

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: P685704

Luminaire Tested: **8CZL-10-UNV-LVR-L940-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685704
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-10-UNV-LVR-L940-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL @90 CRI and 4000K
Light Source: (784) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

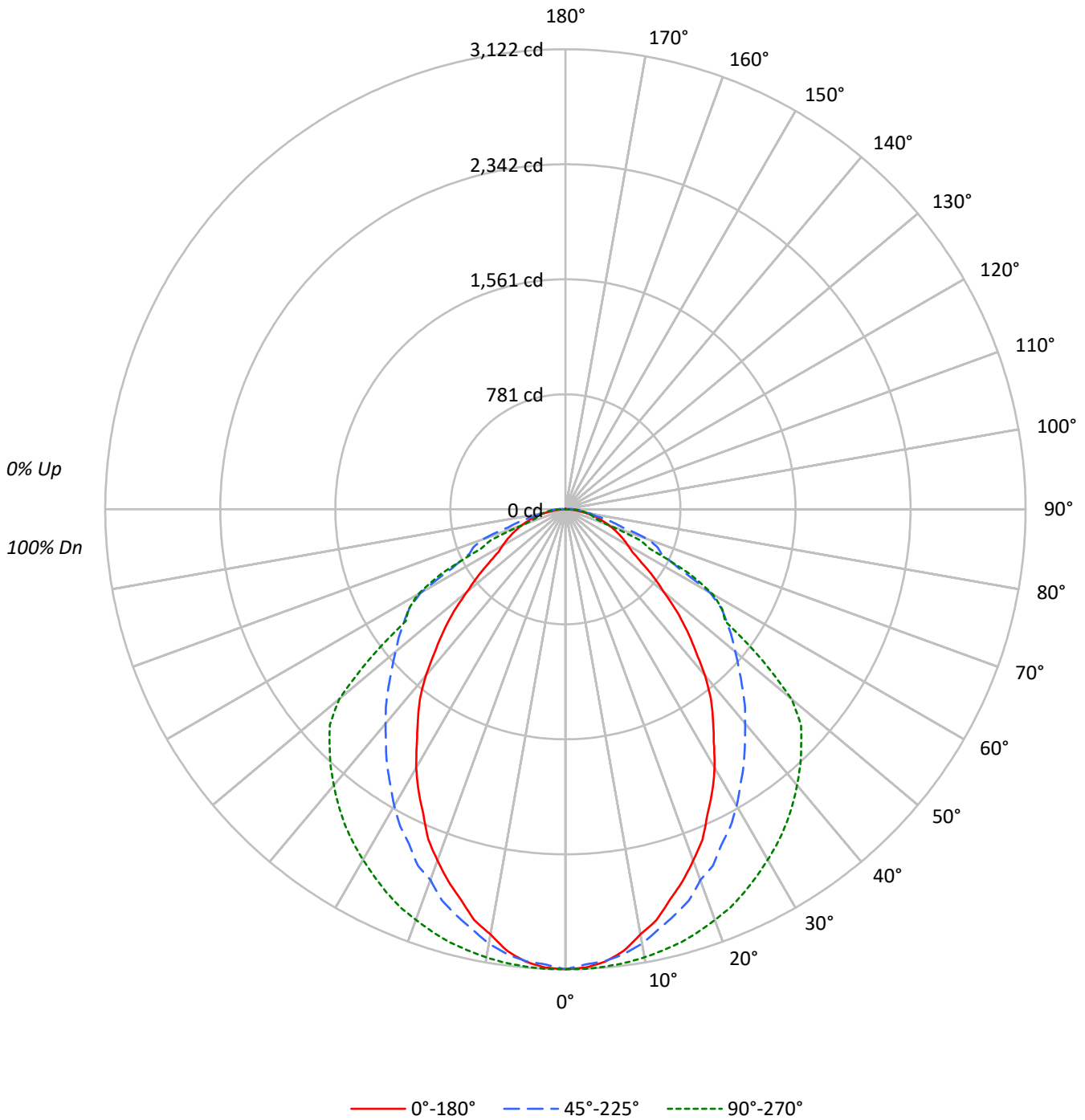
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7068.4 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.31 / 1.26
Luminous Opening: Rectangular (W 0.83' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 63
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: P685704
CATALOG NUMBER: 8CZL-10-UNV-LVR-L940-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	100	100	100	100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	88	85	85	85	85
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73	73	73	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63	63	63	63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	54	54	54	54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	49	47	47	47	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42	42	42	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37	37	37	37
8	63	50	42	36	61	49	42	36	48	41	36	47	40	36	46	40	35	34	34	34	34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30	30	30	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	34	29	28	28	28	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5039	5039	5039
5°	4996	4989	5048
10°	4802	4907	5063
15°	4584	4770	5083
20°	4358	4601	5095
25°	4065	4468	5112
30°	3774	4331	5120
35°	3440	4161	5144
40°	3104	3999	5153
45°	2669	3871	5167
50°	2182	3779	5031
55°	1777	3764	3721
60°	1584	3660	3733
65°	1532	2746	2407
70°	1471	2815	1369
75°	1418	1984	1221
80°	1293	1613	1456
85°	1158	2012	1814



