

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: P843051

Luminaire Tested: **24CZ2-40-SQR-UNV-B50**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P843051  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P388488)  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-40-SQR-UNV-B50  
Description: 2X4 4000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND SQR LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

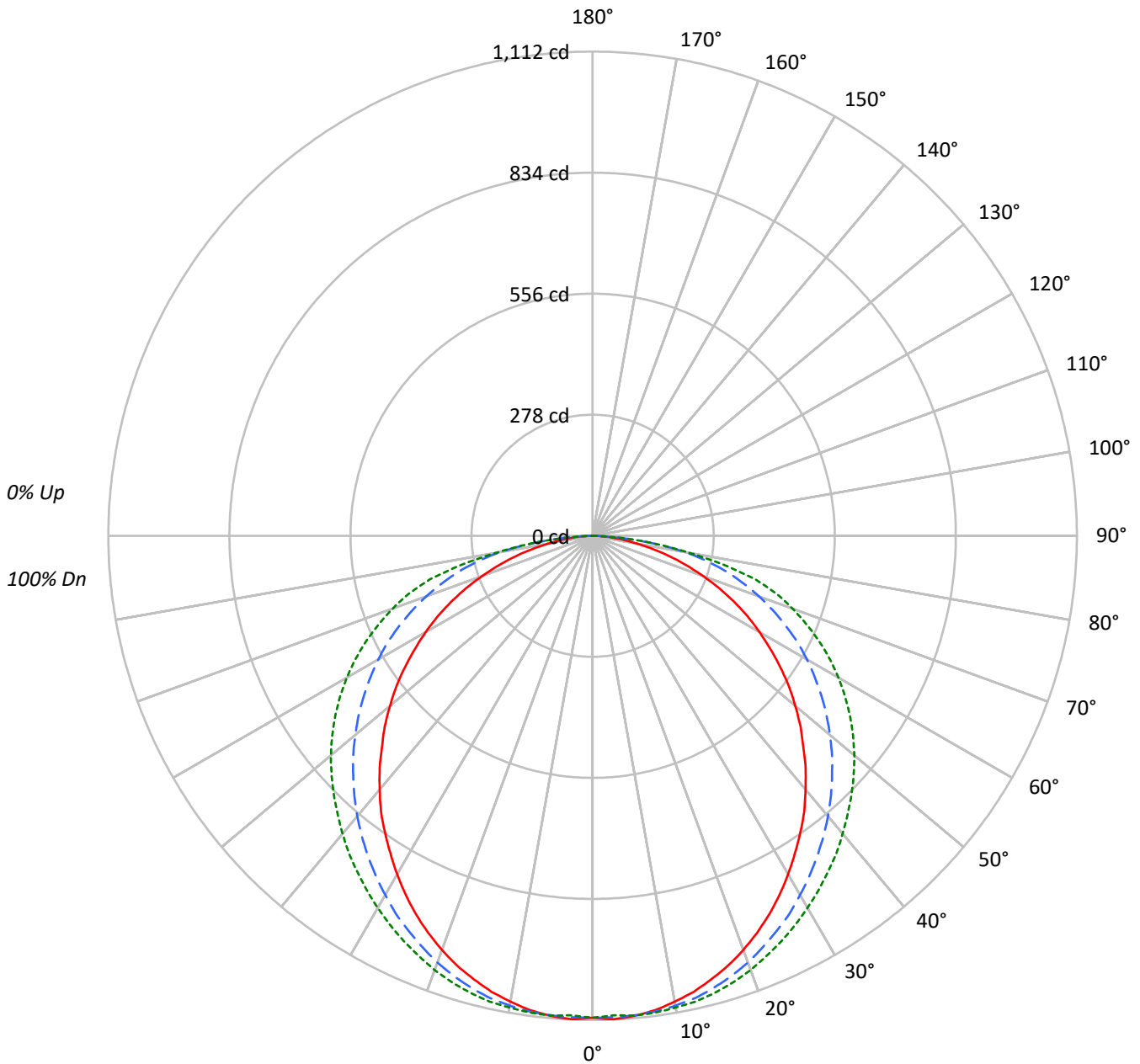
Lumens per Lamp: N/A  
Luminaire Lumens: 3463.0 lumens  
Efficiency: N/A  
Efficacy: 111.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 31  
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82																			
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67																			
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56																			
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47																			
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43	41																			
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35																			
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31																			
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28																			
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25																			
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22																			

