

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: P685695

Luminaire Tested: **8CZL-14-UNV-LVR-L935-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685695  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-14-UNV-LVR-L935-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL @90 CRI and 3500K  
Light Source: (784) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

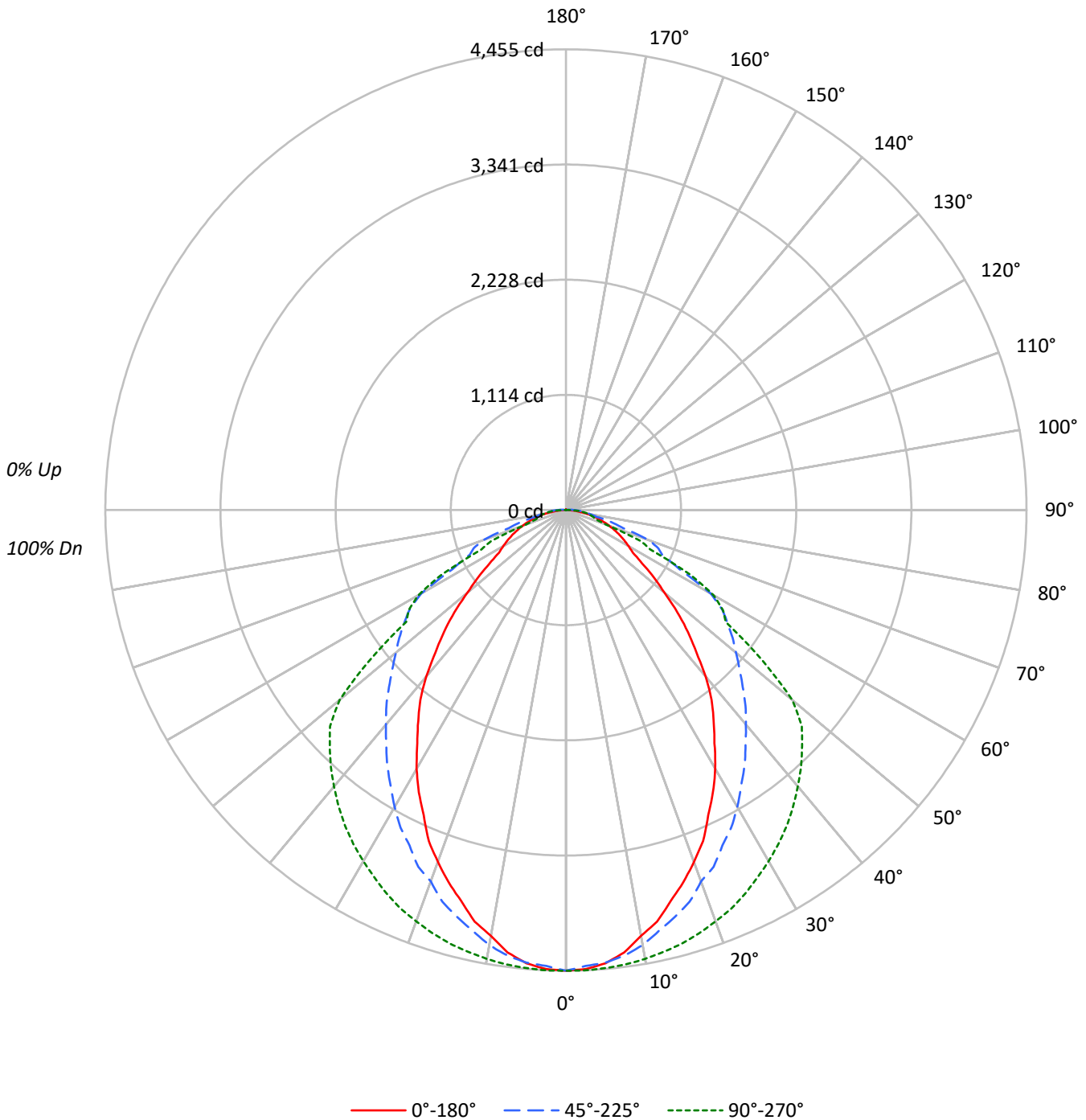
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10088.4 lumens  
Efficiency: N/A  
Efficacy: 113.4 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): 89  
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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### 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°	7193	7193	7193
5°	7130	7120	7205
10°	6853	7004	7226
15°	6542	6808	7255
20°	6220	6566	7273
25°	5801	6377	7296
30°	5386	6181	7308
35°	4910	5939	7342
40°	4430	5707	7355
45°	3810	5524	7374
50°	3114	5394	7180
55°	2536	5373	5311
60°	2261	5223	5328
65°	2186	3920	3436
70°	2100	4017	1953
75°	2024	2831	1744
80°	1847	2303	2078
85°	1652	2871	2588



