

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: P258787

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258787  
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-5000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3088.0 lumens  
Efficiency: N/A  
Efficacy: 136.1 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

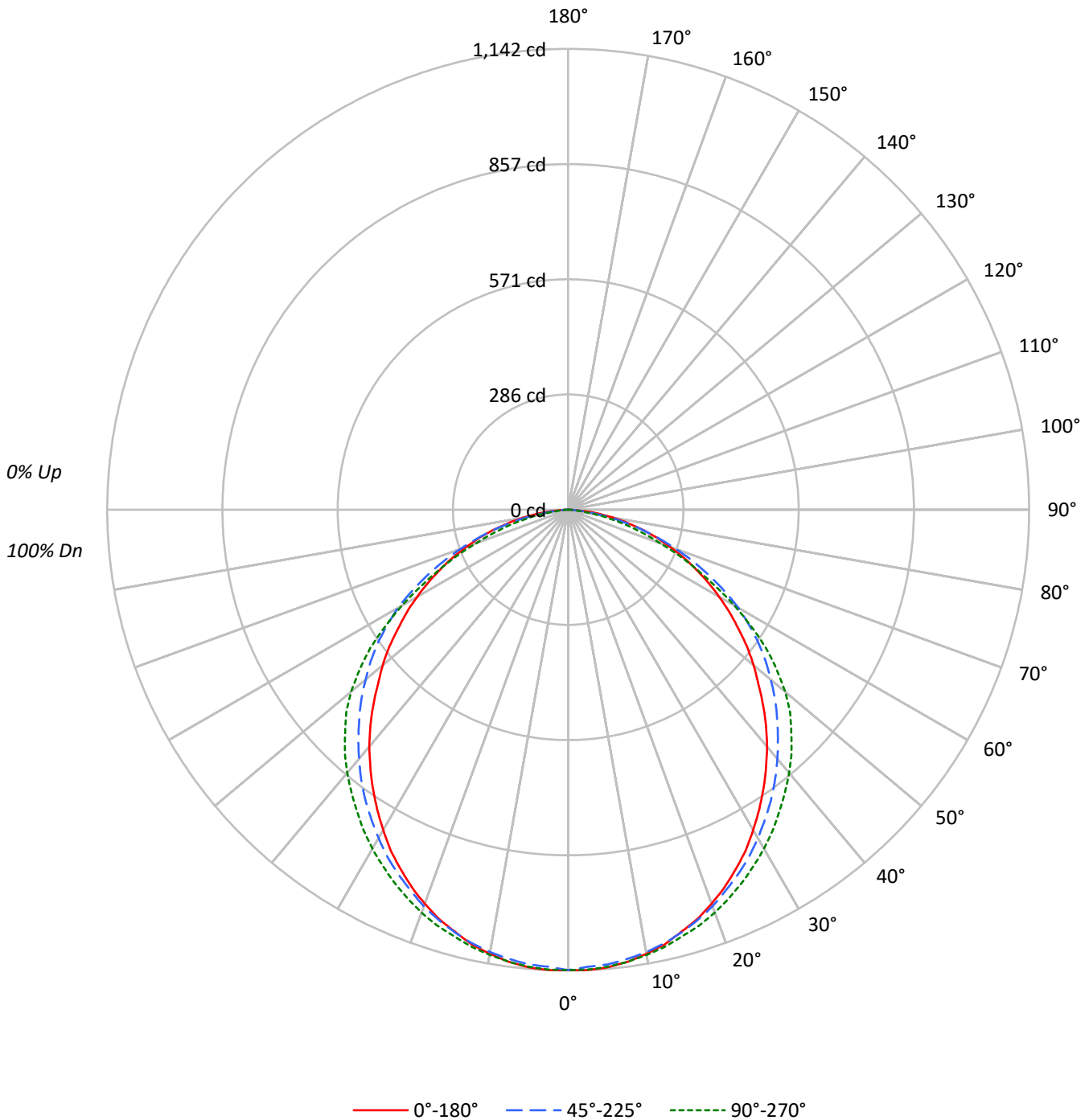
Input Watts (W): 22.692  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3070	3070	3070
5°	3074	3055	3070
10°	3053	3042	3061
15°	3017	3021	3048
20°	2975	2995	3042
25°	2917	2958	3027
30°	2848	2920	3014
35°	2771	2879	2997
40°	2692	2832	2992
45°	2597	2786	2974
50°	2511	2742	2938
55°	2414	2699	2808
60°	2326	2622	2562
65°	2225	2453	2252
70°	2100	2231	1906
75°	1960	1932	1574
80°	1728	1492	1151
85°	1359	722	636



