

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: P388180

Luminaire Tested: **22CZ2-75VHE-SQR-UNV-L935-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: P388180
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-SWPD1-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: 6060.0 lumens
Efficiency: N/A
Efficacy: 110.8 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

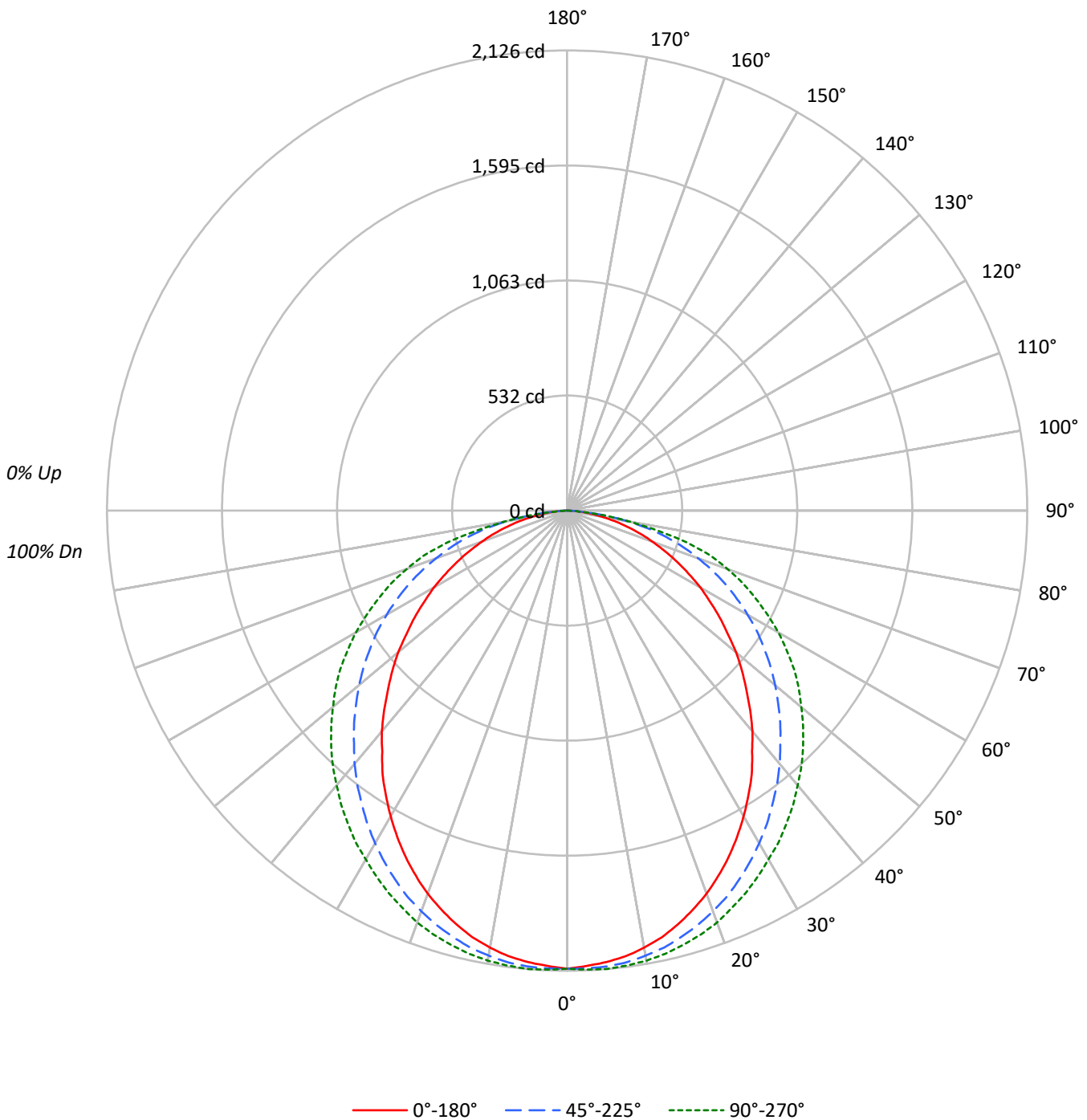
Input Watts (W): 54.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5697	5697	5697
5°	5656	5710	5742
10°	5604	5706	5769
15°	5513	5681	5785
20°	5395	5642	5799
25°	5244	5585	5790
30°	5067	5514	5782
35°	4885	5433	5801
40°	4678	5365	5820
45°	4455	5298	5867
50°	4263	5250	5912
55°	4035	5209	6005
60°	3823	5186	6068
65°	3571	5146	6117
70°	3282	5069	6201
75°	2960	4934	5980
80°	2540	4369	4502
85°	2044	2575	2044



