



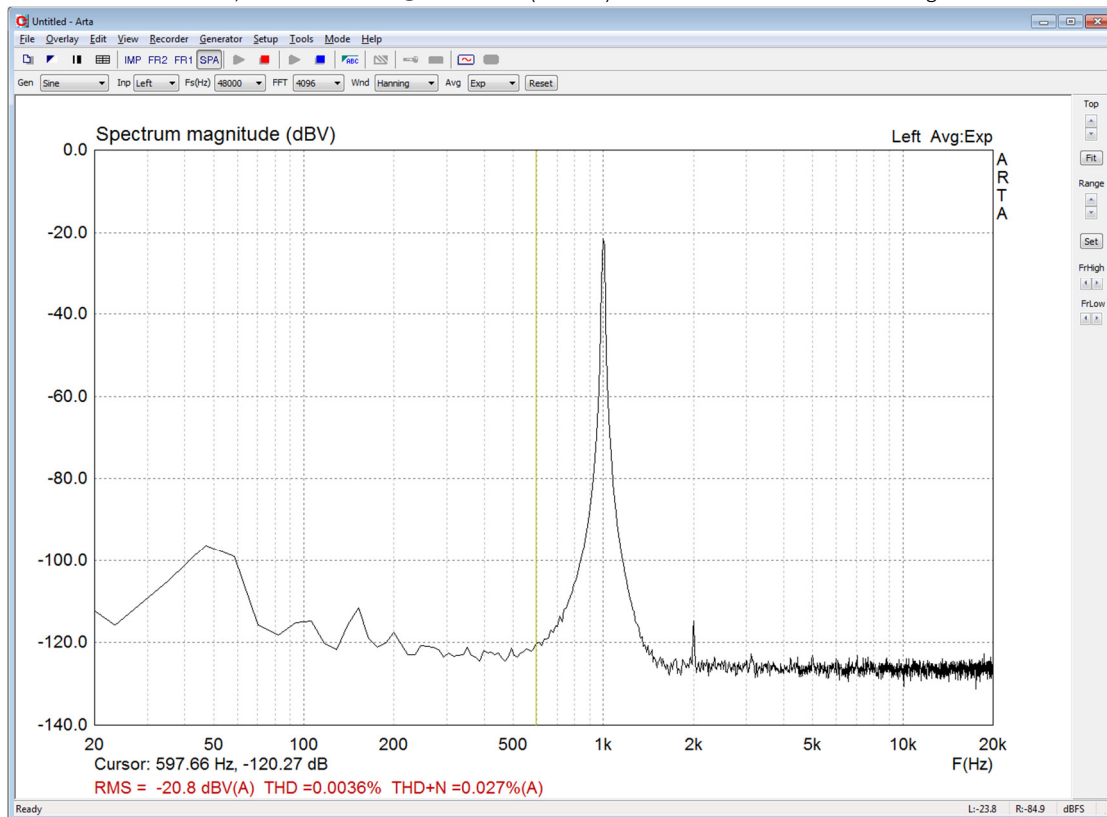
Panterri SA140TINY THD  
Class A/B



Measurements on our SA140DIY amplifier, <https://panterri.com/diy-gallery>  
Average THD over one minut, class A/B, +/-59Vdc, 20 min. warm up before test.  
Idle current adjusted to 25mV (180mA).

