

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: P275673

Luminaire Tested: **14CZ2-20-S-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275673  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-20-S-UNV-L92765-W2A1-U-4000K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1855.0 lumens  
Efficiency: N/A  
Efficacy: 119.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

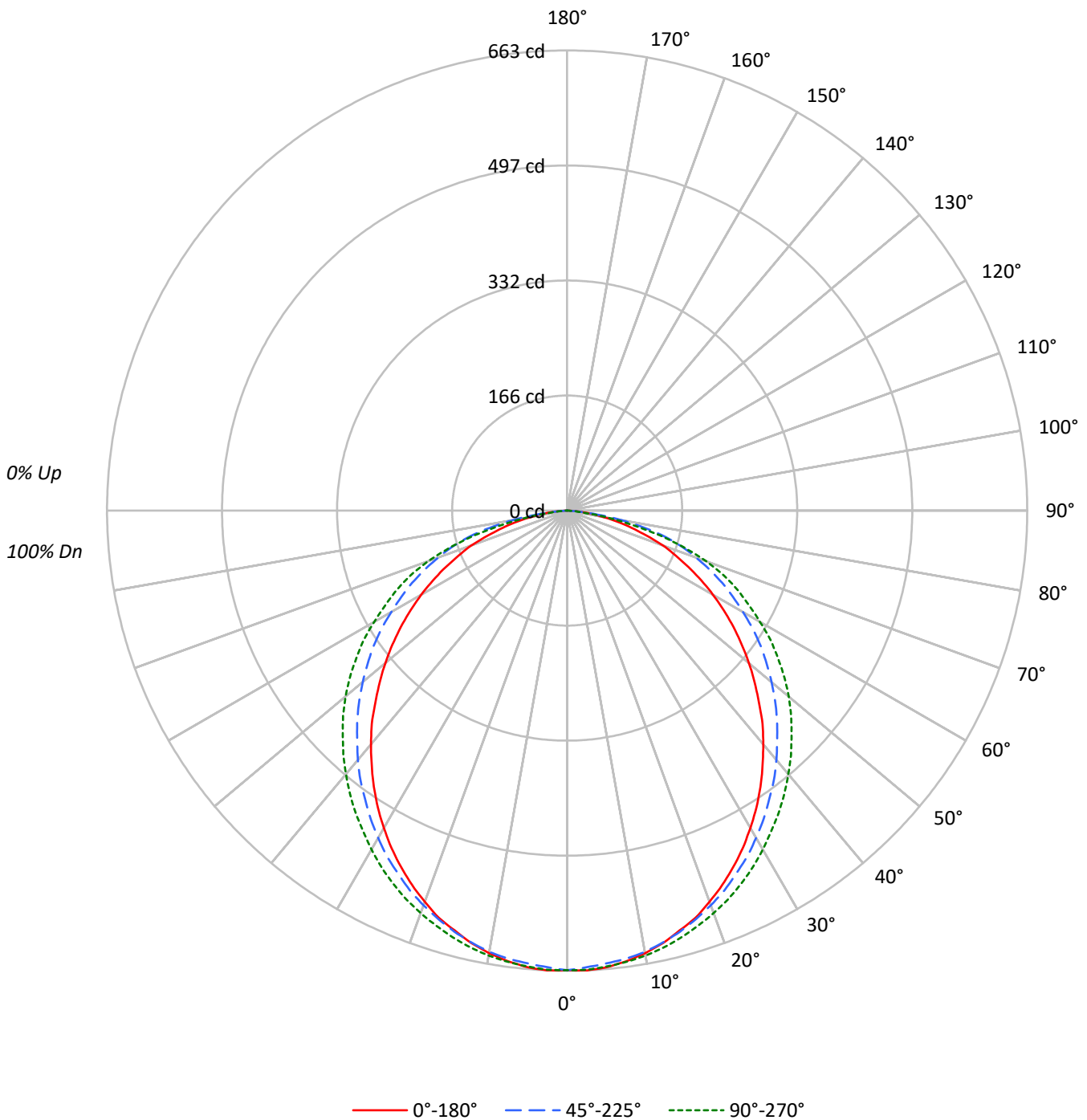
Input Watts (W): 15.531  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P275673

