

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: P685540

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

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685540
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-L835-CD-U
Description: METALUX CRUZE LINEAR 4FT FROSTED LENS MODEL @80 CRI and 3500K
Light Source: (392) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

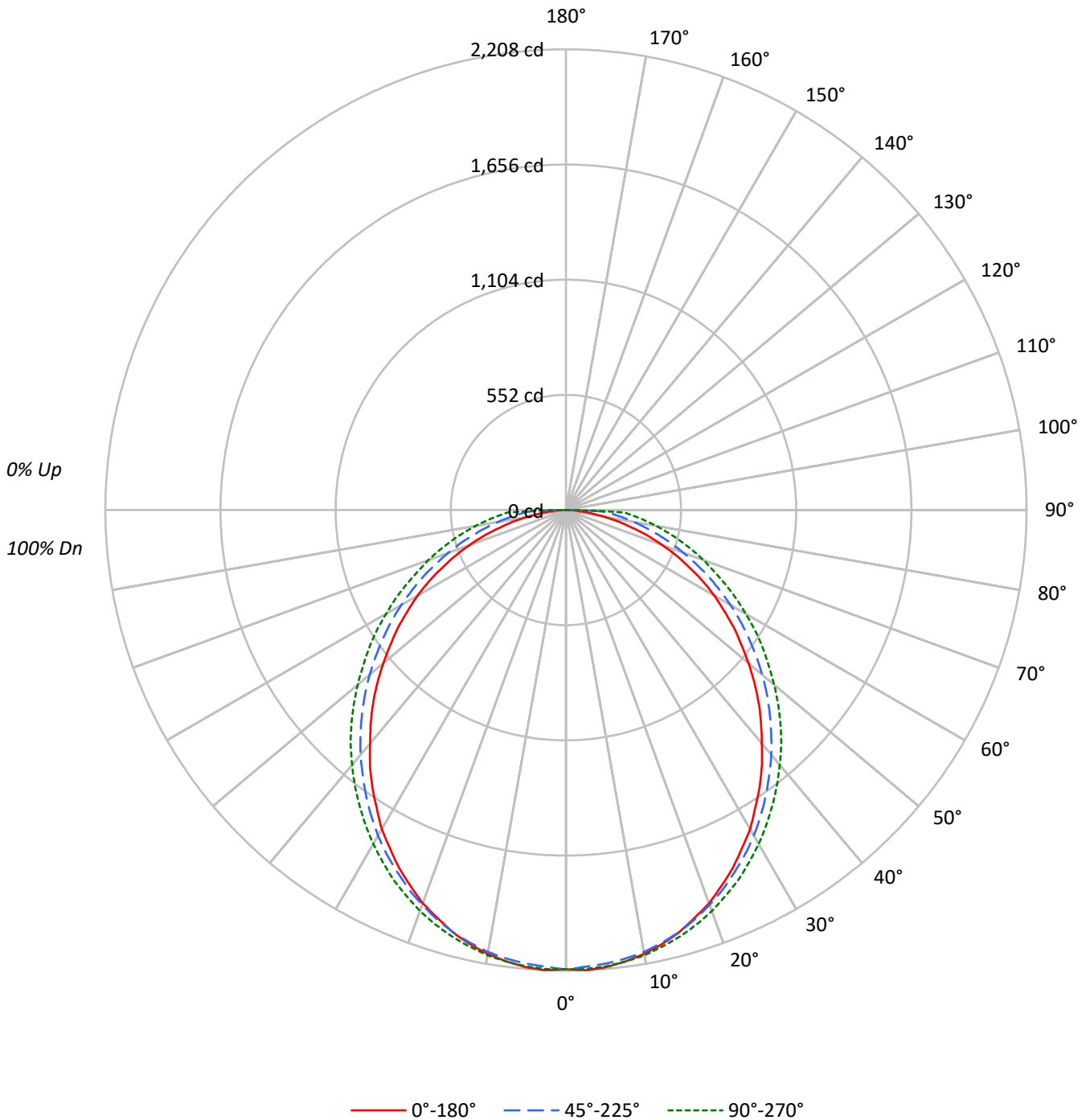
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6201.2 lumens
Efficiency: N/A
Efficacy: 140.9 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°	7109	7109	7109
5°	7116	7023	7054
10°	7057	6948	6983
15°	6966	6844	6888
20°	6842	6711	6781
25°	6679	6557	6658
30°	6505	6403	6514
35°	6291	6215	6360
40°	6050	6026	6202
45°	5846	5815	6039
50°	5600	5598	5848
55°	5372	5360	5675
60°	5120	5123	5478
65°	4787	4866	5305
70°	4398	4582	5201
75°	3827	4335	5141
80°	3090	4156	5209
85°	1978	4189	5643



