

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: P843109

Luminaire Tested: **24CZ2-50-SQR-UNV-B35**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P843109  
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: 24CZ2-50-SQR-UNV-B35  
Description: 2X4 5000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND SQR LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

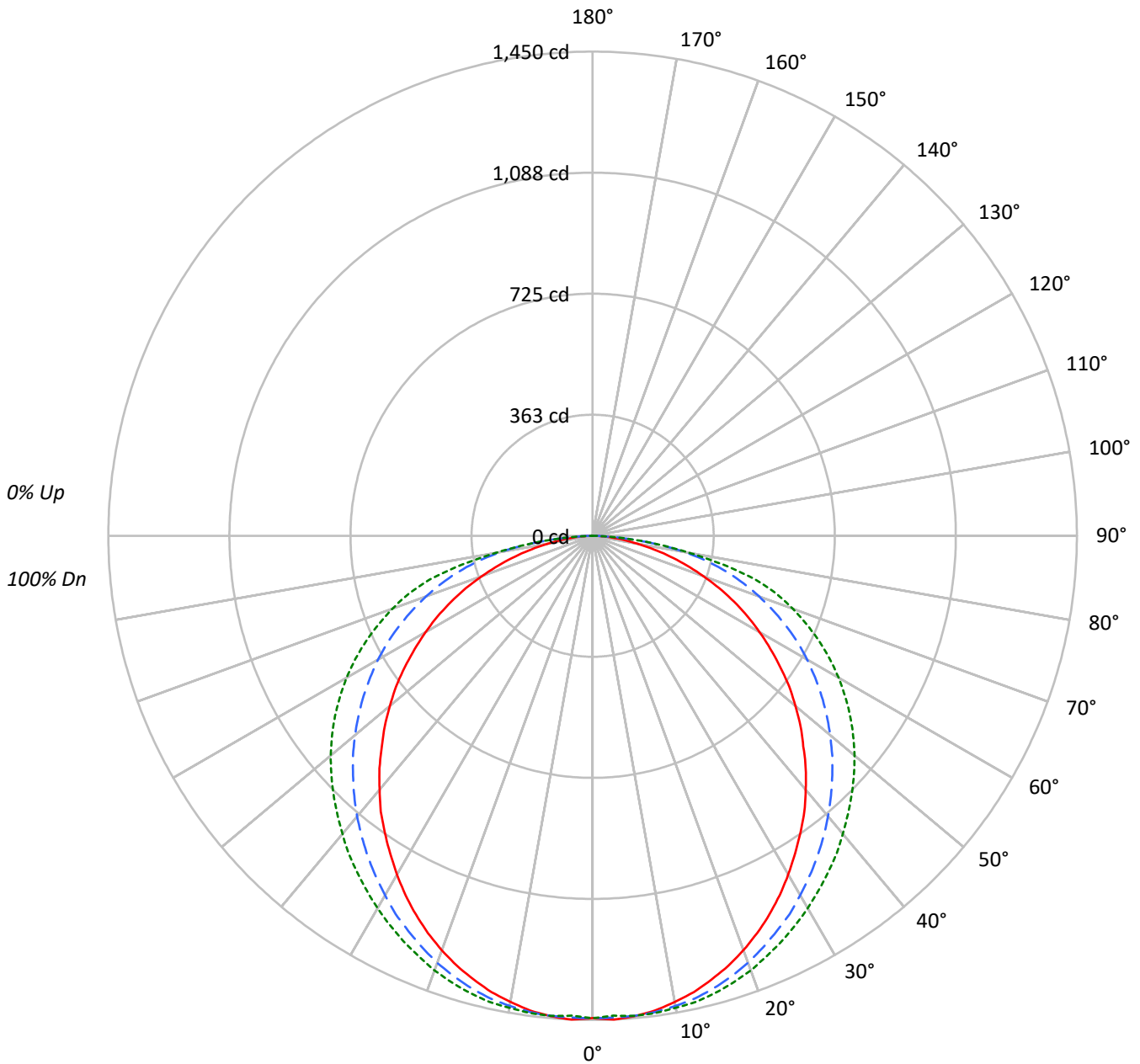
Lumens per Lamp: N/A  
Luminaire Lumens: 4519.0 lumens  
Efficiency: N/A  
Efficacy: 113.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 40  
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°	2039	2039	2039
5°	2046	2044	2044
10°	2032	2049	2057
15°	2010	2050	2071
20°	1984	2044	2080
25°	1950	2033	2087
30°	1909	2026	2099
35°	1869	2021	2118
40°	1828	2021	2147
45°	1781	2025	2189
50°	1740	2038	2248
55°	1689	2060	2317
60°	1630	2093	2401
65°	1560	2133	2502
70°	1447	2186	2630
75°	1310	2262	2750
80°	1104	2268	2364
85°	845	1715	1715



