

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: P388162

Luminaire Tested: **22CZ2-70VHE-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: P388162
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: 22CZ2-70VHE-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: 6034.5 lumens
Efficiency: N/A
Efficacy: 120.0 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

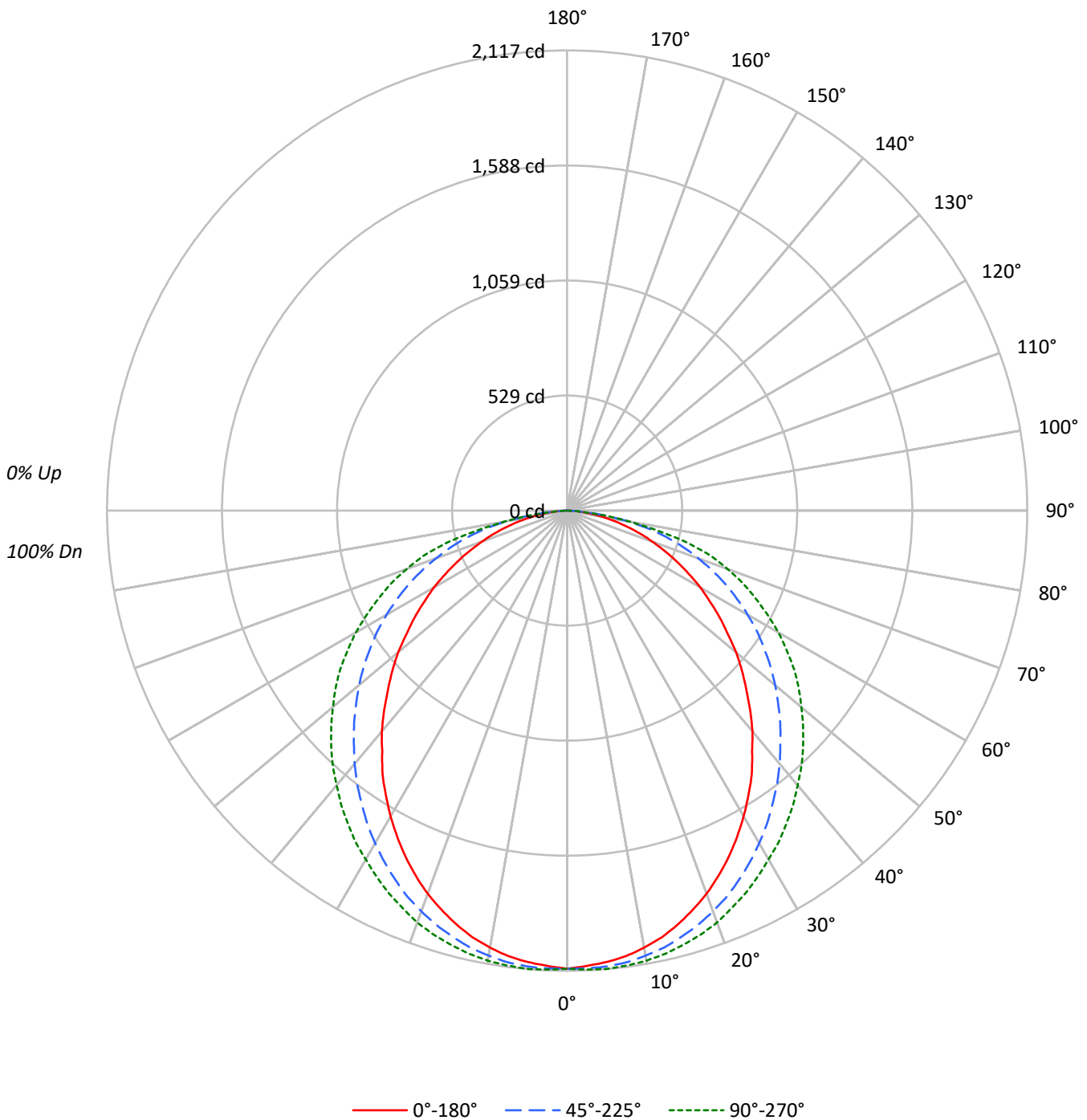
Input Watts (W): 50.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5673	5673	5673
5°	5632	5686	5717
10°	5580	5682	5745
15°	5490	5657	5761
20°	5372	5618	5774
25°	5222	5562	5766
30°	5046	5491	5758
35°	4865	5410	5777
40°	4658	5343	5795
45°	4436	5275	5842
50°	4245	5228	5887
55°	4018	5187	5979
60°	3807	5164	6042
65°	3556	5124	6091
70°	3268	5048	6175
75°	2948	4914	5955
80°	2531	4350	4483
85°	2035	2566	2035



