

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: P388274

Luminaire Tested: **22CZ2-95VHE-SQR-UNV-L930-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: P388274
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-L930-CD1-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: 7614.8 lumens
Efficiency: N/A
Efficacy: 104.7 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

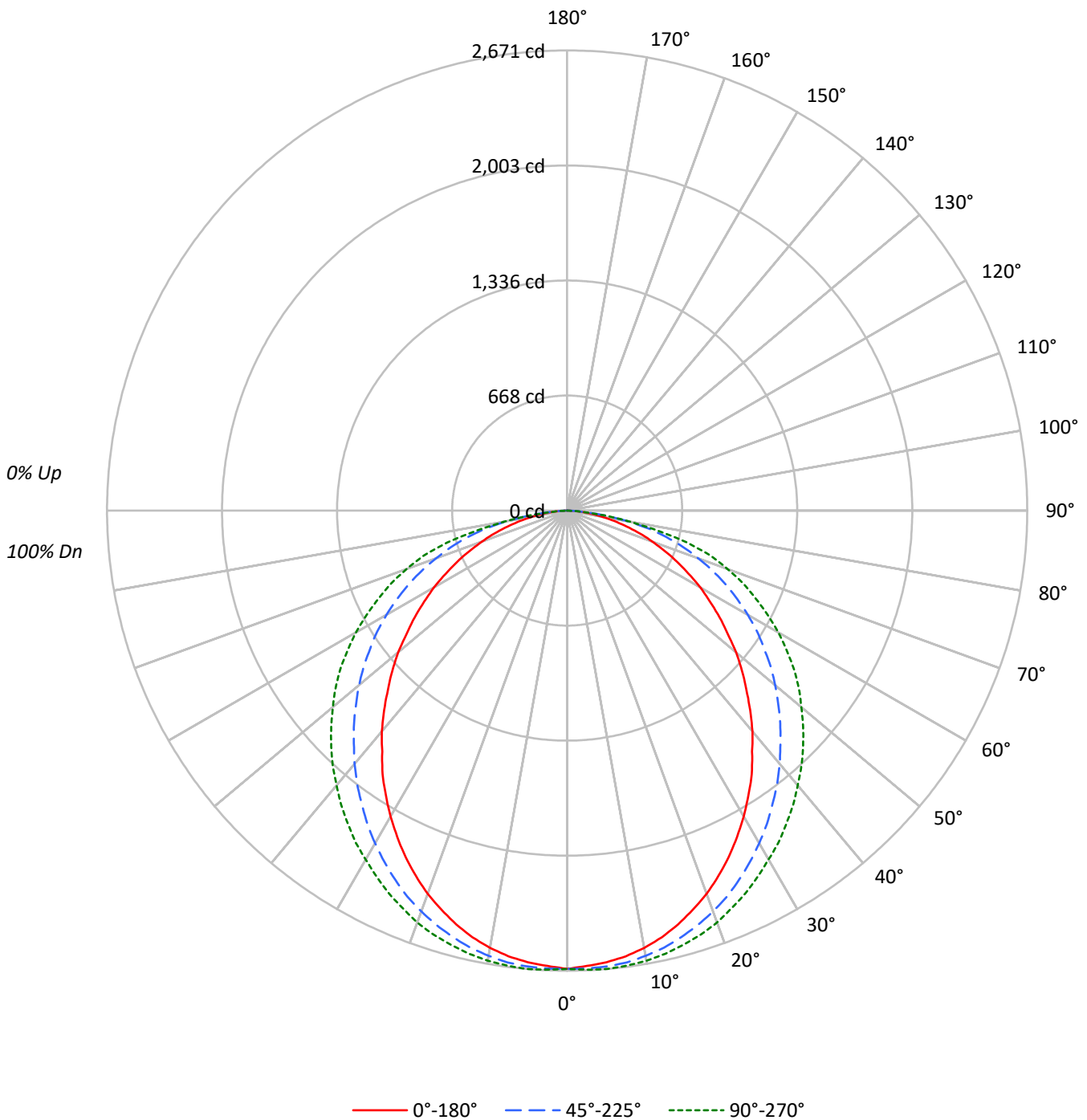
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7158	7158	7158
5°	7107	7176	7215
10°	7041	7170	7249
15°	6927	7139	7270
20°	6779	7090	7286
25°	6589	7018	7276
30°	6367	6929	7266
35°	6138	6827	7290
40°	5878	6741	7313
45°	5598	6657	7372
50°	5356	6597	7429
55°	5070	6545	7545
60°	4804	6516	7625
65°	4488	6467	7686
70°	4124	6370	7792
75°	3720	6200	7515
80°	3192	5489	5656
85°	2566	3236	2566



