

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: P258618

Luminaire Tested: **14CZ-LD5-29-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258618  
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-4500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2987.0 lumens  
Efficiency: N/A  
Efficacy: 132.7 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

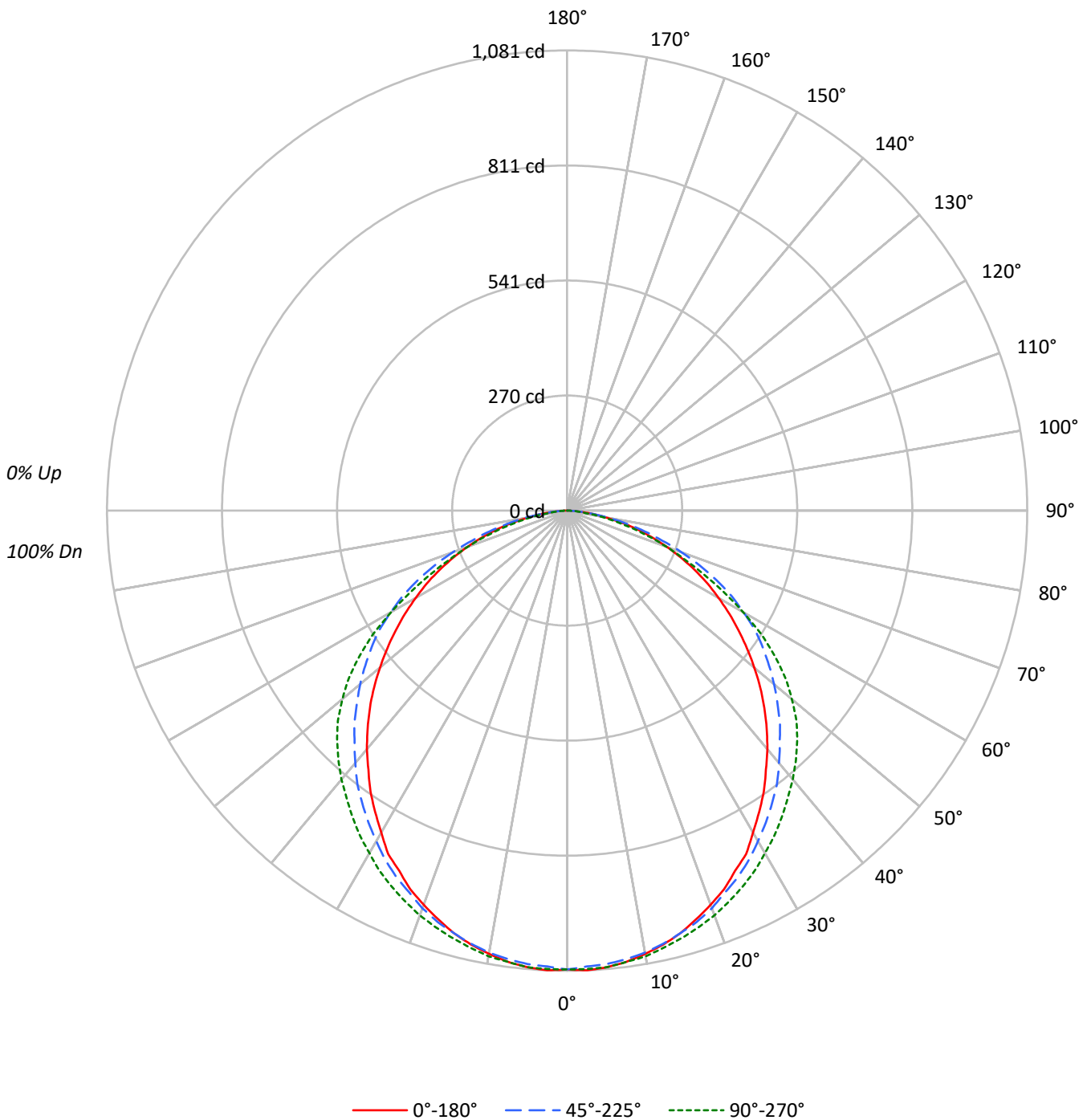
Input Watts (W): 22.506  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2901	2901	2901
5°	2908	2888	2908
10°	2889	2881	2905
15°	2864	2864	2896
20°	2821	2846	2897
25°	2772	2820	2894
30°	2713	2787	2887
35°	2646	2757	2888
40°	2571	2721	2897
45°	2494	2690	2909
50°	2404	2657	2885
55°	2307	2632	2791
60°	2211	2576	2568
65°	2110	2466	2250
70°	1958	2248	1947
75°	1776	1960	1607
80°	1415	1551	1187
85°	1000	865	682



