

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: P685835

Luminaire Tested: **8CZL-14-UNV-M-LVR-L950-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685835  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-14-UNV-M-LVR-L950-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH MEDIUM LENS @90 CRI and 5000K  
Light Source: (784) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

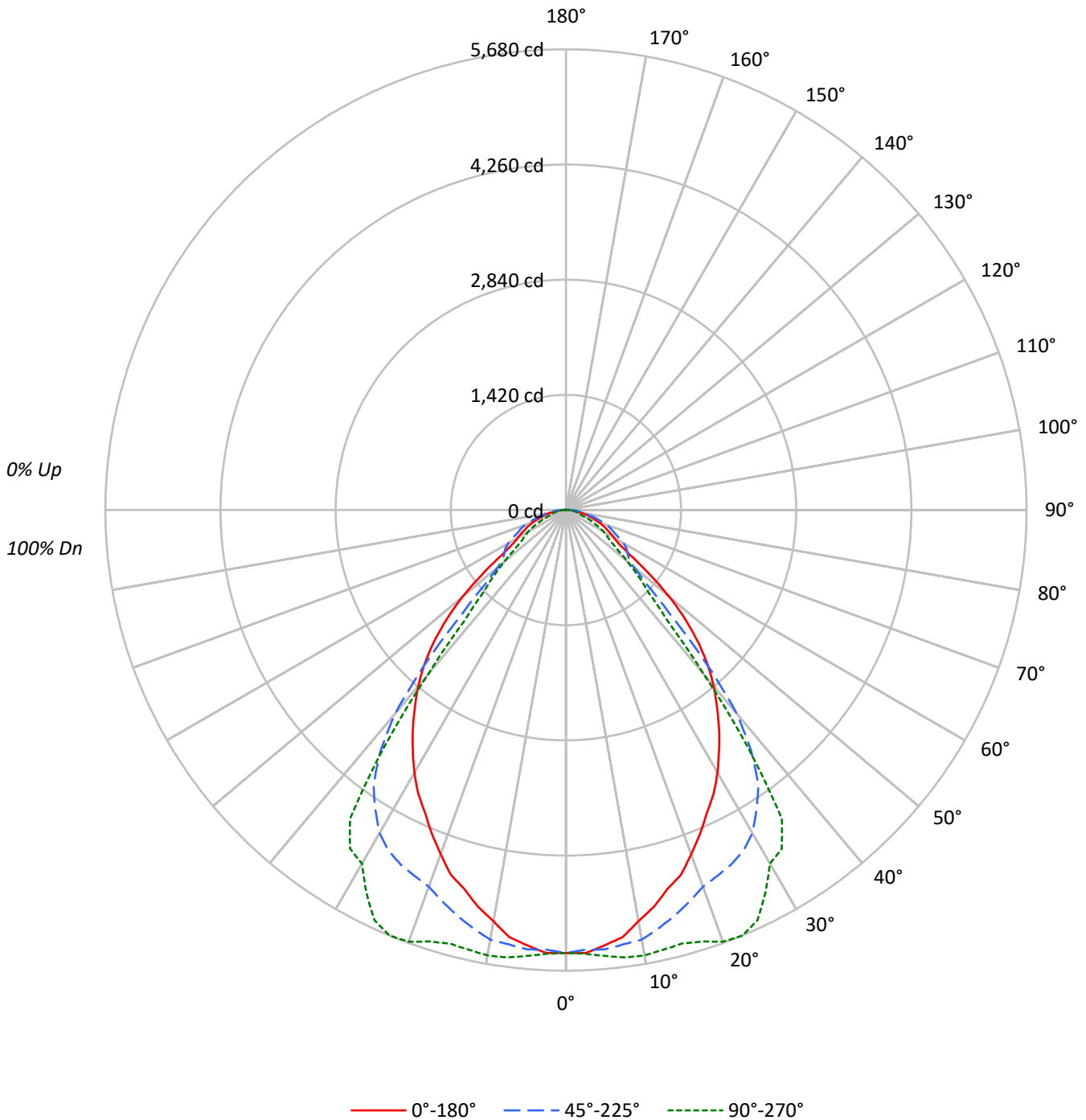
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10101.8 lumens  
Efficiency: N/A  
Efficacy: 113.5 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.34 / 1.2  
Luminous Opening: Rectangular (W 0.83' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 89  
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

