

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: P830841

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

Issue Date: 5/3/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P830841  
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-L840-CD  
Description: 90000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND MEDIUM FROSTED LENS  
Light Source: -  
Ballast/Driver: -

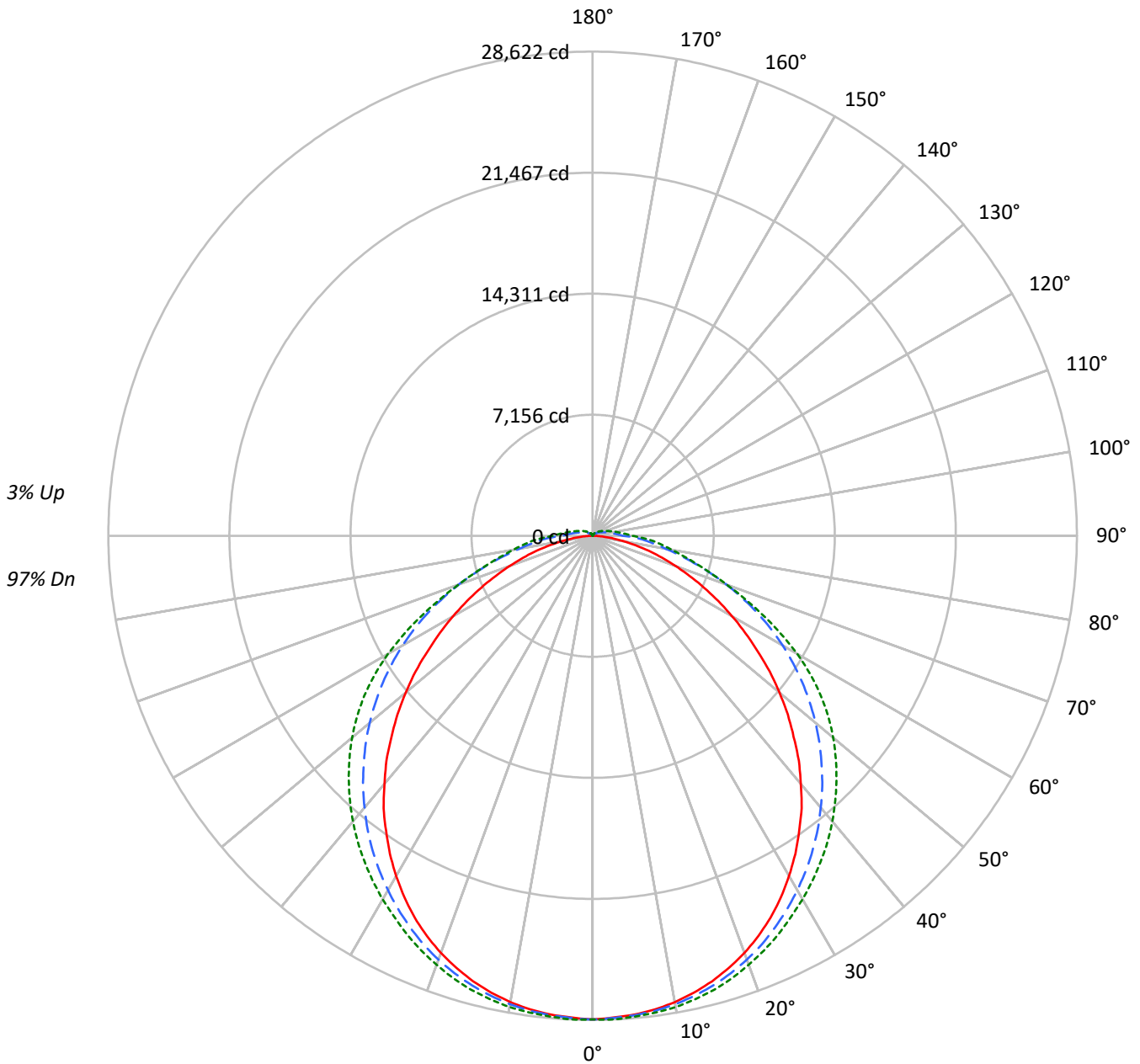
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 85578.0 lumens  
Efficiency: N/A  
Efficacy: 161.8 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°	45221	45221	45221
5°	44932	44793	44930
10°	44617	44398	44694
15°	44118	43926	44386
20°	43457	43348	43934
25°	42573	42626	43476
30°	41350	41844	43016
35°	39869	41013	42619
40°	38090	40051	42228
45°	35993	39006	41729
50°	33698	37950	41123
55°	30877	36656	40098
60°	27988	35134	38055
65°	24835	33188	34695
70°	21416	30708	31057
75°	17956	27842	28600
80°	13613	25771	28373
85°	8612	26787	31706



