

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: P259291

Luminaire Tested: **22CZ-LD5-29-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259291  
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-5000K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2935.0 lumens  
Efficiency: N/A  
Efficacy: 137.8 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

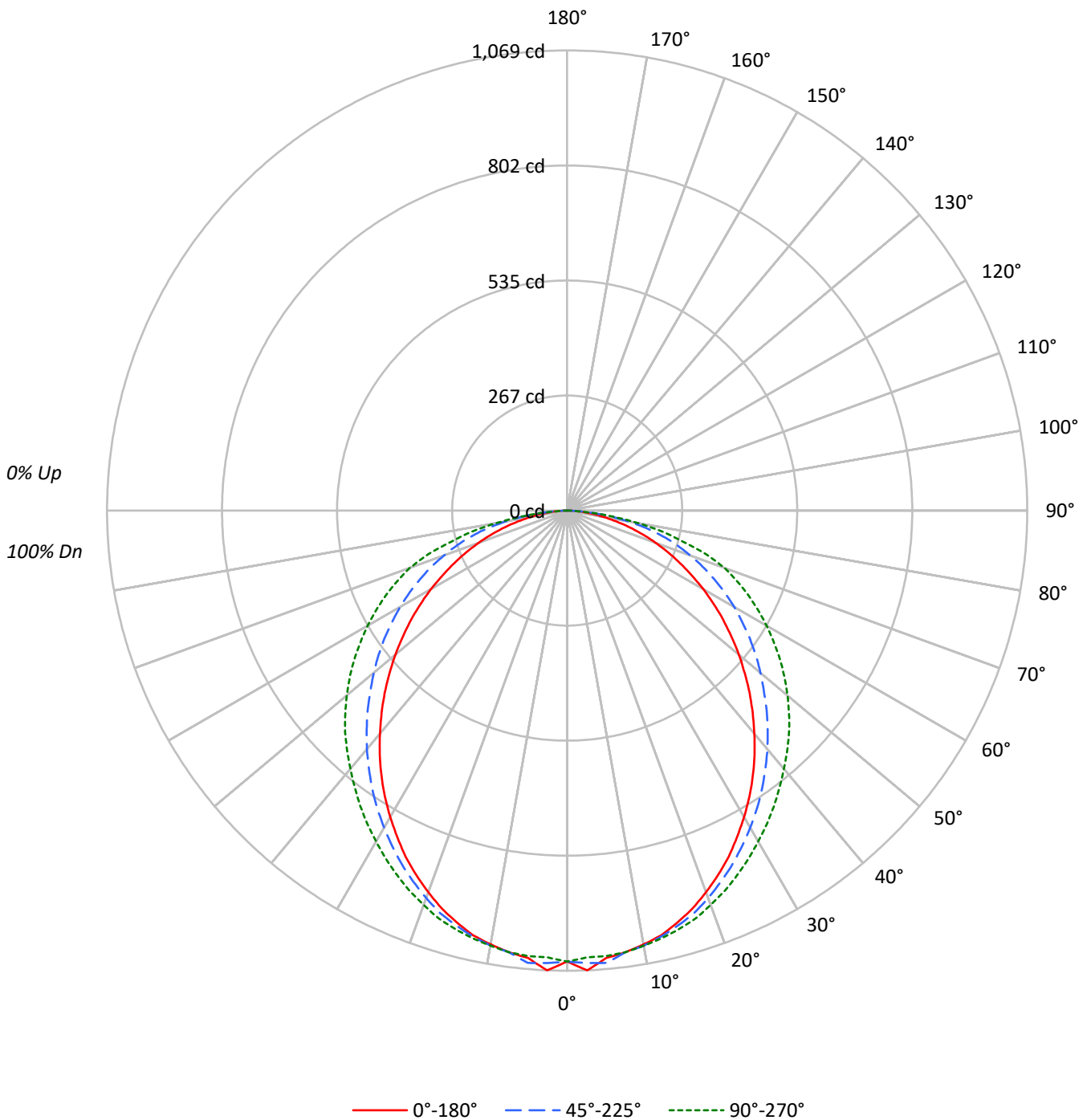
Input Watts (W): 21.297  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2819	2819	2819
5°	2818	2849	2807
10°	2796	2804	2804
15°	2759	2779	2803
20°	2702	2743	2792
25°	2636	2695	2776
30°	2554	2643	2758
35°	2471	2593	2752
40°	2376	2542	2753
45°	2281	2493	2775
50°	2181	2456	2797
55°	2076	2431	2832
60°	1967	2412	2880
65°	1845	2399	2954
70°	1718	2392	3054
75°	1559	2389	2894
80°	1350	2211	2566
85°	1145	1673	1630



