

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: P388966

Luminaire Tested: **24CZ2-75VHE-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: P388966
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-SWPD1-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: 6243.3 lumens
Efficiency: N/A
Efficacy: 125.1 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

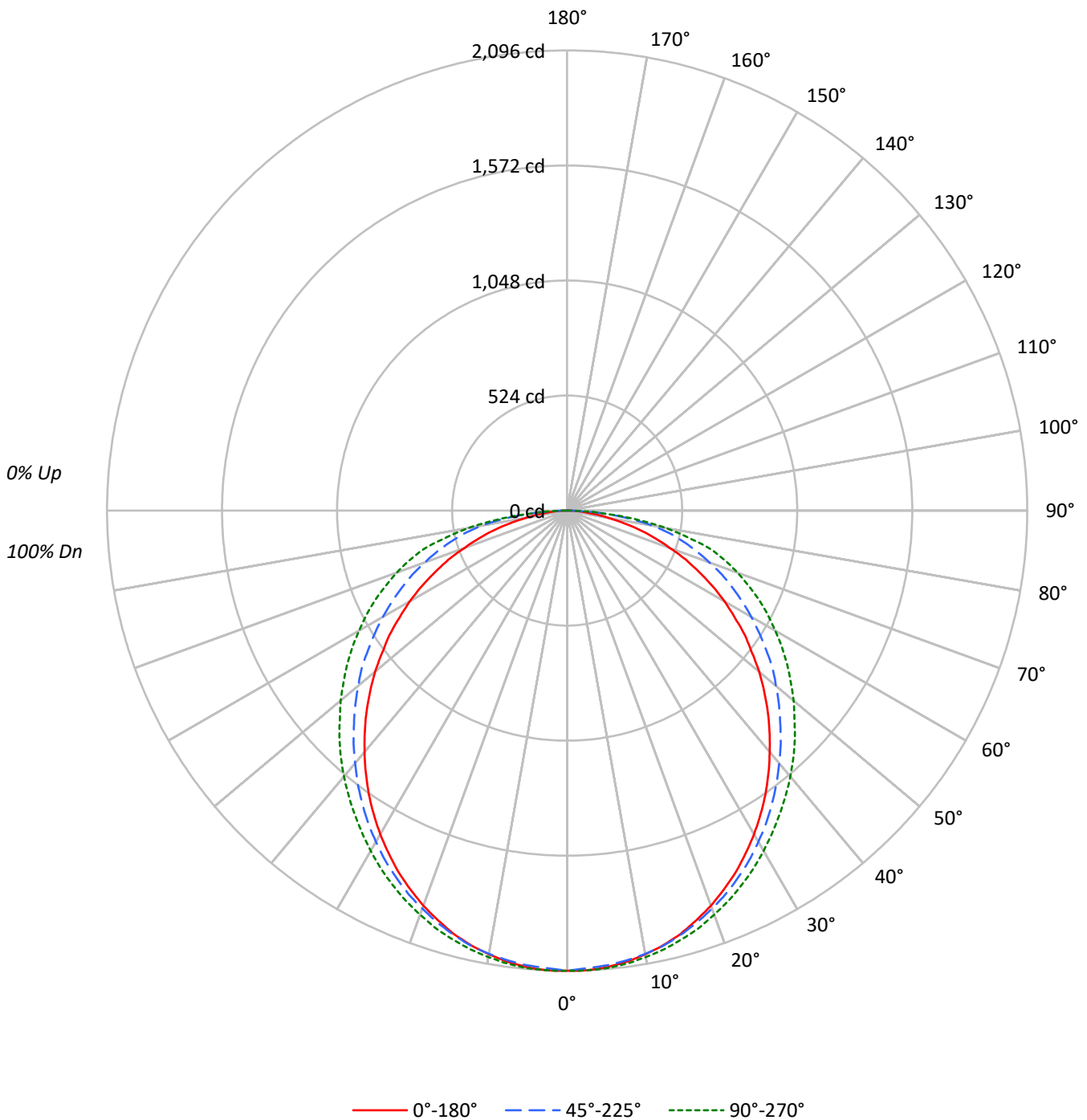
Input Watts (W): 49.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2820	2820	2820
5°	2820	2809	2826
10°	2804	2801	2821
15°	2781	2786	2815
20°	2742	2763	2804
25°	2697	2738	2793
30°	2645	2706	2781
35°	2587	2673	2772
40°	2522	2639	2778
45°	2458	2613	2791
50°	2390	2600	2817
55°	2317	2595	2869
60°	2226	2607	2944
65°	2110	2647	3071
70°	1959	2713	3246
75°	1787	2849	3520
80°	1469	3068	3519
85°	1125	2831	3024



