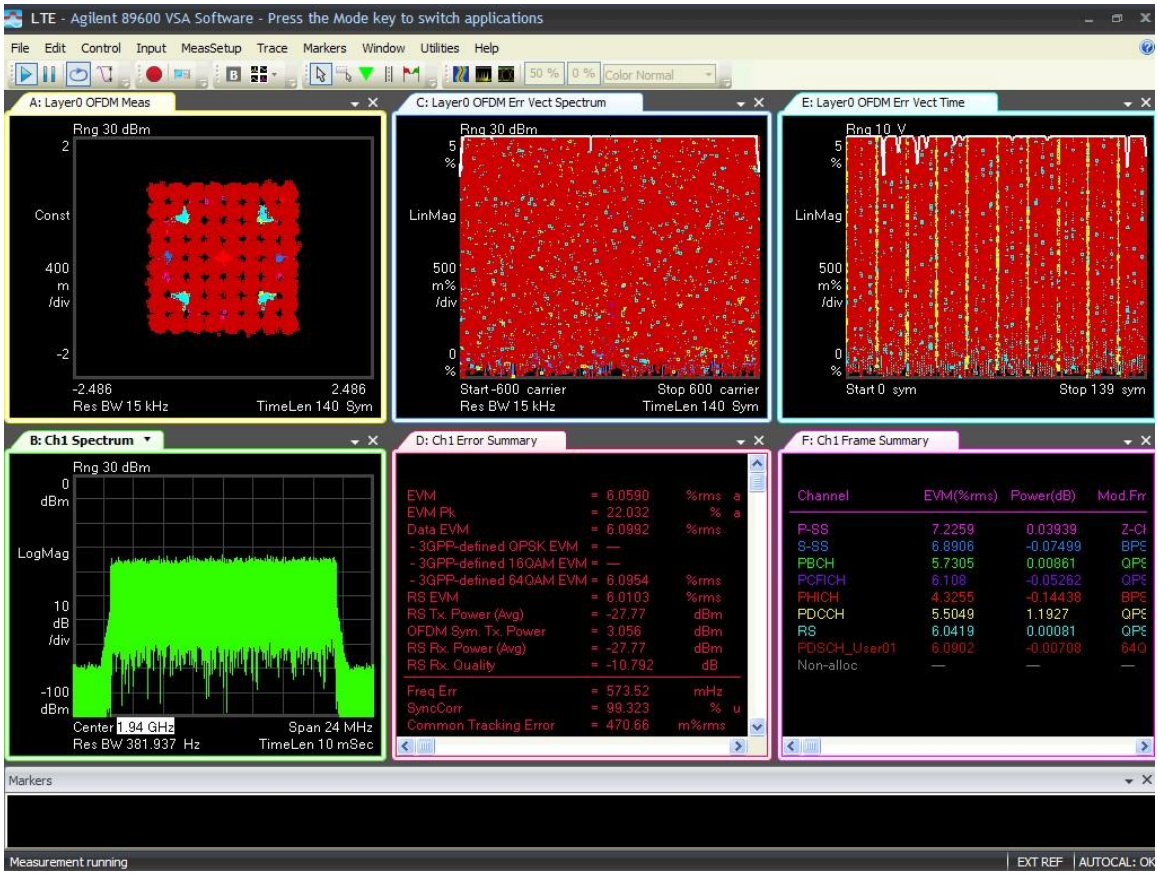
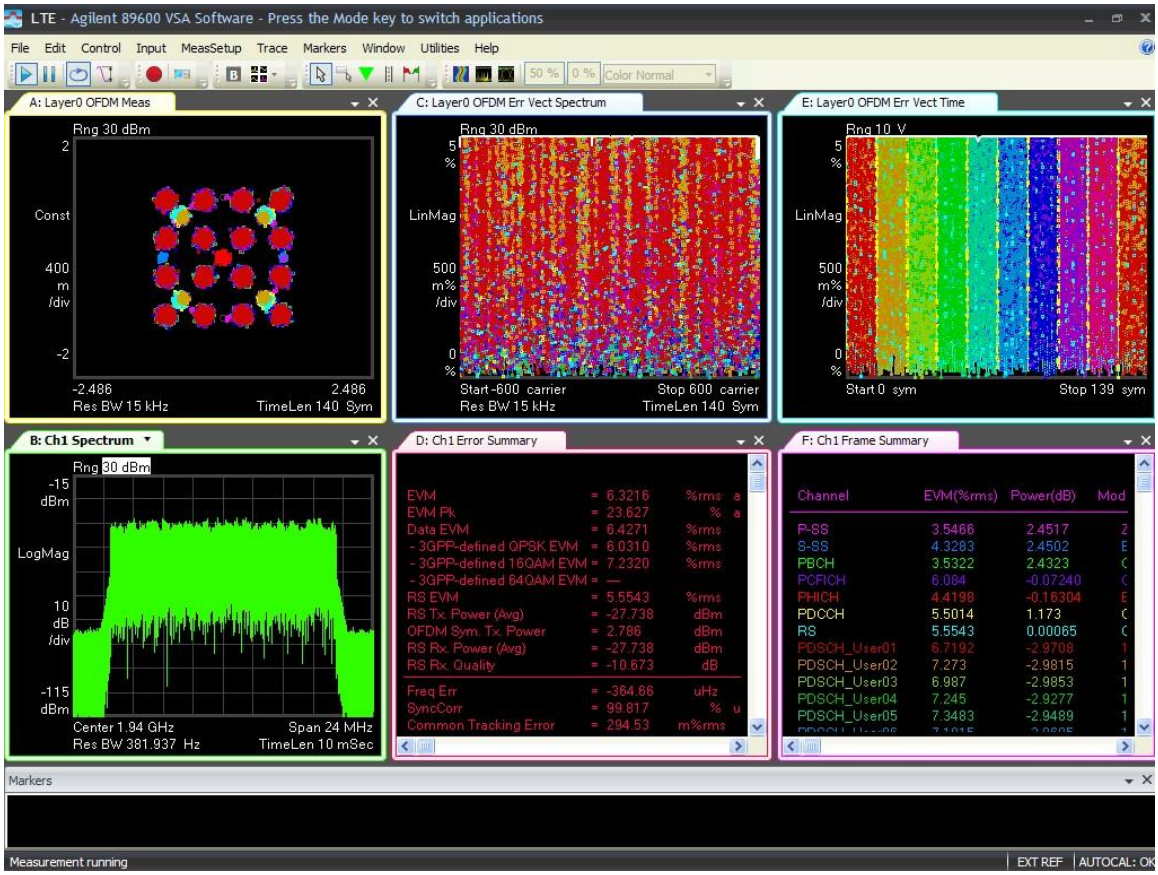
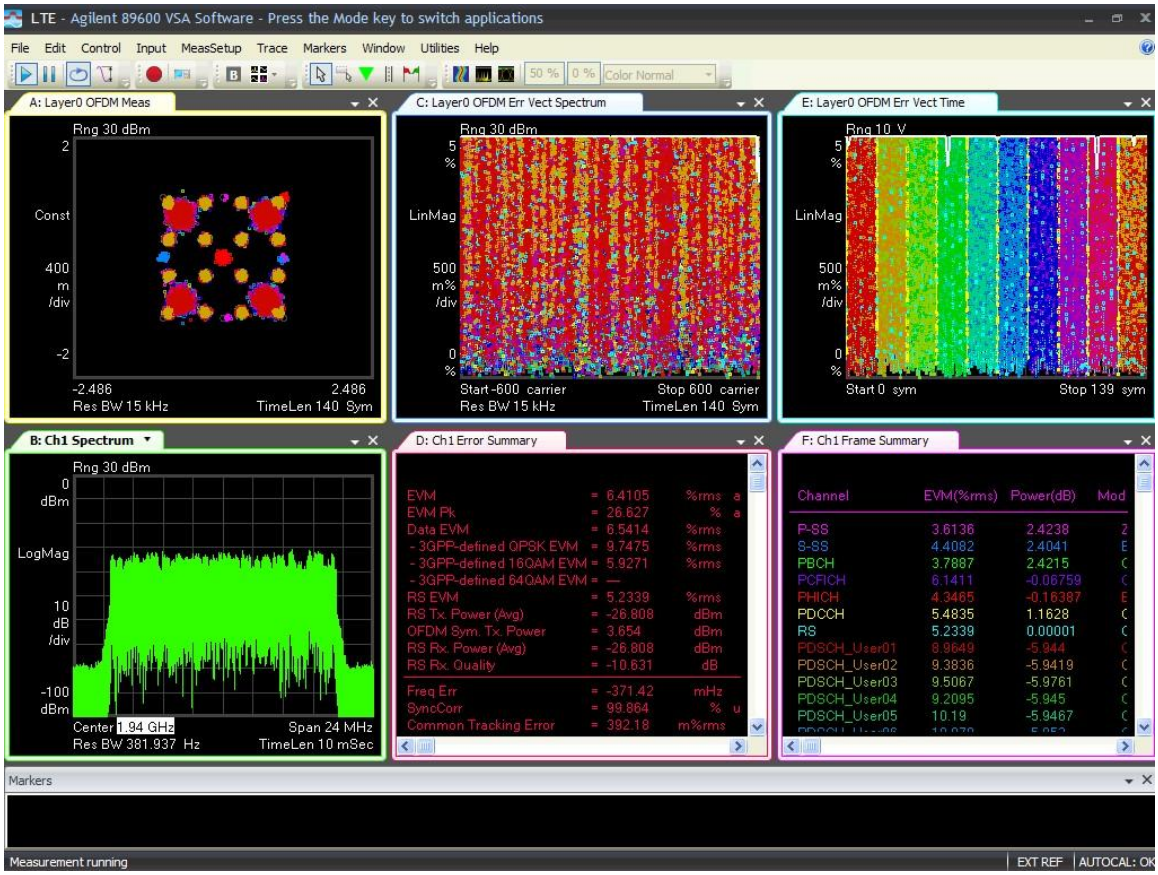


