

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: P685679

Luminaire Tested: **4CZL-5-UNV-LVR-L850-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685679
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4CZL-5-UNV-LVR-L850-CD-U
Description: METALUX CRUZE LINEAR 4FT LOUVER MODEL @80 CRI and 5000K
Light Source: (392) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

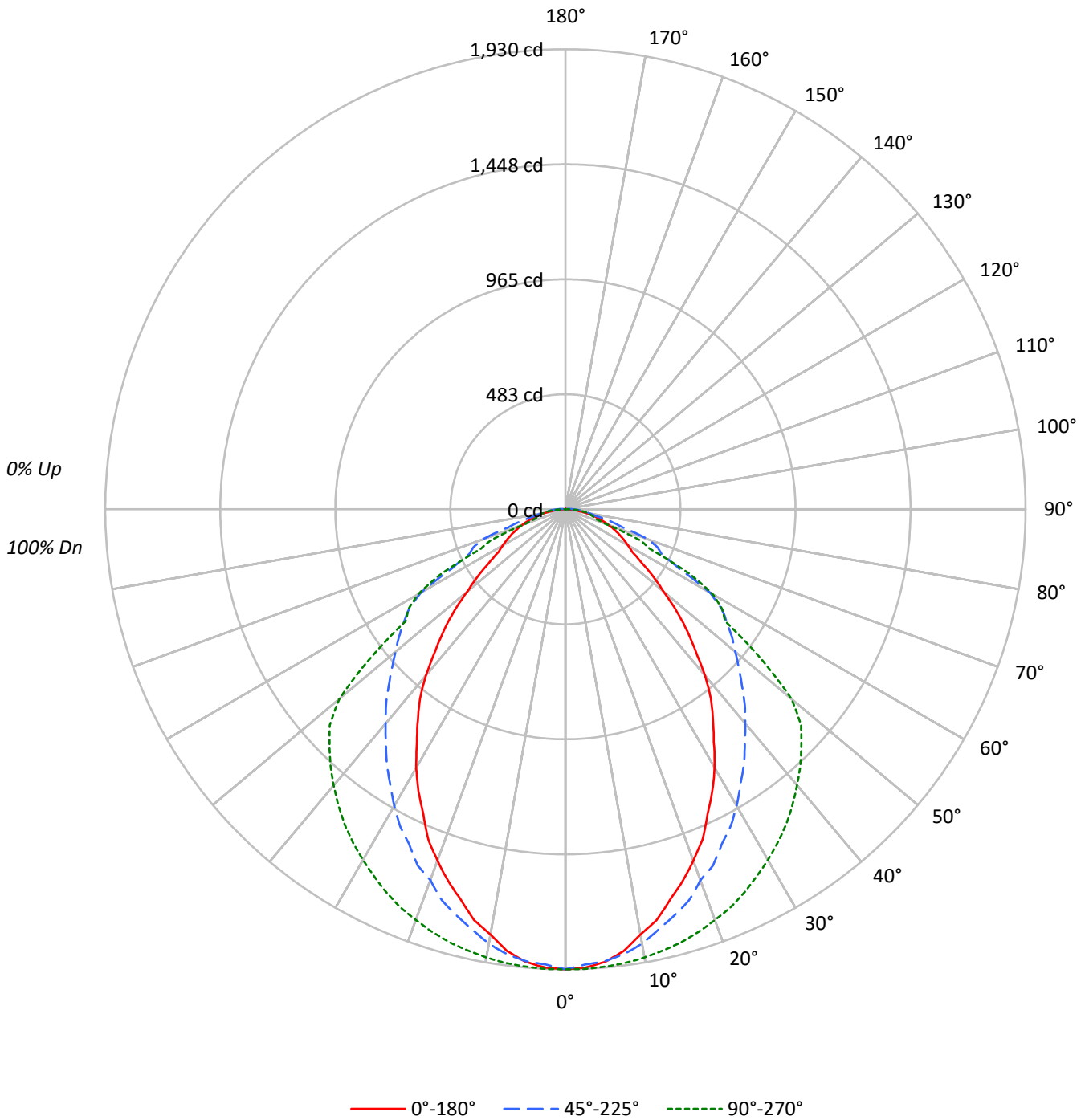
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4370.6 lumens
Efficiency: N/A
Efficacy: 141.0 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.31 / 1.26
Luminous Opening: Rectangular (W 0.83' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31
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

