

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: P388089

Luminaire Tested: **22CZ2-55VHE-SQR-UNV-L950-CD1-SDWPD1-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: P388089
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-SDWPD1-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: 4698.3 lumens
Efficiency: N/A
Efficacy: 119.2 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

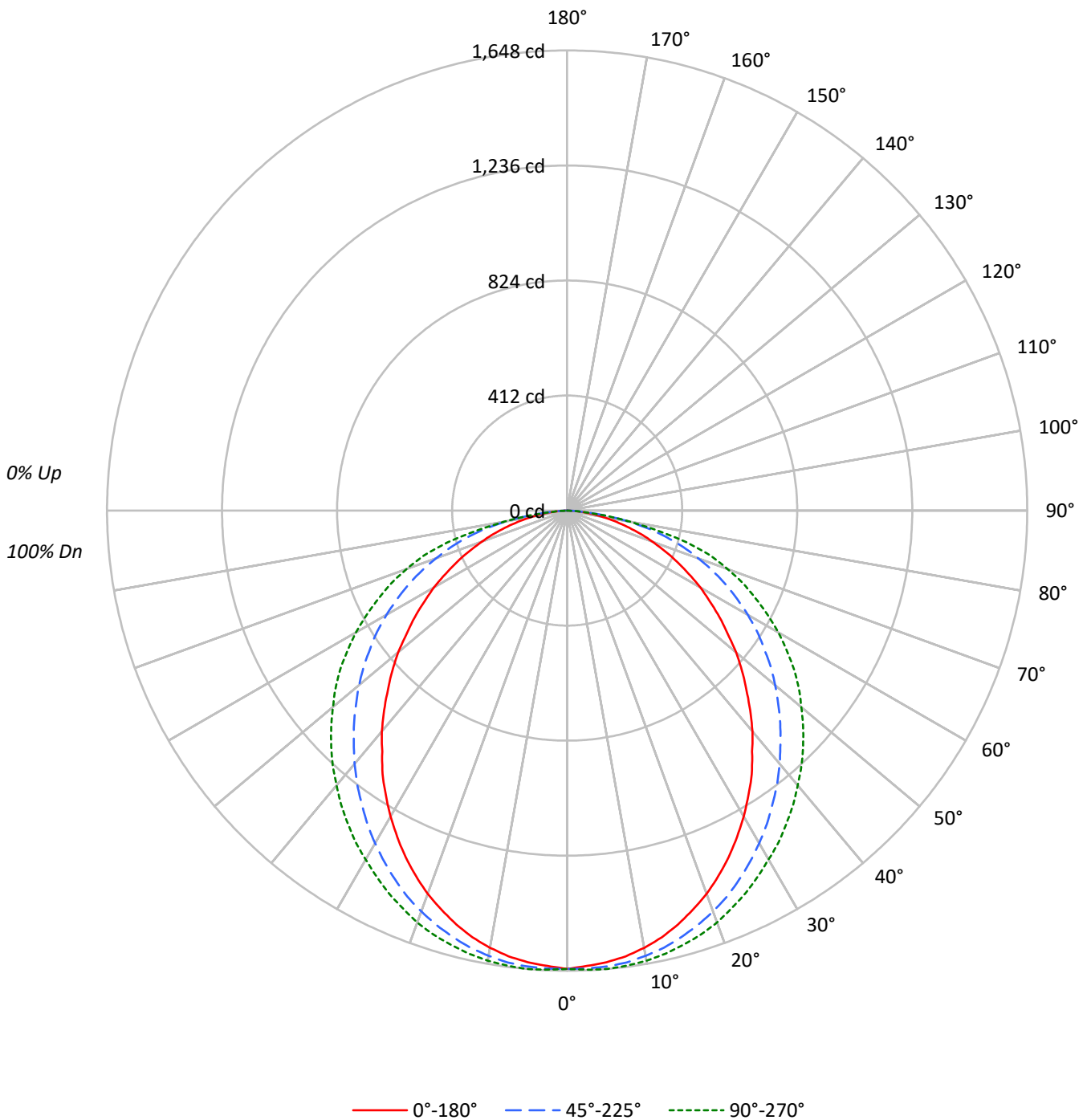
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4416	4416	4416
5°	4385	4427	4451
10°	4344	4424	4473
15°	4274	4405	4485
20°	4183	4374	4496
25°	4065	4330	4489
30°	3929	4275	4483
35°	3787	4212	4498
40°	3627	4160	4512
45°	3454	4107	4548
50°	3305	4070	4584
55°	3128	4039	4655
60°	2964	4020	4704
65°	2769	3990	4742
70°	2544	3930	4807
75°	2296	3825	4637
80°	1970	3386	3490
85°	1584	1998	1584



