

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: P389498

Luminaire Tested: **22CZ2-95VHE-S-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: P389498
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-95VHE-S-UNV-L935-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8537.3 lumens
Efficiency: N/A
Efficacy: 117.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

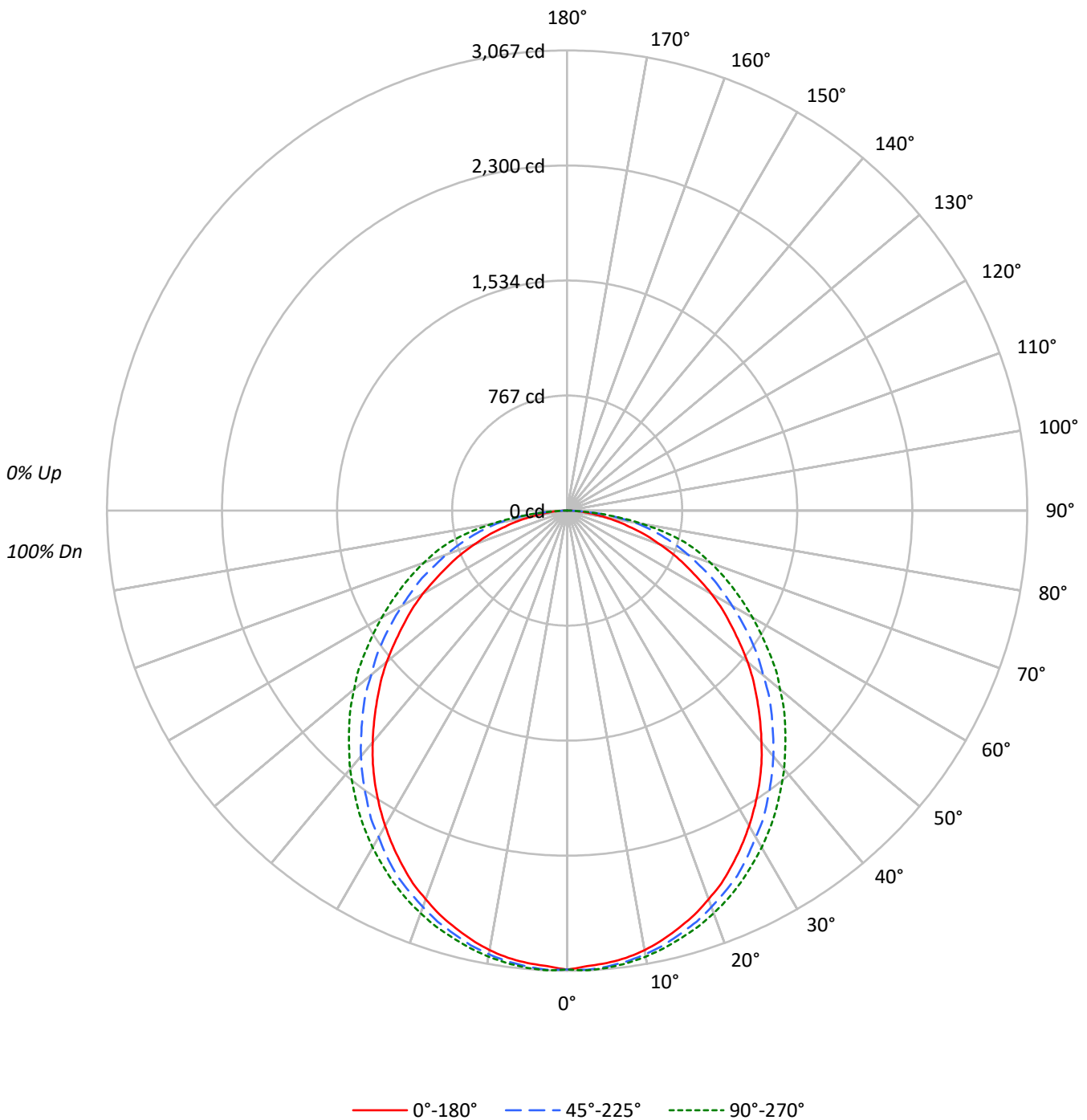
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P389498

