

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: P881221

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

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: P881221
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-UNV-B35
Description: 2X4 5000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND SQR LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

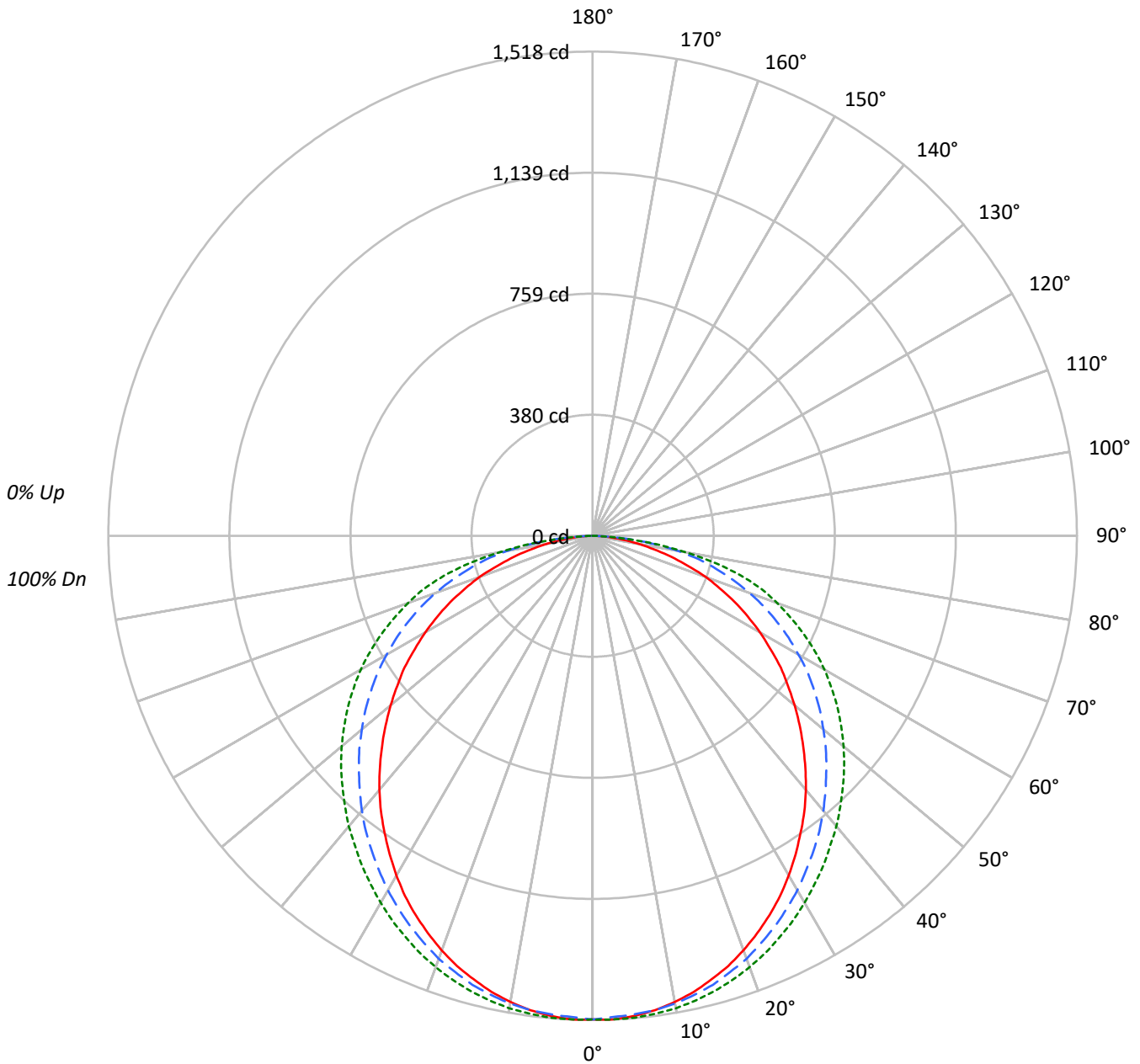
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4617.0 lumens
Efficiency: N/A
Efficacy: 121.5 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

