

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: P387994

Luminaire Tested: **22CZ2-44-SQR-UNV-L950-CD1-SWPD1-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: P387994
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-L950-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3804.5 lumens
Efficiency: N/A
Efficacy: 89.1 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

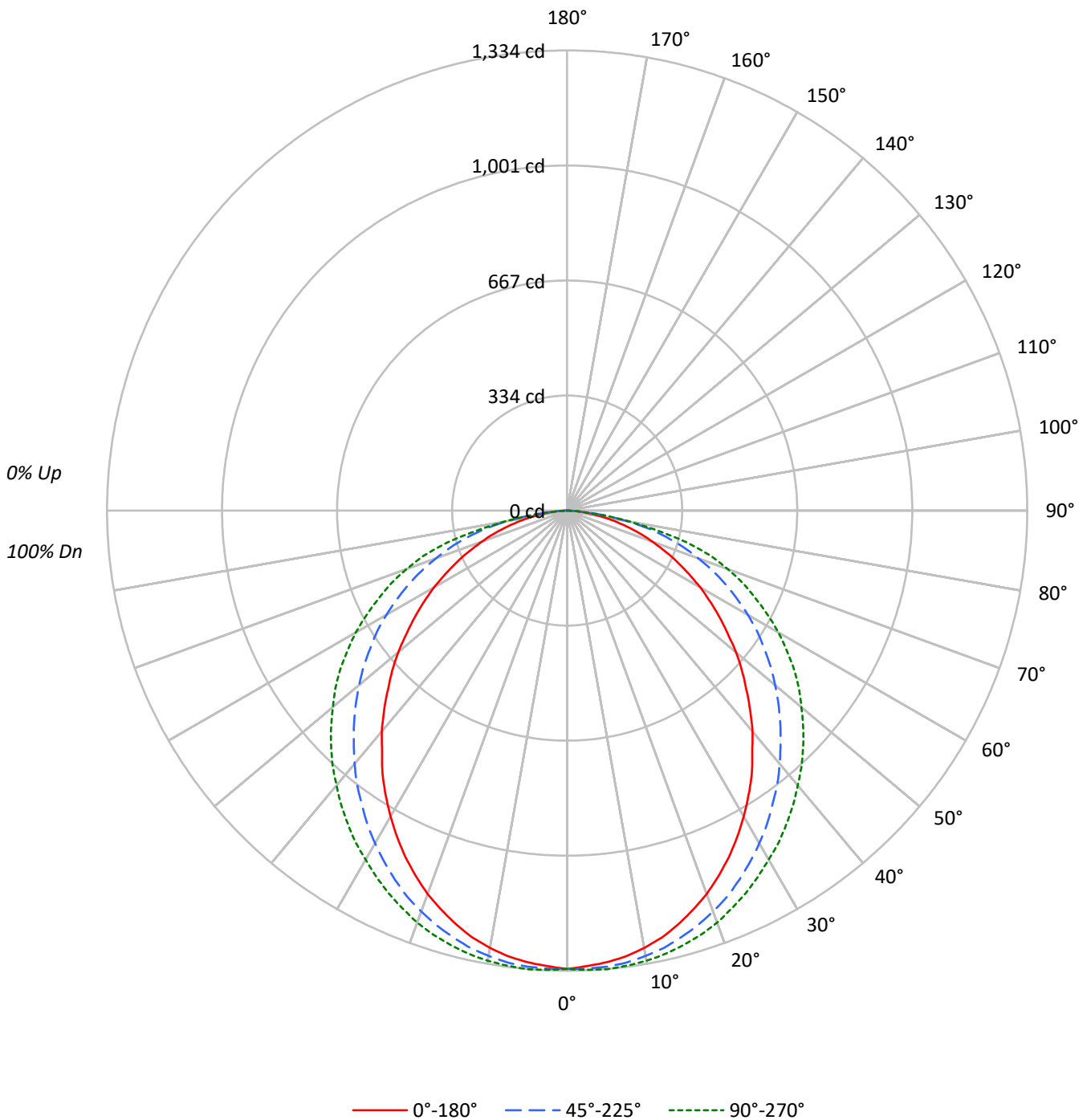
Input Watts (W): 42.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3576	3576	3576
5°	3551	3585	3605
10°	3518	3582	3622
15°	3461	3567	3632
20°	3387	3542	3640
25°	3292	3506	3635
30°	3181	3462	3630
35°	3067	3411	3642
40°	2937	3368	3654
45°	2797	3326	3683
50°	2676	3296	3712
55°	2533	3270	3770
60°	2400	3256	3809
65°	2242	3231	3840
70°	2060	3183	3893
75°	1859	3097	3754
80°	1595	2743	2827
85°	1281	1618	1281



