

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: P259213

Luminaire Tested: **22CZ-LD5-24-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259213
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-LD5-24-UNV-L83050-W2A1-U-3000K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2303.0 lumens
Efficiency: N/A
Efficacy: 131.0 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

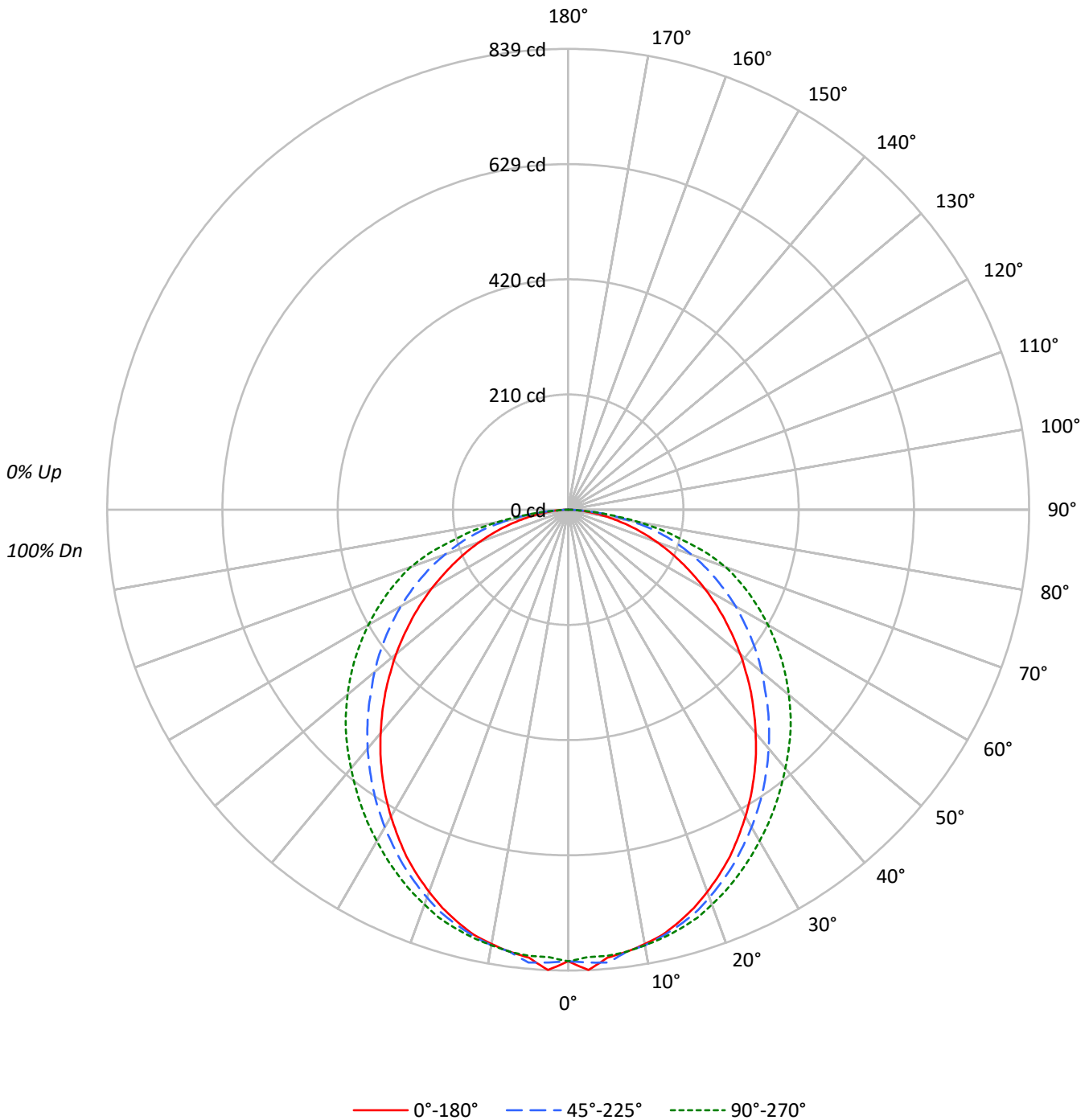
Input Watts (W): 17.577
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	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	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	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°	2212	2212	2212
5°	2212	2236	2202
10°	2194	2200	2200
15°	2165	2181	2199
20°	2120	2152	2190
25°	2068	2115	2178
30°	2005	2074	2165
35°	1939	2034	2160
40°	1865	1995	2160
45°	1790	1956	2178
50°	1711	1927	2194
55°	1629	1907	2222
60°	1543	1893	2260
65°	1447	1883	2318
70°	1348	1876	2397
75°	1223	1875	2271
80°	1058	1736	2013
85°	898	1315	1278



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.0	3.4
10°-20°	220.8	9.6
20°-30°	328.5	14.3
30°-40°	388.5	16.9
40°-50°	399.4	17.3
50°-60°	364.9	15.8
60°-70°	291.9	12.7
70°-80°	183.2	8.0
80°-90°	47.7	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°	627.3	27.2
0°-40°	1015.9	44.1
0°-60°	1780.1	77.3
0°-90°	2303.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2303.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	822	822	822	822	822	
5°	819	819	828	822	815	78
15°	777	778	783	787	790	219
25°	697	701	712	725	734	320
35°	590	598	619	643	657	369
45°	470	483	514	552	572	363
55°	347	364	406	451	474	311
65°	227	248	296	340	364	226
75°	118	140	180	207	218	125
85°	29	37	43	41	41	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	822.0	822.0	822.0	822.0	822.0
2.5°	838.8	835.5	825.4	818.7	815.3
5°	818.7	818.7	827.6	822.0	815.3
7.5°	811.9	811.9	811.9	828.7	811.9
10°	803.0	804.1	805.2	811.9	805.2
12.5°	792.9	792.9	795.1	797.4	798.5
15°	777.2	778.3	782.8	787.3	789.5
17.5°	760.4	763.8	769.4	775.0	779.5
20°	740.3	744.7	751.5	760.4	764.9
22.5°	719.0	723.5	732.4	742.5	750.3
25°	696.6	701.1	712.3	724.6	733.5
27.5°	670.8	676.4	689.9	706.7	715.6
30°	645.1	651.8	667.5	686.5	696.6
32.5°	618.2	626.0	644.0	665.2	677.5
35°	590.2	598.0	619.3	642.8	657.4
37.5°	561.1	570.0	593.6	620.4	636.1
40°	530.8	540.9	567.8	596.9	614.8
42.5°	500.6	511.8	540.9	575.6	593.6
45°	470.4	482.7	514.0	552.1	572.3
47.5°	439.0	453.6	486.0	528.6	548.8
50°	408.8	423.3	460.3	504.0	524.1
52.5°	377.4	394.2	433.4	478.2	499.5
55°	347.2	364.0	406.5	451.3	473.7
57.5°	316.9	333.7	378.5	424.4	446.8
60°	286.7	304.6	351.7	396.5	420.0
62.5°	256.5	275.5	323.7	369.6	392.0
65°	227.3	247.5	295.7	340.5	364.0
67.5°	199.3	220.6	267.7	311.3	334.9
70°	171.3	192.6	238.5	281.1	304.6
72.5°	144.5	165.7	210.5	248.6	266.5
75°	117.6	140.0	180.3	207.2	218.4
77.5°	91.8	114.2	148.9	166.9	179.2
80°	68.3	87.4	112.0	125.4	129.9
82.5°	47.0	62.7	78.4	81.8	84.0
85°	29.1	37.0	42.6	41.4	41.4
87.5°	13.4	14.6	12.3	9.0	5.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)