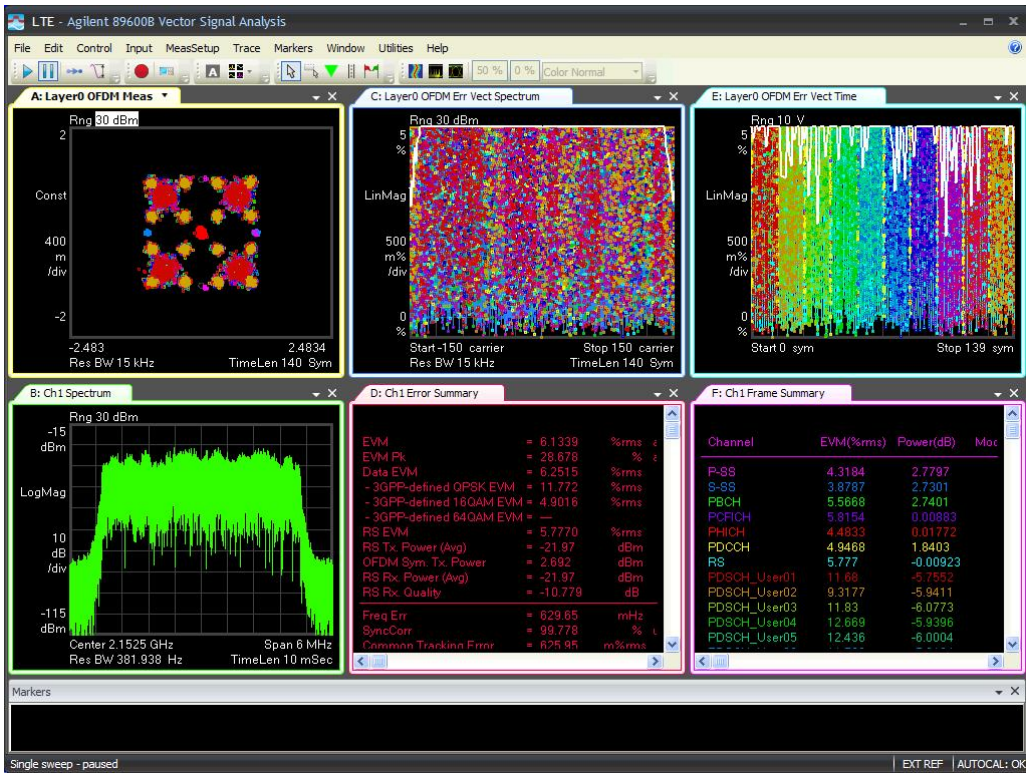

LTE - Agilent 89600B Vector Signal Analysis
File Edit Control Input MeasSetup Trace Markers Window Utilities Help
A: Layer0 OFDM Meas
Rng 30 dBm
Const
-2.483
2.4834
Res BW 15 kHz
TimeLen 140 Sym
C: Layer0 OFDM Err Vect Spectrum
Rng 30 dBm
LinMag
Start -150 carrier
Stop 150 carrier
Res BW 15 kHz
TimeLen 140 Sym
E: Layer0 OFDM Err Vect Time
Rng 10 %
LinMag
Start 0 sym
Stop 139 sym
B: Ch1 Spectrum
Rng 30 dBm
LogMag
Center 2.1525 GHz
Span 6 MHz
Res BW 381.938 Hz
TimeLen 10 mSec
D: Ch1 Error Summary
EVM = 6.1339 %rms
EVM Pk = 28.678 %
Data EVM = 6.2515 %rms
- 3GPP-defined QPSK EVM = 11.772 %rms
- 3GPP-defined 16QAM EVM = 4.9016 %rms
- 3GPP-defined 64QAM EVM = —
RS EVM = 5.7770 %rms
RS Tx Power (Avg) = -21.97 dBm
OFDM Sym Tx Power = 2.692 dBm
RS Rx Power (Avg) = -21.97 dBm
RS Rx Quality = -10.779 dB
Freq Err = 629.65 mHz
SyncCorr = 99.778 %
F: Ch1 Frame Summary
Channel EVM(%rms) Power(dB)
P-SS 4.3184 2.7797
S-SS 3.8787 2.7301
PBCH 5.5668 2.7401
PCFICH 5.8154 0.00883
PHICH 4.4833 0.01772
PDCCH 4.9468 1.8403
RS 5.777 -0.00923
PDSCH_User01 11.68 -5.7552
PDSCH_User02 9.3177 -5.9411
PDSCH_User03 11.83 -6.0773
PDSCH_User04 12.669 -5.9396
PDSCH_User05 12.436 -6.0004
Markers
Single sweep - paused
EXT REF
AUTOCAL: OK

8 SPURIOUS RADIATED EMISSIONS

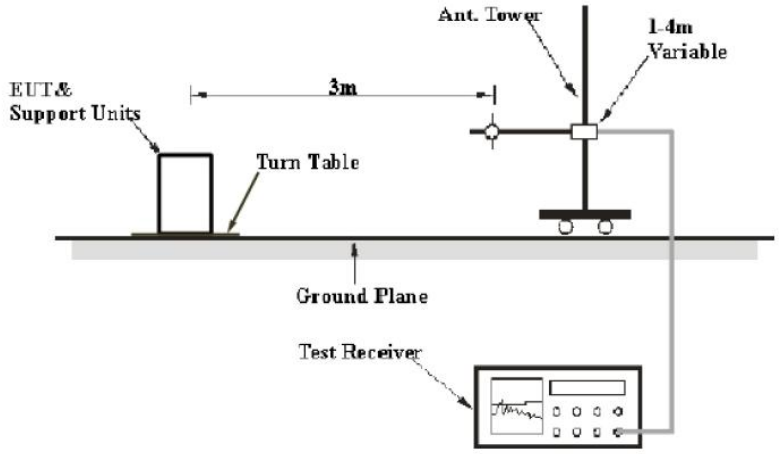
Applicable Standard: FCC CFR 47 §2.1053

Test Equipment List and Details

Manufacturer	Equipment	Model	Serial Number	Last Cal.	Cal. Interval
R&S	SIGNAL GENERATOR	SMR20	A00017351	2011-9-26	1 year
Albatross	Anechoic Chamber	3m Site	A00017354	2011-11-2	1 year
R&S	EMI Test Receiver	ESIB26	100058	2011-10-29	1 year
R&S	Ultra Breitband Antennas	HL562	100022	2011-7-29	1 year
R&S	Double-Ridged Waveguide Horn Antenna	HF906	100032	2011-7-29	1 year
R&S	Double-Ridged Waveguide Horn Antenna	HF906	100446	2011-7-29	1 year
SCHWARZ-BECK	Biconical Antenna	VUBA9117	9117-122	2011-7-29	1 year

Measurement Uncertainty
All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.
Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of a radiated emissions measurement at the EMC lab. is 3.6dB.

EUT Setup



The radiated emission tests were performed in the 3-meter Chamber, using the setup accordance with the FCC part 2.1053.The specification used was the FCC 2.1053 limits.

Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load, which was also placed on the turntable.
The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.
The frequency range up to teeth harmonic of the fundamental frequency was investigated.
Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.
Spurious emissions in dB =10 1g (TX pwr in Watts/0.001)-the absolute level
Spurious attenuation limit in dB =43+10 Lg P (power out in Watts)
The resolution bandwidth of the spectrum analyzer was set at 1 percent as specified for 30MHz to 1GHz scaning, set at 1MHz for 1GHz to 20GHz scaning.

Test Results Summary: PASS

Environmental Conditions

Temperature:	26°C
Relative Humidity:	60 %
ATM Pressure:	1009 mbar

Test data

Indicated		Test Antenna	Substituted		Cable Loss(dB)	Effective radiated power （dBm）	Dipole Antenna	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
Frequency (MHz)	Amp. (dB μ V)	Polar H/V	Level (dBm)	Antenna Gain Correction						
169.95992	24.72	V	-67.51	-3.24	1.1	-71.85	2.15	-74	-13	61
618.997996	26.41	V	-70.28	-1.39	2.1	-73.77	2.15	-75.92	-13	62.92
965.01002	30.58	V	-65.53	-2.82	2.6	-70.95	2.15	-73.1	-13	60.1
1380.76152	45.95	V	-57.84	4.25	3.1	-56.69	2.15	-58.84	-13	45.84
2130.26052	75.32	V	-26.16	7.05	3.9	-23.01	2.15	-25.16	-13	12.16
2959.91984	57.2	V	-44.54	7.95	4.6	-41.19	2.15	-43.34	-13	30.34
171.903808	25.28	H	-70.55	-2.23	1.1	-73.88	2.15	-76.03	-13	63.03
607.334669	26.6	H	-70.05	-1.39	2	-73.44	2.15	-75.59	-13	62.59
895.03006	34.53	H	-62.56	-1.54	2.5	-66.6	2.15	-68.75	-13	55.75
1372.74549	45.89	H	-60.21	4.25	3.1	-59.06	2.15	-61.21	-13	48.21
2126.25251	72.1	H	-33.1	7.05	3.9	-29.95	2.15	-32.1	-13	19.1
2911.82365	57.31	H	-46.8	7.95	4.6	-43.45	2.15	-45.6	-13	32.6

Radiation emission spurious below 3GHz

Indicated		Test Antenna	Substituted		Cable Loss(dB)	Effective radiated power （dBm）	Dipole Antenna	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
Frequency (MHz)	Amp. (dB μ V)	Polar H/V	Level (dBm)	Antenna Gain Correction						
3793.58717	39.78	V	-66.41	7.75	5.2	-63.86	2.15	-66.01	-13	53.01
4274.5491	48.92	V	-58.68	7.95	5.5	-56.23	2.15	-58.38	-13	45.38
6142.28457	47.97	V	-59.5	9.05	6.8	-57.25	2.15	-59.4	-13	46.4
6406.81363	50.71	V	-54.45	9.05	7	-52.4	2.15	-54.55	-13	41.55
9846.19239	55.67	V	-53.15	9.95	8.9	-52.1	2.15	-54.25	-13	41.25
12588.6774	56.31	V	-53.39	12.15	9.9	-51.14	2.15	-53.29	-13	40.29
3681.36273	40.13	H	-63.95	7.75	5.1	-61.3	2.15	-63.45	-13	50.45
4274.5491	54.3	H	-49.02	7.95	5.5	-46.57	2.15	-48.72	-13	35.72
6182.36473	47.74	H	-55.65	9.05	6.9	-53.5	2.15	-55.65	-13	42.65
7610.72144	49.68	H	-58.95	9.25	7.8	-57.5	2.15	-59.65	-13	46.65
9823.14629	55.86	H	-53.08	9.95	8.9	-52.03	2.15	-54.18	-13	41.18
12657.8156	56.5	H	-58.48	12.15	9.9	-56.23	2.15	-58.38	-13	45.38

Radiation emission spurious above 3GHz

9 SPURIOUS EMISSIONS AT ANTENNA TERMINALS

Applicable Standard: FCC§2.1051, §27.53

The spectrum was to be investigated to the tenth harmonics of the highest fundamental frequency as specified.

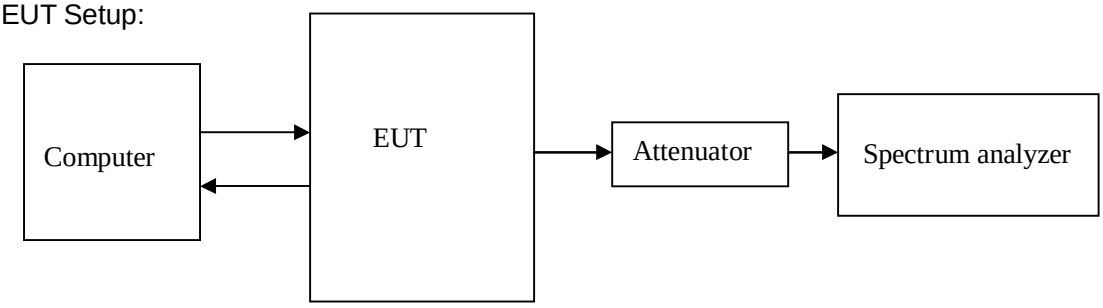
Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	MXA Series Spectrum Analyzer	N9020A	MY48011941	2012.04.10	2013.04.09
DTS	DTS 40dB Attenuator	DTS100-40-3-1	09112005	2011.07.19	2012.07.19

*__statement of traceability:__ ZTE Corporation Reliability Testing Center attest that all calibration have been performed per the NVLAP requirements, traceable to NIST.

Test Procedure

EUT Setup:



REMARKS: Attenuator loss (dB)=40dB, Cable Loss (dB)=1.5dB.

The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidthof 100 kilohertz or greater. However,in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed. Sufficient scans were taken to show any out of band emissions up to 10th harmonic.

Test Data Environmental Conditions

Temperature:	20 °C
Relative Humidity:	53 %
ATM Pressure:	1009 mbar

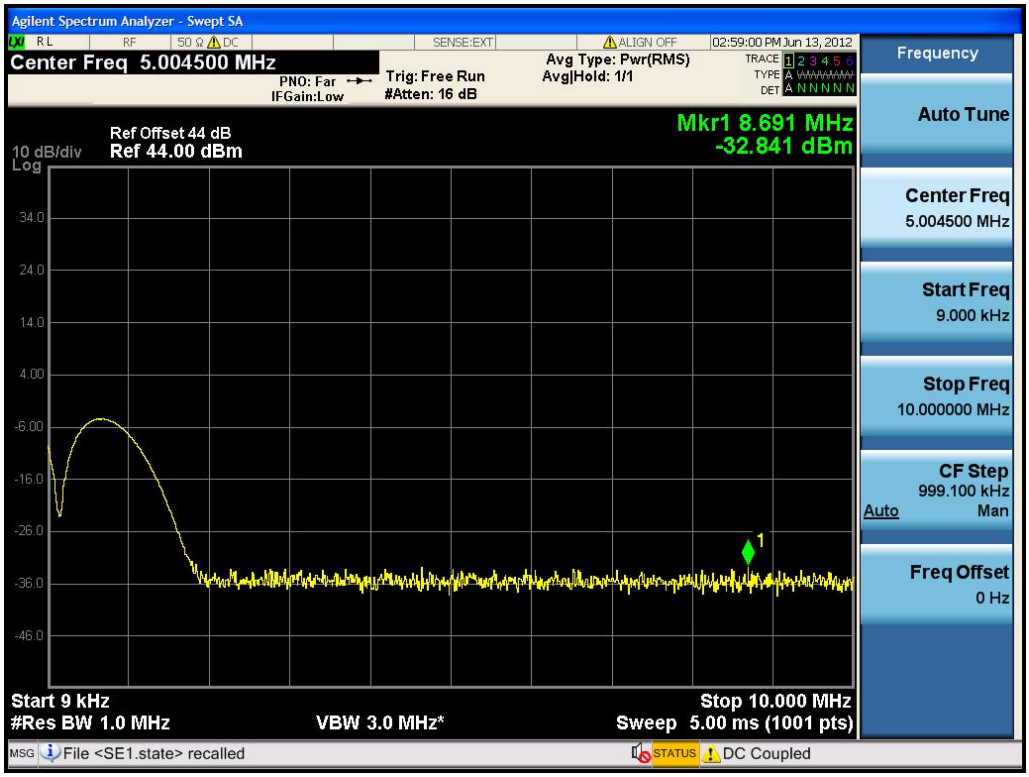
Test Result: Pass

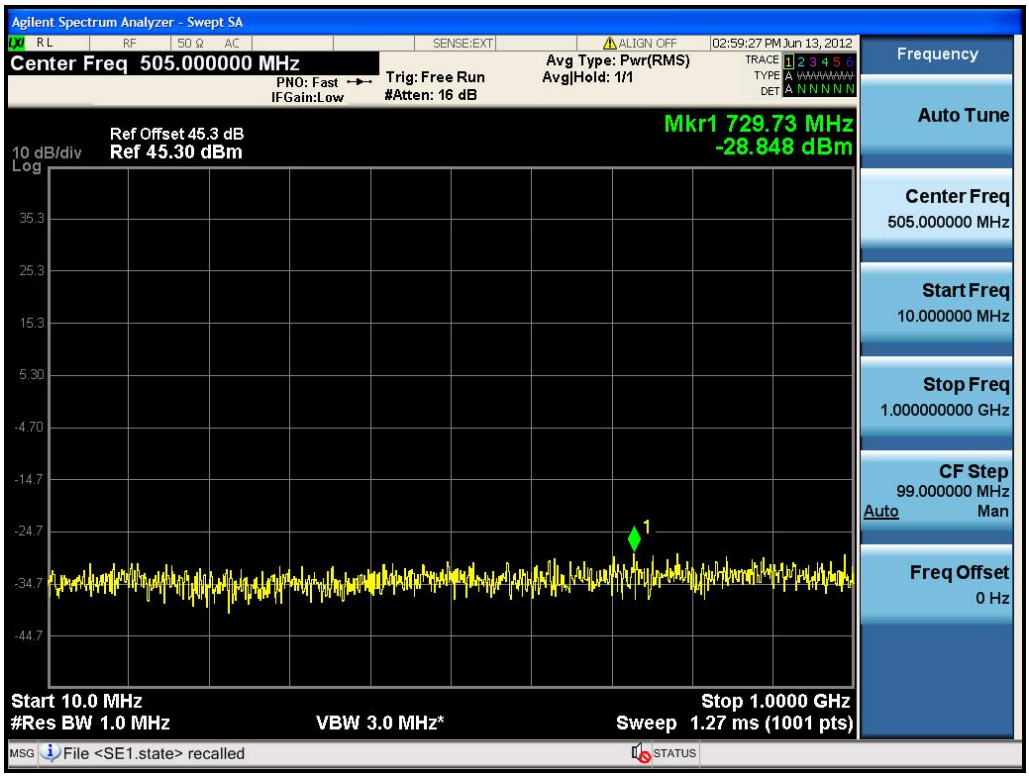
Test Mode: Transmitting LTE

Test Data:

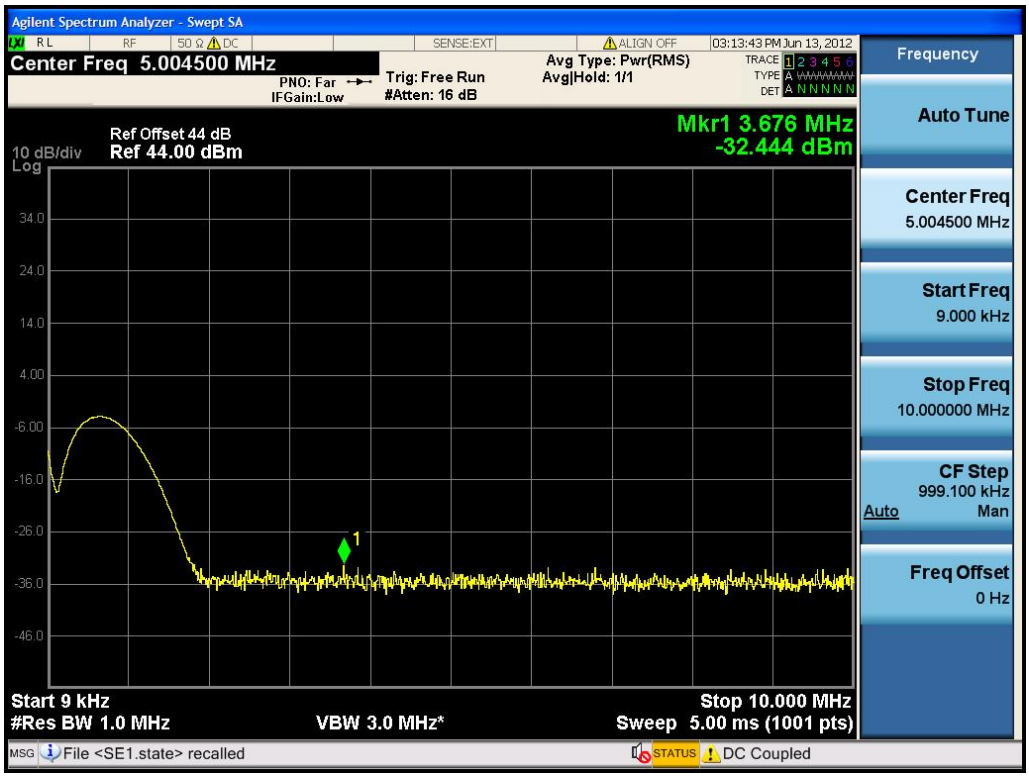
Channel Bandwidth :20M

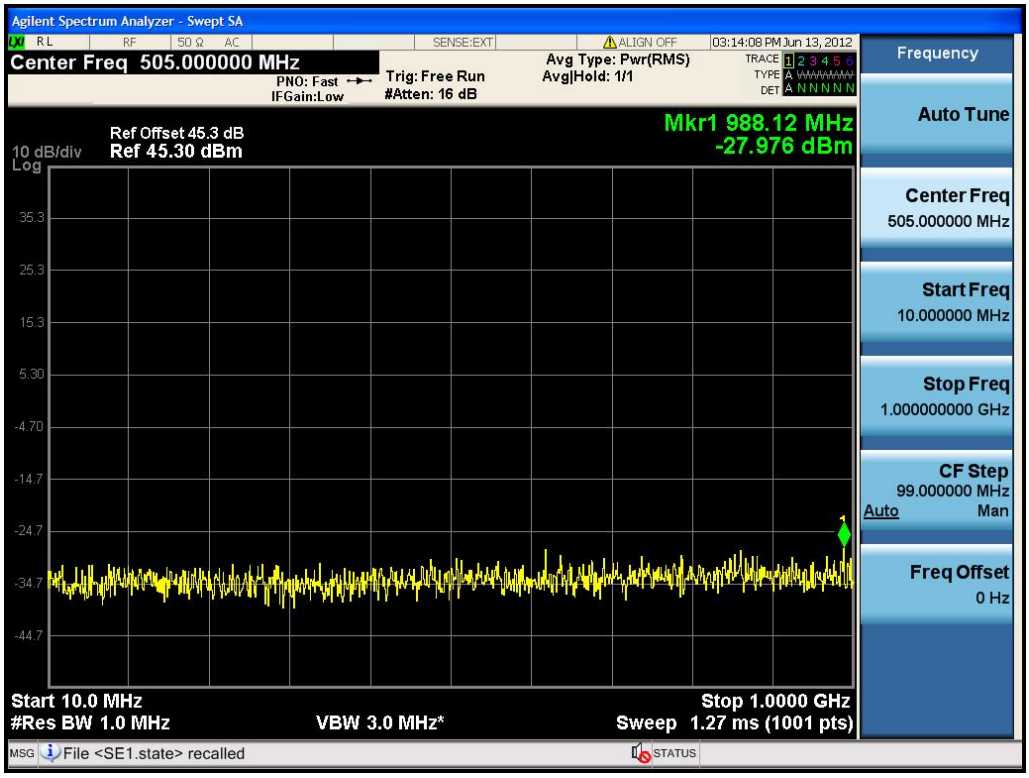
20M-Port 1 -2120MHz



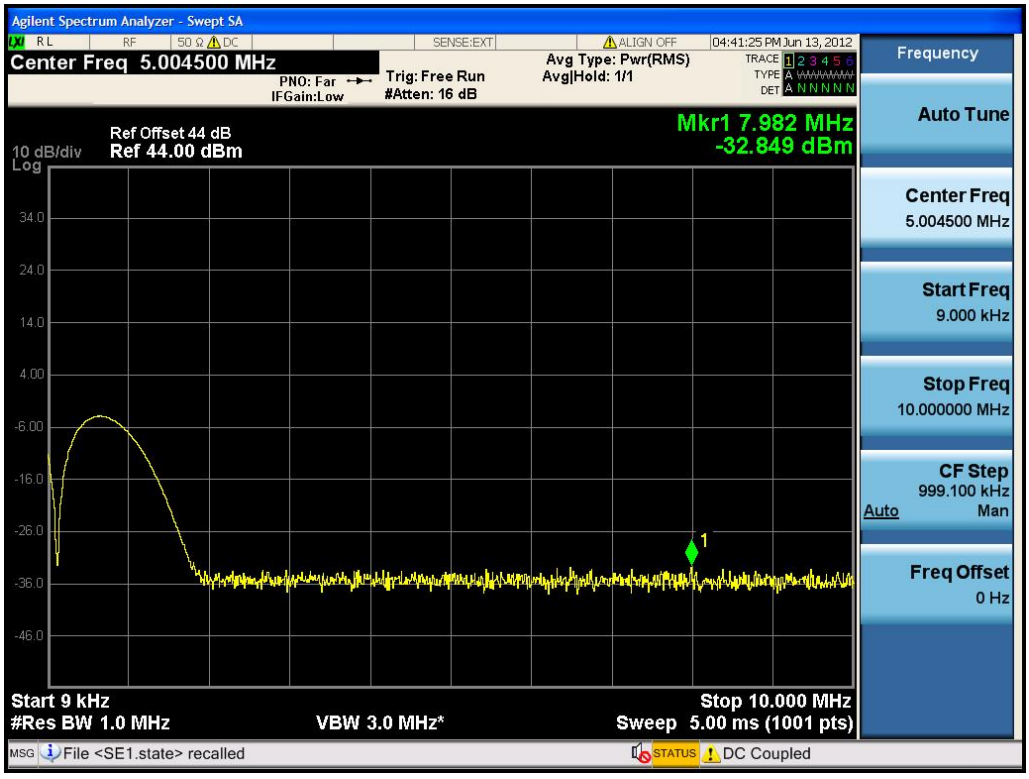


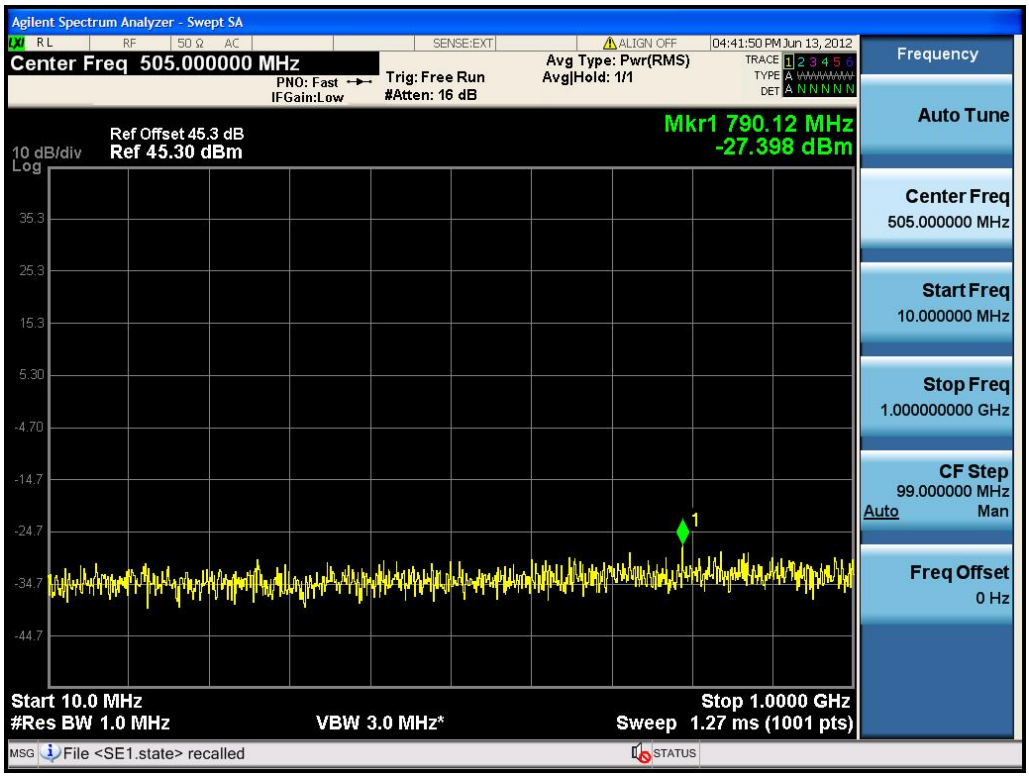
20M-Port 1 -2132.5MHz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.004500 MHz
PNO: Far
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
03:13:43 PM Jun 13, 2012
Ref Offset 44 dB
10 dB/div
Log
Ref 44.00 dBm
Mkr1 3.676 MHz
-32.444 dBm
34.0
24.0
14.0
4.00
-6.00
-16.0
-26.0
-36.0
-46.0
Start 9 kHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 10.000 MHz
Sweep 5.00 ms (1001 pts)
File <SE1.state> recalled
DC Coupled
Frequency
Auto Tune
Center Freq
5.004500 MHz
Start Freq
9.000 kHz
Stop Freq
10.000000 MHz
CF Step
999.100 kHz
Auto
Man
Freq Offset
0 Hz

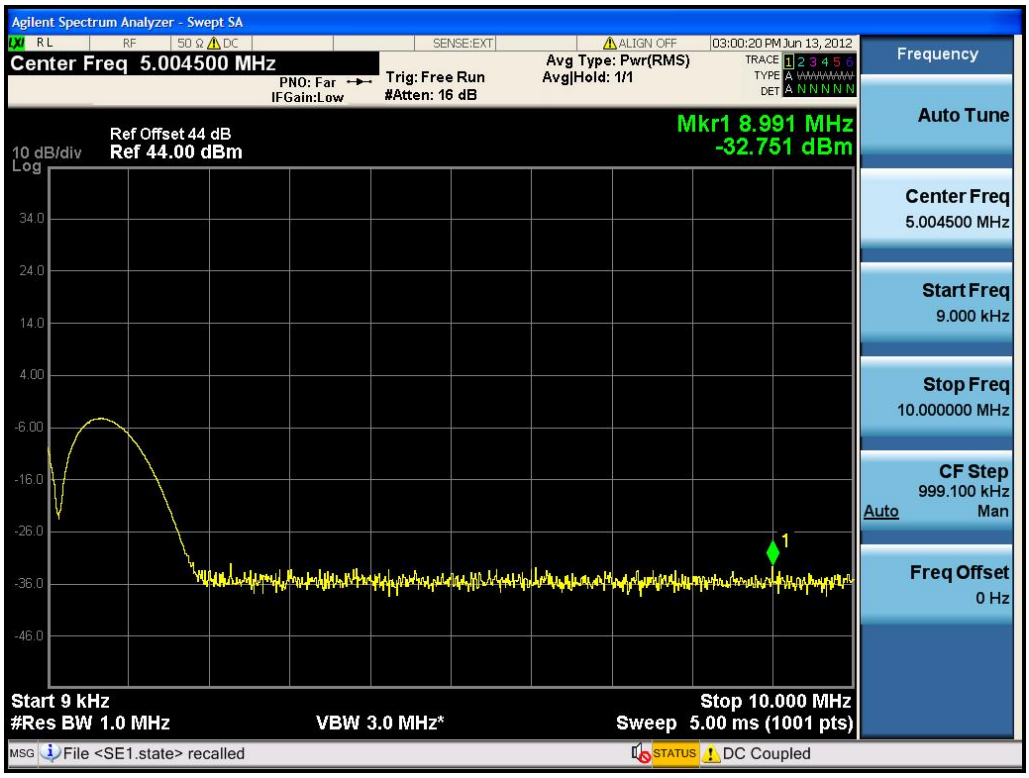

Agilent Spectrum Analyzer - Swept SA
Center Freq 505.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
03:14:08 PM Jun 13, 2012
Ref Offset 45.3 dB
10 dB/div
Log
Ref 45.30 dBm
Mkr1 988.12 MHz
-27.976 dBm
35.3
25.3
15.3
5.30
-4.70
-14.7
-24.7
-34.7
-44.7
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 1.0000 GHz
Sweep 1.27 ms (1001 pts)
File <SE1.state> recalled
Frequency
Auto Tune
Center Freq
505.000000 MHz
Start Freq
10.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
99.000000 MHz
Auto
Man
Freq Offset
0 Hz

