

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: P685957

Luminaire Tested: **8CZL-24-UNV-LVRF-L950-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685957  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-24-UNV-LVRF-L950-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH FROSTED LAY-IN @90 CRI and 5000K  
Light Source: (1176) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

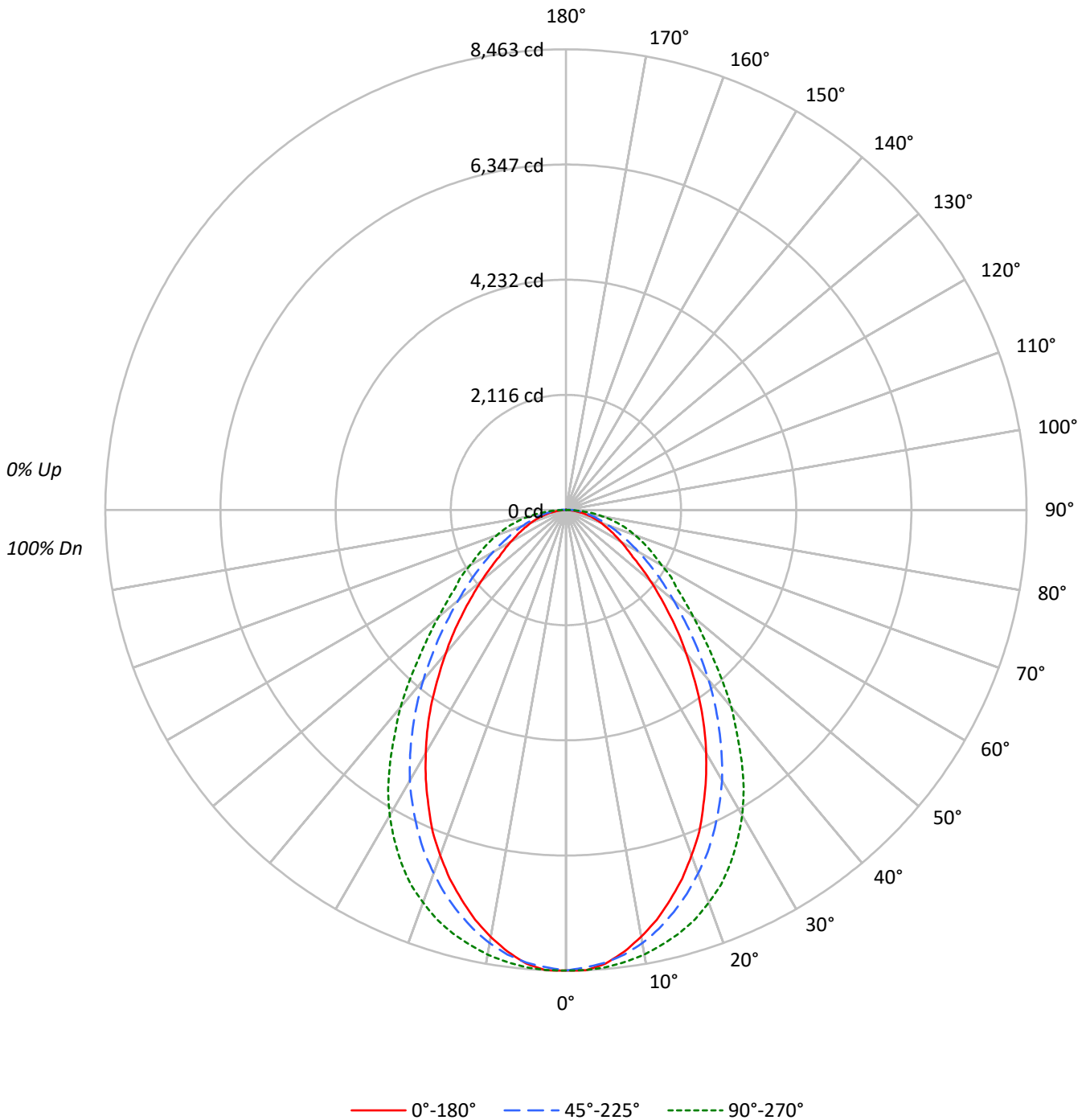
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15604.5 lumens  
Efficiency: N/A  
Efficacy: 101.3 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): 154  
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
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°	13658	13658	13658
5°	13559	13527	13663
10°	13052	13245	13596
15°	12384	12783	13453
20°	11598	12199	13185
25°	10650	11509	12748
30°	9599	10696	12072
35°	8454	9674	11088
40°	7236	8589	9970
45°	6096	7487	8683
50°	5091	6489	7677
55°	4213	5701	6961
60°	3796	4998	6564
65°	3451	4398	6419
70°	3214	3948	6371
75°	2981	3686	6500
80°	2702	3651	6511
85°	2319	4279	6441