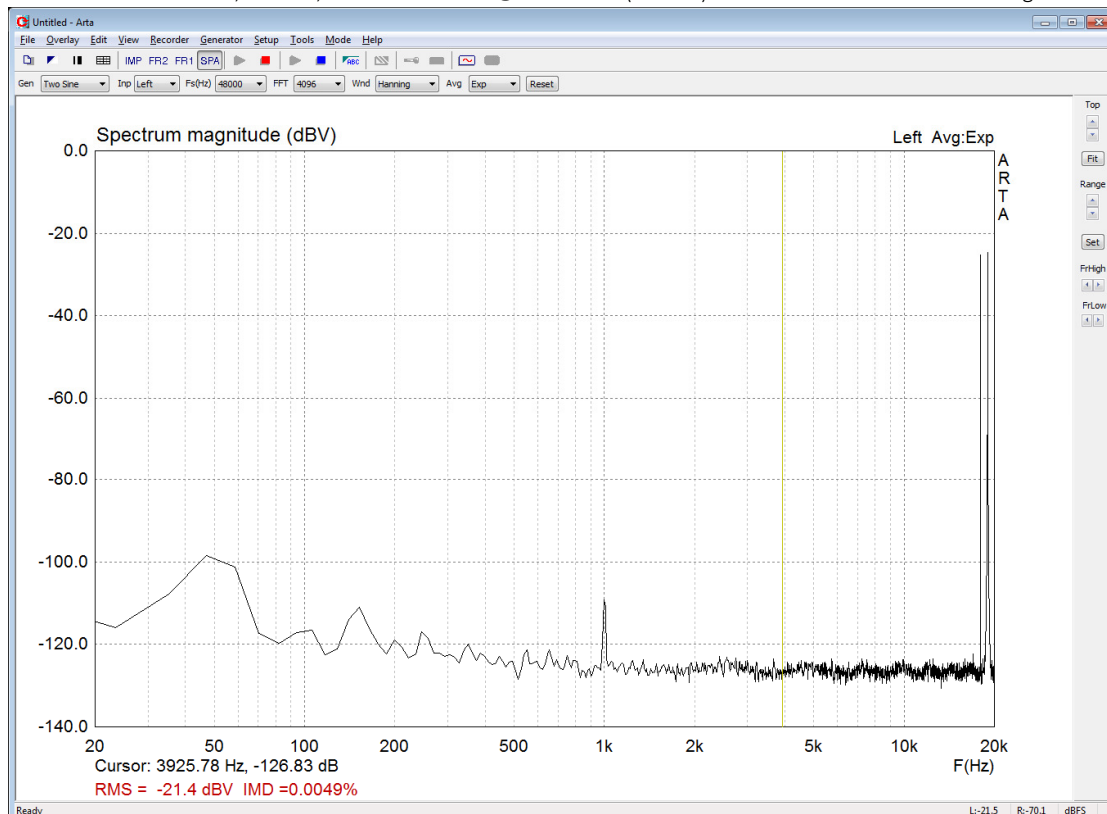
### 1 watt THD:

SA140 - 1W-8R class AB, THD = 0.0036% @ 25mV idle (180mA) +/-59Vdc - NORMAL drift – through INP22A.



### 1 watt IMD:

SA140 - 1W-8R class AB, IMD 18,19KHz = 0.0049% @ 25mV idle (180mA) +/-59Vdc - NORMAL drift – through INP22A.

