

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: P685516

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

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685516
Test Lab: INNOVATION CENTER(G2)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-18-UNV-W-L935-CD-U
Description: METALUX CRUZE LINEAR 8FT WIDE LENS MODEL @90 CRI and 3500K
Light Source: (1176) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

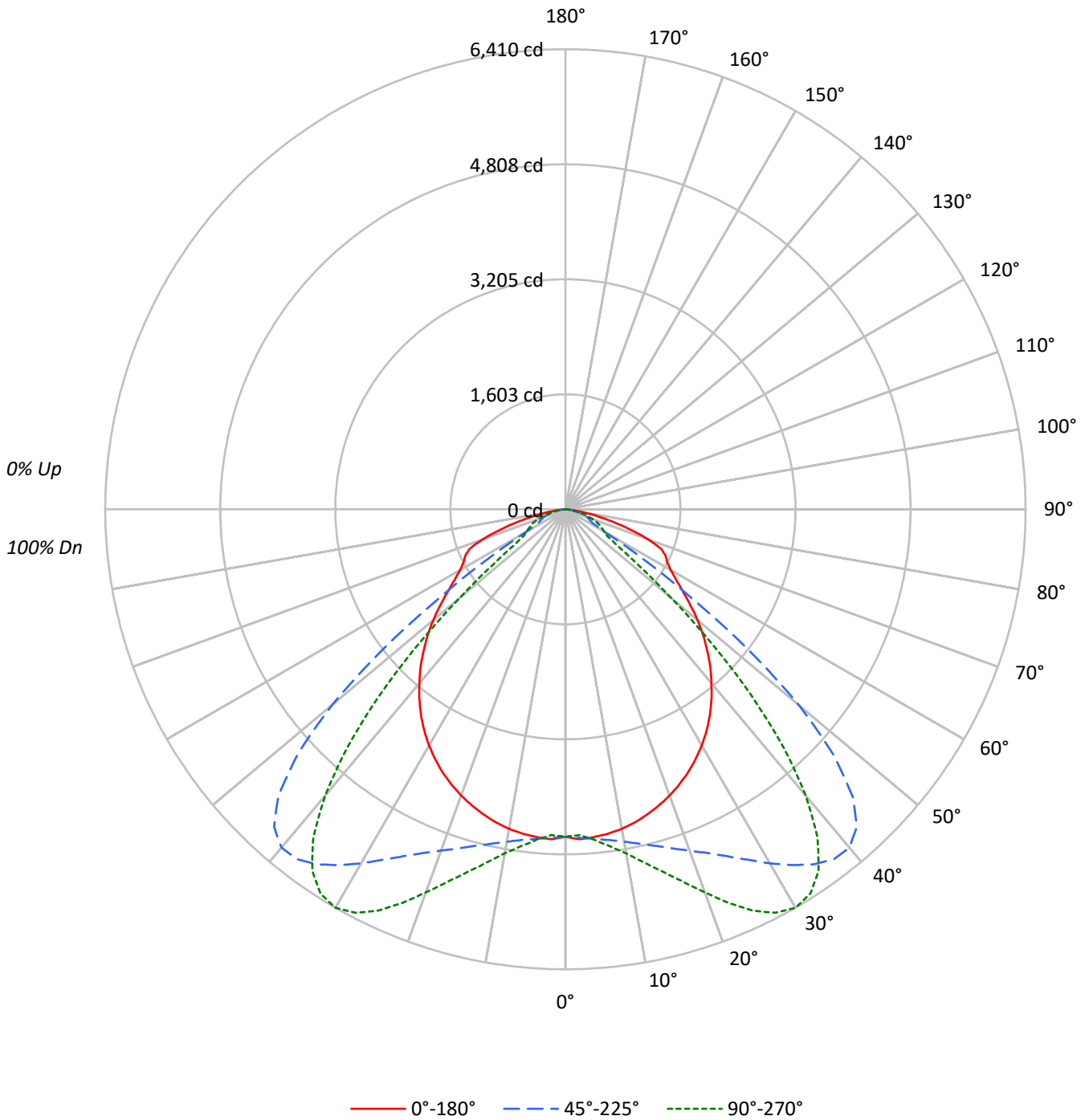
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14590.9 lumens
Efficiency: N/A
Efficacy: 133.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.69 / 1.65
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 (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				
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	102	102	102	100
1	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	89	89	89	87
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77	77	77	77	75
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	67	67	67	65
4	86	75	67	61	84	73	66	60	71	65	59	69	63	59	67	62	58	58	58	58	56
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	51	51	51	49
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	45	45	45	43
7	68	55	46	40	66	54	46	40	52	45	40	51	45	40	50	44	39	39	39	39	38
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	35	35	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	32	32	32	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	29	29	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7366	7366	7366
5°	7430	7469	7492
10°	7412	7709	7979
15°	7358	8116	8734
20°	7294	8695	9758
25°	7206	9501	10990
30°	7083	10617	11951
35°	6910	11900	12116
40°	6670	12966	10976
45°	6382	12916	8331
50°	6037	10675	4801
55°	5626	5872	2469
60°	5461	2049	2013
65°	5885	1491	2018
70°	5811	1528	1947
75°	4394	1336	1563
80°	2655	1092	1106
85°	1323	558	235



