

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: P388183

Luminaire Tested: **22CZ2-75VHE-SQR-UNV-L940-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: P388183
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-L940-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6122.7 lumens
Efficiency: N/A
Efficacy: 111.9 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

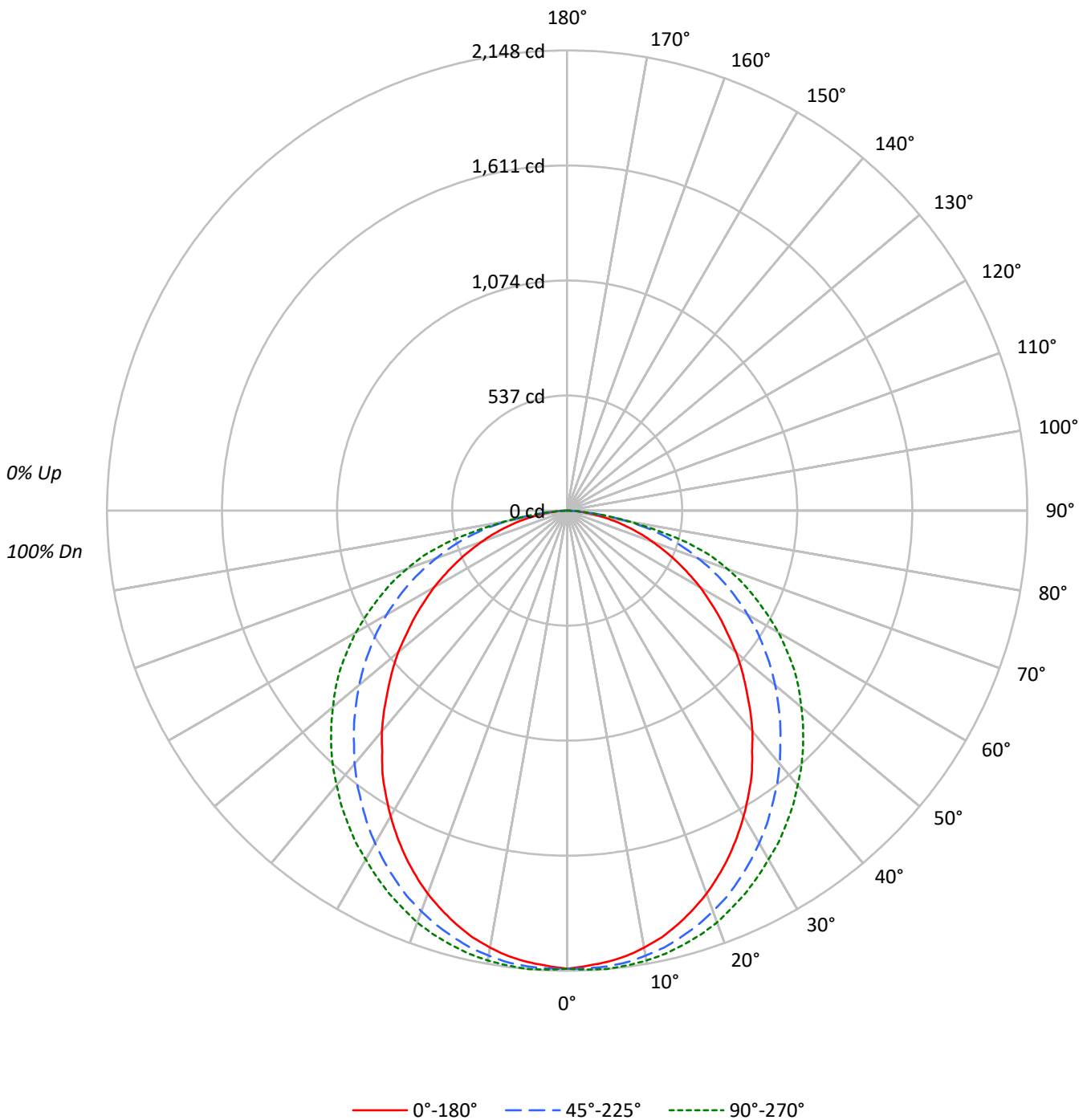
Input Watts (W): 54.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5755	5755	5755
5°	5715	5770	5801
10°	5662	5765	5828
15°	5570	5740	5845
20°	5451	5700	5859
25°	5298	5643	5850
30°	5120	5571	5842
35°	4936	5489	5862
40°	4727	5421	5880
45°	4501	5353	5928
50°	4307	5304	5973
55°	4077	5263	6067
60°	3863	5239	6131
65°	3608	5200	6180
70°	3316	5121	6264
75°	2991	4985	6043
80°	2566	4413	4548
85°	2062	2603	2062