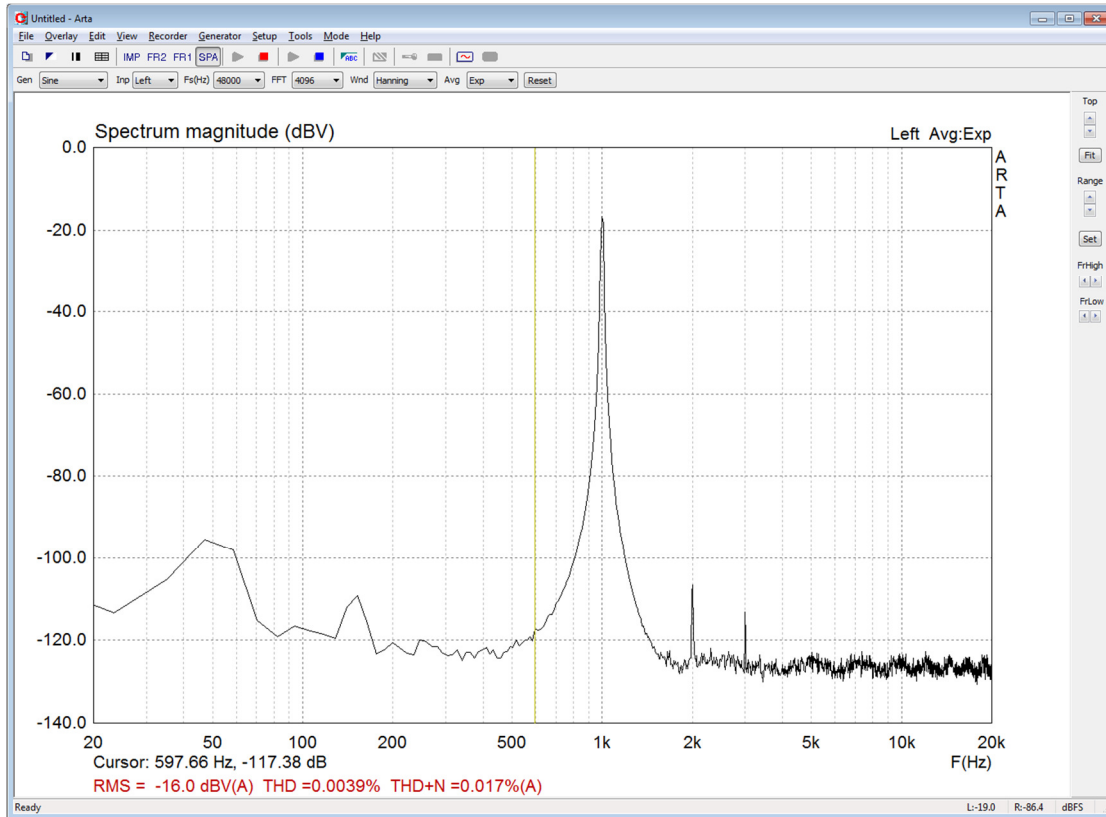




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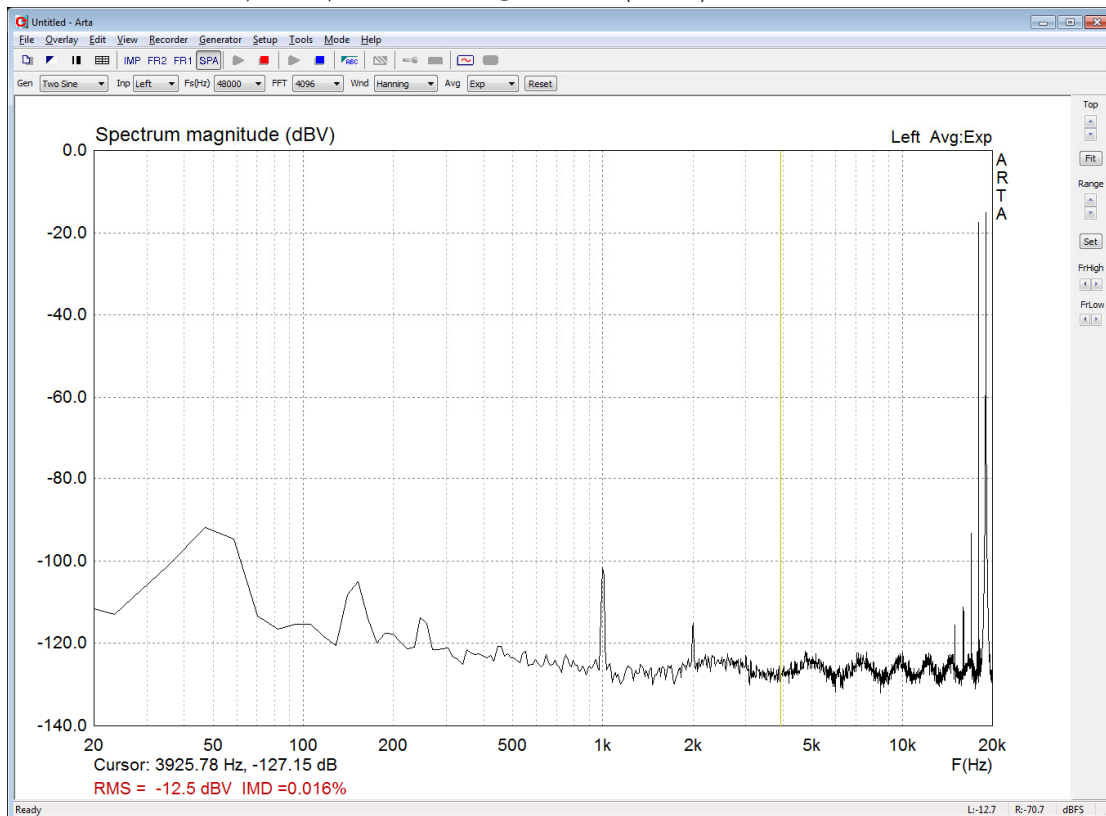
### 10 watt THD:

