

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: P826990

Luminaire Tested: **OHB-24HE-MFL-UNV-L840-CD-UPL24**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P826990
REPORT IS A COMBINATION OF REPORTS P826205 AND G3-2310-221-6
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHB-24HE-MFL-UNV-L840-CD-UPL24
Description: 24000 LUMEN OHB HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND MEDIUM FROSTED LENSAND 2400 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

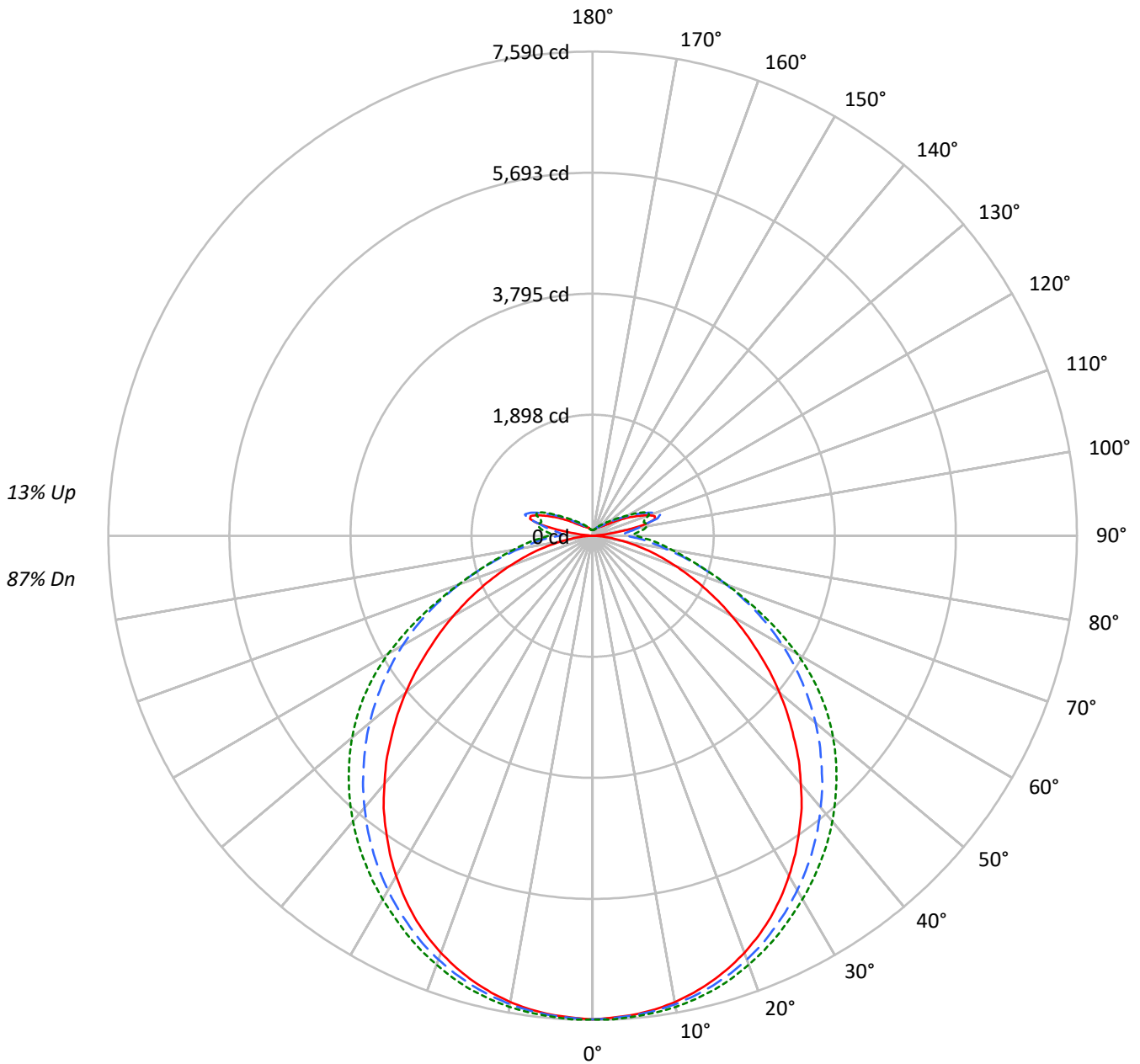
Lumens per Lamp: N/A
Luminaire Lumens: 25112.3 lumens
Efficiency: N/A
Efficacy: 170.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1.93' x L: 1.8' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 147.4
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	112	112	112	112	104	104	104	97	97	97	91	91	91	87				87															
1	105	100	96	92	101	97	93	89	90	87	84	84	82	79	79	77	75	72				72															
2	96	87	80	75	92	84	78	73	79	74	69	74	69	66	69	66	63	60				60															
3	87	77	68	62	84	74	67	61	69	63	58	65	60	55	61	57	53	50				50															
4	80	68	59	52	76	66	58	51	62	55	49	58	52	47	54	49	45	43				43															
5	73	61	52	45	70	59	50	44	55	48	43	52	46	41	49	44	39	37				37															
6	68	54	46	39	65	53	45	39	50	43	37	47	41	36	44	39	35	32				32															
7	63	49	41	35	60	48	40	34	45	38	33	43	36	32	40	35	31	29				29															
8	58	45	36	31	56	44	36	30	41	34	29	39	33	28	37	32	28	25				25															
9	54	41	33	28	52	40	32	27	38	31	26	36	30	26	34	29	25	23				23															
10	51	38	30	25	49	37	30	25	35	28	24	33	27	23	32	26	23	21				21															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23452	23452	23452
5°	23204	23170	23314
10°	22944	22907	23205
15°	22590	22604	23058
20°	22152	22248	22836
25°	21600	21816	22611
30°	20874	21352	22387
35°	20016	20862	22196
40°	19008	20301	22009
45°	17837	19693	21768
50°	16566	19073	21474
55°	15033	18325	20964
60°	13464	17449	19925
65°	11761	16346	18201
70°	9926	14958	16335
75°	8059	13349	15100
80°	5787	12049	15073
85°	3264	11957	17048



