

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: P685744

Luminaire Tested: **8CZL-10-UNV-N-LVR-L850-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685744
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-10-UNV-N-LVR-L850-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH NARROW LENS @80 CRI and 5000K
Light Source: (784) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

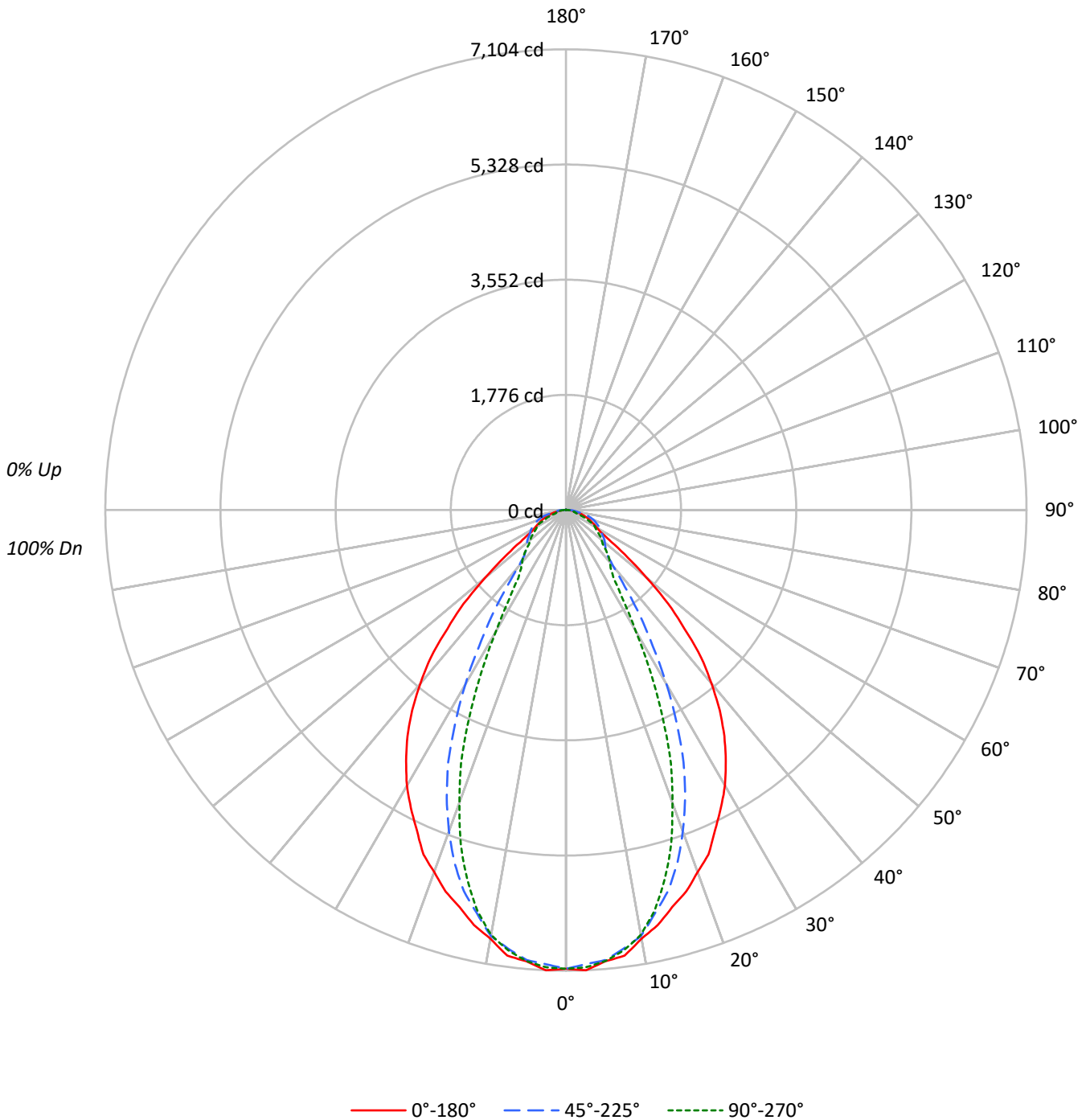
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8375.3 lumens
Efficiency: N/A
Efficacy: 132.9 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.8 / 0.85
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 (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

