

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: P685340

Luminaire Tested: **4CZL-7-UNV-L940-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685340
Test Lab: INNOVATION CENTER(G2)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4CZL-7-UNV-L940-CD-U
Description: METALUX CRUZE LINEAR 4FT BASE MODEL @90 CRI and 4000K
Light Source: (392) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

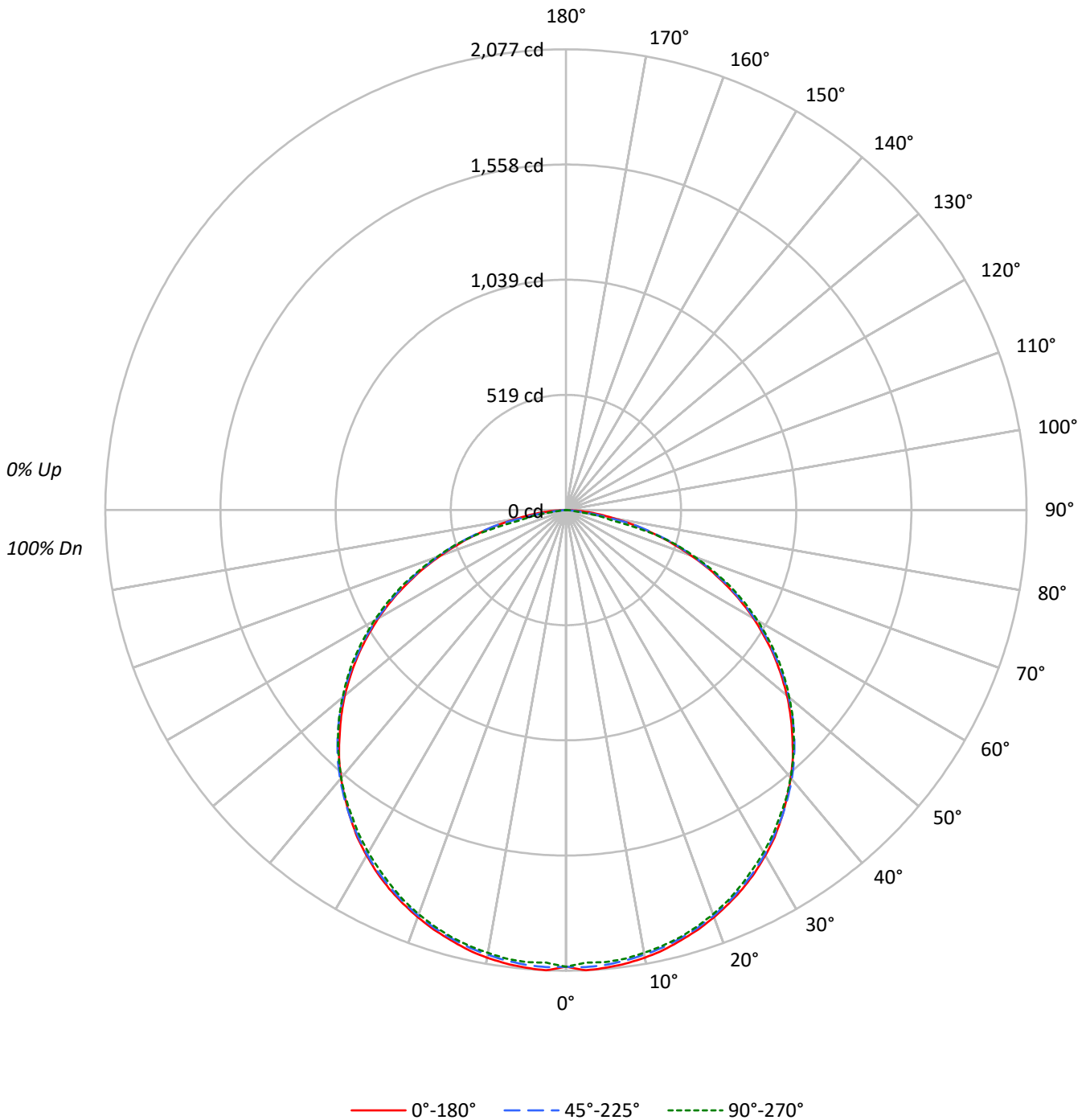
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6107.8 lumens
Efficiency: N/A
Efficacy: 138.8 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.29 / 1.41
Luminous Opening: Rectangular (W 0.83' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 44
Input Voltage (V): 120
Input Current (A_{in}): 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	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	72	72	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	61	61	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	52	52	52	50
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	45	45	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	39	39	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	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	42	34	29	55	42	34	29	41	33	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	25	25	25	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6649	6649	6649
5°	6715	6672	6632
10°	6720	6675	6646
15°	6711	6684	6663
20°	6713	6689	6664
25°	6715	6688	6654
30°	6706	6688	6645
35°	6682	6682	6635
40°	6650	6677	6645
45°	6594	6651	6637
50°	6538	6586	6608
55°	6451	6497	6561
60°	6310	6367	6444
65°	6075	6162	6267
70°	5682	5794	5848
75°	5113	5206	4941
80°	4272	3477	2708
85°	3186	837	304



