

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: P388283

Luminaire Tested: **22CZ2-95VHE-SQR-UNV-L950-CD1-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: P388283
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-L950-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8368.2 lumens
Efficiency: N/A
Efficacy: 115.1 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

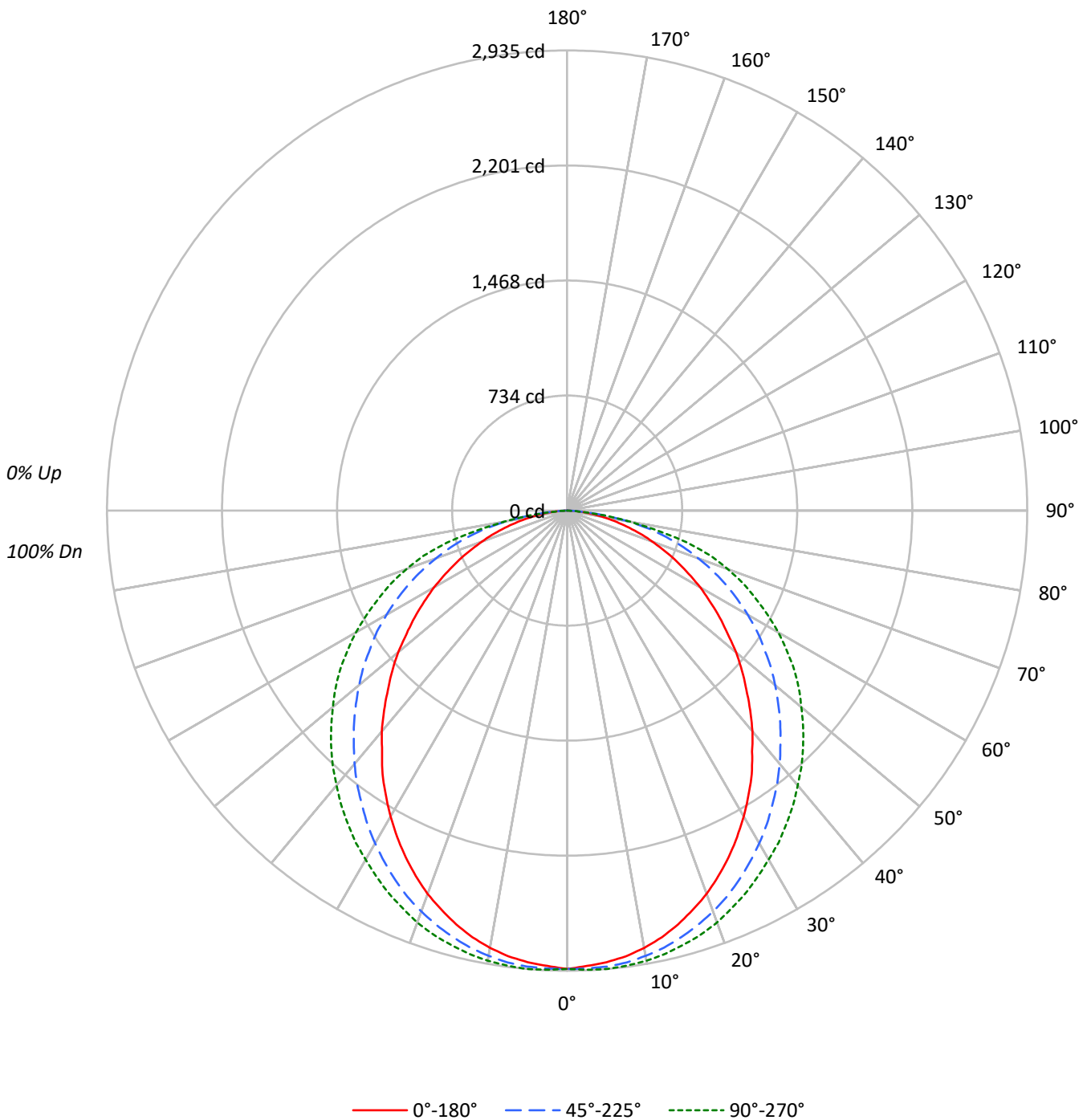
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	7866	7866	7866
5°	7810	7886	7928
10°	7738	7879	7966
15°	7613	7845	7989
20°	7450	7791	8007
25°	7241	7712	7996
30°	6998	7615	7985
35°	6746	7502	8011
40°	6460	7409	8036
45°	6152	7316	8102
50°	5886	7250	8164
55°	5572	7193	8292
60°	5280	7161	8379
65°	4932	7107	8447
70°	4531	7000	8563
75°	4088	6813	8259
80°	3508	6031	6216
85°	2822	3557	2822



