

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: P389496

Luminaire Tested: **22CZ2-95VHE-S-UNV-L935-CD1-SDWPD1-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: P389496
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-SDWPD1-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: 8329.7 lumens
Efficiency: N/A
Efficacy: 114.6 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

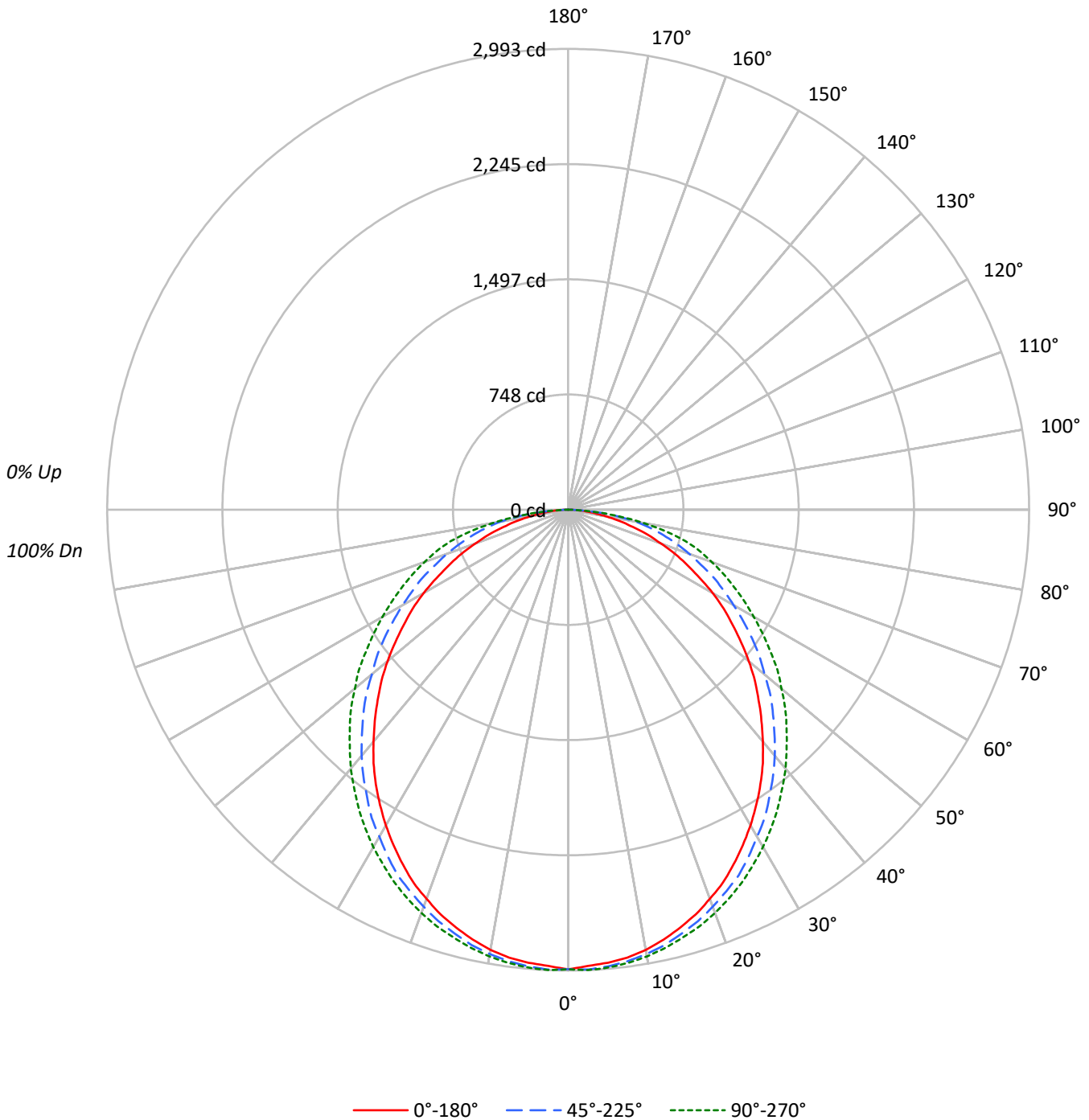
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P389496

CATALOG NUMBER: 22CZ2-95VHE-S-UNV-L935-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P389496

