

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: P685604

Luminaire Tested: **8CZL-10-UNV-FUL-L835-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685604
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-L835-CD-U
Description: METALUX CRUZE LINEAR 8FT FROSTED LENS MODEL WITH UPLIGHT @80 CRI
and 3500K
Light Source: (784) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

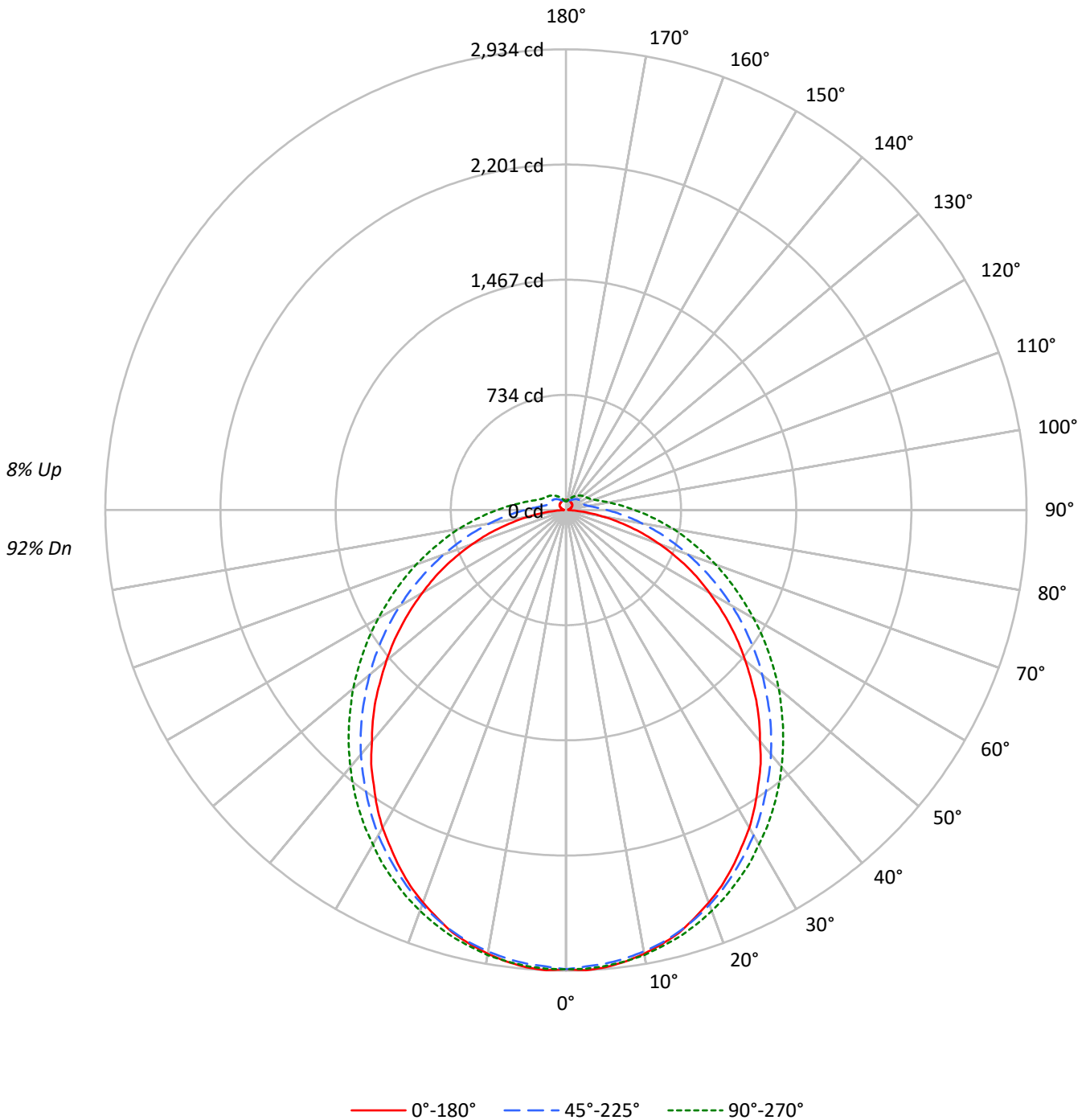
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9123.2 lumens
Efficiency: N/A
Efficacy: 144.8 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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CATALOG NUMBER: 8CZL-10-UNV-FUL-L835-CD-U