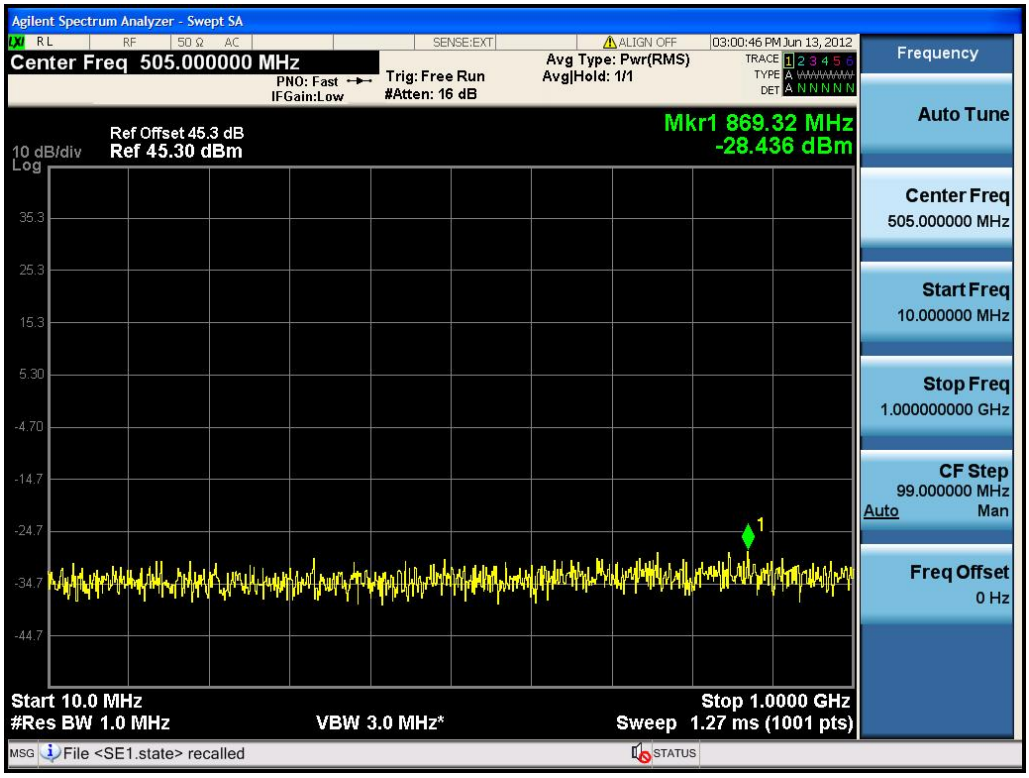
20M-Port 1 -2145MHz



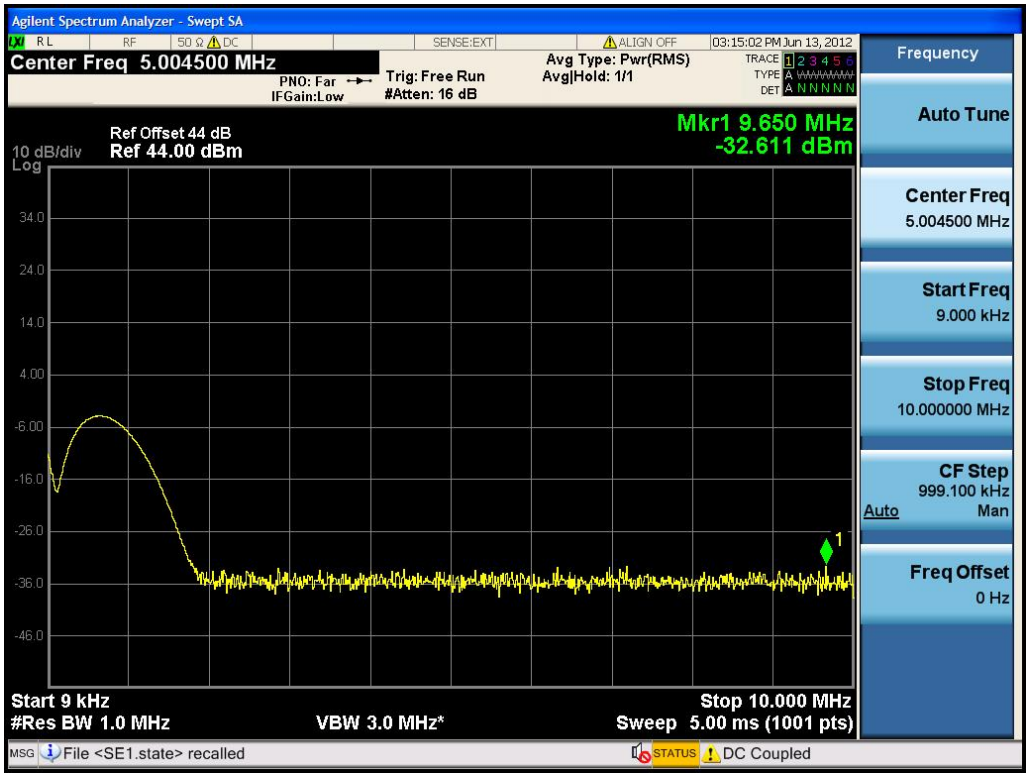


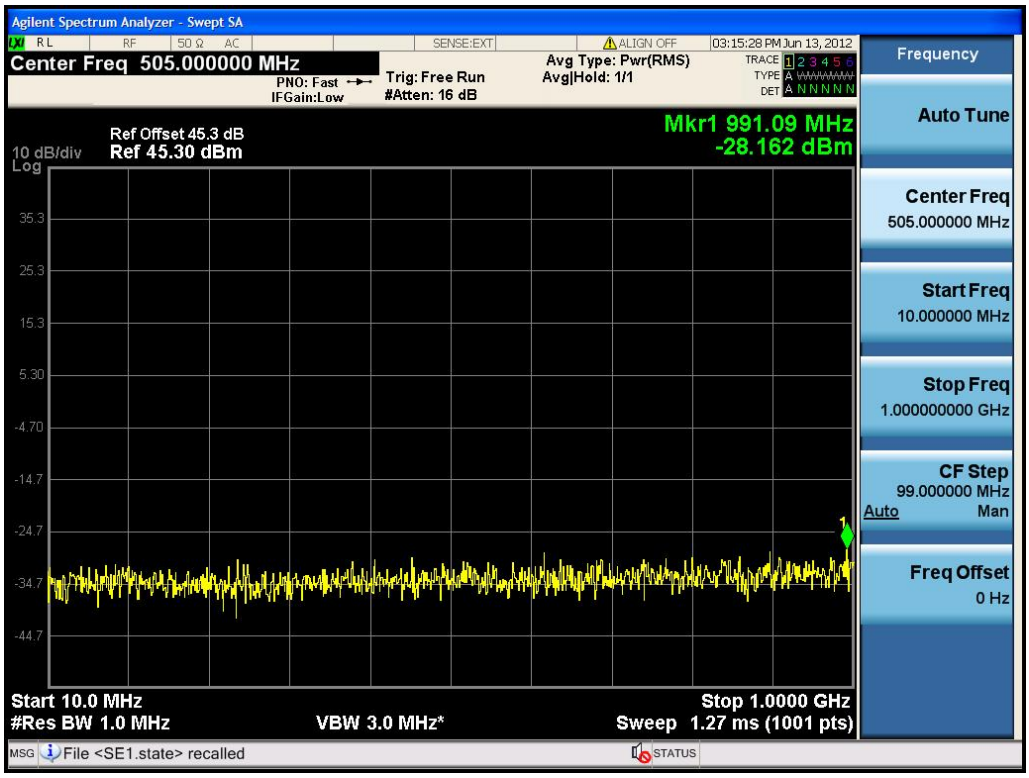
20M-Port 2 -21120MHz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.004500 MHz
PNO: Far
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
03:00:20 PM Jun 13, 2012
Ref Offset 44 dB
10 dB/div
Ref 44.00 dBm
Mkr1 8.991 MHz
-32.751 dBm
Start 9 kHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 10.000 MHz
Sweep 5.00 ms (1001 pts)
File <SE1.state> recalled
DC Coupled
Frequency
Auto Tune
Center Freq
5.004500 MHz
Start Freq
9.000 kHz
Stop Freq
10.000000 MHz
CF Step
999.100 kHz
Auto
Man
Freq Offset
0 Hz

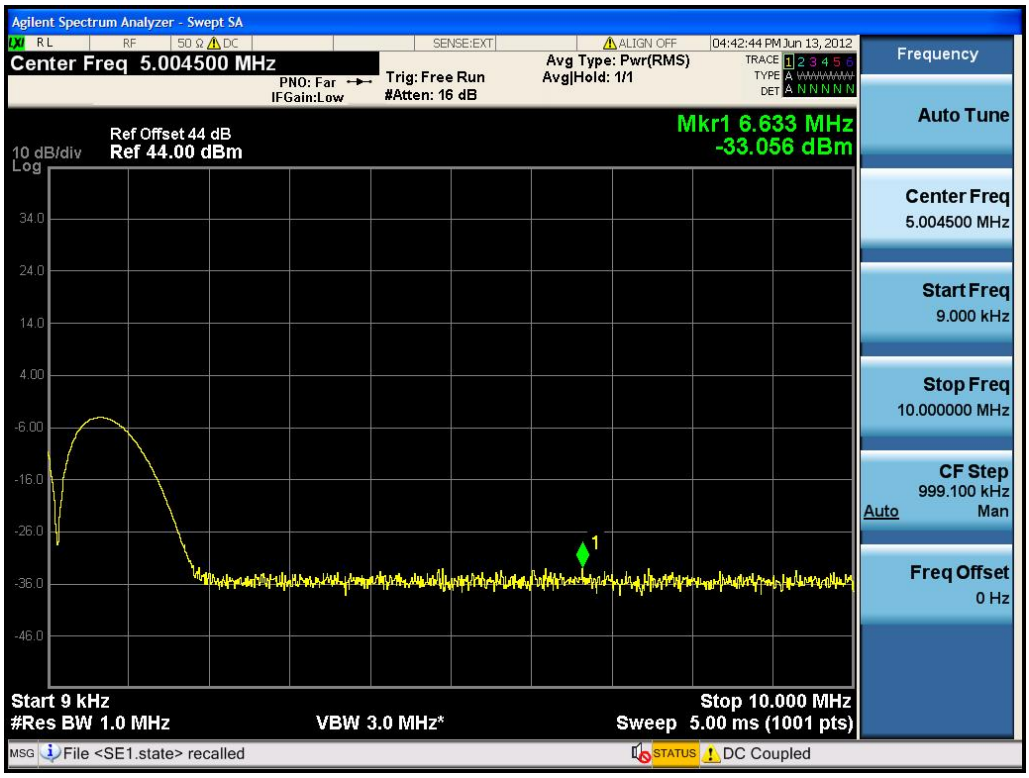

Agilent Spectrum Analyzer - Swept SA
Center Freq 505.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
03:00:46 PM Jun 13, 2012
Ref Offset 45.3 dB
10 dB/div
Ref 45.30 dBm
Mkr1 869.32 MHz
-28.436 dBm
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 1.0000 GHz
Sweep 1.27 ms (1001 pts)
File <SE1.state> recalled
Frequency
Auto Tune
Center Freq
505.000000 MHz
Start Freq
10.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
99.000000 MHz
Auto
Man
Freq Offset
0 Hz

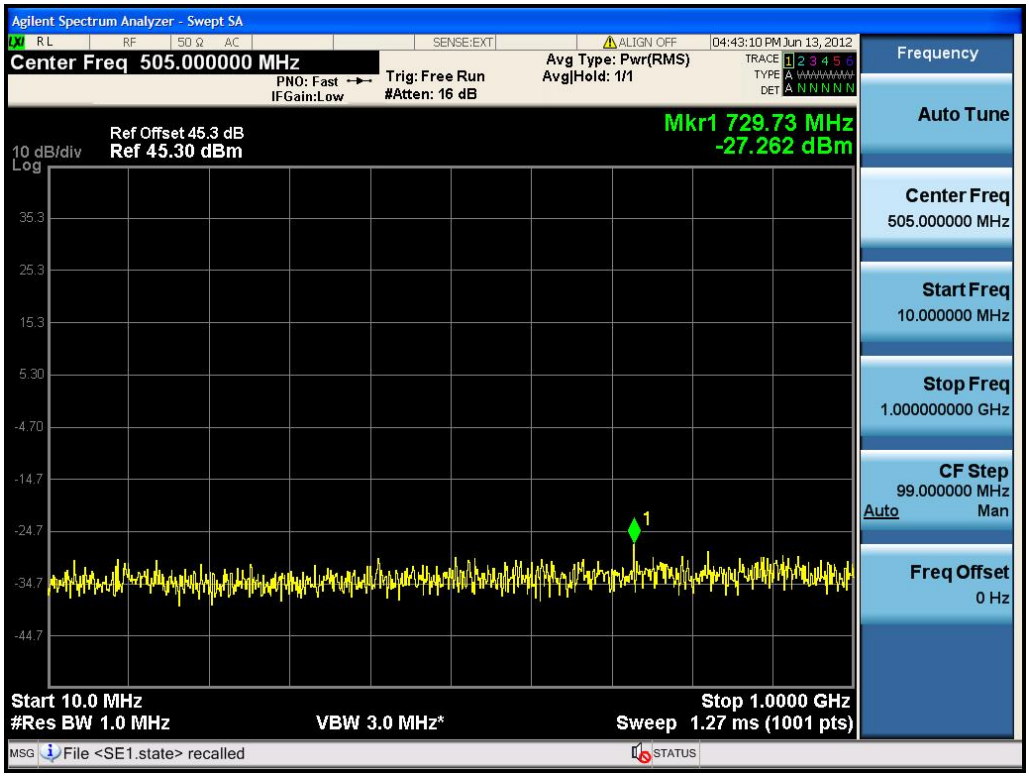
20M-Port 2 -2132.5MHz





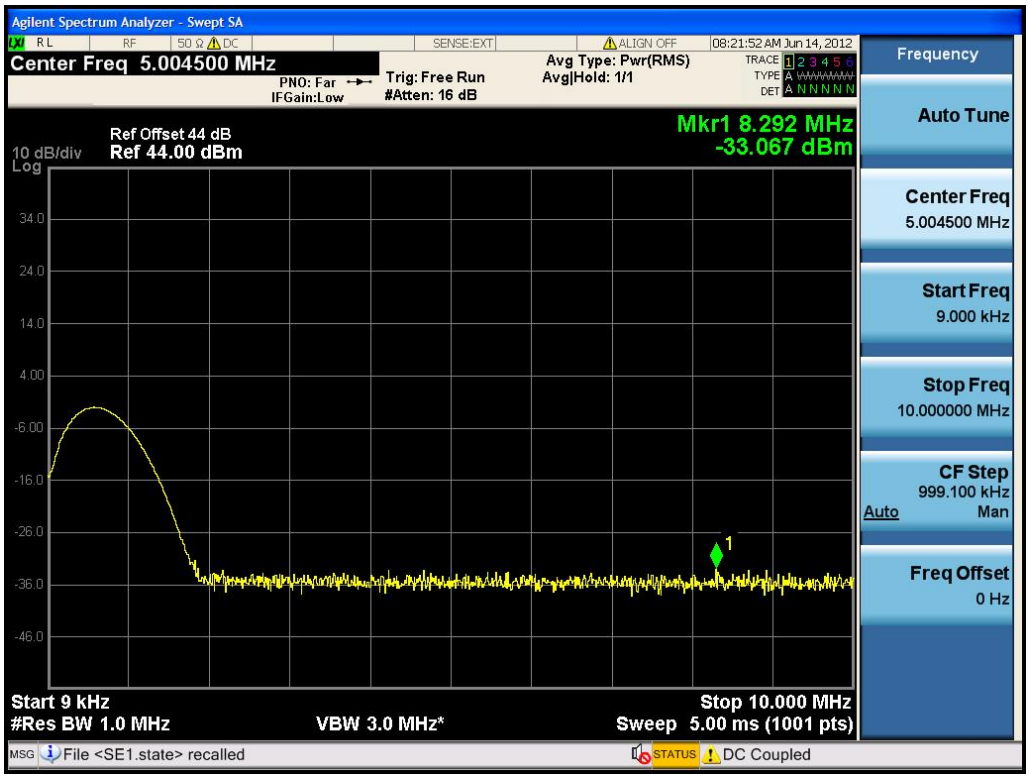
20M-Port 2 -2145MHz

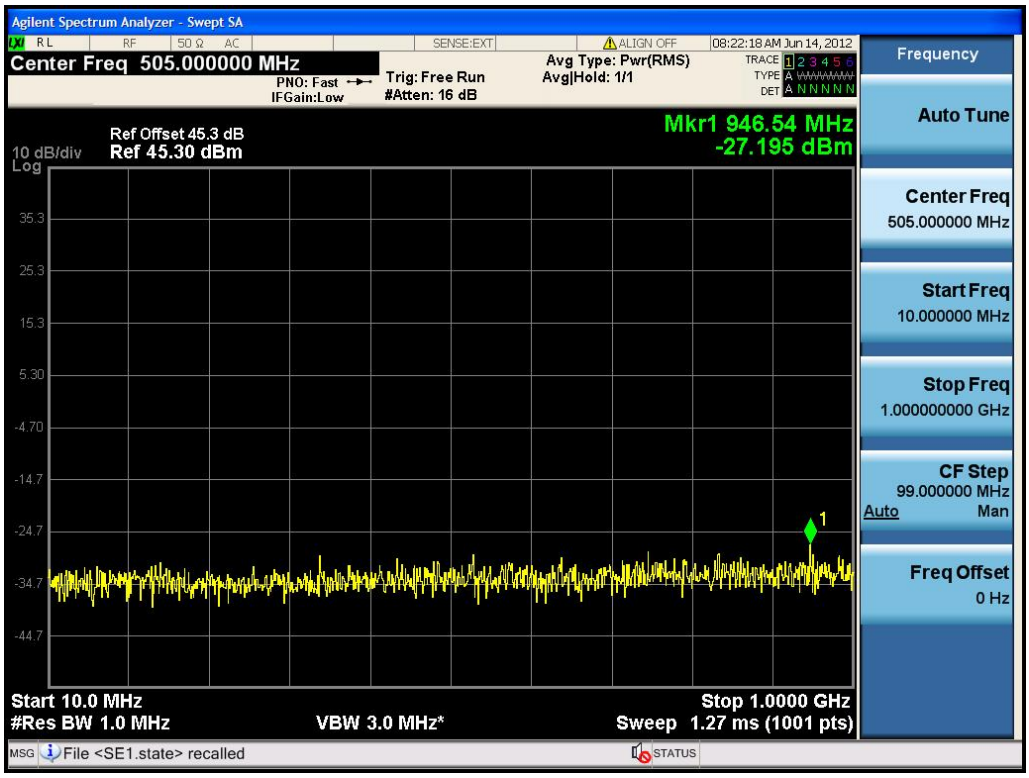

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.004500 MHz
PNO: Far
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
04:42:44 PM Jun 13, 2012
Ref Offset 44 dB
10 dB/div
Log
Ref 44.00 dBm
Mkr1 6.633 MHz
-33.056 dBm
34.0
24.0
14.0
4.00
-6.00
-16.0
-26.0
-36.0
-46.0
Start 9 kHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 10.000 MHz
Sweep 5.00 ms (1001 pts)
File <SE1.state> recalled
DC Coupled
Frequency
Auto Tune
Center Freq
5.004500 MHz
Start Freq
9.000 kHz
Stop Freq
10.000000 MHz
CF Step
999.100 kHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 505.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
04:43:10 PM Jun 13, 2012
Ref Offset 45.3 dB
10 dB/div
Log
Ref 45.30 dBm
Mkr1 729.73 MHz
-27.262 dBm
35.3
25.3
15.3
5.30
-4.70
-14.7
-24.7
-34.7
-44.7
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 1.0000 GHz
Sweep 1.27 ms (1001 pts)
File <SE1.state> recalled
Frequency
Auto Tune
Center Freq
505.000000 MHz
Start Freq
10.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
99.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel Bandwidth :15M

