

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: P685337

Luminaire Tested: **8CZL-24-UNV-L935-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685337  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-24-UNV-L935-CD-U  
Description: METALUX CRUZE LINEAR 8FT BASE MODEL @90 CRI and 3500K  
Light Source: (1176) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

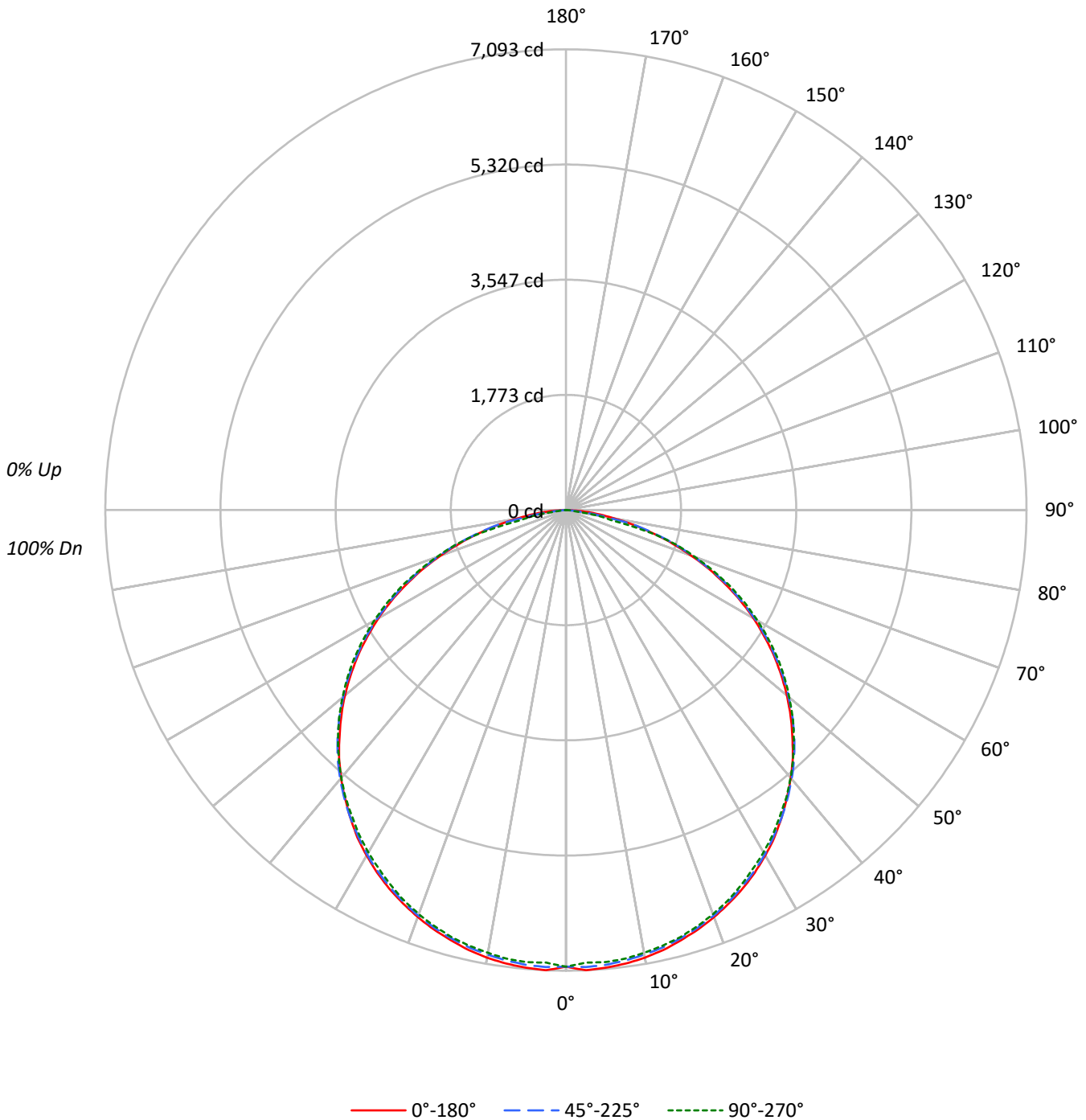
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20855.4 lumens  
Efficiency: N/A  
Efficacy: 135.4 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): 154  
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°	11351	11351	11351
5°	11464	11391	11322
10°	11474	11396	11347
15°	11458	11412	11376
20°	11461	11421	11376
25°	11463	11418	11360
30°	11449	11417	11346
35°	11408	11408	11327
40°	11354	11399	11345
45°	11258	11356	11332
50°	11163	11244	11281
55°	11014	11092	11201
60°	10774	10870	11002
65°	10372	10520	10700
70°	9701	9893	9984
75°	8729	8889	8435
80°	7292	5937	4622
85°	5439	1428	517



