

Diagnostic Report

Date & Time Monday, February 20, 2017 9:14 AM
Instrument Model TSQ Quantiva
Instrument Serial TQH-Q1-0576
Software Version 2.0.1292.15

Name	Result	Value	Minimum	Maximum	Comment
Check Q1	Passed	-	-	-	-
Power supply check	True	-	-	-	-
RFC REF_5V_R	True	-	-	-	-
RFA N15V_R	True	-	-	-	-
RFA P15V_R	True	-	-	-	-
RFA P48V_R	True	-	-	-	-
RD P15V_R	True	-	-	-	-
RD N15V_R	True	-	-	-	-
RD P24V_R	True	-	-	-	-
RD P5V_R	True	-	-	-	-
Checking Functionality of Q1 RFC Board	True	-	-	-	-
Checking Communication between Q1 RFC and Q1 RFA Boards	True	-	-	-	-
Checking Q1 RFA board temperature	True	45.587	-	70	-
Checking coaxial cable connection between Q1 RFA and Q1 Coil Box	True	-	-	-	-
Checking Continuity between Q1 and Q1 Coil Box	True	-	-	-	-
Checking resonant frequency of Q1 circuit	True	1005.005	1004.5	1005.5	-
Checking Q1 RFA board ramp	True	-	-	-	-
Checking Communication between Q1 RFC and Q1 Rod Driver Boards	True	-	-	-	-
Checking continuity between RD Board and capacitor in Q1 Coil Box	True	135104.938	-	-	-
Checking basic functionality of Q1 Rod Driver Board	True	-	-	-	-
Check Q3	Passed	-	-	-	-
Power supply check	True	-	-	-	-
RFC REF_5V_R	True	-	-	-	-
RFA N15V_R	True	-	-	-	-
RFA P15V_R	True	-	-	-	-
RFA P48V_R	True	-	-	-	-
RD P15V_R	True	-	-	-	-
RD N15V_R	True	-	-	-	-
RD P24V_R	True	-	-	-	-
RD P5V_R	True	-	-	-	-
Checking Functionality of Q3 RFC Board	True	-	-	-	-
Checking Communication between Q3 RFC and Q3 RFA Boards	True	-	-	-	-
Checking Q3 RFA board temperature	True	45.694	-	70	-
Checking coaxial cable connection between Q3 RFA and Q3 Coil Box	True	-	-	-	-
Checking Continuity between Q3 and Q3 Coil Box	True	-	-	-	-

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Checking resonant frequency of Q3 circuit	True	1005.063	1004.5	1005.5	-
Checking Q3 RFA board ramp	True	-	-	-	-
Checking Communication between Q3 RFC and Q3 Rod Driver Boards	True	-	-	-	-
Checking continuity between RD Board and capacitor in Q3 Coil Box	True	133558.078	-	-	-
Checking basic functionality of Q3 Rod Driver Board	True	-	-	-	-

Check Q1:

1. Checking Power Supplies (5 cycles)

- Cycle #1
- Cycle #2
- Cycle #3
- Cycle #4
- Cycle #5

2. Checking Functionality of Q1 RFC Board

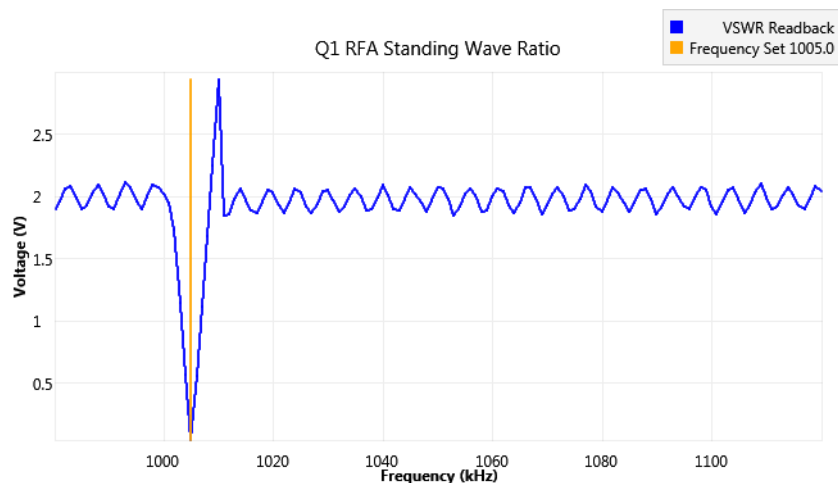
3. Checking Communication between Q1 RFC and Q1 RFA Boards

