

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: P685525

Luminaire Tested: **8CZL-14-UNV-W-L940-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685525  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-14-UNV-W-L940-CD-U  
Description: METALUX CRUZE LINEAR 8FT WIDE LENS MODEL @90 CRI and 4000K  
Light Source: (784) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

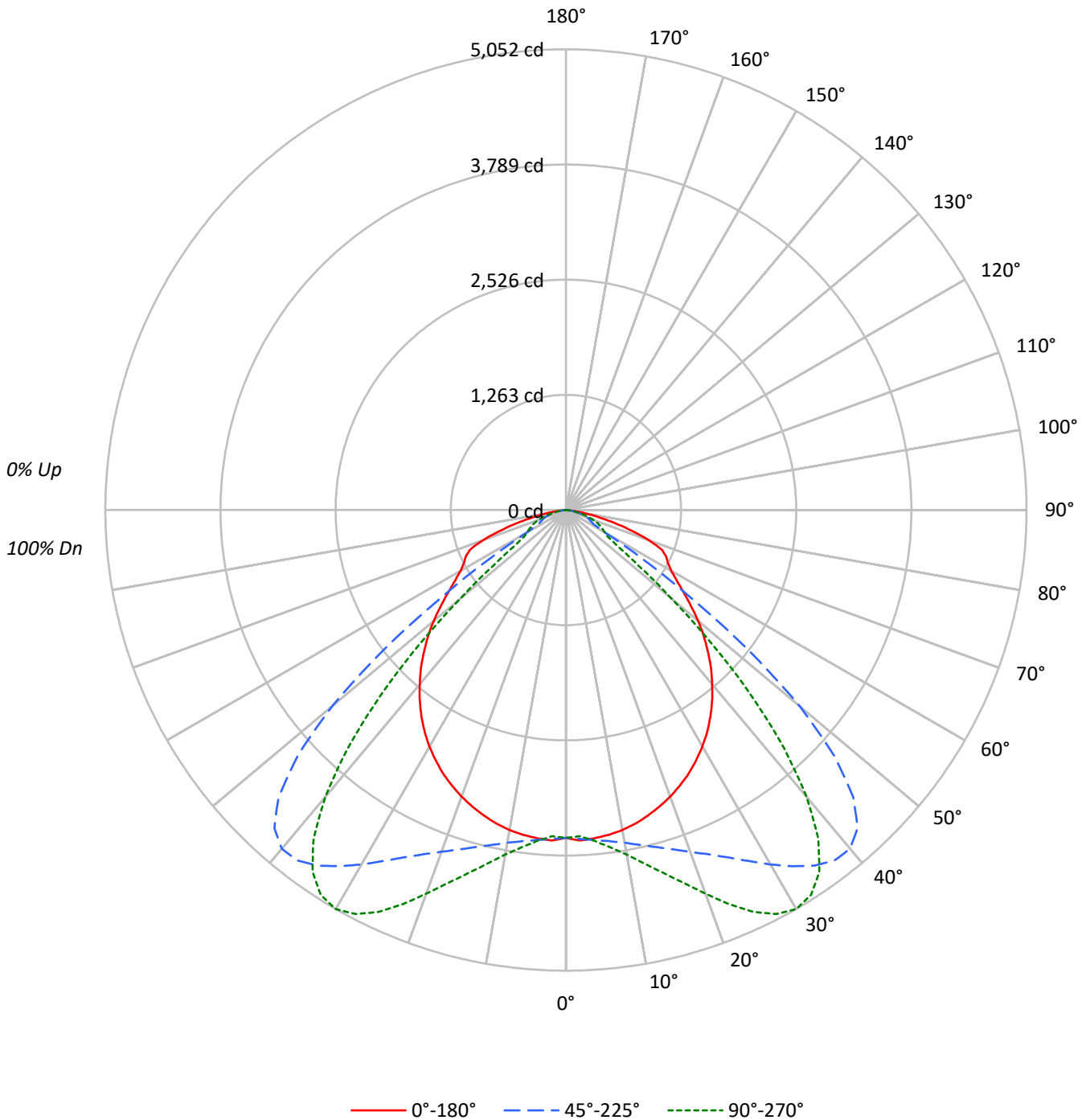
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11498.7 lumens  
Efficiency: N/A  
Efficacy: 129.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.69 / 1.65  
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: P685525  
CATALOG NUMBER: 8CZL-14-UNV-W-L940-CD-U