SA140 - 10W-8R class AB, THD = 0.0039% @ 25mV idle (180mA) +/-59Vdc - NORMAL drift – through INP22A.



### 10 watt IMD:

SA140 - 10W-8R class AB, IMD 18,19KHz = 0.016% @ 25mV idle (180mA) +/-59Vdc - NORMAL drift – direct.

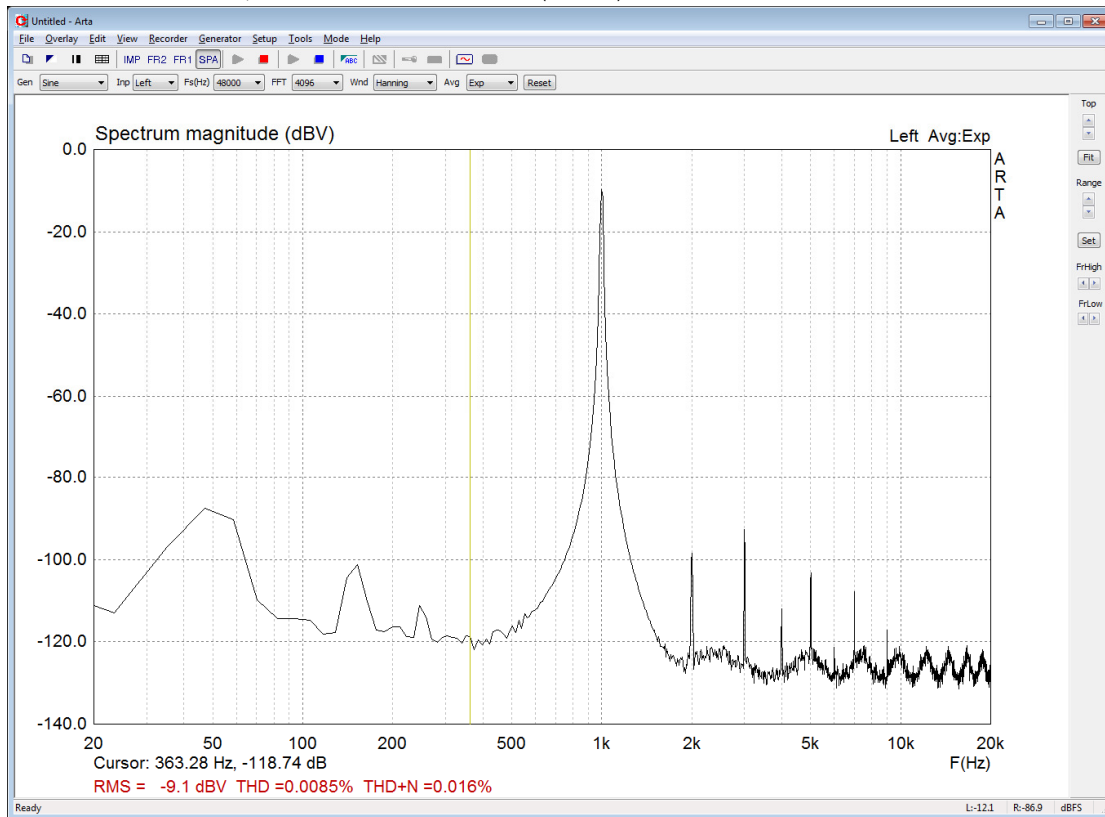




