

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: P685591

Luminaire Tested: **4CZL-9-UNV-FL-L950-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685591  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4CZL-9-UNV-FL-L950-CD-U  
Description: METALUX CRUZE LINEAR 4FT FROSTED LENS MODEL @90 CRI and 5000K  
Light Source: (588) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

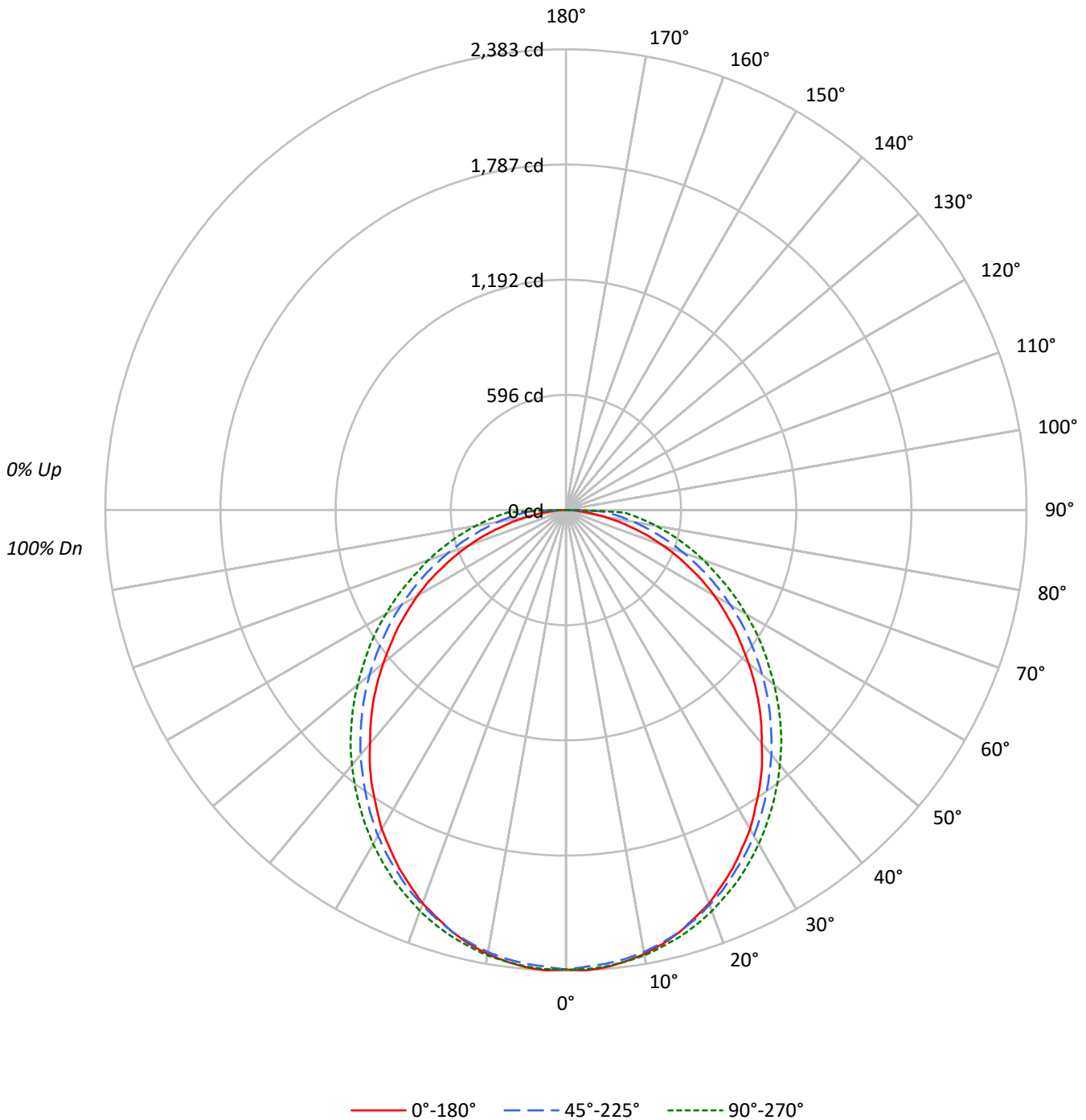
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6694.4 lumens  
Efficiency: N/A  
Efficacy: 124.0 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): 54  
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	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°	7674	7674	7674
5°	7682	7581	7615
10°	7618	7501	7538
15°	7519	7388	7436
20°	7386	7245	7320
25°	7210	7078	7188
30°	7022	6912	7032
35°	6791	6709	6865
40°	6532	6505	6695
45°	6311	6278	6519
50°	6045	6043	6313
55°	5799	5787	6126
60°	5528	5530	5913
65°	5167	5254	5727
70°	4748	4947	5614
75°	4132	4680	5549
80°	3336	4487	5623
85°	2137	4521	6093



