

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: P830851

Luminaire Tested: **OHBL-90SE-N-UNV-L830-CD**

Issue Date: 5/3/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P830851  
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-L830-CD  
Description: 90000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 3000K LEDS AND NARROW LENS  
Light Source: -  
Ballast/Driver: -

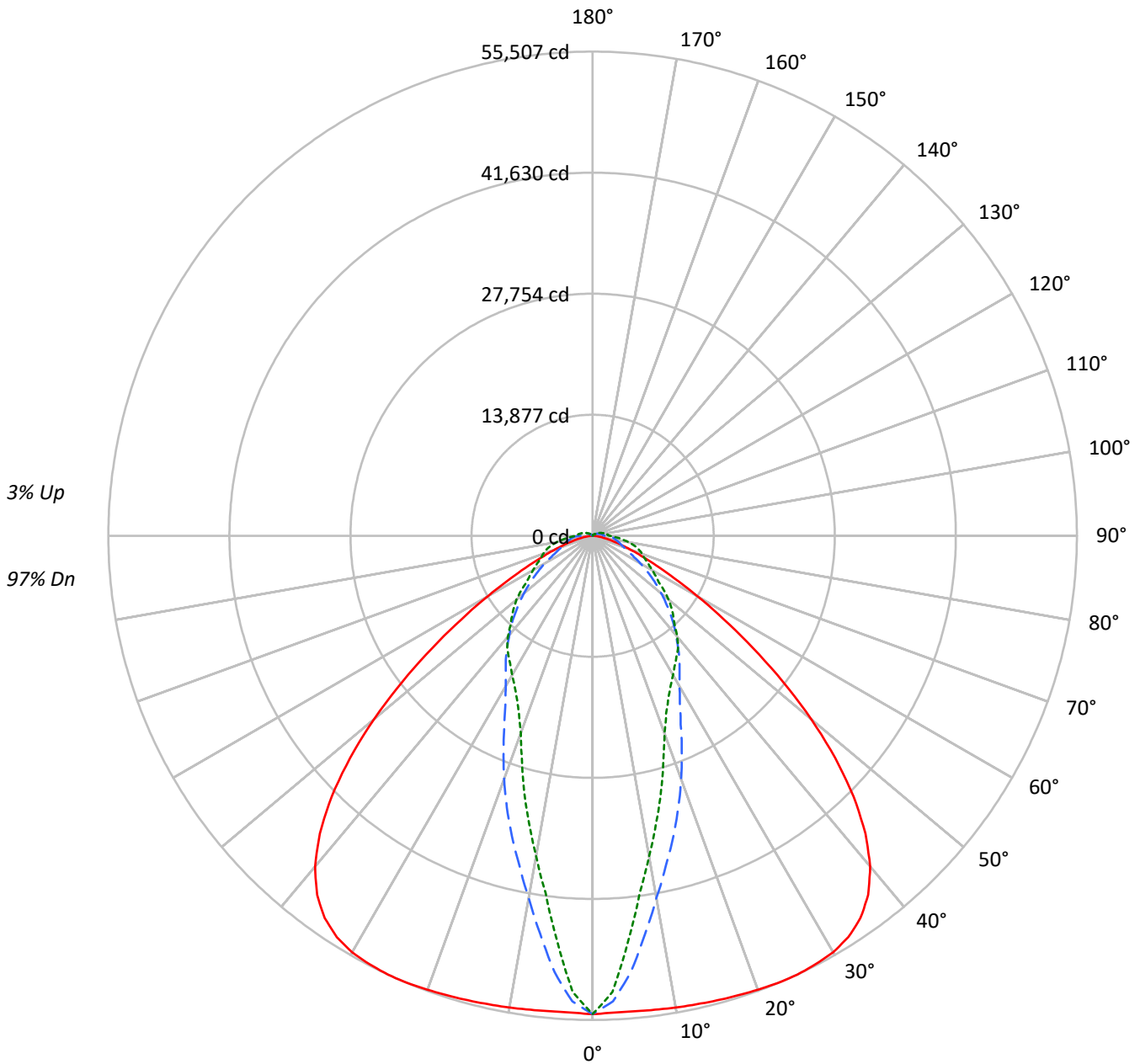
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 80929.0 lumens  
Efficiency: N/A  
Efficacy: 153.0 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<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