TEST NUMBER: P685679
CATALOG NUMBER: 4CZL-5-UNV-LVR-L850-CD-U

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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	88	88	88	88	85
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	75	75	75	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	65	65	65	63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	56	56	56	54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	49	49	49	49	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	44	44	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	39	39	39	37
8	63	50	42	36	61	49	42	36	48	41	36	47	40	36	46	40	35	35	35	35	34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	32	32	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	34	29	29	29	29	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6232	6232	6232
5°	6178	6169	6243
10°	5938	6069	6261
15°	5668	5899	6286
20°	5390	5689	6301
25°	5027	5525	6322
30°	4667	5355	6332
35°	4255	5146	6361
40°	3838	4945	6373
45°	3301	4786	6389
50°	2698	4674	6221
55°	2197	4655	4601
60°	1959	4525	4616
65°	1894	3396	2977
70°	1819	3481	1692
75°	1754	2453	1511
80°	1599	1995	1800
85°	1434	2486	2242



TEST NUMBER: P685679
 CATALOG NUMBER: 4CZL-5-UNV-LVR-L850-CD-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.8	4.1
10°-20°	501.1	11.5
20°-30°	725.0	16.6
30°-40°	827.5	18.9
40°-50°	813.1	18.6
50°-60°	648.5	14.8
60°-70°	408.5	9.3
70°-80°	181.0	4.1
80°-90°	69.4	1.6
90°-100°	13.8	0.3
100°-110°	0.9	0.0
110°-120°	0.1	0.0
120°-130°	0.1	0.0
130°-140°	0.2	0.0
140°-150°	0.2	0.0
150°-160°	0.2	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	1406.9	32.2
0°-40°	2234.4	51.1
0°-60°	3696.0	84.6
0°-90°	4354.9	99.6
90°-120°	14.8	0.3
90°-150°	15.3	0.4
90°-180°	16.0	0.4
0°-180°	4370.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1930	1930	1930	1930	1930	
5°	1906	1910	1903	1919	1926	179
15°	1696	1712	1764	1847	1880	477
25°	1411	1456	1551	1693	1774	650
35°	1079	1145	1305	1498	1614	675
45°	723	828	1048	1283	1399	556
55°	390	528	827	892	817	359
65°	248	338	444	474	390	246
75°	141	162	197	149	121	147
85°	39	47	67	87	60	41
90°	0	16	35	52	10	2
95°	0	2	15	25	3	0
105°	0	0	0	1	0	0
115°	0	0	0	0	0	0
125°	0	1	0	0	0	0
135°	0	1	0	0	0	0
145°	1	1	0	0	0	0
155°	1	1	0	0	0	0
165°	1	1	1	0	0	0
175°	1	1	1	0	0	0
180°	1	1	1	1	1	



