

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: P827222

Luminaire Tested: **OHBL-48SE-W-UNV-L840-CD-UPL24**

Issue Date: 5/3/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P827222  
REPORT IS A COMBINATION OF REPORTS P826262 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: OHBL-48SE-W-UNV-L840-CD-UPL24  
Description: 48000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND WIDE LENS AND 2400 LUMEN UPLIGHT MODULE  
Light Source: -  
Ballast/Driver: -

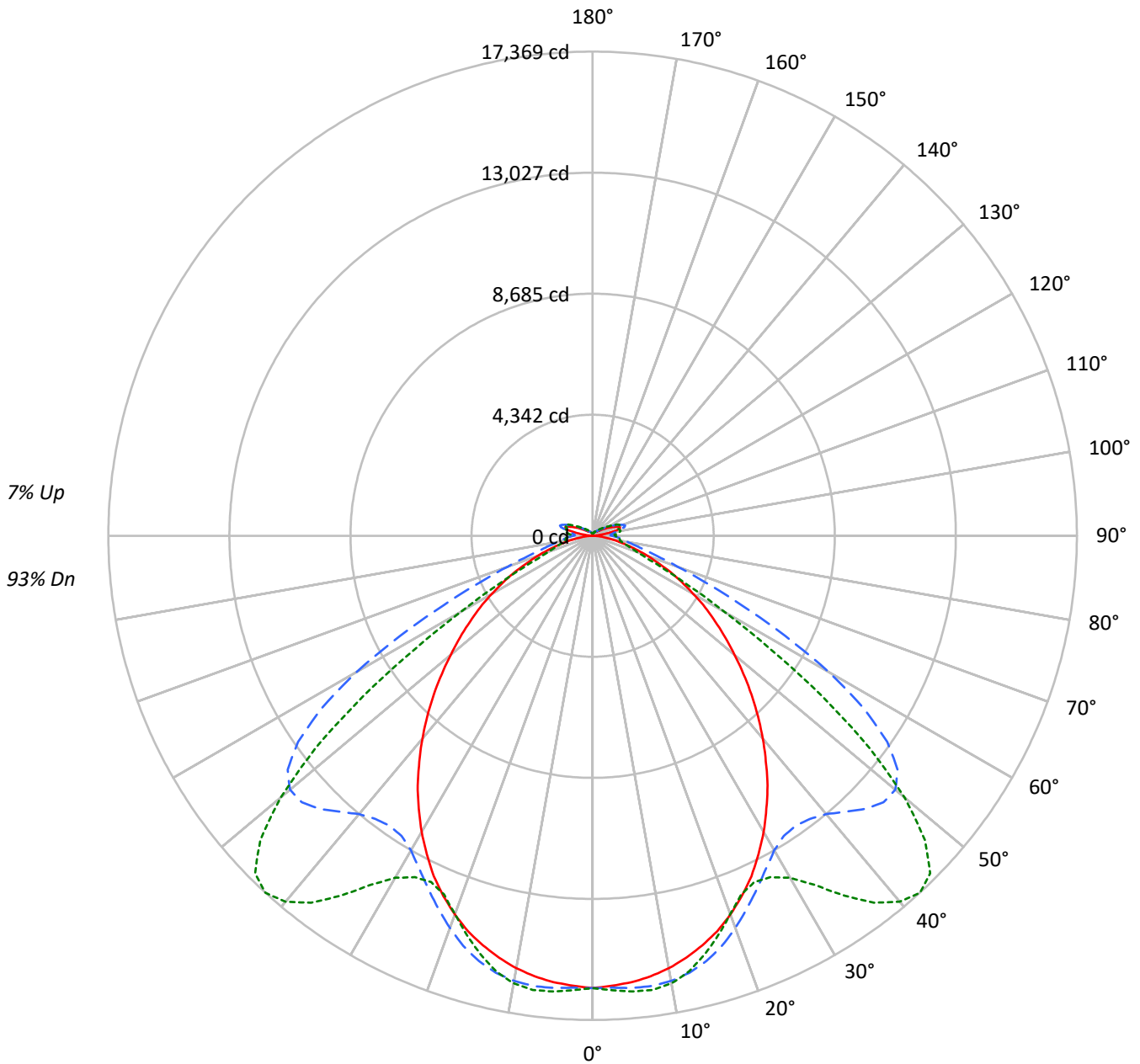
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 50999.2 lumens  
Efficiency: N/A  
Efficacy: 166.6 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.58 / 1.62  
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 306.2  
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: P827222

