

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: P388204

Luminaire Tested: **22CZ2-80VHE-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: P388204
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-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: 6489.1 lumens
Efficiency: N/A
Efficacy: 109.8 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

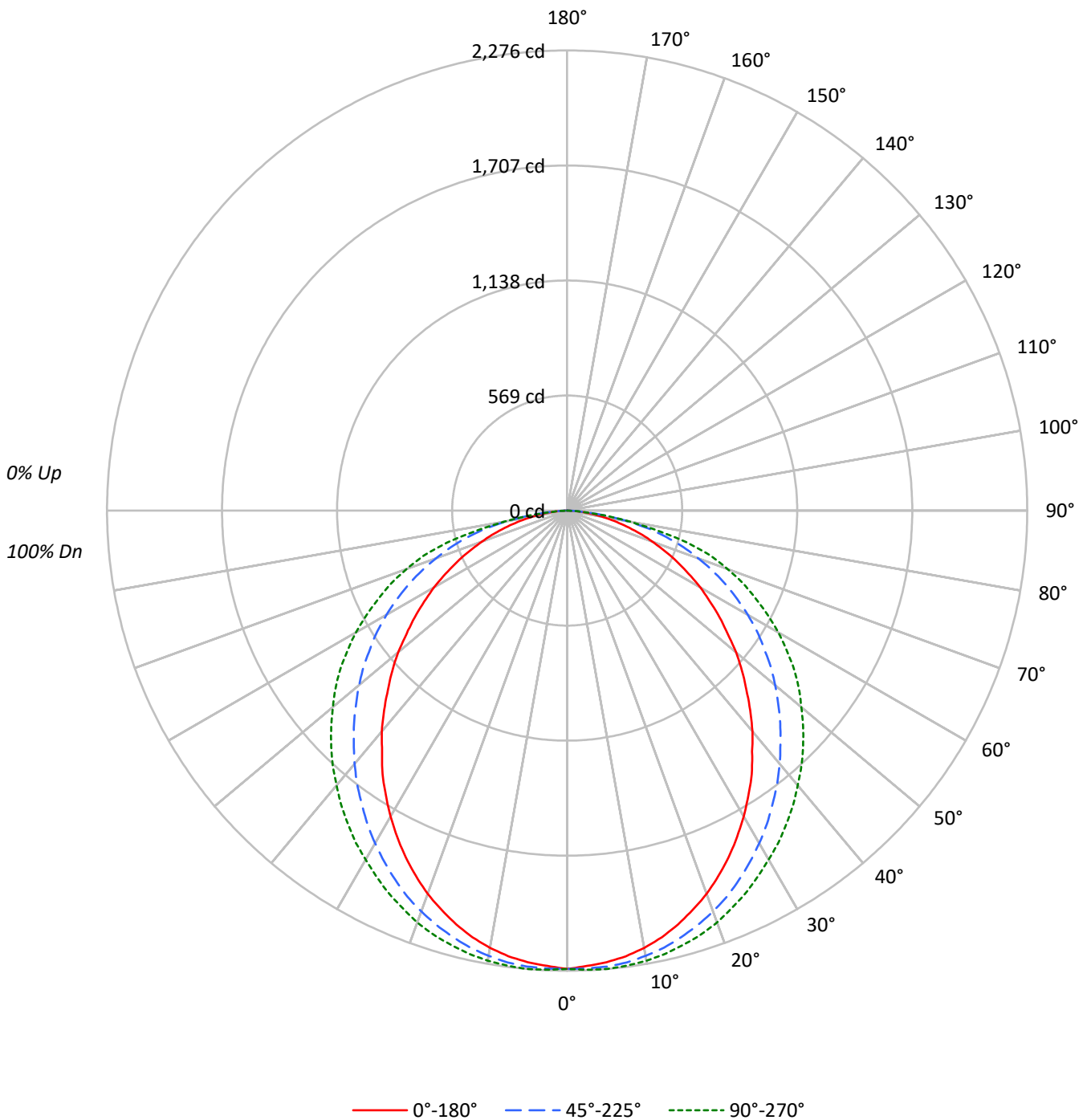
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6100	6100	6100
5°	6057	6115	6148
10°	6001	6110	6177
15°	5903	6083	6195
20°	5777	6042	6209
25°	5615	5980	6200
30°	5426	5905	6192
35°	5231	5818	6212
40°	5009	5745	6232
45°	4770	5673	6282
50°	4564	5622	6331
55°	4320	5577	6430
60°	4094	5553	6498
65°	3824	5510	6550
70°	3514	5428	6640
75°	3170	5284	6405
80°	2721	4677	4821
85°	2186	2757	2186



