

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: P388032

Luminaire Tested: **22CZ2-44VHE-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: P388032
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44VHE-SQR-UNV-L930-CD1-SDWPD1-U
Description: 2x2 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: 3571.8 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

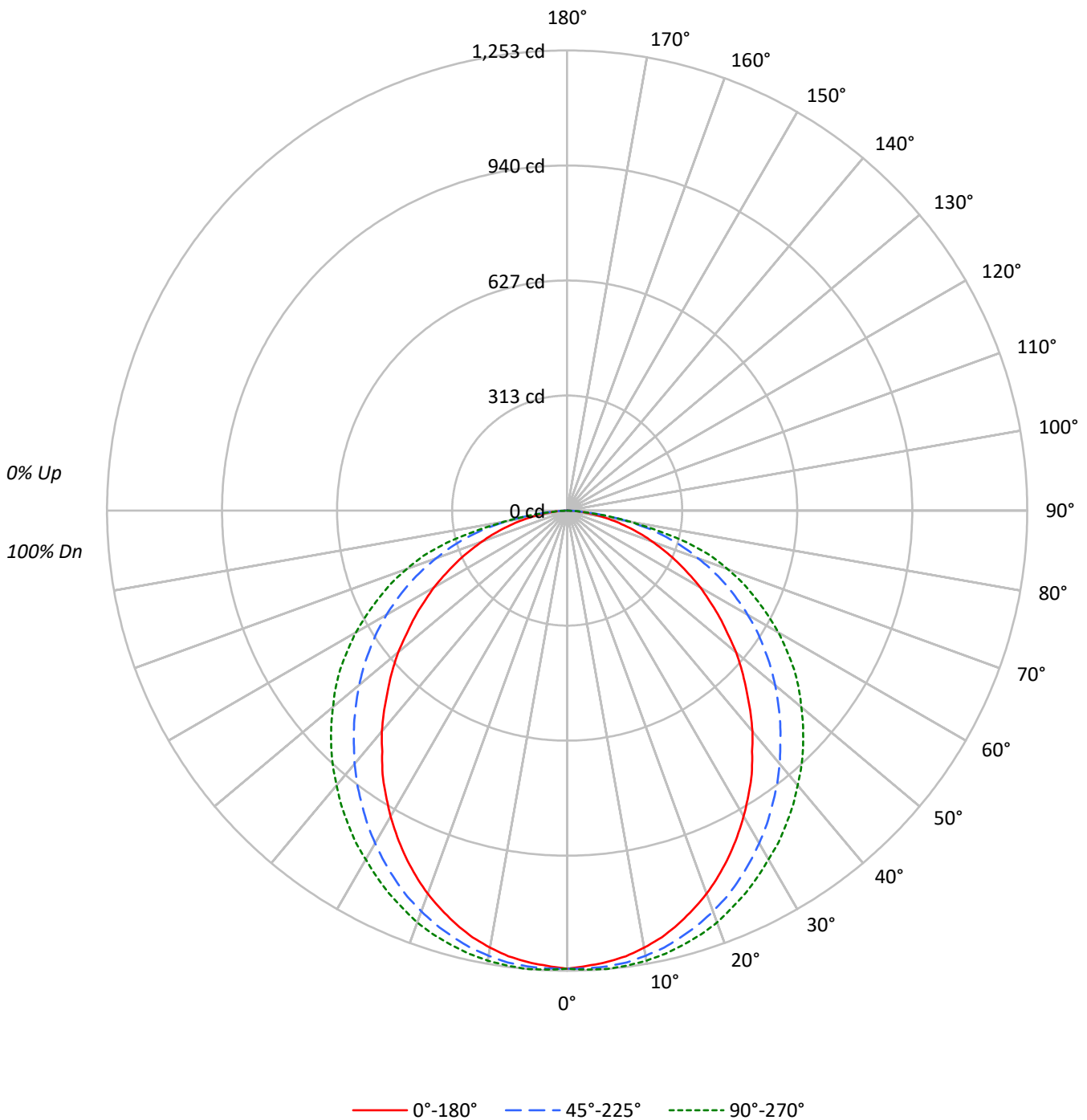
Input Watts (W): 32.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P388032

