

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: P387681

Luminaire Tested: **22CZ2-20HE-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: P387681
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: 22CZ2-20HE-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: 1736.6 lumens
Efficiency: N/A
Efficacy: 108.5 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

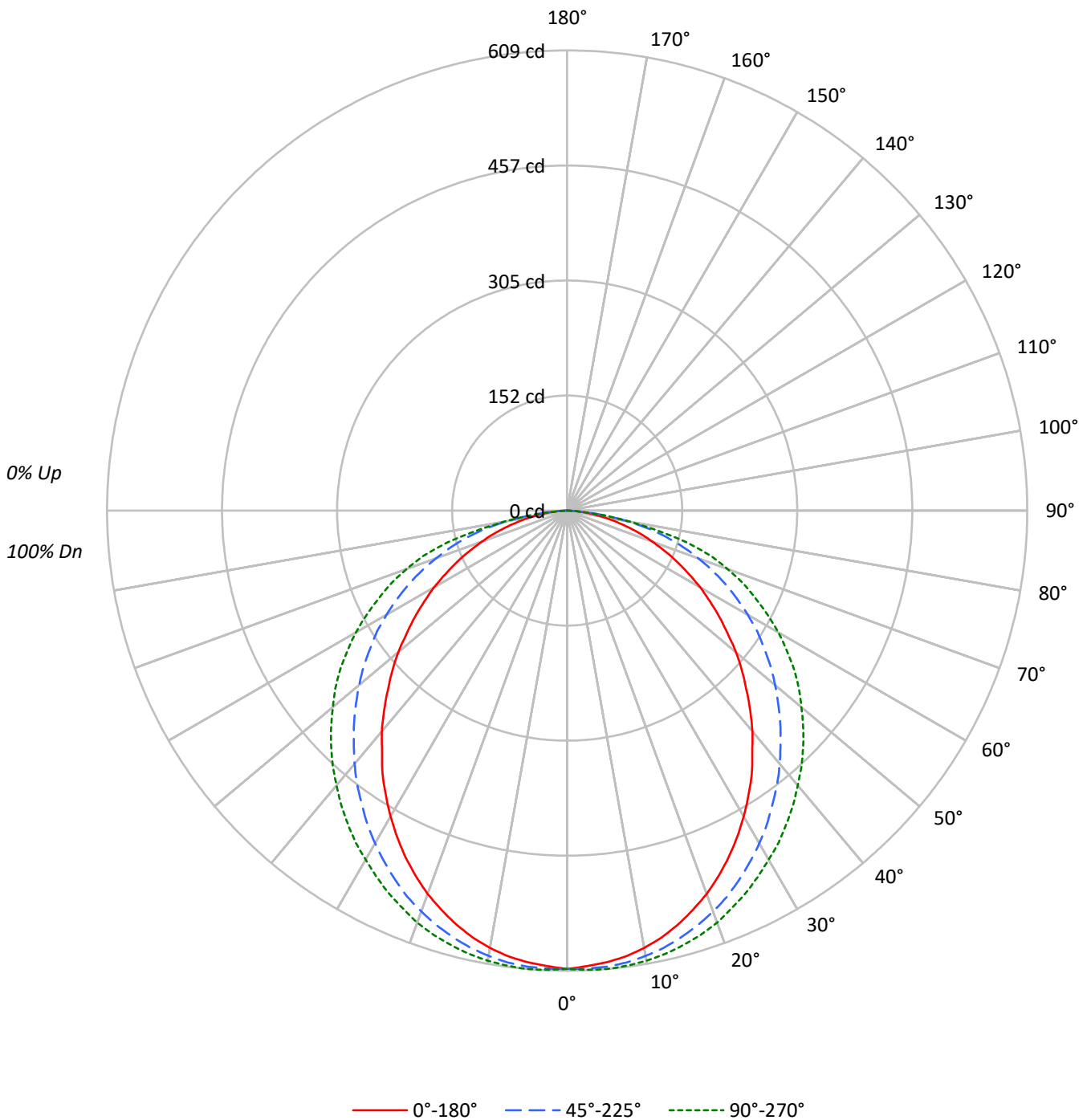
Input Watts (W): 16
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P387681