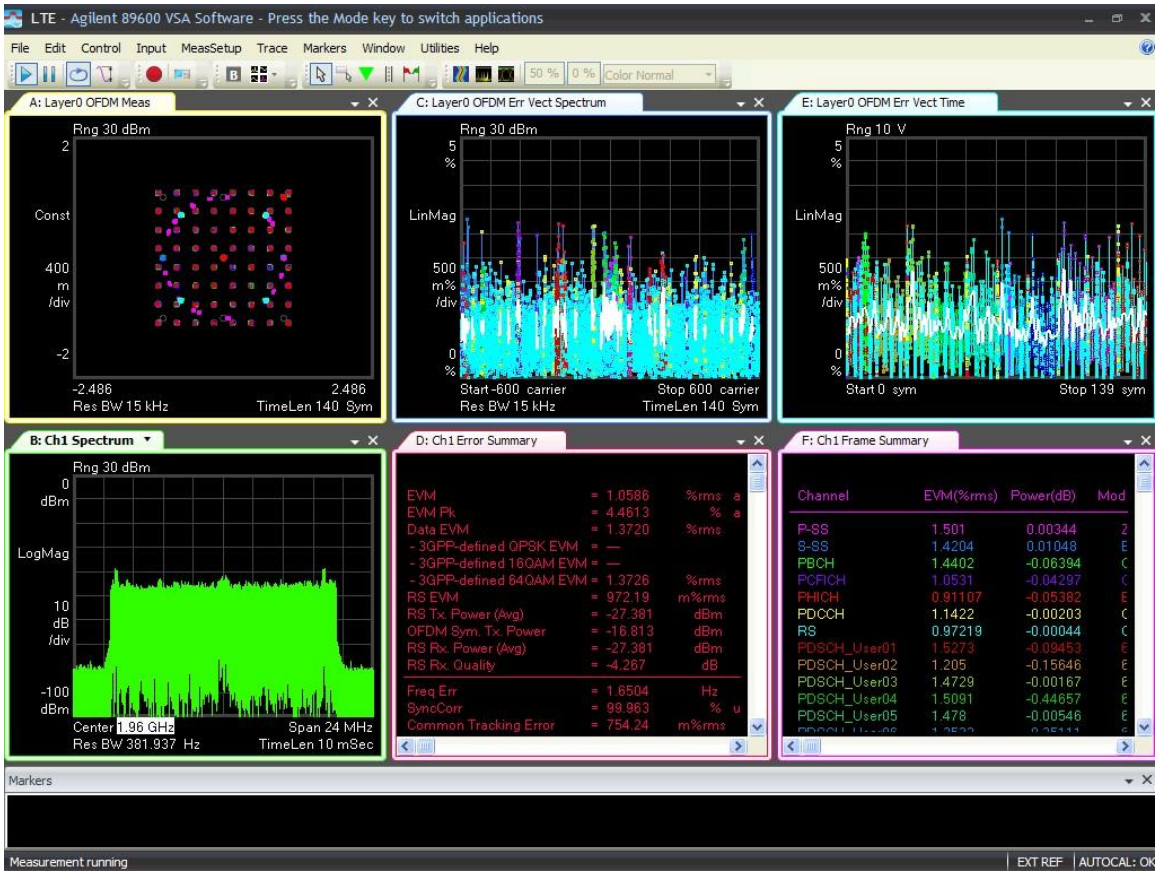
20M -Port 4 -1940MHz -TM3.2



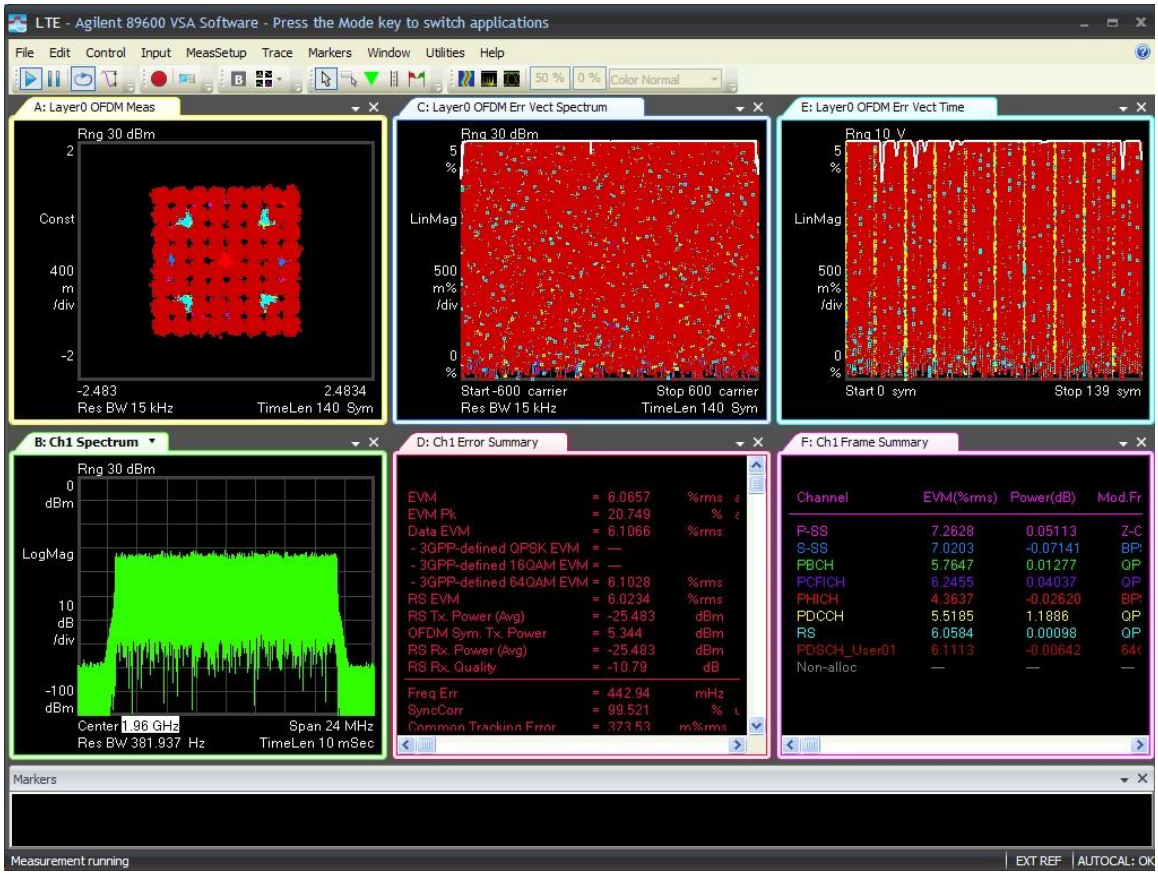
20M -Port 4 -1940MHz -TM3.3



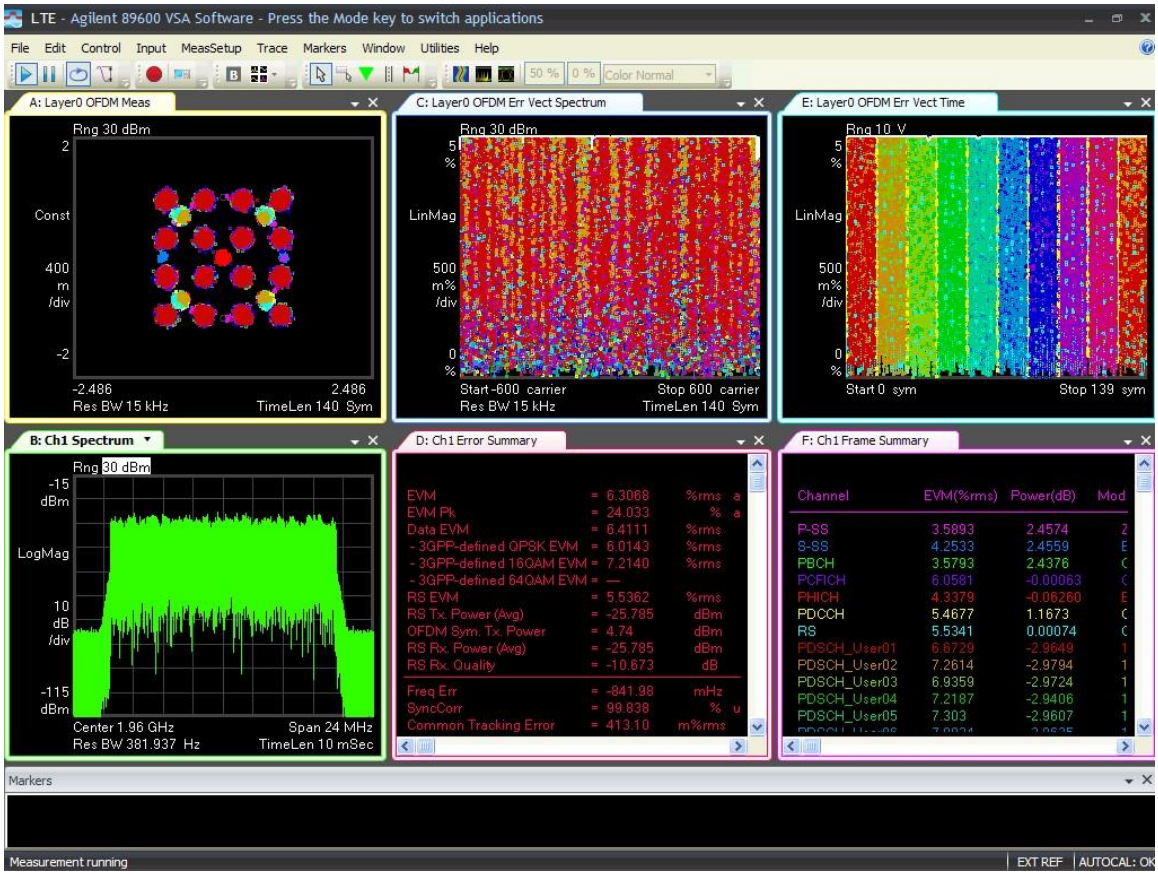
20M -Port 4 -1960MHz-TM2.0



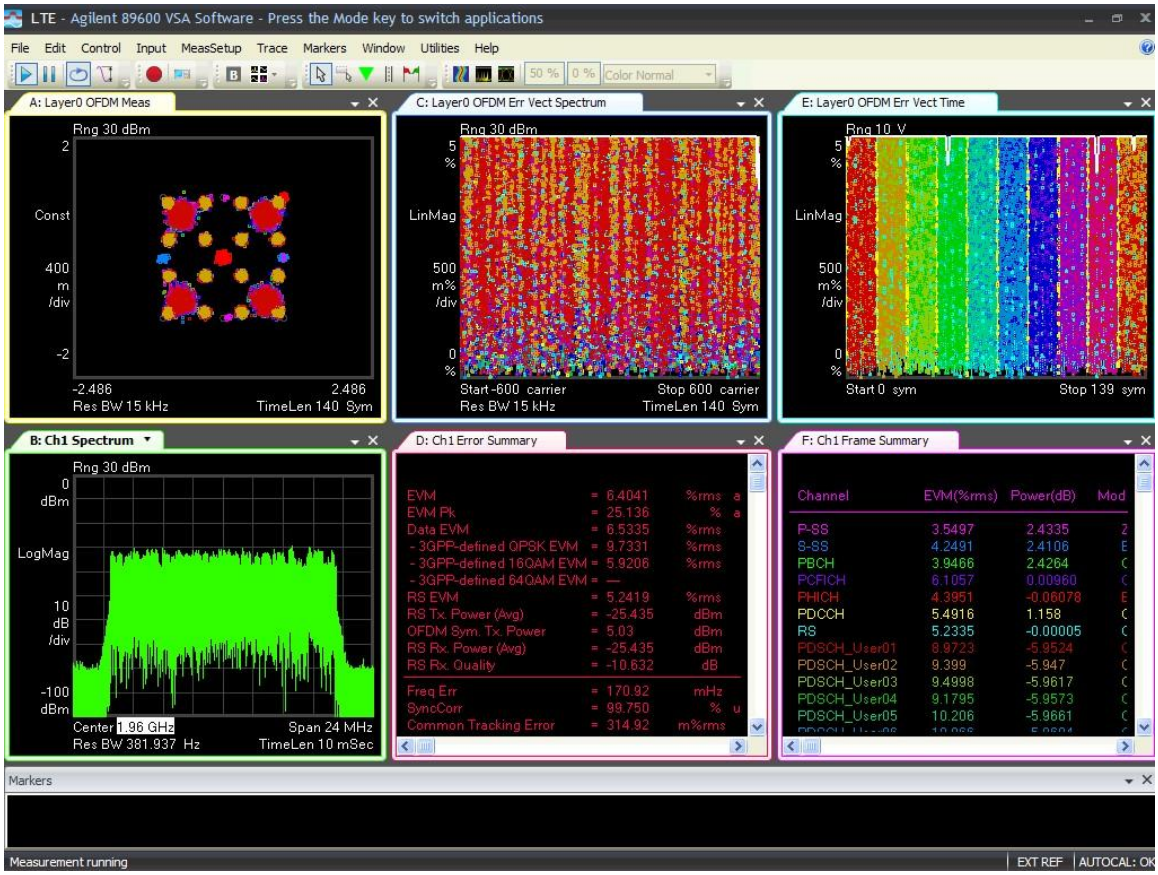
20M -Port 4 -1960MHz -TM3.1



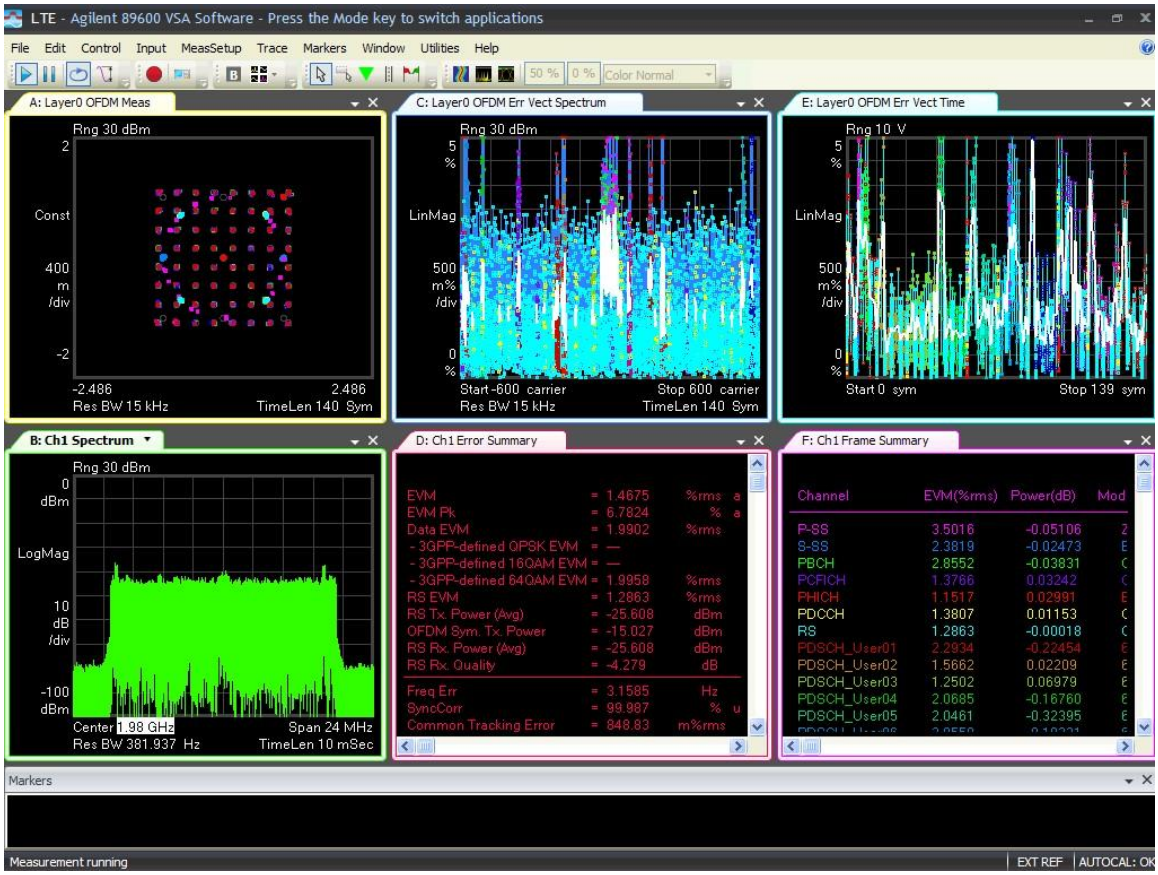
20M -Port 4 -1960MHz -TM3.2



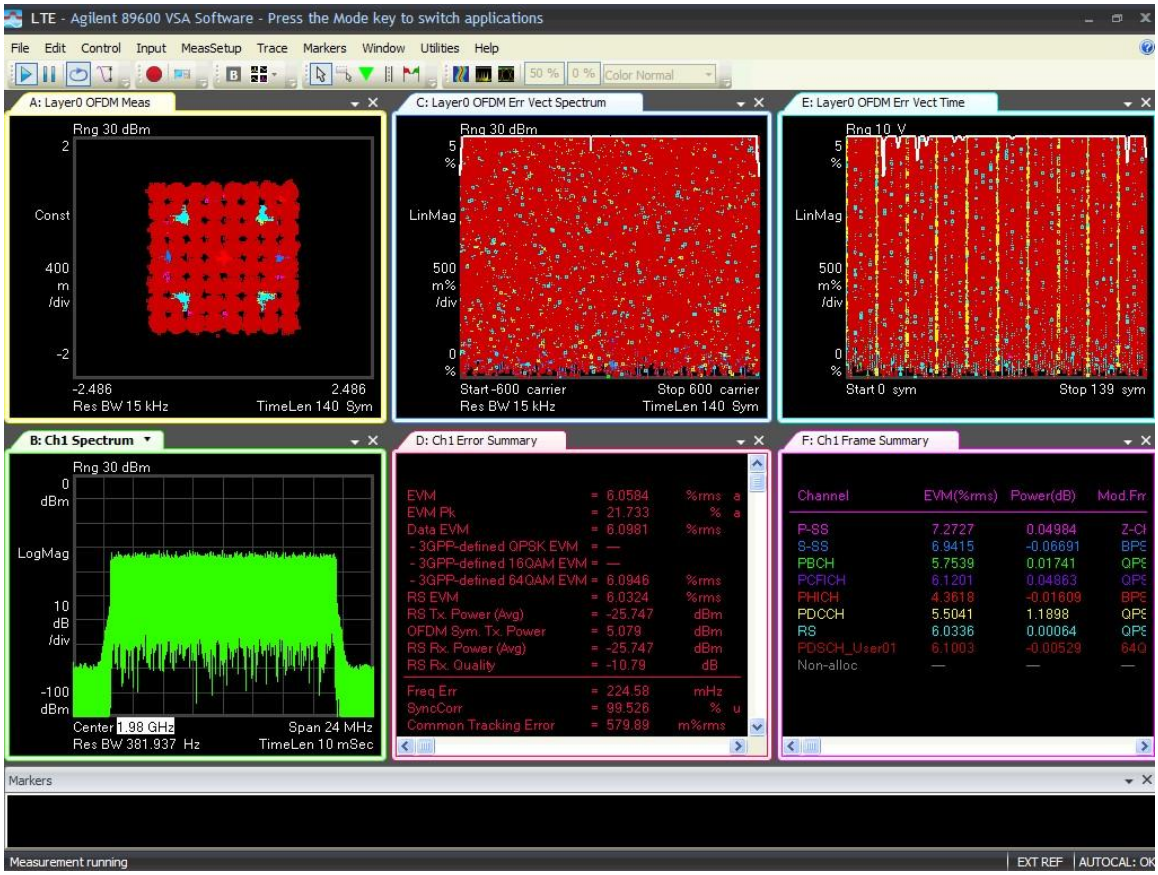
20M -Port 4 -1960MHz -TM3.3



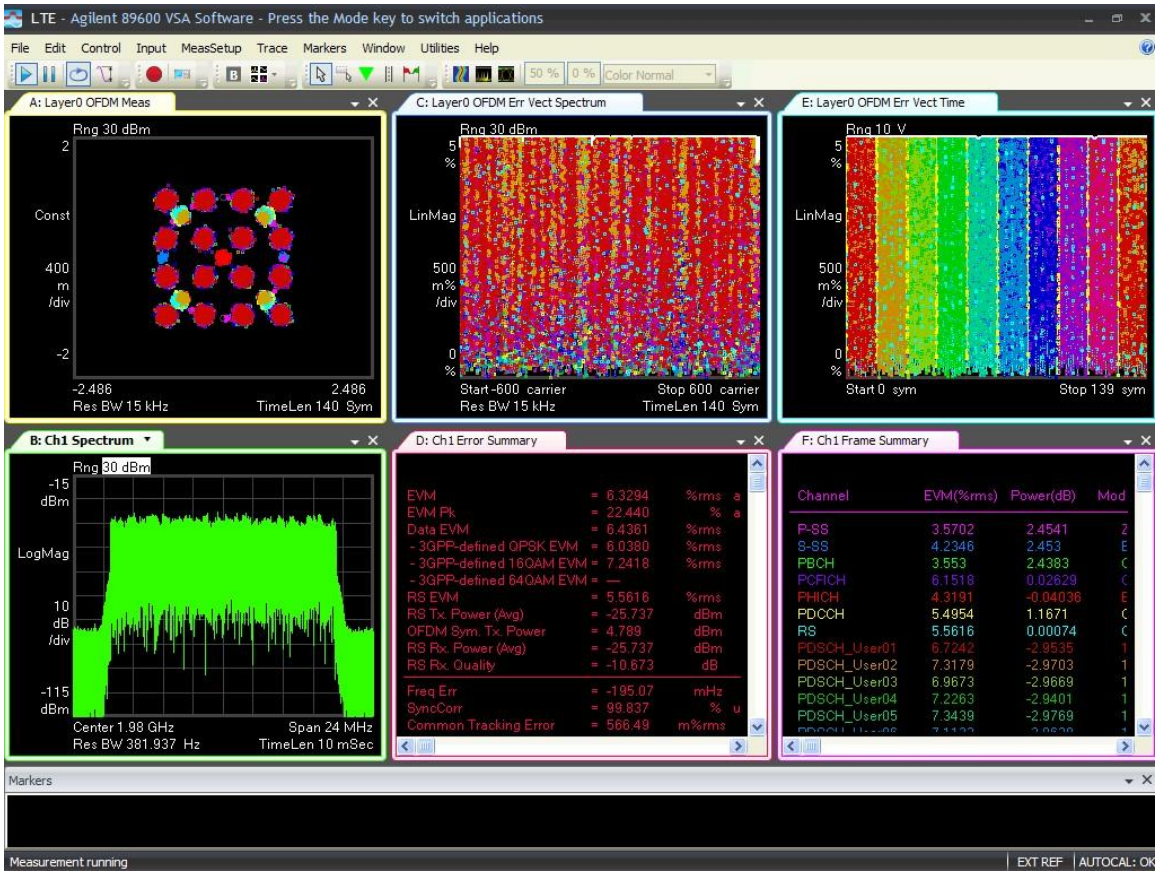
20M -Port 4-1980MHz-TM2.0



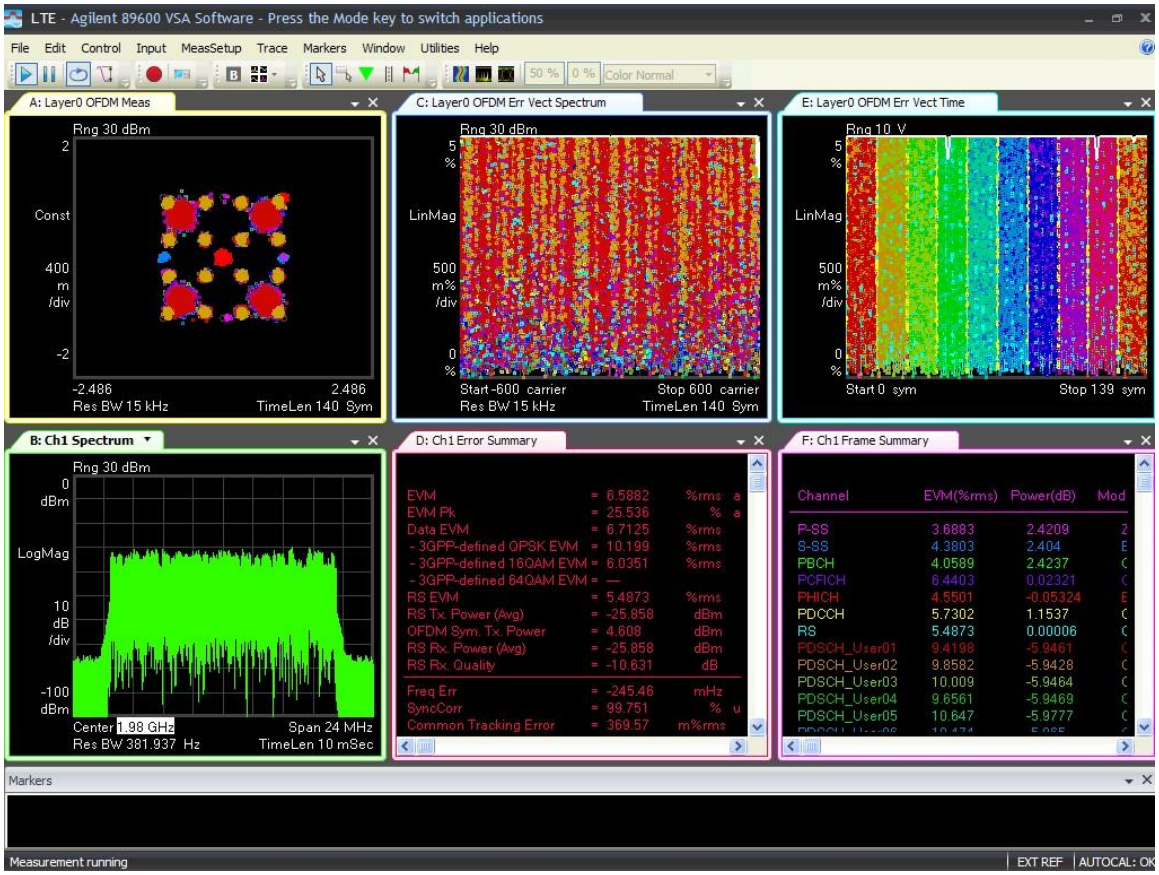
20M -Port 4 -1980MHz -TM3.1



20M -Port 4 -1980MHz -TM3.2



20M -Port 4 -1980MHz -TM3.3



8 SPURIOUS RADIATED EMISSIONS

Applicable Standard: FCC CFR 47 §2.1053

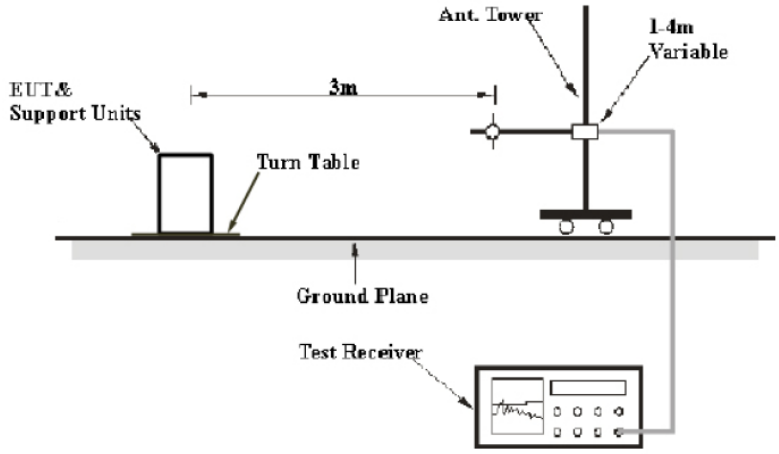
Test Equipment List and Details

Manufacturer	Equipment	Model	Serial Number	Last Cal.	Cal. Interval
R&S	SIGNAL GENERATOR	SMR20	A00017351	2010-10-29	1 year
Albatross	Anechoic Chamber	3m Site	A00017354	2010-6-30	1 year
R&S	EMI Test Receiver	ESIB26	100058	2010-10-29	1 year
R&S	Ultra Breitband Antennas	HL562	100022	2010-8-5	1 year
R&S	Double-Ridged	HF906	100032	2010-8-5	1 year

	Waveguide Horn Antenna				
R&S	Double-Ridged Waveguide Horn Antenna	HF906	100446	2010-8-5	1 year
SCHWARZ-BECK	Biconical Antenna	VUBA9117	9117-122	2010-8-5	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						
45.551102	28.41	V	-33.98	-33.69	0.5	-70.32	2.15	-72.47	-13	59.47
51.382766	18.62	V	-47.93	-31.63	0.5	-82.21	2.15	-84.36	-13	71.36
119.418838	21.48	V	-63.44	-12.48	0.8	-78.87	2.15	-81.02	-13	68.02
171.903808	24.00	V	-68.23	-2.23	1.1	-73.71	2.15	-75.86	-13	62.86
189.398798	19.99	V	-74.52	-0.27	1.1	-78.04	2.15	-80.19	-13	67.19
469.318637	24.04	V	-70.06	-1.35	1.8	-75.36	2.15	-77.51	-13	64.51
743.406814	60.82	V	-37.22	-0.95	2.3	-42.62	2.15	-44.77	-13	31.77
1144.288577	38.98	V	-66.48	4.25	2.8	-67.18	2.15	-69.33	-13	56.33
33.887776	22.26	H	-30.48	-42.03	0.3	-74.96	2.15	-77.11	-13	64.11
70.821643	12.58	H	-61.97	-23.56	0.6	-88.28	2.15	-90.43	-13	77.43
