

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: P685300

Luminaire Tested: **4CZL-7-UNV-L835-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685300
Test Lab: INNOVATION CENTER(G2)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4CZL-7-UNV-L835-CD-U
Description: METALUX CRUZE LINEAR 4FT BASE MODEL @80 CRI and 3500K
Light Source: (392) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

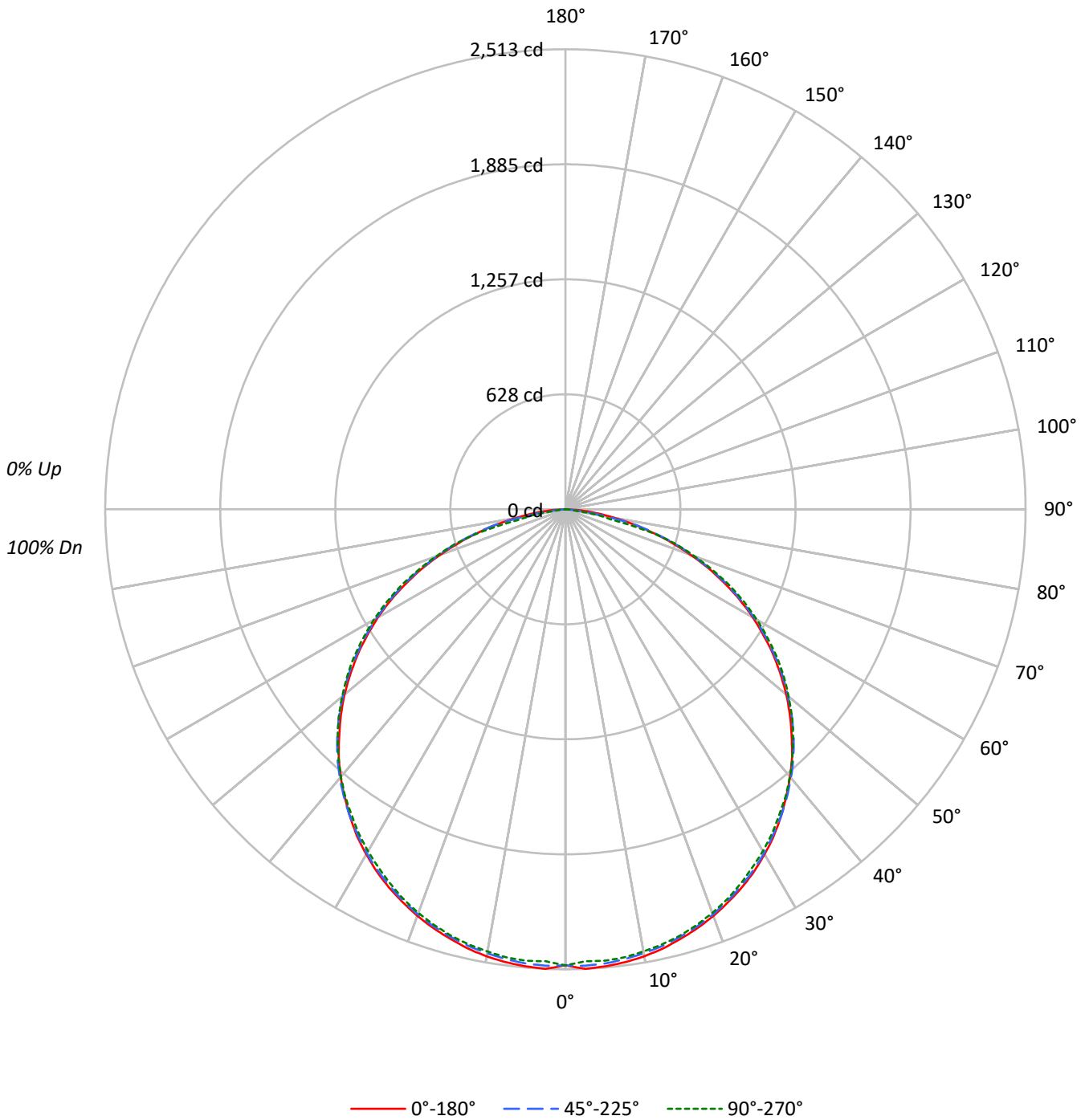
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7389.3 lumens
Efficiency: N/A
Efficacy: 167.9 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.29 / 1.41
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	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	72	72	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	61	61	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	52	52	52	50
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	45	45	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	39	39	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	35	35	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	31	31	31	29
9	56	42	34	29	55	42	34	29	41	33	28	40	33	28	39	33	28	28	28	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	25	25	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8044	8044	8044
5°	8124	8072	8023
10°	8131	8076	8041
15°	8119	8086	8061
20°	8122	8093	8062
25°	8123	8091	8050
30°	8113	8091	8040
35°	8084	8084	8027
40°	8046	8078	8039
45°	7978	8047	8030
50°	7910	7968	7994
55°	7805	7860	7938
60°	7634	7703	7796
65°	7350	7454	7582
70°	6874	7010	7075
75°	6186	6299	5978
80°	5168	4206	3275
85°	3853	1011	367