4. Checking Q1 RFA board temperature

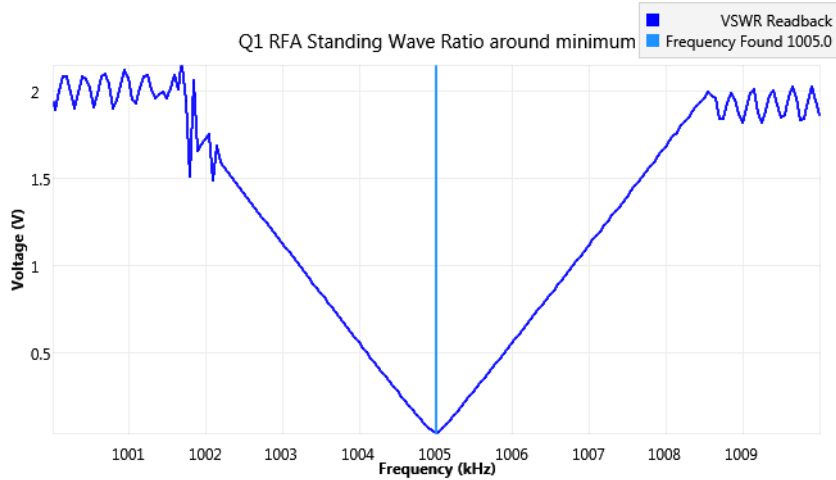
5. Checking coaxial cable connection between Q1 RFA and Q1 Coil Box

6. Checking Continuity between Q1 and Q1 Coil Box

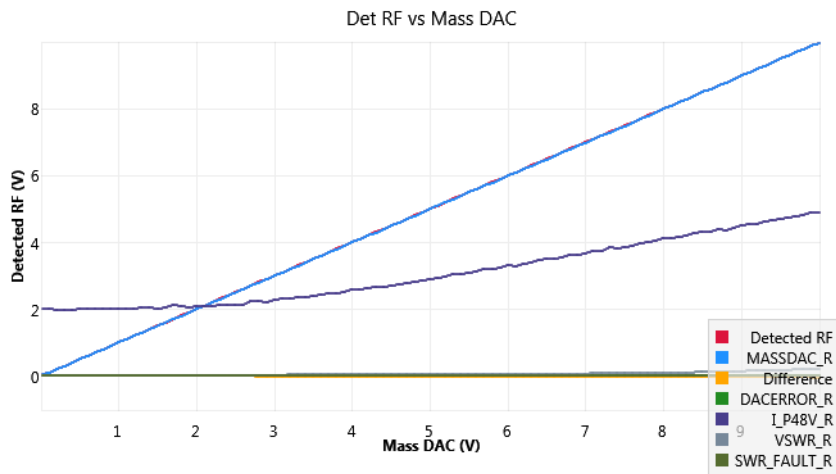
7. Checking resonant frequency of Q1 circuit



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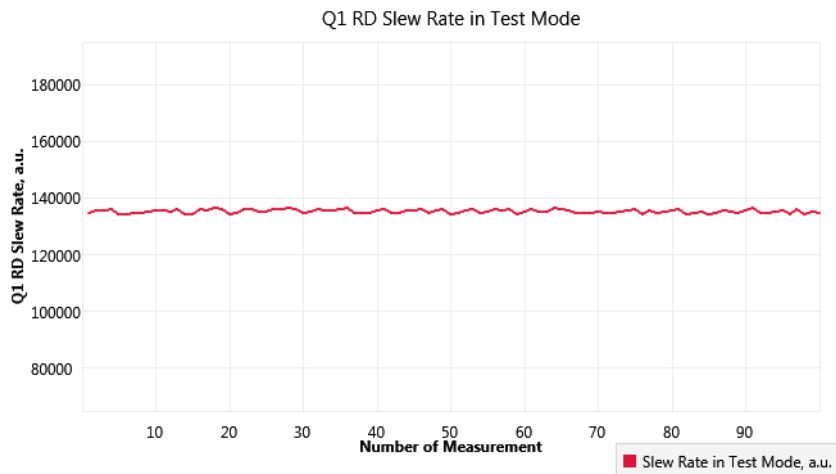


