

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: P258619

Luminaire Tested: **14CZ-LD5-29-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258619  
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-LD5-29-UNV-L82765-W2A1-U-5000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3027.0 lumens  
Efficiency: N/A  
Efficacy: 133.4 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

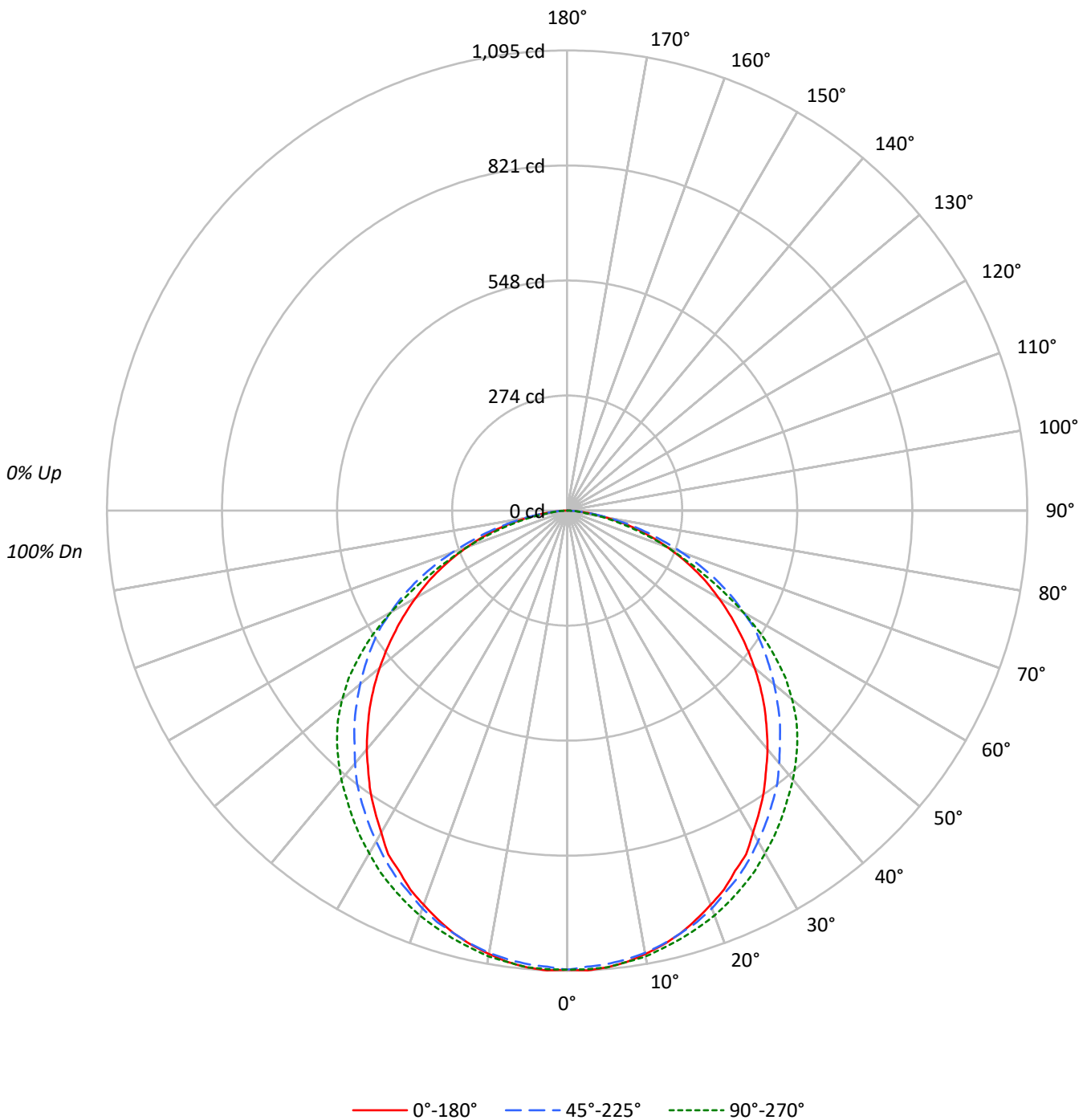
Input Watts (W): 22.692  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2940	2940	2940
5°	2947	2927	2947
10°	2928	2920	2944
15°	2902	2902	2935
20°	2859	2885	2936
25°	2809	2858	2933
30°	2750	2824	2926
35°	2682	2794	2927
40°	2605	2757	2936
45°	2527	2726	2947
50°	2436	2693	2924
55°	2338	2668	2829
60°	2241	2610	2602
65°	2138	2499	2281
70°	1984	2278	1972
75°	1800	1986	1629
80°	1433	1573	1203
85°	1013	877	692



