

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: P388176

Luminaire Tested: **22CZ2-75VHE-SQR-UNV-L930-CD1-SDWPD1-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: P388176
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-SDWPD1-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: 5842.4 lumens
Efficiency: N/A
Efficacy: 106.8 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

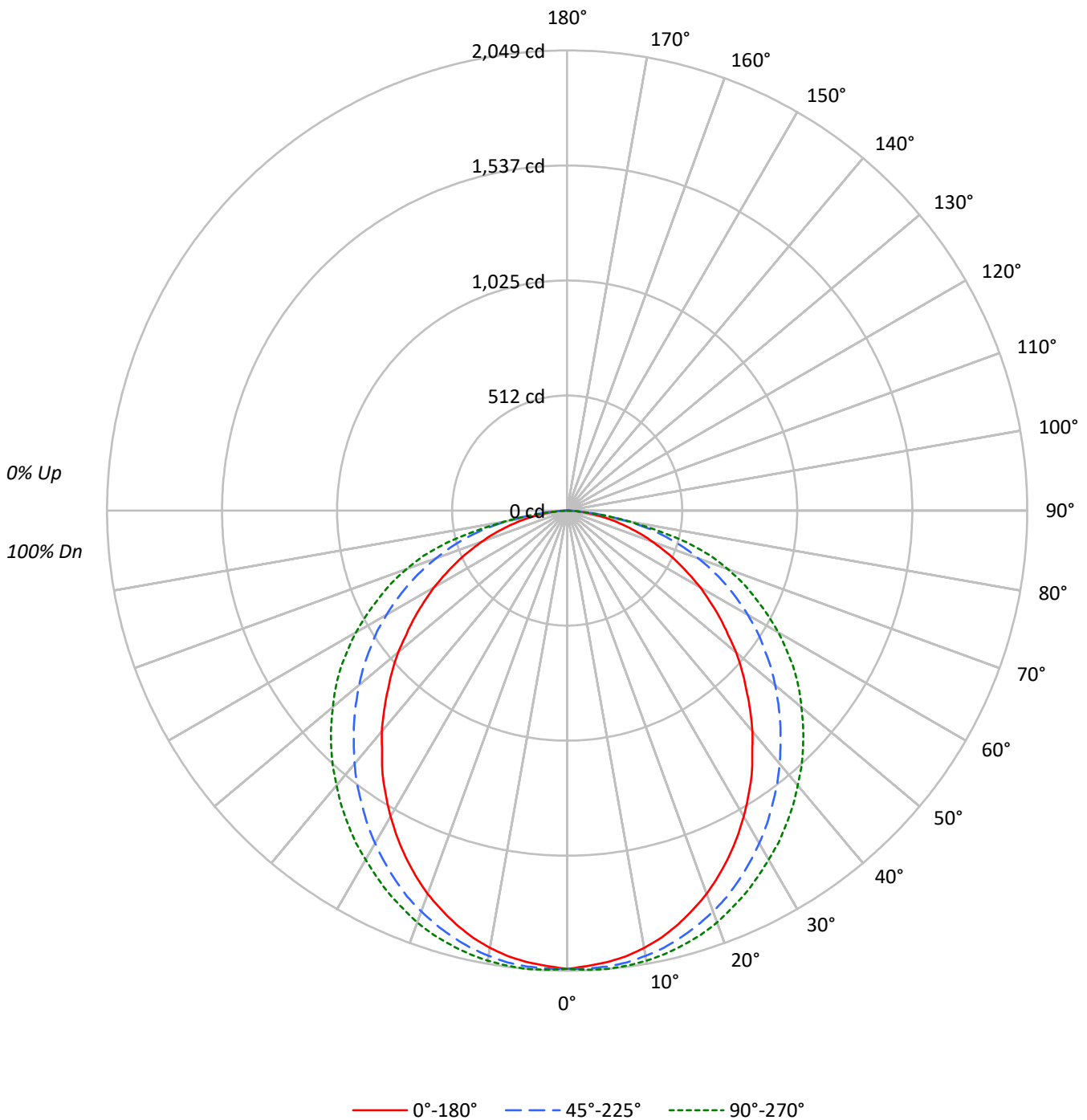
Input Watts (W): 54.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5492	5492	5492
5°	5453	5505	5535
10°	5402	5501	5561
15°	5315	5477	5578
20°	5201	5440	5590
25°	5055	5385	5582
30°	4886	5316	5575
35°	4709	5238	5593
40°	4510	5172	5611
45°	4295	5108	5656
50°	4109	5061	5700
55°	3890	5022	5789
60°	3686	4999	5850
65°	3443	4961	5897
70°	3164	4887	5978
75°	2854	4757	5766
80°	2450	4210	4341
85°	1970	2482	1970



