

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: P685624

Luminaire Tested: **8CZL-10-UNV-FUL-L850-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685624
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-10-UNV-FUL-L850-CD-U
Description: METALUX CRUZE LINEAR 8FT FROSTED LENS MODEL WITH UPLIGHT @80 CRI and 5000K
Light Source: (784) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

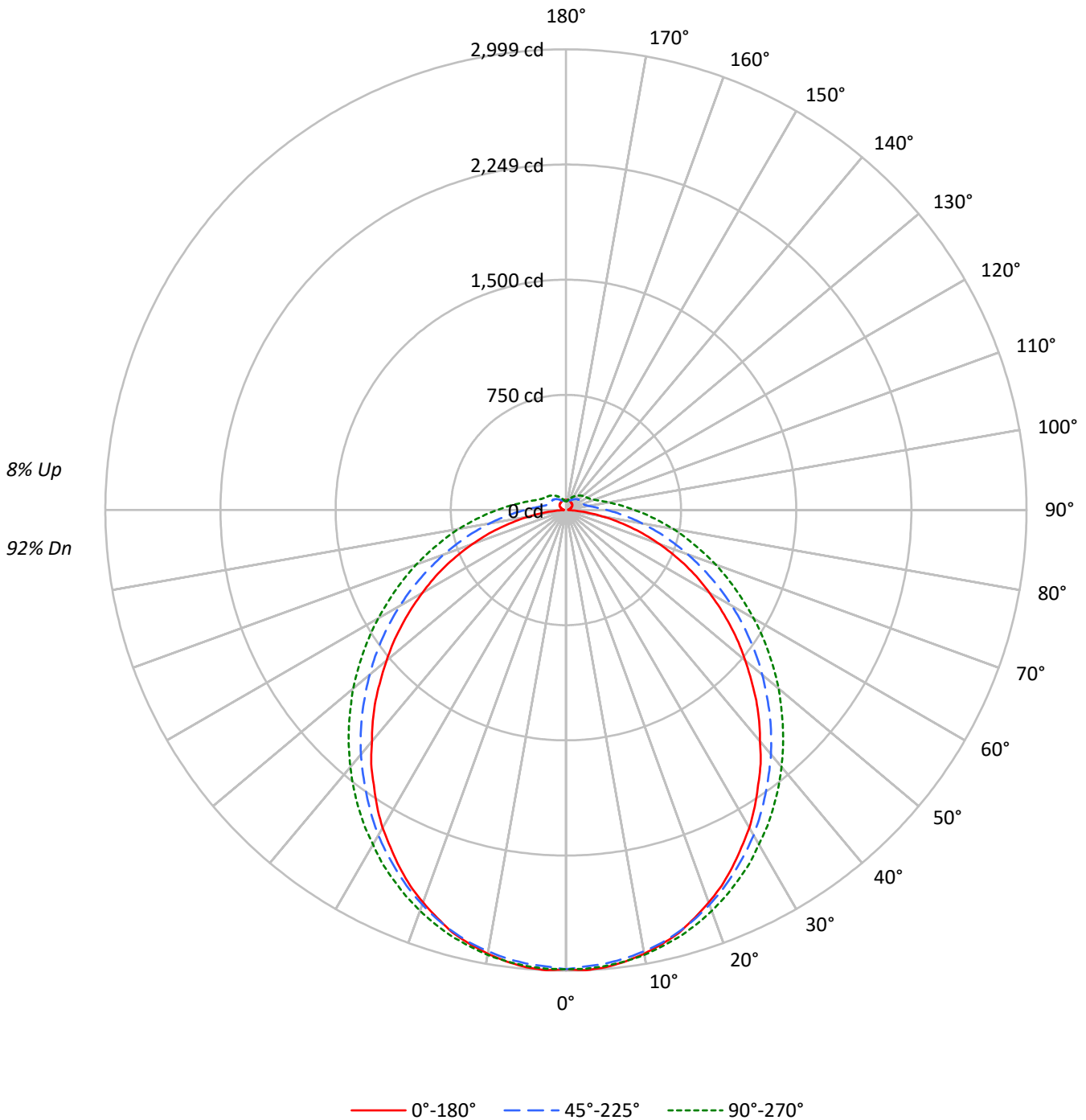
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9324.6 lumens
Efficiency: N/A
Efficacy: 148.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.83' x L: 8' x H: 0.17')
CIE Type: Direct

