



Bruker **BioSpin** MRI

ParaVision 360 V3.4

# Reference Power Adjustment

- TX Coil: RF RES 128 1H/13C 103/040  
L/L TR (BMRIDE T160788/0017)

# Table of Contents

1. Result Summary .....	2
2. Acquisition Information .....	2
3. Adjustment Progression .....	3
4. Profiles .....	5

## 1. Result Summary

Reference gain in use:

PVM_StudyRefPow	262.144 W
Reference Power Status	
Adjustment Status	Max power exceeded!

## 2. Acquisition Information

**Table 1. Protocol Parameters**

Method	Bruker:AdjRefPow
Nucleus	1H
Excitation Pulse Length	0.5 ms
Excitation Pulse Bandwidth	2,560 ms
Excitation Pulse Shape	bp.exc
Derive Init. Power	false
Adjustment Precision	0.3 dB
Initial Power	0.001 W
Max Power	400 W
Calculated Shape	false
Excitation Pulse Shape	bp.exc
Slice Thickness	5 mm
SliceOri	axial
Repetition Time	1,000 ms
Echo Time	15 ms
N Receive Channels	1
Channel Combination	SumOfSquares

**Table 2. Coil information**

Coil configuration	RF RES 128 1H/13C 103/040 L/L TR (BMRIDE T160788/0017)
Operation Mode	[1H] TX/RX Volume
Active Tx Coil	1
Tx Coil Element 1 active	true
Active Rx Coil	1
Active Receivers	1
Rx Coil Element 1 active	true

