

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: P685884

Luminaire Tested: **8CZL-10-UNV-W-LVR-L940-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685884  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-10-UNV-W-LVR-L940-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH WIDE LENS @90 CRI and 4000K  
Light Source: (784) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

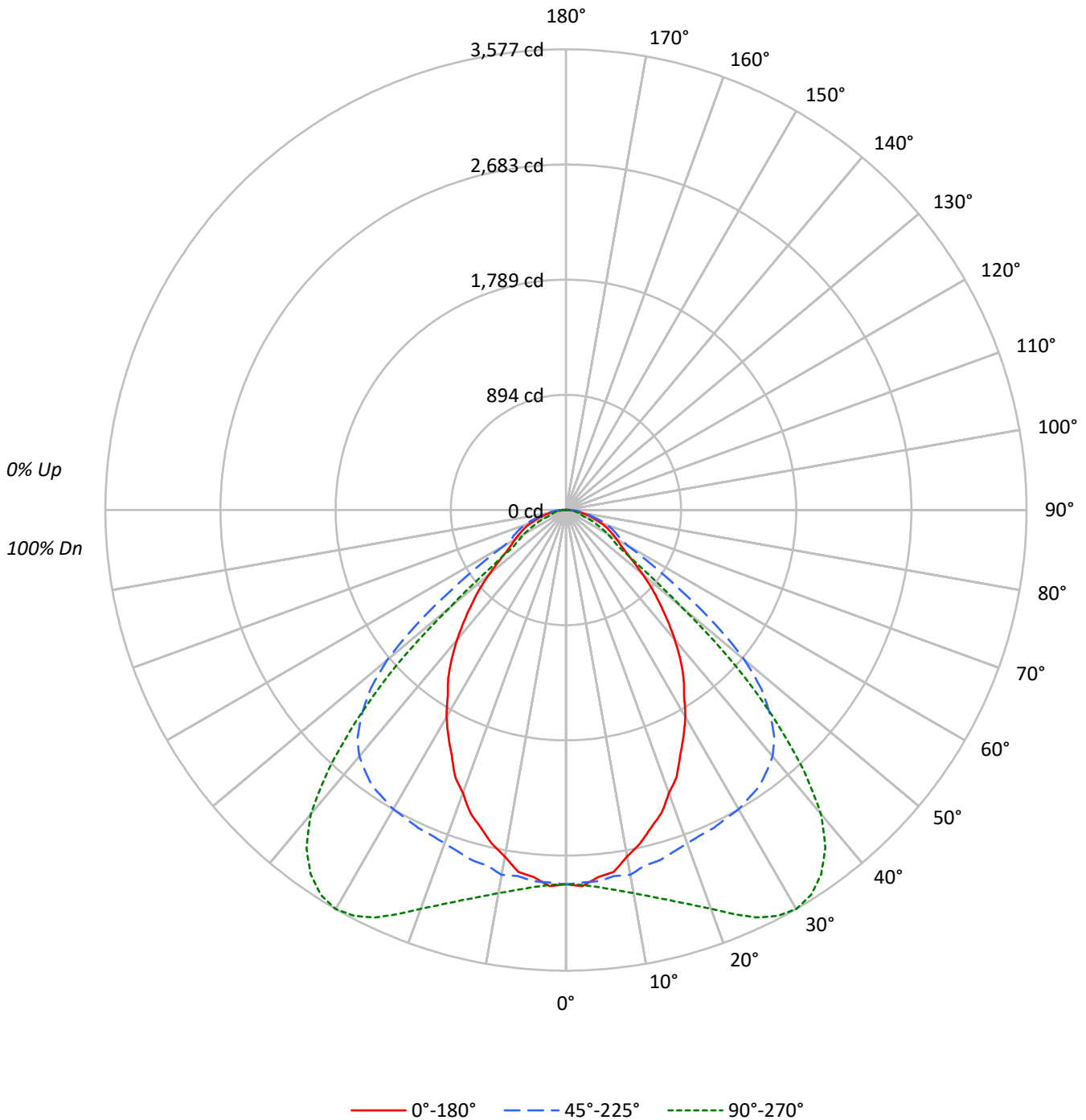
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6913.9 lumens  
Efficiency: N/A  
Efficacy: 109.7 lumens/watt  
Spacing Criteria (0/90/45): 1 / 1.64 / 1.46  
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 (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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	89	89	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	77	77	77	75
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	68	68	68	66
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	59	59	59	59	57
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	53	53	53	51
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	47	47	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	38	38	38	36
9	61	48	40	35	59	47	40	35	46	40	35	45	39	35	44	39	34	34	34	34	33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	35	31	31	31	31	30

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

	0°	45°	90°
0°	4692	4692	4692
5°	4638	4686	4763
10°	4478	4715	4953
15°	4268	4706	5244
20°	4017	4732	5660
25°	3740	4848	6217
30°	3458	5001	6668
35°	3141	5163	6808
40°	2770	5261	6496
45°	2361	5117	5208
50°	1957	4550	2955
55°	1594	3074	1414
60°	1471	1788	1221
65°	1419	1644	993
70°	1339	1613	710
75°	1246	1473	689
80°	1136	1447	757
85°	871	1734	835



