

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: P388235

Luminaire Tested: **22CZ2-85VHE-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: P388235
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: 22CZ2-85VHE-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: 7501.8 lumens
Efficiency: N/A
Efficacy: 118.0 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

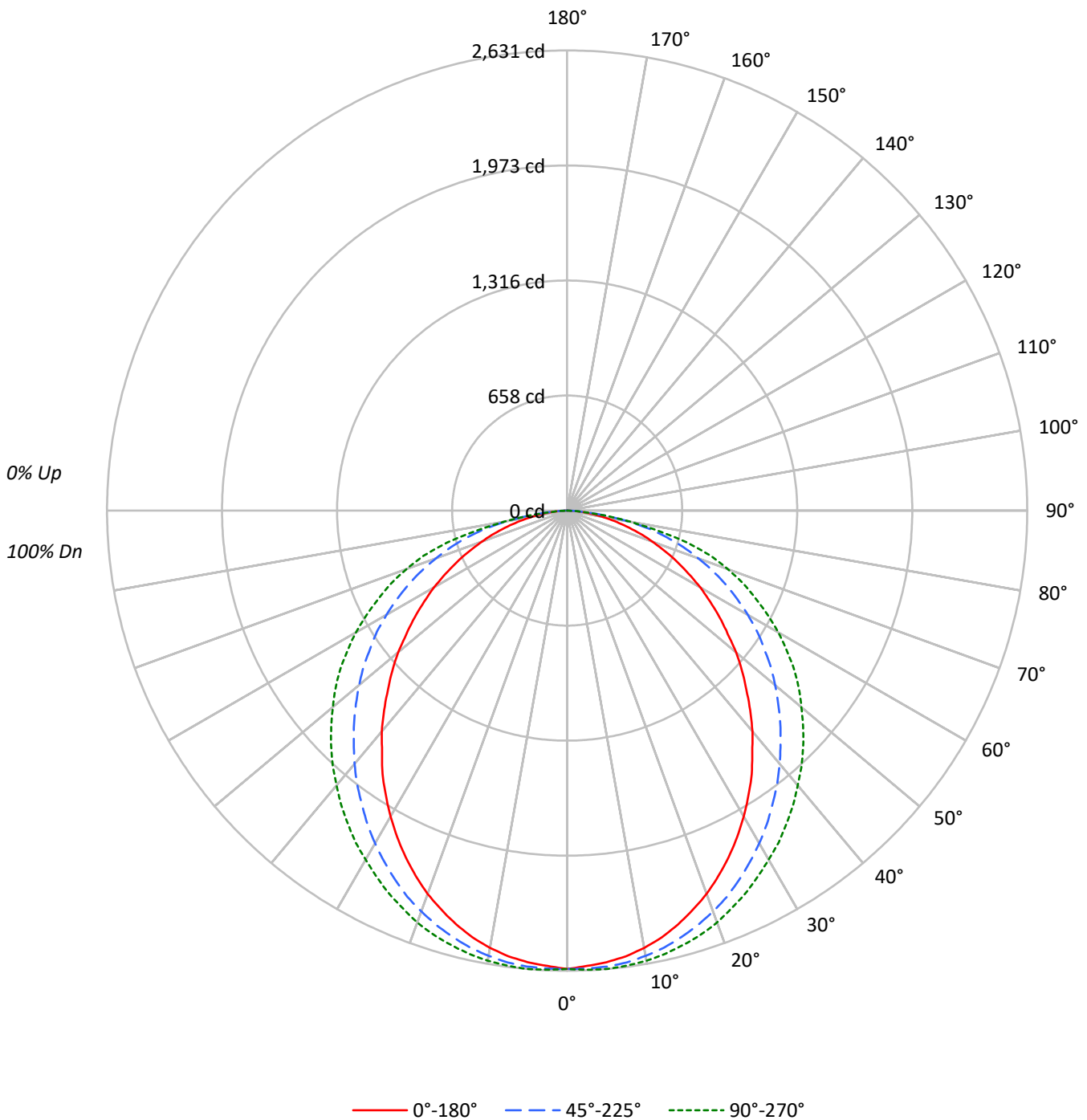
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20				20			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
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°	7052	7052	7052
5°	7002	7069	7108
10°	6937	7063	7141
15°	6825	7033	7162
20°	6679	6985	7178
25°	6491	6914	7168
30°	6273	6826	7158
35°	6047	6726	7182
40°	5791	6641	7204
45°	5515	6558	7263
50°	5277	6499	7319
55°	4995	6448	7433
60°	4733	6420	7512
65°	4421	6371	7572
70°	4062	6275	7676
75°	3665	6108	7404
80°	3146	5407	5573
85°	2529	3189	2529