CATALOG NUMBER: OHBL-48SE-W-UNV-L840-CD-UPL24

### Luminous Intensity Polar Plot





TEST NUMBER: P827222

CATALOG NUMBER: OHBL-48SE-W-UNV-L840-CD-UPL24

**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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93																			
1	108	103	99	95	104	100	96	93	95	92	89	90	87	85	85	83	81	79																			
2	98	90	84	78	95	88	82	77	83	78	74	79	75	71	75	72	69	66																			
3	90	79	71	65	87	77	70	64	73	67	62	70	65	60	66	62	58	56																			
4	82	70	62	55	79	68	60	54	65	58	53	62	56	51	59	54	50	48																			
5	75	63	54	47	73	61	53	47	58	51	46	56	49	44	53	48	43	41																			
6	69	56	47	41	67	55	47	41	52	45	40	50	44	39	48	42	38	36																			
7	64	51	42	36	62	50	41	36	47	40	35	45	39	34	44	38	33	31																			
8	60	46	38	32	58	45	37	32	43	36	31	41	35	30	40	34	30	28																			
9	55	42	34	28	54	41	34	28	40	33	28	38	32	27	37	31	27	25																			
10	52	39	31	26	50	38	31	25	37	30	25	35	29	25	34	28	24	22																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	27711	27711	27711
5°	27320	27672	28027
10°	26846	27630	28060
15°	26192	27173	27161
20°	25348	26239	25830
25°	24266	25108	25313
30°	22876	24268	27239
35°	21315	24716	31874
40°	19535	26768	36848
45°	17686	30363	39608
50°	15773	33574	36859
55°	13973	33531	28163
60°	12149	28367	17219
65°	10239	19586	10430
70°	8118	12660	7531
75°	5955	9071	6983
80°	4020	7965	7877
85°	2400	8746	12452



TEST NUMBER: P827222

CATALOG NUMBER: OHBL-48SE-W-UNV-L840-CD-UPL24

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1550.4	3.0
10°-20°	4390.4	8.6
20°-30°	6424.6	12.6
30°-40°	8343.6	16.4
40°-50°	10188.6	20.0
50°-60°	8972.7	17.6
60°-70°	4675.7	9.2
70°-80°	2005.1	3.9
80°-90°	969.1	1.9
90°-100°	684.3	1.3
100°-110°	1086.1	2.1
110°-120°	856.7	1.7
120°-130°	421.6	0.8
130°-140°	211.1	0.4
140°-150°	117.9	0.2
150°-160°	63.6	0.1
160°-170°	29.0	0.1
170°-180°	8.8	0.0
0°-30°	12365.3	24.2
0°-40°	20709.0	40.6
0°-60°	39870.2	78.2
0°-90°	47520.1	93.2
90°-120°	2627.0	5.2
90°-150°	3377.6	6.6
90°-180°	3479.0	6.8
0°-180°	50999.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	16224	16224	16224	16224	16224	
5°	16074	16196	16284	16428	16410	###
15°	15209	15636	15787	15668	15542	4283
25°	13477	14198	13956	13694	13708	6185
35°	10939	12094	12700	14810	15759	6818
45°	8054	10134	13851	16771	17121	6211
55°	5363	8877	12899	11310	10053	4813
65°	3077	6150	5905	3283	2825	3044
75°	1239	2877	1897	1299	1232	1351
85°	262	1026	966	945	956	293
90°	8	405	684	790	815	22
95°	60	328	680	823	871	170
105°	1017	1114	1173	996	954	967
115°	713	769	902	946	946	720
125°	362	391	482	516	516	338
135°	221	225	267	308	313	174
145°	173	170	176	198	206	109
155°	144	146	141	142	142	63
165°	100	101	102	102	102	29
175°	90	91	91	92	92	9
180°	90	90	90	90	90	



