

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: P685804

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

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685804  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-10-UNV-M-LVR-L850-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH MEDIUM LENS @80 CRI and 5000K  
Light Source: (784) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

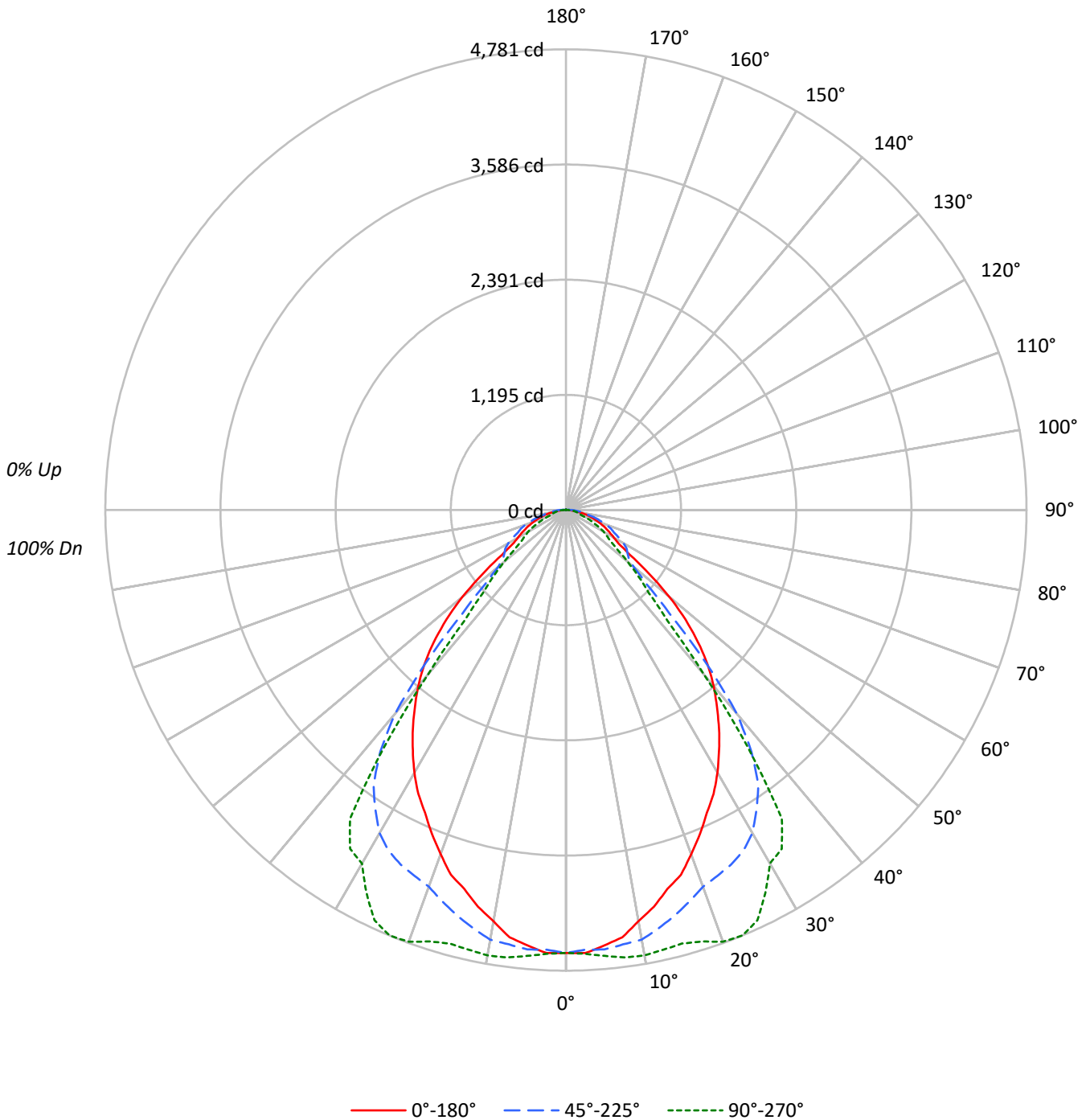
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8502.9 lumens  
Efficiency: N/A  
Efficacy: 135.0 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): 63  
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	93	91	90	88
2	103	96	90	86	100	94	89	84	91	86	83	87	84	81	84	81	79	84	81	79	77
3	95	87	80	74	93	85	79	74	82	77	72	79	75	71	77	73	70	77	73	70	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	70	66	62	70	66	62	60
5	83	72	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	65	60	56	54
6	77	65	58	52	75	65	57	52	63	56	51	61	55	51	60	55	51	60	55	51	49
7	72	60	53	47	70	59	52	47	58	51	47	57	51	46	55	50	46	55	50	46	44
8	68	56	48	43	66	55	48	43	54	47	42	52	47	42	51	46	42	51	46	42	40
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	42	39	48	42	39	37
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	35	45	39	35	34

