

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: P259293

Luminaire Tested: **22CZ-LD5-29-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259293  
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-LD5-29-UNV-L82765-W2A1-U-5700K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2971.0 lumens  
Efficiency: N/A  
Efficacy: 138.9 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

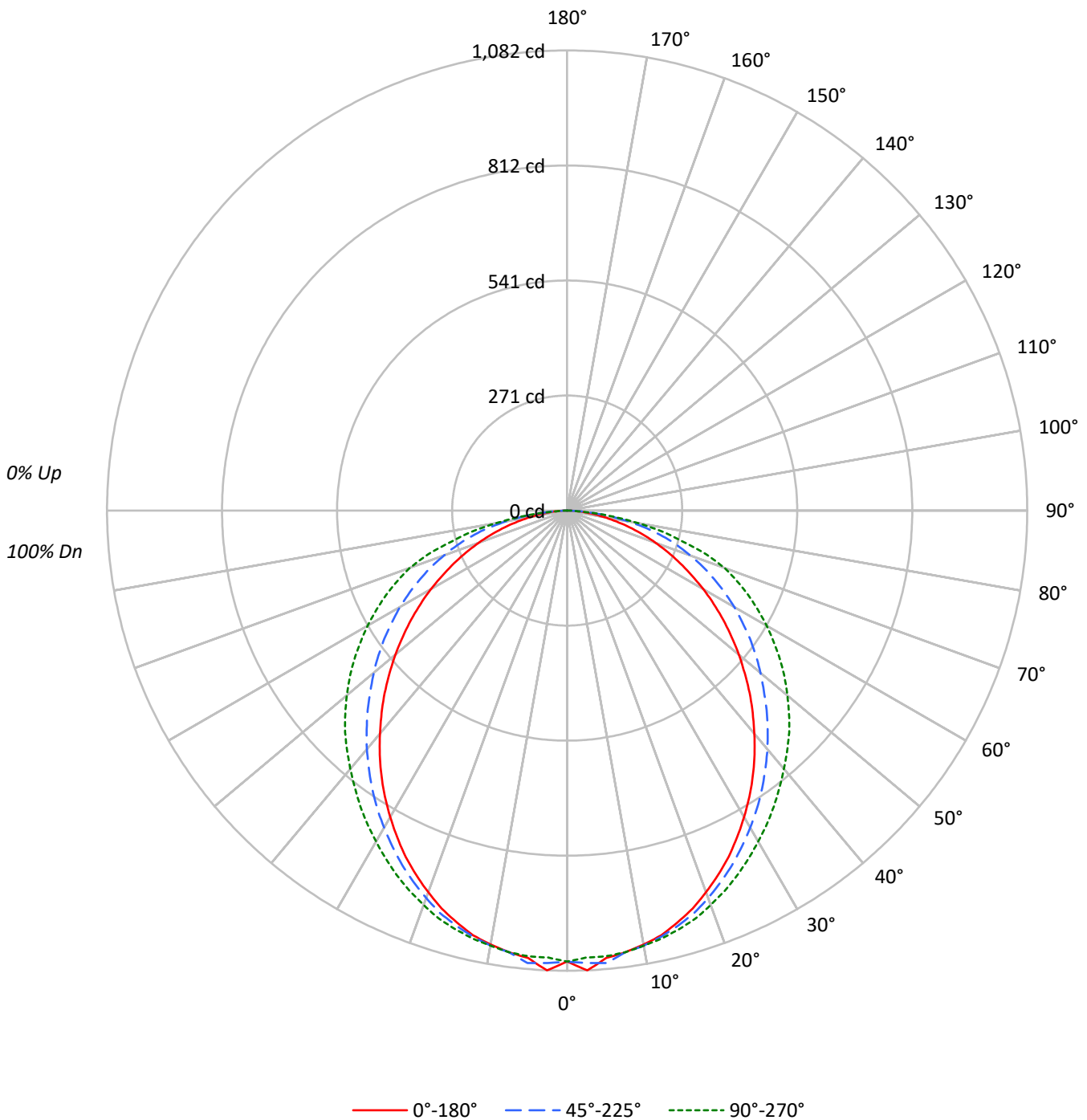
Input Watts (W): 21.39  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2854	2854	2854
5°	2853	2884	2841
10°	2831	2839	2839
15°	2793	2813	2838
20°	2735	2776	2826
25°	2668	2728	2810
30°	2586	2676	2792
35°	2501	2624	2786
40°	2406	2573	2786
45°	2309	2524	2810
50°	2207	2486	2830
55°	2101	2460	2867
60°	1991	2442	2916
65°	1868	2429	2989
70°	1739	2421	3092
75°	1577	2418	2929
80°	1365	2239	2597
85°	1161	1695	1652