TEST NUMBER: P827222

CATALOG NUMBER: OHBL-48SE-W-UNV-L840-CD-UPL24

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	16224.5	16224.5	16224.5	16224.5	16224.5
2.5°	16154.5	16224.5	16228.0	16326.0	16315.5
5°	16074.0	16196.5	16284.0	16427.5	16410.0
7.5°	15941.0	16133.5	16287.5	16445.0	16431.0
10°	15751.9	16014.5	16217.5	16347.0	16305.0
12.5°	15506.9	15853.5	16053.0	16081.0	16000.5
15°	15209.4	15636.4	15786.9	15667.9	15541.9
17.5°	14873.3	15373.9	15426.4	15167.4	15009.8
20°	14453.3	15023.9	14971.3	14614.3	14439.3
22.5°	13987.7	14638.8	14470.8	14096.2	13928.2
25°	13476.7	14197.7	13956.2	13693.7	13707.7
27.5°	12878.1	13697.2	13462.7	13581.7	13805.7
30°	12269.0	13172.1	13028.6	13721.7	14162.7
32.5°	11600.4	12633.1	12762.6	14131.2	14852.3
35°	10938.8	12094.0	12699.6	14810.3	15758.9
37.5°	10207.3	11547.9	12801.1	15594.4	16588.5
40°	9496.7	11015.9	13032.1	16298.0	17138.1
42.5°	8772.1	10539.8	13420.7	16714.6	17369.1
45°	8054.5	10133.7	13851.2	16770.6	17120.6
47.5°	7336.9	9790.7	14148.7	16326.0	16165.0
50°	6643.8	9486.2	14169.7	15258.4	14600.3
52.5°	5996.2	9206.1	13784.7	13557.2	12535.0
55°	5362.7	8877.1	12899.1	11309.9	10053.2
57.5°	4785.1	8422.0	11533.9	8894.6	7522.4
60°	4172.5	7806.0	9769.7	6507.3	5425.7
62.5°	3608.9	7039.4	7792.0	4529.6	3899.5
65°	3076.9	6150.3	5905.2	3283.4	2824.8
67.5°	2513.3	5229.6	4358.0	2394.3	2100.3
70°	2072.3	4375.5	3244.9	1862.2	1690.7
72.5°	1620.7	3563.4	2425.8	1512.2	1417.7
75°	1239.2	2877.4	1897.2	1298.7	1232.2
77.5°	913.6	2275.3	1526.2	1148.1	1085.1
80°	640.6	1792.2	1277.7	1025.6	1001.1
82.5°	430.6	1386.2	1088.6	976.6	980.1
85°	262.5	1025.6	966.1	945.1	955.6
87.5°	126.0	728.1	829.6	861.1	871.6
90°	8.5	405.0	684.1	790.1	814.6
92.5°	17.0	328.5	632.1	753.1	783.6
95°	60.0	328.0	679.6	823.1	870.6
97.5°	276.0	469.5	768.1	925.1	968.6
100°	562.5	740.0	879.1	993.6	1013.1
102.5°	863.5	984.5	982.0	995.1	994.1
105°	1017.0	1114.5	1173.0	996.5	954.5



TEST NUMBER: P827222

CATALOG NUMBER: OHBL-48SE-W-UNV-L840-CD-UPL24

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	829.0	904.0	1035.0	1061.0	1036.0
115°	713.0	769.0	902.0	945.5	946.5
117.5°	616.5	656.0	775.5	816.5	821.0
120°	514.5	553.5	664.0	701.0	698.5
122.5°	435.5	465.0	565.5	602.0	599.5
125°	362.5	391.0	482.0	516.0	516.5
127.5°	307.0	323.5	410.5	446.5	449.0
130°	270.0	278.0	351.0	387.0	395.0
132.5°	242.0	249.0	305.0	344.0	350.0
135°	221.0	225.0	267.0	307.5	313.0
137.5°	204.0	207.0	237.5	275.5	282.5
140°	189.0	193.0	212.0	249.0	253.5
142.5°	179.5	180.0	194.5	224.5	228.0
145°	173.0	170.0	176.5	198.5	206.5
147.5°	164.0	164.5	166.5	182.5	186.0
150°	157.0	159.0	155.0	163.0	171.0
152.5°	150.0	152.0	148.0	149.0	156.0
155°	144.0	146.0	141.0	142.0	142.0
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°	1024.5	1119.5	1227.0	1082.5	967.5
110°	946.5	1032.5	1152.0	1131.0	1040.0



(END OF REPORT)