

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: P388056

Luminaire Tested: **22CZ2-50VHE-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: P388056
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: 22CZ2-50VHE-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: 3939.0 lumens
Efficiency: N/A
Efficacy: 108.8 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

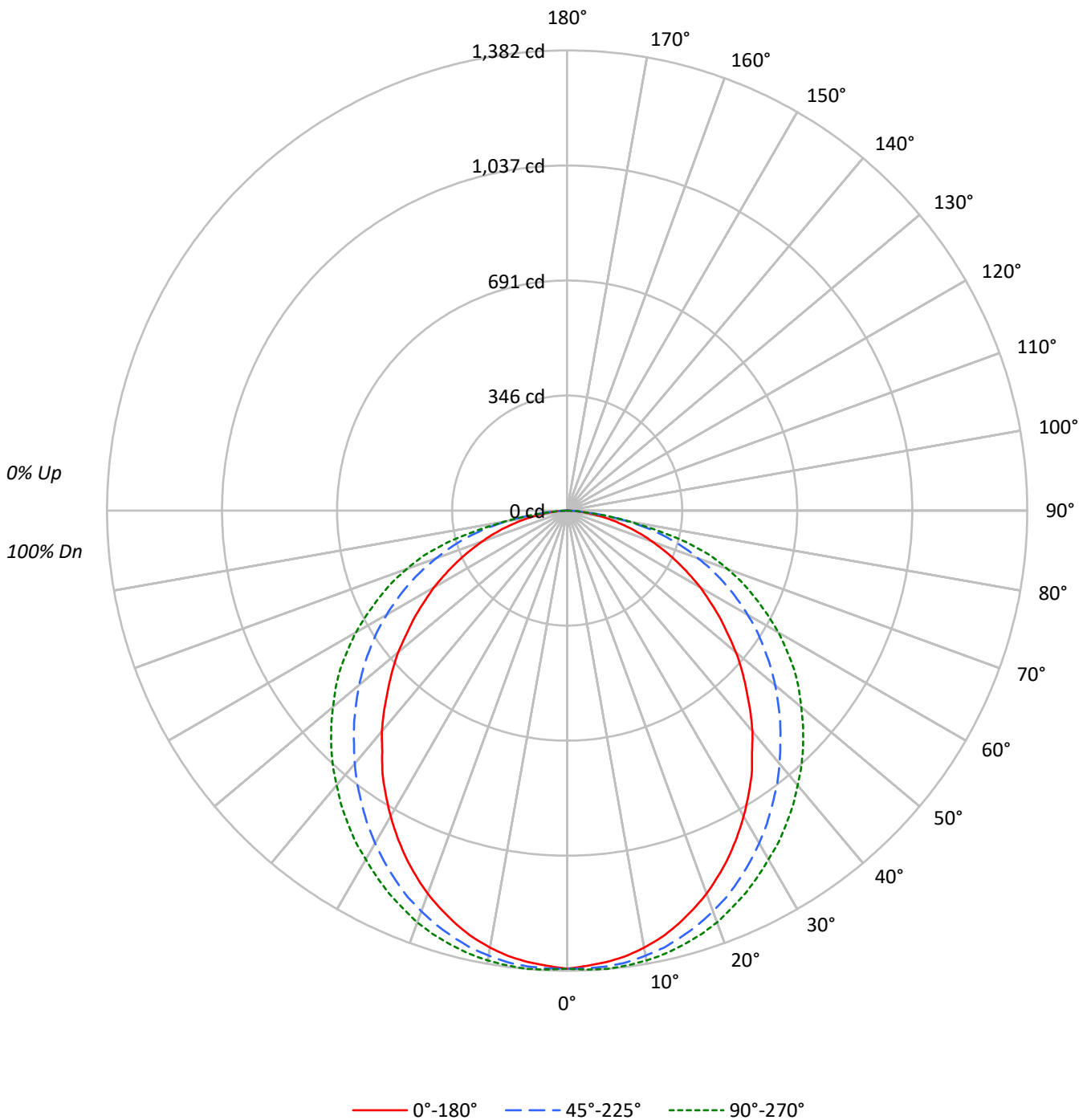
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3703	3703	3703
5°	3676	3712	3732
10°	3642	3709	3750
15°	3583	3693	3760
20°	3507	3667	3769
25°	3408	3630	3764
30°	3294	3584	3759
35°	3175	3531	3771
40°	3041	3487	3783
45°	2896	3444	3814
50°	2771	3412	3843
55°	2623	3385	3903
60°	2485	3371	3944
65°	2322	3345	3976
70°	2133	3295	4031
75°	1925	3208	3887
80°	1652	2839	2926
85°	1328	1673	1328



