

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: P389406

Luminaire Tested: **22CZ2-75VHE-S-UNV-L950-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: P389406  
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: 22CZ2-75VHE-S-UNV-L950-CD1-SDWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SMOOTH LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7024.5 lumens  
Efficiency: N/A  
Efficacy: 128.4 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

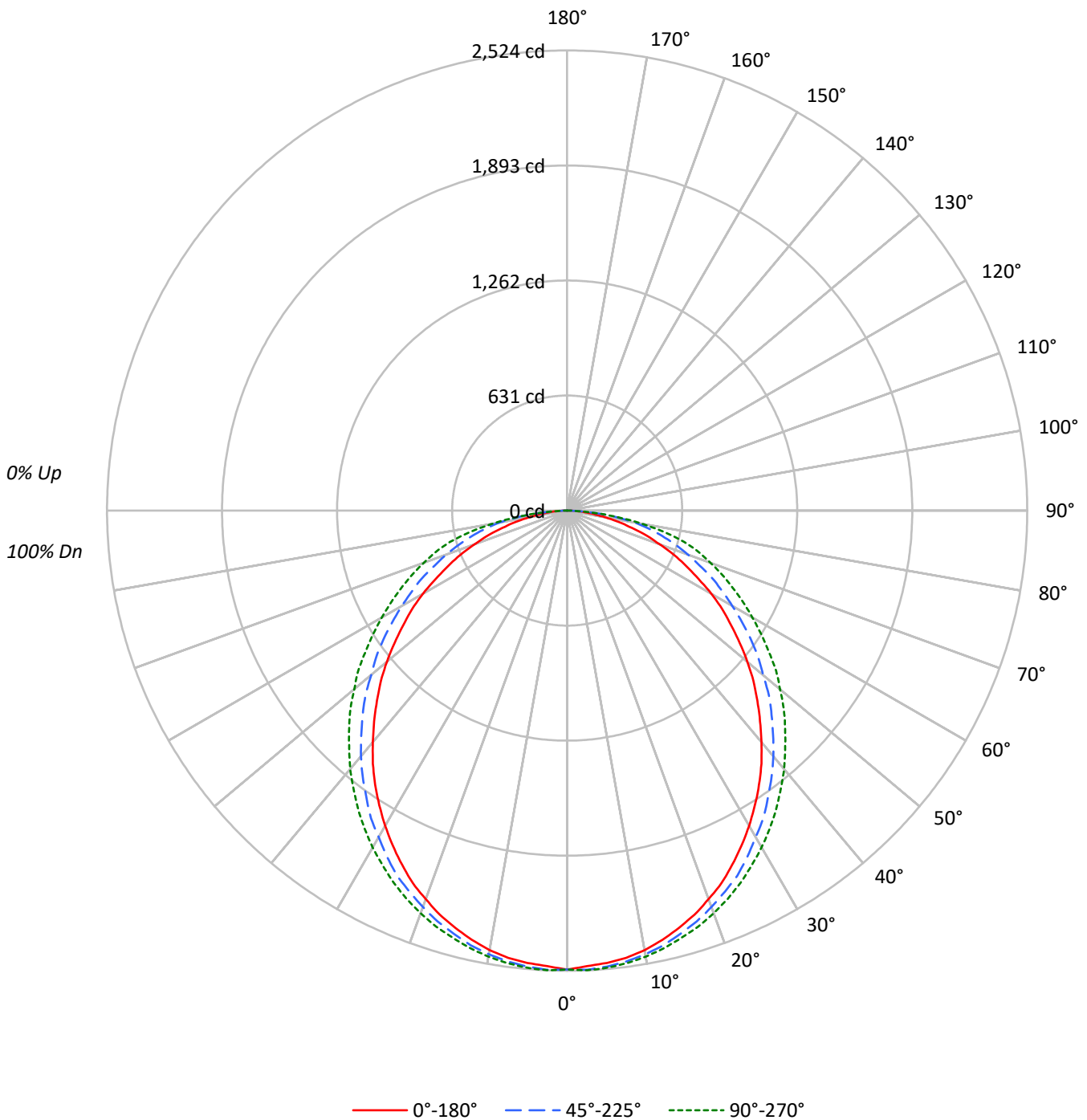
Input Watts (W): 54.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P389406

CATALOG NUMBER: 22CZ2-75VHE-S-UNV-L950-CD1-SDWPD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P389406

