

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: P258656

Luminaire Tested: **14CZ-LD5-20-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258656  
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-L92765-W2A1-U-5500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1979.0 lumens  
Efficiency: N/A  
Efficacy: 125.2 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

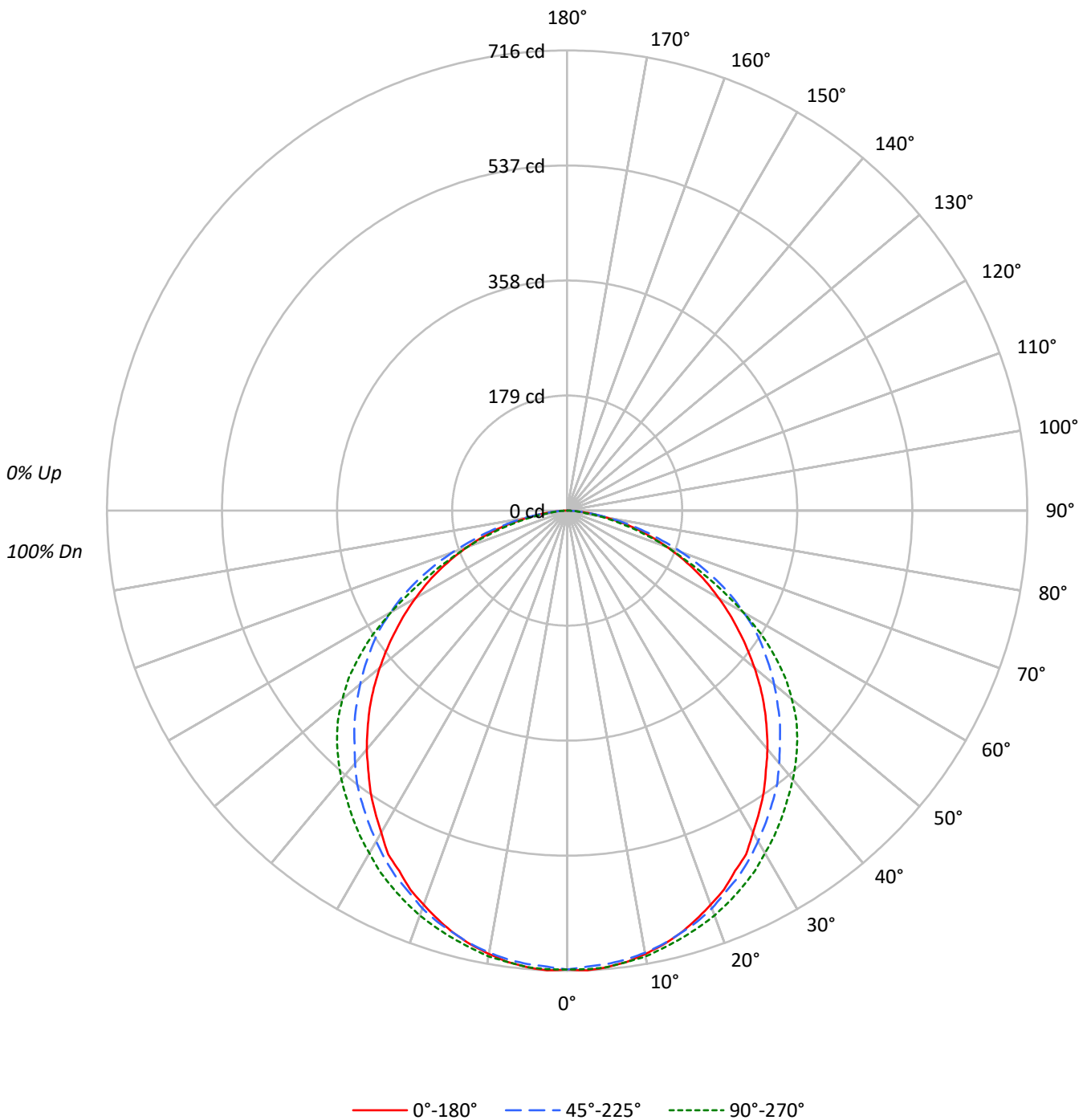
Input Watts (W): 15.81  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P258656

