

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: P685836

Luminaire Tested: **8CZL-18-UNV-M-LVR-L950-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685836  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-18-UNV-M-LVR-L950-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH MEDIUM LENS @90 CRI and 5000K  
Light Source: (1176) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

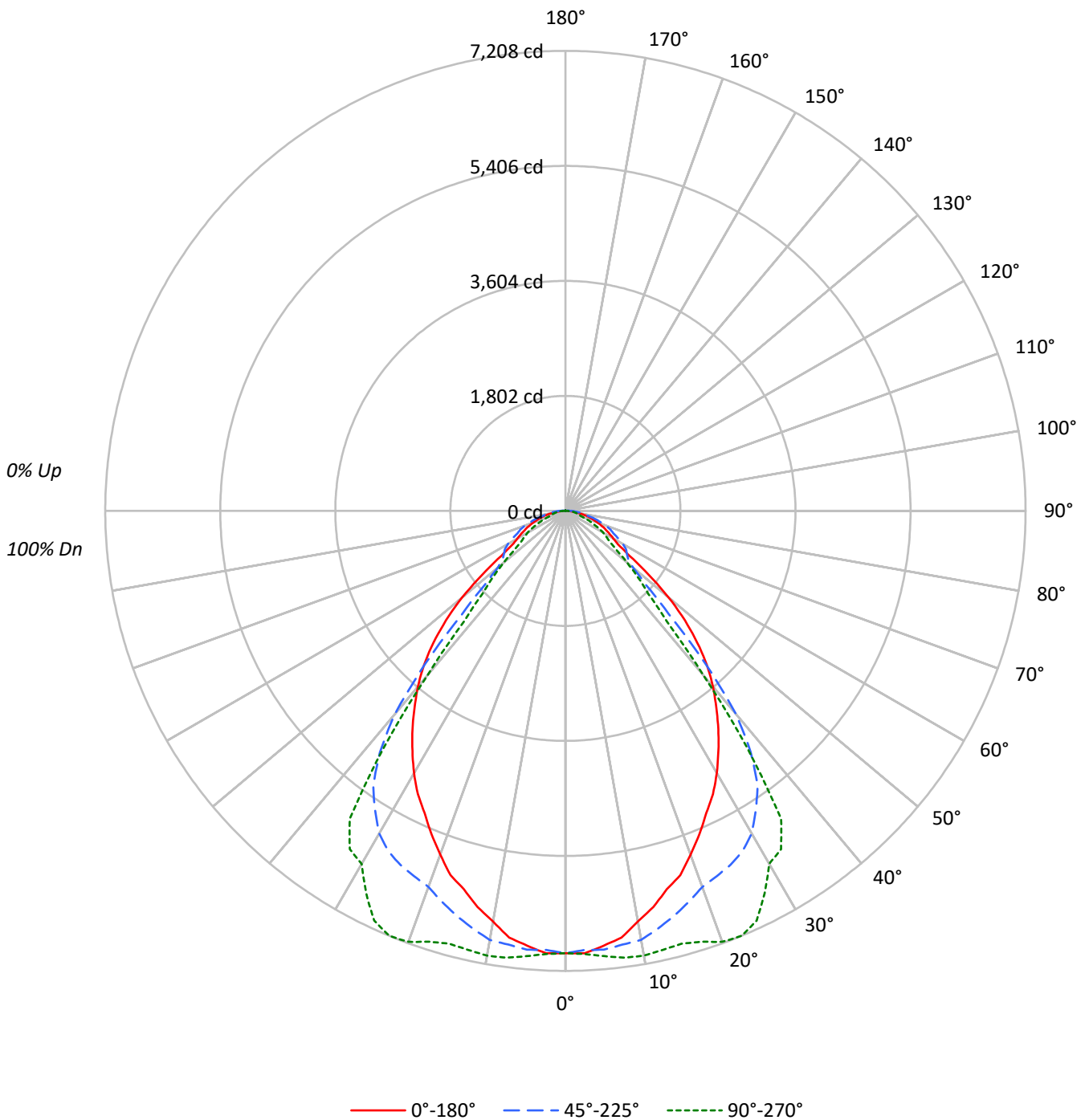
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12818.4 lumens  
Efficiency: N/A  
Efficacy: 117.6 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.34 / 1.2  
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 (A<sub>in</sub>): 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				
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	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	90	90	90	88
2	103	96	90	86	100	94	89	84	91	86	83	87	84	81	84	81	79	79	79	79	77
3	95	87	80	74	93	85	79	74	82	77	72	79	75	71	77	73	70	70	70	70	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	70	66	62	62	62	62	60
5	83	72	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	56	56	56	54
6	77	65	58	52	75	65	57	52	63	56	51	61	55	51	60	55	51	51	51	51	49
7	72	60	53	47	70	59	52	47	58	51	47	57	51	46	55	50	46	46	46	46	44
8	68	56	48	43	66	55	48	43	54	47	42	52	47	42	51	46	42	42	42	42	40
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	42	39	39	39	39	37
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	35	35	35	35	34

