

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: P685396

Luminaire Tested: **8CZL-18-UNV-N-L935-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685396
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-L935-CD-U
Description: METALUX CRUZE LINEAR 8FT NARROW LENS MODEL @90 CRI and 3500K
Light Source: (1176) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

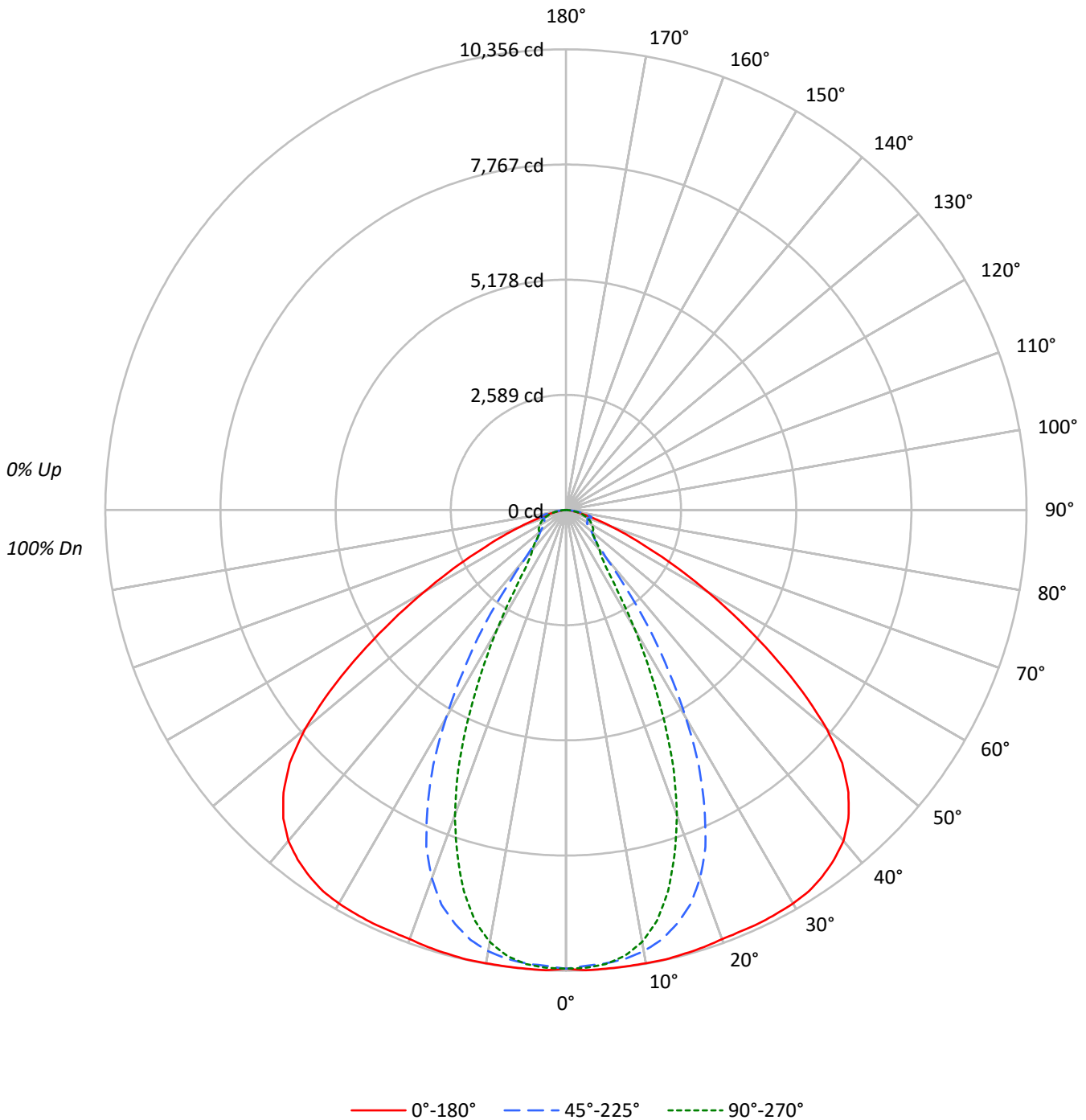
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14555.3 lumens
Efficiency: N/A
Efficacy: 133.5 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_{in}): 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: P685396
CATALOG NUMBER: 8CZL-18-UNV-N-L935-CD-U

