

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: P827141

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

Issue Date: 5/3/2024

Test Information

Test Method: LM-79-08
Report Number: P827141
REPORT IS A COMBINATION OF REPORTS P826303 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-NL-UNV-L840-CD-UPL36
Description: 24000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND NO LENS AND 3600 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

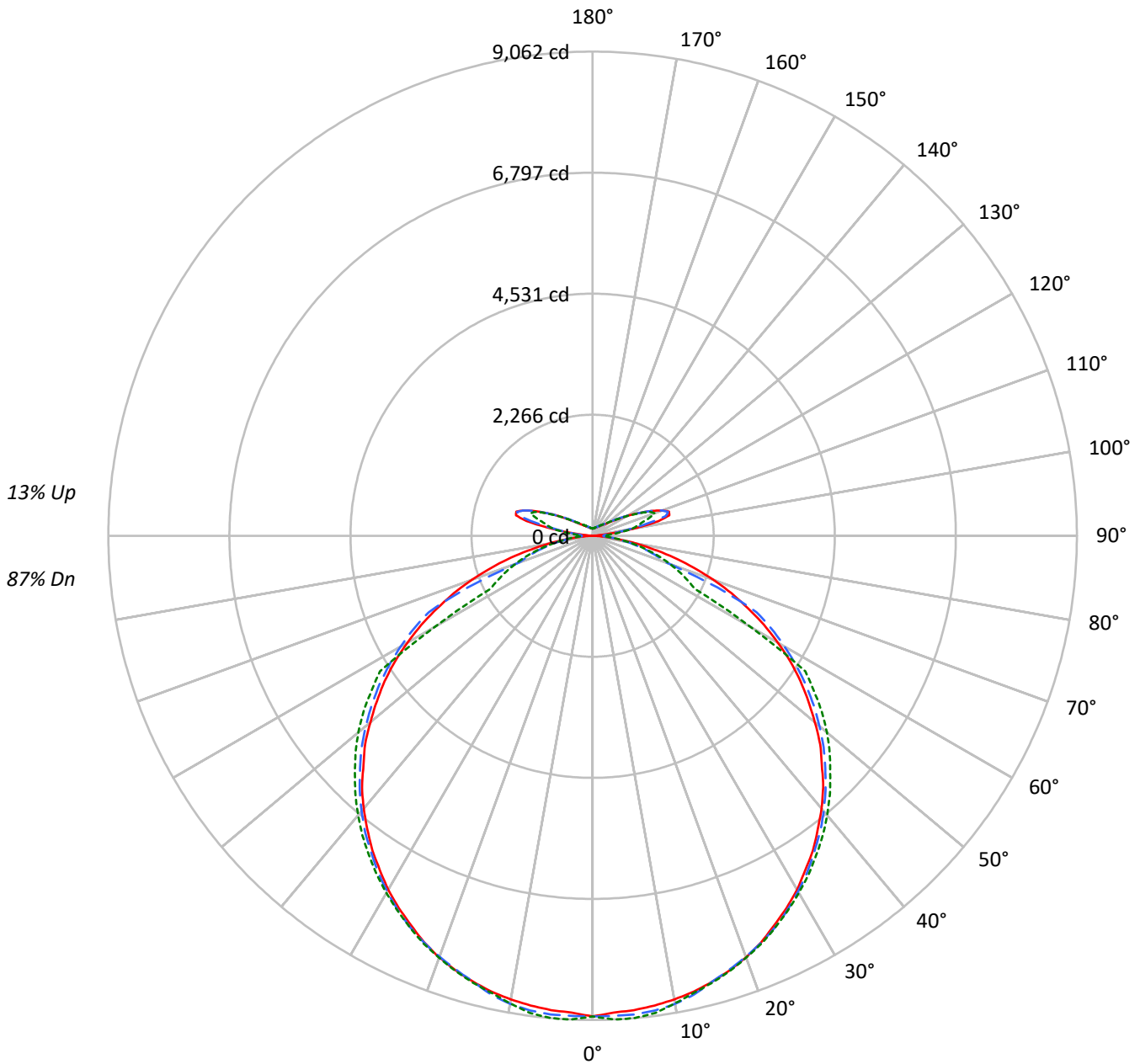
Lumens per Lamp: N/A
Luminaire Lumens: 28838.1 lumens
Efficiency: N/A
Efficacy: 178.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.8' x H: 0.1')
CIE Type: Semi-Direct

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				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	106	102	98	94	102	98	95	91	92	89	86	86	83	81	80	78	77	74				74
2	97	89	83	77	93	86	80	75	81	76	72	75	71	68	71	68	65	62				62
3	88	78	71	64	85	76	69	63	71	65	60	67	62	58	63	59	55	52				52
4	81	69	61	55	78	67	59	53	63	57	51	59	54	49	56	51	47	45				45
5	74	62	53	47	71	60	52	46	57	50	44	53	47	43	50	45	41	39				39
6	69	56	47	41	66	54	46	40	51	44	39	48	42	37	45	40	36	34				34
7	64	50	42	36	61	49	41	35	46	39	34	44	38	33	41	36	32	30				30
8	59	46	38	32	57	45	37	31	42	35	31	40	34	30	38	33	29	27				27
9	55	42	34	29	53	41	33	28	39	32	27	37	31	27	35	30	26	24				24
10	52	39	31	26	50	38	30	26	36	29	25	34	28	24	33	27	23	22				22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14226	14226	14226
5°	14079	14204	14350
10°	14014	14141	14202
15°	13942	13930	14078
20°	13850	13817	14008
25°	13679	13733	13944
30°	13534	13585	13883
35°	13358	13409	13829
40°	13145	13244	13788
45°	12846	13010	13702
50°	12526	12747	13647
55°	12137	12411	13416
60°	11550	11914	10364
65°	10704	11273	6903
70°	9612	5804	6600
75°	8005	5257	6154
80°	5651	4414	5388
85°	2294	3565	4662



