

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: P685687

Luminaire Tested: **8CZL-24-UNV-LVR-L850-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685687  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-24-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

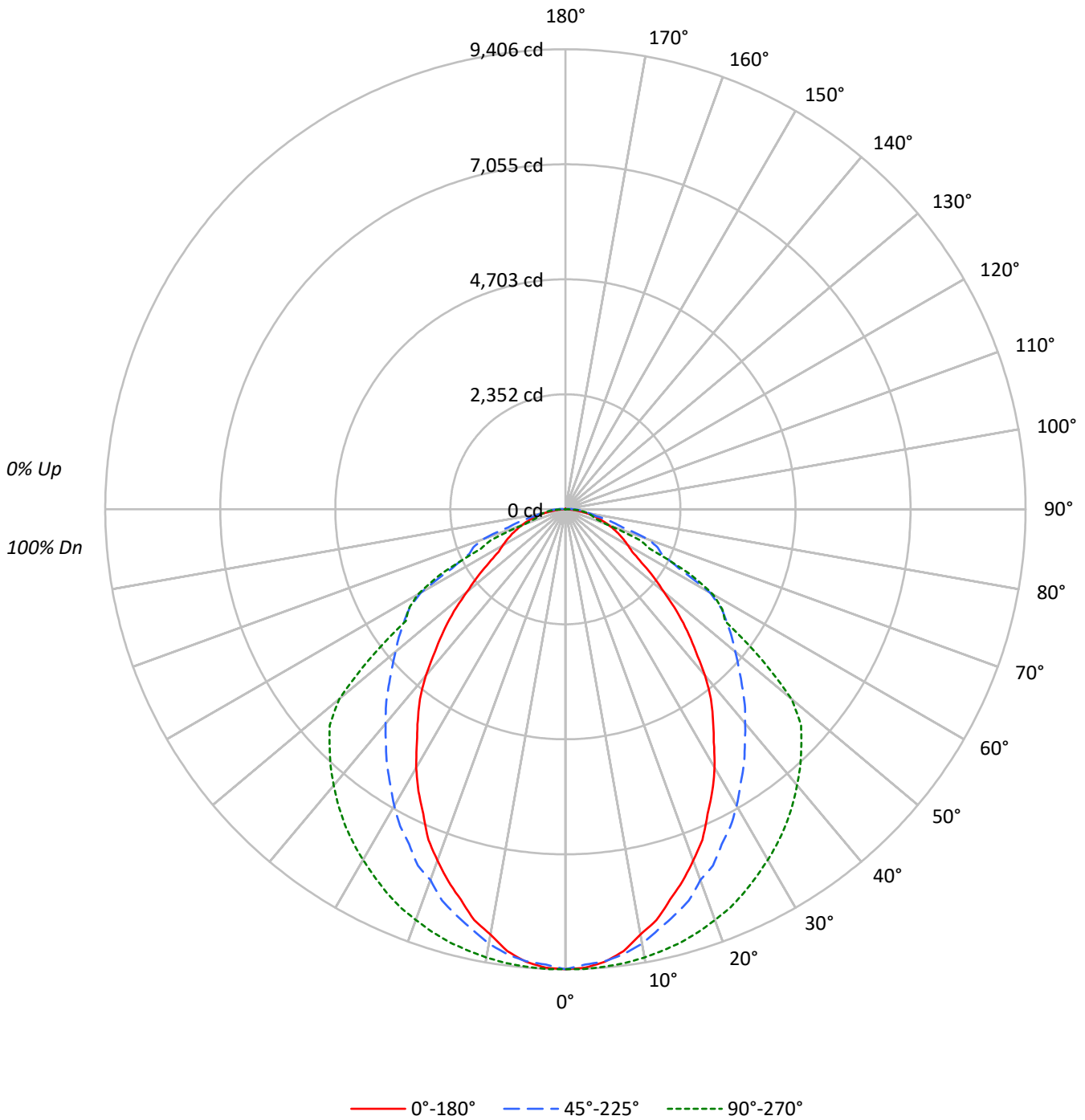
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21298.0 lumens  
Efficiency: N/A  
Efficacy: 138.3 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): 154  
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-24-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				
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°	15184	15184	15184
5°	15053	15032	15211
10°	14468	14786	15256
15°	13811	14372	15317
20°	13132	13863	15353
25°	12248	13462	15404
30°	11371	13049	15428
35°	10367	12537	15499
40°	9352	12049	15527
45°	8044	11662	15568
50°	6574	11388	15159
55°	5353	11343	11212
60°	4773	11027	11249
65°	4615	8275	7254
70°	4433	8481	4123
75°	4273	5977	3681
80°	3898	4862	4387
85°	3490	6062	5465



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	880.9	4.1
10°-20°	2442.0	11.5
20°-30°	3532.9	16.6
30°-40°	4032.4	18.9
40°-50°	3962.1	18.6
50°-60°	3160.4	14.8
60°-70°	1990.7	9.3
70°-80°	881.9	4.1
80°-90°	338.2	1.6
90°-100°	67.1	0.3
100°-110°	4.5	0.0
110°-120°	0.6	0.0
120°-130°	0.7	0.0
130°-140°	1.0	0.0
140°-150°	0.9	0.0
150°-160°	0.7	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	6855.8	32.2
0°-40°	10888.2	51.1
0°-60°	18010.7	84.6
0°-90°	21221.5	99.6
90°-120°	72.1	0.3
90°-150°	74.7	0.4
90°-180°	77.0	0.4
0°-180°	21298.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9404	9404	9404	9404	9404	
5°	9288	9308	9274	9352	9385	872
15°	8262	8344	8598	9001	9163	2326
25°	6875	7097	7557	8249	8646	3168
35°	5259	5578	6361	7298	7864	3288
45°	3523	4036	5108	6251	6818	2707
55°	1902	2575	4030	4345	3983	1748
65°	1208	1645	2166	2308	1899	1197
75°	685	792	958	726	590	718
85°	188	229	327	422	295	199
90°	2	79	172	251	48	11
95°	2	12	72	123	16	1
105°	2	2	2	4	0	2
115°	2	2	0	0	0	1
125°	2	3	0	0	0	1
135°	2	3	2	0	0	1
145°	3	3	2	0	0	2
155°	3	3	2	0	0	1
165°	4	4	3	2	0	1
175°	4	4	3	2	2	0
180°	3	3	3	3	3	