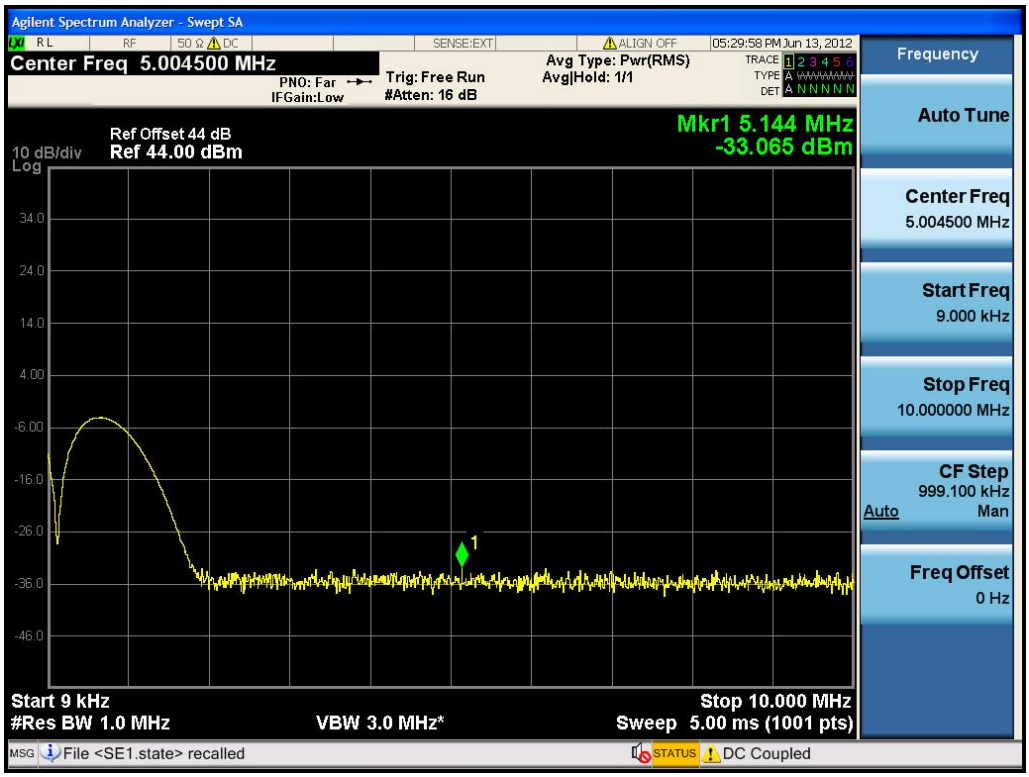
15M-Port 1 -2117.5MHz

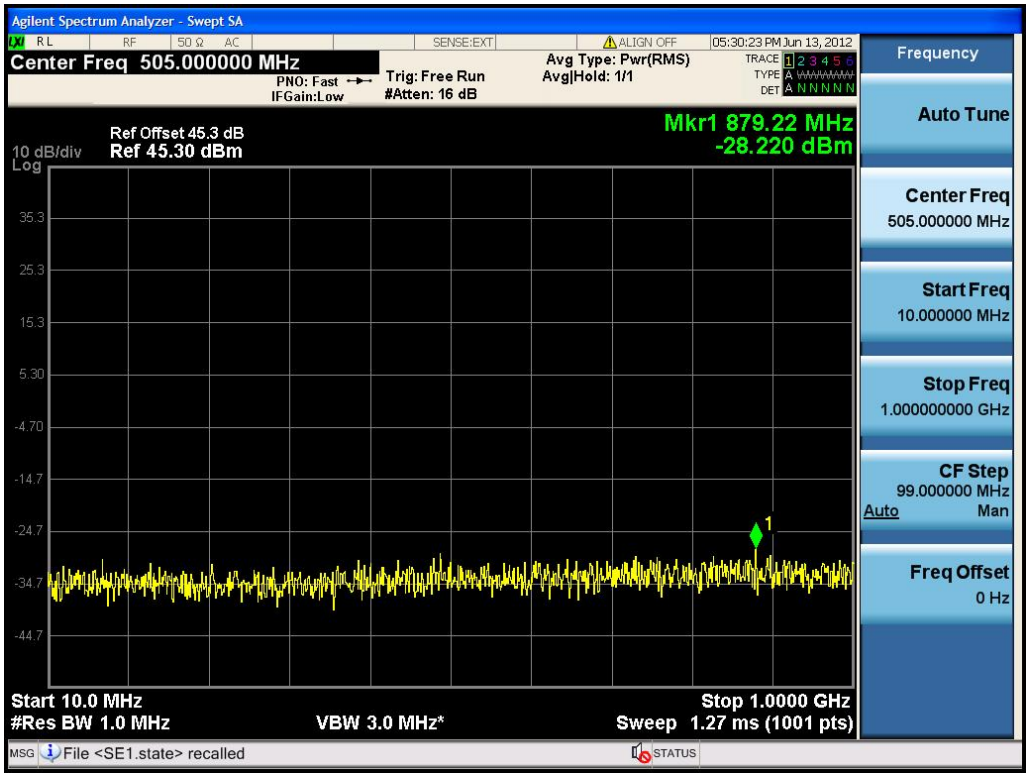



Agilent Spectrum Analyzer - Swept SA
Center Freq 505.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
08:22:18 AM Jun 14, 2012
Ref Offset 45.3 dB
10 dB/div
Ref 45.30 dBm
Log
Mkr1 946.54 MHz
-27.195 dBm
35.3
25.3
15.3
5.30
-4.70
-14.7
-24.7
-34.7
-44.7
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 1.0000 GHz
Sweep 1.27 ms (1001 pts)
File <SE1.state> recalled
Frequency
Auto Tune
Center Freq
505.000000 MHz
Start Freq
10.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
99.000000 MHz
Auto
Man
Freq Offset
0 Hz

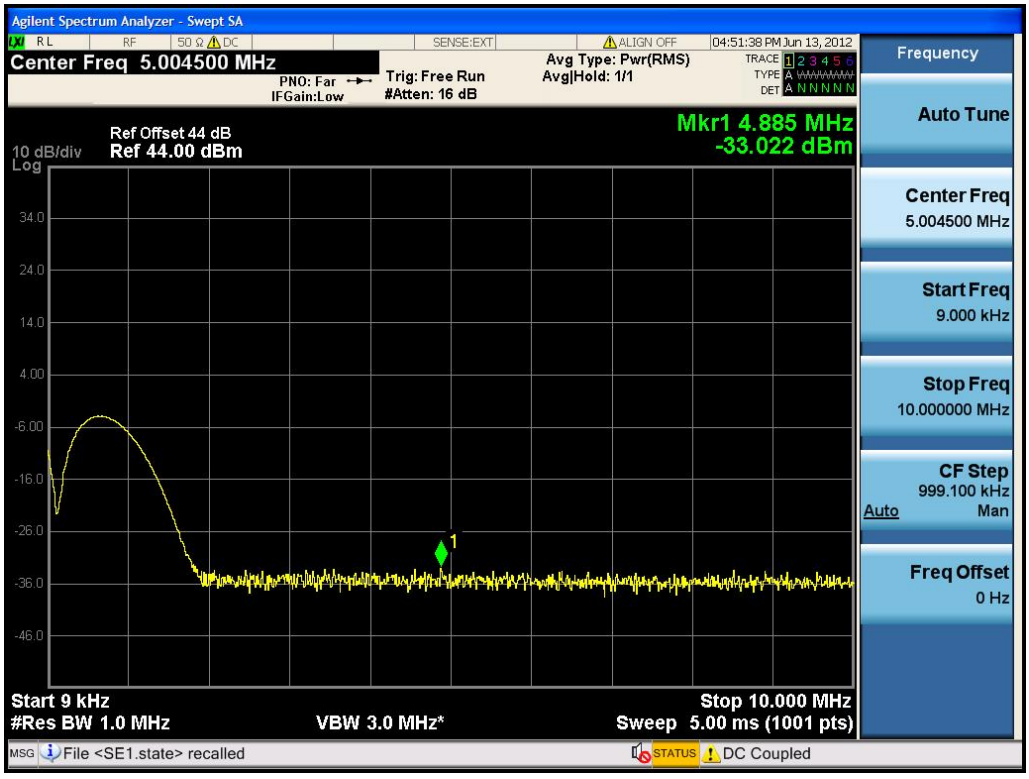

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.750000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
08:22:44 AM Jun 14, 2012
Ref Offset 45.6 dB
10 dB/div
Ref 45.60 dBm
Log
Mkr1 2.122 GHz
34.005 dBm
35.6
25.6
15.6
5.60
-4.40
-14.4
-24.4
-34.4
-44.4
Start 1.00 GHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 26.50 GHz
Sweep 63.8 ms (1001 pts)
File <SE1.state> recalled
Frequency
Auto Tune
Center Freq
13.750000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.550000000 GHz
Auto
Man
Freq Offset
0 Hz

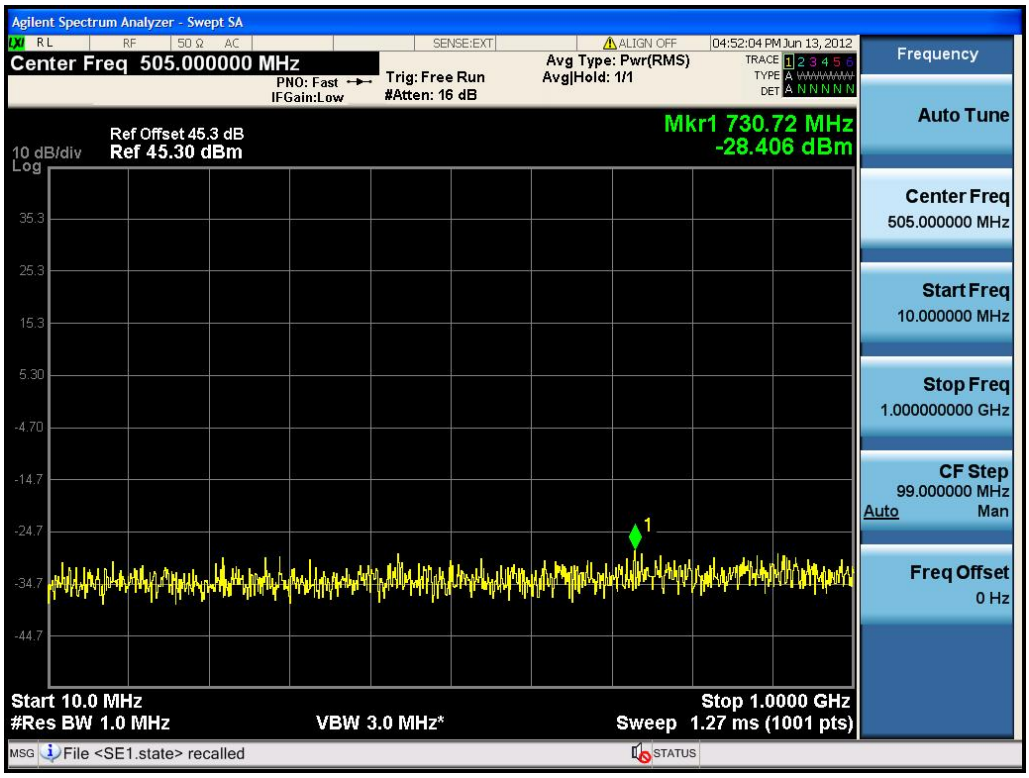
15M-Port 1 -2132.5MHz





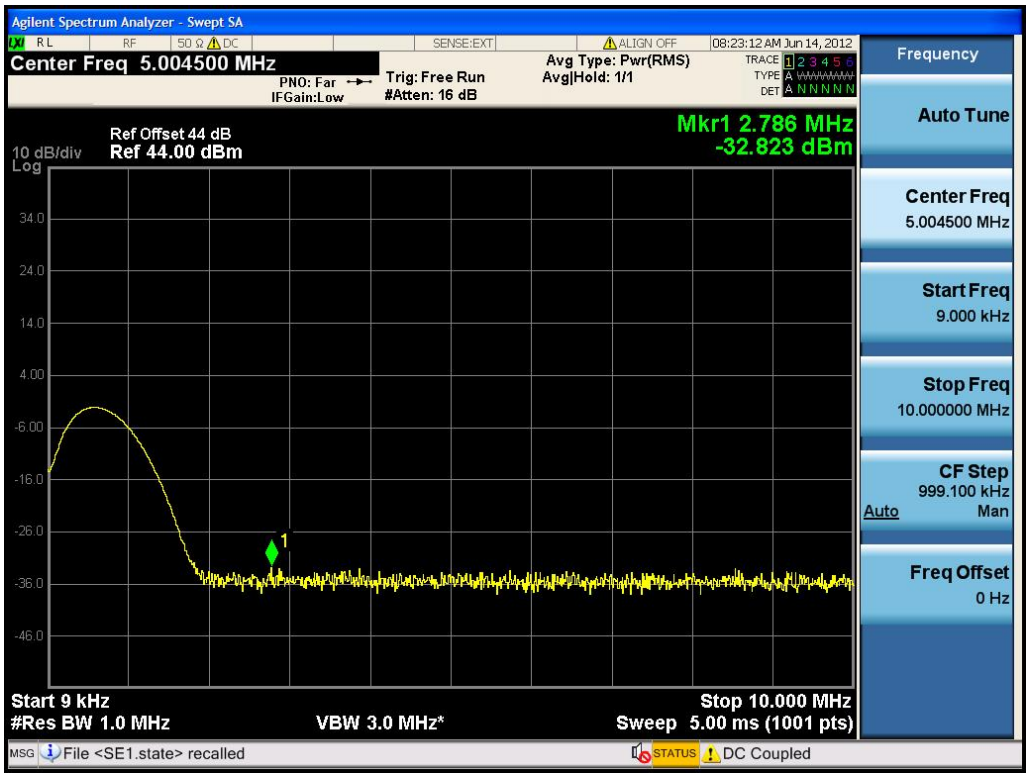
15M-Port 1 -2147.5MHz

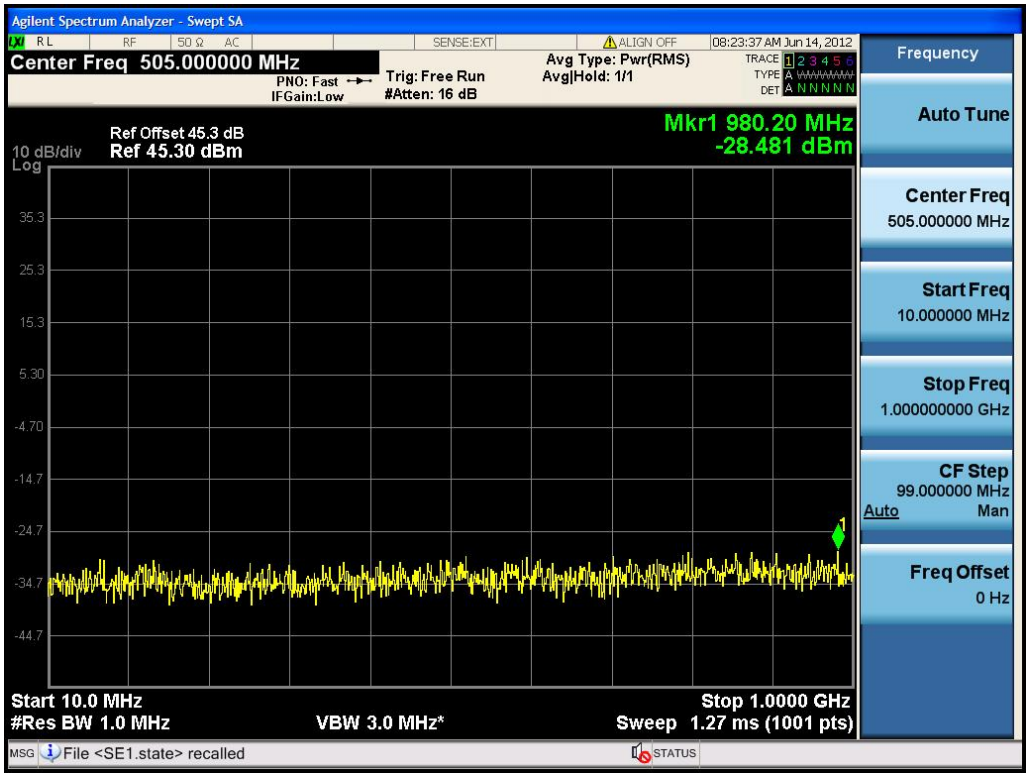



Agilent Spectrum Analyzer - Swept SA
Center Freq 505.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
04:52:04 PM Jun 13, 2012
Ref Offset 45.3 dB
10 dB/div
Ref 45.30 dBm
Mkr1 730.72 MHz
-28.406 dBm
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 1.0000 GHz
Sweep 1.27 ms (1001 pts)
File <SE1.state> recalled
Frequency
Auto Tune
Center Freq
505.000000 MHz
Start Freq
10.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
99.000000 MHz
Auto
Man
Freq Offset
0 Hz

