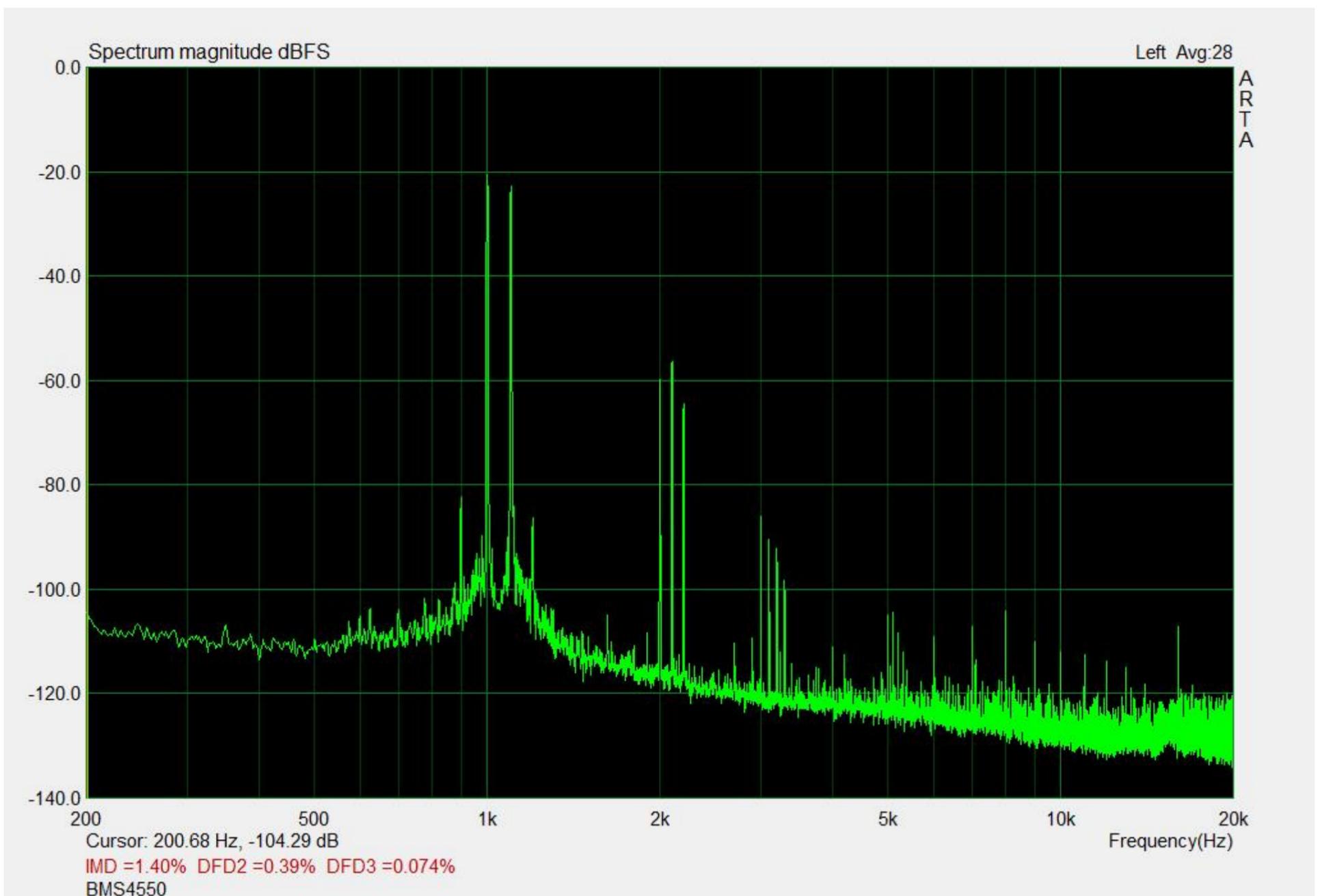
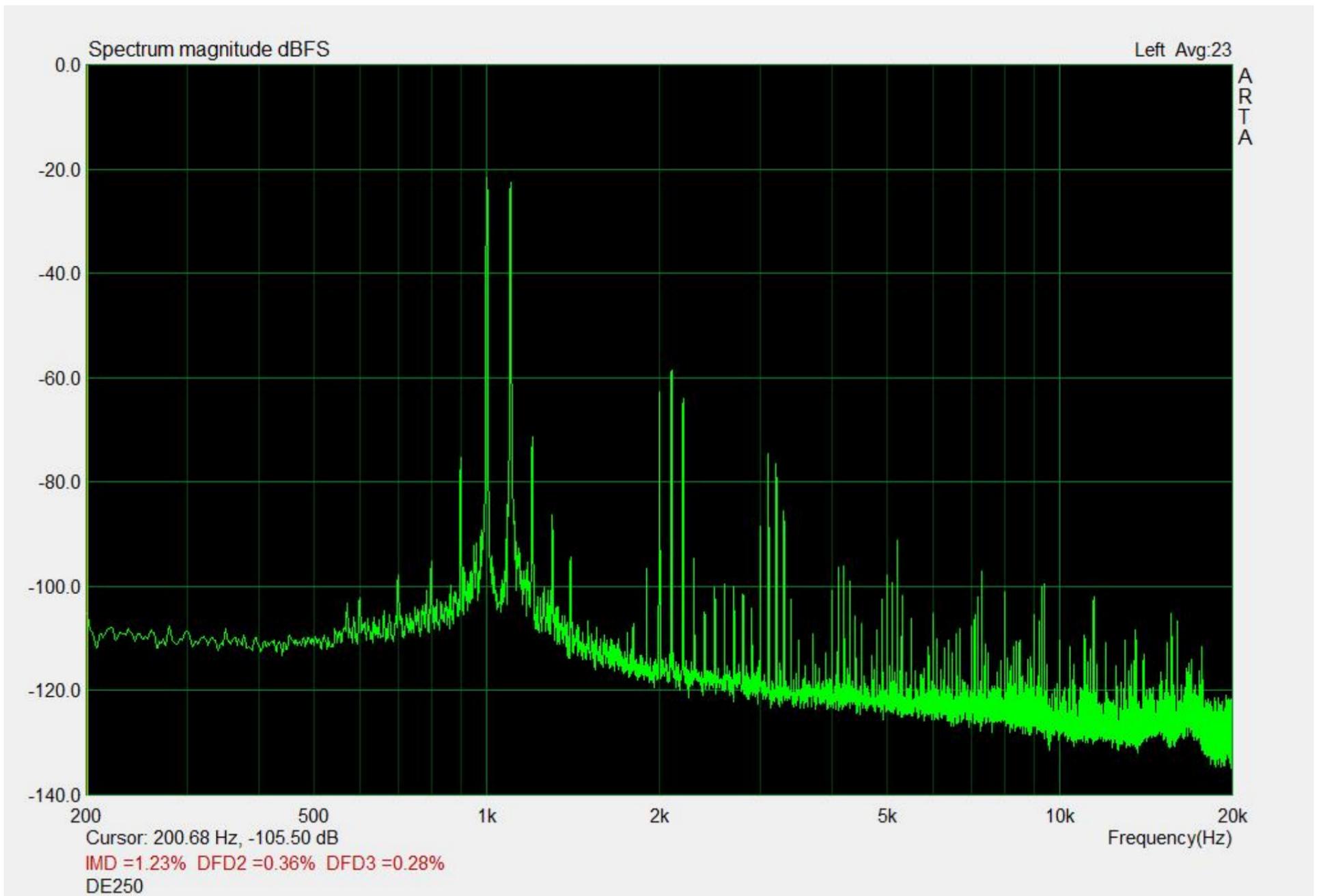