117.474950	21.39	H	-64.77	-12.48	0.8	-80.2	2.15	-82.35	-13	69.35
171.903808	23.66	H	-72.17	-2.23	1.1	-77.65	2.15	-79.80	-13	66.80
189.398798	20.49	H	-78.9	-0.27	1.1	-82.42	2.15	-84.57	-13	71.57
471.262525	23.82	H	-69.73	-1.3	1.8	-74.98	2.15	-77.13	-13	64.13
741.462926	63.94	H	-33.23	-0.95	2.3	-38.63	2.15	-40.78	-13	27.78
1160.320641	39.09	H	-67.11	4.25	2.9	-67.91	2.15	-70.06	-13	57.06

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						
3769.539078	41.25	V	-66.76	7.75	5.2	-66.36	2.15	-68.51	-13	55.51
4827.655311	42.89	V	-64.71	9.15	5.9	-63.61	2.15	-65.76	-13	52.76
4915.831663	50.71	V	-55.92	9.15	6	-54.92	2.15	-57.07	-13	44.07
7864.228457	50.28	V	-62.07	9.25	7.9	-62.87	2.15	-65.02	-13	52.02
9846.192385	55.98	V	-52.84	9.95	8.9	-53.94	2.15	-56.09	-13	43.09
12242.985972	56.03	V	-54.69	12.05	9.8	-54.59	2.15	-56.74	-13	43.74
3697.394790	40.60	H	-67.74	7.75	5.1	-67.24	2.15	-69.39	-13	56.39
4226.452906	43.24	H	-60.08	7.95	5.5	-59.78	2.15	-61.93	-13	48.93
6150.300601	47.91	H	-55.48	9.05	6.9	-55.48	2.15	-57.63	-13	44.63
6927.855711	49.93	H	-55.49	9.25	7.3	-55.69	2.15	-57.84	-13	44.84
9846.192385	55.64	H	-53.3	9.95	8.9	-54.4	2.15	-56.55	-13	43.55
11655.310621	56.07	H	-50.13	11.85	9.6	-50.03	2.15	-52.18	-13	39.18

Radiation emission spurious above 3GHz

9 SPURIOUS EMISSIONS AT ANTENNA TERMINALS

Applicable Standard: FCC§2.1051, §24.238

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

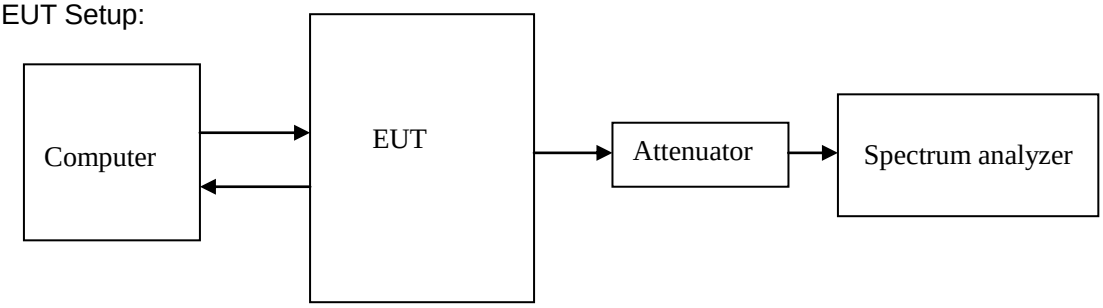
Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	MXA Series Spectrum Analyzer	N9030A	MY49431143	2015.04.17	2016.04.17
DTS	DTS 40dB Attenuator	DTS100-40-3-1	09112005	2015.04.17	2016.04.17

*__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 bandwidth of 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

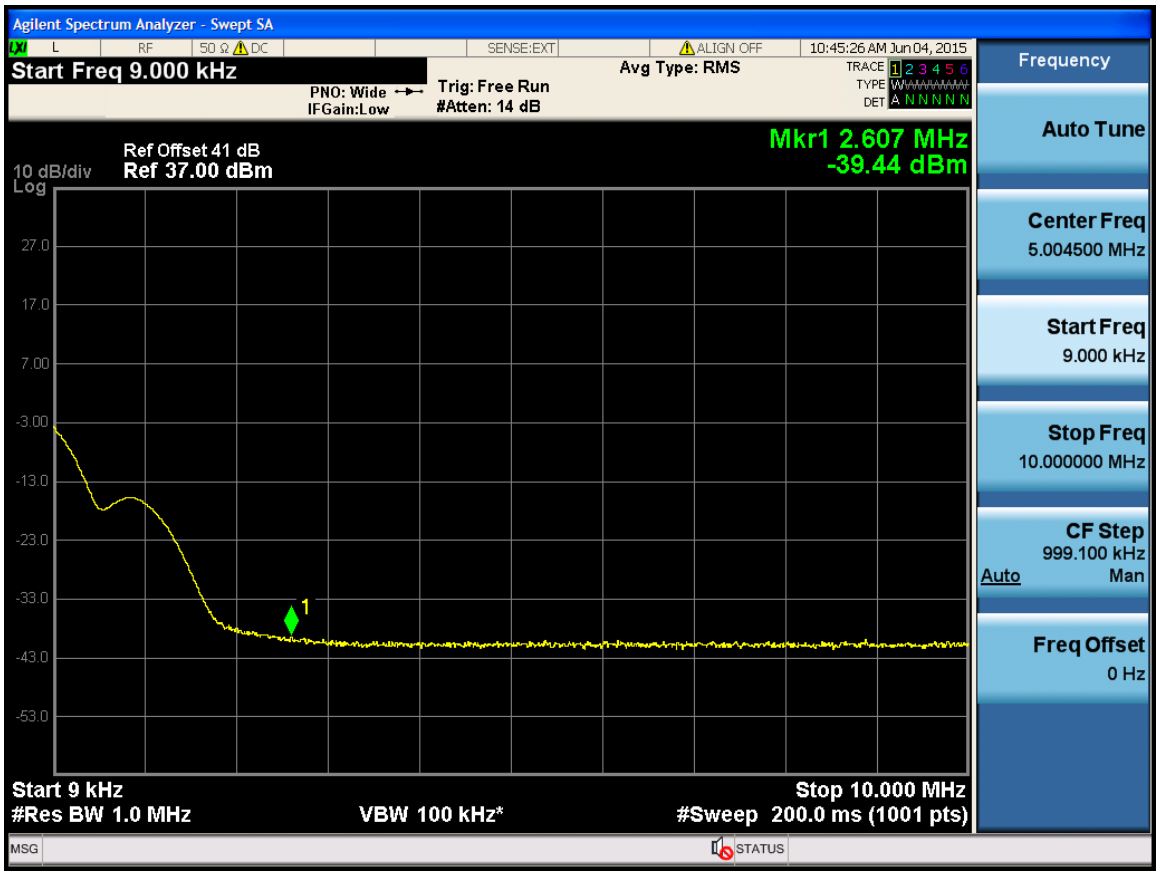
Temperature:	20 °C
Relative Humidity:	53 %
ATM Pressure:	1009 mbar

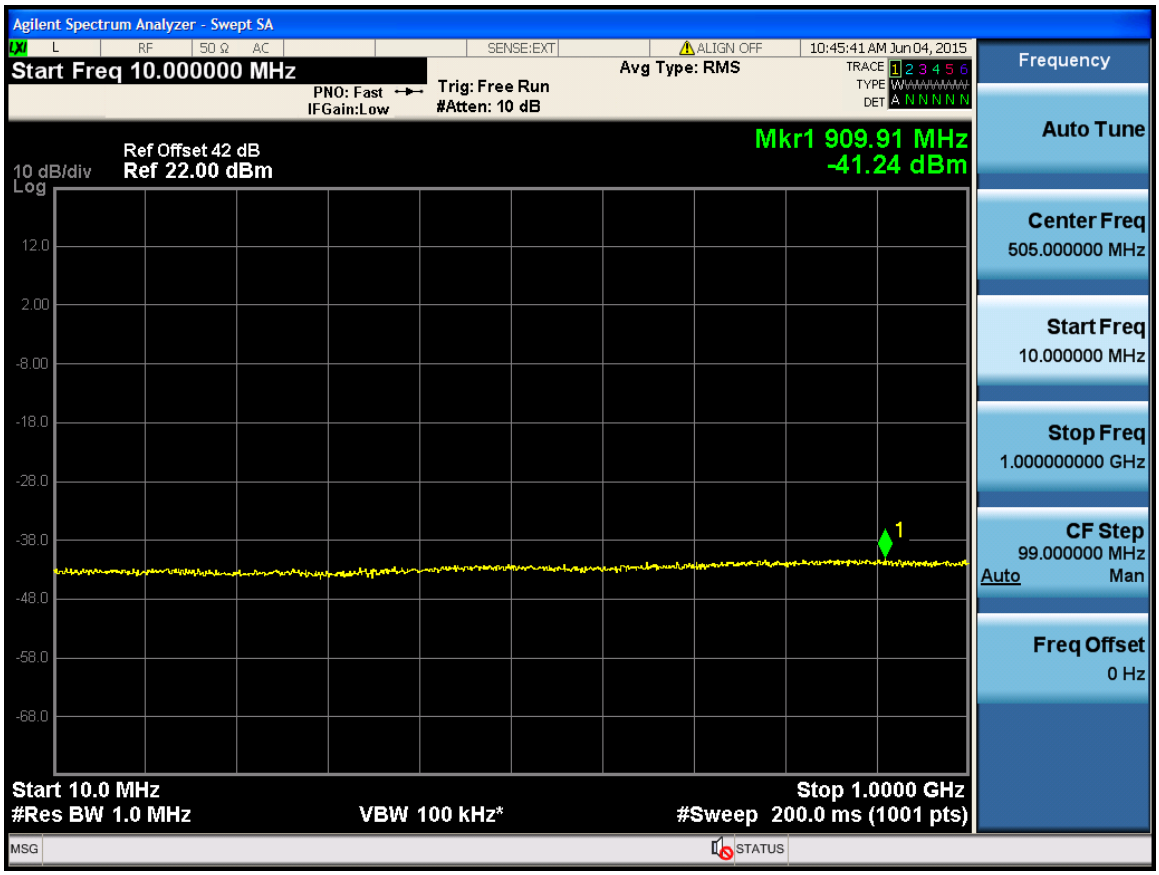
Test Result: Pass

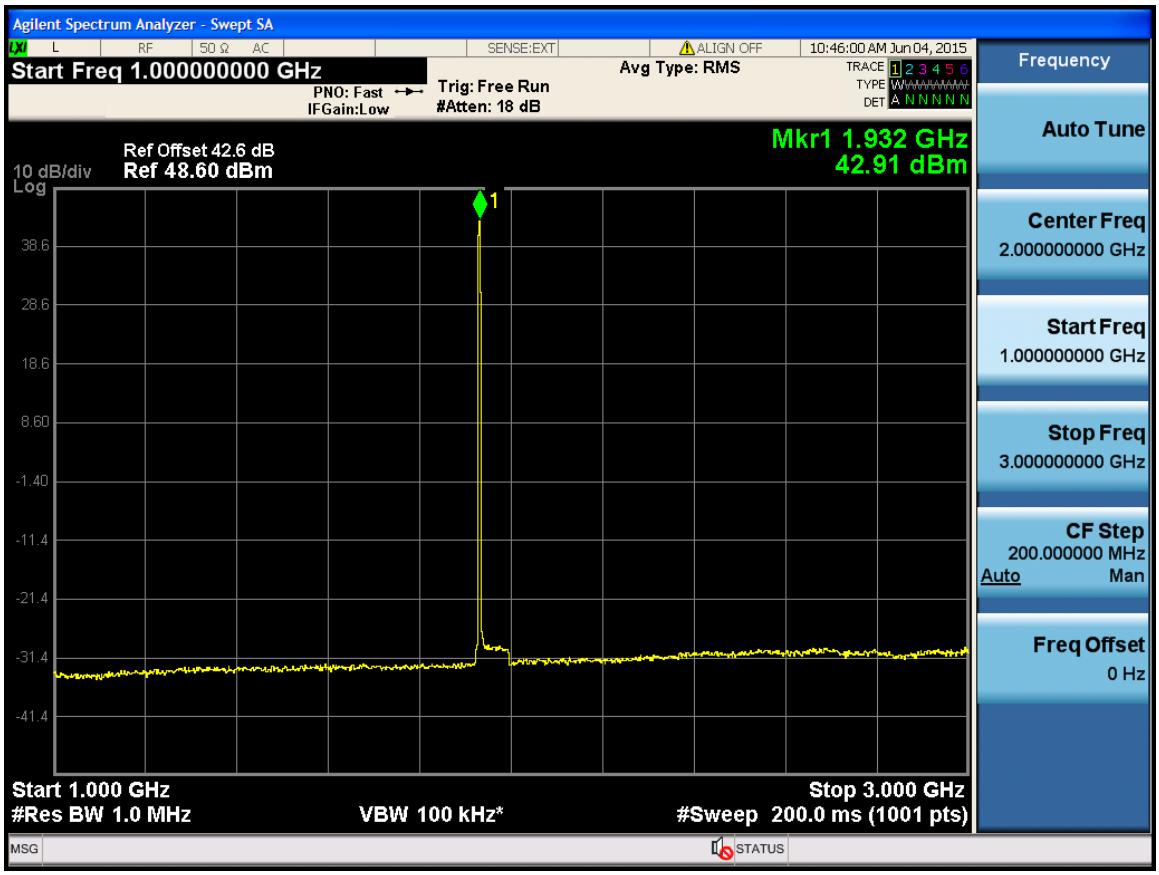
Test Mode: Transmitting LTE

Test Data:

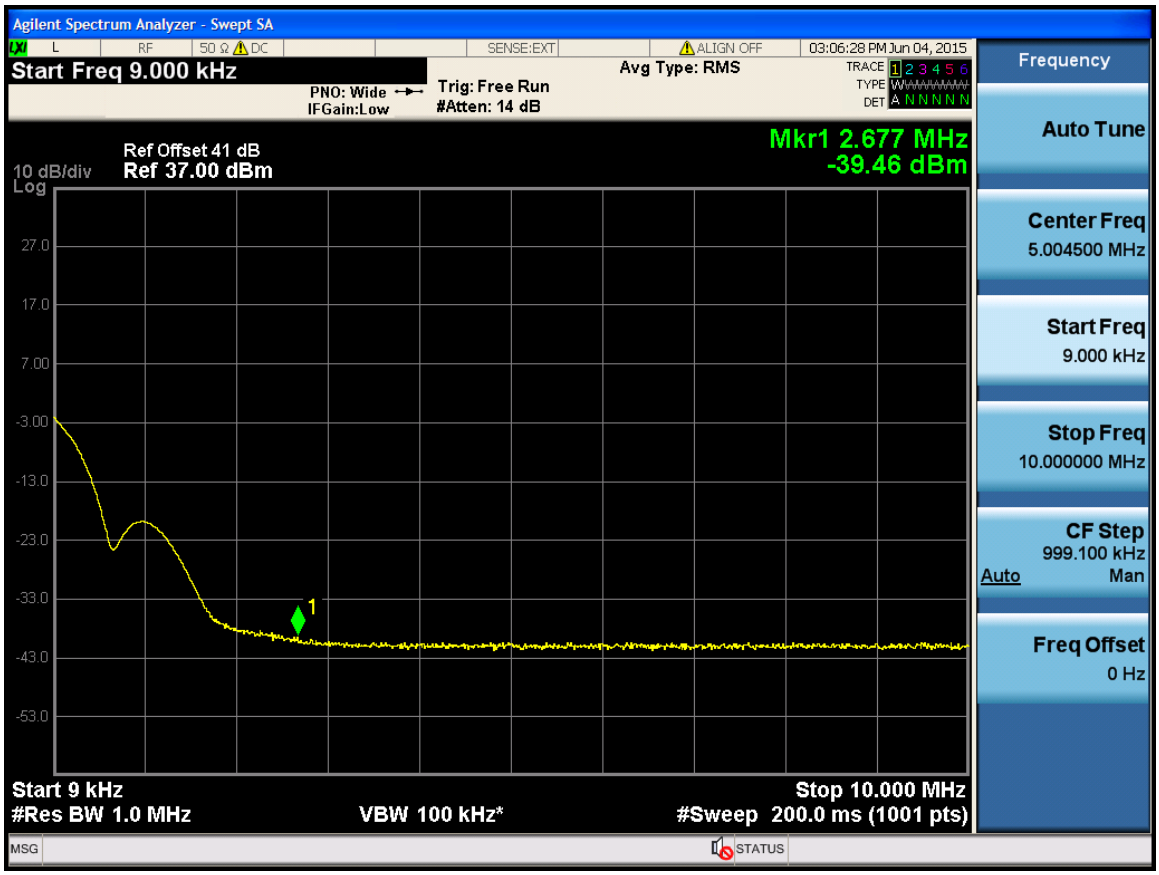
3M -Port 1 -1931.5MHz

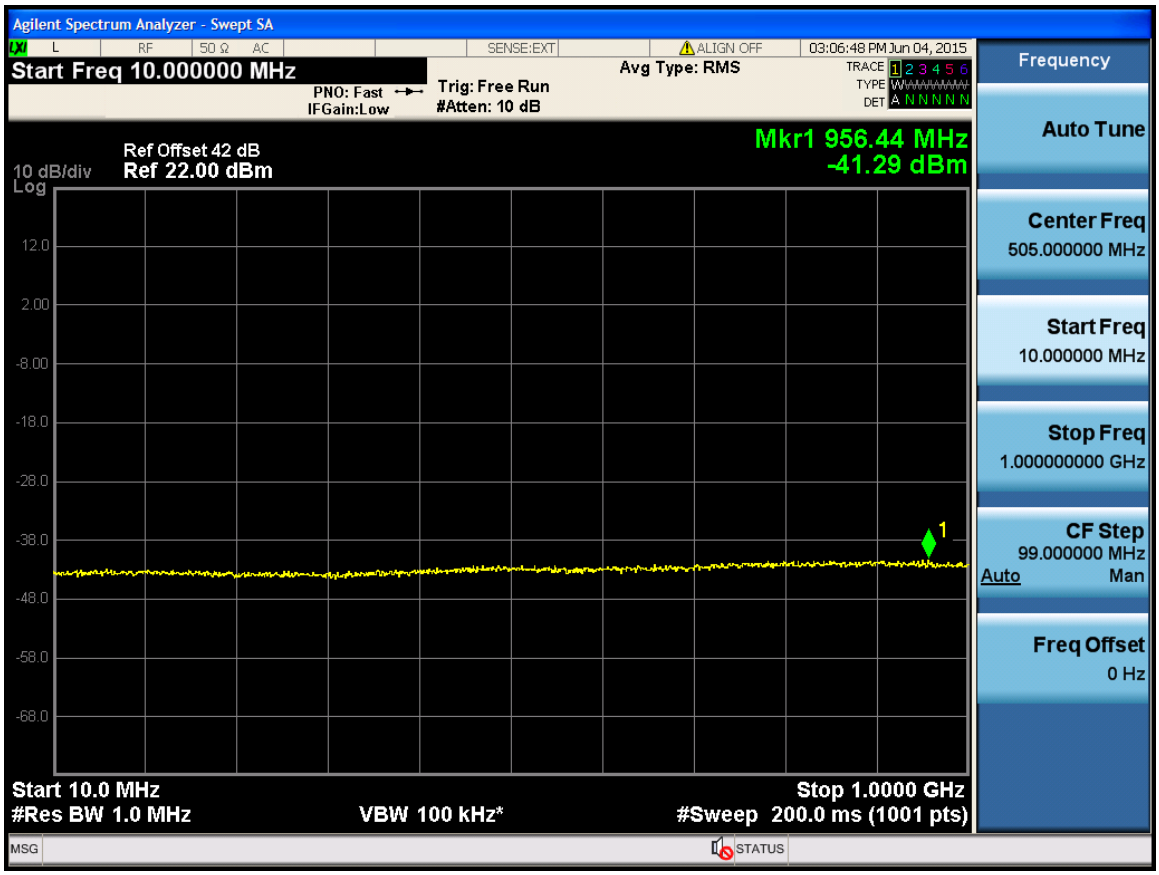

Agilent Spectrum Analyzer - Swept SA
L
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
10:45:26 AM Jun 04, 2015
Start Freq 9.000 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 14 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 41 dB
10 dB/div
Log
Ref 37.00 dBm
Mkr1 2.607 MHz
-39.44 dBm
27.0
17.0
7.00
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
1
Start 9 kHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 10.000 MHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
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

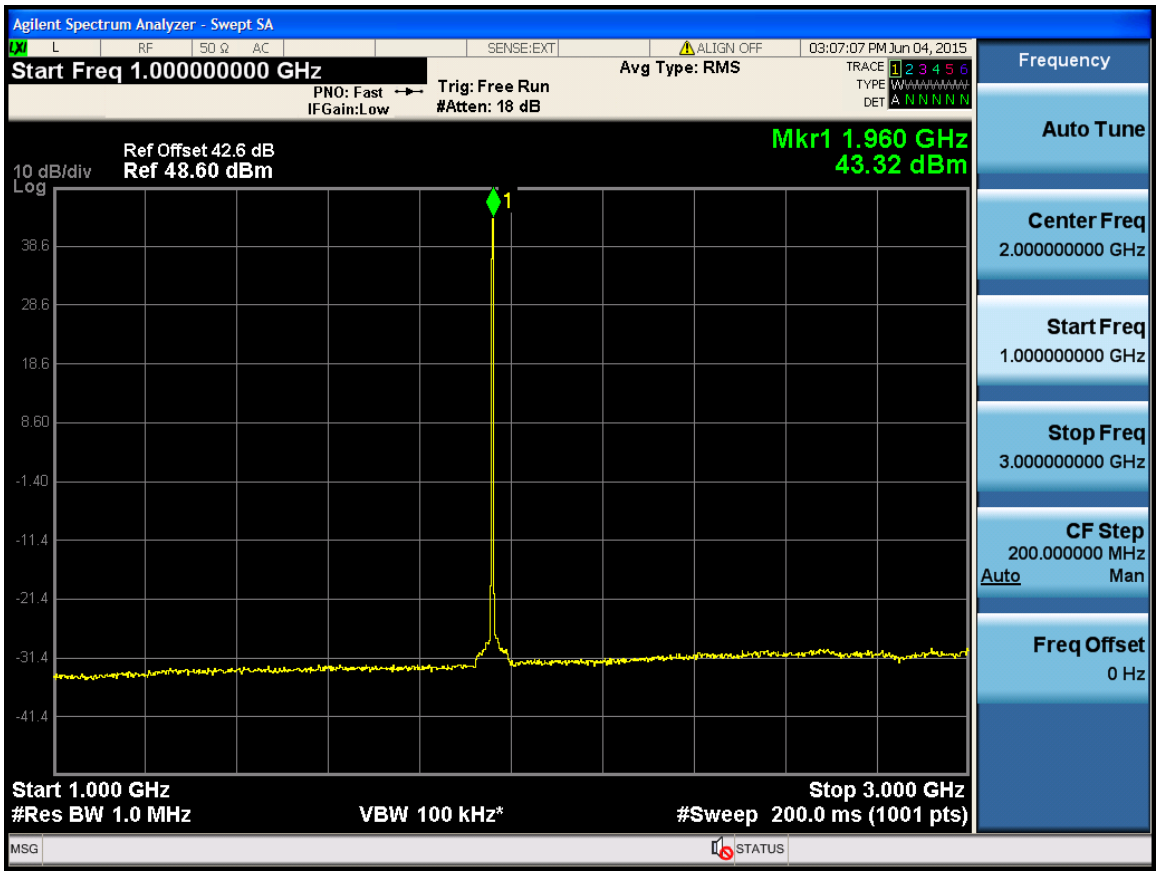

Agilent Spectrum Analyzer - Swept SA
L
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
10:45:41 AM Jun 04, 2015
Start Freq 10.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 22.00 dBm
Mkr1 909.91 MHz
-41.24 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 1.0000 GHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
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
L
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
10:46:00 AM Jun 04, 2015
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 18 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 42.6 dB
10 dB/div
Log
Ref 48.60 dBm
Mkr1 1.932 GHz
42.91 dBm
38.6
28.6
18.6
8.60
-1.40
-11.4
-21.4
-31.4
-41.4
Start 1.000 GHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 3.000 GHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
3.000000000 GHz
CF Step
200.000000 MHz
Auto
Man
Freq Offset
0 Hz

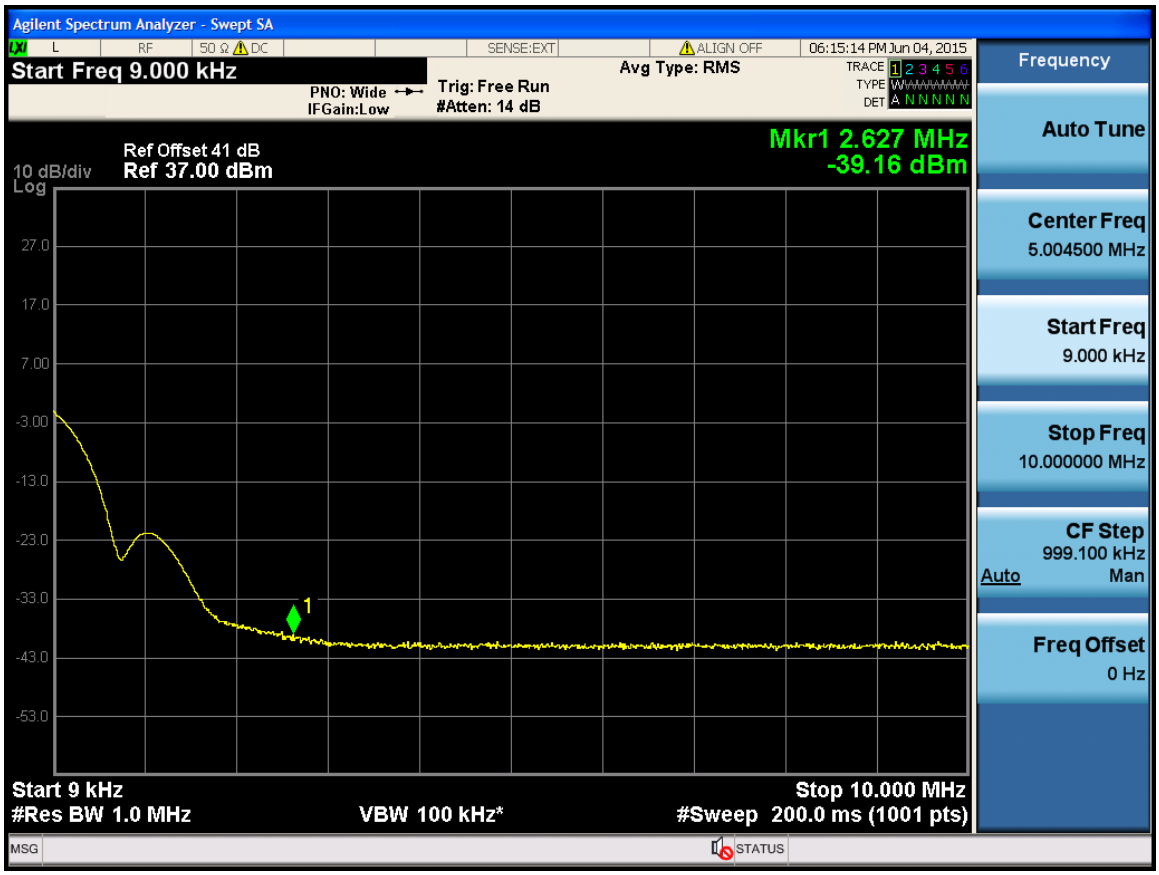
3M -Port 1 -1960MHz

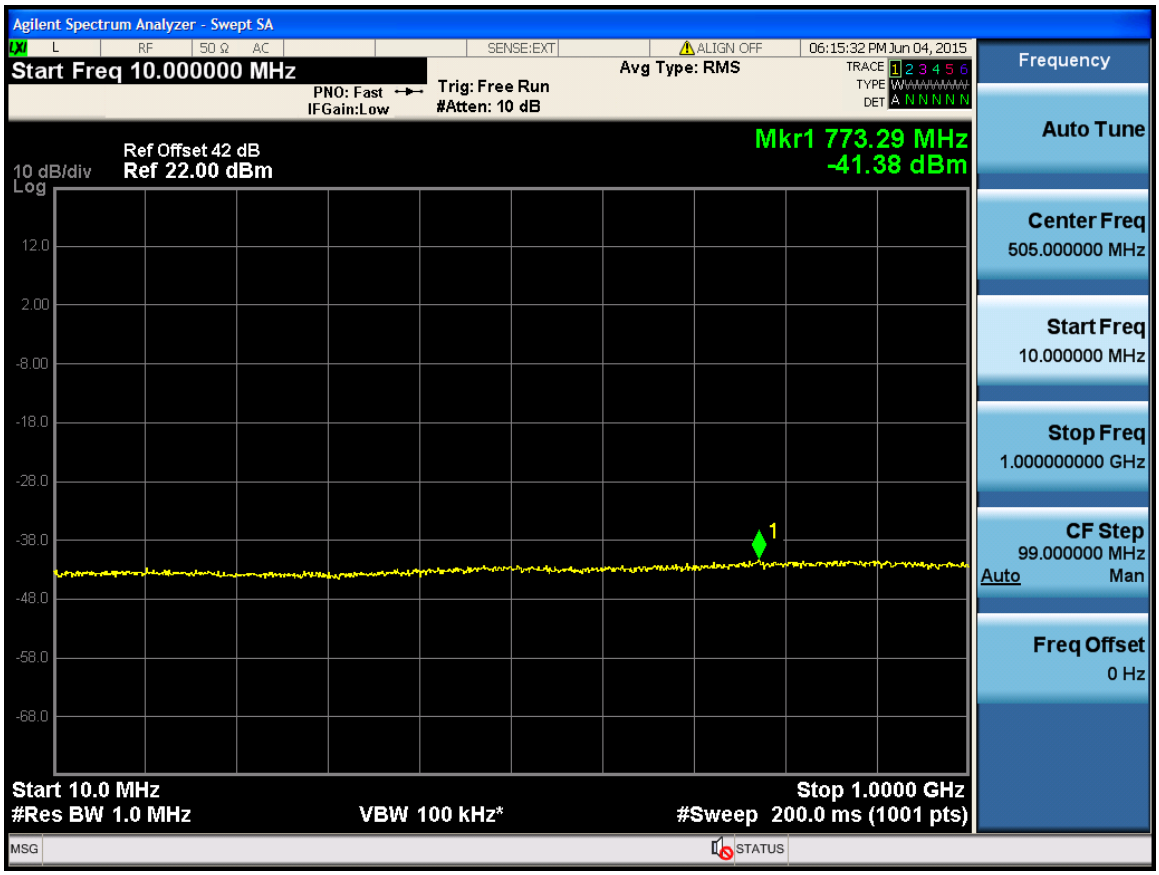

Agilent Spectrum Analyzer - Swept SA
L
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
03:06:28 PM Jun 04, 2015
Start Freq 9.000 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 14 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 41 dB
10 dB/div
Log
Ref 37.00 dBm
Mkr1 2.677 MHz
-39.46 dBm
27.0
17.0
7.00
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
1
Start 9 kHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 10.000 MHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
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