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.8	3.3
10°-20°	571.4	9.5
20°-30°	858.2	14.2
30°-40°	1023.5	17.0
40°-50°	1058.2	17.5
50°-60°	972.9	16.1
60°-70°	774.5	12.8
70°-80°	473.2	7.8
80°-90°	102.9	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°	1629.4	27.0
0°-40°	2652.9	44.0
0°-60°	4684.0	77.6
0°-90°	6034.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6034.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2108	2108	2108	2108	2108	
5°	2085	2091	2105	2114	2117	198
15°	1970	1993	2031	2059	2068	555
25°	1759	1802	1873	1925	1942	809
35°	1481	1544	1647	1733	1759	924
45°	1166	1249	1386	1498	1535	901
55°	856	951	1106	1232	1274	766
65°	558	653	805	916	957	553
75°	284	367	473	556	573	302
85°	66	80	83	72	66	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2108.0	2108.0	2108.0	2108.0	2108.0
2.5°	2096.5	2099.4	2108.0	2113.7	2113.7
5°	2085.1	2090.8	2105.1	2113.7	2116.6
7.5°	2067.9	2076.5	2096.5	2108.0	2110.9
10°	2042.1	2053.6	2079.4	2096.5	2102.3
12.5°	2010.6	2027.8	2059.3	2082.2	2087.9
15°	1970.5	1993.4	2030.7	2059.3	2067.9
17.5°	1924.7	1953.3	1999.2	2033.5	2045.0
20°	1876.0	1904.6	1961.9	2002.0	2016.3
22.5°	1818.7	1856.0	1921.8	1967.7	1979.1
25°	1758.6	1801.5	1873.1	1924.7	1941.9
27.5°	1692.7	1744.3	1821.6	1884.6	1898.9
30°	1624.0	1678.4	1767.2	1835.9	1853.1
32.5°	1552.4	1615.4	1709.9	1787.2	1810.1
35°	1480.8	1543.8	1646.9	1732.8	1758.6
37.5°	1397.7	1472.2	1586.7	1675.5	1707.0
40°	1326.1	1397.7	1520.9	1618.2	1649.7
42.5°	1245.9	1323.2	1452.1	1558.1	1595.3
45°	1165.7	1248.8	1386.2	1497.9	1535.2
47.5°	1091.2	1174.3	1317.5	1434.9	1472.2
50°	1013.9	1099.8	1248.8	1369.1	1406.3
52.5°	930.8	1025.4	1180.0	1300.3	1343.3
55°	856.4	950.9	1105.6	1231.6	1274.5
57.5°	779.0	876.4	1036.8	1157.1	1197.2
60°	707.4	802.0	959.5	1076.9	1122.7
62.5°	630.1	727.5	882.2	996.7	1039.7
65°	558.5	653.0	804.8	916.5	956.6
67.5°	486.9	581.4	724.6	830.6	876.4
70°	415.3	509.8	641.6	744.7	784.8
72.5°	352.3	435.3	561.4	655.9	693.1
75°	283.5	366.6	472.6	555.6	572.8
77.5°	220.5	295.0	383.8	421.0	426.8
80°	163.3	220.5	280.7	289.3	289.3
82.5°	108.8	151.8	174.7	177.6	174.7
85°	65.9	80.2	83.1	71.6	65.9
87.5°	22.9	22.9	14.3	8.6	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)