

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: P685464

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

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685464  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-10-UNV-M-L940-CD-U  
Description: METALUX CRUZE LINEAR 8FT MEDIUM LENS MODEL @90 CRI and 4000K  
Light Source: (784) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

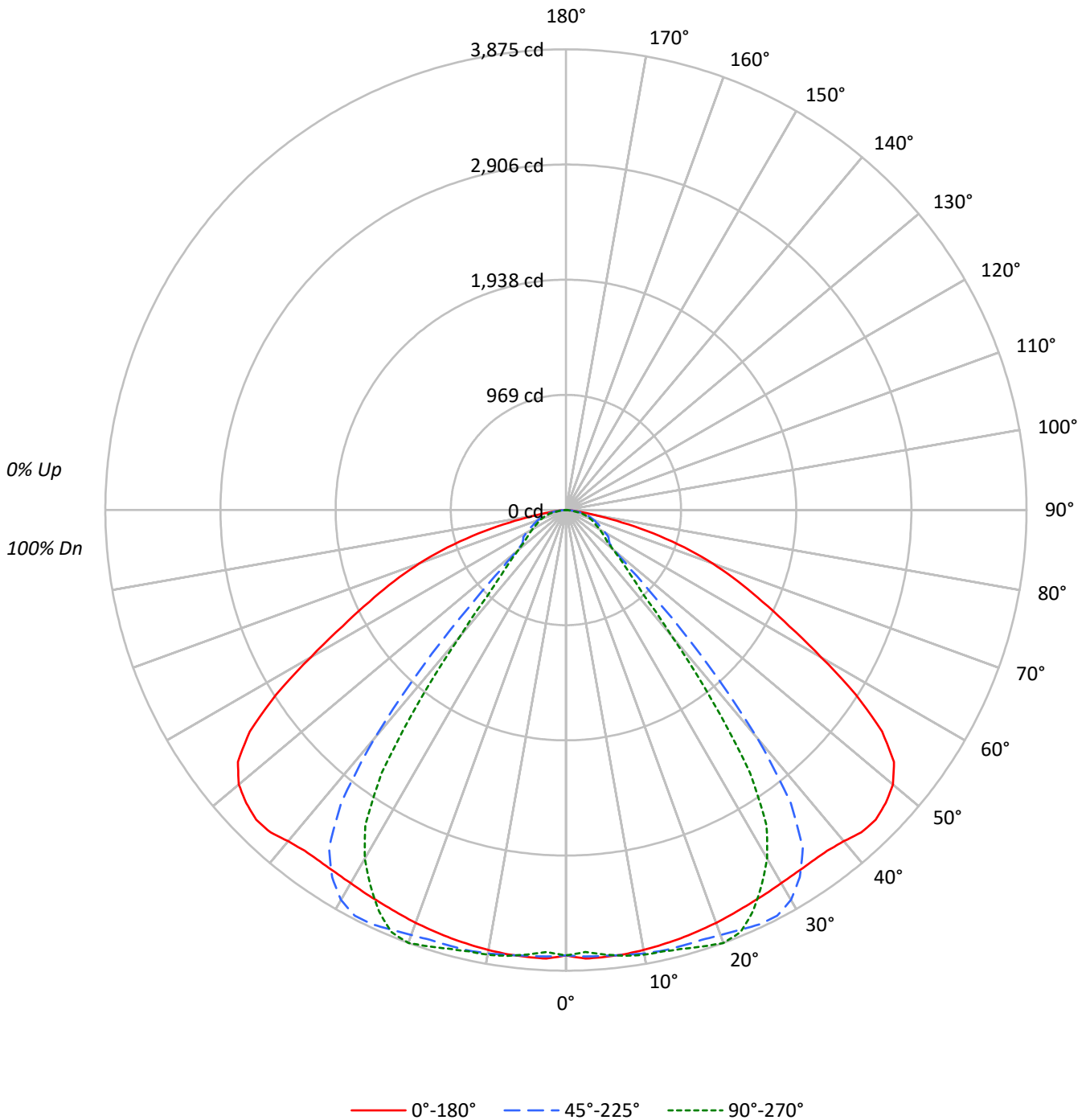
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8093.8 lumens  
Efficiency: N/A  
Efficacy: 128.5 lumens/watt  
Spacing Criteria (0/90/45): 1.48 / 1.28 / 1.22  
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 (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

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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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	90	90	88
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	79	79	79	77
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	70	70	70	68
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	62	62	62	60
5	82	71	63	57	80	70	63	57	68	61	56	66	60	56	64	59	55	55	55	55	53
6	76	65	57	51	75	64	56	51	62	55	51	61	55	50	59	54	50	50	50	50	48
7	71	59	51	46	70	59	51	46	57	50	46	56	50	45	54	49	45	45	45	45	43
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	41	41	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	37	37	37	36
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	34	34	34	33

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

	0°	45°	90°
0°	6049	6049	6049
5°	6116	6099	6082
10°	6161	6209	6226
15°	6234	6341	6385
20°	6349	6535	6658
25°	6511	6853	6633
30°	6756	7059	6310
35°	7112	6847	5328
40°	7664	5281	2914
45°	8414	2596	1742
50°	9023	1357	1299
55°	9138	1238	1121
60°	8014	1235	1057
65°	6973	1186	1023
70°	6188	1201	1030
75°	4747	1234	1046
80°	2417	1253	866
85°	952	706	246



