

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: P685500

Luminaire Tested: **4CZL-7-UNV-W-L850-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685500  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4CZL-7-UNV-W-L850-CD-U  
Description: METALUX CRUZE LINEAR 4FT WIDE LENS MODEL @80 CRI and 5000K  
Light Source: (392) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

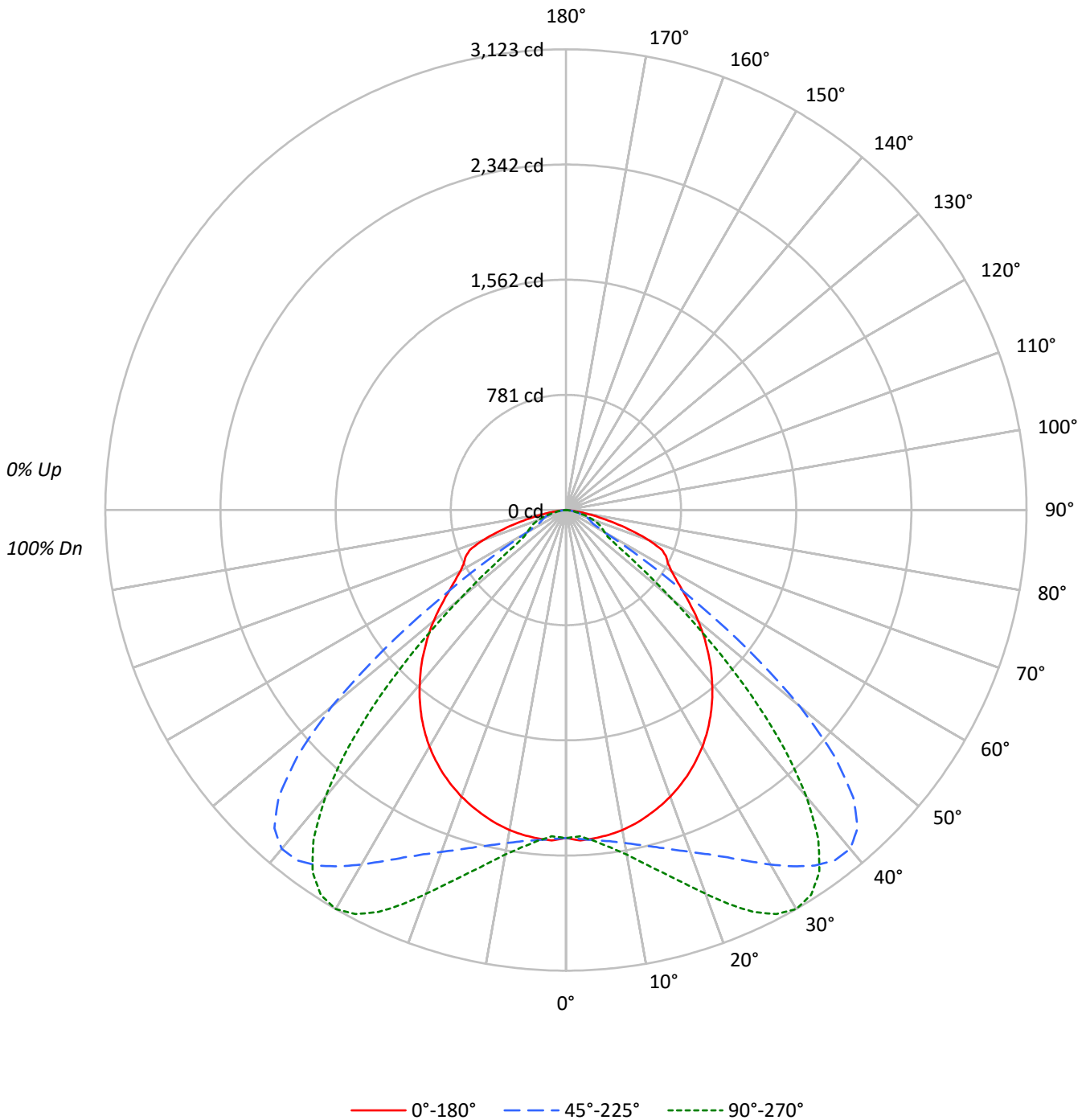
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7109.4 lumens  
Efficiency: N/A  
Efficacy: 161.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.69 / 1.65  
Luminous Opening: Rectangular (W 0.83' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 44  
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				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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87	87	87	87
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77	75	75	75	75
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65	65	65	65
4	86	75	67	61	84	73	66	60	71	65	59	69	63	59	67	62	58	56	56	56	56
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49	49	49	49
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43	43	43	43
7	68	55	46	40	66	54	46	40	52	45	40	51	45	40	50	44	39	38	38	38	38
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33	33	33	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30	30	30	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27	27	27	27

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

	0°	45°	90°
0°	7178	7178	7178
5°	7241	7278	7301
10°	7223	7512	7775
15°	7170	7909	8512
20°	7108	8473	9509
25°	7022	9258	10710
30°	6902	10347	11646
35°	6734	11597	11807
40°	6500	12635	10697
45°	6219	12587	8118
50°	5883	10402	4679
55°	5483	5722	2406
60°	5321	1997	1962
65°	5735	1453	1967
70°	5663	1489	1898
75°	4282	1301	1523
80°	2587	1064	1079
85°	1289	545	230



