

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: P830854

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

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P830854
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-285-5)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-90SE-N-UNV-L850-CD
Description: 90000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 5000K LEDS AND NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

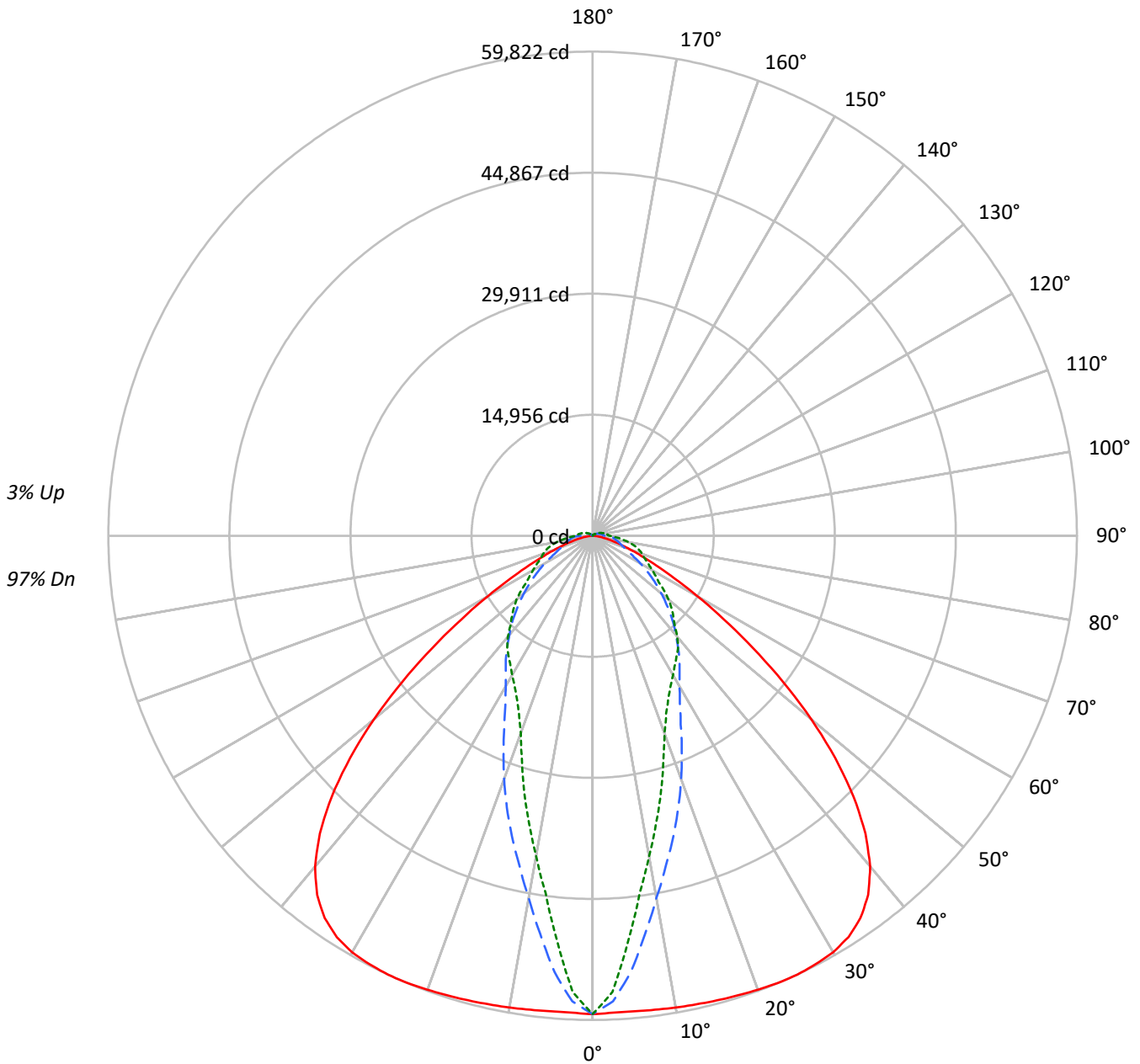
Lumens per Lamp: N/A
Luminaire Lumens: 87221.0 lumens
Efficiency: N/A
Efficacy: 164.9 lumens/watt
Spacing Criteria (0/90/45): 1.47 / 0.53 / 0.78
Luminous Opening: Rectangular w/ Sides (W: 1.8' x L: 3.78' x H: 0.17')
CIE Type: Direct

