

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: P388965

Luminaire Tested: **24CZ2-75VHE-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: P388965
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75VHE-UNV-L930-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6168.0 lumens
Efficiency: N/A
Efficacy: 123.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

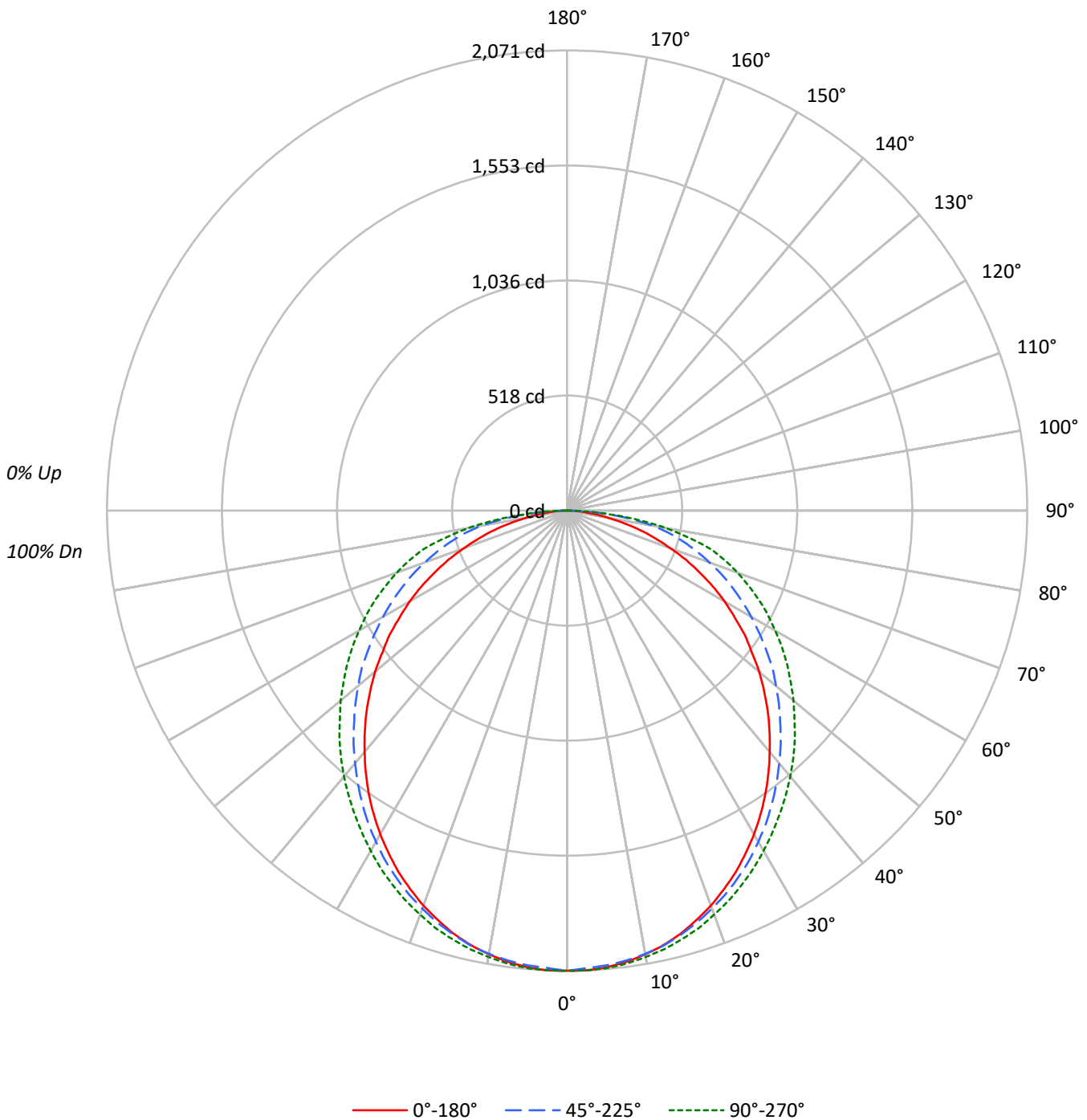
Input Watts (W): 49.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2786	2786	2786
5°	2786	2775	2791
10°	2770	2767	2787
15°	2747	2753	2781
20°	2709	2729	2771
25°	2665	2705	2760
30°	2613	2674	2747
35°	2556	2641	2739
40°	2491	2607	2744
45°	2429	2581	2758
50°	2361	2568	2784
55°	2289	2564	2835
60°	2199	2576	2908
65°	2084	2615	3034
70°	1936	2681	3207
75°	1766	2815	3478
80°	1451	3030	3477
85°	1112	2797	2987



