

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: P389112

Luminaire Tested: **24CZ2-75VHE-SQR-UNV-L930-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: P389112
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-678-2)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75VHE-SQR-UNV-L930-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5923.6 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

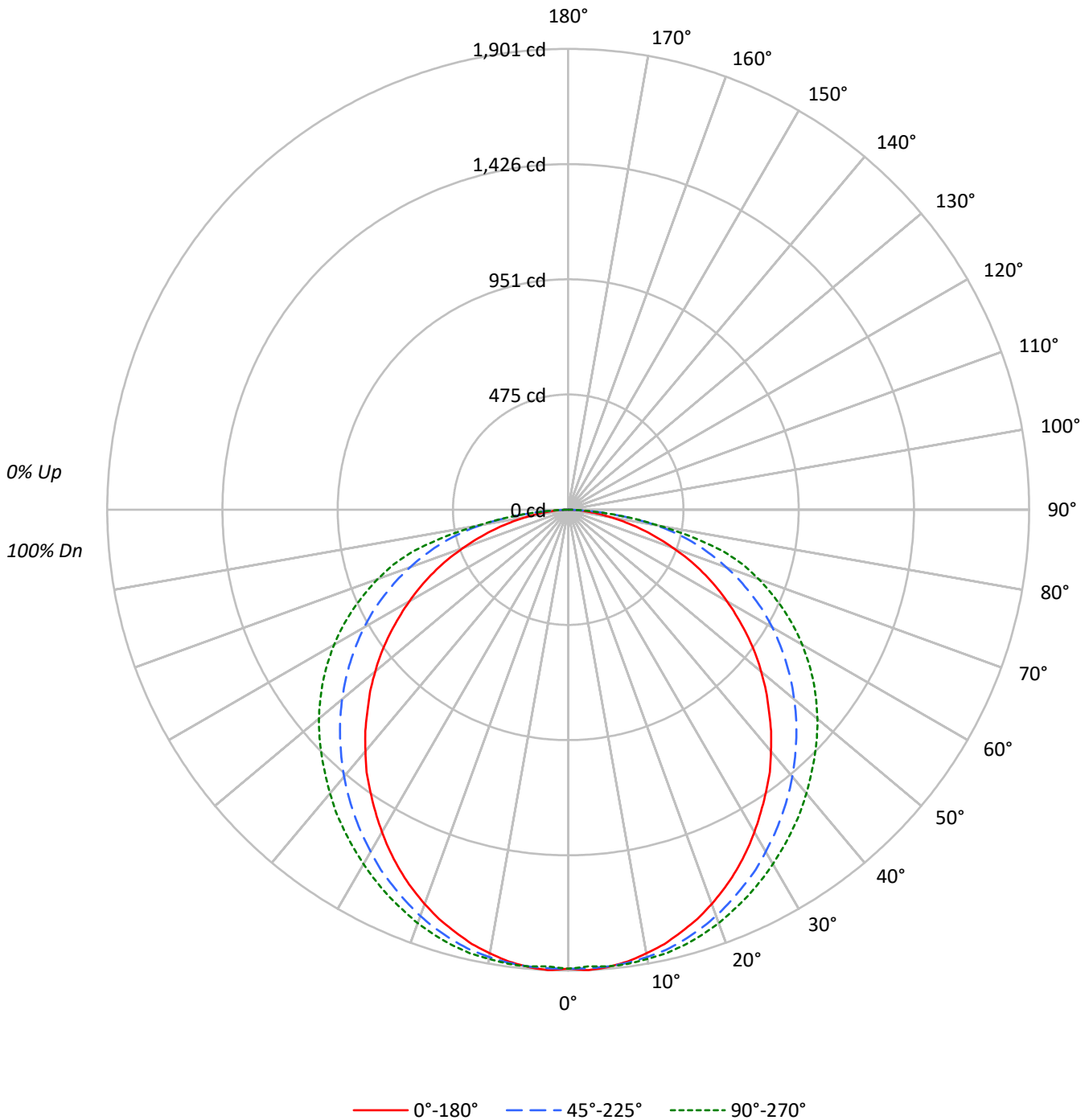
Input Watts (W): 49.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2548	2548	2548
5°	2557	2555	2555
10°	2539	2560	2571
15°	2512	2561	2589
20°	2479	2554	2599
25°	2436	2541	2608
30°	2386	2531	2623
35°	2336	2525	2647
40°	2285	2525	2683
45°	2226	2531	2736
50°	2174	2547	2809
55°	2111	2574	2895
60°	2037	2616	3000
65°	1949	2665	3126
70°	1808	2732	3286
75°	1637	2827	3437
80°	1379	2834	2955
85°	1057	2144	2144