## Routing Information

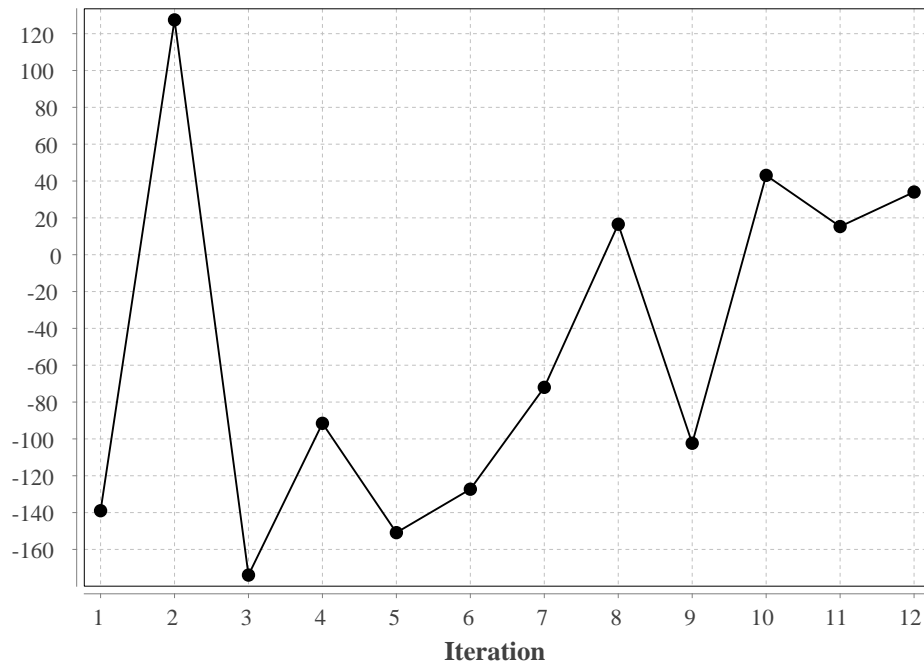
```

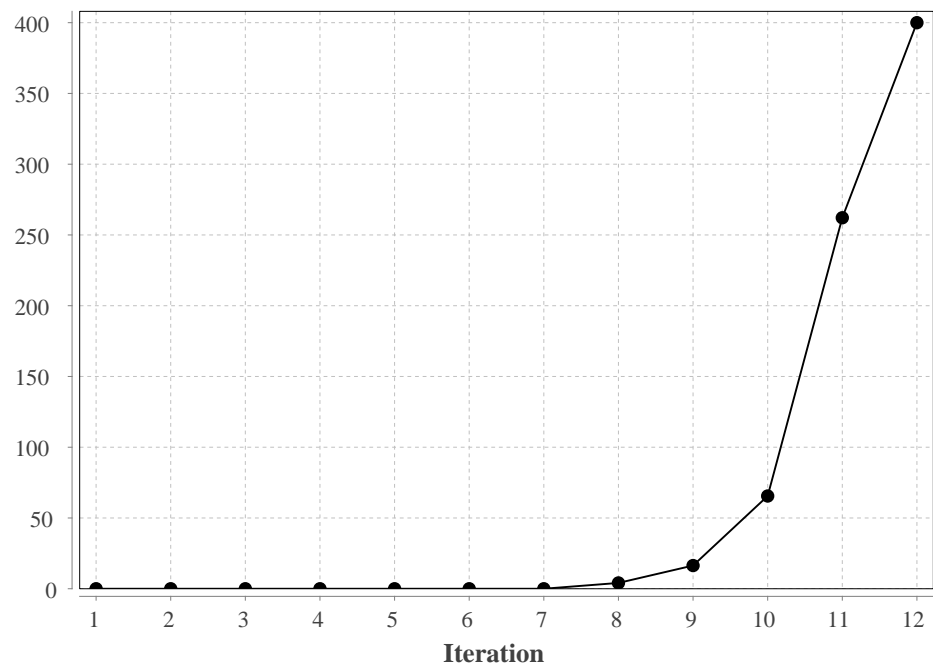
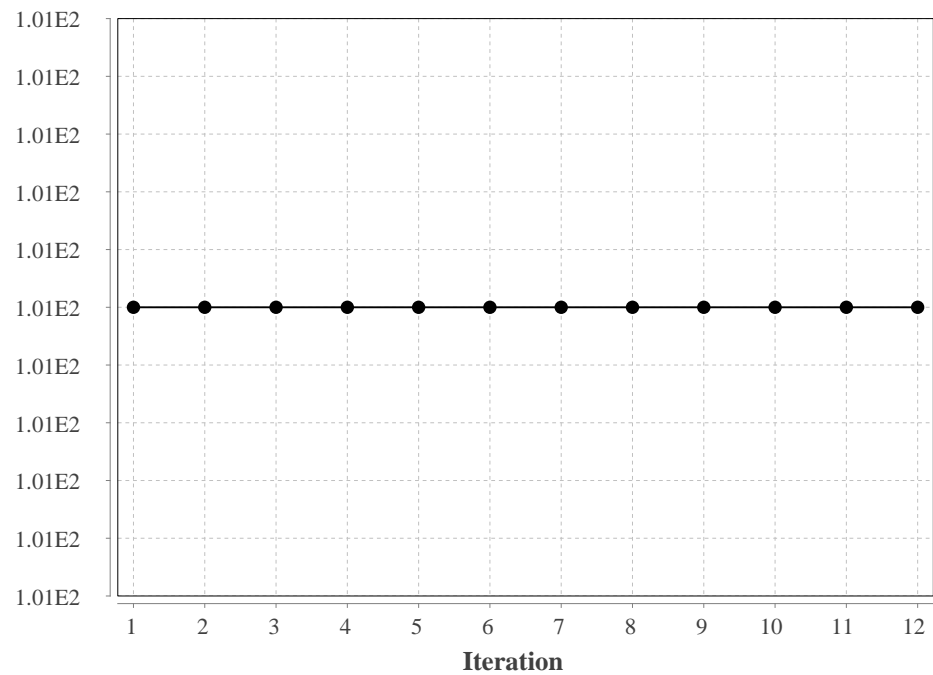
$Bis,1,20230404,2048,ROUTING,2#$Name,[1H]      TX/RX      Volume#$OpMode,1.0,D/
A,2.16.756.5.5.200.8323328.51270.1680621873.17#$TxCoil,1.0,1,RF RES 128 1H/13C 103/040
L/L  TR,BMRIDE,T160788,0017,1#$TxCoil,1.0,2,RF RES 128 1H/13C 103/040 L/
L  TR,BMRIDE,T160788,0017,2#$RxCoil,1.0,1,RF RES 128 1H/13C 103/040 L/
L  TR,BMRIDE,T160788,0017,1#$RxCoil,1.0,2,RF RES 128 1H/13C 103/040 L/L