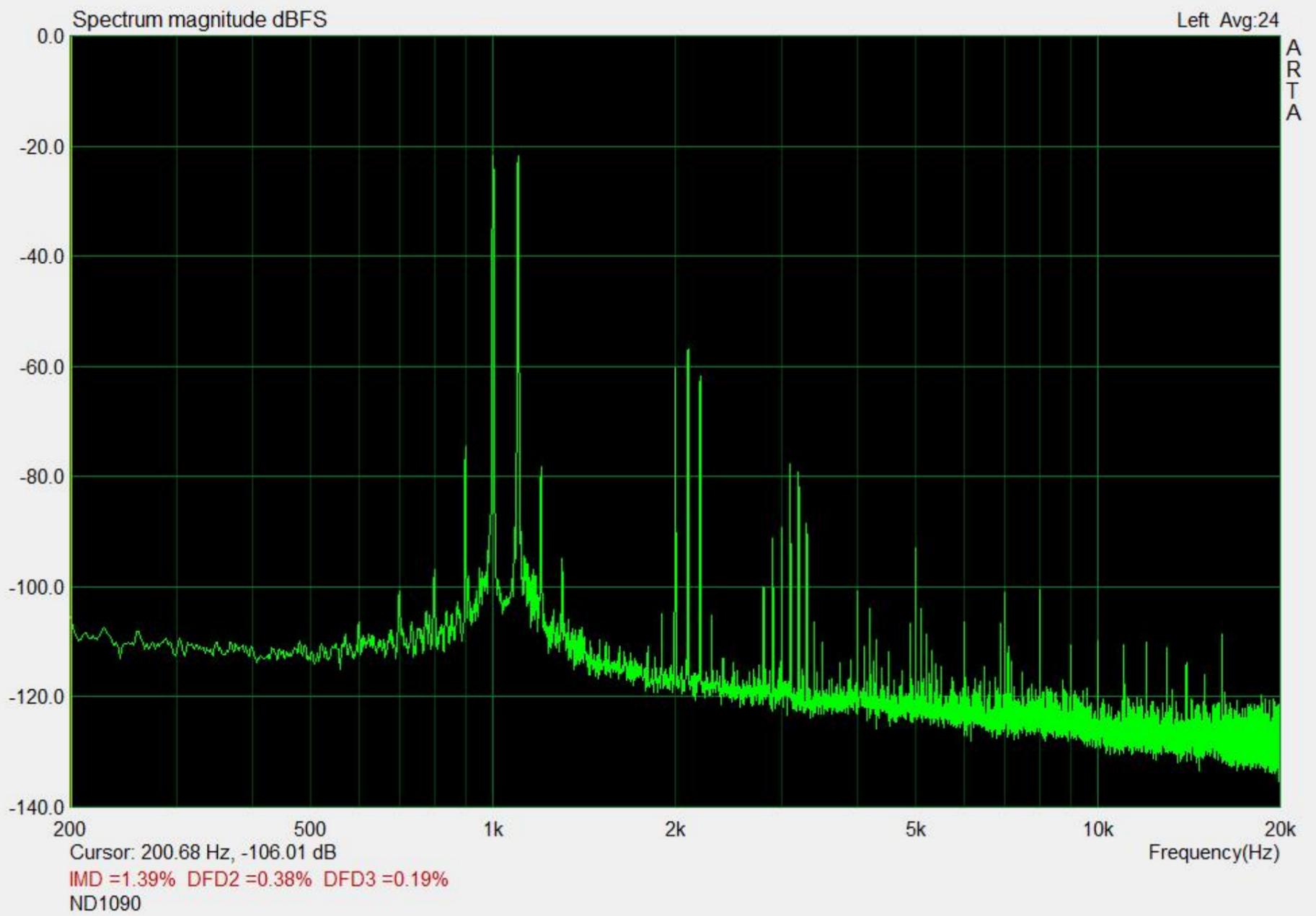
