

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: P685426

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

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685426  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-18-UNV-M-L835-CD-U  
Description: METALUX CRUZE LINEAR 8FT MEDIUM LENS MODEL @80 CRI and 3500K  
Light Source: (1176) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

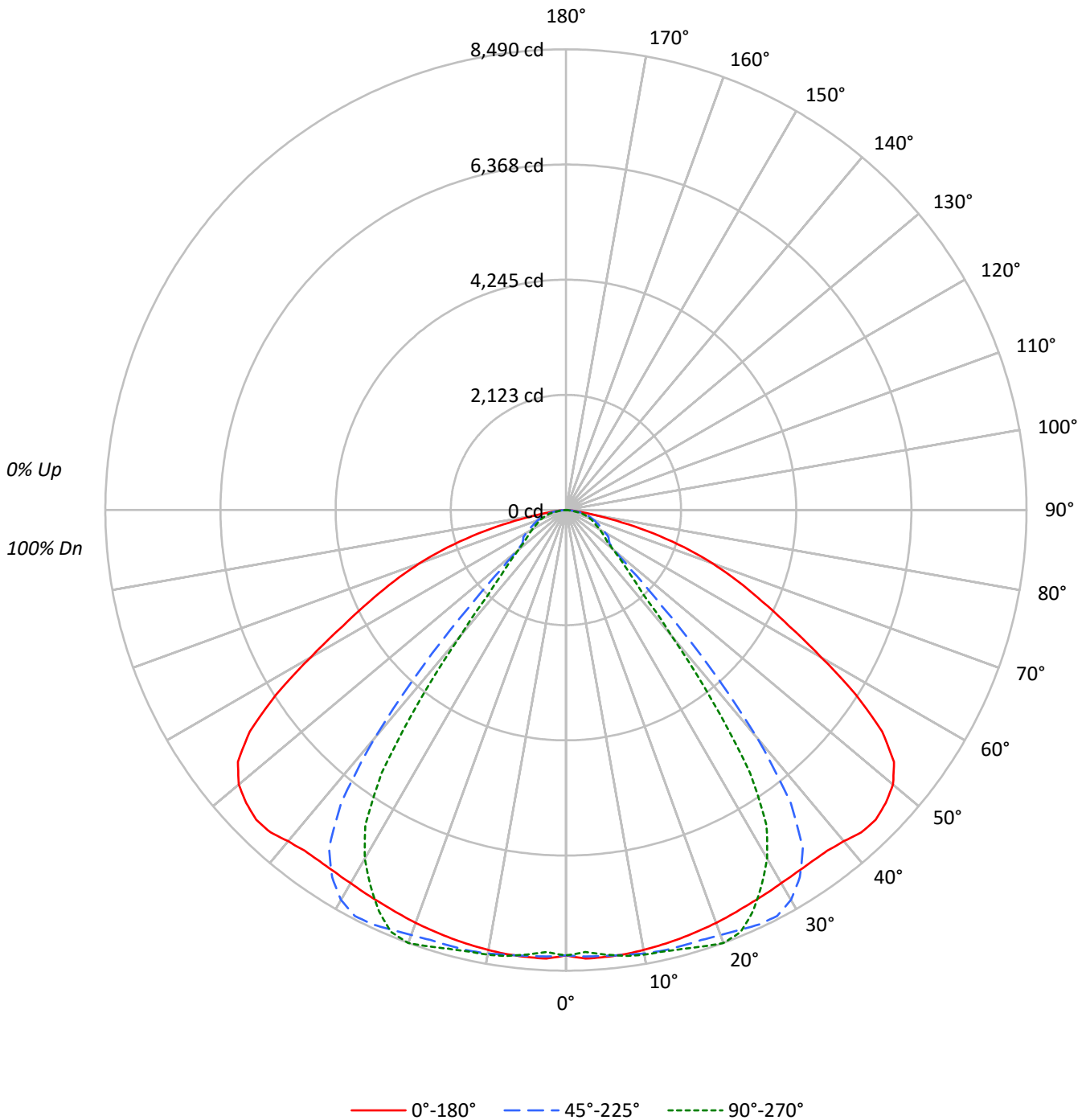
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17734.2 lumens  
Efficiency: N/A  
Efficacy: 162.7 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): 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	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°	13254	13254	13254
5°	13402	13364	13326
10°	13499	13605	13643
15°	13659	13893	13991
20°	13910	14318	14588
25°	14267	15015	14534
30°	14804	15467	13826
35°	15582	15004	11675
40°	16793	11571	6385
45°	18437	5689	3816
50°	19769	2973	2846
55°	20021	2713	2456
60°	17558	2705	2316
65°	15279	2599	2242
70°	13559	2633	2257
75°	10402	2704	2291
80°	5294	2747	1897
85°	2088	1549	539



