

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: P259069

Luminaire Tested: **14CZ-LD5-44-SQP-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259069  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35908)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-44-SQP-UNV-L83050-W2A1-U-5000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2982.0 lumens  
Efficiency: N/A  
Efficacy: 79.8 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

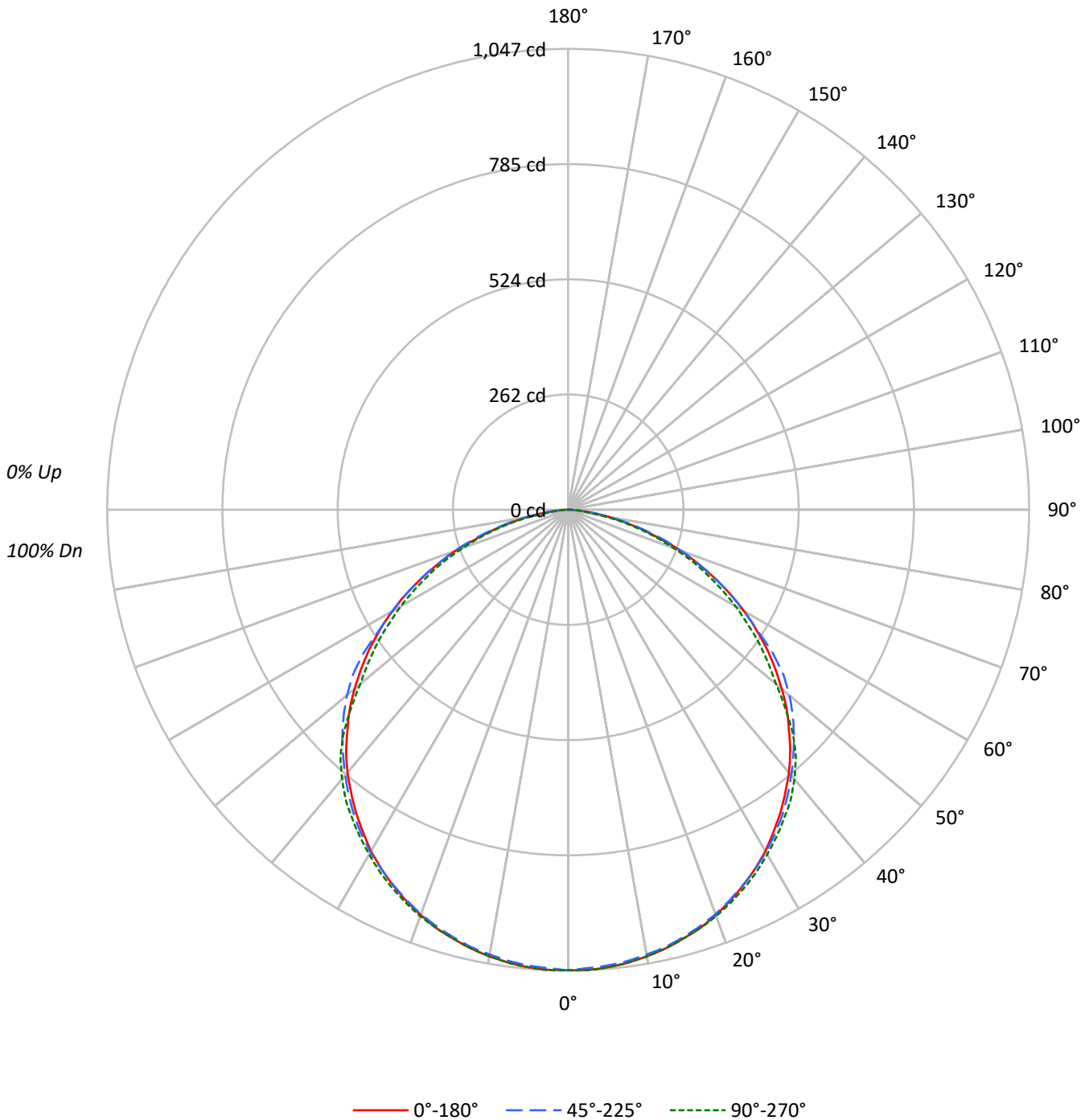
Input Watts (W): 37.386  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	65	88	78	71	65	75	69	64	73	67	63	70	65	62	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	50	46	44
6	70	57	48	42	68	56	48	41	54	47	41	52	46	41	51	45	40	38
7	65	52	43	37	63	51	42	37	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2816	2816	2816
5°	2818	2808	2818
10°	2815	2804	2815
15°	2811	2803	2811
20°	2806	2800	2814
25°	2795	2792	2813
30°	2784	2790	2809
35°	2761	2784	2810
40°	2739	2768	2807
45°	2699	2760	2748
50°	2651	2744	2579
55°	2583	2659	2483
60°	2484	2479	2365
65°	2328	2341	2213
70°	2138	2161	2002
75°	1796	1880	1711
80°	1424	1455	1206
85°	936	812	685



