

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: P387658

Luminaire Tested: **22CZ2-20-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: P387658
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-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: 1806.8 lumens
Efficiency: N/A
Efficacy: 100.9 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

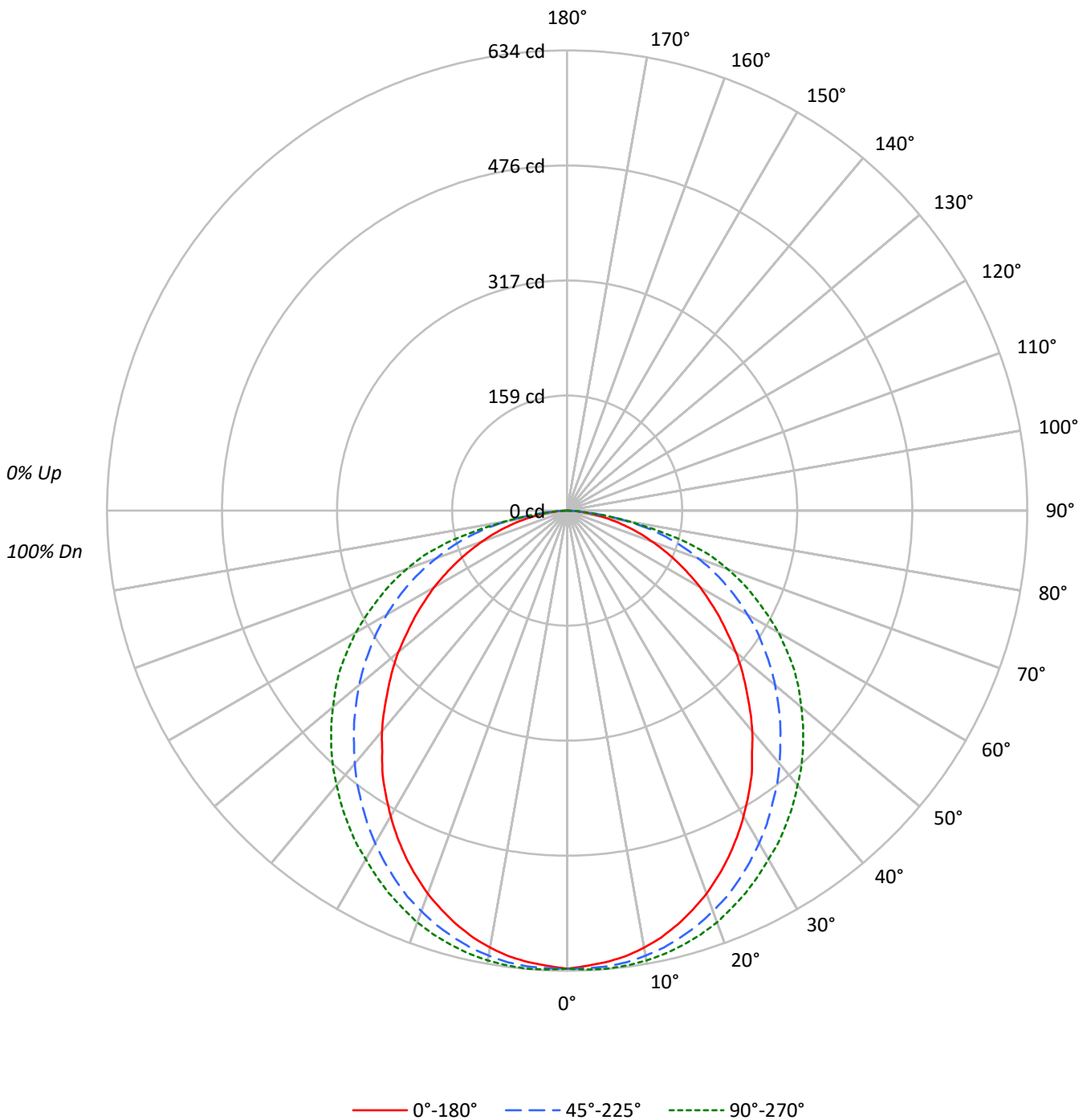
Input Watts (W): 17.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1699	1699	1699
5°	1686	1703	1712
10°	1671	1701	1720
15°	1644	1694	1725
20°	1609	1682	1729
25°	1563	1665	1726
30°	1511	1644	1724
35°	1457	1620	1730
40°	1395	1600	1735
45°	1328	1580	1749
50°	1271	1565	1763
55°	1203	1553	1790
60°	1140	1546	1809
65°	1065	1535	1824
70°	978	1511	1849
75°	883	1471	1783
80°	758	1302	1342
85°	608	769	608



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.8	3.3
10°-20°	171.1	9.5
20°-30°	256.9	14.2
30°-40°	306.4	17.0
40°-50°	316.8	17.5
50°-60°	291.3	16.1
60°-70°	231.9	12.8
70°-80°	141.7	7.8
80°-90°	30.8	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°	487.9	27.0
0°-40°	794.3	44.0
0°-60°	1402.4	77.6
0°-90°	1806.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1806.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	631	631	631	631	631	
5°	624	626	630	633	634	59
15°	590	597	608	617	619	166
25°	526	539	561	576	581	242
35°	443	462	493	519	526	277
45°	349	374	415	448	460	270
55°	256	285	331	369	382	229
65°	167	196	241	274	286	166
75°	85	110	142	166	172	90
85°	20	24	25	21	20	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	631.2	631.2	631.2	631.2	631.2
2.5°	627.7	628.6	631.2	632.9	632.9
5°	624.3	626.0	630.3	632.9	633.7
7.5°	619.2	621.7	627.7	631.2	632.0
10°	611.4	614.9	622.6	627.7	629.4
12.5°	602.0	607.1	616.6	623.4	625.2
15°	590.0	596.9	608.0	616.6	619.2
17.5°	576.3	584.9	598.6	608.9	612.3
20°	561.7	570.3	587.4	599.4	603.7
22.5°	544.5	555.7	575.4	589.1	592.6
25°	526.5	539.4	560.8	576.3	581.4
27.5°	506.8	522.2	545.4	564.3	568.6
30°	486.2	502.5	529.1	549.7	554.8
32.5°	464.8	483.7	512.0	535.1	542.0
35°	443.4	462.2	493.1	518.8	526.5
37.5°	418.5	440.8	475.1	501.7	511.1
40°	397.0	418.5	455.4	484.5	494.0
42.5°	373.0	396.2	434.8	466.5	477.7
45°	349.0	373.9	415.1	448.5	459.6
47.5°	326.7	351.6	394.5	429.6	440.8
50°	303.6	329.3	373.9	409.9	421.1
52.5°	278.7	307.0	353.3	389.3	402.2
55°	256.4	284.7	331.0	368.7	381.6
57.5°	233.3	262.4	310.4	346.5	358.5
60°	211.8	240.1	287.3	322.4	336.2
62.5°	188.7	217.8	264.1	298.4	311.3
65°	167.2	195.5	241.0	274.4	286.4
67.5°	145.8	174.1	217.0	248.7	262.4
70°	124.3	152.6	192.1	223.0	235.0
72.5°	105.5	130.3	168.1	196.4	207.5
75°	84.9	109.8	141.5	166.4	171.5
77.5°	66.0	88.3	114.9	126.1	127.8
80°	48.9	66.0	84.0	86.6	86.6
82.5°	32.6	45.5	52.3	53.2	52.3
85°	19.7	24.0	24.9	21.4	19.7
87.5°	6.9	6.9	4.3	2.6	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)