TR,BMRIDE,T160788,0017,2#$RfConn,1.0, Chan,1, Nuc,1H#$RfConn,1.0, Chan,1, TxSgu,2#
$RfConn,1.0, TxSgu,2, Amp,2#$RfConn,1.0, Amp,2, TxPreamp,3#$RfConn,1.0, Chan,1,
RxSgu,2#$RfConn,1.0, RxSgu,2, Rec,2#$RfConn,1.0, Rec,2, RxPreamp,3#$RfConn,1.0, Chan,2,
Nuc,13C#$RfConn,1.0, Chan,2, TxSgu,1#$RfConn,1.0, TxSgu,1, Amp,1#$RfConn,1.0, Amp,1,
TxPreamp,2#$RfConn,1.0, Chan,2, RxSgu,1#$RfConn,1.0, RxSgu,1, Rec,1#$RfConn,1.0, Rec,1,
RxPreamp,2#$RfDevProp,1.0, Amp,1/2, HpMode,On#$RfDevProp,1.0, Amp,1, OutSwitchPos,1##
$EndBis,DF,4C#

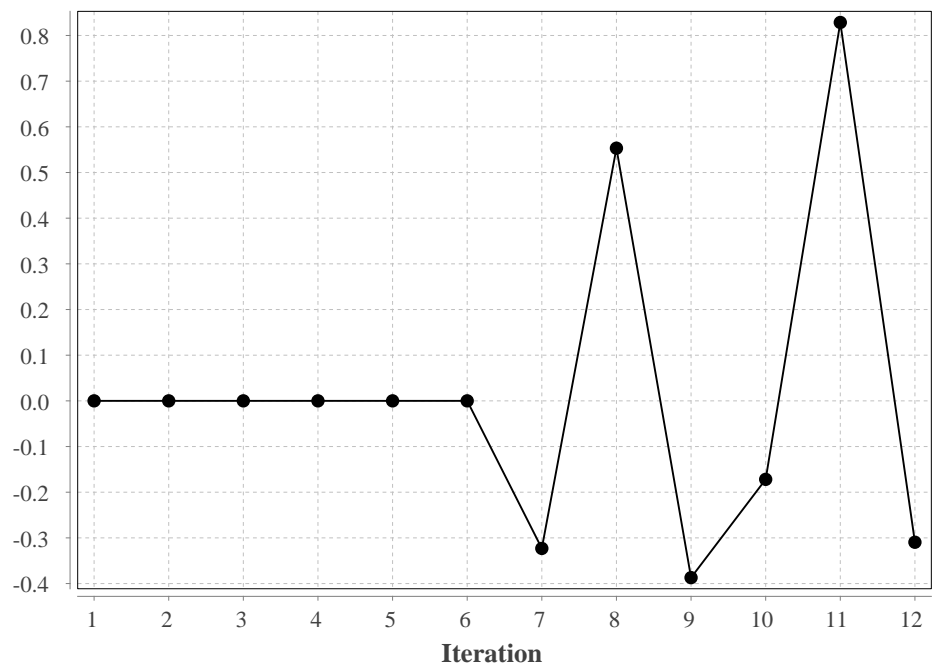
```

