

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: P388139

Luminaire Tested: **22CZ2-65VHE-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: P388139
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: 22CZ2-65VHE-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: 5711.5 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

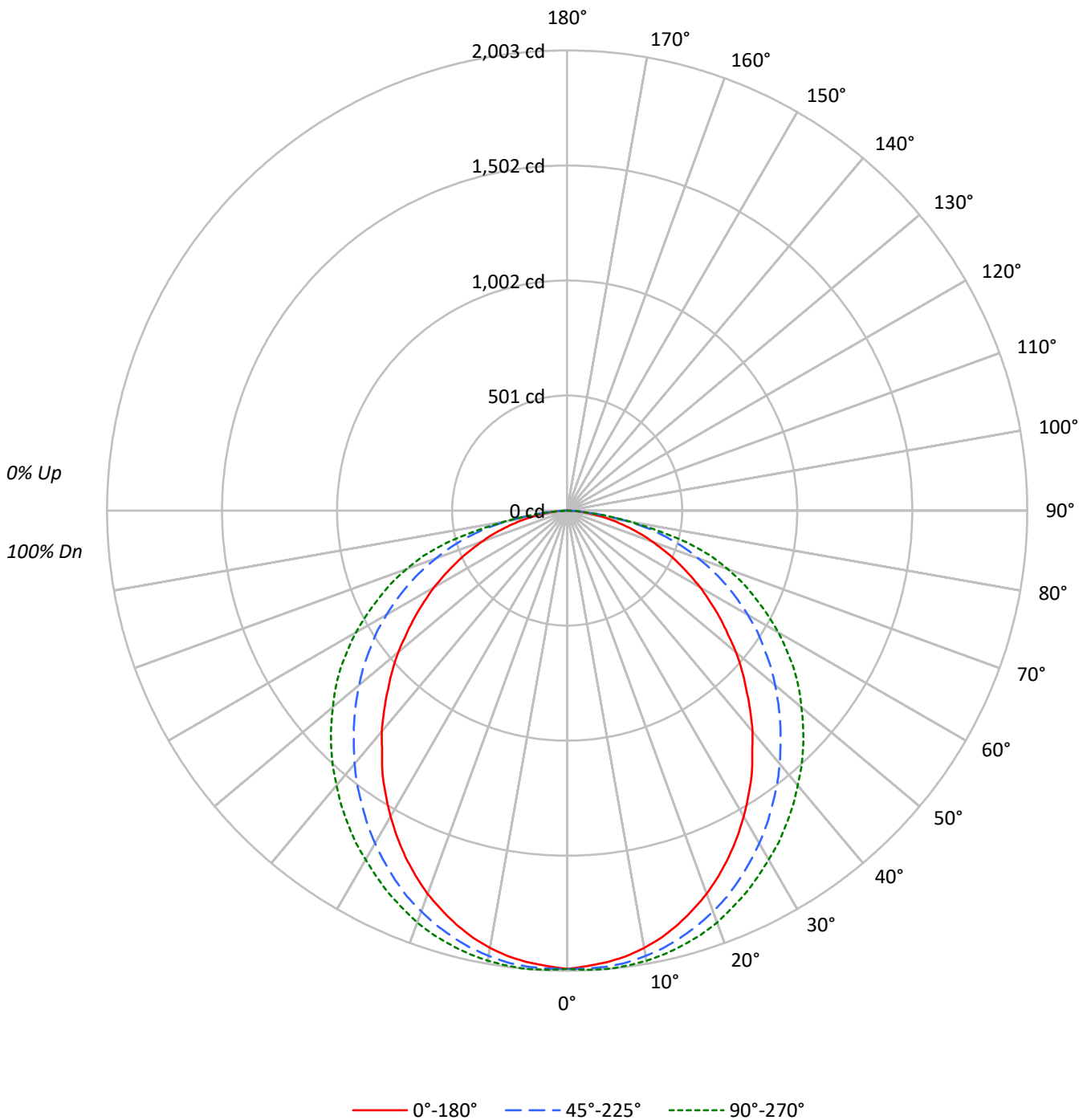
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5369	5369	5369
5°	5331	5382	5411
10°	5281	5378	5437
15°	5196	5355	5453
20°	5085	5318	5465
25°	4942	5264	5457
30°	4776	5197	5450
35°	4604	5120	5468
40°	4409	5056	5485
45°	4199	4993	5530
50°	4017	4948	5572
55°	3803	4909	5659
60°	3604	4887	5719
65°	3366	4850	5765
70°	3093	4777	5844
75°	2791	4651	5637
80°	2394	4117	4243
85°	1924	2427	1924