TEST NUMBER: P685744
CATALOG NUMBER: 8CZL-10-UNV-N-LVR-L850-CD-U

Luminous Intensity Polar Plot





TEST NUMBER: P685744

CATALOG NUMBER: 8CZL-10-UNV-N-LVR-L850-CD-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	90	90	88
2	103	97	92	87	101	95	90	86	92	88	84	88	85	82	86	83	80	80	80	80	78
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	72	72	72	70
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	65	65	65	63
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	59	59	59	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	55	55	55	53
7	75	64	57	51	73	63	56	51	62	55	51	60	55	51	59	54	50	50	50	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	47	47	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	43	43	43	43	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	41	41	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11421	11421	11421
5°	11320	11288	11317
10°	11001	10933	10907
15°	10593	10170	9848
20°	10203	9060	8247
25°	9696	7650	6289
30°	9146	5787	4018
35°	8394	3923	2525
40°	7362	2390	2214
45°	5898	1991	1984
50°	4078	1968	1791
55°	2402	1950	1687
60°	1790	2026	1666
65°	1694	2040	1466
70°	1630	2176	1106
75°	1536	2183	946
80°	1426	1811	1070
85°	1265	2199	1321



TEST NUMBER: P685744
 CATALOG NUMBER: 8CZL-10-UNV-N-LVR-L850-CD-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	657.1	7.8
10°-20°	1701.5	20.3
20°-30°	1987.7	23.7
30°-40°	1474.6	17.6
40°-50°	977.6	11.7
50°-60°	648.3	7.7
60°-70°	483.7	5.8
70°-80°	285.5	3.4
80°-90°	120.2	1.4
90°-100°	26.0	0.3
100°-110°	3.5	0.0
110°-120°	1.8	0.0
120°-130°	1.6	0.0
130°-140°	1.6	0.0
140°-150°	1.6	0.0
150°-160°	1.5	0.0
160°-170°	1.1	0.0
170°-180°	0.4	0.0
0°-30°	4346.2	51.9
0°-40°	5820.9	69.5
0°-60°	7446.8	88.9
0°-90°	8336.3	99.5
90°-120°	31.3	0.4
90°-150°	36.1	0.4
90°-180°	39.0	0.5
0°-180°	8375.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7074	7074	7074	7074	7074	
5°	6985	6979	6965	6990	6983	661
15°	6337	6262	6084	5980	5891	1788
25°	5442	5051	4294	3684	3530	2507
35°	4259	3156	1990	1346	1281	2644
45°	2583	1524	872	905	869	1988
55°	853	750	693	669	599	840
65°	444	496	534	522	384	442
75°	246	276	350	254	152	260
85°	68	83	119	158	71	74
90°	1	25	59	102	21	4
95°	1	4	23	51	11	0
105°	1	1	2	4	4	1
115°	1	1	2	2	2	1
125°	1	1	2	2	2	1
135°	1	2	2	2	2	1
145°	2	2	2	3	3	1
155°	2	3	3	4	4	1
165°	3	4	4	4	4	1
175°	3	4	4	5	5	0
180°	4	4	4	4	4	



