

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: P388181

Luminaire Tested: **22CZ2-75VHE-SQR-UNV-L935-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: P388181
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: 22CZ2-75VHE-SQR-UNV-L935-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6136.2 lumens
Efficiency: N/A
Efficacy: 112.2 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

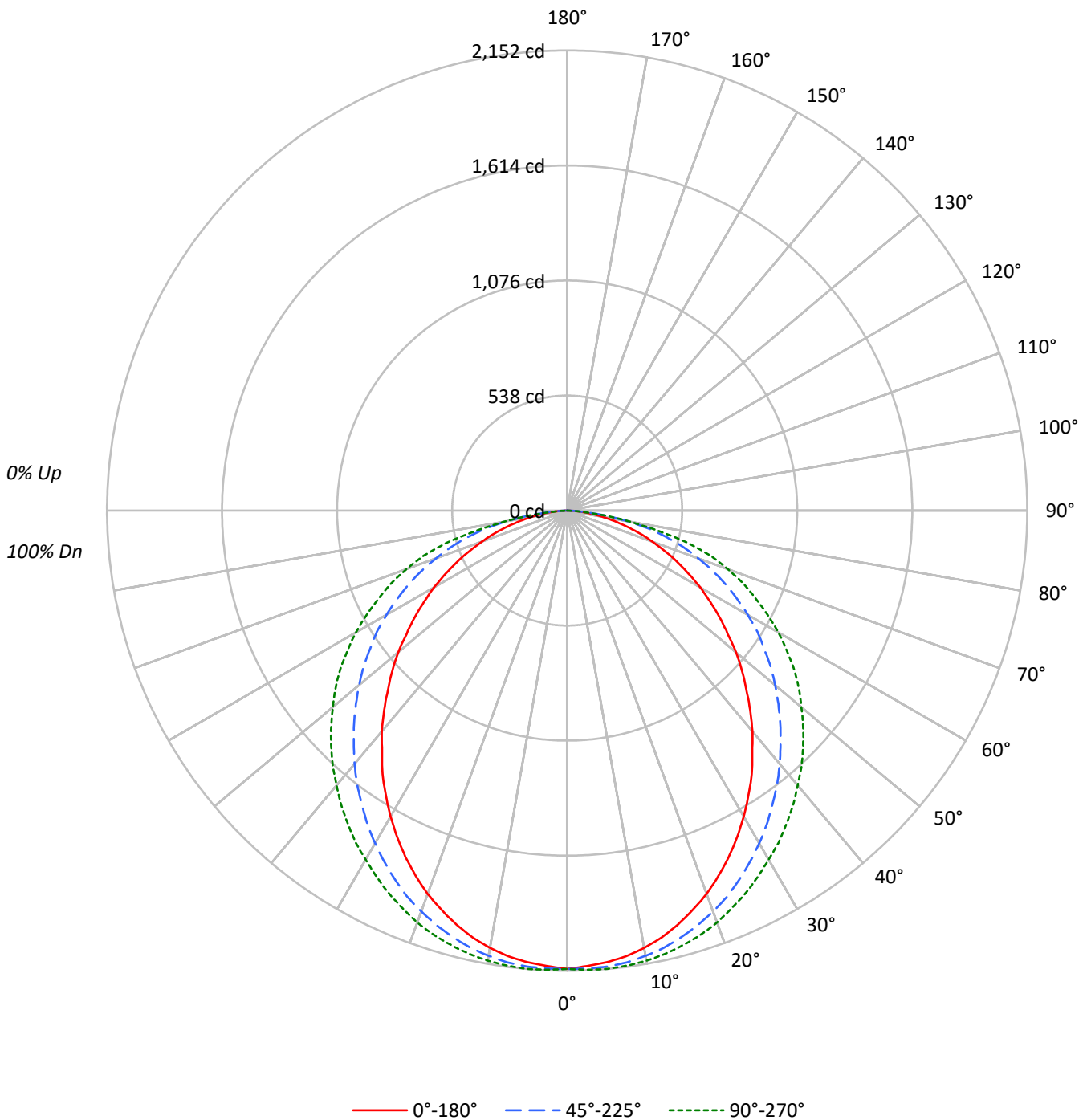
Input Watts (W): 54.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5768	5768	5768
5°	5727	5782	5814
10°	5674	5778	5841
15°	5582	5753	5858
20°	5463	5713	5871
25°	5309	5655	5863
30°	5131	5583	5855
35°	4946	5501	5874
40°	4737	5433	5893
45°	4511	5364	5941
50°	4316	5316	5987
55°	4085	5274	6080
60°	3872	5251	6145
65°	3616	5211	6194
70°	3323	5133	6279
75°	2997	4996	6056
80°	2572	4423	4559
85°	2069	2609	2069



