

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: P259288

Luminaire Tested: **22CZ-LD5-29-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259288  
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-3500K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2784.0 lumens  
Efficiency: N/A  
Efficacy: 133.0 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

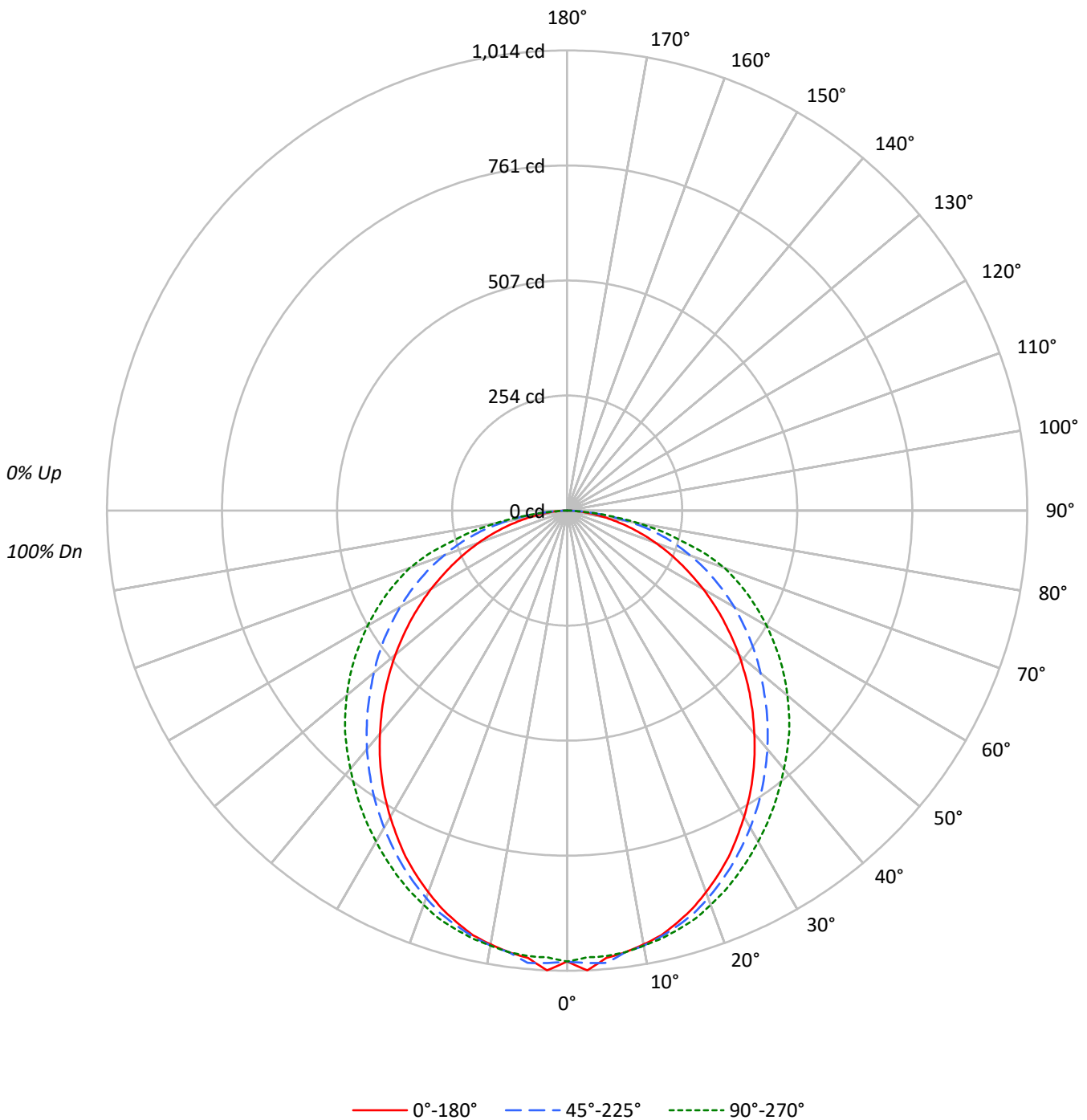
Input Watts (W): 20.925  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33					33			
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

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

	0°	45°	90°
0°	2674	2674	2674
5°	2673	2703	2662
10°	2652	2660	2660
15°	2618	2636	2659
20°	2563	2601	2648
25°	2500	2556	2633
30°	2423	2507	2617
35°	2344	2460	2611
40°	2254	2411	2611
45°	2164	2365	2633
50°	2069	2329	2653
55°	1969	2305	2687
60°	1865	2288	2732
65°	1750	2276	2802
70°	1629	2269	2897
75°	1478	2267	2745
80°	1280	2098	2433
85°	1087	1587	1547



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.3	3.4
10°-20°	267.0	9.6
20°-30°	397.1	14.3
30°-40°	469.7	16.9
40°-50°	482.8	17.3
50°-60°	441.1	15.8
60°-70°	352.9	12.7
70°-80°	221.5	8.0
80°-90°	57.7	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°	758.4	27.2
0°-40°	1228.1	44.1
0°-60°	2152.0	77.3
0°-90°	2784.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2784.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	994	994	994	994	994	
5°	990	990	1000	994	986	94
15°	940	941	946	952	954	265
25°	842	848	861	876	887	387
35°	714	723	749	777	795	446
45°	569	584	621	667	692	438
55°	420	440	491	546	573	375
65°	275	299	357	412	440	273
75°	142	169	218	250	264	151
85°	35	45	51	50	50	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	993.7	993.7	993.7	993.7	993.7
2.5°	1014.0	1009.9	997.8	989.6	985.6
5°	989.6	989.6	1000.5	993.7	985.6
7.5°	981.5	981.5	981.5	1001.8	981.5
10°	970.7	972.0	973.4	981.5	973.4
12.5°	958.5	958.5	961.2	963.9	965.3
15°	939.6	940.9	946.3	951.7	954.4
17.5°	919.2	923.3	930.1	936.8	942.3
20°	894.9	900.3	908.4	919.2	924.7
22.5°	869.2	874.6	885.4	897.6	907.1
25°	842.1	847.5	861.0	875.9	886.8
27.5°	810.9	817.7	834.0	854.3	865.1
30°	779.8	787.9	806.9	829.9	842.1
32.5°	747.3	756.8	778.4	804.2	819.1
35°	713.5	722.9	748.7	777.1	794.7
37.5°	678.3	689.1	717.5	750.0	769.0
40°	641.7	653.9	686.4	721.6	743.2
42.5°	605.2	618.7	653.9	695.9	717.5
45°	568.6	583.5	621.4	667.4	691.8
47.5°	530.7	548.3	587.6	639.0	663.4
50°	494.1	511.7	556.4	609.2	633.6
52.5°	456.2	476.5	523.9	578.1	603.8
55°	419.7	440.0	491.4	545.6	572.7
57.5°	383.1	403.4	457.6	513.1	540.2
60°	346.6	368.2	425.1	479.3	507.7
62.5°	310.0	333.0	391.3	446.8	473.8
65°	274.8	299.2	357.4	411.6	440.0
67.5°	241.0	266.7	323.6	376.4	404.8
70°	207.1	232.9	288.4	339.8	368.2
72.5°	174.6	200.4	254.5	300.5	322.2
75°	142.2	169.2	218.0	250.5	264.0
77.5°	111.0	138.1	180.1	201.7	216.6
80°	82.6	105.6	135.4	151.6	157.0
82.5°	56.9	75.8	94.8	98.8	101.5
85°	35.2	44.7	51.4	50.1	50.1
87.5°	16.2	17.6	14.9	10.8	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)