

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: P830830

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

Issue Date: 5/3/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P830830  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2103-200-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: OHBL-90SE-MCL-UNV-L850-CD  
Description: 90000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 5000K LEDS AND MEDIUM CLEAR LENS  
Light Source: -  
Ballast/Driver: -

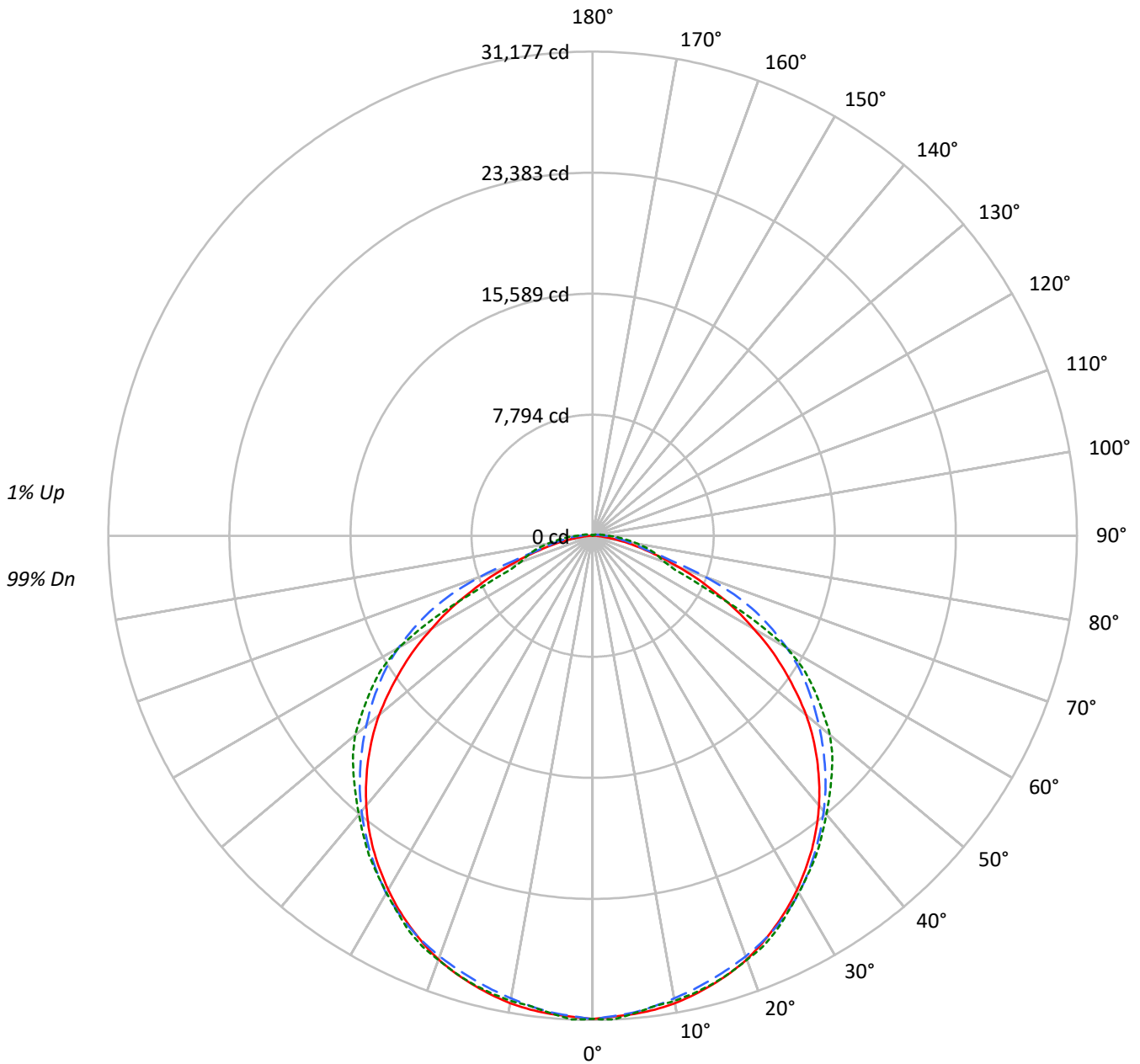
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 87941.1 lumens  
Efficiency: N/A  
Efficacy: 166.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.27 / 1.39  
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					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	110	110	110	106	106	106	101	101	101					99				
1	109	104	100	96	106	102	98	95	97	94	91	93	91	88	90	87	86					83				
2	99	91	84	79	96	89	83	78	85	80	76	82	78	74	79	75	72					70				
3	91	80	72	66	88	79	71	65	75	69	64	72	67	63	70	65	61					59				
4	83	71	62	56	81	70	62	55	67	60	54	65	59	54	62	57	53					51				
5	76	64	55	48	74	62	54	48	60	53	47	58	52	46	56	50	46					44				
6	70	57	48	42	68	56	48	42	54	47	41	52	46	41	51	45	40					38				
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	46	40	36					34				
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	42	36	32					30				
9	57	43	35	30	55	43	35	29	41	34	29	40	34	29	39	33	29					27				
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	36	30	26					24				