8. Checking Q1 RFA board ramp



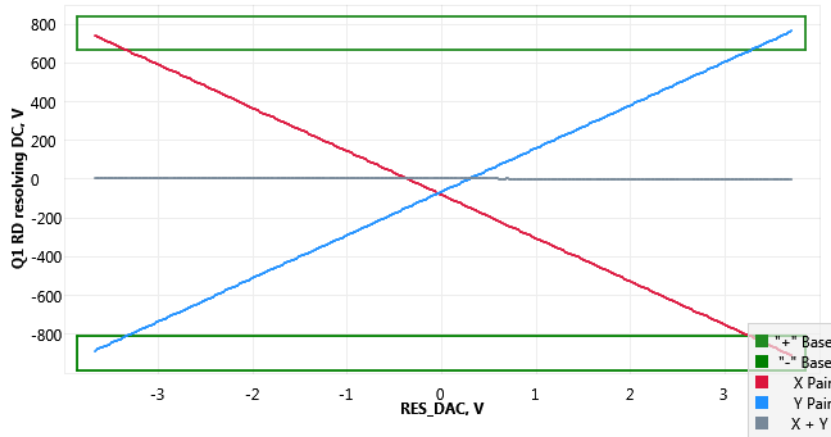
9. Checking Communication between Q1 RFC and Q1 Rod Driver Boards

10. Checking continuity between RD Board and capacitor in Q1 Coil Box

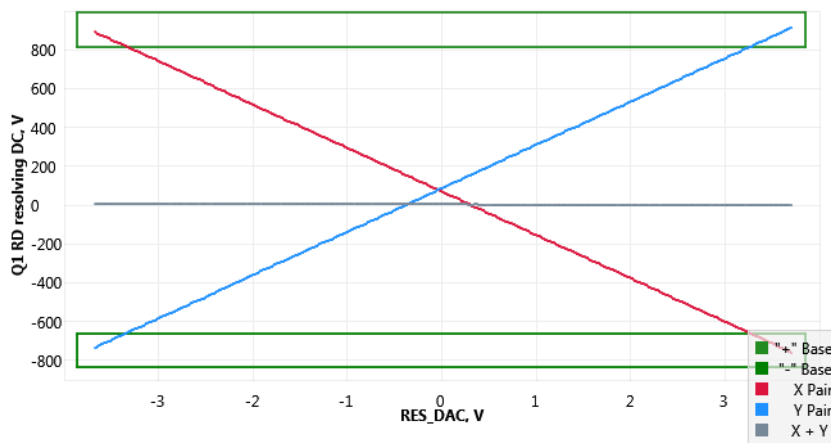


11. Checking basic functionality of Q1 Rod Driver Board

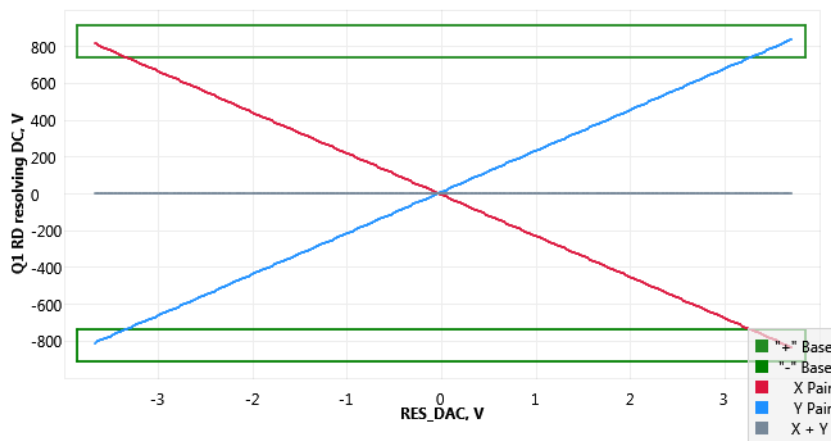
Q1 RD DC Ramp at DC Offset = -75V



Q1 RD DC Ramp at DC Offset = 75V



Q1 RD DC Ramp at DC Offset = 0V



Passed.