TEST NUMBER: P685679

CATALOG NUMBER: 4CZL-5-UNV-LVR-L850-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1929.9	1929.9	1929.9	1929.9	1929.9
2.5°	1924.8	1923.6	1911.9	1928.4	1930.2
5°	1905.9	1910.1	1903.2	1919.1	1926.0
7.5°	1869.6	1874.1	1882.2	1911.3	1919.7
10°	1810.9	1822.3	1850.8	1891.5	1909.5
12.5°	1765.9	1780.0	1805.5	1874.7	1895.4
15°	1695.5	1712.3	1764.4	1847.2	1880.4
17.5°	1635.6	1666.1	1721.6	1812.4	1858.8
20°	1568.4	1593.0	1655.6	1778.2	1833.7
22.5°	1501.3	1532.5	1617.9	1732.7	1808.2
25°	1410.8	1456.3	1550.7	1692.8	1774.3
27.5°	1334.0	1391.6	1500.1	1645.7	1736.6
30°	1251.6	1296.3	1436.2	1597.8	1698.2
32.5°	1158.7	1228.8	1367.3	1542.9	1658.0
35°	1079.3	1144.6	1305.3	1497.7	1613.7
37.5°	1002.6	1064.0	1236.6	1446.4	1564.5
40°	910.5	991.5	1173.1	1388.0	1511.8
42.5°	808.6	907.8	1114.0	1332.8	1458.1
45°	722.9	828.1	1048.1	1282.8	1399.1
47.5°	633.9	744.8	986.4	1221.9	1340.6
50°	537.1	672.0	930.3	1165.6	1238.4
52.5°	466.4	596.1	880.0	1063.7	1043.9
55°	390.2	528.4	826.9	891.7	817.3
57.5°	332.4	467.3	777.2	700.1	780.2
60°	303.3	418.4	700.7	666.6	714.8
62.5°	276.0	375.5	535.9	625.2	588.0
65°	247.9	337.5	444.5	473.6	389.6
67.5°	220.6	304.5	419.0	353.7	339.3
70°	192.7	279.0	368.7	301.5	179.2
72.5°	166.3	249.7	252.1	166.9	133.1
75°	140.6	162.4	196.6	149.0	121.1
77.5°	112.4	139.4	131.6	133.4	109.7
80°	86.0	95.9	107.3	119.3	96.8
82.5°	60.8	71.3	86.9	104.3	79.4
85°	38.7	47.1	67.1	86.6	60.5
87.5°	15.3	29.7	50.1	69.8	35.7
90°	0.3	16.2	35.4	51.6	9.9
92.5°	0.3	7.5	23.7	37.8	5.1
95°	0.3	2.4	14.7	25.2	3.3
97.5°	0.3	0.9	7.8	15.6	1.8
100°	0.3	0.3	3.3	8.4	0.9
102.5°	0.3	0.3	1.2	3.3	0.3
105°	0.3	0.3	0.3	0.9	0.0
107.5°	0.3	0.3	0.0	0.0	0.0
110°	0.3	0.3	0.0	0.0	0.0



TEST NUMBER: P685679
CATALOG NUMBER: 4CZL-5-UNV-LVR-L850-CD-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.3	0.3	0.0	0.0	0.0
115°	0.3	0.3	0.0	0.0	0.0
117.5°	0.3	0.3	0.0	0.0	0.0
120°	0.3	0.3	0.0	0.0	0.0
122.5°	0.3	0.3	0.0	0.0	0.0
125°	0.3	0.6	0.0	0.0	0.0
127.5°	0.3	0.3	0.0	0.0	0.0
130°	0.3	0.6	0.3	0.0	0.0
132.5°	0.3	0.6	0.3	0.0	0.0
135°	0.3	0.6	0.3	0.0	0.0
137.5°	0.3	0.6	0.3	0.0	0.0
140°	0.6	0.6	0.3	0.0	0.0
142.5°	0.6	0.6	0.3	0.0	0.0
145°	0.6	0.6	0.3	0.0	0.0
147.5°	0.6	0.6	0.3	0.0	0.0
150°	0.6	0.6	0.3	0.0	0.0
152.5°	0.6	0.6	0.3	0.0	0.0
155°	0.6	0.6	0.3	0.0	0.0
157.5°	0.6	0.9	0.3	0.0	0.0
160°	0.9	0.9	0.3	0.0	0.0
162.5°	0.9	0.9	0.6	0.3	0.0
165°	0.9	0.9	0.6	0.3	0.0
167.5°	0.9	0.9	0.6	0.3	0.0
170°	0.9	0.9	0.6	0.3	0.3
172.5°	0.9	0.9	0.6	0.3	0.3
175°	0.9	0.9	0.6	0.3	0.3
177.5°	0.9	0.9	0.6	0.3	0.3
180°	0.6	0.6	0.6	0.6	0.6

(END OF REPORT)