

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: P388276

Luminaire Tested: **22CZ2-95VHE-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: P388276
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: 22CZ2-95VHE-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: 7706.4 lumens
Efficiency: N/A
Efficacy: 106.0 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

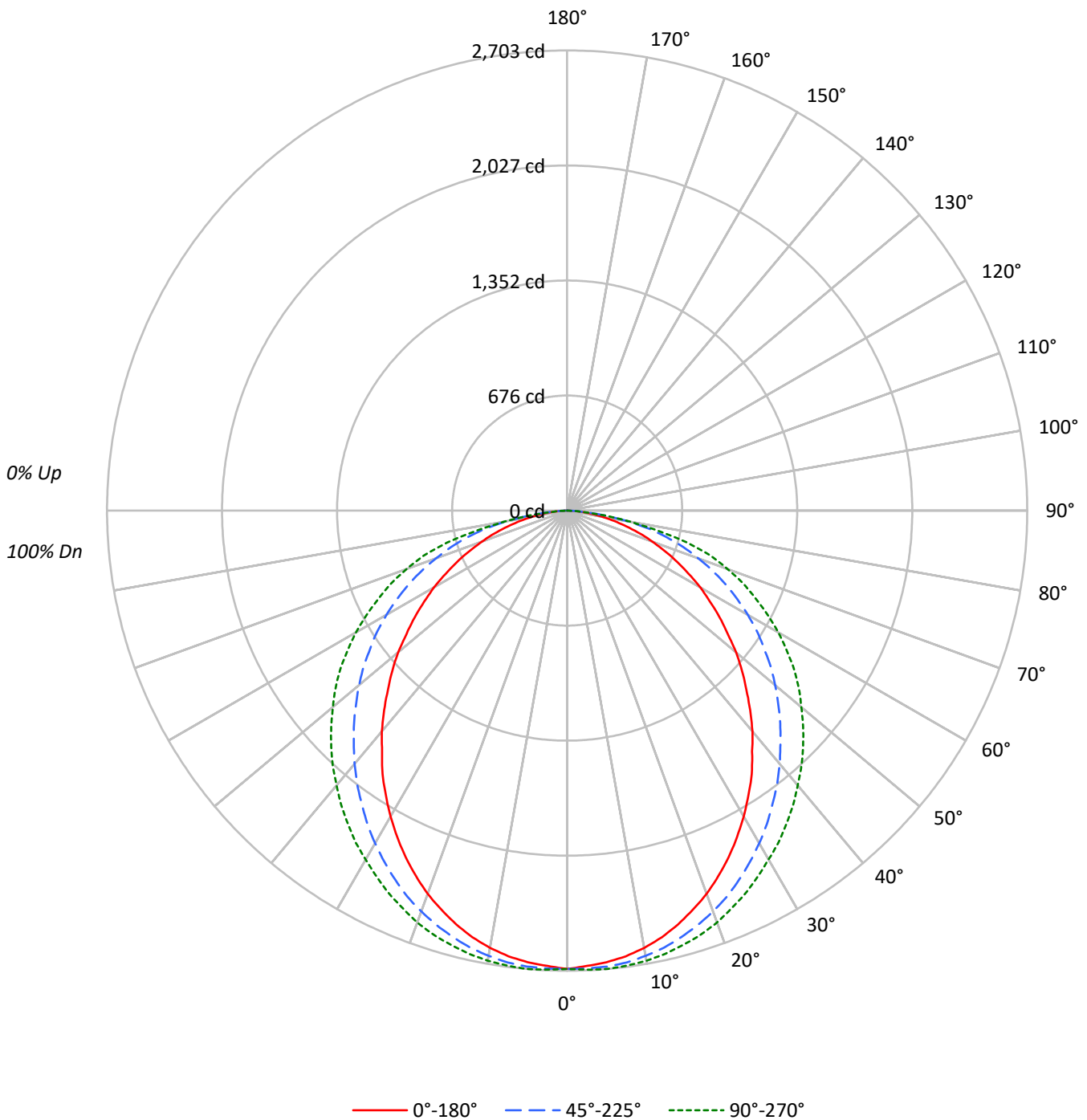
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	7244	7244	7244
5°	7193	7262	7302
10°	7126	7256	7336
15°	7011	7225	7357
20°	6861	7175	7374
25°	6668	7103	7363
30°	6444	7012	7353
35°	6212	6909	7378
40°	5949	6823	7401
45°	5665	6737	7461
50°	5421	6676	7518
55°	5131	6624	7636
60°	4862	6595	7717
65°	4541	6544	7779
70°	4173	6446	7885
75°	3765	6275	7606
80°	3231	5554	5724
85°	2597	3276	2597