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.7	3.3
10°-20°	573.8	9.5
20°-30°	861.8	14.2
30°-40°	1027.8	17.0
40°-50°	1062.7	17.5
50°-60°	977.0	16.1
60°-70°	777.8	12.8
70°-80°	475.2	7.8
80°-90°	103.3	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°	1636.3	27.0
0°-40°	2664.1	44.0
0°-60°	4703.7	77.6
0°-90°	6060.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6060.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2117	2117	2117	2117	2117	
5°	2094	2100	2114	2123	2126	199
15°	1979	2002	2039	2068	2077	557
25°	1766	1809	1881	1933	1950	812
35°	1487	1550	1654	1740	1766	928
45°	1171	1254	1392	1504	1542	905
55°	860	955	1110	1237	1280	769
65°	561	656	808	920	961	556
75°	285	368	475	558	575	303
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°	2116.9	2116.9	2116.9	2116.9	2116.9
2.5°	2105.4	2108.3	2116.9	2122.7	2122.7
5°	2093.9	2099.6	2114.0	2122.7	2125.5
7.5°	2076.6	2085.3	2105.4	2116.9	2119.8
10°	2050.8	2062.3	2088.1	2105.4	2111.2
12.5°	2019.1	2036.4	2068.0	2091.0	2096.8
15°	1978.8	2001.9	2039.2	2068.0	2076.6
17.5°	1932.8	1961.6	2007.6	2042.1	2053.6
20°	1883.9	1912.7	1970.2	2010.5	2024.9
22.5°	1826.4	1863.8	1929.9	1976.0	1987.5
25°	1766.0	1809.1	1881.1	1932.8	1950.1
27.5°	1699.9	1751.6	1829.3	1892.6	1906.9
30°	1630.8	1685.5	1774.6	1843.7	1860.9
32.5°	1558.9	1622.2	1717.1	1794.8	1817.8
35°	1487.0	1550.3	1653.8	1740.1	1766.0
37.5°	1403.6	1478.4	1593.4	1682.6	1714.2
40°	1331.7	1403.6	1527.3	1625.1	1656.7
42.5°	1251.2	1328.8	1458.2	1564.7	1602.1
45°	1170.6	1254.0	1392.1	1504.3	1541.7
47.5°	1095.8	1179.3	1323.1	1441.0	1478.4
50°	1018.2	1104.5	1254.0	1374.8	1412.2
52.5°	934.8	1029.7	1185.0	1305.8	1349.0
55°	860.0	954.9	1110.2	1236.8	1279.9
57.5°	782.3	880.1	1041.2	1162.0	1202.3
60°	710.4	805.3	963.5	1081.5	1127.5
62.5°	632.8	730.6	885.9	1000.9	1044.1
65°	560.9	655.8	808.2	920.4	960.7
67.5°	489.0	583.9	727.7	834.1	880.1
70°	417.1	512.0	644.3	747.8	788.1
72.5°	353.8	437.2	563.7	658.7	696.0
75°	284.7	368.2	474.6	558.0	575.2
77.5°	221.5	296.3	385.4	422.8	428.6
80°	163.9	221.5	281.9	290.5	290.5
82.5°	109.3	152.4	175.4	178.3	175.4
85°	66.2	80.5	83.4	71.9	66.2
87.5°	23.0	23.0	14.4	8.6	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)