

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: P275443

Luminaire Tested: **14CZ2-44-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275443  
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: 14CZ2-44-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: 3345.0 lumens  
Efficiency: N/A  
Efficacy: 91.8 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

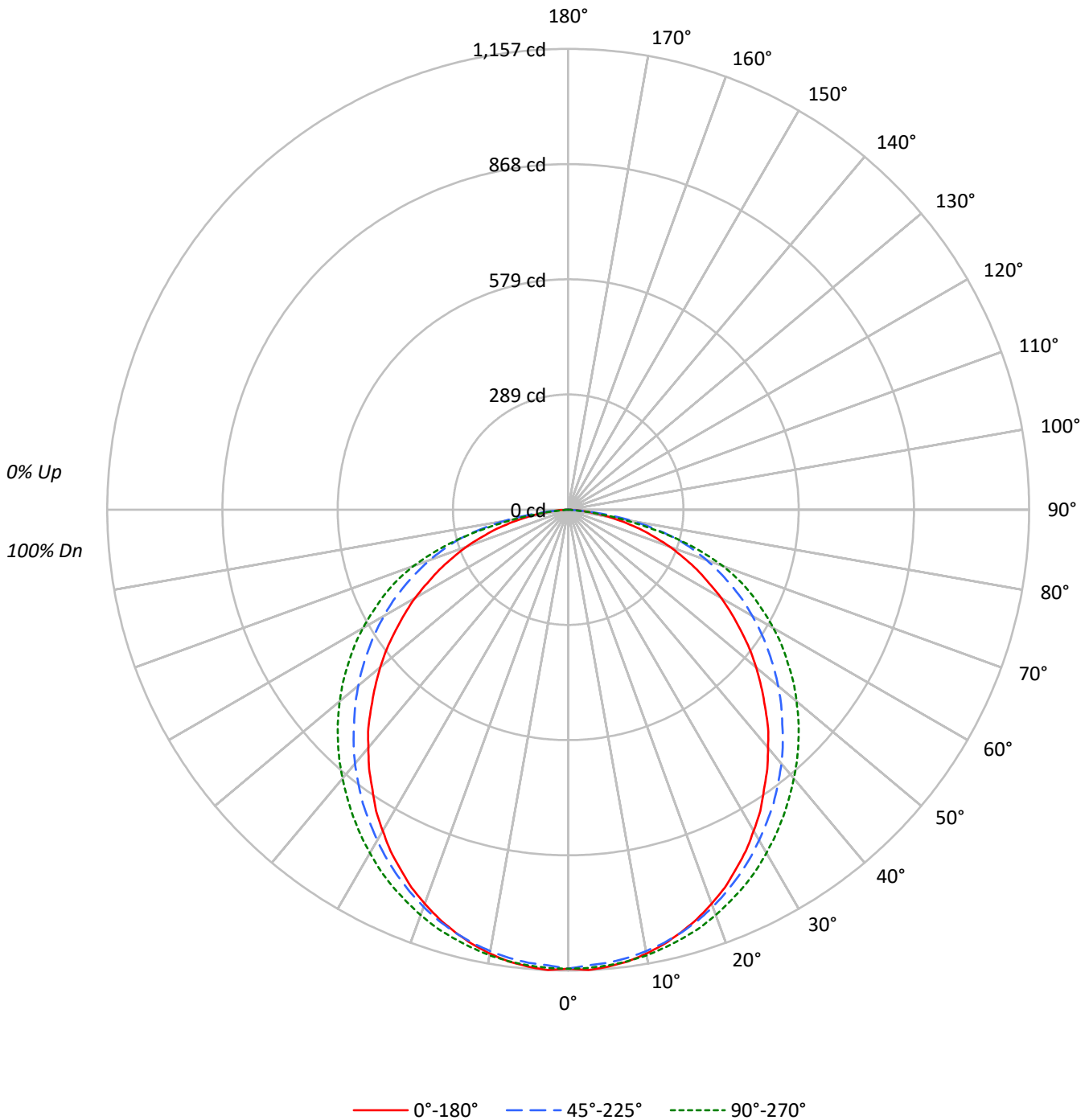
Input Watts (W): 36.456  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3101	3101	3101
5°	3111	3085	3103
10°	3092	3075	3104
15°	3059	3061	3102
20°	3014	3040	3101
25°	2956	3010	3098
30°	2892	2978	3092
35°	2815	2953	3090
40°	2741	2924	3094
45°	2657	2892	3111
50°	2579	2879	3132
55°	2481	2869	3160
60°	2392	2874	3203
65°	2270	2883	3253
70°	2130	2905	3251
75°	1931	2931	2939
80°	1584	2531	2092
85°	1173	1198	485



