

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: P685590

Luminaire Tested: **4CZL-7-UNV-FL-L950-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685590
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-L950-CD-U
Description: METALUX CRUZE LINEAR 4FT FROSTED LENS MODEL @90 CRI and 5000K
Light Source: (392) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

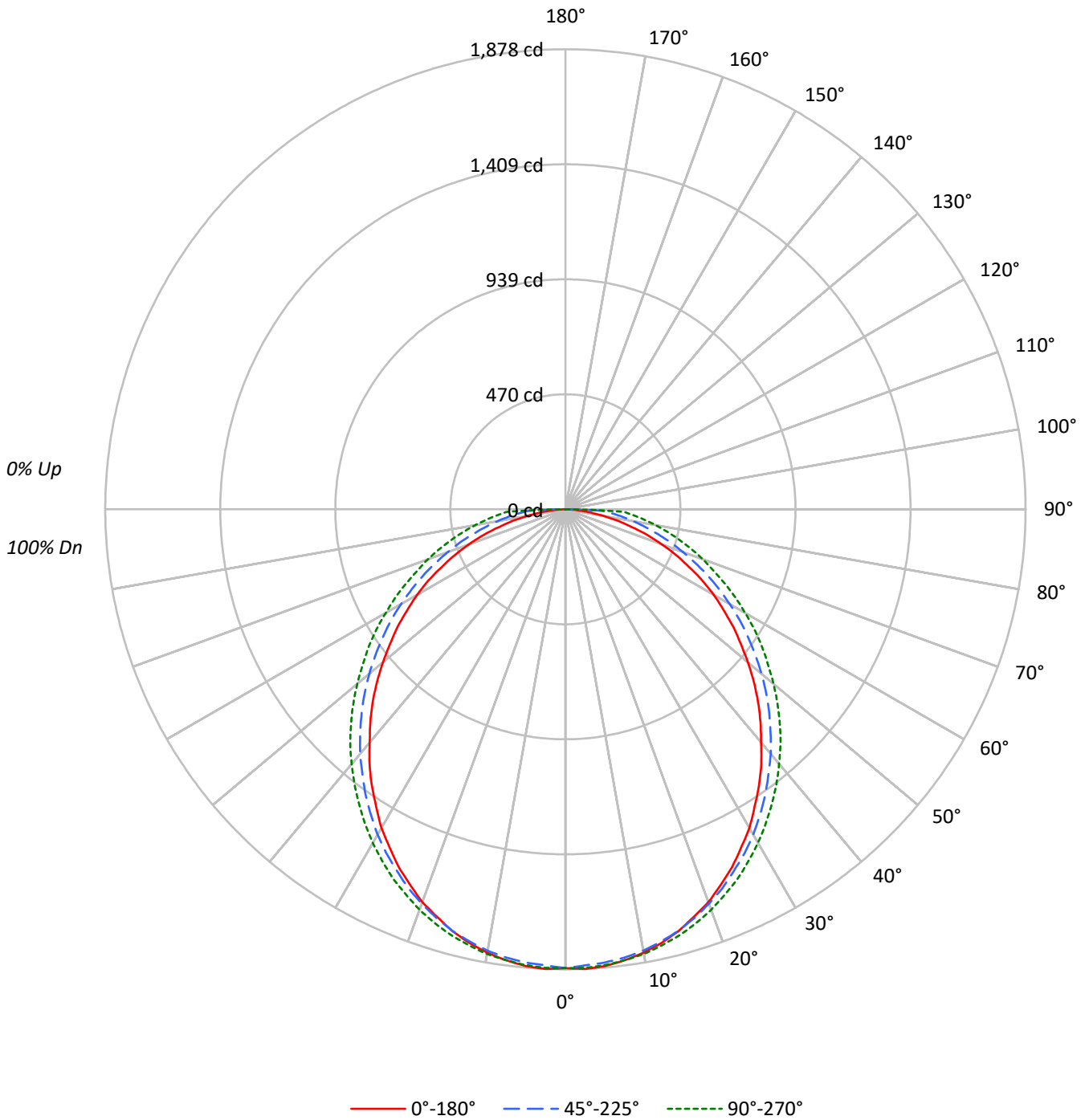
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5275.9 lumens
Efficiency: N/A
Efficacy: 119.9 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°	6048	6048	6048
5°	6055	5975	6002
10°	6004	5912	5941
15°	5926	5822	5861
20°	5821	5710	5769
25°	5682	5579	5665
30°	5534	5447	5542
35°	5352	5288	5411
40°	5148	5127	5277
45°	4974	4947	5138
50°	4764	4763	4975
55°	4570	4561	4828
60°	4357	4358	4660
65°	4073	4141	4514
70°	3742	3898	4425
75°	3256	3688	4373
80°	2629	3536	4432
85°	1685	3563	4801



