

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: P388273

Luminaire Tested: **22CZ2-95VHE-SQR-UNV-L930-CD1-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: P388273  
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-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: 7520.3 lumens  
Efficiency: N/A  
Efficacy: 103.4 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

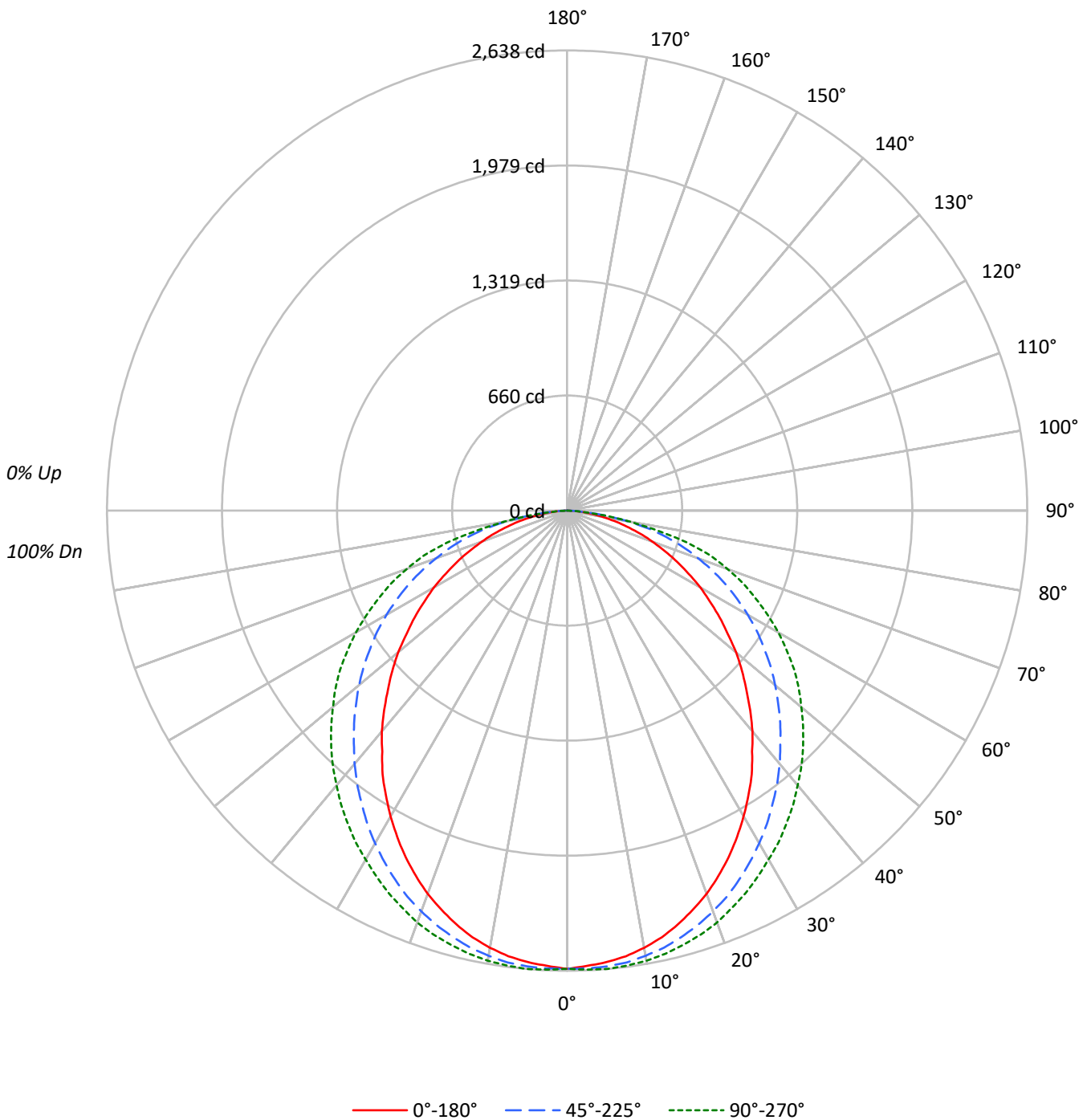
Input Watts (W): 72.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	7069	7069	7069
5°	7019	7087	7125
10°	6954	7081	7159
15°	6841	7050	7180
20°	6695	7002	7196
25°	6507	6931	7185
30°	6289	6843	7176
35°	6062	6742	7200
40°	5805	6658	7222
45°	5528	6575	7281
50°	5290	6515	7337
55°	5007	6464	7452
60°	4745	6435	7530
65°	4432	6387	7591
70°	4072	6290	7695
75°	3674	6123	7423
80°	3154	5421	5587
85°	2535	3196	2535



