

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: P685386

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

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685386  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-18-UNV-N-L850-CD-U  
Description: METALUX CRUZE LINEAR 8FT NARROW LENS MODEL @80 CRI and 5000K  
Light Source: (1176) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

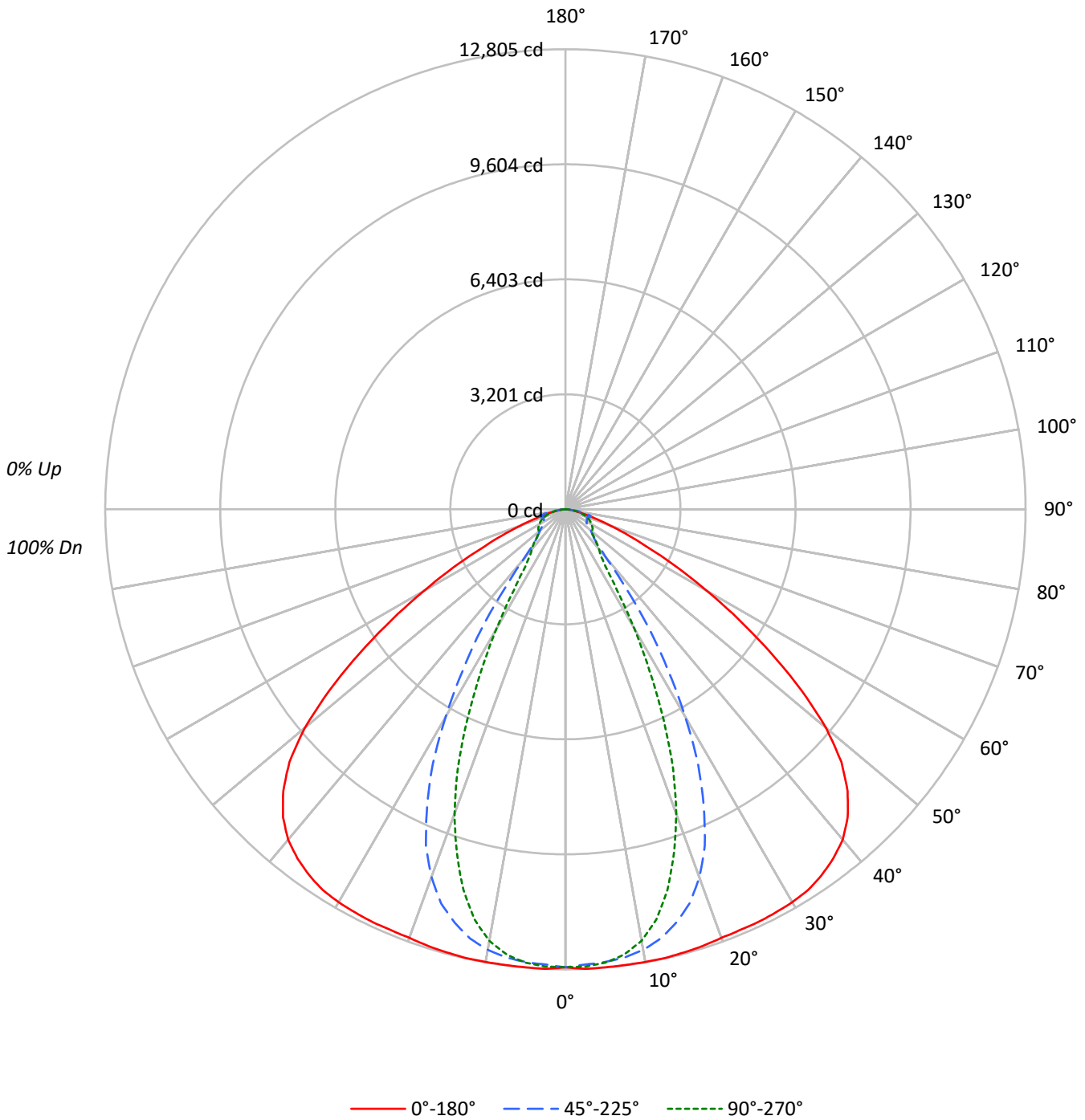
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17998.4 lumens  
Efficiency: N/A  
Efficacy: 165.1 lumens/watt  
Spacing Criteria (0/90/45): 1.48 / 0.81 / 0.89  
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 (A<sub>in</sub>): 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

