

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: P387986

Luminaire Tested: **22CZ2-44-SQR-UNV-L930-CD1-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: P387986
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: 22CZ2-44-SQR-UNV-L930-CD1-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: 3505.5 lumens
Efficiency: N/A
Efficacy: 82.1 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

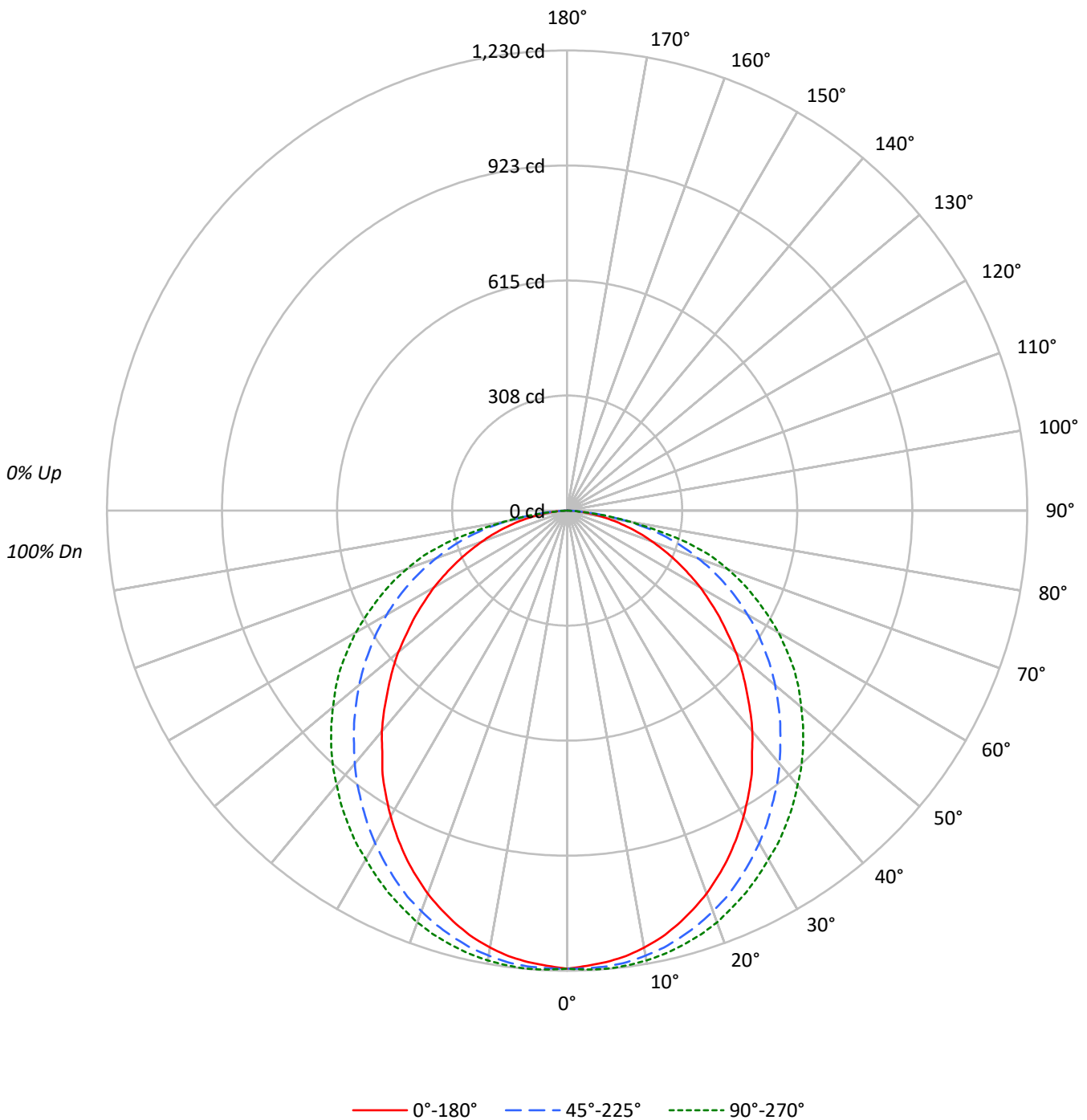
Input Watts (W): 42.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3295	3295	3295
5°	3272	3303	3321
10°	3242	3301	3337
15°	3189	3286	3347
20°	3121	3264	3354
25°	3033	3231	3350
30°	2931	3190	3345
35°	2826	3143	3356
40°	2706	3104	3366
45°	2577	3065	3394
50°	2466	3037	3420
55°	2334	3013	3474
60°	2212	3000	3510
65°	2066	2977	3538
70°	1899	2932	3587
75°	1712	2854	3460
80°	1469	2528	2603
85°	1183	1491	1183