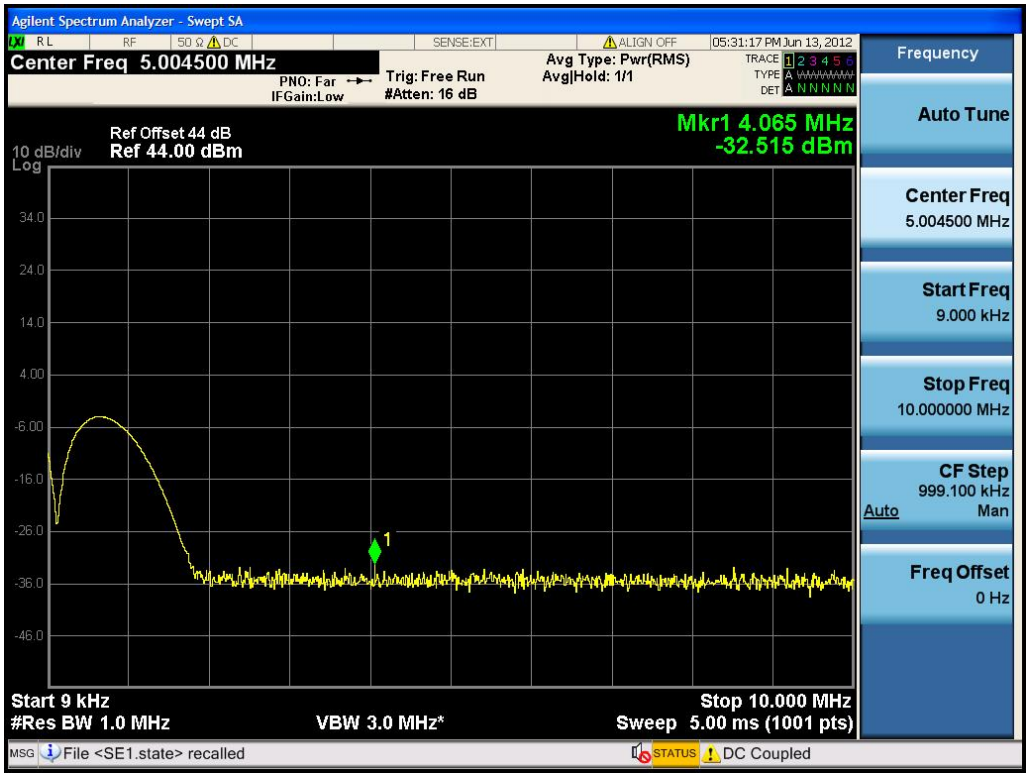

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.750000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
04:52:30 PM Jun 13, 2012
Ref Offset 45.6 dB
10 dB/div
Ref 45.60 dBm
Mkr1 2.148 GHz
34.383 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 26.50 GHz
Sweep 63.8 ms (1001 pts)
File <SE1.state> recalled
Frequency
Auto Tune
Center Freq
13.750000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.550000000 GHz
Auto
Man
Freq Offset
0 Hz

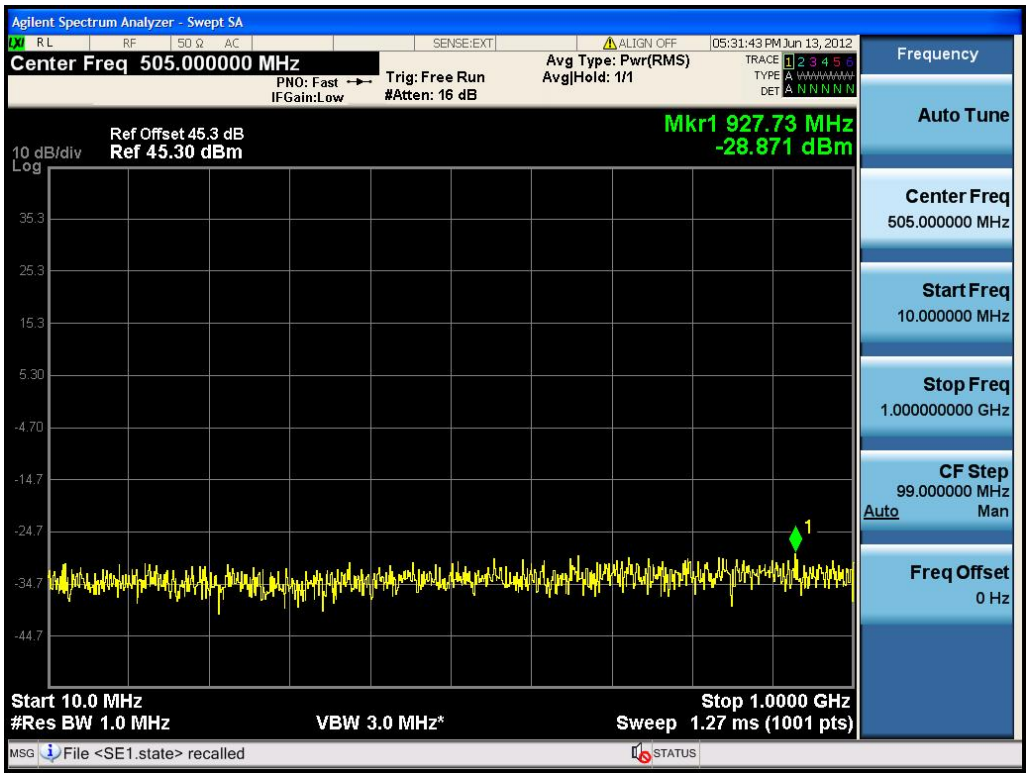
15M-Port 2-2117.5MHz



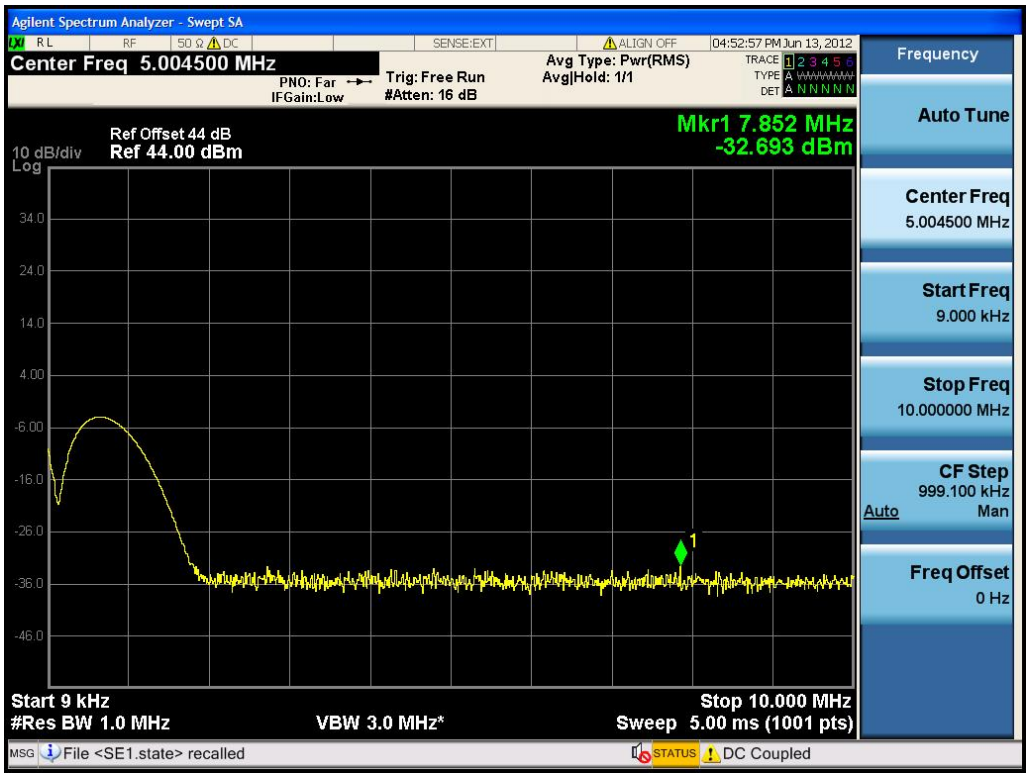


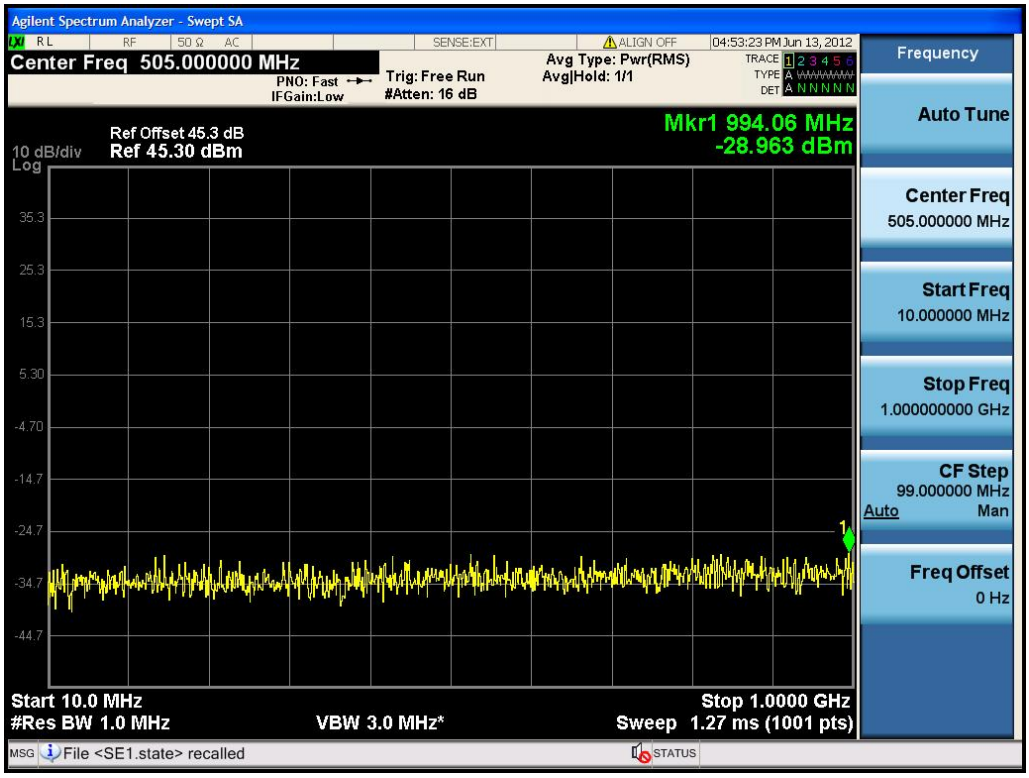
15M-Port 2 -2132.5MHz





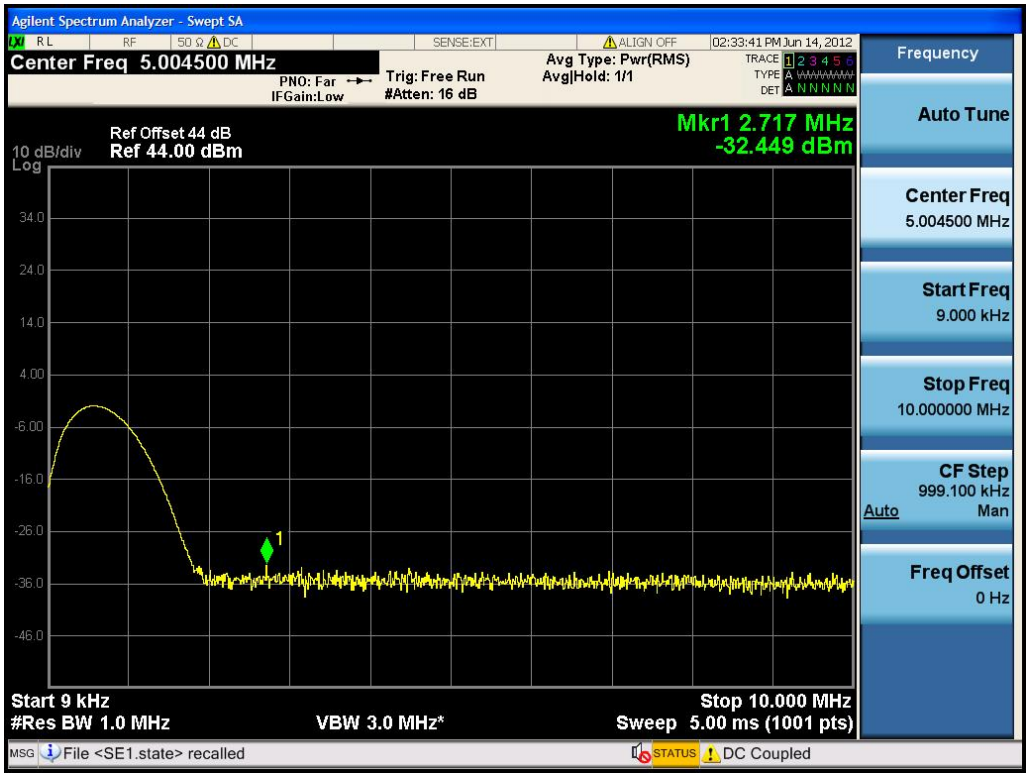
15M-Port 2 -2147.5MHz

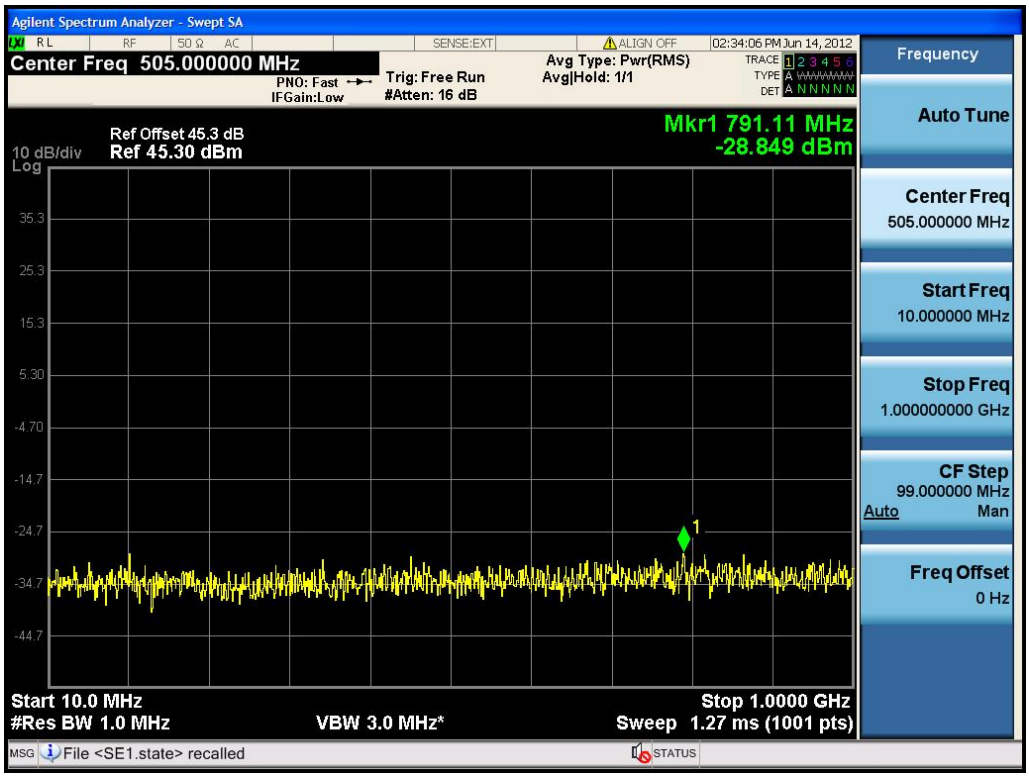

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.004500 MHz
PNO: Far
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
04:52:57 PM Jun 13, 2012
Ref Offset 44 dB
10 dB/div
Ref 44.00 dBm
Mkr1 7.852 MHz
-32.693 dBm
Start 9 kHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 10.000 MHz
Sweep 5.00 ms (1001 pts)
File <SE1.state> recalled
DC Coupled
Frequency
Auto Tune
Center Freq
5.004500 MHz
Start Freq
9.000 kHz
Stop Freq
10.000000 MHz
CF Step
999.100 kHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 505.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
04:53:23 PM Jun 13, 2012
Ref Offset 45.3 dB
10 dB/div
Ref 45.30 dBm
Mkr1 994.06 MHz
-28.963 dBm
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 1.0000 GHz
Sweep 1.27 ms (1001 pts)
File <SE1.state> recalled
Frequency
Auto Tune
Center Freq
505.000000 MHz
Start Freq
10.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
99.000000 MHz
Auto
Man
Freq Offset
0 Hz

