

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: P685904

Luminaire Tested: **8CZL-10-UNV-LVRF-L835-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685904  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-10-UNV-LVRF-L835-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH FROSTED LAY-IN @80 CRI and 3500K  
Light Source: (784) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

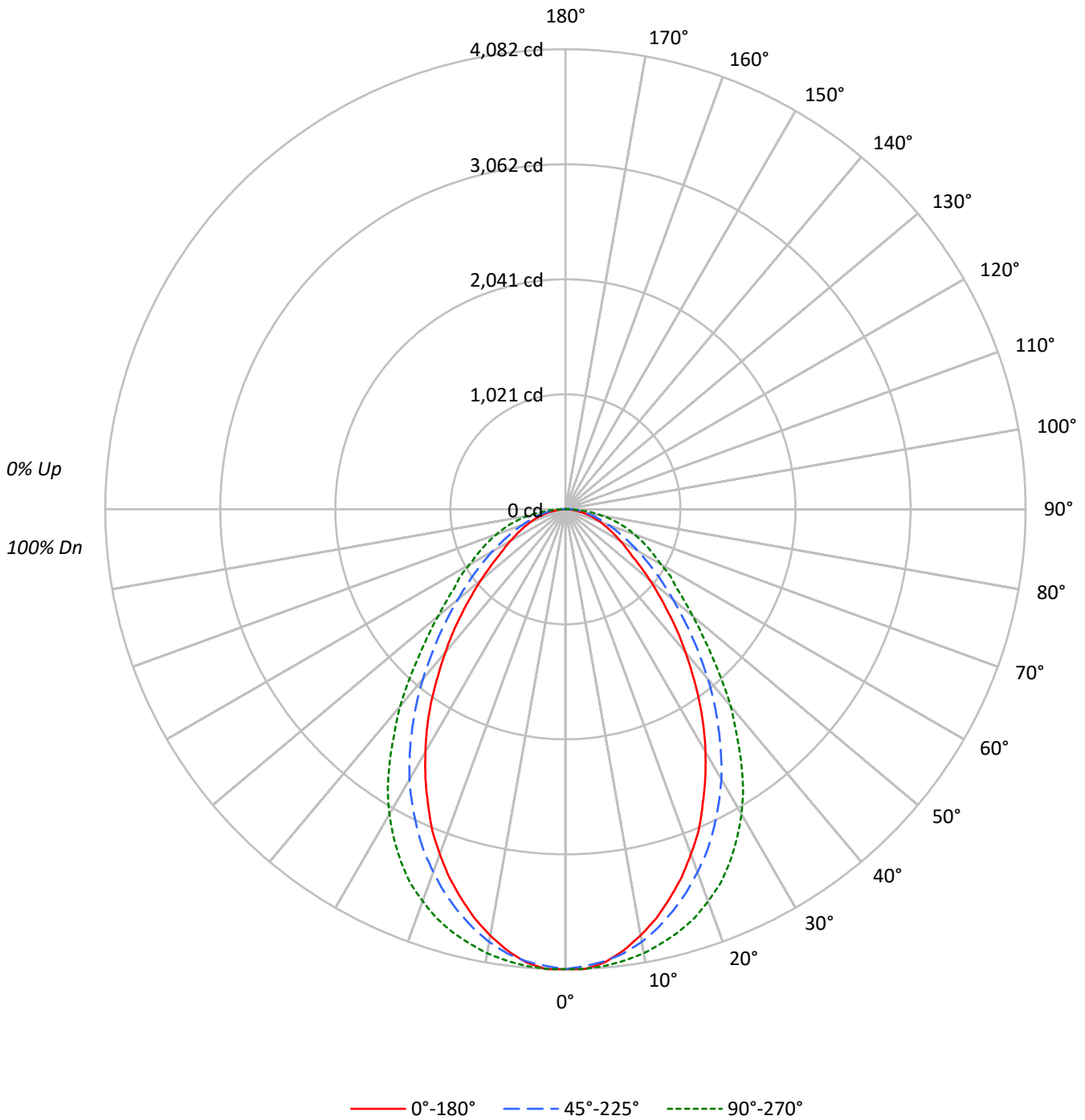
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7527.0 lumens  
Efficiency: N/A  
Efficacy: 119.5 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): 63  
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	100	100	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86	86	86
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	82	79	76	74	74	74
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	65	65	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	57
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	51	51	51
6	75	63	55	49	73	62	54	48	60	53	48	58	52	48	57	51	47	45	45	45
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41	41	41
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37	37	37
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34	34	34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31	31	31

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

	0°	45°	90°
0°	6588	6588	6588
5°	6540	6525	6591
10°	6296	6389	6558
15°	5974	6166	6489
20°	5594	5884	6360
25°	5137	5552	6149
30°	4630	5159	5823
35°	4078	4666	5348
40°	3491	4143	4809
45°	2941	3611	4188
50°	2456	3130	3703
55°	2032	2750	3358
60°	1831	2411	3166
65°	1665	2121	3096
70°	1550	1905	3073
75°	1438	1778	3135
80°	1304	1761	3141
85°	1119	2064	3107



