

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: P685326

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

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685326  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-18-UNV-L850-CD-U  
Description: METALUX CRUZE LINEAR 8FT BASE MODEL @80 CRI and 5000K  
Light Source: (1176) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

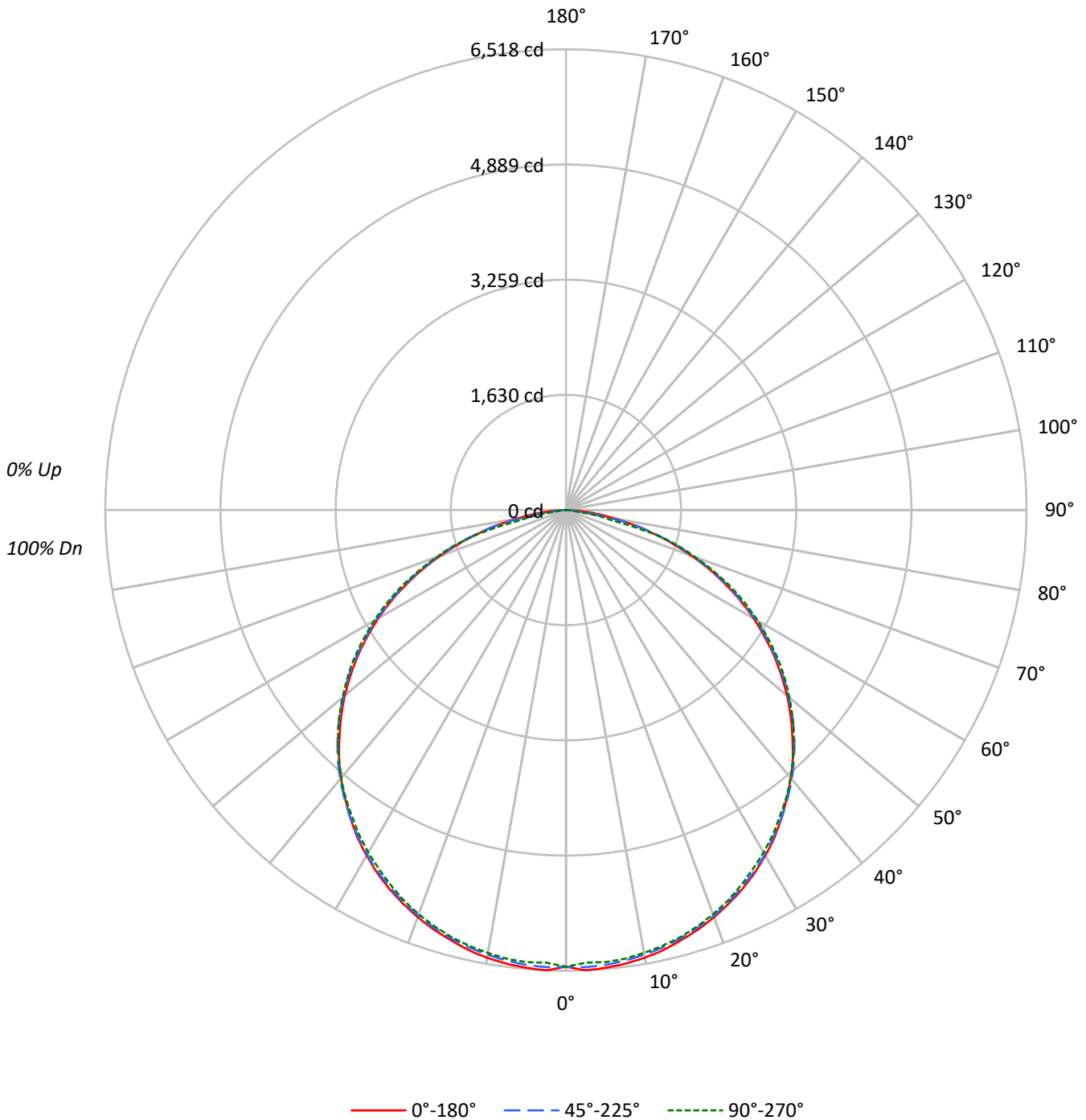
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19167.0 lumens  
Efficiency: N/A  
Efficacy: 175.8 lumens/watt  
Spacing Criteria (0/90/45): 1.3 / 1.29 / 1.41  
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				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	100	100	100	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84	84	84	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70	70	70	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58	58	58	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50	50	50	50
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43	43	43	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37	37	37	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33	33	33	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29	29	29	29
9	56	42	34	29	55	42	34	29	41	33	28	40	33	28	39	33	28	26	26	26	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24	24	24	24