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	359.0	4.4
10°-20°	1069.9	13.2
20°-30°	1726.6	21.3
30°-40°	2022.1	25.0
40°-50°	1376.6	17.0
50°-60°	797.1	9.8
60°-70°	455.7	5.6
70°-80°	234.5	2.9
80°-90°	52.2	0.6
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°	3155.4	39.0
0°-40°	5177.6	64.0
0°-60°	7351.3	90.8
0°-90°	8093.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8093.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3746	3746	3746	3746	3746	
5°	3774	3737	3763	3759	3752	360
15°	3730	3724	3793	3803	3820	1056
25°	3655	3706	3846	3787	3723	1692
35°	3608	3786	3474	2930	2703	2271
45°	3685	2742	1137	766	763	2831
55°	3246	941	440	410	398	2828
65°	1825	336	310	274	268	1830
75°	761	207	198	172	168	809
85°	51	63	38	18	13	87
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3746.3	3746.3	3746.3	3746.3	3746.3	3746.3	3746.3	3746.3	3746.3	3746.3	3746.3
2.5°	3776.5	3765.8	3744.6	3735.7	3735.7	3758.7	3762.3	3748.1	3745.4	3733.0	3721.5
5°	3773.8	3763.2	3742.8	3734.8	3737.5	3763.2	3769.4	3757.9	3761.4	3757.9	3752.5
7.5°	3768.5	3757.0	3738.3	3733.0	3741.0	3773.8	3784.5	3778.3	3786.2	3784.5	3782.7
10°	3757.9	3749.0	3731.3	3730.4	3746.3	3787.1	3800.4	3792.4	3795.1	3794.2	3797.8
12.5°	3743.7	3735.7	3720.6	3728.6	3751.6	3795.1	3804.0	3791.6	3795.1	3796.0	3802.2
15°	3729.5	3719.7	3710.0	3728.6	3752.5	3793.3	3802.2	3800.4	3811.1	3812.0	3819.9
17.5°	3711.7	3705.5	3702.9	3727.7	3746.3	3791.6	3812.0	3822.6	3836.8	3840.3	3848.3
20°	3694.9	3689.6	3695.8	3723.3	3743.7	3803.1	3831.5	3847.4	3862.5	3866.9	3874.9
22.5°	3674.5	3670.9	3687.8	3717.1	3748.1	3820.8	3852.8	3854.5	3848.3	3836.8	3842.1
25°	3655.0	3655.0	3679.8	3715.3	3761.4	3846.5	3849.2	3798.7	3753.4	3723.3	3723.3
27.5°	3639.0	3642.6	3673.6	3723.3	3787.1	3848.3	3774.7	3674.5	3608.0	3564.5	3561.8
30°	3623.9	3630.1	3673.6	3745.4	3805.8	3786.2	3643.4	3521.9	3429.7	3388.0	3384.5
32.5°	3613.3	3623.0	3689.6	3779.1	3783.6	3661.2	3474.9	3321.5	3212.4	3150.3	3139.7
35°	3608.0	3619.5	3719.7	3808.4	3694.0	3474.0	3209.7	2972.9	2800.0	2720.2	2703.3
37.5°	3611.5	3631.9	3761.4	3783.6	3469.6	3106.0	2726.4	2386.7	2149.0	2073.6	2021.3
40°	3636.4	3670.9	3794.2	3581.4	2998.7	2505.5	2002.7	1637.2	1473.2	1419.1	1382.7
42.5°	3678.0	3712.6	3708.2	3118.4	2342.3	1780.0	1290.5	1071.4	991.6	982.7	965.9
45°	3685.1	3698.4	3429.7	2512.6	1703.8	1137.0	831.0	766.3	764.5	770.7	762.7
47.5°	3647.9	3622.2	3027.9	1921.9	1173.4	735.3	625.3	635.9	641.2	636.8	630.6
50°	3592.0	3497.1	2577.4	1412.9	782.3	540.1	545.5	555.2	536.6	524.2	517.1
52.5°	3478.5	3294.0	2077.2	1001.3	541.0	461.2	503.8	475.4	448.8	441.7	440.8
55°	3246.1	2992.5	1598.2	721.9	413.3	439.9	447.9	411.5	403.5	400.0	398.2
57.5°	2892.2	2617.3	1201.8	521.5	362.7	424.8	389.4	375.2	367.2	364.5	361.9
60°	2481.6	2197.8	895.8	383.1	352.1	382.3	353.0	339.7	330.8	327.3	327.3
62.5°	2118.0	1819.1	662.5	311.3	349.4	345.0	318.4	304.2	298.9	297.1	295.3
65°	1825.3	1463.4	478.0	288.2	326.4	310.4	284.7	274.9	271.4	267.8	267.8
67.5°	1564.5	1145.9	352.1	282.9	299.8	279.4	259.9	251.9	247.4	246.6	245.7
70°	1310.9	844.3	267.8	276.7	284.7	254.5	235.9	226.2	220.8	218.2	218.2
72.5°	1043.9	579.2	213.7	254.5	260.8	225.3	206.7	199.6	195.1	192.5	191.6
75°	761.0	363.6	188.0	213.7	224.4	197.8	179.2	172.9	171.2	168.5	167.6
77.5°	484.3	217.3	160.5	174.7	183.6	166.7	152.5	144.6	143.7	141.0	140.1
80°	259.9	139.2	128.6	137.5	142.8	134.8	118.0	102.0	97.6	94.0	93.1
82.5°	120.6	88.7	95.8	103.8	106.4	86.0	71.0	63.9	59.4	55.0	52.3
85°	51.4	47.9	59.4	63.9	52.3	38.1	24.8	18.6	15.1	14.2	13.3
87.5°	18.6	18.6	22.2	15.1	8.9	7.1	7.1	6.2	5.3	4.4	4.4
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)