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	11188	11188	11188
5°	11085	11184	11351
10°	10709	11191	11599
15°	10258	10982	11736
20°	9845	10773	12346
25°	9301	10901	12620
30°	8841	10877	11903
35°	8232	10344	11607
40°	7578	8768	7073
45°	6677	5226	4193
50°	5300	3470	3164
55°	3431	3301	2401
60°	2801	3355	2206
65°	2669	3162	1802
70°	2534	3174	1425
75°	2407	2971	1324
80°	2226	2806	1487
85°	1991	3431	1825



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	657.6	5.1
10°-20°	1865.2	14.6
20°-30°	2812.6	21.9
30°-40°	3107.8	24.2
40°-50°	1948.6	15.2
50°-60°	1049.1	8.2
60°-70°	712.5	5.6
70°-80°	425.5	3.3
80°-90°	184.9	1.4
90°-100°	40.5	0.3
100°-110°	4.6	0.0
110°-120°	1.7	0.0
120°-130°	1.5	0.0
130°-140°	1.8	0.0
140°-150°	1.7	0.0
150°-160°	1.3	0.0
160°-170°	1.0	0.0
170°-180°	0.4	0.0
0°-30°	5335.4	41.6
0°-40°	8443.2	65.9
0°-60°	11440.9	89.3
0°-90°	12763.9	99.6
90°-120°	46.8	0.4
90°-150°	51.8	0.4
90°-180°	55.0	0.4
0°-180°	12818.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6930	6930	6930	6930	6930	
5°	6839	6851	6901	6982	7004	644
15°	6137	6352	6570	6888	7021	1733
25°	5221	5538	6119	6771	7084	2410
35°	4176	4667	5248	5646	5889	2606
45°	2924	3183	2289	1866	1836	2230
55°	1219	1275	1173	1015	853	1184
65°	698	768	828	672	472	691
75°	386	429	476	391	212	407
85°	108	132	185	244	98	116
90°	3	41	94	156	29	7
95°	1	6	37	80	14	1
105°	1	2	3	6	3	1
115°	1	2	2	2	2	1
125°	1	2	2	2	2	1
135°	2	2	3	3	3	1
145°	2	3	3	3	4	1
155°	3	3	3	3	3	1
165°	3	4	4	4	4	1
175°	4	4	4	4	4	0
180°	4	4	4	4	4	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6929.5	6929.5	6929.5	6929.5	6929.5
2.5°	6938.5	6919.6	6884.3	6947.6	6948.5
5°	6839.2	6850.9	6900.6	6981.9	7003.6
7.5°	6742.5	6787.7	6854.5	7050.6	7060.5
10°	6531.9	6625.9	6825.6	7014.4	7075.0
12.5°	6356.6	6495.8	6701.8	6950.3	7044.3
15°	6137.1	6352.1	6569.9	6887.9	7020.8
17.5°	5983.5	6156.1	6422.6	6859.0	7076.8
20°	5729.6	5972.6	6269.9	6878.9	7185.2
22.5°	5482.9	5778.4	6193.1	6886.1	7207.8
25°	5220.9	5538.0	6119.0	6771.4	7084.0