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.4	3.4
10°-20°	281.4	9.6
20°-30°	418.7	14.3
30°-40°	495.2	16.9
40°-50°	509.0	17.3
50°-60°	465.1	15.8
60°-70°	372.0	12.7
70°-80°	233.5	8.0
80°-90°	60.8	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°	799.5	27.2
0°-40°	1294.7	44.1
0°-60°	2268.7	77.3
0°-90°	2935.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2935.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1048	1048	1048	1048	1048	
5°	1043	1043	1055	1048	1039	99
15°	990	992	998	1003	1006	279
25°	888	894	908	923	935	408
35°	752	762	789	819	838	470
45°	599	615	655	704	729	462
55°	442	464	518	575	604	396
65°	290	315	377	434	464	288
75°	150	178	230	264	278	159
85°	37	47	54	53	53	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1047.6	1047.6	1047.6	1047.6	1047.6
2.5°	1069.0	1064.7	1051.9	1043.3	1039.0
5°	1043.3	1043.3	1054.7	1047.6	1039.0
7.5°	1034.8	1034.8	1034.8	1056.2	1034.8
10°	1023.3	1024.8	1026.2	1034.8	1026.2
12.5°	1010.5	1010.5	1013.3	1016.2	1017.6
15°	990.5	991.9	997.6	1003.4	1006.2
17.5°	969.1	973.4	980.5	987.7	993.4
20°	943.4	949.1	957.7	969.1	974.8
22.5°	916.3	922.0	933.4	946.3	956.3
25°	887.7	893.5	907.7	923.4	934.8
27.5°	854.9	862.1	879.2	900.6	912.0
30°	822.1	830.7	850.6	874.9	887.7
32.5°	787.8	797.8	820.7	847.8	863.5
35°	752.2	762.2	789.3	819.2	837.8
37.5°	715.1	726.5	756.4	790.7	810.7
40°	676.5	689.4	723.6	760.7	783.6
42.5°	638.0	652.3	689.4	733.6	756.4
45°	599.4	615.1	655.1	703.6	729.3
47.5°	559.5	578.0	619.4	673.7	699.4
50°	520.9	539.5	586.6	642.3	668.0
52.5°	481.0	502.4	552.3	609.4	636.6
55°	442.4	463.9	518.1	575.2	603.7
57.5°	403.9	425.3	482.4	540.9	569.5
60°	365.4	388.2	448.2	505.2	535.2
62.5°	326.8	351.1	412.5	471.0	499.5
65°	289.7	315.4	376.8	433.9	463.9
67.5°	254.1	281.2	341.1	396.8	426.7
70°	218.4	245.5	304.0	358.2	388.2
72.5°	184.1	211.2	268.3	316.8	339.7
75°	149.9	178.4	229.8	264.0	278.3
77.5°	117.0	145.6	189.8	212.7	228.4
80°	87.1	111.3	142.7	159.9	165.6
82.5°	59.9	79.9	99.9	104.2	107.0
85°	37.1	47.1	54.2	52.8	52.8
87.5°	17.1	18.6	15.7	11.4	7.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)