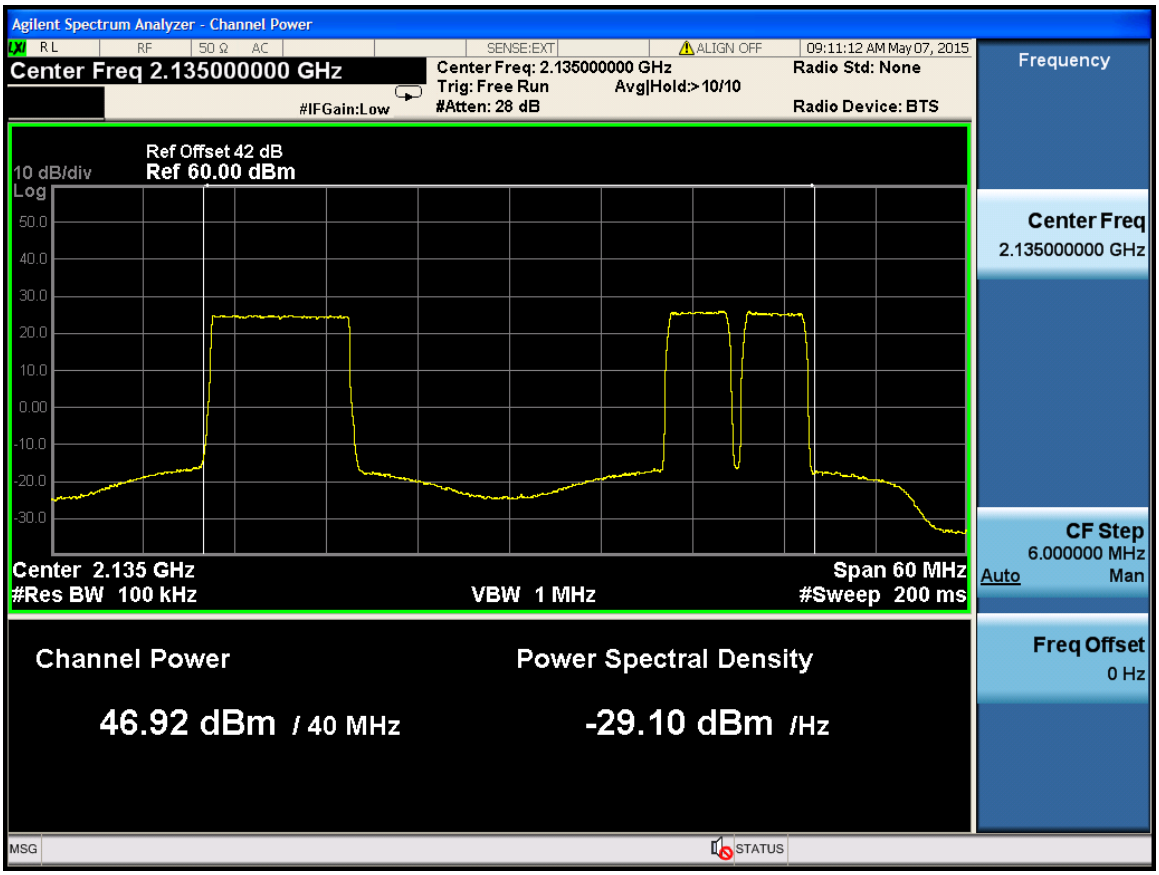
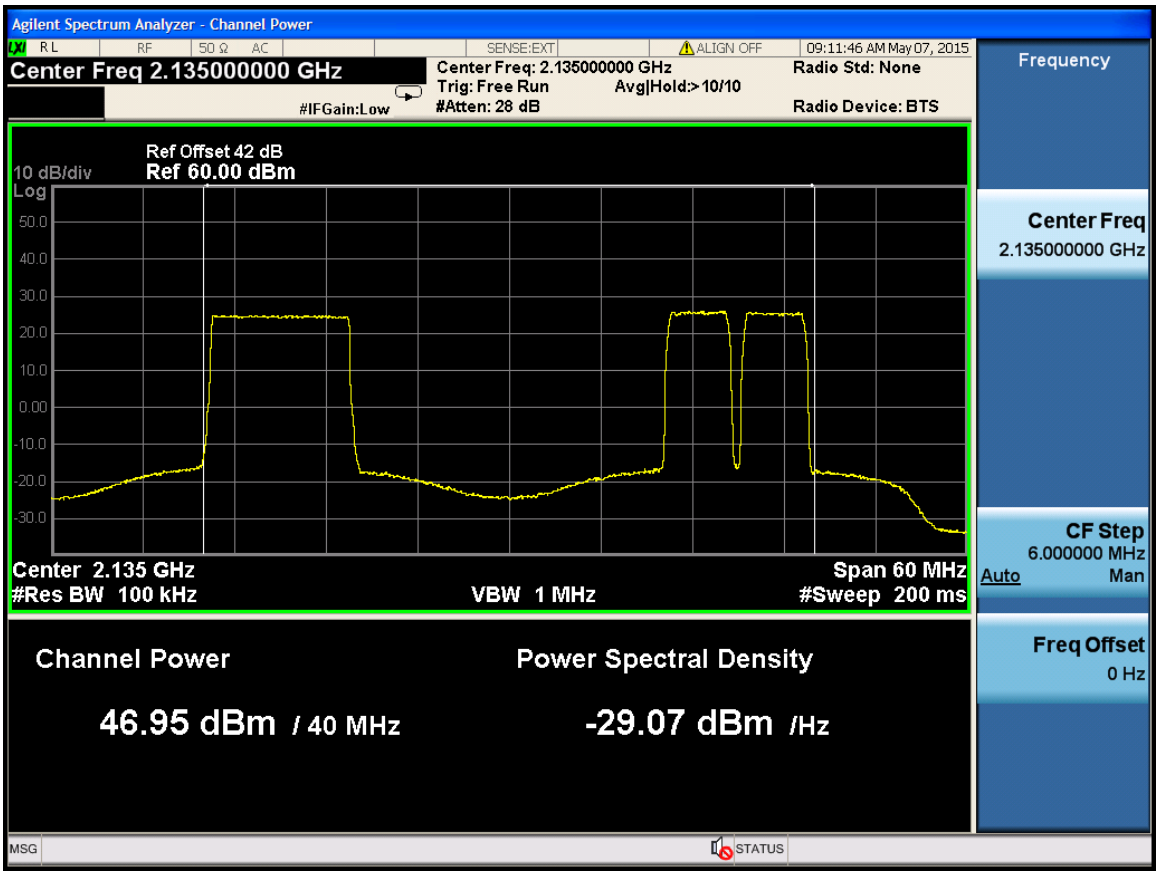
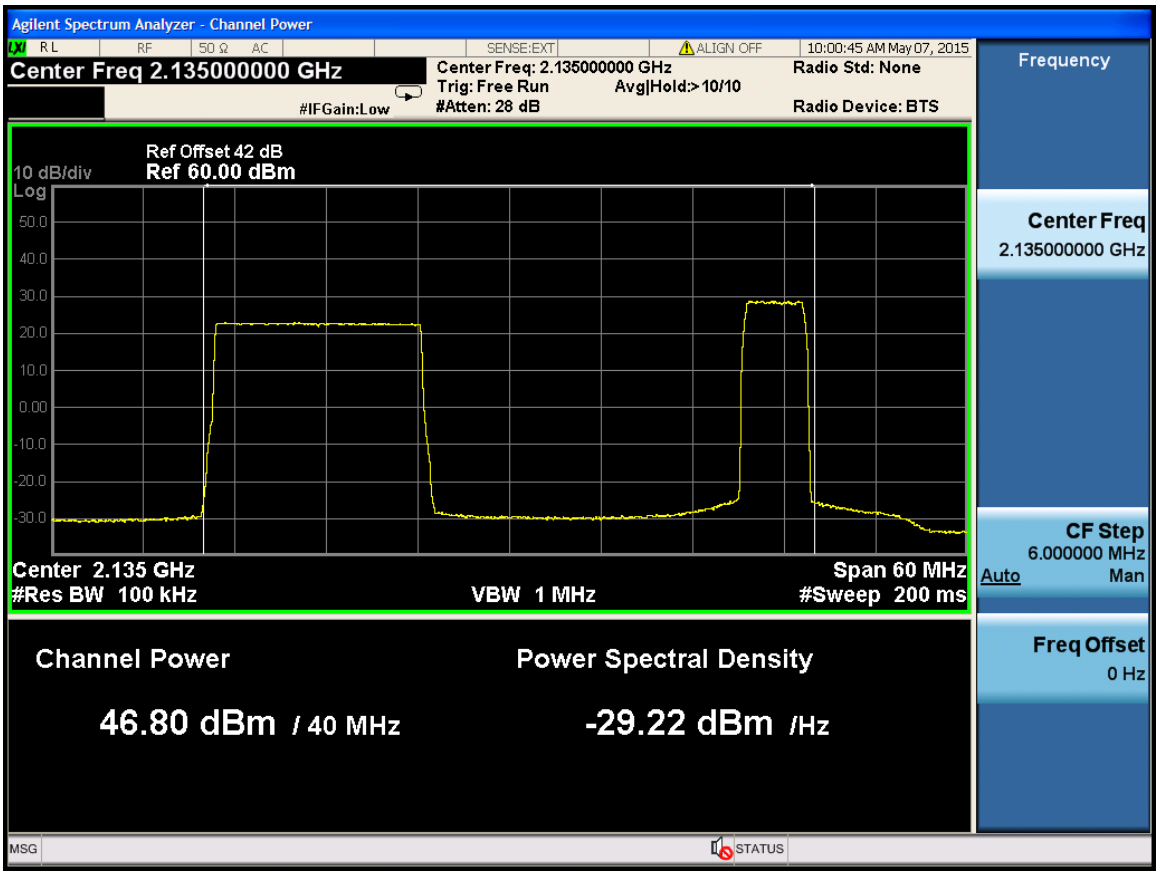
UMTS+LTE-64QAM-Port1


Agilent Spectrum Analyzer - Channel Power
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:11:12 AM May 07, 2015
Center Freq 2.135000000 GHz
Center Freq: 2.135000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#IFGain:Low
#Atten: 28 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 42 dB
10 dB/div
Ref 60.00 dBm
Log
50.0
40.0
30.0
20.0
10.0
0.00
-10.0
-20.0
-30.0
Center Freq
2.135000000 GHz
Center 2.135 GHz
#Res BW 100 kHz
VBW 1 MHz
Span 60 MHz
#Sweep 200 ms
CF Step
6.000000 MHz
Auto
Man
Channel Power
46.92 dBm / 40 MHz
Power Spectral Density
-29.10 dBm /Hz
Freq Offset
0 Hz
MSG
STATUS

