

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: P880921

Luminaire Tested: **24CZ2-50VHE-SQR-B2750-W2D-5000K**

Issue Date: 10/2/2024

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P880921  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P474669)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-50VHE-SQR-B2750-W2D-5000K  
Description: 2X4 5000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND SQR LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

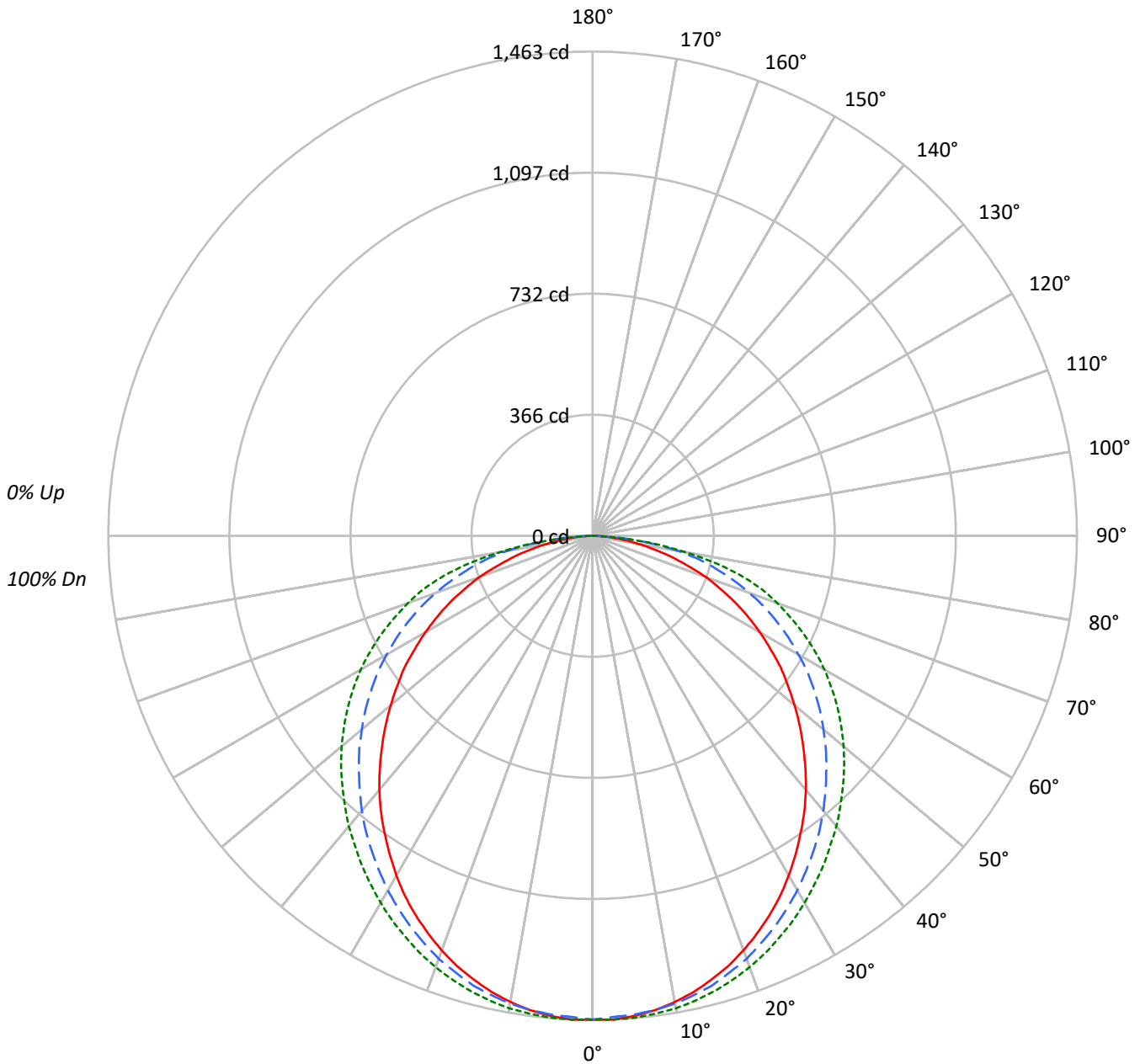
Lumens per Lamp: N/A  
Luminaire Lumens: 4450.0 lumens  
Efficiency: N/A  
Efficacy: 117.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): 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	101	96	93	96	93	90	92	90	87	89	87	84	82																			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68																			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56																			
4	81	69	59	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48																			
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41																			
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36																			
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31																			
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28																			
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25																			
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23																			