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

	0°	45°	90°
0°	7421	7421	7421
5°	7353	7419	7530
10°	7104	7423	7694
15°	6805	7285	7785
20°	6530	7146	8189
25°	6170	7231	8371
30°	5864	7215	7896
35°	5460	6861	7699
40°	5027	5816	4692
45°	4429	3467	2781
50°	3515	2302	2099
55°	2276	2190	1593
60°	1858	2226	1463
65°	1770	2097	1195
70°	1681	2105	945
75°	1596	1971	879
80°	1477	1861	987
85°	1321	2277	1210



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	436.2	5.1
10°-20°	1237.2	14.6
20°-30°	1865.7	21.9
30°-40°	2061.5	24.2
40°-50°	1292.6	15.2
50°-60°	695.9	8.2
60°-70°	472.6	5.6
70°-80°	282.3	3.3
80°-90°	122.7	1.4
90°-100°	26.9	0.3
100°-110°	3.1	0.0
110°-120°	1.1	0.0
120°-130°	1.0	0.0
130°-140°	1.2	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°	3539.1	41.6
0°-40°	5600.6	65.9
0°-60°	7589.1	89.3
0°-90°	8466.6	99.6
90°-120°	31.1	0.4
90°-150°	34.4	0.4
90°-180°	36.0	0.4
0°-180°	8502.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4596	4596	4596	4596	4596	
5°	4537	4544	4577	4631	4646	427
15°	4071	4214	4358	4569	4657	1149
25°	3463	3674	4059	4492	4699	1599
35°	2770	3096	3481	3745	3906	1729
45°	1940	2112	1518	1238	1218	1479
55°	808	846	778	673	566	785
65°	463	510	549	446	313	458
75°	256	285	316	260	141	270
85°	71	88	123	162	65	77
90°	2	27	62	104	19	5
95°	1	4	25	53	10	0
105°	1	1	2	4	2	1
115°	1	1	1	1	1	1
125°	1	1	1	1	1	1
135°	1	1	2	2	2	1
145°	1	2	2	2	2	1
155°	2	2	2	2	2	1
165°	2	2	2	2	2	1
175°	2	2	2	3	3	0
180°	3	3	3	3	3	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4596.5	4596.5	4596.5	4596.5	4596.5
2.5°	4602.5	4589.9	4566.6	4608.5	4609.1
5°	4536.6	4544.4	4577.4	4631.3	4645.7
7.5°	4472.5	4502.4	4546.8	4676.8	4683.4
10°	4332.8	4395.1	4527.6	4652.9	4693.0
12.5°	4216.5	4308.8	4445.5	4610.3	4672.7
15°	4070.9	4213.5	4358.0	4569.0	4657.1
17.5°	3969.0	4083.5	4260.3	4549.8	4694.2
20°	3800.6	3961.8	4159.0	4563.0	4766.2
22.5°	3636.9	3832.9	4108.0	4567.8	4781.1
25°	3463.1	3673.5	4058.9	4491.6	4699.0
27.5°	3319.3	3495.5	3985.8	4332.8	4482.7
30°	3145.5	3352.8	3870.1	4090.1	4235.1
32.5°	2958.5	3221.6	3682.5	3904.3	4168.0
35°	2770.3	3095.7	3481.1	3744.8	3906.1
37.5°	2573.7	2992.0	3164.6	3207.2	3096.9
40°	2384.9	2847.6	2759.5	2347.7	2226.0
42.5°	2178.7	2537.1	2152.3	1615.3	1560.7
45°	1939.5	2111.6	1518.2	1237.7	1217.9
47.5°	1684.8	1635.1	1132.2	1034.5	1023.1
50°	1399.5	1307.2	916.4	912.8	835.5
52.5°	1090.8	1038.1	821.7	791.8	668.9
55°	808.5	845.7	778.0	673.1	565.8
57.5°	647.3	733.6	747.4	588.0	505.9
60°	575.4	641.9	689.3	540.6	453.1
62.5°	516.1	568.8	617.3	501.7	390.8
65°	463.3	509.5	549.0	445.9	312.9
67.5°	407.6	455.5	504.1	383.0	266.1
70°	356.0	407.0	445.9	339.8	200.2
72.5°	302.7	355.4	372.8	284.1	160.0
75°	255.9	284.7	315.9	259.5	140.9
77.5°	206.8	231.4	243.9	237.9	124.1
80°	158.8	178.6	200.2	216.4	106.1
82.5°	116.3	130.7	160.0	190.6	85.1
85°	71.3	87.5	122.9	161.8	65.3
87.5°	31.8	52.1	90.5	133.7	42.0
90°	1.8	27.0	62.3	103.7	19.2
92.5°	0.6	12.0	40.8	76.7	13.2
95°	0.6	4.2	24.6	53.3	9.6
97.5°	0.6	1.8	13.8	34.2	6.0
100°	0.6	1.2	6.6	19.8	4.2
102.5°	0.6	1.2	3.0	9.6	3.0
105°	0.6	1.2	1.8	4.2	1.8
107.5°	0.6	1.2	1.2	1.8	1.2
110°	0.6	1.2	1.2	1.2	1.2



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**CANDELA DISTRIBUTION (continued):**

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

(END OF REPORT)