

**RIGOL**  
Beyond Measure



### DG4000 Arbitrary Waveform Generator Noise Waveform Characteristics

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*Solution:* The DG4000 series of arbitrary waveform has an arbitrary waveform that will generate a noise waveform.

The bandwidth of the noise is  $\sim 140\text{MHz}$ .

See below for more details:

#### **DG4 Settings:**

Arb Function = Noise

CH1 Output Impedance = 50Ohm

Amplitude = 0dBm

#### **DSA Settings:**

Stop Frequency = 500MHz

RBW=VBW=1MHz

Sweep Time = Auto

Trace Type = Video Avg

Detector Type = Sample

Marker Normal-->10MHz-->Marker Delta-->Find the 3dB Noise Bandwidth

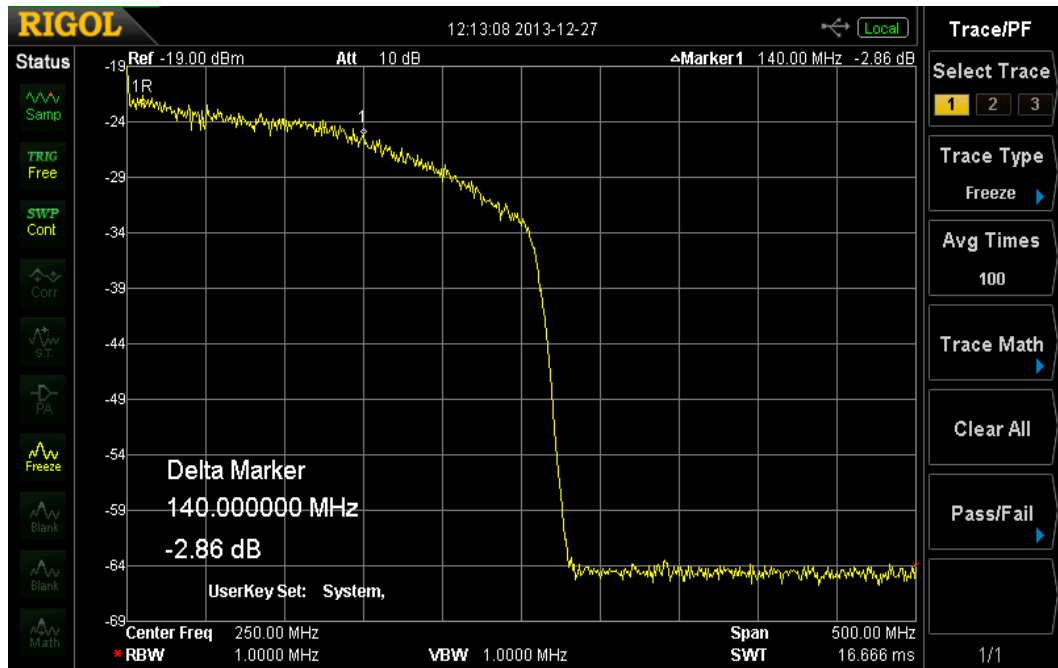


Figure 1: Output characteristics of a DG4000 Series Arb Noise waveform captured on a spectrum analyzer.



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