

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: P685570

Luminaire Tested: **4CZL-7-UNV-FL-L935-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685570  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4CZL-7-UNV-FL-L935-CD-U  
Description: METALUX CRUZE LINEAR 4FT FROSTED LENS MODEL @90 CRI and 3500K  
Light Source: (392) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

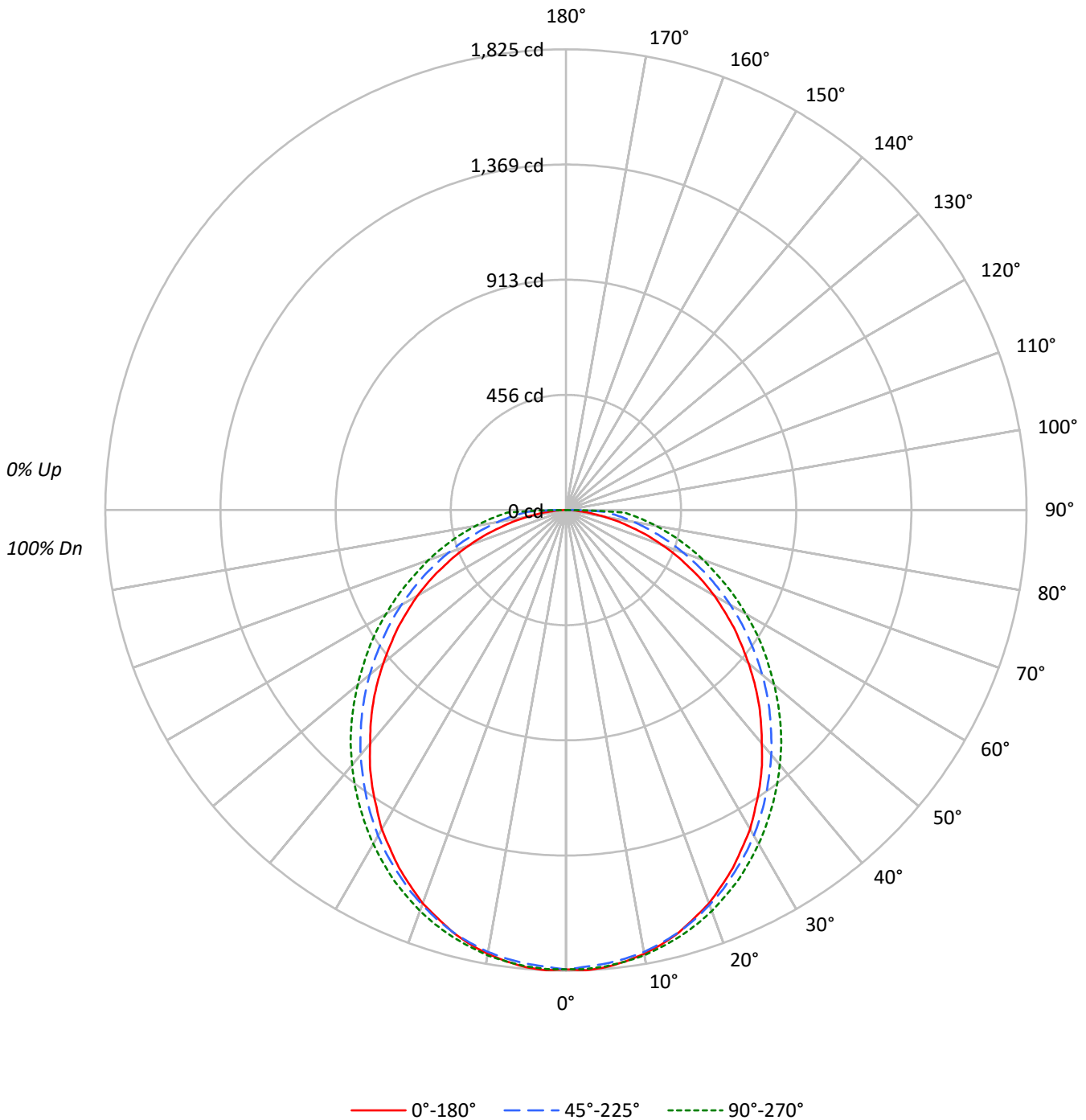
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5125.7 lumens  
Efficiency: N/A  
Efficacy: 116.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.83' x L: 4' x H: 0.08')  
CIE Type: Direct

