

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: P387652

Luminaire Tested: **22CZ2-20-SQR-UNV-L935-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: P387652
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-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1684.8 lumens
Efficiency: N/A
Efficacy: 94.1 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

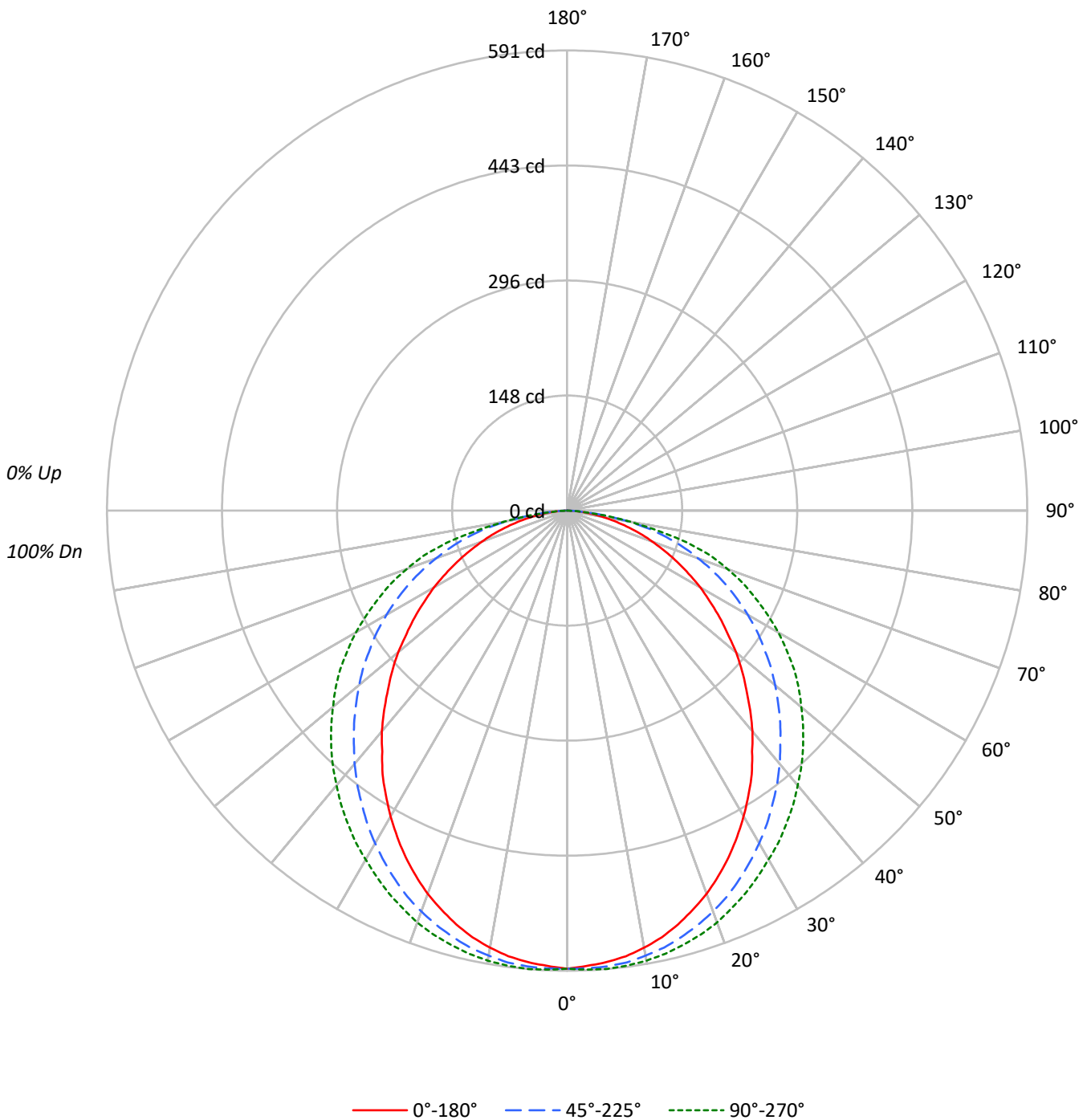
Input Watts (W): 17.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1584	1584	1584
5°	1572	1588	1596
10°	1558	1586	1604
15°	1533	1580	1608
20°	1500	1569	1612
25°	1458	1553	1610
30°	1409	1533	1608
35°	1358	1510	1613
40°	1300	1492	1618
45°	1239	1473	1631
50°	1185	1459	1644
55°	1122	1448	1669
60°	1063	1442	1687
65°	993	1431	1701
70°	912	1409	1724
75°	823	1371	1663
80°	707	1215	1252
85°	568	716	568



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.8	3.3
10°-20°	159.5	9.5
20°-30°	239.6	14.2
30°-40°	285.8	17.0
40°-50°	295.4	17.5
50°-60°	271.6	16.1
60°-70°	216.2	12.8
70°-80°	132.1	7.8
80°-90°	28.7	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°	454.9	27.0
0°-40°	740.7	44.0
0°-60°	1307.7	77.6
0°-90°	1684.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1684.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	588	588	588	588	588	
5°	582	584	588	590	591	55
15°	550	557	567	575	577	155
25°	491	503	523	537	542	226
35°	413	431	460	484	491	258
45°	326	349	387	418	429	252
55°	239	266	309	344	356	214
65°	156	182	225	256	267	154
75°	79	102	132	155	160	84
85°	18	22	23	20	18	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	588.5	588.5	588.5	588.5	588.5
2.5°	585.3	586.1	588.5	590.1	590.1
5°	582.1	583.7	587.7	590.1	590.9
7.5°	577.3	579.7	585.3	588.5	589.3
10°	570.1	573.3	580.5	585.3	586.9
12.5°	561.4	566.2	574.9	581.3	582.9
15°	550.2	556.6	567.0	574.9	577.3
17.5°	537.4	545.4	558.2	567.8	570.9
20°	523.8	531.8	547.8	559.0	563.0
22.5°	507.8	518.2	536.6	549.4	552.6
25°	491.0	503.0	523.0	537.4	542.2
27.5°	472.6	487.0	508.6	526.2	530.2
30°	453.4	468.6	493.4	512.6	517.4
32.5°	433.4	451.0	477.4	499.0	505.4
35°	413.4	431.0	459.8	483.8	491.0
37.5°	390.2	411.0	443.0	467.8	476.6
40°	370.2	390.2	424.6	451.8	460.6
42.5°	347.8	369.4	405.4	435.0	445.4
45°	325.5	348.6	387.0	418.2	428.6
47.5°	304.7	327.9	367.8	400.6	411.0
50°	283.1	307.1	348.6	382.2	392.6
52.5°	259.9	286.3	329.5	363.0	375.0
55°	239.1	265.5	308.7	343.8	355.8
57.5°	217.5	244.7	289.5	323.1	334.3
60°	197.5	223.9	267.9	300.7	313.5
62.5°	175.9	203.1	246.3	278.3	290.3
65°	155.9	182.3	224.7	255.9	267.1
67.5°	135.9	162.3	202.3	231.9	244.7
70°	115.9	142.3	179.1	207.9	219.1
72.5°	98.4	121.5	156.7	183.1	193.5
75°	79.2	102.4	131.9	155.1	159.9
77.5°	61.6	82.4	107.2	117.5	119.1
80°	45.6	61.6	78.4	80.8	80.8
82.5°	30.4	42.4	48.8	49.6	48.8
85°	18.4	22.4	23.2	20.0	18.4
87.5°	6.4	6.4	4.0	2.4	0.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)