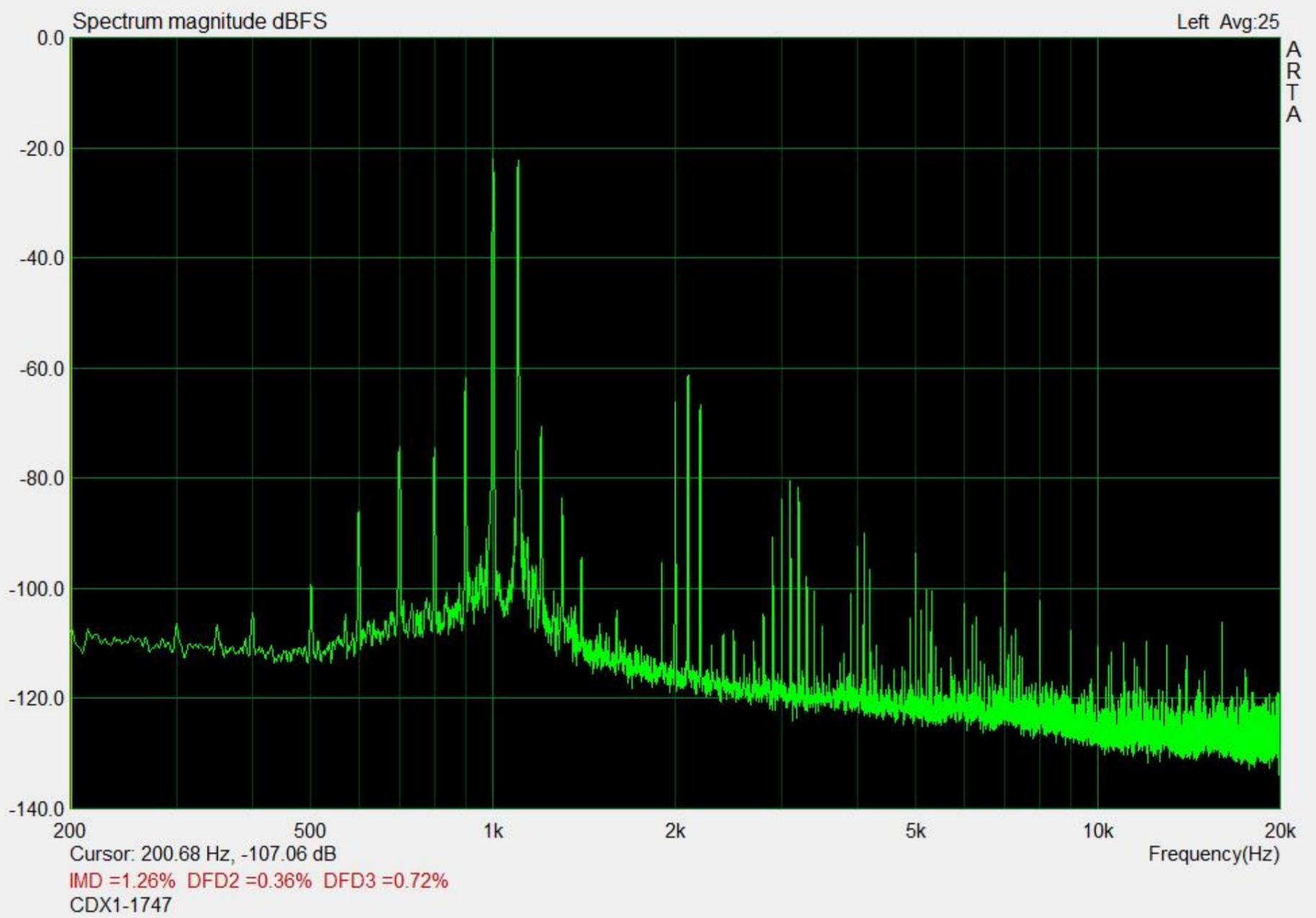
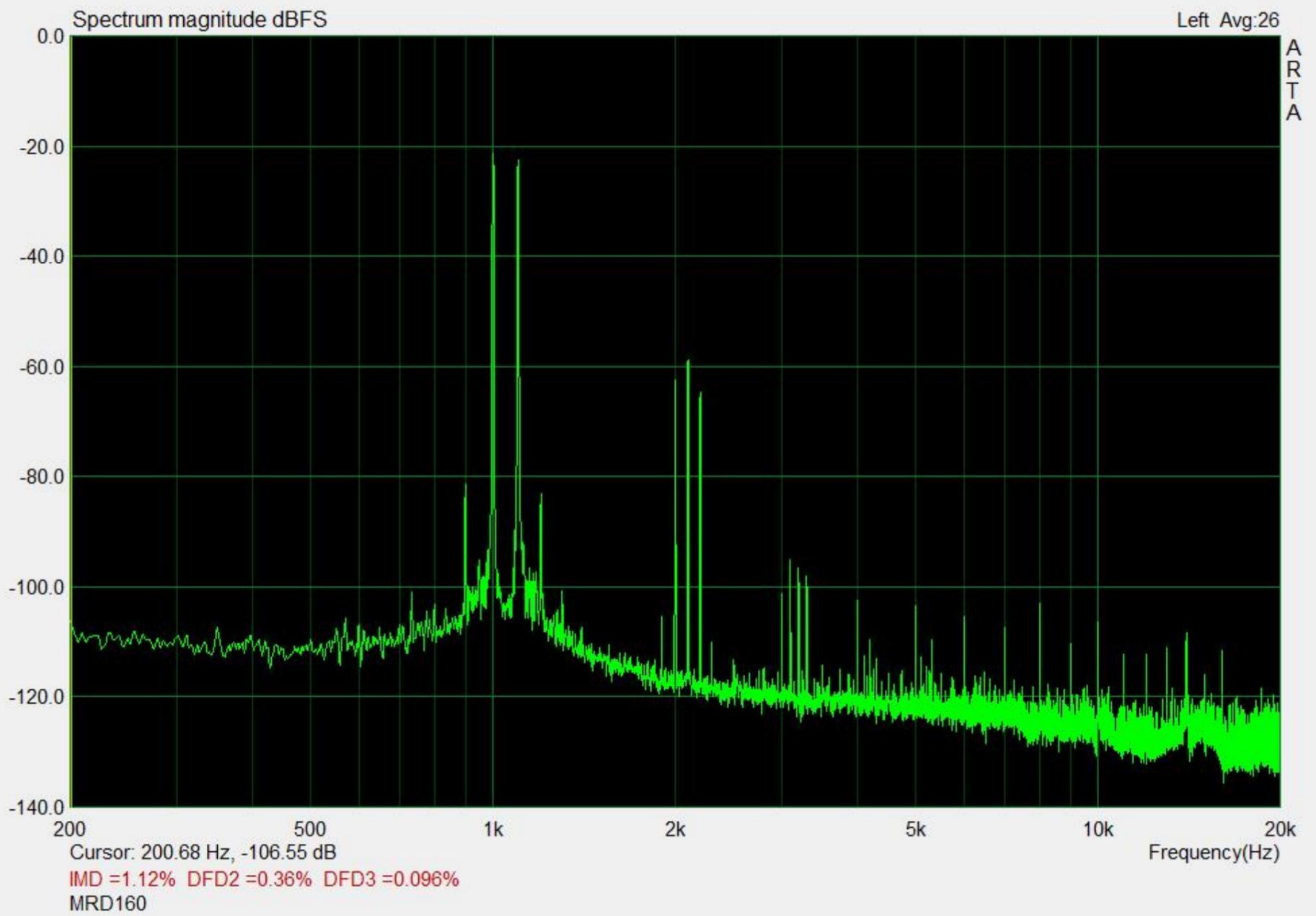