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.2	3.2
10°-20°	566.0	9.1
20°-30°	851.7	13.6
30°-40°	1020.7	16.3
40°-50°	1063.6	17.0
50°-60°	989.6	15.9
60°-70°	815.1	13.1
70°-80°	555.1	8.9
80°-90°	183.3	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°	1615.9	25.9
0°-40°	2636.6	42.2
0°-60°	4689.9	75.1
0°-90°	6243.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6243.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2096	2096	2096	2096	2096	
5°	2088	2088	2080	2090	2092	198
15°	1996	1998	2000	2019	2021	562
25°	1817	1825	1844	1875	1882	836
35°	1575	1594	1627	1671	1688	985
45°	1292	1319	1373	1442	1467	996
55°	988	1021	1106	1194	1223	880
65°	663	719	831	929	965	658
75°	344	421	548	646	677	363
85°	73	142	183	196	196	90
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2096.2	2096.2	2096.2	2096.2	2096.2
2.5°	2096.2	2096.2	2085.7	2096.2	2096.2
5°	2087.8	2087.8	2079.5	2089.9	2092.0
7.5°	2073.2	2075.3	2067.0	2079.5	2081.6
10°	2052.4	2054.5	2050.3	2062.8	2064.9
12.5°	2027.4	2029.5	2029.5	2044.1	2046.2
15°	1996.2	1998.2	2000.3	2019.1	2021.2
17.5°	1956.6	1962.8	1967.0	1989.9	1994.1
20°	1914.9	1921.1	1929.5	1954.5	1958.6
22.5°	1867.0	1875.3	1889.9	1917.0	1923.2
25°	1817.0	1825.3	1844.0	1875.3	1881.5
27.5°	1760.7	1773.2	1796.1	1829.5	1837.8
30°	1702.4	1714.9	1741.9	1777.4	1789.9
32.5°	1639.8	1656.5	1687.8	1727.4	1739.9
35°	1575.3	1594.0	1627.3	1671.1	1687.8
37.5°	1506.5	1527.3	1566.9	1614.8	1635.7
40°	1435.6	1460.6	1502.3	1558.6	1581.5
42.5°	1364.8	1387.7	1439.8	1500.2	1525.2
45°	1291.9	1319.0	1373.1	1441.9	1466.9
47.5°	1216.9	1243.9	1308.5	1381.5	1404.4
50°	1141.8	1168.9	1241.9	1319.0	1346.0
52.5°	1060.6	1096.0	1179.4	1256.4	1283.5
55°	987.7	1021.0	1106.4	1193.9	1223.1
57.5°	904.3	943.9	1037.7	1129.3	1160.6
60°	827.2	868.9	968.9	1062.7	1093.9
62.5°	748.0	793.9	900.1	996.0	1031.4
65°	662.6	718.9	831.4	929.3	964.7
67.5°	585.5	643.9	762.6	862.6	893.9
70°	498.0	568.8	689.7	789.7	825.1
72.5°	423.0	493.8	620.9	718.9	754.3
75°	343.8	420.9	548.0	645.9	677.2
77.5°	264.6	350.1	477.2	552.2	562.6
80°	189.6	279.2	395.9	439.7	454.2
82.5°	133.4	214.6	291.7	320.9	329.2
85°	72.9	141.7	183.4	195.9	195.9
87.5°	31.3	60.4	72.9	75.0	77.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)