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	441.5	3.0
10°-20°	1373.0	9.4
20°-30°	2411.9	16.5
30°-40°	3350.7	23.0
40°-50°	3398.0	23.3
50°-60°	2180.6	14.9
60°-70°	1019.9	7.0
70°-80°	353.7	2.4
80°-90°	61.7	0.4
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°	4226.4	29.0
0°-40°	7577.0	51.9
0°-60°	13155.6	90.2
0°-90°	14590.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14590.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4562	4562	4562	4562	4562	
5°	4584	4552	4608	4623	4622	436
15°	4402	4507	4856	5116	5225	1242
25°	4045	4459	5333	5957	6169	1862
35°	3506	4497	6037	6245	6147	2189
45°	2795	4814	5657	4219	3648	2155
55°	1999	4972	2086	1004	877	1804
65°	1540	1589	390	489	528	1498
75°	704	243	214	247	251	762
85°	71	64	30	17	13	108
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4562.2	4562.2	4562.2	4562.2	4562.2	4562.2	4562.2	4562.2	4562.2	4562.2	4562.2
2.5°	4601.8	4587.5	4563.7	4554.2	4559.0	4582.8	4590.7	4573.3	4568.5	4555.8	4543.1
5°	4584.4	4571.7	4554.2	4551.1	4568.5	4608.2	4625.6	4620.9	4628.8	4630.4	4622.4
7.5°	4559.0	4547.9	4533.6	4547.9	4584.4	4647.8	4687.5	4700.2	4728.7	4735.1	4733.5
10°	4520.9	4511.4	4506.6	4543.1	4606.6	4701.8	4771.6	4806.5	4847.7	4862.0	4866.7
12.5°	4470.2	4460.6	4473.3	4536.8	4636.7	4773.1	4876.2	4938.1	4996.8	5026.9	5036.5
15°	4401.9	4398.8	4430.5	4532.0	4674.8	4855.6	4998.4	5095.2	5179.2	5212.5	5225.2
17.5°	4327.4	4329.0	4386.1	4530.4	4720.8	4952.4	5134.8	5272.8	5375.9	5423.5	5437.8
20°	4244.9	4249.7	4335.3	4528.9	4777.9	5060.3	5285.5	5466.3	5594.8	5658.3	5678.9
22.5°	4148.1	4157.7	4279.8	4530.4	4838.2	5184.0	5463.2	5678.9	5832.8	5908.9	5934.3
25°	4045.0	4059.3	4222.7	4538.4	4914.3	5333.1	5666.2	5918.4	6073.9	6140.5	6169.1
27.5°	3926.1	3949.9	4160.8	4549.5	5004.7	5506.0	5874.0	6116.7	6261.1	6311.8	6337.2
30°	3799.2	3826.1	4100.6	4571.7	5122.1	5694.8	6066.0	6270.6	6367.4	6395.9	6410.2
32.5°	3659.6	3704.0	4040.3	4608.2	5260.1	5877.2	6207.1	6329.3	6353.1	6343.6	6348.3
35°	3505.7	3553.3	3983.2	4668.4	5417.2	6037.4	6262.7	6262.7	6192.9	6150.0	6146.9
37.5°	3342.3	3402.6	3926.1	4738.2	5599.6	6143.7	6202.4	6045.3	5875.6	5783.6	5769.3
40°	3164.6	3245.5	3886.4	4833.4	5764.6	6151.6	5986.6	5663.0	5374.3	5225.2	5207.8
42.5°	2988.6	3088.5	3869.0	4957.1	5888.3	6005.7	5580.6	5080.9	4689.1	4513.0	4494.0
45°	2795.0	2926.7	3875.3	5126.9	5921.6	5656.7	4976.2	4329.0	3889.6	3667.5	3648.5
47.5°	2603.1	2766.5	3891.2	5318.8	5775.7	5065.0	4171.9	3423.2	2987.0	2753.8	2750.6
50°	2403.2	2615.8	3929.2	5475.9	5380.7	4249.7	3183.7	2452.4	2103.4	1925.8	1911.5
52.5°	2195.4	2484.1	4011.7	5504.4	4678.0	3202.7	2160.5	1637.0	1410.2	1297.6	1275.4
55°	1998.7	2373.1	4146.6	5247.4	3667.5	2086.0	1361.0	1032.7	918.5	872.5	877.2
57.5°	1829.0	2290.6	4303.6	4576.4	2381.0	1227.8	788.4	686.9	683.7	688.4	690.0
60°	1691.0	2239.8	4373.4	3432.7	1307.1	634.5	550.4	572.6	602.8	620.2	623.4
62.5°	1600.6	2212.9	4160.8	1989.2	580.6	442.6	480.6	521.9	556.8	572.6	574.2
65°	1540.3	2141.5	3404.2	983.5	355.3	390.2	437.8	480.6	512.4	525.1	528.2
67.5°	1446.7	1940.0	2333.4	407.7	312.5	352.2	398.2	439.4	466.4	475.9	477.5
70°	1231.0	1624.4	1356.3	271.3	282.4	323.6	360.1	391.8	409.3	414.0	412.4
72.5°	961.3	1286.5	685.3	245.9	261.7	283.9	304.6	322.0	331.5	336.3	336.3
75°	704.3	940.7	322.0	217.3	195.1	214.1	234.8	245.9	249.0	250.6	250.6
77.5°	472.7	648.8	191.9	168.1	150.7	166.6	174.5	169.7	166.6	169.7	169.7
80°	285.5	399.7	168.1	122.1	115.8	117.4	111.0	111.0	117.4	120.6	119.0
82.5°	153.9	226.8	147.5	88.8	77.7	71.4	69.8	66.6	63.5	61.9	61.9
85°	71.4	115.8	95.2	53.9	41.2	30.1	23.8	17.4	15.9	12.7	12.7
87.5°	28.6	44.4	28.6	17.4	9.5	6.3	4.8	3.2	1.6	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)