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.2	3.3
10°-20°	721.0	9.5
20°-30°	1082.9	14.2
30°-40°	1291.5	17.0
40°-50°	1335.3	17.5
50°-60°	1227.7	16.1
60°-70°	977.3	12.8
70°-80°	597.1	7.8
80°-90°	129.8	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°	2056.1	27.0
0°-40°	3347.6	44.0
0°-60°	5910.6	77.6
0°-90°	7614.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7614.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2660	2660	2660	2660	2660	
5°	2631	2638	2656	2667	2671	250
15°	2487	2516	2562	2599	2609	700
25°	2219	2273	2364	2429	2450	1021
35°	1868	1948	2078	2187	2219	1166
45°	1471	1576	1749	1890	1937	1138
55°	1081	1200	1395	1554	1608	967
65°	705	824	1016	1156	1207	698
75°	358	463	596	701	723	381
85°	83	101	105	90	83	96
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2660.0	2660.0	2660.0	2660.0	2660.0
2.5°	2645.6	2649.2	2660.0	2667.3	2667.3
5°	2631.1	2638.3	2656.4	2667.3	2670.9
7.5°	2609.4	2620.3	2645.6	2660.0	2663.6
10°	2576.9	2591.4	2623.9	2645.6	2652.8
12.5°	2537.2	2558.8	2598.6	2627.5	2634.7
15°	2486.6	2515.5	2562.5	2598.6	2609.4
17.5°	2428.7	2464.9	2522.7	2566.1	2580.5
20°	2367.3	2403.4	2475.7	2526.3	2544.4
22.5°	2295.0	2342.0	2425.1	2482.9	2497.4
25°	2219.1	2273.3	2363.7	2428.7	2450.4
27.5°	2136.0	2201.0	2298.6	2378.1	2396.2
30°	2049.2	2117.9	2229.9	2316.7	2338.4
32.5°	1958.9	2038.4	2157.7	2255.2	2284.2
35°	1868.5	1948.0	2078.2	2186.6	2219.1
37.5°	1763.7	1857.7	2002.3	2114.3	2154.0
40°	1673.4	1763.7	1919.1	2042.0	2081.8
42.5°	1572.2	1669.7	1832.4	1966.1	2013.1
45°	1471.0	1575.8	1749.3	1890.2	1937.2
47.5°	1377.0	1481.8	1662.5	1810.7	1857.7
50°	1279.4	1387.8	1575.8	1727.6	1774.6
52.5°	1174.6	1293.9	1489.0	1640.8	1695.0
55°	1080.6	1199.9	1395.1	1554.1	1608.3
57.5°	983.1	1105.9	1308.3	1460.1	1510.7
60°	892.7	1012.0	1210.7	1358.9	1416.8
62.5°	795.1	918.0	1113.2	1257.7	1311.9
65°	704.8	824.0	1015.6	1156.5	1207.1
67.5°	614.4	733.7	914.4	1048.1	1105.9
70°	524.1	643.3	809.6	939.7	990.3
72.5°	444.5	549.4	708.4	827.6	874.6
75°	357.8	462.6	596.3	701.2	722.8
77.5°	278.3	372.3	484.3	531.3	538.5
80°	206.0	278.3	354.2	365.0	365.0
82.5°	137.3	191.6	220.5	224.1	220.5
85°	83.1	101.2	104.8	90.4	83.1
87.5°	28.9	28.9	18.1	10.8	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)