

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: P258784

Luminaire Tested: **14CZ-LD5-29-S-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258784  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35112)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-29-S-UNV-L82765-W2A1-U-3500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2928.0 lumens  
Efficiency: N/A  
Efficacy: 131.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

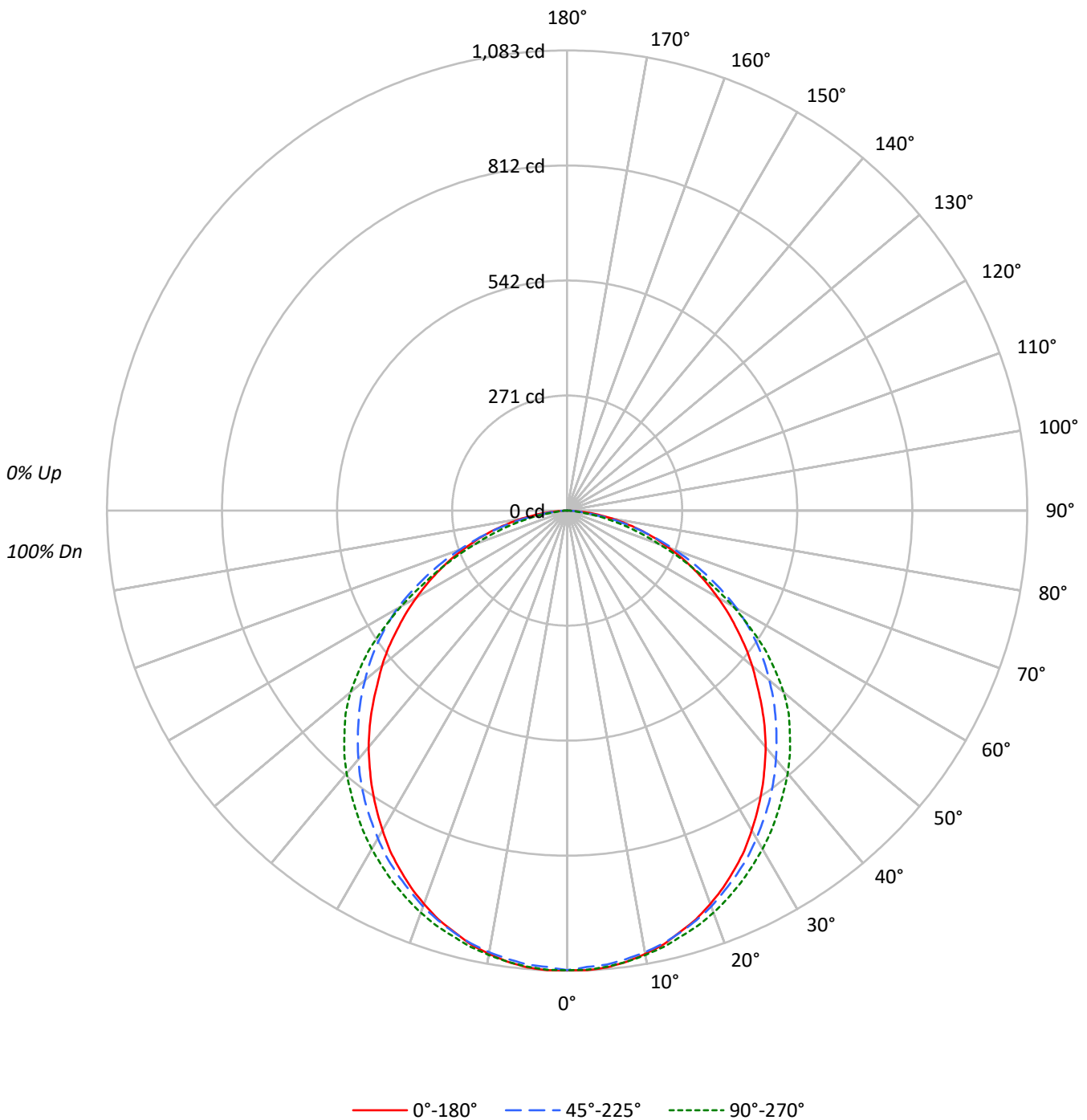
Input Watts (W): 22.227  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85					85			
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60					60			
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51					51			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44					44			
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39					39			
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31					31			
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28					28			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