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.4	3.3
10°-20°	373.0	9.5
20°-30°	560.2	14.2
30°-40°	668.1	17.0
40°-50°	690.7	17.5
50°-60°	635.1	16.1
60°-70°	505.6	12.8
70°-80°	308.9	7.8
80°-90°	67.1	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°	1063.6	27.0
0°-40°	1731.6	44.0
0°-60°	3057.4	77.6
0°-90°	3939.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3939.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1376	1376	1376	1376	1376	
5°	1361	1365	1374	1380	1382	129
15°	1286	1301	1326	1344	1350	362
25°	1148	1176	1223	1256	1268	528
35°	967	1008	1075	1131	1148	603
45°	761	815	905	978	1002	588
55°	559	621	722	804	832	500
65°	365	426	525	598	624	361
75°	185	239	308	363	374	197
85°	43	52	54	47	43	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1376.0	1376.0	1376.0	1376.0	1376.0
2.5°	1368.5	1370.4	1376.0	1379.7	1379.7
5°	1361.0	1364.8	1374.1	1379.7	1381.6
7.5°	1349.8	1355.4	1368.5	1376.0	1377.9
10°	1333.0	1340.5	1357.3	1368.5	1372.2
12.5°	1312.4	1323.6	1344.2	1359.2	1362.9
15°	1286.2	1301.2	1325.5	1344.2	1349.8
17.5°	1256.3	1275.0	1304.9	1327.4	1334.9
20°	1224.6	1243.2	1280.6	1306.8	1316.2
22.5°	1187.2	1211.5	1254.5	1284.4	1291.9
25°	1147.9	1175.9	1222.7	1256.3	1267.6
27.5°	1104.9	1138.6	1189.0	1230.2	1239.5
30°	1060.0	1095.6	1153.5	1198.4	1209.6
32.5°	1013.3	1054.4	1116.1	1166.6	1181.6
35°	966.6	1007.7	1075.0	1131.1	1147.9
37.5°	912.3	960.9	1035.7	1093.7	1114.3
40°	865.6	912.3	992.7	1056.3	1076.9
42.5°	813.3	863.7	947.9	1017.0	1041.3
45°	760.9	815.1	904.9	977.8	1002.1
47.5°	712.3	766.5	860.0	936.6	960.9
50°	661.8	717.9	815.1	893.6	917.9
52.5°	607.6	669.3	770.3	848.8	876.8
55°	559.0	620.7	721.6	803.9	831.9
57.5°	508.5	572.1	676.8	755.3	781.5
60°	461.8	523.5	626.3	703.0	732.9
62.5°	411.3	474.9	575.8	650.6	678.6
65°	364.6	426.3	525.3	598.3	624.4
67.5°	317.8	379.5	473.0	542.2	572.1
70°	271.1	332.8	418.8	486.1	512.3
72.5°	230.0	284.2	366.4	428.1	452.4
75°	185.1	239.3	308.5	362.7	373.9
77.5°	144.0	192.6	250.5	274.8	278.6
80°	106.6	144.0	183.2	188.8	188.8
82.5°	71.0	99.1	114.0	115.9	114.0
85°	43.0	52.3	54.2	46.7	43.0
87.5°	15.0	15.0	9.3	5.6	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)