

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: P258596

Luminaire Tested: **14CZ-LD5-20-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258596  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35573)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-20-UNV-L82765-W2A1-U-2700K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1934.0 lumens  
Efficiency: N/A  
Efficacy: 126.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

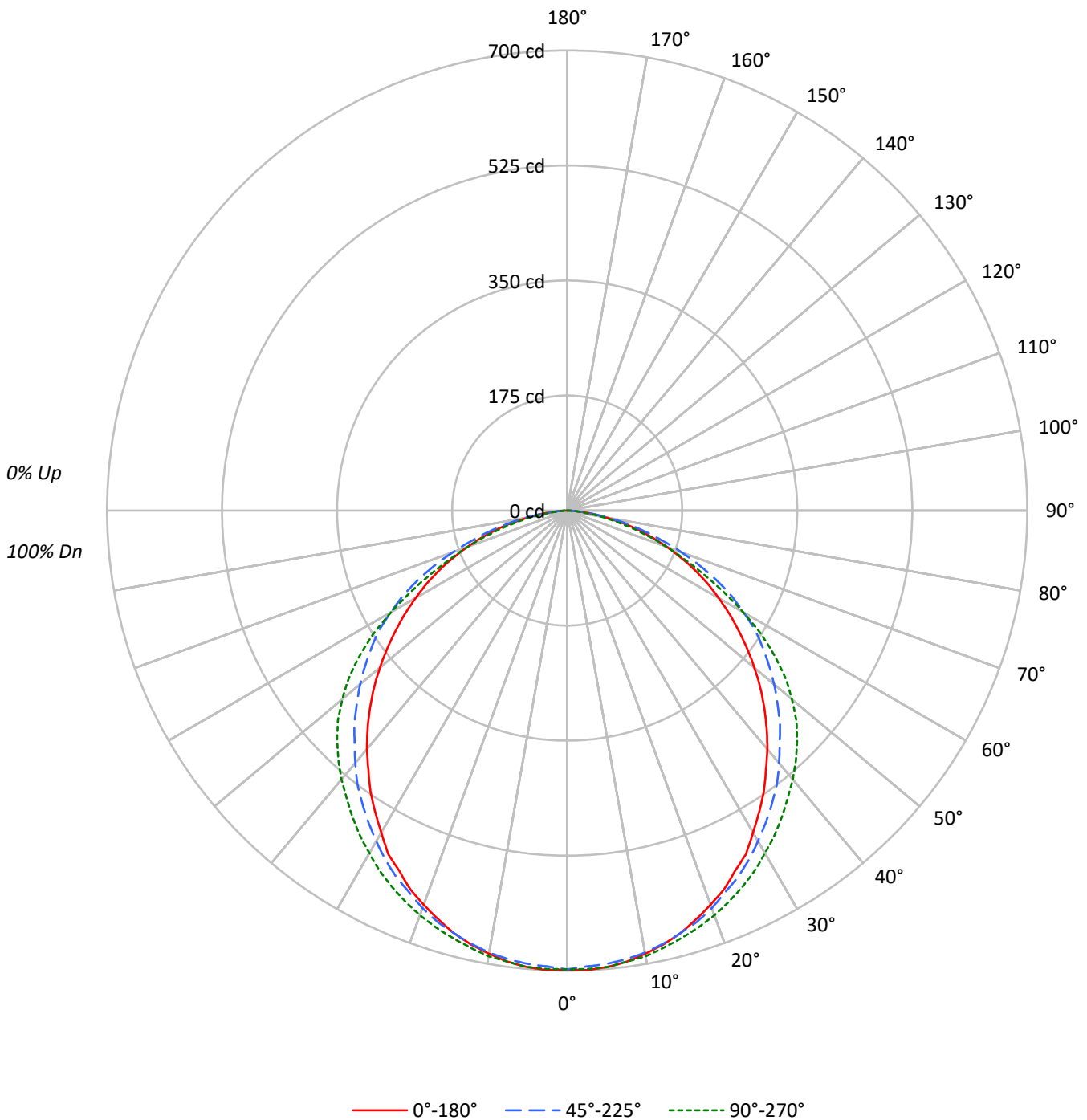
Input Watts (W): 15.345  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P258596