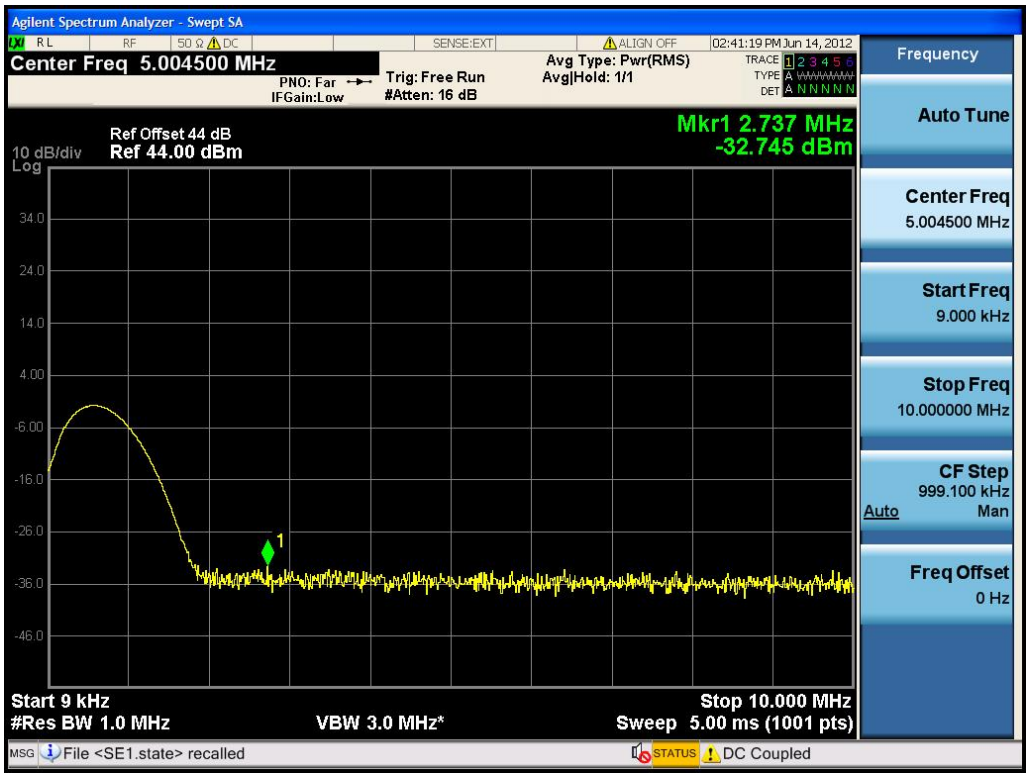
Channel Bandwidth :10M

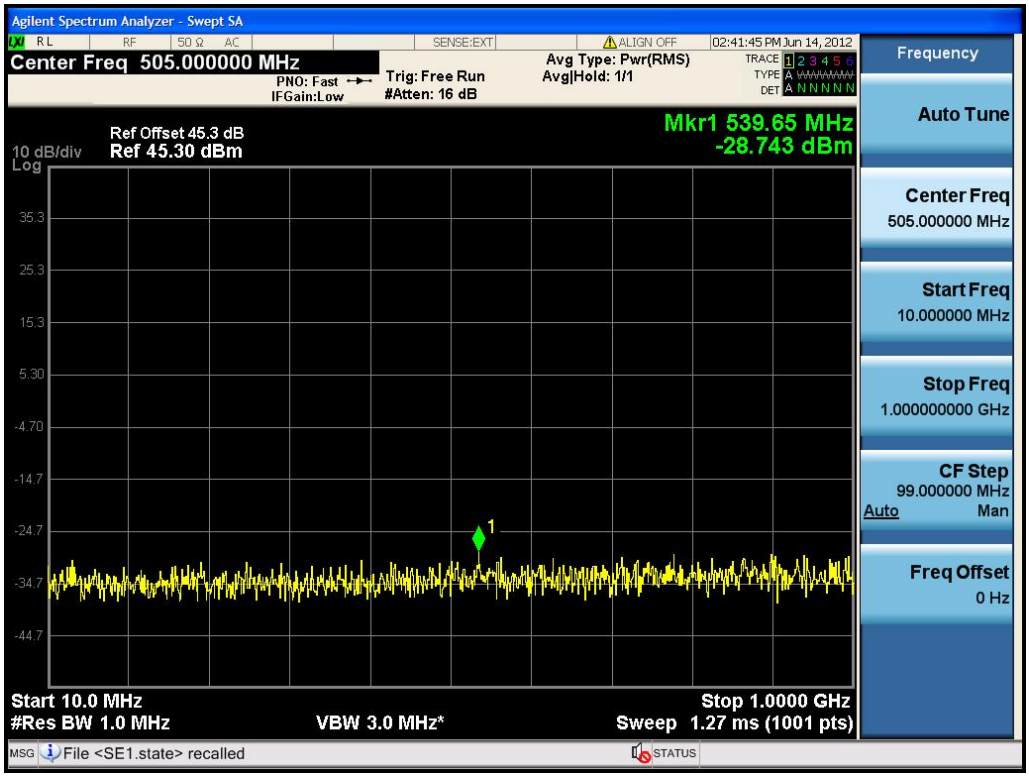
10M-Port 1 -2115MHz



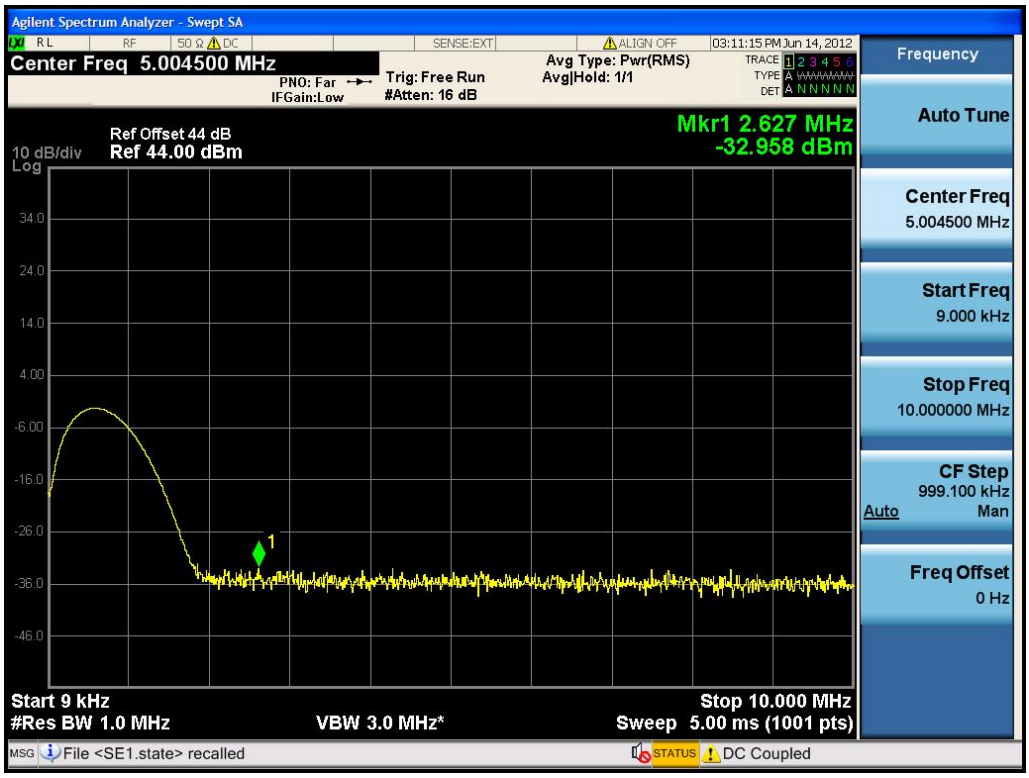


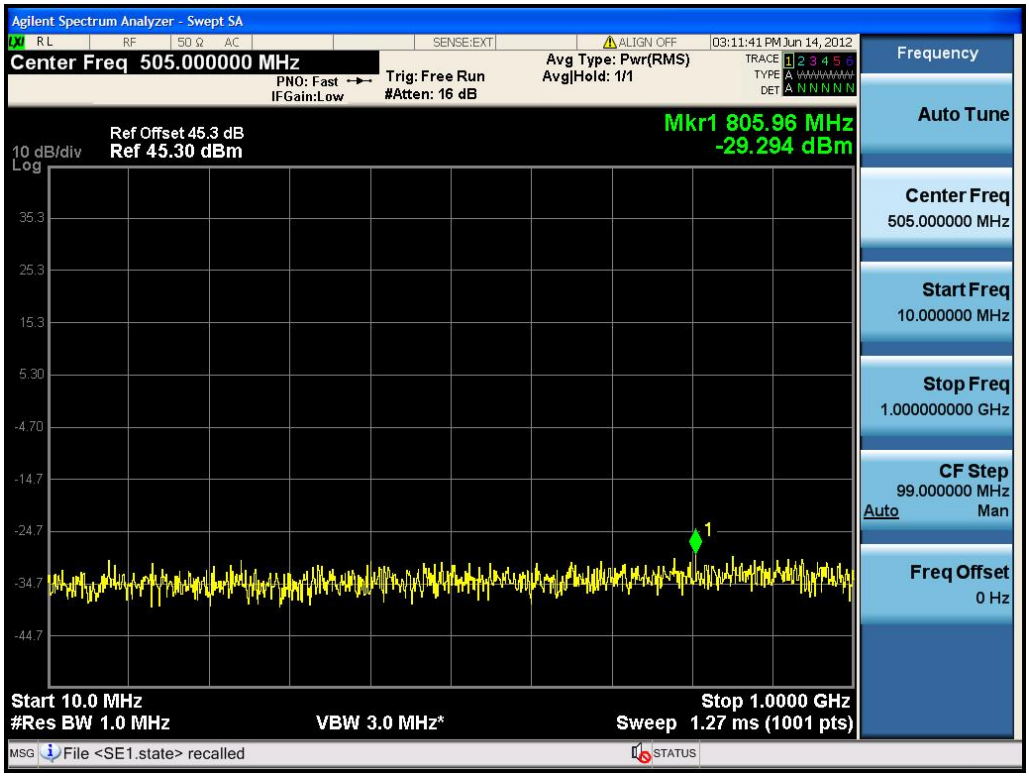
10M-Port 1 -2132.5MHz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.004500 MHz
PNO: Far
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
02:41:19 PM Jun 14, 2012
Ref Offset 44 dB
10 dB/div
Ref 44.00 dBm
Mkr1 2.737 MHz
-32.745 dBm
Start 9 kHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 10.000 MHz
Sweep 5.00 ms (1001 pts)
File <SE1.state> recalled
DC Coupled
Frequency
Auto Tune
Center Freq
5.004500 MHz
Start Freq
9.000 kHz
Stop Freq
10.000000 MHz
CF Step
999.100 kHz
Auto
Man
Freq Offset
0 Hz

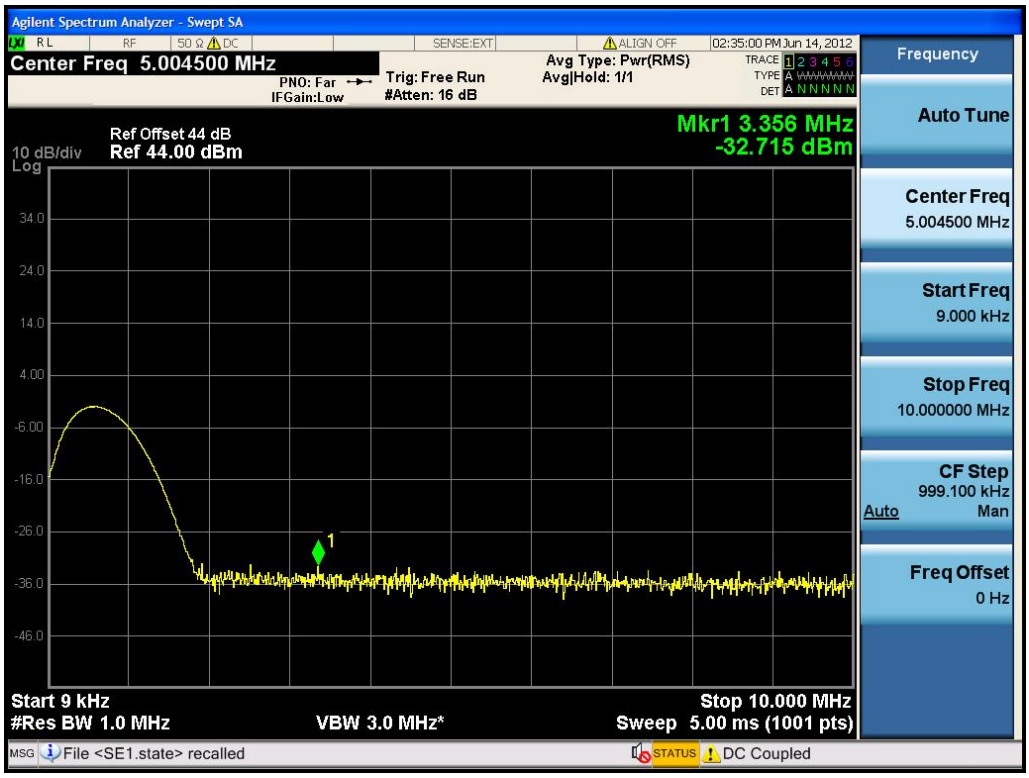

Agilent Spectrum Analyzer - Swept SA
Center Freq 505.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
02:41:45 PM Jun 14, 2012
Ref Offset 45.3 dB
10 dB/div
Ref 45.30 dBm
Mkr1 539.65 MHz
-28.743 dBm
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 1.0000 GHz
Sweep 1.27 ms (1001 pts)
File <SE1.state> recalled
Frequency
Auto Tune
Center Freq
505.000000 MHz
Start Freq
10.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
99.000000 MHz
Auto
Man
Freq Offset
0 Hz

