

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: P258764

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258764  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35112)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-20-S-UNV-L82765-W2A1-U-2700K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1973.0 lumens  
Efficiency: N/A  
Efficacy: 128.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

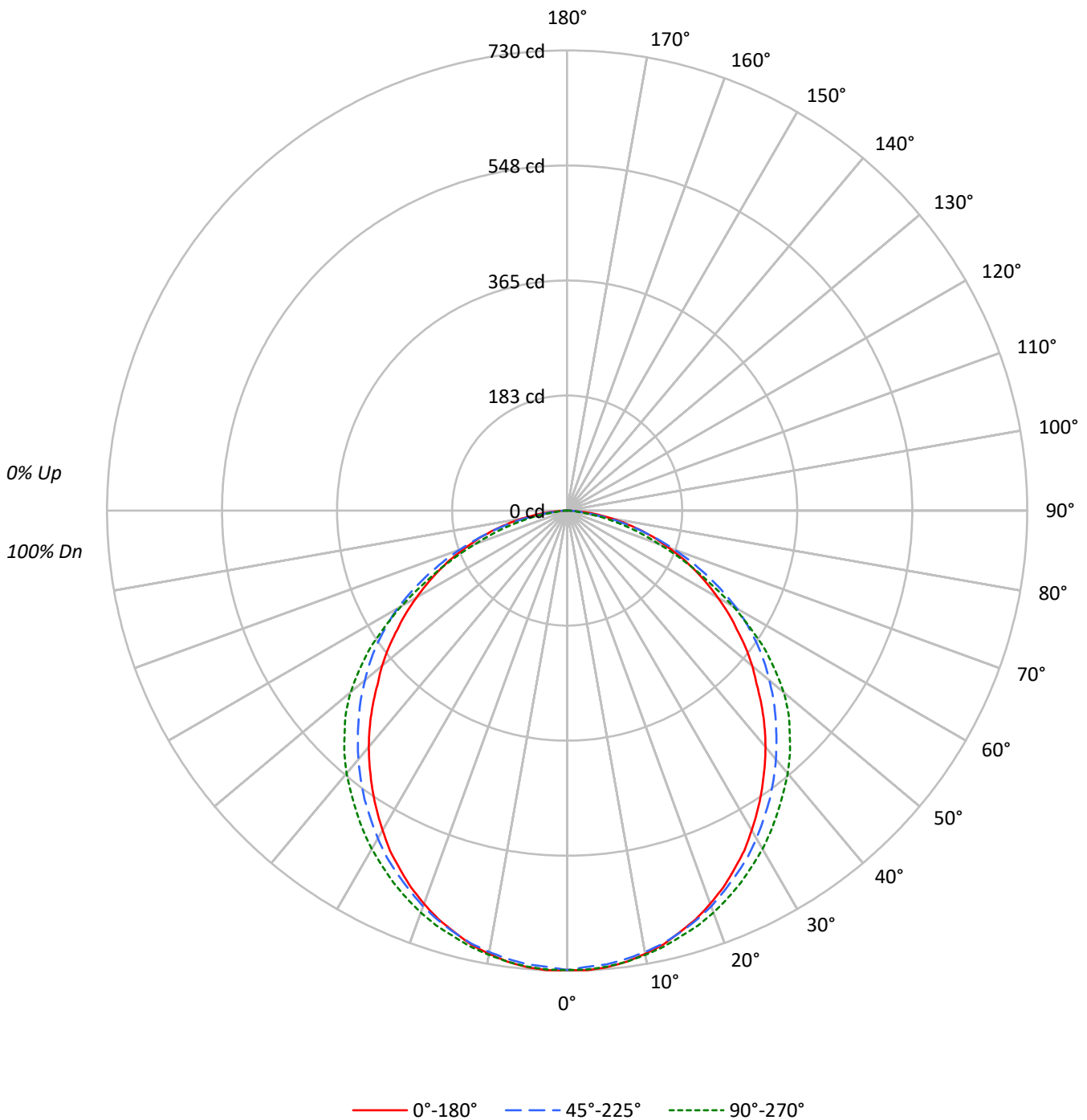
Input Watts (W): 15.345  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P258764