Input Watts (W): 529
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

TEST NUMBER: P830854

CATALOG NUMBER: OHBL-90SE-N-UNV-L850-CD

Luminous Intensity Polar Plot





TEST NUMBER: P830854

CATALOG NUMBER: OHBL-90SE-N-UNV-L850-CD

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	50	30	10	0		
RCR																										
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	99	99	99	99	97		
1	109	104	100	97	106	102	98	95	97	94	91	92	90	88	88	86	85	85	85	85	85	85	85	82		
2	100	93	86	81	97	90	85	80	86	82	78	83	79	75	79	76	73	73	73	73	73	73	73	71		
3	92	83	75	69	90	81	74	69	78	72	67	74	70	65	72	67	64	64	64	64	64	64	64	62		
4	85	74	66	60	83	73	66	60	70	64	59	67	62	57	65	60	56	56	56	56	56	56	56	54		
5	79	67	59	53	77	66	59	53	64	57	52	62	56	51	59	54	50	50	50	50	50	50	50	48		
6	74	62	53	47	72	60	53	47	58	52	46	56	50	46	55	49	45	45	45	45	45	45	45	43		
7	69	56	48	43	67	55	48	42	54	47	42	52	46	41	50	45	41	41	41	41	41	41	41	39		
8	65	52	44	39	63	51	44	39	50	43	38	48	42	38	47	41	37	37	37	37	37	37	37	35		
9	61	48	41	35	59	47	40	35	46	40	35	45	39	35	44	38	34	34	34	34	34	34	34	32		
10	57	45	37	33	56	44	37	32	43	37	32	42	36	32	41	35	32	32	32	32	32	32	32	30		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	93460	93460	93460
5°	93270	85150	79184
10°	94322	71758	63534
15°	96164	61398	52181
20°	98866	51939	42233
25°	102285	43012	37031
30°	105821	37074	34427
35°	108023	33807	32826
40°	106174	30557	31170
45°	97676	27633	28887
50°	82408	24433	27144
55°	62618	21422	24188
60°	43882	18393	23196
65°	29517	15865	22758
70°	20159	14919	23946
75°	13989	15432	25694
80°	9630	17172	26633
85°	5632	21675	28309



TEST NUMBER: P830854

CATALOG NUMBER: OHBL-90SE-N-UNV-L850-CD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4974.7	5.7
10°-20°	11702.7	13.4
20°-30°	14669.2	16.8
30°-40°	15565.7	17.8
40°-50°	14073.9	16.1
50°-60°	10204.5	11.7
60°-70°	6403.8	7.3
70°-80°	4237.8	4.9
80°-90°	2441.4	2.8
90°-100°	1182.8	1.4
100°-110°	816.4	0.9
110°-120°	503.8	0.6
120°-130°	244.0	0.3
130°-140°	112.2	0.1
140°-150°	61.3	0.1
150°-160°	26.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	31346.7	35.9
0°-40°	46912.4	53.8
0°-60°	71190.8	81.6
0°-90°	84273.9	96.6
90°-120°	2503.0	2.9
90°-150°	2920.5	3.3
90°-180°	2947.0	3.4
0°-180°	87221.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	59097	59097	59097	59097	59097	
5°	58979	57466	54091	51582	50283	###
15°	59429	48438	38472	34214	32662	16853
25°	59822	37454	25760	22864	22138	27637
35°	57680	24900	18696	18111	18105	35856
45°	45598	15771	13550	13876	14112	34736
55°	24140	9775	8842	9590	9933	21812
65°	8634	5670	5118	6558	7289	8984
75°	2666	3054	3437	5338	5658	2972
85°	467	1266	2514	3498	3212	560
90°	0	529	1457	2053	2070	30
95°	22	371	1282	1744	1822	20
105°	45	248	934	1237	1271	45
115°	62	174	630	787	804	61
125°	68	90	321	405	399	59
135°	56	68	141	219	219	44
145°	68	73	84	129	124	40
155°	68	84	90	96	84	21
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



