

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: P275602

Luminaire Tested: **14CZ2-35-S-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275602  
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: 14CZ2-35-S-UNV-L93050-W2A1-U-3500K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2994.0 lumens  
Efficiency: N/A  
Efficacy: 107.0 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

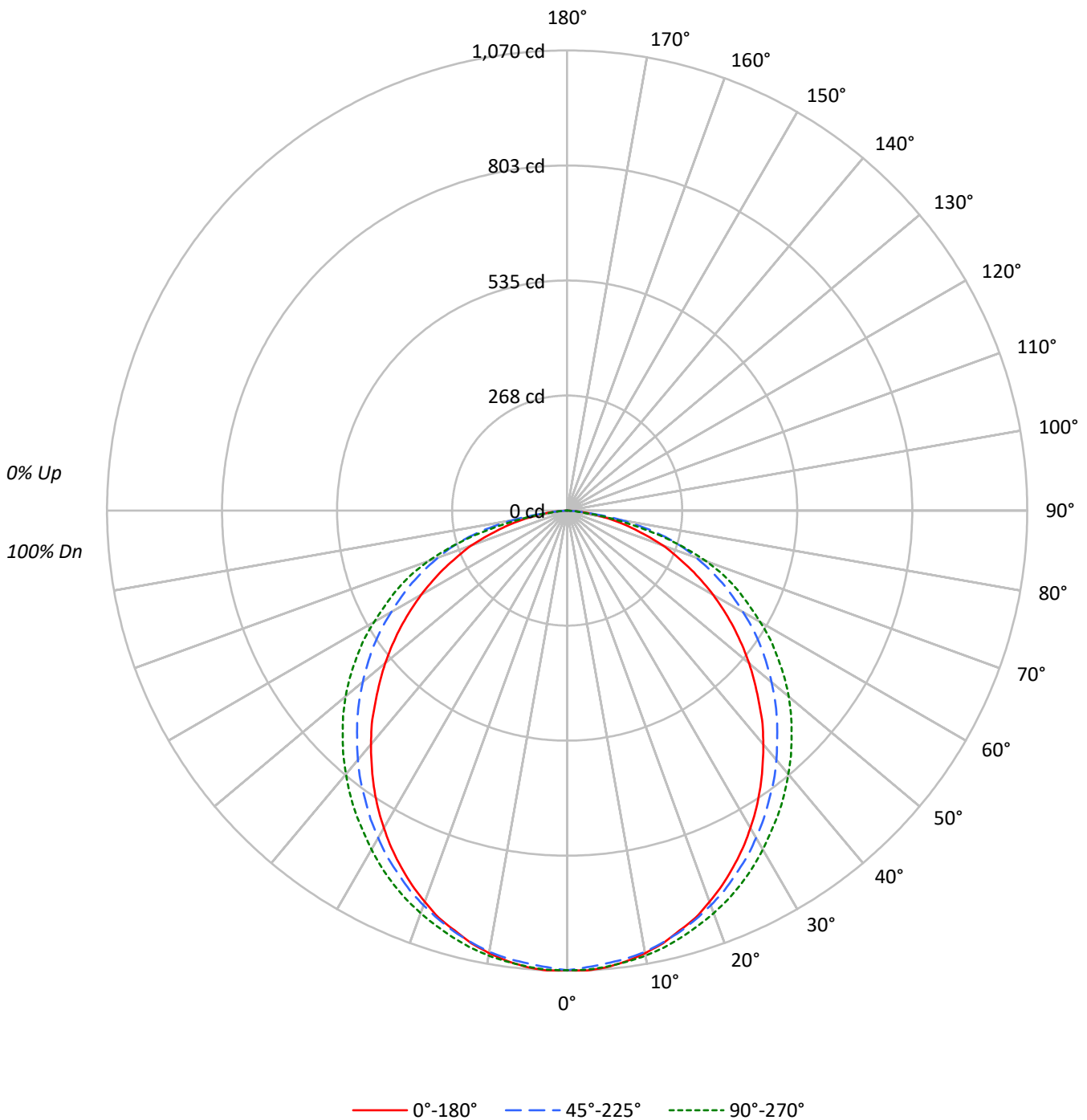
Input Watts (W): 27.993  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84					84			
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70					70			
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58					58			
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50					50			
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