Check Q3:

1. Checking Power Supplies (5 cycles)

- Cycle #1
- Cycle #2
- Cycle #3
- Cycle #4

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Cycle #5

2. Checking Functionality of Q3 RFC Board

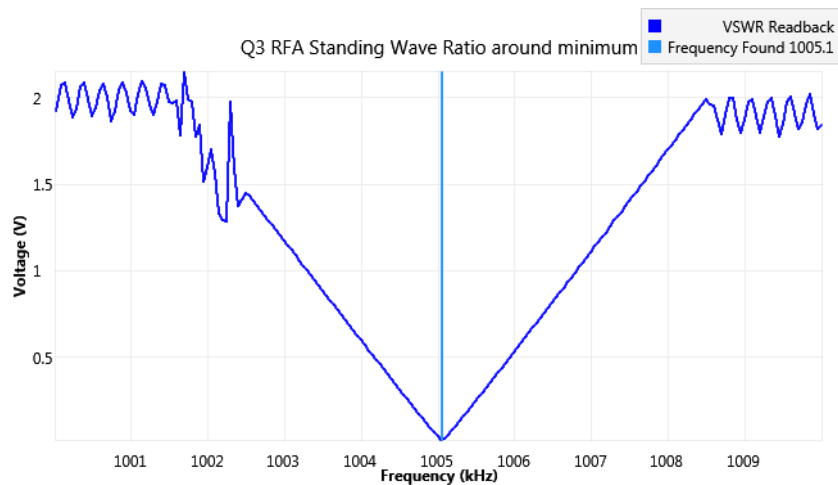
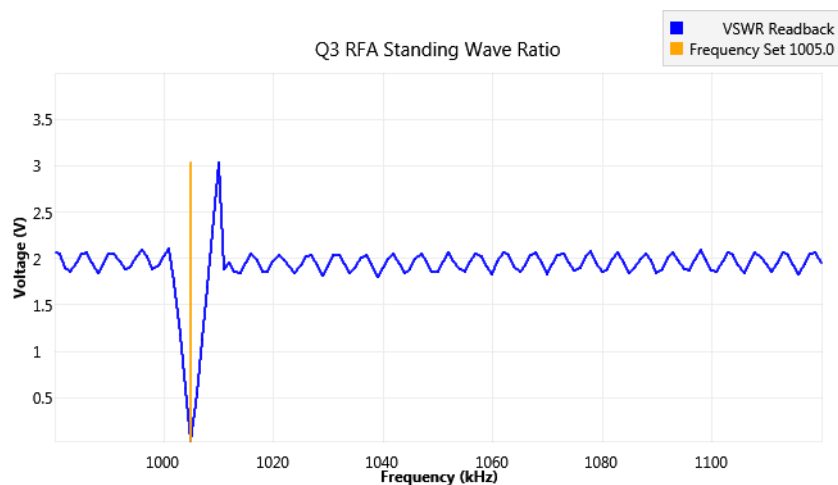
3. Checking Communication between Q3 RFC and Q3 RFA Boards

4. Checking Q3 RFA board temperature

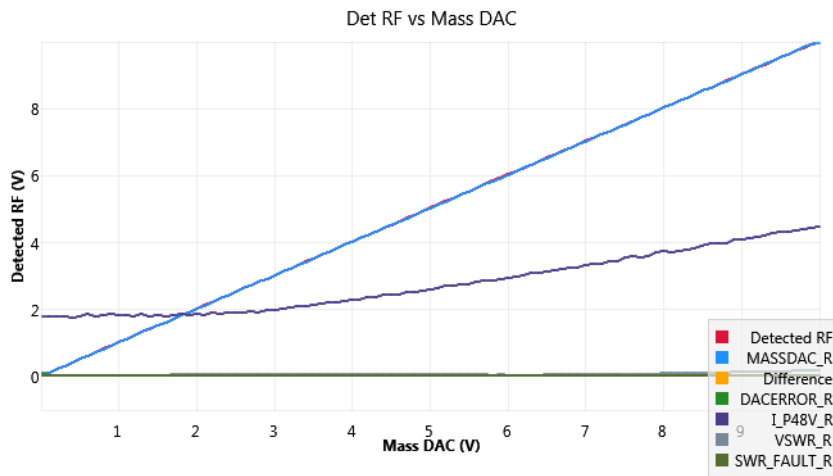
5. Checking coaxial cable connection between Q3 RFA and Q3 Coil Box