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.1	3.3
10°-20°	792.3	9.5
20°-30°	1190.0	14.2
30°-40°	1419.3	17.0
40°-50°	1467.4	17.5
50°-60°	1349.1	16.1
60°-70°	1074.1	12.8
70°-80°	656.2	7.8
80°-90°	142.6	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°	2259.5	27.0
0°-40°	3678.8	44.0
0°-60°	6495.4	77.6
0°-90°	8368.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8368.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2923	2923	2923	2923	2923	
5°	2891	2899	2919	2931	2935	274
15°	2733	2764	2816	2856	2868	770
25°	2439	2498	2598	2669	2693	1122
35°	2053	2141	2284	2403	2439	1281
45°	1616	1732	1922	2077	2129	1250
55°	1188	1319	1533	1708	1767	1062
65°	774	906	1116	1271	1327	767
75°	393	508	655	770	794	419
85°	91	111	115	99	91	105
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2923.2	2923.2	2923.2	2923.2	2923.2
2.5°	2907.3	2911.3	2923.2	2931.2	2931.2
5°	2891.4	2899.4	2919.2	2931.2	2935.1
7.5°	2867.6	2879.5	2907.3	2923.2	2927.2
10°	2831.9	2847.8	2883.5	2907.3	2915.3
12.5°	2788.2	2812.0	2855.7	2887.5	2895.4
15°	2732.6	2764.3	2816.0	2855.7	2867.6
17.5°	2669.0	2708.7	2772.3	2819.9	2835.8
20°	2601.5	2641.2	2720.7	2776.3	2796.1
22.5°	2522.1	2573.7	2665.0	2728.6	2744.5
25°	2438.7	2498.2	2597.5	2669.0	2692.9
27.5°	2347.3	2418.8	2526.0	2613.4	2633.3
30°	2252.0	2327.5	2450.6	2545.9	2569.7
32.5°	2152.7	2240.1	2371.1	2478.4	2510.2
35°	2053.4	2140.8	2283.8	2402.9	2438.7
37.5°	1938.2	2041.5	2200.4	2323.5	2367.2
40°	1838.9	1938.2	2109.0	2244.0	2287.7
42.5°	1727.7	1835.0	2013.7	2160.6	2212.3
45°	1616.5	1731.7	1922.3	2077.2	2128.9
47.5°	1513.2	1628.4	1827.0	1989.9	2041.5
50°	1406.0	1525.2	1731.7	1898.5	1950.1
52.5°	1290.8	1421.9	1636.4	1803.2	1862.8
55°	1187.6	1318.6	1533.1	1707.9	1767.4
57.5°	1080.3	1215.4	1437.8	1604.6	1660.2
60°	981.0	1112.1	1330.5	1493.4	1556.9
62.5°	873.8	1008.8	1223.3	1382.2	1441.7
65°	774.5	905.6	1116.1	1271.0	1326.6
67.5°	675.2	806.3	1004.9	1151.8	1215.4
70°	575.9	707.0	889.7	1032.7	1088.3
72.5°	488.5	603.7	778.5	909.5	961.2
75°	393.2	508.4	655.3	770.5	794.4
77.5°	305.8	409.1	532.2	583.8	591.8
80°	226.4	305.8	389.2	401.1	401.1
82.5°	150.9	210.5	242.3	246.2	242.3
85°	91.4	111.2	115.2	99.3	91.4
87.5°	31.8	31.8	19.9	11.9	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)