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

	0°	45°	90°
0°	2876	2876	2876
5°	2879	2855	2875
10°	2856	2848	2872
15°	2816	2825	2862
20°	2772	2797	2853
25°	2715	2764	2843
30°	2648	2731	2828
35°	2575	2692	2819
40°	2493	2660	2811
45°	2401	2627	2808
50°	2312	2598	2815
55°	2215	2577	2807
60°	2109	2541	2788
65°	1985	2533	2788
70°	1869	2511	2710
75°	1621	2454	2315
80°	1311	1979	1542
85°	871	689	457



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.9	3.4
10°-20°	287.2	9.6
20°-30°	430.8	14.4
30°-40°	513.9	17.2
40°-50°	531.3	17.7
50°-60°	485.0	16.2
60°-70°	381.7	12.7
70°-80°	222.2	7.4
80°-90°	40.9	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°	818.9	27.4
0°-40°	1332.8	44.5
0°-60°	2349.1	78.5
0°-90°	2994.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2994.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1069	1069	1069	1069	1069	
5°	1066	1063	1057	1066	1064	101
15°	1011	1012	1014	1027	1027	285
25°	914	919	931	953	958	421
35°	784	794	819	851	858	490
45°	631	652	690	729	738	487
55°	472	497	549	589	598	422
65°	312	344	398	429	438	310
75°	156	193	236	232	223	166
85°	28	40	22	18	15	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1068.8	1068.8	1068.8	1068.8	1068.8
2.5°	1070.3	1067.3	1062.9	1070.3	1068.8
5°	1065.8	1062.9	1056.9	1065.8	1064.4
7.5°	1056.9	1054.0	1051.0	1059.9	1058.4
10°	1045.1	1043.6	1042.1	1052.5	1051.0
12.5°	1030.2	1030.2	1028.7	1040.6	1040.6
15°	1010.9	1012.4	1013.9	1027.2	1027.2
17.5°	993.1	991.6	996.1	1010.9	1012.4
20°	967.9	970.8	976.8	994.6	996.1
22.5°	942.6	945.6	956.0	973.8	978.3
25°	914.4	918.9	930.8	953.0	957.5
27.5°	884.7	890.7	907.0	930.8	935.2
30°	852.1	861.0	878.8	905.5	910.0
32.5°	819.4	828.3	850.6	877.3	883.3
35°	783.8	794.2	819.4	850.6	858.0
37.5°	746.7	760.0	789.7	820.9	829.8
40°	709.6	724.4	757.1	789.7	800.1
42.5°	672.5	687.3	722.9	760.0	770.4
45°	630.9	651.7	690.3	728.9	737.8
47.5°	590.8	613.1	656.1	694.7	706.6
50°	552.2	574.5	620.5	660.6	672.5
52.5°	512.1	535.9	584.9	626.4	636.8
55°	472.1	497.3	549.2	589.3	598.2
57.5°	432.0	458.7	512.1	550.7	561.1
60°	391.9	420.1	472.1	510.7	518.1
62.5°	351.8	381.5	434.9	469.1	476.5
65°	311.7	344.4	397.8	429.0	437.9
67.5°	273.1	305.8	357.8	387.4	394.9
70°	237.5	267.2	319.2	341.4	344.4
72.5°	193.0	230.1	280.6	292.4	285.0
75°	155.9	193.0	236.0	231.6	222.7
77.5°	118.8	155.9	184.1	169.2	157.4
80°	84.6	121.7	127.7	105.4	99.5
82.5°	54.9	84.6	71.3	54.9	44.5
85°	28.2	40.1	22.3	17.8	14.8
87.5°	8.9	5.9	3.0	3.0	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)