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.1	3.3
10°-20°	284.8	9.6
20°-30°	434.9	14.6
30°-40°	530.6	17.8
40°-50°	554.9	18.6
50°-60°	491.3	16.5
60°-70°	361.8	12.1
70°-80°	187.3	6.3
80°-90°	37.3	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°	818.9	27.5
0°-40°	1349.5	45.3
0°-60°	2395.7	80.3
0°-90°	2982.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2982.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1046	1046	1046	1046	1046	
5°	1043	1043	1039	1043	1043	99
15°	1009	1009	1006	1010	1009	285
25°	941	941	940	946	947	434
35°	840	842	848	856	856	526
45°	709	715	725	731	722	547
55°	550	562	567	537	529	491
65°	366	388	368	354	348	362
75°	173	185	181	170	165	184
85°	30	32	26	23	22	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1046.4	1046.4	1046.4	1046.4	1046.4
2.5°	1046.4	1046.4	1042.4	1046.4	1047.4
5°	1043.4	1043.4	1039.4	1043.4	1043.4
7.5°	1038.4	1037.3	1034.3	1038.4	1038.4
10°	1030.3	1030.3	1026.2	1031.3	1030.3
12.5°	1021.2	1020.2	1018.2	1022.2	1021.2
15°	1009.1	1009.1	1006.0	1010.1	1009.1
17.5°	996.9	995.9	992.9	996.9	996.9
20°	979.8	978.8	977.8	981.8	982.8
22.5°	961.6	960.6	959.6	965.6	965.6
25°	941.4	941.4	940.4	946.4	947.4
27.5°	919.2	919.2	920.2	928.3	927.2
30°	895.9	895.9	898.0	904.0	904.0
32.5°	867.7	869.7	873.7	880.8	880.8
35°	840.4	842.4	847.5	855.5	855.5
37.5°	810.1	813.1	818.2	828.3	830.3
40°	779.8	781.8	787.9	799.0	799.0
42.5°	746.4	748.5	756.5	767.7	765.6
45°	709.1	715.1	725.2	731.3	722.2
47.5°	673.7	677.8	691.9	684.8	669.7
50°	633.3	641.4	655.5	630.3	616.1
52.5°	591.9	601.0	616.1	580.8	572.7
55°	550.5	561.6	566.7	537.4	529.3
57.5°	506.0	518.2	508.1	490.9	482.8
60°	461.6	475.7	460.6	444.4	439.4
62.5°	415.1	431.3	414.1	400.0	392.9
65°	365.6	387.9	367.7	353.5	347.5
67.5°	317.2	340.4	319.2	307.1	303.0
70°	271.7	284.8	274.7	262.6	254.5
72.5°	217.2	230.3	228.3	215.1	210.1
75°	172.7	184.8	180.8	169.7	164.6
77.5°	128.3	141.4	137.4	124.2	122.2
80°	91.9	101.0	93.9	81.8	77.8
82.5°	57.6	64.6	55.6	46.5	44.4
85°	30.3	32.3	26.3	23.2	22.2
87.5°	10.1	11.1	11.1	10.1	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)