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.2	3.3
10°-20°	581.0	9.5
20°-30°	872.6	14.2
30°-40°	1040.7	17.0
40°-50°	1076.0	17.5
50°-60°	989.3	16.1
60°-70°	787.6	12.8
70°-80°	481.2	7.8
80°-90°	104.6	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°	1656.8	27.0
0°-40°	2697.6	44.0
0°-60°	4762.9	77.6
0°-90°	6136.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6136.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2144	2144	2144	2144	2144	
5°	2120	2126	2141	2149	2152	201
15°	2004	2027	2065	2094	2103	564
25°	1788	1832	1905	1957	1975	823
35°	1506	1570	1675	1762	1788	939
45°	1185	1270	1410	1523	1561	917
55°	871	967	1124	1252	1296	779
65°	568	664	818	932	973	563
75°	288	373	480	565	582	307
85°	67	82	84	73	67	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2143.5	2143.5	2143.5	2143.5	2143.5
2.5°	2131.9	2134.8	2143.5	2149.3	2149.3
5°	2120.2	2126.0	2140.6	2149.3	2152.3
7.5°	2102.7	2111.5	2131.9	2143.5	2146.4
10°	2076.5	2088.2	2114.4	2131.9	2137.7
12.5°	2044.5	2062.0	2094.0	2117.3	2123.1
15°	2003.7	2027.0	2064.9	2094.0	2102.7
17.5°	1957.1	1986.3	2032.9	2067.8	2079.4
20°	1907.6	1936.7	1995.0	2035.8	2050.3
22.5°	1849.4	1887.2	1954.2	2000.8	2012.5
25°	1788.2	1831.9	1904.7	1957.1	1974.6
27.5°	1721.2	1773.6	1852.3	1916.4	1930.9
30°	1651.3	1706.7	1796.9	1866.8	1884.3
32.5°	1578.5	1642.6	1738.7	1817.3	1840.6
35°	1505.7	1569.8	1674.6	1762.0	1788.2
37.5°	1421.2	1497.0	1613.5	1703.8	1735.8
40°	1348.4	1421.2	1546.5	1645.5	1677.5
42.5°	1266.9	1345.5	1476.6	1584.3	1622.2
45°	1185.3	1269.8	1409.6	1523.2	1561.0
47.5°	1109.6	1194.1	1339.7	1459.1	1497.0
50°	1031.0	1118.4	1269.8	1392.1	1430.0
52.5°	946.5	1042.6	1199.9	1322.2	1365.9
55°	870.8	966.9	1124.2	1252.3	1296.0
57.5°	792.2	891.2	1054.3	1176.6	1217.4
60°	719.4	815.5	975.7	1095.1	1141.7
62.5°	640.7	739.7	897.0	1013.5	1057.2
65°	567.9	664.0	818.4	932.0	972.7
67.5°	495.1	591.2	736.8	844.6	891.2
70°	422.3	518.4	652.4	757.2	798.0
72.5°	358.2	442.7	570.8	666.9	704.8
75°	288.3	372.8	480.5	565.0	582.5
77.5°	224.3	300.0	390.3	428.1	433.9
80°	166.0	224.3	285.4	294.2	294.2
82.5°	110.7	154.4	177.7	180.6	177.7
85°	67.0	81.5	84.5	72.8	67.0
87.5°	23.3	23.3	14.6	8.7	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)