### 3. Adjustment Progression

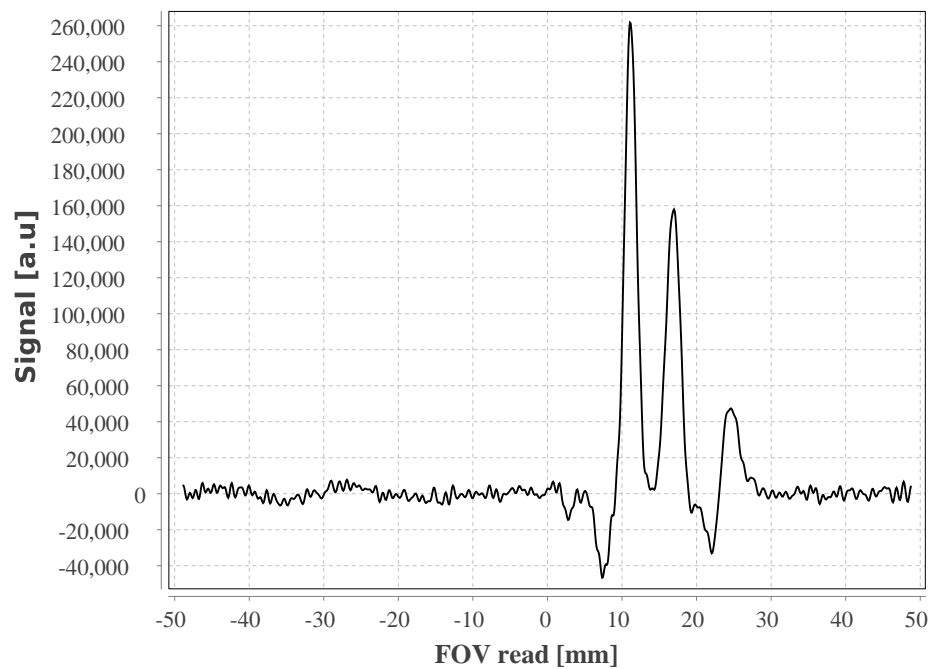
**Figure 1. Spin Echo Phase Channel 1**

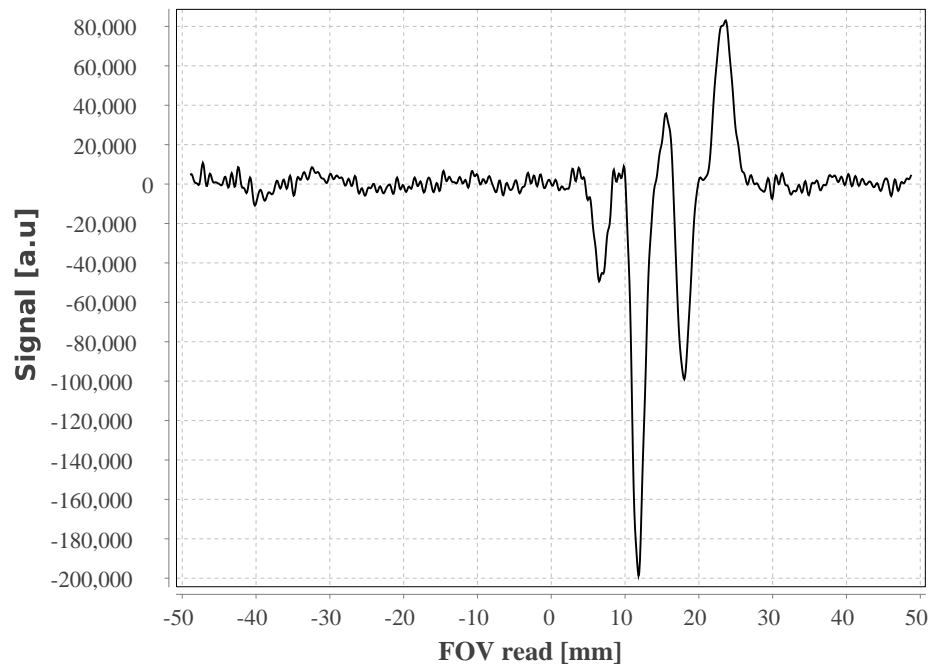
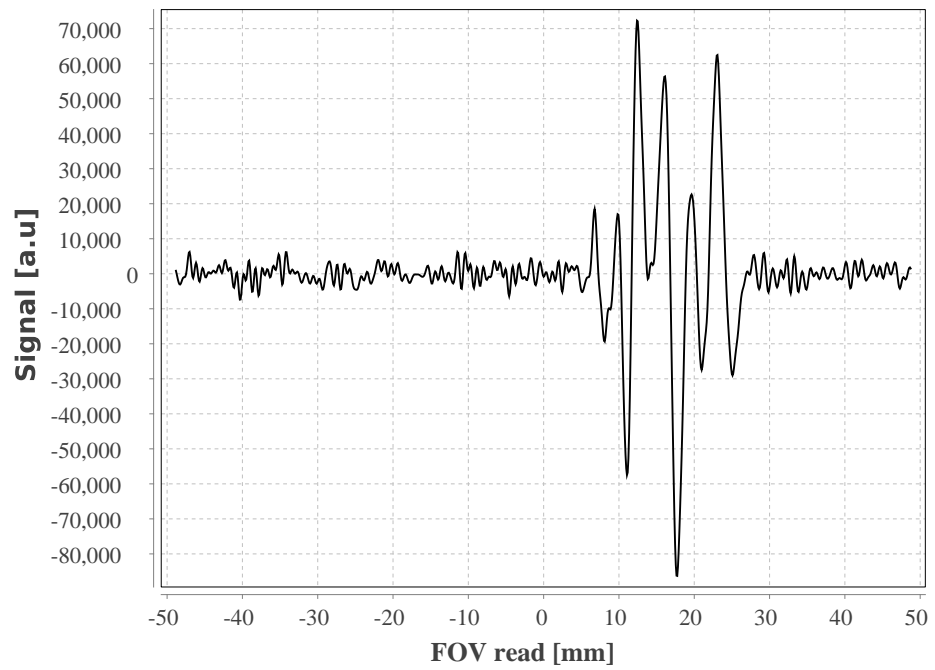