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Average THD over one minut, class A/B, +/-59Vdc, 20 min. warm up before test.  
Idle current adjusted to 25mV (180mA).

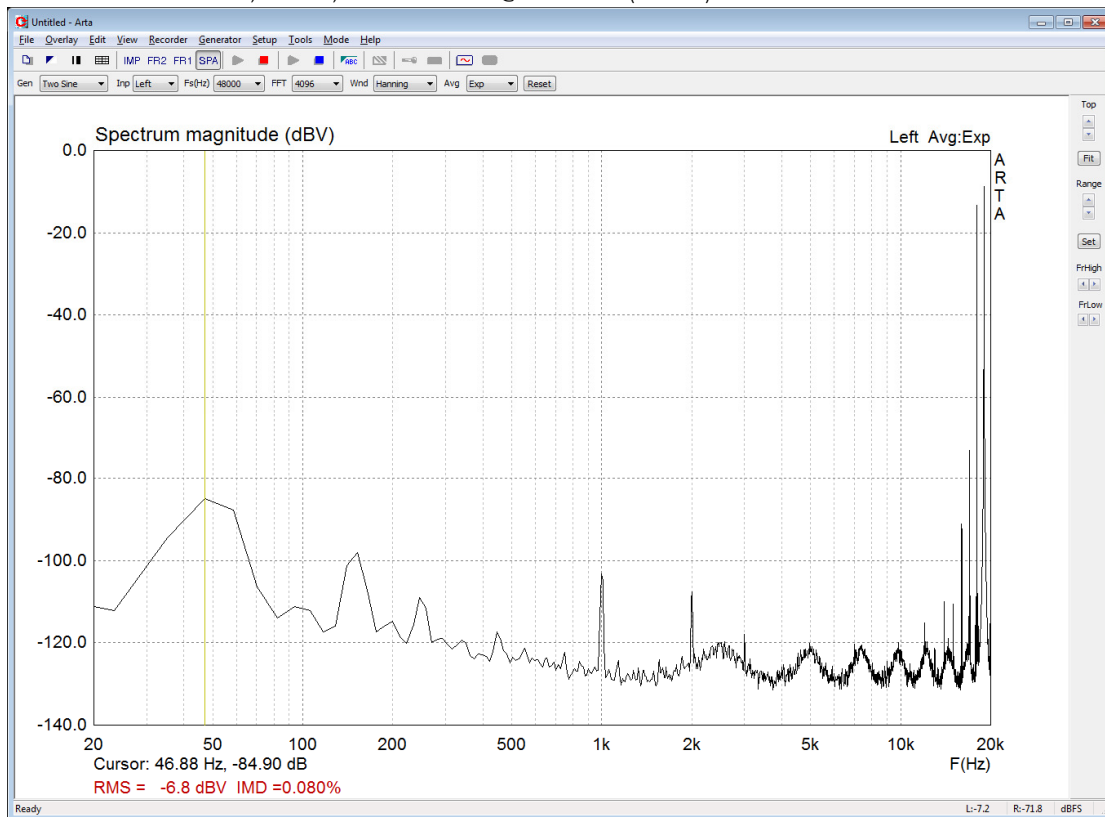
### 50 watt THD:

SA140 - 50W-8R class AB, THD = 0.0085% @ 25mV idle (180mA) +/-59Vdc - NORMAL drift – direct.