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.4	3.4
10°-20°	295.3	9.8
20°-30°	445.2	14.7
30°-40°	533.6	17.6
40°-50°	553.8	18.3
50°-60°	499.5	16.5
60°-70°	364.4	12.0
70°-80°	191.2	6.3
80°-90°	40.8	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°	843.8	27.9
0°-40°	1377.4	45.5
0°-60°	2430.7	80.3
0°-90°	3027.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3027.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1092	1092	1092	1092	1092	
5°	1091	1088	1083	1091	1091	104
15°	1042	1042	1042	1054	1054	293
25°	946	951	962	983	988	437
35°	816	825	851	882	891	510
45°	664	678	716	760	774	512
55°	498	516	569	606	603	446
65°	336	355	392	378	358	332
75°	173	197	191	166	157	182
85°	33	40	28	24	22	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1092.4	1092.4	1092.4	1092.4	1092.4
2.5°	1095.3	1092.4	1086.4	1092.4	1092.4
5°	1090.9	1087.9	1083.4	1090.9	1090.9
7.5°	1083.4	1080.4	1077.4	1084.9	1083.4
10°	1071.5	1070.0	1068.5	1077.4	1077.4
12.5°	1058.0	1058.0	1056.5	1067.0	1065.5
15°	1041.6	1041.6	1041.6	1053.6	1053.6
17.5°	1020.7	1023.7	1026.7	1040.1	1040.1
20°	998.3	1001.3	1007.3	1023.7	1025.2
22.5°	976.0	977.5	983.4	1002.8	1007.3
25°	946.1	950.6	962.5	983.4	987.9
27.5°	922.2	923.7	937.2	961.0	967.0
30°	884.9	895.4	908.8	935.7	941.6
32.5°	850.6	859.6	880.5	908.8	917.8
35°	816.3	825.2	850.6	881.9	890.9
37.5°	777.5	790.9	820.8	852.1	862.5
40°	741.7	753.6	784.9	823.7	835.7
42.5°	702.9	714.8	749.1	792.4	805.8
45°	664.1	677.5	716.3	759.6	774.5
47.5°	623.8	638.7	679.0	726.7	740.2
50°	582.0	598.4	643.2	692.4	698.4
52.5°	540.2	558.1	605.9	649.1	655.1
55°	498.4	516.3	568.6	605.9	602.9
57.5°	458.1	477.5	531.3	550.7	547.7
60°	416.3	437.2	485.0	493.9	483.5
62.5°	377.6	397.0	441.7	434.3	420.8
65°	335.8	355.2	392.5	377.6	358.2
67.5°	294.0	317.9	341.7	316.4	301.4
70°	252.2	279.1	289.5	264.1	250.7
72.5°	211.9	240.3	237.3	211.9	203.0
75°	173.1	197.0	191.0	165.6	156.7
77.5°	131.3	158.2	144.8	123.9	116.4
80°	92.5	116.4	101.5	83.6	77.6
82.5°	61.2	77.6	62.7	49.2	44.8
85°	32.8	40.3	28.4	23.9	22.4
87.5°	13.4	11.9	10.4	10.4	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)