

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: P880920

Luminaire Tested: **24CZ2-50VHE-SQR-B2750-W2D-4000K**

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: P880920  
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-4000K  
Description: 2X4 5000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND SQR LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

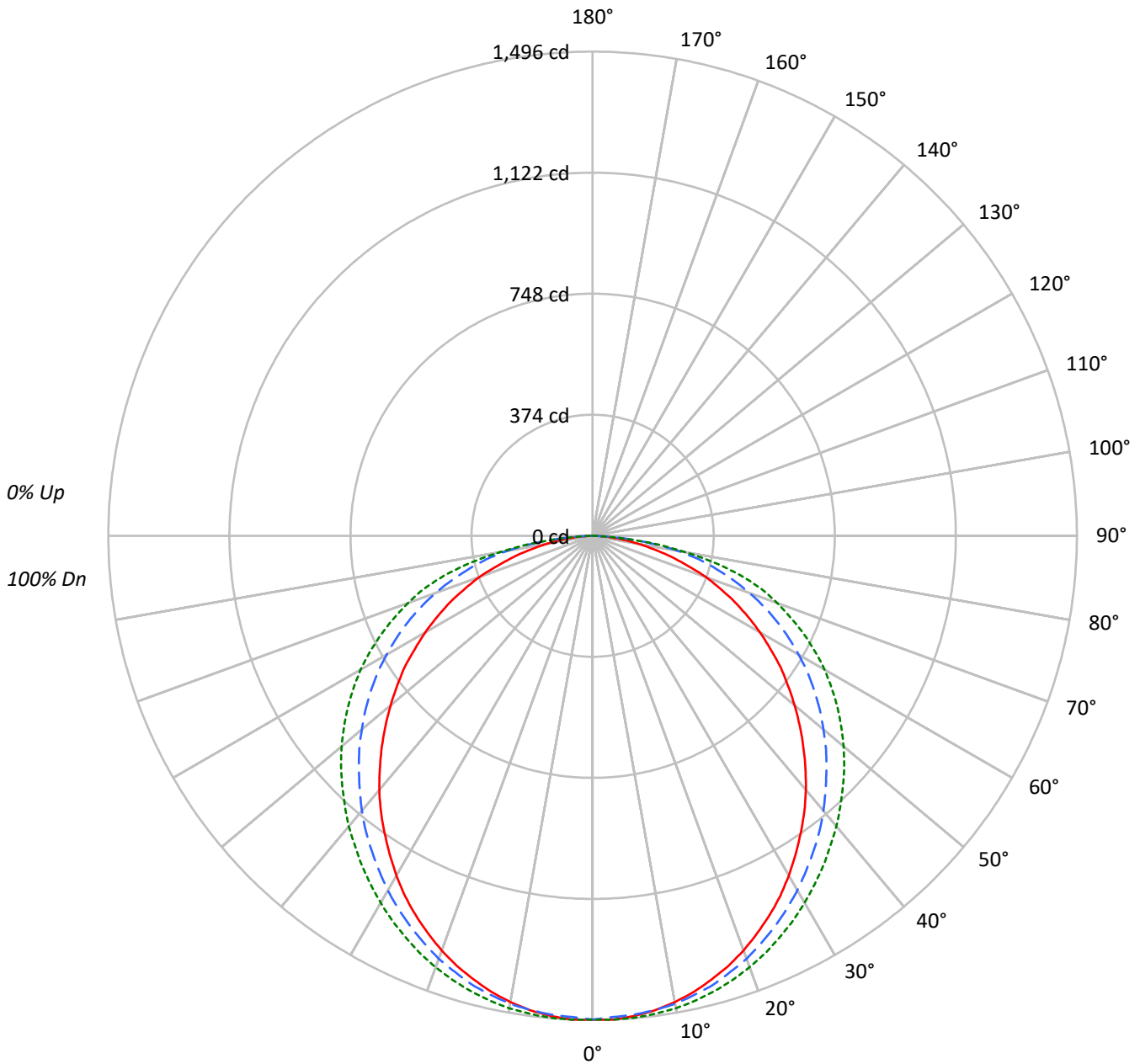
Lumens per Lamp: N/A  
Luminaire Lumens: 4551.0 lumens  
Efficiency: N/A  
Efficacy: 119.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