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.0	3.3
10°-20°	360.2	9.5
20°-30°	541.0	14.2
30°-40°	645.3	17.0
40°-50°	667.1	17.5
50°-60°	613.4	16.1
60°-70°	488.3	12.8
70°-80°	298.3	7.8
80°-90°	64.8	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°	1027.3	27.0
0°-40°	1672.5	44.0
0°-60°	2953.0	77.6
0°-90°	3804.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3804.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1329	1329	1329	1329	1329	
5°	1315	1318	1327	1333	1334	125
15°	1242	1257	1280	1298	1304	350
25°	1109	1136	1181	1213	1224	510
35°	934	973	1038	1092	1109	582
45°	735	787	874	944	968	568
55°	540	600	697	776	804	483
65°	352	412	507	578	603	349
75°	179	231	298	350	361	190
85°	42	51	52	45	42	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1329.0	1329.0	1329.0	1329.0	1329.0
2.5°	1321.8	1323.6	1329.0	1332.6	1332.6
5°	1314.6	1318.2	1327.2	1332.6	1334.4
7.5°	1303.7	1309.1	1321.8	1329.0	1330.8
10°	1287.5	1294.7	1310.9	1321.8	1325.4
12.5°	1267.6	1278.4	1298.3	1312.8	1316.4
15°	1242.3	1256.8	1280.2	1298.3	1303.7
17.5°	1213.4	1231.5	1260.4	1282.1	1289.3
20°	1182.7	1200.8	1236.9	1262.2	1271.2
22.5°	1146.6	1170.1	1211.6	1240.5	1247.7
25°	1108.7	1135.8	1180.9	1213.4	1224.3
27.5°	1067.2	1099.7	1148.4	1188.2	1197.2
30°	1023.8	1058.1	1114.1	1157.5	1168.3
32.5°	978.7	1018.4	1078.0	1126.8	1141.2
35°	933.6	973.3	1038.3	1092.5	1108.7
37.5°	881.2	928.1	1000.4	1056.3	1076.2
40°	836.0	881.2	958.8	1020.2	1040.1
42.5°	785.5	834.2	915.5	982.3	1005.8
45°	734.9	787.3	874.0	944.4	967.9
47.5°	688.0	740.3	830.6	904.7	928.1
50°	639.2	693.4	787.3	863.1	886.6
52.5°	586.9	646.4	744.0	819.8	846.9
55°	539.9	599.5	697.0	776.5	803.5
57.5°	491.2	552.5	653.7	729.5	754.8
60°	446.0	505.6	604.9	678.9	707.8
62.5°	397.3	458.7	556.2	628.4	655.5
65°	352.1	411.7	507.4	577.8	603.1
67.5°	307.0	366.6	456.8	523.7	552.5
70°	261.8	321.4	404.5	469.5	494.8
72.5°	222.1	274.5	353.9	413.5	437.0
75°	178.8	231.1	297.9	350.3	361.1
77.5°	139.0	186.0	242.0	265.4	269.1
80°	102.9	139.0	177.0	182.4	182.4
82.5°	68.6	95.7	110.1	112.0	110.1
85°	41.5	50.6	52.4	45.1	41.5
87.5°	14.4	14.4	9.0	5.4	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)