CATALOG NUMBER: 22CZ2-75VHE-S-UNV-L950-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°	6773	6773	6773
5°	6729	6782	6799
10°	6690	6753	6788
15°	6601	6693	6757
20°	6495	6626	6729
25°	6364	6559	6685
30°	6202	6426	6630
35°	6029	6309	6568
40°	5826	6183	6505
45°	5613	6037	6436
50°	5406	5873	6380
55°	5151	5766	6335
60°	4921	5627	6315
65°	4591	5593	6386
70°	4229	5545	6576
75°	3817	5623	6917
80°	3301	5790	6501
85°	2732	4857	4857



TEST NUMBER: P389406

CATALOG NUMBER: 22CZ2-75VHE-S-UNV-L950-CD1-SDWPD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	238.0	3.4
10°-20°	677.4	9.6
20°-30°	1013.6	14.4
30°-40°	1200.3	17.1
40°-50°	1223.3	17.4
50°-60°	1096.4	15.6
60°-70°	858.4	12.2
70°-80°	553.5	7.9
80°-90°	163.5	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°	1929.0	27.5
0°-40°	3129.4	44.5
0°-60°	5449.1	77.6
0°-90°	7024.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7024.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2517	2517	2517	2517	2517	
5°	2491	2497	2510	2514	2517	236
15°	2370	2383	2402	2422	2425	668
25°	2144	2163	2209	2238	2252	987
35°	1835	1858	1921	1980	1999	1147
45°	1475	1508	1586	1668	1691	1139
55°	1098	1134	1229	1314	1350	984
65°	721	764	878	964	1003	716
75°	367	423	541	633	665	394
85°	88	121	157	157	157	104
90°	0	0	0	0	0	



TEST NUMBER: P389406

CATALOG NUMBER: 22CZ2-75VHE-S-UNV-L950-CD1-SDWPD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2517.1	2517.1	2517.1	2517.1	2517.1
2.5°	2500.7	2507.3	2520.4	2523.7	2523.7
5°	2490.9	2497.4	2510.5	2513.8	2517.1
7.5°	2474.5	2477.8	2494.2	2500.7	2504.0
10°	2448.3	2454.8	2471.2	2481.0	2484.3
12.5°	2412.2	2422.1	2441.7	2454.8	2458.1
15°	2369.6	2382.7	2402.4	2422.1	2425.3
17.5°	2323.7	2336.8	2363.1	2386.0	2392.6
20°	2268.0	2284.4	2313.9	2340.1	2349.9
22.5°	2212.3	2225.4	2261.5	2294.2	2304.1
25°	2143.5	2163.1	2209.0	2238.5	2251.6
27.5°	2071.4	2094.3	2140.2	2179.5	2192.6
30°	1996.0	2018.9	2068.1	2117.2	2133.6
32.5°	1917.3	1943.5	2002.5	2051.7	2068.1
35°	1835.4	1858.3	1920.6	1979.6	1999.3
37.5°	1750.2	1769.8	1841.9	1904.2	1923.9
40°	1658.4	1684.6	1760.0	1832.1	1851.8
42.5°	1566.6	1596.1	1671.5	1750.2	1769.8
45°	1474.9	1507.6	1586.3	1668.2	1691.2
47.5°	1386.4	1412.6	1501.1	1579.7	1612.5
50°	1291.3	1317.5	1402.8	1491.2	1524.0
52.5°	1193.0	1229.1	1320.8	1406.0	1445.4
55°	1098.0	1134.0	1229.1	1314.3	1350.3
57.5°	1009.5	1039.0	1137.3	1225.8	1261.8
60°	914.4	940.6	1045.5	1140.6	1173.3
62.5°	812.8	852.1	960.3	1048.8	1088.1
65°	721.0	763.7	878.4	963.6	1002.9
67.5°	635.8	675.2	786.6	878.4	921.0
70°	537.5	589.9	704.7	796.4	835.8
72.5°	458.8	504.7	622.7	714.5	757.1
75°	367.1	422.8	540.8	632.6	665.3
77.5°	291.7	347.4	458.8	531.0	547.3
80°	213.0	268.8	373.6	409.7	419.5
82.5°	144.2	196.6	268.8	278.6	281.9
85°	88.5	121.3	157.3	157.3	157.3
87.5°	42.6	49.2	55.7	52.4	52.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)