6. Checking Continuity between Q3 and Q3 Coil Box

7. Checking resonant frequency of Q3 circuit

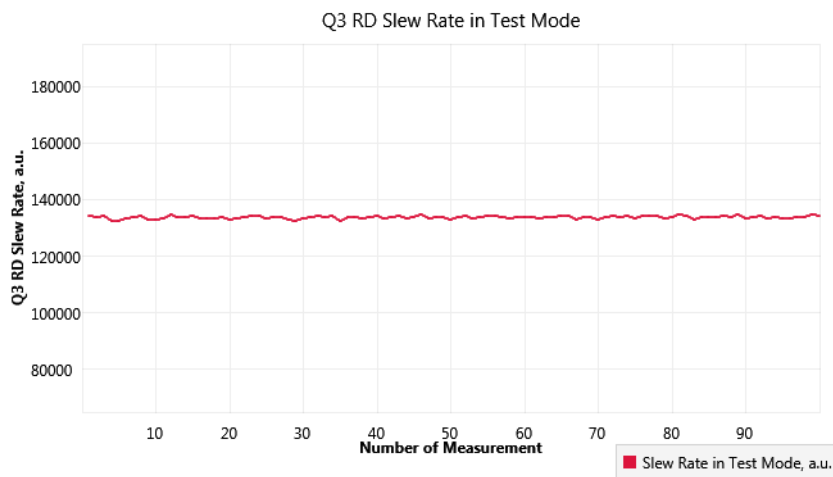


8. Checking Q3 RFA board ramp

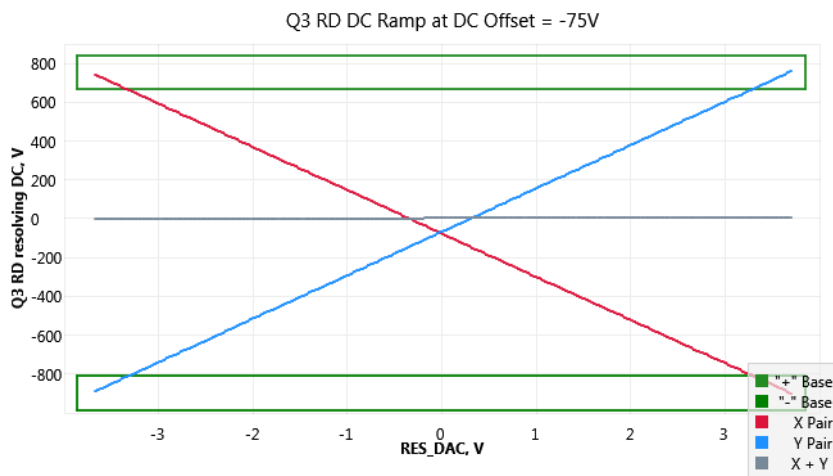


9. Checking Communication between Q3 RFC and Q3 Rod Driver Boards

10. Checking continuity between RD Board and capacitor in Q3 Coil Box

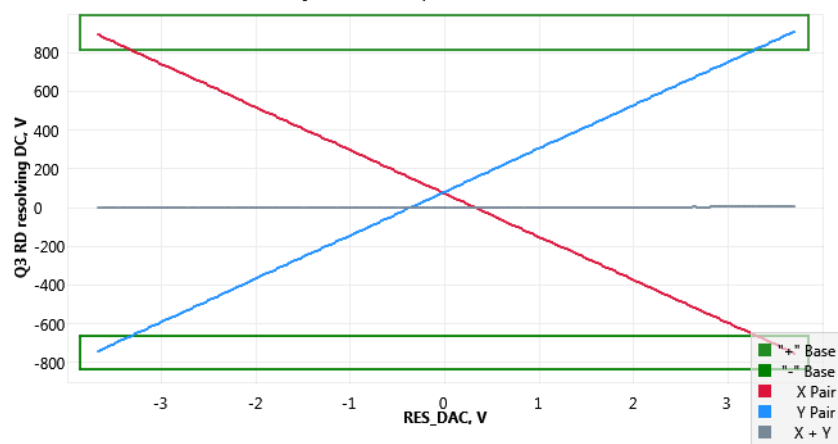


11. Checking basic functionality of Q3 Rod Driver Board

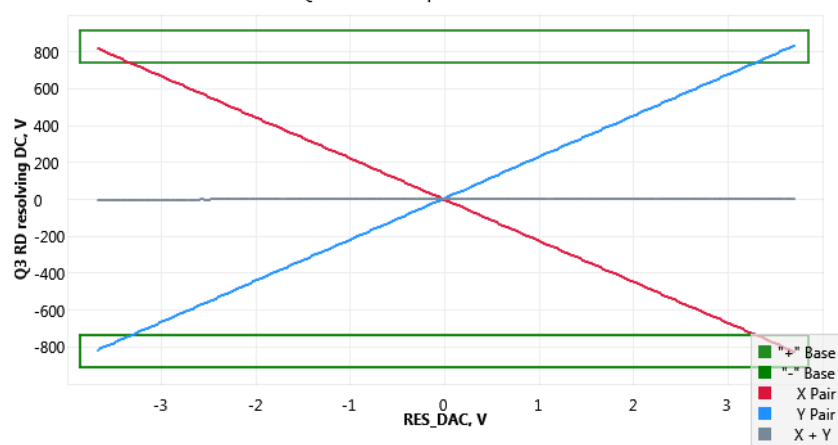


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Q3 RD DC Ramp at DC Offset = 75V



Q3 RD DC Ramp at DC Offset = 0V



Passed.

System Configuration:

DevMode	false
BreadboardDevMode	false
SetAnalogChannelEnabled(0, false)	
SetAnalogChannelEnabled(1, false)	
DivertValveConfig	1
SyringePumpConfigured	true
ContactClosureConfig	0
CIDGasType	0
WaitForGasFlowsToStabilize	true
WaitForTemperaturesToStabilize	true
DisableRunCheck	false
KeepLastMethodSettings	true
SetDivertValveSerialNumber("A", "1245")	
SetDivertValveSerialNumber("B", "4567")	
ActiveSourceType	1
InstalledSourceType	1
EnableSweepGasForNSISource	true
LockMassSourceConfigured	false
ETDSOURCEConfigured	false