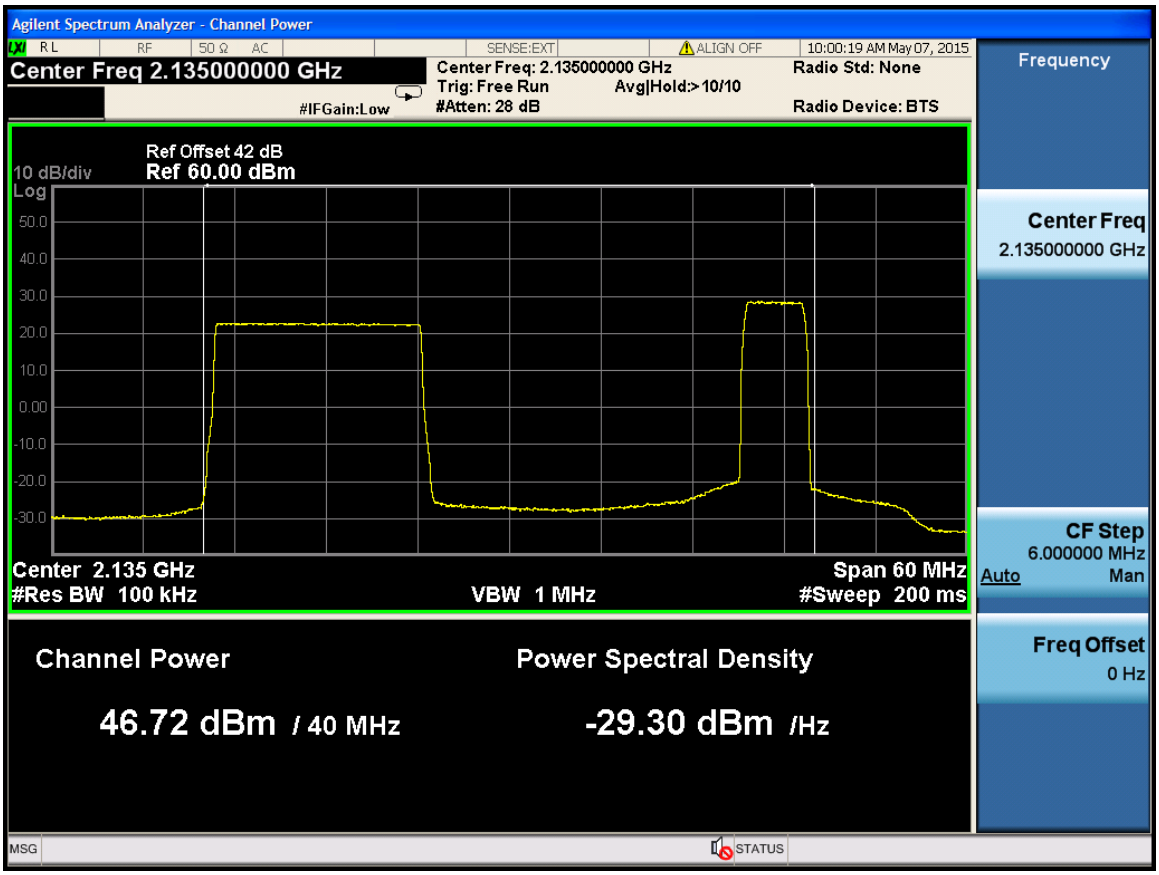
UMTS+LTE-64QAM-Port2


Agilent Spectrum Analyzer - Channel Power
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:11:46 AM May 07, 2015
Center Freq 2.135000000 GHz
Center Freq: 2.135000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#IFGain:Low
#Atten: 28 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 42 dB
10 dB/div
Ref 60.00 dBm
Log
50.0
40.0
30.0
20.0
10.0
0.00
-10.0
-20.0
-30.0
Center Freq
2.135000000 GHz
CF Step
6.000000 MHz
Auto
Man
Center 2.135 GHz
#Res BW 100 kHz
VBW 1 MHz
Span 60 MHz
#Sweep 200 ms
Freq Offset
0 Hz
Channel Power
46.95 dBm / 40 MHz
Power Spectral Density
-29.07 dBm /Hz
MSG
STATUS

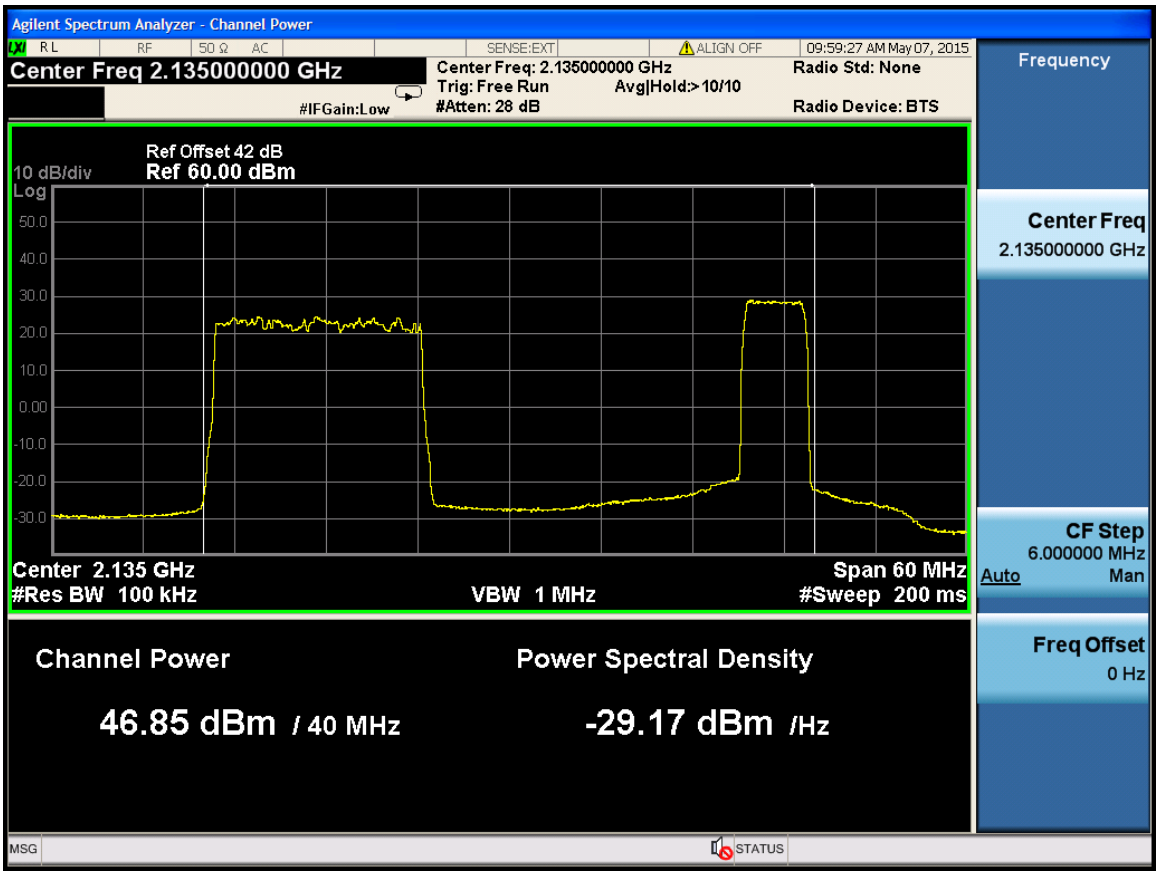
Configuration 4:
UMTS+LTE-QPSK-Port1


Agilent Spectrum Analyzer - Channel Power
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
10:00:45 AM May 07, 2015
Center Freq 2.135000000 GHz
Center Freq: 2.135000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#IFGain:Low
#Atten: 28 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 42 dB
10 dB/div
Ref 60.00 dBm
Log
50.0
40.0
30.0
20.0
10.0
0.00
-10.0
-20.0
-30.0
Center Freq
2.135000000 GHz
Center 2.135 GHz
#Res BW 100 kHz
VBW 1 MHz
Span 60 MHz
#Sweep 200 ms
CF Step
6.000000 MHz
Auto
Man
Channel Power
46.80 dBm / 40 MHz
Power Spectral Density
-29.22 dBm /Hz
Freq Offset
0 Hz
MSG
STATUS

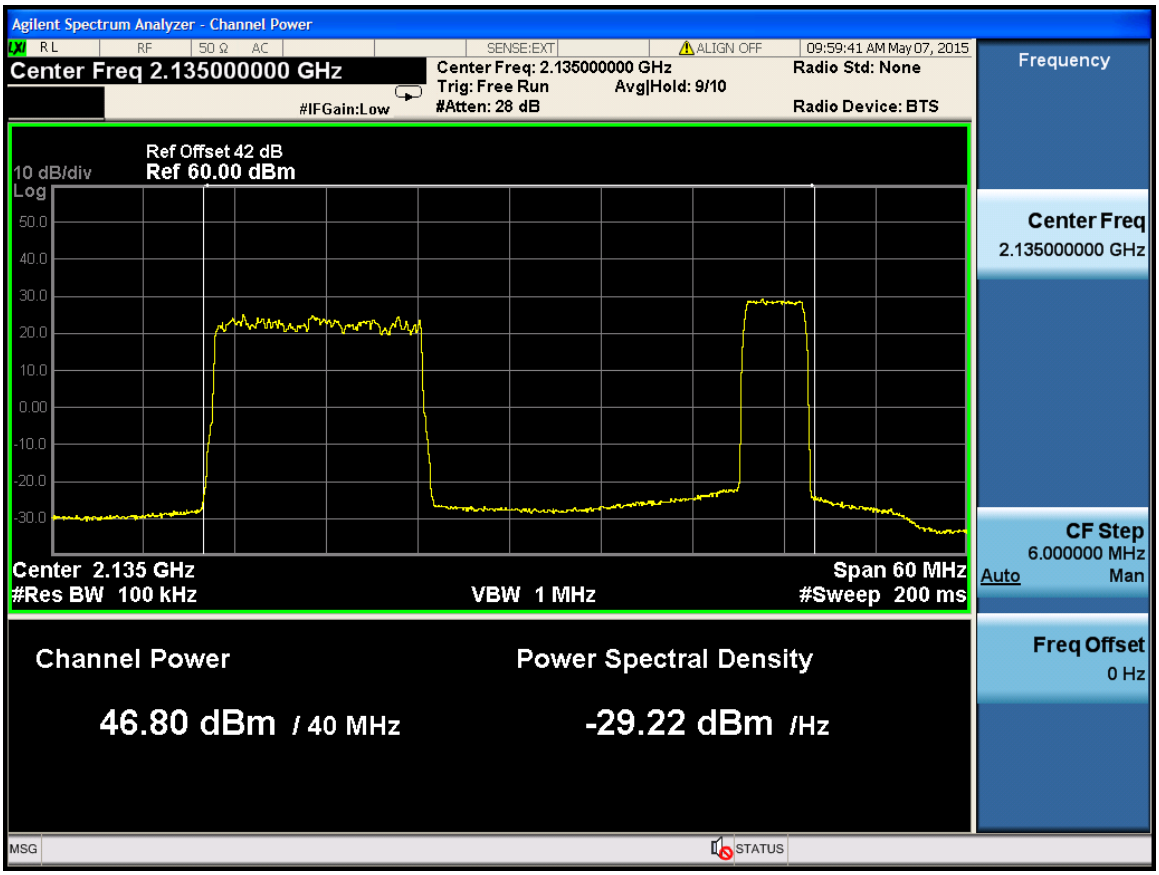
UMTS+LTE-QPSK-Port2


Agilent Spectrum Analyzer - Channel Power
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
10:00:19 AM May 07, 2015
Center Freq 2.135000000 GHz
Center Freq: 2.135000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#IFGain:Low
#Atten: 28 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 42 dB
10 dB/div
Ref 60.00 dBm
Log
50.0
40.0
30.0
20.0
10.0
0.00
-10.0
-20.0
-30.0
Center Freq
2.135000000 GHz
Center 2.135 GHz
#Res BW 100 kHz
VBW 1 MHz
Span 60 MHz
#Sweep 200 ms
CF Step
6.000000 MHz
Auto
Man
Channel Power
46.72 dBm / 40 MHz
Power Spectral Density
-29.30 dBm /Hz
Freq Offset
0 Hz
MSG
STATUS

