

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: P685908

Luminaire Tested: **8CZL-32-UNV-LVRF-L835-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685908  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-32-UNV-LVRF-L835-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH FROSTED LAY-IN @80 CRI and 3500K  
Light Source: (1176) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

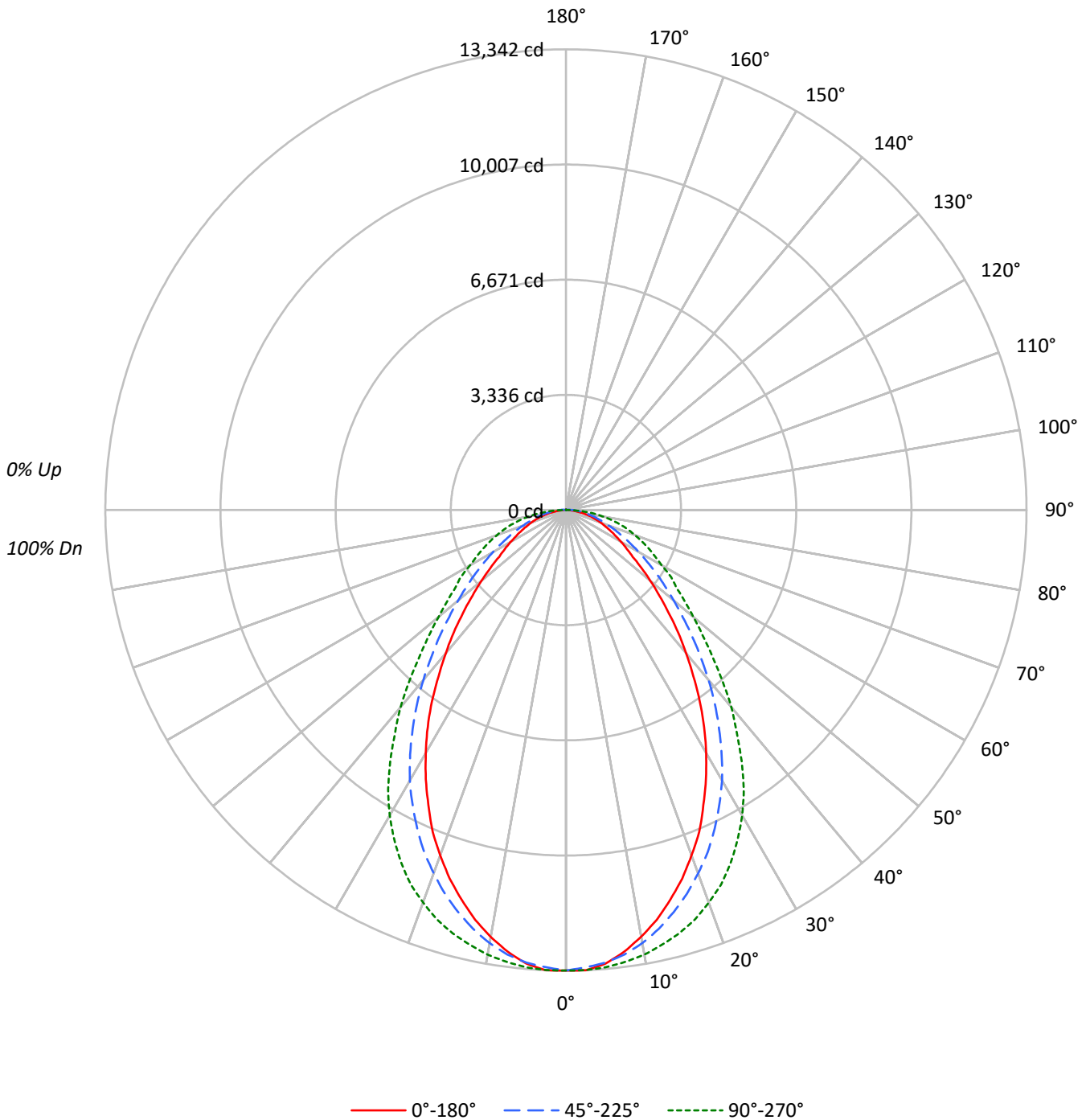
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24601.2 lumens  
Efficiency: N/A  
Efficacy: 119.4 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): 206  
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			
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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100	
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	88	86	
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	82	79	76	76	74	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	67	65	
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	59	57	
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	53	51	
6	75	63	55	49	73	62	54	48	60	53	48	58	52	48	57	51	47	47	45	
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	43	41	
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	39	37	
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	36	34	
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	33	31	