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.5	3.3
10°-20°	553.2	9.5
20°-30°	830.8	14.2
30°-40°	990.9	17.0
40°-50°	1024.5	17.5
50°-60°	941.9	16.1
60°-70°	749.9	12.8
70°-80°	458.1	7.8
80°-90°	99.6	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°	1577.5	27.0
0°-40°	2568.4	44.0
0°-60°	4534.8	77.6
0°-90°	5842.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5842.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2041	2041	2041	2041	2041	
5°	2019	2024	2038	2046	2049	191
15°	1908	1930	1966	1994	2002	537
25°	1703	1744	1814	1863	1880	783
35°	1434	1495	1594	1678	1703	894
45°	1129	1209	1342	1450	1486	873
55°	829	921	1070	1192	1234	742
65°	541	632	779	887	926	536
75°	274	355	458	538	555	292
85°	64	78	80	69	64	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2040.9	2040.9	2040.9	2040.9	2040.9
2.5°	2029.8	2032.6	2040.9	2046.4	2046.4
5°	2018.7	2024.3	2038.1	2046.4	2049.2
7.5°	2002.1	2010.4	2029.8	2040.9	2043.7
10°	1977.1	1988.2	2013.2	2029.8	2035.3
12.5°	1946.6	1963.2	1993.8	2015.9	2021.5
15°	1907.8	1930.0	1966.0	1993.8	2002.1
17.5°	1863.4	1891.2	1935.5	1968.8	1979.9
20°	1816.3	1844.0	1899.5	1938.3	1952.2
22.5°	1760.8	1796.9	1860.6	1905.0	1916.1
25°	1702.6	1744.2	1813.5	1863.4	1880.1
27.5°	1638.8	1688.7	1763.6	1824.6	1838.5
30°	1572.3	1624.9	1710.9	1777.5	1794.1
32.5°	1502.9	1563.9	1655.5	1730.3	1752.5
35°	1433.6	1494.6	1594.4	1677.6	1702.6
37.5°	1353.2	1425.3	1536.2	1622.2	1652.7
40°	1283.9	1353.2	1472.4	1566.7	1597.2
42.5°	1206.2	1281.1	1405.9	1508.5	1544.5
45°	1128.6	1209.0	1342.1	1450.3	1486.3
47.5°	1056.5	1136.9	1275.6	1389.2	1425.3
50°	981.6	1064.8	1209.0	1325.5	1361.5
52.5°	901.2	992.7	1142.5	1258.9	1300.5
55°	829.1	920.6	1070.4	1192.4	1234.0
57.5°	754.2	848.5	1003.8	1120.3	1159.1
60°	684.9	776.4	928.9	1042.6	1087.0
62.5°	610.0	704.3	854.1	965.0	1006.6
65°	540.7	632.2	779.2	887.3	926.2
67.5°	471.4	562.9	701.6	804.2	848.5
70°	402.1	493.6	621.1	721.0	759.8
72.5°	341.1	421.5	543.5	635.0	671.1
75°	274.5	354.9	457.5	538.0	554.6
77.5°	213.5	285.6	371.6	407.6	413.2
80°	158.1	213.5	271.7	280.1	280.1
82.5°	105.4	147.0	169.1	171.9	169.1
85°	63.8	77.6	80.4	69.3	63.8
87.5°	22.2	22.2	13.9	8.3	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)