

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: P685736

Luminaire Tested: **8CZL-18-UNV-N-LVR-L840-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685736  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-18-UNV-N-LVR-L840-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH NARROW LENS @80 CRI and 4000K  
Light Source: (1176) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

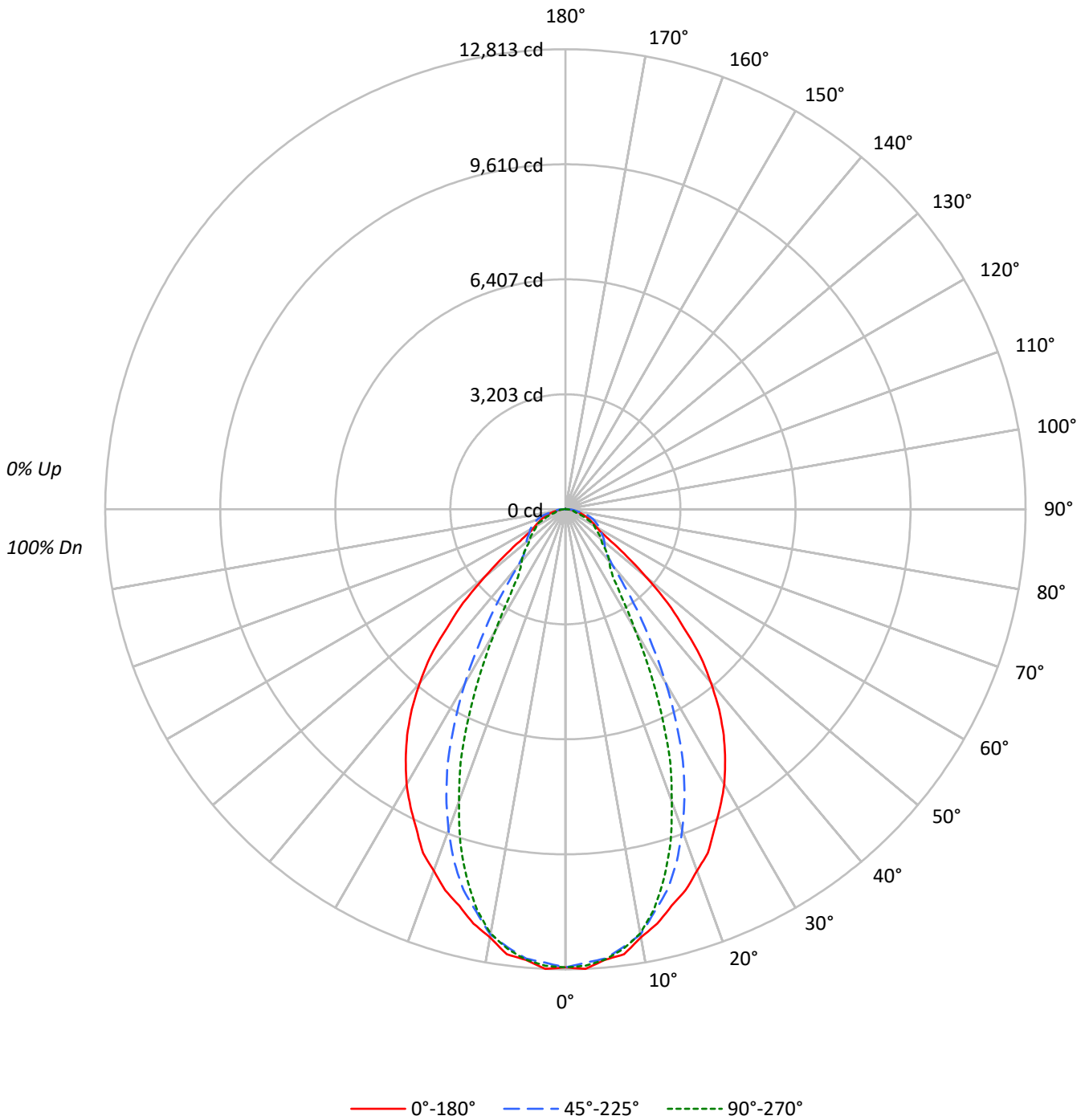
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15104.9 lumens  
Efficiency: N/A  
Efficacy: 138.6 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): 109  
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°	20599	20599	20599
5°	20416	20358	20411
10°	19841	19718	19671
15°	19105	18342	17761
20°	18401	16340	14874
25°	17487	13797	11342
30°	16494	10437	7247
35°	15139	7075	4553
40°	13277	4310	3994
45°	10637	3591	3579
50°	7355	3549	3231
55°	4333	3517	3043
60°	3229	3654	3005
65°	3056	3679	2643
70°	2939	3924	1995
75°	2771	3938	1706
80°	2573	3266	1929
85°	2282	3964	2382