CATALOG NUMBER: 22CZ2-95VHE-S-UNV-L935-CD1-SDWPD1-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°	8032	8032	8032
5°	7979	8042	8063
10°	7933	8007	8050
15°	7828	7936	8012
20°	7702	7857	7980
25°	7547	7778	7928
30°	7354	7620	7862
35°	7150	7482	7788
40°	6908	7331	7713
45°	6656	7158	7632
50°	6411	6964	7566
55°	6108	6838	7512
60°	5836	6673	7488
65°	5444	6632	7573
70°	5015	6574	7797
75°	4526	6668	8202
80°	3914	6867	7710
85°	3239	5758	5758



TEST NUMBER: P389496

CATALOG NUMBER: 22CZ2-95VHE-S-UNV-L935-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	282.3	3.4
10°-20°	803.3	9.6
20°-30°	1201.9	14.4
30°-40°	1423.4	17.1
40°-50°	1450.6	17.4
50°-60°	1300.1	15.6
60°-70°	1017.9	12.2
70°-80°	656.4	7.9
80°-90°	193.9	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°	2287.4	27.5
0°-40°	3710.8	44.5
0°-60°	6461.5	77.6
0°-90°	8329.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8329.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2985	2985	2985	2985	2985	
5°	2954	2962	2977	2981	2985	280
15°	2810	2825	2849	2872	2876	792
25°	2542	2565	2620	2654	2670	1170
35°	2176	2204	2278	2347	2371	1360
45°	1749	1788	1881	1978	2005	1351
55°	1302	1345	1457	1558	1601	1167
65°	855	906	1042	1143	1189	849
75°	435	501	641	750	789	467
85°	105	144	186	186	186	123
90°	0	0	0	0	0	



TEST NUMBER: P389496

CATALOG NUMBER: 22CZ2-95VHE-S-UNV-L935-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2984.8	2984.8	2984.8	2984.8	2984.8
2.5°	2965.4	2973.1	2988.7	2992.6	2992.6
5°	2953.7	2961.5	2977.0	2980.9	2984.8
7.5°	2934.3	2938.2	2957.6	2965.4	2969.2
10°	2903.2	2910.9	2930.4	2942.0	2945.9
12.5°	2860.4	2872.1	2895.4	2910.9	2914.8
15°	2809.9	2825.4	2848.8	2872.1	2876.0
17.5°	2755.5	2771.0	2802.1	2829.3	2837.1
20°	2689.4	2708.9	2743.8	2774.9	2786.6
22.5°	2623.4	2638.9	2681.6	2720.5	2732.2
25°	2541.7	2565.1	2619.5	2654.4	2670.0
27.5°	2456.2	2483.4	2537.8	2584.5	2600.0
30°	2366.8	2394.1	2452.3	2510.6	2530.1
32.5°	2273.6	2304.7	2374.6	2432.9	2452.3
35°	2176.4	2203.6	2277.5	2347.4	2370.7
37.5°	2075.4	2098.7	2184.2	2258.0	2281.3
40°	1966.5	1997.6	2087.0	2172.5	2195.8
42.5°	1857.7	1892.7	1982.1	2075.4	2098.7
45°	1748.9	1787.8	1881.0	1978.2	2005.4
47.5°	1644.0	1675.1	1780.0	1873.3	1912.1
50°	1531.3	1562.4	1663.4	1768.3	1807.2
52.5°	1414.7	1457.4	1566.2	1667.3	1713.9
55°	1302.0	1344.7	1457.4	1558.5	1601.2
57.5°	1197.0	1232.0	1348.6	1453.5	1496.3
60°	1084.3	1115.4	1239.8	1352.5	1391.3
62.5°	963.8	1010.5	1138.7	1243.7	1290.3
65°	855.0	905.5	1041.6	1142.6	1189.3
67.5°	754.0	800.6	932.7	1041.6	1092.1
70°	637.4	699.6	835.6	944.4	991.0
72.5°	544.1	598.5	738.4	847.2	897.8
75°	435.3	501.4	641.3	750.1	788.9
77.5°	345.9	412.0	544.1	629.6	649.0
80°	252.6	318.7	443.1	485.8	497.5
82.5°	171.0	233.2	318.7	330.3	334.2
85°	104.9	143.8	186.5	186.5	186.5
87.5°	50.5	58.3	66.1	62.2	62.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)