

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: P387626

Luminaire Tested: **22CZ2-110VHE-SQR-UNV-L930-CD2-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: P387626
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: 22CZ2-110VHE-SQR-UNV-L930-CD2-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: 8767.7 lumens
Efficiency: N/A
Efficacy: 100.0 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

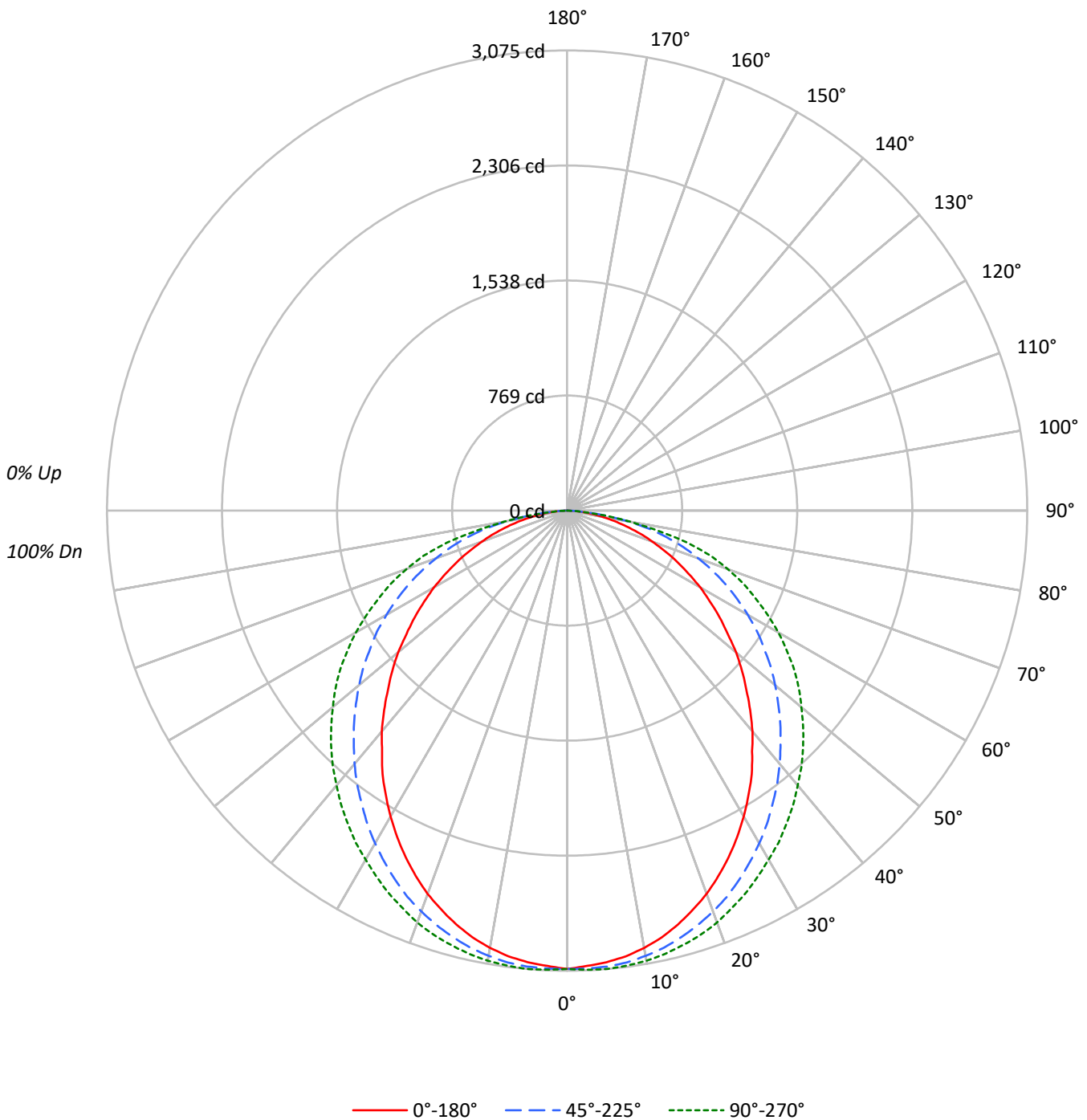
Input Watts (W): 87.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	8242	8242	8242
5°	8183	8262	8307
10°	8108	8255	8346
15°	7976	8220	8370
20°	7806	8163	8389
25°	7587	8081	8377
30°	7332	7978	8366
35°	7068	7861	8394
40°	6768	7762	8420
45°	6446	7665	8488
50°	6167	7596	8554
55°	5837	7536	8688
60°	5532	7503	8780
65°	5167	7445	8850
70°	4747	7334	8971
75°	4284	7139	8654
80°	3676	6320	6513
85°	2955	3727	2955



