

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: P259461

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259461  
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-L82765-W2A1-U-5700K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3030.0 lumens  
Efficiency: N/A  
Efficacy: 141.7 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

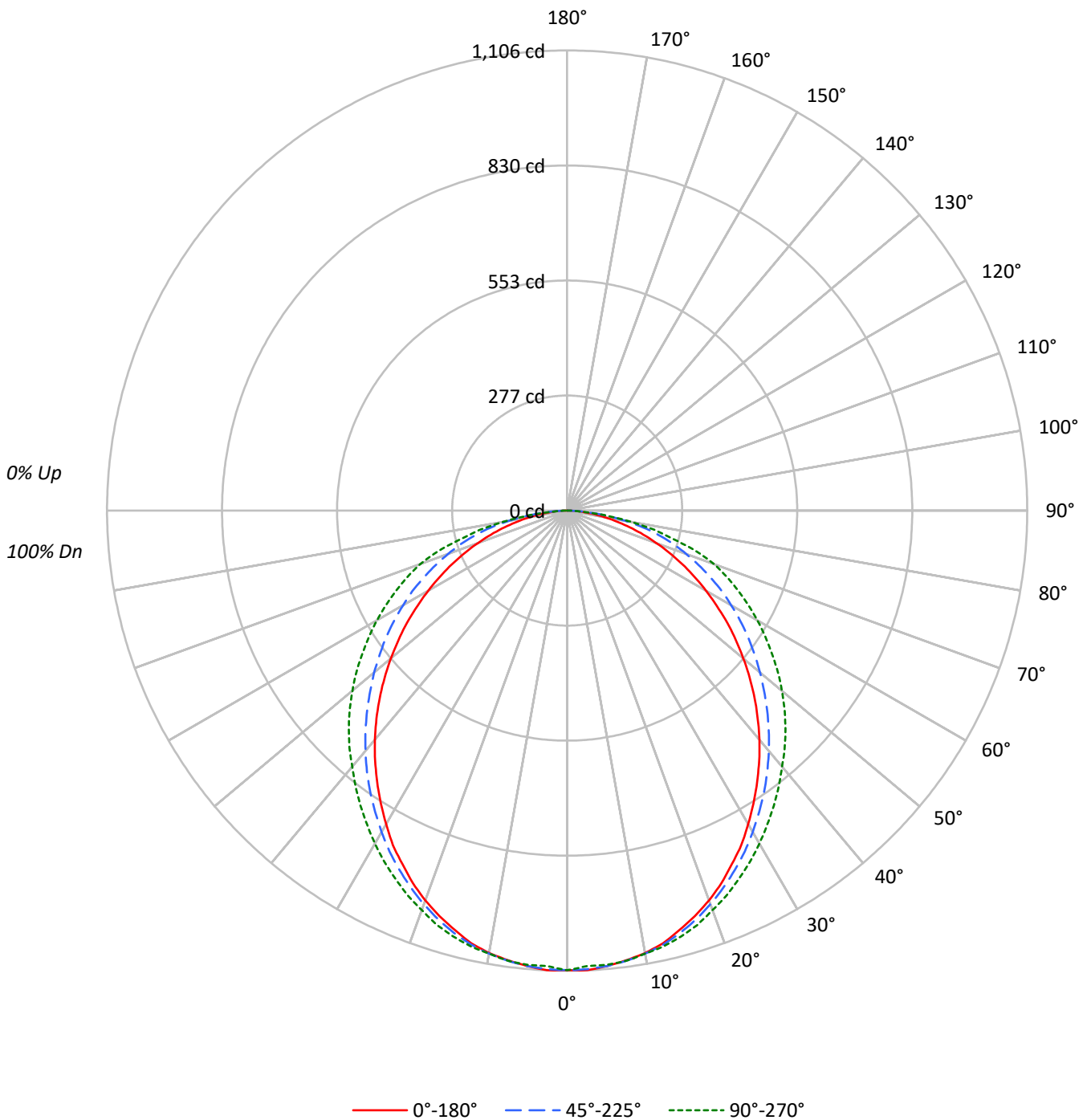
Input Watts (W): 21.39  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P259461