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CATALOG NUMBER: 8CZL-24-UNV-LVR-L850-CD-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9404.4	9404.4	9404.4	9404.4	9404.4
2.5°	9379.6	9373.7	9316.8	9397.1	9405.9
5°	9287.6	9308.0	9274.4	9351.8	9385.4
7.5°	9110.8	9132.7	9172.2	9313.8	9354.7
10°	8824.6	8880.1	9018.8	9217.5	9305.1
12.5°	8605.5	8674.1	8798.3	9135.7	9236.4
15°	8262.3	8344.1	8598.2	9001.3	9163.4
17.5°	7970.2	8119.1	8389.3	8831.9	9058.3
20°	7643.0	7762.8	8068.0	8665.4	8935.6
22.5°	7315.8	7467.7	7884.0	8443.4	8811.4
25°	6874.8	7096.8	7556.8	8249.1	8646.4
27.5°	6500.9	6781.3	7310.0	8019.8	8462.4
30°	6099.2	6316.8	6998.9	7786.1	8275.4
32.5°	5646.4	5988.2	6663.0	7518.8	8079.7
35°	5259.4	5577.8	6360.6	7298.3	7863.5
37.5°	4885.5	5184.9	6026.2	7048.6	7624.0
40°	4437.1	4831.5	5716.5	6763.7	7367.0
42.5°	3940.5	4424.0	5428.8	6495.0	7105.5
45°	3522.8	4035.5	5107.5	6251.1	6817.8
47.5°	3089.0	3629.4	4806.6	5954.6	6533.0
50°	2617.3	3274.5	4533.5	5680.0	6034.9
52.5°	2272.6	2905.0	4288.1	5183.4	5087.1
55°	1901.6	2574.9	4029.6	4345.1	3982.9
57.5°	1619.7	2277.0	3787.2	3411.8	3801.8
60°	1478.1	2038.9	3414.7	3248.2	3483.4
62.5°	1345.2	1830.1	2611.4	3046.7	2865.6
65°	1207.9	1644.6	2166.0	2307.6	1898.7
67.5°	1075.0	1483.9	2041.8	1723.4	1653.3
70°	939.1	1359.8	1796.5	1469.3	873.4
72.5°	810.6	1216.6	1228.3	813.5	648.5
75°	685.0	791.6	958.1	725.9	590.1
77.5°	547.7	679.1	641.2	649.9	534.6
80°	419.2	467.4	522.9	581.3	471.8
82.5°	296.5	347.6	423.6	508.3	387.0
85°	188.4	229.3	327.2	422.1	295.0
87.5°	74.5	144.6	243.9	340.3	173.8
90°	1.5	78.9	172.3	251.2	48.2
92.5°	1.5	36.5	115.4	184.0	24.8
95°	1.5	11.7	71.6	122.7	16.1
97.5°	1.5	4.4	38.0	75.9	8.8
100°	1.5	1.5	16.1	40.9	4.4
102.5°	1.5	1.5	5.8	16.1	1.5
105°	1.5	1.5	1.5	4.4	0.0
107.5°	1.5	1.5	0.0	0.0	0.0
110°	1.5	1.5	0.0	0.0	0.0



TEST NUMBER: P685687  
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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1.5	1.5	0.0	0.0	0.0
115°	1.5	1.5	0.0	0.0	0.0
117.5°	1.5	1.5	0.0	0.0	0.0
120°	1.5	1.5	0.0	0.0	0.0
122.5°	1.5	1.5	0.0	0.0	0.0
125°	1.5	2.9	0.0	0.0	0.0
127.5°	1.5	1.5	0.0	0.0	0.0
130°	1.5	2.9	1.5	0.0	0.0
132.5°	1.5	2.9	1.5	0.0	0.0
135°	1.5	2.9	1.5	0.0	0.0
137.5°	1.5	2.9	1.5	0.0	0.0
140°	2.9	2.9	1.5	0.0	0.0
142.5°	2.9	2.9	1.5	0.0	0.0
145°	2.9	2.9	1.5	0.0	0.0
147.5°	2.9	2.9	1.5	0.0	0.0
150°	2.9	2.9	1.5	0.0	0.0
152.5°	2.9	2.9	1.5	0.0	0.0
155°	2.9	2.9	1.5	0.0	0.0
157.5°	2.9	4.4	1.5	0.0	0.0
160°	4.4	4.4	1.5	0.0	0.0
162.5°	4.4	4.4	2.9	1.5	0.0
165°	4.4	4.4	2.9	1.5	0.0
167.5°	4.4	4.4	2.9	1.5	0.0
170°	4.4	4.4	2.9	1.5	1.5
172.5°	4.4	4.4	2.9	1.5	1.5
175°	4.4	4.4	2.9	1.5	1.5
177.5°	4.4	4.4	2.9	1.5	1.5
180°	2.9	2.9	2.9	2.9	2.9

(END OF REPORT)