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

	0°	45°	90°
0°	1562	1562	1562
5°	1568	1567	1567
10°	1557	1570	1576
15°	1540	1571	1587
20°	1520	1566	1594
25°	1494	1558	1599
30°	1463	1552	1608
35°	1432	1549	1623
40°	1401	1549	1646
45°	1365	1552	1678
50°	1333	1562	1722
55°	1295	1579	1775
60°	1249	1604	1840
65°	1195	1634	1917
70°	1109	1675	2015
75°	1004	1734	2108
80°	845	1738	1812
85°	648	1313	1313



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.1	3.0
10°-20°	302.3	8.7
20°-30°	459.2	13.3
30°-40°	558.5	16.1
40°-50°	594.7	17.2
50°-60°	566.4	16.4
60°-70°	473.6	13.7
70°-80°	315.8	9.1
80°-90°	87.4	2.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	866.6	25.0
0°-40°	1425.1	41.2
0°-60°	2586.2	74.7
0°-90°	3463.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3463.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1107	1107	1107	1107	1107	
5°	1107	1100	1106	1106	1106	105
15°	1054	1057	1075	1083	1086	297
25°	960	972	1001	1018	1027	442
35°	831	855	899	928	942	520
45°	684	720	778	821	841	529
55°	526	572	642	698	722	470
65°	358	410	489	550	574	354
75°	184	242	318	372	386	195
85°	40	74	81	80	81	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1106.9	1106.9	1106.9	1106.9	1106.9
2.5°	1111.5	1103.5	1106.9	1106.9	1102.4
5°	1106.9	1100.0	1105.8	1105.8	1105.8
7.5°	1099.0	1093.2	1102.4	1104.7	1104.7
10°	1086.4	1084.1	1095.6	1099.0	1100.0
12.5°	1072.7	1071.5	1087.6	1092.0	1095.6
15°	1054.3	1056.7	1074.9	1083.0	1086.4
17.5°	1035.0	1039.4	1060.1	1071.5	1074.9
20°	1012.1	1018.9	1043.0	1054.3	1061.3
22.5°	987.0	997.2	1022.3	1036.0	1044.0
25°	959.5	971.9	1000.6	1017.7	1026.9
27.5°	929.7	945.8	978.9	998.2	1007.5
30°	897.6	915.9	952.6	975.5	987.0
32.5°	864.5	886.2	926.3	951.4	965.1
35°	831.4	855.4	898.8	928.5	942.2
37.5°	798.2	822.1	870.3	902.2	919.5
40°	760.5	789.0	840.6	875.9	893.2
42.5°	723.9	754.7	809.7	848.4	866.9
45°	683.8	720.5	777.6	821.1	840.6
47.5°	647.2	683.8	745.6	791.4	813.1
50°	607.2	646.0	711.3	761.7	784.5
52.5°	568.3	608.4	676.9	730.7	753.6
55°	526.1	571.7	641.6	697.6	721.5
57.5°	483.7	532.9	604.9	663.3	687.3
60°	442.6	492.8	568.3	626.7	651.8
62.5°	401.4	451.6	530.6	590.0	614.1
65°	357.9	410.5	489.4	550.0	574.1
67.5°	314.5	369.3	448.2	508.9	531.7
70°	268.7	327.1	406.0	465.5	488.3
72.5°	226.5	284.7	362.5	420.9	442.6
75°	184.1	242.4	317.9	371.7	386.5
77.5°	143.0	201.2	268.7	304.2	307.6
80°	104.0	159.0	213.9	224.1	222.9
82.5°	69.7	118.9	147.6	148.6	152.0
85°	40.0	74.3	81.1	80.1	81.1
87.5°	16.1	26.3	22.9	17.1	17.1
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG







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







(END OF REPORT)