### Luminous Intensity Polar Plot





TEST NUMBER: P685525

CATALOG NUMBER: 8CZL-14-UNV-W-L940-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	102	102	102	100
1	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	89	89	89	87
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77	77	77	77	75
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	67	67	67	65
4	86	75	67	61	84	73	66	60	71	65	59	69	63	59	67	62	58	58	58	58	56
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	51	51	51	49
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	45	45	45	43
7	68	55	46	40	66	54	46	40	52	45	40	51	45	40	50	44	39	39	39	39	38
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	35	35	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	32	32	32	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	29	29	29	27

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

	0°	45°	90°
0°	5805	5805	5805
5°	5855	5886	5904
10°	5841	6075	6288
15°	5799	6396	6883
20°	5748	6852	7690
25°	5679	7487	8661
30°	5582	8367	9418
35°	5446	9378	9548
40°	5257	10218	8650
45°	5030	10179	6565
50°	4757	8412	3784
55°	4434	4628	1946
60°	4303	1615	1586
65°	4638	1175	1590
70°	4580	1204	1534
75°	3463	1053	1232
80°	2092	860	872
85°	1043	441	185



TEST NUMBER: P685525  
 CATALOG NUMBER: 8CZL-14-UNV-W-L940-CD-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	348.0	3.0
10°-20°	1082.0	9.4
20°-30°	1900.7	16.5
30°-40°	2640.6	23.0
40°-50°	2677.9	23.3
50°-60°	1718.5	14.9
60°-70°	803.8	7.0
70°-80°	278.7	2.4
80°-90°	48.6	0.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3330.7	29.0
0°-40°	5971.3	51.9
0°-60°	10367.6	90.2
0°-90°	11498.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11498.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3595	3595	3595	3595	3595	
5°	3613	3587	3632	3643	3643	343
15°	3469	3552	3827	4032	4118	979
25°	3188	3514	4203	4695	4862	1467
35°	2763	3544	4758	4922	4844	1725
45°	2203	3794	4458	3325	2875	1698
55°	1575	3918	1644	791	691	1422
65°	1214	1252	308	385	416	1181
75°	555	192	169	194	198	601
85°	56	51	24	13	10	85
90°	0	0	0	0	0	



