

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: P275754

Luminaire Tested: **14CZ2-20-RDP-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275754  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-20-RDP-UNV-L93050-W2A1-U-3000K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1038.0 lumens  
Efficiency: N/A  
Efficacy: 66.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

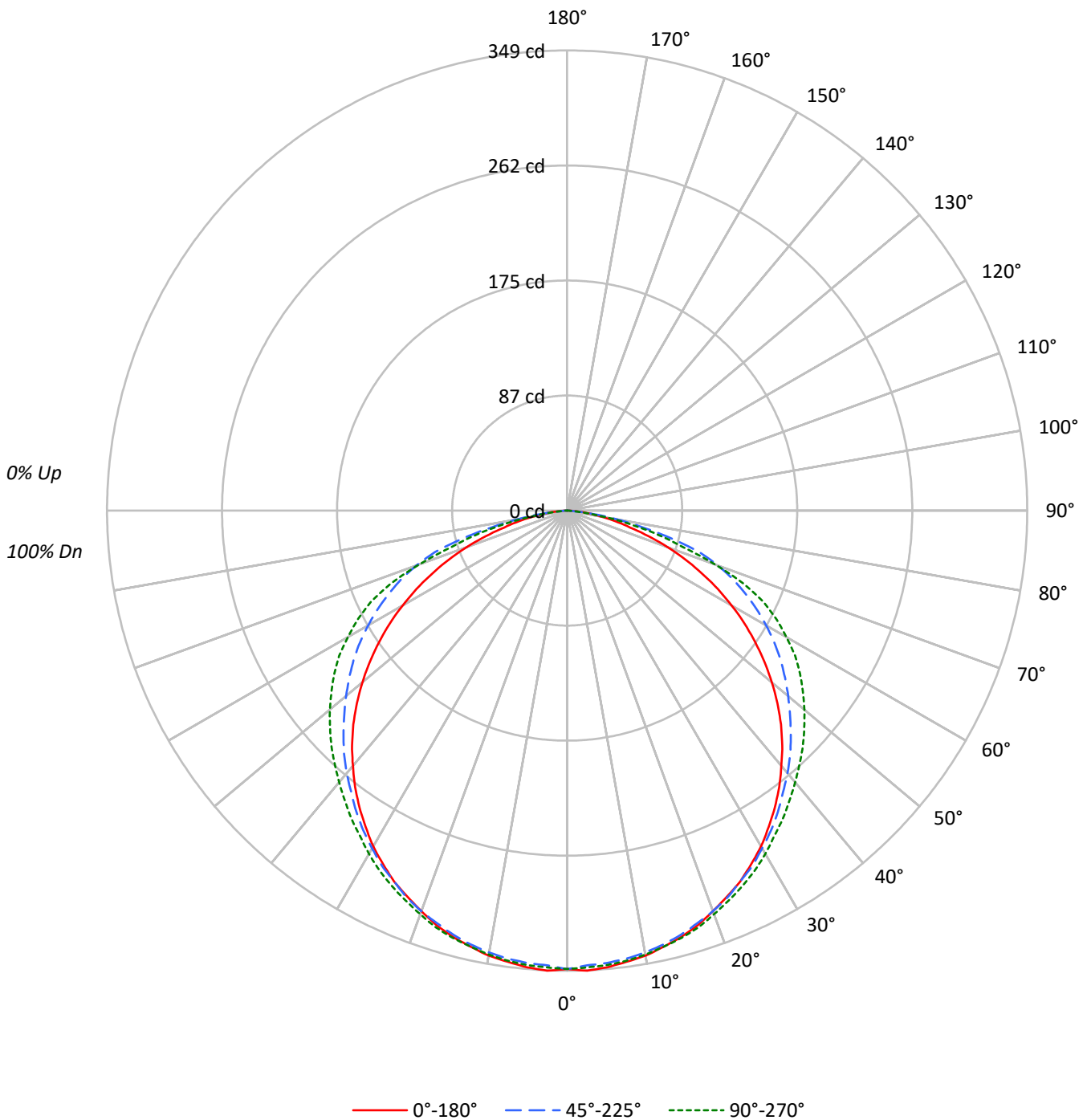
Input Watts (W): 15.717  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P275754