27.5°	5004.0	5269.6	6008.8	6531.9	6757.8
30°	4742.0	5054.6	5834.4	6166.0	6384.7
32.5°	4460.0	4856.7	5551.6	5885.9	6283.5
35°	4176.3	4667.0	5248.0	5645.5	5888.6
37.5°	3879.9	4510.6	4770.9	4835.0	4668.8
40°	3595.3	4292.9	4160.1	3539.3	3355.9
42.5°	3284.5	3824.8	3244.7	2435.1	2352.9
45°	2924.0	3183.3	2288.8	1865.9	1836.1
47.5°	2539.9	2465.0	1706.9	1559.6	1542.4
50°	2109.8	1970.7	1381.6	1376.1	1259.6
52.5°	1644.5	1565.0	1238.8	1193.6	1008.4
55°	1218.9	1274.9	1172.8	1014.7	853.0
57.5°	975.9	1106.0	1126.8	886.4	762.6
60°	867.4	967.7	1039.1	815.0	683.1
62.5°	778.0	857.5	930.7	756.3	589.1
65°	698.5	768.0	827.7	672.3	471.7
67.5°	614.4	686.7	759.9	577.4	401.2
70°	536.7	613.5	672.3	512.3	301.8
72.5°	456.3	535.8	562.0	428.3	241.3
75°	385.8	429.2	476.2	391.2	212.3
77.5°	311.7	348.8	367.8	358.7	187.0
80°	239.4	269.3	301.8	326.2	159.9
82.5°	175.3	197.0	241.3	287.3	128.3
85°	107.5	131.9	185.2	244.0	98.5
87.5°	47.9	78.6	136.4	201.5	63.3
90°	2.7	40.7	94.0	156.3	28.9
92.5°	0.9	18.1	61.4	115.7	19.9
95°	0.9	6.3	37.0	80.4	14.5
97.5°	0.9	2.7	20.8	51.5	9.0
100°	0.9	1.8	9.9	29.8	6.3
102.5°	0.9	1.8	4.5	14.5	4.5
105°	0.9	1.8	2.7	6.3	2.7
107.5°	0.9	1.8	1.8	2.7	1.8
110°	0.9	1.8	1.8	1.8	1.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	1.8	1.8	1.8	1.8
115°	0.9	1.8	1.8	1.8	1.8
117.5°	0.9	1.8	1.8	1.8	1.8
120°	0.9	1.8	1.8	1.8	1.8
122.5°	0.9	1.8	1.8	1.8	1.8
125°	0.9	1.8	1.8	1.8	1.8
127.5°	0.9	1.8	1.8	1.8	1.8
130°	0.9	1.8	1.8	1.8	1.8
132.5°	1.8	1.8	2.7	2.7	2.7
135°	1.8	1.8	2.7	2.7	2.7
137.5°	1.8	2.7	2.7	2.7	2.7
140°	1.8	2.7	2.7	2.7	2.7
142.5°	1.8	2.7	2.7	2.7	2.7
145°	1.8	2.7	2.7	2.7	3.6
147.5°	1.8	2.7	2.7	2.7	3.6
150°	1.8	2.7	2.7	2.7	2.7
152.5°	2.7	2.7	2.7	2.7	2.7
155°	2.7	2.7	2.7	2.7	2.7
157.5°	2.7	2.7	2.7	3.6	3.6
160°	2.7	3.6	3.6	3.6	3.6
162.5°	2.7	3.6	3.6	3.6	3.6
165°	2.7	3.6	3.6	3.6	3.6
167.5°	2.7	3.6	3.6	3.6	4.5
170°	3.6	3.6	3.6	4.5	4.5
172.5°	3.6	3.6	3.6	4.5	4.5
175°	3.6	3.6	3.6	4.5	4.5
177.5°	3.6	4.5	3.6	4.5	5.4
180°	4.5	4.5	4.5	4.5	4.5

(END OF REPORT)