

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: P387655

Luminaire Tested: **22CZ2-20-SQR-UNV-L940-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: P387655
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-L940-CD1-SWPD1-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: 1702.2 lumens
Efficiency: N/A
Efficacy: 95.1 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

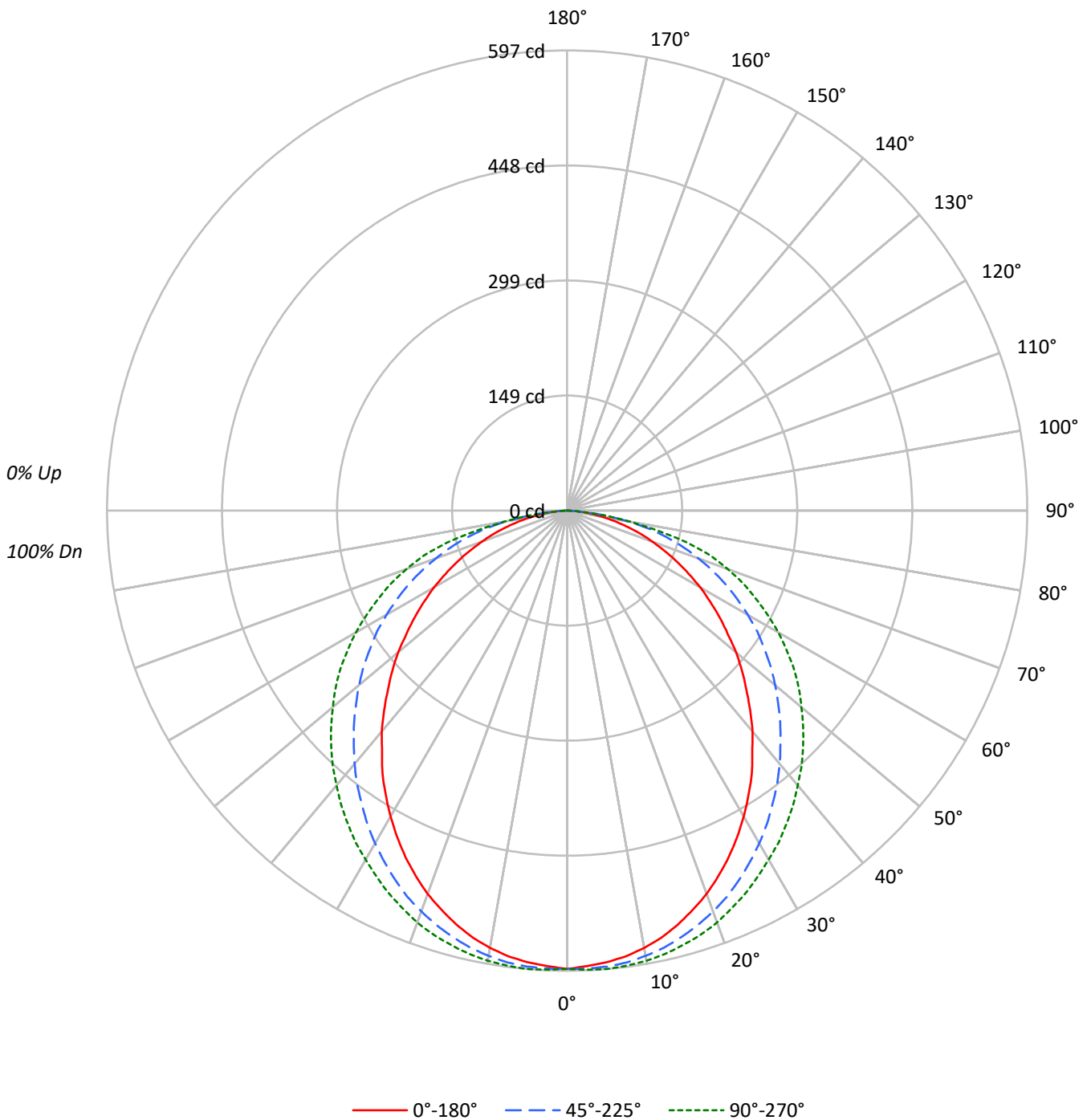
Input Watts (W): 17.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1600	1600	1600
5°	1589	1604	1613
10°	1574	1603	1620
15°	1548	1596	1625
20°	1515	1585	1629
25°	1473	1569	1627
30°	1423	1549	1624
35°	1372	1526	1630
40°	1314	1507	1635
45°	1251	1488	1648
50°	1197	1474	1661
55°	1133	1463	1687
60°	1074	1456	1704
65°	1003	1445	1718
70°	921	1424	1742
75°	832	1386	1680
80°	714	1227	1265
85°	574	722	574



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.4	3.3
10°-20°	161.2	9.5
20°-30°	242.1	14.2
30°-40°	288.7	17.0
40°-50°	298.5	17.5
50°-60°	274.4	16.1
60°-70°	218.5	12.8
70°-80°	133.5	7.8
80°-90°	29.0	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°	459.6	27.0
0°-40°	748.3	44.0
0°-60°	1321.2	77.6
0°-90°	1702.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1702.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	595	595	595	595	595	
5°	588	590	594	596	597	56
15°	556	562	573	581	583	157
25°	496	508	528	543	548	228
35°	418	436	464	489	496	261
45°	329	352	391	422	433	254
55°	242	268	312	347	360	216
65°	158	184	227	258	270	156
75°	80	103	133	157	162	85
85°	19	23	23	20	19	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	594.6	594.6	594.6	594.6	594.6
2.5°	591.4	592.2	594.6	596.2	596.2
5°	588.2	589.8	593.8	596.2	597.0
7.5°	583.3	585.7	591.4	594.6	595.4
10°	576.0	579.3	586.5	591.4	593.0
12.5°	567.2	572.0	580.9	587.3	589.0
15°	555.8	562.3	572.8	580.9	583.3
17.5°	542.9	551.0	563.9	573.6	576.8
20°	529.2	537.3	553.4	564.7	568.8
22.5°	513.0	523.5	542.1	555.0	558.3
25°	496.1	508.2	528.4	542.9	547.8
27.5°	477.5	492.0	513.8	531.6	535.6
30°	458.1	473.4	498.5	517.9	522.7
32.5°	437.9	455.7	482.3	504.1	510.6
35°	417.7	435.5	464.5	488.8	496.1
37.5°	394.3	415.3	447.6	472.6	481.5
40°	374.1	394.3	429.0	456.5	465.4
42.5°	351.4	373.3	409.6	439.5	450.0
45°	328.8	352.2	391.0	422.5	433.0
47.5°	307.8	331.2	371.6	404.8	415.3
50°	286.0	310.2	352.2	386.2	396.7
52.5°	262.6	289.2	332.9	366.8	378.9
55°	241.6	268.2	311.9	347.4	359.5
57.5°	219.8	247.2	292.5	326.4	337.7
60°	199.6	226.2	270.6	303.8	316.7
62.5°	177.7	205.2	248.8	281.2	293.3
65°	157.5	184.2	227.0	258.5	269.8
67.5°	137.3	164.0	204.4	234.3	247.2
70°	117.1	143.8	181.0	210.1	221.4
72.5°	99.4	122.8	158.3	185.0	195.5
75°	80.0	103.4	133.3	156.7	161.6
77.5°	62.2	83.2	108.3	118.8	120.4
80°	46.1	62.2	79.2	81.6	81.6
82.5°	30.7	42.8	49.3	50.1	49.3
85°	18.6	22.6	23.4	20.2	18.6
87.5°	6.5	6.5	4.0	2.4	0.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)