

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: P388091

Luminaire Tested: **22CZ2-55VHE-SQR-UNV-L950-CD1-U**

Issue Date: 2/28/2020

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: P388091
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-55VHE-SQR-UNV-L950-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4815.4 lumens
Efficiency: N/A
Efficacy: 122.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

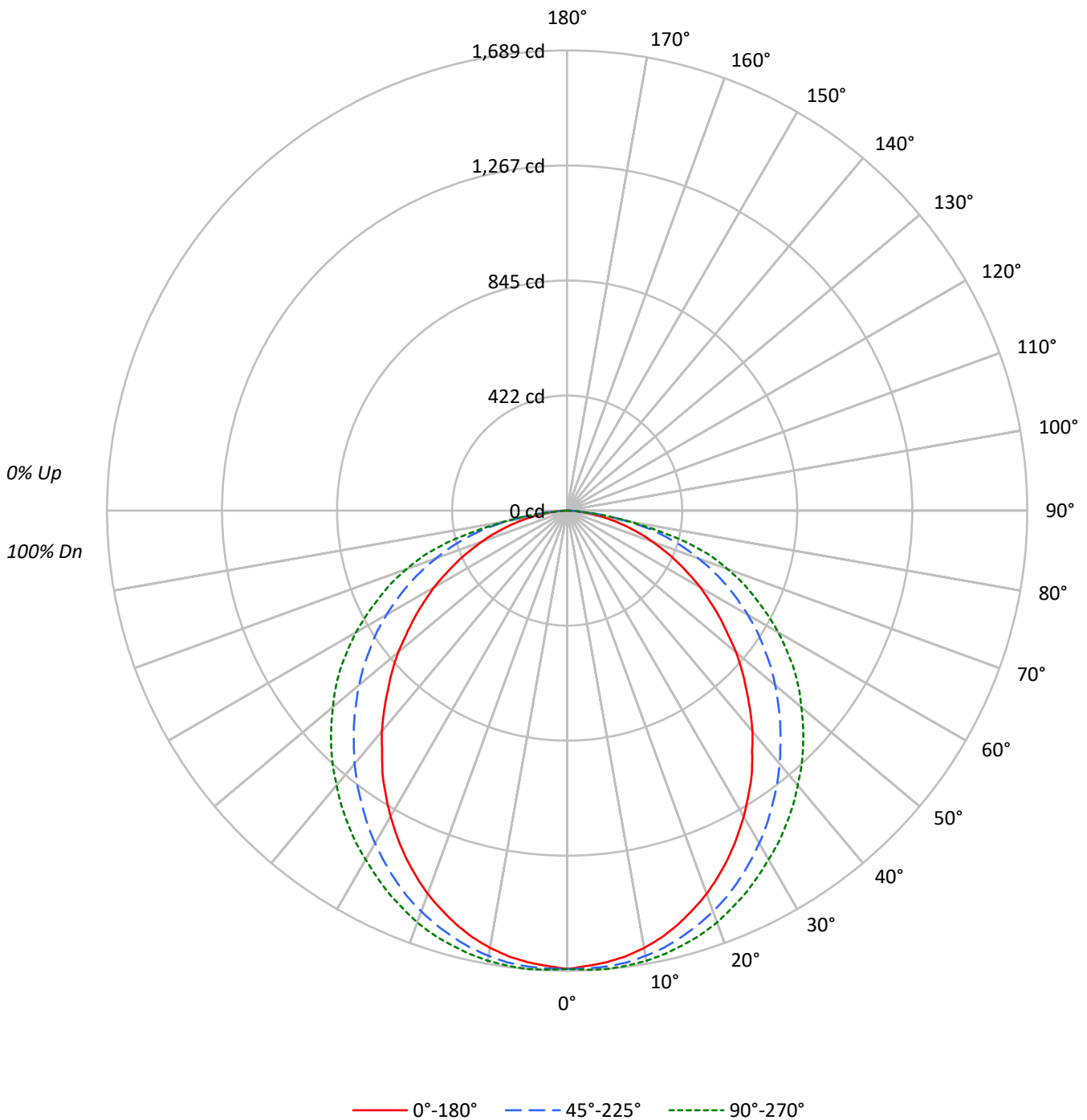
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4526	4526	4526
5°	4495	4538	4562
10°	4453	4534	4584
15°	4381	4514	4597
20°	4287	4483	4608
25°	4167	4438	4601
30°	4027	4382	4595
35°	3882	4317	4610
40°	3717	4263	4625
45°	3540	4210	4662
50°	3387	4172	4698
55°	3206	4139	4772
60°	3038	4120	4822
65°	2838	4089	4861
70°	2607	4028	4927
75°	2353	3921	4753
80°	2019	3471	3577
85°	1624	2047	1624



