

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: P685486

Luminaire Tested: **8CZL-18-UNV-W-L835-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685486  
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-L835-CD-U  
Description: METALUX CRUZE LINEAR 8FT WIDE LENS MODEL @80 CRI and 3500K  
Light Source: (1176) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

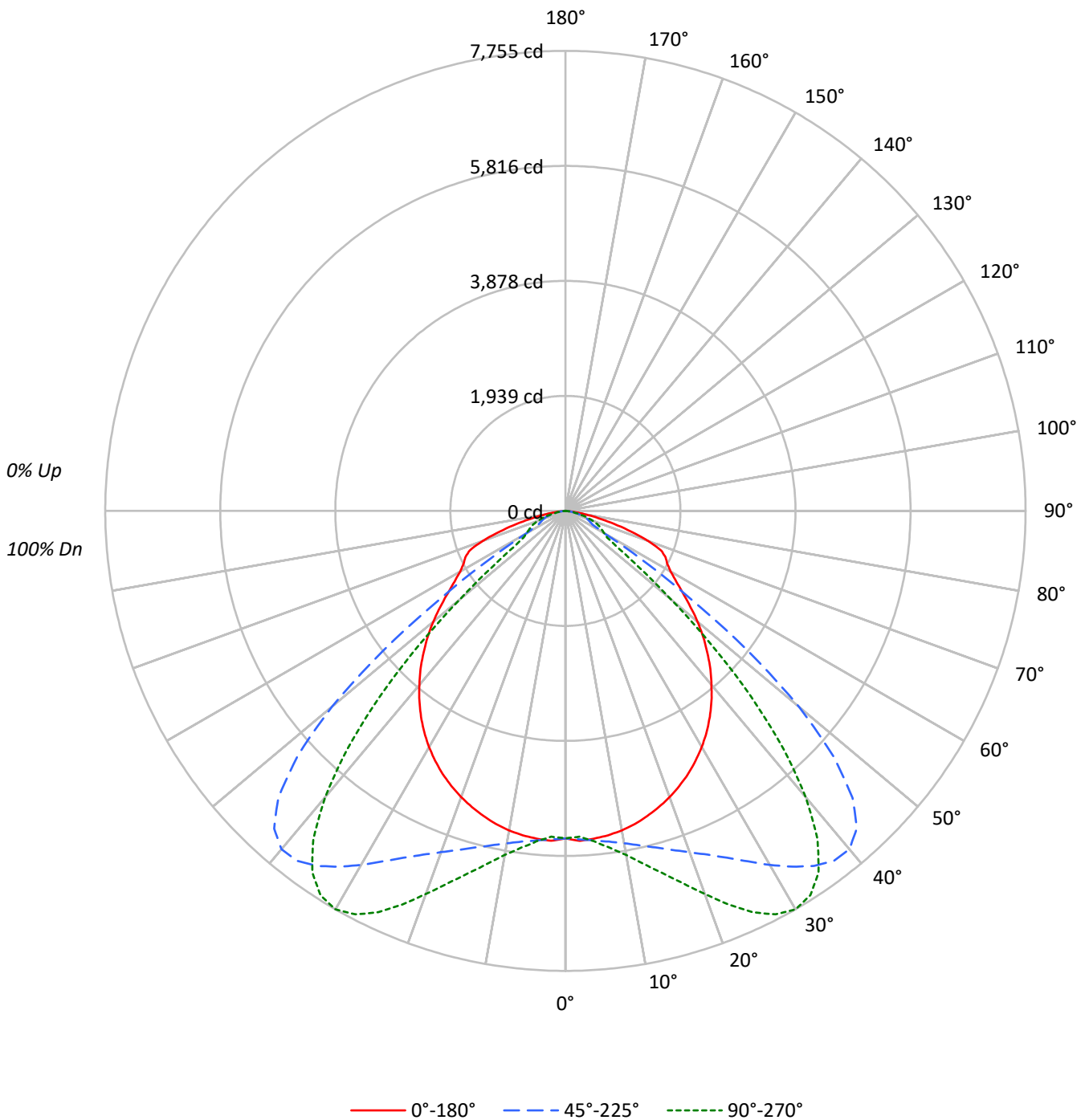
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17652.4 lumens  
Efficiency: N/A  
Efficacy: 161.9 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77	75
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65
4	86	75	67	61	84	73	66	60	71	65	59	69	63	59	67	62	58	56
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43
7	68	55	46	40	66	54	46	40	52	45	40	51	45	40	50	44	39	38
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27

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

	0°	45°	90°
0°	8912	8912	8912
5°	8989	9036	9064
10°	8967	9326	9653
15°	8902	9820	10567
20°	8824	10519	11805
25°	8718	11494	13296
30°	8569	12845	14459
35°	8360	14397	14658
40°	8070	15686	13280
45°	7721	15627	10079
50°	7303	12914	5809
55°	6807	7104	2988
60°	6606	2479	2435
65°	7119	1804	2442
70°	7030	1848	2356
75°	5316	1616	1891
80°	3212	1320	1338
85°	1601	676	285



