

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: P388825

Luminaire Tested: **24CZ2-55-SQR-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: P388825
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: 24CZ2-55-SQR-UNV-L930-CD1-SWPD1-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: 4359.6 lumens
Efficiency: N/A
Efficacy: 86.3 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

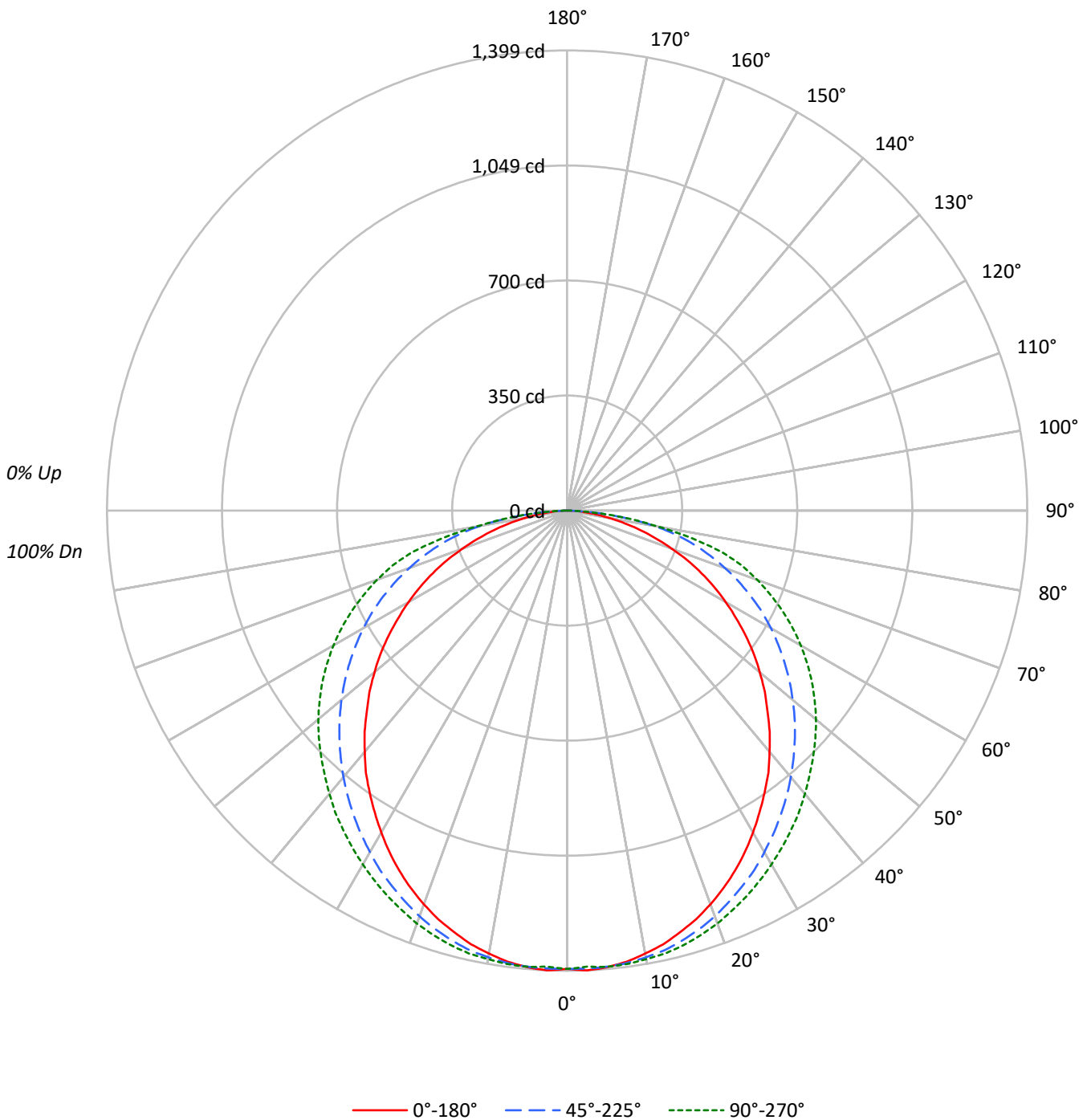
Input Watts (W): 50.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1875	1875	1875
5°	1882	1880	1880
10°	1868	1884	1892
15°	1849	1885	1905
20°	1824	1880	1913
25°	1793	1870	1919
30°	1756	1863	1930
35°	1719	1859	1948
40°	1681	1858	1975
45°	1638	1863	2013
50°	1600	1874	2067
55°	1553	1894	2131
60°	1499	1925	2208
65°	1435	1962	2301
70°	1331	2011	2418
75°	1205	2080	2530
80°	1015	2086	2175
85°	778	1578	1578