TEST NUMBER: P830851

CATALOG NUMBER: OHBL-90SE-N-UNV-L830-CD

### Luminous Intensity Polar Plot





TEST NUMBER: P830851

CATALOG NUMBER: OHBL-90SE-N-UNV-L830-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	0
RCR																					
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	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	82
2	100	93	86	81	97	90	85	80	86	82	78	83	79	75	79	76	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	62
4	85	74	66	60	83	73	66	60	70	64	59	67	62	57	65	60	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	48
6	74	62	53	47	72	60	53	47	58	52	46	56	50	46	55	49	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	39
8	65	52	44	39	63	51	44	39	50	43	38	48	42	38	47	41	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	32
10	57	45	37	33	56	44	37	32	43	37	32	42	36	32	41	35	32	32	32	32	30

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

	0°	45°	90°
0°	86718	86718	86718
5°	86542	79008	73472
10°	87518	66581	58951
15°	89227	56969	48417
20°	91734	48192	39187
25°	94907	39909	34360
30°	98187	34400	31943
35°	100230	31368	30458
40°	98515	28352	28922
45°	90630	25640	26803
50°	76464	22670	25186
55°	58101	19876	22443
60°	40716	17066	21522
65°	27388	14720	21116
70°	18704	13843	22218
75°	12980	14319	23840
80°	8935	15933	24712
85°	5227	20111	26267



TEST NUMBER: P830851

CATALOG NUMBER: OHBL-90SE-N-UNV-L830-CD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	4615.8	5.7
10°-20°	10858.5	13.4
20°-30°	13611.0	16.8
30°-40°	14442.8	17.8
40°-50°	13058.6	16.1
50°-60°	9468.4	11.7
60°-70°	5941.8	7.3
70°-80°	3932.1	4.9
80°-90°	2265.3	2.8
90°-100°	1097.5	1.4
100°-110°	757.5	0.9
110°-120°	467.4	0.6
120°-130°	226.4	0.3
130°-140°	104.1	0.1
140°-150°	56.9	0.1
150°-160°	24.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
<hr/>		
0°-30°	29085.4	35.9
0°-40°	43528.2	53.8
0°-60°	66055.2	81.6
0°-90°	78194.5	96.6
90°-120°	2322.4	2.9
90°-150°	2709.8	3.3
90°-180°	2735.0	3.4
0°-180°	80929.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	54834	54834	54834	54834	54834	
5°	54724	53320	50189	47861	46656	###
15°	55142	44944	35696	31746	30306	15638
25°	55507	34752	23902	21214	20541	25643
35°	53519	23104	17347	16804	16799	33270
45°	42309	14634	12572	12875	13094	32231
55°	22399	9070	8204	8898	9216	20238
65°	8011	5260	4749	6085	6764	8336
75°	2474	2834	3189	4953	5250	2758
85°	433	1174	2333	3246	2980	519
90°	0	491	1352	1905	1920	28
95°	21	344	1190	1618	1691	18
105°	42	230	866	1148	1179	42
115°	57	162	584	731	746	56
125°	63	84	298	376	370	54
135°	52	63	130	204	204	41
145°	63	68	78	120	115	38
155°	63	78	84	89	78	19
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



