

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: P387625

Luminaire Tested: **22CZ2-110VHE-SQR-UNV-L930-CD2-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: P387625
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-SWPD1-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: 8659.0 lumens
Efficiency: N/A
Efficacy: 98.7 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

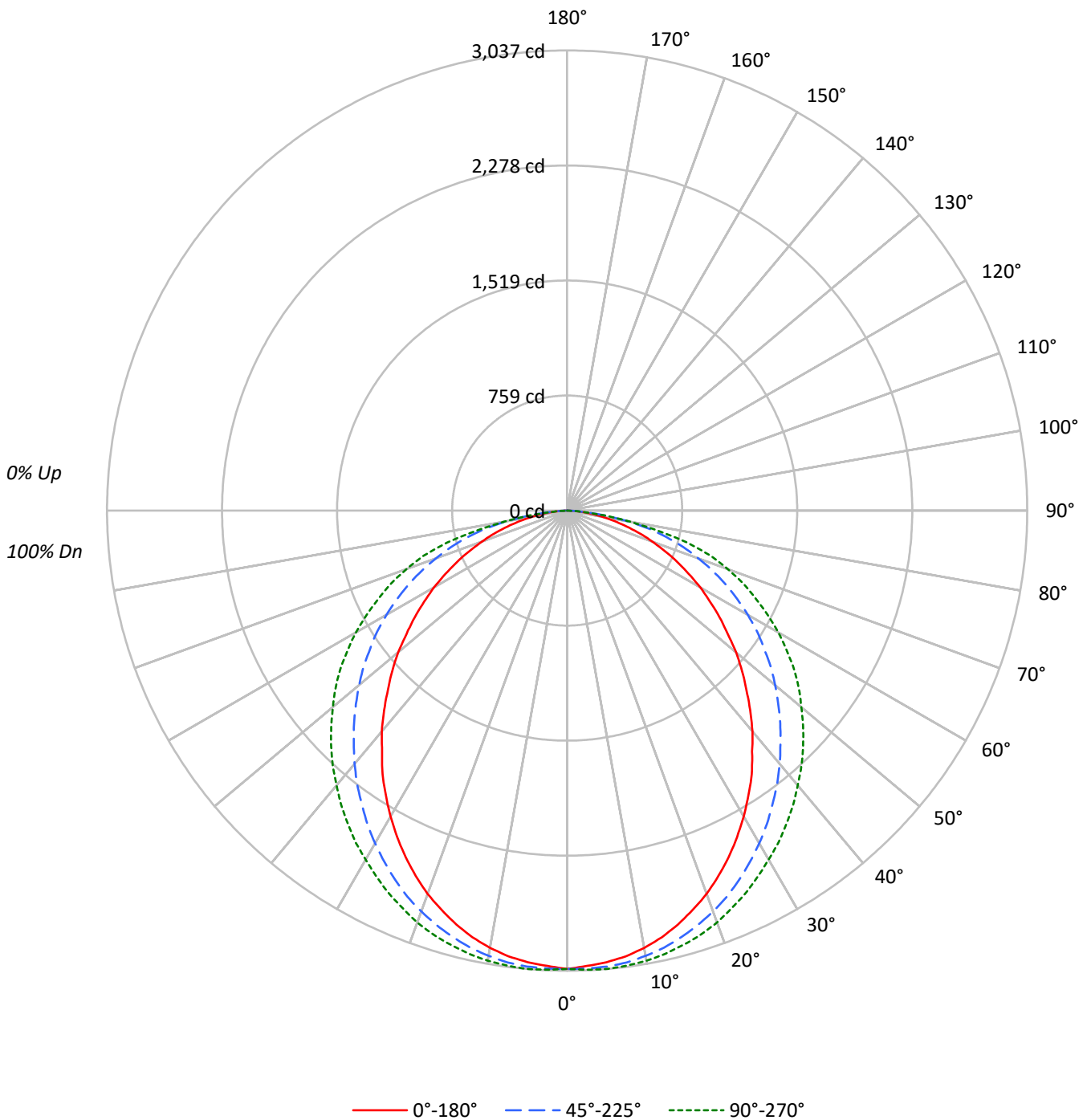
Input Watts (W): 87.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	8140	8140	8140
5°	8082	8160	8204
10°	8007	8153	8243
15°	7877	8118	8267
20°	7709	8062	8285
25°	7492	7981	8273
30°	7241	7879	8262
35°	6980	7763	8290
40°	6684	7666	8316
45°	6366	7570	8383
50°	6091	7502	8448
55°	5765	7443	8580
60°	5463	7410	8670
65°	5103	7353	8741
70°	4688	7243	8860
75°	4231	7050	8546
80°	3631	6242	6433
85°	2918	3680	2918



