

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: P685550

Luminaire Tested: **4CZL-7-UNV-FL-L840-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685550  
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-L840-CD-U  
Description: METALUX CRUZE LINEAR 4FT FROSTED LENS MODEL @80 CRI and 4000K  
Light Source: (392) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

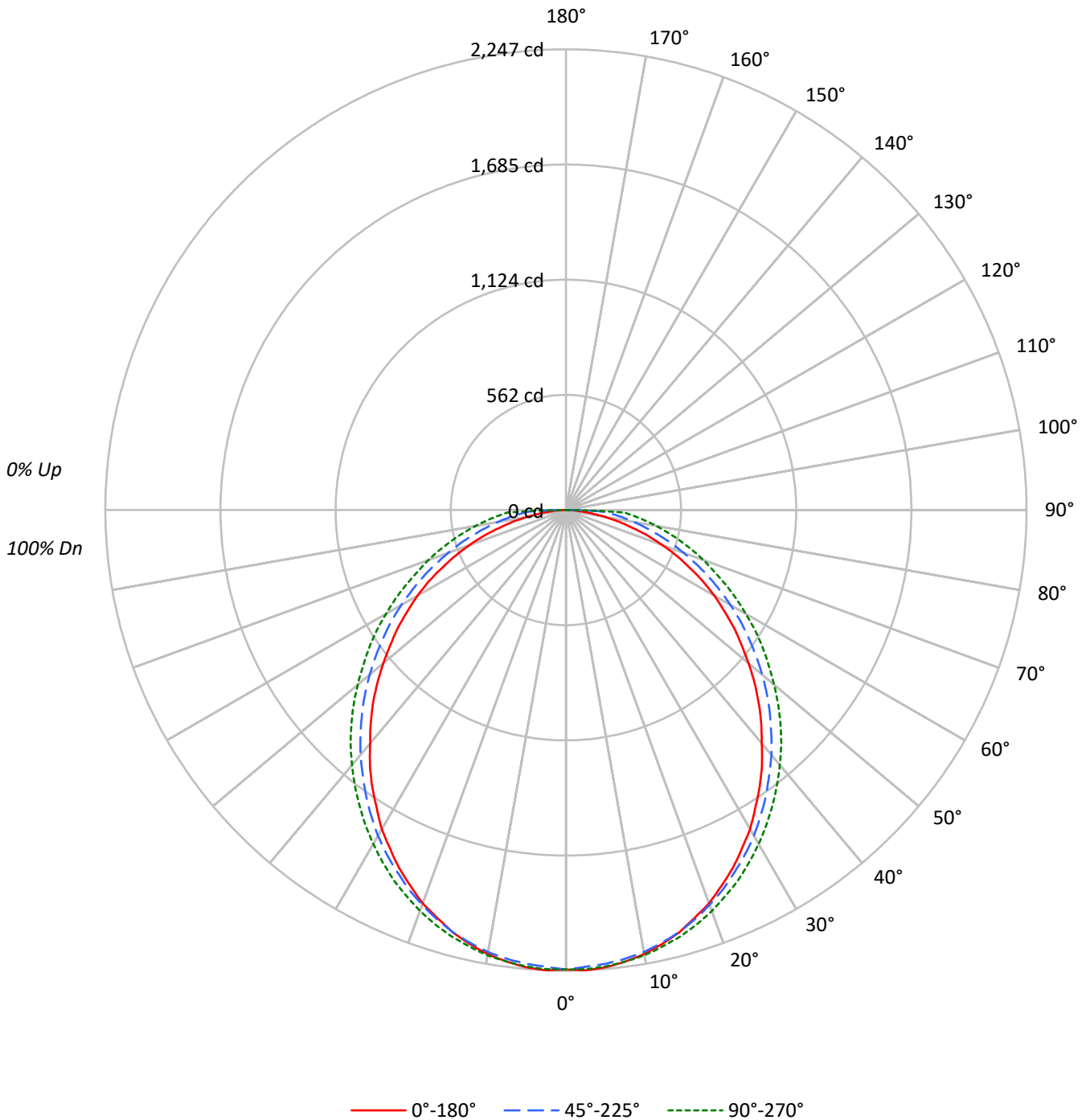
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6311.7 lumens  
Efficiency: N/A  
Efficacy: 143.4 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 (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°	7236	7236	7236
5°	7243	7148	7180
10°	7183	7072	7108
15°	7090	6966	7011
20°	6964	6831	6901
25°	6798	6674	6777
30°	6621	6517	6630
35°	6403	6326	6473
40°	6158	6133	6313
45°	5950	5919	6146
50°	5700	5697	5952
55°	5467	5456	5776
60°	5212	5214	5575
65°	4872	4954	5400
70°	4477	4664	5293
75°	3896	4412	5232
80°	3145	4230	5302
85°	2014	4263	5743