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	791.5	5.1
10°-20°	2163.1	13.9
20°-30°	2988.8	19.2
30°-40°	3074.6	19.7
40°-50°	2520.6	16.2
50°-60°	1808.7	11.6
60°-70°	1216.5	7.8
70°-80°	710.0	4.6
80°-90°	273.6	1.8
90°-100°	47.4	0.3
100°-110°	4.0	0.0
110°-120°	0.7	0.0
120°-130°	0.7	0.0
130°-140°	1.0	0.0
140°-150°	1.2	0.0
150°-160°	1.0	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	5943.4	38.1
0°-40°	9017.9	57.8
0°-60°	13347.2	85.5
0°-90°	15547.4	99.6
90°-120°	52.2	0.3
90°-150°	55.0	0.4
90°-180°	57.0	0.4
0°-180°	15604.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8459	8459	8459	8459	8459	
5°	8366	8372	8346	8424	8430	785
15°	7409	7484	7647	7944	8048	2078
25°	5978	6118	6460	6910	7156	2744
35°	4289	4487	4908	5368	5625	2673
45°	2670	2878	3279	3601	3803	2072
55°	1497	1675	2025	2303	2473	1378
65°	903	957	1151	1478	1680	900
75°	478	495	591	821	1042	507
85°	125	156	231	345	348	136
90°	1	52	118	180	38	7
95°	1	8	50	86	16	0
105°	0	1	2	5	2	0
115°	1	1	1	0	0	1
125°	1	1	1	0	0	1
135°	1	2	1	1	0	1
145°	2	2	2	1	1	1
155°	2	4	2	1	1	1
165°	4	4	4	2	1	1
175°	4	5	4	2	2	0
180°	4	4	4	4	4	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8459.2	8459.2	8459.2	8459.2	8459.2
2.5°	8462.9	8455.6	8408.1	8462.9	8460.4
5°	8365.6	8371.7	8346.1	8423.9	8430.0
7.5°	8184.4	8208.8	8236.7	8351.0	8371.7
10°	7960.7	7997.2	8078.7	8248.9	8292.6
12.5°	7709.1	7749.2	7881.7	8116.4	8177.1
15°	7408.8	7484.2	7647.1	7943.7	8048.3
17.5°	7098.8	7191.2	7393.0	7744.3	7885.4
20°	6749.9	6842.3	7100.0	7491.5	7673.8
22.5°	6399.7	6489.7	6804.6	7221.6	7448.9
25°	5977.9	6117.7	6460.5	6910.3	7155.9
27.5°	5574.2	5722.5	6104.3	6586.9	6831.3
30°	5148.7	5322.6	5737.1	6197.9	6475.1
32.5°	4726.8	4903.1	5326.2	5806.4	6081.2
35°	4289.2	4487.3	4908.0	5367.5	5625.3
37.5°	3845.4	4061.8	4494.6	4946.9	5154.8
40°	3433.3	3646.0	4075.2	4480.0	4730.5
42.5°	3052.8	3261.9	3659.4	4026.6	4251.5
45°	2669.8	2877.7	3278.9	3601.1	3802.9
47.5°	2326.9	2539.7	2912.9	3238.8	3407.8
50°	2026.7	2220.0	2583.5	2878.9	3056.4
52.5°	1751.9	1928.2	2288.0	2575.0	2746.4
55°	1496.6	1675.3	2025.4	2302.6	2472.8
57.5°	1325.2	1452.8	1767.7	2075.3	2294.1
60°	1175.6	1254.7	1547.7	1912.4	2032.7
62.5°	1023.7	1095.4	1336.1	1657.1	1844.3
65°	903.3	956.8	1151.3	1478.4	1680.2
67.5°	784.2	824.3	990.8	1305.7	1510.0
70°	680.8	706.4	836.4	1135.5	1349.5
72.5°	582.3	595.7	712.4	979.9	1192.7
75°	477.8	494.8	590.9	820.6	1041.9
77.5°	378.1	402.4	487.5	684.5	869.3
80°	290.6	310.0	392.7	562.9	700.3
82.5°	201.8	228.6	306.4	445.0	536.1
85°	125.2	155.6	231.0	345.3	347.7
87.5°	52.3	97.3	169.0	255.3	177.5
90°	1.2	52.3	117.9	179.9	37.7
92.5°	0.0	24.3	80.2	128.9	21.9
95°	1.2	8.5	49.8	86.3	15.8
97.5°	0.0	2.4	26.7	54.7	9.7
100°	0.0	1.2	10.9	30.4	6.1
102.5°	0.0	1.2	4.9	13.4	3.6
105°	0.0	1.2	2.4	4.9	2.4
107.5°	0.0	1.2	1.2	1.2	1.2
110°	1.2	1.2	1.2	1.2	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	1.2	1.2	0.0	0.0
115°	1.2	1.2	1.2	0.0	0.0
117.5°	1.2	1.2	1.2	0.0	0.0
120°	1.2	1.2	1.2	0.0	0.0
122.5°	1.2	1.2	1.2	0.0	0.0
125°	1.2	1.2	1.2	0.0	0.0
127.5°	1.2	1.2	1.2	0.0	0.0
130°	1.2	1.2	1.2	0.0	0.0
132.5°	1.2	2.4	1.2	1.2	0.0
135°	1.2	2.4	1.2	1.2	0.0
137.5°	1.2	2.4	1.2	1.2	0.0
140°	1.2	2.4	1.2	1.2	1.2
142.5°	2.4	2.4	2.4	1.2	1.2
145°	2.4	2.4	2.4	1.2	1.2
147.5°	2.4	2.4	2.4	1.2	1.2
150°	2.4	2.4	2.4	1.2	1.2
152.5°	2.4	3.6	2.4	1.2	1.2
155°	2.4	3.6	2.4	1.2	1.2
157.5°	2.4	3.6	2.4	1.2	1.2
160°	2.4	3.6	2.4	1.2	1.2
162.5°	3.6	3.6	2.4	2.4	1.2
165°	3.6	3.6	3.6	2.4	1.2
167.5°	3.6	3.6	3.6	2.4	1.2
170°	3.6	3.6	3.6	2.4	2.4
172.5°	3.6	3.6	3.6	2.4	2.4
175°	3.6	4.9	3.6	2.4	2.4
177.5°	3.6	4.9	3.6	2.4	2.4
180°	3.6	3.6	3.6	3.6	3.6

(END OF REPORT)