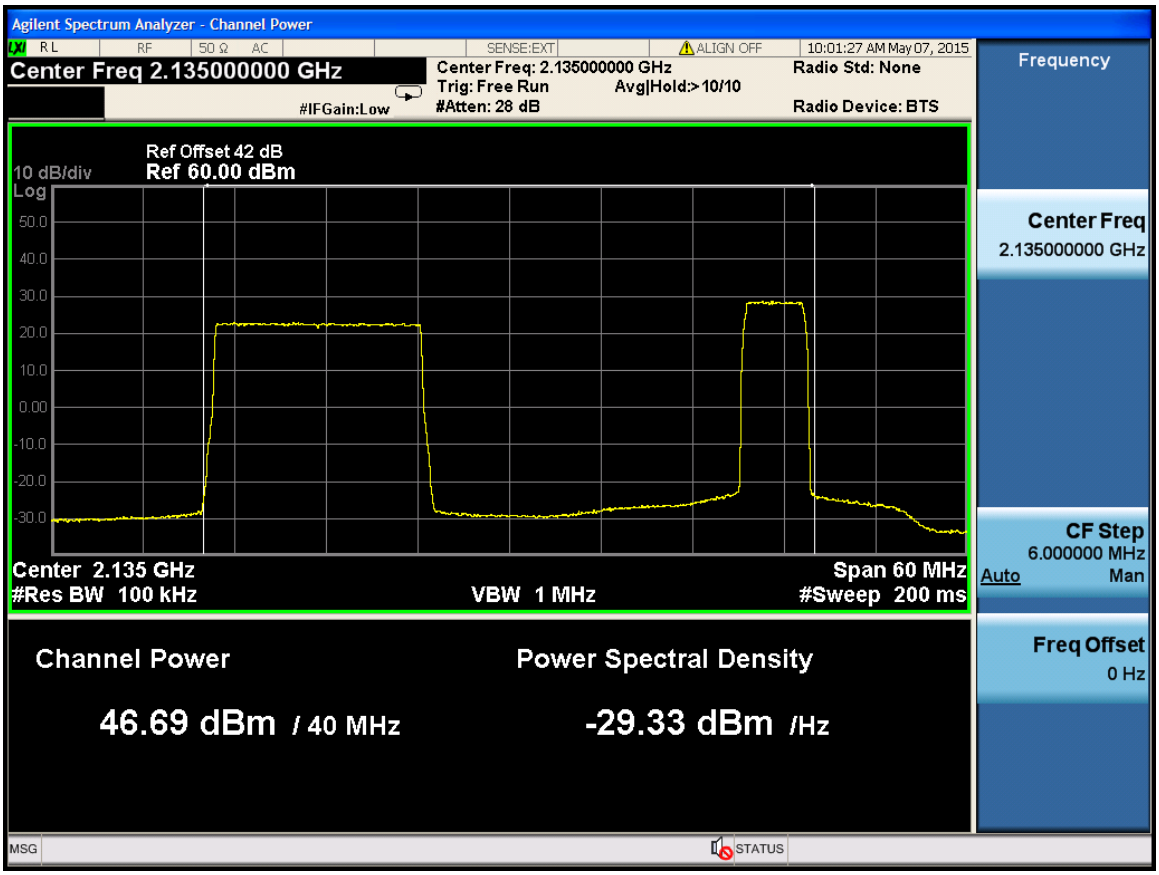
UMTS+LTE-16QAM-Port1


Agilent Spectrum Analyzer - Channel Power
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:59:27 AM May 07, 2015
Center Freq 2.135000000 GHz
Center Freq: 2.135000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#IFGain:Low
#Atten: 28 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 42 dB
10 dB/div
Ref 60.00 dBm
Log
50.0
40.0
30.0
20.0
10.0
0.00
-10.0
-20.0
-30.0
Center Freq
2.135000000 GHz
Center 2.135 GHz
#Res BW 100 kHz
VBW 1 MHz
Span 60 MHz
#Sweep 200 ms
CF Step
6.000000 MHz
Auto
Man
Channel Power
46.85 dBm / 40 MHz
Power Spectral Density
-29.17 dBm /Hz
Freq Offset
0 Hz
MSG
STATUS

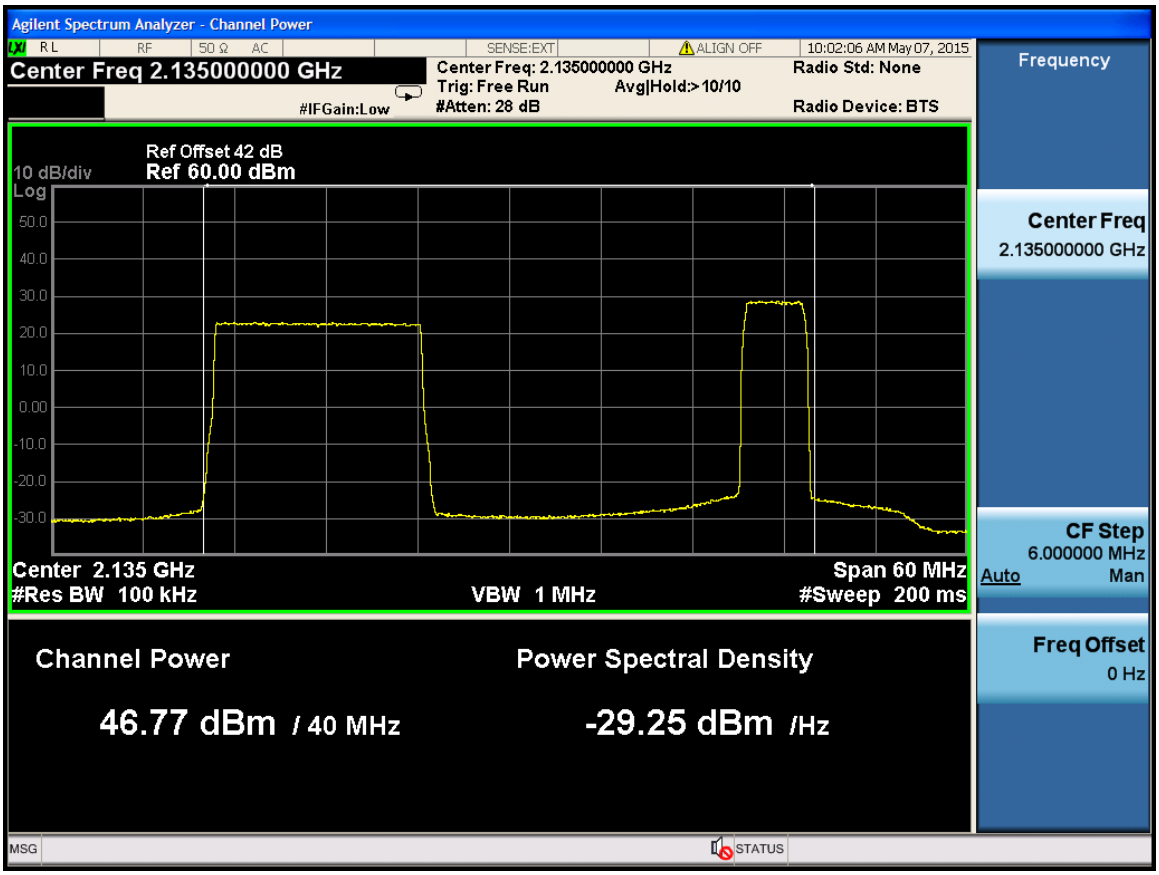
UMTS+LTE-16QAM-Port2


Agilent Spectrum Analyzer - Channel Power
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:59:41 AM May 07, 2015
Center Freq 2.135000000 GHz
Center Freq: 2.135000000 GHz
Trig: Free Run
Avg|Hold: 9/10
#IFGain:Low
#Atten: 28 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 42 dB
10 dB/div
Ref 60.00 dBm
Log
50.0
40.0
30.0
20.0
10.0
0.00
-10.0
-20.0
-30.0
Center Freq
2.135000000 GHz
Center 2.135 GHz
#Res BW 100 kHz
VBW 1 MHz
Span 60 MHz
#Sweep 200 ms
CF Step
6.000000 MHz
Auto
Man
Channel Power
46.80 dBm / 40 MHz
Power Spectral Density
-29.22 dBm /Hz
Freq Offset
0 Hz
MSG
STATUS

UMTS+LTE-64QAM-Port1


Agilent Spectrum Analyzer - Channel Power
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
10:01:27 AM May 07, 2015
Center Freq 2.135000000 GHz
Center Freq: 2.135000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#IFGain:Low
#Atten: 28 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 42 dB
10 dB/div
Ref 60.00 dBm
Log
50.0
40.0
30.0
20.0
10.0
0.00
-10.0
-20.0
-30.0
Center Freq
2.135000000 GHz
Center 2.135 GHz
#Res BW 100 kHz
VBW 1 MHz
Span 60 MHz
#Sweep 200 ms
CF Step
6.000000 MHz
Auto
Man
Channel Power
46.69 dBm / 40 MHz
Power Spectral Density
-29.33 dBm /Hz
Freq Offset
0 Hz
MSG
STATUS

UMTS+LTE-64QAM-Port2


Agilent Spectrum Analyzer - Channel Power
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
10:02:06 AM May 07, 2015
Center Freq 2.135000000 GHz
Center Freq: 2.135000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#IFGain:Low
#Atten: 28 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 42 dB
10 dB/div
Ref 60.00 dBm
Log
50.0
40.0
30.0
20.0
10.0
0.00
-10.0
-20.0
-30.0
Center Freq
2.135000000 GHz
Center 2.135 GHz
#Res BW 100 kHz
VBW 1 MHz
Span 60 MHz
#Sweep 200 ms
CF Step
6.000000 MHz
Auto
Man
Channel Power
46.77 dBm / 40 MHz
Power Spectral Density
-29.25 dBm /Hz
Freq Offset
0 Hz
MSG
STATUS

9 TRANSMITTER UNWANTED EMISSIONS

Applicable Standard: RSS-139 § 6.5;rss-Gen

(i) In the first 1.0 MHz bands immediately outside and adjacent to the equipment's operating frequency block, the emission power per any 1% of the emission bandwidth shall be attenuated below the transmitter output power P (in watts) by at least 43 + 10 $\log_{10}$(P), dB.
(ii) After the first 1.0 MHz outside the equipment's operating frequency block, the emission power in any 1 MHz bandwidth shall be attenuated below the transmitter output power P (in watts) by at least43 + 10 $\log_{10}$(P), dB.any 1 MHz bandwidth shall be attenuated below the transmitter output power P (in watts) by at least43 + 10 $\log_{10}$(P), dB.

the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (p) by a factor of at least 43 + 10 log (p) dB. The limit (dBm) should < P –(43+10log(P)) = -13dBm.

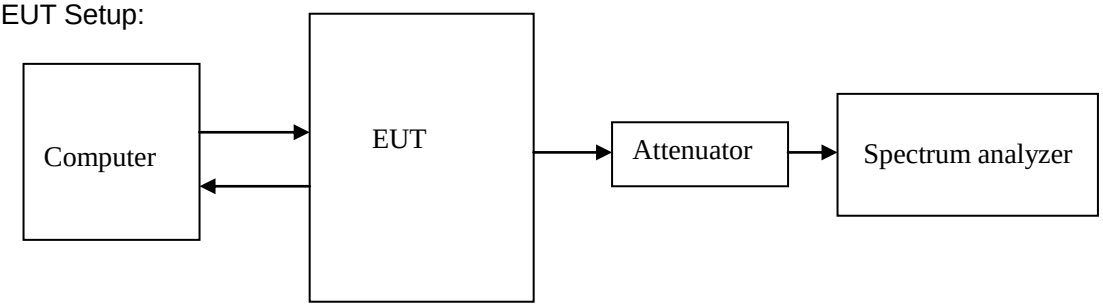
Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	PXA Series Spectrum Analyzer	N9030A	MY49431143	2014.09.16	2015.09.16
DTS	DTS 40dB Attenuator	DTS100-40-3-1	201312160104	2014.09.16	2015.09.16

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

Test Procedure

EUT Setup:



The unwanted emissions shall be measured at the frequencies of the highest and lowest channel of all bandwidths and types of modulation that the equipment can operate with a resolution bandwidth of 1 MHz or less, but at least 1% of the occupied bandwidth of the transmitter, provided that the measured power is integrated over a 1 MHz bandwidth.

When conducted unwanted emissions test, configure R8882 S1700 output at rated power, the R8882 S1700 output antenna connected to spectrum analyzer, and testing emissions by spectrum analyzer one antenna by another.

When radiated unwanted emissions test, configure R8882 S1700 output at rated power, the R8882 S1700 output antenna connected to load.

