

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: P685506

Luminaire Tested: **8CZL-18-UNV-W-L850-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685506  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-18-UNV-W-L850-CD-U  
Description: METALUX CRUZE LINEAR 8FT WIDE LENS MODEL @80 CRI and 5000K  
Light Source: (1176) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

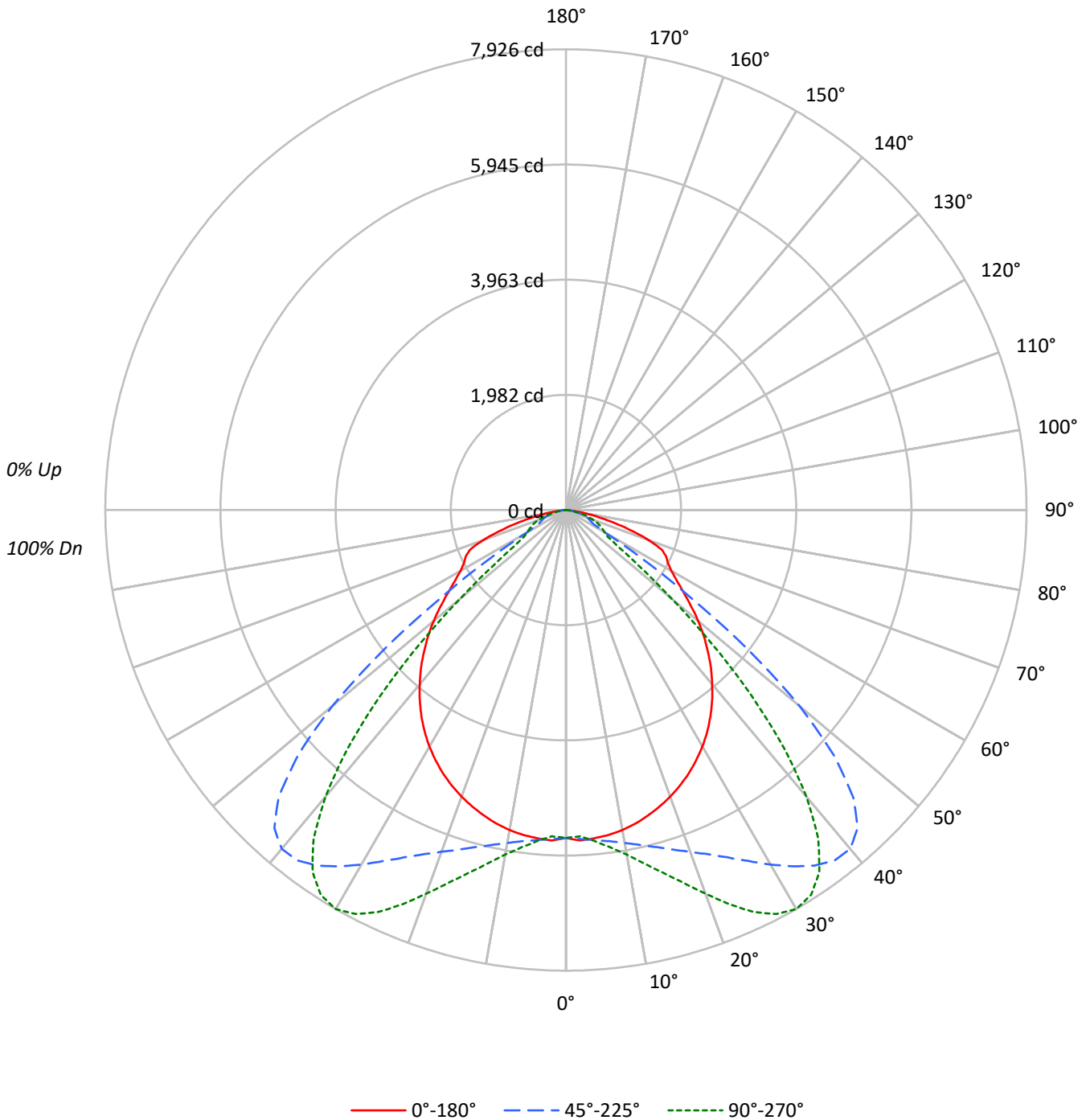
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18042.3 lumens  
Efficiency: N/A  
Efficacy: 165.5 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): 109  
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	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°	9108	9108	9108
5°	9188	9235	9264
10°	9165	9532	9866
15°	9099	10036	10800
20°	9019	10751	12066
25°	8911	11748	13590
30°	8758	13129	14778
35°	8545	14715	14982
40°	8248	16033	13573
45°	7892	15972	10301
50°	7465	13200	5937
55°	6957	7261	3053
60°	6752	2534	2489
65°	7276	1843	2496
70°	7185	1889	2408
75°	5433	1652	1933
80°	3283	1350	1368
85°	1636	691	291