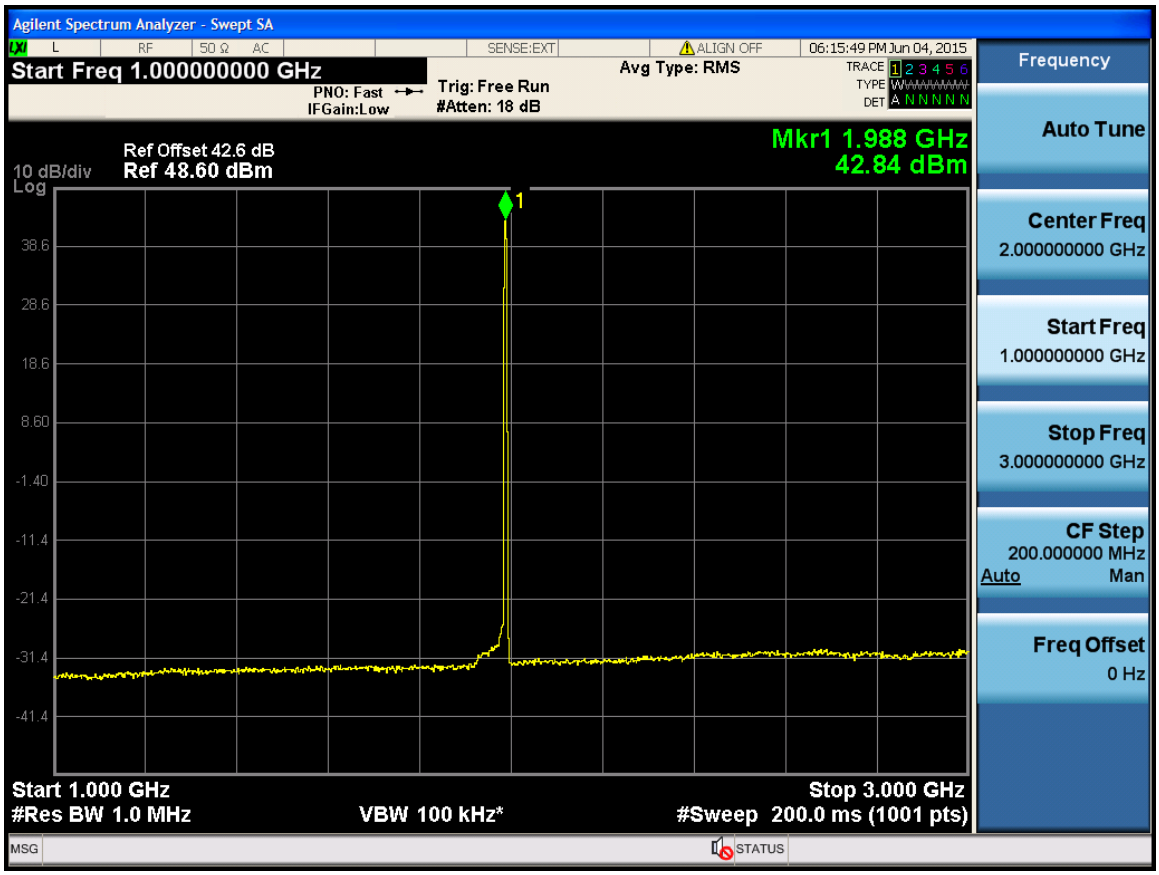

Agilent Spectrum Analyzer - Swept SA
L
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
03:06:48 PM Jun 04, 2015
Start Freq 10.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 22.00 dBm
Mkr1 956.44 MHz
-41.29 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 1.0000 GHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
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
L
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
03:07:07 PM Jun 04, 2015
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 18 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 42.6 dB
10 dB/div
Log
Ref 48.60 dBm
Mkr1 1.960 GHz
43.32 dBm
38.6
28.6
18.6
8.60
-1.40
-11.4
-21.4
-31.4
-41.4
1
Start 1.000 GHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 3.000 GHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
3.000000000 GHz
CF Step
200.000000 MHz
Auto
Man
Freq Offset
0 Hz

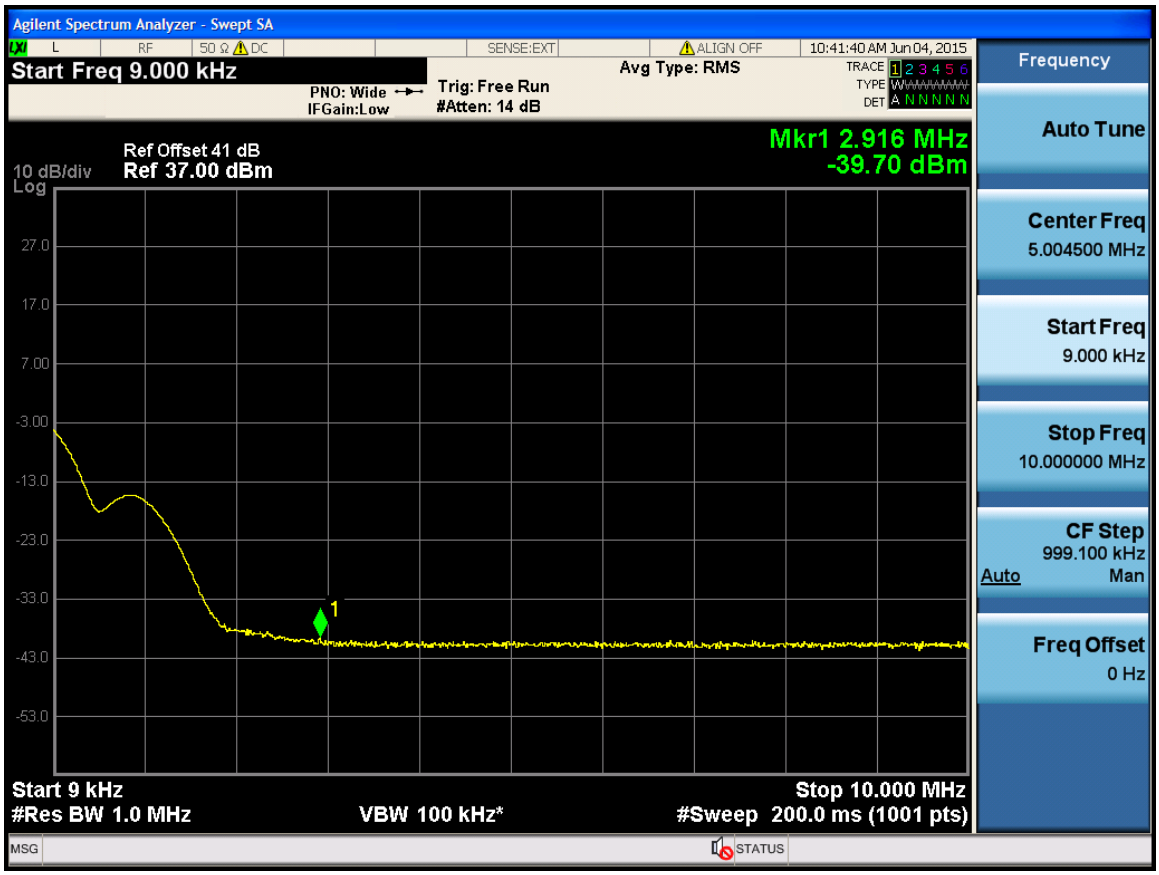
3M -Port 1 -1988.5MHz

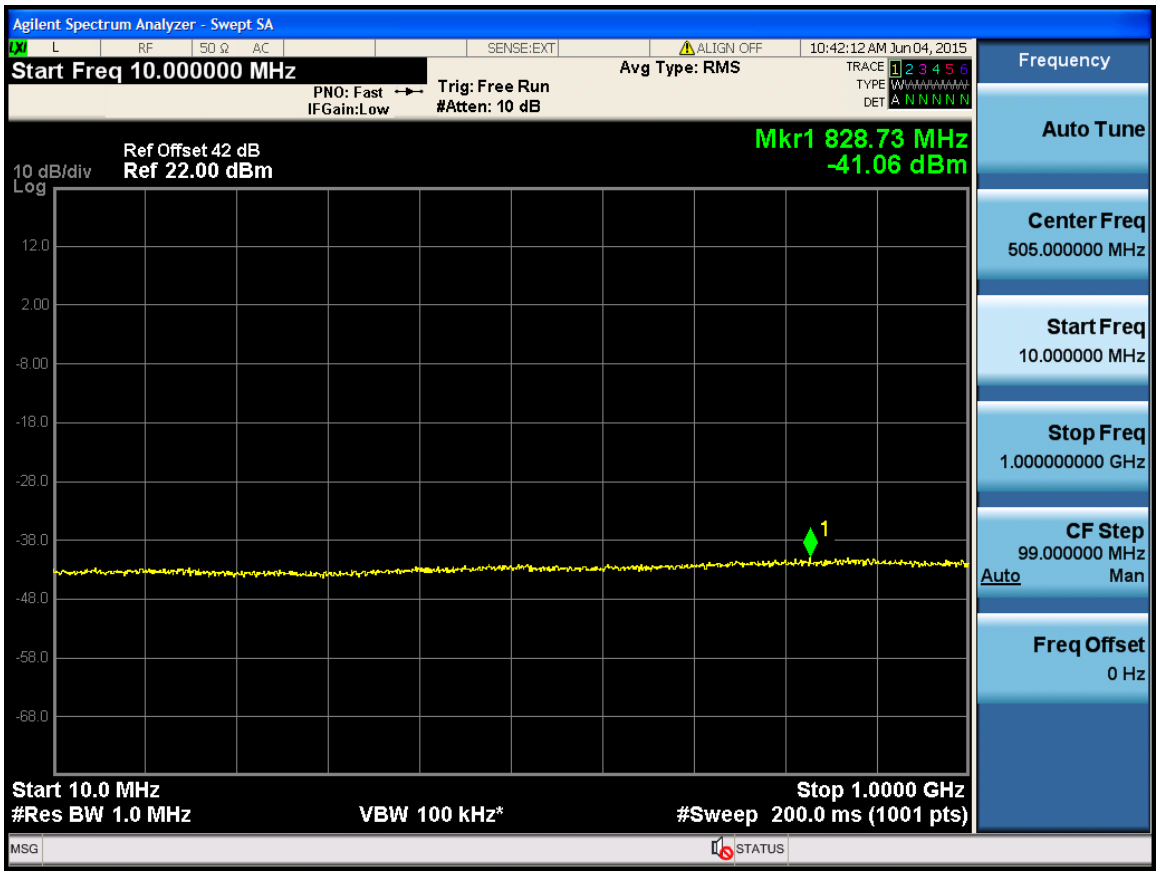

Agilent Spectrum Analyzer - Swept SA
Start Freq 9.000 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 14 dB
Avg Type: RMS
06:15:14 PM Jun 04, 2015
Ref Offset 41 dB
10 dB/div
Log
Ref 37.00 dBm
Mkr1 2.627 MHz
-39.16 dBm
27.0
17.0
7.00
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
Start 9 kHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 10.000 MHz
#Sweep 200.0 ms (1001 pts)
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
MSG
STATUS

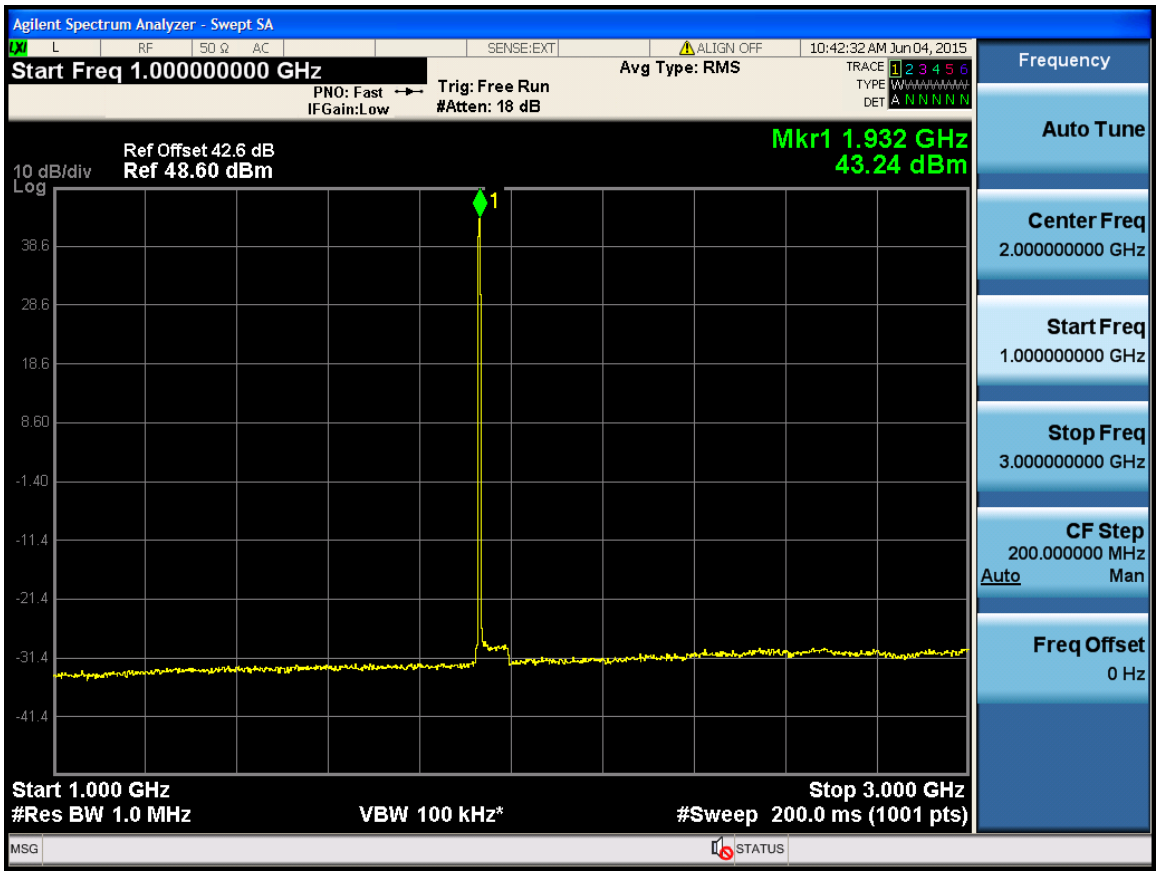

Agilent Spectrum Analyzer - Swept SA
L
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
06:15:32 PM Jun 04, 2015
Start Freq 10.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 22.00 dBm
Mkr1 773.29 MHz
-41.38 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 1.0000 GHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
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
L
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
06:15:49 PM Jun 04, 2015
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 18 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 42.6 dB
10 dB/div
Log
Ref 48.60 dBm
Mkr1 1.988 GHz
42.84 dBm
38.6
28.6
18.6
8.60
-1.40
-11.4
-21.4
-31.4
-41.4
Start 1.000 GHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 3.000 GHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
3.000000000 GHz
CF Step
200.000000 MHz
Auto
Man
Freq Offset
0 Hz