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.1	3.3
10°-20°	540.8	9.5
20°-30°	812.2	14.2
30°-40°	968.7	17.0
40°-50°	1001.6	17.5
50°-60°	920.8	16.1
60°-70°	733.0	12.8
70°-80°	447.9	7.8
80°-90°	97.4	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°	1542.2	27.0
0°-40°	2510.9	44.0
0°-60°	4433.2	77.6
0°-90°	5711.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5711.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1995	1995	1995	1995	1995	
5°	1974	1979	1992	2001	2003	187
15°	1865	1887	1922	1949	1957	525
25°	1664	1705	1773	1822	1838	766
35°	1402	1461	1559	1640	1664	874
45°	1103	1182	1312	1418	1453	853
55°	810	900	1046	1166	1206	725
65°	529	618	762	868	905	524
75°	268	347	447	526	542	286
85°	62	76	79	68	62	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1995.2	1995.2	1995.2	1995.2	1995.2
2.5°	1984.3	1987.0	1995.2	2000.6	2000.6
5°	1973.5	1978.9	1992.5	2000.6	2003.3
7.5°	1957.2	1965.3	1984.3	1995.2	1997.9
10°	1932.8	1943.7	1968.1	1984.3	1989.7
12.5°	1903.0	1919.3	1949.1	1970.8	1976.2
15°	1865.0	1886.7	1922.0	1949.1	1957.2
17.5°	1821.7	1848.8	1892.2	1924.7	1935.5
20°	1775.6	1802.7	1856.9	1894.9	1908.4
22.5°	1721.4	1756.6	1819.0	1862.3	1873.2
25°	1664.4	1705.1	1772.9	1821.7	1837.9
27.5°	1602.1	1650.9	1724.1	1783.7	1797.3
30°	1537.0	1588.5	1672.6	1737.6	1753.9
32.5°	1469.3	1528.9	1618.4	1691.6	1713.2
35°	1401.5	1461.1	1558.7	1640.0	1664.4
37.5°	1322.9	1393.4	1501.8	1585.8	1615.6
40°	1255.1	1322.9	1439.4	1531.6	1561.4
42.5°	1179.2	1252.4	1374.4	1474.7	1509.9
45°	1103.3	1181.9	1312.0	1417.8	1453.0
47.5°	1032.8	1111.4	1247.0	1358.1	1393.4
50°	959.6	1041.0	1181.9	1295.8	1331.0
52.5°	881.0	970.5	1116.9	1230.7	1271.4
55°	810.5	900.0	1046.4	1165.7	1206.3
57.5°	737.3	829.5	981.3	1095.2	1133.1
60°	669.6	759.0	908.1	1019.3	1062.6
62.5°	596.4	688.5	834.9	943.4	984.0
65°	528.6	618.1	761.7	867.5	905.4
67.5°	460.8	550.3	685.8	786.1	829.5
70°	393.1	482.5	607.2	704.8	742.8
72.5°	333.4	412.0	531.3	620.8	656.0
75°	268.4	347.0	447.3	525.9	542.2
77.5°	208.7	279.2	363.3	398.5	403.9
80°	154.5	208.7	265.7	273.8	273.8
82.5°	103.0	143.7	165.4	168.1	165.4
85°	62.3	75.9	78.6	67.8	62.3
87.5°	21.7	21.7	13.6	8.1	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)