

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: P685638

Luminaire Tested: **8CZL-32-UNV-FUL-L935-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685638
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-32-UNV-FUL-L935-CD-U
Description: METALUX CRUZE LINEAR 8FT FROSTED LENS MODEL WITH UPLIGHT @90 CRI
and 3500K
Light Source: (1176) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

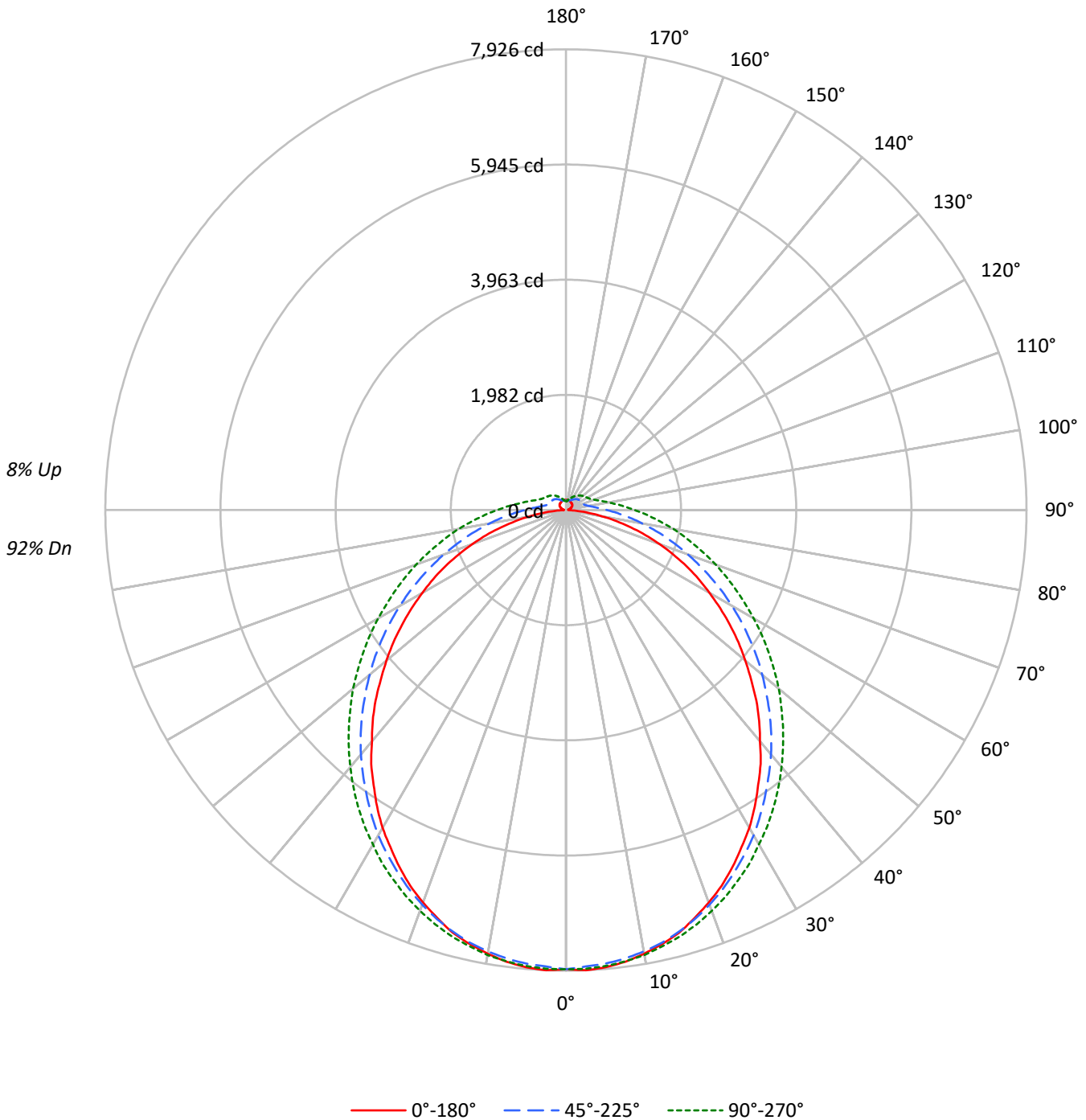
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24646.9 lumens
Efficiency: N/A
Efficacy: 119.6 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): 206
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	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°	12756	12756	12756
5°	12774	12526	12544
10°	12662	12305	12311
15°	12517	12053	12047
20°	12254	11750	11756
25°	11960	11402	11441
30°	11630	11049	11102
35°	11206	10629	10775
40°	10761	10230	10416
45°	10361	9790	10050
50°	9878	9340	9698
55°	9411	8875	9310
60°	8888	8384	8948
65°	8378	7876	8607
70°	7633	7385	8350
75°	6713	6931	8121
80°	5388	6593	8179
85°	3389	6503	8422