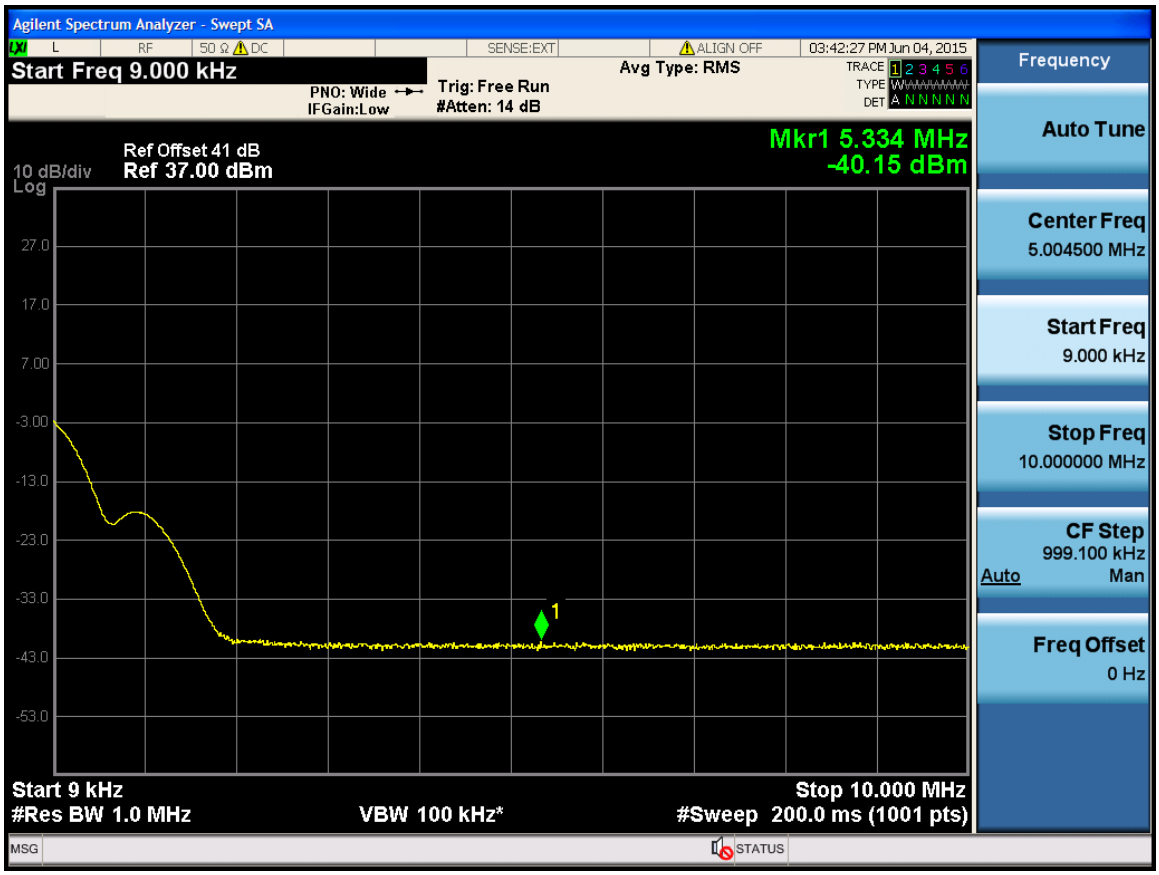
3M -Port 4 -1931.5MHz

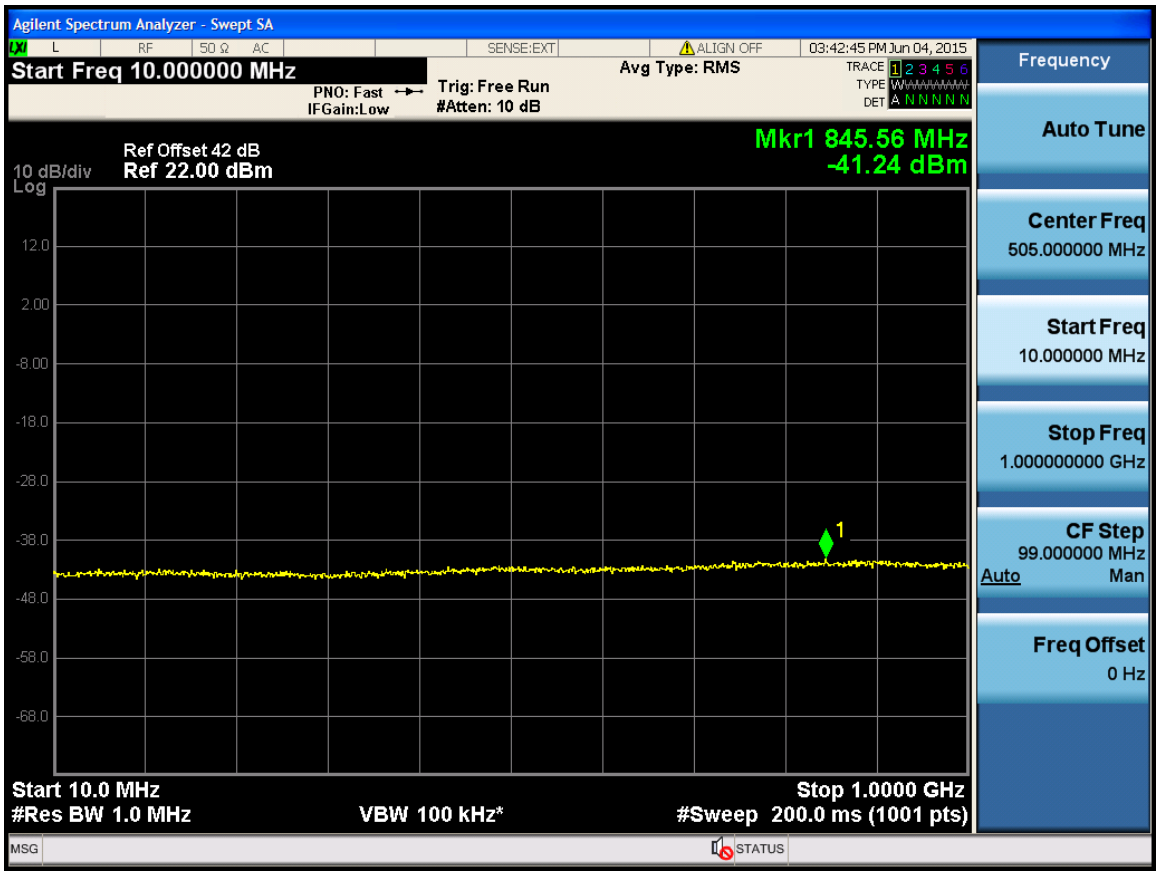

Agilent Spectrum Analyzer - Swept SA
Start Freq 9.000 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 14 dB
Avg Type: RMS
10:41:40 AM Jun 04, 2015
Ref Offset 41 dB
10 dB/div
Log
Ref 37.00 dBm
Mkr1 2.916 MHz
-39.70 dBm
27.0
17.0
7.00
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
Start 9 kHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 10.000 MHz
#Sweep 200.0 ms (1001 pts)
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
MSG
STATUS

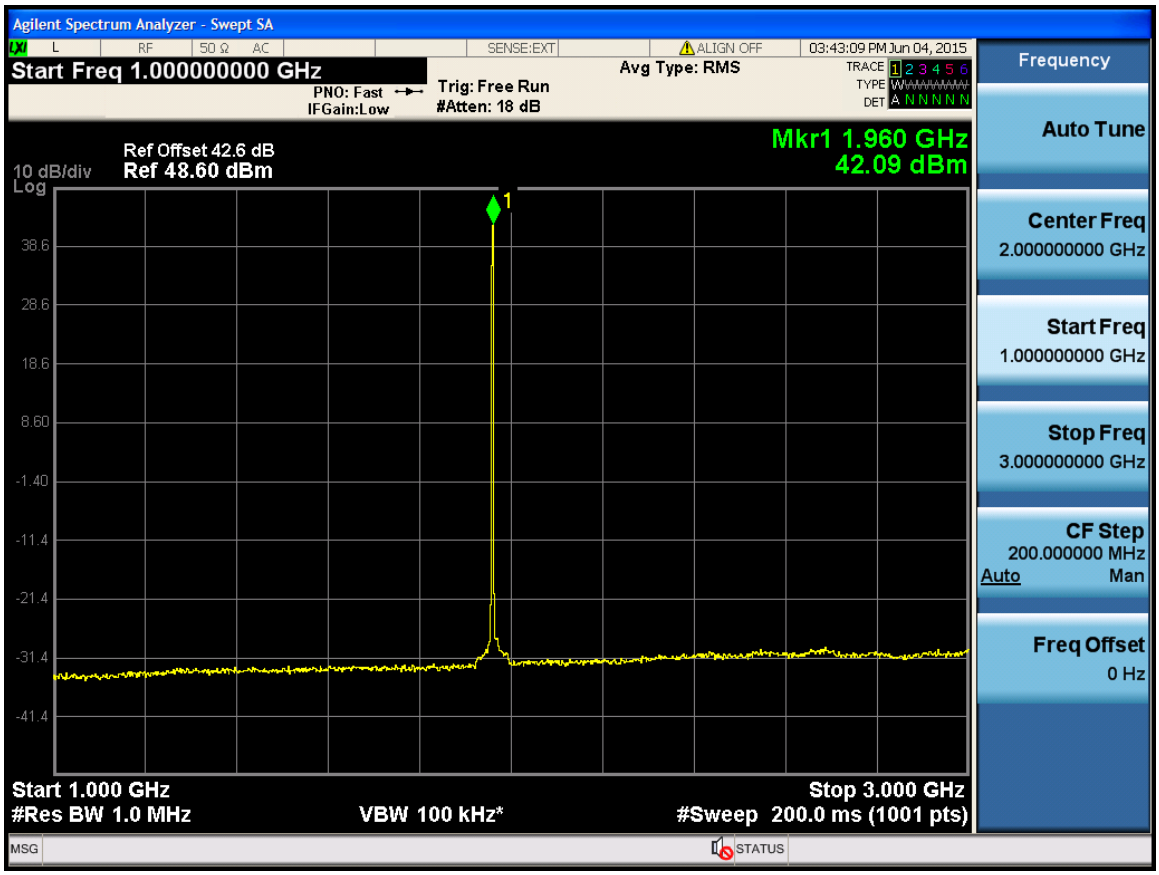

Agilent Spectrum Analyzer - Swept SA
L
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
10:42:12 AM Jun 04, 2015
Start Freq 10.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 42 dB
10 dB/div
Ref 22.00 dBm
Log
Mkr1 828.73 MHz
-41.06 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 1.0000 GHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
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
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 18 dB
Avg Type: RMS
10:42:32 AM Jun 04, 2015
Ref Offset 42.6 dB
10 dB/div
Log
Ref 48.60 dBm
Mkr1 1.932 GHz
43.24 dBm
38.6
28.6
18.6
8.60
-1.40
-11.4
-21.4
-31.4
-41.4
Start 1.000 GHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 3.000 GHz
#Sweep 200.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
3.000000000 GHz
CF Step
200.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

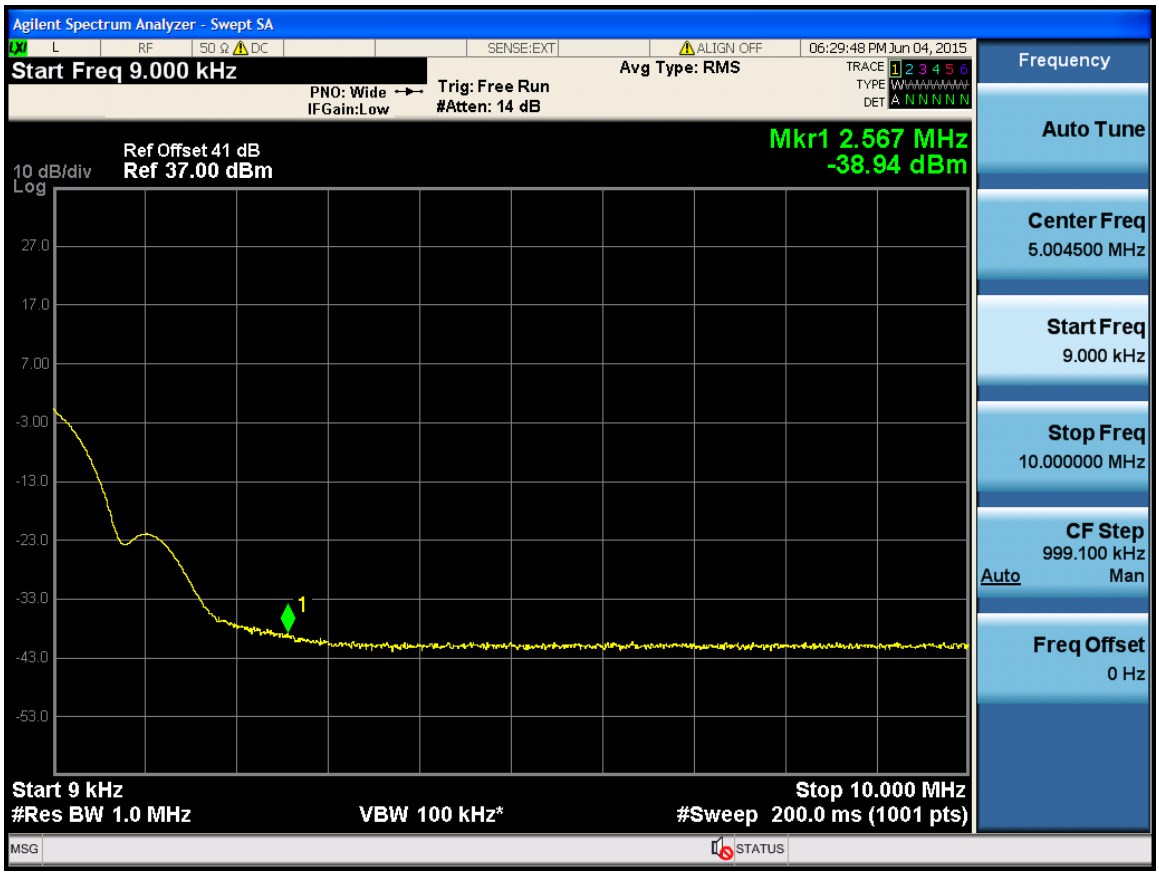
3M -Port 4 -1960MHz

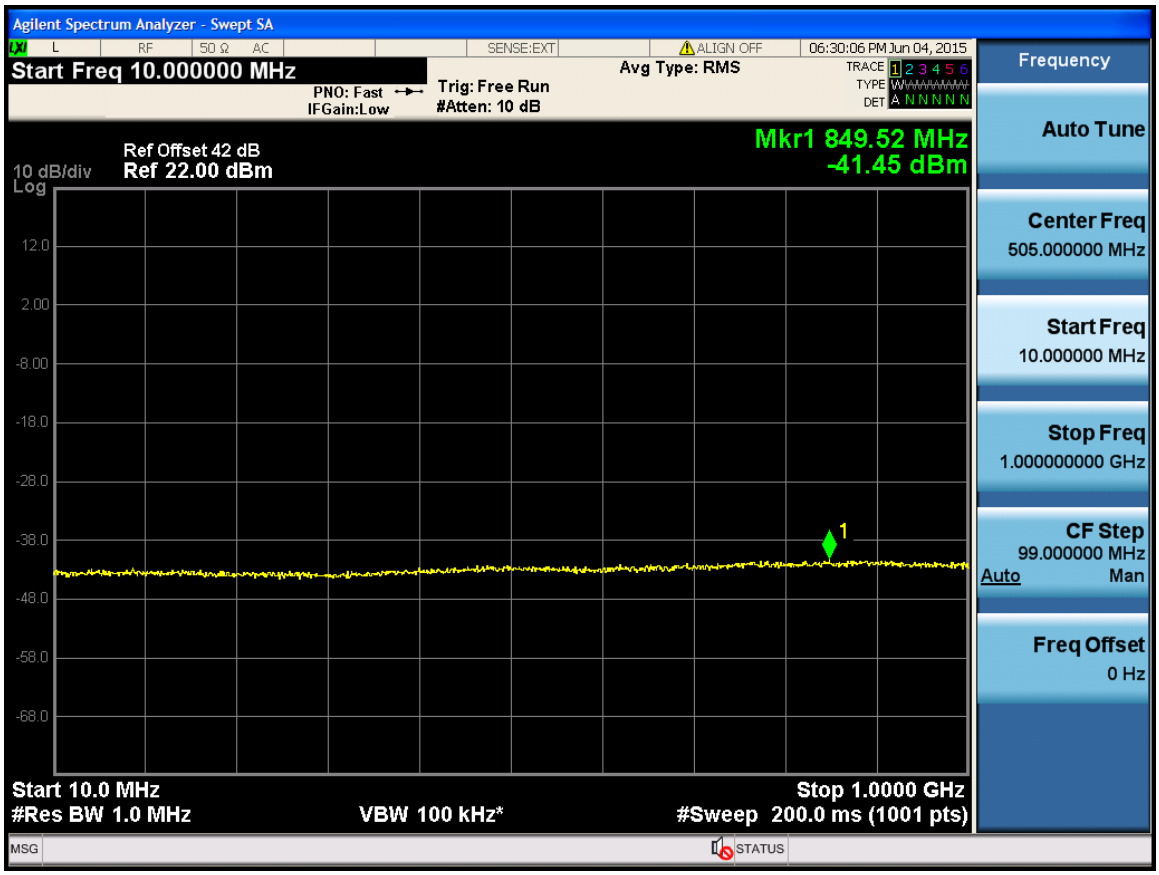

Agilent Spectrum Analyzer - Swept SA
L
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
03:42:27 PM Jun 04, 2015
Start Freq 9.000 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 14 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 41 dB
10 dB/div
Log
Ref 37.00 dBm
Mkr1 5.334 MHz
-40.15 dBm
27.0
17.0
7.00
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
1
Start 9 kHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 10.000 MHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
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

