

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: P387984

Luminaire Tested: **22CZ2-44-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: P387984
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-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: 3420.3 lumens
Efficiency: N/A
Efficacy: 80.1 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

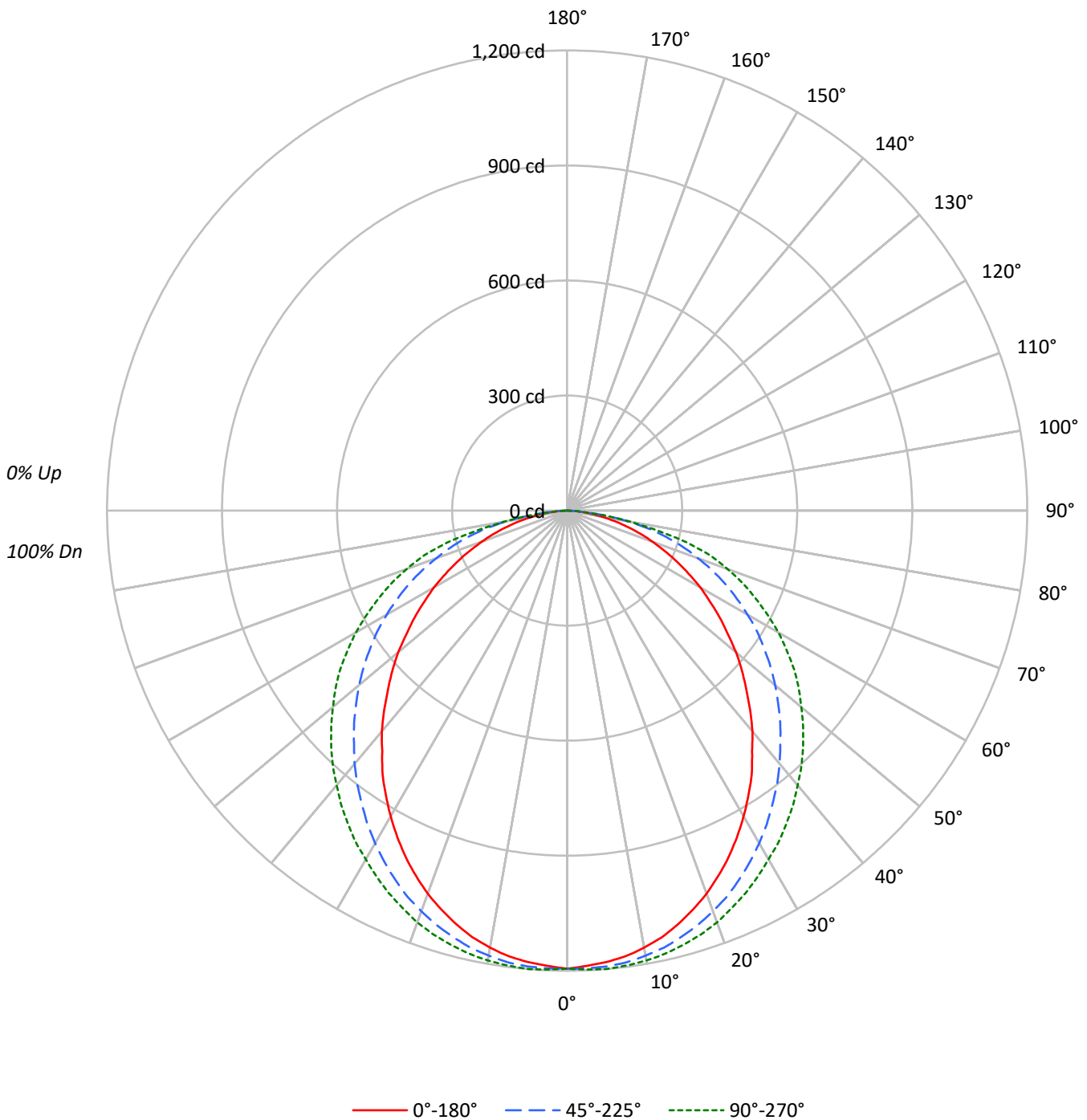
Input Watts (W): 42.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3215	3215	3215
5°	3192	3223	3241
10°	3163	3221	3256
15°	3112	3207	3265
20°	3045	3184	3273
25°	2959	3152	3268
30°	2860	3112	3264
35°	2757	3066	3274
40°	2640	3028	3285
45°	2514	2990	3311
50°	2406	2963	3337
55°	2277	2940	3389
60°	2158	2927	3425
65°	2016	2905	3452
70°	1852	2861	3500
75°	1671	2785	3376
80°	1433	2466	2541
85°	1152	1454	1152



