

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: P258582

Luminaire Tested: **14CZ-LD5-35-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258582  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35573)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-35-UNV-L93050-W2A1-U-3500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3005.0 lumens  
Efficiency: N/A  
Efficacy: 107.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

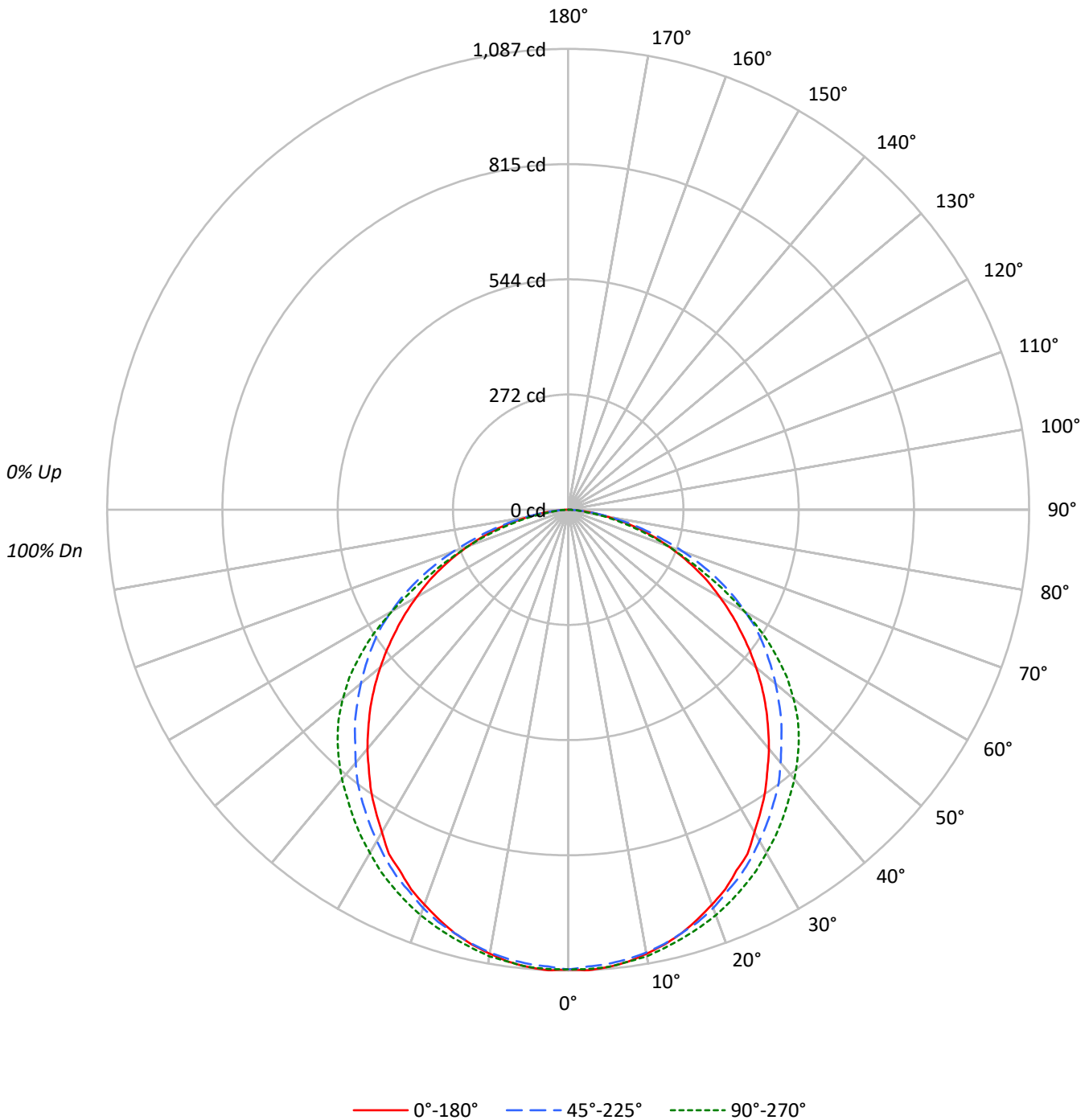
Input Watts (W): 27.993  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