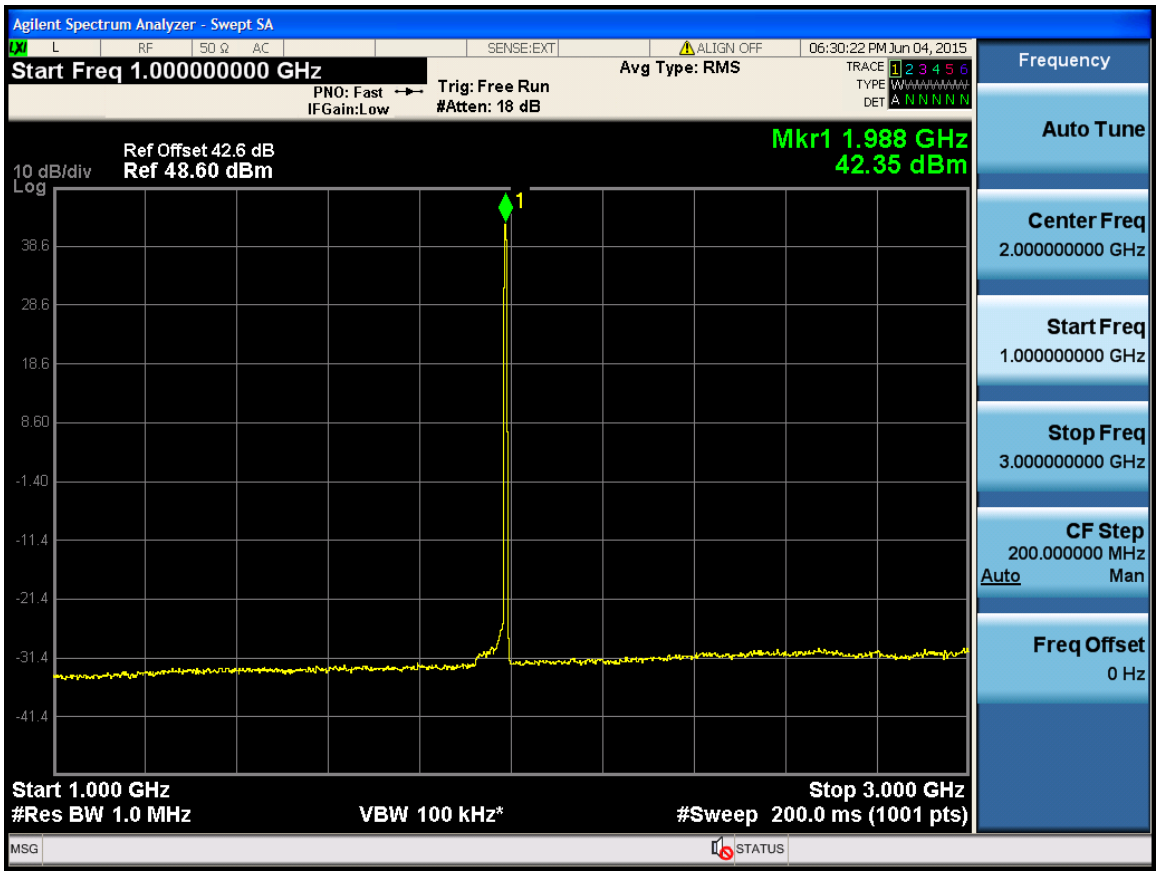

Agilent Spectrum Analyzer - Swept SA
L
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
03:42:45 PM Jun 04, 2015
Start Freq 10.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 22.00 dBm
Mkr1 845.56 MHz
-41.24 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 1.0000 GHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
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
L
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
03:43:09 PM Jun 04, 2015
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 18 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 42.6 dB
10 dB/div
Log
Ref 48.60 dBm
Mkr1 1.960 GHz
42.09 dBm
38.6
28.6
18.6
8.60
-1.40
-11.4
-21.4
-31.4
-41.4
Start 1.000 GHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 3.000 GHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
3.000000000 GHz
CF Step
200.000000 MHz
Auto
Man
Freq Offset
0 Hz

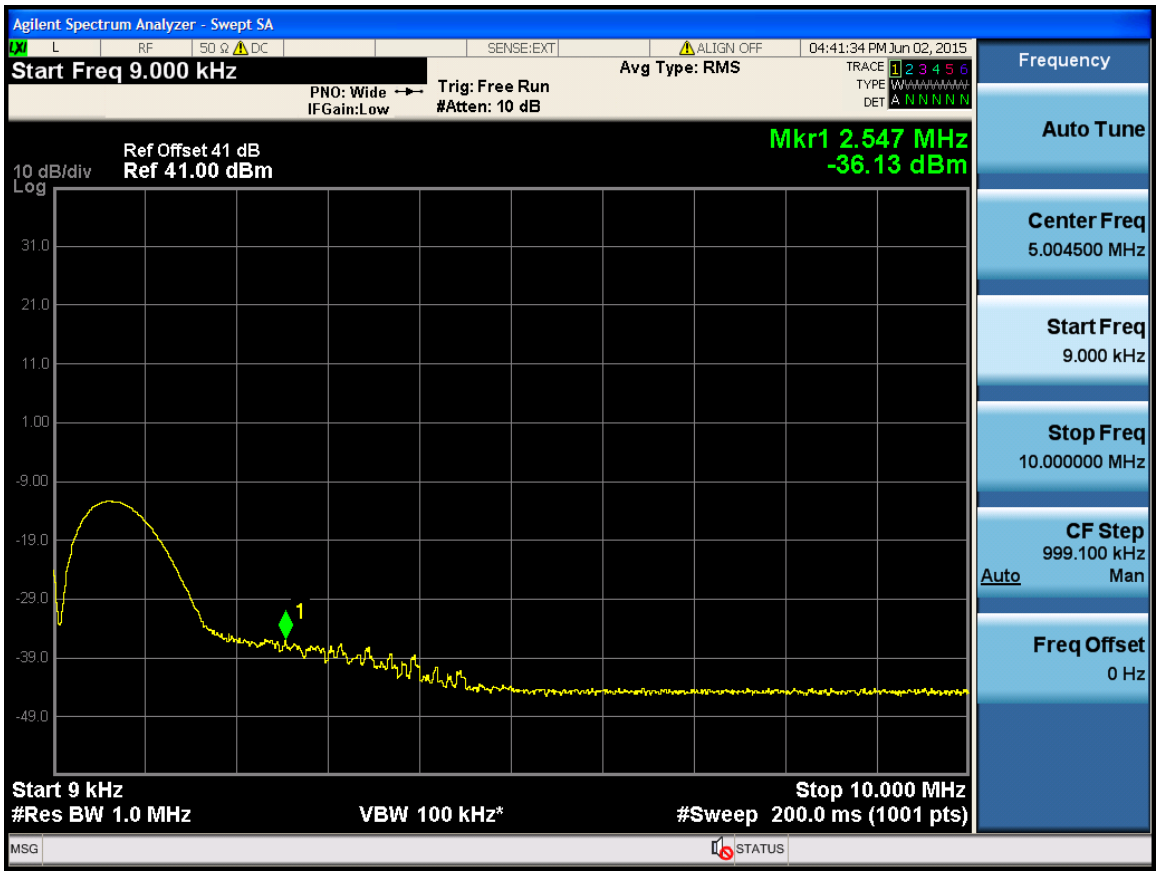
3M -Port 4 -1988.5MHz

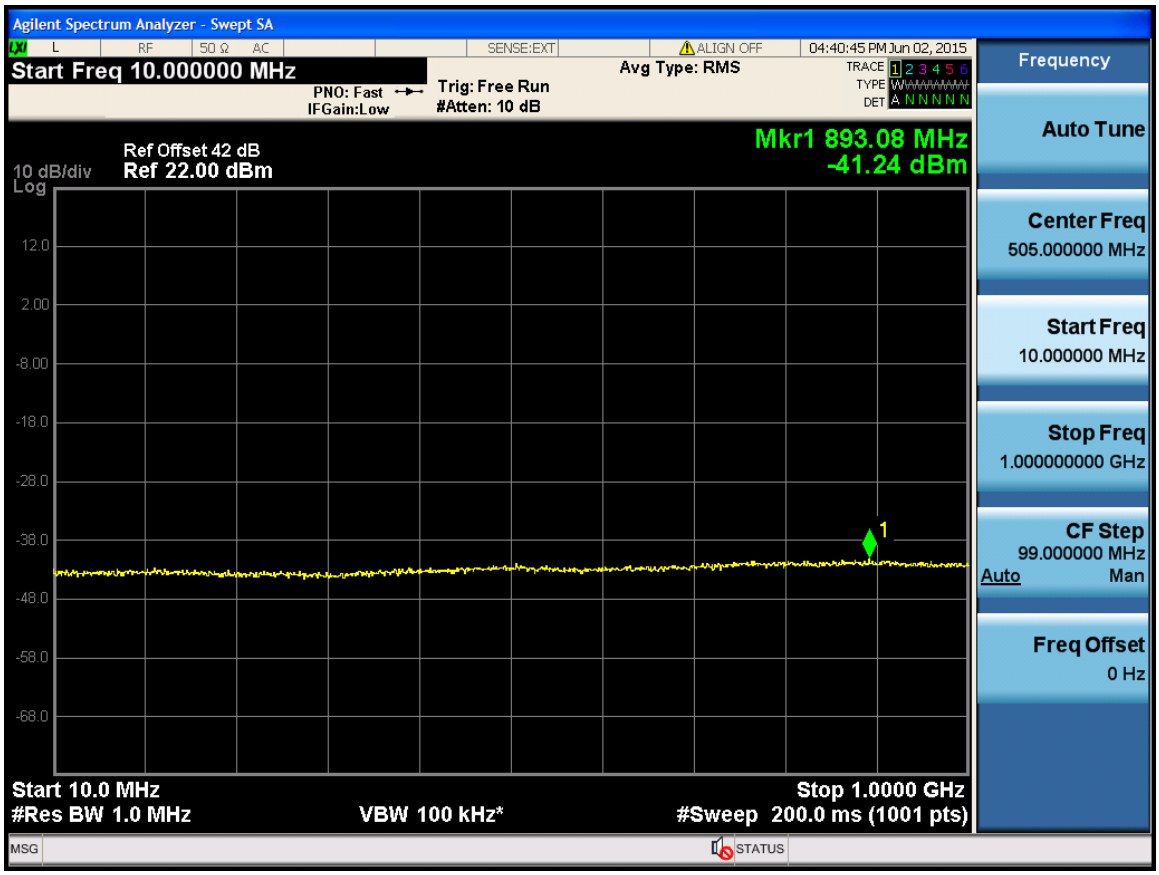

Agilent Spectrum Analyzer - Swept SA
Start Freq 9.000 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 14 dB
Avg Type: RMS
06:29:48 PM Jun 04, 2015
Ref Offset 41 dB
10 dB/div
Log
Ref 37.00 dBm
Mkr1 2.567 MHz
-38.94 dBm
27.0
17.0
7.00
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
Start 9 kHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 10.000 MHz
#Sweep 200.0 ms (1001 pts)
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
MSG
STATUS

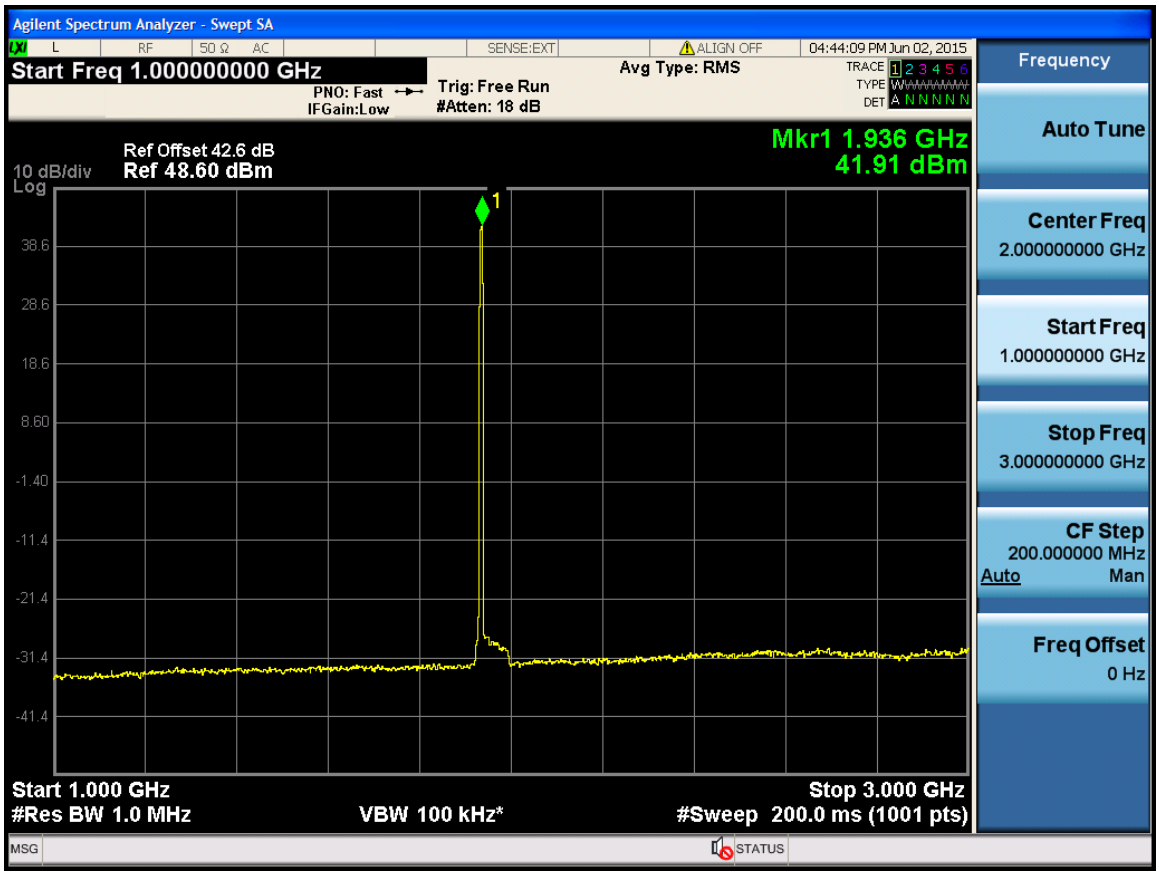

Agilent Spectrum Analyzer - Swept SA
L
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
06:30:06 PM Jun 04, 2015
Start Freq 10.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 22.00 dBm
Mkr1 849.52 MHz
-41.45 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 1.0000 GHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
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
L
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
06:30:22 PM Jun 04, 2015
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 18 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 42.6 dB
10 dB/div
Log
Ref 48.60 dBm
Mkr1 1.988 GHz
42.35 dBm
38.6
28.6
18.6
8.60
-1.40
-11.4
-21.4
-31.4
-41.4
Start 1.000 GHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 3.000 GHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
3.000000000 GHz
CF Step
200.000000 MHz
Auto
Man
Freq Offset
0 Hz