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.8	3.3
10°-20°	579.7	9.5
20°-30°	870.7	14.2
30°-40°	1038.4	17.0
40°-50°	1073.7	17.5
50°-60°	987.1	16.1
60°-70°	785.8	12.8
70°-80°	480.1	7.8
80°-90°	104.4	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°	1653.2	27.0
0°-40°	2691.6	44.0
0°-60°	4752.4	77.6
0°-90°	6122.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6122.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2139	2139	2139	2139	2139	
5°	2116	2121	2136	2145	2148	201
15°	1999	2023	2060	2089	2098	563
25°	1784	1828	1900	1953	1970	821
35°	1502	1566	1671	1758	1784	937
45°	1183	1267	1406	1520	1558	915
55°	869	965	1122	1250	1293	777
65°	567	663	817	930	971	561
75°	288	372	480	564	581	306
85°	67	81	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°	2138.8	2138.8	2138.8	2138.8	2138.8
2.5°	2127.2	2130.1	2138.8	2144.6	2144.6
5°	2115.6	2121.4	2135.9	2144.6	2147.5
7.5°	2098.1	2106.8	2127.2	2138.8	2141.7
10°	2072.0	2083.6	2109.7	2127.2	2133.0
12.5°	2040.0	2057.4	2089.4	2112.7	2118.5
15°	1999.3	2022.6	2060.3	2089.4	2098.1
17.5°	1952.8	1981.9	2028.4	2063.3	2074.9
20°	1903.4	1932.5	1990.6	2031.3	2045.8
22.5°	1845.3	1883.1	1949.9	1996.4	2008.0
25°	1784.3	1827.9	1900.5	1952.8	1970.3
27.5°	1717.4	1769.7	1848.2	1912.1	1926.7
30°	1647.7	1702.9	1793.0	1862.7	1880.2
32.5°	1575.0	1639.0	1734.9	1813.3	1836.6
35°	1502.4	1566.3	1670.9	1758.1	1784.3
37.5°	1418.1	1493.7	1609.9	1700.0	1732.0
40°	1345.5	1418.1	1543.1	1641.9	1673.8
42.5°	1264.1	1342.6	1473.3	1580.9	1618.6
45°	1182.7	1267.0	1406.5	1519.8	1557.6
47.5°	1107.2	1191.5	1336.8	1455.9	1493.7
50°	1028.7	1115.9	1267.0	1389.1	1426.8
52.5°	944.4	1040.3	1197.3	1319.3	1362.9
55°	868.9	964.8	1121.7	1249.6	1293.2
57.5°	790.4	889.2	1052.0	1174.0	1214.7
60°	717.8	813.7	973.5	1092.7	1139.1
62.5°	639.3	738.1	895.0	1011.3	1054.9
65°	566.7	662.6	816.6	929.9	970.6
67.5°	494.0	589.9	735.2	842.7	889.2
70°	421.4	517.3	650.9	755.6	796.2
72.5°	357.4	441.7	569.6	665.5	703.2
75°	287.7	372.0	479.5	563.8	581.2
77.5°	223.8	299.3	389.4	427.2	433.0
80°	165.6	223.8	284.8	293.5	293.5
82.5°	110.4	154.0	177.3	180.2	177.3
85°	66.8	81.4	84.3	72.6	66.8
87.5°	23.2	23.2	14.5	8.7	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)