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1185.1	7.8
10°-20°	3068.6	20.3
20°-30°	3584.8	23.7
30°-40°	2659.5	17.6
40°-50°	1763.1	11.7
50°-60°	1169.3	7.7
60°-70°	872.4	5.8
70°-80°	514.9	3.4
80°-90°	216.8	1.4
90°-100°	46.9	0.3
100°-110°	6.3	0.0
110°-120°	3.2	0.0
120°-130°	2.9	0.0
130°-140°	2.8	0.0
140°-150°	2.9	0.0
150°-160°	2.6	0.0
160°-170°	1.9	0.0
170°-180°	0.7	0.0
0°-30°	7838.5	51.9
0°-40°	10498.0	69.5
0°-60°	13430.4	88.9
0°-90°	15034.6	99.5
90°-120°	56.4	0.4
90°-150°	65.1	0.4
90°-180°	70.0	0.5
0°-180°	15104.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	12758	12758	12758	12758	12758	
5°	12597	12586	12561	12606	12594	1192
15°	11429	11293	10973	10784	10625	3224
25°	9816	9110	7745	6643	6366	4521
35°	7681	5691	3590	2427	2310	4768
45°	4659	2749	1573	1632	1567	3586
55°	1539	1352	1250	1206	1081	1515
65°	800	894	963	942	692	798
75°	444	497	631	458	274	469
85°	123	150	214	284	129	133
90°	2	45	107	184	38	8
95°	1	8	42	92	20	1
105°	1	2	4	8	6	1
115°	1	2	3	4	4	1
125°	2	2	3	4	4	2
135°	2	3	3	4	4	2
145°	3	4	4	5	5	2
155°	4	5	5	6	6	2
165°	5	6	6	8	8	1
175°	5	6	8	9	10	1
180°	8	8	8	8	8	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	12757.8	12757.8	12757.8	12757.8	12757.8
2.5°	12812.9	12743.7	12644.3	12734.0	12726.4
5°	12596.7	12585.9	12561.0	12606.4	12593.5
7.5°	12499.4	12441.1	12302.7	12409.7	12349.2
10°	12101.7	12033.6	12027.1	12005.5	11997.9
12.5°	11819.5	11737.4	11474.7	11460.7	11402.3
15°	11429.3	11293.1	10973.2	10784.0	10625.2
17.5°	11126.7	10830.5	10296.6	9944.2	9739.9
20°	10709.5	10383.0	9509.7	8894.7	8656.9
22.5°	10365.7	9787.5	8664.4	7794.3	7631.1
25°	9815.6	9109.7	7744.6	6643.2	6366.4
27.5°	9337.8	8363.9	6659.4	5450.9	5111.5
30°	8847.1	7528.4	5597.9	4281.4	3886.9
32.5°	8275.3	6686.4	4505.2	3212.4	2927.1
35°	7680.8	5690.9	3589.6	2426.6	2309.9
37.5°	7025.8	4795.9	2697.9	2026.7	2046.1
40°	6299.4	4015.5	2045.0	1858.1	1894.8
42.5°	5575.2	3358.3	1701.3	1747.8	1758.6
45°	4658.6	2748.7	1572.7	1632.1	1567.3
47.5°	3857.7	2246.1	1481.9	1475.4	1383.5
50°	2928.1	1831.0	1412.7	1334.9	1286.3
52.5°	2168.3	1544.6	1346.8	1261.4	1211.7
55°	1539.2	1352.2	1249.5	1206.3	1080.9
57.5°	1156.6	1216.0	1174.9	1077.6	990.1
60°	999.8	1096.0	1131.7	1016.0	930.6
62.5°	902.5	993.3	1061.4	979.3	851.7
65°	799.9	893.9	963.1	941.5	691.8
67.5°	710.1	815.0	900.4	807.4	565.3
70°	622.6	719.9	831.2	685.3	422.6
72.5°	528.6	602.1	736.1	532.9	308.1
75°	444.2	497.2	631.2	458.3	273.5
77.5°	355.6	399.9	432.4	417.2	241.0
80°	276.7	321.0	351.3	379.4	207.5
82.5°	201.0	230.2	278.9	336.2	172.9
85°	123.2	150.2	214.0	284.3	128.6
87.5°	53.0	91.9	156.7	235.6	84.3
90°	2.2	45.4	107.0	183.8	37.8
92.5°	1.1	19.5	69.2	135.1	24.9
95°	1.1	7.6	42.2	91.9	19.5
97.5°	1.1	3.2	21.6	59.4	14.1
100°	1.1	2.2	11.9	34.6	9.7
102.5°	1.1	2.2	5.4	17.3	7.6
105°	1.1	2.2	4.3	7.6	6.5
107.5°	1.1	2.2	3.2	5.4	5.4
110°	1.1	2.2	3.2	5.4	5.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1.1	2.2	3.2	5.4	5.4
115°	1.1	2.2	3.2	4.3	4.3
117.5°	1.1	2.2	3.2	4.3	4.3
120°	1.1	2.2	3.2	4.3	4.3
122.5°	1.1	2.2	3.2	4.3	4.3
125°	2.2	2.2	3.2	4.3	4.3
127.5°	2.2	3.2	3.2	4.3	4.3
130°	2.2	3.2	3.2	4.3	4.3
132.5°	2.2	3.2	3.2	4.3	4.3
135°	2.2	3.2	3.2	4.3	4.3
137.5°	2.2	3.2	4.3	4.3	4.3
140°	3.2	4.3	4.3	4.3	4.3
142.5°	3.2	4.3	4.3	5.4	4.3
145°	3.2	4.3	4.3	5.4	5.4
147.5°	3.2	4.3	5.4	5.4	5.4
150°	3.2	4.3	5.4	6.5	6.5
152.5°	4.3	4.3	5.4	6.5	6.5
155°	4.3	5.4	5.4	6.5	6.5
157.5°	4.3	5.4	5.4	6.5	7.6
160°	4.3	5.4	6.5	7.6	7.6
162.5°	4.3	5.4	6.5	7.6	7.6
165°	5.4	6.5	6.5	7.6	7.6
167.5°	5.4	6.5	7.6	7.6	8.6
170°	5.4	6.5	7.6	8.6	8.6
172.5°	5.4	6.5	7.6	8.6	8.6
175°	5.4	6.5	7.6	8.6	9.7
177.5°	5.4	6.5	7.6	8.6	9.7
180°	7.6	7.6	7.6	7.6	7.6

(END OF REPORT)