

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: P685814

Luminaire Tested: **8CZL-10-UNV-M-LVR-L935-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685814  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-10-UNV-M-LVR-L935-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH MEDIUM LENS @90 CRI and 3500K  
Light Source: (784) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

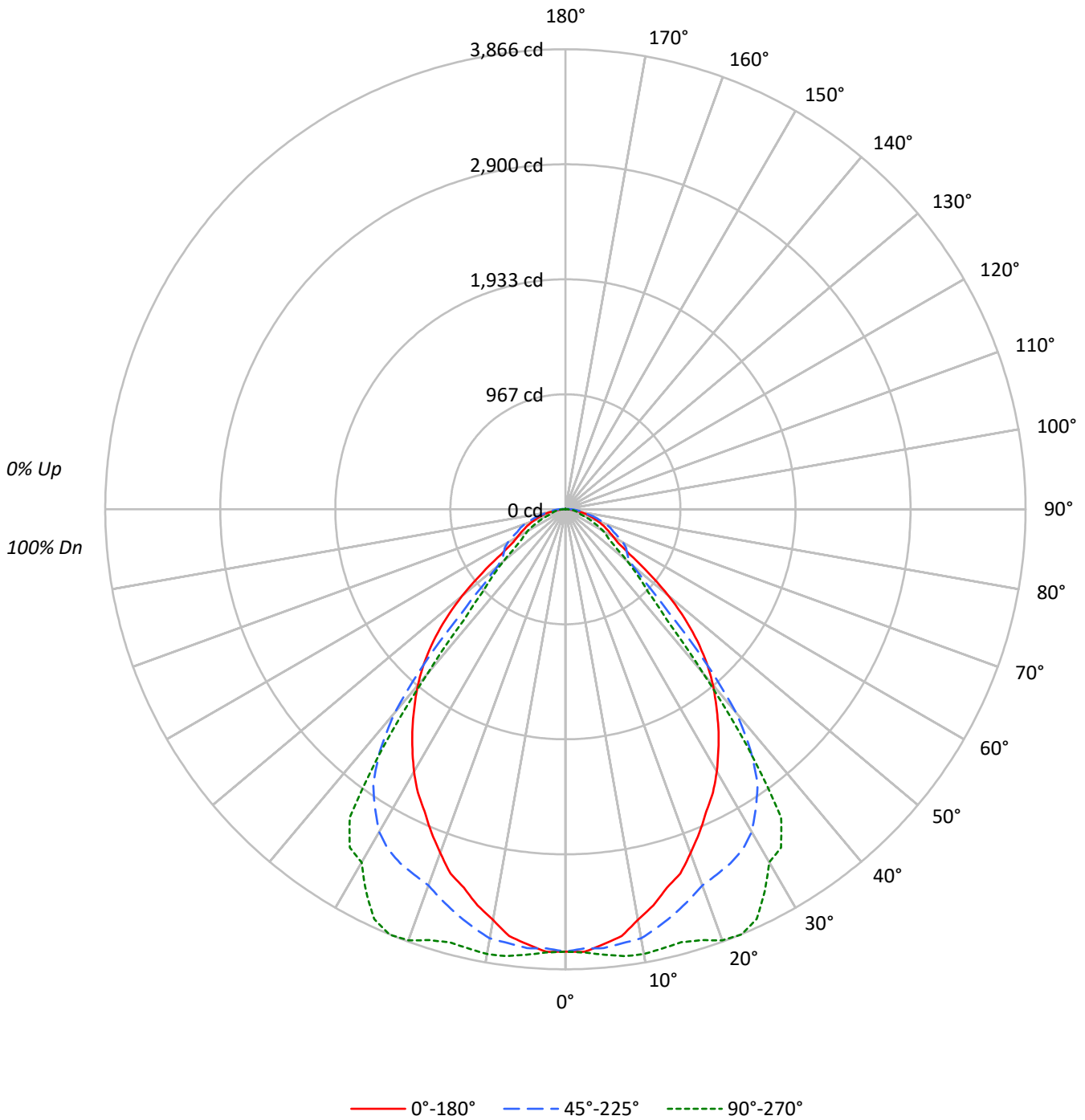
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6876.4 lumens  
Efficiency: N/A  
Efficacy: 109.1 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): 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

