

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: P388138

Luminaire Tested: **22CZ2-65VHE-SQR-UNV-L950-CD1-SWPD1-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: P388138  
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-SWPD1-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: 5640.6 lumens  
Efficiency: N/A  
Efficacy: 117.8 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

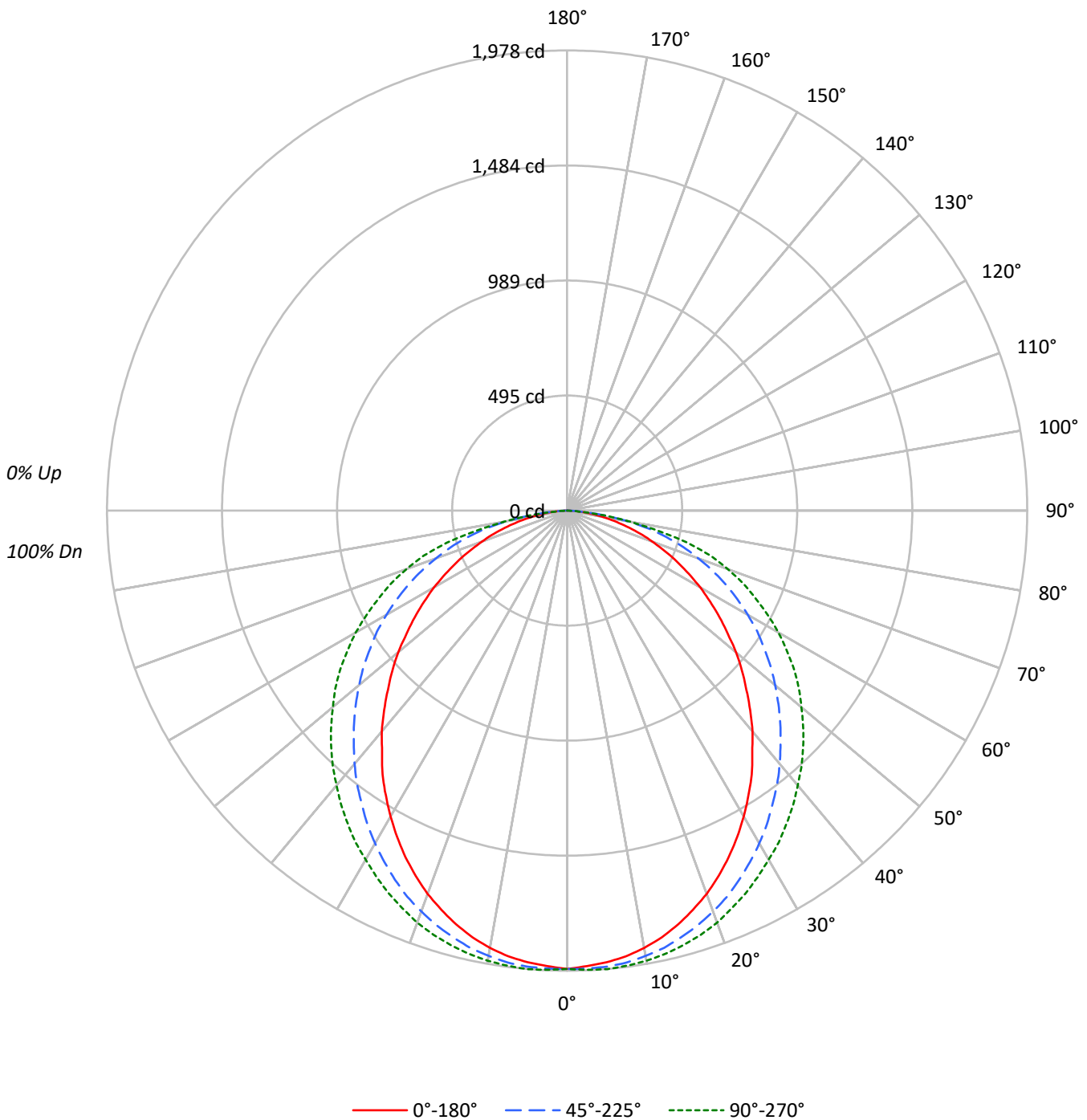
Input Watts (W): 47.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5302	5302	5302
5°	5265	5315	5344
10°	5216	5311	5369
15°	5131	5288	5385
20°	5021	5252	5397
25°	4881	5199	5389
30°	4717	5133	5382
35°	4547	5057	5400
40°	4354	4994	5417
45°	4147	4931	5461
50°	3967	4886	5503
55°	3756	4848	5589
60°	3559	4827	5648
65°	3324	4790	5694
70°	3054	4718	5771
75°	2755	4592	5567
80°	2365	4066	4190
85°	1902	2396	1902