Test Data Environmental Conditions

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

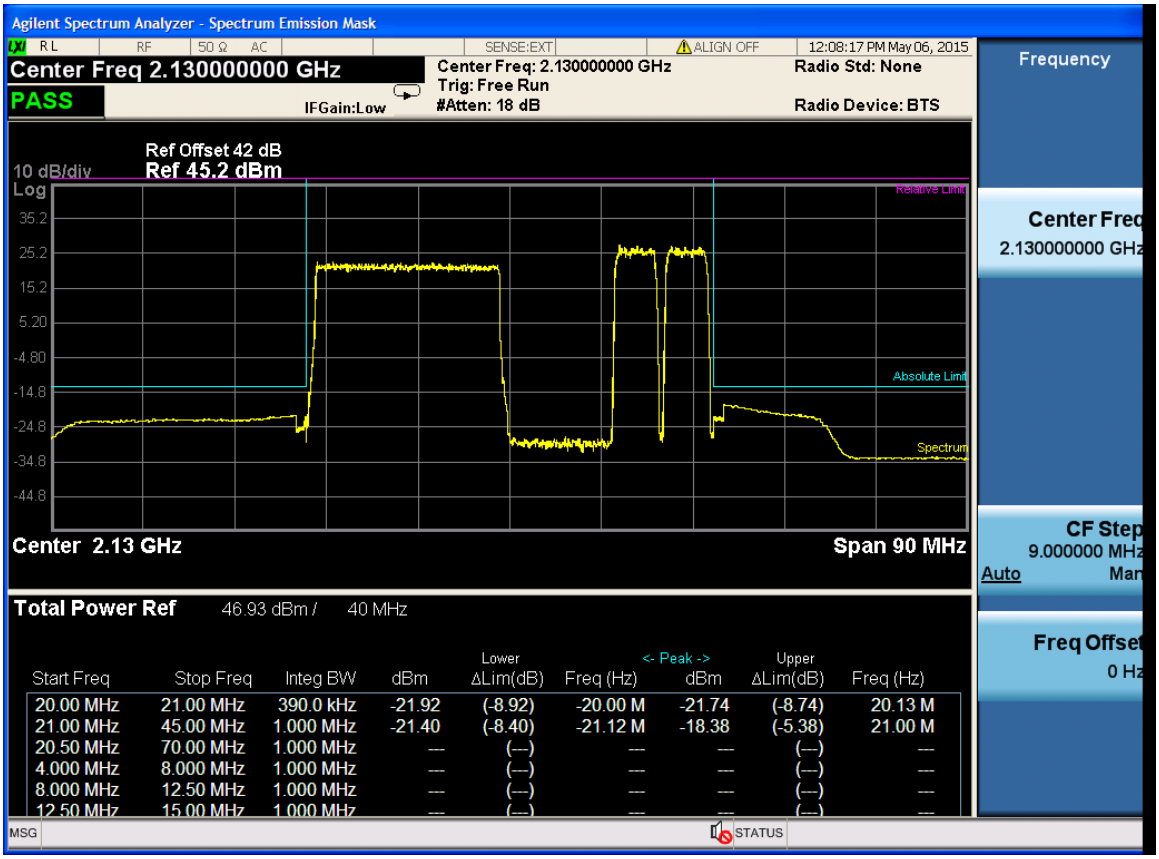
Test Result: Pass

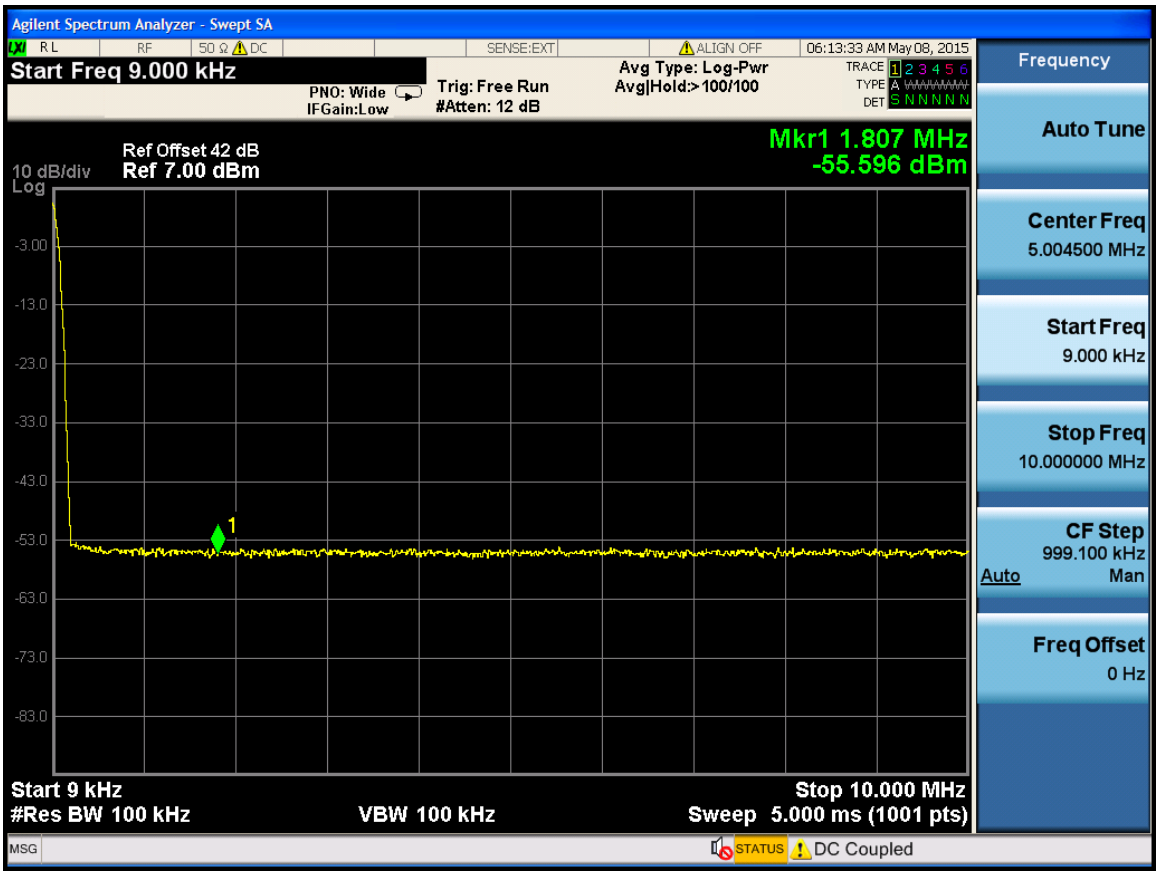
Test Mode: Transmitting UMTS+LTE

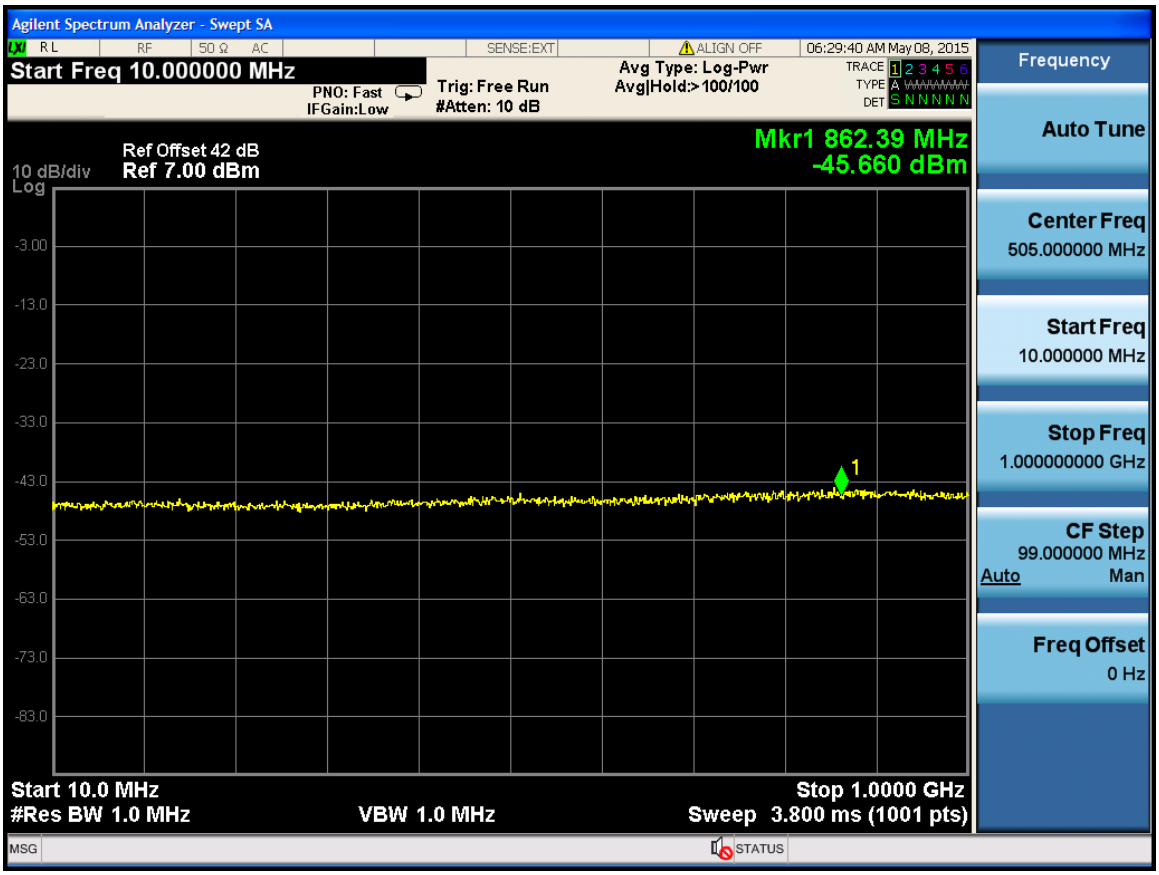
configuration	Radio mode	Bandwidth	LTE frequency And Power		UMTS 1 Carrier frequency And Power		UMTS 2 Carrier frequency And Power	
NO	UMTS+LTE	IBW:40MHz	Frequency (MHz)	Power/ Port	Frequency (MHz)	Power/ Port	Frequency (MHz)	Power /Port
1	1L+2U	2110-2150	2110-2130	20W	2139.9 -2144.9	15W	2144.9 -2149.9	15W
2	1L+2U	2110-2150	2110-2125	20W	2139.9 -2144.9	15W	2144.9 -2149.9	15W
3	1L+2U	2115-2155	2115-2125	20W	2144.9 -2149.9	15W	2149.9 -2154.9	15W
4	1L+1U	2115-2155	2115-2130	20W	2149.9 -2154.9	30W		

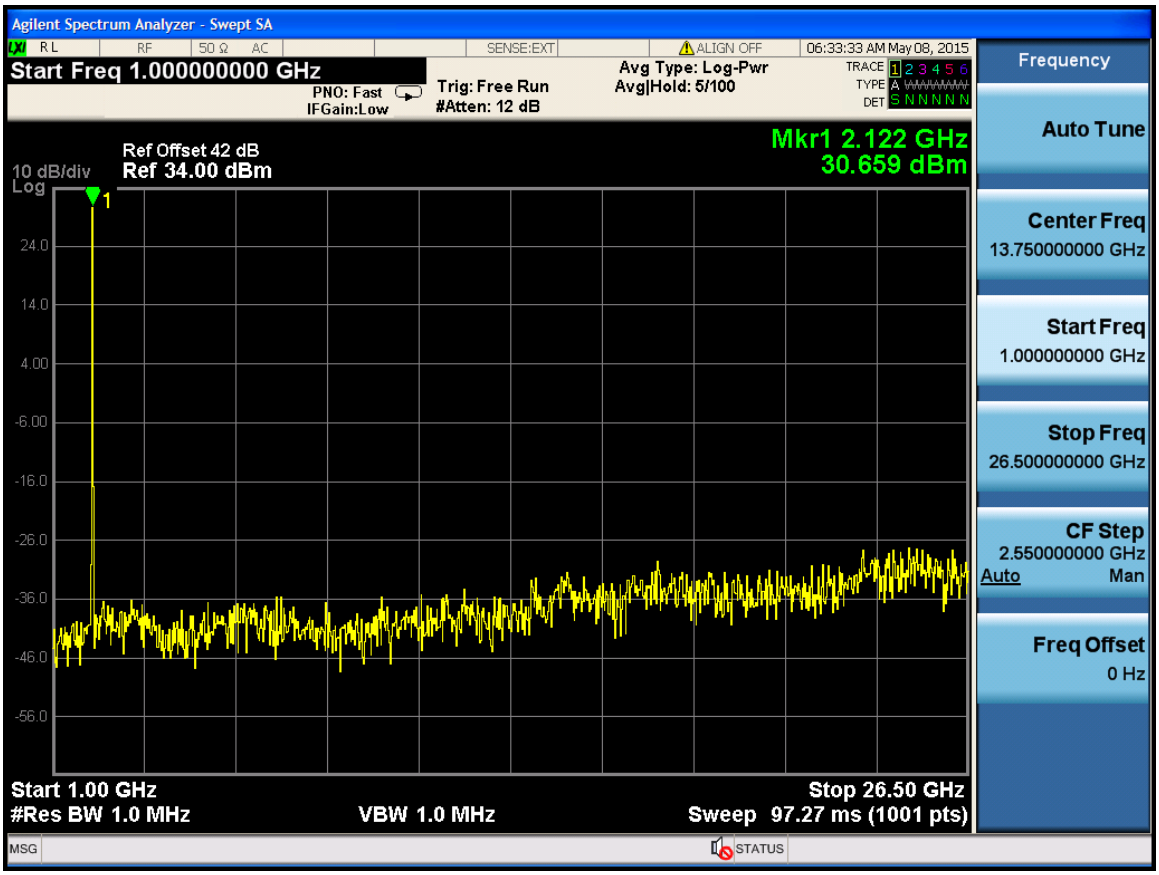
Test Data:

