

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: P388277

Luminaire Tested: **22CZ2-95VHE-SQR-UNV-L935-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: P388277
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-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: 7803.2 lumens
Efficiency: N/A
Efficacy: 107.3 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

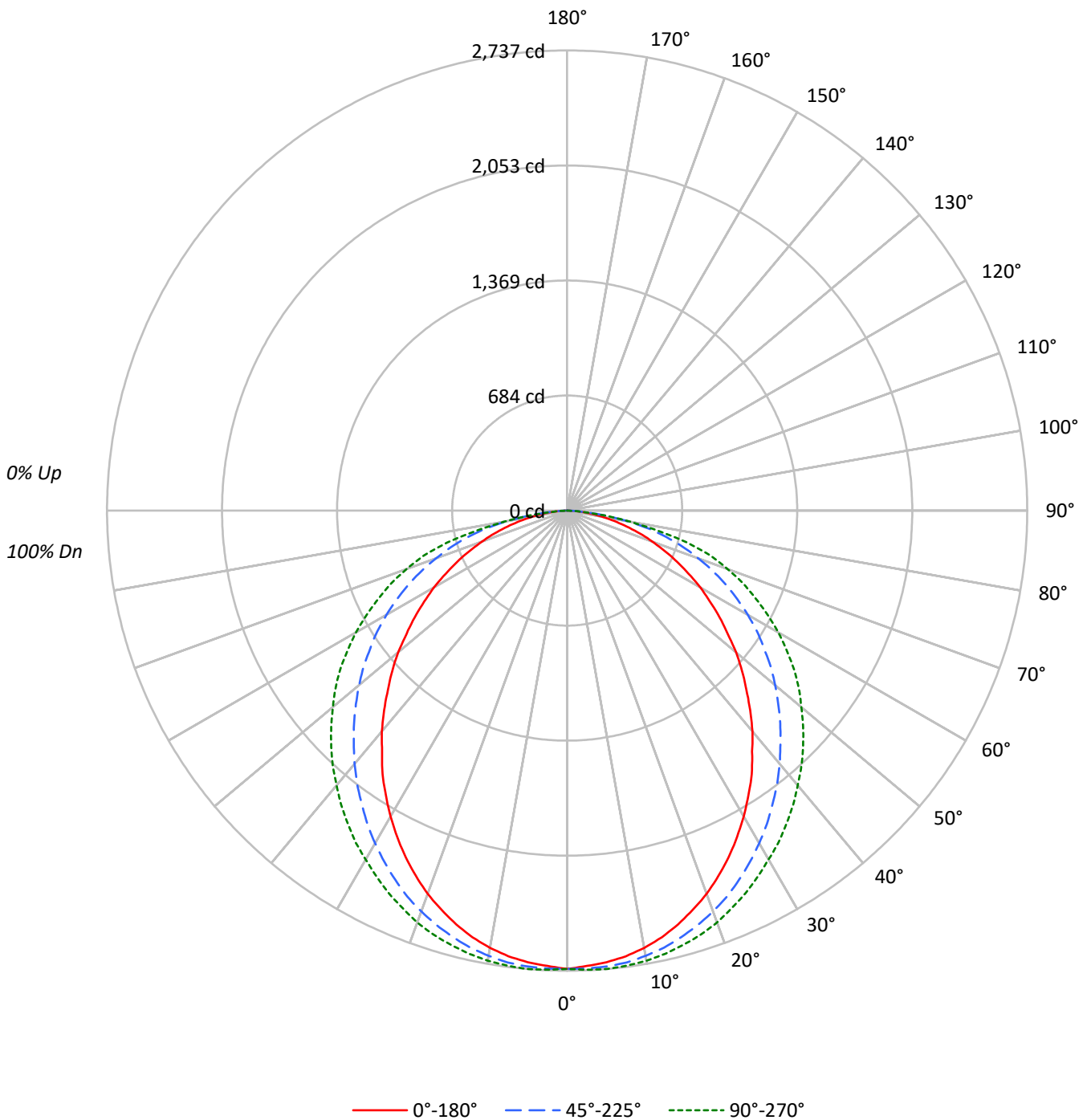
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7335	7335	7335
5°	7283	7353	7393
10°	7216	7347	7428
15°	7099	7315	7450
20°	6947	7265	7466
25°	6752	7192	7456
30°	6525	7100	7446
35°	6290	6996	7470
40°	6024	6908	7494
45°	5737	6822	7555
50°	5489	6760	7613
55°	5195	6707	7732
60°	4923	6677	7814
65°	4599	6627	7876
70°	4225	6527	7984
75°	3813	6354	7701
80°	3271	5625	5797
85°	2631	3316	2631