TEST NUMBER: P685525

CATALOG NUMBER: 8CZL-14-UNV-W-L940-CD-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3595.3	3595.3	3595.3	3595.3	3595.3	3595.3	3595.3	3595.3	3595.3	3595.3	3595.3
2.5°	3626.6	3615.3	3596.6	3589.1	3592.8	3611.6	3617.8	3604.1	3600.3	3590.3	3580.3
5°	3612.8	3602.8	3589.1	3586.6	3600.3	3631.6	3645.3	3641.6	3647.8	3649.1	3642.8
7.5°	3592.8	3584.1	3572.8	3584.1	3612.8	3662.8	3694.1	3704.1	3726.6	3731.6	3730.3
10°	3562.8	3555.3	3551.6	3580.3	3630.3	3705.3	3760.3	3787.8	3820.3	3831.6	3835.4
12.5°	3522.8	3515.3	3525.3	3575.3	3654.1	3761.6	3842.9	3891.6	3937.9	3961.6	3969.1
15°	3469.1	3466.6	3491.6	3571.6	3684.1	3826.6	3939.1	4015.4	4081.6	4107.9	4117.9
17.5°	3410.3	3411.6	3456.6	3570.3	3720.3	3902.9	4046.6	4155.4	4236.6	4274.1	4285.4
20°	3345.3	3349.1	3416.6	3569.1	3765.3	3987.9	4165.4	4307.9	4409.2	4459.2	4475.4
22.5°	3269.0	3276.5	3372.8	3570.3	3812.8	4085.4	4305.4	4475.4	4596.7	4656.7	4676.7
25°	3187.8	3199.0	3327.8	3576.6	3872.9	4202.9	4465.4	4664.2	4786.7	4839.2	4861.7
27.5°	3094.0	3112.8	3279.0	3585.3	3944.1	4339.1	4629.2	4820.4	4934.2	4974.2	4994.2
30°	2994.0	3015.3	3231.5	3602.8	4036.6	4487.9	4780.4	4941.7	5018.0	5040.5	5051.7
32.5°	2884.0	2919.0	3184.0	3631.6	4145.4	4631.7	4891.7	4988.0	5006.7	4999.2	5003.0
35°	2762.8	2800.3	3139.0	3679.1	4269.1	4757.9	4935.5	4935.5	4880.4	4846.7	4844.2
37.5°	2634.0	2681.5	3094.0	3734.1	4412.9	4841.7	4887.9	4764.2	4630.4	4557.9	4546.7
40°	2494.0	2557.7	3062.8	3809.1	4542.9	4847.9	4717.9	4462.9	4235.4	4117.9	4104.1
42.5°	2355.2	2434.0	3049.0	3906.6	4640.4	4732.9	4397.9	4004.1	3695.3	3556.6	3541.6
45°	2202.7	2306.5	3054.0	4040.4	4666.7	4457.9	3921.6	3411.6	3065.3	2890.3	2875.3
47.5°	2051.4	2180.2	3066.5	4191.6	4551.7	3991.6	3287.8	2697.7	2354.0	2170.2	2167.7
50°	1893.9	2061.4	3096.5	4315.4	4240.4	3349.1	2509.0	1932.7	1657.7	1517.6	1506.4
52.5°	1730.2	1957.7	3161.5	4337.9	3686.6	2524.0	1702.7	1290.1	1111.4	1022.6	1005.1
55°	1575.1	1870.2	3267.8	4135.4	2890.3	1643.9	1072.6	813.8	723.8	687.6	691.3
57.5°	1441.4	1805.2	3391.6	3606.6	1876.4	967.6	621.3	541.3	538.8	542.5	543.8
60°	1332.6	1765.2	3446.6	2705.2	1030.1	500.0	433.8	451.3	475.0	488.8	491.3
62.5°	1261.4	1743.9	3279.0	1567.6	457.5	348.8	378.8	411.3	438.8	451.3	452.5
65°	1213.9	1687.7	2682.7	775.1	280.0	307.5	345.0	378.8	403.8	413.8	416.3
67.5°	1140.1	1528.9	1838.9	321.3	246.3	277.5	313.8	346.3	367.5	375.0	376.3
70°	970.1	1280.1	1068.8	213.8	222.5	255.0	283.8	308.8	322.5	326.3	325.0
72.5°	757.6	1013.8	540.0	193.8	206.3	223.8	240.0	253.8	261.3	265.0	265.0
75°	555.1	741.3	253.8	171.3	153.8	168.8	185.0	193.8	196.3	197.5	197.5
77.5°	372.5	511.3	151.3	132.5	118.8	131.3	137.5	133.8	131.3	133.8	133.8
80°	225.0	315.0	132.5	96.3	91.3	92.5	87.5	87.5	92.5	95.0	93.8
82.5°	121.3	178.8	116.3	70.0	61.3	56.3	55.0	52.5	50.0	48.8	48.8
85°	56.3	91.3	75.0	42.5	32.5	23.8	18.8	13.8	12.5	10.0	10.0
87.5°	22.5	35.0	22.5	13.8	7.5	5.0	3.8	2.5	1.3	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)