

Scale : 100 = 0.0001% or 1 ppm (up to 40 harmonics/ max 100 KHz)

The legend Cs indicates the input level in Vrms (0.025 up to 0.8 Vrms)

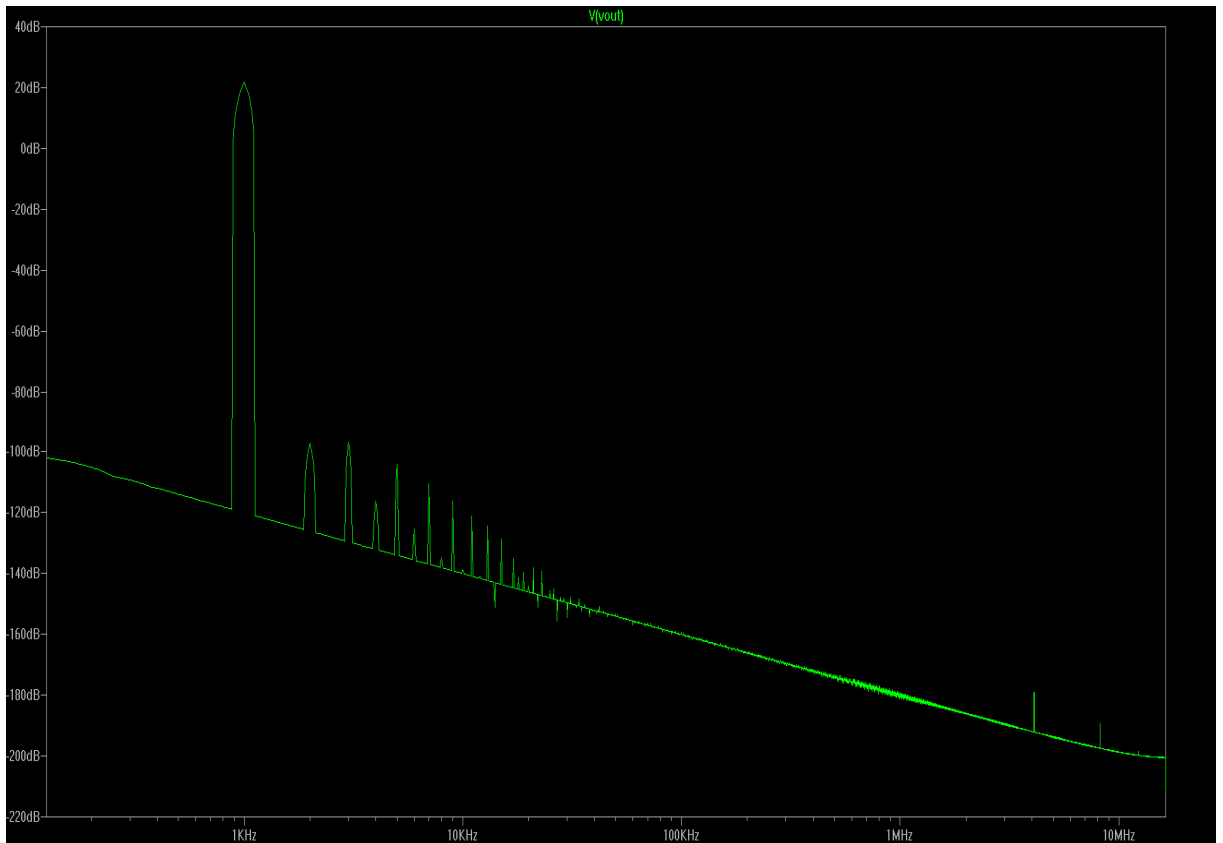
Distortion of Circlophone with MOSFET output and CCS + DC trim and Electrostatic speaker as load.

The rise of distortion above 6 to 8 KHz seems to me unimportant, since the harmonics products of the distortion fall outside the audioband and should probably be inaudible.

