
0°-180°	27795.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8567	8567	8567	8567	8567	
5°	8511	8541	8481	8507	8496	809
15°	8235	8202	8144	8216	8226	2325
25°	7650	7616	7670	7740	7718	3526
35°	6780	6796	6866	6939	6912	4238
45°	5627	5719	5825	5974	5993	4335
55°	4141	4340	4636	4822	4811	3696
65°	2430	2810	3191	2693	2199	2421
75°	956	1387	1021	1044	1112	1045
85°	165	316	405	489	513	201
90°	9	154	272	335	348	15
95°	63	190	309	385	406	232
105°	1482	1502	1457	1116	1020	1410
115°	1040	1031	1060	1077	1069	1050
125°	516	535	559	554	545	486
135°	311	319	329	338	340	246
145°	229	235	240	245	247	146
155°	188	193	196	198	196	88
165°	165	167	168	169	170	47
175°	152	152	151	150	151	15
180°	148	148	148	148	148	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8566.6	8566.6	8566.6	8566.6	8566.6
2.5°	8531.9	8567.8	8523.2	8571.5	8583.9
5°	8510.8	8540.6	8481.1	8507.1	8496.0
7.5°	8472.4	8482.4	8411.7	8432.8	8410.5
10°	8415.5	8410.5	8327.5	8368.4	8373.3
12.5°	8331.2	8316.4	8242.1	8304.0	8305.2
15°	8234.6	8202.4	8144.2	8216.0	8225.9
17.5°	8123.1	8081.0	8042.6	8135.5	8120.7
20°	7993.1	7943.5	7936.1	8037.7	8000.5
22.5°	7832.1	7793.7	7811.0	7907.6	7884.1
25°	7650.0	7616.5	7669.8	7740.4	7718.1
27.5°	7458.0	7438.2	7498.9	7553.4	7510.0
30°	7247.4	7236.3	7316.8	7361.4	7306.9
32.5°	7018.3	7022.0	7098.8	7159.5	7108.7
35°	6780.4	6796.5	6865.9	6939.0	6911.7
37.5°	6519.1	6555.0	6624.4	6707.3	6678.9
40°	6242.9	6294.9	6371.7	6472.0	6446.0
42.5°	5944.3	6010.0	6109.1	6220.6	6218.1
45°	5627.2	5718.9	5825.4	5974.1	5992.6
47.5°	5297.8	5400.6	5535.6	5733.8	5762.3
50°	4939.8	5068.6	5237.1	5474.9	5492.2
52.5°	4540.9	4716.8	4939.8	5167.7	5146.6
55°	4140.8	4340.3	4636.3	4822.1	4811.0
57.5°	3742.0	3966.2	4325.4	4457.9	4456.7
60°	3296.1	3579.7	3972.4	4072.7	3973.6
62.5°	2883.6	3188.3	3595.8	3522.8	3183.4
65°	2430.3	2810.5	3190.8	2692.8	2198.6
67.5°	2027.7	2424.1	2710.2	1844.4	1579.3
70°	1622.6	2059.9	2113.2	1368.7	1350.1
72.5°	1263.4	1729.2	1457.9	1171.8	1231.2
75°	956.2	1387.3	1020.7	1044.2	1112.3
77.5°	697.4	1065.2	794.0	915.4	971.1
80°	479.4	754.3	647.8	769.2	807.6
82.5°	301.0	497.9	519.0	619.3	659.0
85°	164.7	315.9	405.0	489.3	512.8
87.5°	68.1	190.8	309.7	377.8	397.6
90°	9.2	154.3	272.3	334.6	348.0
92.5°	26.2	140.5	247.9	307.8	322.5
95°	63.2	189.6	308.7	384.7	405.6
97.5°	376.5	454.0	469.2	561.9	590.9
100°	806.7	867.4	739.3	765.4	789.1
102.5°	1263.0	1309.7	1092.2	935.6	909.3
105°	1482.0	1502.5	1456.6	1116.5	1020.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1218.7	1230.3	1244.1	1251.3	1221.7
115°	1039.9	1030.9	1059.9	1076.8	1069.3
117.5°	890.9	883.4	910.0	913.4	904.9
120°	750.9	752.1	778.3	770.4	763.7
122.5°	623.9	637.9	658.5	654.7	643.0
125°	515.7	534.9	559.3	554.0	545.3
127.5°	444.9	450.9	474.8	473.5	474.8
130°	383.9	393.1	410.3	417.3	415.3
132.5°	343.1	352.4	366.1	374.1	377.1
135°	311.1	319.4	328.6	337.8	340.1
137.5°	286.4	292.4	298.4	309.6	311.8
140°	264.4	270.4	275.1	284.1	285.3
142.5°	245.1	252.4	256.1	262.9	264.1
145°	229.1	235.4	240.4	244.6	246.9
147.5°	218.4	222.4	227.4	228.4	230.6
150°	207.4	210.4	214.4	216.4	217.4
152.5°	197.4	200.4	204.4	205.4	206.4
155°	188.4	192.6	195.6	197.6	196.4
157.5°	180.4	184.6	187.6	188.6	188.6
160°	174.4	177.6	180.6	180.6	181.6
162.5°	169.6	171.6	173.6	174.6	175.6
165°	164.6	166.6	167.6	168.6	169.6
167.5°	160.6	162.9	162.6	163.6	163.6
170°	156.6	157.6	158.6	157.4	158.4
172.5°	153.6	154.6	155.6	154.4	154.4
175°	151.6	151.6	151.4	150.1	151.1
177.5°	150.9	150.6	149.4	148.1	147.9
180°	148.4	148.4	148.4	148.4	148.4



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







107.5°	1497.2	1517.5	1518.7	1357.1	<i>1185.6</i>
110°	1383.4	1408.8	1416.8	1370.9	<i>1294.4</i>



(END OF REPORT)