

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: P389902

Luminaire Tested: **24CZ2-75VHE-S-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: P389902
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75VHE-S-UNV-L930-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6560.0 lumens
Efficiency: N/A
Efficacy: 131.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

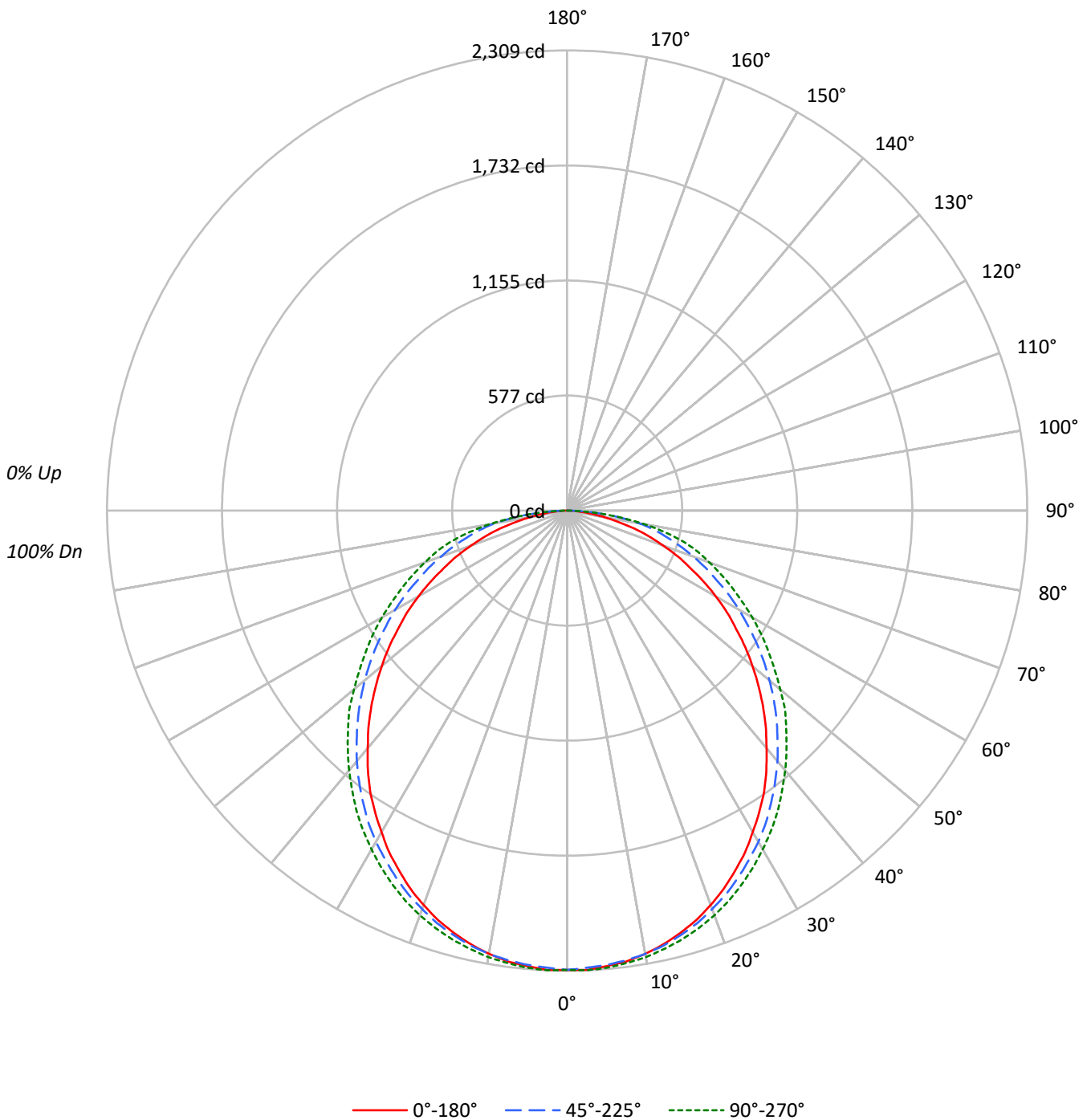
Input Watts (W): 49.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P389902

CATALOG NUMBER: 24CZ2-75VHE-S-UNV-L930-CD1-SWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P389902

