

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: P685380

Luminaire Tested: **4CZL-7-UNV-N-L850-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685380
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-L850-CD-U
Description: METALUX CRUZE LINEAR 4FT NARROW LENS MODEL @80 CRI and 5000K
Light Source: (392) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

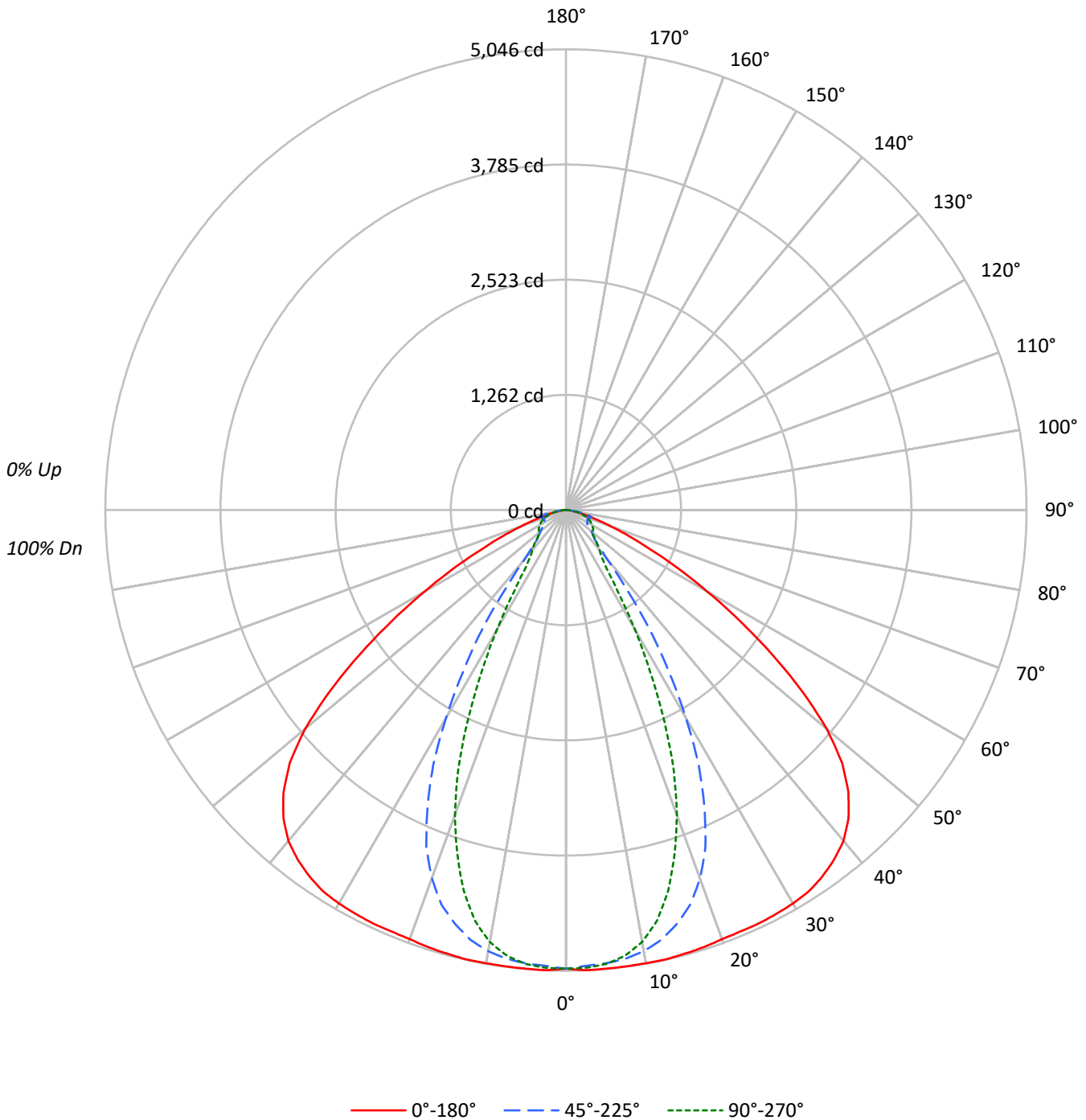
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7092.0 lumens
Efficiency: N/A
Efficacy: 161.2 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

