

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: P259092

Luminaire Tested: **14CZ-LD5-39-SQP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259092  
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-L93050-W2A1-U-4000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2310.0 lumens  
Efficiency: N/A  
Efficacy: 72.6 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

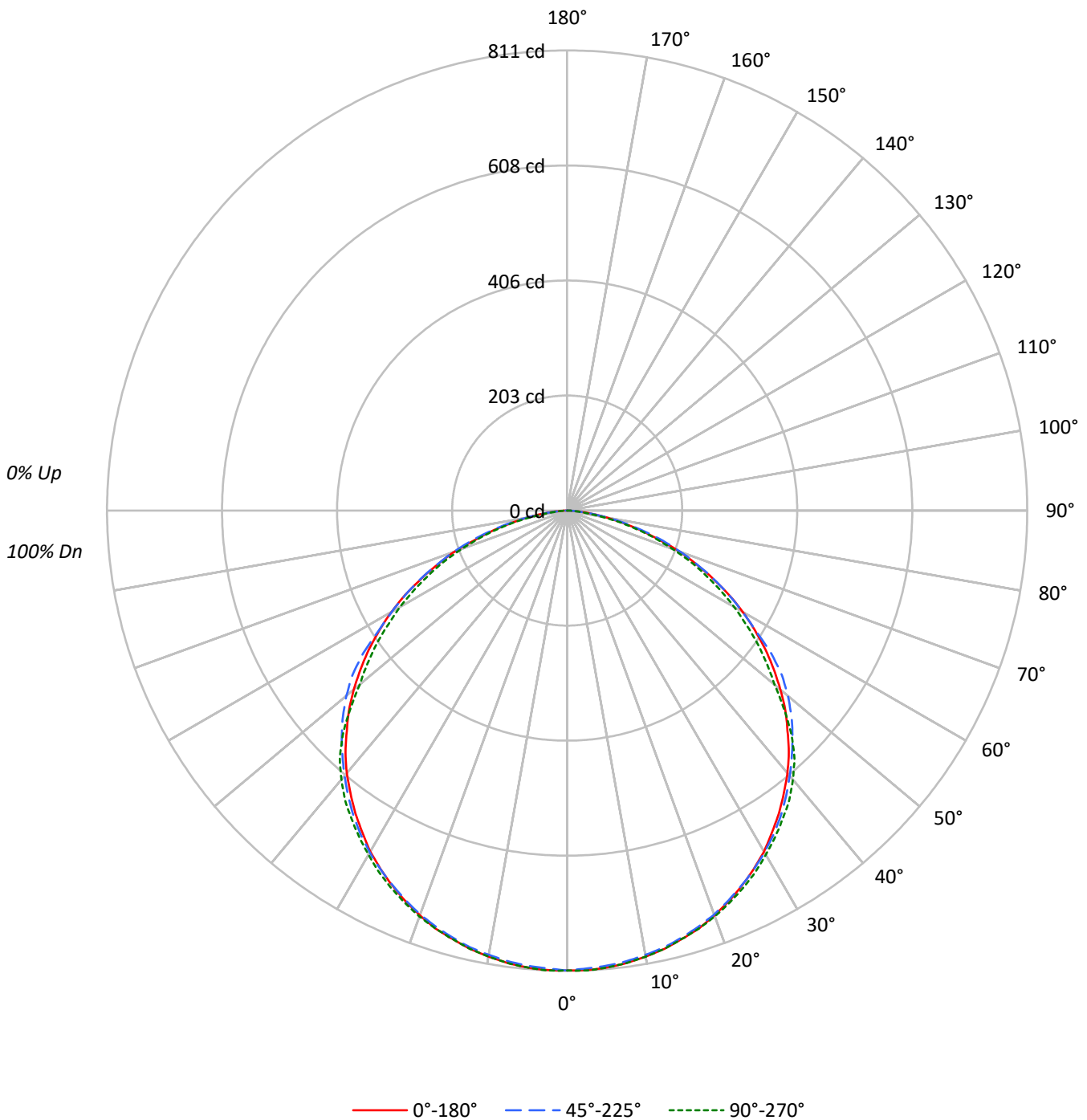
Input Watts (W): 31.806  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2181	2181	2181
5°	2183	2175	2183
10°	2181	2172	2181
15°	2178	2171	2178
20°	2174	2169	2180
25°	2165	2163	2179
30°	2156	2161	2176
35°	2139	2157	2177
40°	2122	2144	2174
45°	2090	2138	2129
50°	2054	2126	1998
55°	2000	2060	1924
60°	1925	1920	1832
65°	1803	1813	1714
70°	1656	1674	1552
75°	1391	1457	1326
80°	1103	1128	933
85°	726	627	531



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.8	3.3
10°-20°	220.6	9.6
20°-30°	336.9	14.6
30°-40°	411.1	17.8
40°-50°	429.9	18.6
50°-60°	380.6	16.5
60°-70°	280.2	12.1
70°-80°	145.1	6.3
80°-90°	28.9	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°	634.3	27.5
0°-40°	1045.4	45.3
0°-60°	1855.8	80.3
0°-90°	2310.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2310.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	811	811	811	811	811	
5°	808	808	805	808	808	77
15°	782	782	779	782	782	221
25°	729	729	728	733	734	336
35°	651	653	656	663	663	407
45°	549	554	562	566	560	424
55°	426	435	439	416	410	380
65°	283	300	285	274	269	281
75°	134	143	140	132	128	143
85°	24	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°	810.6	810.6	810.6	810.6	810.6
2.5°	810.6	810.6	807.5	810.6	811.4
5°	808.3	808.3	805.1	808.3	808.3
7.5°	804.4	803.6	801.2	804.4	804.4
10°	798.1	798.1	795.0	798.9	798.1
12.5°	791.1	790.3	788.7	791.8	791.1
15°	781.7	781.7	779.3	782.5	781.7
17.5°	772.3	771.5	769.1	772.3	772.3
20°	759.0	758.2	757.4	760.5	761.3
22.5°	744.9	744.1	743.3	748.0	748.0
25°	729.2	729.2	728.5	733.2	733.9
27.5°	712.0	712.0	712.8	719.1	718.3
30°	694.0	694.0	695.6	700.3	700.3
32.5°	672.1	673.7	676.8	682.3	682.3
35°	651.0	652.6	656.5	662.7	662.7
37.5°	627.5	629.9	633.8	641.6	643.2
40°	604.1	605.6	610.3	618.9	618.9
42.5°	578.2	579.8	586.1	594.7	593.1
45°	549.3	554.0	561.8	566.5	559.5
47.5°	521.9	525.0	536.0	530.5	518.8
50°	490.6	496.9	507.8	488.2	477.3
52.5°	458.5	465.6	477.3	449.9	443.6
55°	426.4	435.0	439.0	416.3	410.0
57.5°	392.0	401.4	393.6	380.3	374.0
60°	357.6	368.5	356.8	344.3	340.4
62.5°	321.6	334.1	320.8	309.9	304.4
65°	283.2	300.5	284.8	273.9	269.2
67.5°	245.7	263.7	247.3	237.9	234.7
70°	210.5	220.7	212.8	203.4	197.2
72.5°	168.2	178.4	176.8	166.7	162.7
75°	133.8	143.2	140.1	131.5	127.5
77.5°	99.4	109.5	106.4	96.2	94.7
80°	71.2	78.2	72.8	63.4	60.2
82.5°	44.6	50.1	43.0	36.0	34.4
85°	23.5	25.0	20.3	18.0	17.2
87.5°	7.8	8.6	8.6	7.8	7.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)