Configrution1:
Port 1

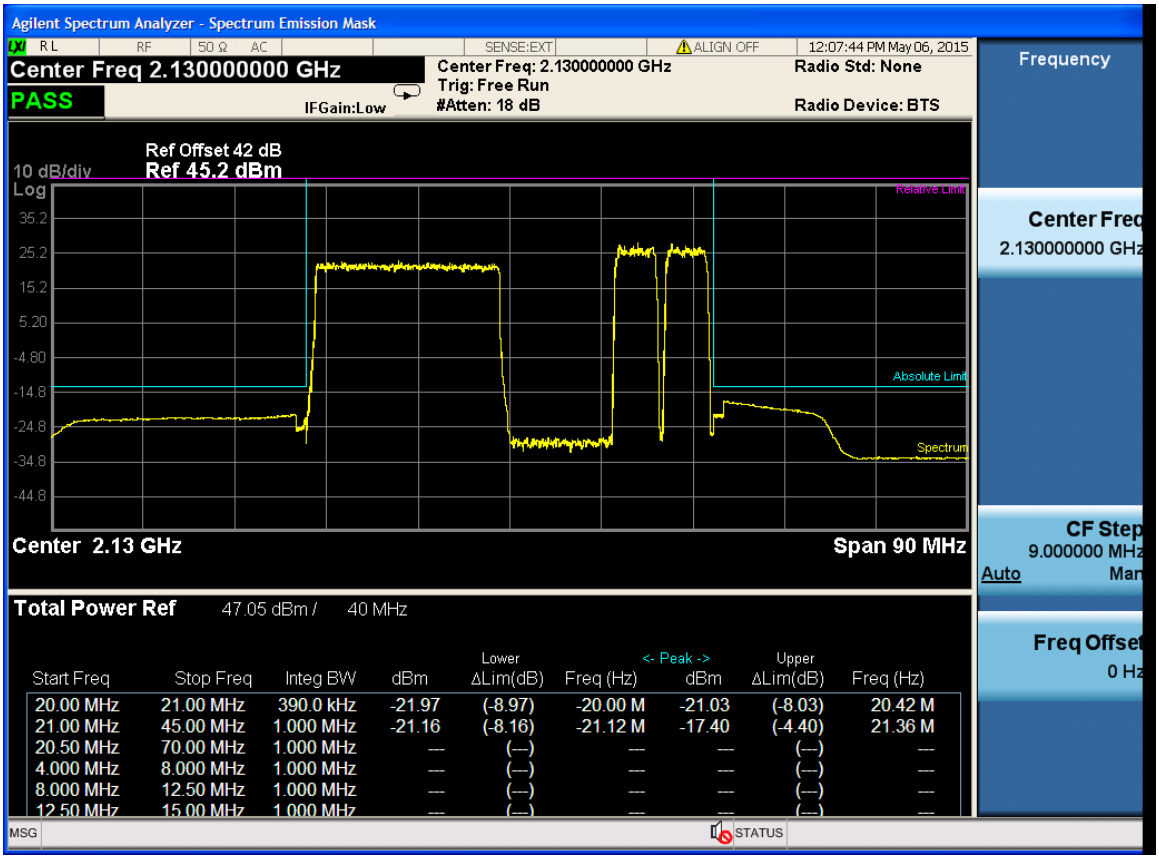

Agilent Spectrum Analyzer - Spectrum Emission Mask
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
12:08:17 PM May 06, 2015
Center Freq 2.130000000 GHz
PASS
IFGain:Low
Center Freq: 2.130000000 GHz
Trig: Free Run
#Atten: 18 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 42 dB
10 dB/div
Ref 45.2 dBm
Log
35.2
25.2
15.2
5.20
-4.80
-14.8
-24.8
-34.8
-44.8
Relative Limit
Absolute Limit
Spectrum
Center 2.13 GHz
Span 90 MHz
Center Freq
2.130000000 GHz
CF Step
9.000000 MHz
Auto
Man
Freq Offset
0 Hz
Total Power Ref
46.93 dBm /
40 MHz
Lower
<- Peak ->
Upper
Start Freq
Stop Freq
Integ BW
dBm
ΔLim(dB)
Freq (Hz)
dBm
ΔLim(dB)
Freq (Hz)
20.00 MHz 21.00 MHz 390.0 kHz -21.92 (-8.92) -20.00 M -21.74 (-8.74) 20.13 M
21.00 MHz 45.00 MHz 1.000 MHz -21.40 (-8.40) -21.12 M -18.38 (-5.38) 21.00 M
20.50 MHz 70.00 MHz 1.000 MHz --- (---) --- --- (---) ---
4.000 MHz 8.000 MHz 1.000 MHz --- (---) --- --- (---) ---
8.000 MHz 12.50 MHz 1.000 MHz --- (---) --- --- (---) ---
12.50 MHz 15.00 MHz 1.000 MHz --- (---) --- --- (---) ---
MSG
STATUS

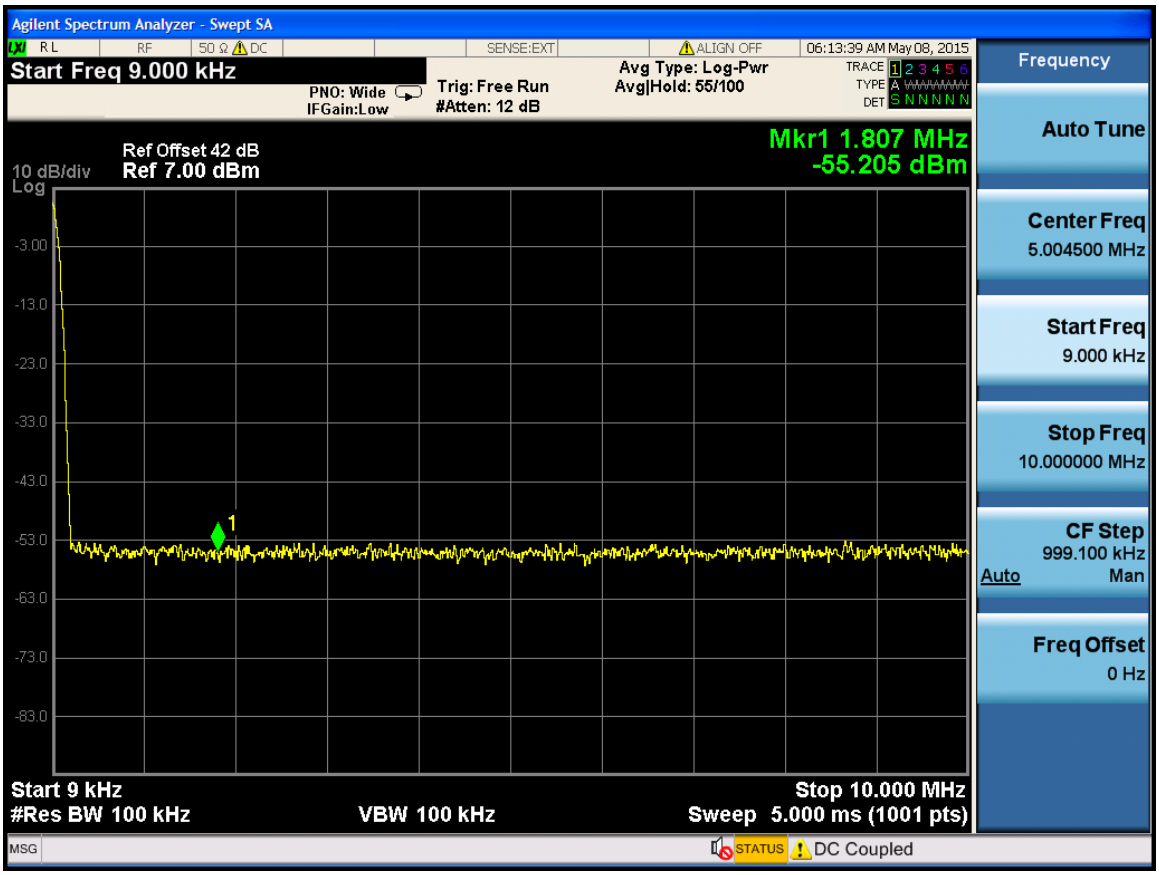

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
06:13:33 AM May 08, 2015
Start Freq 9.000 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 1.807 MHz
-55.596 dBm
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
-63.0
-73.0
-83.0
1
Start 9 kHz
#Res BW 100 kHz
VBW 100 kHz
Stop 10.000 MHz
Sweep 5.000 ms (1001 pts)
MSG
STATUS
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

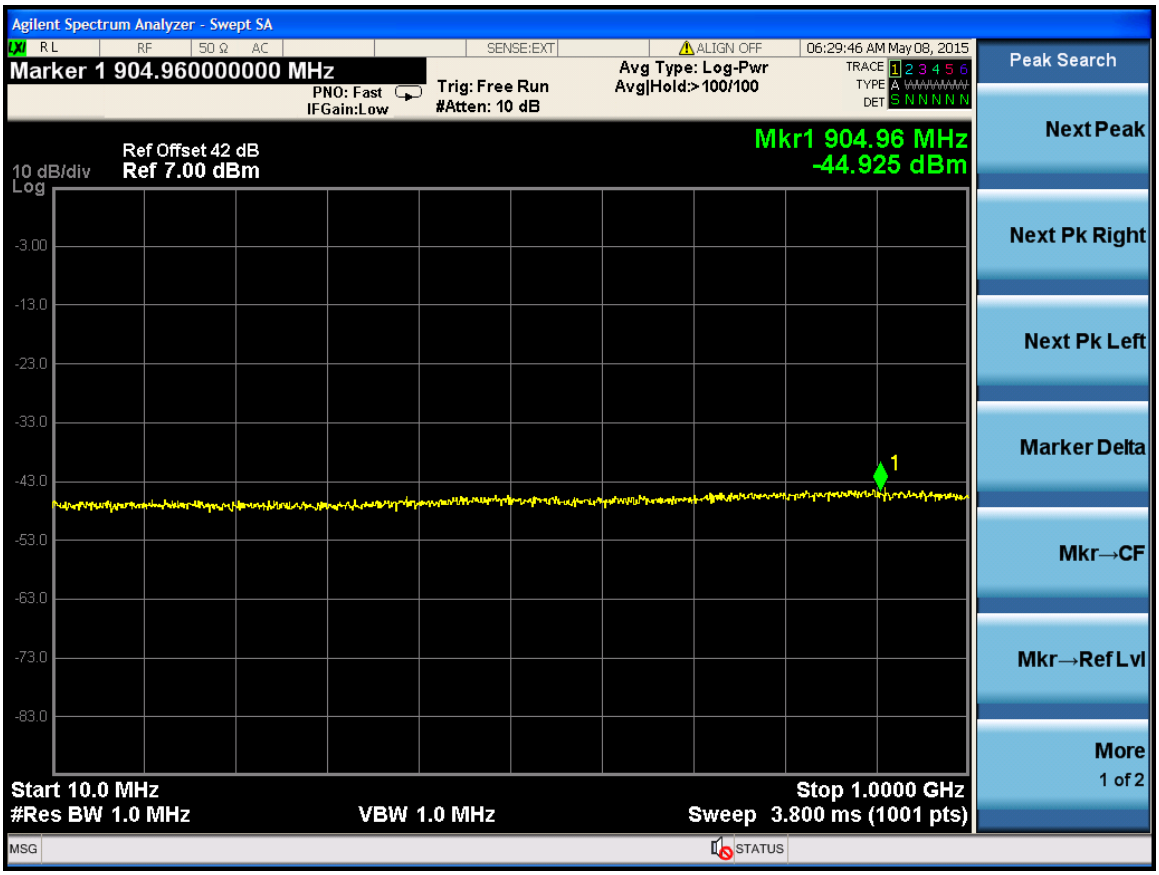

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
06:29:40 AM May 08, 2015
Start Freq 10.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 862.39 MHz
-45.660 dBm
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
-63.0
-73.0
-83.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 1.0000 GHz
Sweep 3.800 ms (1001 pts)
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
MSG
STATUS