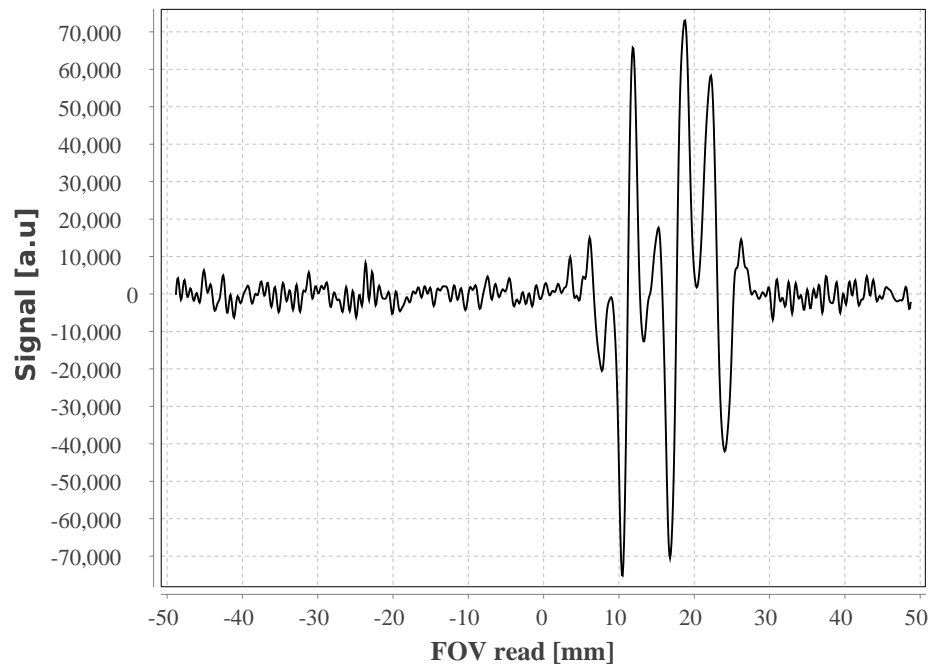
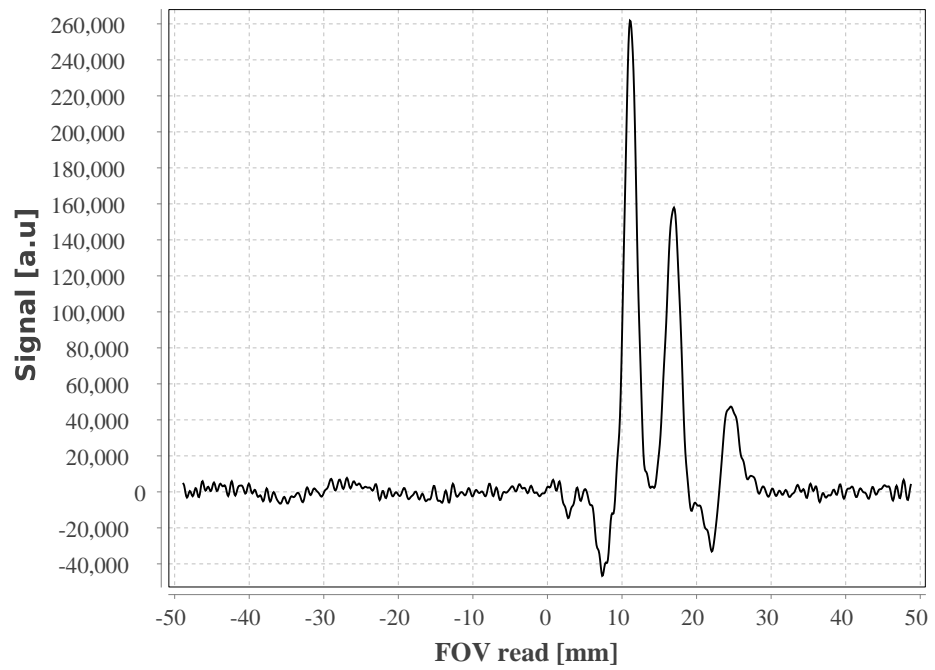
**Figure 2. Pulse Power of Adjustment Pulse****Figure 3. Receiver Gain**