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.8	3.3
10°-20°	534.1	9.5
20°-30°	802.2	14.2
30°-40°	956.7	17.0
40°-50°	989.1	17.5
50°-60°	909.4	16.1
60°-70°	724.0	12.8
70°-80°	442.3	7.8
80°-90°	96.1	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°	1523.0	27.0
0°-40°	2479.7	44.0
0°-60°	4378.2	77.6
0°-90°	5640.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5640.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1970	1970	1970	1970	1970	
5°	1949	1954	1968	1976	1978	185
15°	1842	1863	1898	1925	1933	519
25°	1644	1684	1751	1799	1815	756
35°	1384	1443	1539	1620	1644	864
45°	1090	1167	1296	1400	1435	843
55°	800	889	1033	1151	1191	716
65°	522	610	752	857	894	517
75°	265	343	442	519	535	282
85°	62	75	78	67	62	71
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1970.4	1970.4	1970.4	1970.4	1970.4
2.5°	1959.7	1962.4	1970.4	1975.8	1975.8
5°	1949.0	1954.3	1967.7	1975.8	1978.4
7.5°	1932.9	1940.9	1959.7	1970.4	1973.1
10°	1908.8	1919.5	1943.6	1959.7	1965.0
12.5°	1879.4	1895.4	1924.9	1946.3	1951.7
15°	1841.9	1863.3	1898.1	1924.9	1932.9
17.5°	1799.1	1825.8	1868.7	1900.8	1911.5
20°	1753.5	1780.3	1833.9	1871.3	1884.7
22.5°	1700.0	1734.8	1796.4	1839.2	1849.9
25°	1643.8	1683.9	1750.9	1799.1	1815.1
27.5°	1582.2	1630.4	1702.7	1761.6	1775.0
30°	1518.0	1568.8	1651.8	1716.1	1732.1
32.5°	1451.0	1509.9	1598.3	1670.6	1692.0
35°	1384.1	1443.0	1539.4	1619.7	1643.8
37.5°	1306.5	1376.1	1483.2	1566.1	1595.6
40°	1239.5	1306.5	1421.6	1512.6	1542.1
42.5°	1164.6	1236.9	1357.3	1456.4	1491.2
45°	1089.6	1167.2	1295.8	1400.2	1435.0
47.5°	1020.0	1097.6	1231.5	1341.3	1376.1
50°	947.7	1028.0	1167.2	1279.7	1314.5
52.5°	870.1	958.4	1103.0	1215.4	1255.6
55°	800.5	888.8	1033.4	1151.2	1191.3
57.5°	728.2	819.2	969.1	1081.6	1119.1
60°	661.3	749.6	896.9	1006.6	1049.5
62.5°	589.0	680.0	824.6	931.7	971.8
65°	522.0	610.4	752.3	856.7	894.2
67.5°	455.1	543.5	677.3	776.4	819.2
70°	388.2	476.5	599.7	696.1	733.5
72.5°	329.3	406.9	524.7	613.1	647.9
75°	265.0	342.7	441.7	519.4	535.4
77.5°	206.1	275.7	358.7	393.5	398.9
80°	152.6	206.1	262.4	270.4	270.4
82.5°	101.7	141.9	163.3	166.0	163.3
85°	61.6	75.0	77.6	66.9	61.6
87.5°	21.4	21.4	13.4	8.0	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)