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	666.9	3.2
10°-20°	1923.0	9.2
20°-30°	2944.8	14.1
30°-40°	3605.4	17.3
40°-50°	3814.1	18.3
50°-60°	3517.2	16.9
60°-70°	2713.2	13.0
70°-80°	1449.0	6.9
80°-90°	221.7	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°	5534.7	26.5
0°-40°	9140.1	43.8
0°-60°	16471.4	79.0
0°-90°	20855.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20855.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7030	7030	7030	7030	7030	
5°	7073	6990	7028	6998	6985	673
15°	6855	6782	6827	6803	6805	1937
25°	6435	6368	6409	6362	6377	2966
35°	5788	5753	5788	5738	5747	3621
45°	4930	4928	4973	4939	4963	3806
55°	3913	3908	3940	3964	3979	3490
65°	2715	2715	2754	2775	2801	2680
75°	1399	1397	1425	1436	1352	1481
85°	294	210	77	32	28	360
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7030.4	7030.4	7030.4	7030.4	7030.4
2.5°	7092.6	7009.0	7043.3	7017.6	6974.7
5°	7073.3	6989.7	7028.3	6998.3	6985.4
7.5°	7043.3	6957.6	6996.1	6972.6	6968.3
10°	6998.3	6910.4	6951.1	6925.4	6921.1
12.5°	6938.3	6852.6	6897.6	6867.6	6871.9
15°	6854.7	6781.9	6826.9	6803.3	6805.4
17.5°	6771.1	6696.1	6743.3	6719.7	6721.9
20°	6670.4	6597.6	6646.9	6610.4	6621.1
22.5°	6556.9	6492.6	6535.4	6488.3	6509.7
25°	6434.7	6368.3	6409.0	6361.9	6376.9
27.5°	6295.4	6233.3	6274.0	6224.7	6231.2
30°	6141.2	6085.5	6124.0	6074.7	6085.5
32.5°	5976.2	5926.9	5956.9	5911.9	5926.9
35°	5787.6	5753.3	5787.6	5738.3	5746.9
37.5°	5590.5	5556.2	5603.3	5560.5	5575.5
40°	5386.9	5354.8	5408.3	5365.5	5382.6
42.5°	5170.5	5146.9	5200.5	5157.6	5179.1
45°	4930.5	4928.4	4973.4	4939.1	4962.6
47.5°	4692.7	4688.4	4733.4	4709.8	4737.7
50°	4444.1	4439.8	4476.2	4474.1	4491.2
52.5°	4178.4	4184.8	4219.1	4225.5	4244.8
55°	3912.7	3908.4	3940.5	3964.1	3979.1
57.5°	3623.4	3632.0	3657.7	3685.6	3696.3
60°	3336.3	3332.0	3366.3	3389.9	3407.0
62.5°	3032.0	3032.0	3059.9	3094.2	3111.3
65°	2714.9	2714.9	2753.5	2774.9	2800.6
67.5°	2391.3	2384.9	2419.2	2466.3	2462.0
70°	2054.9	2057.1	2095.6	2119.2	2114.9
72.5°	1720.6	1727.1	1767.8	1778.5	1789.2
75°	1399.2	1397.1	1424.9	1435.7	1352.1
77.5°	1080.0	1082.1	1099.2	805.7	707.1
80°	784.3	788.5	638.5	497.1	497.1
82.5°	518.5	510.0	327.8	192.8	141.4
85°	293.6	210.0	77.1	32.1	27.9
87.5°	120.0	38.6	21.4	15.0	12.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)