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	249.1	3.3
10°-20°	712.1	9.5
20°-30°	1069.5	14.2
30°-40°	1275.5	17.0
40°-50°	1318.7	17.5
50°-60°	1212.4	16.1
60°-70°	965.2	12.8
70°-80°	589.7	7.8
80°-90°	128.2	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°	2030.6	27.0
0°-40°	3306.0	44.0
0°-60°	5837.2	77.6
0°-90°	7520.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7520.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2627	2627	2627	2627	2627	
5°	2598	2606	2624	2634	2638	246
15°	2456	2484	2531	2566	2577	692
25°	2192	2245	2334	2399	2420	1008
35°	1845	1924	2052	2159	2192	1151
45°	1453	1556	1728	1867	1913	1123
55°	1067	1185	1378	1535	1588	955
65°	696	814	1003	1142	1192	689
75°	353	457	589	692	714	376
85°	82	100	104	89	82	95
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2627.0	2627.0	2627.0	2627.0	2627.0
2.5°	2612.7	2616.3	2627.0	2634.2	2634.2
5°	2598.5	2605.6	2623.5	2634.2	2637.7
7.5°	2577.1	2587.8	2612.7	2627.0	2630.6
10°	2544.9	2559.2	2591.3	2612.7	2619.9
12.5°	2505.7	2527.1	2566.3	2594.9	2602.0
15°	2455.7	2484.2	2530.7	2566.3	2577.1
17.5°	2398.6	2434.3	2491.4	2534.2	2548.5
20°	2337.9	2373.6	2445.0	2495.0	2512.8
22.5°	2266.5	2312.9	2395.0	2452.1	2466.4
25°	2191.6	2245.1	2334.3	2398.6	2420.0
27.5°	2109.5	2173.7	2270.1	2348.6	2366.5
30°	2023.8	2091.6	2202.3	2287.9	2309.4
32.5°	1934.6	2013.1	2130.9	2227.3	2255.8
35°	1845.3	1923.9	2052.4	2159.4	2191.6
37.5°	1741.8	1834.6	1977.4	2088.1	2127.3
40°	1652.6	1741.8	1895.3	2016.7	2055.9
42.5°	1552.7	1649.0	1809.6	1941.7	1988.1
45°	1452.7	1556.2	1727.6	1866.8	1913.2
47.5°	1359.9	1463.4	1641.9	1788.2	1834.6
50°	1263.5	1370.6	1556.2	1706.1	1752.5
52.5°	1160.0	1277.8	1470.6	1620.5	1674.0
55°	1067.2	1185.0	1377.8	1534.8	1588.3
57.5°	970.9	1092.2	1292.1	1442.0	1492.0
60°	881.6	999.4	1195.7	1342.1	1399.2
62.5°	785.3	906.6	1099.4	1242.1	1295.7
65°	696.0	813.8	1003.0	1142.2	1192.2
67.5°	606.8	724.6	903.0	1035.1	1092.2
70°	517.6	635.3	799.5	928.0	978.0
72.5°	439.0	542.5	699.6	817.4	863.8
75°	353.4	456.9	588.9	692.4	713.9
77.5°	274.8	367.6	478.3	524.7	531.8
80°	203.5	274.8	349.8	360.5	360.5
82.5°	135.6	189.2	217.7	221.3	217.7
85°	82.1	99.9	103.5	89.2	82.1
87.5°	28.6	28.6	17.8	10.7	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)