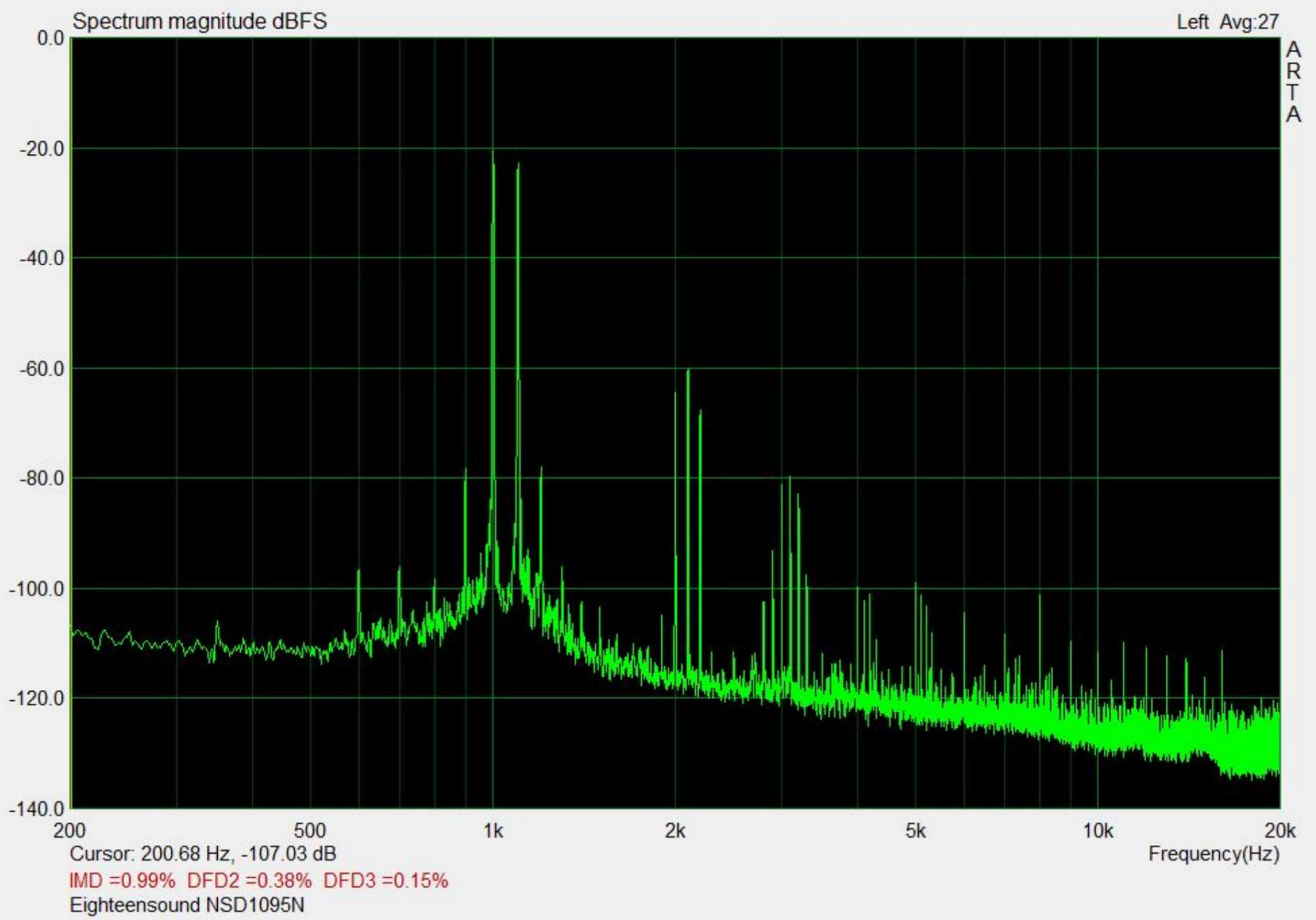


