

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: P685728

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

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685728  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-32-UNV-N-LVR-L835-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH NARROW LENS @80 CRI and 3500K  
Light Source: (1176) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

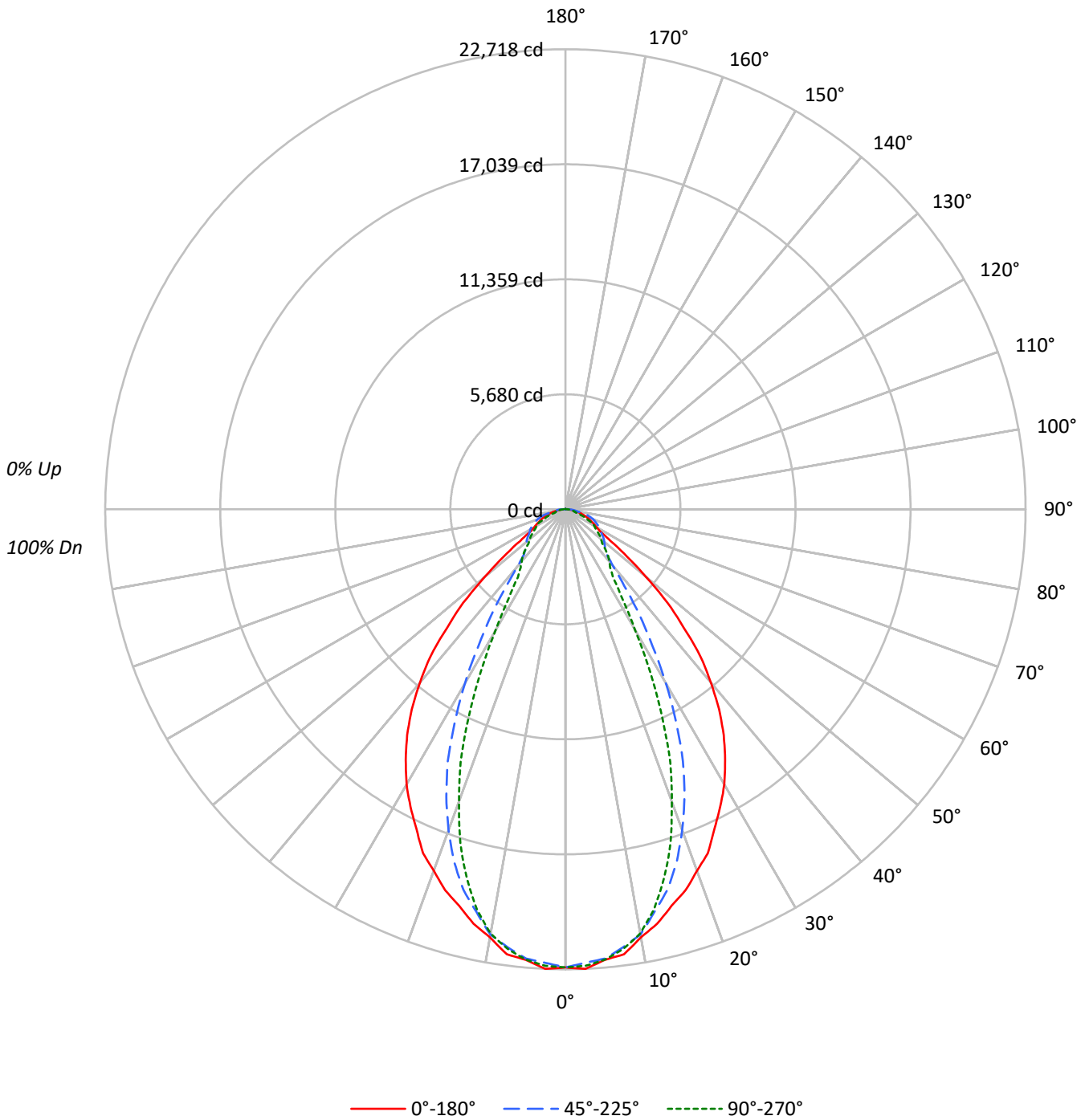
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26782.5 lumens  
Efficiency: N/A  
Efficacy: 130.0 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 0.8 / 0.85  
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 (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	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	90	90	88
2	103	97	92	87	101	95	90	86	92	88	84	88	85	82	86	83	80	80	80	80	78
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	72	72	72	70
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	65	65	65	63
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	59	59	59	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	55	55	55	53
7	75	64	57	51	73	63	56	51	62	55	51	60	55	51	59	54	50	50	50	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	47	47	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	43	43	43	43	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	41	41	41	39