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.4	3.3
10°-20°	830.2	9.5
20°-30°	1246.9	14.2
30°-40°	1487.0	17.0
40°-50°	1537.5	17.5
50°-60°	1413.5	16.1
60°-70°	1125.3	12.8
70°-80°	687.5	7.8
80°-90°	149.4	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°	2367.4	27.0
0°-40°	3854.4	44.0
0°-60°	6805.5	77.6
0°-90°	8767.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8767.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3063	3063	3063	3063	3063	
5°	3030	3038	3059	3071	3075	287
15°	2863	2896	2950	2992	3004	806
25°	2555	2618	2722	2796	2821	1175
35°	2151	2243	2393	2518	2555	1342
45°	1694	1814	2014	2176	2230	1310
55°	1244	1382	1606	1789	1852	1113
65°	812	949	1169	1332	1390	804
75°	412	533	687	807	832	439
85°	96	116	121	104	96	110
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3062.8	3062.8	3062.8	3062.8	3062.8
2.5°	3046.1	3050.3	3062.8	3071.1	3071.1
5°	3029.5	3037.8	3058.6	3071.1	3075.3
7.5°	3004.5	3017.0	3046.1	3062.8	3066.9
10°	2967.1	2983.7	3021.2	3046.1	3054.4
12.5°	2921.3	2946.3	2992.0	3025.3	3033.6
15°	2863.0	2896.3	2950.4	2992.0	3004.5
17.5°	2796.4	2838.1	2904.6	2954.6	2971.2
20°	2725.7	2767.3	2850.5	2908.8	2929.6
22.5°	2642.5	2696.6	2792.3	2858.9	2875.5
25°	2555.1	2617.5	2721.5	2796.4	2821.4
27.5°	2459.4	2534.3	2646.6	2738.2	2759.0
30°	2359.5	2438.6	2567.6	2667.4	2692.4
32.5°	2255.5	2347.0	2484.3	2596.7	2630.0
35°	2151.4	2243.0	2392.8	2517.6	2555.1
37.5°	2030.7	2138.9	2305.4	2434.4	2480.2
40°	1926.7	2030.7	2209.7	2351.2	2396.9
42.5°	1810.2	1922.6	2109.8	2263.8	2317.9
45°	1693.7	1814.4	2014.1	2176.4	2230.5
47.5°	1585.5	1706.2	1914.2	2084.8	2138.9
50°	1473.1	1598.0	1814.4	1989.1	2043.2
52.5°	1352.4	1489.8	1714.5	1889.3	1951.7
55°	1244.2	1381.6	1606.3	1789.4	1851.8
57.5°	1131.9	1273.4	1506.4	1681.2	1739.5
60°	1027.9	1165.2	1394.1	1564.7	1631.3
62.5°	915.5	1057.0	1281.7	1448.2	1510.6
65°	811.5	948.8	1169.3	1331.6	1389.9
67.5°	707.4	844.8	1052.8	1206.8	1273.4
70°	603.4	740.7	932.1	1082.0	1140.2
72.5°	511.8	632.5	815.6	953.0	1007.1
75°	412.0	532.7	686.6	807.3	832.3
77.5°	320.4	428.6	557.6	611.7	620.0
80°	237.2	320.4	407.8	420.3	420.3
82.5°	158.1	220.6	253.8	258.0	253.8
85°	95.7	116.5	120.7	104.0	95.7
87.5°	33.3	33.3	20.8	12.5	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)