

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: P387657

Luminaire Tested: **22CZ2-20-SQR-UNV-L950-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: P387657
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: 22CZ2-20-SQR-UNV-L950-CD1-SDWPD1-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: 1785.0 lumens
Efficiency: N/A
Efficacy: 99.7 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

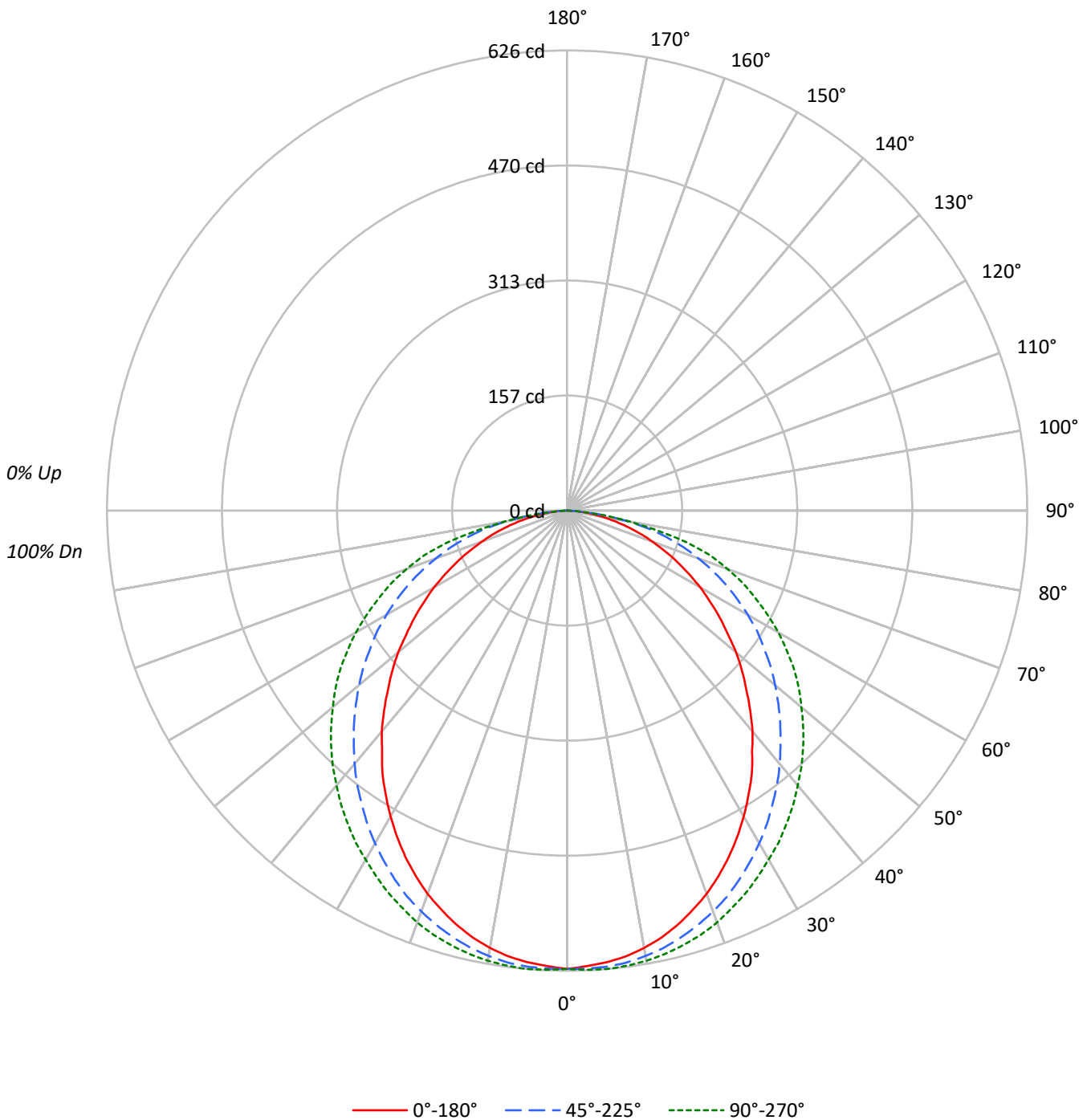
Input Watts (W): 17.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1678	1678	1678
5°	1666	1682	1691
10°	1651	1681	1699
15°	1624	1673	1704
20°	1589	1662	1708
25°	1545	1645	1705
30°	1493	1624	1703
35°	1439	1600	1709
40°	1378	1580	1714
45°	1312	1560	1728
50°	1256	1546	1742
55°	1188	1534	1769
60°	1126	1527	1787
65°	1052	1516	1802
70°	966	1493	1826
75°	872	1454	1761
80°	748	1286	1327
85°	602	760	602



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.1	3.3
10°-20°	169.0	9.5
20°-30°	253.8	14.2
30°-40°	302.7	17.0
40°-50°	313.0	17.5
50°-60°	287.8	16.1
60°-70°	229.1	12.8
70°-80°	140.0	7.8
80°-90°	30.4	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°	482.0	27.0
0°-40°	784.7	44.0
0°-60°	1385.5	77.6
0°-90°	1785.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1785.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	624	624	624	624	624	
5°	617	618	623	625	626	58
15°	583	590	601	609	612	164
25°	520	533	554	569	574	239
35°	438	457	487	513	520	273
45°	345	369	410	443	454	267
55°	253	281	327	364	377	227
65°	165	193	238	271	283	164
75°	84	108	140	164	169	89
85°	20	24	25	21	20	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	623.5	623.5	623.5	623.5	623.5
2.5°	620.2	621.0	623.5	625.2	625.2
5°	616.8	618.5	622.7	625.2	626.1
7.5°	611.7	614.2	620.2	623.5	624.4
10°	604.1	607.4	615.1	620.2	621.8
12.5°	594.7	599.8	609.1	615.9	617.6
15°	582.9	589.7	600.7	609.1	611.7
17.5°	569.3	577.8	591.3	601.5	604.9
20°	554.9	563.4	580.3	592.2	596.4
22.5°	538.0	549.0	568.5	582.0	585.4
25°	520.2	532.9	554.1	569.3	574.4
27.5°	500.7	515.9	538.8	557.5	561.7
30°	480.4	496.5	522.7	543.1	548.1
32.5°	459.2	477.8	505.8	528.7	535.4
35°	438.0	456.6	487.1	512.6	520.2
37.5°	413.4	435.5	469.4	495.6	504.9
40°	392.3	413.4	449.9	478.7	488.0
42.5°	368.5	391.4	429.5	460.9	471.9
45°	344.8	369.4	410.0	443.1	454.1
47.5°	322.8	347.4	389.7	424.5	435.5
50°	299.9	325.3	369.4	405.0	416.0
52.5°	275.3	303.3	349.0	384.6	397.3
55°	253.3	281.3	327.0	364.3	377.0
57.5°	230.4	259.2	306.7	342.3	354.1
60°	209.3	237.2	283.8	318.5	332.1
62.5°	186.4	215.2	260.9	294.8	307.5
65°	165.2	193.2	238.1	271.1	283.0
67.5°	144.0	172.0	214.3	245.7	259.2
70°	122.8	150.8	189.8	220.3	232.1
72.5°	104.2	128.8	166.1	194.0	205.0
75°	83.9	108.4	139.8	164.4	169.4
77.5°	65.2	87.3	113.5	124.5	126.2
80°	48.3	65.2	83.0	85.6	85.6
82.5°	32.2	44.9	51.7	52.5	51.7
85°	19.5	23.7	24.6	21.2	19.5
87.5°	6.8	6.8	4.2	2.5	0.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)