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	224.8	3.4
10°-20°	639.7	9.6
20°-30°	955.4	14.3
30°-40°	1129.9	16.9
40°-50°	1151.3	17.2
50°-60°	1031.7	15.4
60°-70°	803.6	12.0
70°-80°	520.2	7.8
80°-90°	237.7	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°	1819.9	27.2
0°-40°	2949.8	44.1
0°-60°	5132.8	76.7
0°-90°	6694.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6694.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2377	2377	2377	2377	2377	
5°	2374	2370	2356	2370	2370	225
15°	2262	2262	2260	2282	2284	637
25°	2043	2050	2066	2102	2111	940
35°	1748	1764	1804	1853	1863	1092
45°	1411	1436	1492	1549	1570	1087
55°	1061	1090	1153	1220	1244	947
65°	706	737	814	882	910	702
75°	357	402	495	577	611	383
85°	71	138	241	328	352	92
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2376.6	2376.6	2376.6	2376.6	2376.6
2.5°	2383.4	2379.3	2364.8	2377.5	2377.0
5°	2374.3	2370.3	2356.3	2370.3	2369.8
7.5°	2355.8	2354.5	2341.8	2357.2	2355.8
10°	2331.9	2330.1	2321.9	2337.3	2339.5
12.5°	2300.2	2299.3	2293.0	2311.1	2312.4
15°	2261.8	2261.8	2260.5	2281.7	2284.0
17.5°	2212.6	2218.9	2220.3	2243.3	2248.3
20°	2165.6	2167.4	2173.8	2201.8	2207.6
22.5°	2103.7	2111.4	2124.1	2154.8	2159.8
25°	2043.2	2050.4	2065.8	2102.4	2111.4
27.5°	1972.7	1986.7	2008.0	2044.6	2053.6
30°	1905.9	1917.6	1945.2	1985.8	1994.9
32.5°	1824.1	1844.0	1875.6	1918.5	1930.7
35°	1747.8	1764.5	1803.8	1852.6	1863.4
37.5°	1666.0	1685.9	1727.4	1779.4	1794.3
40°	1576.6	1605.5	1653.8	1705.8	1721.6
42.5°	1494.8	1521.5	1572.5	1631.2	1649.3
45°	1410.8	1436.1	1492.1	1549.0	1570.2
47.5°	1323.1	1349.3	1410.3	1470.9	1489.8
50°	1233.2	1264.4	1325.4	1389.1	1406.3
52.5°	1143.8	1175.0	1239.6	1303.3	1322.7
55°	1060.7	1090.5	1153.3	1219.7	1243.6
57.5°	970.3	1002.0	1071.1	1135.2	1161.0
60°	886.8	909.8	983.0	1049.4	1074.2
62.5°	800.5	825.3	896.7	964.9	994.3
65°	706.5	737.2	813.6	881.8	910.3
67.5°	620.7	650.0	728.7	805.4	828.5
70°	531.7	565.6	646.9	725.5	758.0
72.5°	446.8	482.0	571.4	649.6	682.6
75°	356.9	402.5	494.7	576.9	610.7
77.5°	282.8	328.0	422.4	508.2	540.7
80°	200.6	256.1	358.2	445.0	473.9
82.5°	133.7	190.2	297.2	381.7	412.9
85°	71.4	137.8	241.2	328.4	352.4
87.5°	31.2	96.2	195.6	273.3	301.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)