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	381.8	5.1
10°-20°	1043.4	13.9
20°-30°	1441.6	19.2
30°-40°	1483.0	19.7
40°-50°	1215.8	16.2
50°-60°	872.4	11.6
60°-70°	586.8	7.8
70°-80°	342.5	4.6
80°-90°	132.0	1.8
90°-100°	22.9	0.3
100°-110°	1.9	0.0
110°-120°	0.4	0.0
120°-130°	0.3	0.0
130°-140°	0.5	0.0
140°-150°	0.6	0.0
150°-160°	0.5	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	2866.8	38.1
0°-40°	4349.8	57.8
0°-60°	6438.1	85.5
0°-90°	7499.3	99.6
90°-120°	25.2	0.3
90°-150°	26.6	0.4
90°-180°	28.0	0.4
0°-180°	7527.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4080	4080	4080	4080	4080	
5°	4035	4038	4026	4063	4066	379
15°	3574	3610	3689	3832	3882	1002
25°	2883	2951	3116	3333	3452	1323
35°	2069	2164	2367	2589	2713	1289
45°	1288	1388	1582	1737	1834	999
55°	722	808	977	1111	1193	665
65°	436	462	555	713	810	434
75°	230	239	285	396	503	245
85°	60	75	111	166	168	65
90°	1	25	57	87	18	4
95°	1	4	24	42	8	0
105°	0	1	1	2	1	0
115°	1	1	1	0	0	0
125°	1	1	1	0	0	1
135°	1	1	1	1	0	0
145°	1	1	1	1	1	1
155°	1	2	1	1	1	1
165°	2	2	2	1	1	0
175°	2	2	2	1	1	0
180°	2	2	2	2	2	



TEST NUMBER: P685904

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4080.3	4080.3	4080.3	4080.3	4080.3
2.5°	4082.1	4078.6	4055.7	4082.1	4080.9
5°	4035.2	4038.1	4025.8	4063.3	4066.3
7.5°	3947.8	3959.5	3973.0	4028.1	4038.1
10°	3839.9	3857.5	3896.8	3978.9	4000.0
12.5°	3718.5	3737.9	3801.8	3915.0	3944.3
15°	3573.7	3610.0	3688.6	3831.7	3882.1
17.5°	3424.1	3468.7	3566.0	3735.5	3803.5
20°	3255.8	3300.4	3424.7	3613.5	3701.5
22.5°	3086.9	3130.3	3282.2	3483.4	3593.0
25°	2883.4	2950.9	3116.3	3333.2	3451.7
27.5°	2688.7	2760.3	2944.4	3177.2	3295.1
30°	2483.5	2567.4	2767.3	2989.6	3123.3
32.5°	2280.0	2365.0	2569.1	2800.8	2933.3
35°	2068.9	2164.5	2367.4	2589.1	2713.4
37.5°	1854.9	1959.2	2168.0	2386.2	2486.4
40°	1656.1	1758.7	1965.7	2161.0	2281.8
42.5°	1472.5	1573.4	1765.1	1942.2	2050.7
45°	1287.8	1388.1	1581.6	1737.0	1834.3
47.5°	1122.4	1225.0	1405.1	1562.2	1643.7
50°	977.6	1070.8	1246.1	1388.6	1474.3
52.5°	845.0	930.1	1103.6	1242.0	1324.7
55°	721.9	808.1	977.0	1110.7	1192.8
57.5°	639.2	700.8	852.7	1001.0	1106.6
60°	567.1	605.2	746.5	922.4	980.5
62.5°	493.8	528.4	644.5	799.3	889.6
65°	435.7	461.5	555.3	713.1	810.4
67.5°	378.2	397.6	477.9	629.8	728.3
70°	328.4	340.7	403.5	547.7	650.9
72.5°	280.9	287.3	343.6	472.7	575.3
75°	230.5	238.7	285.0	395.8	502.6
77.5°	182.4	194.1	235.2	330.2	419.3
80°	140.2	149.5	189.4	271.5	337.8
82.5°	97.3	110.2	147.8	214.6	258.6
85°	60.4	75.1	111.4	166.5	167.7
87.5°	25.2	46.9	81.5	123.1	85.6
90°	0.6	25.2	56.9	86.8	18.2
92.5°	0.0	11.7	38.7	62.2	10.6
95°	0.6	4.1	24.0	41.6	7.6
97.5°	0.0	1.2	12.9	26.4	4.7
100°	0.0	0.6	5.3	14.7	2.9
102.5°	0.0	0.6	2.3	6.5	1.8
105°	0.0	0.6	1.2	2.3	1.2
107.5°	0.0	0.6	0.6	0.6	0.6
110°	0.6	0.6	0.6	0.6	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.6	0.6	0.0	0.0
115°	0.6	0.6	0.6	0.0	0.0
117.5°	0.6	0.6	0.6	0.0	0.0
120°	0.6	0.6	0.6	0.0	0.0
122.5°	0.6	0.6	0.6	0.0	0.0
125°	0.6	0.6	0.6	0.0	0.0
127.5°	0.6	0.6	0.6	0.0	0.0
130°	0.6	0.6	0.6	0.0	0.0
132.5°	0.6	1.2	0.6	0.6	0.0
135°	0.6	1.2	0.6	0.6	0.0
137.5°	0.6	1.2	0.6	0.6	0.0
140°	0.6	1.2	0.6	0.6	0.6
142.5°	1.2	1.2	1.2	0.6	0.6
145°	1.2	1.2	1.2	0.6	0.6
147.5°	1.2	1.2	1.2	0.6	0.6
150°	1.2	1.2	1.2	0.6	0.6
152.5°	1.2	1.8	1.2	0.6	0.6
155°	1.2	1.8	1.2	0.6	0.6
157.5°	1.2	1.8	1.2	0.6	0.6
160°	1.2	1.8	1.2	0.6	0.6
162.5°	1.8	1.8	1.2	1.2	0.6
165°	1.8	1.8	1.8	1.2	0.6
167.5°	1.8	1.8	1.8	1.2	0.6
170°	1.8	1.8	1.8	1.2	1.2
172.5°	1.8	1.8	1.8	1.2	1.2
175°	1.8	2.3	1.8	1.2	1.2
177.5°	1.8	2.3	1.8	1.2	1.2
180°	1.8	1.8	1.8	1.8	1.8

(END OF REPORT)