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.6	3.4
10°-20°	284.9	9.6
20°-30°	423.8	14.3
30°-40°	501.2	16.9
40°-50°	515.2	17.3
50°-60°	470.8	15.8
60°-70°	376.6	12.7
70°-80°	236.3	8.0
80°-90°	61.6	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°	809.3	27.2
0°-40°	1310.5	44.1
0°-60°	2296.5	77.3
0°-90°	2971.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2971.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1056	1056	1068	1060	1052	100
15°	1003	1004	1010	1016	1019	282
25°	899	904	919	935	946	413
35°	761	772	799	829	848	476
45°	607	623	663	712	738	468
55°	448	470	524	582	611	401
65°	293	319	381	439	470	291
75°	152	181	233	267	282	161
85°	38	48	55	54	54	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1060.5	1060.5	1060.5	1060.5	1060.5
2.5°	1082.1	1077.8	1064.8	1056.1	1051.8
5°	1056.1	1056.1	1067.7	1060.5	1051.8
7.5°	1047.4	1047.4	1047.4	1069.1	1047.4
10°	1035.9	1037.3	1038.8	1047.4	1038.8
12.5°	1022.9	1022.9	1025.8	1028.7	1030.1
15°	1002.7	1004.1	1009.9	1015.7	1018.6
17.5°	981.0	985.3	992.5	999.8	1005.5
20°	955.0	960.8	969.4	981.0	986.8
22.5°	927.5	933.3	944.9	957.9	968.0
25°	898.6	904.4	918.9	934.8	946.3
27.5°	865.4	872.6	890.0	911.6	923.2
30°	832.2	840.8	861.1	885.6	898.6
32.5°	797.5	807.6	830.7	858.2	874.1
35°	761.4	771.5	798.9	829.3	848.1
37.5°	723.8	735.4	765.7	800.4	820.6
40°	684.8	697.8	732.5	770.1	793.2
42.5°	645.8	660.3	697.8	742.6	765.7
45°	606.8	622.7	663.1	712.3	738.3
47.5°	566.3	585.1	627.0	681.9	707.9
50°	527.3	546.1	593.8	650.1	676.1
52.5°	486.9	508.6	559.1	616.9	644.4
55°	447.9	469.5	524.4	582.2	611.1
57.5°	408.9	430.5	488.3	547.6	576.5
60°	369.9	393.0	453.7	511.4	541.8
62.5°	330.8	355.4	417.5	476.8	505.7
65°	293.3	319.3	381.4	439.2	469.5
67.5°	257.2	284.6	345.3	401.6	432.0
70°	221.0	248.5	307.7	362.6	393.0
72.5°	186.4	213.8	271.6	320.7	343.9
75°	151.7	180.6	232.6	267.3	281.7
77.5°	118.5	147.4	192.2	215.3	231.2
80°	88.1	112.7	144.5	161.8	167.6
82.5°	60.7	80.9	101.1	105.5	108.4
85°	37.6	47.7	54.9	53.5	53.5
87.5°	17.3	18.8	15.9	11.6	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)