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.0	3.4
10°-20°	603.1	9.6
20°-30°	900.8	14.3
30°-40°	1065.4	16.9
40°-50°	1085.5	17.2
50°-60°	972.7	15.4
60°-70°	757.6	12.0
70°-80°	490.5	7.8
80°-90°	224.1	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°	1715.8	27.2
0°-40°	2781.2	44.1
0°-60°	4839.4	76.7
0°-90°	6311.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6311.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2241	2241	2241	2241	2241	
5°	2239	2235	2222	2235	2234	212
15°	2133	2133	2131	2151	2153	601
25°	1926	1933	1948	1982	1991	886
35°	1648	1664	1701	1747	1757	1030
45°	1330	1354	1407	1460	1480	1025
55°	1000	1028	1087	1150	1172	893
65°	666	695	767	831	858	662
75°	336	380	466	544	576	361
85°	67	130	227	310	332	86
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2240.7	2240.7	2240.7	2240.7	2240.7
2.5°	2247.1	2243.3	2229.7	2241.6	2241.2
5°	2238.6	2234.8	2221.6	2234.8	2234.3
7.5°	2221.1	2219.9	2207.9	2222.4	2221.1
10°	2198.6	2196.9	2189.2	2203.7	2205.8
12.5°	2168.8	2167.9	2161.9	2179.0	2180.3
15°	2132.6	2132.6	2131.3	2151.3	2153.4
17.5°	2086.1	2092.1	2093.4	2115.1	2119.8
20°	2041.8	2043.5	2049.5	2075.9	2081.4
22.5°	1983.5	1990.7	2002.6	2031.6	2036.3
25°	1926.4	1933.2	1947.7	1982.2	1990.7
27.5°	1860.0	1873.2	1893.2	1927.7	1936.2
30°	1796.9	1808.0	1834.0	1872.3	1880.8
32.5°	1719.8	1738.6	1768.4	1808.9	1820.4
35°	1647.9	1663.6	1700.7	1746.7	1756.9
37.5°	1570.8	1589.5	1628.7	1677.7	1691.7
40°	1486.4	1513.7	1559.3	1608.3	1623.2
42.5°	1409.4	1434.5	1482.6	1538.0	1555.0
45°	1330.1	1354.0	1406.8	1460.5	1480.5
47.5°	1247.5	1272.2	1329.7	1386.8	1404.7
50°	1162.7	1192.1	1249.6	1309.7	1325.9
52.5°	1078.4	1107.8	1168.7	1228.8	1247.1
55°	1000.0	1028.2	1087.4	1150.0	1172.5
57.5°	914.9	944.7	1009.8	1070.3	1094.6
60°	836.1	857.8	926.8	989.4	1012.8
62.5°	754.7	778.1	845.4	909.8	937.4
65°	666.1	695.1	767.1	831.4	858.2
67.5°	585.2	612.9	687.0	759.4	781.1
70°	501.3	533.2	609.9	684.0	714.7
72.5°	421.2	454.5	538.8	612.5	643.6
75°	336.5	379.5	466.4	543.9	575.8
77.5°	266.6	309.2	398.2	479.2	509.8
80°	189.1	241.5	337.7	419.5	446.8
82.5°	126.1	179.3	280.3	359.9	389.3
85°	67.3	129.9	227.4	309.6	332.2
87.5°	29.4	90.7	184.4	257.7	284.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)