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EnableIonGaugeCheck	true
EnableVacuumCheck	true
EnableTurboCheck	true
EnableBoardIdentification	true
EnableIonSourceIdentification	true
LowConvectronGaugePressureWarning	true
LowSheathGasFlowWarning	true
LowAuxGasFlowWarning	true
LowSweepGasFlowWarning	true
LowCollisionGasFlowWarning	true
CurrentCalMix	0

Embedded System Information:

Acquisition Driver	2015-0830-0002
Acquisition Driver	2015-0830-0002
DSP Driver	2015-0830-0002
DSP Driver	2015-0830-0002
DSP Image	02.00.046.2 20150830
DSP Image	02.00.046.2 20150830
General Purpose Linux Driver	2015-0830-0002
General Purpose Linux Driver	2015-0830-0002
Linux Kernel	2.6.35-ts-powerpc
Linux Kernel	2.6.35-ts-powerpc
PPC Image	02.00.046.02 20150830
PPC Image	02.00.046.02 20150830
PPC MAC Address	00:01:EC:00:E4:52
PPC MAC Address	00:01:EC:00:E4:52
CPU	02.00.117.0 20150429 20140207
Electrometer	02.00.053.0 20160810 20150428
Host FPGA	02.00.117.0 20150429
LBP	02.00.048.0 20150428 20150427
RD	02.00.048.0 20150428 20150427
RD2	02.00.048.0 20150428 20150427
RFA1	02.00.048.0 20150428 20150427
RFA2	02.00.048.0 20150428 20150427
RFC1	02.00.048.0 20150428 20150427
RFC2	02.00.048.0 20150428 20150427
SRC	02.00.048.0 20150428 20150427