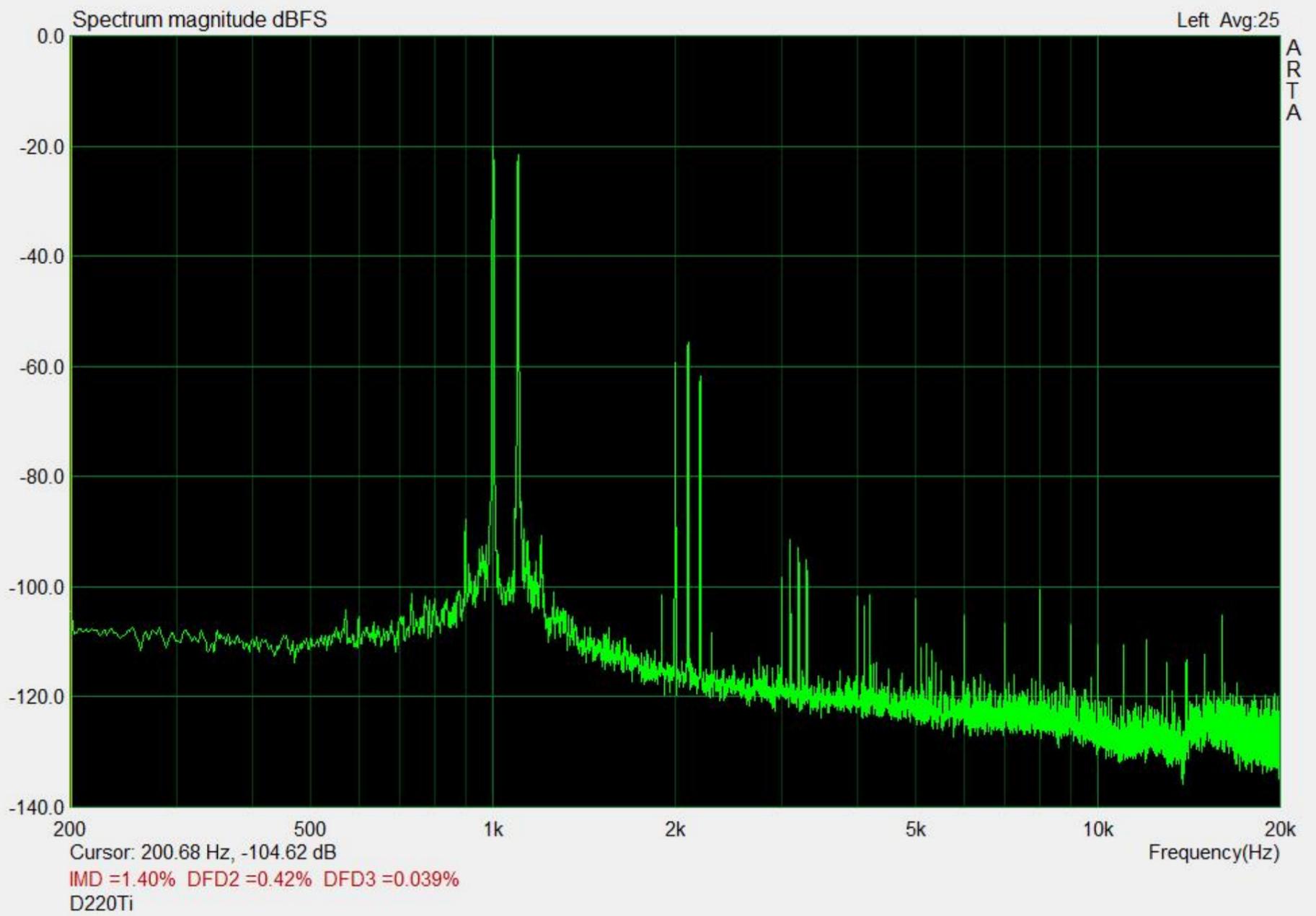
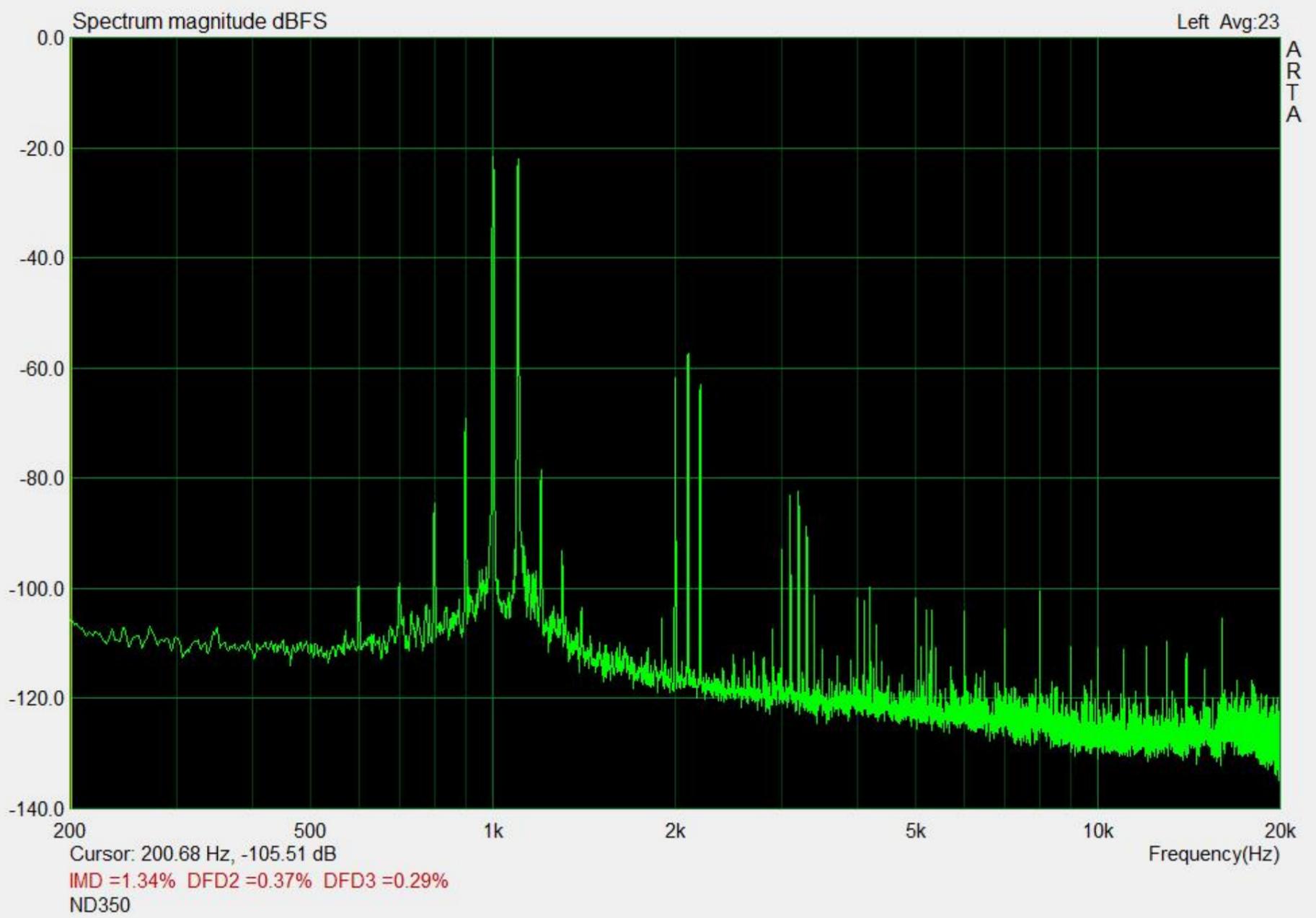
# Intermodulation distortions