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.7	3.0
10°-20°	517.1	8.7
20°-30°	785.5	13.3
30°-40°	955.4	16.1
40°-50°	1017.2	17.2
50°-60°	968.8	16.4
60°-70°	810.2	13.7
70°-80°	540.2	9.1
80°-90°	149.5	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°	1482.3	25.0
0°-40°	2437.7	41.2
0°-60°	4423.7	74.7
0°-90°	5923.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5923.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1894	1894	1894	1894	1894	
5°	1894	1882	1892	1892	1892	180
15°	1804	1807	1839	1852	1858	509
25°	1641	1663	1712	1741	1756	756
35°	1422	1463	1538	1588	1612	890
45°	1170	1232	1330	1404	1438	904
55°	900	978	1097	1193	1234	804
65°	612	702	837	941	982	605
75°	315	415	544	636	661	334
85°	68	127	139	137	139	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1893.5	1893.5	1893.5	1893.5	1893.5
2.5°	1901.3	1887.6	1893.5	1893.5	1885.6
5°	1893.5	1881.7	1891.5	1891.5	1891.5
7.5°	1879.8	1870.0	1885.6	1889.6	1889.6
10°	1858.3	1854.3	1873.9	1879.8	1881.7
12.5°	1834.8	1832.8	1860.2	1868.0	1873.9
15°	1803.5	1807.4	1838.7	1852.4	1858.3
17.5°	1770.2	1778.1	1813.3	1832.8	1838.7
20°	1731.1	1742.9	1783.9	1803.5	1815.2
22.5°	1688.1	1705.7	1748.7	1772.2	1785.9
25°	1641.1	1662.7	1711.6	1740.9	1756.5
27.5°	1590.3	1617.7	1674.4	1707.6	1723.3
30°	1535.5	1566.8	1629.4	1668.5	1688.1
32.5°	1478.8	1516.0	1584.4	1627.4	1650.9
35°	1422.1	1463.1	1537.5	1588.3	1611.8
37.5°	1365.3	1406.4	1488.6	1543.3	1572.7
40°	1300.8	1349.7	1437.7	1498.3	1527.7
42.5°	1238.2	1291.0	1384.9	1451.4	1482.7
45°	1169.7	1232.3	1330.1	1404.5	1437.7
47.5°	1107.1	1169.7	1275.4	1353.6	1390.8
50°	1038.7	1105.2	1216.7	1302.7	1341.9
52.5°	972.2	1040.6	1158.0	1249.9	1289.0
55°	899.8	978.0	1097.4	1193.2	1234.3
57.5°	827.4	911.5	1034.8	1134.5	1175.6
60°	757.0	843.1	972.2	1071.9	1115.0
62.5°	686.6	772.6	907.6	1009.3	1050.4
65°	612.2	702.2	837.2	940.9	981.9
67.5°	537.9	631.8	766.8	870.4	909.6
70°	459.7	559.4	694.4	796.1	835.2
72.5°	387.3	487.1	620.1	719.8	757.0
75°	314.9	414.7	543.8	635.7	661.1
77.5°	244.5	344.3	459.7	520.3	526.2
80°	178.0	271.9	365.8	383.4	381.4
82.5°	119.3	203.4	252.3	254.3	260.2
85°	68.5	127.1	138.9	136.9	138.9
87.5°	27.4	45.0	39.1	29.3	29.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)