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

	0°	45°	90°
0°	49205	49205	49205
5°	48883	48491	48593
10°	48704	47756	48053
15°	48395	47207	47731
20°	48086	46861	47309
25°	47506	46512	46890
30°	46875	45963	46003
35°	46121	45092	45513
40°	45140	44191	44848
45°	43780	43150	44553
50°	41938	41964	44200
55°	39011	40797	42550
60°	35178	39089	39338
65°	30177	35921	24930
70°	24307	28041	18075
75°	18224	16646	18345
80°	12684	13841	17515
85°	7219	12682	16417



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2933.7	3.3
10°-20°	8412.5	9.6
20°-30°	12848.6	14.6
30°-40°	15589.8	17.7
40°-50°	16339.5	18.6
50°-60°	14806.1	16.8
60°-70°	9926.9	11.3
70°-80°	4457.6	5.1
80°-90°	1617.6	1.8
90°-100°	486.9	0.6
100°-110°	229.7	0.3
110°-120°	115.2	0.1
120°-130°	63.5	0.1
130°-140°	43.7	0.0
140°-150°	29.4	0.0
150°-160°	21.8	0.0
160°-170°	14.0	0.0
170°-180°	4.5	0.0
0°-30°	24194.8	27.5
0°-40°	39784.6	45.2
0°-60°	70930.2	80.7
0°-90°	86932.3	98.9
90°-120°	831.8	0.9
90°-150°	968.4	1.1
90°-180°	1009.0	1.1
0°-180°	87941.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	31114	31114	31114	31114	31114	
5°	30911	31019	30803	30898	30857	###
15°	29908	29791	29580	29840	29876	8444
25°	27784	27663	27856	28113	28032	12807
35°	24626	24685	24937	25202	25103	15392
45°	20438	20771	21158	21698	21765	15744
55°	15039	15764	16839	17514	17473	13425
65°	8827	10208	11589	9780	7985	8795
75°	3473	5039	3707	3792	4040	3796
85°	598	1147	1471	1777	1862	730
90°	4	382	760	954	999	36
95°	4	238	522	634	652	6
105°	18	104	256	310	324	21
115°	36	54	130	166	176	33
125°	32	36	81	94	99	31
135°	40	45	50	72	76	32
145°	40	45	45	50	54	27
155°	45	50	50	50	45	21
165°	50	50	50	50	50	14
175°	50	50	45	40	40	5
180°	45	45	45	45	45	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	31113.6	31113.6	31113.6	31113.6	<i>31113.6</i>
2.5°	<i>30987.6</i>	<i>31118.1</i>	<i>30956.1</i>	<i>31131.6</i>	<i>31176.6</i>
5°	30911.2	31019.1	30803.2	30897.7	<i>30857.2</i>
7.5°	30771.7	30807.7	30551.3	30627.7	<i>30546.8</i>
10°	30564.7	30546.8	30245.3	30393.8	<i>30411.8</i>
12.5°	30258.8	30204.8	29934.9	30159.9	<i>30164.4</i>
15°	29907.9	29791.0	29579.5	29840.4	<i>29876.4</i>
17.5°	29503.0	29350.1	29210.6	29548.0	<i>29494.0</i>
20°	29030.7	28850.7	28823.7	29192.6	<i>29057.7</i>
22.5°	28445.8	28306.4	28369.3	28720.2	<i>28634.8</i>
25°	27784.5	27663.0	27856.5	28112.9	<i>28031.9</i>
27.5°	27087.2	27015.2	27235.6	27433.6	<i>27276.1</i>
30°	26322.4	26281.9	26574.3	26736.3	<i>26538.3</i>
32.5°	25490.1	25503.6	25782.5	26003.0	<i>25818.5</i>
35°	24626.4	24684.8	24936.8	25202.2	<i>25103.2</i>
37.5°	23677.1	23807.6	24059.5	24360.9	<i>24257.5</i>
40°	22673.9	22862.8	23141.8	23506.2	<i>23411.7</i>
42.5°	21589.7	21828.1	22188.0	22592.9	<i>22583.9</i>
45°	20438.0	20770.9	21157.8	21697.6	<i>21765.1</i>
47.5°	19241.3	19614.7	20105.1	20824.9	<i>20928.3</i>
50°	17941.2	18409.0	19020.9	19884.6	<i>19947.6</i>
52.5°	16492.5	17131.4	17941.2	18768.9	<i>18692.5</i>
55°	15039.4	15763.7	16839.0	17513.8	<i>17473.3</i>
57.5°	13590.8	14405.1	15709.8	16191.1	<i>16186.6</i>
60°	11971.3	13001.5	14427.6	14792.0	<i>14432.1</i>
62.5°	10473.2	11579.9	13060.0	12794.5	<i>11561.9</i>
65°	8826.6	10207.7	11588.9	9780.4	<i>7985.3</i>
67.5°	7364.5	8804.1	9843.3	6698.7	<i>5736.0</i>
70°	5893.4	7481.5	7674.9	4971.2	<i>4903.7</i>
72.5°	4588.8	6280.3	5295.1	4255.9	<i>4471.8</i>
75°	3473.1	5038.6	3707.0	3792.5	<i>4039.9</i>
77.5°	2532.8	3869.0	2883.7	3324.6	<i>3527.0</i>
80°	1741.0	2739.8	2352.9	2793.7	<i>2933.2</i>
82.5°	1093.2	1808.5	1885.0	2249.4	<i>2393.4</i>
85°	598.3	1147.2	1471.1	1777.0	<i>1862.5</i>
87.5°	247.4	692.8	1124.7	1372.1	<i>1444.1</i>
90°	4.5	382.4	760.3	953.7	<i>998.7</i>
92.5°	4.5	292.4	620.8	769.3	<i>800.8</i>
95°	4.5	238.4	521.9	634.3	<i>652.3</i>
97.5°	9.0	188.9	436.4	526.4	<i>544.4</i>
100°	13.5	157.5	364.4	440.9	<i>454.4</i>
102.5°	18.0	126.0	305.9	368.9	<i>382.4</i>
105°	18.0	103.5	256.4	310.4	<i>323.9</i>