Hereunder is the harmonic content of output at 100 Hz at input of 0.5 Vrms. Distortion is almost pure H2 & H3.

Number	[Hz]	Component	Component	[degree]	Phase [deg]
1	1.000e+03	1.754e+01	1.000e+00	179.64°	0.00°
2	2.000e+03	1.983e-05	1.131e-06	-6.42°	-186.07°
3	3.000e+03	2.071e-05	1.181e-06	124.50°	-55.15°
4	4.000e+03	2.211e-06	1.260e-07	87.66°	-91.98°
5	5.000e+03	8.687e-06	4.952e-07	-165.01°	-344.65°
6	6.000e+03	7.575e-07	4.319e-08	167.61°	-12.03°
7	7.000e+03	4.214e-06	2.403e-07	-92.56°	-272.21°
8	8.000e+03	2.616e-07	1.492e-08	-156.34°	-335.99°
9	9.000e+03	2.143e-06	1.222e-07	-15.72°	-195.37°
10	1.000e+04	1.634e-07	9.317e-09	-170.56°	-350.20°
11	1.100e+04	1.244e-06	7.090e-08	67.23°	-112.41°
12	1.200e+04	1.288e-07	7.343e-09	-152.25°	-331.89°
13	1.300e+04	8.401e-07	4.789e-08	146.05°	-33.59°
14	1.400e+04	3.924e-08	2.237e-09	-160.58°	-340.23°
15	1.500e+04	5.251e-07	2.994e-08	-142.81°	-322.46°
16	1.600e+04	8.600e-08	4.903e-09	142.40°	-37.24°
17	1.700e+04	2.487e-07	1.418e-08	-65.35°	-244.99°
18	1.800e+04	1.193e-07	6.802e-09	171.19°	-8.45°
19	1.900e+04	1.459e-07	8.318e-09	50.25°	-129.40°
20	2.000e+04	8.880e-08	5.063e-09	-159.79°	-339.44°
21	2.100e+04	1.789e-07	1.020e-08	135.16°	-44.48°
22	2.200e+04	3.890e-08	2.218e-09	-169.02°	-348.66°
23	2.300e+04	1.515e-07	8.640e-09	-171.00°	-350.64°
24	2.400e+04	6.017e-08	3.430e-09	156.45°	-23.20°
25	2.500e+04	7.401e-08	4.219e-09	-133.36°	-313.00°
26	2.600e+04	7.790e-08	4.442e-09	178.34°	-1.30°
27	2.700e+04	2.390e-08	1.363e-09	174.31°	-5.34°
28	2.800e+04	5.822e-08	3.319e-09	-157.01°	-336.66°
29	2.900e+04	5.631e-08	3.210e-09	164.01°	-15.63°
30	3.000e+04	2.742e-08	1.563e-09	-169.64°	-349.29°
31	3.100e+04	5.744e-08	3.275e-09	-173.21°	-352.85°
32	3.200e+04	4.187e-08	2.387e-09	157.33°	-22.32°
33	3.300e+04	3.995e-08	2.278e-09	-166.11°	-345.75°
34	3.400e+04	5.432e-08	3.097e-09	175.27°	-4.38°
35	3.500e+04	3.472e-08	1.979e-09	179.35°	-0.30°
36	3.600e+04	4.340e-08	2.475e-09	-166.22°	-345.87°
37	3.700e+04	3.772e-08	2.151e-09	178.79°	-0.86°
38	3.800e+04	2.806e-08	1.600e-09	-176.43°	-356.07°
39	3.900e+04	3.431e-08	1.956e-09	-178.03°	-357.67°
40	4.000e+04	3.478e-08	1.983e-09	166.02°	-13.63°

Total Harmonic Distortion: 0.000174%



Open loop gain =  $>75^\circ$ , gainmarging is only 5.2 dB.

I can't find any traces of oscillation so far (but I'm not a specialist in electronics, nor LTspice)

