

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: P388177

Luminaire Tested: **22CZ2-75VHE-SQR-UNV-L930-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: P388177
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-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5913.8 lumens
Efficiency: N/A
Efficacy: 108.1 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

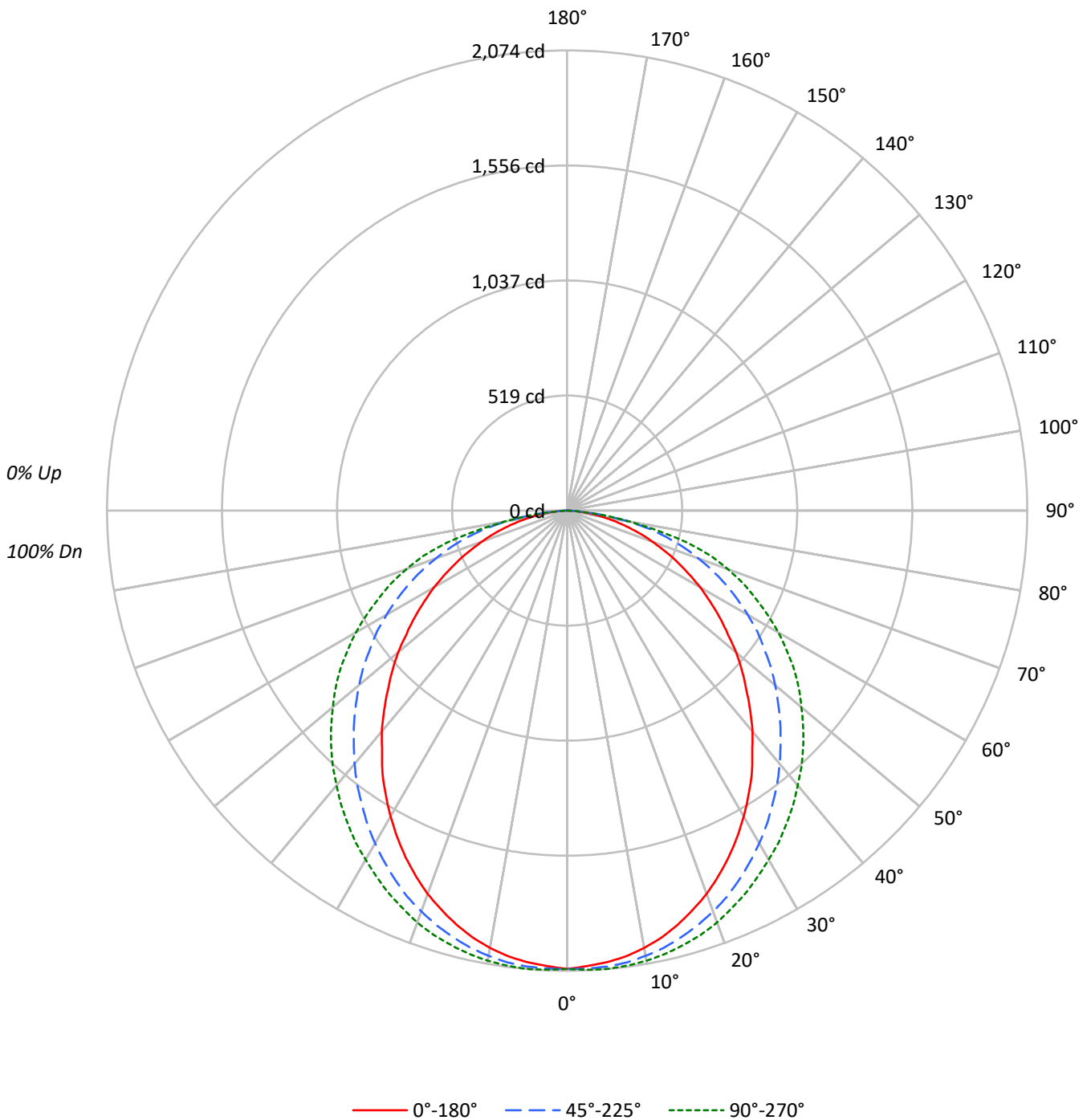
Input Watts (W): 54.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5559	5559	5559
5°	5520	5573	5603
10°	5469	5568	5629
15°	5380	5544	5646
20°	5265	5506	5659
25°	5117	5450	5650
30°	4945	5381	5643
35°	4767	5302	5662
40°	4565	5236	5679
45°	4348	5170	5726
50°	4160	5123	5770
55°	3937	5083	5860
60°	3731	5061	5922
65°	3485	5022	5969
70°	3202	4947	6051
75°	2889	4815	5837
80°	2479	4263	4393
85°	1995	2513	1995



