

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: P830866

Luminaire Tested: **OHBL-90SE-NL-UNV-L850-CD**

Issue Date: 5/3/2024



**Test Information**

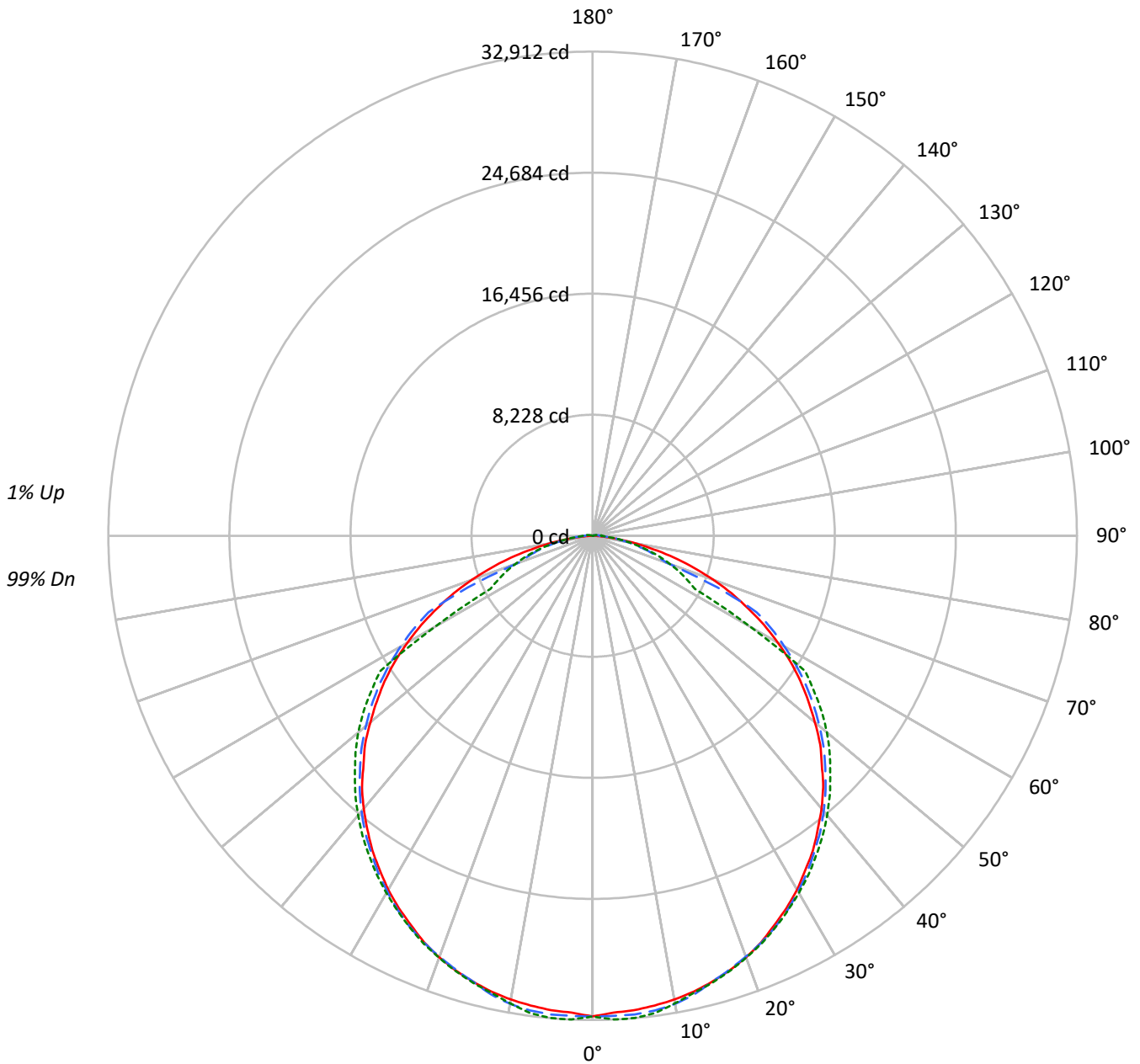
Test Method: LM-79-08  
Report Number: P830866  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P472951)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: OHBL-90SE-NL-UNV-L850-CD  
Description: 90000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 5000K LEDS AND NO LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 91730.0 lumens  
Efficiency: N/A  
Efficacy: 173.4 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

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

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

	0°	45°	90°
0°	51670	51670	51670
5°	51384	51849	52240
10°	51399	51887	51823
15°	51390	51381	51493
20°	51320	51242	51368
25°	50969	51229	51269
30°	50733	50995	51194
35°	50404	50681	51156
40°	49969	50442	51188
45°	49248	49992	51082
50°	48506	49495	51130
55°	47578	48811	50567
60°	45984	47616	39367
65°	43507	46037	26494
70°	40240	24439	25713
75°	35099	23224	24556
80°	26992	21304	22503
85°	13624	21531	22048