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.0	3.3
10°-20°	311.5	9.3
20°-30°	469.2	14.0
30°-40°	563.1	16.8
40°-50°	586.9	17.5
50°-60°	543.3	16.2
60°-70°	439.0	13.1
70°-80°	267.7	8.0
80°-90°	55.3	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°	889.8	26.6
0°-40°	1452.9	43.4
0°-60°	2583.1	77.2
0°-90°	3345.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3345.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1152	1152	1152	1152	1152	
5°	1152	1149	1142	1150	1149	109
15°	1098	1099	1099	1114	1114	309
25°	996	1002	1014	1039	1044	459
35°	857	870	899	932	940	537
45°	698	719	760	803	818	540
55°	529	556	612	659	674	474
65°	356	392	453	498	511	353
75°	186	227	282	286	283	195
85°	38	57	39	22	16	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1152.4	1152.4	1152.4	1152.4	1152.4
2.5°	1156.8	1153.1	1144.9	1153.1	1151.6
5°	1151.6	1148.6	1141.9	1150.1	1148.6
7.5°	1144.2	1141.2	1135.2	1144.9	1143.4
10°	1131.5	1130.0	1125.5	1136.7	1136.0
12.5°	1116.6	1115.8	1113.6	1126.3	1125.5
15°	1097.9	1098.7	1098.7	1113.6	1113.6
17.5°	1077.0	1078.5	1081.5	1097.9	1100.2
20°	1052.4	1055.4	1061.4	1080.0	1083.0
22.5°	1027.1	1029.3	1038.2	1060.6	1063.6
25°	995.7	1001.7	1013.6	1039.0	1043.5
27.5°	965.9	971.1	987.5	1013.6	1021.1
30°	930.8	939.0	958.4	986.8	995.0
32.5°	897.3	906.2	928.6	961.4	968.9
35°	857.0	870.4	898.8	931.6	940.5
37.5°	820.5	833.1	865.2	901.0	911.4
40°	780.2	795.8	832.4	870.4	880.9
42.5°	742.9	757.8	797.3	836.1	850.3
45°	698.1	719.0	760.0	802.6	817.5
47.5°	657.1	678.0	725.0	770.5	783.9
50°	616.1	638.5	687.7	734.7	748.1
52.5°	573.6	597.4	650.4	697.4	713.0
55°	528.8	556.4	611.6	659.3	673.5
57.5°	486.3	514.6	573.6	622.1	636.2
60°	444.5	473.6	534.0	580.3	595.2
62.5°	398.3	432.6	495.3	540.8	551.9
65°	356.5	391.6	452.7	498.2	510.9
67.5°	312.5	350.6	411.7	453.5	465.4
70°	270.7	310.3	369.2	408.0	413.2
72.5°	226.0	266.3	325.9	350.6	350.6
75°	185.7	226.7	281.9	286.4	282.7
77.5°	141.7	187.2	223.0	214.1	205.1
80°	102.2	146.9	163.3	146.9	135.0
82.5°	68.6	106.7	98.5	78.3	69.4
85°	38.0	56.7	38.8	21.6	15.7
87.5°	14.2	12.7	3.7	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)