### 50 watt IMD:

SA140 – 50W-8R class AB, IMD 18,19KHz = 0.080% @ 25mV idle (180mA) +/-59Vdc - NORMAL drift – direct.

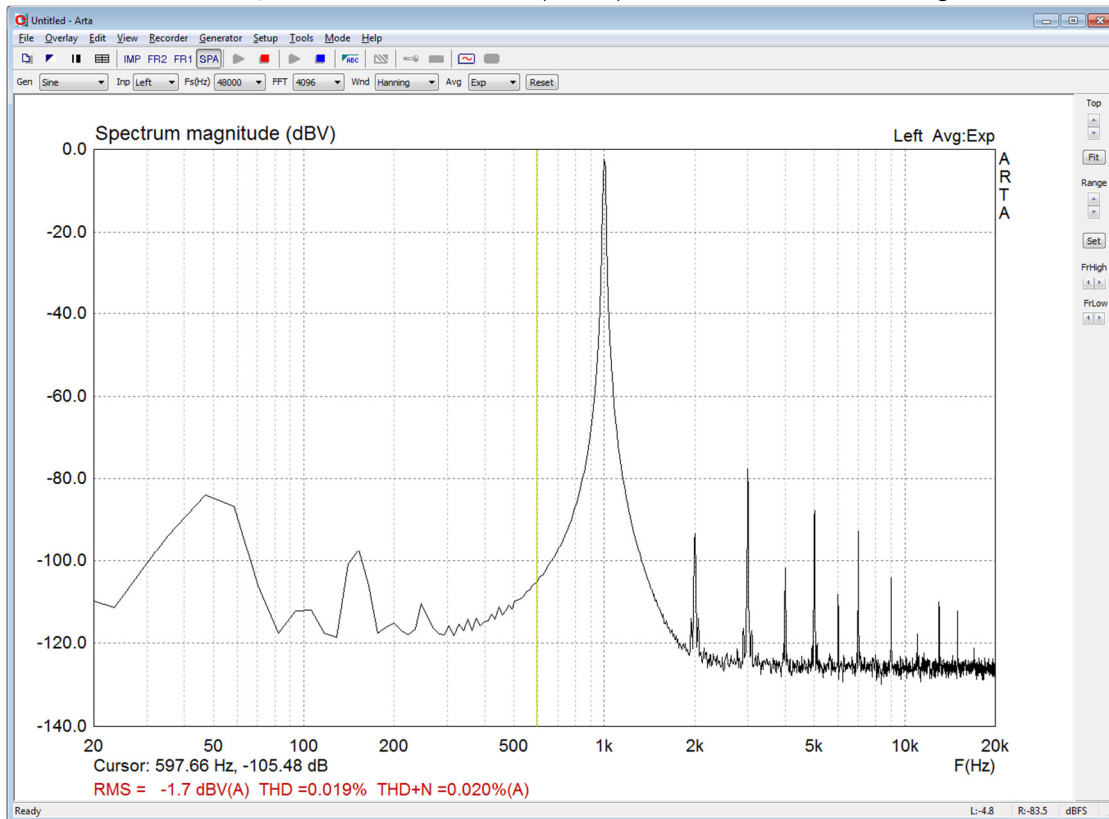




Measurements on our SA140DIY amplifier, <https://panterri.com/diy-gallery>  
Average THD over one minut, class A/B, +/-59Vdc, 20 min. warm up before test.  
Idle current adjusted to 25mV (180mA).