CATALOG NUMBER: 22CZ2-44VHE-SQR-UNV-L930-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P388032

CATALOG NUMBER: 22CZ2-44VHE-SQR-UNV-L930-CD1-SDWPD1-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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	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°	3358	3358	3358
5°	3334	3366	3384
10°	3303	3363	3400
15°	3249	3348	3410
20°	3180	3326	3418
25°	3091	3292	3413
30°	2987	3250	3408
35°	2879	3202	3419
40°	2757	3162	3430
45°	2626	3123	3458
50°	2512	3094	3485
55°	2378	3070	3539
60°	2253	3056	3576
65°	2105	3033	3605
70°	1934	2987	3655
75°	1745	2908	3526
80°	1497	2574	2653
85°	1204	1519	1204



TEST NUMBER: P388032

CATALOG NUMBER: 22CZ2-44VHE-SQR-UNV-L930-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.3	3.3
10°-20°	338.2	9.5
20°-30°	507.9	14.2
30°-40°	605.8	17.0
40°-50°	626.3	17.5
50°-60°	575.9	16.1
60°-70°	458.4	12.8
70°-80°	280.1	7.8
80°-90°	60.9	1.7
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°	964.4	27.0
0°-40°	1570.2	44.0
0°-60°	2772.4	77.6
0°-90°	3571.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3571.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1248	1248	1248	1248	1248	
5°	1234	1238	1246	1251	1253	117
15°	1166	1180	1202	1219	1224	328
25°	1041	1066	1109	1139	1149	479
35°	876	914	975	1026	1041	547
45°	690	739	820	887	909	534
55°	507	563	654	729	754	453
65°	331	386	476	542	566	327
75°	168	217	280	329	339	179
85°	39	48	49	42	39	45
90°	0	0	0	0	0	



TEST NUMBER: P388032

CATALOG NUMBER: 22CZ2-44VHE-SQR-UNV-L930-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1247.7	1247.7	1247.7	1247.7	1247.7
2.5°	1240.9	1242.6	1247.7	1251.1	1251.1
5°	1234.2	1237.5	1246.0	1251.1	1252.8
7.5°	1224.0	1229.1	1240.9	1247.7	1249.4
10°	1208.7	1215.5	1230.8	1240.9	1244.3
12.5°	1190.1	1200.2	1218.9	1232.5	1235.8
15°	1166.3	1179.9	1201.9	1218.9	1224.0
17.5°	1139.2	1156.2	1183.3	1203.6	1210.4
20°	1110.4	1127.4	1161.3	1185.0	1193.5
22.5°	1076.5	1098.5	1137.5	1164.6	1171.4
25°	1040.9	1066.3	1108.7	1139.2	1149.4
27.5°	1001.9	1032.4	1078.2	1115.5	1124.0
30°	961.2	993.4	1046.0	1086.7	1096.8
32.5°	918.8	956.1	1012.1	1057.8	1071.4
35°	876.5	913.7	974.8	1025.6	1040.9
37.5°	827.3	871.4	939.2	991.7	1010.4
40°	784.9	827.3	900.2	957.8	976.5
42.5°	737.4	783.2	859.5	922.2	944.3
45°	690.0	739.1	820.5	886.6	908.7
47.5°	645.9	695.1	779.8	849.3	871.4
50°	600.1	651.0	739.1	810.3	832.4
52.5°	551.0	606.9	698.4	769.7	795.1
55°	506.9	562.8	654.4	729.0	754.4
57.5°	461.1	518.8	613.7	684.9	708.6
60°	418.7	474.7	567.9	637.4	664.5
62.5°	373.0	430.6	522.1	590.0	615.4
65°	330.6	386.5	476.4	542.5	566.2
67.5°	288.2	344.1	428.9	491.6	518.8
70°	245.8	301.8	379.7	440.8	464.5
72.5°	208.5	257.7	332.3	388.2	410.3
75°	167.8	217.0	279.7	328.9	339.1
77.5°	130.5	174.6	227.2	249.2	252.6
80°	96.6	130.5	166.1	171.2	171.2
82.5°	64.4	89.8	103.4	105.1	103.4
85°	39.0	47.5	49.2	42.4	39.0
87.5°	13.6	13.6	8.5	5.1	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)