

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: P230917

Luminaire Tested: **14CZ-LD5-29-S-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230917  
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-L935-CD1-U  
Description: CRUZE 1x4 LED TROFFER  
WITH SMOOTH LENS  
Light Source: (84) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2563.0 lumens  
Efficiency: N/A  
Efficacy: 104.6 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

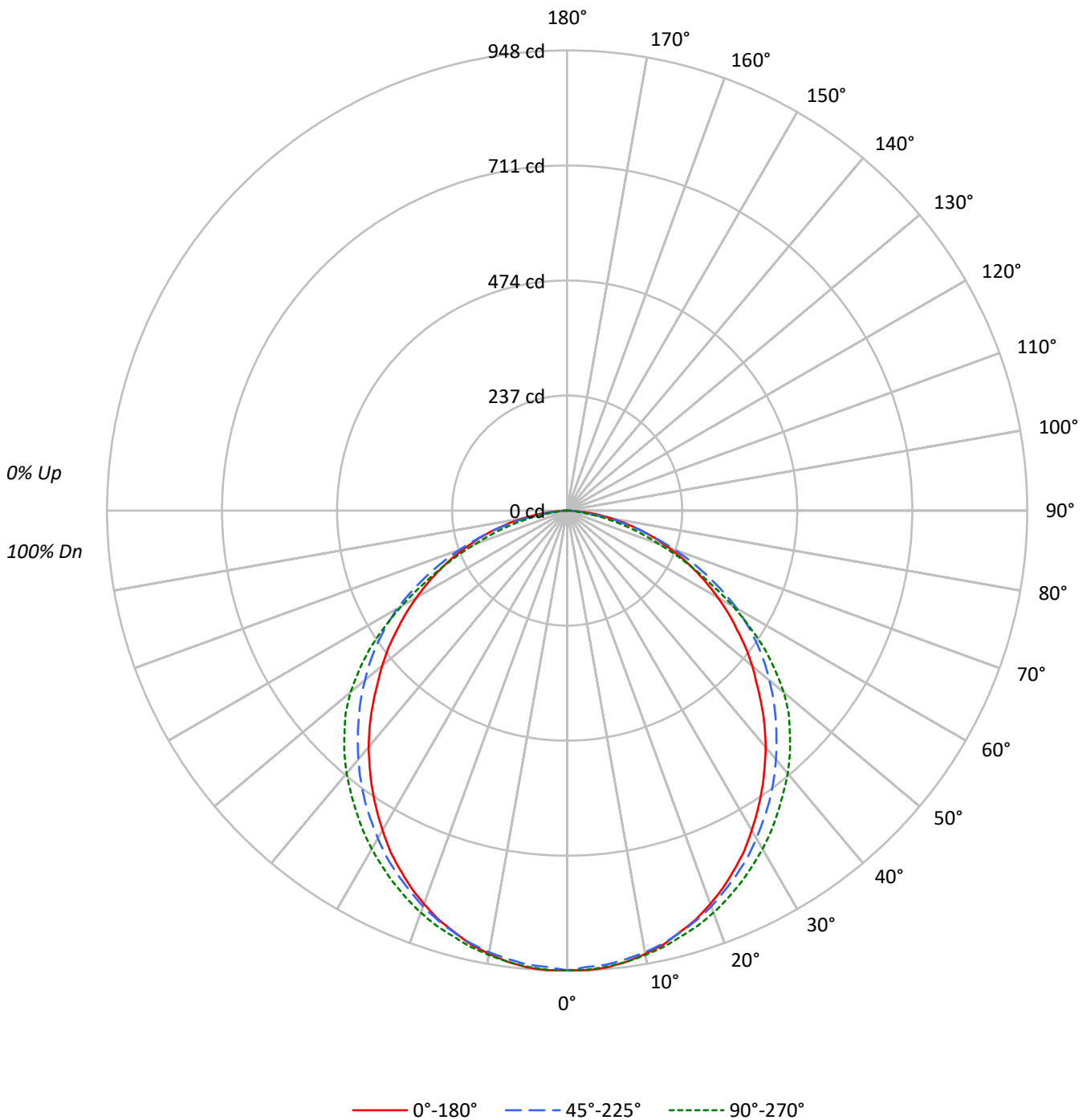
Input Watts (W): 24.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2548	2548	2548
5°	2551	2536	2548
10°	2534	2525	2540
15°	2504	2507	2529
20°	2469	2486	2525
25°	2421	2455	2513
30°	2363	2424	2502
35°	2300	2390	2487
40°	2235	2351	2483
45°	2156	2312	2469
50°	2084	2276	2439
55°	2004	2240	2331
60°	1930	2176	2127
65°	1847	2036	1869
70°	1744	1851	1581
75°	1627	1603	1306
80°	1433	1238	956
85°	1127	599	528