TEST NUMBER: P830851

CATALOG NUMBER: OHBL-90SE-N-UNV-L830-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	54833.7	54833.7	54833.7	54833.7	54833.7
2.5°	54718.9	54405.8	53429.9	52834.9	52333.9
5°	54724.1	53320.3	50189.0	47861.4	46655.9
7.5°	54802.4	51681.6	46040.1	42642.6	41317.1
10°	54922.4	49651.5	42167.7	38545.9	37309.1
12.5°	55011.2	47365.6	38759.9	35038.9	33682.0
15°	55141.6	44944.1	35696.4	31745.8	30305.5
17.5°	55261.7	42663.5	32669.6	28541.5	26939.3
20°	55381.7	40205.5	29642.7	25389.4	24069.0
22.5°	55496.5	37611.7	26688.8	22941.8	22038.9
25°	55506.9	34751.9	23902.0	21214.3	20541.1
27.5°	55371.2	31787.6	21642.3	19768.7	19351.2
30°	55136.4	28912.0	19888.8	18725.0	18427.5
32.5°	54551.9	25979.1	18531.9	17717.8	17545.5
35°	53518.6	23103.5	17347.2	16804.5	16799.3
37.5°	51890.3	20551.6	16063.4	15969.5	16084.3
40°	49484.5	18317.9	14847.4	15097.9	15097.9
42.5°	46274.9	16376.5	13746.3	14002.0	13934.1
45°	42308.6	14633.5	12572.0	12874.7	13093.9
47.5°	37710.9	13099.1	11371.7	11956.2	12258.9
50°	32711.3	11637.9	10275.8	11022.1	11366.5
52.5°	27471.7	10286.2	9205.9	10061.8	10338.4
55°	22399.0	9070.2	8203.9	8898.0	9216.4
57.5°	17806.5	7911.7	7222.8	7880.4	8537.9
60°	13855.9	6914.9	6299.1	7238.4	7896.0
62.5°	10583.7	6027.7	5432.7	6638.3	7295.9
65°	8010.8	5260.5	4749.1	6085.1	6763.5
67.5°	6038.1	4597.7	4216.8	5683.3	6346.0
70°	4535.1	3955.8	3788.8	5432.7	6027.7
72.5°	3350.5	3366.1	3449.6	5213.6	5667.6
75°	2473.7	2833.8	3188.7	4952.6	5250.1
77.5°	1769.2	2348.5	2953.8	4639.5	4743.9
80°	1226.4	1915.3	2708.5	4227.2	4138.5
82.5°	767.2	1534.3	2489.4	3773.2	3527.9
85°	433.2	1174.2	2332.8	3246.1	2979.9
87.5°	193.1	876.8	2040.5	2531.1	2364.1
90°	0.0	490.6	1351.7	1904.9	1920.5
92.5°	10.4	407.1	1247.3	1743.1	1795.3
95°	20.9	344.4	1189.9	1617.8	1690.9
97.5°	26.1	302.7	1116.8	1503.0	1565.6
100°	31.3	271.4	1028.1	1383.0	1435.2
102.5°	36.5	250.5	944.6	1257.7	1299.5
105°	41.8	229.6	866.3	1148.1	1179.4



TEST NUMBER: P830851

CATALOG NUMBER: OHBL-90SE-N-UNV-L830-CD

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	52.2	177.4	652.3	824.6	850.7
115°	57.4	161.8	584.5	730.6	746.3
117.5°	62.6	140.9	511.4	641.9	647.1
120°	62.6	125.3	438.4	548.0	548.0
122.5°	62.6	104.4	365.3	454.0	448.8
125°	62.6	83.5	297.5	375.8	370.5
127.5°	57.4	67.8	240.1	313.1	307.9
130°	57.4	67.8	193.1	266.2	266.2
132.5°	52.2	62.6	156.6	229.6	229.6
135°	52.2	62.6	130.5	203.5	203.5
137.5°	52.2	67.8	109.6	177.4	177.4
140°	52.2	62.6	93.9	156.6	156.6
142.5°	57.4	62.6	83.5	135.7	135.7
145°	62.6	67.8	78.3	120.0	114.8
147.5°	62.6	73.1	78.3	104.4	99.2
150°	62.6	78.3	78.3	93.9	88.7
152.5°	62.6	78.3	78.3	88.7	83.5
155°	62.6	78.3	83.5	88.7	78.3
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°	41.8	214.0	793.3	1028.1	1064.6
110°	47.0	193.1	725.4	918.5	955.0



(END OF REPORT)