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	786.5	4.4
10°-20°	2344.2	13.2
20°-30°	3783.2	21.3
30°-40°	4430.7	25.0
40°-50°	3016.2	17.0
50°-60°	1746.5	9.8
60°-70°	998.5	5.6
70°-80°	513.9	2.9
80°-90°	114.4	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°	6913.9	39.0
0°-40°	11344.6	64.0
0°-60°	16107.3	90.8
0°-90°	17734.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17734.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8209	8209	8209	8209	8209	
5°	8269	8188	8246	8236	8222	788
15°	8172	8160	8312	8333	8370	2313
25°	8008	8121	8428	8298	8158	3707
35°	7905	8296	7612	6419	5923	4977
45°	8074	6008	2491	1678	1671	6203
55°	7112	2062	964	897	872	6197
65°	3999	736	680	600	587	4010
75°	1667	454	433	378	367	1773
85°	113	137	84	39	29	191
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°	8208.6	8208.6	8208.6	8208.6	8208.6	8208.6	8208.6	8208.6	8208.6	8208.6	8208.6
2.5°	8274.6	8251.3	8204.7	8185.2	8185.2	8235.8	8243.5	8212.4	8206.6	8179.4	8154.1
5°	8268.8	8245.5	8200.8	8183.3	8189.1	8245.5	8259.1	8233.8	8241.6	8233.8	8222.2
7.5°	8257.1	8231.9	8191.1	8179.4	8196.9	8268.8	8292.1	8278.5	8296.0	8292.1	8288.2
10°	8233.8	8214.4	8175.5	8173.6	8208.6	8298.0	8327.1	8309.6	8315.4	8313.5	8321.3
12.5°	8202.7	8185.2	8152.2	8169.7	8220.2	8315.4	8334.9	8307.7	8315.4	8317.4	8331.0
15°	8171.6	8150.3	8128.9	8169.7	8222.2	8311.6	8331.0	8327.1	8350.4	8352.4	8369.9
17.5°	8132.8	8119.2	8113.3	8167.8	8208.6	8307.7	8352.4	8375.7	8406.8	8414.6	8432.0
20°	8095.8	8084.2	8097.8	8158.0	8202.7	8332.9	8395.1	8430.1	8463.1	8472.9	8490.3
22.5°	8051.2	8043.4	8080.3	8144.4	8212.4	8371.8	8441.8	8445.6	8432.0	8406.8	8418.4
25°	8008.4	8008.4	8062.8	8140.5	8241.6	8428.2	8434.0	8323.2	8224.1	8158.0	8158.0
27.5°	7973.4	7981.2	8049.2	8158.0	8298.0	8432.0	8270.7	8051.2	7905.4	7810.2	7804.4
30°	7940.4	7954.0	8049.2	8206.6	8338.8	8296.0	7983.1	7716.9	7514.8	7423.5	7415.7
32.5°	7917.1	7938.4	8084.2	8280.5	8290.2	8022.0	7613.9	7277.7	7038.7	6902.7	6879.3
35°	7905.4	7930.7	8150.3	8344.6	8093.9	7612.0	7032.9	6514.0	6135.0	5960.1	5923.2
37.5°	7913.2	7957.9	8241.6	8290.2	7602.2	6805.5	5973.7	5229.5	4708.7	4543.5	4428.8
40°	7967.6	8043.4	8313.5	7847.1	6570.3	5489.9	4388.0	3587.4	3227.8	3109.3	3029.6
42.5°	8058.9	8134.7	8125.0	6832.7	5132.3	3900.2	2827.5	2347.5	2172.6	2153.2	2116.3
45°	8074.5	8103.6	7514.8	5505.4	3733.1	2491.3	1820.9	1679.0	1675.1	1688.7	1671.3
47.5°	7992.9	7936.5	6634.5	4211.2	2571.0	1611.0	1370.0	1393.4	1405.0	1395.3	1381.7
50°	7870.4	7662.5	5647.3	3095.7	1714.0	1183.5	1195.1	1216.5	1175.7	1148.5	1133.0
52.5°	7621.7	7217.5	4551.2	2194.0	1185.4	1010.5	1103.8	1041.6	983.3	967.8	965.8
55°	7112.5	6556.7	3501.9	1581.9	905.6	963.9	981.4	901.7	884.2	876.4	872.5
57.5°	6337.1	5734.7	2633.2	1142.7	794.8	930.8	853.1	822.0	804.5	798.7	792.9
60°	5437.4	4815.5	1962.7	839.5	771.5	837.6	773.4	744.3	724.9	717.1	717.1
62.5°	4640.6	3985.7	1451.7	682.1	765.7	755.9	697.7	666.6	654.9	651.0	647.1
65°	3999.3	3206.5	1047.4	631.6	715.1	680.2	623.8	602.4	594.7	586.9	586.9
67.5°	3428.0	2510.8	771.5	619.9	656.8	612.1	569.4	551.9	542.2	540.2	538.3
70°	2872.2	1850.0	586.9	606.3	623.8	557.7	516.9	495.5	483.9	478.1	478.1
72.5°	2287.3	1269.0	468.3	557.7	571.3	493.6	452.8	437.2	427.5	421.7	419.8
75°	1667.4	796.8	412.0	468.3	491.7	433.4	392.5	378.9	375.1	369.2	367.3
77.5°	1061.0	476.1	351.7	382.8	402.3	365.3	334.3	316.8	314.8	309.0	307.0
80°	569.4	305.1	281.8	301.2	312.9	295.4	258.5	223.5	213.8	206.0	204.0
82.5°	264.3	194.3	209.9	227.4	233.2	188.5	155.5	139.9	130.2	120.5	114.7
85°	112.7	104.9	130.2	139.9	114.7	83.6	54.4	40.8	33.0	31.1	29.1
87.5°	40.8	40.8	48.6	33.0	19.4	15.5	15.5	13.6	11.7	9.7	9.7
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)