

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: P258574

Luminaire Tested: **14CZ-LD5-25-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258574  
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-L93050-W2A1-U-4500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2298.0 lumens  
Efficiency: N/A  
Efficacy: 121.1 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

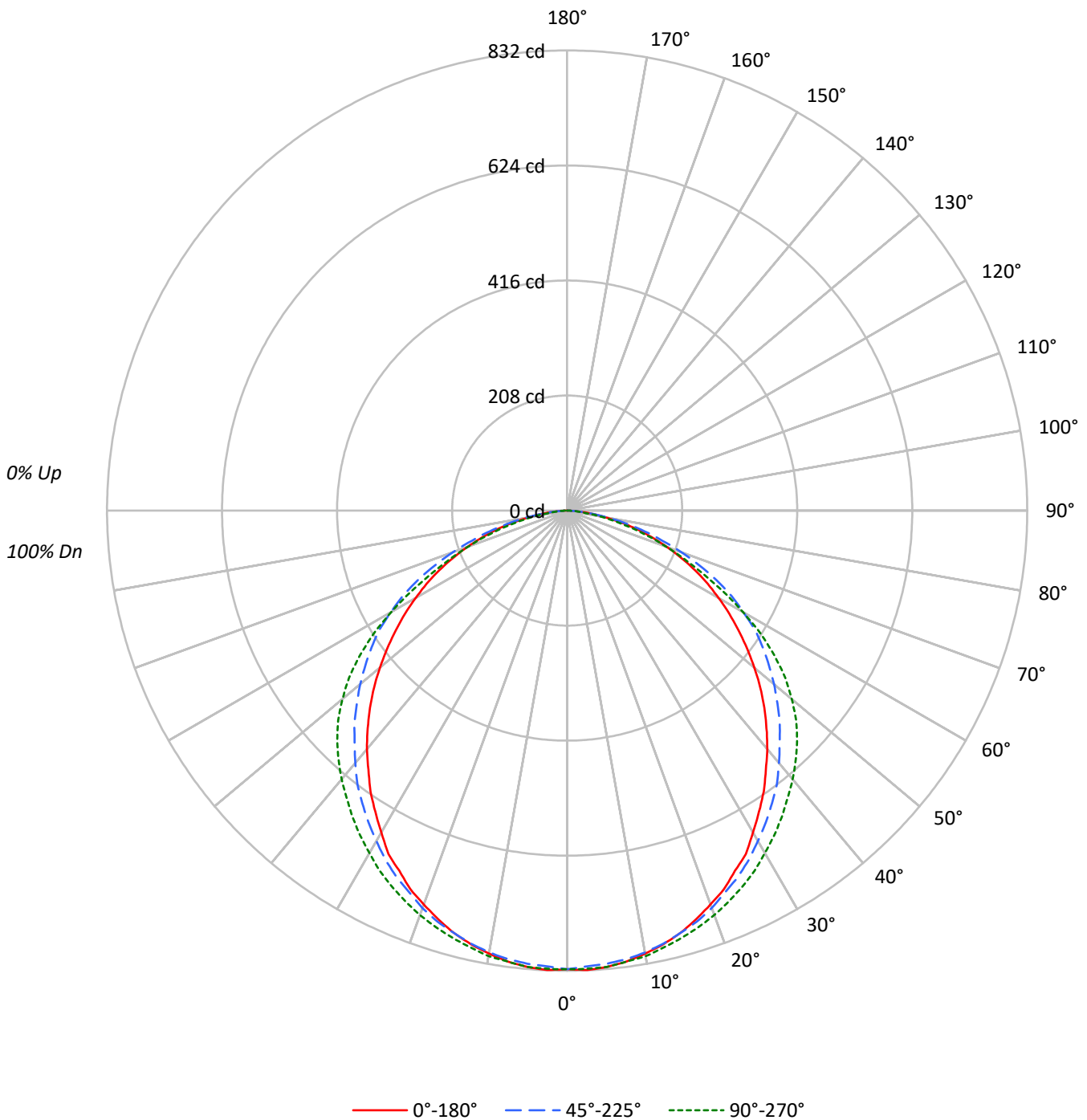
Input Watts (W): 18.972  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2232	2232	2232
5°	2237	2222	2237
10°	2223	2217	2235
15°	2203	2203	2228
20°	2170	2190	2229
25°	2133	2170	2227
30°	2087	2144	2221
35°	2036	2122	2222
40°	1978	2093	2229
45°	1918	2069	2238
50°	1850	2044	2220
55°	1775	2025	2147
60°	1701	1982	1976
65°	1623	1897	1731
70°	1507	1729	1497
75°	1366	1508	1237
80°	1088	1193	913
85°	769	664	525



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.5	3.4
10°-20°	224.2	9.8
20°-30°	338.0	14.7
30°-40°	405.1	17.6
40°-50°	420.4	18.3
50°-60°	379.2	16.5
60°-70°	276.6	12.0
70°-80°	145.1	6.3
80°-90°	30.9	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°	640.6	27.9
0°-40°	1045.7	45.5
0°-60°	1845.3	80.3
0°-90°	2298.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2298.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	829	829	829	829	829	
5°	828	826	822	828	828	79
15°	791	791	791	800	800	223
25°	718	722	731	747	750	331
35°	620	626	646	670	676	387
45°	504	514	544	577	588	389
55°	378	392	432	460	458	339
65°	255	270	298	287	272	252
75°	131	150	145	126	119	138
85°	25	31	22	18	17	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	829.3	829.3	829.3	829.3	829.3
2.5°	831.5	829.3	824.8	829.3	829.3
5°	828.2	825.9	822.5	828.2	828.2
7.5°	822.5	820.2	818.0	823.6	822.5
10°	813.4	812.3	811.2	818.0	818.0
12.5°	803.2	803.2	802.1	810.0	808.9
15°	790.8	790.8	790.8	799.8	799.8
17.5°	774.9	777.2	779.4	789.6	789.6
20°	757.9	760.2	764.7	777.2	778.3
22.5°	740.9	742.0	746.6	761.3	764.7
25°	718.3	721.7	730.7	746.6	750.0
27.5°	700.1	701.3	711.5	729.6	734.1
30°	671.8	679.7	689.9	710.3	714.9
32.5°	645.8	652.6	668.4	689.9	696.7
35°	619.7	626.5	645.8	669.5	676.3
37.5°	590.2	600.4	623.1	646.9	654.8
40°	563.1	572.1	595.9	625.4	634.4
42.5°	533.6	542.7	568.7	601.6	611.8
45°	504.1	514.3	543.8	576.6	588.0
47.5°	473.6	484.9	515.5	551.7	561.9
50°	441.8	454.3	488.3	525.7	530.2
52.5°	410.1	423.7	460.0	492.8	497.3
55°	378.4	392.0	431.6	460.0	457.7
57.5°	347.8	362.5	403.3	418.0	415.8
60°	316.1	331.9	368.2	375.0	367.1
62.5°	286.6	301.4	335.3	329.7	319.5
65°	254.9	269.6	298.0	286.6	271.9
67.5°	223.2	241.3	259.4	240.2	228.8
70°	191.5	211.9	219.8	200.5	190.3
72.5°	160.9	182.4	180.1	160.9	154.1
75°	131.4	149.5	145.0	125.8	119.0
77.5°	99.7	120.1	109.9	94.0	88.4
80°	70.2	88.4	77.0	63.4	58.9
82.5°	46.4	58.9	47.6	37.4	34.0
85°	24.9	30.6	21.5	18.1	17.0
87.5°	10.2	9.1	7.9	7.9	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)