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	747.3	3.0
10°-20°	2126.3	8.6
20°-30°	3175.0	12.9
30°-40°	3753.3	15.2
40°-50°	3824.7	15.5
50°-60°	3448.7	14.0
60°-70°	2728.8	11.1
70°-80°	1844.2	7.5
80°-90°	1031.4	4.2
90°-100°	561.2	2.3
100°-110°	368.1	1.5
110°-120°	292.0	1.2
120°-130°	248.4	1.0
130°-140°	198.7	0.8
140°-150°	142.2	0.6
150°-160°	91.6	0.4
160°-170°	49.5	0.2
170°-180°	15.5	0.1
0°-30°	6048.7	24.5
0°-40°	9802.0	39.8
0°-60°	17075.4	69.3
0°-90°	22679.8	92.0
90°-120°	1221.3	5.0
90°-150°	1810.5	7.3
90°-180°	1967.0	8.0
0°-180°	24646.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7901	7901	7901	7901	7901	
5°	7896	7883	7834	7878	7875	749
15°	7530	7520	7512	7577	7593	2118
25°	6779	6811	6866	6994	7021	3120
35°	5768	5847	5982	6172	6232	3611
45°	4632	4724	4957	5188	5282	3567
55°	3442	3571	3856	4148	4252	3079
65°	2291	2406	2752	3091	3219	2262
75°	1160	1320	1758	2148	2273	1232
85°	226	508	978	1358	1494	278
90°	35	280	703	1050	1180	27
95°	38	184	516	825	941	33
105°	65	163	337	532	612	68
115°	101	176	301	412	458	100
125°	135	182	287	371	401	120
135°	149	179	266	331	353	115
145°	155	171	223	282	298	98
155°	166	168	185	233	239	77
165°	173	170	166	174	188	49
175°	174	171	165	144	146	17
180°	162	162	162	162	162	