TEST NUMBER: P685835  
CATALOG NUMBER: 8CZL-14-UNV-M-LVR-L950-CD-U

### Luminous Intensity Polar Plot





TEST NUMBER: P685835

CATALOG NUMBER: 8CZL-14-UNV-M-LVR-L950-CD-U

**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	100	100	100	100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88	88	88	88
2	103	96	90	86	100	94	89	84	91	86	83	87	84	81	84	81	79	77	77	77	77
3	95	87	80	74	93	85	79	74	82	77	72	79	75	71	77	73	70	68	68	68	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	70	66	62	60	60	60	60
5	83	72	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54	54	54	54
6	77	65	58	52	75	65	57	52	63	56	51	61	55	51	60	55	51	49	49	49	49
7	72	60	53	47	70	59	52	47	58	51	47	57	51	46	55	50	46	44	44	44	44
8	68	56	48	43	66	55	48	43	54	47	42	52	47	42	51	46	42	40	40	40	40
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	42	39	37	37	37	37
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	35	34	34	34	34

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

	0°	45°	90°
0°	8817	8817	8817
5°	8736	8814	8946
10°	8440	8819	9141
15°	8084	8655	9249
20°	7758	8490	9729
25°	7330	8591	9946
30°	6967	8572	9381
35°	6487	8152	9147
40°	5972	6910	5574
45°	5262	4119	3304
50°	4176	2735	2493
55°	2704	2602	1892
60°	2207	2644	1738
65°	2103	2492	1420
70°	1997	2501	1123
75°	1897	2341	1044
80°	1755	2211	1172
85°	1569	2705	1438



TEST NUMBER: P685835  
 CATALOG NUMBER: 8CZL-14-UNV-M-LVR-L950-CD-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	518.2	5.1
10°-20°	1469.9	14.6
20°-30°	2216.6	21.9
30°-40°	2449.2	24.2
40°-50°	1535.7	15.2
50°-60°	826.8	8.2
60°-70°	561.5	5.6
70°-80°	335.4	3.3
80°-90°	145.7	1.4
90°-100°	31.9	0.3
100°-110°	3.7	0.0
110°-120°	1.3	0.0
120°-130°	1.2	0.0
130°-140°	1.4	0.0
140°-150°	1.3	0.0
150°-160°	1.0	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	4204.7	41.6
0°-40°	6653.9	65.9
0°-60°	9016.4	89.3
0°-90°	10058.9	99.6
90°-120°	36.9	0.4
90°-150°	40.8	0.4
90°-180°	43.0	0.4
0°-180°	10101.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5461	5461	5461	5461	5461	
5°	5390	5399	5438	5502	5519	508
15°	4836	5006	5178	5428	5533	1365
25°	4114	4364	4822	5336	5583	1899
35°	3291	3678	4136	4449	4641	2054
45°	2304	2509	1804	1470	1447	1758
55°	961	1005	924	800	672	933
65°	550	605	652	530	372	545
75°	304	338	375	308	167	321
85°	85	104	146	192	78	91
90°	2	32	74	123	23	6
95°	1	5	29	63	11	1
105°	1	1	2	5	2	1
115°	1	1	1	1	1	1
125°	1	1	1	1	1	1
135°	1	1	2	2	2	1
145°	1	2	2	2	3	1
155°	2	2	2	2	2	1
165°	2	3	3	3	3	1
175°	3	3	3	4	4	0
180°	4	4	4	4	4	