Luminous Intensity Polar Plot





TEST NUMBER: P685396
 CATALOG NUMBER: 8CZL-18-UNV-N-L935-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	80	79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	66	74	70	66	72	68	65	63
5	84	74	66	61	82	73	66	60	71	64	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16646	16646	16646
5°	16776	16582	16608
10°	16962	16511	16169
15°	17258	16103	14825
20°	17638	15143	12532
25°	18272	13125	9312
30°	19037	10052	5778
35°	19819	6498	3099
40°	20461	3025	2481
45°	20505	2053	2113
50°	19225	1881	1945
55°	15894	1694	2110
60°	11897	1787	2166
65°	8020	2043	2320
70°	5090	2491	2387
75°	3071	3711	2382
80°	1874	3312	2219
85°	1212	2145	1523



TEST NUMBER: P685396
 CATALOG NUMBER: 8CZL-18-UNV-N-L935-CD-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	976.0	6.7
10°-20°	2694.6	18.5
20°-30°	3441.4	23.6
30°-40°	2791.2	19.2
40°-50°	1975.0	13.6
50°-60°	1286.2	8.8
60°-70°	789.9	5.4
70°-80°	469.2	3.2
80°-90°	131.8	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°	7112.0	48.9
0°-40°	9903.2	68.0
0°-60°	13164.4	90.4
0°-90°	14555.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14555.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10310	10310	10310	10310	10310	
5°	10350	10328	10231	10273	10247	988
15°	10325	10185	9634	9133	8869	2924
25°	10257	9410	7367	5728	5227	4742
35°	10055	6826	3297	1769	1572	6289
45°	8980	3437	899	956	925	6850
55°	5646	1157	602	703	750	5046
65°	2099	593	535	642	607	2181
75°	492	337	595	436	382	574
85°	65	131	116	103	82	91
90°	0	0	0	0	0	



TEST NUMBER: P685396

CATALOG NUMBER: 8CZL-18-UNV-N-L935-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10309.7	10309.7	10309.7	10309.7	10309.7
2.5°	10355.7	10335.3	10256.7	10318.5	10300.9
5°	10350.4	10328.3	10231.0	10272.6	10246.9
7.5°	10346.8	10314.1	10176.2	10163.9	10110.8
10°	10345.9	10288.5	10071.0	9951.7	9862.4
12.5°	10347.7	10246.1	9898.7	9635.3	9454.1
15°	10324.7	10185.1	9633.5	9133.2	8869.0
17.5°	10303.5	10045.4	9299.4	8518.9	8122.1
20°	10265.5	9907.5	8813.3	7765.9	7293.9
22.5°	10254.9	9698.9	8199.0	6796.2	6328.7
25°	10256.7	9409.9	7367.2	5727.6	5227.3
27.5°	10237.2	9024.5	6461.2	4694.3	4102.1
30°	10210.7	8478.3	5391.7	3586.8	3098.9
32.5°	10163.9	7711.9	4296.6	2556.2	2151.4
35°	10055.1	6826.3	3296.9	1768.7	1572.4
37.5°	9904.0	5841.6	2223.0	1327.6	1295.8
40°	9707.8	4948.0	1435.4	1160.5	1177.3
42.5°	9403.7	4176.4	1048.3	1055.4	1057.1
45°	8980.3	3436.6	898.9	955.5	925.4
47.5°	8423.5	2698.5	816.7	832.6	828.2
50°	7653.6	2020.6	748.7	745.1	774.3
52.5°	6701.7	1494.7	678.8	708.9	763.7
55°	5646.3	1157.0	601.9	702.7	749.5
57.5°	4634.2	937.8	557.7	685.0	712.4
60°	3684.1	781.4	553.3	652.3	670.9
62.5°	2846.1	670.0	550.7	636.4	643.5
65°	2099.2	593.1	534.8	641.7	607.2
67.5°	1529.1	568.3	522.4	632.9	559.5
70°	1078.3	499.4	527.7	584.3	505.6
72.5°	731.9	417.2	586.9	515.3	442.8
75°	492.3	336.8	594.9	435.8	381.8
77.5°	320.0	280.2	505.6	356.2	316.4
80°	201.5	233.3	356.2	274.0	238.7
82.5°	130.8	179.4	225.4	193.6	164.4
85°	65.4	130.8	115.8	103.4	82.2
87.5°	38.9	79.6	61.9	45.1	41.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)