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	534.2	3.0
10°-20°	1661.0	9.4
20°-30°	2917.9	16.5
30°-40°	4053.7	23.0
40°-50°	4111.0	23.3
50°-60°	2638.2	14.9
60°-70°	1233.9	7.0
70°-80°	427.9	2.4
80°-90°	74.6	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°	5113.2	29.0
0°-40°	9166.9	51.9
0°-60°	15916.0	90.2
0°-90°	17652.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17652.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5519	5519	5519	5519	5519	
5°	5546	5507	5575	5593	5592	527
15°	5326	5452	5874	6190	6322	1503
25°	4894	5395	6452	7207	7464	2252
35°	4241	5441	7304	7556	7437	2649
45°	3382	5824	6844	5104	4414	2607
55°	2418	6016	2524	1215	1061	2182
65°	1864	1922	472	591	639	1813
75°	852	295	259	298	303	922
85°	86	78	36	21	15	130
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°	5519.4	5519.4	5519.4	5519.4	5519.4	5519.4	5519.4	5519.4	5519.4	5519.4	5519.4
2.5°	5567.4	5550.1	5521.3	5509.8	5515.6	5544.4	5554.0	5532.9	5527.1	5511.7	5496.4
5°	5546.3	5530.9	5509.8	5506.0	5527.1	5575.1	5596.2	5590.4	5600.0	5601.9	5592.4
7.5°	5515.6	5502.2	5484.9	5502.2	5546.3	5623.1	5671.0	5686.4	5720.9	5728.6	5726.7
10°	5469.5	5458.0	5452.3	5496.4	5573.2	5688.3	5772.7	5815.0	5864.9	5882.1	5887.9
12.5°	5408.1	5396.6	5412.0	5488.7	5609.6	5774.7	5899.4	5974.3	6045.3	6081.7	6093.2
15°	5325.6	5321.8	5360.1	5483.0	5655.7	5874.5	6047.2	6164.3	6266.0	6306.3	6321.6
17.5°	5235.4	5237.3	5306.4	5481.0	5711.3	5991.5	6212.2	6379.2	6503.9	6561.5	6578.8
20°	5135.6	5141.4	5245.0	5479.1	5780.4	6122.0	6394.5	6613.3	6768.8	6845.5	6870.5
22.5°	5018.5	5030.0	5177.8	5481.0	5853.4	6271.7	6609.5	6870.5	7056.6	7148.8	7179.5
25°	4893.8	4911.1	5108.7	5490.6	5945.5	6452.1	6855.1	7160.3	7348.4	7429.0	7463.5
27.5°	4749.9	4778.6	5033.9	5504.1	6054.9	6661.3	7106.5	7400.2	7574.8	7636.2	7666.9
30°	4596.3	4628.9	4961.0	5530.9	6196.9	6889.7	7338.8	7586.3	7703.4	7737.9	7755.2
32.5°	4427.4	4481.2	4888.0	5575.1	6363.8	7110.4	7509.6	7657.3	7686.1	7674.6	7680.4
35°	4241.3	4298.9	4818.9	5648.0	6553.8	7304.2	7576.7	7576.7	7492.3	7440.5	7436.6
37.5°	4043.6	4116.5	4749.9	5732.4	6774.5	7432.8	7503.8	7313.8	7108.5	6997.2	6979.9
40°	3828.7	3926.5	4701.9	5847.6	6974.1	7442.4	7242.8	6851.3	6502.0	6321.6	6300.5
42.5°	3615.6	3736.6	4680.8	5997.3	7123.8	7265.8	6751.5	6147.0	5673.0	5459.9	5436.9
45°	3381.5	3540.8	4688.4	6202.6	7164.1	6843.6	6020.3	5237.3	4705.7	4437.0	4414.0
47.5°	3149.3	3347.0	4707.6	6434.9	6987.6	6127.8	5047.3	4141.5	3613.7	3331.6	3327.8
50°	2907.5	3164.6	4753.7	6624.8	6509.7	5141.4	3851.7	2967.0	2544.8	2329.8	2312.6
52.5°	2656.1	3005.4	4853.5	6659.4	5659.5	3874.7	2613.9	1980.5	1706.1	1569.9	1543.0
55°	2418.1	2871.0	5016.6	6348.5	4437.0	2523.7	1646.6	1249.4	1111.2	1055.5	1061.3
57.5°	2212.8	2771.2	5206.6	5536.7	2880.6	1485.4	953.8	831.0	827.1	832.9	834.8
60°	2045.8	2709.8	5291.0	4153.0	1581.4	767.7	665.9	692.8	729.3	750.4	754.2
62.5°	1936.4	2677.2	5033.9	2406.6	702.4	535.4	581.5	631.4	673.6	692.8	694.7
65°	1863.5	2590.8	4118.5	1189.9	429.9	472.1	529.7	581.5	619.9	635.2	639.1
67.5°	1750.2	2347.1	2823.0	493.2	378.1	426.0	481.7	531.6	564.2	575.7	577.7
70°	1489.2	1965.2	1640.9	328.2	341.6	391.5	435.6	474.0	495.1	500.9	499.0
72.5°	1163.0	1556.4	829.1	297.5	316.7	343.5	368.5	389.6	401.1	406.9	406.9
75°	852.1	1138.0	389.6	262.9	236.1	259.1	284.0	297.5	301.3	303.2	303.2
77.5°	571.9	784.9	232.2	203.4	182.3	201.5	211.1	205.3	201.5	205.3	205.3
80°	345.4	483.6	203.4	147.8	140.1	142.0	134.3	134.3	142.0	145.9	143.9
82.5°	186.2	274.4	178.5	107.5	94.0	86.4	84.4	80.6	76.8	74.8	74.8
85°	86.4	140.1	115.1	65.3	49.9	36.5	28.8	21.1	19.2	15.4	15.4
87.5°	34.5	53.7	34.5	21.1	11.5	7.7	5.8	3.8	1.9	1.9	1.9
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)