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	718.4	2.9
10°-20°	2061.1	8.2
20°-30°	3117.1	12.4
30°-40°	3742.1	14.9
40°-50°	3865.0	15.4
50°-60°	3477.3	13.8
60°-70°	2619.4	10.4
70°-80°	1581.7	6.3
80°-90°	779.7	3.1
90°-100°	557.4	2.2
100°-110°	990.8	3.9
110°-120°	799.6	3.2
120°-130°	392.9	1.6
130°-140°	198.2	0.8
140°-150°	111.9	0.4
150°-160°	61.9	0.2
160°-170°	29.0	0.1
170°-180°	8.8	0.0
0°-30°	5896.6	23.5
0°-40°	9638.7	38.4
0°-60°	16980.9	67.6
0°-90°	21961.7	87.5
90°-120°	2347.8	9.3
90°-150°	3050.8	12.1
90°-180°	3151.0	12.5
0°-180°	25112.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7582	7582	7582	7582	7582	
5°	7534	7554	7545	7575	7565	716
15°	7230	7265	7298	7359	7367	2038
25°	6602	6675	6769	6875	6892	3037
35°	5645	5777	6014	6196	6233	3529
45°	4455	4680	5071	5348	5406	3440
55°	3156	3483	4012	4314	4366	2830
65°	1926	2320	2839	2980	2947	1914
75°	907	1303	1644	1687	1670	968
85°	189	499	824	937	954	219
90°	5	229	518	656	687	16
95°	62	243	525	677	724	172
105°	1016	1068	1048	868	830	965
115°	707	742	825	866	867	713
125°	353	376	439	472	474	330
135°	213	221	250	280	289	168
145°	164	166	171	186	193	103
155°	135	138	139	138	140	60
165°	100	101	102	102	102	29
175°	90	91	91	92	92	9
180°	90	90	90	90	90	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7582.1	7582.1	7582.1	7582.1	7582.1
2.5°	7559.9	7578.4	7567.3	7591.4	7589.5
5°	7533.9	7554.3	7545.0	7574.7	7565.4
7.5°	7489.3	7511.6	7509.7	7543.2	7539.4
10°	7424.4	7448.5	7455.9	7500.5	7500.5
12.5°	7335.3	7366.9	7385.4	7439.2	7441.1
15°	7229.5	7264.8	7298.2	7359.4	7366.9
17.5°	7101.5	7146.0	7192.4	7263.0	7272.2
20°	6956.8	7006.9	7070.0	7144.2	7155.3
22.5°	6789.8	6849.1	6930.8	7018.0	7031.0
25°	6602.3	6674.7	6769.4	6875.1	6891.8
27.5°	6388.9	6472.5	6600.5	6719.2	6734.1
30°	6157.0	6255.3	6414.9	6556.0	6580.1
32.5°	5912.0	6025.2	6221.9	6379.7	6413.1
35°	5644.8	5776.6	6014.1	6196.0	6233.1
37.5°	5381.3	5526.1	5795.1	6003.0	6047.5
40°	5073.3	5253.3	5561.3	5791.4	5845.2
42.5°	4783.8	4978.7	5327.5	5578.0	5630.0
45°	4455.4	4679.9	5071.4	5347.9	5405.5
47.5°	4147.3	4390.4	4824.6	5110.4	5169.8