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	286.8	3.3
10°-20°	819.9	9.5
20°-30°	1231.4	14.2
30°-40°	1468.6	17.0
40°-50°	1518.4	17.5
50°-60°	1396.0	16.1
60°-70°	1111.4	12.8
70°-80°	679.0	7.8
80°-90°	147.6	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°	2338.0	27.0
0°-40°	3806.6	44.0
0°-60°	6721.1	77.6
0°-90°	8659.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8659.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3025	3025	3025	3025	3025	
5°	2992	3000	3021	3033	3037	284
15°	2828	2860	2914	2955	2967	796
25°	2523	2585	2688	2762	2786	1161
35°	2125	2215	2363	2486	2523	1326
45°	1673	1792	1989	2149	2203	1293
55°	1229	1364	1586	1767	1829	1099
65°	801	937	1155	1315	1373	794
75°	407	526	678	797	822	433
85°	94	115	119	103	94	109
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3024.8	3024.8	3024.8	3024.8	3024.8
2.5°	3008.4	3012.5	3024.8	3033.0	3033.0
5°	2991.9	3000.1	3020.7	3033.0	3037.1
7.5°	2967.3	2979.6	3008.4	3024.8	3028.9
10°	2930.3	2946.7	2983.7	3008.4	3016.6
12.5°	2885.1	2909.7	2954.9	2987.8	2996.0
15°	2827.5	2860.4	2913.8	2954.9	2967.3
17.5°	2761.8	2802.9	2868.6	2917.9	2934.4
20°	2691.9	2733.0	2815.2	2872.7	2893.3
22.5°	2609.7	2663.1	2757.7	2823.4	2839.9
25°	2523.4	2585.1	2687.8	2761.8	2786.4
27.5°	2428.9	2502.9	2613.8	2704.2	2724.8
30°	2330.2	2408.3	2535.7	2634.4	2659.0
32.5°	2227.5	2317.9	2453.5	2564.5	2597.4
35°	2124.8	2215.2	2363.1	2486.4	2523.4
37.5°	2005.6	2112.4	2276.8	2404.2	2449.4
40°	1902.8	2005.6	2182.3	2322.0	2367.2
42.5°	1787.8	1898.7	2083.7	2235.7	2289.1
45°	1672.7	1791.9	1989.1	2149.4	2202.8
47.5°	1565.8	1685.0	1890.5	2059.0	2112.4
50°	1454.9	1578.2	1791.9	1964.5	2017.9
52.5°	1335.7	1471.3	1693.2	1865.8	1927.5
55°	1228.8	1364.4	1586.4	1767.2	1828.9
57.5°	1117.9	1257.6	1487.7	1660.4	1717.9
60°	1015.1	1150.7	1376.8	1545.3	1611.0
62.5°	904.2	1043.9	1265.8	1430.2	1491.8
65°	801.4	937.0	1154.8	1315.1	1372.7
67.5°	698.7	834.3	1039.8	1191.8	1257.6
70°	595.9	731.5	920.6	1068.5	1126.1
72.5°	505.5	624.7	805.5	941.1	994.6
75°	406.9	526.1	678.1	797.3	822.0
77.5°	316.5	423.3	550.7	604.1	612.4
80°	234.3	316.5	402.8	415.1	415.1
82.5°	156.2	217.8	250.7	254.8	250.7
85°	94.5	115.1	119.2	102.7	94.5
87.5°	32.9	32.9	20.5	12.3	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)