TEST NUMBER: P685704
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	292.3	4.1
10°-20°	810.4	11.5
20°-30°	1172.5	16.6
30°-40°	1338.2	18.9
40°-50°	1314.9	18.6
50°-60°	1048.9	14.8
60°-70°	660.7	9.3
70°-80°	292.7	4.1
80°-90°	112.2	1.6
90°-100°	22.3	0.3
100°-110°	1.5	0.0
110°-120°	0.2	0.0
120°-130°	0.2	0.0
130°-140°	0.3	0.0
140°-150°	0.3	0.0
150°-160°	0.3	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	2275.3	32.2
0°-40°	3613.5	51.1
0°-60°	5977.3	84.6
0°-90°	7042.9	99.6
90°-120°	23.9	0.3
90°-150°	24.8	0.4
90°-180°	25.0	0.4
0°-180°	7068.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3121	3121	3121	3121	3121	
5°	3082	3089	3078	3104	3115	289
15°	2742	2769	2854	2987	3041	772
25°	2282	2355	2508	2738	2870	1051
35°	1746	1851	2111	2422	2610	1091
45°	1169	1339	1695	2075	2263	898
55°	631	855	1337	1442	1322	580
65°	401	546	719	766	630	397
75°	227	263	318	241	196	238
85°	62	76	109	140	98	66
90°	0	26	57	83	16	4
95°	0	4	24	41	5	0
105°	0	0	0	2	0	1
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	1
155°	1	1	0	0	0	0
165°	2	2	1	0	0	0
175°	2	2	1	0	0	0
180°	1	1	1	1	1	



