

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: P830865

Luminaire Tested: **OHBL-90SE-NL-UNV-L840-CD**

Issue Date: 5/3/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P830865  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P472951)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: OHBL-90SE-NL-UNV-L840-CD  
Description: 90000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND NO LENS  
Light Source: -  
Ballast/Driver: -

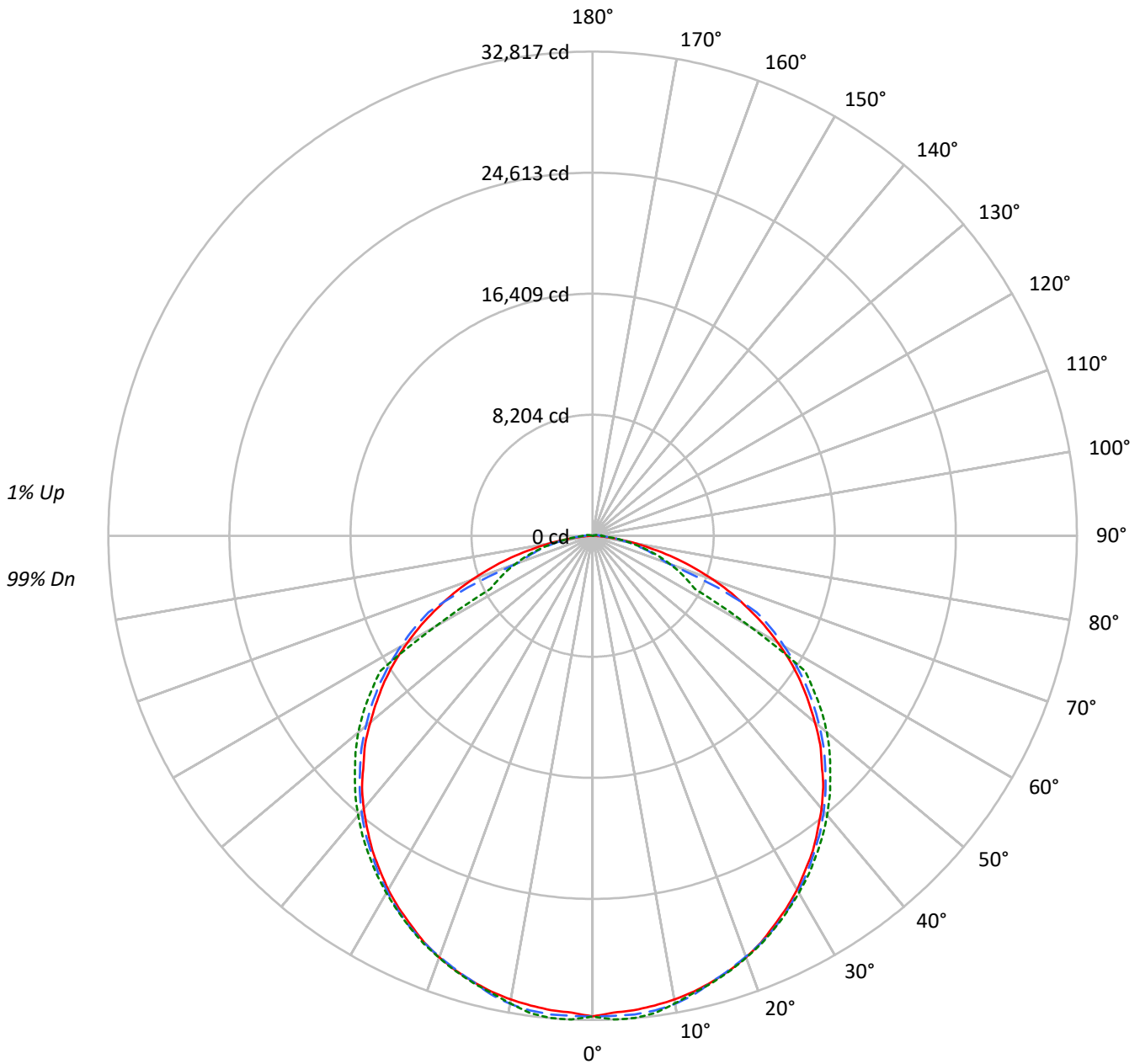
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 91465.0 lumens  
Efficiency: N/A  
Efficacy: 172.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.39  
Luminous Opening: Rectangular (W 1.8' x L: 3.78' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 529  
Input Voltage (V): NR  
Input Current (Ain): 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: P830865

CATALOG NUMBER: OHBL-90SE-NL-UNV-L840-CD

### 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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	99				99
1	109	105	100	97	106	102	99	95	98	95	92	94	91	89	90	88	86	84				84
2	99	92	85	79	97	90	84	78	86	81	76	83	78	75	80	76	73	71				71
3	91	81	73	66	88	79	72	66	76	70	64	73	68	63	70	66	62	60				60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51				51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44				44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39				39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34				34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30				30
9	57	43	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	27				27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25				25