CATALOG NUMBER: 14CZ2-20-RDP-UNV-L93050-W2A1-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P275754

CATALOG NUMBER: 14CZ2-20-RDP-UNV-L93050-W2A1-U-3000K

**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	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	936	936	936
5°	939	930	935
10°	937	930	935
15°	932	928	935
20°	926	926	933
25°	922	922	934
30°	914	919	934
35°	902	916	937
40°	888	914	945
45°	873	913	962
50°	848	916	984
55°	817	928	1012
60°	776	938	1034
65°	717	949	1047
70°	637	957	937
75°	514	860	750
80°	401	603	490
85°	275	176	127



TEST NUMBER: P275754

CATALOG NUMBER: 14CZ2-20-RDP-UNV-L93050-W2A1-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.9	3.2
10°-20°	94.4	9.1
20°-30°	143.8	13.8
30°-40°	175.1	16.9
40°-50°	185.8	17.9
50°-60°	175.3	16.9
60°-70°	141.6	13.6
70°-80°	76.8	7.4
80°-90°	12.4	1.2
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°	271.1	26.1
0°-40°	446.1	43.0
0°-60°	807.2	77.8
0°-90°	1038.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1038.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	348	348	348	348	348	
5°	348	347	344	347	346	33
15°	335	334	333	336	336	94
25°	310	310	310	314	314	143
35°	275	276	279	284	285	172
45°	229	233	240	249	253	177
55°	174	182	198	211	216	156
65°	113	126	149	161	164	112
75°	49	72	83	75	72	54
85°	9	10	6	5	4	11
90°	0	0	0	0	0	



TEST NUMBER: P275754

CATALOG NUMBER: 14CZ2-20-RDP-UNV-L93050-W2A1-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	347.7	347.7	347.7	347.7	347.7
2.5°	349.3	347.7	345.2	347.7	346.8
5°	347.7	346.8	344.4	346.8	346.0
7.5°	345.2	345.2	342.8	344.4	344.4
10°	342.8	342.0	340.4	342.8	342.0
12.5°	338.7	337.9	337.1	339.5	338.7
15°	334.7	333.9	333.1	335.5	335.5
17.5°	329.8	329.0	328.2	331.4	331.4
20°	323.3	323.3	323.3	326.6	325.8
22.5°	316.9	316.9	317.7	320.9	320.1
25°	310.4	309.6	310.4	313.6	314.4
27.5°	302.3	303.1	303.9	307.1	307.9
30°	294.2	295.0	295.8	299.8	300.7
32.5°	284.4	286.1	287.7	292.5	292.5
35°	274.7	276.3	278.8	284.4	285.3
37.5°	264.2	265.8	269.0	275.5	277.1
40°	252.8	255.3	260.1	266.6	269.0
42.5°	241.5	244.7	250.4	257.7	260.9
45°	229.3	232.6	239.9	248.8	252.8
47.5°	216.4	220.4	229.3	240.7	243.9
50°	202.6	208.3	218.8	231.0	235.0
52.5°	188.8	195.3	208.3	221.2	225.3
55°	174.2	181.5	197.7	210.7	215.6
57.5°	159.6	167.7	186.4	200.2	205.0
60°	144.2	154.0	174.2	188.0	192.1
62.5°	128.9	140.2	162.1	175.9	179.1
65°	112.6	126.4	149.1	161.3	164.5
67.5°	97.2	113.5	136.1	145.1	145.1
70°	81.0	98.9	121.6	124.0	119.1
72.5°	64.8	85.1	105.3	96.4	92.4
75°	49.4	72.1	82.7	74.6	72.1
77.5°	37.3	58.3	58.3	53.5	51.9
80°	25.9	44.6	38.9	34.0	31.6
82.5°	17.0	25.1	20.3	16.2	13.8
85°	8.9	9.7	5.7	4.9	4.1
87.5°	3.2	1.6	0.8	1.6	0.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)