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.2	3.4
10°-20°	504.1	9.6
20°-30°	753.0	14.3
30°-40°	890.5	16.9
40°-50°	907.4	17.2
50°-60°	813.1	15.4
60°-70°	633.3	12.0
70°-80°	410.0	7.8
80°-90°	187.4	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°	1434.3	27.2
0°-40°	2324.8	44.1
0°-60°	4045.3	76.7
0°-90°	5275.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5275.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1873	1873	1873	1873	1873	
5°	1871	1868	1857	1868	1868	177
15°	1783	1783	1782	1798	1800	502
25°	1610	1616	1628	1657	1664	741
35°	1377	1391	1422	1460	1469	861
45°	1112	1132	1176	1221	1238	857
55°	836	859	909	961	980	746
65°	557	581	641	695	717	553
75°	281	317	390	455	481	302
85°	56	109	190	259	278	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1873.0	1873.0	1873.0	1873.0	1873.0
2.5°	1878.4	1875.2	1863.8	1873.7	1873.4
5°	1871.3	1868.0	1857.0	1868.0	1867.7
7.5°	1856.7	1855.6	1845.6	1857.7	1856.7
10°	1837.8	1836.4	1830.0	1842.1	1843.8
12.5°	1812.9	1812.2	1807.2	1821.4	1822.5
15°	1782.6	1782.6	1781.5	1798.3	1800.0
17.5°	1743.8	1748.8	1749.8	1768.0	1771.9
20°	1706.8	1708.2	1713.2	1735.2	1739.9
22.5°	1658.0	1664.0	1674.0	1698.2	1702.1
25°	1610.3	1616.0	1628.1	1656.9	1664.0
27.5°	1554.7	1565.8	1582.5	1611.4	1618.5
30°	1502.1	1511.3	1533.0	1565.1	1572.2
32.5°	1437.6	1453.3	1478.2	1512.0	1521.6
35°	1377.4	1390.6	1421.6	1460.0	1468.6
37.5°	1313.0	1328.7	1361.4	1402.4	1414.1
40°	1242.5	1265.3	1303.4	1344.3	1356.8
42.5°	1178.1	1199.1	1239.3	1285.6	1299.8
45°	1111.9	1131.8	1175.9	1220.8	1237.5
47.5°	1042.8	1063.4	1111.5	1159.2	1174.2
50°	971.9	996.5	1044.6	1094.8	1108.3
52.5°	901.4	926.0	976.9	1027.1	1042.4
55°	835.9	859.4	908.9	961.3	980.1
57.5°	764.7	789.7	844.1	894.7	915.0
60°	698.9	717.0	774.7	827.0	846.6
62.5°	630.9	650.5	706.7	760.5	783.6
65°	556.8	581.0	641.2	695.0	717.4
67.5°	489.2	512.3	574.3	634.8	652.9
70°	419.0	445.7	509.8	571.8	597.4
72.5°	352.1	379.9	450.4	512.0	537.9
75°	281.3	317.2	389.8	454.6	481.3
77.5°	222.9	258.5	332.9	400.5	426.2
80°	158.1	201.9	282.3	350.7	373.5
82.5°	105.4	149.9	234.3	300.8	325.4
85°	56.3	108.6	190.1	258.8	277.7
87.5°	24.6	75.8	154.2	215.4	237.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)