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	31.5	63.0	153.0	193.4	202.4
115°	36.0	54.0	130.5	166.5	175.5
117.5°	36.0	45.0	112.5	139.5	148.5
120°	36.0	40.5	99.0	121.5	126.0
122.5°	36.0	36.0	85.5	108.0	112.5
125°	31.5	36.0	81.0	94.5	99.0
127.5°	36.0	36.0	72.0	85.5	90.0
130°	36.0	40.5	63.0	81.0	81.0
132.5°	40.5	45.0	58.5	76.5	76.5
135°	40.5	45.0	49.5	72.0	76.5
137.5°	45.0	45.0	45.0	67.5	72.0
140°	45.0	45.0	40.5	58.5	63.0
142.5°	40.5	45.0	40.5	54.0	58.5
145°	40.5	45.0	45.0	49.5	54.0
147.5°	45.0	45.0	45.0	45.0	49.5
150°	45.0	45.0	45.0	45.0	45.0
152.5°	45.0	45.0	45.0	45.0	45.0
155°	45.0	49.5	49.5	49.5	45.0
157.5°	45.0	49.5	49.5	49.5	49.5
160°	45.0	49.5	49.5	49.5	49.5
162.5°	49.5	49.5	49.5	49.5	49.5
165°	49.5	49.5	49.5	49.5	49.5
167.5°	49.5	54.0	49.5	49.5	49.5
170°	49.5	49.5	49.5	45.0	45.0
172.5°	49.5	49.5	49.5	45.0	45.0
175°	49.5	49.5	45.0	40.5	40.5
177.5°	54.0	49.5	45.0	40.5	36.0
180°	45.0	45.0	45.0	45.0	45.0



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	22.5	85.5	220.4	265.4	274.4
110°	27.0	72.0	184.5	224.9	233.9



(END OF REPORT)