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.1	3.0
10°-20°	394.5	8.7
20°-30°	599.2	13.3
30°-40°	728.9	16.1
40°-50°	776.0	17.2
50°-60°	739.1	16.4
60°-70°	618.1	13.7
70°-80°	412.1	9.1
80°-90°	114.0	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°	1130.8	25.0
0°-40°	1859.7	41.2
0°-60°	3374.8	74.7
0°-90°	4519.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4519.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1444	1444	1444	1444	1444	
5°	1444	1436	1443	1443	1443	137
15°	1376	1379	1403	1413	1418	388
25°	1252	1268	1306	1328	1340	576
35°	1085	1116	1173	1212	1230	679
45°	892	940	1015	1072	1097	690
55°	686	746	837	910	942	614
65°	467	536	639	718	749	461
75°	240	316	415	485	504	255
85°	52	97	106	104	106	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1444.4	1444.4	1444.4	1444.4	1444.4
2.5°	1450.4	1440.0	1444.4	1444.4	1438.6
5°	1444.4	1435.5	1443.1	1443.1	1443.1
7.5°	1434.1	1426.6	1438.6	1441.5	1441.5
10°	1417.7	1414.7	1429.7	1434.1	1435.5
12.5°	1399.8	1398.3	1419.2	1425.0	1429.7
15°	1375.8	1378.9	1402.7	1413.2	1417.7
17.5°	1350.5	1356.4	1383.3	1398.3	1402.7
20°	1320.7	1329.6	1361.0	1375.8	1384.9
22.5°	1287.9	1301.3	1334.1	1351.9	1362.4
25°	1252.0	1268.3	1305.8	1328.1	1340.1
27.5°	1213.2	1234.2	1277.4	1302.6	1314.7
30°	1171.4	1195.2	1243.1	1273.0	1287.9
32.5°	1128.1	1156.4	1208.8	1241.6	1259.4
35°	1084.9	1116.3	1172.9	1211.7	1229.5
37.5°	1041.6	1072.8	1135.7	1177.4	1199.9
40°	992.4	1029.6	1096.9	1143.0	1165.5
42.5°	944.6	984.8	1056.5	1107.2	1131.2
45°	892.3	940.2	1014.7	1071.5	1096.9
47.5°	844.6	892.3	973.0	1032.7	1061.0
50°	792.4	843.0	928.2	993.9	1023.8
52.5°	741.6	794.0	883.4	953.6	983.4
55°	686.5	746.1	837.2	910.3	941.5
57.5°	631.3	695.4	789.3	865.5	896.9
60°	577.5	643.1	741.6	817.8	850.6
62.5°	523.8	589.4	692.3	769.9	801.3
65°	467.0	535.6	638.6	717.7	749.2
67.5°	410.4	481.9	584.9	664.0	693.9
70°	350.6	426.8	529.8	607.4	637.3
72.5°	295.6	371.6	473.0	549.2	577.5
75°	240.3	316.3	414.8	485.0	504.4
77.5°	186.6	262.6	350.6	397.0	401.4
80°	135.8	207.5	279.1	292.5	290.9
82.5°	91.0	155.1	192.6	193.9	198.4
85°	52.2	97.0	105.9	104.5	105.9
87.5°	20.9	34.3	29.9	22.3	22.3
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)