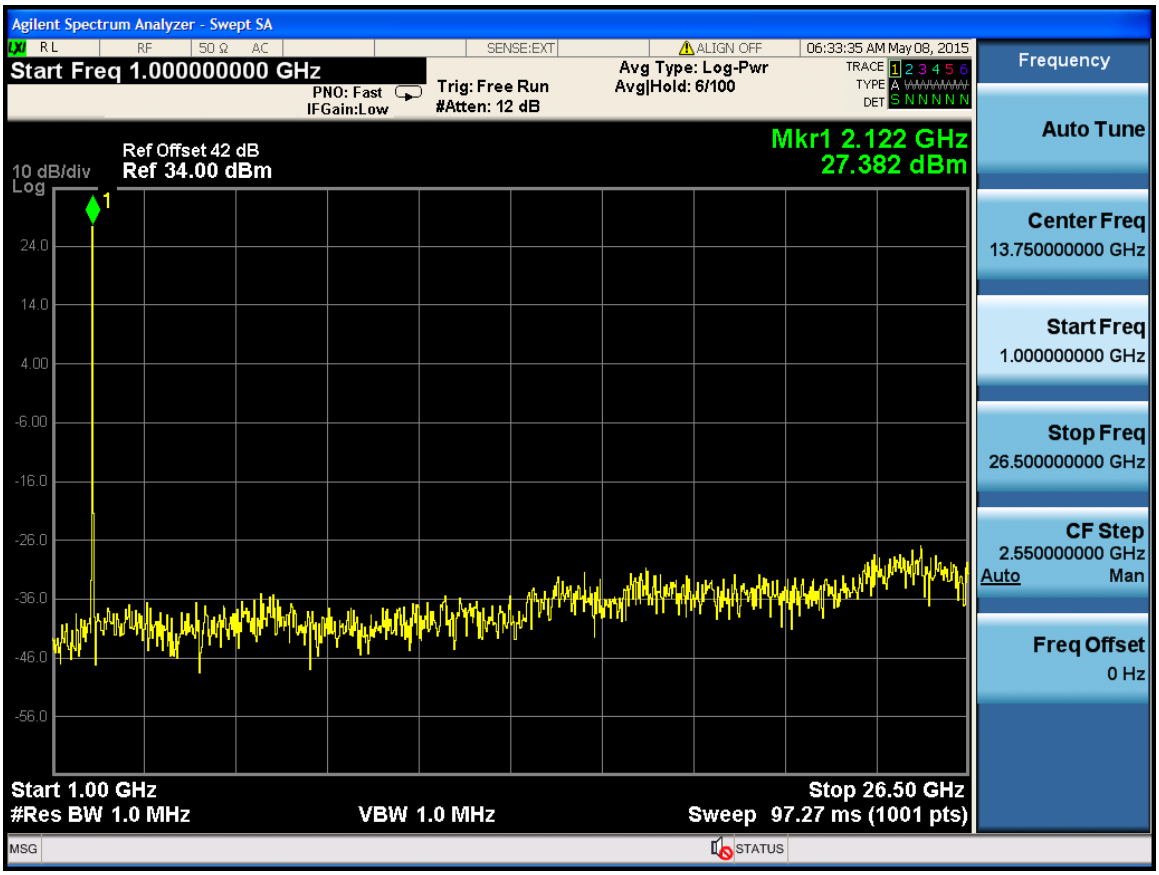

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
06:33:33 AM May 08, 2015
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 5/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 34.00 dBm
Mkr1 2.122 GHz
30.659 dBm
24.0
14.0
4.00
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
Start 1.00 GHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 26.50 GHz
Sweep 97.27 ms (1001 pts)
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
MSG
STATUS

Port 2

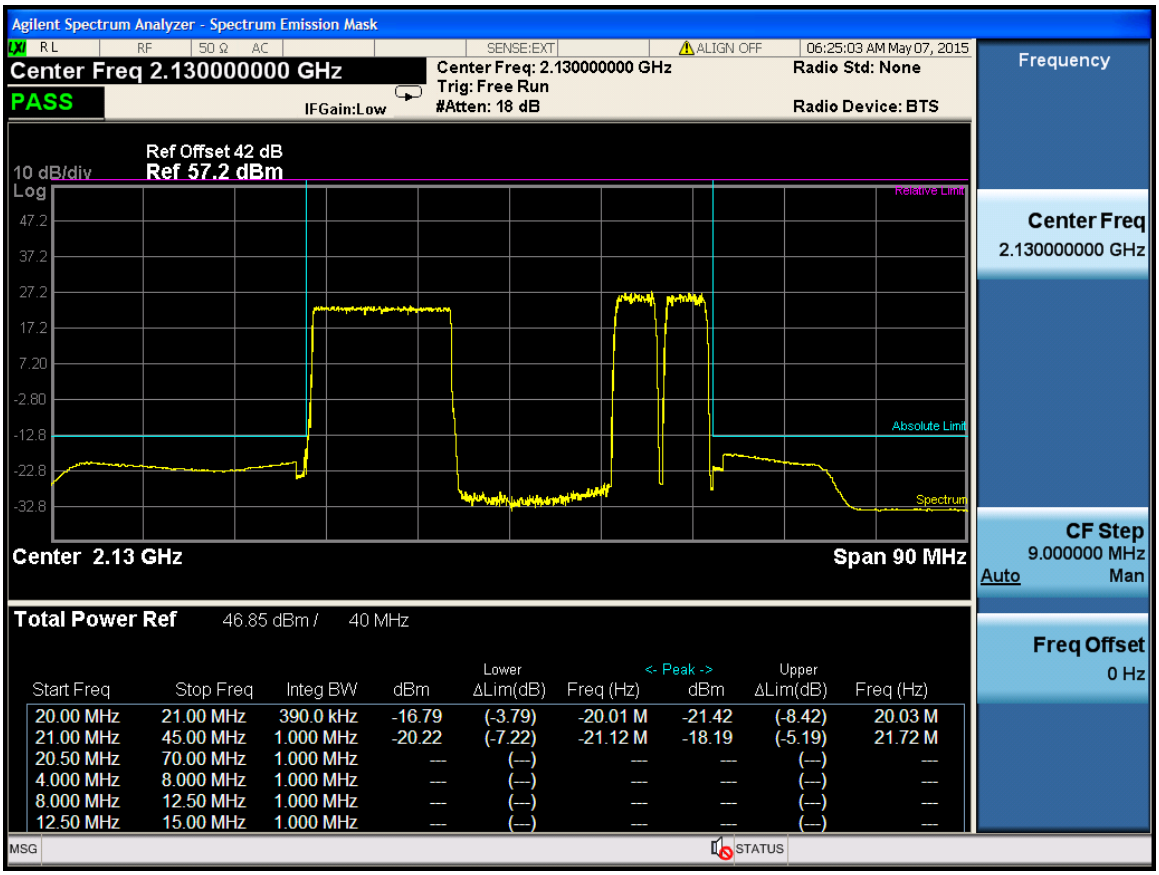

Agilent Spectrum Analyzer - Spectrum Emission Mask
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
12:07:44 PM May 06, 2015
Center Freq 2.130000000 GHz
PASS
IFGain:Low
Center Freq: 2.130000000 GHz
Trig: Free Run
#Atten: 18 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 42 dB
10 dB/div
Ref 45.2 dBm
Log
35.2
25.2
15.2
5.20
-4.80
-14.8
-24.8
-34.8
-44.8
Relative Limit
Absolute Limit
Spectrum
Center 2.13 GHz
Span 90 MHz
Center Freq
2.130000000 GHz
CF Step
9.000000 MHz
Auto
Man
Freq Offset
0 Hz
Total Power Ref 47.05 dBm / 40 MHz
Lower
<- Peak ->
Upper
Start Freq | Stop Freq | Integ BW | dBm | ΔLim(dB) | Freq (Hz) | dBm | ΔLim(dB) | Freq (Hz)
20.00 MHz | 21.00 MHz | 390.0 kHz | -21.97 | (-8.97) | -20.00 M | -21.03 | (-8.03) | 20.42 M
21.00 MHz | 45.00 MHz | 1.000 MHz | -21.16 | (-8.16) | -21.12 M | -17.40 | (-4.40) | 21.36 M
20.50 MHz | 70.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | ---
4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | ---
8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | ---
12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | ---
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
06:13:39 AM May 08, 2015
Start Freq 9.000 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 55/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 1.807 MHz
-55.205 dBm
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
-63.0
-73.0
-83.0
1
Start 9 kHz
#Res BW 100 kHz
VBW 100 kHz
Stop 10.000 MHz
Sweep 5.000 ms (1001 pts)
MSG
STATUS
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

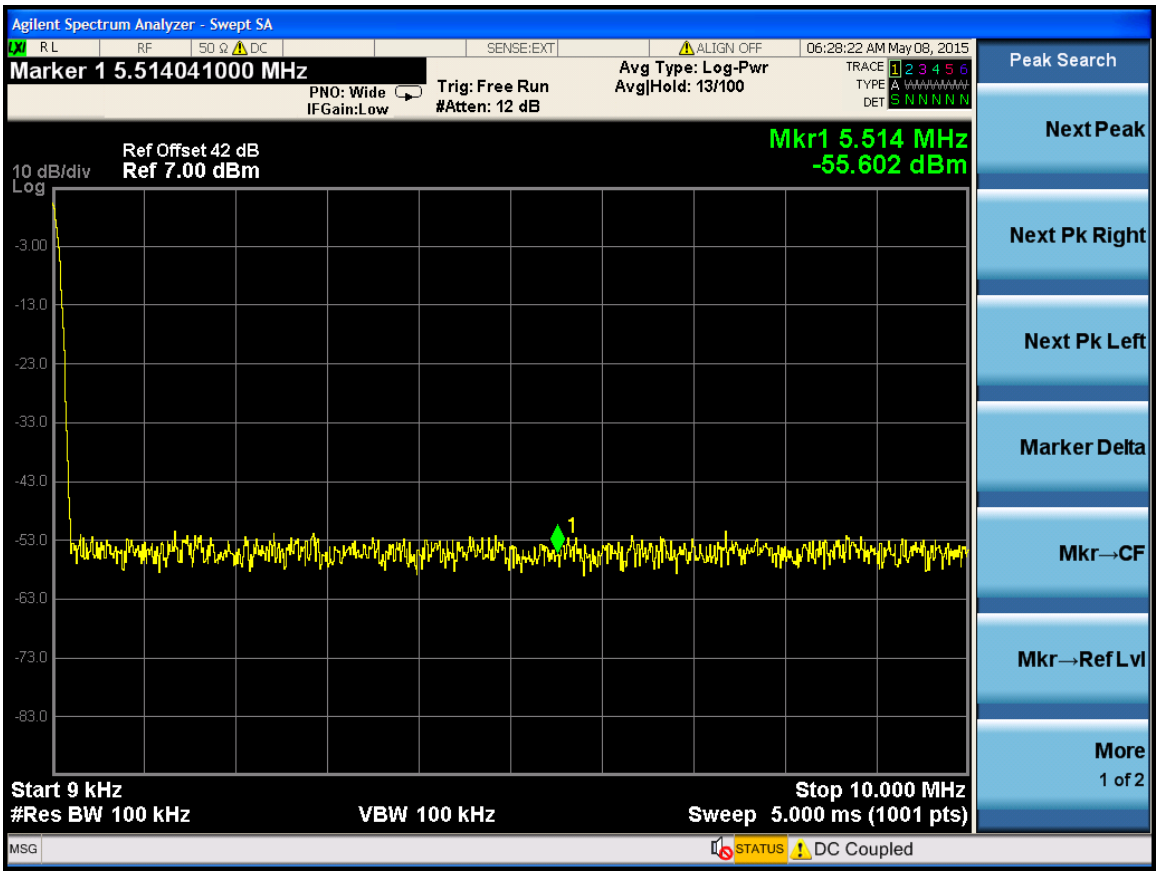

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
06:29:46 AM May 08, 2015
Marker 1 904.960000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 904.96 MHz
-44.925 dBm
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
-63.0
-73.0
-83.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 1.0000 GHz
Sweep 3.800 ms (1001 pts)
MSG
STATUS
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