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.0	3.4
10°-20°	291.4	9.8
20°-30°	439.3	14.7
30°-40°	526.6	17.6
40°-50°	546.5	18.3
50°-60°	492.9	16.5
60°-70°	359.5	12.0
70°-80°	188.6	6.3
80°-90°	40.2	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°	832.7	27.9
0°-40°	1359.2	45.5
0°-60°	2398.6	80.3
0°-90°	2987.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2987.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1078	1078	1078	1078	1078	
5°	1076	1074	1069	1076	1076	102
15°	1028	1028	1028	1040	1040	290
25°	934	938	950	970	975	431
35°	806	814	839	870	879	503
45°	655	668	707	750	764	505
55°	492	510	561	598	595	440
65°	331	350	387	373	353	327
75°	171	194	188	164	155	179
85°	32	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°	1077.9	1077.9	1077.9	1077.9	1077.9
2.5°	1080.9	1077.9	1072.0	1077.9	1077.9
5°	1076.5	1073.5	1069.1	1076.5	1076.5
7.5°	1069.1	1066.1	1063.2	1070.6	1069.1
10°	1057.3	1055.8	1054.4	1063.2	1063.2
12.5°	1044.1	1044.1	1042.6	1052.9	1051.4
15°	1027.9	1027.9	1027.9	1039.6	1039.6
17.5°	1007.2	1010.2	1013.1	1026.4	1026.4
20°	985.2	988.1	994.0	1010.2	1011.7
22.5°	963.1	964.5	970.4	989.6	994.0
25°	933.6	938.0	949.8	970.4	974.8
27.5°	910.1	911.5	924.8	948.3	954.2
30°	873.2	883.5	896.8	923.3	929.2
32.5°	839.4	848.2	868.8	896.8	905.6
35°	805.5	814.3	839.4	870.3	879.1
37.5°	767.2	780.5	809.9	840.8	851.1
40°	731.9	743.6	774.6	812.9	824.6
42.5°	693.6	705.4	739.2	781.9	795.2
45°	655.3	668.5	706.8	749.5	764.3
47.5°	615.5	630.3	670.0	717.1	730.4
50°	574.3	590.5	634.7	683.3	689.2
52.5°	533.1	550.7	597.9	640.6	646.5
55°	491.8	509.5	561.1	597.9	594.9
57.5°	452.1	471.2	524.2	543.4	540.4
60°	410.8	431.5	478.6	487.4	477.1
62.5°	372.6	391.7	435.9	428.5	415.3
65°	331.3	350.5	387.3	372.6	353.4
67.5°	290.1	313.7	337.2	312.2	297.5
70°	248.9	275.4	285.7	260.6	247.4
72.5°	209.1	237.1	234.1	209.1	200.3
75°	170.8	194.4	188.5	163.5	154.6
77.5°	129.6	156.1	142.8	122.2	114.9
80°	91.3	114.9	100.1	82.5	76.6
82.5°	60.4	76.6	61.8	48.6	44.2
85°	32.4	39.8	28.0	23.6	22.1
87.5°	13.3	11.8	10.3	10.3	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)