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	276.3	4.0
10°-20°	802.1	11.6
20°-30°	1272.9	18.4
30°-40°	1589.8	23.0
40°-50°	1460.2	21.1
50°-60°	779.3	11.3
60°-70°	401.1	5.8
70°-80°	220.5	3.2
80°-90°	91.0	1.3
90°-100°	17.6	0.3
100°-110°	1.0	0.0
110°-120°	0.2	0.0
120°-130°	0.3	0.0
130°-140°	0.6	0.0
140°-150°	0.5	0.0
150°-160°	0.4	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	2351.3	34.0
0°-40°	3941.0	57.0
0°-60°	6180.5	89.4
0°-90°	6893.0	99.7
90°-120°	18.8	0.3
90°-150°	20.1	0.3
90°-180°	21.0	0.3
0°-180°	6913.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2906	2906	2906	2906	2906	
5°	2862	2869	2891	2936	2939	270
15°	2553	2636	2815	3045	3137	718
25°	2099	2297	2721	3220	3490	967
35°	1594	1888	2620	3191	3454	989
45°	1034	1491	2241	2322	2281	800
55°	566	1015	1092	612	502	523
65°	371	487	430	351	260	367
75°	200	222	236	210	110	212
85°	47	62	94	123	45	54
90°	0	18	46	75	10	2
95°	0	2	18	34	4	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	1	1	0	0	0
145°	0	1	1	0	0	0
155°	1	1	1	0	0	0
165°	1	2	1	0	0	0
175°	2	2	1	0	0	0
180°	1	1	1	1	1	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2906.0	2906.0	2906.0	2906.0	2906.0
2.5°	2922.9	2916.6	2895.8	2914.7	2913.2
5°	2861.9	2869.1	2891.4	2936.0	2938.9
7.5°	2834.7	2854.6	2867.2	2963.7	2976.3
10°	2731.5	2762.5	2875.9	2976.3	3020.9
12.5°	2653.9	2716.4	2826.5	2996.6	3074.2
15°	2553.1	2636.5	2815.3	3044.6	3137.2
17.5°	2467.3	2552.6	2781.4	3081.0	3210.4
20°	2337.9	2492.5	2753.8	3118.8	3294.2
22.5°	2245.3	2401.8	2732.4	3152.2	3393.6
25°	2099.4	2296.7	2721.3	3219.6	3489.6
27.5°	1977.2	2208.0	2696.6	3262.7	3553.1
30°	1854.6	2099.4	2682.5	3270.5	3576.8
32.5°	1706.7	2011.2	2647.1	3252.6	3542.9
35°	1593.8	1888.0	2619.5	3191.0	3454.2
37.5°	1456.1	1791.1	2558.9	3079.5	3308.8
40°	1314.1	1701.4	2495.9	2905.5	3081.9
42.5°	1170.6	1600.6	2395.1	2673.3	2727.1
45°	1033.9	1490.6	2240.9	2322.4	2280.7
47.5°	911.3	1372.3	2058.7	1882.2	1784.3
50°	779.0	1252.1	1811.4	1432.9	1176.4
52.5°	659.7	1151.7	1471.2	970.4	731.9
55°	566.2	1015.0	1092.1	611.7	502.2
57.5°	499.8	910.3	788.2	483.8	430.0
60°	455.6	779.4	553.6	444.0	378.1
62.5°	412.0	616.6	473.6	404.8	318.0
65°	371.3	486.7	430.4	350.9	259.8
67.5°	329.1	395.1	388.8	318.5	216.7
70°	283.6	324.8	341.7	266.6	150.3
72.5°	242.9	272.4	290.8	227.8	127.5
75°	199.7	221.5	236.1	209.9	110.5
77.5°	158.5	178.4	192.4	190.0	96.9
80°	122.2	135.2	155.6	170.1	81.4
82.5°	83.4	93.1	122.6	146.9	63.5
85°	47.0	61.6	93.6	123.1	45.1
87.5°	13.6	36.4	67.9	98.9	26.2
90°	0.0	17.5	46.0	74.6	9.7
92.5°	0.0	6.8	30.1	52.4	6.8
95°	0.0	1.9	17.5	34.4	4.4
97.5°	0.0	0.5	8.2	20.4	1.9
100°	0.0	0.5	2.9	9.7	0.5
102.5°	0.0	0.5	1.0	3.4	0.0
105°	0.0	0.5	0.5	0.5	0.0
107.5°	0.0	0.5	0.5	0.0	0.0
110°	0.0	0.5	0.5	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.5	0.5	0.0	0.0
115°	0.0	0.5	0.5	0.0	0.0
117.5°	0.0	0.5	0.5	0.0	0.0
120°	0.0	0.5	0.5	0.0	0.0
122.5°	0.0	0.5	0.5	0.0	0.0
125°	0.0	0.5	0.5	0.0	0.0
127.5°	0.5	0.5	0.5	0.5	0.0
130°	0.5	1.0	1.0	0.5	0.0
132.5°	0.5	1.0	1.0	0.5	0.0
135°	0.5	1.0	1.0	0.5	0.5
137.5°	0.5	1.0	1.0	0.5	0.5
140°	0.5	1.0	1.0	0.5	0.5
142.5°	0.5	1.0	1.0	0.5	0.5
145°	0.5	1.0	1.0	0.5	0.5
147.5°	0.5	1.0	1.0	0.5	0.5
150°	0.5	1.0	1.0	0.5	0.5
152.5°	1.0	1.0	1.0	0.5	0.5
155°	1.0	1.0	1.0	0.5	0.5
157.5°	1.0	1.0	1.0	0.5	0.5
160°	1.0	1.0	1.0	0.5	0.5
162.5°	1.0	1.5	1.0	0.5	0.5
165°	1.0	1.5	1.0	0.5	0.5
167.5°	1.0	1.5	1.0	0.5	0.5
170°	1.0	1.5	1.0	0.5	0.5
172.5°	1.0	1.5	1.0	0.5	0.5
175°	1.5	1.5	1.0	0.5	0.5
177.5°	1.5	1.5	1.0	1.0	1.0
180°	1.0	1.0	1.0	1.0	1.0

(END OF REPORT)