

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: P830842

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

Issue Date: 5/3/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P830842  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-285-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: OHBL-90SE-MFL-UNV-L850-CD  
Description: 90000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 5000K LEDS AND MEDIUM FROSTED LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

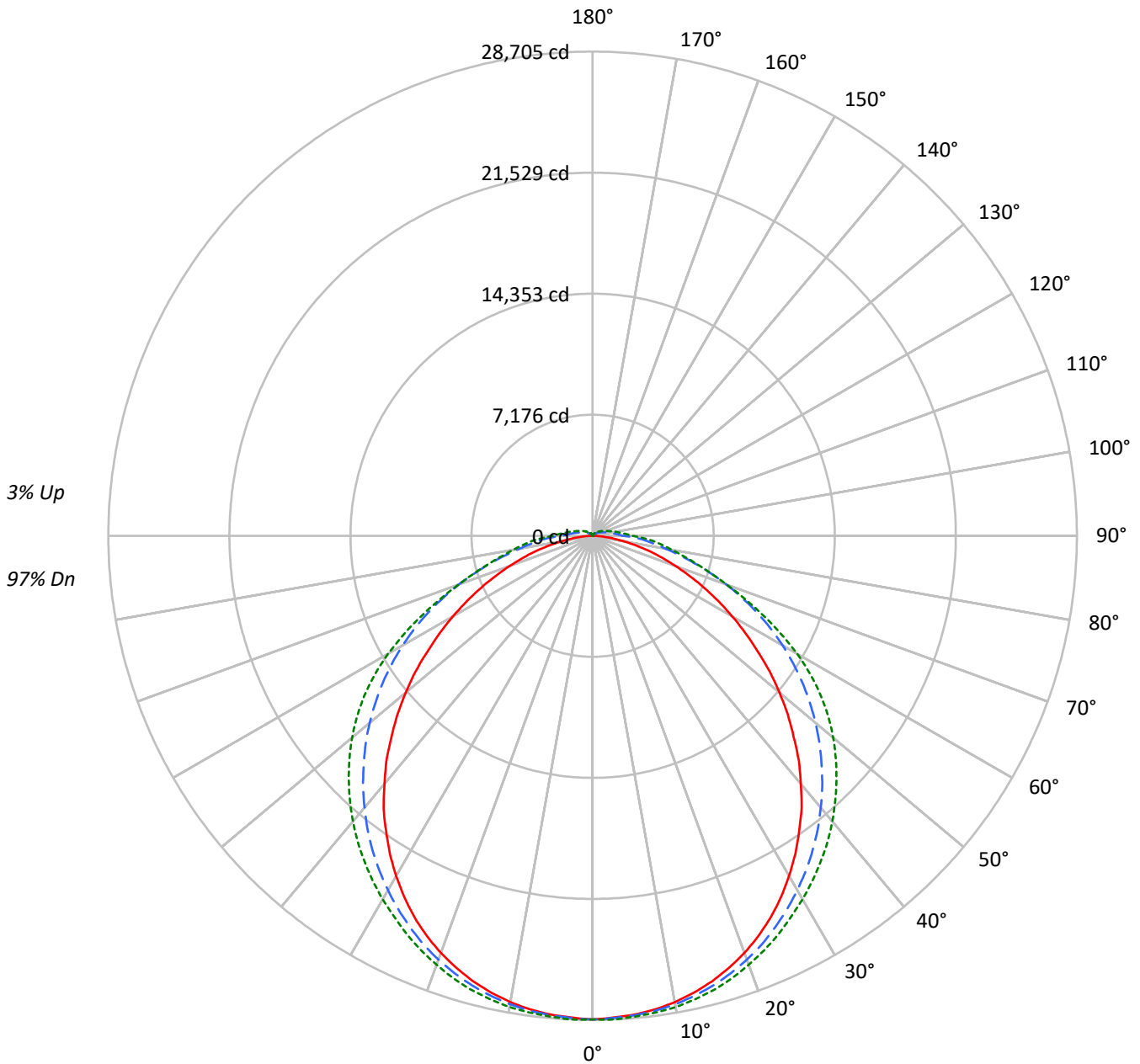
Lumens per Lamp: N/A  
Luminaire Lumens: 85826.0 lumens  
Efficiency: N/A  
Efficacy: 162.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 1.8' x L: 3.78' x H: 0.17')  
CIE Type: Direct

