

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: P685926

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

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685926  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-18-UNV-LVRF-L850-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH FROSTED LAY-IN @80 CRI and 5000K  
Light Source: (1176) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

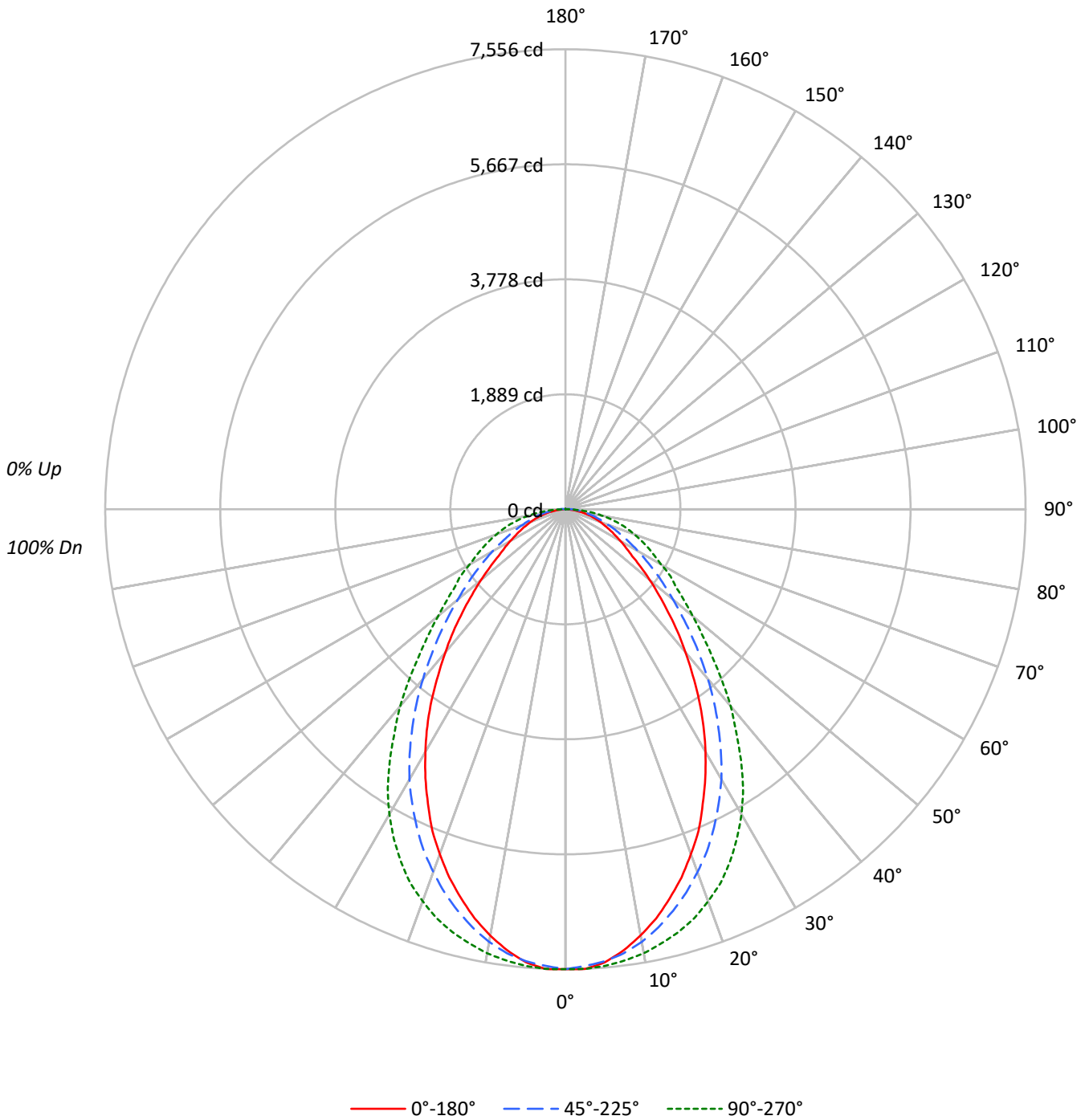
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13933.1 lumens  
Efficiency: N/A  
Efficacy: 127.8 lumens/watt  
Spacing Criteria (0/90/45): 0.97 / 1.15 / 1.12  
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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	88	88	88	86
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	82	79	76	76	76	76	74
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	59	59	59	57
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	53	53	53	51
6	75	63	55	49	73	62	54	48	60	53	48	58	52	48	57	51	47	47	47	47	45
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	43	43	43	41
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	39	39	39	37
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	36	36	36	34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	33	33	33	31