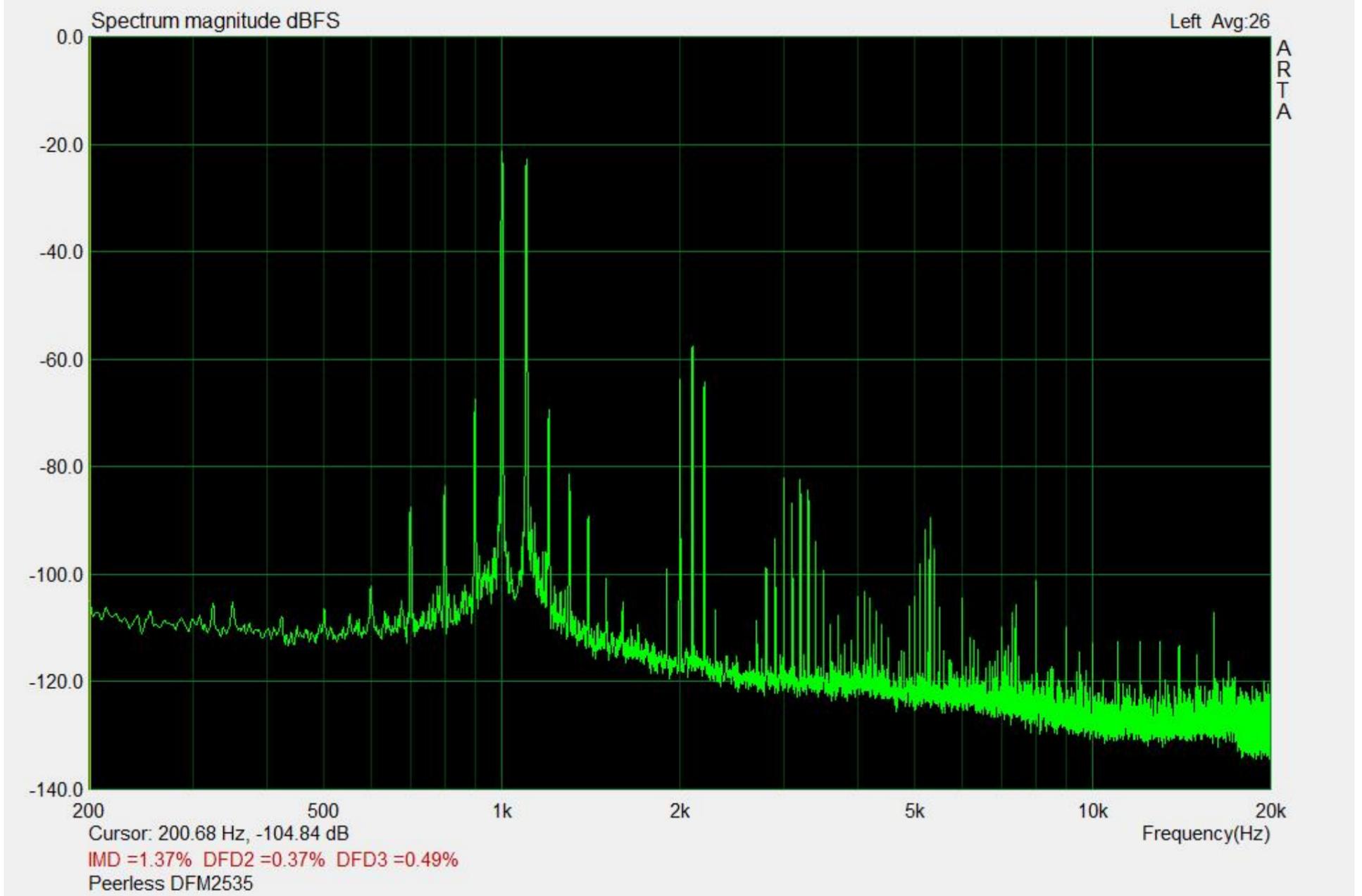
I only made a measurement at 100db / 1m with a double sine signal at 1000 + 1100 Hz. The conditions are the same as for harmonic distortion measurements.