TEST NUMBER: P881221
CATALOG NUMBER: 24CZ2-50VHE-SQR-UNV-B35

Luminous Intensity Polar Plot





TEST NUMBER: P881221

CATALOG NUMBER: 24CZ2-50VHE-SQR-UNV-B35

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°	2140	2140	2140
5°	2140	2134	2149
10°	2127	2134	2155
15°	2104	2130	2159
20°	2077	2119	2161
25°	2044	2104	2162
30°	2004	2092	2165
35°	1958	2079	2173
40°	1916	2072	2191
45°	1864	2067	2214
50°	1814	2073	2254
55°	1772	2087	2305
60°	1711	2103	2369
65°	1643	2129	2441
70°	1559	2158	2539
75°	1396	2188	2622
80°	1175	2194	2380
85°	871	1660	1564



TEST NUMBER: P881221

CATALOG NUMBER: 24CZ2-50VHE-SQR-UNV-B35

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.7	3.1
10°-20°	411.9	8.9
20°-30°	623.5	13.5
30°-40°	754.3	16.3
40°-50°	796.2	17.2
50°-60°	750.8	16.3
60°-70°	619.0	13.4
70°-80°	406.1	8.8
80°-90°	111.6	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°	1179.1	25.5
0°-40°	1933.3	41.9
0°-60°	3480.3	75.4
0°-90°	4617.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4617.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1517	1517	1517	1517	1517	
5°	1511	1511	1506	1517	1517	143
15°	1440	1448	1458	1474	1478	406
25°	1312	1328	1351	1379	1388	604
35°	1137	1166	1207	1248	1261	712
45°	934	976	1036	1091	1109	721
55°	720	771	848	912	937	641
65°	492	551	637	705	731	486
75°	256	322	401	465	481	270
85°	54	93	102	100	97	67
90°	0	0	0	0	0	



TEST NUMBER: P881221

CATALOG NUMBER: 24CZ2-50VHE-SQR-UNV-B35

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1516.6	1516.6	1516.6	1516.6	1516.6
2.5°	1518.0	1516.6	1510.0	1518.7	1518.0
5°	1510.6	1510.6	1506.3	1516.6	1516.6
7.5°	1500.3	1501.0	1499.5	1511.3	1511.3
10°	1484.1	1487.0	1489.2	1502.6	1504.0
12.5°	1464.9	1470.1	1474.4	1490.7	1492.3
15°	1439.8	1448.0	1457.5	1474.4	1477.5
17.5°	1414.0	1423.7	1434.0	1456.1	1459.8
20°	1383.0	1394.1	1411.0	1433.2	1439.0
22.5°	1348.4	1363.8	1381.5	1408.1	1415.5
25°	1312.3	1328.4	1351.3	1379.3	1388.1
27.5°	1273.2	1292.3	1318.1	1350.6	1360.1
30°	1229.7	1251.7	1283.5	1318.1	1328.4
32.5°	1183.8	1209.7	1245.0	1283.5	1295.2
35°	1136.7	1166.1	1206.7	1248.1	1261.4
37.5°	1090.1	1119.7	1167.7	1211.2	1223.7
40°	1040.0	1072.4	1124.9	1171.4	1189.0
42.5°	986.9	1025.4	1080.6	1132.3	1149.2
45°	933.8	975.8	1035.7	1090.9	1109.4
47.5°	880.0	926.4	992.1	1048.1	1069.5
50°	826.1	875.5	944.1	1004.6	1026.7
52.5°	771.5	823.2	897.7	961.8	981.8
55°	720.0	770.7	848.3	911.7	936.7
57.5°	660.1	717.7	799.5	863.8	888.1
60°	606.3	662.4	745.1	812.9	839.4
62.5°	548.0	605.5	692.6	760.4	786.3
65°	492.0	551.1	637.4	705.2	730.9
67.5°	431.5	493.5	582.0	647.7	672.8
70°	377.7	436.0	522.9	590.1	615.2
72.5°	312.0	378.5	461.7	528.1	555.4
75°	256.0	321.5	401.2	464.8	480.9
77.5°	196.9	262.6	341.5	382.8	393.8
80°	144.6	206.5	270.0	292.1	292.8
82.5°	97.4	152.0	188.1	199.2	197.7
85°	53.8	92.9	102.5	99.5	96.6
87.5°	22.2	30.9	25.1	17.7	14.0
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)