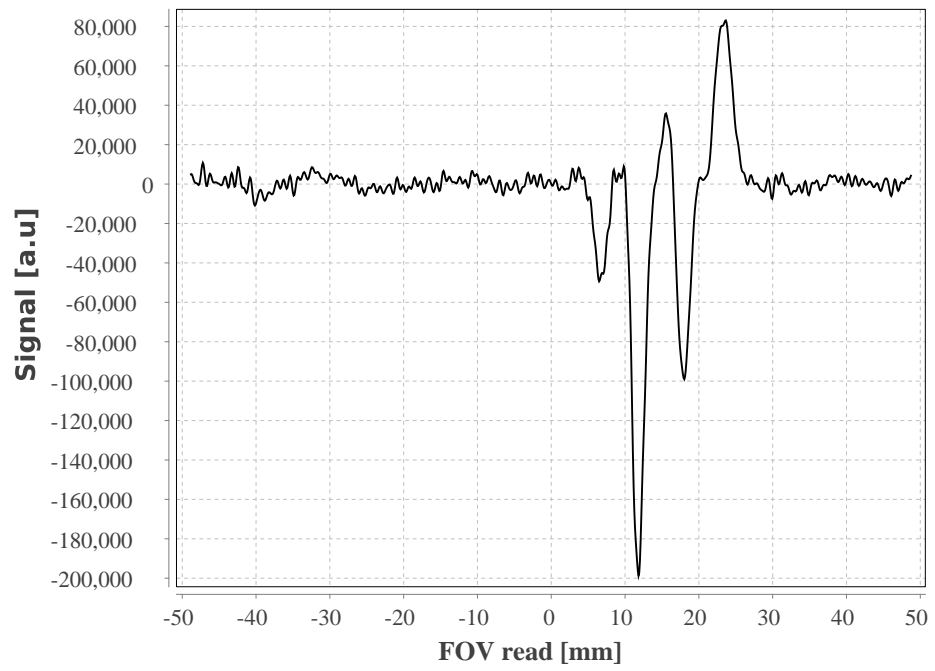
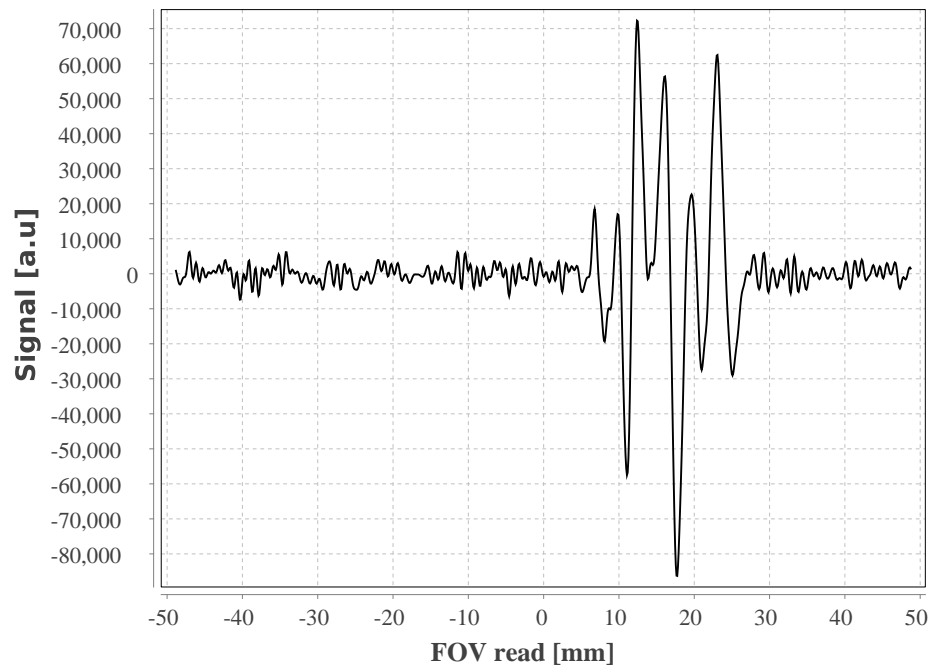
**Figure 4. STE / SE ratio**

## 4. Profiles

**Figure 5. Spin Echo Sum Profile (real part)**

**Figure 6. Spin Echo Sum Profile (imag part)****Figure 7. Stimulated Echo Sum Profile (real part)**

**Figure 8. Stimulated Echo Sum Profile (imag part)****Figure 9. Spin Echo Profile (real part) channel 1**

**Figure 10. Spin Echo Profile (imag part) channel 1****Figure 11. Stimulated Echo Profile (real part) channel 1**



**Figure 12. Stimulated Echo Profile (imag part) channel 1**