TEST NUMBER: P685704

CATALOG NUMBER: 8CZL-10-UNV-LVR-L940-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3121.1	3121.1	3121.1	3121.1	3121.1
2.5°	3112.9	3110.9	3092.0	3118.7	3121.6
5°	3082.3	3089.1	3078.0	3103.7	3114.8
7.5°	3023.7	3030.9	3044.0	3091.0	3104.6
10°	2928.7	2947.1	2993.1	3059.1	3088.1
12.5°	2856.0	2878.7	2919.9	3031.9	3065.4
15°	2742.1	2769.2	2853.5	2987.3	3041.1
17.5°	2645.1	2694.5	2784.2	2931.1	3006.2
20°	2536.5	2576.3	2677.6	2875.8	2965.5
22.5°	2428.0	2478.4	2616.5	2802.2	2924.3
25°	2281.6	2355.2	2507.9	2737.7	2869.5
27.5°	2157.5	2250.5	2426.0	2661.6	2808.5
30°	2024.2	2096.4	2322.8	2584.0	2746.4
32.5°	1873.9	1987.3	2211.3	2495.3	2681.5
35°	1745.5	1851.1	2110.9	2422.1	2609.7
37.5°	1621.4	1720.8	1999.9	2339.3	2530.2
40°	1472.6	1603.4	1897.2	2244.7	2444.9
42.5°	1307.8	1468.2	1801.7	2155.5	2358.2
45°	1169.1	1339.3	1695.1	2074.6	2262.7
47.5°	1025.2	1204.5	1595.2	1976.2	2168.1
50°	868.6	1086.7	1504.6	1885.1	2002.9
52.5°	754.2	964.1	1423.1	1720.3	1688.3
55°	631.1	854.6	1337.3	1442.0	1321.8
57.5°	537.6	755.7	1256.9	1132.3	1261.7
60°	490.5	676.7	1133.3	1078.0	1156.1
62.5°	446.4	607.4	866.7	1011.1	951.0
65°	400.9	545.8	718.8	765.9	630.1
67.5°	356.8	492.5	677.6	572.0	548.7
70°	311.7	451.3	596.2	487.6	289.9
72.5°	269.0	403.8	407.6	270.0	215.2
75°	227.3	262.7	318.0	240.9	195.8
77.5°	181.8	225.4	212.8	215.7	177.4
80°	139.1	155.1	173.5	192.9	156.6
82.5°	98.4	115.4	140.6	168.7	128.5
85°	62.5	76.1	108.6	140.1	97.9
87.5°	24.7	48.0	80.9	112.9	57.7
90°	0.5	26.2	57.2	83.4	16.0
92.5°	0.5	12.1	38.3	61.1	8.2
95°	0.5	3.9	23.8	40.7	5.3
97.5°	0.5	1.5	12.6	25.2	2.9
100°	0.5	0.5	5.3	13.6	1.5
102.5°	0.5	0.5	1.9	5.3	0.5
105°	0.5	0.5	0.5	1.5	0.0
107.5°	0.5	0.5	0.0	0.0	0.0
110°	0.5	0.5	0.0	0.0	0.0



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CATALOG NUMBER: 8CZL-10-UNV-LVR-L940-CD-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.5	0.5	0.0	0.0	0.0
115°	0.5	0.5	0.0	0.0	0.0
117.5°	0.5	0.5	0.0	0.0	0.0
120°	0.5	0.5	0.0	0.0	0.0
122.5°	0.5	0.5	0.0	0.0	0.0
125°	0.5	1.0	0.0	0.0	0.0
127.5°	0.5	0.5	0.0	0.0	0.0
130°	0.5	1.0	0.5	0.0	0.0
132.5°	0.5	1.0	0.5	0.0	0.0
135°	0.5	1.0	0.5	0.0	0.0
137.5°	0.5	1.0	0.5	0.0	0.0
140°	1.0	1.0	0.5	0.0	0.0
142.5°	1.0	1.0	0.5	0.0	0.0
145°	1.0	1.0	0.5	0.0	0.0
147.5°	1.0	1.0	0.5	0.0	0.0
150°	1.0	1.0	0.5	0.0	0.0
152.5°	1.0	1.0	0.5	0.0	0.0
155°	1.0	1.0	0.5	0.0	0.0
157.5°	1.0	1.5	0.5	0.0	0.0
160°	1.5	1.5	0.5	0.0	0.0
162.5°	1.5	1.5	1.0	0.5	0.0
165°	1.5	1.5	1.0	0.5	0.0
167.5°	1.5	1.5	1.0	0.5	0.0
170°	1.5	1.5	1.0	0.5	0.5
172.5°	1.5	1.5	1.0	0.5	0.5
175°	1.5	1.5	1.0	0.5	0.5
177.5°	1.5	1.5	1.0	0.5	0.5
180°	1.0	1.0	1.0	1.0	1.0

(END OF REPORT)