Input Watts (W): 44  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	84	84	84	82
2	98	89	82	76	95	87	81	75	84	78	74	81	76	72	78	74	70	70	70	70	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	59	59	59	59	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	51	51	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	44	44	44	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	39	39	39	37
7	64	51	42	36	63	50	41	36	48	41	35	47	40	35	46	39	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	43	34	29	55	42	34	29	41	34	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	26	26	26	26	24

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

	0°	45°	90°
0°	5876	5876	5876
5°	5882	5805	5831
10°	5833	5743	5772
15°	5757	5657	5694
20°	5655	5547	5605
25°	5520	5420	5504
30°	5377	5293	5384
35°	5199	5137	5257
40°	5001	4981	5127
45°	4832	4807	4991
50°	4629	4627	4833
55°	4440	4431	4691
60°	4233	4234	4528
65°	3957	4022	4385
70°	3636	3787	4299
75°	3163	3583	4249
80°	2555	3436	4305
85°	1634	3462	4665



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.1	3.4
10°-20°	489.8	9.6
20°-30°	731.5	14.3
30°-40°	865.2	16.9
40°-50°	881.5	17.2
50°-60°	789.9	15.4
60°-70°	615.3	12.0
70°-80°	398.3	7.8
80°-90°	182.0	3.6
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°	1393.4	27.2
0°-40°	2258.6	44.1
0°-60°	3930.1	76.7
0°-90°	5125.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5125.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1820	1820	1820	1820	1820	
5°	1818	1815	1804	1815	1814	172
15°	1732	1732	1731	1747	1749	488
25°	1564	1570	1582	1610	1617	720
35°	1338	1351	1381	1418	1427	836
45°	1080	1100	1142	1186	1202	832
55°	812	835	883	934	952	725
65°	541	564	623	675	697	537
75°	273	308	379	442	468	293
85°	55	106	185	252	270	70
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1819.7	1819.7	1819.7	1819.7	1819.7
2.5°	1824.9	1821.8	1810.7	1820.4	1820.0
5°	1818.0	1814.9	1804.1	1814.9	1814.5
7.5°	1803.8	1802.8	1793.1	1804.8	1803.8
10°	1785.5	1784.1	1777.8	1789.6	1791.3
12.5°	1761.2	1760.6	1755.7	1769.5	1770.6
15°	1731.8	1731.8	1730.8	1747.1	1748.8
17.5°	1694.1	1699.0	1700.0	1717.7	1721.5
20°	1658.2	1659.6	1664.4	1685.8	1690.3
22.5°	1610.8	1616.7	1626.4	1649.9	1653.7
25°	1564.4	1570.0	1581.7	1609.7	1616.7
27.5°	1510.5	1521.2	1537.5	1565.5	1572.4
30°	1459.3	1468.3	1489.4	1520.5	1527.4
32.5°	1396.7	1411.9	1436.1	1469.0	1478.3
35°	1338.2	1351.0	1381.1	1418.5	1426.8
37.5°	1275.6	1290.8	1322.7	1362.4	1373.9
40°	1207.1	1229.3	1266.3	1306.1	1318.2
42.5°	1144.5	1164.9	1204.0	1249.0	1262.8
45°	1080.2	1099.6	1142.5	1186.0	1202.3
47.5°	1013.1	1033.2	1079.9	1126.2	1140.7
50°	944.3	968.1	1014.8	1063.6	1076.7
52.5°	875.8	899.6	949.1	997.9	1012.8
55°	812.1	835.0	883.0	933.9	952.2
57.5°	743.0	767.2	820.1	869.2	888.9
60°	679.0	696.6	752.6	803.5	822.5
62.5°	612.9	631.9	686.6	738.8	761.3
65°	541.0	564.5	622.9	675.2	697.0
67.5°	475.2	497.7	557.9	616.7	634.4
70°	407.1	433.0	495.3	555.5	580.4
72.5°	342.1	369.1	437.5	497.4	522.6
75°	273.2	308.2	378.7	441.7	467.6
77.5°	216.5	251.1	323.4	389.1	414.0
80°	153.6	196.1	274.3	340.7	362.8
82.5°	102.4	145.6	227.6	292.3	316.1
85°	54.6	105.5	184.7	251.5	269.8
87.5°	23.9	73.7	149.8	209.3	231.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)