Input Watts (W): 63
Input Voltage (V): 120
Input Current (A_{in}): 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	117	117	117	117	113	113	113	113	107	107	107	100	100	100	95	95	95	95	95	95	92
1	106	101	96	92	102	98	93	90	92	88	85	87	84	81	82	79	77	77	77	77	75
2	96	87	80	74	93	85	78	73	80	74	70	75	71	67	71	68	64	64	64	64	62
3	87	77	68	61	84	74	67	60	70	64	58	66	61	56	63	58	54	54	54	54	52
4	80	68	59	52	77	66	58	51	62	55	50	59	53	48	56	51	47	47	47	47	44
5	74	61	51	45	71	59	50	44	56	49	43	53	47	42	50	45	41	41	41	41	38
6	68	54	45	39	65	53	45	38	50	43	38	48	42	37	46	40	36	36	36	36	33
7	63	49	41	34	61	48	40	34	46	39	33	44	37	32	42	36	32	32	32	32	30
8	59	45	37	31	57	44	36	30	42	35	30	40	34	29	38	33	28	28	28	28	26
9	55	41	33	28	53	40	33	27	39	32	27	37	31	26	35	30	26	26	26	26	24
10	51	38	30	25	50	37	30	25	36	29	24	34	28	24	33	27	23	23	23	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4826	4826	4826
5°	4833	4739	4746
10°	4791	4655	4658
15°	4735	4560	4558
20°	4636	4445	4448
25°	4525	4314	4329
30°	4400	4180	4200
35°	4240	4021	4077
40°	4071	3870	3941
45°	3920	3704	3802
50°	3737	3534	3669
55°	3560	3358	3522
60°	3363	3172	3385
65°	3170	2980	3256
70°	2888	2794	3159
75°	2539	2622	3072
80°	2038	2495	3094
85°	1282	2460	3186