CATALOG NUMBER: 14CZ2-20-S-UNV-L92765-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P275673

CATALOG NUMBER: 14CZ2-20-S-UNV-L92765-W2A1-U-4000K

**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	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	1782	1782	1782
5°	1784	1769	1781
10°	1769	1764	1779
15°	1745	1750	1773
20°	1717	1733	1767
25°	1682	1712	1761
30°	1640	1692	1752
35°	1595	1668	1746
40°	1544	1648	1741
45°	1488	1628	1740
50°	1432	1609	1744
55°	1372	1597	1739
60°	1307	1574	1728
65°	1230	1570	1727
70°	1158	1555	1679
75°	1004	1520	1435
80°	812	1226	955
85°	540	426	284



TEST NUMBER: P275673

CATALOG NUMBER: 14CZ2-20-S-UNV-L92765-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.5	3.4
10°-20°	177.9	9.6
20°-30°	266.9	14.4
30°-40°	318.4	17.2
40°-50°	329.2	17.7
50°-60°	300.5	16.2
60°-70°	236.5	12.7
70°-80°	137.7	7.4
80°-90°	25.3	1.4
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°	507.4	27.4
0°-40°	825.8	44.5
0°-60°	1455.5	78.5
0°-90°	1855.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1855.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	662	662	662	662	662	
5°	660	658	655	660	659	63
15°	626	627	628	636	636	177
25°	567	569	577	590	593	261
35°	486	492	508	527	532	304
45°	391	404	428	452	457	302
55°	292	308	340	365	371	262
65°	193	213	246	266	271	192
75°	97	120	146	144	138	103
85°	18	25	14	11	9	23
90°	0	0	0	0	0	



TEST NUMBER: P275673

CATALOG NUMBER: 14CZ2-20-S-UNV-L92765-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	662.2	662.2	662.2	662.2	662.2
2.5°	663.1	661.3	658.5	663.1	662.2
5°	660.4	658.5	654.8	660.4	659.4
7.5°	654.8	653.0	651.2	656.7	655.8
10°	647.5	646.6	645.6	652.1	651.2
12.5°	638.3	638.3	637.4	644.7	644.7
15°	626.3	627.3	628.2	636.5	636.5
17.5°	615.3	614.4	617.1	626.3	627.3
20°	599.7	601.5	605.2	616.2	617.1
22.5°	584.0	585.9	592.3	603.3	606.1
25°	566.6	569.3	576.7	590.5	593.2
27.5°	548.2	551.8	562.0	576.7	579.4
30°	527.9	533.4	544.5	561.0	563.8
32.5°	507.7	513.2	527.0	543.6	547.2
35°	485.6	492.1	507.7	527.0	531.6
37.5°	462.6	470.9	489.3	508.6	514.1
40°	439.6	448.8	469.1	489.3	495.7
42.5°	416.6	425.8	447.9	470.9	477.3
45°	390.9	403.8	427.7	451.6	457.1
47.5°	366.1	379.8	406.5	430.4	437.8
50°	342.1	355.9	384.4	409.3	416.6
52.5°	317.3	332.0	362.4	388.1	394.6
55°	292.5	308.1	340.3	365.1	370.7
57.5°	267.6	284.2	317.3	341.2	347.7
60°	242.8	260.3	292.5	316.4	321.0
62.5°	218.0	236.4	269.5	290.6	295.2
65°	193.1	213.4	246.5	265.8	271.3
67.5°	169.2	189.5	221.7	240.0	244.6
70°	147.2	165.6	197.7	211.5	213.4
72.5°	119.6	142.6	173.8	181.2	176.6
75°	96.6	119.6	146.2	143.5	138.0
77.5°	73.6	96.6	114.0	104.8	97.5
80°	52.4	75.4	79.1	65.3	61.6
82.5°	34.0	52.4	44.1	34.0	27.6
85°	17.5	24.8	13.8	11.0	9.2
87.5°	5.5	3.7	1.8	1.8	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)