

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: P390822

Luminaire Tested: **22CZ2-90VHE-RDP-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: P390822
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-90VHE-RDP-UNV-L950-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5429.3 lumens
Efficiency: N/A
Efficacy: 79.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

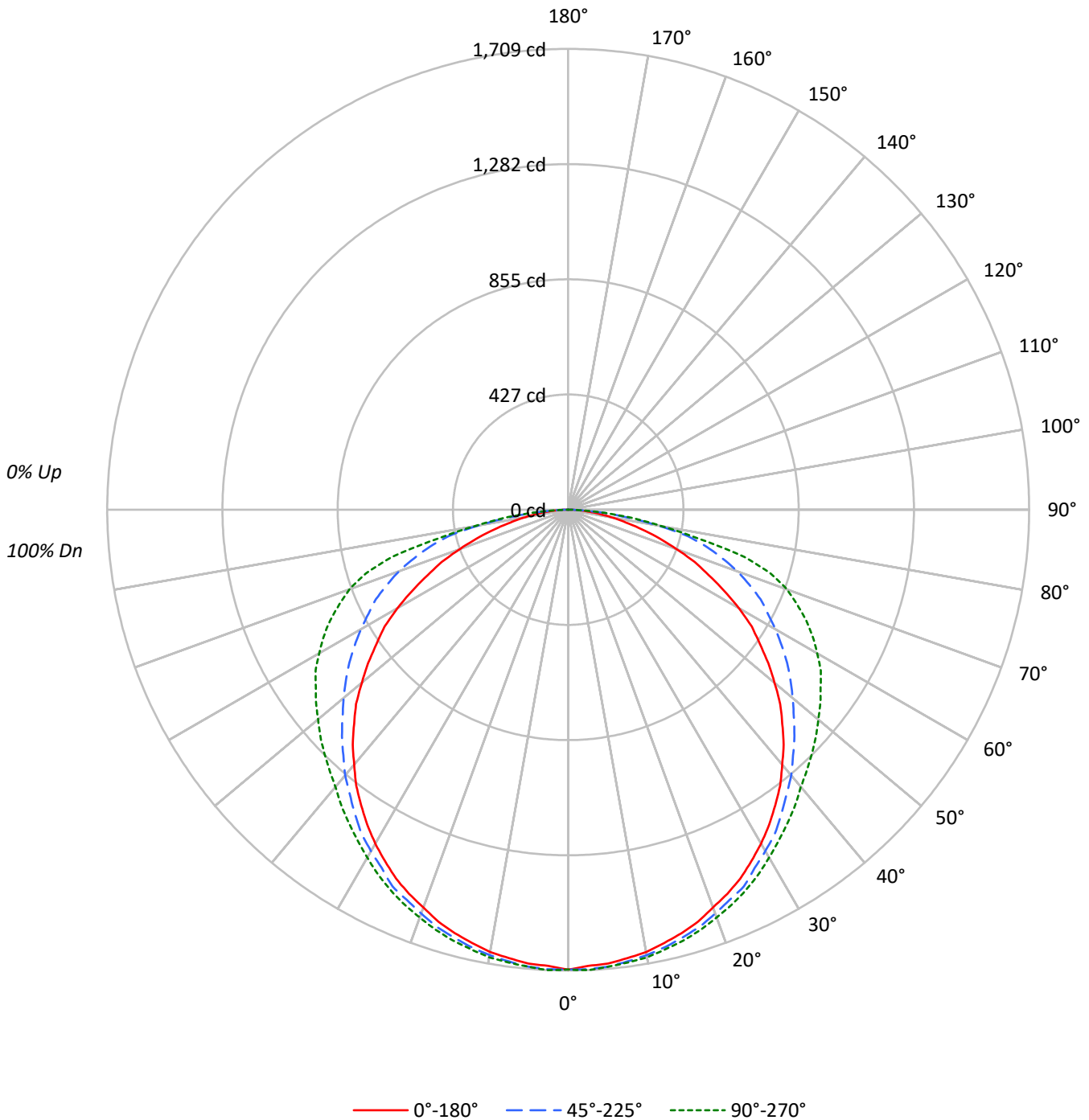
Input Watts (W): 68.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P390822

CATALOG NUMBER: 22CZ2-90VHE-RDP-UNV-L950-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P390822

