

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: P387920

Luminaire Tested: **22CZ2-39-SQR-UNV-L940-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: P387920
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: 22CZ2-39-SQR-UNV-L940-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

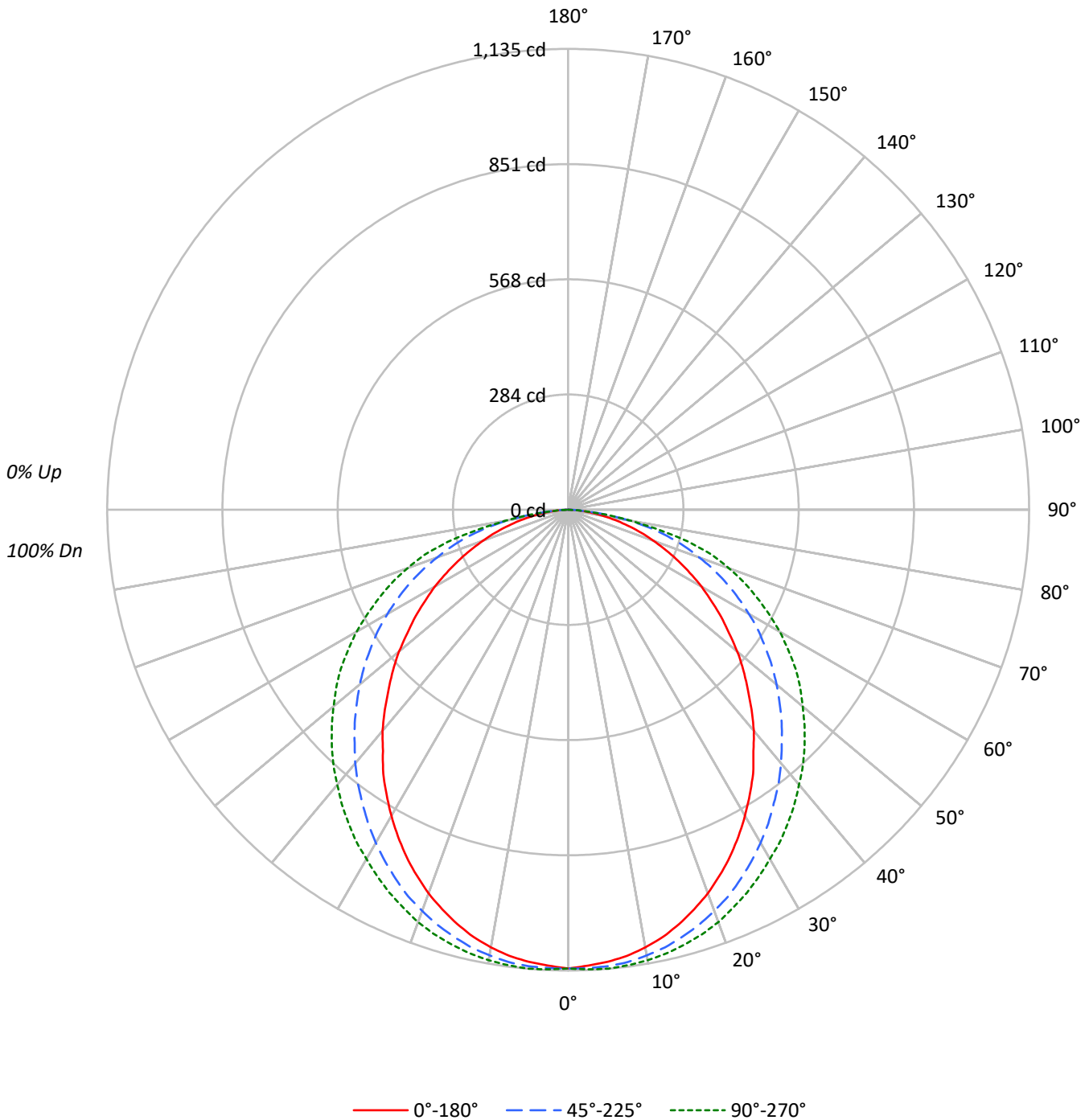
Lumens per Lamp: N/A
Luminaire Lumens: 3234.8 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 34.5
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	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°	3041	3041	3041
5°	3019	3048	3065
10°	2991	3046	3079
15°	2943	3032	3088
20°	2880	3012	3095
25°	2799	2981	3091
30°	2705	2944	3087
35°	2608	2900	3097
40°	2497	2864	3106
45°	2378	2828	3132
50°	2275	2802	3156
55°	2154	2780	3205
60°	2041	2768	3239
65°	1906	2747	3265
70°	1751	2706	3310
75°	1580	2634	3193
80°	1356	2332	2404
85°	1090	1374	1090