TEST NUMBER: P685638

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7900.6	7900.6	7900.6	7900.6	7900.6
2.5°	7925.9	7913.3	7861.0	7902.2	7900.6
5°	7895.8	7883.2	7834.0	7878.4	7875.2
7.5°	7837.2	7829.3	7783.3	7832.5	7830.9
10°	7751.7	7751.7	7712.1	7769.1	7773.8
12.5°	7648.7	7647.1	7626.5	7685.1	7685.1
15°	7529.9	7520.4	7512.4	7577.4	7593.2
17.5°	7360.4	7366.7	7381.0	7458.6	7474.4
20°	7186.1	7200.4	7227.3	7319.2	7339.8
22.5°	6999.2	7015.0	7057.8	7157.6	7190.8
25°	6778.9	6810.6	6866.1	6994.4	7021.3
27.5°	6541.3	6596.8	6668.0	6804.3	6850.2
30°	6313.2	6357.5	6460.5	6603.1	6642.7
32.5°	6050.2	6104.1	6224.5	6395.6	6449.4
35°	5768.2	5847.4	5982.1	6172.2	6232.4
37.5°	5505.2	5568.6	5734.9	5937.7	6009.0
40°	5194.7	5297.7	5489.4	5689.0	5771.4
42.5°	4922.2	5010.9	5226.4	5446.6	5532.2
45°	4632.3	4724.2	4957.1	5188.4	5281.8
47.5°	4321.8	4431.1	4679.8	4938.1	5025.2
50°	4030.3	4144.4	4410.5	4671.9	4781.2
52.5°	3743.5	3862.4	4138.0	4413.7	4515.1
55°	3442.5	3570.9	3856.0	4147.5	4252.1
57.5°	3147.9	3276.2	3580.4	3881.4	3993.9
60°	2851.6	2972.0	3298.4	3607.3	3730.9
62.5°	2574.4	2691.6	3027.5	3360.2	3467.9
65°	2290.8	2406.5	2751.8	3090.8	3219.2
67.5°	1997.7	2137.1	2484.1	2839.0	2975.2
70°	1709.4	1852.0	2235.4	2604.5	2740.7
72.5°	1436.9	1598.5	1985.0	2362.1	2501.5
75°	1159.7	1319.7	1758.5	2148.2	2273.4
77.5°	898.3	1085.2	1536.7	1929.6	2076.9
80°	648.0	860.2	1337.1	1722.1	1877.3
82.5°	426.2	668.5	1151.7	1533.5	1673.0
85°	226.5	508.5	977.5	1357.7	1493.9
87.5°	88.7	377.0	831.7	1197.7	1333.9
90°	34.9	280.4	703.4	1050.3	1180.3
92.5°	34.9	218.6	598.8	931.5	1053.5
95°	38.0	183.8	516.5	825.4	941.0
97.5°	41.2	166.3	451.5	731.9	834.9
100°	47.5	160.0	402.4	655.9	749.3
102.5°	55.4	160.0	362.8	586.2	674.9
105°	65.0	163.2	337.4	532.3	611.5
107.5°	72.9	166.3	320.0	487.9	559.2
110°	82.4	171.1	310.5	454.7	516.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	91.9	174.3	304.2	430.9	484.8
115°	101.4	175.9	301.0	411.9	457.8
117.5°	110.9	179.0	297.8	399.2	438.8
120°	120.4	180.6	294.7	389.7	424.6
122.5°	128.3	180.6	291.5	380.2	411.9
125°	134.7	182.2	286.7	370.7	400.8
127.5°	139.4	183.8	283.6	361.2	388.1
130°	144.2	182.2	278.8	351.7	377.0
132.5°	147.3	180.6	272.5	342.2	366.0
135°	148.9	179.0	266.2	331.1	353.3
137.5°	150.5	177.4	256.6	320.0	340.6
140°	150.5	175.9	245.6	307.3	326.4
142.5°	152.1	172.7	234.5	294.7	312.1
145°	155.3	171.1	223.4	282.0	297.8
147.5°	158.4	167.9	213.9	267.7	282.0
150°	161.6	167.9	204.4	255.1	267.7
152.5°	163.2	167.9	194.9	244.0	253.5
155°	166.3	167.9	185.4	232.9	239.2
157.5°	167.9	167.9	179.0	218.6	225.0
160°	169.5	169.5	172.7	202.8	212.3
162.5°	172.7	169.5	169.5	186.9	199.6
165°	172.7	169.5	166.3	174.3	188.5
167.5°	174.3	171.1	164.8	164.8	179.0
170°	174.3	171.1	164.8	156.8	164.8
172.5°	174.3	171.1	164.8	150.5	153.7
175°	174.3	171.1	164.8	144.2	145.7
177.5°	174.3	171.1	163.2	139.4	145.7
180°	161.6	161.6	161.6	161.6	161.6

(END OF REPORT)