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	3103.9	3.4
10°-20°	8887.5	9.7
20°-30°	13523.0	14.7
30°-40°	16442.1	17.9
40°-50°	17288.0	18.8
50°-60°	15786.1	17.2
60°-70°	10119.7	11.0
70°-80°	4780.4	5.2
80°-90°	1325.6	1.4
90°-100°	351.1	0.4
100°-110°	96.1	0.1
110°-120°	26.6	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°	25514.4	27.8
0°-40°	41956.5	45.7
0°-60°	75030.6	81.8
0°-90°	91256.2	99.5
90°-120°	473.8	0.5
90°-150°	473.8	0.5
90°-180°	474.0	0.5
0°-180°	91730.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	32672	32672	32672	32672	32672	
5°	32368	32494	32660	32838	32907	###
15°	31388	31622	31382	31428	31451	8861
25°	29209	29255	29358	29404	29381	13478
35°	26108	25953	26251	26572	26497	16316
45°	22020	21980	22352	22880	22840	17020
55°	17256	17124	17703	18294	18340	15389
65°	11626	11626	12302	7057	7080	11526
75°	5744	5854	3801	4002	4019	6055
85°	751	952	1187	1284	1215	1110
90°	0	321	527	625	614	33
95°	17	166	379	510	510	9
105°	28	63	92	92	86	29
115°	28	40	57	40	6	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



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	32671.9	32671.9	32671.9	32671.9	32671.9
2.5°	32442.4	32551.7	32671.9	32826.6	32912.2
5°	32367.8	32494.0	32660.3	32838.2	32906.8
7.5°	32207.5	32384.8	32545.6	32671.9	32711.9
10°	32006.6	32219.1	32310.7	32299.2	32270.7
12.5°	31737.2	31961.1	31932.6	31800.3	31823.3
15°	31387.5	31622.4	31382.1	31427.6	31450.7
17.5°	30974.8	31204.2	30923.2	31014.9	31020.9
20°	30493.5	30665.3	30447.4	30522.0	30522.0
22.5°	29914.5	30034.6	29943.0	29994.6	30006.1
25°	29209.2	29254.7	29357.9	29404.0	29380.9
27.5°	28533.0	28475.4	28676.3	28784.9	28727.3
30°	27781.6	27690.0	27924.9	28102.7	28034.1
32.5°	26921.6	26864.5	27134.0	27345.8	27305.8
35°	26107.6	25952.9	26250.9	26572.0	26497.3
37.5°	25144.4	25052.7	25390.8	25729.5	25689.4
40°	24204.2	24049.4	24433.6	24834.8	24794.8
42.5°	23195.5	23011.5	23430.3	23912.3	23866.1
45°	22019.8	21979.7	22352.4	22879.8	22839.8
47.5°	20977.0	20776.1	21297.5	21807.9	21854.1
50°	19715.2	19641.1	20117.0	20736.1	20781.6
52.5°	18483.0	18431.4	18929.8	19554.9	19635.0
55°	17255.8	17124.1	17703.1	18293.7	18339.8
57.5°	15943.5	15805.8	16396.3	17038.5	17135.6
60°	14538.4	14406.7	15054.3	15651.0	12446.3
62.5°	13133.9	13042.3	13719.0	9717.4	7831.6
65°	11626.3	11626.3	12302.4	7057.1	7080.1
67.5°	10216.3	10124.6	9172.9	6340.3	6340.3
70°	8702.5	8737.1	5285.4	5555.5	5560.9
72.5°	7183.3	7309.6	4563.7	4781.0	4792.5
75°	5744.2	5853.5	3800.8	4001.7	4018.7
77.5°	4219.6	3244.8	3055.4	3210.8	3216.3
80°	2963.8	2046.7	2339.2	2487.9	2470.9
82.5°	1731.0	1433.0	1714.0	1823.3	1817.2
85°	750.8	951.7	1186.6	1284.3	1215.1
87.5°	240.4	590.6	739.3	796.9	790.9
90°	0.0	321.1	527.4	624.6	613.6
92.5°	0.0	251.9	458.9	573.6	579.0
95°	17.0	166.3	378.7	510.5	510.5
97.5°	11.5	120.2	269.5	401.2	412.7
100°	11.5	97.1	177.8	286.5	292.6
102.5°	28.5	80.1	108.6	183.3	189.4
105°	28.5	63.1	91.7	91.7	86.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	34.6	46.1	63.1	46.1	5.5
115°	28.5	40.1	57.1	40.1	5.5
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°	28.5	57.1	80.1	51.6	17.0
110°	34.6	51.6	68.6	46.1	5.5



(END OF REPORT)