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

	0°	45°	90°
0°	10432	10432	10432
5°	10536	10469	10405
10°	10545	10474	10429
15°	10530	10488	10455
20°	10533	10496	10456
25°	10535	10493	10441
30°	10523	10493	10427
35°	10484	10484	10411
40°	10435	10476	10427
45°	10347	10437	10414
50°	10259	10334	10368
55°	10122	10194	10294
60°	9901	9990	10111
65°	9532	9668	9833
70°	8916	9092	9176
75°	8022	8170	7752
80°	6702	5457	4248
85°	4998	1313	474



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	612.9	3.2
10°-20°	1767.3	9.2
20°-30°	2706.4	14.1
30°-40°	3313.5	17.3
40°-50°	3505.4	18.3
50°-60°	3232.5	16.9
60°-70°	2493.6	13.0
70°-80°	1331.7	6.9
80°-90°	203.8	1.1
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°	5086.6	26.5
0°-40°	8400.1	43.8
0°-60°	15138.0	79.0
0°-90°	19167.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19167.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6461	6461	6461	6461	6461	
5°	6501	6424	6459	6432	6420	618
15°	6300	6233	6274	6252	6254	1780
25°	5914	5853	5890	5847	5861	2726
35°	5319	5288	5319	5274	5282	3328
45°	4531	4529	4571	4539	4561	3498
55°	3596	3592	3622	3643	3657	3208
65°	2495	2495	2530	2550	2574	2463
75°	1286	1284	1310	1319	1243	1361
85°	270	193	71	30	26	331
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6461.3	6461.3	6461.3	6461.3	6461.3
2.5°	6518.4	6441.6	6473.1	6449.4	6410.1
5°	6500.6	6423.8	6459.3	6431.7	6419.9
7.5°	6473.1	6394.3	6429.8	6408.1	6404.2
10°	6431.7	6351.0	6388.4	6364.8	6360.8
12.5°	6376.6	6297.8	6339.2	6311.6	6315.5
15°	6299.8	6232.8	6274.2	6252.5	6254.5
17.5°	6223.0	6154.1	6197.4	6175.7	6177.7
20°	6130.4	6063.5	6108.8	6075.3	6085.1
22.5°	6026.0	5967.0	6006.4	5963.0	5982.7
25°	5913.8	5852.7	5890.2	5846.8	5860.6
27.5°	5785.8	5728.7	5766.1	5720.8	5726.7
30°	5644.0	5592.8	5628.3	5583.0	5592.8
32.5°	5492.4	5447.1	5474.6	5433.3	5447.1
35°	5319.1	5287.6	5319.1	5273.8	5281.7
37.5°	5137.9	5106.4	5149.7	5110.3	5124.1
40°	4950.8	4921.3	4970.5	4931.1	4946.9
42.5°	4751.9	4730.3	4779.5	4740.1	4759.8
45°	4531.4	4529.4	4570.7	4539.2	4560.9
47.5°	4312.8	4308.8	4350.2	4328.5	4354.1
50°	4084.3	4080.4	4113.9	4111.9	4127.6
52.5°	3840.1	3846.0	3877.5	3883.5	3901.2
55°	3595.9	3592.0	3621.5	3643.2	3657.0
57.5°	3330.1	3338.0	3361.6	3387.2	3397.0
60°	3066.2	3062.3	3093.8	3115.4	3131.2
62.5°	2786.6	2786.6	2812.2	2843.7	2859.4
65°	2495.1	2495.1	2530.5	2550.2	2573.9
67.5°	2197.7	2191.8	2223.3	2266.7	2262.7
70°	1888.6	1890.5	1926.0	1947.6	1943.7
72.5°	1581.3	1587.3	1624.7	1634.5	1644.4
75°	1286.0	1284.0	1309.6	1319.4	1242.6
77.5°	992.5	994.5	1010.2	740.5	649.9
80°	720.8	724.7	586.9	456.9	456.9
82.5°	476.6	468.7	301.3	177.2	130.0
85°	269.8	193.0	70.9	29.5	25.6
87.5°	110.3	35.4	19.7	13.8	11.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)