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

### Luminous Intensity Polar Plot





TEST NUMBER: P258764

CATALOG NUMBER: 14CZ-LD5-20-S-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	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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

	0°	45°	90°
0°	1961	1961	1961
5°	1964	1952	1962
10°	1951	1943	1955
15°	1928	1930	1947
20°	1901	1914	1944
25°	1864	1890	1934
30°	1819	1866	1926
35°	1770	1840	1915
40°	1720	1810	1912
45°	1660	1780	1901
50°	1605	1752	1877
55°	1543	1724	1794
60°	1486	1675	1637
65°	1422	1568	1438
70°	1342	1425	1217
75°	1252	1234	1005
80°	1103	953	736
85°	868	460	408



TEST NUMBER: P258764

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

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.9	3.5
10°-20°	196.2	9.9
20°-30°	294.4	14.9
30°-40°	351.0	17.8
40°-50°	361.6	18.3
50°-60°	322.2	16.3
60°-70°	232.2	11.8
70°-80°	121.4	6.2
80°-90°	25.1	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°	559.5	28.4
0°-40°	910.5	46.1
0°-60°	1594.3	80.8
0°-90°	1973.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1973.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	729	729	729	729	729	
5°	727	725	723	727	726	69
15°	692	693	693	700	699	195
25°	628	631	636	649	652	289
35°	539	546	560	578	583	337
45°	436	446	468	494	499	336
55°	329	339	368	384	382	295
65°	223	231	246	235	226	221
75°	120	127	119	103	97	128
85°	28	25	15	13	13	33
90°	0	0	0	0	0	



TEST NUMBER: P258764

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

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	728.8	728.8	728.8	728.8	728.8
2.5°	729.7	727.9	724.4	728.8	728.8
5°	727.1	725.3	722.7	727.1	726.2
7.5°	721.8	720.0	717.4	722.7	721.8
10°	713.9	713.0	711.2	716.5	715.6
12.5°	705.1	704.2	703.3	708.6	708.6
15°	691.9	692.8	692.8	699.8	698.9
17.5°	679.6	680.5	681.4	690.1	690.1
20°	663.8	664.6	668.2	677.8	678.7
22.5°	647.1	647.9	652.3	663.8	665.5
25°	627.7	631.2	636.5	648.8	651.5
27.5°	608.4	611.0	619.8	633.9	635.6
30°	585.5	590.8	600.5	616.3	619.8
32.5°	562.7	568.8	580.2	597.8	602.2
35°	538.9	546.0	560.0	578.5	582.9
37.5°	514.3	520.5	538.0	557.4	563.5
40°	489.7	495.8	515.2	537.2	544.2
42.5°	463.3	472.1	491.5	516.1	523.1
45°	436.1	445.7	467.7	494.1	499.4
47.5°	407.9	418.5	444.0	470.4	476.5
50°	383.3	393.0	418.5	444.0	448.4
52.5°	356.9	365.7	393.9	415.0	415.8
55°	328.8	339.4	367.5	384.2	382.4
57.5°	303.3	312.1	339.4	348.1	342.9
60°	276.1	284.0	311.2	312.1	304.2
62.5°	249.7	257.6	278.7	272.5	262.9
65°	223.3	231.2	246.2	234.7	225.9
67.5°	197.8	204.8	213.6	198.7	189.9
70°	170.6	180.2	181.1	163.5	154.7
72.5°	146.8	152.1	150.3	133.6	125.7
75°	120.4	126.6	118.7	102.9	96.7
77.5°	95.8	100.2	89.7	74.7	70.3
80°	71.2	73.8	61.5	50.1	47.5
82.5°	48.4	48.4	35.2	27.3	24.6
85°	28.1	24.6	14.9	13.2	13.2
87.5°	9.7	6.2	6.2	6.2	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)