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2709.5	3.2
10°-20°	7773.1	9.1
20°-30°	11755.4	13.7
30°-40°	14112.5	16.5
40°-50°	14575.9	17.0
50°-60°	13113.7	15.3
60°-70°	9878.4	11.5
70°-80°	5964.9	7.0
80°-90°	2917.3	3.4
90°-100°	1228.0	1.4
100°-110°	701.0	0.8
110°-120°	411.5	0.5
120°-130°	232.7	0.3
130°-140°	122.5	0.1
140°-150°	59.6	0.1
150°-160°	22.2	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	22237.9	26.0
0°-40°	36350.4	42.5
0°-60°	64040.1	74.8
0°-90°	82800.6	96.8
90°-120°	2340.4	2.7
90°-150°	2755.2	3.2
90°-180°	2777.0	3.2
0°-180°	85578.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	28594	28594	28594	28594	28594	
5°	28412	28489	28454	28566	28531	###
15°	27265	27398	27524	27755	27783	7687
25°	24899	25172	25529	25928	25991	11453
35°	21288	21785	22681	23367	23507	13308
45°	16802	17649	19126	20169	20386	12972
55°	11904	13136	15130	16271	16467	10673
65°	7264	8748	10707	11239	11113	7217
75°	3422	4913	6200	6361	6298	3651
85°	714	1882	3107	3534	3597	825
90°	0	735	1778	2239	2330	45
95°	35	497	1330	1694	1756	30
105°	49	287	770	1008	1050	49
115°	56	161	476	637	665	57
125°	56	77	287	413	434	50
135°	49	63	147	252	280	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°	28594.3	28594.3	28594.3	28594.3	28594.3
2.5°	28510.4	28580.3	28538.3	28629.3	28622.3
5°	28412.4	28489.4	28454.4	28566.3	28531.3
7.5°	28244.4	28328.4	28321.4	28447.4	28433.4
10°	27999.5	28090.5	28118.5	28286.4	28286.4
12.5°	27663.6	27782.6	27852.5	28055.5	28062.5
15°	27264.7	27397.7	27523.6	27754.6	27782.6
17.5°	26781.8	26949.8	27124.7	27390.7	27425.6
20°	26236.0	26424.9	26662.9	26942.8	26984.8
22.5°	25606.1	25830.1	26138.0	26466.9	26515.9
25°	24899.3	25172.3	25529.2	25928.0	25991.0
27.5°	24094.5	24409.5	24892.3	25340.2	25396.2
30°	23219.8	23590.7	24192.5	24724.4	24815.3
32.5°	22296.0	22722.9	23464.7	24059.5	24185.5
35°	21288.3	21785.2	22680.9	23366.7	23506.7
37.5°	20294.6	20840.4	21855.1	22638.9	22806.9
40°	19132.9	19811.7	20973.4	21841.1	22044.1
42.5°	18041.2	18776.0	20091.6	21036.4	21232.3
45°	16802.5	17649.3	19125.9	20168.6	20385.5
47.5°	15640.8	16557.6	18195.1	19272.8	19496.8
50°	14416.1	15423.9	17201.4	18328.1	18559.0
52.5°	13191.5	14276.2	16172.7	17341.4	17558.3
55°	11903.8	13135.5	15129.9	16270.6	16466.6
57.5°	10707.1	12008.8	14059.2	15143.9	15262.9
60°	9524.4	10875.1	12967.5	13919.3	13961.3
62.5°	8369.8	9790.4	11847.8	12603.6	12547.6
65°	7264.1	8747.7	10707.1	11239.0	11113.0
67.5°	6200.3	7732.9	9538.4	9881.4	9713.4
70°	5192.6	6746.2	8404.7	8579.7	8425.7
72.5°	4303.8	5808.4	7257.1	7404.0	7292.0
75°	3422.1	4912.7	6200.3	6361.3	6298.3
77.5°	2596.3	4044.9	5227.6	5437.5	5451.5
80°	1868.5	3254.1	4380.8	4709.7	4751.7
82.5°	1231.7	2526.3	3674.0	4093.9	4156.9
85°	713.8	1882.5	3107.2	3534.1	3597.0
87.5°	307.9	1357.6	2498.3	2883.2	2960.2
90°	0.0	734.8	1777.5	2239.4	2330.4
92.5°	21.0	608.8	1525.6	1945.5	2022.5
95°	35.0	496.9	1329.6	1693.5	1756.5
97.5°	42.0	419.9	1154.7	1476.6	1539.6
100°	42.0	363.9	1000.7	1294.7	1350.6
102.5°	42.0	321.9	874.8	1133.7	1182.7
105°	49.0	286.9	769.8	1007.7	1049.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	56.0	188.9	531.9	713.8	741.8
115°	56.0	161.0	475.9	636.8	664.8
117.5°	63.0	140.0	419.9	573.8	594.8
120°	63.0	119.0	370.9	510.9	538.9
122.5°	63.0	98.0	328.9	461.9	482.9
125°	56.0	77.0	286.9	412.9	433.9
127.5°	49.0	63.0	244.9	370.9	391.9
130°	49.0	56.0	209.9	328.9	349.9
132.5°	49.0	63.0	175.0	286.9	314.9
135°	49.0	63.0	147.0	251.9	279.9
137.5°	49.0	63.0	119.0	216.9	244.9
140°	56.0	63.0	98.0	182.0	209.9
142.5°	63.0	63.0	77.0	154.0	175.0
145°	70.0	63.0	70.0	126.0	147.0
147.5°	70.0	70.0	70.0	98.0	119.0
150°	70.0	77.0	70.0	77.0	98.0
152.5°	70.0	77.0	70.0	63.0	77.0
155°	70.0	77.0	70.0	63.0	70.0
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°	49.0	251.9	678.8	895.8	930.8
110°	49.0	223.9	601.8	797.8	832.8



(END OF REPORT)