

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: P685485

Luminaire Tested: **8CZL-14-UNV-W-L835-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685485
Test Lab: INNOVATION CENTER(G2)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-14-UNV-W-L835-CD-U
Description: METALUX CRUZE LINEAR 8FT WIDE LENS MODEL @80 CRI and 3500K
Light Source: (784) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

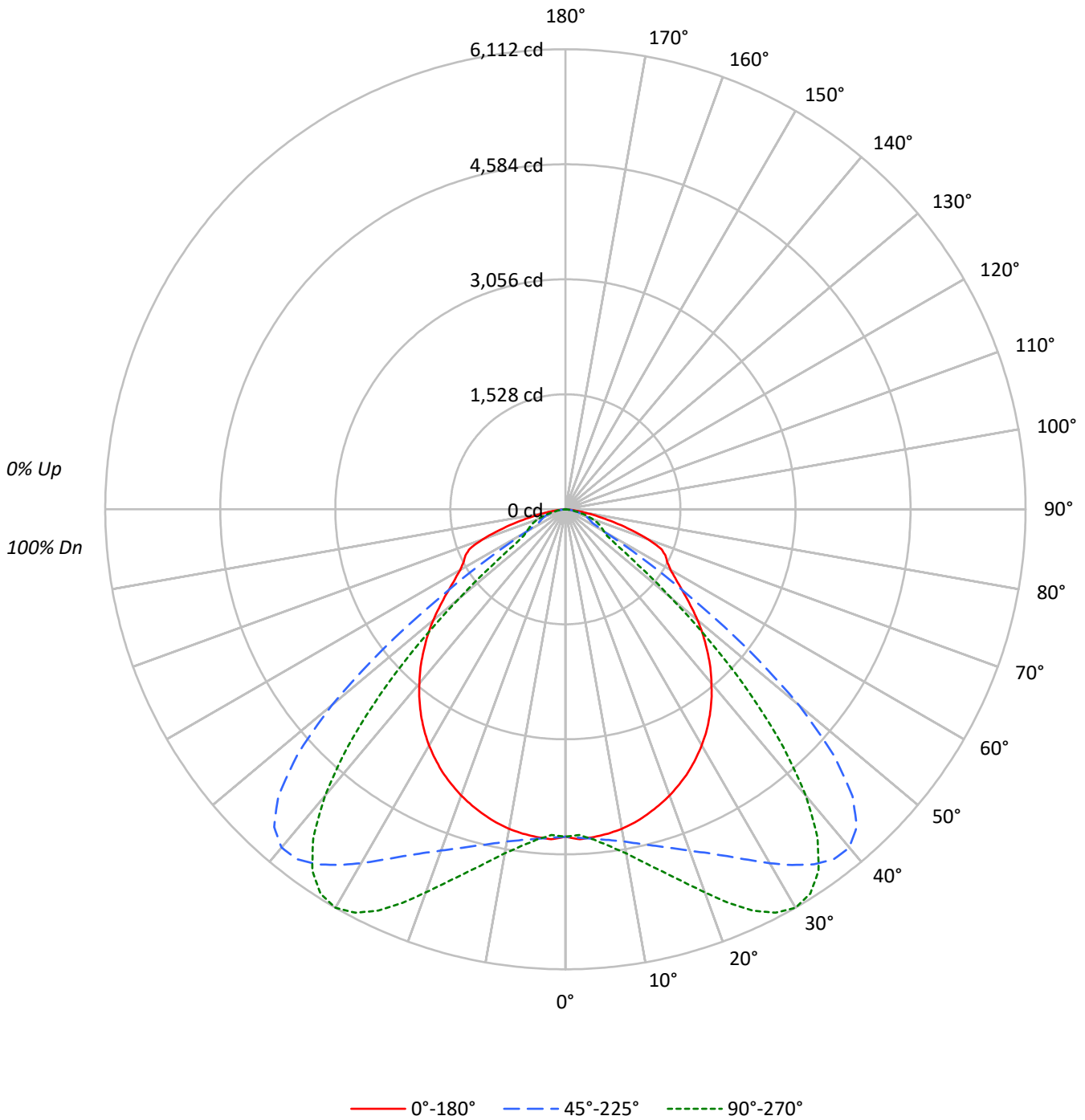
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13911.4 lumens
Efficiency: N/A
Efficacy: 156.3 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): 89
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77	75
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65
4	86	75	67	61	84	73	66	60	71	65	59	69	63	59	67	62	58	56
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43
7	68	55	46	40	66	54	46	40	52	45	40	51	45	40	50	44	39	38
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7023	7023	7023
5°	7084	7121	7143
10°	7067	7350	7607
15°	7015	7738	8327
20°	6954	8290	9303
25°	6871	9059	10478
30°	6753	10123	11394
35°	6588	11346	11552
40°	6360	12362	10465
45°	6085	12315	7943
50°	5755	10178	4578
55°	5364	5598	2354
60°	5206	1954	1919
65°	5611	1422	1924
70°	5540	1456	1856
75°	4189	1274	1491
80°	2531	1040	1054
85°	1262	532	224