CATALOG NUMBER: 22CZ2-90VHE-RDP-UNV-L950-CD1-SDWPD1-U

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	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4589	4589	4589
5°	4564	4596	4596
10°	4551	4584	4606
15°	4529	4573	4606
20°	4495	4564	4609
25°	4483	4578	4625
30°	4443	4542	4629
35°	4395	4527	4658
40°	4335	4518	4714
45°	4271	4514	4864
50°	4180	4548	5066
55°	4066	4647	5359
60°	3934	4772	5739
65°	3662	5010	6205
70°	3363	5248	6788
75°	2949	5523	7018
80°	2538	5261	5509
85°	2220	3822	4193



TEST NUMBER: P390822

CATALOG NUMBER: 22CZ2-90VHE-RDP-UNV-L950-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.3	3.0
10°-20°	463.2	8.5
20°-30°	706.7	13.0
30°-40°	862.9	15.9
40°-50°	922.6	17.0
50°-60°	890.5	16.4
60°-70°	766.6	14.1
70°-80°	518.7	9.6
80°-90°	136.8	2.5
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°	1331.2	24.5
0°-40°	2194.1	40.4
0°-60°	4007.2	73.8
0°-90°	5429.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5429.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1705	1705	1705	1705	1705	
5°	1690	1694	1701	1701	1701	160
15°	1626	1630	1642	1650	1654	459
25°	1510	1518	1542	1550	1558	695
35°	1338	1350	1378	1406	1418	837
45°	1122	1142	1186	1246	1278	866
55°	867	895	990	1090	1142	777
65°	575	631	787	911	974	572
75°	284	375	531	639	675	304
85°	72	100	124	128	136	81
90°	0	0	0	0	0	



TEST NUMBER: P390822

CATALOG NUMBER: 22CZ2-90VHE-RDP-UNV-L950-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1705.4	1705.4	1705.4	1705.4	1705.4
2.5°	1693.5	1697.4	1705.4	1705.4	1709.4
5°	1689.5	1693.5	1701.4	1701.4	1701.4
7.5°	1677.5	1681.5	1689.5	1693.5	1693.5
10°	1665.5	1669.5	1677.5	1681.5	1685.5
12.5°	1645.5	1649.5	1661.5	1669.5	1669.5
15°	1625.6	1629.6	1641.5	1649.5	1653.5
17.5°	1601.6	1609.6	1621.6	1629.6	1633.5
20°	1569.6	1577.6	1593.6	1605.6	1609.6
22.5°	1541.7	1549.7	1565.6	1577.6	1585.6
25°	1509.7	1517.7	1541.7	1549.7	1557.7
27.5°	1469.8	1477.8	1497.7	1513.7	1525.7
30°	1429.9	1437.8	1461.8	1481.8	1489.8
32.5°	1385.9	1397.9	1425.9	1441.8	1453.8
35°	1338.0	1350.0	1377.9	1405.9	1417.9
37.5°	1290.1	1302.0	1330.0	1365.9	1381.9
40°	1234.1	1250.1	1286.1	1334.0	1342.0
42.5°	1182.2	1202.2	1234.1	1290.1	1310.0
45°	1122.3	1142.3	1186.2	1246.1	1278.1
47.5°	1066.4	1086.4	1134.3	1206.2	1246.1
50°	998.5	1026.5	1086.4	1170.2	1210.2
52.5°	934.6	958.6	1038.4	1130.3	1178.2
55°	866.7	894.7	990.5	1090.4	1142.3
57.5°	806.8	830.8	938.6	1050.4	1110.3
60°	730.9	762.9	886.7	1006.5	1066.4
62.5°	651.0	698.9	834.7	958.6	1022.5
65°	575.1	631.1	786.8	910.6	974.5
67.5°	507.2	567.1	726.9	858.7	918.6
70°	427.4	503.2	667.0	794.8	862.7
72.5°	355.5	439.3	599.1	726.9	786.8
75°	283.6	375.4	531.2	639.0	675.0
77.5°	219.7	307.5	455.3	487.3	491.3
80°	163.8	243.6	339.5	343.5	355.5
82.5°	111.8	171.7	219.7	239.6	243.6
85°	71.9	99.8	123.8	127.8	135.8
87.5°	32.0	35.9	43.9	39.9	39.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)