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

	0°	45°	90°
0°	36523	36523	36523
5°	36200	36098	36191
10°	35180	34963	34878
15°	33875	32523	31491
20°	32627	28972	26374
25°	31005	24463	20110
30°	29246	18505	12849
35°	26844	12545	8073
40°	23542	7643	7081
45°	18861	6367	6346
50°	13041	6292	5729
55°	7682	6237	5395
60°	5725	6480	5328
65°	5418	6524	4686
70°	5211	6957	3538
75°	4914	6983	3025
80°	4562	5792	3422
85°	4048	7030	4226



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2101.3	7.8
10°-20°	5440.9	20.3
20°-30°	6356.2	23.7
30°-40°	4715.6	17.6
40°-50°	3126.1	11.7
50°-60°	2073.3	7.7
60°-70°	1546.9	5.8
70°-80°	913.0	3.4
80°-90°	384.5	1.4
90°-100°	83.0	0.3
100°-110°	11.2	0.0
110°-120°	5.7	0.0
120°-130°	5.2	0.0
130°-140°	5.0	0.0
140°-150°	5.2	0.0
150°-160°	4.6	0.0
160°-170°	3.4	0.0
170°-180°	1.3	0.0
0°-30°	13898.4	51.9
0°-40°	18614.1	69.5
0°-60°	23813.5	88.9
0°-90°	26657.8	99.5
90°-120°	100.0	0.4
90°-150°	115.4	0.4
90°-180°	125.0	0.5
0°-180°	26782.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	22621	22621	22621	22621	22621	
5°	22335	22316	22272	22352	22330	2113
15°	20265	20024	19457	19121	18840	5717
25°	17404	16152	13732	11779	11288	8016
35°	13619	10090	6365	4303	4096	8454
45°	8260	4874	2789	2894	2779	6358
55°	2729	2398	2216	2139	1916	2685
65°	1418	1585	1708	1669	1227	1414
75°	788	882	1119	813	485	831
85°	218	266	380	504	228	236
90°	4	80	190	326	67	14
95°	2	13	75	163	34	2
105°	2	4	8	13	12	2
115°	2	4	6	8	8	2
125°	4	4	6	8	8	3
135°	4	6	6	8	8	3
145°	6	8	8	10	10	4
155°	8	10	10	12	12	3
165°	10	12	12	13	13	2
175°	10	12	13	15	17	1
180°	13	13	13	13	13	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	22620.8	22620.8	22620.8	22620.8	22620.8
2.5°	22718.5	22595.9	22419.6	22578.6	22565.2
5°	22335.2	22316.1	22272.0	22352.5	22329.5
7.5°	22162.8	22059.3	21813.9	22003.7	21896.4
10°	21457.5	21336.7	21325.2	21286.9	21273.5
12.5°	20957.3	20811.6	20345.9	20321.0	20217.5
15°	20265.4	20023.9	19456.6	19121.2	18839.5
17.5°	19728.8	19203.6	18256.9	17632.1	17269.9
20°	18989.0	18410.2	16861.6	15771.1	15349.5
22.5°	18379.5	17354.2	15362.9	13820.1	13530.7
