

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: P388562

Luminaire Tested: **22CZ2-95VHE-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: P388562  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-95VHE-UNV-L935-CD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

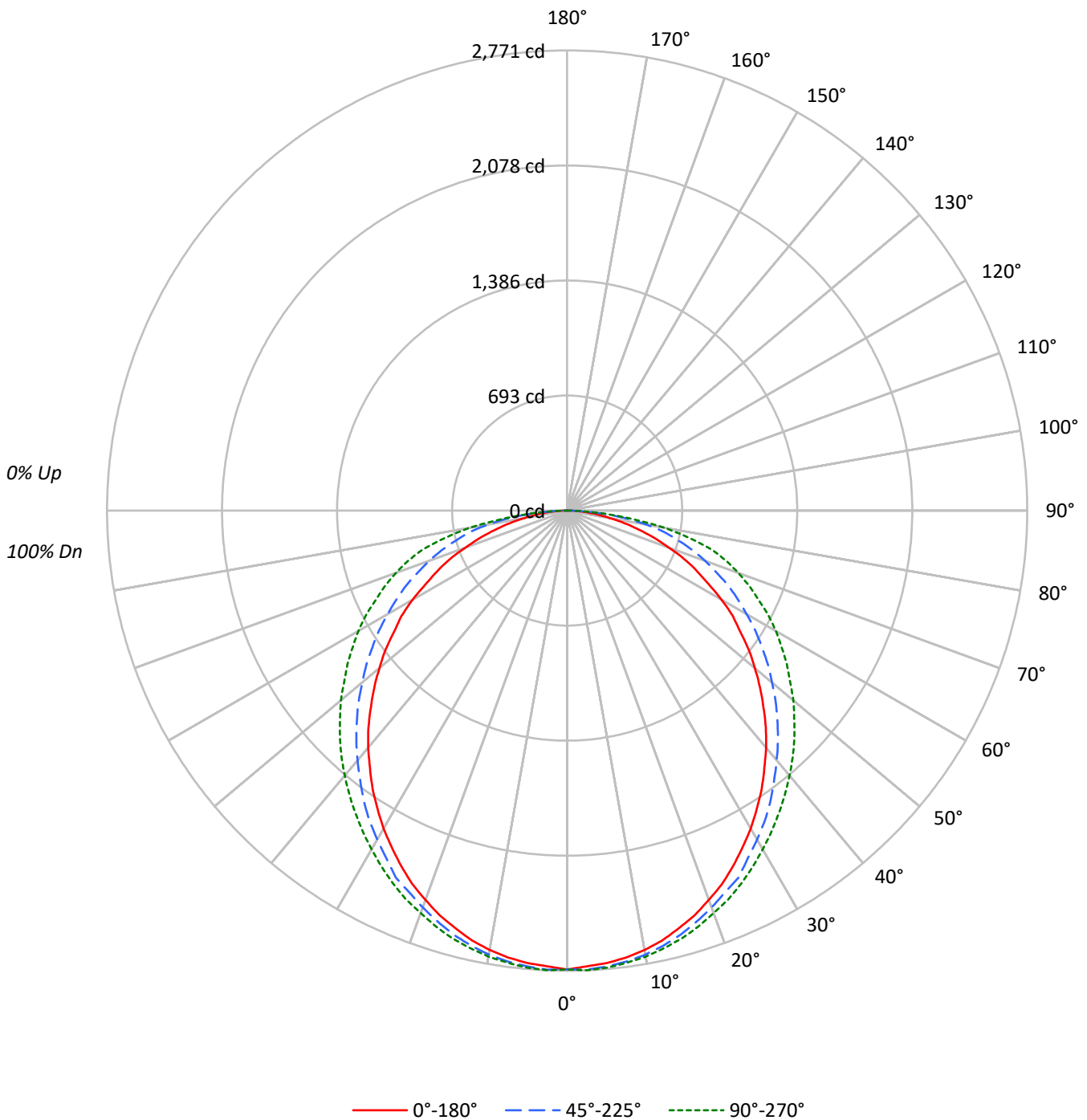
Lumens per Lamp: N/A  
Luminaire Lumens: 8125.1 lumens  
Efficiency: N/A  
Efficacy: 111.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

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



TEST NUMBER: P388562  
CATALOG NUMBER: 22CZ2-95VHE-UNV-L935-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P388562

