

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: P387683

Luminaire Tested: **22CZ2-20HE-SQR-UNV-L950-CD1-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: P387683
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-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: 1779.9 lumens
Efficiency: N/A
Efficacy: 111.2 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

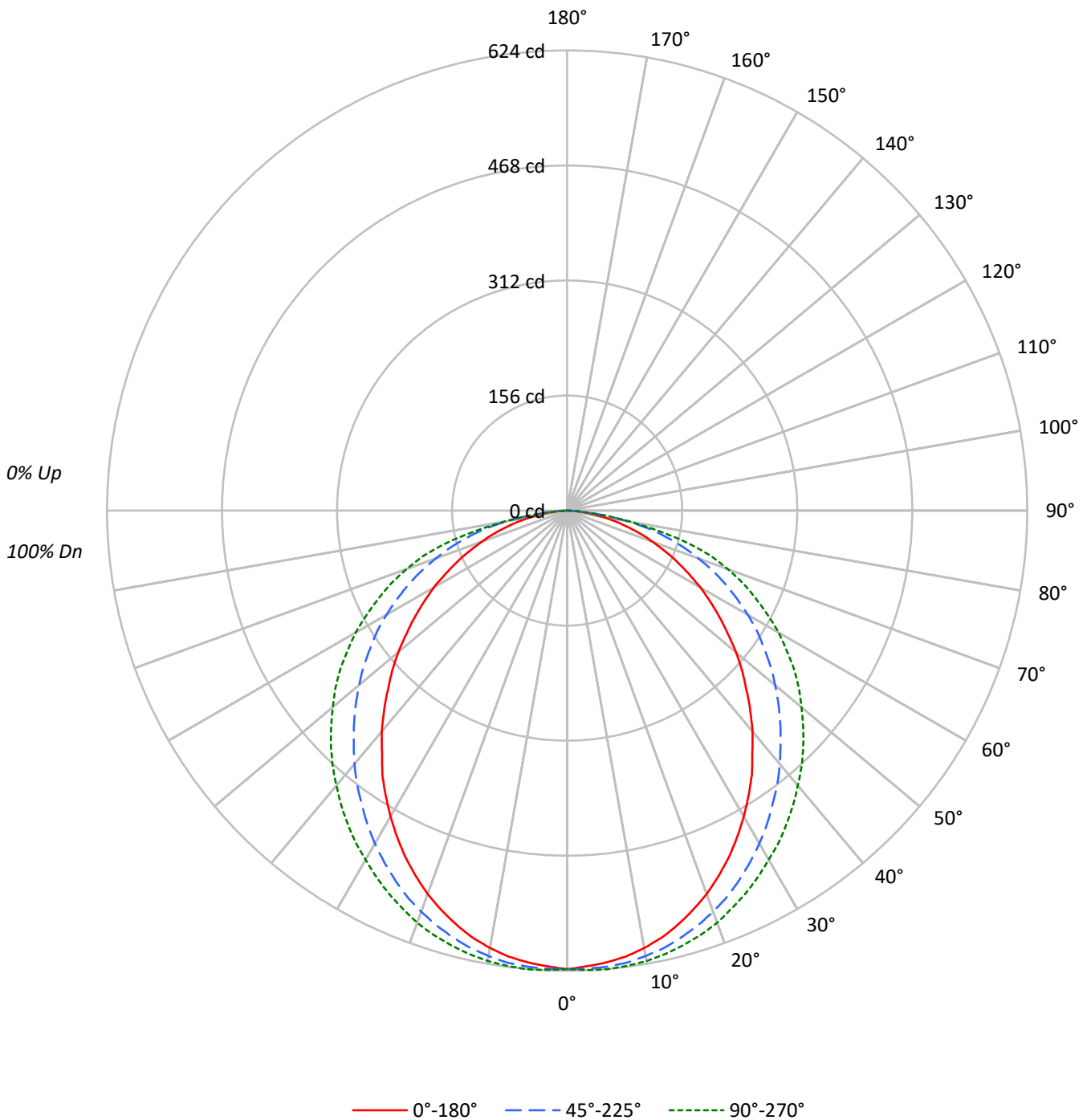
Input Watts (W): 16
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1673	1673	1673
5°	1661	1677	1686
10°	1646	1676	1694
15°	1619	1669	1699
20°	1584	1657	1703
25°	1540	1640	1701
30°	1488	1620	1698
35°	1435	1596	1704
40°	1374	1576	1709
45°	1308	1556	1723
50°	1252	1542	1737
55°	1185	1530	1764
60°	1123	1523	1783
65°	1049	1512	1797
70°	964	1489	1821
75°	869	1449	1757
80°	747	1283	1322
85°	599	756	599



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.9	3.3
10°-20°	168.5	9.5
20°-30°	253.1	14.2
30°-40°	301.9	17.0
40°-50°	312.1	17.5
50°-60°	287.0	16.1
60°-70°	228.4	12.8
70°-80°	139.6	7.8
80°-90°	30.3	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°	480.6	27.0
0°-40°	782.5	44.0
0°-60°	1381.6	77.6
0°-90°	1779.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1779.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	622	622	622	622	622	
5°	615	617	621	624	624	58
15°	581	588	599	607	610	164
25°	519	531	552	568	573	239
35°	437	455	486	511	519	272
45°	344	368	409	442	453	266
55°	253	280	326	363	376	226
65°	165	193	237	270	282	163
75°	84	108	139	164	169	89
85°	19	24	24	21	19	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	621.8	621.8	621.8	621.8	621.8
2.5°	618.4	619.2	621.8	623.5	623.5
5°	615.0	616.7	620.9	623.5	624.3
7.5°	609.9	612.5	618.4	621.8	622.6
10°	602.3	605.7	613.3	618.4	620.1
12.5°	593.0	598.1	607.4	614.2	615.8
15°	581.2	588.0	599.0	607.4	609.9
17.5°	567.7	576.1	589.7	599.8	603.2
20°	553.3	561.8	578.7	590.5	594.7
22.5°	536.4	547.4	566.9	580.4	583.7
25°	518.7	531.4	552.5	567.7	572.8
27.5°	499.3	514.5	537.3	555.9	560.1
30°	479.0	495.0	521.2	541.5	546.6
32.5°	457.9	476.5	504.3	527.1	533.9
35°	436.8	455.3	485.8	511.1	518.7
37.5°	412.3	434.2	468.0	494.2	503.5
40°	391.1	412.3	448.6	477.3	486.6
42.5°	367.5	390.3	428.3	459.6	470.5
45°	343.8	368.3	408.9	441.8	452.8
47.5°	321.9	346.4	388.6	423.2	434.2
50°	299.1	324.4	368.3	403.8	414.8
52.5°	274.6	302.4	348.1	383.5	396.2
55°	252.6	280.5	326.1	363.3	375.9
57.5°	229.8	258.5	305.8	341.3	353.1
60°	208.7	236.5	283.0	317.6	331.2
62.5°	185.9	214.6	260.2	294.0	306.7
65°	164.7	192.6	237.4	270.3	282.2
67.5°	143.6	171.5	213.7	245.0	258.5
70°	122.5	150.4	189.2	219.6	231.5
72.5°	103.9	128.4	165.6	193.5	204.4
75°	83.6	108.1	139.4	163.9	169.0
77.5°	65.0	87.0	113.2	124.2	125.9
80°	48.2	65.0	82.8	85.3	85.3
82.5°	32.1	44.8	51.5	52.4	51.5
85°	19.4	23.7	24.5	21.1	19.4
87.5°	6.8	6.8	4.2	2.5	0.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)