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

	0°	45°	90°
0°	2063	2063	2063
5°	2063	2057	2071
10°	2050	2057	2077
15°	2028	2053	2081
20°	2002	2043	2083
25°	1970	2028	2083
30°	1931	2016	2087
35°	1888	2004	2095
40°	1847	1998	2111
45°	1796	1992	2134
50°	1748	1998	2173
55°	1707	2012	2222
60°	1650	2027	2284
65°	1584	2051	2353
70°	1502	2080	2447
75°	1345	2109	2527
80°	1133	2115	2294
85°	840	1600	1508



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.5	3.1
10°-20°	397.0	8.9
20°-30°	600.9	13.5
30°-40°	727.0	16.3
40°-50°	767.4	17.2
50°-60°	723.6	16.3
60°-70°	596.6	13.4
70°-80°	391.4	8.8
80°-90°	107.6	2.4
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°	1136.4	25.5
0°-40°	1863.4	41.9
0°-60°	3354.4	75.4
0°-90°	4450.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4450.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1462	1462	1462	1462	1462	
5°	1456	1456	1452	1462	1462	138
15°	1388	1396	1405	1421	1424	391
25°	1265	1280	1302	1330	1338	582
35°	1096	1124	1163	1203	1216	686
45°	900	940	998	1051	1069	695
55°	694	743	818	879	903	618
65°	474	531	614	680	704	468
75°	247	310	387	448	464	261
85°	52	90	99	96	93	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1461.7	1461.7	1461.7	1461.7	1461.7
2.5°	1463.1	1461.7	1455.3	1463.8	1463.1
5°	1455.9	1455.9	1451.8	1461.7	1461.7
7.5°	1446.0	1446.7	1445.3	1456.7	1456.7
10°	1430.4	1433.2	1435.3	1448.2	1449.6
12.5°	1411.9	1416.9	1421.1	1436.8	1438.3
15°	1387.7	1395.6	1404.8	1421.1	1424.1
17.5°	1362.8	1372.2	1382.1	1403.4	1407.0
20°	1333.0	1343.7	1360.0	1381.4	1387.0
22.5°	1299.7	1314.5	1331.5	1357.2	1364.3
25°	1264.8	1280.4	1302.5	1329.5	1337.9
27.5°	1227.1	1245.5	1270.4	1301.7	1310.9
30°	1185.2	1206.4	1237.1	1270.4	1280.4
32.5°	1141.0	1165.9	1200.0	1237.1	1248.3
35°	1095.6	1123.9	1163.1	1203.0	1215.7
37.5°	1050.7	1079.2	1125.4	1167.4	1179.4
40°	1002.4	1033.6	1084.2	1129.0	1146.0
42.5°	951.2	988.3	1041.5	1091.3	1107.6
45°	900.0	940.5	998.2	1051.4	1069.2
47.5°	848.1	892.9	956.2	1010.2	1030.8
50°	796.2	843.8	910.0	968.3	989.6
52.5°	743.6	793.4	865.2	927.0	946.3
55°	693.9	742.9	817.6	878.7	902.9
57.5°	636.3	691.7	770.6	832.6	856.0
60°	584.4	638.5	718.1	783.5	809.0
62.5°	528.2	583.6	667.5	732.9	757.8
65°	474.2	531.1	614.3	679.7	704.5
67.5°	415.9	475.7	560.9	624.2	648.4
70°	364.0	420.2	504.0	568.8	593.0
72.5°	300.7	364.8	445.0	509.0	535.3
75°	246.7	309.9	386.7	447.9	463.5
77.5°	189.8	253.1	329.2	368.9	379.6
80°	139.4	199.0	260.2	281.6	282.2
82.5°	93.9	146.5	181.3	192.0	190.5
85°	51.9	89.6	98.8	95.9	93.1
87.5°	21.4	29.8	24.2	17.1	13.5
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)