CATALOG NUMBER: 22CZ2-95VHE-UNV-L935-CD1-U

**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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	7434	7434	7434
5°	7387	7441	7463
10°	7341	7418	7451
15°	7251	7362	7429
20°	7144	7282	7385
25°	7016	7241	7360
30°	6870	7106	7317
35°	6711	7014	7302
40°	6545	6896	7317
45°	6360	6816	7364
50°	6176	6745	7448
55°	5965	6715	7578
60°	5788	6713	7811
65°	5499	6823	8096
70°	5128	6952	8619
75°	4697	7192	9312
80°	4090	7497	9169
85°	3578	6666	7284



TEST NUMBER: P388562

CATALOG NUMBER: 22CZ2-95VHE-UNV-L935-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	261.3	3.2
10°-20°	744.2	9.2
20°-30°	1117.2	13.7
30°-40°	1334.9	16.4
40°-50°	1388.1	17.1
50°-60°	1286.6	15.8
60°-70°	1055.3	13.0
70°-80°	713.4	8.8
80°-90°	224.2	2.8
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°	2122.6	26.1
0°-40°	3457.6	42.6
0°-60°	6132.2	75.5
0°-90°	8125.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8125.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2763	2763	2763	2763	2763	
5°	2735	2739	2755	2759	2763	260
15°	2603	2615	2643	2659	2667	734
25°	2363	2383	2439	2467	2479	1088
35°	2043	2071	2135	2199	2223	1277
45°	1671	1703	1791	1895	1935	1291
55°	1271	1311	1431	1559	1615	1143
65°	864	912	1072	1211	1271	854
75°	452	528	692	832	896	479
85°	116	160	216	240	236	132
90°	0	0	0	0	0	



TEST NUMBER: P388562

CATALOG NUMBER: 22CZ2-95VHE-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2762.7	2762.7	2762.7	2762.7	2762.7
2.5°	2746.7	2754.7	2766.7	2770.7	2770.7
5°	2734.7	2738.7	2754.7	2758.7	2762.7
7.5°	2714.7	2722.7	2738.7	2742.7	2746.7
10°	2686.7	2694.7	2714.7	2722.7	2726.7
12.5°	2650.7	2658.7	2682.7	2694.7	2698.7
15°	2602.8	2614.8	2642.7	2658.7	2666.7
17.5°	2554.8	2566.8	2594.8	2618.8	2626.7
20°	2494.8	2522.8	2542.8	2574.8	2578.8
22.5°	2434.8	2450.8	2486.8	2518.8	2534.8
25°	2362.9	2382.9	2438.8	2466.8	2478.8
27.5°	2286.9	2314.9	2358.9	2402.9	2418.8
30°	2210.9	2230.9	2286.9	2338.9	2354.9
32.5°	2127.0	2155.0	2214.9	2266.9	2290.9
35°	2043.0	2071.0	2135.0	2199.0	2222.9
37.5°	1951.1	1983.1	2047.0	2123.0	2155.0
40°	1863.1	1887.1	1963.1	2055.0	2083.0
42.5°	1771.2	1799.1	1879.1	1979.1	2011.0
45°	1671.2	1703.2	1791.1	1895.1	1935.1
47.5°	1575.2	1607.2	1703.2	1807.1	1855.1
50°	1475.3	1515.3	1611.2	1731.2	1779.2
52.5°	1379.3	1415.3	1523.3	1647.2	1691.2
55°	1271.4	1311.4	1431.3	1559.3	1615.2
57.5°	1183.4	1211.4	1343.4	1475.3	1531.3
60°	1075.5	1111.5	1247.4	1387.3	1451.3
62.5°	959.5	1019.5	1159.4	1303.4	1367.3
65°	863.6	911.6	1071.5	1211.4	1271.4
67.5°	763.6	815.6	971.5	1119.5	1187.4
70°	651.7	719.7	883.6	1031.5	1095.5
72.5°	551.7	623.7	791.6	935.6	1003.5
75°	451.8	527.7	691.7	831.6	895.6
77.5°	355.8	439.8	599.7	707.7	747.6
80°	263.9	343.8	483.8	559.7	591.7
82.5°	183.9	251.9	355.8	395.8	403.8
85°	115.9	159.9	215.9	239.9	235.9
87.5°	52.0	64.0	80.0	88.0	84.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)