TEST NUMBER: P830854

CATALOG NUMBER: OHBL-90SE-N-UNV-L850-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	59096.9	59096.9	59096.9	59096.9	59096.9
2.5°	58973.1	58635.7	57583.9	56942.7	56402.7
5°	58978.8	57465.8	54091.1	51582.5	50283.2
7.5°	59063.1	55699.7	49619.6	45958.0	44529.4
10°	59192.5	53511.7	45446.2	41542.7	40209.7
12.5°	59288.1	51048.2	41773.3	37763.1	36300.7
15°	59428.7	48438.4	38471.7	34214.0	32661.6
17.5°	59558.1	45980.5	35209.5	30760.5	29033.8
20°	59687.5	43331.3	31947.3	27363.3	25940.3
22.5°	59811.2	40535.9	28763.8	24725.4	23752.4
25°	59822.4	37453.7	25760.3	22863.7	22138.1
27.5°	59676.2	34259.0	23324.9	21305.7	20855.7
30°	59423.1	31159.9	21435.1	20180.8	19860.2
32.5°	58793.2	27998.9	19972.7	19095.3	18909.7
35°	57679.5	24899.8	18695.9	18111.0	18105.3
37.5°	55924.6	22149.4	17312.3	17211.0	17334.8
40°	53331.7	19742.1	16001.8	16271.7	16271.7
42.5°	49872.7	17649.8	14815.0	15090.6	15017.5
45°	45598.0	15771.2	13549.5	13875.7	14111.9
47.5°	40642.8	14117.6	12255.8	12885.8	13212.0
50°	35254.5	12542.7	11074.7	11879.0	12250.2
52.5°	29607.5	11085.9	9921.7	10844.1	11142.2
55°	24140.5	9775.4	8841.8	9589.8	9932.9
57.5°	19190.9	8526.8	7784.3	8493.0	9201.7
60°	14933.1	7452.5	6788.8	7801.2	8509.9
62.5°	11406.5	6496.3	5855.1	7154.4	7863.1
65°	8633.6	5669.5	5118.3	6558.2	7289.4
67.5°	6507.6	4955.2	4544.6	6125.1	6839.4
70°	4887.7	4263.4	4083.4	5855.1	6496.3
72.5°	3610.9	3627.8	3717.8	5618.9	6108.2
75°	2666.0	3054.1	3436.6	5337.7	5658.3
77.5°	1906.7	2531.0	3183.5	5000.2	5112.7
80°	1321.8	2064.2	2919.1	4555.9	4460.2
82.5°	826.8	1653.6	2682.9	4066.5	3802.2
85°	466.8	1265.5	2514.2	3498.5	3211.6
87.5°	208.1	944.9	2199.2	2727.9	2547.9
90°	0.0	528.7	1456.8	2053.0	2069.8
92.5°	11.2	438.7	1344.3	1878.6	1934.8
95°	22.5	371.2	1282.4	1743.6	1822.3
97.5°	28.1	326.2	1203.6	1619.9	1687.4
100°	33.7	292.5	1108.0	1490.5	1546.7
102.5°	39.4	270.0	1018.0	1355.5	1400.5
105°	45.0	247.5	933.7	1237.4	1271.1



TEST NUMBER: P830854

CATALOG NUMBER: OHBL-90SE-N-UNV-L850-CD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	56.2	191.2	703.1	888.7	916.8
115°	61.9	174.4	629.9	787.4	804.3
117.5°	67.5	151.9	551.2	691.8	697.4
120°	67.5	135.0	472.5	590.6	590.6
122.5°	67.5	112.5	393.7	489.3	483.7
125°	67.5	90.0	320.6	405.0	399.3
127.5°	61.9	73.1	258.7	337.5	331.8
130°	61.9	73.1	208.1	286.9	286.9
132.5°	56.2	67.5	168.7	247.5	247.5
135°	56.2	67.5	140.6	219.4	219.4
137.5°	56.2	73.1	118.1	191.2	191.2
140°	56.2	67.5	101.2	168.7	168.7
142.5°	61.9	67.5	90.0	146.2	146.2
145°	67.5	73.1	84.4	129.4	123.7
147.5°	67.5	78.7	84.4	112.5	106.9
150°	67.5	84.4	84.4	101.2	95.6
152.5°	67.5	84.4	84.4	95.6	90.0
155°	67.5	84.4	90.0	95.6	84.4
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°	45.0	230.6	854.9	1108.0	1147.4
110°	50.6	208.1	781.8	989.9	1029.3



(END OF REPORT)