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	417.3	4.1
10°-20°	1156.7	11.5
20°-30°	1673.5	16.6
30°-40°	1910.0	18.9
40°-50°	1876.8	18.6
50°-60°	1497.0	14.8
60°-70°	943.0	9.3
70°-80°	417.7	4.1
80°-90°	160.2	1.6
90°-100°	31.8	0.3
100°-110°	2.1	0.0
110°-120°	0.3	0.0
120°-130°	0.3	0.0
130°-140°	0.5	0.0
140°-150°	0.4	0.0
150°-160°	0.4	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	3247.4	32.2
0°-40°	5157.5	51.1
0°-60°	8531.3	84.6
0°-90°	10052.1	99.6
90°-120°	34.2	0.3
90°-150°	35.4	0.4
90°-180°	36.0	0.4
0°-180°	10088.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4455	4455	4455	4455	4455	
5°	4399	4409	4393	4430	4446	413
15°	3914	3952	4073	4264	4340	1102
25°	3256	3362	3580	3907	4096	1501
35°	2491	2642	3013	3457	3725	1557
45°	1669	1912	2419	2961	3229	1282
55°	901	1220	1909	2058	1887	828
65°	572	779	1026	1093	899	567
75°	324	375	454	344	280	340
85°	89	109	155	200	140	94
90°	1	37	82	119	23	5
95°	1	6	34	58	8	1
105°	1	1	1	2	0	1
115°	1	1	0	0	0	1
125°	1	1	0	0	0	1
135°	1	1	1	0	0	1
145°	1	1	1	0	0	1
155°	1	1	1	0	0	1
165°	2	2	1	1	0	1
175°	2	2	1	1	1	0
180°	1	1	1	1	1	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4454.7	4454.7	4454.7	4454.7	4454.7
2.5°	4442.9	4440.1	4413.1	4451.2	4455.3
5°	4399.3	4409.0	4393.1	4429.7	4445.7
7.5°	4315.6	4326.0	4344.7	4411.8	4431.1
10°	4180.0	4206.3	4272.0	4366.1	4407.6
12.5°	4076.2	4108.7	4167.5	4327.4	4375.1
15°	3913.6	3952.4	4072.8	4263.7	4340.5
17.5°	3775.3	3845.9	3973.8	4183.5	4290.7
20°	3620.3	3677.0	3821.6	4104.6	4232.6
22.5°	3465.3	3537.3	3734.5	3999.4	4173.8
25°	3256.4	3361.6	3579.5	3907.4	4095.6
27.5°	3079.3	3212.1	3462.6	3798.8	4008.4
30°	2889.1	2992.1	3315.2	3688.1	3919.9
32.5°	2674.6	2836.5	3156.1	3561.5	3827.2
35°	2491.3	2642.1	3012.9	3457.0	3724.8
37.5°	2314.2	2456.0	2854.5	3338.7	3611.3
40°	2101.8	2288.6	2707.8	3203.8	3489.6
42.5°	1866.5	2095.5	2571.5	3076.5	3365.7
45°	1668.7	1911.5	2419.3	2961.0	3229.4
47.5°	1463.2	1719.2	2276.8	2820.6	3094.5
50°	1239.7	1551.1	2147.4	2690.5	2858.6
52.5°	1076.5	1376.0	2031.2	2455.3	2409.6
55°	900.8	1219.7	1908.7	2058.2	1886.6
57.5°	767.2	1078.6	1793.9	1616.1	1800.8
60°	700.1	965.8	1617.5	1538.6	1650.0
62.5°	637.2	866.9	1237.0	1443.1	1357.4
65°	572.1	779.0	1026.0	1093.1	899.4
67.5°	509.2	702.9	967.2	816.4	783.1
70°	444.8	644.1	850.9	696.0	413.7
72.5°	384.0	576.3	581.8	385.3	307.2
75°	324.5	375.0	453.8	343.8	279.5
77.5°	259.4	321.7	303.7	307.9	253.2
80°	198.6	221.4	247.7	275.3	223.5
82.5°	140.4	164.7	200.6	240.8	183.3
85°	89.2	108.6	155.0	199.9	139.7
87.5°	35.3	68.5	115.5	161.2	82.3
90°	0.7	37.4	81.6	119.0	22.8
92.5°	0.7	17.3	54.7	87.2	11.8
95°	0.7	5.5	33.9	58.1	7.6
97.5°	0.7	2.1	18.0	36.0	4.2
100°	0.7	0.7	7.6	19.4	2.1
102.5°	0.7	0.7	2.8	7.6	0.7
105°	0.7	0.7	0.7	2.1	0.0
107.5°	0.7	0.7	0.0	0.0	0.0
110°	0.7	0.7	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.7	0.7	0.0	0.0	0.0
115°	0.7	0.7	0.0	0.0	0.0
117.5°	0.7	0.7	0.0	0.0	0.0
120°	0.7	0.7	0.0	0.0	0.0
122.5°	0.7	0.7	0.0	0.0	0.0
125°	0.7	1.4	0.0	0.0	0.0
127.5°	0.7	0.7	0.0	0.0	0.0
130°	0.7	1.4	0.7	0.0	0.0
132.5°	0.7	1.4	0.7	0.0	0.0
135°	0.7	1.4	0.7	0.0	0.0
137.5°	0.7	1.4	0.7	0.0	0.0
140°	1.4	1.4	0.7	0.0	0.0
142.5°	1.4	1.4	0.7	0.0	0.0
145°	1.4	1.4	0.7	0.0	0.0
147.5°	1.4	1.4	0.7	0.0	0.0
150°	1.4	1.4	0.7	0.0	0.0
152.5°	1.4	1.4	0.7	0.0	0.0
155°	1.4	1.4	0.7	0.0	0.0
157.5°	1.4	2.1	0.7	0.0	0.0
160°	2.1	2.1	0.7	0.0	0.0
162.5°	2.1	2.1	1.4	0.7	0.0
165°	2.1	2.1	1.4	0.7	0.0
167.5°	2.1	2.1	1.4	0.7	0.0
170°	2.1	2.1	1.4	0.7	0.7
172.5°	2.1	2.1	1.4	0.7	0.7
175°	2.1	2.1	1.4	0.7	0.7
177.5°	2.1	2.1	1.4	0.7	0.7
180°	1.4	1.4	1.4	1.4	1.4

(END OF REPORT)