

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: P259194

Luminaire Tested: **14CZ-LD5-39-SQP-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259194  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35908)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-39-SQP-UNV-L92765-W2A1-U-4500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2280.0 lumens  
Efficiency: N/A  
Efficacy: 72.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

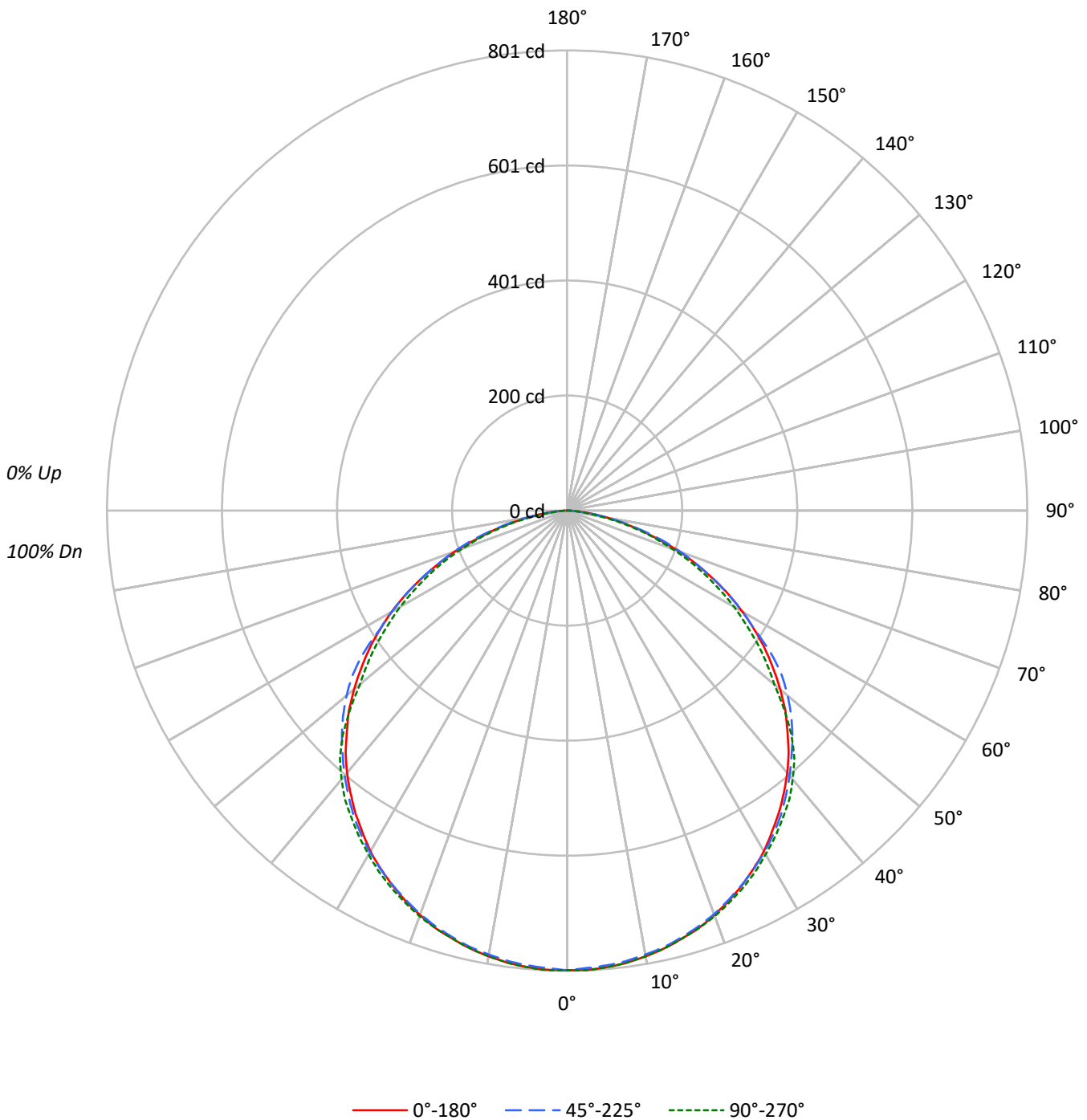
Input Watts (W): 31.527  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	65	88	78	71	65	75	69	64	73	67	63	70	65	62	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	50	46	44
6	70	57	48	42	68	56	48	41	54	47	41	52	46	41	51	45	40	38
7	65	52	43	37	63	51	42	37	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2153	2153	2153
5°	2155	2147	2155
10°	2152	2144	2152
15°	2149	2143	2149
20°	2145	2141	2152
25°	2137	2135	2151
30°	2128	2133	2148
35°	2111	2129	2149
40°	2094	2116	2146
45°	2063	2110	2101
50°	2027	2098	1972
55°	1975	2033	1899
60°	1899	1896	1808
65°	1780	1790	1692
70°	1634	1653	1531
75°	1373	1437	1309
80°	1089	1113	922
85°	716	621	525