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	258.4	3.3
10°-20°	738.8	9.5
20°-30°	1109.7	14.2
30°-40°	1323.5	17.0
40°-50°	1368.4	17.5
50°-60°	1258.0	16.1
60°-70°	1001.5	12.8
70°-80°	611.9	7.8
80°-90°	133.0	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°	2107.0	27.0
0°-40°	3430.4	44.0
0°-60°	6056.8	77.6
0°-90°	7803.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7803.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2726	2726	2726	2726	2726	
5°	2696	2704	2722	2733	2737	256
15°	2548	2578	2626	2663	2674	718
25°	2274	2330	2422	2489	2511	1046
35°	1915	1996	2130	2241	2274	1195
45°	1507	1615	1792	1937	1985	1166
55°	1107	1230	1430	1592	1648	991
65°	722	844	1041	1185	1237	715
75°	367	474	611	718	741	391
85°	85	104	107	93	85	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2725.8	2725.8	2725.8	2725.8	2725.8
2.5°	2711.0	2714.7	2725.8	2733.3	2733.3
5°	2696.2	2703.6	2722.1	2733.3	2737.0
7.5°	2674.0	2685.1	2711.0	2725.8	2729.5
10°	2640.7	2655.5	2688.8	2711.0	2718.4
12.5°	2599.9	2622.1	2662.9	2692.5	2699.9
15°	2548.1	2577.7	2625.8	2662.9	2674.0
17.5°	2488.8	2525.9	2585.1	2629.6	2644.4
20°	2425.9	2462.9	2537.0	2588.8	2607.3
22.5°	2351.8	2399.9	2485.1	2544.4	2559.2
25°	2274.0	2329.6	2422.2	2488.8	2511.0
27.5°	2188.8	2255.5	2355.5	2437.0	2455.5
30°	2099.9	2170.3	2285.1	2374.0	2396.2
32.5°	2007.3	2088.8	2211.0	2311.0	2340.7
35°	1914.8	1996.2	2129.6	2240.7	2274.0
37.5°	1807.4	1903.6	2051.8	2166.6	2207.3
40°	1714.8	1807.4	1966.6	2092.5	2133.3
42.5°	1611.1	1711.1	1877.7	2014.8	2062.9
45°	1507.4	1614.8	1792.5	1937.0	1985.1
47.5°	1411.1	1518.5	1703.7	1855.5	1903.6
50°	1311.1	1422.2	1614.8	1770.3	1818.5
52.5°	1203.7	1325.9	1525.9	1681.4	1737.0
55°	1107.4	1229.6	1429.6	1592.5	1648.1
57.5°	1007.4	1133.3	1340.7	1496.3	1548.1
60°	914.8	1037.0	1240.7	1392.6	1451.8
62.5°	814.8	940.7	1140.7	1288.9	1344.4
65°	722.2	844.4	1040.7	1185.2	1237.0
67.5°	629.6	751.8	937.0	1074.0	1133.3
70°	537.0	659.2	829.6	962.9	1014.8
72.5°	455.5	562.9	725.9	848.1	896.3
75°	366.7	474.1	611.1	718.5	740.7
77.5°	285.2	381.5	496.3	544.4	551.8
80°	211.1	285.2	363.0	374.1	374.1
82.5°	140.7	196.3	225.9	229.6	225.9
85°	85.2	103.7	107.4	92.6	85.2
87.5°	29.6	29.6	18.5	11.1	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)