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.2	3.4
10°-20°	592.6	9.6
20°-30°	885.0	14.3
30°-40°	1046.7	16.9
40°-50°	1066.5	17.2
50°-60°	955.7	15.4
60°-70°	744.4	12.0
70°-80°	481.9	7.8
80°-90°	220.2	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°	1685.8	27.2
0°-40°	2732.5	44.1
0°-60°	4754.7	76.7
0°-90°	6201.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6201.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2202	2202	2202	2202	2202	
5°	2199	2196	2183	2196	2195	209
15°	2095	2095	2094	2114	2116	590
25°	1893	1899	1914	1948	1956	871
35°	1619	1634	1671	1716	1726	1012
45°	1307	1330	1382	1435	1455	1007
55°	982	1010	1068	1130	1152	877
65°	654	683	754	817	843	650
75°	331	373	458	534	566	355
85°	66	128	224	304	326	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2201.5	2201.5	2201.5	2201.5	2201.5
2.5°	2207.8	2204.0	2190.6	2202.4	2201.9
5°	2199.4	2195.7	2182.7	2195.7	2195.2
7.5°	2182.3	2181.0	2169.3	2183.5	2182.3
10°	2160.1	2158.4	2150.9	2165.1	2167.2
12.5°	2130.8	2130.0	2124.1	2140.8	2142.1
15°	2095.2	2095.2	2094.0	2113.6	2115.7
17.5°	2049.6	2055.5	2056.7	2078.1	2082.7
20°	2006.1	2007.8	2013.6	2039.6	2045.0
22.5°	1948.8	1955.9	1967.6	1996.1	2000.7
25°	1892.7	1899.4	1913.6	1947.5	1955.9
27.5°	1827.4	1840.4	1860.1	1894.0	1902.3
30°	1765.5	1776.4	1801.9	1839.6	1847.9
32.5°	1689.7	1708.2	1737.4	1777.2	1788.5
35°	1619.0	1634.5	1670.9	1716.1	1726.2
37.5°	1543.3	1561.7	1600.2	1648.3	1662.1
40°	1460.4	1487.2	1532.0	1580.1	1594.8
42.5°	1384.7	1409.4	1456.7	1511.1	1527.8
45°	1306.9	1330.3	1382.2	1434.9	1454.6
47.5°	1225.7	1249.9	1306.4	1362.5	1380.1
50°	1142.4	1171.3	1227.8	1286.8	1302.7
52.5°	1059.5	1088.4	1148.3	1207.3	1225.3
55°	982.5	1010.2	1068.3	1129.8	1152.0
57.5°	898.9	928.1	992.2	1051.6	1075.4
60°	821.4	842.8	910.6	972.1	995.1
62.5°	741.5	764.5	830.6	893.8	921.0
65°	654.5	682.9	753.6	816.8	843.2
67.5°	575.0	602.2	675.0	746.1	767.5
70°	492.5	523.9	599.2	672.0	702.2
72.5°	413.9	446.5	529.4	601.7	632.3
75°	330.6	372.8	458.2	534.4	565.8
77.5°	262.0	303.8	391.3	470.8	500.9
80°	185.8	237.3	331.8	412.2	439.0
82.5°	123.9	176.2	275.3	353.6	382.5
85°	66.1	127.6	223.5	304.2	326.4
87.5°	28.9	89.1	181.2	253.2	279.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)