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°	4722	4722	4722
5°	4728	4637	4643
10°	4687	4555	4557
15°	4633	4462	4459
20°	4536	4349	4351
25°	4427	4220	4235
30°	4305	4090	4110
35°	4148	3934	3988
40°	3983	3787	3856
45°	3835	3624	3720
50°	3656	3457	3590
55°	3483	3285	3446
60°	3290	3103	3312
65°	3101	2915	3186
70°	2825	2733	3091
75°	2485	2565	3006
80°	1994	2440	3027
85°	1255	2407	3118



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	276.6	3.0
10°-20°	787.1	8.6
20°-30°	1175.2	12.9
30°-40°	1389.3	15.2
40°-50°	1415.8	15.5
50°-60°	1276.5	14.0
60°-70°	1010.1	11.1
70°-80°	682.6	7.5
80°-90°	381.8	4.2
90°-100°	207.7	2.3
100°-110°	136.3	1.5
110°-120°	108.1	1.2
120°-130°	91.9	1.0
130°-140°	73.6	0.8
140°-150°	52.6	0.6
150°-160°	33.9	0.4
160°-170°	18.3	0.2
170°-180°	5.7	0.1
0°-30°	2238.9	24.5
0°-40°	3628.2	39.8
0°-60°	6320.5	69.3
0°-90°	8395.0	92.0
90°-120°	452.1	5.0
90°-150°	670.2	7.3
90°-180°	728.0	8.0
0°-180°	9123.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2924	2924	2924	2924	2924	
5°	2923	2918	2900	2916	2915	277
15°	2787	2784	2781	2805	2811	784
25°	2509	2521	2542	2589	2599	1155
35°	2135	2164	2214	2285	2307	1337
45°	1715	1749	1835	1920	1955	1320
55°	1274	1322	1427	1535	1574	1140
65°	848	891	1019	1144	1192	837
75°	429	488	651	795	842	456
85°	84	188	362	503	553	103
90°	13	104	260	389	437	10
95°	14	68	191	306	348	12
105°	24	60	125	197	226	25
115°	38	65	111	152	170	37
125°	50	67	106	137	148	44
135°	55	66	98	123	131	43
145°	58	63	83	104	110	36
155°	62	62	69	86	88	28
165°	64	63	62	64	70	18
175°	64	63	61	53	54	6
180°	60	60	60	60	60	