CATALOG NUMBER: 22CZ-LD5-29-S-UNV-L82765-W2A1-U-5700K

### Luminous Intensity Polar Plot





TEST NUMBER: P259461

CATALOG NUMBER: 22CZ-LD5-29-S-UNV-L82765-W2A1-U-5700K

**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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58					58			
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50					50			
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43					43			
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27					27			
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2972	2972	2972
5°	2968	2968	2960
10°	2951	2955	2955
15°	2907	2927	2952
20°	2855	2884	2926
25°	2783	2831	2899
30°	2704	2772	2872
35°	2615	2711	2845
40°	2525	2648	2822
45°	2426	2587	2825
50°	2315	2534	2821
55°	2206	2492	2820
60°	2076	2451	2843
65°	1946	2418	2882
70°	1798	2393	2954
75°	1619	2376	2739
80°	1421	2210	2391
85°	1167	1661	1482



TEST NUMBER: P259461

CATALOG NUMBER: 22CZ-LD5-29-S-UNV-L82765-W2A1-U-5700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.3	3.4
10°-20°	296.3	9.8
20°-30°	440.1	14.5
30°-40°	518.1	17.1
40°-50°	528.1	17.4
50°-60°	476.3	15.7
60°-70°	375.2	12.4
70°-80°	231.4	7.6
80°-90°	60.1	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°	840.8	27.7
0°-40°	1358.8	44.8
0°-60°	2363.3	78.0
0°-90°	3030.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3030.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1105	1105	1105	1105	1105	
5°	1099	1100	1099	1097	1096	104
15°	1044	1048	1051	1057	1060	294
25°	937	943	953	969	976	432
35°	796	805	825	851	866	498
45°	637	648	680	720	742	491
55°	470	486	531	579	601	419
65°	306	328	380	428	453	303
75°	156	182	228	255	263	166
85°	38	48	54	51	48	45
90°	0	0	0	0	0	



TEST NUMBER: P259461

CATALOG NUMBER: 22CZ-LD5-29-S-UNV-L82765-W2A1-U-5700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1104.6	1104.6	1104.6	1104.6	1104.6
2.5°	1106.1	1106.1	1103.2	1100.2	1095.9
5°	1098.8	1100.2	1098.8	1097.3	1095.9
7.5°	1090.1	1091.5	1091.5	1091.5	1091.5
10°	1079.9	1081.3	1081.3	1081.3	1081.3
12.5°	1065.3	1066.8	1068.2	1069.7	1072.6
15°	1043.5	1047.9	1050.8	1056.6	1059.5
17.5°	1021.7	1026.0	1030.4	1037.7	1043.5
20°	996.9	999.8	1007.1	1015.8	1021.7
22.5°	969.3	973.6	980.9	992.6	1001.3
25°	937.2	943.1	953.3	969.3	976.5
27.5°	906.7	911.1	924.2	941.6	951.8
30°	870.3	876.1	892.1	914.0	924.2
32.5°	833.9	841.2	858.7	883.4	895.0
35°	796.1	804.8	825.2	851.4	865.9
37.5°	758.2	767.0	790.3	819.4	835.4
40°	718.9	727.7	753.9	785.9	803.4
42.5°	678.2	688.4	717.5	753.9	774.2
45°	637.4	647.6	679.7	720.4	742.2
47.5°	595.2	606.9	641.8	686.9	708.8
50°	553.0	566.1	605.4	652.0	673.8
52.5°	510.8	525.4	567.6	615.6	638.9
55°	470.1	486.1	531.2	579.2	601.1
57.5°	426.4	445.3	493.4	539.9	564.7
60°	385.7	406.0	455.5	502.1	528.3
62.5°	344.9	366.7	419.1	465.7	490.5
65°	305.6	327.5	379.8	427.9	452.6
67.5°	266.3	291.1	342.0	390.0	414.8
70°	228.5	254.7	304.2	350.7	375.5
72.5°	192.1	218.3	267.8	311.4	326.0
75°	155.7	181.9	228.5	254.7	263.4
77.5°	122.2	147.0	187.7	203.7	215.4
80°	91.7	113.5	142.6	152.8	154.3
82.5°	62.6	81.5	99.0	100.4	99.0
85°	37.8	48.0	53.8	50.9	48.0
87.5°	17.5	18.9	17.5	11.6	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)