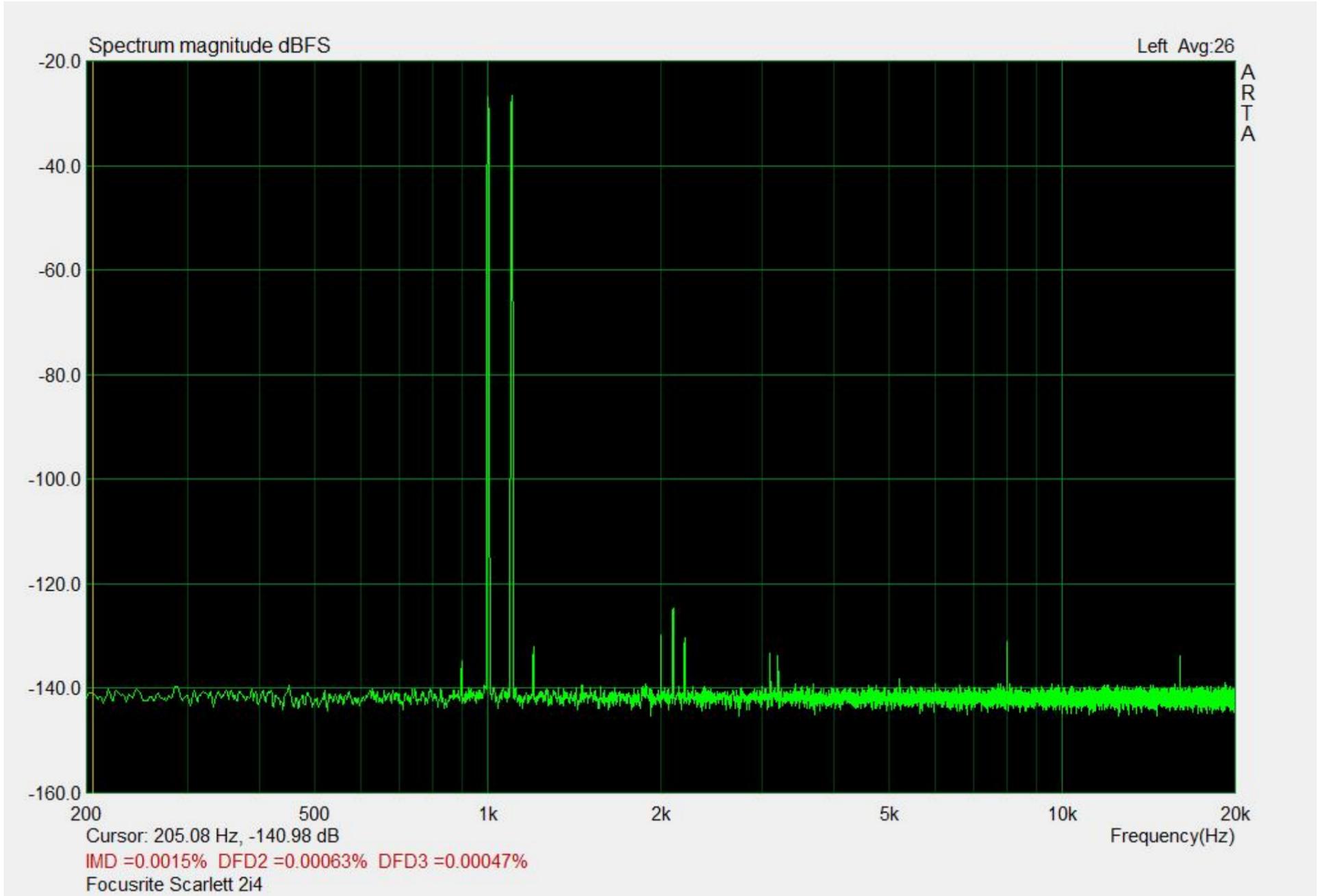




There are good disparities in the behavior of the compressions between them. If one sticks purely to the figures the classification would be a little different.