Input Watts (W): 529  
Input Voltage (V): NR  
Input Current (A<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

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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	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	97																	
1	107	102	98	94	104	100	96	92	95	91	88	90	88	85	86	84	82	82	82	80																	
2	98	89	82	76	95	87	80	75	83	77	73	79	74	71	75	72	68	68	68	66																	
3	89	78	70	63	86	76	69	62	73	66	61	70	64	59	67	62	58	58	58	56																	
4	81	69	60	53	79	68	59	53	65	57	52	62	56	51	59	54	50	50	50	47																	
5	75	62	53	46	72	60	52	46	58	50	45	56	49	44	53	48	43	43	43	41																	
6	69	56	47	40	67	54	46	40	52	45	39	50	44	39	48	43	38	38	38	36																	
7	64	50	42	35	62	49	41	35	48	40	35	46	39	34	44	38	34	34	34	32																	
8	60	46	37	31	58	45	37	31	43	36	31	42	35	31	41	35	30	30	30	28																	
9	56	42	34	28	54	41	34	28	40	33	28	39	32	28	37	32	27	27	27	25																	
10	52	39	31	26	51	38	31	26	37	30	25	36	29	25	35	29	25	25	25	23																	

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

	0°	45°	90°
0°	45352	45352	45352
5°	45062	44923	45060
10°	44746	44527	44824
15°	44246	44053	44515
20°	43583	43473	44061
25°	42697	42750	43602
30°	41470	41965	43141
35°	39985	41131	42742
40°	38201	40167	42350
45°	36097	39119	41850
50°	33796	38060	41242
55°	30967	36763	40215
60°	28069	35235	38165
65°	24907	33284	34796
70°	21478	30797	31148
75°	18008	27923	28683
80°	13653	25845	28456
85°	8638	26864	31799



