

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: P388200

Luminaire Tested: **22CZ2-80VHE-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: P388200
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: 22CZ2-80VHE-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: 6256.0 lumens
Efficiency: N/A
Efficacy: 105.9 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

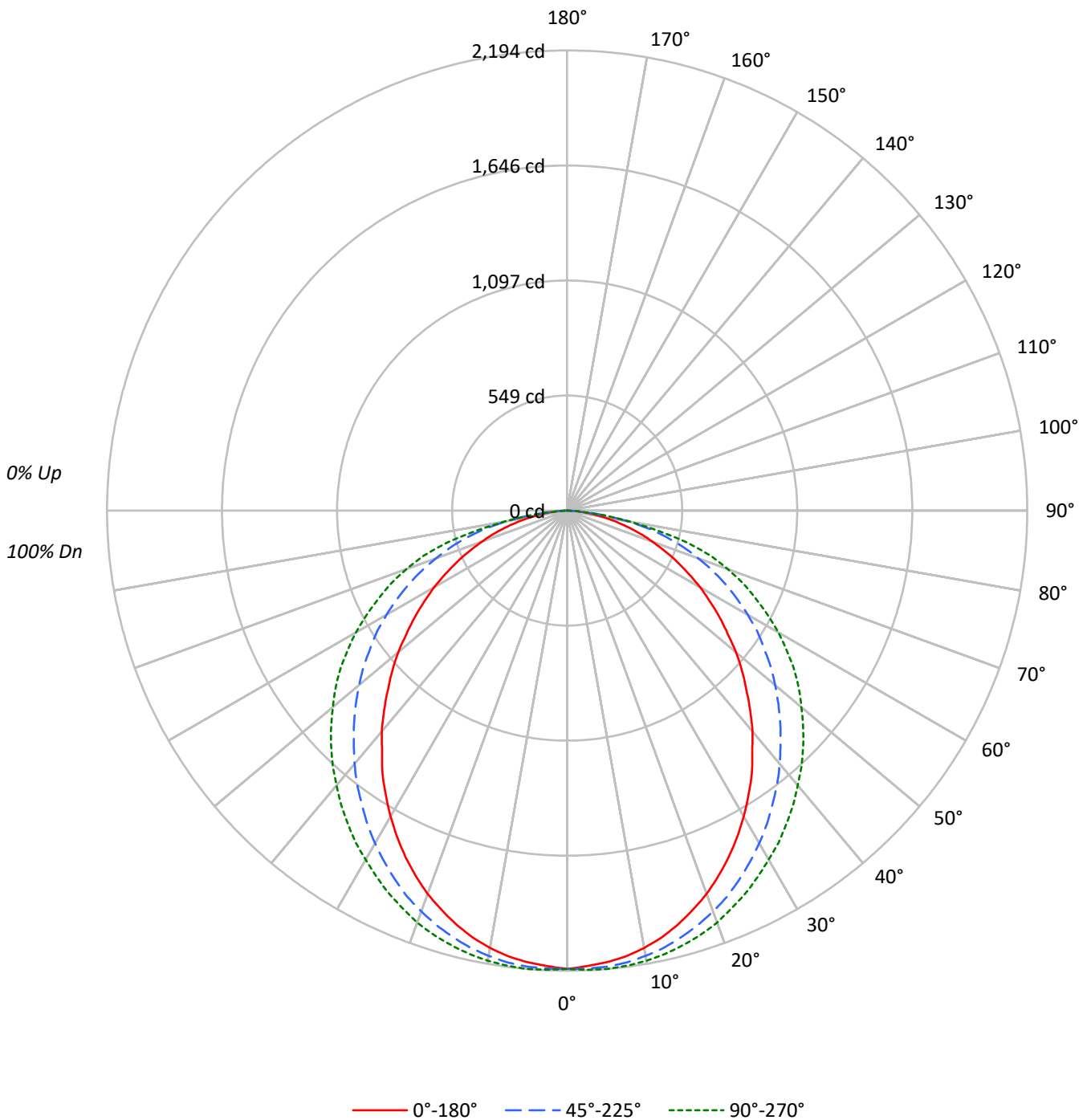
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5881	5881	5881
5°	5839	5895	5927
10°	5785	5890	5955
15°	5691	5865	5972
20°	5570	5824	5986
25°	5413	5766	5978
30°	5231	5693	5969
35°	5043	5609	5989
40°	4829	5539	6008
45°	4599	5469	6057
50°	4400	5420	6103
55°	4165	5377	6199
60°	3947	5353	6264
65°	3687	5313	6315
70°	3387	5233	6401
75°	3057	5094	6175
80°	2622	4510	4647
85°	2109	2658	2109



