

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: P685505

Luminaire Tested: **8CZL-14-UNV-W-L850-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685505
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-L850-CD-U
Description: METALUX CRUZE LINEAR 8FT WIDE LENS MODEL @80 CRI and 5000K
Light Source: (784) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

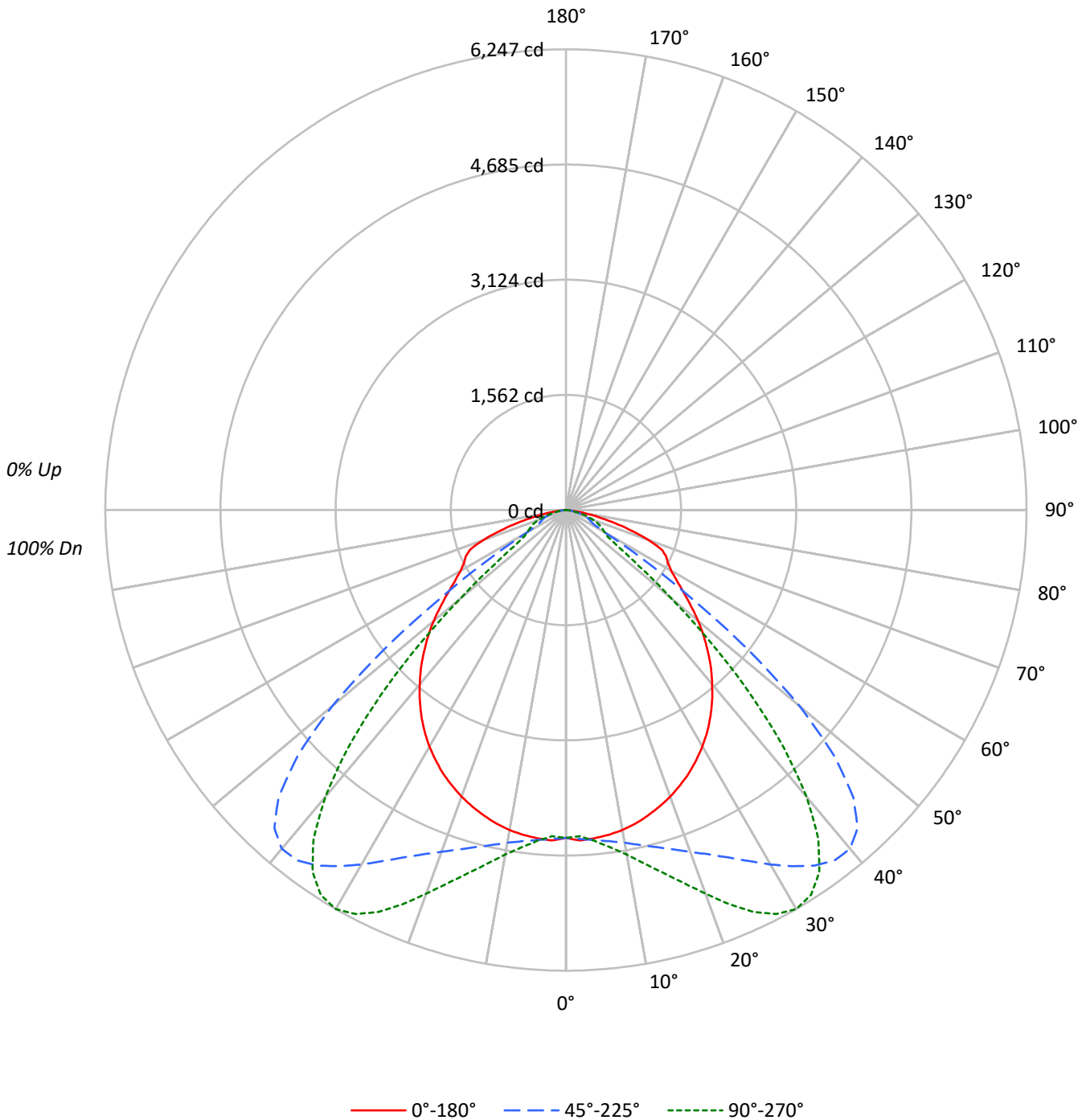
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14218.7 lumens
Efficiency: N/A
Efficacy: 159.8 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	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°	7178	7178	7178
5°	7241	7278	7301
10°	7223	7512	7775
15°	7170	7909	8511
20°	7108	8473	9509
25°	7023	9259	10710
30°	6902	10346	11646
35°	6734	11597	11807
40°	6500	12635	10696
45°	6219	12587	8118
50°	5883	10402	4679
55°	5483	5722	2406
60°	5321	1997	1962
65°	5735	1453	1967
70°	5663	1488	1897
75°	4281	1302	1523
80°	2587	1064	1078
85°	1289	545	230