TEST NUMBER: P685814  
CATALOG NUMBER: 8CZL-10-UNV-M-LVR-L935-CD-U

### Luminous Intensity Polar Plot





TEST NUMBER: P685814

CATALOG NUMBER: 8CZL-10-UNV-M-LVR-L935-CD-U

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				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	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	90	90	90	88
2	103	96	90	86	100	94	89	84	91	86	83	87	84	81	84	81	79	79	79	79	77
3	95	87	80	74	93	85	79	74	82	77	72	79	75	71	77	73	70	70	70	70	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	70	66	62	62	62	62	60
5	83	72	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	56	56	56	54
6	77	65	58	52	75	65	57	52	63	56	51	61	55	51	60	55	51	51	51	51	49
7	72	60	53	47	70	59	52	47	58	51	47	57	51	46	55	50	46	46	46	46	44
8	68	56	48	43	66	55	48	43	54	47	42	52	47	42	51	46	42	42	42	42	40
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	42	39	39	39	39	37
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	35	35	35	35	34

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

	0°	45°	90°
0°	6002	6002	6002
5°	5946	6000	6089
10°	5745	6003	6222
15°	5503	5891	6295
20°	5281	5779	6623
25°	4989	5848	6770
30°	4743	5835	6385
35°	4416	5549	6226
40°	4065	4704	3794
45°	3581	2804	2249
50°	2843	1862	1697
55°	1841	1771	1288
60°	1503	1800	1183
65°	1432	1696	967
70°	1359	1702	764
75°	1291	1593	711
80°	1194	1505	798
85°	1069	1841	978



TEST NUMBER: P685814  
 CATALOG NUMBER: 8CZL-10-UNV-M-LVR-L935-CD-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	352.7	5.1
10°-20°	1000.6	14.6
20°-30°	1508.8	21.9
30°-40°	1667.2	24.2
40°-50°	1045.3	15.2
50°-60°	562.8	8.2
60°-70°	382.2	5.6
70°-80°	228.3	3.3
80°-90°	99.2	1.4
90°-100°	21.7	0.3
100°-110°	2.5	0.0
110°-120°	0.9	0.0
120°-130°	0.8	0.0
130°-140°	1.0	0.0
140°-150°	0.9	0.0
150°-160°	0.7	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	2862.1	41.6
0°-40°	4529.2	65.9
0°-60°	6137.3	89.3
0°-90°	6847.0	99.6
90°-120°	25.2	0.4
90°-150°	28.0	0.4
90°-180°	29.0	0.4
0°-180°	6876.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3717	3717	3717	3717	3717	
5°	3669	3675	3702	3745	3757	346
15°	3292	3408	3524	3695	3766	929
25°	2801	2971	3282	3632	3800	1293
35°	2240	2504	2815	3028	3159	1398
45°	1568	1708	1228	1001	985	1196
55°	654	684	629	544	458	635
65°	375	412	444	361	253	371
75°	207	230	255	210	114	218
85°	58	71	99	131	53	62
90°	2	22	50	84	16	4
95°	0	3	20	43	8	0
105°	0	1	2	3	2	1
115°	0	1	1	1	1	0
125°	0	1	1	1	1	0
135°	1	1	2	2	2	1
145°	1	2	2	2	2	1
155°	2	2	2	2	2	1
165°	2	2	2	2	2	0
175°	2	2	2	2	2	0
180°	2	2	2	2	2	