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.8	3.3
10°-20°	217.8	9.6
20°-30°	332.5	14.6
30°-40°	405.7	17.8
40°-50°	424.3	18.6
50°-60°	375.6	16.5
60°-70°	276.6	12.1
70°-80°	143.2	6.3
80°-90°	28.5	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°	626.1	27.5
0°-40°	1031.8	45.3
0°-60°	1831.7	80.3
0°-90°	2280.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2280.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	800	800	800	800	800	
5°	798	798	795	798	798	76
15°	772	772	769	772	772	218
25°	720	720	719	724	724	332
35°	642	644	648	654	654	402
45°	542	547	554	559	552	419
55°	421	429	433	411	405	375
65°	280	297	281	270	266	277
75°	132	141	138	130	126	141
85°	23	25	20	18	17	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	800.1	800.1	800.1	800.1	800.1
2.5°	800.1	800.1	797.0	800.1	800.9
5°	797.8	797.8	794.7	797.8	797.8
7.5°	793.9	793.1	790.8	793.9	793.9
10°	787.7	787.7	784.6	788.5	787.7
12.5°	780.8	780.0	778.5	781.6	780.8
15°	771.5	771.5	769.2	772.3	771.5
17.5°	762.2	761.5	759.2	762.2	762.2
20°	749.1	748.3	747.6	750.7	751.4
22.5°	735.2	734.4	733.7	738.3	738.3
25°	719.8	719.8	719.0	723.6	724.4
27.5°	702.8	702.8	703.6	709.7	709.0
30°	685.0	685.0	686.6	691.2	691.2
32.5°	663.4	664.9	668.0	673.4	673.4
35°	642.5	644.1	648.0	654.1	654.1
37.5°	619.4	621.7	625.6	633.3	634.8
40°	596.2	597.8	602.4	610.9	610.9
42.5°	570.7	572.3	578.4	586.9	585.4
45°	542.1	546.8	554.5	559.1	552.2
47.5°	515.1	518.2	529.0	523.6	512.0
50°	484.2	490.4	501.2	481.9	471.1
52.5°	452.6	459.5	471.1	444.1	437.9
55°	420.9	429.4	433.3	410.9	404.7
57.5°	386.9	396.2	388.5	375.3	369.2
60°	352.9	363.7	352.2	339.8	335.9
62.5°	317.4	329.8	316.6	305.8	300.4
65°	279.6	296.6	281.1	270.3	265.7
67.5°	242.5	260.3	244.0	234.8	231.7
70°	207.7	217.8	210.1	200.8	194.6
72.5°	166.0	176.1	174.5	164.5	160.6
75°	132.1	141.3	138.2	129.7	125.9
77.5°	98.1	108.1	105.0	95.0	93.4
80°	70.3	77.2	71.8	62.6	59.5
82.5°	44.0	49.4	42.5	35.5	34.0
85°	23.2	24.7	20.1	17.8	17.0
87.5°	7.7	8.5	8.5	7.7	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)