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

	0°	45°	90°
0°	51521	51521	51521
5°	51236	51699	52089
10°	51250	51737	51673
15°	51241	51232	51344
20°	51171	51094	51219
25°	50822	51081	51121
30°	50586	50847	51046
35°	50258	50534	51008
40°	49825	50297	51040
45°	49106	49848	50935
50°	48366	49352	50982
55°	47440	48670	50421
60°	45851	47479	39253
65°	43381	45904	26418
70°	40124	24369	25639
75°	34998	23157	24484
80°	26914	21243	22439
85°	13584	21470	21985



TEST NUMBER: P830865

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	3095.0	3.4
10°-20°	8861.8	9.7
20°-30°	13483.9	14.7
30°-40°	16394.6	17.9
40°-50°	17238.1	18.8
50°-60°	15740.5	17.2
60°-70°	10090.4	11.0
70°-80°	4766.6	5.2
80°-90°	1321.7	1.4
90°-100°	350.0	0.4
100°-110°	95.8	0.1
110°-120°	26.5	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	25440.7	27.8
0°-40°	41835.3	45.7
0°-60°	74813.9	81.8
0°-90°	90992.6	99.5
90°-120°	472.4	0.5
90°-150°	472.4	0.5
90°-180°	472.0	0.5
0°-180°	91465.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	32578	32578	32578	32578	32578	
5°	32274	32400	32566	32743	32812	###
15°	31297	31531	31291	31337	31360	8836
25°	29125	29170	29273	29319	29296	13439
35°	26032	25878	26175	26495	26421	16269
45°	21956	21916	22288	22814	22774	16971
55°	17206	17075	17652	18241	18287	15345
65°	11593	11593	12267	7037	7060	11493
75°	5728	5837	3790	3990	4007	6038
85°	749	949	1183	1281	1212	1107
90°	0	320	526	623	612	33
95°	17	166	378	509	509	9
105°	28	63	91	91	86	29
115°	28	40	57	40	5	20
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P830865

CATALOG NUMBER: OHBL-90SE-NL-UNV-L840-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	32577.5	32577.5	32577.5	32577.5	32577.5
2.5°	32348.7	32457.6	32577.5	32731.8	32817.1
5°	32274.3	32400.2	32566.0	32743.3	32811.7
7.5°	32114.5	32291.2	32451.6	32577.5	32617.4
10°	31914.2	32126.0	32217.4	32205.9	32177.4
12.5°	31645.5	31868.8	31840.3	31708.4	31731.4
15°	31296.9	31531.1	31291.4	31336.8	31359.8
17.5°	30885.3	31114.1	30833.9	30925.3	30931.3
20°	30405.4	30576.7	30359.4	30433.8	30433.8
22.5°	29828.0	29947.9	29856.5	29907.9	29919.4
25°	29124.8	29170.2	29273.1	29319.1	29296.1
27.5°	28450.6	28393.1	28593.4	28701.8	28644.3
30°	27701.4	27610.0	27844.2	28021.5	27953.1
32.5°	26843.8	26786.9	27055.6	27266.8	27226.9
35°	26032.2	25877.9	26175.0	26495.2	26420.7
37.5°	25071.7	24980.4	25317.5	25655.2	25615.2
40°	24134.3	23980.0	24363.1	24763.1	24723.2
42.5°	23128.4	22945.1	23362.7	23843.2	23797.2
45°	21956.2	21916.2	22287.8	22813.7	22773.8
47.5°	20916.4	20716.1	21236.0	21744.9	21790.9
50°	19658.2	19584.4	20058.9	20676.2	20721.5
52.5°	18429.6	18378.2	18875.1	19498.4	19578.3
55°	17205.9	17074.6	17652.0	18240.8	18286.8
57.5°	15897.5	15760.1	16349.0	16989.3	17086.1
60°	14496.4	14365.1	15010.9	15605.8	12410.3
62.5°	13096.0	13004.6	13679.4	9689.3	7808.9
65°	11592.7	11592.7	12266.9	7036.7	7059.7
67.5°	10186.8	10095.4	9146.4	6322.0	6322.0
70°	8677.4	8711.9	5270.1	5539.4	5544.9
72.5°	7162.6	7288.5	4550.5	4767.2	4778.7
75°	5727.6	5836.6	3789.8	3990.1	4007.0
77.5°	4207.4	3235.4	3046.6	3201.5	3207.0
80°	2955.2	2040.7	2332.5	2480.7	2463.8
82.5°	1726.0	1428.9	1709.1	1818.0	1812.0
85°	748.6	949.0	1183.2	1280.6	1211.6
87.5°	239.7	588.9	737.1	794.6	788.6
90°	0.0	320.2	525.9	622.8	611.9
92.5°	0.0	251.2	457.5	571.9	577.4
95°	16.9	165.8	377.6	509.0	509.0
97.5°	11.5	119.8	268.7	400.0	411.5
100°	11.5	96.8	177.3	285.7	291.7
102.5°	28.4	79.9	108.3	182.8	188.8
105°	28.4	62.9	91.4	91.4	85.9



TEST NUMBER: P830865

CATALOG NUMBER: OHBL-90SE-NL-UNV-L840-CD

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	34.5	46.0	62.9	46.0	5.4
115°	28.4	39.9	56.9	39.9	5.4
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	28.4	56.9	79.9	51.4	16.9
110°	34.5	51.4	68.4	46.0	5.4



(END OF REPORT)