

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: P258671

Luminaire Tested: **14CZ-LD5-29-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258671  
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-L92765-W2A1-U-4000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2597.0 lumens  
Efficiency: N/A  
Efficacy: 115.9 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

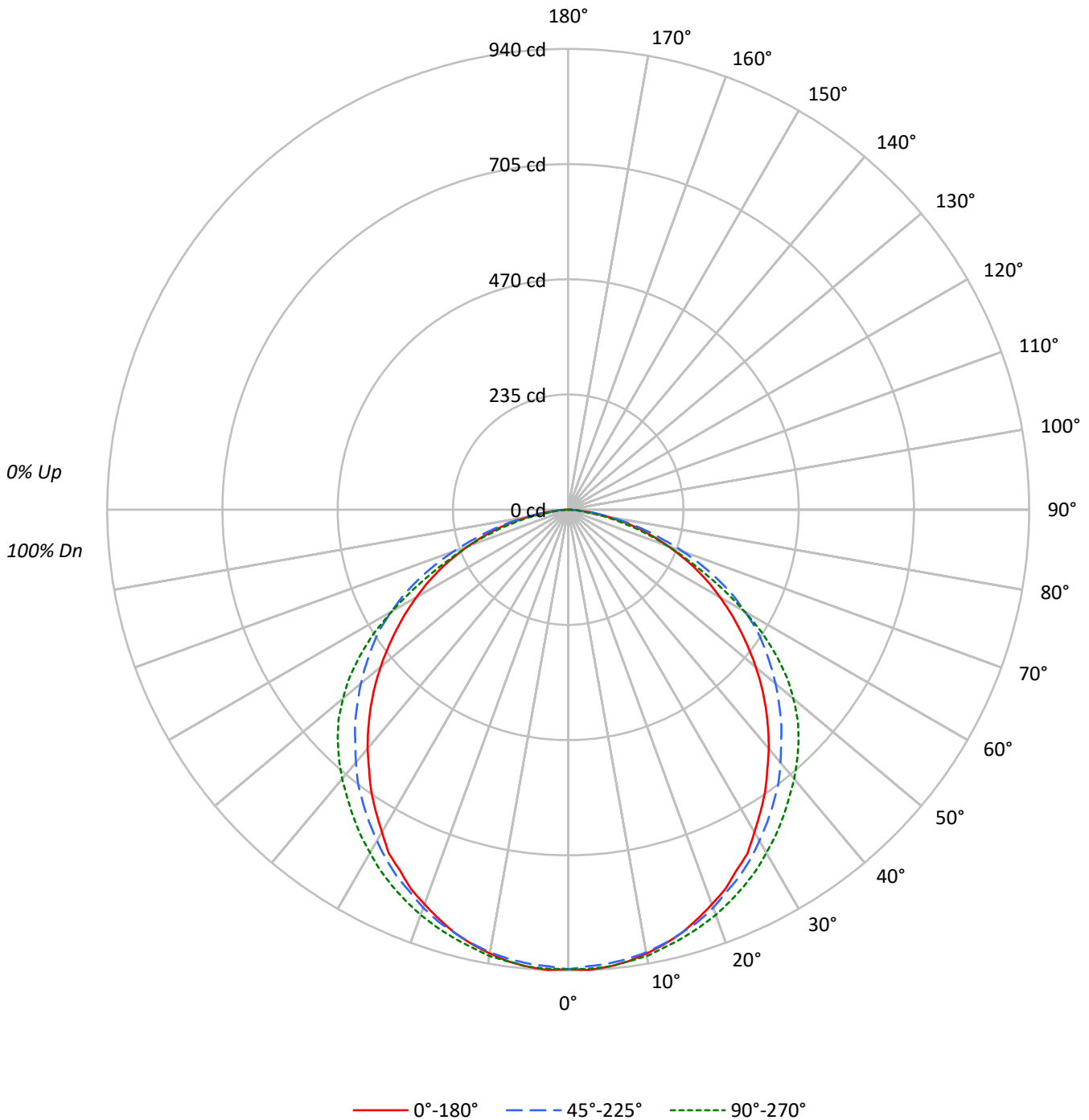
Input Watts (W): 22.413  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2522	2522	2522
5°	2528	2511	2528
10°	2512	2505	2526
15°	2490	2490	2518
20°	2453	2475	2519
25°	2410	2452	2517
30°	2359	2423	2510
35°	2301	2397	2511
40°	2235	2366	2519
45°	2168	2339	2529
50°	2090	2310	2509
55°	2006	2289	2426
60°	1922	2239	2232
65°	1834	2144	1957
70°	1703	1954	1692
75°	1544	1704	1397
80°	1230	1350	1032
85°	871	750	593



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.7	3.4
10°-20°	253.3	9.8
20°-30°	381.9	14.7
30°-40°	457.8	17.6
40°-50°	475.1	18.3
50°-60°	428.5	16.5
60°-70°	312.6	12.0
70°-80°	164.0	6.3
80°-90°	35.0	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°	723.9	27.9
0°-40°	1181.8	45.5
0°-60°	2085.4	80.3
0°-90°	2597.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2597.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	937	937	937	937	937	
5°	936	933	930	936	936	89
15°	894	894	894	904	904	252
25°	812	816	826	844	848	375
35°	700	708	730	757	764	437
45°	570	581	614	652	664	439
55°	428	443	488	520	517	383
65°	288	305	337	324	307	285
75°	148	169	164	142	134	156
85°	28	35	24	20	19	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	937.2	937.2	937.2	937.2	937.2
2.5°	939.7	937.2	932.1	937.2	937.2
5°	935.9	933.3	929.5	935.9	935.9
7.5°	929.5	926.9	924.4	930.8	929.5
10°	919.3	918.0	916.7	924.4	924.4
12.5°	907.7	907.7	906.5	915.4	914.1
15°	893.7	893.7	893.7	903.9	903.9
17.5°	875.7	878.3	880.9	892.4	892.4
20°	856.5	859.1	864.2	878.3	879.6
22.5°	837.3	838.6	843.7	860.4	864.2
25°	811.7	815.6	825.8	843.7	847.6
27.5°	791.2	792.5	804.0	824.5	829.6
30°	759.2	768.2	779.7	802.8	807.9
32.5°	729.8	737.5	755.4	779.7	787.4
35°	700.3	708.0	729.8	756.7	764.3
37.5°	667.0	678.6	704.2	731.1	740.0
40°	636.3	646.6	673.4	706.7	717.0
42.5°	603.0	613.3	642.7	679.8	691.4
45°	569.7	581.3	614.5	651.7	664.5
47.5°	535.2	548.0	582.5	623.5	635.0
50°	499.3	513.4	551.8	594.1	599.2
52.5°	463.5	478.8	519.8	556.9	562.1
55°	427.6	443.0	487.8	519.8	517.2
57.5°	393.1	409.7	455.8	472.4	469.9
60°	357.2	375.1	416.1	423.8	414.8
62.5°	323.9	340.6	379.0	372.6	361.0
65°	288.1	304.7	336.7	323.9	307.3
67.5°	252.2	272.7	293.2	271.4	258.6
70°	216.4	239.4	248.4	226.6	215.1
72.5°	181.8	206.1	203.6	181.8	174.1
75°	148.5	169.0	163.9	142.1	134.4
77.5°	112.7	135.7	124.2	106.3	99.9
80°	79.4	99.9	87.1	71.7	66.6
82.5°	52.5	66.6	53.8	42.3	38.4
85°	28.2	34.6	24.3	20.5	19.2
87.5°	11.5	10.2	9.0	9.0	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)