CATALOG NUMBER: 22CZ2-20HE-SQR-UNV-L950-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P387681

CATALOG NUMBER: 22CZ2-20HE-SQR-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	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°	1632	1632	1632
5°	1621	1636	1645
10°	1606	1635	1653
15°	1580	1628	1658
20°	1546	1617	1662
25°	1503	1600	1659
30°	1452	1580	1657
35°	1400	1557	1663
40°	1340	1538	1668
45°	1277	1518	1681
50°	1222	1505	1694
55°	1156	1493	1721
60°	1096	1486	1739
65°	1023	1475	1753
70°	940	1452	1777
75°	848	1414	1713
80°	728	1252	1289
85°	587	738	587



TEST NUMBER: P387681

CATALOG NUMBER: 22CZ2-20HE-SQR-UNV-L950-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.5	3.3
10°-20°	164.4	9.5
20°-30°	247.0	14.2
30°-40°	294.5	17.0
40°-50°	304.5	17.5
50°-60°	280.0	16.1
60°-70°	222.9	12.8
70°-80°	136.2	7.8
80°-90°	29.6	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°	468.9	27.0
0°-40°	763.4	44.0
0°-60°	1347.9	77.6
0°-90°	1736.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1736.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	607	607	607	607	607	
5°	600	602	606	608	609	57
15°	567	574	584	593	595	160
25°	506	518	539	554	559	233
35°	426	444	474	499	506	266
45°	336	359	399	431	442	259
55°	246	274	318	354	367	220
65°	161	188	232	264	275	159
75°	82	106	136	160	165	87
85°	19	23	24	21	19	22
90°	0	0	0	0	0	



TEST NUMBER: P387681

CATALOG NUMBER: 22CZ2-20HE-SQR-UNV-L950-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	606.6	606.6	606.6	606.6	606.6
2.5°	603.3	604.2	606.6	608.3	608.3
5°	600.0	601.7	605.8	608.3	609.1
7.5°	595.1	597.6	603.3	606.6	607.5
10°	587.7	591.0	598.4	603.3	605.0
12.5°	578.6	583.6	592.6	599.2	600.9
15°	567.1	573.7	584.4	592.6	595.1
17.5°	553.9	562.1	575.3	585.2	588.5
20°	539.9	548.1	564.6	576.1	580.3
22.5°	523.4	534.1	553.1	566.2	569.5
25°	506.1	518.4	539.0	553.9	558.8
27.5°	487.1	502.0	524.2	542.3	546.5
30°	467.3	483.0	508.6	528.3	533.3
32.5°	446.7	464.9	492.1	514.3	520.9
35°	426.1	444.3	473.9	498.7	506.1
37.5°	402.2	423.7	456.6	482.2	491.2
40°	381.6	402.2	437.7	465.7	474.8
42.5°	358.5	380.8	417.9	448.4	459.1
45°	335.5	359.4	398.9	431.1	441.8
47.5°	314.0	337.9	379.1	412.9	423.7
50°	291.8	316.5	359.4	394.0	404.7
52.5°	267.9	295.1	339.6	374.2	386.6
55°	246.4	273.6	318.2	354.4	366.8
57.5°	224.2	252.2	298.4	333.0	344.5
60°	203.6	230.8	276.1	309.9	323.1
62.5°	181.3	209.4	253.9	286.8	299.2
65°	160.7	187.9	231.6	263.8	275.3
67.5°	140.1	167.3	208.5	239.0	252.2
70°	119.5	146.7	184.6	214.3	225.8
72.5°	101.4	125.3	161.5	188.7	199.5
75°	81.6	105.5	136.0	159.9	164.8
77.5°	63.5	84.9	110.4	121.2	122.8
80°	47.0	63.5	80.8	83.2	83.2
82.5°	31.3	43.7	50.3	51.1	50.3
85°	19.0	23.1	23.9	20.6	19.0
87.5°	6.6	6.6	4.1	2.5	0.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)