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.1	3.3
10°-20°	331.9	9.5
20°-30°	498.5	14.2
30°-40°	594.5	17.0
40°-50°	614.7	17.5
50°-60°	565.2	16.1
60°-70°	449.9	12.8
70°-80°	274.9	7.8
80°-90°	59.8	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°	946.5	27.0
0°-40°	1541.1	44.0
0°-60°	2721.0	77.6
0°-90°	3505.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3505.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1225	1225	1225	1225	1225	
5°	1211	1215	1223	1228	1230	115
15°	1145	1158	1180	1196	1201	322
25°	1022	1046	1088	1118	1128	470
35°	860	897	957	1007	1022	537
45°	677	725	805	870	892	524
55°	498	552	642	715	740	445
65°	324	379	468	532	556	321
75°	165	213	274	323	333	175
85°	38	47	48	42	38	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1224.6	1224.6	1224.6	1224.6	1224.6
2.5°	1217.9	1219.6	1224.6	1227.9	1227.9
5°	1211.2	1214.6	1222.9	1227.9	1229.5
7.5°	1201.3	1206.3	1217.9	1224.6	1226.2
10°	1186.3	1192.9	1207.9	1217.9	1221.2
12.5°	1168.0	1178.0	1196.3	1209.6	1212.9
15°	1144.7	1158.0	1179.6	1196.3	1201.3
17.5°	1118.1	1134.7	1161.3	1181.3	1188.0
20°	1089.8	1106.4	1139.7	1163.0	1171.3
22.5°	1056.5	1078.1	1116.4	1143.0	1149.7
25°	1021.6	1046.5	1088.1	1118.1	1128.1
27.5°	983.3	1013.3	1058.2	1094.8	1103.1
30°	943.4	975.0	1026.6	1066.5	1076.5
32.5°	901.8	938.4	993.3	1038.2	1051.5
35°	860.2	896.8	956.7	1006.6	1021.6
37.5°	811.9	855.2	921.7	973.3	991.6
40°	770.3	811.9	883.5	940.0	958.3
42.5°	723.8	768.7	843.5	905.1	926.7
45°	677.2	725.4	805.3	870.2	891.8
47.5°	633.9	682.2	765.3	833.6	855.2
50°	589.0	638.9	725.4	795.3	816.9
52.5°	540.7	595.6	685.5	755.4	780.3
55°	497.5	552.4	642.2	715.4	740.4
57.5°	452.6	509.1	602.3	672.2	695.5
60°	411.0	465.9	557.4	625.6	652.2
62.5°	366.0	422.6	512.4	579.0	604.0
65°	324.4	379.3	467.5	532.4	555.7
67.5°	282.8	337.8	420.9	482.5	509.1
70°	241.3	296.2	372.7	432.6	455.9
72.5°	204.6	252.9	326.1	381.0	402.6
75°	164.7	213.0	274.5	322.8	332.8
77.5°	128.1	171.4	222.9	244.6	247.9
80°	94.8	128.1	163.1	168.0	168.0
82.5°	63.2	88.2	101.5	103.2	101.5
85°	38.3	46.6	48.3	41.6	38.3
87.5°	13.3	13.3	8.3	5.0	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)