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.5	3.5
10°-20°	254.9	9.9
20°-30°	382.5	14.9
30°-40°	456.0	17.8
40°-50°	469.7	18.3
50°-60°	418.6	16.3
60°-70°	301.6	11.8
70°-80°	157.7	6.2
80°-90°	32.6	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°	726.8	28.4
0°-40°	1182.8	46.1
0°-60°	2071.0	80.8
0°-90°	2563.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2563.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	947	947	947	947	947	
5°	944	942	939	944	943	90
15°	899	900	900	909	908	254
25°	815	820	827	843	846	376
35°	700	709	728	752	757	438
45°	566	579	608	642	649	437
55°	427	441	477	499	497	383
65°	290	300	320	305	294	287
75°	156	164	154	134	126	166
85°	36	32	19	17	17	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	946.8	946.8	946.8	946.8	946.8
2.5°	947.9	945.6	941.1	946.8	946.8
5°	944.5	942.2	938.8	944.5	943.3
7.5°	937.6	935.4	931.9	938.8	937.6
10°	927.4	926.2	923.9	930.8	929.6
12.5°	915.9	914.8	913.7	920.5	920.5
15°	898.8	899.9	899.9	909.1	907.9
17.5°	882.8	884.0	885.1	896.5	896.5
20°	862.3	863.4	868.0	880.5	881.7
22.5°	840.6	841.7	847.4	862.3	864.5
25°	815.4	820.0	826.9	842.8	846.3
27.5°	790.3	793.7	805.2	823.4	825.7
30°	760.6	767.5	780.0	800.6	805.2
32.5°	730.9	738.9	753.8	776.6	782.3
35°	700.1	709.2	727.5	751.5	757.2
37.5°	668.1	676.1	698.9	724.1	732.1
40°	636.1	644.1	669.3	697.8	706.9
42.5°	601.9	613.3	638.4	670.4	679.5
45°	566.5	579.0	607.6	641.8	648.7
47.5°	529.9	543.6	576.7	611.0	619.0
50°	497.9	510.5	543.6	576.7	582.5
52.5°	463.7	475.1	511.6	539.1	540.2
55°	427.1	440.8	477.4	499.1	496.8
57.5°	394.0	405.4	440.8	452.3	445.4
60°	358.6	368.9	404.3	405.4	395.2
62.5°	324.3	334.6	362.0	354.0	341.5
65°	290.1	300.4	319.8	304.9	293.5
67.5°	257.0	266.1	277.5	258.1	246.7
70°	221.6	234.1	235.3	212.4	201.0
72.5°	190.7	197.6	195.3	173.6	163.3
75°	156.5	164.5	154.2	133.6	125.6
77.5°	124.5	130.2	116.5	97.1	91.4
80°	92.5	95.9	79.9	65.1	61.7
82.5°	62.8	62.8	45.7	35.4	32.0
85°	36.5	32.0	19.4	17.1	17.1
87.5°	12.6	8.0	8.0	8.0	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)