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.3	3.3
10°-20°	323.8	9.5
20°-30°	486.4	14.2
30°-40°	580.1	17.0
40°-50°	599.8	17.5
50°-60°	551.4	16.1
60°-70°	439.0	12.8
70°-80°	268.2	7.8
80°-90°	58.3	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°	923.5	27.0
0°-40°	1503.6	44.0
0°-60°	2654.8	77.6
0°-90°	3420.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3420.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1195	1195	1195	1195	1195	
5°	1182	1185	1193	1198	1200	112
15°	1117	1130	1151	1167	1172	315
25°	997	1021	1062	1091	1101	458
35°	839	875	933	982	997	524
45°	661	708	786	849	870	511
55°	485	539	627	698	722	434
65°	317	370	456	520	542	314
75°	161	208	268	315	325	171
85°	37	46	47	41	37	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1194.8	1194.8	1194.8	1194.8	1194.8
2.5°	1188.3	1189.9	1194.8	1198.0	1198.0
5°	1181.8	1185.1	1193.2	1198.0	1199.7
7.5°	1172.1	1176.9	1188.3	1194.8	1196.4
10°	1157.5	1163.9	1178.6	1188.3	1191.5
12.5°	1139.6	1149.3	1167.2	1180.2	1183.4
15°	1116.9	1129.9	1151.0	1167.2	1172.1
17.5°	1090.9	1107.1	1133.1	1152.6	1159.1
20°	1063.3	1079.5	1112.0	1134.7	1142.8
22.5°	1030.8	1051.9	1089.3	1115.2	1121.7
25°	996.7	1021.1	1061.7	1090.9	1100.6
27.5°	959.4	988.6	1032.5	1068.2	1076.3
30°	920.4	951.3	1001.6	1040.6	1050.3
32.5°	879.9	915.6	969.1	1013.0	1026.0
35°	839.3	875.0	933.4	982.1	996.7
37.5°	792.2	834.4	899.3	949.7	967.5
40°	751.6	792.2	862.0	917.2	935.1
42.5°	706.2	750.0	823.0	883.1	904.2
45°	660.7	707.8	785.7	849.0	870.1
47.5°	618.5	665.6	746.7	813.3	834.4
50°	574.7	623.4	707.8	776.0	797.1
52.5°	527.6	581.2	668.8	737.0	761.4
55°	485.4	539.0	626.6	698.0	722.4
57.5°	441.6	496.7	587.7	655.8	678.6
60°	401.0	454.5	543.8	610.4	636.4
62.5°	357.1	412.3	500.0	564.9	589.3
65°	316.6	370.1	456.2	519.5	542.2
67.5°	276.0	329.5	410.7	470.8	496.7
70°	235.4	289.0	363.6	422.1	444.8
72.5°	199.7	246.8	318.2	371.7	392.9
75°	160.7	207.8	267.9	314.9	324.7
77.5°	125.0	167.2	217.5	238.6	241.9
80°	92.5	125.0	159.1	164.0	164.0
82.5°	61.7	86.0	99.0	100.6	99.0
85°	37.3	45.5	47.1	40.6	37.3
87.5°	13.0	13.0	8.1	4.9	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)