TEST NUMBER: P685835

CATALOG NUMBER: 8CZL-14-UNV-M-LVR-L950-CD-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5461.0	5461.0	5461.0	5461.0	5461.0
2.5°	5468.1	5453.1	5425.4	5475.2	5475.9
5°	5389.8	5399.0	5438.2	5502.3	5519.4
7.5°	5313.6	5349.2	5401.9	5556.4	5564.2
10°	5147.7	5221.7	5379.1	5527.9	5575.6
12.5°	5009.5	5119.2	5281.5	5477.4	5551.4
15°	4836.5	5006.0	5177.6	5428.2	5532.9
17.5°	4715.4	4851.4	5061.5	5405.4	5577.0
20°	4515.3	4706.9	4941.2	5421.1	5662.5
22.5°	4320.9	4553.8	4880.6	5426.8	5680.3
25°	4114.4	4364.4	4822.2	5336.4	5582.7
27.5°	3943.5	4152.9	4735.4	5147.7	5325.7
30°	3737.0	3983.4	4597.9	4859.3	5031.6
32.5°	3514.9	3827.5	4375.0	4638.5	4951.8
35°	3291.3	3677.9	4135.8	4449.1	4640.7
37.5°	3057.7	3554.7	3759.8	3810.4	3679.3
40°	2833.4	3383.1	3278.4	2789.2	2644.7
42.5°	2588.4	3014.3	2557.1	1919.1	1854.3
45°	2304.3	2508.7	1803.7	1470.5	1447.0
47.5°	2001.7	1942.6	1345.1	1229.1	1215.5
50°	1662.7	1553.1	1088.8	1084.5	992.6
52.5°	1296.0	1233.3	976.3	940.7	794.7
55°	960.6	1004.8	924.3	799.7	672.2
57.5°	769.1	871.6	888.0	698.6	601.0
60°	683.6	762.6	818.9	642.3	538.3
62.5°	613.1	675.8	733.4	596.0	464.3
65°	550.4	605.3	652.3	529.8	371.7
67.5°	484.2	541.2	598.9	455.0	316.2
70°	423.0	483.5	529.8	403.8	237.8
72.5°	359.6	422.3	442.9	337.5	190.1
75°	304.1	338.2	375.3	308.3	167.3
77.5°	245.7	274.9	289.8	282.7	147.4
80°	188.7	212.2	237.8	257.1	126.0
82.5°	138.1	155.2	190.1	226.4	101.1
85°	84.7	104.0	146.0	192.3	77.6
87.5°	37.7	62.0	107.5	158.8	49.8
90°	2.1	32.0	74.1	123.2	22.8
92.5°	0.7	14.2	48.4	91.1	15.7
95°	0.7	5.0	29.2	63.4	11.4
97.5°	0.7	2.1	16.4	40.6	7.1
100°	0.7	1.4	7.8	23.5	5.0
102.5°	0.7	1.4	3.6	11.4	3.6
105°	0.7	1.4	2.1	5.0	2.1
107.5°	0.7	1.4	1.4	2.1	1.4
110°	0.7	1.4	1.4	1.4	1.4



TEST NUMBER: P685835  
CATALOG NUMBER: 8CZL-14-UNV-M-LVR-L950-CD-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.7	1.4	1.4	1.4	1.4
115°	0.7	1.4	1.4	1.4	1.4
117.5°	0.7	1.4	1.4	1.4	1.4
120°	0.7	1.4	1.4	1.4	1.4
122.5°	0.7	1.4	1.4	1.4	1.4
125°	0.7	1.4	1.4	1.4	1.4
127.5°	0.7	1.4	1.4	1.4	1.4
130°	0.7	1.4	1.4	1.4	1.4
132.5°	1.4	1.4	2.1	2.1	2.1
135°	1.4	1.4	2.1	2.1	2.1
137.5°	1.4	2.1	2.1	2.1	2.1
140°	1.4	2.1	2.1	2.1	2.1
142.5°	1.4	2.1	2.1	2.1	2.1
145°	1.4	2.1	2.1	2.1	2.8
147.5°	1.4	2.1	2.1	2.1	2.8
150°	1.4	2.1	2.1	2.1	2.1
152.5°	2.1	2.1	2.1	2.1	2.1
155°	2.1	2.1	2.1	2.1	2.1
157.5°	2.1	2.1	2.1	2.8	2.8
160°	2.1	2.8	2.8	2.8	2.8
162.5°	2.1	2.8	2.8	2.8	2.8
165°	2.1	2.8	2.8	2.8	2.8
167.5°	2.1	2.8	2.8	2.8	3.6
170°	2.8	2.8	2.8	3.6	3.6
172.5°	2.8	2.8	2.8	3.6	3.6
175°	2.8	2.8	2.8	3.6	3.6
177.5°	2.8	3.6	2.8	3.6	4.3
180°	3.6	3.6	3.6	3.6	3.6

(END OF REPORT)