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.9	3.3
10°-20°	614.4	9.5
20°-30°	922.8	14.2
30°-40°	1100.6	17.0
40°-50°	1137.9	17.5
50°-60°	1046.2	16.1
60°-70°	832.9	12.8
70°-80°	508.8	7.8
80°-90°	110.6	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°	1752.1	27.0
0°-40°	2852.7	44.0
0°-60°	5036.8	77.6
0°-90°	6489.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6489.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2267	2267	2267	2267	2267	
5°	2242	2248	2264	2273	2276	213
15°	2119	2144	2184	2214	2224	597
25°	1891	1937	2014	2070	2088	870
35°	1592	1660	1771	1863	1891	993
45°	1254	1343	1491	1611	1651	969
55°	921	1022	1189	1324	1371	824
65°	601	702	865	986	1029	595
75°	305	394	508	598	616	325
85°	71	86	89	77	71	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2266.8	2266.8	2266.8	2266.8	2266.8
2.5°	2254.5	2257.6	2266.8	2273.0	2273.0
5°	2242.2	2248.3	2263.7	2273.0	2276.0
7.5°	2223.7	2232.9	2254.5	2266.8	2269.9
10°	2196.0	2208.3	2236.0	2254.5	2260.6
12.5°	2162.1	2180.6	2214.4	2239.1	2245.2
15°	2119.0	2143.6	2183.6	2214.4	2223.7
17.5°	2069.7	2100.5	2149.8	2186.7	2199.0
20°	2017.3	2048.1	2109.7	2152.8	2168.2
22.5°	1955.7	1995.8	2066.6	2115.9	2128.2
25°	1891.1	1937.3	2014.2	2069.7	2088.2
27.5°	1820.2	1875.7	1958.8	2026.6	2042.0
30°	1746.3	1804.8	1900.3	1974.2	1992.7
32.5°	1669.3	1737.1	1838.7	1921.9	1946.5
35°	1592.3	1660.1	1770.9	1863.3	1891.1
37.5°	1503.0	1583.1	1706.3	1801.7	1835.6
40°	1426.0	1503.0	1635.4	1740.1	1774.0
42.5°	1339.8	1422.9	1561.5	1675.5	1715.5
45°	1253.5	1342.8	1490.7	1610.8	1650.8
47.5°	1173.4	1262.8	1416.7	1543.0	1583.1
50°	1090.3	1182.7	1342.8	1472.2	1512.2
52.5°	1001.0	1102.6	1268.9	1398.3	1444.5
55°	920.9	1022.5	1188.8	1324.4	1370.6
57.5°	837.7	942.4	1114.9	1244.3	1287.4
60°	760.7	862.4	1031.8	1158.0	1207.3
62.5°	677.6	782.3	948.6	1071.8	1118.0
65°	600.6	702.2	865.4	985.6	1028.7
67.5°	523.6	625.2	779.2	893.2	942.4
70°	446.6	548.2	689.9	800.8	843.9
72.5°	378.8	468.1	603.7	705.3	745.3
75°	304.9	394.2	508.2	597.5	616.0
77.5°	237.2	317.2	412.7	452.7	458.9
80°	175.6	237.2	301.8	311.1	311.1
82.5°	117.0	163.2	187.9	191.0	187.9
85°	70.8	86.2	89.3	77.0	70.8
87.5°	24.6	24.6	15.4	9.2	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)