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

	0°	45°	90°
0°	12195	12195	12195
5°	12106	12078	12199
10°	11654	11826	12139
15°	11057	11413	12012
20°	10355	10892	11773
25°	9509	10276	11383
30°	8571	9550	10779
35°	7549	8638	9900
40°	6461	7669	8902
45°	5443	6685	7753
50°	4545	5794	6855
55°	3762	5091	6215
60°	3390	4462	5861
65°	3081	3927	5731
70°	2870	3525	5688
75°	2661	3291	5804
80°	2412	3260	5814
85°	2071	3820	5752



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	706.7	5.1
10°-20°	1931.4	13.9
20°-30°	2668.6	19.2
30°-40°	2745.2	19.7
40°-50°	2250.6	16.2
50°-60°	1614.9	11.6
60°-70°	1086.2	7.8
70°-80°	634.0	4.6
80°-90°	244.3	1.8
90°-100°	42.3	0.3
100°-110°	3.6	0.0
110°-120°	0.7	0.0
120°-130°	0.6	0.0
130°-140°	0.9	0.0
140°-150°	1.1	0.0
150°-160°	0.9	0.0
160°-170°	0.7	0.0
170°-180°	0.3	0.0
0°-30°	5306.7	38.1
0°-40°	8051.9	57.8
0°-60°	11917.4	85.5
0°-90°	13881.9	99.6
90°-120°	46.6	0.3
90°-150°	49.2	0.4
90°-180°	51.0	0.4
0°-180°	13933.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7553	7553	7553	7553	7553	
5°	7469	7475	7452	7522	7527	701
15°	6615	6682	6828	7093	7186	1856
25°	5338	5462	5768	6170	6389	2450
35°	3830	4007	4382	4793	5023	2386
45°	2384	2569	2928	3215	3396	1850
55°	1336	1496	1808	2056	2208	1230
65°	806	854	1028	1320	1500	804
75°	427	442	528	733	930	453
85°	112	139	206	308	310	121
90°	1	47	105	161	34	7
95°	1	8	44	77	14	0
105°	0	1	2	4	2	0
115°	1	1	1	0	0	1
125°	1	1	1	0	0	1
135°	1	2	1	1	0	1
145°	2	2	2	1	1	1
155°	2	3	2	1	1	1
165°	3	3	3	2	1	1
175°	3	4	3	2	2	0
180°	3	3	3	3	3	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7553.0	7553.0	7553.0	7553.0	7553.0
2.5°	7556.3	7549.8	7507.4	7556.3	7554.1
5°	7469.4	7474.9	7452.1	7521.5	7527.0
7.5°	7307.7	7329.4	7354.4	7456.4	7474.9
10°	7108.0	7140.5	7213.3	7365.2	7404.3
12.5°	6883.3	6919.1	7037.4	7246.9	7301.2
15°	6615.1	6682.4	6827.9	7092.8	7186.1
17.5°	6338.3	6420.8	6601.0	6914.7	7040.7
20°	6026.8	6109.3	6339.4	6689.0	6851.8
22.5°	5714.2	5794.5	6075.6	6448.0	6651.0
25°	5337.5	5462.3	5768.4	6170.1	6389.4