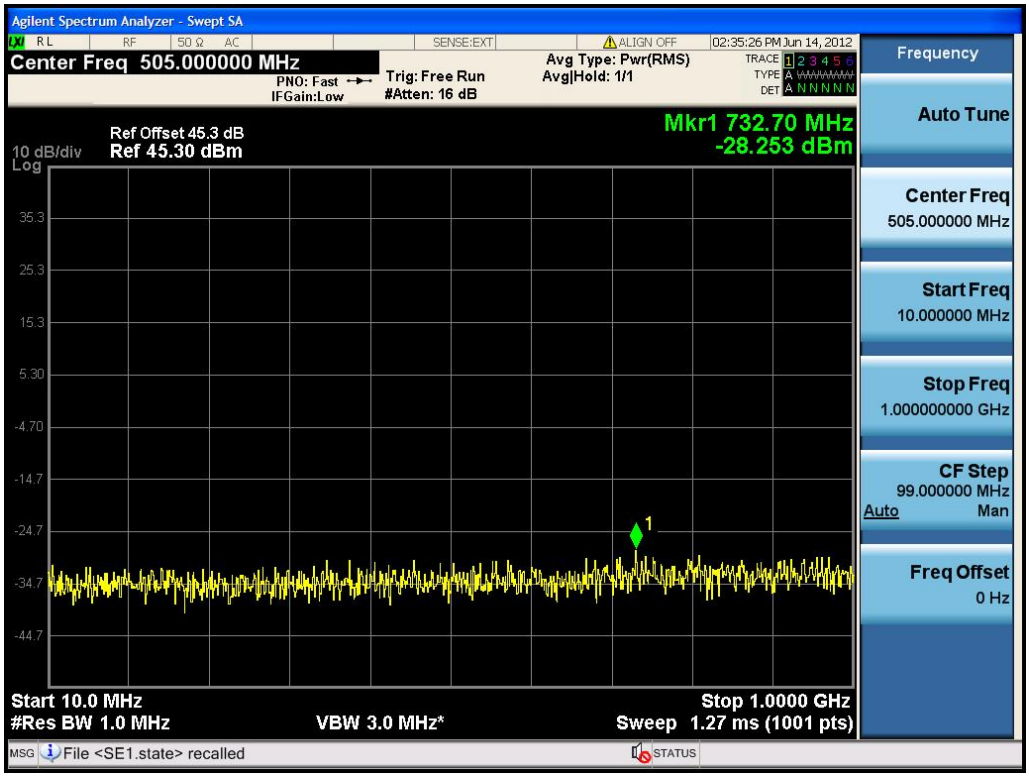
10M-Port 1 -2150MHz



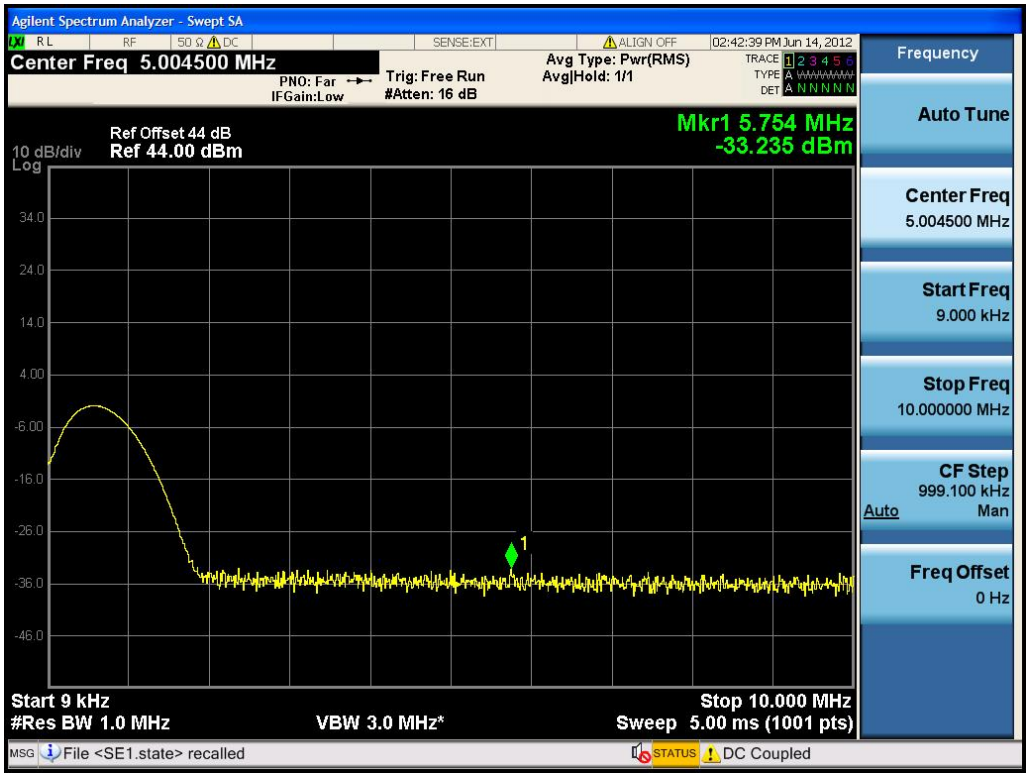


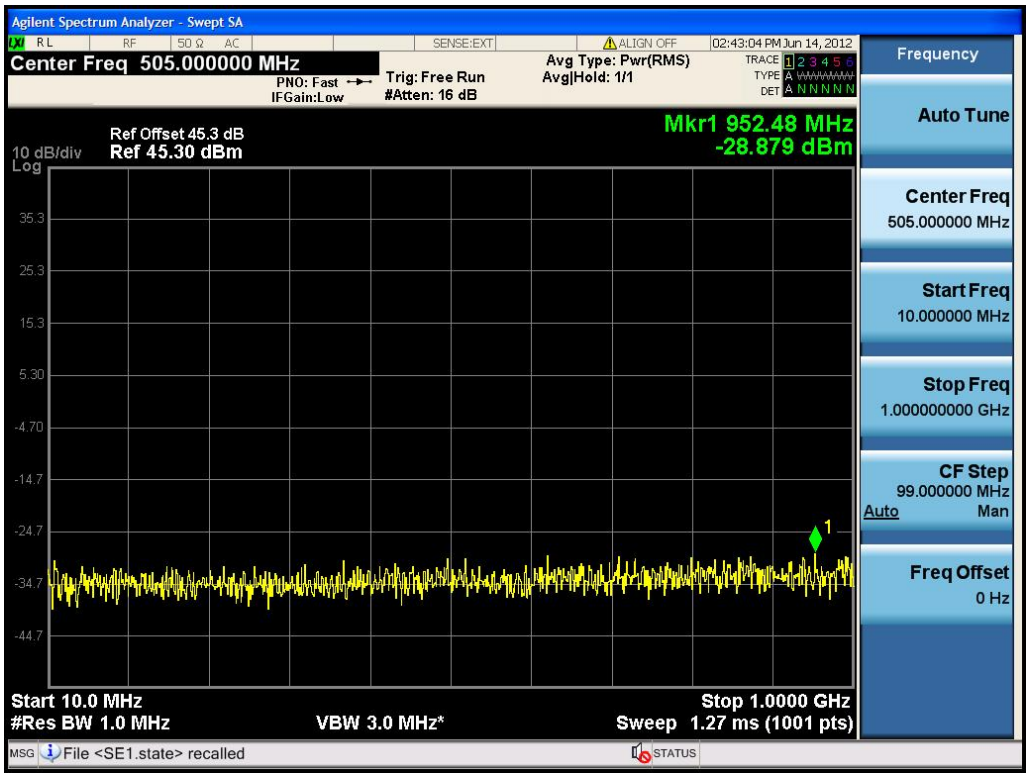
10M-Port 2 -2115MHz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.004500 MHz
PNO: Far
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
02:35:00 PM Jun 14, 2012
Ref Offset 44 dB
10 dB/div
Ref 44.00 dBm
Mkr1 3.356 MHz
-32.715 dBm
Start 9 kHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 10.000 MHz
Sweep 5.00 ms (1001 pts)
File <SE1.state> recalled
DC Coupled
Frequency
Auto Tune
Center Freq
5.004500 MHz
Start Freq
9.000 kHz
Stop Freq
10.000000 MHz
CF Step
999.100 kHz
Auto
Man
Freq Offset
0 Hz

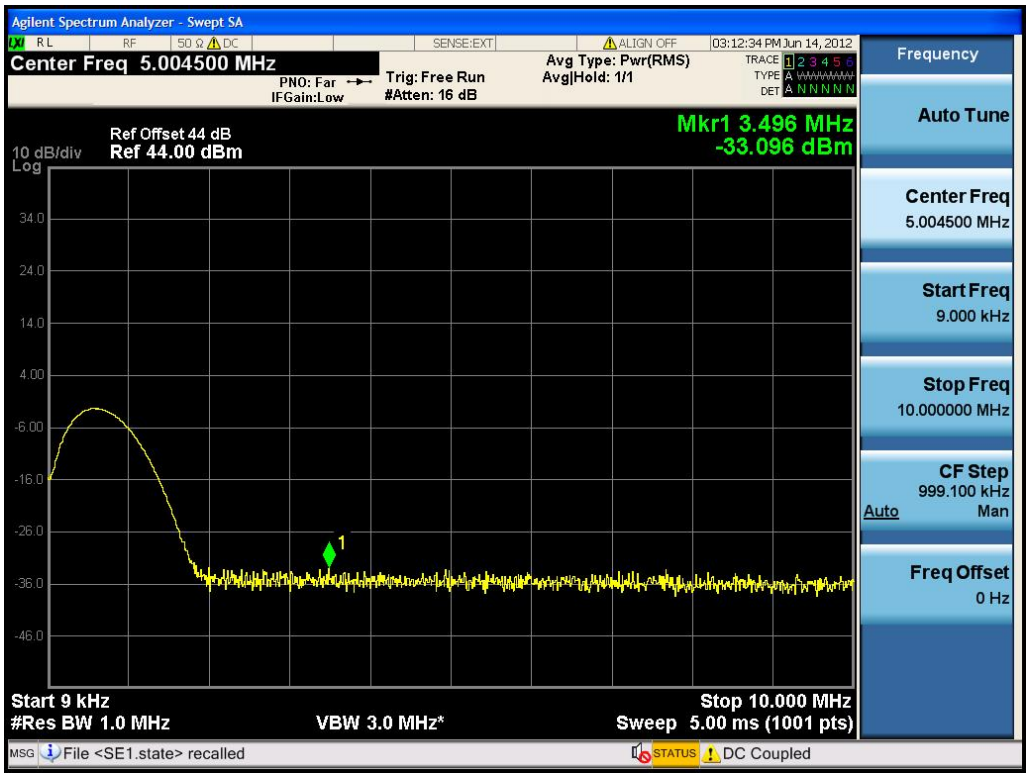

Agilent Spectrum Analyzer - Swept SA
Center Freq 505.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
02:35:26 PM Jun 14, 2012
Ref Offset 45.3 dB
10 dB/div
Ref 45.30 dBm
Mkr1 732.70 MHz
-28.253 dBm
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 1.0000 GHz
Sweep 1.27 ms (1001 pts)
File <SE1.state> recalled
Frequency
Auto Tune
Center Freq
505.000000 MHz
Start Freq
10.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
99.000000 MHz
Auto
Man
Freq Offset
0 Hz

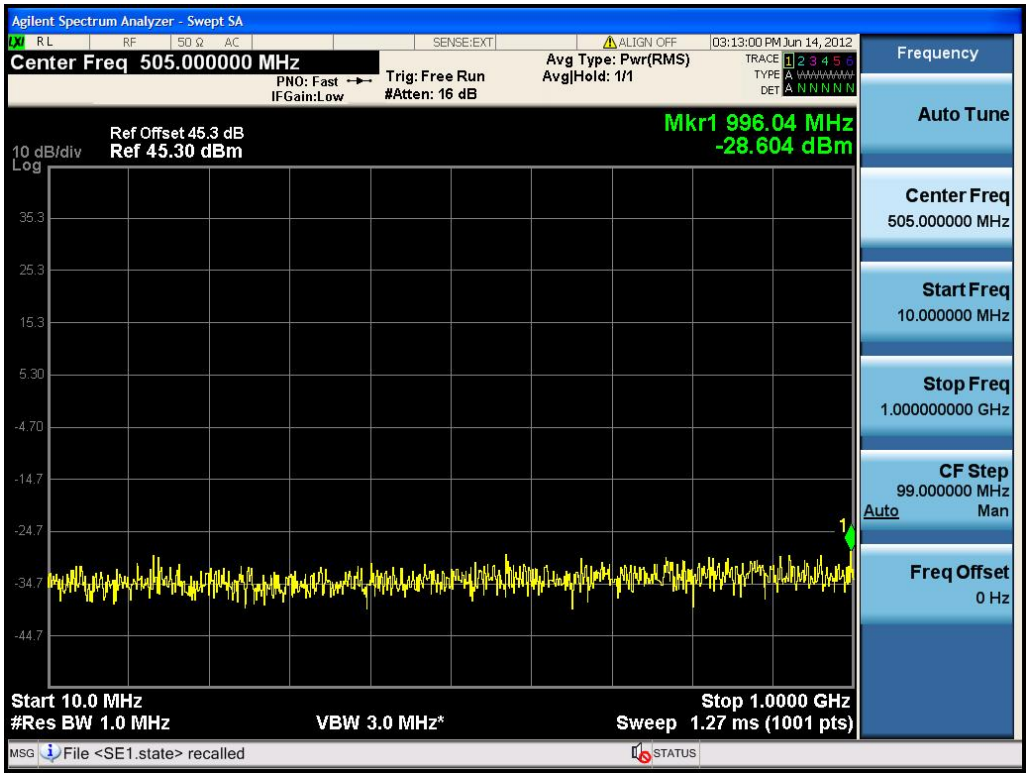
10M-Port 2 -2132.5MHz





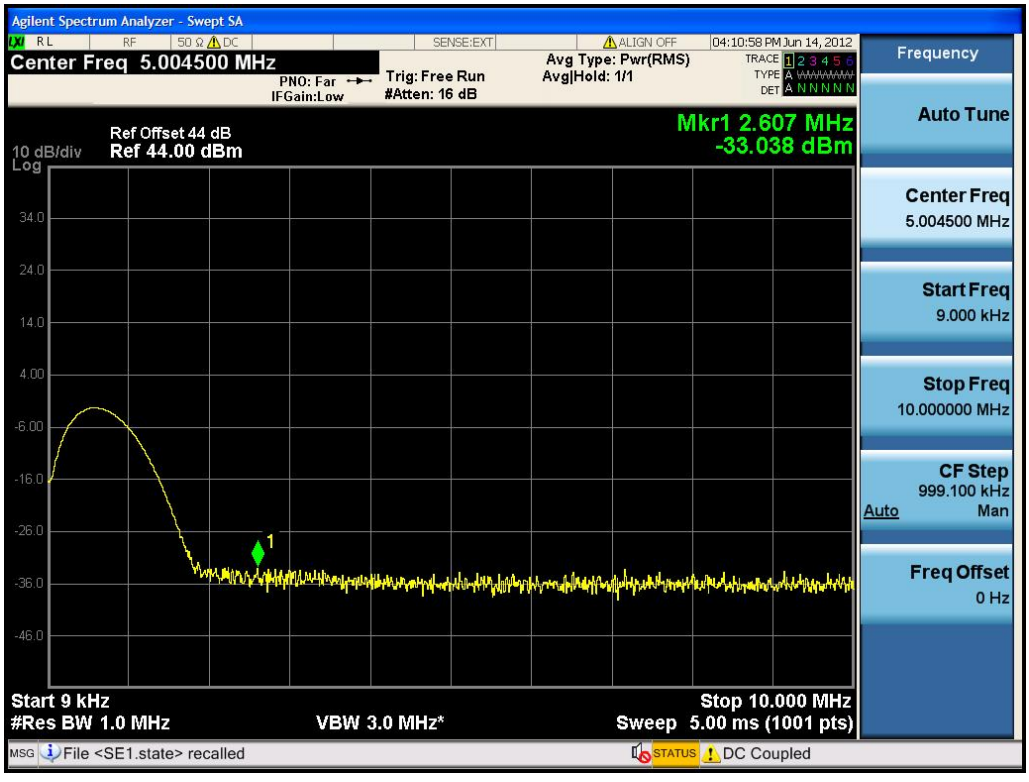
10M-Port 2 -2150MHz

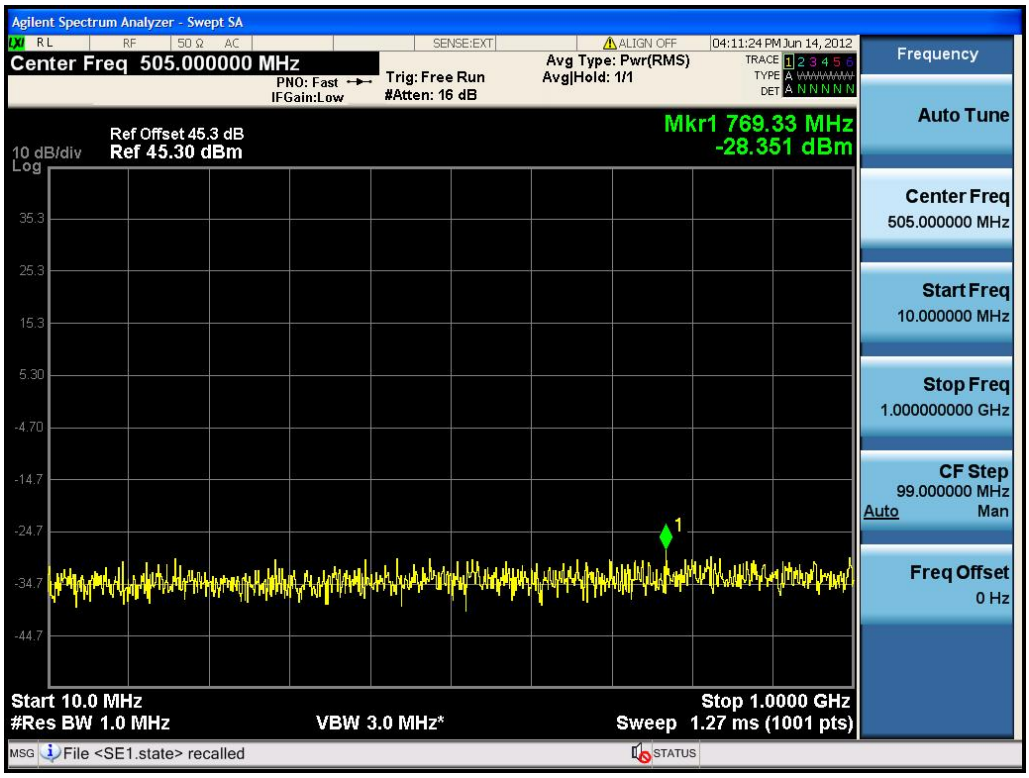

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.004500 MHz
PNO: Far
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
03:12:34 PM Jun 14, 2012
Ref Offset 44 dB
10 dB/div
Ref 44.00 dBm
Mkr1 3.496 MHz
-33.096 dBm
Start 9 kHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 10.000 MHz
Sweep 5.00 ms (1001 pts)
File <SE1.state> recalled
DC Coupled
Frequency
Auto Tune
Center Freq
5.004500 MHz
Start Freq
9.000 kHz
Stop Freq
10.000000 MHz
CF Step
999.100 kHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 505.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
03:13:00 PM Jun 14, 2012
Ref Offset 45.3 dB
10 dB/div
Ref 45.30 dBm
Mkr1 996.04 MHz
-28.604 dBm
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 1.0000 GHz
Sweep 1.27 ms (1001 pts)
File <SE1.state> recalled
Frequency
Auto Tune
Center Freq
505.000000 MHz
Start Freq
10.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
99.000000 MHz
Auto
Man
Freq Offset
0 Hz