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.4	3.3
10°-20°	710.3	9.5
20°-30°	1066.8	14.2
30°-40°	1272.3	17.0
40°-50°	1315.5	17.5
50°-60°	1209.4	16.1
60°-70°	962.8	12.8
70°-80°	588.2	7.8
80°-90°	127.9	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°	2025.6	27.0
0°-40°	3297.9	44.0
0°-60°	5822.8	77.6
0°-90°	7501.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7501.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2621	2621	2621	2621	2621	
5°	2592	2599	2617	2628	2631	246
15°	2450	2478	2524	2560	2571	690
25°	2186	2240	2329	2393	2414	1006
35°	1841	1919	2047	2154	2186	1148
45°	1449	1552	1723	1862	1908	1121
55°	1065	1182	1374	1531	1584	952
65°	694	812	1000	1139	1189	688
75°	352	456	588	691	712	375
85°	82	100	103	89	82	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2620.6	2620.6	2620.6	2620.6	2620.6
2.5°	2606.3	2609.9	2620.6	2627.7	2627.7
5°	2592.1	2599.2	2617.0	2627.7	2631.2
7.5°	2570.7	2581.4	2606.3	2620.6	2624.1
10°	2538.7	2552.9	2585.0	2606.3	2613.4
12.5°	2499.5	2520.9	2560.0	2588.5	2595.6
15°	2449.7	2478.1	2524.4	2560.0	2570.7
17.5°	2392.7	2428.3	2485.3	2528.0	2542.2
20°	2332.2	2367.8	2439.0	2488.8	2506.6
22.5°	2260.9	2307.2	2389.1	2446.1	2460.3
25°	2186.2	2239.6	2328.6	2392.7	2414.0
27.5°	2104.3	2168.4	2264.5	2342.8	2360.6
30°	2018.8	2086.5	2196.9	2282.3	2303.7
32.5°	1929.8	2008.1	2125.6	2221.8	2250.3
35°	1840.8	1919.1	2047.3	2154.1	2186.2
37.5°	1737.5	1830.1	1972.5	2082.9	2122.1
40°	1648.5	1737.5	1890.6	2011.7	2050.9
42.5°	1548.8	1645.0	1805.2	1936.9	1983.2
45°	1449.1	1552.4	1723.3	1862.2	1908.5
47.5°	1356.6	1459.8	1637.8	1783.8	1830.1
50°	1260.4	1367.2	1552.4	1701.9	1748.2
52.5°	1157.2	1274.7	1466.9	1616.5	1669.9
55°	1064.6	1182.1	1374.4	1531.0	1584.4
57.5°	968.5	1089.5	1288.9	1438.5	1488.3
60°	879.5	997.0	1192.8	1338.8	1395.7
62.5°	783.3	904.4	1096.6	1239.1	1292.5
65°	694.3	811.8	1000.5	1139.4	1189.2
67.5°	605.3	722.8	900.8	1032.6	1089.5
70°	516.3	633.8	797.6	925.7	975.6
72.5°	437.9	541.2	697.9	815.4	861.7
75°	352.5	455.7	587.5	690.7	712.1
77.5°	274.2	366.7	477.1	523.4	530.5
80°	203.0	274.2	348.9	359.6	359.6
82.5°	135.3	188.7	217.2	220.8	217.2
85°	81.9	99.7	103.3	89.0	81.9
87.5°	28.5	28.5	17.8	10.7	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)