27.5°	4977.1	5109.5	5450.4	5881.3	6099.5
30°	4597.2	4752.4	5122.6	5534.0	5781.5
32.5°	4220.5	4377.9	4755.7	5184.4	5429.8
35°	3829.7	4006.6	4382.2	4792.6	5022.7
37.5°	3433.5	3626.7	4013.2	4417.0	4602.6
40°	3065.5	3255.5	3638.7	4000.1	4223.7
42.5°	2725.7	2912.4	3267.4	3595.2	3796.1
45°	2383.8	2569.4	2927.6	3215.3	3395.5
47.5°	2077.7	2267.6	2600.9	2891.8	3042.7
50°	1809.6	1982.2	2306.7	2570.5	2729.0
52.5°	1564.2	1721.6	2042.9	2299.1	2452.2
55°	1336.3	1495.8	1808.5	2056.0	2207.9
57.5°	1183.2	1297.2	1578.3	1853.0	2048.4
60°	1049.7	1120.3	1381.9	1707.5	1815.0
62.5°	914.0	978.1	1193.0	1479.6	1646.7
65°	806.5	854.3	1028.0	1320.0	1500.2
67.5°	700.2	736.0	884.7	1165.8	1348.2
70°	607.9	630.7	746.8	1013.9	1204.9
72.5°	520.0	531.9	636.1	874.9	1064.9
75°	426.6	441.8	527.6	732.7	930.3
77.5°	337.6	359.3	435.3	611.1	776.1
80°	259.4	276.8	350.6	502.6	625.3
82.5°	180.2	204.1	273.6	397.3	478.7
85°	111.8	138.9	206.2	308.3	310.5
87.5°	46.7	86.8	150.9	228.0	158.5
90°	1.1	46.7	105.3	160.7	33.7
92.5°	0.0	21.7	71.6	115.1	19.5
95°	1.1	7.6	44.5	77.1	14.1
97.5°	0.0	2.2	23.9	48.8	8.7
100°	0.0	1.1	9.8	27.1	5.4
102.5°	0.0	1.1	4.3	11.9	3.3
105°	0.0	1.1	2.2	4.3	2.2
107.5°	0.0	1.1	1.1	1.1	1.1
110°	1.1	1.1	1.1	1.1	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	1.1	1.1	0.0	0.0
115°	1.1	1.1	1.1	0.0	0.0
117.5°	1.1	1.1	1.1	0.0	0.0
120°	1.1	1.1	1.1	0.0	0.0
122.5°	1.1	1.1	1.1	0.0	0.0
125°	1.1	1.1	1.1	0.0	0.0
127.5°	1.1	1.1	1.1	0.0	0.0
130°	1.1	1.1	1.1	0.0	0.0
132.5°	1.1	2.2	1.1	1.1	0.0
135°	1.1	2.2	1.1	1.1	0.0
137.5°	1.1	2.2	1.1	1.1	0.0
140°	1.1	2.2	1.1	1.1	1.1
142.5°	2.2	2.2	2.2	1.1	1.1
145°	2.2	2.2	2.2	1.1	1.1
147.5°	2.2	2.2	2.2	1.1	1.1
150°	2.2	2.2	2.2	1.1	1.1
152.5°	2.2	3.3	2.2	1.1	1.1
155°	2.2	3.3	2.2	1.1	1.1
157.5°	2.2	3.3	2.2	1.1	1.1
160°	2.2	3.3	2.2	1.1	1.1
162.5°	3.3	3.3	2.2	2.2	1.1
165°	3.3	3.3	3.3	2.2	1.1
167.5°	3.3	3.3	3.3	2.2	1.1
170°	3.3	3.3	3.3	2.2	2.2
172.5°	3.3	3.3	3.3	2.2	2.2
175°	3.3	4.3	3.3	2.2	2.2
177.5°	3.3	4.3	3.3	2.2	2.2
180°	3.3	3.3	3.3	3.3	3.3

(END OF REPORT)