

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: P685686

Luminaire Tested: **8CZL-18-UNV-LVR-L850-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685686  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-18-UNV-LVR-L850-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL @80 CRI and 5000K  
Light Source: (1176) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

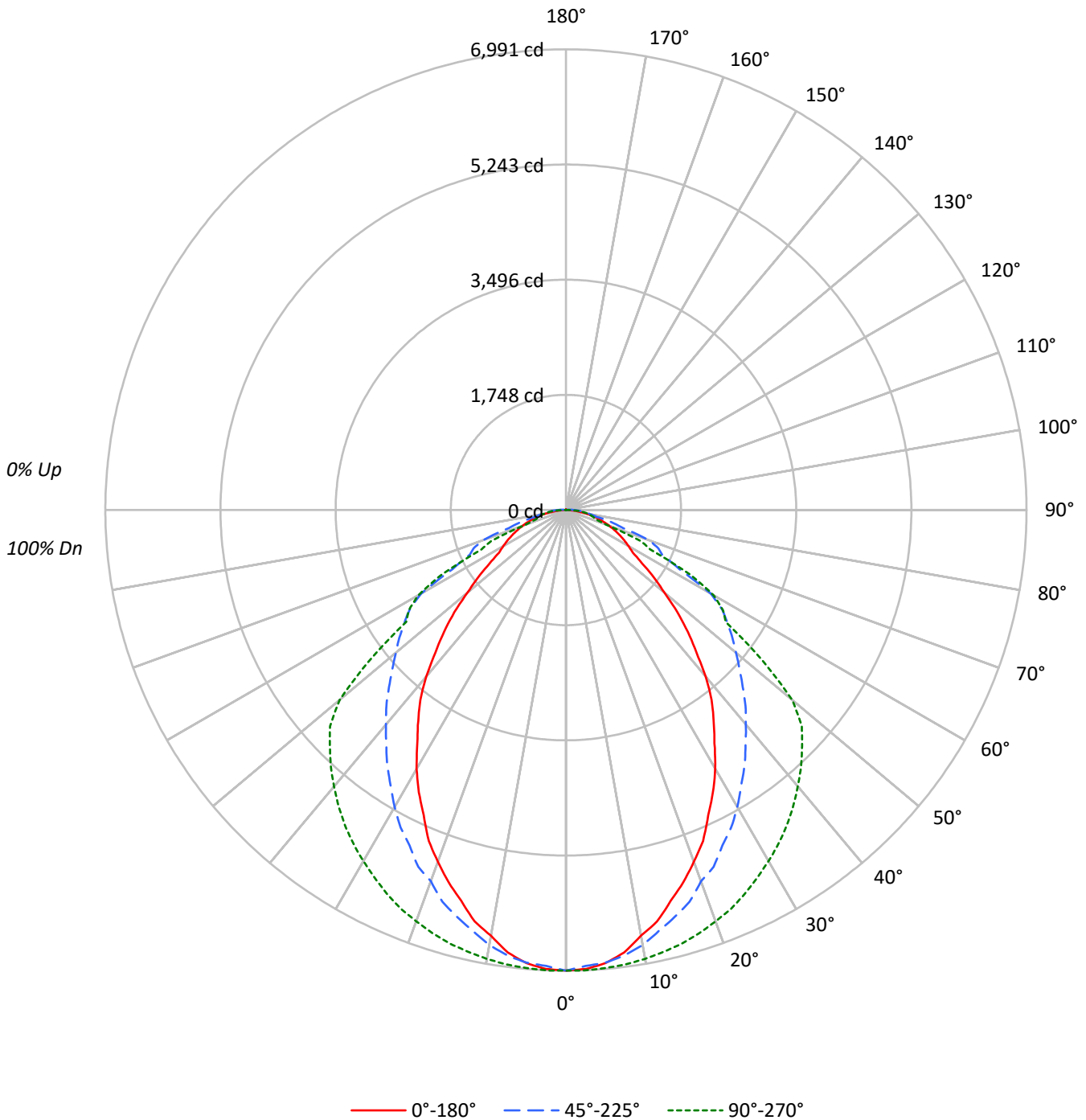
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15829.4 lumens  
Efficiency: N/A  
Efficacy: 145.2 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): 109  
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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CATALOG NUMBER: 8CZL-18-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°	11286	11286	11286
5°	11188	11172	11306
10°	10753	10990	11339
15°	10265	10682	11384
20°	9760	10303	11411
25°	9103	10006	11448
30°	8451	9698	11467
35°	7705	9318	11520
40°	6951	8955	11541
45°	5979	8668	11570
50°	4886	8464	11267
55°	3978	8431	8333
60°	3547	8195	8360
65°	3430	6150	5391
70°	3295	6303	3064
75°	3176	4442	2736
80°	2896	3613	3260
85°	2594	4505	4063



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	654.7	4.1
10°-20°	1815.0	11.5
20°-30°	2625.8	16.6
30°-40°	2997.0	18.9
40°-50°	2944.8	18.6
50°-60°	2348.9	14.8
60°-70°	1479.5	9.3
70°-80°	655.5	4.1
80°-90°	251.4	1.6
90°-100°	49.9	0.3
100°-110°	3.3	0.0
110°-120°	0.4	0.0
120°-130°	0.5	0.0
130°-140°	0.8	0.0
140°-150°	0.7	0.0
150°-160°	0.6	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	5095.5	32.2
0°-40°	8092.5	51.1
0°-60°	13386.2	84.6
0°-90°	15772.5	99.6
90°-120°	53.6	0.3
90°-150°	55.5	0.4
90°-180°	57.0	0.4
0°-180°	15829.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6990	6990	6990	6990	6990	
5°	6903	6918	6893	6951	6976	648
15°	6141	6202	6390	6690	6811	1729
25°	5110	5274	5616	6131	6426	2355
35°	3909	4146	4727	5424	5844	2444
45°	2618	2999	3796	4646	5067	2012
55°	1413	1914	2995	3229	2960	1299
65°	898	1222	1610	1715	1411	889
75°	509	588	712	540	439	534
85°	140	170	243	314	219	148
90°	1	59	128	187	36	8
95°	1	9	53	91	12	1
105°	1	1	1	3	0	1
115°	1	1	0	0	0	1
125°	1	2	0	0	0	1
135°	1	2	1	0	0	1
145°	2	2	1	0	0	1
155°	2	2	1	0	0	1
165°	3	3	2	1	0	1
175°	3	3	2	1	1	0
180°	2	2	2	2	2	