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

	0°	45°	90°
0°	2918	2918	2918
5°	2925	2905	2925
10°	2907	2898	2923
15°	2881	2881	2914
20°	2838	2864	2915
25°	2789	2837	2912
30°	2730	2803	2905
35°	2662	2774	2905
40°	2586	2737	2914
45°	2509	2706	2926
50°	2419	2673	2902
55°	2321	2648	2808
60°	2224	2591	2583
65°	2122	2481	2264
70°	1970	2261	1958
75°	1786	1971	1618
80°	1423	1561	1193
85°	1007	868	685



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.6	3.4
10°-20°	293.1	9.8
20°-30°	442.0	14.7
30°-40°	529.7	17.6
40°-50°	549.8	18.3
50°-60°	495.9	16.5
60°-70°	361.7	12.0
70°-80°	189.8	6.3
80°-90°	40.5	1.3
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°	837.7	27.9
0°-40°	1367.4	45.5
0°-60°	2413.1	80.3
0°-90°	3005.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3005.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1084	1084	1084	1084	1084	
5°	1083	1080	1076	1083	1083	103
15°	1034	1034	1034	1046	1046	291
25°	939	944	956	976	981	433
35°	810	819	844	876	884	506
45°	659	673	711	754	769	508
55°	495	513	564	602	598	443
65°	333	353	390	375	356	329
75°	172	196	190	164	156	180
85°	33	40	28	24	22	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1084.4	1084.4	1084.4	1084.4	1084.4
2.5°	1087.4	1084.4	1078.5	1084.4	1084.4
5°	1082.9	1080.0	1075.5	1082.9	1082.9
7.5°	1075.5	1072.6	1069.6	1077.0	1075.5
10°	1063.7	1062.2	1060.7	1069.6	1069.6
12.5°	1050.3	1050.3	1048.9	1059.2	1057.8
15°	1034.1	1034.1	1034.1	1045.9	1045.9
17.5°	1013.3	1016.3	1019.2	1032.6	1032.6
20°	991.1	994.1	1000.0	1016.3	1017.8
22.5°	968.9	970.3	976.3	995.5	1000.0
25°	939.2	943.7	955.5	976.3	980.7
27.5°	915.5	917.0	930.3	954.1	960.0
30°	878.5	888.9	902.2	928.9	934.8
32.5°	844.4	853.3	874.1	902.2	911.1
35°	810.4	819.2	844.4	875.5	884.4
37.5°	771.8	785.2	814.8	845.9	856.3
40°	736.3	748.1	779.2	817.8	829.6
42.5°	697.8	709.6	743.7	786.6	800.0
45°	659.2	672.6	711.1	754.1	768.9
47.5°	619.2	634.1	674.1	721.5	734.8
50°	577.8	594.1	638.5	687.4	693.3
52.5°	536.3	554.1	601.5	644.4	650.4
55°	494.8	512.6	564.4	601.5	598.5
57.5°	454.8	474.1	527.4	546.7	543.7
60°	413.3	434.1	481.5	490.4	480.0
62.5°	374.8	394.1	438.5	431.1	417.8
65°	333.3	352.6	389.6	374.8	355.5
67.5°	291.8	315.5	339.3	314.1	299.3
70°	250.4	277.0	287.4	262.2	248.9
72.5°	210.4	238.5	235.6	210.4	201.5
75°	171.8	195.6	189.6	164.4	155.6
77.5°	130.4	157.0	143.7	123.0	115.6
80°	91.8	115.6	100.7	83.0	77.0
82.5°	60.7	77.0	62.2	48.9	44.4
85°	32.6	40.0	28.1	23.7	22.2
87.5°	13.3	11.9	10.4	10.4	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)