

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: P685410

Luminaire Tested: **4CZL-7-UNV-N-L950-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685410
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4CZL-7-UNV-N-L950-CD-U
Description: METALUX CRUZE LINEAR 4FT NARROW LENS MODEL @90 CRI and 5000K
Light Source: (392) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

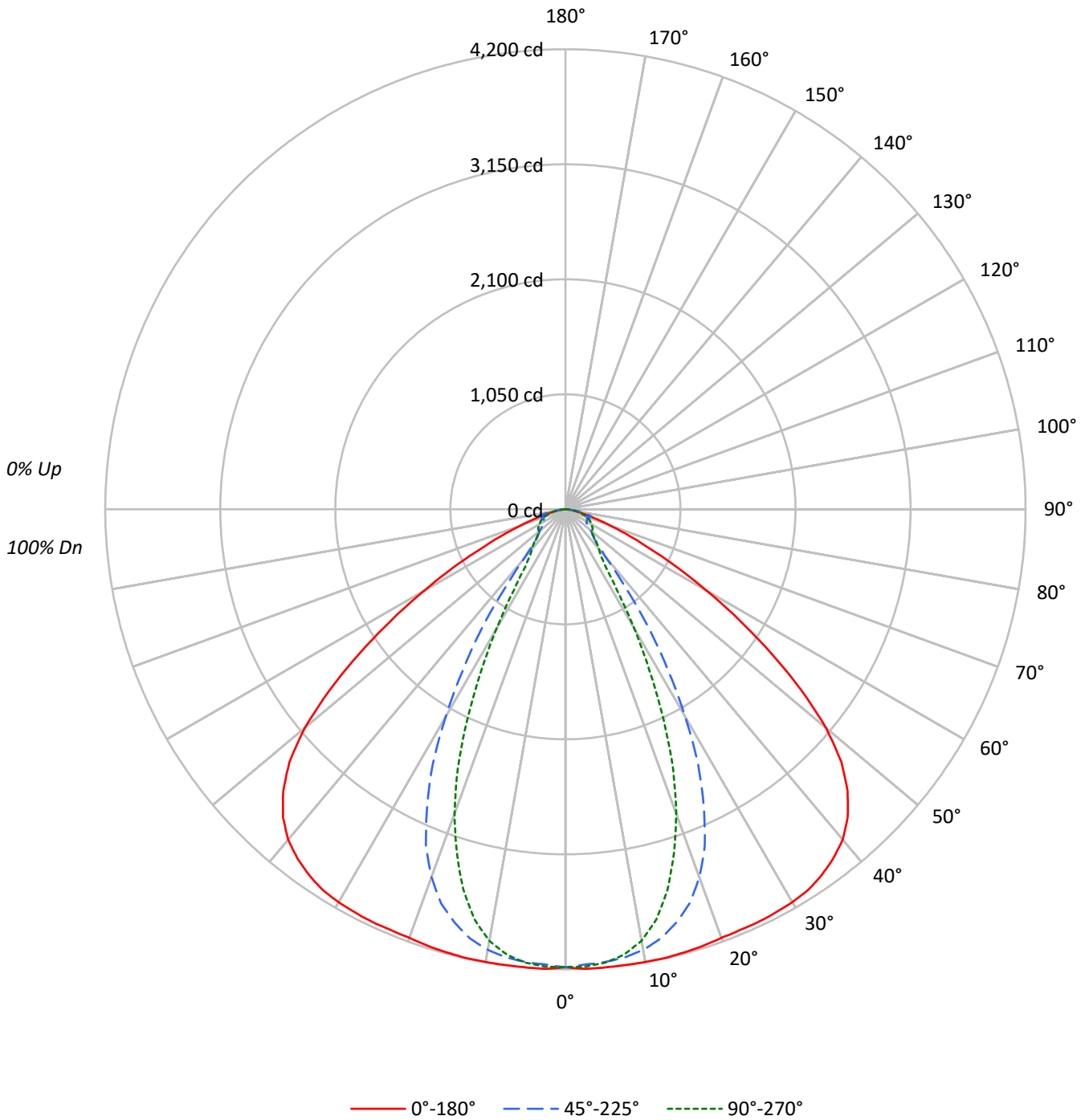
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5903.4 lumens
Efficiency: N/A
Efficacy: 134.2 lumens/watt
Spacing Criteria (0/90/45): 1.48 / 0.81 / 0.89
Luminous Opening: Rectangular (W 0.83' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 44
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

