

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: P275428

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275428  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-29-UNV-L93050-W2A1-U-3000K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2255.0 lumens  
Efficiency: N/A  
Efficacy: 99.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

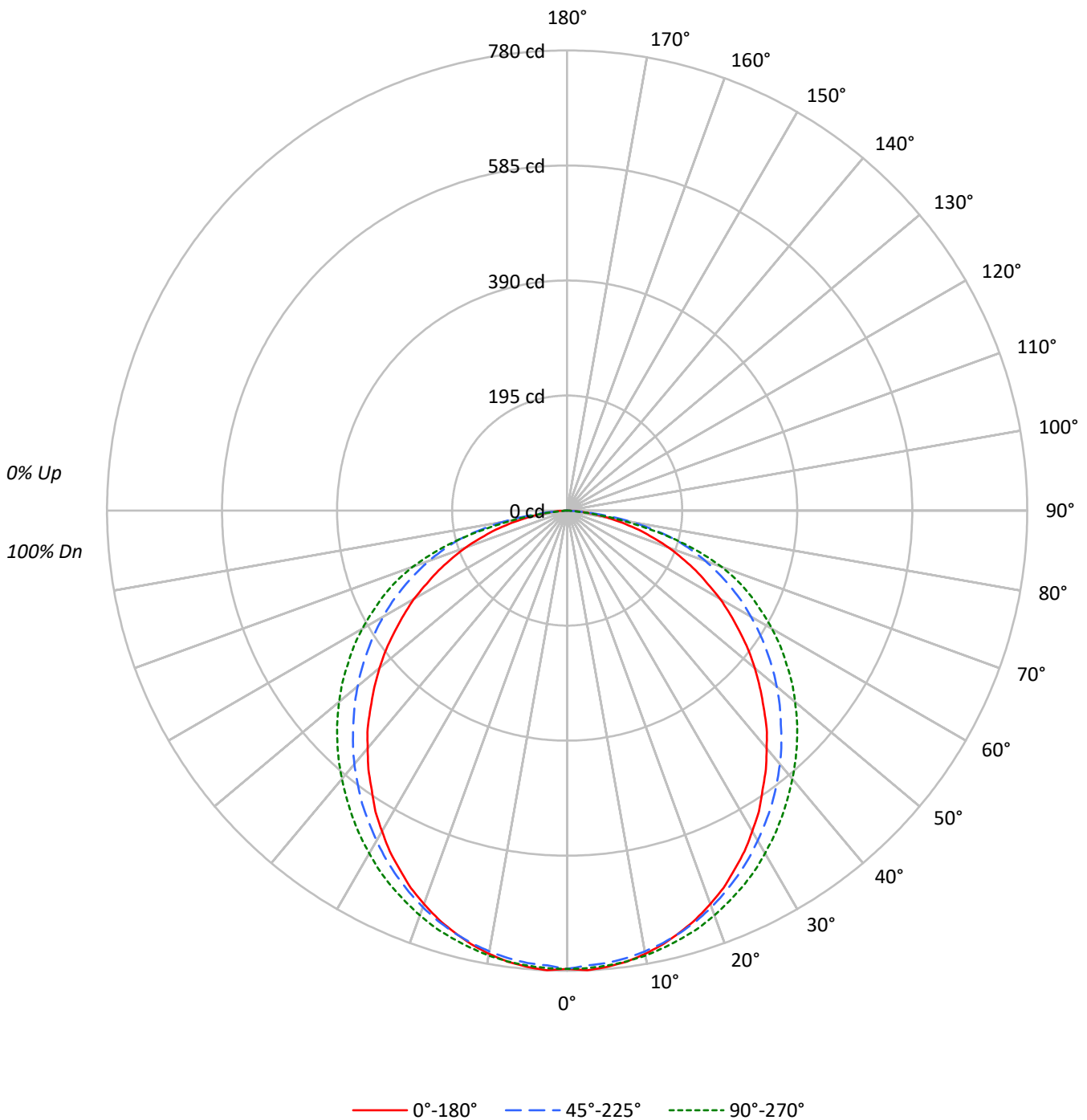
Input Watts (W): 22.599  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	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	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	2091	2091	2091
5°	2097	2079	2092
10°	2084	2073	2093
15°	2062	2064	2091
20°	2032	2049	2091
25°	1993	2029	2089
30°	1950	2008	2084
35°	1898	1990	2083
40°	1847	1971	2086
45°	1791	1950	2097
50°	1739	1941	2111
55°	1673	1934	2130
60°	1613	1938	2159
65°	1530	1943	2193
70°	1436	1958	2192
75°	1302	1976	1982
80°	1068	1706	1410
85°	790	806	327



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.5	3.3
10°-20°	210.0	9.3
20°-30°	316.3	14.0
30°-40°	379.6	16.8
40°-50°	395.6	17.5
50°-60°	366.3	16.2
60°-70°	295.9	13.1
70°-80°	180.4	8.0
80°-90°	37.3	1.7
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°	599.8	26.6
0°-40°	979.4	43.4
0°-60°	1741.4	77.2
0°-90°	2255.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2255.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	777	777	777	777	777	
5°	776	774	770	775	774	74
15°	740	741	741	751	751	209
25°	671	675	683	700	703	309
35°	578	587	606	628	634	362
45°	471	485	512	541	551	364
55°	356	375	412	444	454	319
65°	240	264	305	336	344	238
75°	125	153	190	193	191	131
85°	26	38	26	15	11	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	776.9	776.9	776.9	776.9	776.9
2.5°	779.9	777.4	771.8	777.4	776.4
5°	776.4	774.3	769.8	775.3	774.3
7.5°	771.3	769.3	765.3	771.8	770.8
10°	762.8	761.8	758.8	766.3	765.8
12.5°	752.7	752.2	750.7	759.3	758.8
15°	740.1	740.7	740.7	750.7	750.7
17.5°	726.1	727.1	729.1	740.1	741.7
20°	709.5	711.5	715.5	728.1	730.1
22.5°	692.4	693.9	699.9	715.0	717.0
25°	671.3	675.3	683.3	700.4	703.4
27.5°	651.2	654.7	665.7	683.3	688.4
30°	627.5	633.0	646.1	665.2	670.8
32.5°	604.9	610.9	626.0	648.1	653.2
35°	577.7	586.8	605.9	628.0	634.1
37.5°	553.1	561.6	583.3	607.4	614.4
40°	525.9	536.5	561.1	586.8	593.8
42.5°	500.8	510.9	537.5	563.7	573.2
45°	470.6	484.7	512.4	541.0	551.1
47.5°	443.0	457.1	488.7	519.4	528.5
50°	415.3	430.4	463.6	495.3	504.3
52.5°	386.7	402.8	438.5	470.1	480.7
55°	356.5	375.1	412.3	444.5	454.0
57.5°	327.8	346.9	386.7	419.4	428.9
60°	299.7	319.3	360.0	391.2	401.2
62.5°	268.5	291.6	333.9	364.5	372.1
65°	240.3	264.0	305.2	335.9	344.4
67.5°	210.7	236.3	277.6	305.7	313.8
70°	182.5	209.2	248.9	275.0	278.6
72.5°	152.4	179.5	219.7	236.3	236.3
75°	125.2	152.9	190.1	193.1	190.6
77.5°	95.5	126.2	150.3	144.3	138.3
80°	68.9	99.1	110.1	99.1	91.0
82.5°	46.3	71.9	66.4	52.8	46.8
85°	25.6	38.2	26.1	14.6	10.6
87.5°	9.6	8.5	2.5	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)