

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: P258712

Luminaire Tested: **14CZ-LD5-25-S-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258712  
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-L83050-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: 2659.7 lumens  
Efficiency: N/A  
Efficacy: 138.8 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

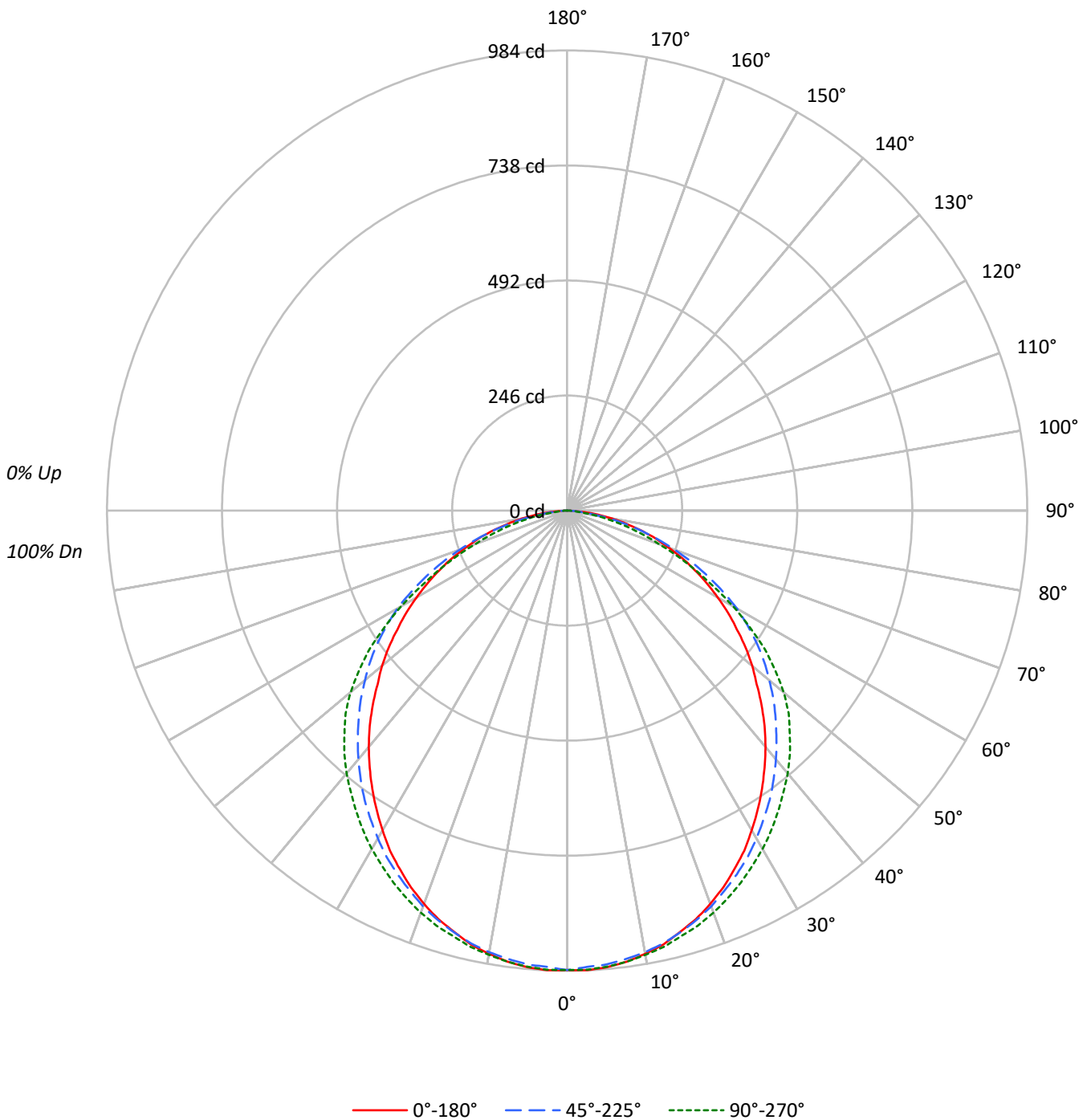
Input Watts (W): 19.158  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2644	2644	2644
5°	2648	2632	2645
10°	2630	2620	2636
15°	2598	2602	2625
20°	2562	2579	2620
25°	2513	2548	2608
30°	2453	2515	2596
35°	2387	2480	2581
40°	2319	2440	2577
45°	2237	2399	2562
50°	2163	2362	2530
55°	2080	2324	2419
60°	2003	2258	2207
65°	1917	2113	1940
70°	1809	1921	1641
75°	1688	1664	1356
80°	1488	1286	992
85°	1170	621	550



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.8	3.5
10°-20°	264.5	9.9
20°-30°	396.9	14.9
30°-40°	473.2	17.8
40°-50°	487.4	18.3
50°-60°	434.4	16.3
60°-70°	313.0	11.8
70°-80°	163.7	6.2
80°-90°	33.9	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°	754.2	28.4
0°-40°	1227.4	46.1
0°-60°	2149.2	80.8
0°-90°	2659.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2659.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	982	982	982	982	982	
5°	980	978	974	980	979	93
15°	933	934	934	943	942	263
25°	846	851	858	875	878	390
35°	726	736	755	780	786	454
45°	588	601	630	666	673	454
55°	443	458	495	518	516	398
65°	301	312	332	316	305	298
75°	162	171	160	139	130	172
85°	38	33	20	18	18	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	982.5	982.5	982.5	982.5	982.5
2.5°	983.7	981.3	976.6	982.5	982.5
5°	980.1	977.8	974.2	980.1	979.0
7.5°	973.0	970.7	967.1	974.2	973.0
10°	962.4	961.2	958.8	965.9	964.7
12.5°	950.5	949.3	948.1	955.3	955.3
15°	932.7	933.9	933.9	943.4	942.2
17.5°	916.1	917.3	918.5	930.4	930.4
20°	894.8	896.0	900.7	913.8	915.0
22.5°	872.3	873.5	879.4	894.8	897.2
25°	846.2	851.0	858.1	874.7	878.2
27.5°	820.1	823.7	835.6	854.5	856.9
30°	789.3	796.4	809.5	830.8	835.6
32.5°	758.5	766.8	782.2	805.9	811.8
35°	726.5	736.0	755.0	779.8	785.8
37.5°	693.3	701.6	725.3	751.4	759.7
40°	660.1	668.4	694.5	724.1	733.6
42.5°	624.6	636.4	662.5	695.7	705.2
45°	587.8	600.9	630.5	666.1	673.2
47.5°	549.9	564.1	598.5	634.1	642.4
50°	516.7	529.8	564.1	598.5	604.4
52.5°	481.2	493.0	531.0	559.4	560.6
55°	443.3	457.5	495.4	517.9	515.6
57.5°	408.9	420.7	457.5	469.3	462.2
60°	372.1	382.8	419.6	420.7	410.1
62.5°	336.6	347.3	375.7	367.4	354.4
65°	301.0	311.7	331.9	316.4	304.6
67.5°	266.7	276.1	288.0	267.9	256.0
70°	229.9	243.0	244.1	220.4	208.6
72.5°	197.9	205.0	202.7	180.1	169.5
75°	162.4	170.7	160.0	138.7	130.4
77.5°	129.2	135.1	120.9	100.7	94.8
80°	96.0	99.6	83.0	67.6	64.0
82.5°	65.2	65.2	47.4	36.7	33.2
85°	37.9	33.2	20.1	17.8	17.8
87.5°	13.0	8.3	8.3	8.3	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)