TEST NUMBER: P685744

CATALOG NUMBER: 8CZL-10-UNV-N-LVR-L850-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7073.9	7073.9	7073.9	7073.9	7073.9
2.5°	7104.4	7066.1	7010.9	7060.7	7056.5
5°	6984.6	6978.6	6964.8	6990.0	6982.8
7.5°	6930.6	6898.3	6821.5	6880.9	6847.3
10°	6710.1	6672.3	6668.7	6656.7	6652.5
12.5°	6553.6	6508.1	6362.5	6354.7	6322.3
15°	6337.3	6261.8	6084.4	5979.5	5891.4
17.5°	6169.5	6005.3	5709.2	5513.8	5400.5
20°	5938.1	5757.1	5272.9	4931.9	4800.0
22.5°	5747.5	5426.9	4804.2	4321.7	4231.2
25°	5442.5	5051.1	4294.2	3683.5	3530.0
27.5°	5177.6	4637.6	3692.5	3022.4	2834.2
30°	4905.5	4174.3	3103.9	2373.9	2155.2
32.5°	4588.4	3707.4	2498.0	1781.2	1623.0
35°	4258.8	3155.5	1990.4	1345.5	1280.8
37.5°	3895.6	2659.2	1495.9	1123.7	1134.5
40°	3492.9	2226.5	1133.9	1030.2	1050.6
42.5°	3091.3	1862.1	943.3	969.1	975.1
45°	2583.1	1524.1	872.0	905.0	869.0
47.5°	2139.0	1245.4	821.7	818.1	767.1
50°	1623.6	1015.3	783.3	740.2	713.2
52.5°	1202.2	856.4	746.8	699.4	671.8
55°	853.4	749.8	692.8	668.8	599.3
57.5°	641.3	674.2	651.5	597.5	549.0
60°	554.4	607.7	627.5	563.4	516.0
62.5°	500.4	550.8	588.5	543.0	472.3
65°	443.5	495.6	534.0	522.0	383.6
67.5°	393.8	451.9	499.2	447.7	313.4
70°	345.2	399.2	460.9	380.0	234.3
72.5°	293.1	333.8	408.1	295.5	170.8
75°	246.3	275.7	350.0	254.1	151.6
77.5°	197.2	221.8	239.7	231.3	133.6
80°	153.4	178.0	194.8	210.4	115.1
82.5°	111.5	127.7	154.6	186.4	95.9
85°	68.3	83.3	118.7	157.6	71.3
87.5°	29.4	50.9	86.9	130.7	46.7
90°	1.2	25.2	59.3	101.9	21.0
92.5°	0.6	10.8	38.4	74.9	13.8
95°	0.6	4.2	23.4	50.9	10.8
97.5°	0.6	1.8	12.0	33.0	7.8
100°	0.6	1.2	6.6	19.2	5.4
102.5°	0.6	1.2	3.0	9.6	4.2
105°	0.6	1.2	2.4	4.2	3.6
107.5°	0.6	1.2	1.8	3.0	3.0
110°	0.6	1.2	1.8	3.0	3.0



TEST NUMBER: P685744

CATALOG NUMBER: 8CZL-10-UNV-N-LVR-L850-CD-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.6	1.2	1.8	3.0	3.0
115°	0.6	1.2	1.8	2.4	2.4
117.5°	0.6	1.2	1.8	2.4	2.4
120°	0.6	1.2	1.8	2.4	2.4
122.5°	0.6	1.2	1.8	2.4	2.4
125°	1.2	1.2	1.8	2.4	2.4
127.5°	1.2	1.8	1.8	2.4	2.4
130°	1.2	1.8	1.8	2.4	2.4
132.5°	1.2	1.8	1.8	2.4	2.4
135°	1.2	1.8	1.8	2.4	2.4
137.5°	1.2	1.8	2.4	2.4	2.4
140°	1.8	2.4	2.4	2.4	2.4
142.5°	1.8	2.4	2.4	3.0	2.4
145°	1.8	2.4	2.4	3.0	3.0
147.5°	1.8	2.4	3.0	3.0	3.0
150°	1.8	2.4	3.0	3.6	3.6
152.5°	2.4	2.4	3.0	3.6	3.6
155°	2.4	3.0	3.0	3.6	3.6
157.5°	2.4	3.0	3.0	3.6	4.2
160°	2.4	3.0	3.6	4.2	4.2
162.5°	2.4	3.0	3.6	4.2	4.2
165°	3.0	3.6	3.6	4.2	4.2
167.5°	3.0	3.6	4.2	4.2	4.8
170°	3.0	3.6	4.2	4.8	4.8
172.5°	3.0	3.6	4.2	4.8	4.8
175°	3.0	3.6	4.2	4.8	5.4
177.5°	3.0	3.6	4.2	4.8	5.4
180°	4.2	4.2	4.2	4.2	4.2

(END OF REPORT)