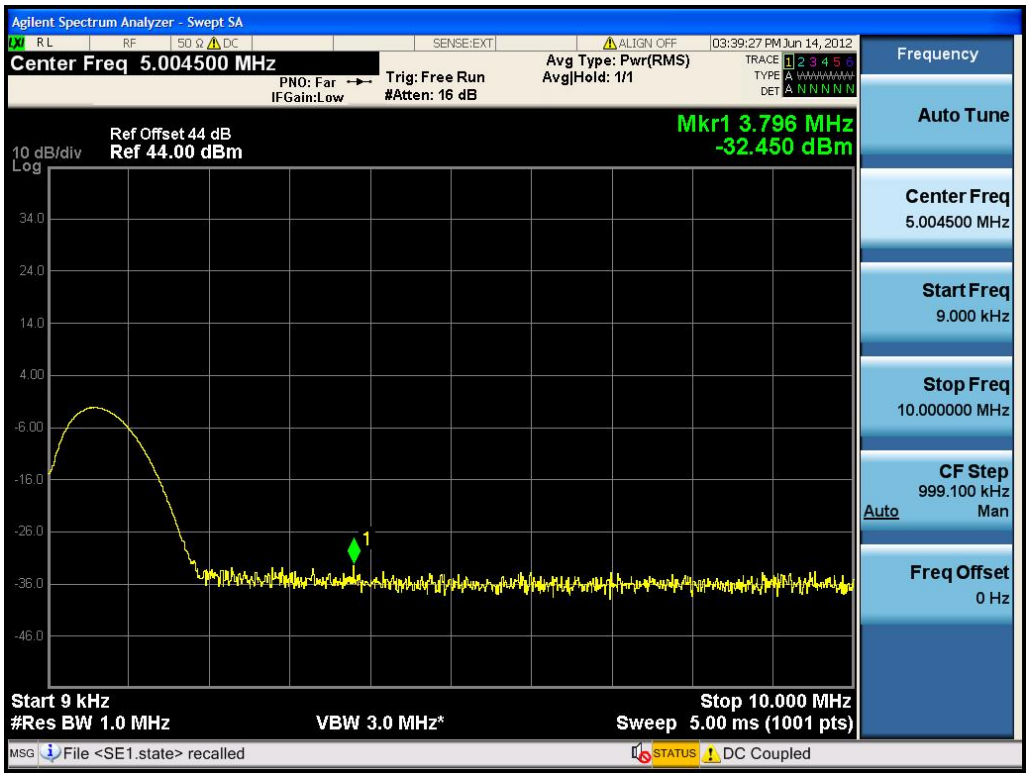
Channel Bandwidth :5M

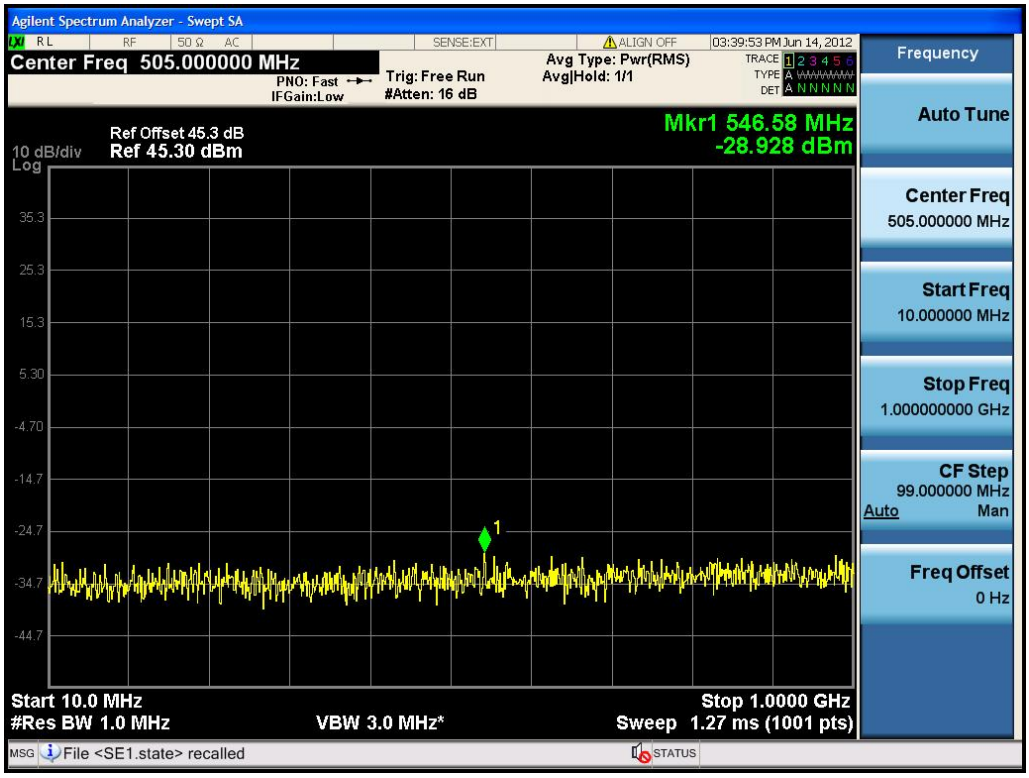
5M-Port 1 -2112.5MHz



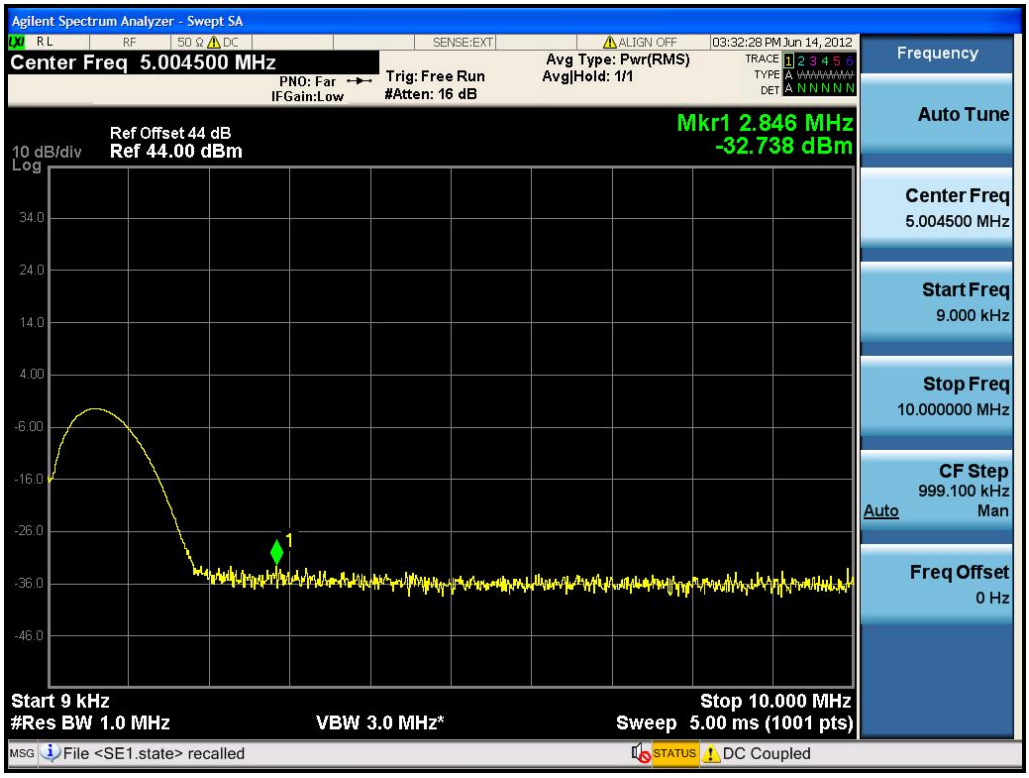


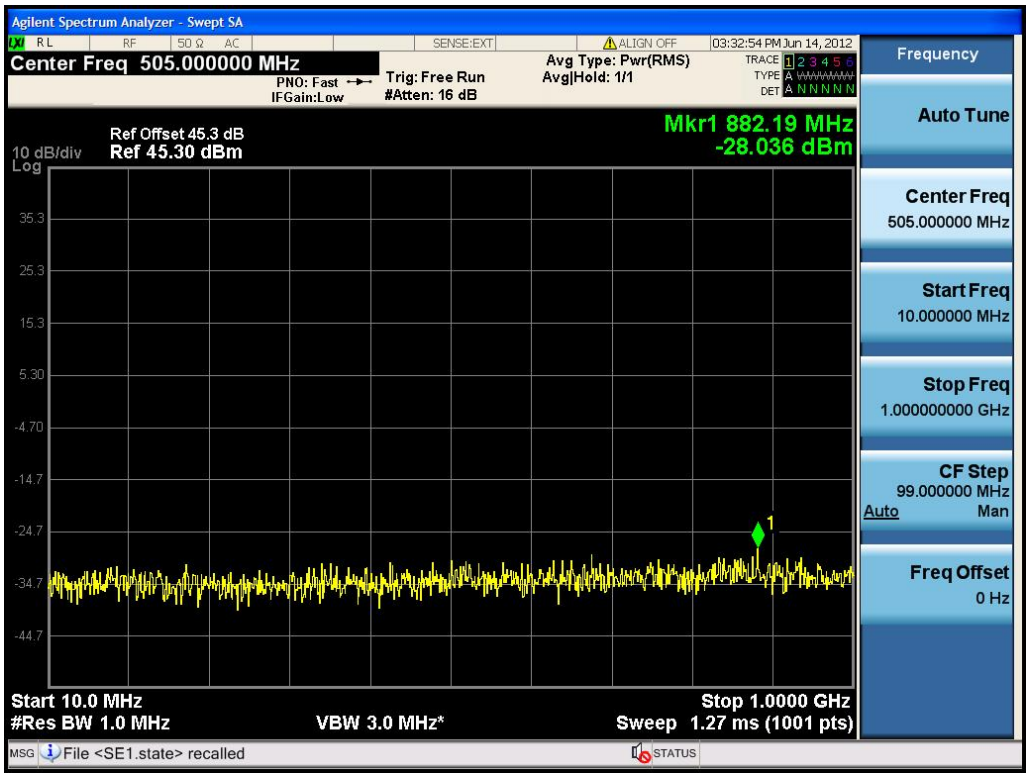
5M-Port 1 -2132.5MHz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.004500 MHz
PNO: Far
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
03:39:27 PM Jun 14, 2012
Ref Offset 44 dB
10 dB/div
Log
Ref 44.00 dBm
Mkr1 3.796 MHz
-32.450 dBm
34.0
24.0
14.0
4.00
-6.00
-16.0
-26.0
-36.0
-46.0
Start 9 kHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 10.000 MHz
Sweep 5.00 ms (1001 pts)
File <SE1.state> recalled
DC Coupled
Frequency
Auto Tune
Center Freq
5.004500 MHz
Start Freq
9.000 kHz
Stop Freq
10.000000 MHz
CF Step
999.100 kHz
Auto
Man
Freq Offset
0 Hz

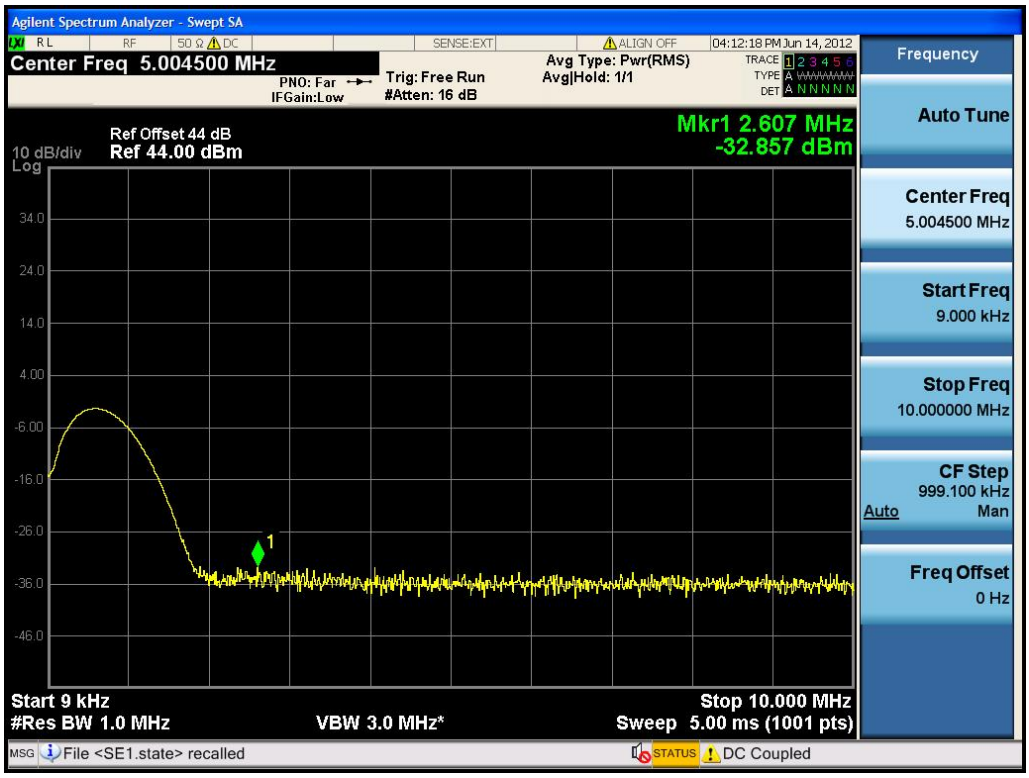

Agilent Spectrum Analyzer - Swept SA
Center Freq 505.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
03:39:53 PM Jun 14, 2012
Ref Offset 45.3 dB
10 dB/div
Log
Ref 45.30 dBm
Mkr1 546.58 MHz
-28.928 dBm
35.3
25.3
15.3
5.30
-4.70
-14.7
-24.7
-34.7
-44.7
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 1.0000 GHz
Sweep 1.27 ms (1001 pts)
File <SE1.state> recalled
Frequency
Auto Tune
Center Freq
505.000000 MHz
Start Freq
10.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
99.000000 MHz
Auto
Man
Freq Offset
0 Hz

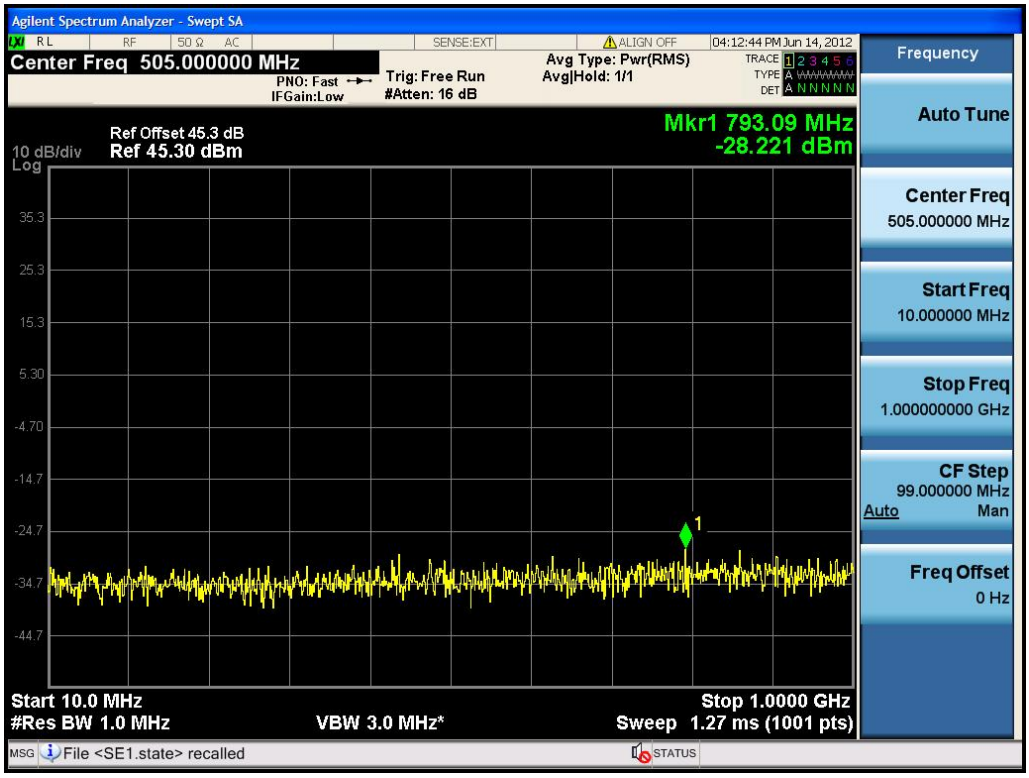
5M-Port 1 -2152.5MHz





5M-Port 2 -2112.5MHz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.004500 MHz
PNO: Far
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
04:12:18 PM Jun 14, 2012
Ref Offset 44 dB
10 dB/div
Log
Ref 44.00 dBm
Mkr1 2.607 MHz
-32.857 dBm
34.0
24.0
14.0
4.00
-6.00
-16.0
-26.0
-36.0
-46.0
Start 9 kHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 10.000 MHz
Sweep 5.00 ms (1001 pts)
File <SE1.state> recalled
DC Coupled
Frequency
Auto Tune
Center Freq
5.004500 MHz
Start Freq
9.000 kHz
Stop Freq
10.000000 MHz
CF Step
999.100 kHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 505.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Pwr(RMS)
Avg|Hold: 1/1
04:12:44 PM Jun 14, 2012
Ref Offset 45.3 dB
10 dB/div
Log
Ref 45.30 dBm
Mkr1 793.09 MHz
-28.221 dBm
35.3
25.3
15.3
5.30
-4.70
-14.7
-24.7
-34.7
-44.7
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 3.0 MHz*
Stop 1.0000 GHz
Sweep 1.27 ms (1001 pts)
File <SE1.state> recalled
Frequency
Auto Tune
Center Freq
505.000000 MHz
Start Freq
10.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
99.000000 MHz
Auto
Man
Freq Offset
0 Hz