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.2	3.3
10°-20°	592.3	9.5
20°-30°	889.7	14.2
30°-40°	1061.0	17.0
40°-50°	1097.0	17.5
50°-60°	1008.6	16.1
60°-70°	802.9	12.8
70°-80°	490.6	7.8
80°-90°	106.6	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°	1689.2	27.0
0°-40°	2750.2	44.0
0°-60°	4855.9	77.6
0°-90°	6256.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6256.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2185	2185	2185	2185	2185	
5°	2162	2168	2182	2191	2194	205
15°	2043	2067	2105	2135	2144	575
25°	1823	1868	1942	1995	2013	839
35°	1535	1600	1707	1796	1823	958
45°	1208	1295	1437	1553	1592	935
55°	888	986	1146	1277	1321	794
65°	579	677	834	950	992	574
75°	294	380	490	576	594	313
85°	68	83	86	74	68	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2185.4	2185.4	2185.4	2185.4	2185.4
2.5°	2173.5	2176.5	2185.4	2191.3	2191.3
5°	2161.6	2167.6	2182.4	2191.3	2194.3
7.5°	2143.8	2152.7	2173.5	2185.4	2188.3
10°	2117.1	2129.0	2155.7	2173.5	2179.4
12.5°	2084.4	2102.2	2134.9	2158.6	2164.6
15°	2042.8	2066.6	2105.2	2134.9	2143.8
17.5°	1995.3	2025.0	2072.5	2108.2	2120.0
20°	1944.9	1974.6	2033.9	2075.5	2090.4
22.5°	1885.5	1924.1	1992.4	2039.9	2051.8
25°	1823.1	1867.7	1941.9	1995.3	2013.2
27.5°	1754.8	1808.3	1888.4	1953.8	1968.6
30°	1683.6	1740.0	1832.0	1903.3	1921.1
32.5°	1609.3	1674.7	1772.6	1852.8	1876.6
35°	1535.1	1600.4	1707.3	1796.4	1823.1
37.5°	1449.0	1526.2	1645.0	1737.0	1769.7
40°	1374.8	1449.0	1576.7	1677.6	1710.3
42.5°	1291.6	1371.8	1505.4	1615.3	1653.9
45°	1208.5	1294.6	1437.1	1552.9	1591.5
47.5°	1131.3	1217.4	1365.9	1487.6	1526.2
50°	1051.1	1140.2	1294.6	1419.3	1457.9
52.5°	965.0	1063.0	1223.3	1348.0	1392.6
55°	887.8	985.8	1146.1	1276.8	1321.3
57.5°	807.6	908.6	1074.9	1199.6	1241.1
60°	733.4	831.4	994.7	1116.4	1163.9
62.5°	653.2	754.2	914.5	1033.3	1077.8
65°	579.0	677.0	834.4	950.2	991.7
67.5°	504.8	602.8	751.2	861.1	908.6
70°	430.5	528.5	665.1	772.0	813.6
72.5°	365.2	451.3	582.0	680.0	718.6
75°	294.0	380.1	489.9	576.0	593.9
77.5°	228.6	305.8	397.9	436.5	442.4
80°	169.2	228.6	291.0	299.9	299.9
82.5°	112.8	157.4	181.1	184.1	181.1
85°	68.3	83.1	86.1	74.2	68.3
87.5°	23.8	23.8	14.8	8.9	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)