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	546.0	3.0
10°-20°	1697.7	9.4
20°-30°	2982.4	16.5
30°-40°	4143.3	23.0
40°-50°	4201.8	23.3
50°-60°	2696.4	14.9
60°-70°	1261.2	7.0
70°-80°	437.3	2.4
80°-90°	76.2	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°	5226.1	29.0
0°-40°	9369.4	51.9
0°-60°	16267.6	90.2
0°-90°	18042.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18042.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5641	5641	5641	5641	5641	
5°	5669	5629	5698	5716	5716	539
15°	5443	5573	6004	6326	6461	1536
25°	5002	5514	6595	7366	7628	2302
35°	4335	5561	7466	7723	7601	2707
45°	3456	5953	6995	5217	4512	2664
55°	2472	6148	2579	1242	1085	2231
65°	1905	1964	482	604	653	1853
75°	871	301	265	305	310	943
85°	88	79	37	21	16	133
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°	5641.3	5641.3	5641.3	5641.3	5641.3	5641.3	5641.3	5641.3	5641.3	5641.3	5641.3
2.5°	5690.4	5672.7	5643.3	5631.5	5637.4	5666.8	5676.6	5655.1	5649.2	5633.5	5617.8
5°	5668.8	5653.1	5631.5	5627.6	5649.2	5698.2	5719.8	5713.9	5723.7	5725.7	5715.9
7.5°	5637.4	5623.7	5606.0	5623.7	5668.8	5747.3	5796.3	5812.0	5847.3	5855.1	5853.2
10°	5590.3	5578.6	5572.7	5617.8	5696.3	5813.9	5900.2	5943.4	5994.4	6012.1	6017.9
12.5°	5527.6	5515.8	5531.5	5609.9	5733.5	5902.2	6029.7	6106.2	6178.8	6216.1	6227.8
15°	5443.2	5439.3	5478.5	5604.1	5780.6	6004.2	6180.7	6300.4	6404.4	6445.6	6461.2
17.5°	5351.0	5353.0	5423.6	5602.1	5837.5	6123.9	6349.4	6520.1	6647.6	6706.4	6724.1
20°	5249.0	5254.9	5360.8	5600.1	5908.1	6257.2	6535.8	6759.4	6918.3	6996.7	7022.2
22.5°	5129.4	5141.1	5292.2	5602.1	5982.6	6410.2	6755.5	7022.2	7212.5	7306.7	7338.0
25°	5001.9	5019.5	5221.6	5611.9	6076.8	6594.6	7006.5	7318.4	7510.7	7593.0	7628.3
27.5°	4854.8	4884.2	5145.1	5625.6	6188.6	6808.4	7263.5	7563.6	7742.1	7804.9	7836.3
30°	4697.8	4731.2	5070.5	5653.1	6333.7	7041.9	7500.8	7753.9	7873.5	7908.8	7926.5
32.5°	4525.2	4580.1	4996.0	5698.2	6504.4	7267.4	7675.4	7826.5	7855.9	7844.1	7850.0
35°	4335.0	4393.8	4925.4	5772.8	6698.6	7465.5	7744.1	7744.1	7657.8	7604.8	7600.9
37.5°	4132.9	4207.5	4854.8	5859.1	6924.2	7597.0	7669.5	7475.3	7265.5	7151.7	7134.0
40°	3913.2	4013.3	4805.7	5976.7	7128.2	7606.8	7402.8	7002.6	6645.6	6461.2	6439.7
42.5°	3695.5	3819.1	4784.1	6129.7	7281.2	7426.3	6900.6	6282.7	5798.3	5580.5	5557.0
45°	3456.2	3619.0	4792.0	6339.6	7322.4	6994.8	6153.3	5353.0	4809.6	4535.0	4511.5
47.5°	3218.9	3420.9	4811.6	6577.0	7141.9	6263.1	5158.8	4233.0	3693.5	3405.2	3401.3
50°	2971.7	3234.5	4858.7	6771.2	6653.5	5254.9	3936.8	3032.5	2601.0	2381.3	2363.6
52.5°	2714.7	3071.7	4960.7	6806.5	5784.5	3960.3	2671.6	2024.3	1743.8	1604.5	1577.1
55°	2471.5	2934.4	5127.4	6488.7	4535.0	2579.4	1683.0	1276.9	1135.7	1078.8	1084.7
57.5°	2261.6	2832.4	5321.6	5659.0	2944.2	1518.2	974.9	849.3	845.4	851.3	853.3
60°	2091.0	2769.7	5407.9	4244.7	1616.3	784.6	680.6	708.1	745.4	767.0	770.9
62.5°	1979.2	2736.3	5145.1	2459.7	717.9	547.3	594.3	645.3	688.5	708.1	710.1
65°	1904.6	2648.1	4209.4	1216.1	439.4	482.5	541.4	594.3	633.6	649.3	653.2
67.5°	1788.9	2398.9	2885.4	504.1	386.4	435.5	492.3	543.3	576.7	588.5	590.4
70°	1522.1	2008.6	1677.1	335.4	349.2	400.1	445.3	484.5	506.1	512.0	510.0
72.5°	1188.7	1590.8	847.4	304.0	323.7	351.1	376.6	398.2	410.0	415.8	415.8
75°	870.9	1163.2	398.2	268.7	241.3	264.8	290.3	304.0	308.0	309.9	309.9
77.5°	584.5	802.3	237.3	207.9	186.3	206.0	215.8	209.9	206.0	209.9	209.9
80°	353.1	494.3	207.9	151.0	143.2	145.2	137.3	137.3	145.2	149.1	147.1
82.5°	190.3	280.5	182.4	109.8	96.1	88.3	86.3	82.4	78.5	76.5	76.5
85°	88.3	143.2	117.7	66.7	51.0	37.3	29.4	21.6	19.6	15.7	15.7
87.5°	35.3	54.9	35.3	21.6	11.8	7.8	5.9	3.9	2.0	2.0	2.0
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)