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2717.3	3.2
10°-20°	7795.6	9.1
20°-30°	11789.5	13.7
30°-40°	14153.4	16.5
40°-50°	14618.1	17.0
50°-60°	13151.7	15.3
60°-70°	9907.0	11.5
70°-80°	5982.2	7.0
80°-90°	2925.8	3.4
90°-100°	1231.5	1.4
100°-110°	703.0	0.8
110°-120°	412.7	0.5
120°-130°	233.4	0.3
130°-140°	122.9	0.1
140°-150°	59.8	0.1
150°-160°	22.2	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	22302.4	26.0
0°-40°	36455.7	42.5
0°-60°	64225.6	74.8
0°-90°	83040.6	96.8
90°-120°	2347.2	2.7
90°-150°	2763.2	3.2
90°-180°	2785.0	3.2
0°-180°	85826.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	28677	28677	28677	28677	28677	
5°	28495	28572	28537	28649	28614	###
15°	27344	27477	27603	27835	27863	7709
25°	24972	25245	25603	26003	26066	11486
35°	21350	21848	22747	23434	23575	13347
45°	16851	17700	19181	20227	20445	13009
55°	11938	13174	15174	16318	16514	10704
65°	7285	8773	10738	11272	11145	7238
75°	3432	4927	6218	6380	6317	3661
85°	716	1888	3116	3544	3608	827
90°	0	737	1783	2246	2337	45
95°	35	498	1334	1698	1762	30
105°	49	288	772	1011	1053	49
115°	56	161	477	639	667	57
125°	56	77	288	414	435	51
135°	49	63	147	253	281	39
145°	70	63	70	126	147	42
155°	70	77	70	63	70	22
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	28677.2	28677.2	28677.2	28677.2	28677.2
2.5°	28593.0	28663.2	28621.1	28712.3	28705.3
5°	28494.7	28571.9	28536.8	28649.1	28614.0
7.5°	28326.3	28410.5	28403.5	28529.8	28515.8
10°	28080.6	28171.9	28199.9	28368.4	28368.4
12.5°	27743.7	27863.1	27933.2	28136.8	28143.8
15°	27343.7	27477.1	27603.4	27835.0	27863.1
17.5°	26859.4	27027.9	27203.3	27470.0	27505.1
20°	26312.0	26501.5	26740.1	27020.9	27063.0
22.5°	25680.3	25904.9	26213.7	26543.6	26592.7
25°	24971.5	25245.2	25603.1	26003.2	26066.4
27.5°	24164.4	24480.2	24964.5	25413.6	25469.8
30°	23287.1	23659.0	24262.6	24796.0	24887.3
32.5°	22360.6	22788.8	23532.7	24129.3	24255.6
35°	21350.0	21848.3	22746.6	23434.5	23574.8
37.5°	20353.4	20900.8	21918.5	22704.5	22873.0
40°	19188.3	19869.1	21034.2	21904.4	22108.0
42.5°	18093.4	18830.4	20149.8	21097.3	21293.8
45°	16851.2	17700.4	19181.3	20227.0	20444.6
47.5°	15686.1	16605.5	18247.8	19328.7	19553.3
50°	14457.9	15468.6	17251.2	18381.2	18612.8
52.5°	13229.7	14317.5	16219.5	17391.6	17609.2
55°	11938.3	13173.5	15173.8	16317.8	16514.3
57.5°	10738.2	12043.6	14100.0	15187.8	15307.1
60°	9552.0	10906.6	13005.1	13959.6	14001.7
62.5°	8394.0	9818.7	11882.2	12640.1	12584.0
65°	7285.1	8773.0	10738.2	11271.6	11145.2
67.5°	6218.3	7755.3	9566.1	9910.0	9741.5
70°	5207.7	6765.7	8429.1	8604.6	8450.2
72.5°	4316.3	5825.3	7278.1	7425.5	7313.2
75°	3432.0	4926.9	6218.3	6379.7	6316.6
77.5°	2603.8	4056.6	5242.7	5453.3	5467.3
80°	1873.9	3263.6	4393.5	4723.4	4765.5
82.5°	1235.2	2533.6	3684.7	4105.8	4168.9
85°	715.9	1888.0	3116.2	3544.3	3607.5
87.5°	308.8	1361.6	2505.6	2891.6	2968.8
90°	0.0	736.9	1782.7	2245.9	2337.1
92.5°	21.1	610.6	1530.0	1951.1	2028.3
95°	35.1	498.3	1333.5	1698.5	1761.6
97.5°	42.1	421.1	1158.0	1480.9	1544.0
100°	42.1	365.0	1003.6	1298.4	1354.6
102.5°	42.1	322.8	877.3	1137.0	1186.1
105°	49.1	287.8	772.0	1010.7	1052.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	56.1	189.5	533.4	715.9	744.0
115°	56.1	161.4	477.3	638.7	666.7
117.5°	63.2	140.4	421.1	575.5	596.6
120°	63.2	119.3	372.0	512.3	540.4
122.5°	63.2	98.3	329.9	463.2	484.3
125°	56.1	77.2	287.8	414.1	435.1
127.5°	49.1	63.2	245.6	372.0	393.0
130°	49.1	56.1	210.6	329.9	350.9
132.5°	49.1	63.2	175.5	287.8	315.8
135°	49.1	63.2	147.4	252.7	280.7
137.5°	49.1	63.2	119.3	217.6	245.6
140°	56.1	63.2	98.3	182.5	210.6
142.5°	63.2	63.2	77.2	154.4	175.5
145°	70.2	63.2	70.2	126.3	147.4
147.5°	70.2	70.2	70.2	98.3	119.3
150°	70.2	77.2	70.2	77.2	98.3
152.5°	70.2	77.2	70.2	63.2	77.2
155°	70.2	77.2	70.2	63.2	70.2
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°	49.1	252.7	680.8	898.4	933.4
110°	49.1	224.6	603.6	800.1	835.2



(END OF REPORT)