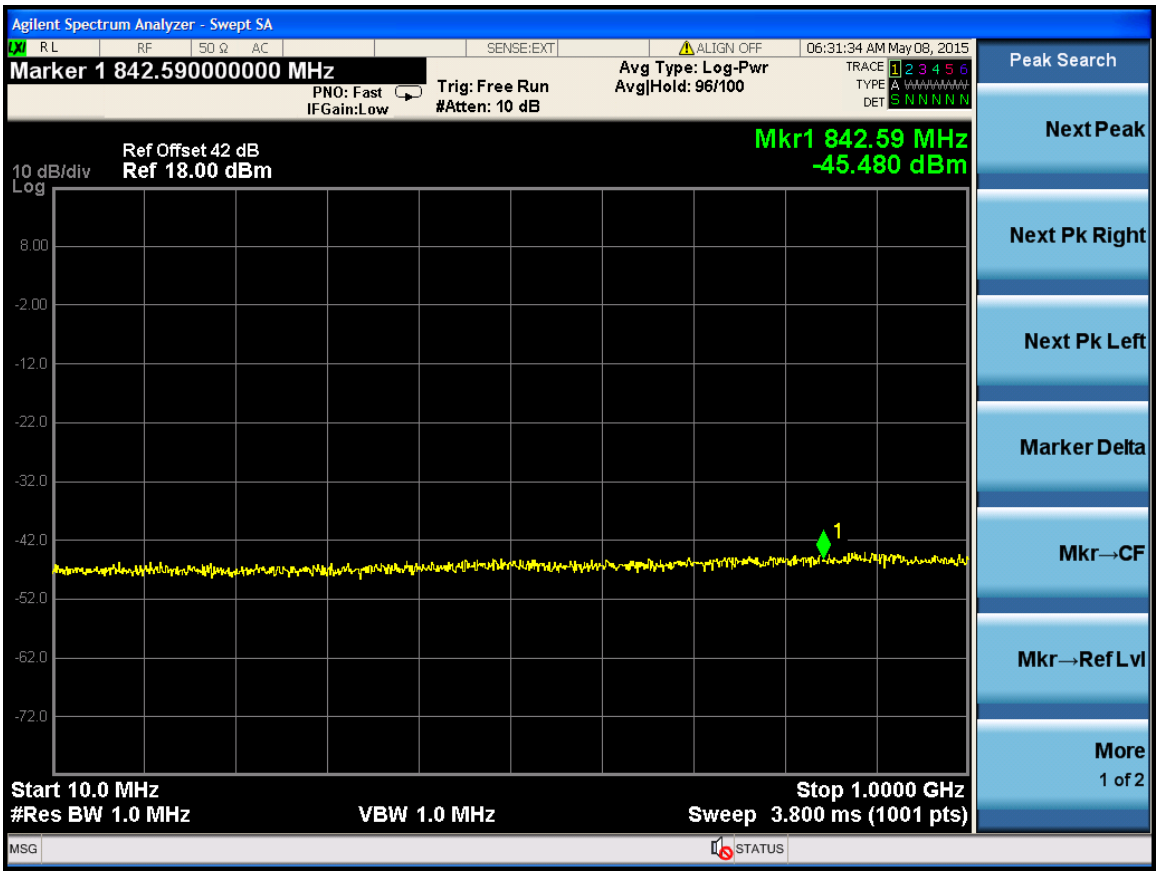


Configrution2:
Port 1



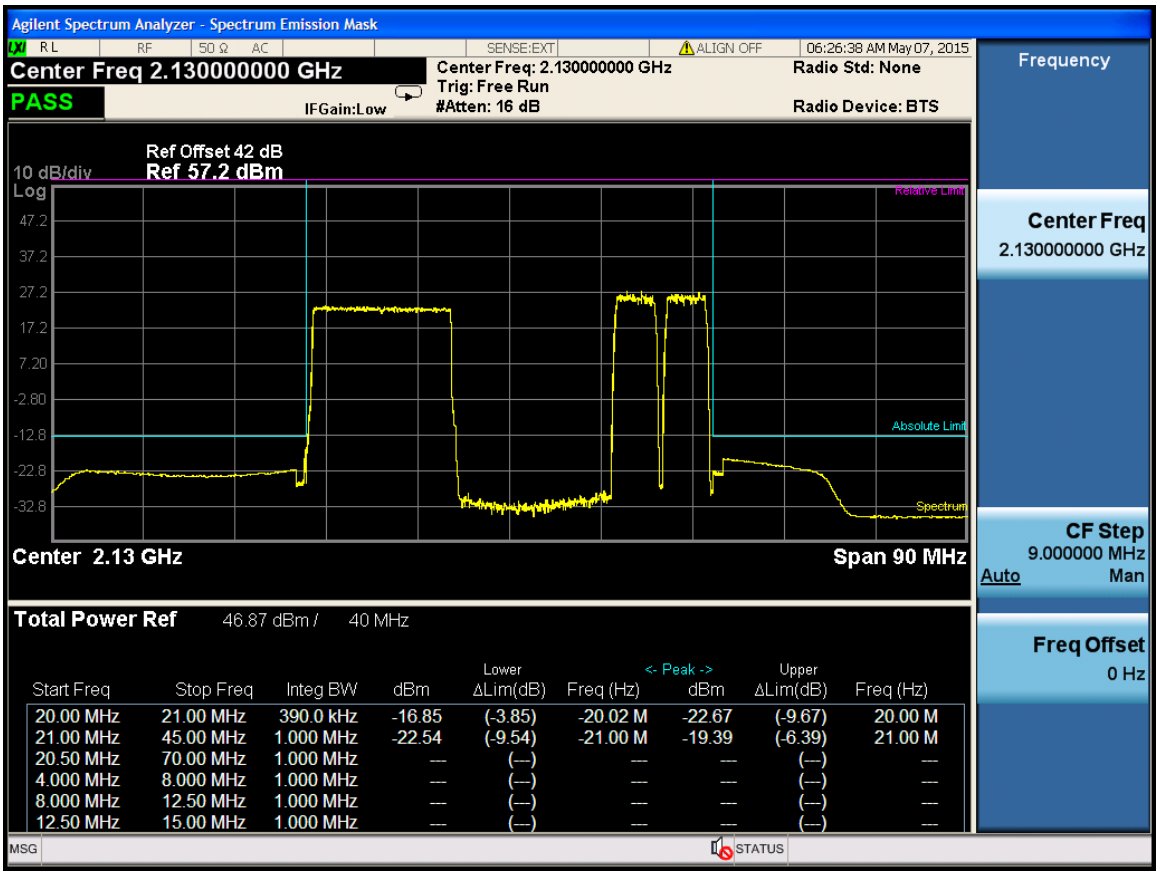
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Lower Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Upper Freq (Hz)
20.00 MHz	21.00 MHz	390.0 kHz	-16.79	(-3.79)	-20.01 M	-21.42	(-8.42)	20.03 M
21.00 MHz	45.00 MHz	1.000 MHz	-20.22	(-7.22)	-21.12 M	-18.19	(-5.19)	21.72 M
20.50 MHz	70.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
4.000 MHz	8.000 MHz	1.000 MHz	---	(---)	---	---	(---)	---
8.000 MHz	12.50 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

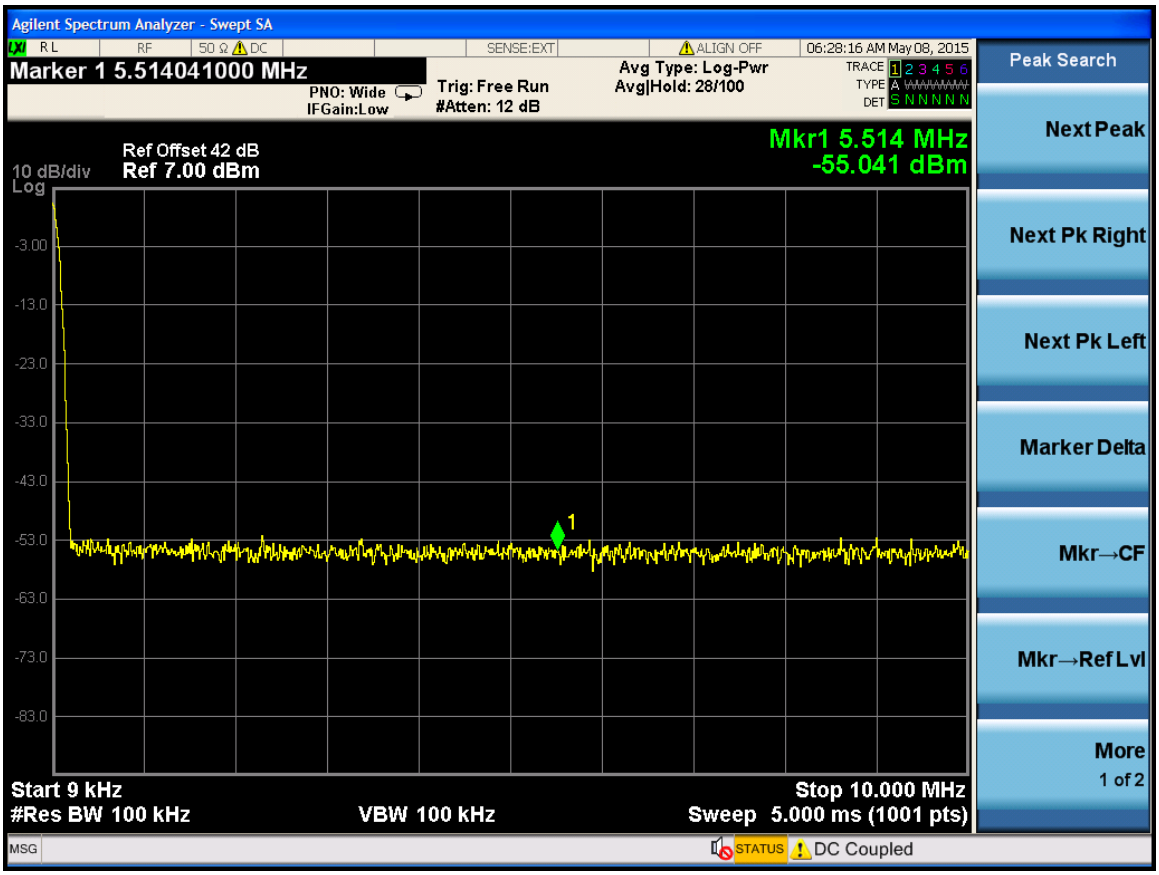

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
06:28:22 AM May 08, 2015
Marker 1 5.514041000 MHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 13/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 5.514 MHz
-55.602 dBm
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
-63.0
-73.0
-83.0
1
Start 9 kHz
#Res BW 100 kHz
VBW 100 kHz
Stop 10.000 MHz
Sweep 5.000 ms (1001 pts)
MSG
STATUS
DC Coupled
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