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	255.2	3.3
10°-20°	729.7	9.5
20°-30°	1095.9	14.2
30°-40°	1307.0	17.0
40°-50°	1351.4	17.5
50°-60°	1242.4	16.1
60°-70°	989.1	12.8
70°-80°	604.3	7.8
80°-90°	131.4	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°	2080.8	27.0
0°-40°	3387.9	44.0
0°-60°	5981.7	77.6
0°-90°	7706.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7706.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2692	2692	2692	2692	2692	
5°	2663	2670	2688	2699	2703	253
15°	2516	2546	2593	2630	2641	709
25°	2246	2301	2392	2458	2480	1033
35°	1891	1972	2103	2213	2246	1180
45°	1489	1595	1770	1913	1960	1151
55°	1094	1214	1412	1573	1628	978
65°	713	834	1028	1170	1222	707
75°	362	468	604	710	732	386
85°	84	102	106	91	84	97
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2692.0	2692.0	2692.0	2692.0	2692.0
2.5°	2677.4	2681.1	2692.0	2699.3	2699.3
5°	2662.8	2670.1	2688.4	2699.3	2703.0
7.5°	2640.8	2651.8	2677.4	2692.0	2695.7
10°	2607.9	2622.5	2655.5	2677.4	2684.7
12.5°	2567.7	2589.6	2629.9	2659.1	2666.4
15°	2516.5	2545.7	2593.3	2629.9	2640.8
17.5°	2457.9	2494.5	2553.0	2596.9	2611.6
20°	2395.8	2432.3	2505.5	2556.7	2575.0
22.5°	2322.6	2370.2	2454.3	2512.8	2527.4
25°	2245.8	2300.7	2392.1	2457.9	2479.9
27.5°	2161.7	2227.5	2326.3	2406.7	2425.0
30°	2073.9	2143.4	2256.8	2344.6	2366.5
32.5°	1982.4	2062.9	2183.6	2282.4	2311.6
35°	1891.0	1971.5	2103.1	2212.9	2245.8
37.5°	1784.9	1880.0	2026.3	2139.7	2180.0
40°	1693.5	1784.9	1942.2	2066.6	2106.8
42.5°	1591.1	1689.8	1854.4	1989.8	2037.3
45°	1488.7	1594.7	1770.3	1913.0	1960.5
47.5°	1393.6	1499.6	1682.5	1832.5	1880.0
50°	1294.8	1404.5	1594.7	1748.4	1795.9
52.5°	1188.7	1309.4	1507.0	1660.6	1715.4
55°	1093.6	1214.3	1411.9	1572.8	1627.7
57.5°	994.9	1119.2	1324.1	1477.7	1528.9
60°	903.4	1024.1	1225.3	1375.3	1433.8
62.5°	804.7	929.0	1126.6	1272.9	1327.7
65°	713.2	833.9	1027.8	1170.4	1221.7
67.5°	621.8	742.5	925.4	1060.7	1119.2
70°	530.4	651.1	819.3	951.0	1002.2
72.5°	449.9	556.0	716.9	837.6	885.2
75°	362.1	468.2	603.5	709.6	731.5
77.5°	281.6	376.7	490.1	537.7	545.0
80°	208.5	281.6	358.4	369.4	369.4
82.5°	139.0	193.9	223.1	226.8	223.1
85°	84.1	102.4	106.1	91.4	84.1
87.5°	29.3	29.3	18.3	11.0	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)