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.3	3.0
10°-20°	380.6	8.7
20°-30°	578.1	13.3
30°-40°	703.1	16.1
40°-50°	748.6	17.2
50°-60°	713.0	16.4
60°-70°	596.3	13.7
70°-80°	397.6	9.1
80°-90°	110.0	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°	1090.9	25.0
0°-40°	1794.1	41.2
0°-60°	3255.7	74.7
0°-90°	4359.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4359.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1394	1394	1394	1394	1394	
5°	1394	1385	1392	1392	1392	132
15°	1327	1330	1353	1363	1368	374
25°	1208	1224	1260	1281	1293	556
35°	1047	1077	1132	1169	1186	655
45°	861	907	979	1034	1058	666
55°	662	720	808	878	908	592
65°	451	517	616	692	723	445
75°	232	305	400	468	487	246
85°	50	94	102	101	102	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1393.5	1393.5	1393.5	1393.5	1393.5
2.5°	1399.3	1389.2	1393.5	1393.5	1387.8
5°	1393.5	1384.9	1392.1	1392.1	1392.1
7.5°	1383.5	1376.3	1387.8	1390.7	1390.7
10°	1367.6	1364.7	1379.1	1383.5	1384.9
12.5°	1350.4	1348.9	1369.1	1374.8	1379.1
15°	1327.3	1330.2	1353.2	1363.3	1367.6
17.5°	1302.8	1308.6	1334.5	1348.9	1353.2
20°	1274.1	1282.7	1312.9	1327.3	1336.0
22.5°	1242.4	1255.3	1287.0	1304.3	1314.4
25°	1207.8	1223.7	1259.7	1281.3	1292.8
27.5°	1170.4	1190.6	1232.3	1256.8	1268.3
30°	1130.1	1153.1	1199.2	1228.0	1242.4
32.5°	1088.3	1115.7	1166.1	1197.8	1215.0
35°	1046.6	1076.8	1131.5	1169.0	1186.2
37.5°	1004.8	1035.1	1095.5	1135.9	1157.4
40°	957.3	993.3	1058.1	1102.7	1124.3
42.5°	911.3	950.1	1019.2	1068.2	1091.2
45°	860.9	907.0	978.9	1033.6	1058.1
47.5°	814.8	860.9	938.6	996.2	1023.6
50°	764.4	813.4	895.4	958.8	987.6
52.5°	715.5	765.9	852.2	919.9	948.7
55°	662.2	719.8	807.6	878.2	908.4
57.5°	609.0	670.9	761.6	835.0	865.2
60°	557.1	620.5	715.5	788.9	820.6
62.5°	505.3	568.6	668.0	742.8	773.1
65°	450.6	516.8	616.2	692.5	722.7
67.5°	395.9	465.0	564.3	640.6	669.4
70°	338.3	411.7	511.1	585.9	614.7
72.5°	285.0	358.5	456.4	529.8	557.1
75°	231.8	305.2	400.2	467.9	486.6
77.5°	180.0	253.4	338.3	382.9	387.3
80°	131.0	200.1	269.2	282.2	280.7
82.5°	87.8	149.7	185.7	187.1	191.5
85°	50.4	93.6	102.2	100.8	102.2
87.5°	20.2	33.1	28.8	21.6	21.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)