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

	0°	45°	90°
0°	21533	21533	21533
5°	21376	21326	21540
10°	20576	20881	21434
15°	19524	20152	21209
20°	18284	19233	20787
25°	16789	18145	20098
30°	15133	16863	19032
35°	13328	15251	17480
40°	11408	13541	15719
45°	9611	11803	13690
50°	8026	10231	12103
55°	6642	8989	10974
60°	5985	7879	10349
65°	5441	6935	10120
70°	5067	6225	10043
75°	4699	5811	10247
80°	4259	5756	10265
85°	3657	6747	10156



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1247.9	5.1
10°-20°	3410.2	13.9
20°-30°	4711.9	19.2
30°-40°	4847.2	19.7
40°-50°	3973.8	16.2
50°-60°	2851.5	11.6
60°-70°	1917.9	7.8
70°-80°	1119.4	4.6
80°-90°	431.3	1.8
90°-100°	74.8	0.3
100°-110°	6.3	0.0
110°-120°	1.2	0.0
120°-130°	1.1	0.0
130°-140°	1.6	0.0
140°-150°	1.9	0.0
150°-160°	1.6	0.0
160°-170°	1.3	0.0
170°-180°	0.5	0.0
0°-30°	9370.0	38.1
0°-40°	14217.2	57.8
0°-60°	21042.4	85.5
0°-90°	24511.0	99.6
90°-120°	82.3	0.3
90°-150°	86.8	0.4
90°-180°	90.0	0.4
0°-180°	24601.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	13336	13336	13336	13336	13336	
5°	13189	13198	13158	13281	13290	1238
15°	11680	11799	12056	12524	12688	3276
25°	9424	9645	10185	10894	11282	4326
35°	6762	7074	7738	8462	8868	4213
45°	4209	4537	5169	5677	5995	3267
55°	2359	2641	3193	3630	3898	2172
65°	1424	1508	1815	2331	2649	1419
75°	753	780	932	1294	1643	800
85°	197	245	364	544	548	214
90°	2	82	186	284	59	12
95°	2	13	79	136	25	1
105°	0	2	4	8	4	0
115°	2	2	2	0	0	1
125°	2	2	2	0	0	2
135°	2	4	2	2	0	1
145°	4	4	4	2	2	2
155°	4	6	4	2	2	2
165°	6	6	6	4	2	2
175°	6	8	6	4	4	1
180°	6	6	6	6	6	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	13336.3	13336.3	13336.3	13336.3	13336.3
2.5°	13342.0	13330.5	13255.8	13342.0	13338.2
5°	13188.7	13198.3	13158.0	13280.7	13290.3
7.5°	12903.1	12941.4	12985.5	13165.7	13198.3
10°	12550.4	12607.9	12736.4	13004.7	13073.7
12.5°	12153.7	12216.9	12425.9	12795.8	12891.6
15°	11680.3	11799.1	12055.9	12523.6	12688.4
17.5°	11191.5	11337.2	11655.3	12209.3	12431.6
20°	10641.4	10787.1	11193.4	11810.6	12098.1
22.5°	10089.4	10231.3	10727.7	11385.1	11743.5