TEST NUMBER: P685410
CATALOG NUMBER: 4CZL-7-UNV-N-L950-CD-U

Luminous Intensity Polar Plot





TEST NUMBER: P685410
 CATALOG NUMBER: 4CZL-7-UNV-N-L950-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	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	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89	89	89	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	80	79	79	79	79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70	70	70	70
4	90	80	73	68	88	79	72	67	77	71	66	74	70	66	72	68	65	63	63	63	63
5	84	74	66	61	82	73	66	60	71	64	60	69	63	59	67	62	59	57	57	57	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52	52	52	52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47	47	47	47
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44	44	44	44
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40	40	40	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37	37	37	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13503	13503	13503
5°	13608	13451	13472
10°	13759	13394	13116
15°	14000	13062	12025
20°	14308	12284	10166
25°	14822	10646	7554
30°	15442	8154	4687
35°	16077	5271	2514
40°	16597	2454	2013
45°	16634	1665	1714
50°	15595	1525	1577
55°	12893	1374	1711
60°	9650	1449	1757
65°	6505	1657	1882
70°	4130	2020	1936
75°	2492	3011	1933
80°	1519	2687	1800
85°	982	1741	1234



TEST NUMBER: P685410
 CATALOG NUMBER: 4CZL-7-UNV-N-L950-CD-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	395.9	6.7
10°-20°	1092.9	18.5
20°-30°	1395.8	23.6
30°-40°	1132.1	19.2
40°-50°	801.0	13.6
50°-60°	521.7	8.8
60°-70°	320.4	5.4
70°-80°	190.3	3.2
80°-90°	53.5	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°	2884.5	48.9
0°-40°	4016.6	68.0
0°-60°	5339.3	90.4
0°-90°	5903.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5903.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4182	4182	4182	4182	4182	
5°	4198	4189	4150	4166	4156	401
15°	4188	4131	3907	3704	3597	1186
25°	4160	3816	2988	2323	2120	1923
35°	4078	2769	1337	717	638	2551
45°	3642	1394	365	388	375	2778
55°	2290	469	244	285	304	2047
65°	851	240	217	260	246	885
75°	200	137	241	177	155	233
85°	26	53	47	42	33	37
90°	0	0	0	0	0	



TEST NUMBER: P685410

CATALOG NUMBER: 4CZL-7-UNV-N-L950-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4181.5	4181.5	4181.5	4181.5	4181.5
2.5°	4200.1	4191.9	4160.0	4185.1	4177.9
5°	4198.0	4189.0	4149.6	4166.4	4156.0
7.5°	4196.5	4183.3	4127.3	4122.3	4100.8
10°	4196.2	4172.9	4084.7	4036.3	4000.1
12.5°	4196.9	4155.7	4014.8	3907.9	3834.4
15°	4187.6	4130.9	3907.2	3704.3	3597.1
17.5°	4179.0	4074.3	3771.7	3455.2	3294.2
20°	4163.5	4018.4	3574.5	3149.7	2958.3
22.5°	4159.2	3933.7	3325.4	2756.5	2566.8
25°	4160.0	3816.5	2988.0	2323.0	2120.1
27.5°	4152.1	3660.2	2620.6	1904.0	1663.8
30°	4141.3	3438.7	2186.8	1454.8	1256.9
32.5°	4122.3	3127.9	1742.6	1036.8	872.6
35°	4078.2	2768.6	1337.2	717.3	637.8
37.5°	4016.9	2369.3	901.6	538.5	525.6
40°	3937.3	2006.8	582.2	470.7	477.5
42.5°	3814.0	1693.9	425.2	428.0	428.8
45°	3642.3	1393.8	364.6	387.5	375.3
47.5°	3416.4	1094.5	331.2	337.7	335.9
50°	3104.2	819.5	303.6	302.2	314.0
52.5°	2718.1	606.2	275.3	287.5	309.7
55°	2290.1	469.3	244.1	285.0	304.0
57.5°	1879.6	380.4	226.2	277.8	288.9
60°	1494.2	316.9	224.4	264.6	272.1
62.5°	1154.3	271.7	223.3	258.1	261.0
65°	851.4	240.5	216.9	260.3	246.3
67.5°	620.2	230.5	211.9	256.7	226.9
70°	437.4	202.5	214.0	237.0	205.1
72.5°	296.8	169.2	238.0	209.0	179.6
75°	199.7	136.6	241.3	176.7	154.9
77.5°	129.8	113.6	205.1	144.5	128.3
80°	81.7	94.6	144.5	111.1	96.8
82.5°	53.1	72.8	91.4	78.5	66.7
85°	26.5	53.1	47.0	41.9	33.3
87.5°	15.8	32.3	25.1	18.3	16.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)