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	430.3	3.0
10°-20°	1337.9	9.4
20°-30°	2350.3	16.5
30°-40°	3265.2	23.0
40°-50°	3311.3	23.3
50°-60°	2125.0	14.9
60°-70°	993.9	7.0
70°-80°	344.6	2.4
80°-90°	60.1	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°	4118.6	29.0
0°-40°	7383.8	51.9
0°-60°	12820.1	90.2
0°-90°	14218.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14218.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4446	4446	4446	4446	4446	
5°	4467	4436	4491	4505	4504	424
15°	4290	4392	4732	4986	5092	1210
25°	3942	4346	5197	5805	6012	1814
35°	3416	4382	5883	6086	5990	2133
45°	2724	4691	5512	4112	3555	2100
55°	1948	4845	2033	978	855	1758
65°	1501	1548	380	476	515	1460
75°	686	237	209	240	244	743
85°	70	63	29	17	12	105
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°	4445.8	4445.8	4445.8	4445.8	4445.8	4445.8	4445.8	4445.8	4445.8	4445.8	4445.8
2.5°	4484.4	4470.5	4447.3	4438.1	4442.7	4465.9	4473.6	4456.6	4452.0	4439.6	4427.2
5°	4467.4	4455.1	4438.1	4435.0	4452.0	4490.6	4507.6	4503.0	4510.7	4512.3	4504.5
7.5°	4442.7	4431.9	4418.0	4431.9	4467.4	4529.3	4567.9	4580.3	4608.1	4614.3	4612.7
10°	4405.6	4396.3	4391.7	4427.2	4489.1	4581.8	4649.8	4683.9	4724.0	4738.0	4742.6
12.5°	4356.1	4346.9	4359.2	4421.1	4518.4	4651.4	4751.9	4812.2	4869.4	4898.7	4908.0
15°	4289.7	4286.6	4317.5	4416.4	4555.5	4731.8	4870.9	4965.2	5047.1	5079.6	5091.9
17.5°	4217.0	4218.6	4274.2	4414.9	4600.4	4826.1	5003.8	5138.3	5238.8	5285.2	5299.1
20°	4136.6	4141.3	4224.7	4413.3	4656.0	4931.2	5150.7	5326.9	5452.1	5514.0	5534.1
22.5°	4042.3	4051.6	4170.6	4414.9	4714.8	5051.8	5323.8	5534.1	5684.0	5758.2	5782.9
25°	3941.9	3955.8	4115.0	4422.6	4789.0	5197.1	5521.7	5767.5	5919.0	5983.9	6011.7
27.5°	3825.9	3849.1	4054.7	4433.4	4877.1	5365.6	5724.2	5960.7	6101.4	6150.8	6175.6
30°	3702.3	3728.5	3996.0	4455.1	4991.5	5549.5	5911.2	6110.6	6204.9	6232.8	6246.7
32.5°	3566.2	3609.5	3937.2	4490.6	5126.0	5727.3	6048.8	6167.8	6191.0	6181.8	6186.4
35°	3416.3	3462.6	3881.6	4549.4	5279.0	5883.4	6102.9	6102.9	6034.9	5993.2	5990.1
37.5°	3257.1	3315.8	3825.9	4617.4	5456.8	5987.0	6044.2	5891.1	5725.7	5636.1	5622.2
40°	3083.9	3162.8	3787.3	4710.1	5617.5	5994.7	5833.9	5518.6	5237.3	5091.9	5074.9
42.5°	2912.3	3009.7	3770.3	4830.7	5738.1	5852.5	5438.2	4951.3	4569.5	4397.9	4379.3
45°	2723.7	2852.0	3776.5	4996.1	5770.6	5512.4	4849.3	4218.6	3790.4	3573.9	3555.4
47.5°	2536.7	2695.9	3791.9	5183.2	5628.4	4935.8	4065.5	3335.9	2910.8	2683.6	2680.5
50°	2341.9	2549.1	3829.0	5336.2	5243.4	4141.3	3102.5	2389.8	2049.8	1876.6	1862.7
52.5°	2139.4	2420.8	3909.4	5364.0	4558.6	3121.0	2105.4	1595.3	1374.2	1264.5	1242.8
55°	1947.7	2312.6	4040.8	5113.6	3573.9	2032.8	1326.3	1006.3	895.0	850.2	854.8
57.5°	1782.3	2232.2	4193.8	4459.7	2320.3	1196.5	768.3	669.3	666.3	670.9	672.4
60°	1647.8	2182.7	4261.8	3345.2	1273.8	618.3	536.4	558.0	587.4	604.4	607.5
62.5°	1559.7	2156.4	4054.7	1938.5	565.8	431.3	468.4	508.6	542.6	558.0	559.6
65°	1501.0	2086.9	3317.3	958.4	346.3	380.3	426.6	468.4	499.3	511.7	514.8
67.5°	1409.8	1890.5	2273.9	397.3	304.5	343.2	388.0	428.2	454.5	463.7	465.3
70°	1199.6	1582.9	1321.7	264.3	275.2	315.3	350.9	381.8	398.8	403.5	401.9
72.5°	936.8	1253.7	667.8	239.6	255.1	276.7	296.8	313.8	323.1	327.7	327.7
75°	686.3	916.7	313.8	211.8	190.1	208.7	228.8	239.6	242.7	244.2	244.2
77.5°	460.7	632.2	187.0	163.9	146.9	162.3	170.0	165.4	162.3	165.4	165.4
80°	278.2	389.5	163.9	119.0	112.8	114.4	108.2	108.2	114.4	117.5	115.9
82.5°	149.9	221.1	143.8	86.6	75.7	69.6	68.0	64.9	61.8	60.3	60.3
85°	69.6	112.8	92.7	52.6	40.2	29.4	23.2	17.0	15.5	12.4	12.4
87.5°	27.8	43.3	27.8	17.0	9.3	6.2	4.6	3.1	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)