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	282.7	3.0
10°-20°	804.4	8.6
20°-30°	1201.2	12.9
30°-40°	1420.0	15.2
40°-50°	1447.0	15.5
50°-60°	1304.7	14.0
60°-70°	1032.4	11.1
70°-80°	697.7	7.5
80°-90°	390.2	4.2
90°-100°	212.3	2.3
100°-110°	139.3	1.5
110°-120°	110.4	1.2
120°-130°	94.0	1.0
130°-140°	75.2	0.8
140°-150°	53.8	0.6
150°-160°	34.7	0.4
160°-170°	18.7	0.2
170°-180°	5.8	0.1
0°-30°	2288.4	24.5
0°-40°	3708.4	39.8
0°-60°	6460.2	69.3
0°-90°	8580.5	92.0
90°-120°	462.0	5.0
90°-150°	685.0	7.3
90°-180°	744.0	8.0
0°-180°	9324.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2989	2989	2989	2989	2989	
5°	2987	2982	2964	2981	2979	283
15°	2849	2845	2842	2867	2873	801
25°	2565	2577	2598	2646	2656	1181
35°	2182	2212	2263	2335	2358	1366
45°	1752	1787	1875	1963	1998	1350
55°	1302	1351	1459	1569	1609	1165
65°	867	910	1041	1169	1218	856
75°	439	499	665	813	860	466
85°	86	192	370	514	565	105
90°	13	106	266	397	446	10
95°	14	70	195	312	356	12
105°	25	62	128	201	231	26
115°	38	66	114	156	173	38
125°	51	69	108	140	152	45
135°	56	68	101	125	134	43
145°	59	65	84	107	113	37
155°	63	64	70	88	90	29
165°	65	64	63	66	71	19
175°	66	65	62	54	55	6
180°	61	61	61	61	61	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2989.0	2989.0	2989.0	2989.0	2989.0
2.5°	2998.6	2993.8	2974.0	2989.6	2989.0
5°	2987.2	2982.4	2963.9	2980.6	2979.4
7.5°	2965.1	2962.1	2944.7	2963.3	2962.7
10°	2932.7	2932.7	2917.7	2939.3	2941.1
12.5°	2893.7	2893.1	2885.3	2907.5	2907.5
15°	2848.8	2845.2	2842.2	2866.8	2872.8
17.5°	2784.6	2787.0	2792.4	2821.8	2827.8
20°	2718.7	2724.1	2734.3	2769.1	2776.9
22.5°	2648.0	2654.0	2670.2	2707.9	2720.5
25°	2564.7	2576.7	2597.6	2646.2	2656.4
27.5°	2474.8	2495.8	2522.7	2574.3	2591.7
30°	2388.5	2405.2	2444.2	2498.2	2513.1
32.5°	2289.0	2309.4	2354.9	2419.6	2440.0
35°	2182.3	2212.3	2263.2	2335.1	2357.9
37.5°	2082.8	2106.8	2169.7	2246.4	2273.4
40°	1965.3	2004.3	2076.8	2152.3	2183.5
42.5°	1862.2	1895.8	1977.3	2060.6	2093.0
45°	1752.5	1787.3	1875.4	1962.9	1998.3
47.5°	1635.1	1676.4	1770.5	1868.2	1901.2
50°	1524.8	1567.9	1668.6	1767.5	1808.9
52.5°	1416.3	1461.3	1565.5	1669.8	1708.2
55°	1302.4	1351.0	1458.9	1569.1	1608.7
57.5°	1190.9	1239.5	1354.6	1468.4	1511.0
60°	1078.9	1124.4	1247.9	1364.8	1411.5
62.5°	974.0	1018.3	1145.4	1271.3	1312.0
65°	866.7	910.4	1041.1	1169.4	1217.9
67.5°	755.8	808.5	939.8	1074.1	1125.6
70°	646.7	700.7	845.7	985.4	1036.9
72.5°	543.6	604.8	751.0	893.7	946.4
75°	438.7	499.3	665.3	812.7	860.1
77.5°	339.8	410.6	581.4	730.0	785.8
80°	245.1	325.5	505.9	651.5	710.2
82.5°	161.2	252.9	435.7	580.2	632.9
85°	85.7	192.4	369.8	513.7	565.2
87.5°	33.6	142.6	314.7	453.1	504.7
90°	13.2	106.1	266.1	397.4	446.5
92.5°	13.2	82.7	226.6	352.4	398.6
95°	14.4	69.5	195.4	312.3	356.0
97.5°	15.6	62.9	170.8	276.9	315.9
100°	18.0	60.5	152.2	248.1	283.5
102.5°	21.0	60.5	137.3	221.8	255.3
105°	24.6	61.7	127.7	201.4	231.4
107.5°	27.6	62.9	121.1	184.6	211.6
110°	31.2	64.7	117.5	172.0	195.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	34.8	65.9	115.1	163.0	183.4
115°	38.4	66.5	113.9	155.8	173.2
117.5°	42.0	67.7	112.7	151.0	166.0
120°	45.6	68.3	111.5	147.4	160.6
122.5°	48.5	68.3	110.3	143.8	155.8
125°	50.9	68.9	108.5	140.3	151.6
127.5°	52.7	69.5	107.3	136.7	146.8
130°	54.5	68.9	105.5	133.1	142.6
132.5°	55.7	68.3	103.1	129.5	138.5
135°	56.3	67.7	100.7	125.3	133.7
137.5°	56.9	67.1	97.1	121.1	128.9
140°	56.9	66.5	92.9	116.3	123.5
142.5°	57.5	65.3	88.7	111.5	118.1
145°	58.7	64.7	84.5	106.7	112.7
147.5°	59.9	63.5	80.9	101.3	106.7
150°	61.1	63.5	77.3	96.5	101.3
152.5°	61.7	63.5	73.7	92.3	95.9
155°	62.9	63.5	70.1	88.1	90.5
157.5°	63.5	63.5	67.7	82.7	85.1
160°	64.1	64.1	65.3	76.7	80.3
162.5°	65.3	64.1	64.1	70.7	75.5
165°	65.3	64.1	62.9	65.9	71.3
167.5°	65.9	64.7	62.3	62.3	67.7
170°	65.9	64.7	62.3	59.3	62.3
172.5°	65.9	64.7	62.3	56.9	58.1
175°	65.9	64.7	62.3	54.5	55.1
177.5°	65.9	64.7	61.7	52.7	55.1
180°	61.1	61.1	61.1	61.1	61.1

(END OF REPORT)