50°	3822.6	4089.8	4561.1	4859.9	4921.1
52.5°	3497.9	3785.5	4288.4	4598.3	4655.8
55°	3156.4	3483.0	4011.9	4314.3	4366.3
57.5°	2839.1	3184.3	3728.0	4015.6	4047.1
60°	2525.5	2883.7	3438.5	3690.9	3702.0
62.5°	2219.3	2596.0	3141.6	3342.0	3327.2
65°	1926.1	2319.5	2839.1	2980.1	2946.7
67.5°	1644.1	2050.5	2529.2	2620.2	2575.6
70°	1376.9	1788.8	2228.6	2275.0	2234.2
72.5°	1141.2	1540.2	1924.3	1963.3	1933.6
75°	907.4	1302.7	1644.1	1686.8	1670.1
77.5°	688.4	1072.6	1386.2	1441.8	1445.5
80°	495.5	862.9	1161.6	1248.8	1260.0
82.5°	326.6	669.9	974.2	1085.5	1102.2
85°	189.3	499.2	823.9	937.1	953.8
87.5°	81.6	360.0	662.5	764.5	784.9
90°	5.0	228.8	518.3	655.8	686.9
92.5°	22.6	206.4	476.5	617.9	651.3
95°	62.3	242.7	524.6	677.1	723.8
97.5°	280.1	402.3	619.2	770.5	820.2
100°	563.1	682.5	738.4	843.3	867.1
102.5°	864.1	933.4	850.0	854.6	859.6
105°	1016.0	1068.1	1048.1	868.2	830.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	822.8	870.1	945.0	970.3	945.7
115°	706.8	741.7	825.2	865.9	867.3
117.5°	608.7	630.1	708.3	748.2	754.7
120°	506.7	532.5	608.3	640.5	641.9
122.5°	427.7	449.0	516.2	549.5	549.0
125°	352.8	376.4	439.1	471.5	474.0
127.5°	299.0	315.7	373.9	408.3	412.9
130°	262.0	271.8	322.7	355.2	361.8
132.5°	234.0	244.7	281.4	315.1	321.5
135°	213.0	220.7	250.0	279.8	289.2
137.5°	196.0	202.7	223.5	252.5	259.9
140°	182.8	188.7	203.0	227.2	235.7
142.5°	171.7	175.7	183.4	205.8	211.4
145°	163.6	165.7	170.6	186.4	193.0
147.5°	154.6	158.6	160.6	170.0	175.5
150°	147.6	151.4	152.6	155.4	162.0
152.5°	140.6	144.4	145.6	144.7	148.4
155°	134.6	138.4	138.6	137.7	139.6
157.5°	111.0	113.0	115.0	116.0	116.0
160°	107.0	108.0	110.0	111.0	111.0
162.5°	103.0	104.0	105.0	106.0	106.0
165°	100.0	101.0	102.0	102.0	102.0
167.5°	97.0	97.0	98.0	99.0	99.0
170°	94.0	95.0	95.0	96.0	96.0
172.5°	92.0	93.0	93.0	93.0	94.0
175°	90.0	91.0	91.0	92.0	92.0
177.5°	90.0	90.0	90.0	90.0	90.0
180°	90.0	90.0	90.0	90.0	90.0



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	1020.0	1077.8	1113.0	966.5	853.8
110°	942.0	997.4	1052.6	1027.5	938.8



(END OF REPORT)