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.6	3.3
10°-20°	444.9	9.5
20°-30°	668.1	14.2
30°-40°	796.9	17.0
40°-50°	823.9	17.5
50°-60°	757.5	16.1
60°-70°	603.0	12.8
70°-80°	368.4	7.8
80°-90°	80.1	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°	1268.6	27.0
0°-40°	2065.4	44.0
0°-60°	3646.8	77.6
0°-90°	4698.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4698.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1641	1641	1641	1641	1641	
5°	1623	1628	1639	1646	1648	154
15°	1534	1552	1581	1603	1610	432
25°	1369	1403	1458	1498	1512	630
35°	1153	1202	1282	1349	1369	719
45°	908	972	1079	1166	1195	702
55°	667	740	861	959	992	596
65°	435	508	627	714	745	431
75°	221	285	368	433	446	235
85°	51	62	65	56	51	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1641.2	1641.2	1641.2	1641.2	1641.2
2.5°	1632.3	1634.5	1641.2	1645.7	1645.7
5°	1623.4	1627.8	1639.0	1645.7	1647.9
7.5°	1610.0	1616.7	1632.3	1641.2	1643.5
10°	1589.9	1598.9	1618.9	1632.3	1636.8
12.5°	1565.4	1578.8	1603.3	1621.2	1625.6
15°	1534.2	1552.0	1581.0	1603.3	1610.0
17.5°	1498.5	1520.8	1556.5	1583.3	1592.2
20°	1460.6	1482.9	1527.5	1558.7	1569.9
22.5°	1416.0	1445.0	1496.3	1532.0	1540.9
25°	1369.2	1402.6	1458.4	1498.5	1511.9
27.5°	1317.9	1358.0	1418.2	1467.3	1478.4
30°	1264.4	1306.7	1375.9	1429.4	1442.8
32.5°	1208.6	1257.7	1331.3	1391.5	1409.3
35°	1152.9	1201.9	1282.2	1349.1	1369.2
37.5°	1088.2	1146.2	1235.4	1304.5	1329.0
40°	1032.5	1088.2	1184.1	1259.9	1284.4
42.5°	970.0	1030.2	1130.6	1213.1	1242.1
45°	907.6	972.3	1079.3	1166.3	1195.2
47.5°	849.6	914.3	1025.8	1117.2	1146.2
50°	789.4	856.3	972.3	1065.9	1094.9
52.5°	724.7	798.3	918.7	1012.4	1045.8
55°	666.7	740.3	860.8	958.9	992.3
57.5°	606.5	682.4	807.2	900.9	932.1
60°	550.8	624.4	747.0	838.5	874.1
62.5°	490.6	566.4	686.8	776.0	809.5
65°	434.8	508.4	626.6	713.6	744.8
67.5°	379.1	452.7	564.2	646.7	682.4
70°	323.3	396.9	499.5	579.8	611.0
72.5°	274.3	338.9	437.1	510.7	539.6
75°	220.8	285.4	367.9	432.6	446.0
77.5°	171.7	229.7	298.8	327.8	332.3
80°	127.1	171.7	218.5	225.2	225.2
82.5°	84.7	118.2	136.0	138.3	136.0
85°	51.3	62.4	64.7	55.7	51.3
87.5°	17.8	17.8	11.1	6.7	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)