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	215.1	3.0
10°-20°	669.0	9.4
20°-30°	1175.2	16.5
30°-40°	1632.6	23.0
40°-50°	1655.7	23.3
50°-60°	1062.5	14.9
60°-70°	497.0	7.0
70°-80°	172.3	2.4
80°-90°	30.0	0.4
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°	2059.3	29.0
0°-40°	3691.9	51.9
0°-60°	6410.0	90.2
0°-90°	7109.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7109.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2223	2223	2223	2223	2223	
5°	2234	2218	2245	2252	2252	212
15°	2145	2196	2366	2493	2546	605
25°	1971	2173	2598	2903	3006	907
35°	1708	2191	2942	3043	2995	1067
45°	1362	2346	2756	2056	1778	1050
55°	974	2423	1016	489	427	879
65°	750	774	190	238	257	730
75°	343	119	104	120	122	371
85°	35	31	15	8	6	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2222.9	2222.9	2222.9	2222.9	2222.9	2222.9	2222.9	2222.9	2222.9	2222.9	2222.9
2.5°	2242.2	2235.3	2223.7	2219.0	2221.4	2232.9	2236.8	2228.3	2226.0	2219.8	2213.6
5°	2233.7	2227.5	2219.0	2217.5	2226.0	2245.3	2253.8	2251.5	2255.4	2256.1	2252.3
7.5°	2221.4	2215.9	2209.0	2215.9	2233.7	2264.6	2284.0	2290.1	2304.1	2307.1	2306.4
10°	2202.8	2198.2	2195.8	2213.6	2244.5	2290.9	2324.9	2341.9	2362.0	2369.0	2371.3
12.5°	2178.1	2173.4	2179.6	2210.5	2259.2	2325.7	2375.9	2406.1	2434.7	2449.4	2454.0
15°	2144.8	2143.3	2158.7	2208.2	2277.8	2365.9	2435.4	2482.6	2523.6	2539.8	2546.0
17.5°	2108.5	2109.3	2137.1	2207.4	2300.2	2413.0	2501.9	2569.2	2619.4	2642.6	2649.5
20°	2068.3	2070.6	2112.4	2206.7	2328.0	2465.6	2575.3	2663.5	2726.1	2757.0	2767.0
22.5°	2021.2	2025.8	2085.3	2207.4	2357.4	2525.9	2661.9	2767.0	2842.0	2879.1	2891.5
25°	1970.9	1977.9	2057.5	2211.3	2394.5	2598.5	2760.8	2883.7	2959.5	2991.9	3005.9
27.5°	1913.0	1924.6	2027.4	2216.7	2438.5	2682.8	2862.1	2980.4	3050.7	3075.4	3087.8
30°	1851.1	1864.3	1998.0	2227.5	2495.7	2774.8	2955.6	3055.3	3102.5	3116.4	3123.3
32.5°	1783.1	1804.8	1968.6	2245.3	2563.0	2863.6	3024.4	3083.9	3095.5	3090.9	3093.2
35°	1708.1	1731.3	1940.8	2274.7	2639.5	2941.7	3051.5	3051.5	3017.5	2996.6	2995.0
37.5°	1628.5	1657.9	1913.0	2308.7	2728.4	2993.5	3022.1	2945.6	2862.9	2818.0	2811.1
40°	1542.0	1581.4	1893.6	2355.1	2808.8	2997.4	2917.0	2759.3	2618.6	2546.0	2537.5
42.5°	1456.2	1504.9	1885.1	2415.4	2869.1	2926.2	2719.1	2475.6	2284.7	2198.9	2189.7
45°	1361.9	1426.0	1888.2	2498.1	2885.3	2756.2	2424.6	2109.3	1895.2	1787.0	1777.7
47.5°	1268.3	1348.0	1896.0	2591.6	2814.2	2467.9	2032.8	1667.9	1455.4	1341.8	1340.2
50°	1171.0	1274.5	1914.5	2668.1	2621.7	2070.6	1551.2	1194.9	1024.9	938.3	931.4
52.5°	1069.7	1210.4	1954.7	2682.0	2279.3	1560.5	1052.7	797.6	687.1	632.2	621.4
55°	973.9	1156.3	2020.4	2556.8	1787.0	1016.4	663.2	503.2	447.5	425.1	427.4
57.5°	891.2	1116.1	2096.9	2229.9	1160.1	598.2	384.1	334.7	333.1	335.4	336.2
60°	823.9	1091.4	2130.9	1672.6	636.9	309.2	268.2	279.0	293.7	302.2	303.8
62.5°	779.9	1078.2	2027.4	969.2	282.9	215.6	234.2	254.3	271.3	279.0	279.8
65°	750.5	1043.4	1658.7	479.2	173.1	190.1	213.3	234.2	249.7	255.8	257.4
67.5°	704.9	945.3	1137.0	198.6	152.3	171.6	194.0	214.1	227.2	231.9	232.6
70°	599.8	791.5	660.8	132.2	137.6	157.7	175.5	190.9	199.4	201.7	201.0
72.5°	468.4	626.8	333.9	119.8	127.5	138.4	148.4	156.9	161.5	163.9	163.9
75°	343.2	458.3	156.9	105.9	95.1	104.3	114.4	119.8	121.3	122.1	122.1
77.5°	230.3	316.1	93.5	81.9	73.4	81.2	85.0	82.7	81.2	82.7	82.7
80°	139.1	194.8	81.9	59.5	56.4	57.2	54.1	54.1	57.2	58.7	58.0
82.5°	75.0	110.5	71.9	43.3	37.9	34.8	34.0	32.5	30.9	30.1	30.1
85°	34.8	56.4	46.4	26.3	20.1	14.7	11.6	8.5	7.7	6.2	6.2
87.5°	13.9	21.6	13.9	8.5	4.6	3.1	2.3	1.5	0.8	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)