

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: P230560

Luminaire Tested: **22CZ-LD5-24SE-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230560
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-LD5-24SE-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: 2044.0 lumens
Efficiency: N/A
Efficacy: 96.9 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

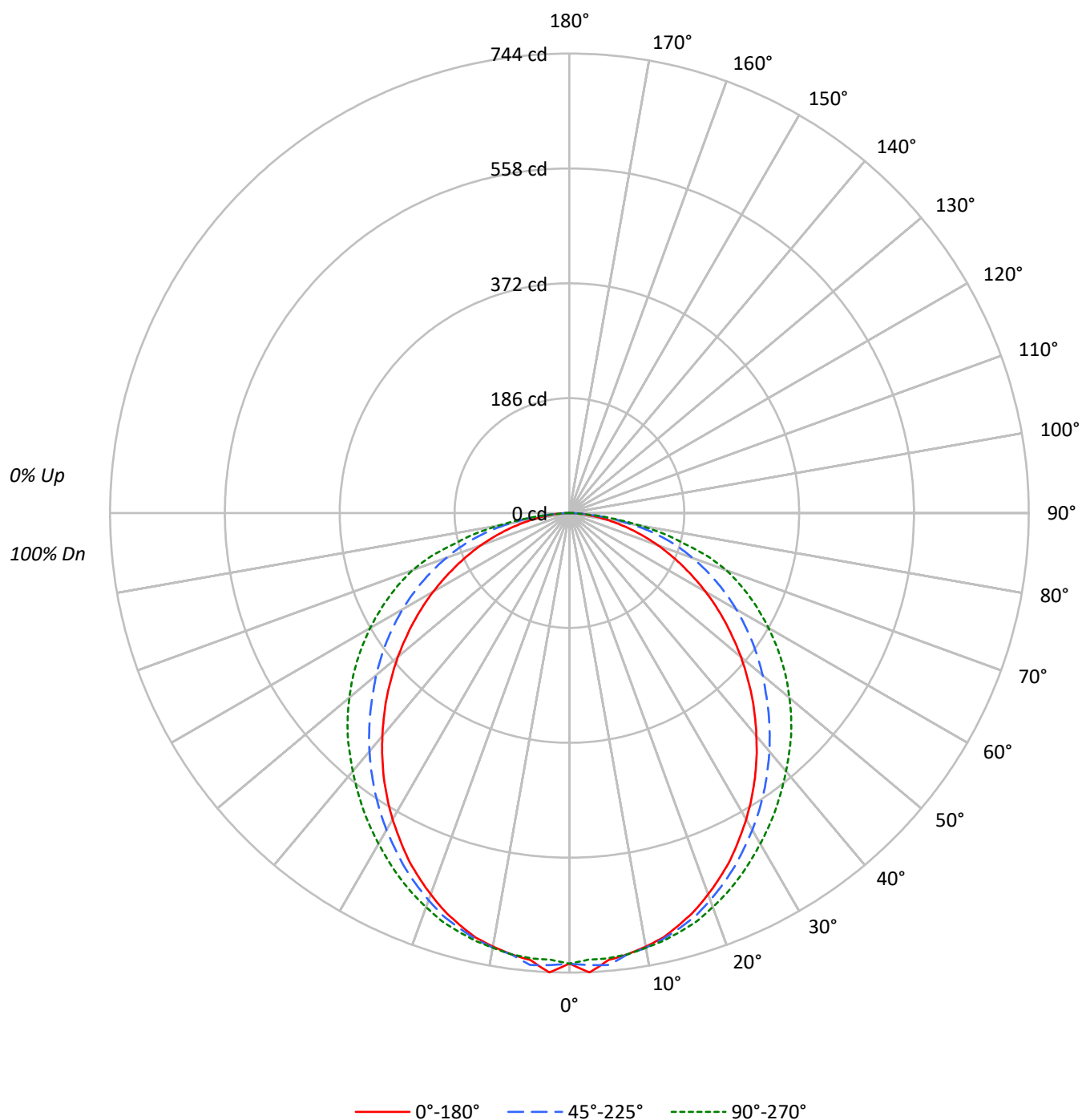
Input Watts (W): 21.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1963	1963	1963
5°	1963	1984	1955
10°	1947	1953	1953
15°	1922	1936	1952
20°	1881	1910	1944
25°	1836	1877	1933
30°	1779	1841	1921
35°	1721	1806	1917
40°	1655	1770	1917
45°	1589	1736	1933
50°	1519	1710	1948
55°	1445	1693	1972
60°	1370	1680	2006
65°	1285	1671	2057
70°	1197	1666	2127
75°	1085	1664	2015
80°	939	1540	1787
85°	797	1167	1136



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.2	3.4
10°-20°	196.0	9.6
20°-30°	291.6	14.3
30°-40°	344.8	16.9
40°-50°	354.4	17.3
50°-60°	323.9	15.8
60°-70°	259.1	12.7
70°-80°	162.6	8.0
80°-90°	42.4	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°	556.8	27.2
0°-40°	901.6	44.1
0°-60°	1580.0	77.3
0°-90°	2044.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2044.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	727	727	734	730	724	69
15°	690	691	695	699	701	194
25°	618	622	632	643	651	284
35°	524	531	550	570	584	327
45°	418	428	456	490	508	322
55°	308	323	361	401	420	276
65°	202	220	262	302	323	200
75°	104	124	160	184	194	111
85°	26	33	38	37	37	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	729.6	729.6	729.6	729.6	729.6
2.5°	744.5	741.5	732.6	726.6	723.6
5°	726.6	726.6	734.5	729.6	723.6
7.5°	720.6	720.6	720.6	735.5	720.6
10°	712.7	713.7	714.7	720.6	714.7
12.5°	703.7	703.7	705.7	707.7	708.7
15°	689.8	690.8	694.8	698.8	700.7
17.5°	674.9	677.9	682.9	687.8	691.8
20°	657.0	661.0	667.0	674.9	678.9
22.5°	638.1	642.1	650.1	659.0	666.0
25°	618.2	622.2	632.2	643.1	651.0
27.5°	595.4	600.4	612.3	627.2	635.1
30°	572.5	578.5	592.4	609.3	618.2
32.5°	548.7	555.6	571.5	590.4	601.4
35°	523.8	530.8	549.7	570.5	583.5
37.5°	498.0	505.9	526.8	550.7	564.6
40°	471.1	480.1	503.9	529.8	545.7
42.5°	444.3	454.2	480.1	510.9	526.8
45°	417.5	428.4	456.2	490.0	507.9
47.5°	389.6	402.6	431.4	469.2	487.0
50°	362.8	375.7	408.5	447.3	465.2
52.5°	335.0	349.9	384.7	424.4	443.3
55°	308.1	323.0	360.8	400.6	420.4
57.5°	281.3	296.2	336.0	376.7	396.6
60°	254.5	270.4	312.1	351.9	372.7
62.5°	227.6	244.5	287.3	328.0	347.9
65°	201.8	219.7	262.4	302.2	323.0
67.5°	176.9	195.8	237.6	276.3	297.2
70°	152.1	171.0	211.7	249.5	270.4
72.5°	128.2	147.1	186.9	220.7	236.6
75°	104.4	124.2	160.0	183.9	193.8
77.5°	81.5	101.4	132.2	148.1	159.0
80°	60.6	77.5	99.4	111.3	115.3
82.5°	41.7	55.7	69.6	72.6	74.5
85°	25.8	32.8	37.8	36.8	36.8
87.5°	11.9	12.9	10.9	8.0	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)