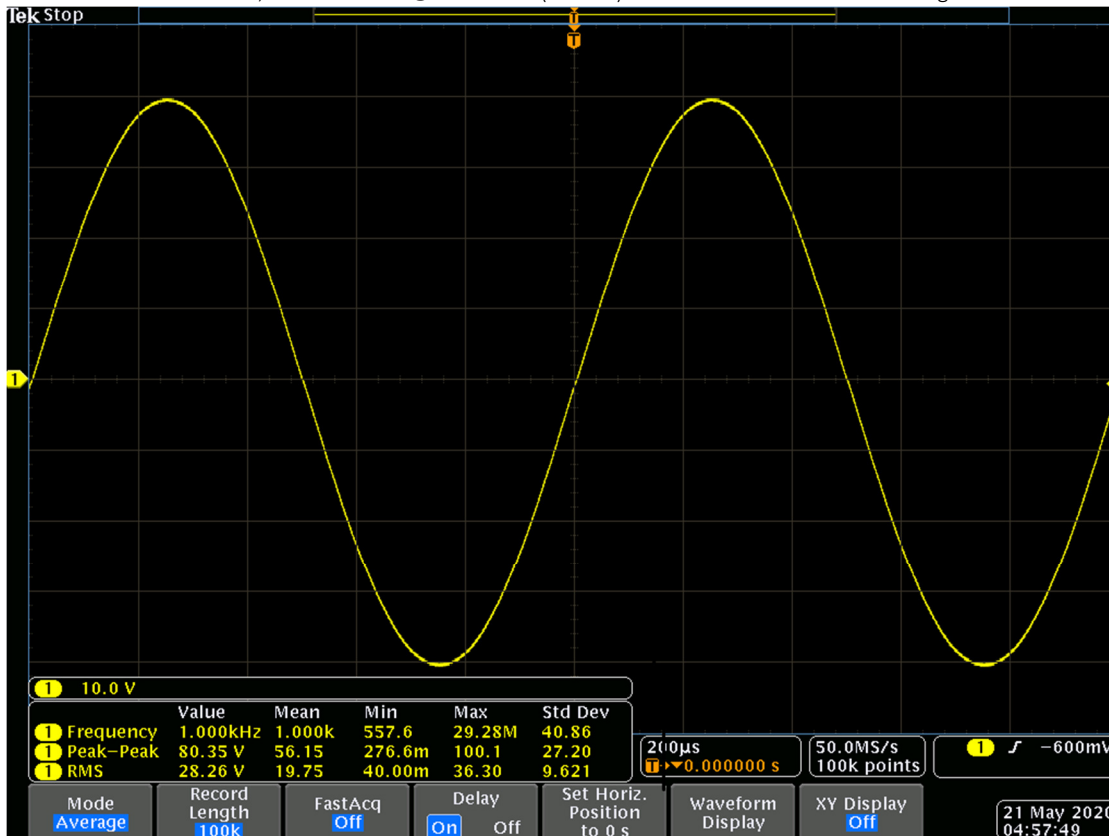
### 100 watt THD:

SA140 - 100W-8R class AB, THD = 0.019% @ 25mV idle (180mA) +/-59Vdc - NORMAL drift – through INP22A.



### 100 watt IMD: No measurements was done.

SA140 - 100W-8R class AB, THD = 0.019% @ 25mV idle (180mA) +/-59Vdc - NORMAL drift – through INP22A.





### **THD (Total Harmonic Distortion).**

These THD measurements are done by FLAT measurement and NOT through an A-weighting filter as usual. Most manufacturers measure their amplifiers through an A-weighting filter which concentrates the measurements around 1KHz which is the fundamental frequency of the measurement. In this way, hum and other undesirable noise are removed from the measurements and therefore the measurements often look better than they really are.

When we do not use an A-filter, the measurements are negatively affected because hum and low frequency noise, especially from the power supply, affects the results. It gets even worse when the output power increases because the current is increased and therefore also the hum.

All measurements in this document were made on the SA140DIY demonstration amplifier and not on a stand alone SA140TINY module. Some of the measurements is even done through our INP22A input selector PCB.

<https://panterri.com/diy-gallery>

It is important to mention that such precise measurements are easily influenced by many things, such as cables, length of cables, power supplies, ambient noise, temperatures, idle currents and much more.

### **IMD (Inter Modulation Distortion).**

IMD is an often overlooked measurement that many manufacturers do not usually show. This measurement is actually even more important than THD as it is more audible than THD.