

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: P387706

Luminaire Tested: **22CZ2-20VHE-SQR-UNV-L950-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: P387706
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: 22CZ2-20VHE-SQR-UNV-L950-CD1-SWPD1-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: 1726.8 lumens
Efficiency: N/A
Efficacy: 121.6 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

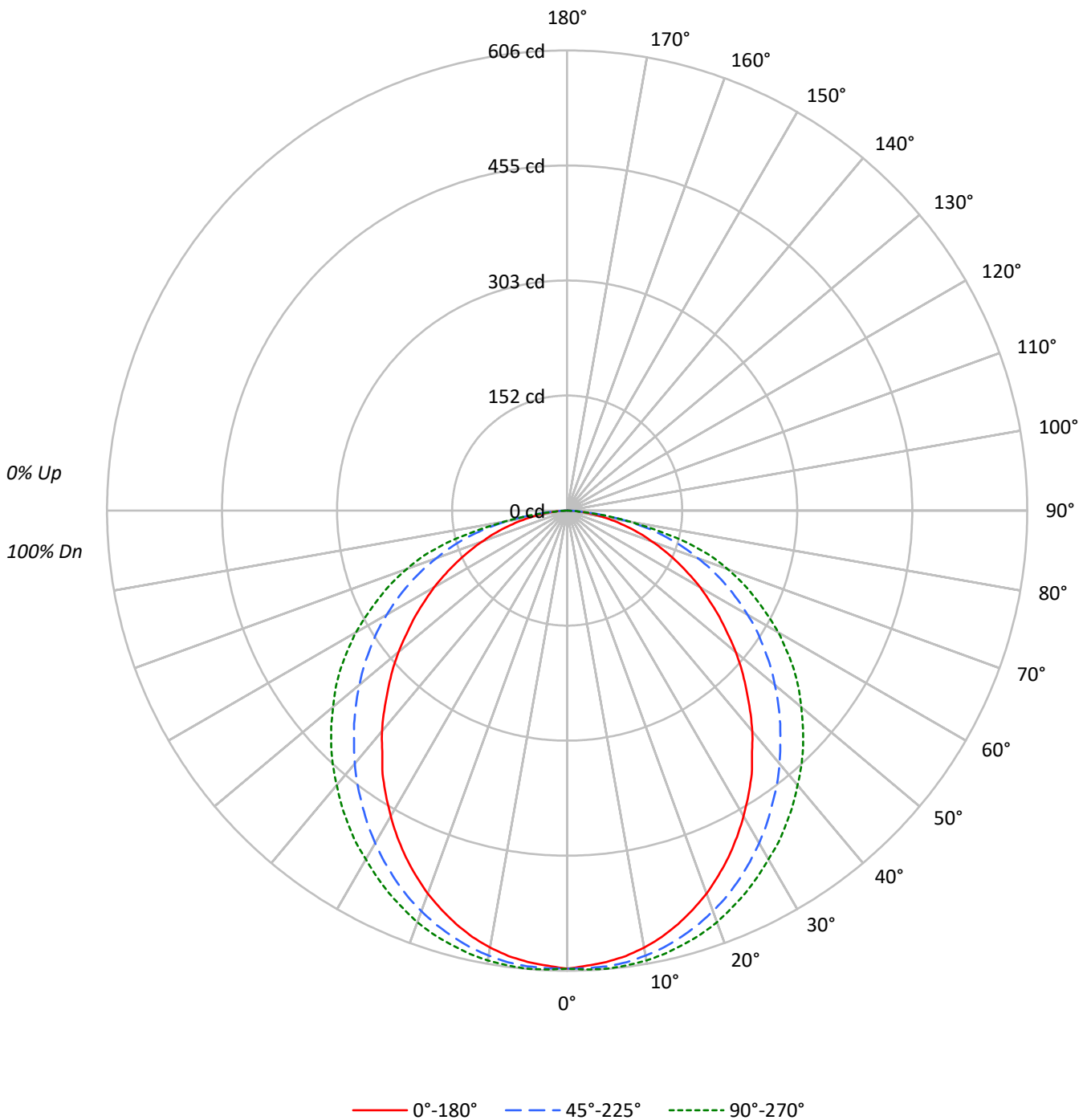
Input Watts (W): 14.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1623	1623	1623
5°	1612	1627	1636
10°	1597	1626	1644
15°	1571	1619	1648
20°	1537	1608	1652
25°	1494	1591	1650
30°	1444	1571	1648
35°	1392	1548	1653
40°	1333	1529	1658
45°	1270	1510	1672
50°	1214	1496	1685
55°	1150	1484	1711
60°	1089	1478	1729
65°	1018	1466	1743
70°	935	1445	1767
75°	843	1406	1704
80°	724	1244	1283
85°	584	735	584



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.2	3.3
10°-20°	163.5	9.5
20°-30°	245.6	14.2
30°-40°	292.9	17.0
40°-50°	302.8	17.5
50°-60°	278.4	16.1
60°-70°	221.6	12.8
70°-80°	135.4	7.8
80°-90°	29.4	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°	466.3	27.0
0°-40°	759.1	44.0
0°-60°	1340.3	77.6
0°-90°	1726.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1726.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	603	603	603	603	603	
5°	597	598	602	605	606	57
15°	564	570	581	589	592	159
25°	503	516	536	551	556	231
35°	424	442	471	496	503	264
45°	334	357	397	429	439	258
55°	245	272	316	352	365	219
65°	160	187	230	262	274	158
75°	81	105	135	159	164	86
85°	19	23	24	20	19	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	603.2	603.2	603.2	603.2	603.2
2.5°	599.9	600.8	603.2	604.9	604.9
5°	596.7	598.3	602.4	604.9	605.7
7.5°	591.7	594.2	599.9	603.2	604.0
10°	584.4	587.6	595.0	599.9	601.6
12.5°	575.3	580.3	589.3	595.8	597.5
15°	563.9	570.4	581.1	589.3	591.7
17.5°	550.8	559.0	572.1	581.9	585.2
20°	536.8	545.0	561.4	572.9	577.0
22.5°	520.4	531.1	549.9	563.1	566.3
25°	503.2	515.5	536.0	550.8	555.7
27.5°	484.4	499.1	521.3	539.3	543.4
30°	464.7	480.3	505.7	525.4	530.3
32.5°	444.2	462.2	489.3	511.4	518.0
35°	423.7	441.8	471.3	495.8	503.2
37.5°	400.0	421.3	454.0	479.5	488.5
40°	379.5	400.0	435.2	463.1	472.1
42.5°	356.5	378.6	415.5	445.9	456.5
45°	333.6	357.3	396.7	428.6	439.3
47.5°	312.3	336.0	377.0	410.6	421.3
50°	290.1	314.7	357.3	391.8	402.4
52.5°	266.4	293.4	337.7	372.1	384.4
55°	245.1	272.1	316.4	352.4	364.7
57.5°	222.9	250.8	296.7	331.1	342.6
60°	202.4	229.5	274.6	308.2	321.3
62.5°	180.3	208.2	252.4	285.2	297.5
65°	159.8	186.9	230.3	262.3	273.7
67.5°	139.3	166.4	207.4	237.7	250.8
70°	118.8	145.9	183.6	213.1	224.6
72.5°	100.8	124.6	160.6	187.7	198.3
75°	81.1	104.9	135.2	159.0	163.9
77.5°	63.1	84.4	109.8	120.5	122.1
80°	46.7	63.1	80.3	82.8	82.8
82.5°	31.1	43.4	50.0	50.8	50.0
85°	18.9	22.9	23.8	20.5	18.9
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)