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

Luminous Intensity Polar Plot





TEST NUMBER: P389498

CATALOG NUMBER: 22CZ2-95VHE-S-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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	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	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8232	8232	8232
5°	8178	8242	8264
10°	8131	8207	8250
15°	8023	8134	8212
20°	7893	8053	8179
25°	7735	7971	8125
30°	7538	7810	8057
35°	7328	7668	7982
40°	7080	7514	7906
45°	6822	7337	7822
50°	6570	7137	7754
55°	6260	7008	7699
60°	5981	6839	7675
65°	5580	6797	7761
70°	5140	6738	7991
75°	4638	6833	8407
80°	4012	7037	7902
85°	3319	5903	5903



TEST NUMBER: P389498

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	289.3	3.4
10°-20°	823.3	9.6
20°-30°	1231.9	14.4
30°-40°	1458.8	17.1
40°-50°	1486.7	17.4
50°-60°	1332.5	15.6
60°-70°	1043.3	12.2
70°-80°	672.7	7.9
80°-90°	198.7	2.3
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°	2344.5	27.5
0°-40°	3803.3	44.5
0°-60°	6622.6	77.6
0°-90°	8537.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8537.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3059	3059	3059	3059	3059	
5°	3027	3035	3051	3055	3059	287
15°	2880	2896	2920	2944	2948	812
25°	2605	2629	2685	2721	2736	1199
35°	2231	2258	2334	2406	2430	1394
45°	1792	1832	1928	2028	2055	1384
55°	1334	1378	1494	1597	1641	1196
65°	876	928	1068	1171	1219	871
75°	446	514	657	769	809	478
85°	108	147	191	191	191	126
90°	0	0	0	0	0	



TEST NUMBER: P389498

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3059.2	3059.2	3059.2	3059.2	3059.2
2.5°	3039.3	3047.2	3063.2	3067.1	3067.1
5°	3027.3	3035.3	3051.2	3055.2	3059.2
7.5°	3007.4	3011.4	3031.3	3039.3	3043.2
10°	2975.5	2983.5	3003.4	3015.4	3019.3
12.5°	2931.7	2943.7	2967.6	2983.5	2987.5
15°	2879.9	2895.9	2919.8	2943.7	2947.6
17.5°	2824.2	2840.1	2872.0	2899.8	2907.8
20°	2756.4	2776.4	2812.2	2844.1	2856.0
22.5°	2688.7	2704.7	2748.5	2788.3	2800.3
25°	2605.1	2629.0	2684.7	2720.6	2736.5
27.5°	2517.5	2545.3	2601.1	2648.9	2664.8
30°	2425.8	2453.7	2513.5	2573.2	2593.1
32.5°	2330.2	2362.1	2433.8	2493.6	2513.5
35°	2230.7	2258.5	2334.2	2405.9	2429.8
37.5°	2127.1	2151.0	2238.6	2314.3	2338.2
40°	2015.6	2047.4	2139.0	2226.7	2250.6
42.5°	1904.0	1939.9	2031.5	2127.1	2151.0
45°	1792.5	1832.3	1927.9	2027.5	2055.4
47.5°	1684.9	1716.8	1824.4	1920.0	1959.8
50°	1569.4	1601.3	1704.9	1812.4	1852.2
52.5°	1449.9	1493.7	1605.3	1708.8	1756.6
55°	1334.4	1378.2	1493.7	1597.3	1641.1
57.5°	1226.9	1262.7	1382.2	1489.8	1533.6
60°	1111.3	1143.2	1270.7	1386.2	1426.0
62.5°	987.9	1035.7	1167.1	1274.7	1322.5
65°	876.3	928.1	1067.5	1171.1	1218.9
67.5°	772.8	820.6	956.0	1067.5	1119.3
70°	653.3	717.0	856.4	967.9	1015.7
72.5°	557.7	613.4	756.8	868.4	920.1
75°	446.1	513.8	657.2	768.8	808.6
77.5°	354.5	422.2	557.7	645.3	665.2
80°	258.9	326.6	454.1	497.9	509.9
82.5°	175.3	239.0	326.6	338.6	342.6
85°	107.5	147.4	191.2	191.2	191.2
87.5°	51.8	59.7	67.7	63.7	63.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)