

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: P827129

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

Issue Date: 5/3/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P827129  
REPORT IS A COMBINATION OF REPORTS P826299 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-A-UNV-L840-CD-UPL36  
Description: 24000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND AISLE LENS AND 3600 LUMEN UPLIGHT MODULE  
Light Source: -  
Ballast/Driver: -

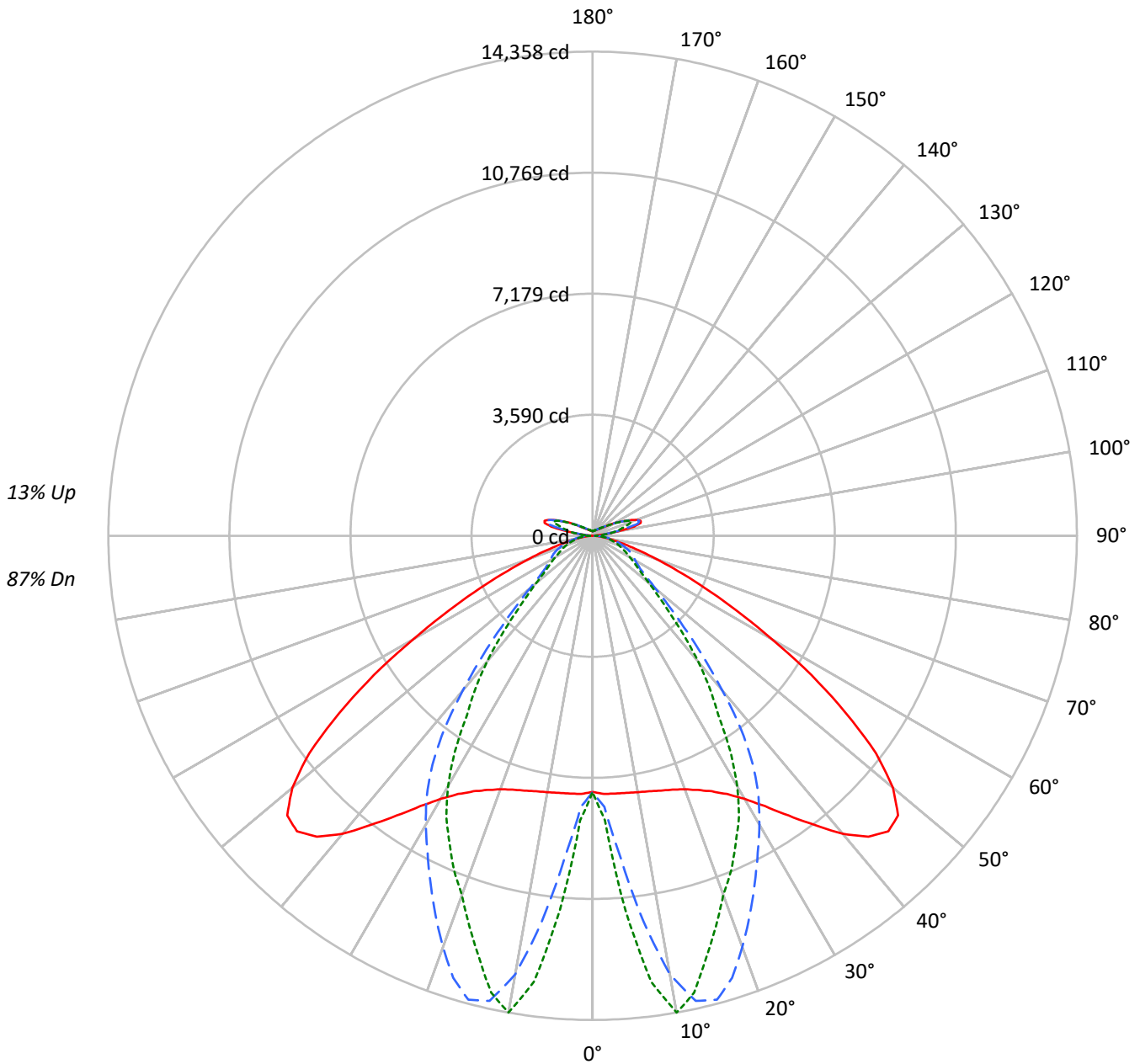
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27963.1 lumens  
Efficiency: N/A  
Efficacy: 172.8 lumens/watt  
Spacing Criteria (0/90/45): 2.18 / 1.37 / 1.3  
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<sub>in</sub>): 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