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.3	3.2
10°-20°	681.3	9.2
20°-30°	1043.4	14.1
30°-40°	1277.4	17.3
40°-50°	1351.4	18.3
50°-60°	1246.2	16.9
60°-70°	961.3	13.0
70°-80°	513.4	6.9
80°-90°	78.6	1.1
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°	1961.0	26.5
0°-40°	3238.4	43.8
0°-60°	5836.0	79.0
0°-90°	7389.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7389.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2491	2491	2491	2491	2491	
5°	2506	2476	2490	2480	2475	238
15°	2429	2403	2419	2410	2411	686
25°	2280	2256	2271	2254	2259	1051
35°	2051	2038	2051	2033	2036	1283
45°	1747	1746	1762	1750	1758	1348
55°	1386	1385	1396	1404	1410	1237
65°	962	962	976	983	992	950
75°	496	495	505	509	479	525
85°	104	74	27	11	10	128
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2491.0	2491.0	2491.0	2491.0	2491.0
2.5°	2513.0	2483.4	2495.5	2486.4	2471.2
5°	2506.1	2476.5	2490.2	2479.6	2475.0
7.5°	2495.5	2465.2	2478.8	2470.5	2468.9
10°	2479.6	2448.4	2462.9	2453.8	2452.2
12.5°	2458.3	2428.0	2443.9	2433.3	2434.8
15°	2428.7	2402.9	2418.8	2410.5	2411.2
17.5°	2399.1	2372.5	2389.2	2380.9	2381.6
20°	2363.4	2337.6	2355.1	2342.2	2346.0
22.5°	2323.2	2300.4	2315.6	2298.9	2306.5
25°	2279.9	2256.4	2270.8	2254.1	2259.4
27.5°	2230.6	2208.5	2223.0	2205.5	2207.8
30°	2175.9	2156.2	2169.8	2152.4	2156.2
32.5°	2117.4	2100.0	2110.6	2094.7	2100.0
35°	2050.6	2038.5	2050.6	2033.2	2036.2
37.5°	1980.8	1968.6	1985.3	1970.1	1975.5
40°	1908.7	1897.3	1916.2	1901.1	1907.1
42.5°	1832.0	1823.6	1842.6	1827.4	1835.0
45°	1746.9	1746.2	1762.1	1750.0	1758.3
47.5°	1662.7	1661.1	1677.1	1668.7	1678.6
50°	1574.6	1573.1	1586.0	1585.2	1591.3
52.5°	1480.5	1482.7	1494.9	1497.2	1504.0
55°	1386.3	1384.8	1396.2	1404.5	1409.9
57.5°	1283.8	1286.9	1296.0	1305.8	1309.6
60°	1182.1	1180.6	1192.7	1201.1	1207.1
62.5°	1074.3	1074.3	1084.2	1096.3	1102.4
65°	961.9	961.9	975.6	983.2	992.3
67.5°	847.3	845.0	857.1	873.8	872.3
70°	728.1	728.8	742.5	750.9	749.3
72.5°	609.6	611.9	626.3	630.1	633.9
75°	495.8	495.0	504.9	508.7	479.1
77.5°	382.6	383.4	389.5	285.5	250.5
80°	277.9	279.4	226.2	176.1	176.1
82.5°	183.7	180.7	116.2	68.3	50.1
85°	104.0	74.4	27.3	11.4	9.9
87.5°	42.5	13.7	7.6	5.3	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)