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.8	3.3
10°-20°	559.9	9.5
20°-30°	841.0	14.2
30°-40°	1003.0	17.0
40°-50°	1037.0	17.5
50°-60°	953.4	16.1
60°-70°	759.0	12.8
70°-80°	463.7	7.8
80°-90°	100.8	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°	1596.8	27.0
0°-40°	2599.8	44.0
0°-60°	4590.3	77.6
0°-90°	5913.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5913.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2066	2066	2066	2066	2066	
5°	2043	2049	2063	2071	2074	194
15°	1931	1954	1990	2018	2026	544
25°	1723	1766	1836	1886	1903	793
35°	1451	1513	1614	1698	1723	905
45°	1142	1224	1358	1468	1504	883
55°	839	932	1083	1207	1249	751
65°	547	640	789	898	938	542
75°	278	359	463	544	561	296
85°	65	79	81	70	65	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2065.8	2065.8	2065.8	2065.8	2065.8
2.5°	2054.6	2057.4	2065.8	2071.4	2071.4
5°	2043.4	2049.0	2063.0	2071.4	2074.3
7.5°	2026.5	2035.0	2054.6	2065.8	2068.6
10°	2001.3	2012.5	2037.8	2054.6	2060.2
12.5°	1970.4	1987.2	2018.1	2040.6	2046.2
15°	1931.1	1953.6	1990.0	2018.1	2026.5
17.5°	1886.2	1914.3	1959.2	1992.9	2004.1
20°	1838.5	1866.5	1922.7	1962.0	1976.0
22.5°	1782.3	1818.8	1883.4	1928.3	1939.5
25°	1723.4	1765.5	1835.7	1886.2	1903.0
27.5°	1658.8	1709.4	1785.1	1846.9	1860.9
30°	1591.5	1644.8	1731.8	1799.2	1816.0
32.5°	1521.3	1583.1	1675.7	1751.5	1773.9
35°	1451.1	1512.9	1613.9	1698.1	1723.4
37.5°	1369.7	1442.7	1555.0	1642.0	1672.9
40°	1299.6	1369.7	1490.4	1585.9	1616.7
42.5°	1221.0	1296.8	1423.1	1526.9	1563.4
45°	1142.4	1223.8	1358.5	1468.0	1504.5
47.5°	1069.4	1150.8	1291.1	1406.2	1442.7
50°	993.6	1077.8	1223.8	1341.7	1378.2
52.5°	912.2	1004.8	1156.4	1274.3	1316.4
55°	839.2	931.9	1083.4	1206.9	1249.0
57.5°	763.5	858.9	1016.1	1134.0	1173.3
60°	693.3	785.9	940.3	1055.4	1100.3
62.5°	617.5	712.9	864.5	976.8	1018.9
65°	547.3	640.0	788.7	898.2	937.5
67.5°	477.2	569.8	710.1	814.0	858.9
70°	407.0	499.6	628.7	729.8	769.1
72.5°	345.2	426.6	550.1	642.8	679.3
75°	277.9	359.3	463.1	544.5	561.4
77.5°	216.1	289.1	376.1	412.6	418.2
80°	160.0	216.1	275.1	283.5	283.5
82.5°	106.7	148.8	171.2	174.0	171.2
85°	64.6	78.6	81.4	70.2	64.6
87.5°	22.5	22.5	14.0	8.4	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)