

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: P275596

Luminaire Tested: **14CZ2-29-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275596  
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: 14CZ2-29-S-UNV-L93050-W2A1-U-3000K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2279.0 lumens  
Efficiency: N/A  
Efficacy: 100.8 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

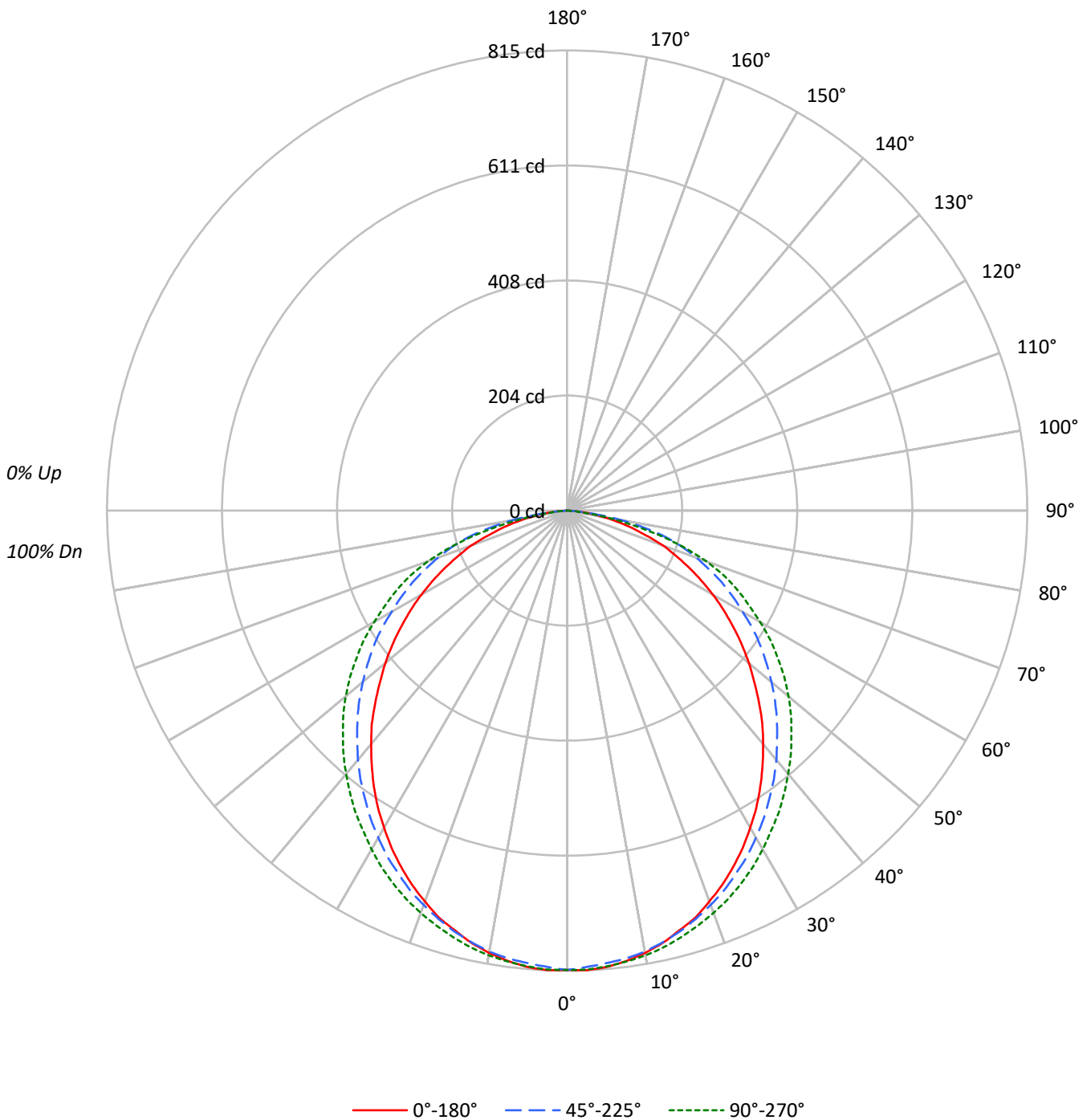
Input Watts (W): 22.599  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P275596