25°	17404.0	16152.5	13731.9	11779.0	11288.4
27.5°	16556.9	14830.1	11807.7	9665.1	9063.3
30°	15686.8	13348.6	9925.7	7591.4	6891.8
32.5°	14673.0	11855.7	7988.1	5695.9	5190.0
35°	13618.9	10090.5	6364.8	4302.6	4095.6
37.5°	12457.4	8503.6	4783.7	3593.5	3628.0
40°	11169.5	7119.9	3626.1	3294.5	3359.7
42.5°	9885.5	5954.7	3016.6	3099.0	3118.2
45°	8260.2	4873.7	2788.6	2894.0	2779.0
47.5°	6840.1	3982.5	2627.6	2616.1	2453.2
50°	5191.9	3246.6	2504.9	2366.9	2280.7
52.5°	3844.6	2738.7	2388.0	2236.6	2148.4
55°	2729.1	2397.6	2215.5	2138.8	1916.5
57.5°	2050.7	2156.1	2083.3	1910.8	1755.5
60°	1772.8	1943.4	2006.6	1801.5	1650.1
62.5°	1600.3	1761.3	1882.0	1736.4	1510.2
65°	1418.2	1585.0	1707.6	1669.3	1226.6
67.5°	1259.2	1445.1	1596.5	1431.6	1002.3
70°	1103.9	1276.4	1473.8	1215.1	749.4
72.5°	937.2	1067.5	1305.2	944.8	546.2
75°	787.7	881.6	1119.3	812.6	484.9
77.5°	630.5	709.1	766.6	739.8	427.4
80°	490.6	569.2	622.9	672.7	368.0
82.5°	356.5	408.2	494.5	596.0	306.6
85°	218.5	266.4	379.5	504.0	228.1
87.5°	93.9	162.9	277.9	417.8	149.5
90°	3.8	80.5	189.7	325.8	67.1
92.5°	1.9	34.5	122.7	239.6	44.1
95°	1.9	13.4	74.7	162.9	34.5
97.5°	1.9	5.7	38.3	105.4	24.9
100°	1.9	3.8	21.1	61.3	17.2
102.5°	1.9	3.8	9.6	30.7	13.4
105°	1.9	3.8	7.7	13.4	11.5
107.5°	1.9	3.8	5.7	9.6	9.6
110°	1.9	3.8	5.7	9.6	9.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1.9	3.8	5.7	9.6	9.6
115°	1.9	3.8	5.7	7.7	7.7
117.5°	1.9	3.8	5.7	7.7	7.7
120°	1.9	3.8	5.7	7.7	7.7
122.5°	1.9	3.8	5.7	7.7	7.7
125°	3.8	3.8	5.7	7.7	7.7
127.5°	3.8	5.7	5.7	7.7	7.7
130°	3.8	5.7	5.7	7.7	7.7
132.5°	3.8	5.7	5.7	7.7	7.7
135°	3.8	5.7	5.7	7.7	7.7
137.5°	3.8	5.7	7.7	7.7	7.7
140°	5.7	7.7	7.7	7.7	7.7
142.5°	5.7	7.7	7.7	9.6	7.7
145°	5.7	7.7	7.7	9.6	9.6
147.5°	5.7	7.7	9.6	9.6	9.6
150°	5.7	7.7	9.6	11.5	11.5
152.5°	7.7	7.7	9.6	11.5	11.5
155°	7.7	9.6	9.6	11.5	11.5
157.5°	7.7	9.6	9.6	11.5	13.4
160°	7.7	9.6	11.5	13.4	13.4
162.5°	7.7	9.6	11.5	13.4	13.4
165°	9.6	11.5	11.5	13.4	13.4
167.5°	9.6	11.5	13.4	13.4	15.3
170°	9.6	11.5	13.4	15.3	15.3
172.5°	9.6	11.5	13.4	15.3	15.3
175°	9.6	11.5	13.4	15.3	17.2
177.5°	9.6	11.5	13.4	15.3	17.2
180°	13.4	13.4	13.4	13.4	13.4

(END OF REPORT)