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	421.0	3.0
10°-20°	1309.0	9.4
20°-30°	2299.6	16.5
30°-40°	3194.6	23.0
40°-50°	3239.8	23.3
50°-60°	2079.1	14.9
60°-70°	972.4	7.0
70°-80°	337.2	2.4
80°-90°	58.8	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°	4029.6	29.0
0°-40°	7224.2	51.9
0°-60°	12543.0	90.2
0°-90°	13911.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13911.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4350	4350	4350	4350	4350	
5°	4371	4340	4394	4408	4407	415
15°	4197	4297	4630	4878	4982	1184
25°	3857	4252	5085	5680	5882	1775
35°	3342	4288	5756	5954	5861	2087
45°	2665	4590	5393	4023	3479	2054
55°	1906	4741	1989	957	836	1720
65°	1469	1515	372	466	504	1429
75°	672	232	204	235	239	727
85°	68	61	29	16	12	103
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°	4349.7	4349.7	4349.7	4349.7	4349.7	4349.7	4349.7	4349.7	4349.7	4349.7	4349.7
2.5°	4387.5	4373.9	4351.2	4342.2	4346.7	4369.4	4376.9	4360.3	4355.8	4343.7	4331.6
5°	4370.9	4358.8	4342.2	4339.1	4355.8	4393.6	4410.2	4405.7	4413.2	4414.8	4407.2
7.5°	4346.7	4336.1	4322.5	4336.1	4370.9	4431.4	4469.2	4481.3	4508.5	4514.6	4513.1
10°	4310.4	4301.3	4296.8	4331.6	4392.1	4482.8	4549.4	4582.6	4622.0	4635.6	4640.1
12.5°	4262.0	4252.9	4265.0	4325.5	4420.8	4550.9	4649.2	4708.2	4764.1	4792.9	4801.9
15°	4197.0	4193.9	4224.2	4321.0	4457.1	4629.5	4765.6	4857.9	4938.1	4969.8	4981.9
17.5°	4125.9	4127.4	4181.8	4319.5	4501.0	4721.8	4895.7	5027.3	5125.6	5171.0	5184.6
20°	4047.2	4051.8	4133.4	4318.0	4555.4	4824.6	5039.4	5211.8	5334.3	5394.8	5414.5
22.5°	3955.0	3964.1	4080.5	4319.5	4612.9	4942.6	5208.8	5414.5	5561.2	5633.8	5658.0
25°	3856.7	3870.3	4026.1	4327.0	4685.5	5084.8	5402.4	5642.8	5791.1	5854.6	5881.8
27.5°	3743.2	3765.9	3967.1	4337.6	4771.7	5249.6	5600.5	5831.9	5969.5	6017.9	6042.1
30°	3622.2	3648.0	3909.6	4358.8	4883.6	5429.6	5783.5	5978.6	6070.9	6098.1	6111.7
32.5°	3489.2	3531.5	3852.1	4393.6	5015.2	5603.5	5918.1	6034.6	6057.2	6048.2	6052.7
35°	3342.5	3387.8	3797.7	4451.1	5164.9	5756.3	5971.0	5971.0	5904.5	5863.7	5860.6
37.5°	3186.7	3244.1	3743.2	4517.6	5338.8	5857.6	5913.6	5763.8	5602.0	5514.3	5500.7
40°	3017.3	3094.4	3705.4	4608.3	5496.1	5865.2	5707.9	5399.3	5124.1	4981.9	4965.3
42.5°	2849.4	2944.7	3688.8	4726.3	5614.1	5726.0	5320.7	4844.3	4470.7	4302.8	4284.7
45°	2664.9	2790.4	3694.8	4888.1	5645.9	5393.3	4744.5	4127.4	3708.5	3496.7	3478.6
47.5°	2481.9	2637.7	3710.0	5071.1	5506.7	4829.2	3977.7	3263.8	2847.9	2625.6	2622.5
50°	2291.3	2494.0	3746.3	5220.9	5130.1	4051.8	3035.4	2338.2	2005.5	1836.1	1822.5
52.5°	2093.2	2368.5	3824.9	5248.1	4460.1	3053.6	2059.9	1560.8	1344.5	1237.2	1216.0
55°	1905.7	2262.6	3953.5	5003.1	3496.7	1988.8	1297.7	984.6	875.7	831.8	836.4
57.5°	1743.8	2183.9	4103.2	4363.3	2270.1	1170.6	751.7	654.9	651.9	656.4	657.9
60°	1612.2	2135.5	4169.7	3272.9	1246.2	605.0	524.8	546.0	574.7	591.4	594.4
62.5°	1526.0	2109.8	3967.1	1896.6	553.5	422.0	458.3	497.6	530.9	546.0	547.5
65°	1468.6	2041.8	3245.7	937.7	338.8	372.1	417.4	458.3	488.5	500.6	503.6
67.5°	1379.3	1849.7	2224.8	388.7	297.9	335.8	379.6	418.9	444.7	453.7	455.2
70°	1173.6	1548.7	1293.1	258.6	269.2	308.5	343.3	373.6	390.2	394.7	393.2
72.5°	916.5	1226.6	653.4	234.4	249.5	270.7	290.4	307.0	316.1	320.6	320.6
75°	671.5	896.9	307.0	207.2	186.0	204.2	223.8	234.4	237.5	239.0	239.0
77.5°	450.7	618.6	183.0	160.3	143.7	158.8	166.4	161.8	158.8	161.8	161.8
80°	272.2	381.1	160.3	116.5	110.4	111.9	105.9	105.9	111.9	114.9	113.4
82.5°	146.7	216.3	140.7	84.7	74.1	68.1	66.5	63.5	60.5	59.0	59.0
85°	68.1	110.4	90.7	51.4	39.3	28.7	22.7	16.6	15.1	12.1	12.1
87.5°	27.2	42.3	27.2	16.6	9.1	6.0	4.5	3.0	1.5	1.5	1.5
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)