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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	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°	16222	16222	16222
5°	16348	16159	16184
10°	16529	16090	15757
15°	16818	15692	14447
20°	17188	14757	12213
25°	17806	12790	9075
30°	18551	9796	5630
35°	19314	6333	3020
40°	19939	2948	2418
45°	19982	2000	2059
50°	18734	1833	1895
55°	15488	1651	2056
60°	11593	1741	2111
65°	7815	1991	2261
70°	4961	2427	2325
75°	2993	3616	2322
80°	1826	3228	2163
85°	1182	2090	1486



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	475.6	6.7
10°-20°	1312.9	18.5
20°-30°	1676.8	23.6
30°-40°	1360.0	19.2
40°-50°	962.3	13.6
50°-60°	626.7	8.8
60°-70°	384.9	5.4
70°-80°	228.6	3.2
80°-90°	64.2	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°	3465.3	48.9
0°-40°	4825.3	68.0
0°-60°	6414.3	90.4
0°-90°	7092.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7092.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5023	5023	5023	5023	5023	
5°	5043	5032	4985	5005	4993	481
15°	5031	4963	4694	4450	4321	1425
25°	4998	4585	3590	2791	2547	2311
35°	4899	3326	1606	862	766	3064
45°	4376	1674	438	466	451	3337
55°	2751	564	293	342	365	2459
65°	1023	289	261	313	296	1063
75°	240	164	290	212	186	280
85°	32	64	56	50	40	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5023.4	5023.4	5023.4	5023.4	5023.4
2.5°	5045.8	5035.9	4997.5	5027.7	5019.1
5°	5043.2	5032.4	4985.0	5005.3	4992.8
7.5°	5041.4	5025.5	4958.3	4952.3	4926.5
10°	5041.0	5013.0	4907.1	4848.9	4805.4
12.5°	5041.9	4992.4	4823.1	4694.8	4606.5
15°	5030.7	4962.6	4693.9	4450.1	4321.4
17.5°	5020.3	4894.6	4531.1	4150.8	3957.4
20°	5001.8	4827.4	4294.2	3783.9	3553.9
22.5°	4996.7	4725.8	3994.9	3311.4	3083.6
25°	4997.5	4584.9	3589.7	2790.8	2547.0
27.5°	4988.0	4397.2	3148.2	2287.3	1998.8
30°	4975.1	4131.0	2627.1	1747.7	1509.9
32.5°	4952.3	3757.6	2093.5	1245.5	1048.3
35°	4899.3	3326.1	1606.4	861.8	766.2
37.5°	4825.7	2846.3	1083.1	646.9	631.4
40°	4730.1	2410.9	699.4	565.5	573.7
42.5°	4581.9	2034.9	510.8	514.2	515.1
45°	4375.6	1674.5	438.0	465.6	450.9
47.5°	4104.3	1314.8	397.9	405.7	403.5
50°	3729.2	984.5	364.8	363.1	377.3
52.5°	3265.4	728.3	330.8	345.4	372.1
55°	2751.1	563.8	293.3	342.4	365.2
57.5°	2258.0	456.9	271.8	333.8	347.1
60°	1795.0	380.7	269.6	317.8	326.9
62.5°	1386.8	326.4	268.3	310.1	313.5
65°	1022.8	289.0	260.6	312.7	295.9
67.5°	745.1	276.9	254.5	308.4	272.6
70°	525.4	243.3	257.1	284.7	246.3
72.5°	356.6	203.3	286.0	251.1	215.8
75°	239.9	164.1	289.8	212.3	186.1
77.5°	155.9	136.5	246.3	173.6	154.2
80°	98.2	113.7	173.6	133.5	116.3
82.5°	63.7	87.4	109.8	94.3	80.1
85°	31.9	63.7	56.4	50.4	40.1
87.5°	18.9	38.8	30.1	22.0	20.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)