TEST NUMBER: P685604

CATALOG NUMBER: 8CZL-10-UNV-FUL-L835-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2924.4	2924.4	2924.4	2924.4	2924.4
2.5°	2933.8	2929.1	2909.8	2925.0	2924.4
5°	2922.7	2918.0	2899.8	2916.2	2915.1
7.5°	2901.0	2898.1	2881.0	2899.2	2898.6
10°	2869.3	2869.3	2854.7	2875.8	2877.5
12.5°	2831.2	2830.6	2823.0	2844.7	2844.7
15°	2787.2	2783.7	2780.8	2804.8	2810.7
17.5°	2724.5	2726.8	2732.1	2760.8	2766.7
20°	2660.0	2665.2	2675.2	2709.2	2716.9
22.5°	2590.8	2596.6	2612.5	2649.4	2661.7
25°	2509.3	2521.0	2541.5	2589.0	2599.0
27.5°	2421.3	2441.8	2468.2	2518.6	2535.6
30°	2336.9	2353.3	2391.4	2444.2	2458.8
32.5°	2239.5	2259.4	2304.0	2367.3	2387.3
35°	2135.1	2164.4	2214.3	2284.7	2306.9
37.5°	2037.8	2061.2	2122.8	2197.9	2224.3
40°	1922.8	1961.0	2031.9	2105.8	2136.3
42.5°	1822.0	1854.8	1934.6	2016.1	2047.8
45°	1714.7	1748.7	1834.9	1920.5	1955.1
47.5°	1599.7	1640.2	1732.3	1827.8	1860.1
50°	1491.8	1534.1	1632.6	1729.3	1769.8
52.5°	1385.7	1429.7	1531.7	1633.7	1671.3
55°	1274.3	1321.8	1427.3	1535.2	1573.9
57.5°	1165.2	1212.7	1325.3	1436.7	1478.3
60°	1055.5	1100.1	1220.9	1335.3	1381.0
62.5°	952.9	996.3	1120.6	1243.8	1283.7
65°	848.0	890.8	1018.6	1144.1	1191.6
67.5°	739.5	791.1	919.5	1050.9	1101.3
70°	632.7	685.5	827.4	964.1	1014.5
72.5°	531.9	591.7	734.8	874.3	925.9
75°	429.3	488.5	650.9	795.2	841.5
77.5°	332.5	401.7	568.8	714.3	768.8
80°	239.8	318.4	494.9	637.4	694.9
82.5°	157.7	247.5	426.3	567.6	619.3
85°	83.9	188.2	361.8	502.6	553.0
87.5°	32.8	139.6	307.9	443.3	493.8
90°	12.9	103.8	260.4	388.8	436.9
92.5°	12.9	80.9	221.7	344.8	390.0
95°	14.1	68.0	191.2	305.5	348.3
97.5°	15.2	61.6	167.1	270.9	309.0
100°	17.6	59.2	148.9	242.8	277.4
102.5°	20.5	59.2	134.3	217.0	249.8
105°	24.0	60.4	124.9	197.0	226.4
107.5°	27.0	61.6	118.5	180.6	207.0
110°	30.5	63.3	114.9	168.3	191.2

TEST NUMBER: P685604

CATALOG NUMBER: 8CZL-10-UNV-FUL-L835-CD-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	34.0	64.5	112.6	159.5	179.4
115°	37.5	65.1	111.4	152.5	169.5
117.5°	41.0	66.3	110.2	147.8	162.4
120°	44.6	66.9	109.1	144.3	157.2
122.5°	47.5	66.9	107.9	140.7	152.5
125°	49.8	67.4	106.1	137.2	148.4
127.5°	51.6	68.0	105.0	133.7	143.7
130°	53.4	67.4	103.2	130.2	139.6
132.5°	54.5	66.9	100.9	126.7	135.5
135°	55.1	66.3	98.5	122.6	130.8
137.5°	55.7	65.7	95.0	118.5	126.1
140°	55.7	65.1	90.9	113.8	120.8
142.5°	56.3	63.9	86.8	109.1	115.5
145°	57.5	63.3	82.7	104.4	110.2
147.5°	58.6	62.2	79.2	99.1	104.4
150°	59.8	62.2	75.6	94.4	99.1
152.5°	60.4	62.2	72.1	90.3	93.8
155°	61.6	62.2	68.6	86.2	88.5
157.5°	62.2	62.2	66.3	80.9	83.3
160°	62.7	62.7	63.9	75.1	78.6
162.5°	63.9	62.7	62.7	69.2	73.9
165°	63.9	62.7	61.6	64.5	69.8
167.5°	64.5	63.3	61.0	61.0	66.3
170°	64.5	63.3	61.0	58.1	61.0
172.5°	64.5	63.3	61.0	55.7	56.9
175°	64.5	63.3	61.0	53.4	53.9
177.5°	64.5	63.3	60.4	51.6	53.9
180°	59.8	59.8	59.8	59.8	59.8

(END OF REPORT)