CATALOG NUMBER: 14CZ-LD5-20-UNV-L82765-W2A1-U-2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P258596

CATALOG NUMBER: 14CZ-LD5-20-UNV-L82765-W2A1-U-2700K

**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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

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

	0°	45°	90°
0°	1878	1878	1878
5°	1883	1870	1883
10°	1871	1865	1881
15°	1854	1854	1875
20°	1827	1843	1876
25°	1795	1826	1874
30°	1757	1804	1869
35°	1713	1785	1870
40°	1665	1762	1875
45°	1615	1742	1883
50°	1557	1720	1868
55°	1494	1704	1807
60°	1432	1668	1662
65°	1366	1597	1457
70°	1268	1456	1260
75°	1150	1268	1041
80°	916	1004	769
85°	648	559	442



TEST NUMBER: P258596

CATALOG NUMBER: 14CZ-LD5-20-UNV-L82765-W2A1-U-2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.0	3.4
10°-20°	188.7	9.8
20°-30°	284.4	14.7
30°-40°	340.9	17.6
40°-50°	353.8	18.3
50°-60°	319.1	16.5
60°-70°	232.8	12.0
70°-80°	122.1	6.3
80°-90°	26.1	1.3
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°	539.1	27.9
0°-40°	880.1	45.5
0°-60°	1553.0	80.3
0°-90°	1934.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1934.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	698	698	698	698	698	
5°	697	695	692	697	697	66
15°	666	666	666	673	673	187
25°	604	607	615	628	631	279
35°	522	527	544	564	569	326
45°	424	433	458	485	495	327
55°	318	330	363	387	385	285
65°	214	227	251	241	229	212
75°	111	126	122	106	100	116
85°	21	26	18	15	14	27
90°	0	0	0	0	0	



TEST NUMBER: P258596

CATALOG NUMBER: 14CZ-LD5-20-UNV-L82765-W2A1-U-2700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	697.9	697.9	697.9	697.9	697.9
2.5°	699.8	697.9	694.1	697.9	697.9
5°	697.0	695.1	692.2	697.0	697.0
7.5°	692.2	690.3	688.4	693.2	692.2
10°	684.6	683.6	682.7	688.4	688.4
12.5°	676.0	676.0	675.0	681.7	680.8
15°	665.5	665.5	665.5	673.1	673.1
17.5°	652.2	654.1	656.0	664.6	664.6
20°	637.9	639.8	643.6	654.1	655.0
22.5°	623.6	624.5	628.3	640.7	643.6
25°	604.5	607.3	615.0	628.3	631.2
27.5°	589.2	590.2	598.8	614.0	617.8
30°	565.4	572.1	580.7	597.8	601.6
32.5°	543.5	549.2	562.5	580.7	586.4
35°	521.5	527.3	543.5	563.5	569.2
37.5°	496.7	505.3	524.4	544.4	551.1
40°	473.9	481.5	501.5	526.3	533.9
42.5°	449.1	456.7	478.6	506.3	514.9
45°	424.3	432.9	457.7	485.3	494.8
47.5°	398.5	408.1	433.8	464.3	472.9
50°	371.8	382.3	410.9	442.4	446.2
52.5°	345.1	356.6	387.1	414.8	418.6
55°	318.5	329.9	363.3	387.1	385.2
57.5°	292.7	305.1	339.4	351.8	349.9
60°	266.0	279.4	309.9	315.6	308.9
62.5°	241.2	253.6	282.2	277.5	268.9
65°	214.5	226.9	250.8	241.2	228.8
67.5°	187.8	203.1	218.3	202.1	192.6
70°	161.1	178.3	185.0	168.8	160.2
72.5°	135.4	153.5	151.6	135.4	129.7
75°	110.6	125.9	122.0	105.8	100.1
77.5°	83.9	101.1	92.5	79.1	74.4
80°	59.1	74.4	64.8	53.4	49.6
82.5°	39.1	49.6	40.0	31.5	28.6
85°	21.0	25.7	18.1	15.3	14.3
87.5°	8.6	7.6	6.7	6.7	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)