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.1	3.3
10°-20°	306.3	9.5
20°-30°	460.0	14.2
30°-40°	548.6	17.0
40°-50°	567.3	17.5
50°-60°	521.5	16.1
60°-70°	415.2	12.8
70°-80°	253.7	7.8
80°-90°	55.1	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°	873.4	27.0
0°-40°	1422.1	44.0
0°-60°	2510.8	77.6
0°-90°	3234.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3234.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1130	1130	1130	1130	1130	
5°	1118	1121	1128	1133	1135	106
15°	1056	1069	1088	1104	1108	297
25°	943	966	1004	1032	1041	434
35°	794	828	883	929	943	495
45°	625	669	743	803	823	483
55°	459	510	593	660	683	411
65°	299	350	431	491	513	297
75°	152	196	253	298	307	162
85°	35	43	44	38	35	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1130.0	1130.0	1130.0	1130.0	1130.0
2.5°	1123.9	1125.4	1130.0	1133.1	1133.1
5°	1117.7	1120.8	1128.5	1133.1	1134.6
7.5°	1108.5	1113.1	1123.9	1130.0	1131.5
10°	1094.7	1100.8	1114.6	1123.9	1126.9
12.5°	1077.8	1087.0	1103.9	1116.2	1119.2
15°	1056.3	1068.6	1088.5	1103.9	1108.5
17.5°	1031.7	1047.1	1071.7	1090.1	1096.2
20°	1005.6	1021.0	1051.7	1073.2	1080.9
22.5°	974.9	994.9	1030.2	1054.8	1060.9
25°	942.7	965.7	1004.1	1031.7	1040.9
27.5°	907.4	935.0	976.5	1010.2	1017.9
30°	870.5	899.7	947.3	984.1	993.4
32.5°	832.1	865.9	916.6	958.0	970.3
35°	793.8	827.5	882.8	928.9	942.7
37.5°	749.2	789.2	850.6	898.2	915.0
40°	710.9	749.2	815.3	867.5	884.3
42.5°	667.9	709.3	778.4	835.2	855.2
45°	624.9	669.4	743.1	803.0	822.9
47.5°	585.0	629.5	706.2	769.2	789.2
50°	543.5	589.6	669.4	733.9	753.8
52.5°	499.0	549.6	632.6	697.0	720.1
55°	459.1	509.7	592.6	660.2	683.2
57.5°	417.6	469.8	555.8	620.3	641.8
60°	379.2	429.9	514.3	577.3	601.8
62.5°	337.8	390.0	472.9	534.3	557.3
65°	299.4	350.1	431.4	491.3	512.8
67.5°	261.0	311.7	388.4	445.2	469.8
70°	222.6	273.3	343.9	399.2	420.7
72.5°	188.8	233.4	300.9	351.6	371.5
75°	152.0	196.5	253.3	297.9	307.1
77.5°	118.2	158.1	205.7	225.7	228.8
80°	87.5	118.2	150.5	155.1	155.1
82.5°	58.3	81.4	93.7	95.2	93.7
85°	35.3	43.0	44.5	38.4	35.3
87.5°	12.3	12.3	7.7	4.6	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)