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				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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82				82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68				68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56				56
4	81	69	59	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48				48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41				41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36				36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31				31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28				28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25				25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23				23

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

	0°	45°	90°
0°	2110	2110	2110
5°	2110	2103	2118
10°	2096	2104	2125
15°	2074	2099	2128
20°	2048	2089	2130
25°	2014	2074	2131
30°	1975	2062	2134
35°	1931	2049	2142
40°	1889	2043	2159
45°	1837	2038	2183
50°	1788	2043	2222
55°	1746	2058	2272
60°	1687	2073	2335
65°	1620	2098	2406
70°	1536	2127	2502
75°	1376	2157	2585
80°	1158	2163	2346
85°	860	1636	1542



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.7	3.1
10°-20°	406.0	8.9
20°-30°	614.6	13.5
30°-40°	743.5	16.3
40°-50°	784.8	17.2
50°-60°	740.1	16.3
60°-70°	610.2	13.4
70°-80°	400.2	8.8
80°-90°	110.0	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°	1162.2	25.5
0°-40°	1905.7	41.9
0°-60°	3430.6	75.4
0°-90°	4551.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4551.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1495	1495	1495	1495	1495	
5°	1489	1489	1485	1495	1495	141
15°	1419	1427	1437	1453	1456	400
25°	1294	1309	1332	1360	1368	596
35°	1120	1150	1190	1230	1243	701
45°	920	962	1021	1075	1094	710
55°	710	760	836	899	923	632
65°	485	543	628	695	720	479
75°	252	317	396	458	474	267
85°	53	92	101	98	95	66
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1494.9	1494.9	1494.9	1494.9	1494.9
2.5°	1496.3	1494.9	1488.4	1497.0	1496.3
5°	1489.0	1489.0	1484.7	1494.9	1494.9
7.5°	1478.8	1479.6	1478.1	1489.7	1489.7
10°	1462.9	1465.8	1467.9	1481.1	1482.5
12.5°	1443.9	1449.1	1453.3	1469.4	1470.9
15°	1419.2	1427.3	1436.7	1453.3	1456.4
17.5°	1393.7	1403.3	1413.5	1435.3	1438.9
20°	1363.3	1374.2	1390.9	1412.7	1418.5
22.5°	1329.1	1344.3	1361.8	1388.0	1395.3
25°	1293.5	1309.4	1332.0	1359.6	1368.3
27.5°	1255.0	1273.8	1299.3	1331.3	1340.7
30°	1212.1	1233.8	1265.2	1299.3	1309.4
32.5°	1166.9	1192.4	1227.2	1265.2	1276.7
35°	1120.5	1149.5	1189.5	1230.3	1243.3
37.5°	1074.5	1103.7	1151.0	1193.9	1206.2
40°	1025.1	1057.1	1108.8	1154.6	1172.0
42.5°	972.8	1010.7	1065.1	1116.1	1132.8
45°	920.5	961.9	1020.9	1075.3	1093.5
47.5°	867.4	913.2	977.9	1033.1	1054.2
50°	814.3	863.0	930.6	990.2	1012.1
52.5°	760.5	811.4	884.8	948.1	967.8
55°	709.7	759.7	836.2	898.6	923.4
57.5°	650.7	707.4	788.1	851.5	875.4
60°	597.6	653.0	734.4	801.3	827.4
62.5°	540.2	596.9	682.7	749.6	775.0
65°	485.0	543.2	628.3	695.1	720.5
67.5°	425.4	486.5	573.7	638.4	663.1
70°	372.3	429.8	515.4	581.7	606.4
72.5°	307.5	373.0	455.1	520.6	547.4
75°	252.3	316.9	395.5	458.1	474.0
77.5°	194.1	258.9	336.6	377.3	388.2
80°	142.5	203.5	266.1	288.0	288.6
82.5°	96.0	149.8	185.5	196.4	194.9
85°	53.1	91.6	101.0	98.1	95.2
87.5°	21.8	30.5	24.7	17.4	13.8
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)