

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: P259416

Luminaire Tested: **22CZ-LD5-29-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259416
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-29-S-UNV-L93050-W2A1-U-3000K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2262.0 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

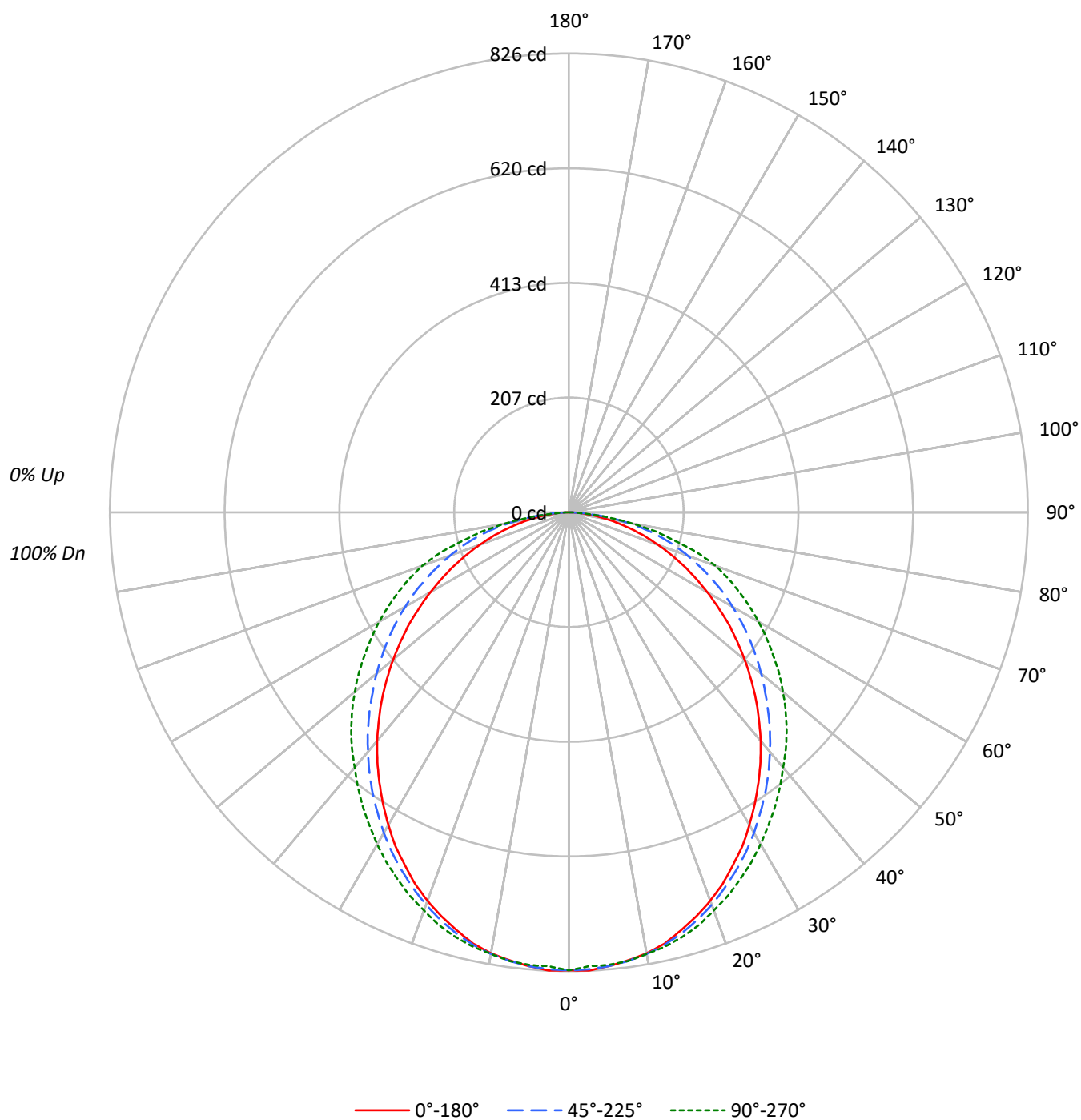
Input Watts (W): 21.311136
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2219	2219	2219
5°	2216	2216	2210
10°	2203	2206	2206
15°	2170	2185	2204
20°	2131	2153	2184
25°	2078	2113	2165
30°	2019	2069	2144
35°	1952	2024	2124
40°	1885	1977	2107
45°	1811	1931	2109
50°	1729	1892	2106
55°	1646	1861	2105
60°	1549	1830	2123
65°	1453	1806	2152
70°	1342	1787	2205
75°	1209	1774	2045
80°	1060	1650	1785
85°	871	1241	1108



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.9	3.4
10°-20°	221.2	9.8
20°-30°	328.6	14.5
30°-40°	386.7	17.1
40°-50°	394.3	17.4
50°-60°	355.6	15.7
60°-70°	280.1	12.4
70°-80°	172.8	7.6
80°-90°	44.8	2.0
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°	627.6	27.7
0°-40°	1014.4	44.8
0°-60°	1764.3	78.0
0°-90°	2262.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2262.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	825	825	825	825	825	
5°	820	821	820	819	818	78
15°	779	782	784	789	791	220
25°	700	704	712	724	729	322
35°	594	601	616	636	646	372
45°	476	484	507	538	554	367
55°	351	363	397	432	449	313
65°	228	244	284	319	338	226
75°	116	136	171	190	197	124
85°	28	36	40	38	36	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	824.6	824.6	824.6	824.6	824.6
2.5°	825.7	825.7	823.5	821.4	818.1
5°	820.3	821.4	820.3	819.2	818.1
7.5°	813.8	814.9	814.9	814.9	814.9
10°	806.2	807.2	807.2	807.2	807.2
12.5°	795.3	796.4	797.5	798.6	800.7
15°	779.0	782.3	784.4	788.8	791.0
17.5°	762.7	766.0	769.2	774.7	779.0
20°	744.2	746.4	751.8	758.4	762.7
22.5°	723.6	726.9	732.3	741.0	747.5
25°	699.7	704.0	711.6	723.6	729.0
27.5°	676.9	680.1	689.9	702.9	710.6
30°	649.7	654.1	666.0	682.3	689.9
32.5°	622.5	628.0	641.0	659.5	668.2
35°	594.3	600.8	616.0	635.6	646.5
37.5°	566.1	572.6	590.0	611.7	623.6
40°	536.7	543.2	562.8	586.7	599.7
42.5°	506.3	513.9	535.6	562.8	578.0
45°	475.9	483.5	507.4	537.8	554.1
47.5°	444.4	453.1	479.1	512.8	529.1
50°	412.9	422.6	452.0	486.7	503.0
52.5°	381.4	392.2	423.7	459.6	477.0
55°	350.9	362.9	396.6	432.4	448.7
57.5°	318.3	332.5	368.3	403.1	421.6
60°	287.9	303.1	340.1	374.8	394.4
62.5°	257.5	273.8	312.9	347.7	366.1
65°	228.2	244.5	283.6	319.4	337.9
67.5°	198.8	217.3	255.3	291.2	309.6
70°	170.6	190.1	227.1	261.8	280.3
72.5°	143.4	163.0	199.9	232.5	243.4
75°	116.3	135.8	170.6	190.1	196.7
77.5°	91.3	109.7	140.2	152.1	160.8
80°	68.4	84.7	106.5	114.1	115.2
82.5°	46.7	60.8	73.9	75.0	73.9
85°	28.2	35.9	40.2	38.0	35.9
87.5°	13.0	14.1	13.0	8.7	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)