TEST NUMBER: P685814

CATALOG NUMBER: 8CZL-10-UNV-M-LVR-L935-CD-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3717.2	3717.2	3717.2	3717.2	3717.2
2.5°	3722.1	3711.9	3693.0	3726.9	3727.4
5°	3668.8	3675.1	3701.7	3745.3	3757.0
7.5°	3616.9	3641.1	3677.0	3782.2	3787.5
10°	3504.0	3554.4	3661.5	3762.8	3795.3
12.5°	3409.9	3484.6	3595.1	3728.4	3778.8
15°	3292.1	3407.5	3524.3	3694.9	3766.2
17.5°	3209.7	3302.3	3445.3	3679.4	3796.2
20°	3073.5	3203.9	3363.4	3690.1	3854.4
22.5°	2941.2	3099.7	3322.2	3694.0	3866.5
25°	2800.6	2970.8	3282.4	3632.4	3800.1
27.5°	2684.3	2826.8	3223.3	3504.0	3625.1
30°	2543.8	2711.5	3129.8	3307.7	3425.0
32.5°	2392.5	2605.3	2978.1	3157.4	3370.7
35°	2240.3	2503.5	2815.2	3028.5	3158.8
37.5°	2081.3	2419.7	2559.3	2593.7	2504.5
40°	1928.7	2302.9	2231.6	1898.6	1800.2
42.5°	1761.9	2051.8	1740.6	1306.3	1262.2
45°	1568.5	1707.6	1227.8	1000.9	984.9
47.5°	1362.5	1322.3	915.6	836.6	827.4
50°	1131.8	1057.1	741.1	738.2	675.7
52.5°	882.2	839.5	664.5	640.3	540.9
55°	653.9	683.9	629.2	544.3	457.6
57.5°	523.5	593.3	604.4	475.5	409.1
60°	465.3	519.1	557.4	437.2	366.4
62.5°	417.3	460.0	499.2	405.7	316.0
65°	374.7	412.0	444.0	360.6	253.0
67.5°	329.6	368.4	407.6	309.7	215.2
70°	287.9	329.1	360.6	274.8	161.9
72.5°	244.8	287.4	301.5	229.8	129.4
75°	207.0	230.2	255.4	209.9	113.9
77.5°	167.2	187.1	197.3	192.4	100.3
80°	128.4	144.4	161.9	175.0	85.8
82.5°	94.0	105.7	129.4	154.1	68.8
85°	57.7	70.8	99.4	130.9	52.8
87.5°	25.7	42.2	73.2	108.1	33.9
90°	1.5	21.8	50.4	83.9	15.5
92.5°	0.5	9.7	33.0	62.0	10.7
95°	0.5	3.4	19.9	43.1	7.8
97.5°	0.5	1.5	11.1	27.6	4.8
100°	0.5	1.0	5.3	16.0	3.4
102.5°	0.5	1.0	2.4	7.8	2.4
105°	0.5	1.0	1.5	3.4	1.5
107.5°	0.5	1.0	1.0	1.5	1.0
110°	0.5	1.0	1.0	1.0	1.0



TEST NUMBER: P685814  
 CATALOG NUMBER: 8CZL-10-UNV-M-LVR-L935-CD-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.5	1.0	1.0	1.0	1.0
115°	0.5	1.0	1.0	1.0	1.0
117.5°	0.5	1.0	1.0	1.0	1.0
120°	0.5	1.0	1.0	1.0	1.0
122.5°	0.5	1.0	1.0	1.0	1.0
125°	0.5	1.0	1.0	1.0	1.0
127.5°	0.5	1.0	1.0	1.0	1.0
130°	0.5	1.0	1.0	1.0	1.0
132.5°	1.0	1.0	1.5	1.5	1.5
135°	1.0	1.0	1.5	1.5	1.5
137.5°	1.0	1.5	1.5	1.5	1.5
140°	1.0	1.5	1.5	1.5	1.5
142.5°	1.0	1.5	1.5	1.5	1.5
145°	1.0	1.5	1.5	1.5	1.9
147.5°	1.0	1.5	1.5	1.5	1.9
150°	1.0	1.5	1.5	1.5	1.5
152.5°	1.5	1.5	1.5	1.5	1.5
155°	1.5	1.5	1.5	1.5	1.5
157.5°	1.5	1.5	1.5	1.9	1.9
160°	1.5	1.9	1.9	1.9	1.9
162.5°	1.5	1.9	1.9	1.9	1.9
165°	1.5	1.9	1.9	1.9	1.9
167.5°	1.5	1.9	1.9	1.9	2.4
170°	1.9	1.9	1.9	2.4	2.4
172.5°	1.9	1.9	1.9	2.4	2.4
175°	1.9	1.9	1.9	2.4	2.4
177.5°	1.9	2.4	1.9	2.4	2.9
180°	2.4	2.4	2.4	2.4	2.4

(END OF REPORT)