Protocol of RF Detector Calibration

IAP RAS

September 26, 2025

1 Measurement equipment

1. Microwave generator: `Rigol DSG830`

2. Spectrum analyzer: `Rigol RSA5065N`

3. Oscilloscope: `Tektronix MDO34`

2 Parameters

Parameters from DetCal application settings file.

RF frequencies	2000 to 2900 MHz [3]
RF levels	-10.0 to 15.0 dBm [52]
SPAN wide	1000 kHz
SPAN narrow	100 kHz
RBW wide	10 kHz
RBW narrow	1 kHz
VBW wide	10 kHz
VBW narrow	1 kHz
REF level	14.0 dBm
SWEEP points	1001
SWEEP time	AUTO ON
Precise	True
HOR scale	10 ms/div
High res	True
Impedance 50Ohm	False
Coupling DC	True
Channel	4
Recalc atten	True

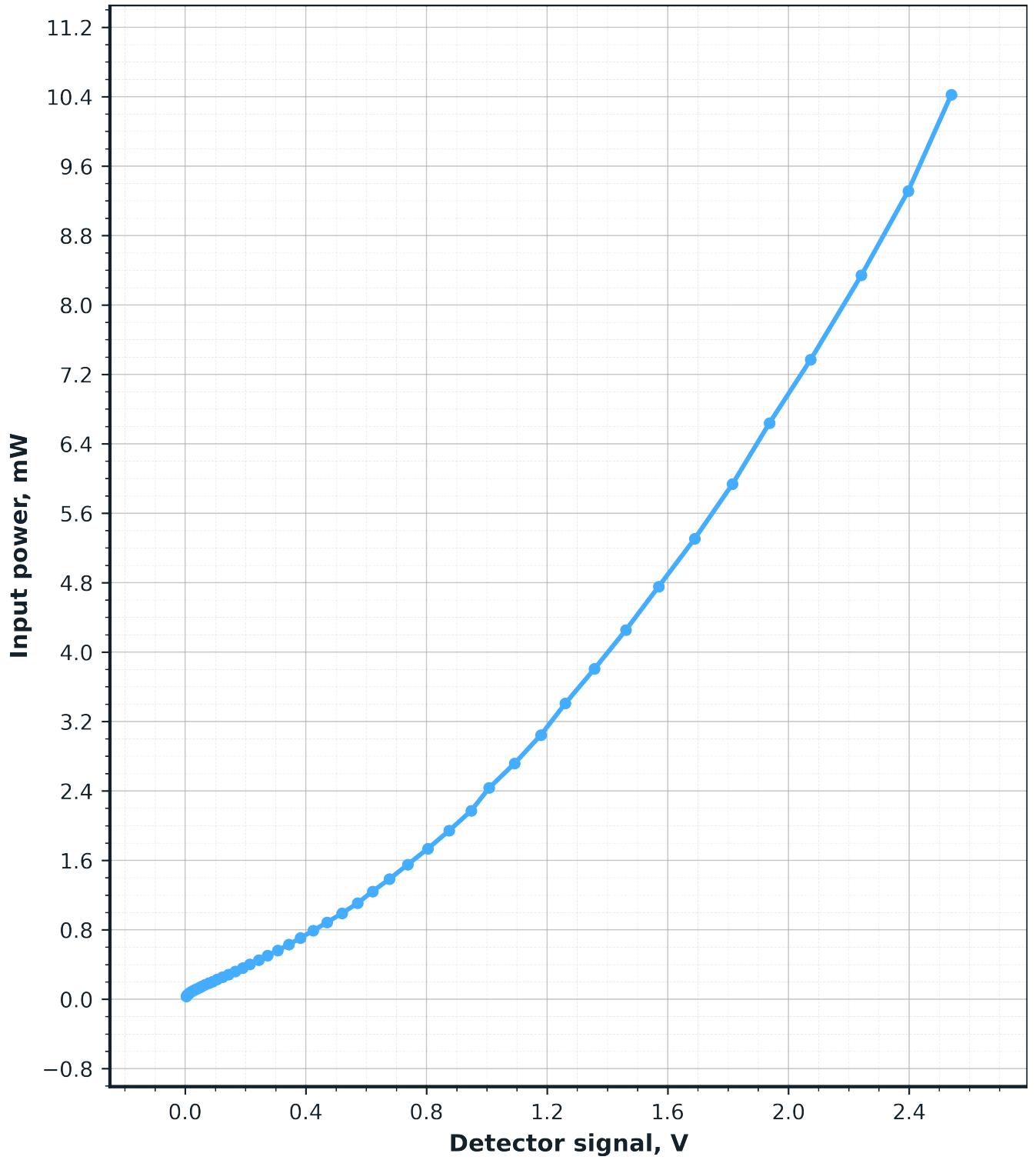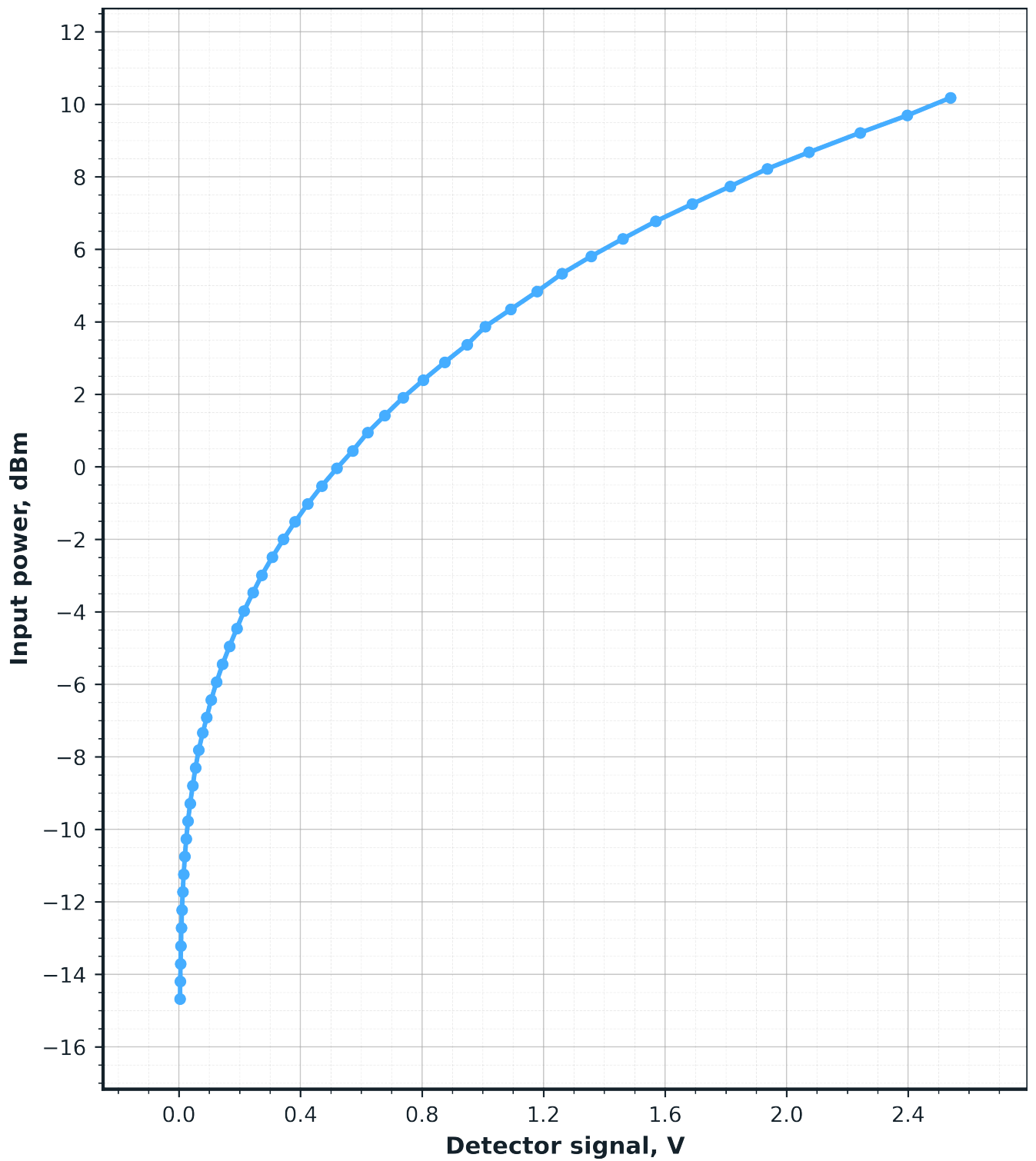Table 1: Measurement parameters

3 Results

Figure 1: Detector response at 2450 MHz

Figure 2: Detector response at 2450 MHz