

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: P258609

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258609  
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-LD5-25-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: 2499.0 lumens  
Efficiency: N/A  
Efficacy: 134.4 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

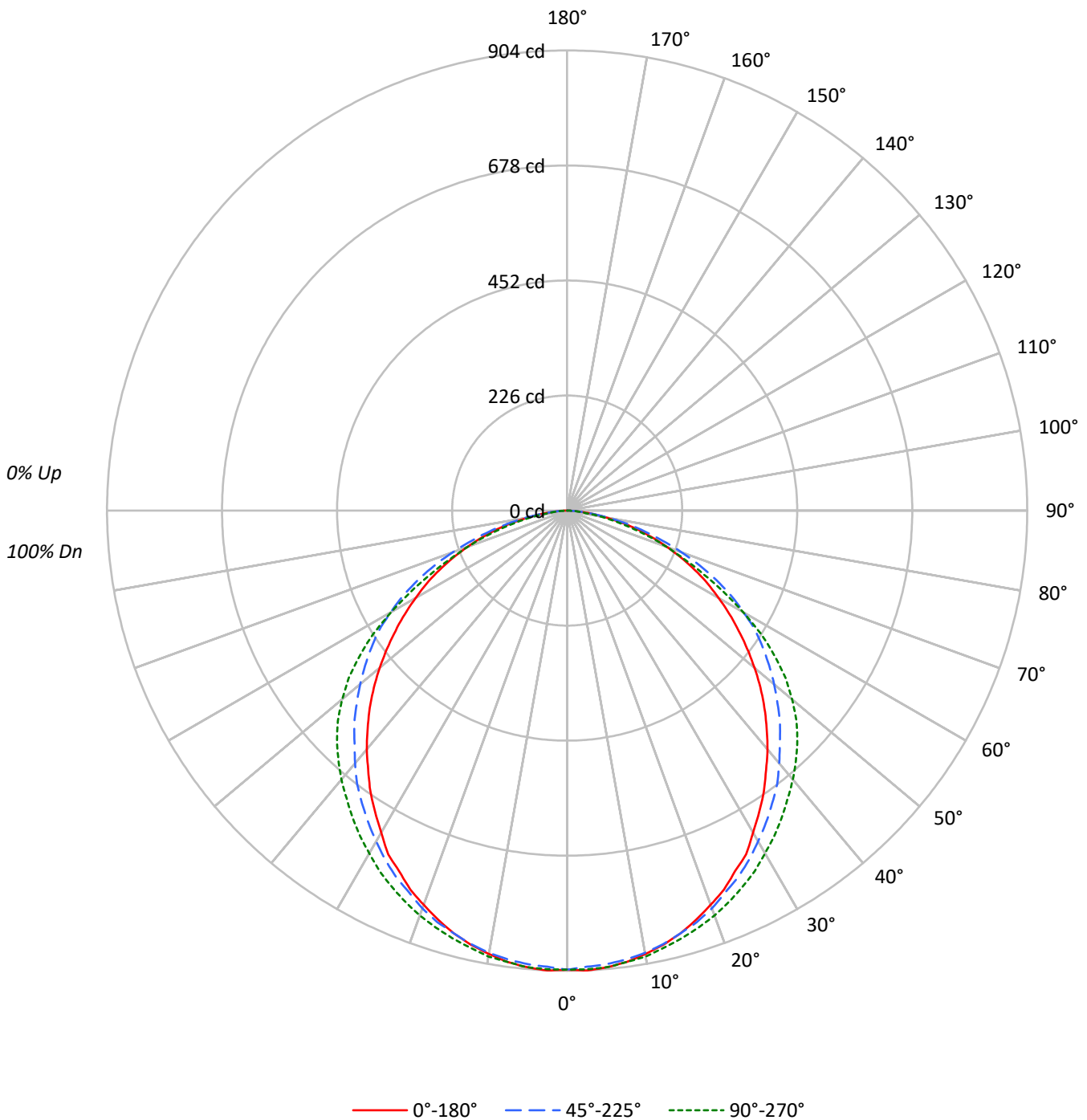
Input Watts (W): 18.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70					70			
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59					59			
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51					51			
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44					44			
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38					38			
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34					34			
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30					30			
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27					27			
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25					25			