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.3	3.2
10°-20°	563.2	9.2
20°-30°	862.4	14.1
30°-40°	1055.9	17.3
40°-50°	1117.0	18.3
50°-60°	1030.1	16.9
60°-70°	794.6	13.0
70°-80°	424.4	6.9
80°-90°	64.9	1.1
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°	1620.9	26.5
0°-40°	2676.8	43.8
0°-60°	4823.8	79.0
0°-90°	6107.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6107.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2059	2059	2059	2059	2059	
5°	2072	2047	2058	2050	2046	197
15°	2008	1986	1999	1992	1993	567
25°	1884	1865	1877	1863	1868	869
35°	1695	1685	1695	1680	1683	1061
45°	1444	1443	1456	1446	1453	1115
55°	1146	1145	1154	1161	1165	1022
65°	795	795	806	813	820	785
75°	410	409	417	420	396	434
85°	86	62	23	9	8	105
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2058.9	2058.9	2058.9	2058.9	2058.9
2.5°	2077.1	2052.7	2062.7	2055.2	2042.6
5°	2071.5	2047.0	2058.3	2049.5	2045.8
7.5°	2062.7	2037.6	2048.9	2042.0	2040.7
10°	2049.5	2023.8	2035.7	2028.2	2026.9
12.5°	2032.0	2006.9	2020.0	2011.3	2012.5
15°	2007.5	1986.2	1999.3	1992.4	1993.1
17.5°	1983.0	1961.0	1974.9	1968.0	1968.6
20°	1953.5	1932.2	1946.6	1935.9	1939.1
22.5°	1920.3	1901.4	1914.0	1900.2	1906.5
25°	1884.5	1865.0	1877.0	1863.2	1867.5
27.5°	1843.7	1825.5	1837.4	1823.0	1824.9
30°	1798.5	1782.2	1793.5	1779.1	1782.2
32.5°	1750.2	1735.8	1744.5	1731.4	1735.8
35°	1695.0	1684.9	1695.0	1680.5	1683.1
37.5°	1637.2	1627.2	1641.0	1628.5	1632.8
40°	1577.6	1568.2	1583.9	1571.3	1576.4
42.5°	1514.2	1507.3	1523.0	1510.5	1516.8
45°	1444.0	1443.3	1456.5	1446.5	1453.4
47.5°	1374.3	1373.0	1386.2	1379.3	1387.5
50°	1301.5	1300.3	1310.9	1310.3	1315.3
52.5°	1223.7	1225.6	1235.6	1237.5	1243.1
55°	1145.9	1144.6	1154.0	1160.9	1165.3
57.5°	1061.2	1063.7	1071.2	1079.4	1082.5
60°	977.1	975.8	985.9	992.8	997.8
62.5°	888.0	888.0	896.1	906.2	911.2
65°	795.1	795.1	806.4	812.7	820.2
67.5°	700.3	698.4	708.5	722.3	721.0
70°	601.8	602.4	613.7	620.6	619.4
72.5°	503.9	505.8	517.7	520.9	524.0
75°	409.8	409.2	417.3	420.4	396.0
77.5°	316.3	316.9	321.9	236.0	207.1
80°	229.7	230.9	187.0	145.6	145.6
82.5°	151.9	149.4	96.0	56.5	41.4
85°	86.0	61.5	22.6	9.4	8.2
87.5°	35.1	11.3	6.3	4.4	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)