

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: P258777

Luminaire Tested: **14CZ-LD5-25-S-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258777  
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-LD5-25-S-UNV-L82765-W2A1-U-4500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2549.0 lumens  
Efficiency: N/A  
Efficacy: 137.0 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

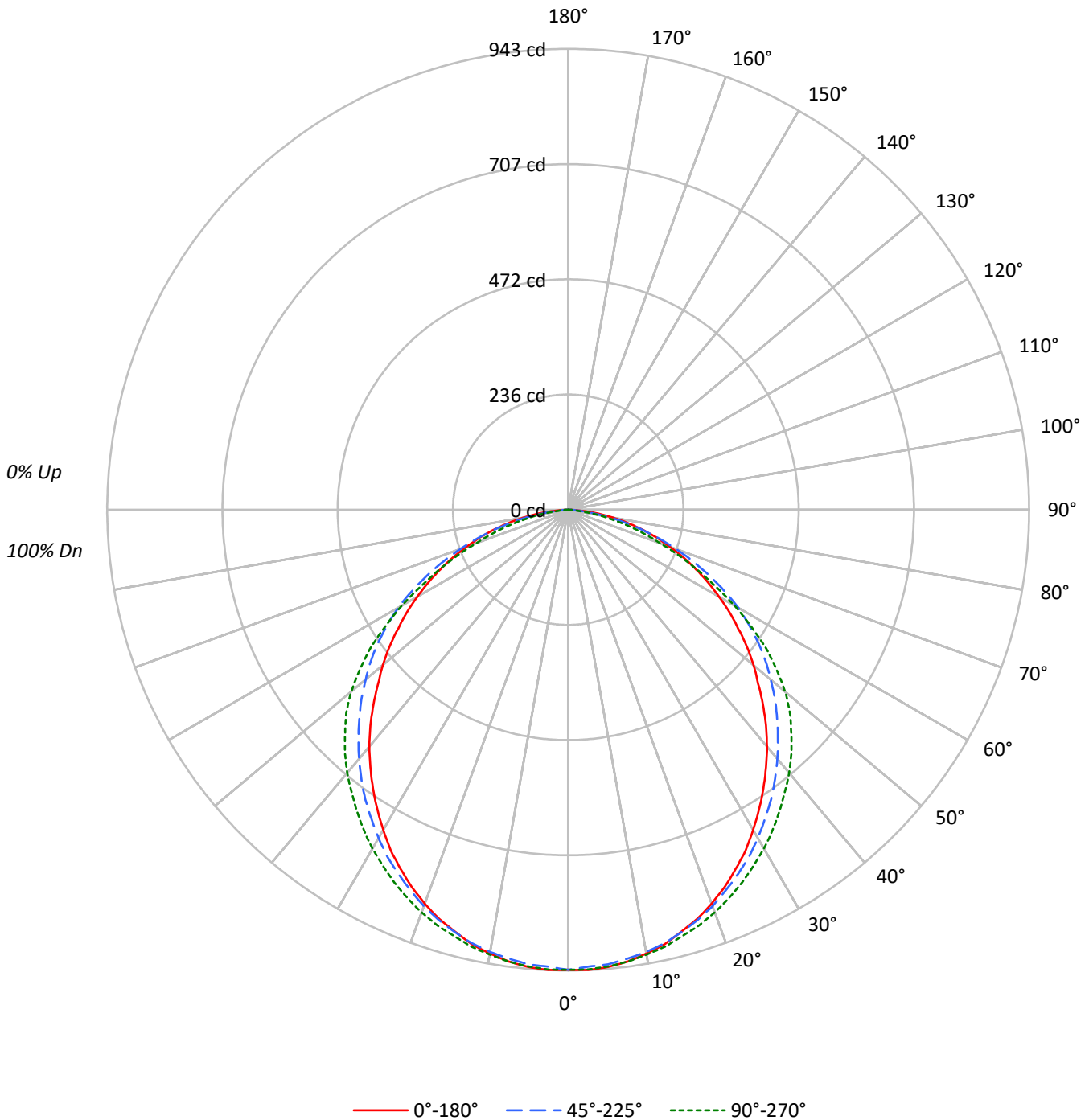
Input Watts (W): 18.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2534	2534	2534
5°	2537	2522	2534
10°	2520	2511	2526
15°	2490	2493	2516
20°	2456	2472	2511
25°	2408	2442	2499
30°	2351	2411	2488
35°	2287	2377	2474
40°	2223	2338	2470
45°	2144	2300	2455
50°	2073	2264	2425
55°	1993	2228	2318
60°	1920	2164	2115
65°	1837	2025	1859
70°	1734	1841	1573
75°	1618	1594	1299
80°	1426	1232	950
85°	1121	596	525



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.0	3.5
10°-20°	253.5	9.9
20°-30°	380.4	14.9
30°-40°	453.5	17.8
40°-50°	467.1	18.3
50°-60°	416.3	16.3
60°-70°	300.0	11.8
70°-80°	156.9	6.2
80°-90°	32.4	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°	722.8	28.4
0°-40°	1176.3	46.1
0°-60°	2059.7	80.8
0°-90°	2549.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2549.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	942	942	942	942	942	
5°	939	937	934	939	938	89
15°	894	895	895	904	903	252
25°	811	816	822	838	842	374
35°	696	705	724	747	753	435
45°	563	576	604	638	645	435
55°	425	438	475	496	494	381
65°	288	299	318	303	292	286
75°	156	164	153	133	125	165
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°	941.6	941.6	941.6	941.6	941.6
2.5°	942.7	940.5	935.9	941.6	941.6
5°	939.3	937.1	933.7	939.3	938.2
7.5°	932.5	930.2	926.8	933.7	932.5
10°	922.3	921.2	918.9	925.7	924.6
12.5°	910.9	909.8	908.7	915.5	915.5
15°	893.9	895.0	895.0	904.1	903.0
17.5°	878.0	879.1	880.3	891.6	891.6
20°	857.6	858.7	863.2	875.7	876.9
22.5°	836.0	837.1	842.8	857.6	859.8
25°	811.0	815.5	822.3	838.2	841.6
27.5°	786.0	789.4	800.8	818.9	821.2
30°	756.5	763.3	775.8	796.2	800.8
32.5°	726.9	734.9	749.6	772.4	778.0
35°	696.3	705.3	723.5	747.4	753.1
37.5°	664.5	672.4	695.1	720.1	728.1
40°	632.7	640.6	665.6	694.0	703.1
42.5°	598.6	609.9	634.9	666.7	675.8
45°	563.4	575.9	604.3	638.3	645.2
47.5°	527.0	540.7	573.6	607.7	615.6
50°	495.2	507.7	540.7	573.6	579.3
52.5°	461.1	472.5	508.9	536.1	537.2
55°	424.8	438.4	474.8	496.4	494.1
57.5°	391.9	403.2	438.4	449.8	443.0
60°	356.7	366.9	402.1	403.2	393.0
62.5°	322.6	332.8	360.1	352.1	339.6
65°	288.5	298.7	318.0	303.3	291.9
67.5°	255.6	264.6	276.0	256.7	245.3
70°	220.4	232.8	234.0	211.3	199.9
72.5°	189.7	196.5	194.2	172.6	162.4
75°	155.6	163.6	153.3	132.9	124.9
77.5°	123.8	129.5	115.9	96.5	90.9
80°	92.0	95.4	79.5	64.7	61.3
82.5°	62.5	62.5	45.4	35.2	31.8
85°	36.3	31.8	19.3	17.0	17.0
87.5°	12.5	8.0	8.0	8.0	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)