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	854.6	3.0
10°-20°	2447.0	8.5
20°-30°	3723.3	12.9
30°-40°	4527.0	15.7
40°-50°	4759.9	16.5
50°-60°	4346.4	15.1
60°-70°	2786.3	9.7
70°-80°	1316.2	4.6
80°-90°	372.6	1.3
90°-100°	371.8	1.3
100°-110°	1272.5	4.4
110°-120°	1038.6	3.6
120°-130°	488.1	1.7
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°	7024.9	24.4
0°-40°	11551.9	40.1
0°-60°	20658.2	71.6
0°-90°	25133.2	87.2
90°-120°	2682.9	9.3
90°-150°	3562.6	12.4
90°-180°	3705.0	12.8
0°-180°	28838.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8996	8996	8996	8996	8996	
5°	8912	8947	8992	9041	9060	848
15°	8642	8707	8640	8653	8659	2440
25°	8042	8055	8083	8096	8089	3711
35°	7188	7146	7228	7316	7296	4492
45°	6063	6052	6154	6300	6288	4686
55°	4751	4715	4874	5037	5050	4237
65°	3201	3201	3387	1943	1949	3174
75°	1582	1612	1046	1102	1106	1667
85°	207	262	327	354	335	306
90°	8	137	208	244	242	15
95°	67	170	269	350	366	233
105°	1485	1491	1411	1056	955	1412
115°	1038	1027	1040	1042	1022	1047
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°	8995.5	8995.5	8995.5	8995.5	8995.5
2.5°	8932.4	8962.4	8995.5	9038.2	9061.7
5°	8911.8	8946.6	8992.4	9041.3	9060.2
7.5°	8867.7	8916.5	8960.8	8995.5	9006.6
10°	8812.4	8870.9	8896.1	8892.9	8885.1
12.5°	8738.2	8799.8	8792.0	8755.6	8761.9
15°	8641.9	8706.6	8640.4	8653.0	8659.3
17.5°	8528.3	8591.5	8514.1	8539.3	8541.0
20°	8395.8	8443.1	8383.1	8403.6	8403.6
22.5°	8236.3	8269.4	8244.2	8258.4	8261.6
25°	8042.2	8054.7	8083.1	8095.8	8089.4
27.5°	7856.0	7840.1	7895.4	7925.3	7909.5
30°	7649.1	7623.9	7688.5	7737.5	7718.6
32.5°	7412.3	7396.6	7470.8	7529.1	7518.1
35°	7188.2	7145.6	7227.6	7316.0	7295.5
37.5°	6923.0	6897.8	6990.8	7084.1	7073.1
40°	6664.1	6621.5	6727.3	6837.8	6826.7
42.5°	6386.4	6335.8	6451.1	6583.8	6571.1
45°	6062.7	6051.7	6154.3	6299.5	6288.5
47.5°	5775.6	5720.3	5863.8	6004.4	6017.1
50°	5428.2	5407.8	5538.8	5709.3	5721.8
52.5°	5088.9	5074.7	5211.9	5384.1	5406.1
55°	4751.0	4714.8	4874.2	5036.8	5049.5
57.5°	4389.7	4351.8	4514.4	4691.2	4717.9
60°	4002.9	3966.6	4144.9	4309.2	3426.8
62.5°	3616.2	3590.9	3777.3	2675.5	2156.3
65°	3201.1	3201.1	3387.2	1943.0	1949.4
67.5°	2812.8	2787.6	2525.6	1745.7	1745.7
70°	2396.1	2405.6	1455.2	1529.6	1531.1
72.5°	1977.8	2012.5	1256.5	1316.4	1319.5
75°	1581.6	1611.6	1046.5	1101.8	1106.5
77.5°	1161.8	893.4	841.2	884.0	885.5
80°	816.0	563.5	644.1	685.0	680.3
82.5°	476.6	394.6	471.9	502.0	500.3
85°	206.7	262.0	326.7	353.6	334.6
87.5°	66.2	162.6	203.5	219.4	217.7
90°	8.0	137.4	208.2	244.0	242.0
92.5°	25.0	129.4	203.3	253.9	261.4
95°	66.7	169.8	269.3	350.5	366.5
97.5°	377.2	435.1	423.2	527.5	554.6
100°	806.2	850.7	688.0	722.9	744.5
102.5°	1265.9	1297.1	1037.9	884.5	856.1
105°	1484.9	1491.4	1411.2	1056.2	954.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1219.5	1225.7	1219.4	1210.7	1167.5
115°	1037.9	1027.0	1039.7	1042.0	1022.5
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°	1498.9	1509.7	1480.1	1298.2	<i>1114.7</i>
110°	1385.5	1403.2	1384.9	1321.7	<i>1231.5</i>



(END OF REPORT)