CATALOG NUMBER: 24CZ2-75VHE-S-UNV-L930-CD1-SWPD1-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	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	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°	3101	3101	3101
5°	3099	3090	3110
10°	3086	3086	3109
15°	3056	3071	3103
20°	3016	3046	3094
25°	2960	3016	3075
30°	2894	2982	3049
35°	2830	2933	3026
40°	2734	2884	2990
45°	2645	2827	2958
50°	2543	2774	2922
55°	2429	2723	2894
60°	2316	2680	2888
65°	2169	2634	2906
70°	2008	2648	2984
75°	1798	2697	3152
80°	1453	2858	3084
85°	1093	2509	2445



TEST NUMBER: P389902

CATALOG NUMBER: 24CZ2-75VHE-S-UNV-L930-CD1-SWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.2	3.3
10°-20°	623.4	9.5
20°-30°	937.1	14.3
30°-40°	1116.3	17.0
40°-50°	1142.4	17.4
50°-60°	1028.5	15.7
60°-70°	807.7	12.3
70°-80°	524.2	8.0
80°-90°	162.1	2.5
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°	1778.7	27.1
0°-40°	2895.0	44.1
0°-60°	5065.9	77.2
0°-90°	6560.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6560.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2305	2305	2305	2305	2305	
5°	2294	2298	2288	2300	2302	218
15°	2194	2200	2205	2223	2228	619
25°	1994	2011	2032	2065	2071	919
35°	1723	1744	1786	1830	1842	1075
45°	1390	1423	1486	1542	1554	1072
55°	1036	1081	1161	1221	1234	928
65°	681	734	827	896	913	678
75°	346	413	519	590	606	366
85°	71	131	162	158	158	86
90°	0	0	0	0	0	



TEST NUMBER: P389902

CATALOG NUMBER: 24CZ2-75VHE-S-UNV-L930-CD1-SWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2304.6	2304.6	2304.6	2304.6	2304.6
2.5°	2306.7	2306.7	2296.2	2306.7	2308.7
5°	2294.2	2298.3	2287.9	2300.4	2302.5
7.5°	2281.7	2281.7	2275.4	2287.9	2290.0
10°	2258.7	2260.8	2258.7	2273.3	2275.4
12.5°	2229.6	2233.7	2235.8	2250.4	2252.5
15°	2194.1	2200.4	2204.6	2223.3	2227.5
17.5°	2154.5	2160.8	2171.2	2192.1	2196.2
20°	2106.6	2115.0	2127.5	2154.5	2160.8
22.5°	2054.5	2062.9	2083.7	2108.7	2119.1
25°	1994.1	2010.8	2031.6	2064.9	2071.2
27.5°	1933.7	1948.3	1975.3	2010.8	2019.1
30°	1862.8	1885.7	1919.1	1954.5	1962.8
32.5°	1794.1	1817.0	1856.6	1894.1	1904.5
35°	1723.2	1744.1	1785.7	1829.5	1842.0
37.5°	1642.0	1669.0	1714.9	1758.6	1771.1
40°	1556.5	1589.9	1642.0	1687.8	1702.4
42.5°	1475.3	1510.7	1562.8	1612.8	1629.5
45°	1389.8	1423.2	1485.7	1541.9	1554.4
47.5°	1302.3	1339.8	1406.5	1462.8	1483.6
50°	1214.8	1254.4	1325.2	1383.6	1396.1
52.5°	1127.3	1169.0	1244.0	1306.5	1312.7
55°	1035.6	1081.4	1160.6	1221.0	1233.5
57.5°	952.3	991.8	1077.3	1139.8	1154.4
60°	860.6	904.3	996.0	1054.4	1073.1
62.5°	773.1	818.9	914.7	973.1	989.8
65°	681.4	733.5	827.2	896.0	912.7
67.5°	602.2	652.2	752.2	818.9	835.6
70°	510.5	566.8	673.0	741.8	758.5
72.5°	431.3	489.7	595.9	662.6	687.6
75°	345.9	412.6	518.8	589.7	606.4
77.5°	262.5	339.6	448.0	502.2	502.2
80°	187.5	268.8	368.8	393.8	398.0
82.5°	122.9	202.1	273.0	270.9	270.9
85°	70.8	131.3	162.5	158.4	158.4
87.5°	27.1	54.2	58.3	58.3	56.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)