TEST NUMBER: P827129

CATALOG NUMBER: OHBL-24HE-A-UNV-L840-CD-UPL36

### 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	108	104	100	97	104	100	97	94	94	91	89	88	86	84	82	81	79	76			76
2	99	92	87	82	96	89	84	80	84	80	76	79	76	73	74	72	69	67			67
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	66	60	68	63	58	65	60	56	61	57	54	52			52
5	79	68	60	54	76	66	58	53	62	56	51	59	54	50	56	52	48	46			46
6	73	61	54	48	71	60	53	47	57	51	46	54	49	45	52	47	43	41			41
7	68	56	48	43	66	55	48	42	52	46	41	50	44	40	48	43	39	37			37
8	64	52	44	39	62	50	43	38	48	42	37	46	40	36	44	39	35	34			34
9	60	48	40	35	58	47	40	35	45	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°	12016	12016	12016
5°	12085	15119	17614
10°	12200	20854	22879
15°	12499	22728	20998
20°	13024	21098	18766
25°	13984	18984	17166
30°	15605	17103	15264
35°	18360	14978	12163
40°	22096	11413	9680
45°	25371	7781	6890
50°	25751	5342	5096
55°	22321	4208	4163
60°	16702	3942	3745
65°	11473	3961	3548
70°	7357	3828	3436
75°	4443	3554	3287
80°	2632	3137	3392
85°	1283	2719	3144



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	991.9	3.5
10°-20°	3500.9	12.5
20°-30°	5158.7	18.4
30°-40°	5421.0	19.4
40°-50°	4148.1	14.8
50°-60°	2504.8	9.0
60°-70°	1528.5	5.5
70°-80°	834.3	3.0
80°-90°	300.5	1.1
90°-100°	275.1	1.0
100°-110°	1246.1	4.5
110°-120°	1031.3	3.7
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°	9651.5	34.5
0°-40°	15072.5	53.9
0°-60°	21725.4	77.7
0°-90°	24388.7	87.2
90°-120°	2552.5	9.1
90°-150°	3432.2	12.3
90°-180°	3574.0	12.8
0°-180°	27963.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7598	7598	7598	7598	7598	
5°	7674	8233	9604	10724	11138	734
15°	7824	12185	14241	13289	12977	2224
25°	8360	14142	11370	10294	10039	3907
35°	10127	11325	8283	6898	6495	6424
45°	12395	6462	3816	3357	3216	9365
55°	9166	2191	1737	1610	1605	8100
65°	3675	1387	1278	1093	1038	3765
75°	978	863	791	653	626	1126
85°	146	268	315	287	261	180
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	



TEST NUMBER: P827129

CATALOG NUMBER: OHBL-24HE-A-UNV-L840-CD-UPL36

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7597.8	7597.8	7597.8	7597.8	7597.8
2.5°	7660.0	7738.2	8046.4	8366.4	8444.2
5°	7674.0	8233.1	9604.4	10724.2	11138.0
7.5°	7690.3	9034.9	11534.8	12905.8	13344.7
10°	7721.3	10048.8	13207.5	14191.8	14357.6
12.5°	7759.7	11123.0	14127.9	14092.1	13882.9
15°	7823.6	12185.4	14241.3	13289.3	12976.8
17.5°	7890.7	13084.3	13746.7	12415.5	12143.4
20°	7999.8	13751.6	12977.5	11638.7	11329.6
22.5°	8157.2	14118.5	12170.8	10936.3	10734.6
25°	8360.2	14142.2	11369.6	10293.5	10039.4
27.5°	8632.2	13814.1	10601.7	9663.7	9395.3
30°	9002.3	13186.0	9888.2	8904.3	8571.3
32.5°	9505.0	12281.9	9152.5	7987.4	7614.1
35°	10126.7	11325.3	8283.0	6898.0	6494.6
37.5°	10805.0	10263.2	7227.7	5933.2	5698.3
40°	11534.8	9168.8	5976.9	5030.4	4862.3
42.5°	12104.3	7979.0	4815.1	4180.4	4001.5
45°	12394.6	6462.4	3815.5	3357.4	3216.4
47.5°	12281.6	5016.4	3024.8	2667.7	2625.3
50°	11621.8	3704.1	2421.4	2197.6	2180.0
52.5°	10590.3	2760.9	2000.1	1861.7	1831.4
55°	9166.2	2191.4	1736.9	1609.8	1604.9
57.5°	7695.8	1861.7	1576.6	1478.2	1444.0
60°	6127.4	1660.0	1455.0	1343.9	1274.6
62.5°	4803.0	1518.9	1365.8	1214.9	1150.1
65°	3674.8	1387.3	1277.8	1093.4	1037.7
67.5°	2739.4	1261.8	1170.3	965.7	933.1
70°	1995.9	1133.2	1047.8	858.8	833.1
72.5°	1422.5	1004.8	925.3	758.5	730.1
75°	978.4	862.7	791.4	652.9	626.5
77.5°	660.1	717.7	659.4	557.5	546.4
80°	440.8	569.2	533.3	472.4	465.6
82.5°	267.5	413.1	420.9	384.1	365.6
85°	145.6	267.5	315.4	287.4	260.6
87.5°	57.0	148.2	217.3	195.2	183.8
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



TEST NUMBER: P827129

CATALOG NUMBER: OHBL-24HE-A-UNV-L840-CD-UPL36

**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)