

# Protocol of RF Detector Calibration

IAP RAS

September 25, 2025

## 1 Measurement equipment

1. Microwave generator: Rigol DSG830
2. Spectrum analyzer: Rigol RSA5065N
3. Oscilloscope: Tektronix MD034

## 2 Parameters

Parameters from DetCal settings file shown below.

RF frequencies	[1000000000.0, 3000000000.0, 3]
RF levels	[-5.0, 14.0, 21]
SPAN wide	2000000.0
SPAN narrow	100000.0
RBW wide	10000.0
RBW narrow	1000.0
VBW wide	10000.0
VBW narrow	1000.0
REF level	10.0
SWEEP points	1001.0
SWEEP time	AUTO ON
Precise	True
HOR scale	0.01
High res	True
Impedance 50Ohm	True
Coupling DC	True
Channel	4
Recalc atten	True

Table 1: Measurement parameters

### 3 Results

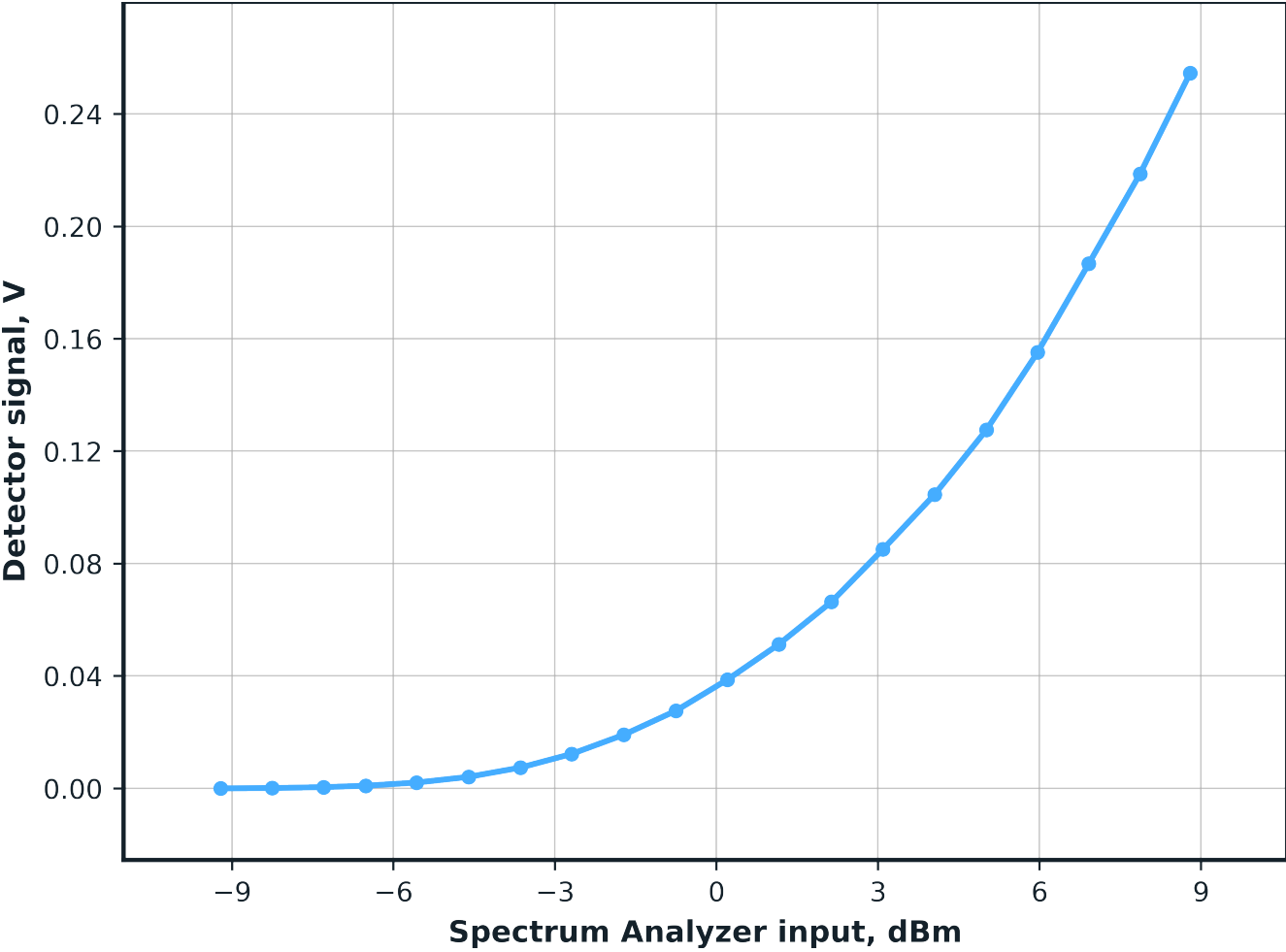


Figure 1: Detector response at 2000.00 MHz