CATALOG NUMBER: 14CZ-LD5-20-UNV-L92765-W2A1-U-5500K

### Luminous Intensity Polar Plot





TEST NUMBER: P258656

CATALOG NUMBER: 14CZ-LD5-20-UNV-L92765-W2A1-U-5500K

**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°	1922	1922	1922
5°	1927	1913	1927
10°	1914	1909	1925
15°	1897	1897	1919
20°	1869	1886	1920
25°	1837	1868	1918
30°	1798	1846	1913
35°	1753	1827	1914
40°	1703	1803	1919
45°	1652	1782	1927
50°	1593	1760	1912
55°	1529	1744	1849
60°	1465	1707	1701
65°	1398	1634	1491
70°	1297	1489	1290
75°	1177	1299	1065
80°	938	1027	786
85°	664	571	451



TEST NUMBER: P258656

CATALOG NUMBER: 14CZ-LD5-20-UNV-L92765-W2A1-U-5500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.6	3.4
10°-20°	193.0	9.8
20°-30°	291.1	14.7
30°-40°	348.9	17.6
40°-50°	362.1	18.3
50°-60°	326.6	16.5
60°-70°	238.2	12.0
70°-80°	125.0	6.3
80°-90°	26.6	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°	551.7	27.9
0°-40°	900.5	45.5
0°-60°	1589.2	80.3
0°-90°	1979.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1979.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	714	714	714	714	714	
5°	713	711	708	713	713	68
15°	681	681	681	689	689	192
25°	619	622	629	643	646	285
35°	534	540	556	577	582	333
45°	434	443	468	497	506	335
55°	326	338	372	396	394	292
65°	220	232	257	247	234	217
75°	113	129	125	108	102	119
85°	22	26	18	16	15	27
90°	0	0	0	0	0	



TEST NUMBER: P258656

CATALOG NUMBER: 14CZ-LD5-20-UNV-L92765-W2A1-U-5500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	714.2	714.2	714.2	714.2	714.2
2.5°	716.1	714.2	710.3	714.2	714.2
5°	713.2	711.2	708.3	713.2	713.2
7.5°	708.3	706.4	704.4	709.3	708.3
10°	700.5	699.5	698.6	704.4	704.4
12.5°	691.7	691.7	690.7	697.6	696.6
15°	681.0	681.0	681.0	688.8	688.8
17.5°	667.3	669.3	671.2	680.0	680.0
20°	652.7	654.7	658.6	669.3	670.3
22.5°	638.1	639.0	642.9	655.6	658.6
25°	618.6	621.5	629.3	642.9	645.9
27.5°	602.9	603.9	612.7	628.3	632.2
30°	578.6	585.4	594.2	611.7	615.6
32.5°	556.1	562.0	575.6	594.2	600.0
35°	533.7	539.5	556.1	576.6	582.5
37.5°	508.3	517.1	536.6	557.1	563.9
40°	484.9	492.7	513.2	538.6	546.4
42.5°	459.5	467.3	489.8	518.1	526.8
45°	434.2	442.9	468.3	496.6	506.4
47.5°	407.8	417.6	443.9	475.1	483.9
50°	380.5	391.2	420.5	452.7	456.6
52.5°	353.2	364.9	396.1	424.4	428.3
55°	325.9	337.6	371.7	396.1	394.2
57.5°	299.5	312.2	347.3	360.0	358.1
60°	272.2	285.9	317.1	322.9	316.1
62.5°	246.8	259.5	288.8	283.9	275.1
65°	219.5	232.2	256.6	246.8	234.2
67.5°	192.2	207.8	223.4	206.8	197.1
70°	164.9	182.4	189.3	172.7	163.9
72.5°	138.5	157.1	155.1	138.5	132.7
75°	113.2	128.8	124.9	108.3	102.4
77.5°	85.9	103.4	94.6	81.0	76.1
80°	60.5	76.1	66.3	54.6	50.7
82.5°	40.0	50.7	41.0	32.2	29.3
85°	21.5	26.3	18.5	15.6	14.6
87.5°	8.8	7.8	6.8	6.8	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)