TEST NUMBER: P685686

CATALOG NUMBER: 8CZL-18-UNV-LVR-L850-CD-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6989.7	6989.7	6989.7	6989.7	6989.7
2.5°	6971.2	6966.9	6924.5	6984.2	6990.8
5°	6902.8	6918.0	6893.1	6950.6	6975.6
7.5°	6771.5	6787.8	6817.1	6922.4	6952.8
10°	6558.7	6600.0	6703.1	6850.7	6915.9
12.5°	6395.9	6446.9	6539.2	6789.9	6864.8
15°	6140.8	6201.6	6390.5	6690.1	6810.6
17.5°	5923.7	6034.4	6235.2	6564.1	6732.4
20°	5680.5	5769.5	5996.4	6440.4	6641.2
22.5°	5437.4	5550.3	5859.6	6275.4	6549.0
25°	5109.6	5274.5	5616.5	6131.0	6426.3
27.5°	4831.7	5040.1	5433.0	5960.6	6289.5
30°	4533.1	4694.9	5201.8	5786.9	6150.6
32.5°	4196.6	4450.6	4952.1	5588.3	6005.1
35°	3909.0	4145.6	4727.4	5424.4	5844.4
37.5°	3631.1	3853.6	4478.9	5238.7	5666.4
40°	3297.8	3590.9	4248.7	5027.1	5475.4
42.5°	2928.7	3288.0	4034.9	4827.3	5281.1
45°	2618.3	2999.3	3796.1	4646.0	5067.2
47.5°	2295.9	2697.5	3572.5	4425.7	4855.5
50°	1945.3	2433.7	3369.5	4221.6	4485.4
52.5°	1689.1	2159.1	3187.1	3852.5	3780.9
55°	1413.3	1913.8	2995.0	3229.4	2960.2
57.5°	1203.8	1692.3	2814.8	2535.8	2825.6
60°	1098.5	1515.4	2537.9	2414.2	2589.0
62.5°	999.8	1360.2	1940.9	2264.4	2129.8
65°	897.7	1222.3	1609.8	1715.1	1411.2
67.5°	798.9	1102.9	1517.6	1280.9	1228.8
70°	698.0	1010.6	1335.2	1092.0	649.1
72.5°	602.5	904.2	912.9	604.6	482.0
75°	509.1	588.4	712.1	539.5	438.6
77.5°	407.1	504.8	476.5	483.1	397.3
80°	311.5	347.4	388.6	432.0	350.6
82.5°	220.4	258.4	314.8	377.8	287.7
85°	140.0	170.4	243.2	313.7	219.3
87.5°	55.4	107.5	181.3	252.9	129.2
90°	1.1	58.6	128.1	186.7	35.8
92.5°	1.1	27.1	85.8	136.8	18.5
95°	1.1	8.7	53.2	91.2	11.9
97.5°	1.1	3.3	28.2	56.4	6.5
100°	1.1	1.1	11.9	30.4	3.3
102.5°	1.1	1.1	4.3	11.9	1.1
105°	1.1	1.1	1.1	3.3	0.0
107.5°	1.1	1.1	0.0	0.0	0.0
110°	1.1	1.1	0.0	0.0	0.0



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 CATALOG NUMBER: 8CZL-18-UNV-LVR-L850-CD-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1.1	1.1	0.0	0.0	0.0
115°	1.1	1.1	0.0	0.0	0.0
117.5°	1.1	1.1	0.0	0.0	0.0
120°	1.1	1.1	0.0	0.0	0.0
122.5°	1.1	1.1	0.0	0.0	0.0
125°	1.1	2.2	0.0	0.0	0.0
127.5°	1.1	1.1	0.0	0.0	0.0
130°	1.1	2.2	1.1	0.0	0.0
132.5°	1.1	2.2	1.1	0.0	0.0
135°	1.1	2.2	1.1	0.0	0.0
137.5°	1.1	2.2	1.1	0.0	0.0
140°	2.2	2.2	1.1	0.0	0.0
142.5°	2.2	2.2	1.1	0.0	0.0
145°	2.2	2.2	1.1	0.0	0.0
147.5°	2.2	2.2	1.1	0.0	0.0
150°	2.2	2.2	1.1	0.0	0.0
152.5°	2.2	2.2	1.1	0.0	0.0
155°	2.2	2.2	1.1	0.0	0.0
157.5°	2.2	3.3	1.1	0.0	0.0
160°	3.3	3.3	1.1	0.0	0.0
162.5°	3.3	3.3	2.2	1.1	0.0
165°	3.3	3.3	2.2	1.1	0.0
167.5°	3.3	3.3	2.2	1.1	0.0
170°	3.3	3.3	2.2	1.1	1.1
172.5°	3.3	3.3	2.2	1.1	1.1
175°	3.3	3.3	2.2	1.1	1.1
177.5°	3.3	3.3	2.2	1.1	1.1
180°	2.2	2.2	2.2	2.2	2.2

(END OF REPORT)