

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: P230556

Luminaire Tested: **22CZ-LD5-20SE-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230556
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25706)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-20SE-UNV-L930-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RIBBED LENS
Light Source: (56) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1714.0 lumens
Efficiency: N/A
Efficacy: 99.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

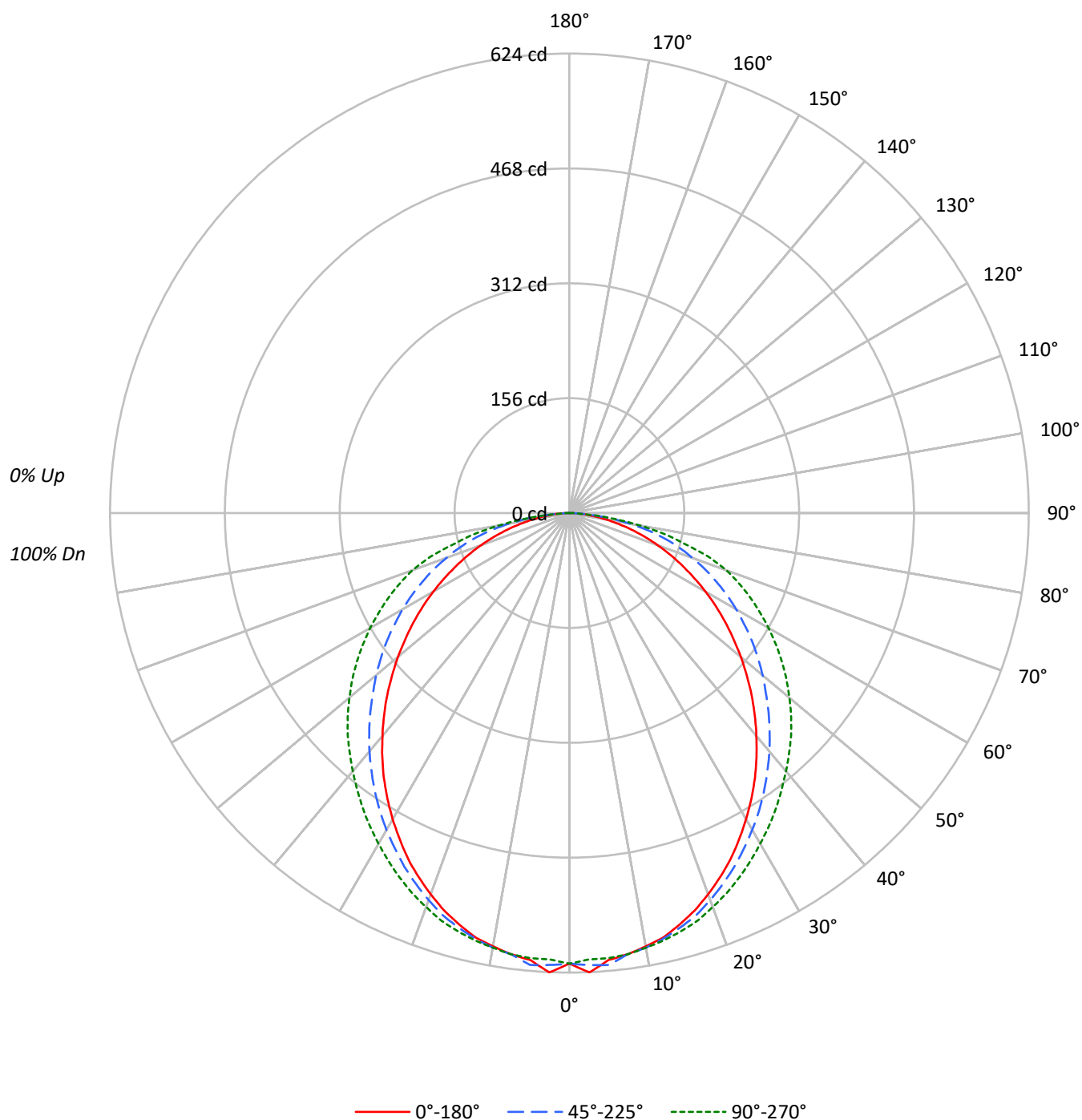
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	108	104	99	95	106	101	97	94		97	94	91			93	90	88			89
2	98	90	83	77	96	88	82	76		84	79	74			81	77	73			78
3	90	79	70	64	87	77	69	63		74	68	62			71	66	61			69
4	82	70	61	54	80	68	60	54		66	59	53			64	57	52			61
5	75	62	53	46	73	61	53	46		59	51	46			57	50	45			55
6	70	56	47	41	68	55	47	40		53	46	40			52	45	40			50
7	65	51	42	36	63	50	42	36		48	41	35			47	40	35			46
8	60	46	38	32	58	46	38	32		44	37	32			43	36	31			42
9	56	43	34	29	55	42	34	29		41	34	29			40	33	28			39
10	53	39	31	26	51	39	31	26		38	31	26			37	30	26			36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1646	1646	1646
5°	1646	1664	1639
10°	1633	1638	1638
15°	1611	1623	1637
20°	1578	1602	1630
25°	1539	1574	1621
30°	1492	1544	1611
35°	1443	1514	1607
40°	1388	1485	1607
45°	1332	1456	1621
50°	1274	1434	1633
55°	1212	1420	1654
60°	1149	1408	1682
65°	1077	1401	1725
70°	1003	1397	1784
75°	910	1395	1690
80°	787	1291	1499
85°	670	979	951