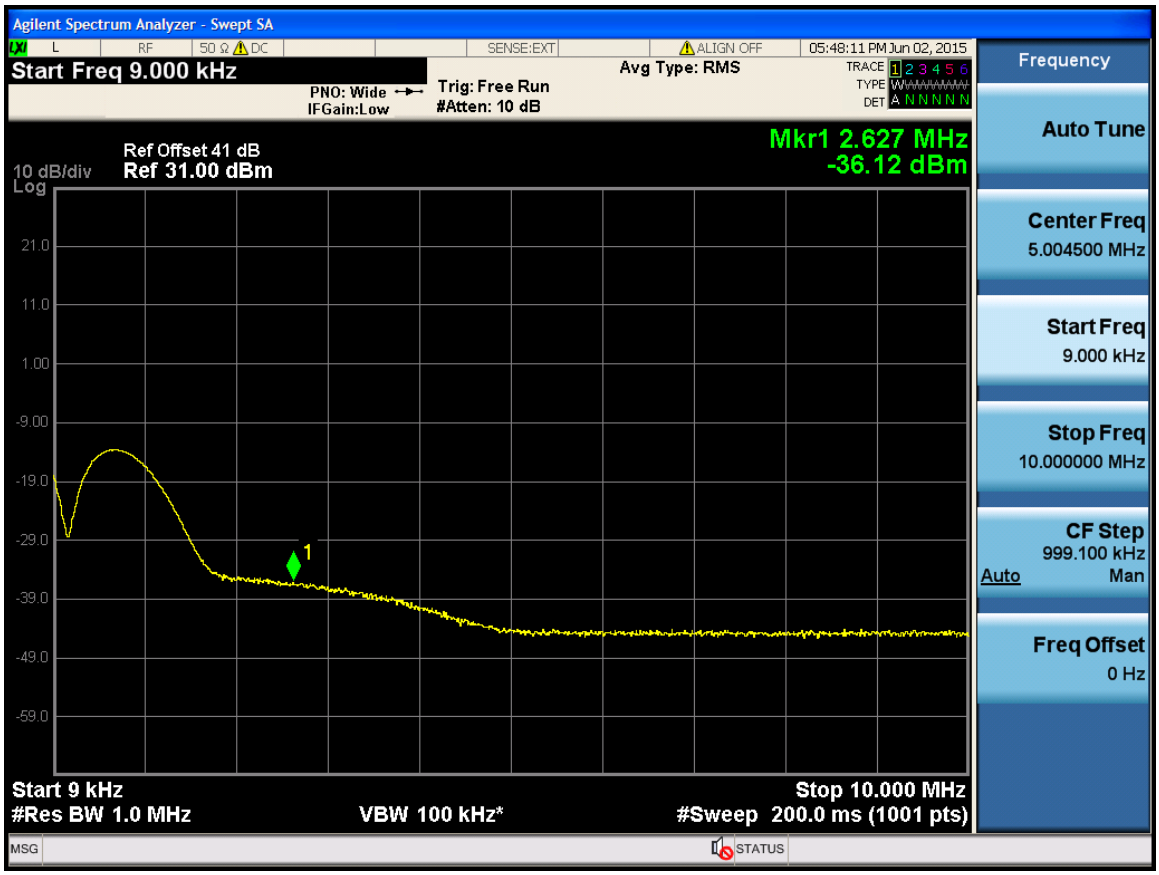
5M -Port 1 -1932.5MHz

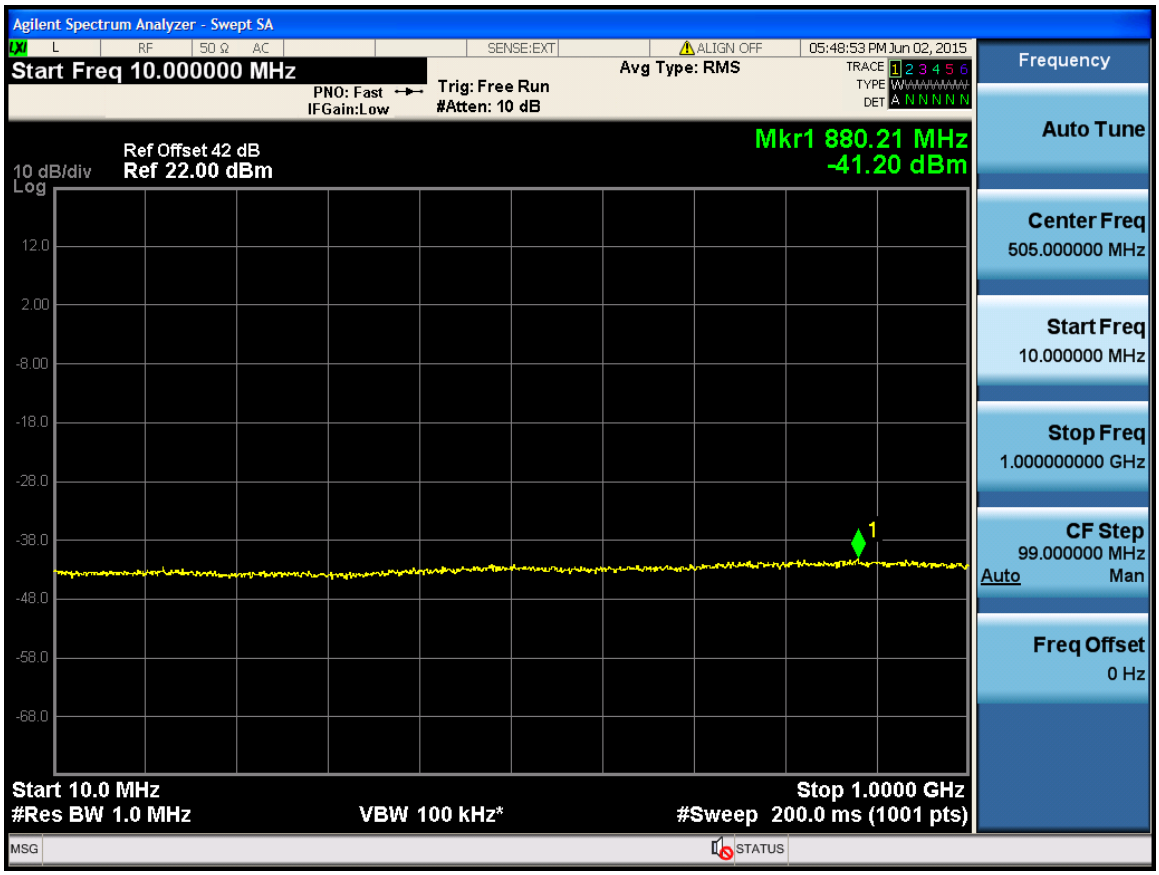

Agilent Spectrum Analyzer - Swept SA
L
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
04:41:34 PM Jun 02, 2015
Start Freq 9.000 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 41 dB
10 dB/div
Log
Ref 41.00 dBm
Mkr1 2.547 MHz
-36.13 dBm
31.0
21.0
11.0
1.00
-9.00
-19.0
-29.0
-39.0
-49.0
1
Start 9 kHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 10.000 MHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
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

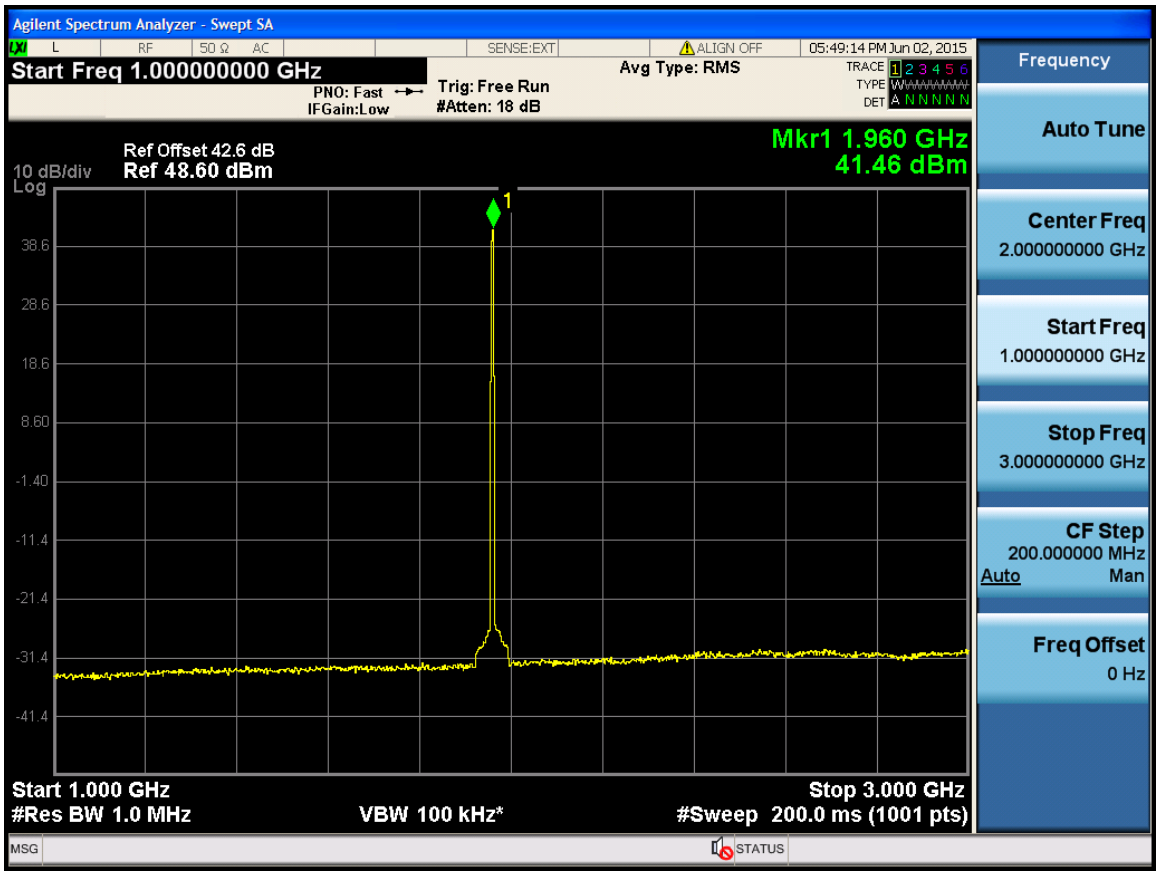

Agilent Spectrum Analyzer - Swept SA
L
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
04:40:45 PM Jun 02, 2015
Start Freq 10.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 22.00 dBm
Mkr1 893.08 MHz
-41.24 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 1.0000 GHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
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
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
04:44:09 PM Jun 02, 2015
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 18 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE M
DET A N N N N N
Ref Offset 42.6 dB
10 dB/div
Log
Ref 48.60 dBm
Mkr1 1.936 GHz
41.91 dBm
38.6
28.6
18.6
8.60
-1.40
-11.4
-21.4
-31.4
-41.4
Start 1.000 GHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 3.000 GHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
3.000000000 GHz
CF Step
200.000000 MHz
Auto
Man
Freq Offset
0 Hz

5M -Port 1 -1960MHz

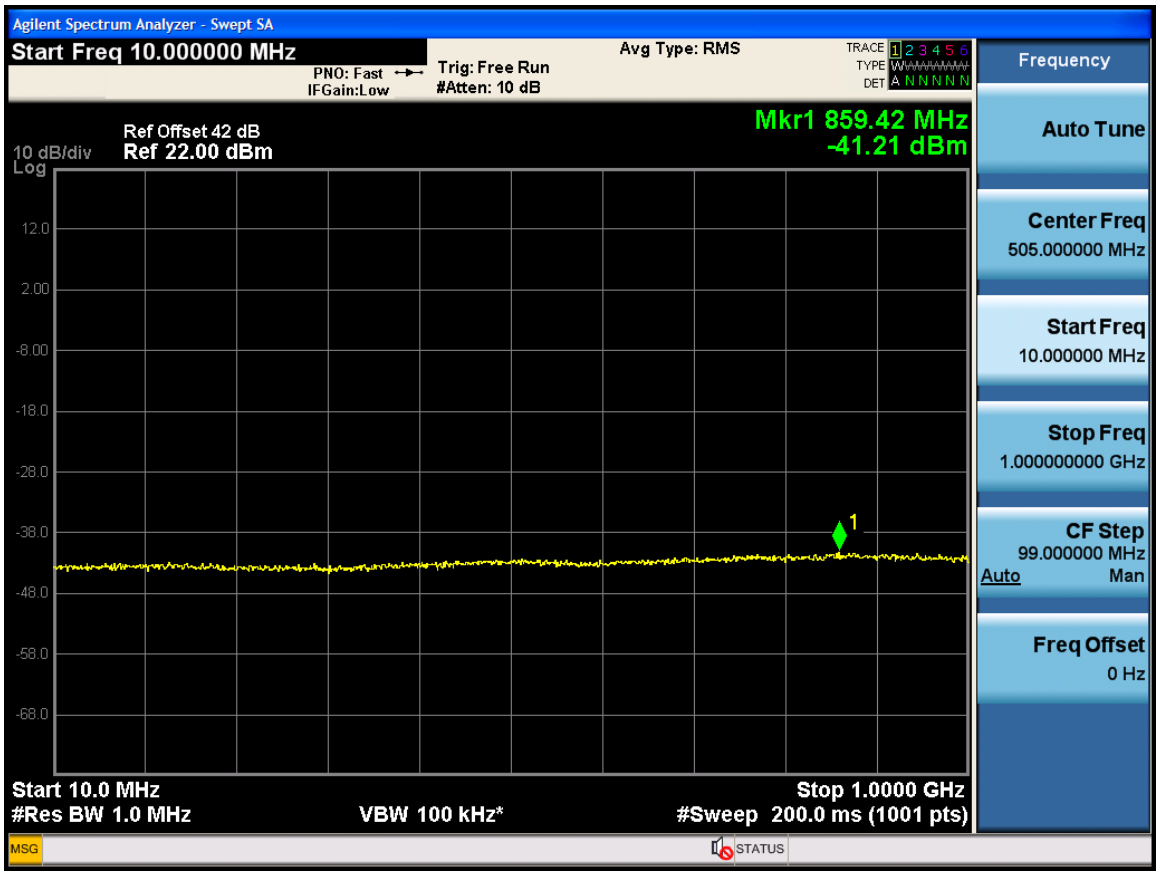

Agilent Spectrum Analyzer - Swept SA
L
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
05:48:11 PM Jun 02, 2015
Start Freq 9.000 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 41 dB
10 dB/div
Log
Ref 31.00 dBm
Mkr1 2.627 MHz
-36.12 dBm
21.0
11.0
1.00
-9.00
-19.0
-29.0
-39.0
-49.0
-59.0
1
Start 9 kHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 10.000 MHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
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

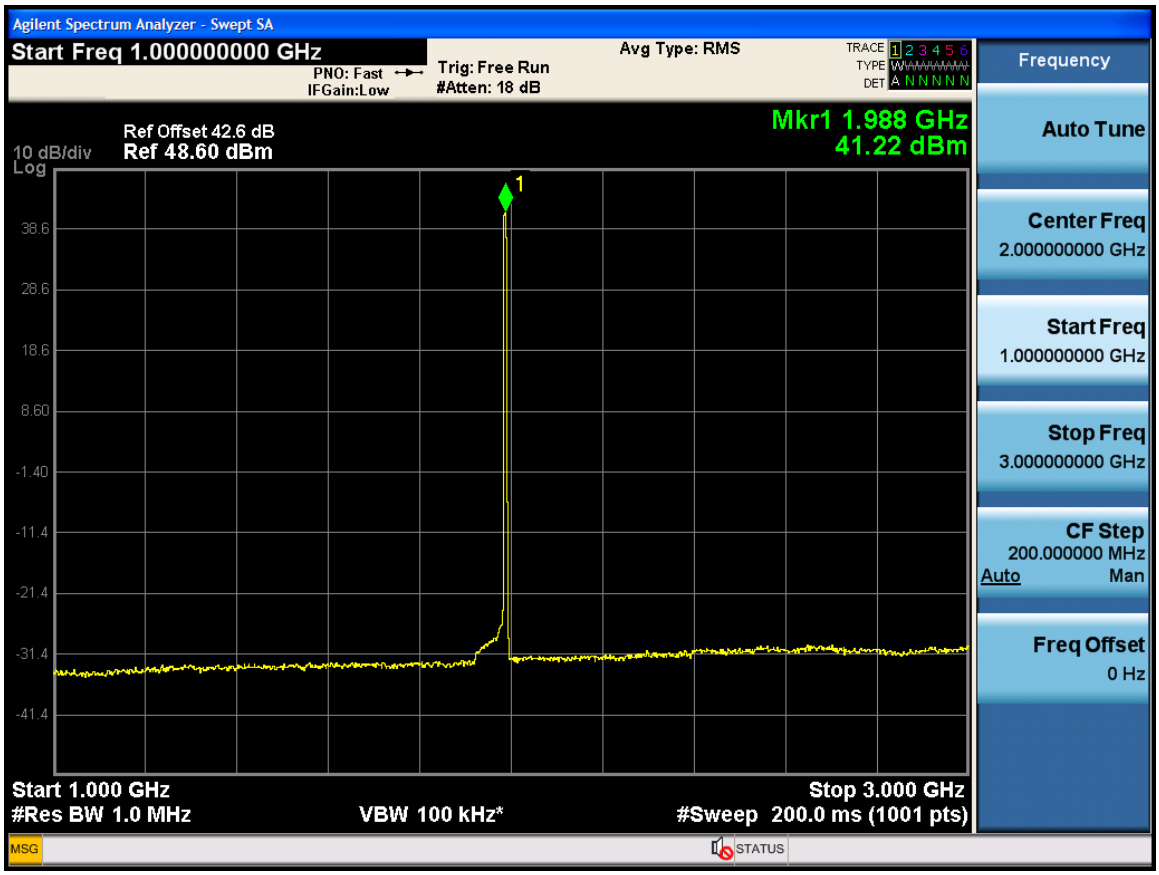

Agilent Spectrum Analyzer - Swept SA
L
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
05:48:53 PM Jun 02, 2015
Start Freq 10.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 22.00 dBm
Mkr1 880.21 MHz
-41.20 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 1.0000 GHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
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
L
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
05:49:14 PM Jun 02, 2015
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 18 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE
DET A N N N N N
Ref Offset 42.6 dB
10 dB/div
Log
Ref 48.60 dBm
Mkr1 1.960 GHz
41.46 dBm
38.6
28.6
18.6
8.60
-1.40
-11.4
-21.4
-31.4
-41.4
1
Start 1.000 GHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 3.000 GHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
3.000000000 GHz
CF Step
200.000000 MHz
Auto
Man
Freq Offset
0 Hz

5M -Port 1 -1987.5MHz


Agilent Spectrum Analyzer - Swept SA
Start Freq 9.000 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 14 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 41 dB
10 dB/div
Log
Ref 37.00 dBm
Mkr1 2.767 MHz
-37.06 dBm
27.0
17.0
7.00
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
1
Start 9 kHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 10.000 MHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
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
Start Freq 10.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Frequency
Ref Offset 42 dB
10 dB/div
Log
Ref 22.00 dBm
Mkr1 859.42 MHz
-41.21 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
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
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 1.0000 GHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 18 dB
Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE W
DET A N N N N N
Ref Offset 42.6 dB
10 dB/div
Log
Ref 48.60 dBm
Mkr1 1.988 GHz
41.22 dBm
38.6
28.6
18.6
8.60
-1.40
-11.4
-21.4
-31.4
-41.4
Start 1.000 GHz
#Res BW 1.0 MHz
VBW 100 kHz*
Stop 3.000 GHz
#Sweep 200.0 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
3.000000000 GHz
CF Step
200.000000 MHz
Auto
Man
Freq Offset
0 Hz