25°	9424.3	9644.7	10185.3	10894.4	11281.6
27.5°	8788.0	9021.8	9623.7	10384.6	10769.8
30°	8117.1	8391.2	9044.8	9771.2	10208.3
32.5°	7452.1	7730.0	8397.0	9154.1	9587.2
35°	6762.1	7074.5	7737.6	8462.2	8868.5
37.5°	6062.5	6403.6	7086.0	7799.0	8126.7
40°	5412.7	5748.1	6424.7	7063.0	7457.8
42.5°	4812.8	5142.5	5769.2	6348.1	6702.6
45°	4209.0	4536.8	5169.3	5677.2	5995.4
47.5°	3668.5	4003.9	4592.4	5106.0	5372.5
50°	3195.1	3499.9	4073.0	4538.7	4818.5
52.5°	2761.9	3039.9	3607.2	4059.5	4329.8
55°	2359.4	2641.2	3193.2	3630.2	3898.5
57.5°	2089.2	2290.4	2786.9	3271.8	3616.8
60°	1853.4	1978.0	2439.9	3014.9	3204.7
62.5°	1613.8	1726.9	2106.4	2612.4	2907.6
65°	1424.1	1508.4	1815.1	2330.7	2648.9
67.5°	1236.3	1299.5	1562.1	2058.5	2380.5
70°	1073.3	1113.6	1318.7	1790.2	2127.5
72.5°	918.1	939.2	1123.2	1544.8	1880.3
75°	753.3	780.1	931.5	1293.8	1642.6
77.5°	596.1	634.4	768.6	1079.1	1370.4
80°	458.1	488.8	619.1	887.4	1104.0
82.5°	318.2	360.3	483.0	701.5	845.3
85°	197.4	245.3	364.2	544.3	548.2
87.5°	82.4	153.3	266.4	402.5	279.8
90°	1.9	82.4	185.9	283.7	59.4
92.5°	0.0	38.3	126.5	203.2	34.5
95°	1.9	13.4	78.6	136.1	24.9
97.5°	0.0	3.8	42.2	86.3	15.3
100°	0.0	1.9	17.3	47.9	9.6
102.5°	0.0	1.9	7.7	21.1	5.8
105°	0.0	1.9	3.8	7.7	3.8
107.5°	0.0	1.9	1.9	1.9	1.9
110°	1.9	1.9	1.9	1.9	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	1.9	1.9	0.0	0.0
115°	1.9	1.9	1.9	0.0	0.0
117.5°	1.9	1.9	1.9	0.0	0.0
120°	1.9	1.9	1.9	0.0	0.0
122.5°	1.9	1.9	1.9	0.0	0.0
125°	1.9	1.9	1.9	0.0	0.0
127.5°	1.9	1.9	1.9	0.0	0.0
130°	1.9	1.9	1.9	0.0	0.0
132.5°	1.9	3.8	1.9	1.9	0.0
135°	1.9	3.8	1.9	1.9	0.0
137.5°	1.9	3.8	1.9	1.9	0.0
140°	1.9	3.8	1.9	1.9	1.9
142.5°	3.8	3.8	3.8	1.9	1.9
145°	3.8	3.8	3.8	1.9	1.9
147.5°	3.8	3.8	3.8	1.9	1.9
150°	3.8	3.8	3.8	1.9	1.9
152.5°	3.8	5.8	3.8	1.9	1.9
155°	3.8	5.8	3.8	1.9	1.9
157.5°	3.8	5.8	3.8	1.9	1.9
160°	3.8	5.8	3.8	1.9	1.9
162.5°	5.8	5.8	3.8	3.8	1.9
165°	5.8	5.8	5.8	3.8	1.9
167.5°	5.8	5.8	5.8	3.8	1.9
170°	5.8	5.8	5.8	3.8	3.8
172.5°	5.8	5.8	5.8	3.8	3.8
175°	5.8	7.7	5.8	3.8	3.8
177.5°	5.8	7.7	5.8	3.8	3.8
180°	5.8	5.8	5.8	5.8	5.8

(END OF REPORT)