TEST NUMBER: P685386  
CATALOG NUMBER: 8CZL-18-UNV-N-L850-CD-U

### Luminous Intensity Polar Plot





TEST NUMBER: P685386  
 CATALOG NUMBER: 8CZL-18-UNV-N-L850-CD-U

**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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	
1	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89	89	
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	80	79	79	
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70	70	
4	90	80	73	68	88	79	72	67	77	71	66	74	70	66	72	68	65	63	63	
5	84	74	66	61	82	73	66	60	71	64	60	69	63	59	67	62	59	57	57	
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52	52	
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47	47	
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44	44	
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40	40	
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37	37	

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

	0°	45°	90°
0°	20583	20583	20583
5°	20744	20504	20536
10°	20974	20417	19994
15°	21341	19912	18332
20°	21811	18725	15497
25°	22594	16229	11515
30°	23540	12430	7144
35°	24507	8036	3833
40°	25301	3741	3068
45°	25356	2538	2613
50°	23772	2325	2405
55°	19654	2095	2609
60°	14711	2209	2679
65°	9917	2526	2869
70°	6295	3080	2951
75°	3798	4589	2946
80°	2317	4096	2744
85°	1499	2653	1882



TEST NUMBER: P685386  
 CATALOG NUMBER: 8CZL-18-UNV-N-L850-CD-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1206.9	6.7
10°-20°	3332.0	18.5
20°-30°	4255.5	23.6
30°-40°	3451.5	19.2
40°-50°	2442.1	13.6
50°-60°	1590.5	8.8
60°-70°	976.7	5.4
70°-80°	580.2	3.2
80°-90°	163.0	0.9
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°	8794.4	48.9
0°-40°	12245.8	68.0
0°-60°	16278.4	90.4
0°-90°	17998.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17998.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	12748	12748	12748	12748	12748	
5°	12799	12771	12651	12702	12671	1221
15°	12767	12594	11912	11294	10967	3616
25°	12683	11636	9110	7082	6464	5864
35°	12434	8441	4077	2187	1944	7776
45°	11105	4250	1112	1182	1144	8470
55°	6982	1431	744	869	927	6239
65°	2596	733	661	794	751	2697
75°	609	416	736	539	472	710
85°	81	162	143	128	102	113
90°	0	0	0	0	0	

TEST NUMBER: P685386

CATALOG NUMBER: 8CZL-18-UNV-N-L850-CD-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	12748.4	12748.4	12748.4	12748.4	12748.4
2.5°	12805.3	12780.1	12682.8	12759.4	12737.5
5°	12798.7	12771.4	12651.1	12702.5	12670.8
7.5°	12794.3	12753.9	12583.4	12568.1	12502.5
10°	12793.2	12722.2	12453.3	12305.8	12195.4
12.5°	12795.4	12669.7	12240.2	11914.5	11690.4
15°	12767.0	12594.3	11912.3	11293.7	10966.9
17.5°	12740.8	12421.6	11499.2	10534.1	10043.3
20°	12693.8	12251.1	10898.0	9602.9	9019.2
22.5°	12680.7	11993.2	10138.4	8403.9	7825.7
25°	12682.8	11635.8	9109.9	7082.5	6463.8
27.5°	12658.8	11159.2	7989.6	5804.8	5072.5
30°	12626.0	10483.8	6667.1	4435.3	3832.0
32.5°	12568.1	9536.2	5312.9	3160.9	2660.3
35°	12433.6	8441.0	4076.8	2187.0	1944.4
37.5°	12246.8	7223.5	2748.8	1641.6	1602.3
40°	12004.1	6118.5	1775.0	1435.1	1455.8
42.5°	11628.1	5164.3	1296.3	1305.0	1307.2
45°	11104.6	4249.5	1111.6	1181.5	1144.3
47.5°	10416.0	3336.8	1009.9	1029.6	1024.1
50°	9464.0	2498.5	925.7	921.4	957.4
52.5°	8286.9	1848.2	839.4	876.6	944.3
55°	6981.9	1430.7	744.3	868.9	926.8
57.5°	5730.5	1159.6	689.7	847.1	880.9
60°	4555.5	966.2	684.2	806.6	829.6
62.5°	3519.4	828.5	680.9	786.9	795.7
65°	2595.8	733.4	661.2	793.5	750.9
67.5°	1890.8	702.8	645.9	782.6	691.9
70°	1333.4	617.5	652.5	722.5	625.2
72.5°	905.0	515.9	725.7	637.2	547.6
75°	608.8	416.4	735.6	538.8	472.2
77.5°	395.7	346.5	625.2	440.5	391.3
80°	249.2	288.5	440.5	338.8	295.1
82.5°	161.8	221.9	278.7	239.4	203.3
85°	80.9	161.8	143.2	127.9	101.6
87.5°	48.1	98.4	76.5	55.7	51.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)