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.5	3.3
10°-20°	455.9	9.5
20°-30°	684.8	14.2
30°-40°	816.7	17.0
40°-50°	844.4	17.5
50°-60°	776.3	16.1
60°-70°	618.0	12.8
70°-80°	377.6	7.8
80°-90°	82.1	1.7
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°	1300.2	27.0
0°-40°	2116.9	44.0
0°-60°	3737.7	77.6
0°-90°	4815.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4815.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1682	1682	1682	1682	1682	
5°	1664	1668	1680	1687	1689	158
15°	1572	1591	1620	1643	1650	443
25°	1403	1438	1495	1536	1550	645
35°	1182	1232	1314	1383	1403	737
45°	930	996	1106	1195	1225	719
55°	683	759	882	983	1017	611
65°	446	521	642	731	763	441
75°	226	292	377	443	457	241
85°	53	64	66	57	53	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1682.1	1682.1	1682.1	1682.1	1682.1
2.5°	1673.0	1675.3	1682.1	1686.7	1686.7
5°	1663.9	1668.4	1679.8	1686.7	1689.0
7.5°	1650.1	1657.0	1673.0	1682.1	1684.4
10°	1629.6	1638.7	1659.3	1673.0	1677.6
12.5°	1604.4	1618.1	1643.3	1661.6	1666.1
15°	1572.4	1590.7	1620.4	1643.3	1650.1
17.5°	1535.9	1558.7	1595.3	1622.7	1631.9
20°	1497.0	1519.9	1565.6	1597.6	1609.0
22.5°	1451.3	1481.0	1533.6	1570.1	1579.3
25°	1403.3	1437.6	1494.7	1535.9	1549.6
27.5°	1350.7	1391.9	1453.6	1503.9	1515.3
30°	1295.9	1339.3	1410.2	1465.0	1478.7
32.5°	1238.7	1289.0	1364.4	1426.2	1444.4
35°	1181.6	1231.9	1314.2	1382.7	1403.3
37.5°	1115.3	1174.8	1266.2	1337.0	1362.2
40°	1058.2	1115.3	1213.6	1291.3	1316.5
42.5°	994.2	1055.9	1158.8	1243.3	1273.0
45°	930.2	996.5	1106.2	1195.3	1225.0
47.5°	870.8	937.1	1051.3	1145.0	1174.8
50°	809.1	877.6	996.5	1092.5	1122.2
52.5°	742.8	818.2	941.6	1037.6	1071.9
55°	683.4	758.8	882.2	982.8	1017.1
57.5°	621.7	699.4	827.4	923.3	955.3
60°	564.5	639.9	765.6	859.4	895.9
62.5°	502.8	580.5	703.9	795.4	829.6
65°	445.7	521.1	642.2	731.4	763.4
67.5°	388.5	464.0	578.2	662.8	699.4
70°	331.4	406.8	512.0	594.2	626.2
72.5°	281.1	347.4	448.0	523.4	553.1
75°	226.3	292.5	377.1	443.4	457.1
77.5°	176.0	235.4	306.3	336.0	340.5
80°	130.3	176.0	224.0	230.8	230.8
82.5°	86.8	121.1	139.4	141.7	139.4
85°	52.6	64.0	66.3	57.1	52.6
87.5°	18.3	18.3	11.4	6.9	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)