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.8	3.5
10°-20°	307.1	9.9
20°-30°	460.8	14.9
30°-40°	549.4	17.8
40°-50°	565.9	18.3
50°-60°	504.3	16.3
60°-70°	363.4	11.8
70°-80°	190.1	6.2
80°-90°	39.3	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°	875.7	28.4
0°-40°	1425.1	46.1
0°-60°	2495.3	80.8
0°-90°	3088.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3088.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1141	1141	1141	1141	1141	
5°	1138	1135	1131	1138	1137	108
15°	1083	1084	1084	1095	1094	306
25°	982	988	996	1016	1020	453
35°	844	854	876	905	912	527
45°	682	698	732	773	782	527
55°	515	531	575	601	599	461
65°	350	362	385	367	354	346
75°	188	198	186	161	151	200
85°	44	38	23	21	21	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1140.7	1140.7	1140.7	1140.7	1140.7
2.5°	1142.1	1139.3	1133.8	1140.7	1140.7
5°	1138.0	1135.2	1131.1	1138.0	1136.6
7.5°	1129.7	1126.9	1122.8	1131.1	1129.7
10°	1117.3	1115.9	1113.2	1121.4	1120.1
12.5°	1103.6	1102.2	1100.8	1109.1	1109.1
15°	1082.9	1084.3	1084.3	1095.3	1093.9
17.5°	1063.7	1065.0	1066.4	1080.2	1080.2
20°	1038.9	1040.3	1045.8	1060.9	1062.3
22.5°	1012.7	1014.1	1021.0	1038.9	1041.6
25°	982.5	988.0	996.2	1015.5	1019.6
27.5°	952.2	956.3	970.1	992.1	994.9
30°	916.4	924.7	939.8	964.6	970.1
32.5°	880.6	890.3	908.2	935.7	942.6
35°	843.5	854.5	876.5	905.4	912.3
37.5°	805.0	814.6	842.1	872.4	882.0
40°	766.4	776.1	806.3	840.7	851.7
42.5°	725.2	738.9	769.2	807.7	818.7
45°	682.5	697.6	732.0	773.3	781.6
47.5°	638.5	655.0	694.9	736.2	745.8
50°	599.9	615.1	655.0	694.9	701.8
52.5°	558.7	572.4	616.5	649.5	650.9
55°	514.6	531.1	575.2	601.3	598.6
57.5°	474.7	488.5	531.1	544.9	536.6
60°	432.1	444.4	487.1	488.5	476.1
62.5°	390.8	403.2	436.2	426.6	411.4
65°	349.5	361.9	385.3	367.4	353.6
67.5°	309.6	320.6	334.4	311.0	297.2
70°	266.9	282.1	283.5	255.9	242.2
72.5°	229.8	238.0	235.3	209.2	196.8
75°	188.5	198.1	185.8	161.0	151.4
77.5°	150.0	156.9	140.4	117.0	110.1
80°	111.5	115.6	96.3	78.4	74.3
82.5°	75.7	75.7	55.0	42.7	38.5
85°	44.0	38.5	23.4	20.6	20.6
87.5°	15.1	9.6	9.6	9.6	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)