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.0	3.4
10°-20°	164.4	9.6
20°-30°	244.5	14.3
30°-40°	289.2	16.9
40°-50°	297.2	17.3
50°-60°	271.6	15.8
60°-70°	217.3	12.7
70°-80°	136.4	8.0
80°-90°	35.5	2.1
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°	466.9	27.2
0°-40°	756.1	44.1
0°-60°	1324.9	77.3
0°-90°	1714.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1714.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	612	612	612	612	612	
5°	609	609	616	612	607	58
15°	578	579	583	586	588	163
25°	518	522	530	539	546	238
35°	439	445	461	478	489	275
45°	350	359	383	411	426	270
55°	258	271	303	336	353	231
65°	169	184	220	253	271	168
75°	88	104	134	154	162	93
85°	22	28	32	31	31	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	611.8	611.8	611.8	611.8	611.8
2.5°	624.3	621.8	614.3	609.3	606.8
5°	609.3	609.3	616.0	611.8	606.8
7.5°	604.3	604.3	604.3	616.8	604.3
10°	597.6	598.4	599.3	604.3	599.3
12.5°	590.1	590.1	591.8	593.4	594.3
15°	578.4	579.3	582.6	585.9	587.6
17.5°	565.9	568.4	572.6	576.8	580.1
20°	550.9	554.3	559.3	565.9	569.3
22.5°	535.1	538.4	545.1	552.6	558.4
25°	518.4	521.8	530.1	539.3	545.9
27.5°	499.3	503.4	513.4	525.9	532.6
30°	480.1	485.1	496.8	510.9	518.4
32.5°	460.1	465.9	479.3	495.1	504.3
35°	439.3	445.1	460.9	478.4	489.3
37.5°	417.6	424.2	441.8	461.8	473.4
40°	395.1	402.6	422.6	444.3	457.6
42.5°	372.6	380.9	402.6	428.4	441.8
45°	350.1	359.2	382.6	410.9	425.9
47.5°	326.7	337.6	361.7	393.4	408.4
50°	304.2	315.1	342.6	375.1	390.1
52.5°	280.9	293.4	322.6	355.9	371.7
55°	258.4	270.9	302.6	335.9	352.6
57.5°	235.9	248.4	281.7	315.9	332.6
60°	213.4	226.7	261.7	295.1	312.6
62.5°	190.9	205.0	240.9	275.1	291.7
65°	169.2	184.2	220.0	253.4	270.9
67.5°	148.4	164.2	199.2	231.7	249.2
70°	127.5	143.4	177.5	209.2	226.7
72.5°	107.5	123.4	156.7	185.0	198.4
75°	87.5	104.2	134.2	154.2	162.5
77.5°	68.3	85.0	110.9	124.2	133.4
80°	50.8	65.0	83.3	93.4	96.7
82.5°	35.0	46.7	58.3	60.8	62.5
85°	21.7	27.5	31.7	30.8	30.8
87.5°	10.0	10.8	9.2	6.7	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)