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.9	3.2
10°-20°	559.2	9.1
20°-30°	841.4	13.6
30°-40°	1008.4	16.3
40°-50°	1050.8	17.0
50°-60°	977.7	15.9
60°-70°	805.2	13.1
70°-80°	548.4	8.9
80°-90°	181.0	2.9
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°	1596.4	25.9
0°-40°	2604.8	42.2
0°-60°	4633.3	75.1
0°-90°	6168.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6168.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2071	2071	2071	2071	2071	
5°	2063	2063	2054	2065	2067	196
15°	1972	1974	1976	1995	1997	556
25°	1795	1803	1822	1853	1859	826
35°	1556	1575	1608	1651	1667	973
45°	1276	1303	1357	1424	1449	984
55°	976	1009	1093	1180	1208	870
65°	655	710	821	918	953	650
75°	340	416	541	638	669	358
85°	72	140	181	194	194	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2070.9	2070.9	2070.9	2070.9	2070.9
2.5°	2070.9	2070.9	2060.6	2070.9	2070.9
5°	2062.7	2062.7	2054.4	2064.7	2066.8
7.5°	2048.2	2050.3	2042.1	2054.4	2056.5
10°	2027.7	2029.7	2025.6	2037.9	2040.0
12.5°	2003.0	2005.0	2005.0	2019.4	2021.5
15°	1972.1	1974.1	1976.2	1994.7	1996.8
17.5°	1933.0	1939.1	1943.3	1965.9	1970.0
20°	1891.8	1898.0	1906.2	1930.9	1935.0
22.5°	1844.4	1852.7	1867.1	1893.9	1900.0
25°	1795.0	1803.3	1821.8	1852.7	1858.9
27.5°	1739.5	1751.8	1774.5	1807.4	1815.6
30°	1681.8	1694.2	1720.9	1755.9	1768.3
32.5°	1620.1	1636.5	1667.4	1706.5	1718.9
35°	1556.3	1574.8	1607.7	1650.9	1667.4
37.5°	1488.3	1508.9	1548.0	1595.4	1615.9
40°	1418.3	1443.0	1484.2	1539.8	1562.4
42.5°	1348.3	1371.0	1422.4	1482.1	1506.8
45°	1276.3	1303.1	1356.6	1424.5	1449.2
47.5°	1202.2	1228.9	1292.8	1364.8	1387.5
50°	1128.1	1154.8	1226.9	1303.1	1329.8
52.5°	1047.8	1082.8	1165.1	1241.3	1268.1
55°	975.7	1008.7	1093.1	1179.5	1208.4
57.5°	893.4	932.5	1025.1	1115.7	1146.6
60°	817.2	858.4	957.2	1049.9	1080.7
62.5°	739.0	784.3	889.3	984.0	1019.0
65°	654.6	710.2	821.4	918.1	953.1
67.5°	578.4	636.1	753.4	852.2	883.1
70°	492.0	562.0	681.4	780.2	815.2
72.5°	417.9	487.9	613.4	710.2	745.2
75°	339.7	415.8	541.4	638.1	669.0
77.5°	261.4	345.8	471.4	545.5	555.8
80°	187.3	275.8	391.1	434.4	448.8
82.5°	131.7	212.0	288.2	317.0	325.2
85°	72.0	140.0	181.2	193.5	193.5
87.5°	30.9	59.7	72.0	74.1	76.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)