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

	0°	45°	90°
0°	2911	2911	2911
5°	2915	2897	2911
10°	2895	2884	2902
15°	2861	2864	2890
20°	2821	2840	2884
25°	2766	2805	2871
30°	2700	2769	2858
35°	2627	2730	2842
40°	2553	2686	2837
45°	2463	2641	2820
50°	2382	2600	2786
55°	2289	2559	2662
60°	2205	2486	2429
65°	2110	2326	2135
70°	1991	2115	1806
75°	1858	1831	1492
80°	1638	1415	1093
85°	1291	685	605



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.2	3.5
10°-20°	291.2	9.9
20°-30°	437.0	14.9
30°-40°	520.9	17.8
40°-50°	536.6	18.3
50°-60°	478.2	16.3
60°-70°	344.6	11.8
70°-80°	180.2	6.2
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°	830.3	28.4
0°-40°	1351.2	46.1
0°-60°	2366.0	80.8
0°-90°	2928.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2928.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1082	1082	1082	1082	1082	
5°	1079	1076	1072	1079	1078	102
15°	1027	1028	1028	1038	1037	290
25°	932	937	945	963	967	429
35°	800	810	831	858	865	500
45°	647	662	694	733	741	499
55°	488	504	545	570	568	438
65°	331	343	365	348	335	328
75°	179	188	176	153	144	189
85°	42	36	22	20	20	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1081.6	1081.6	1081.6	1081.6	1081.6
2.5°	1082.9	1080.3	1075.1	1081.6	1081.6
5°	1079.0	1076.4	1072.5	1079.0	1077.7
7.5°	1071.2	1068.6	1064.6	1072.5	1071.2
10°	1059.4	1058.1	1055.5	1063.3	1062.0
12.5°	1046.4	1045.1	1043.8	1051.6	1051.6
15°	1026.8	1028.1	1028.1	1038.5	1037.2
17.5°	1008.5	1009.8	1011.1	1024.2	1024.2
20°	985.1	986.4	991.6	1005.9	1007.2
22.5°	960.3	961.6	968.1	985.1	987.7
25°	931.6	936.8	944.6	962.9	966.8
27.5°	902.9	906.8	919.8	940.7	943.3
30°	868.9	876.8	891.1	914.6	919.8
32.5°	835.0	844.1	861.1	887.2	893.7
35°	799.8	810.2	831.1	858.5	865.0
37.5°	763.3	772.4	798.5	827.2	836.3
40°	726.7	735.9	764.6	797.2	807.6
42.5°	687.6	700.6	729.3	765.9	776.3
45°	647.1	661.5	694.1	733.2	741.1
47.5°	605.4	621.0	658.9	698.0	707.2
50°	568.9	583.2	621.0	658.9	665.4
52.5°	529.7	542.8	584.5	615.8	617.1
55°	488.0	503.6	545.4	570.2	567.5
57.5°	450.1	463.2	503.6	516.7	508.8
60°	409.7	421.4	461.9	463.2	451.4
62.5°	370.5	382.3	413.6	404.5	390.1
65°	331.4	343.1	365.3	348.4	335.3
67.5°	293.6	304.0	317.0	294.9	281.8
70°	253.1	267.5	268.8	242.7	229.6
72.5°	217.9	225.7	223.1	198.3	186.6
75°	178.7	187.9	176.1	152.7	143.5
77.5°	142.2	148.7	133.1	110.9	104.4
80°	105.7	109.6	91.3	74.4	70.5
82.5°	71.8	71.8	52.2	40.4	36.5
85°	41.8	36.5	22.2	19.6	19.6
87.5°	14.4	9.1	9.1	9.1	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)