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

	0°	45°	90°
0°	2427	2427	2427
5°	2433	2416	2433
10°	2417	2410	2431
15°	2396	2396	2423
20°	2360	2381	2424
25°	2319	2359	2422
30°	2270	2331	2416
35°	2214	2307	2416
40°	2151	2276	2423
45°	2086	2251	2433
50°	2012	2223	2414
55°	1931	2202	2335
60°	1850	2155	2148
65°	1765	2063	1883
70°	1638	1880	1629
75°	1486	1640	1345
80°	1184	1299	993
85°	837	722	571



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.3	3.4
10°-20°	243.8	9.8
20°-30°	367.5	14.7
30°-40°	440.5	17.6
40°-50°	457.2	18.3
50°-60°	412.4	16.5
60°-70°	300.8	12.0
70°-80°	157.8	6.3
80°-90°	33.7	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°	696.6	27.9
0°-40°	1137.2	45.5
0°-60°	2006.7	80.3
0°-90°	2499.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2499.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	902	902	902	902	902	
5°	901	898	894	901	901	85
15°	860	860	860	870	870	242
25°	781	785	795	812	816	360
35°	674	681	702	728	736	421
45°	548	559	591	627	639	423
55°	412	426	469	500	498	368
65°	277	293	324	312	296	274
75°	143	163	158	137	129	150
85°	27	33	23	20	18	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	901.8	901.8	901.8	901.8	901.8
2.5°	904.3	901.8	896.9	901.8	901.8
5°	900.6	898.1	894.4	900.6	900.6
7.5°	894.4	892.0	889.5	895.7	894.4
10°	884.6	883.3	882.1	889.5	889.5
12.5°	873.5	873.5	872.3	880.9	879.6
15°	859.9	859.9	859.9	869.8	869.8
17.5°	842.7	845.1	847.6	858.7	858.7
20°	824.2	826.7	831.6	845.1	846.4
22.5°	805.7	807.0	811.9	827.9	831.6
25°	781.1	784.8	794.6	811.9	815.6
27.5°	761.4	762.6	773.7	793.4	798.3
30°	730.6	739.2	750.3	772.5	777.4
32.5°	702.2	709.6	726.9	750.3	757.7
35°	673.9	681.3	702.2	728.1	735.5
37.5°	641.9	653.0	677.6	703.5	712.1
40°	612.3	622.2	648.0	680.1	689.9
42.5°	580.3	590.1	618.5	654.2	665.3
45°	548.2	559.3	591.4	627.1	639.4
47.5°	515.0	527.3	560.6	600.0	611.1
50°	480.5	494.0	531.0	571.6	576.6
52.5°	446.0	460.8	500.2	535.9	540.8
55°	411.5	426.3	469.4	500.2	497.7
57.5°	378.2	394.2	438.6	454.6	452.1
60°	343.7	361.0	400.4	407.8	399.2
62.5°	311.7	327.7	364.7	358.5	347.4
65°	277.2	293.2	324.0	311.7	295.7
67.5°	242.7	262.4	282.1	261.2	248.9
70°	208.2	230.4	239.0	218.1	207.0
72.5°	174.9	198.4	195.9	174.9	167.6
75°	142.9	162.6	157.7	136.8	129.4
77.5°	108.4	130.6	119.5	102.3	96.1
80°	76.4	96.1	83.8	69.0	64.1
82.5°	50.5	64.1	51.7	40.7	37.0
85°	27.1	33.3	23.4	19.7	18.5
87.5°	11.1	9.9	8.6	8.6	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)