CATALOG NUMBER: 14CZ2-29-S-UNV-L93050-W2A1-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P275596

CATALOG NUMBER: 14CZ2-29-S-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	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°	2189	2189	2189
5°	2192	2173	2189
10°	2174	2167	2186
15°	2144	2150	2178
20°	2110	2129	2171
25°	2067	2104	2164
30°	2015	2078	2152
35°	1960	2049	2145
40°	1897	2024	2139
45°	1827	1999	2137
50°	1760	1977	2143
55°	1686	1962	2137
60°	1605	1934	2123
65°	1511	1928	2122
70°	1423	1911	2062
75°	1233	1868	1762
80°	998	1506	1173
85°	664	522	349



TEST NUMBER: P275596

CATALOG NUMBER: 14CZ2-29-S-UNV-L93050-W2A1-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.8	3.4
10°-20°	218.6	9.6
20°-30°	327.9	14.4
30°-40°	391.2	17.2
40°-50°	404.4	17.7
50°-60°	369.2	16.2
60°-70°	290.6	12.7
70°-80°	169.1	7.4
80°-90°	31.2	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°	623.4	27.4
0°-40°	1014.5	44.5
0°-60°	1788.1	78.5
0°-90°	2279.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2279.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	814	814	814	814	814	
5°	811	809	804	811	810	77
15°	770	771	772	782	782	217
25°	696	699	708	725	729	320
35°	597	604	624	648	653	373
45°	480	496	525	555	562	371
55°	359	378	418	449	455	321
65°	237	262	303	327	333	236
75°	119	147	180	176	170	126
85°	22	30	17	14	11	28
90°	0	0	0	0	0	



TEST NUMBER: P275596

CATALOG NUMBER: 14CZ2-29-S-UNV-L93050-W2A1-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	813.6	813.6	813.6	813.6	813.6
2.5°	814.7	812.4	809.0	814.7	813.6
5°	811.3	809.0	804.5	811.3	810.2
7.5°	804.5	802.3	800.0	806.8	805.7
10°	795.5	794.4	793.2	801.1	800.0
12.5°	784.2	784.2	783.1	792.1	792.1
15°	769.5	770.6	771.8	781.9	781.9
17.5°	755.9	754.8	758.2	769.5	770.6
20°	736.7	739.0	743.5	757.1	758.2
22.5°	717.5	719.8	727.7	741.2	744.6
25°	696.1	699.4	708.5	725.4	728.8
27.5°	673.5	678.0	690.4	708.5	711.9
30°	648.6	655.4	668.9	689.3	692.7
32.5°	623.7	630.5	647.5	667.8	672.3
35°	596.6	604.5	623.7	647.5	653.1
37.5°	568.4	578.5	601.1	624.9	631.6
40°	540.1	551.4	576.3	601.1	609.0
42.5°	511.9	523.2	550.3	578.5	586.4
45°	480.2	496.0	525.4	554.8	561.6
47.5°	449.7	466.7	499.4	528.8	537.9
50°	420.3	437.3	472.3	502.8	511.9
52.5°	389.8	407.9	445.2	476.8	484.7
55°	359.3	378.5	418.1	448.6	455.4
57.5°	328.8	349.2	389.8	419.2	427.1
60°	298.3	319.8	359.3	388.7	394.4
62.5°	267.8	290.4	331.1	357.1	362.7
65°	237.3	262.1	302.8	326.6	333.3
67.5°	207.9	232.8	272.3	294.9	300.6
70°	180.8	203.4	242.9	259.9	262.1
72.5°	146.9	175.1	213.6	222.6	217.0
75°	118.6	146.9	179.7	176.3	169.5
77.5°	90.4	118.6	140.1	128.8	119.8
80°	64.4	92.7	97.2	80.2	75.7
82.5°	41.8	64.4	54.2	41.8	33.9
85°	21.5	30.5	16.9	13.6	11.3
87.5°	6.8	4.5	2.3	2.3	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)