But I also look "with the eye" all the lines produced which are not products resulting from calculations but which exist nevertheless.

*NB: For the record, I posted in another test a measurement of my sound card in loopback with the same type of signal. Its intermodulation distortions are much lower than those of a speaker and better show what would be expected as a result.*



## IMD rating

1. BMS 4550, Monacor MRD 160, Selenium D220Ti
2. 18's NSD1095N
3. RCF ND350, 18's ND1090
4. JBL 2426J, B&C DE250
5. Celestion CDX1-1747, Tymphany DFM2535R

## Final Classification

As usual, I produced a summary table of the marks obtained. This time I applied a coefficient 2 to the harmonic distortions for the calculation of the overall score.

**Important note:** I don't have the impression that a compression really stands out from the others and if you have to choose from all these references you will have to apply your own selection criteria.

In addition, the test having been carried out with a single pavilion, the result should, in theory only be considered in the context of the Dayton H812 + compression couple tested. The result could be significantly different with another pavilion.

### Classement Final du Grand Comparatif de compressions 1 pouce

	Prix	Impedance	Temporel	Disto H 90db	Disto H 100db	Disto H 110db	Disto H Moy	Disto IMD	Note globale
<b>B&amp;C DE250</b>	3	4	3	5	5	3	4,3	4	3,8
<b>BMS 4550</b>	4	4	2	1	2	1	1,3	1	2,3
<b>Celestion CDX1-1747</b>	2	3	4	2	3	1	2,0	5	3,0
<b>18'S ND1090</b>	5	1	2	1	2	1	1,3	3	2,3
<b>18'SNSD1095N</b>	5	1	3	2	2	1	1,7	2	2,4
<b>JBL 2426J Radian</b>	6	2	4	1	4	2	2,3	4	3,4
<b>Monacor MRD160</b>	2	5	5	3	3	1	2,3	1	2,9
<b>RCF ND350</b>	3	3	3	1	1	2	1,3	3	2,4
<b>Selenium D220Ti-OMF</b>	2	4	4	1	3	1	1,7	1	2,4
<b>Tymphany DFM2535R</b>	1	2	1	4	5	2	3,7	5	2,7

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Rather than sticking to these notes I will rather bend to the exercise of a global comment for each compression.

#### B&C DE250

Good last of the group (and provided that the test model is not defective) it does not really shine by its benefits which are generally below all the others.

Nothing catastrophic in these performances which are, after all, no less good than many cone speakers in low medium which could be associated with it. You just have to know that there is better for not necessarily more expensive or not much more expensive.

#### BMS 4550

It is for me one of the big winners of the test. Its performances are very homogeneous in all areas. Without being a "low cost" value for money is excellent. It will allow low cuts (for 1 inch compression) and should fit in all your projects.

#### Celestion CDX1-1747

The performances are a little disparate. It is excellent in harmonic distortions but stumbles in intermodulation and its temporal behavior is not great. I find him of little interest.

#### 18's ND1090 and 18's NSD1095N

A little more expensive than the BMS 4550 the value for money is a little less good but we have excellent benefits too. They are part of the top of the basket in their category.

I will not really make a distinction between these two sisters are all very close behavior but I would just allow myself to think that the diaphragm technology supposedly more advanced on the NSD1095N does not really tip the scales.

#### JBL 2426J Radian diaphragm

The concept of value for money is not applicable here. It is the most expensive of the group (by far!) But its performances are rather average. As for the DE250, provided that the model tested is at its best, it is for me an outdated compression that belongs to history.

#### Monacor MRD 160

I stopped being interested in this compression when I measured its temporal behavior. It is part of the prohibition for me. It catches up a bit on its performance in distortion, especially in IMD.

#### RCF ND350

This small compression has for me its place on the podium with the BMS and the two Eighteensound. It is very compact, not very expensive, and its performance is first rate.

It has two faults: its temporal behavior is average without being catastrophic and it is not comfortable at high level on low cuts. But if you are looking for a small compression at a reasonable price for a cut > 1500Hz in domestic use it is frankly to consider.

### **Selenium D220Ti**

I have a shared opinion on this Selenium. A bit like the Monacor its temporal behavior is something to worry about, nevertheless the resonance is placed higher and I will give it the benefit of the doubt when listening. Why ? Because besides that it offers excellent services. Unlike the RCF this one is very efficient for considering a low cut, and if the resonance up there does not bother you too much it is to be taken into account for projects requiring a 1 inch low cut.

### **Tymphany DFM2535R**

This tymphany is exaggeratedly noted in this comparison. It owes it to its floor price and its excellent temporal behavior but as regards the performances in distortion it does not really shine and I will join part of the commentary on the B&C DE250.