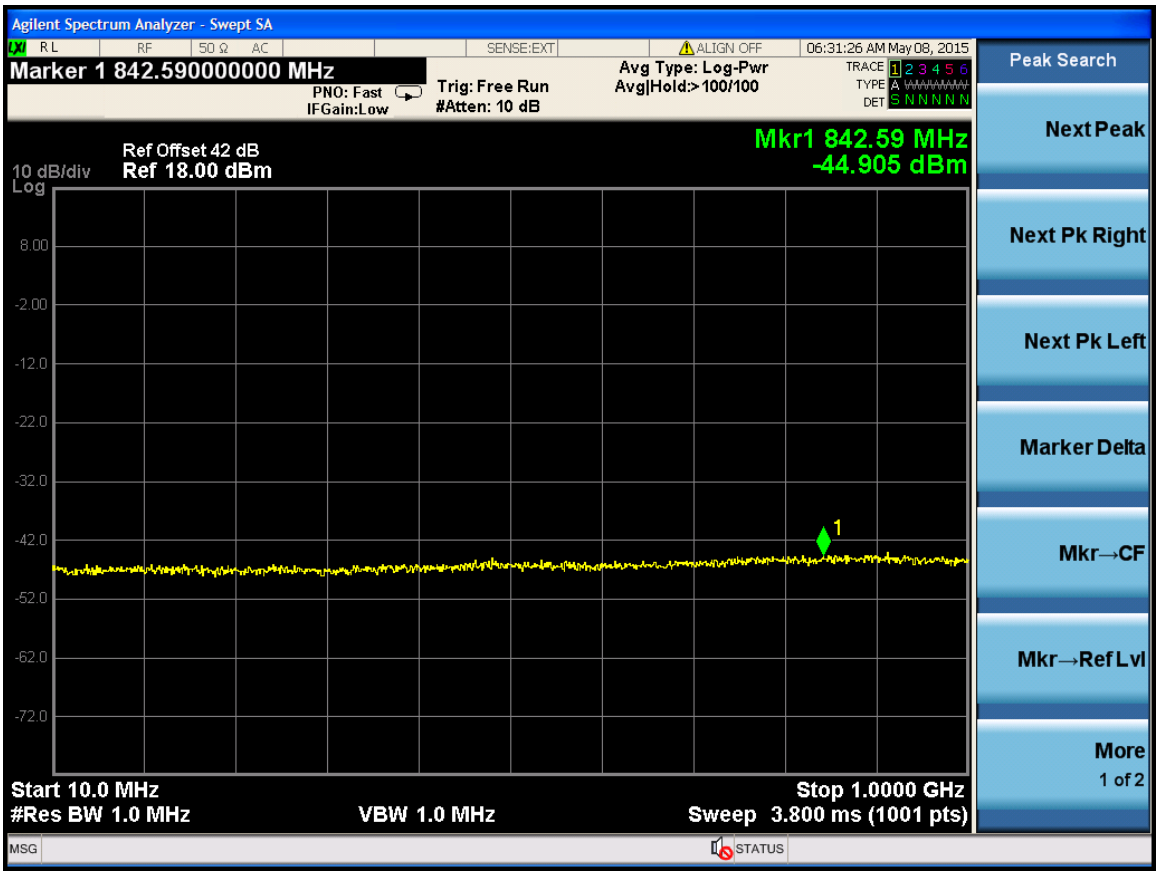

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
06:31:34 AM May 08, 2015
Marker 1 842.590000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 96/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 18.00 dBm
Mkr1 842.59 MHz
-45.480 dBm
8.00
-2.00
-12.0
-22.0
-32.0
-42.0
-52.0
-62.0
-72.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 1.0000 GHz
Sweep 3.800 ms (1001 pts)
MSG
STATUS
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

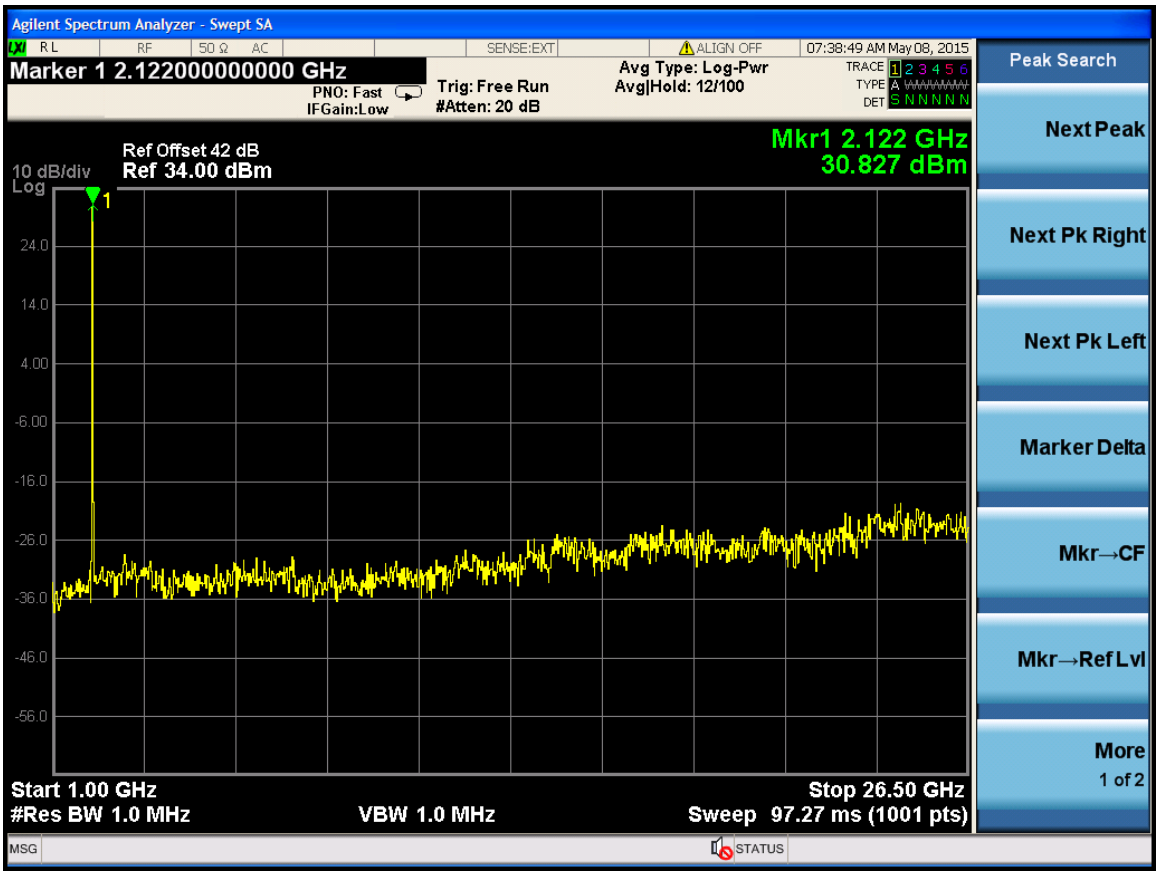

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
07:40:11 AM May 08, 2015
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 63/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 34.00 dBm
Mkr1 2.122 GHz
31.404 dBm
24.0
14.0
4.00
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
Start 1.00 GHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 26.50 GHz
Sweep 97.27 ms (1001 pts)
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
MSG
STATUS

Port 2

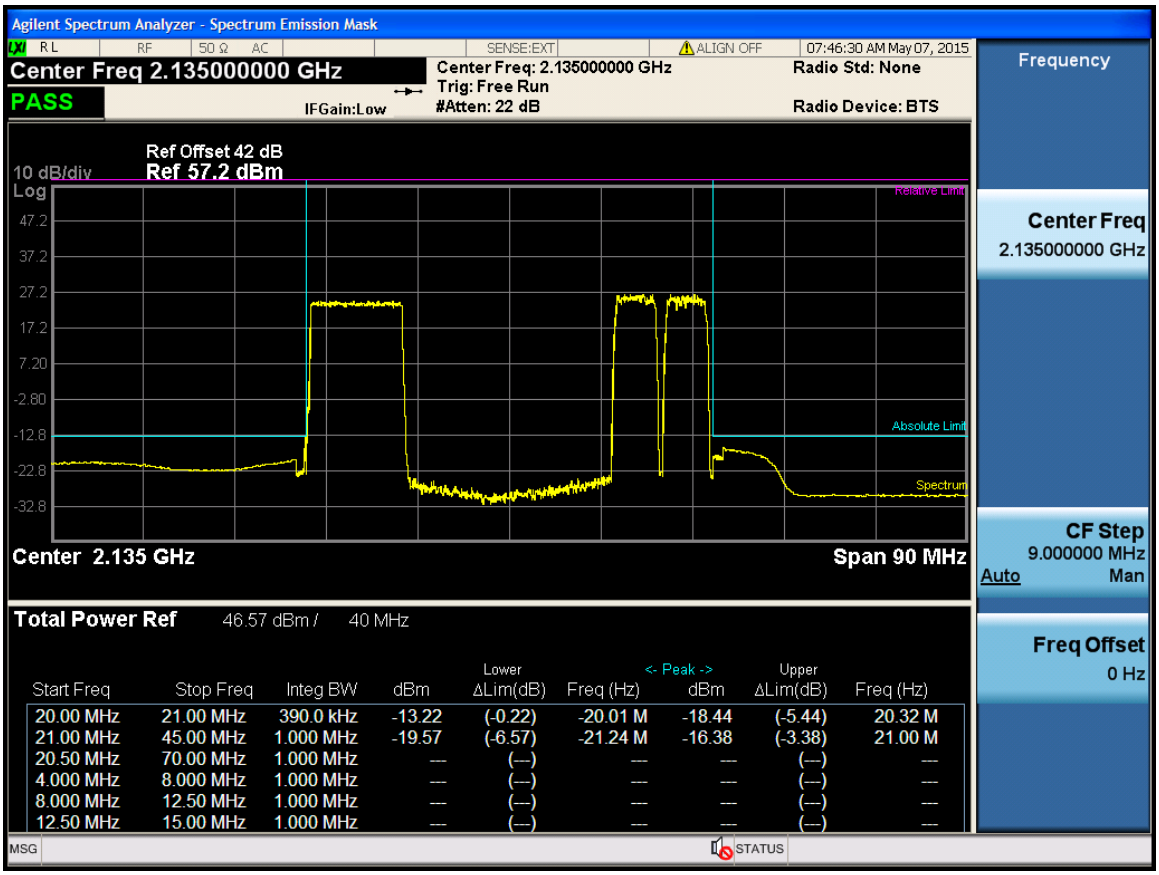

Agilent Spectrum Analyzer - Spectrum Emission Mask
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
06:26:38 AM May 07, 2015
Center Freq 2.130000000 GHz
PASS
IFGain:Low
Center Freq: 2.130000000 GHz
Trig: Free Run
#Atten: 16 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 42 dB
10 dB/div
Log
Ref 57.2 dBm
47.2
37.2
27.2
17.2
7.20
-2.80
-12.8
-22.8
-32.8
Relative Limit
Absolute Limit
Spectrum
Center Freq
2.130000000 GHz
Center 2.13 GHz
Span 90 MHz
CF Step
9.000000 MHz
Auto
Man
Total Power Ref
46.87 dBm / 40 MHz
Freq Offset
0 Hz
Lower
<- Peak ->
Upper
Start Freq
Stop Freq
Integ BW
dBm
ΔLim(dB)
Freq (Hz)
dBm
ΔLim(dB)
Freq (Hz)
20.00 MHz 21.00 MHz 390.0 kHz -16.85 (-3.85) -20.02 M -22.67 (-9.67) 20.00 M
21.00 MHz 45.00 MHz 1.000 MHz -22.54 (-9.54) -21.00 M -19.39 (-6.39) 21.00 M
20.50 MHz 70.00 MHz 1.000 MHz --- (---) --- --- (---) ---
4.000 MHz 8.000 MHz 1.000 MHz --- (---) --- --- (---) ---
8.000 MHz 12.50 MHz 1.000 MHz --- (---) --- --- (---) ---
12.50 MHz 15.00 MHz 1.000 MHz --- (---) --- --- (---) ---
MSG
STATUS

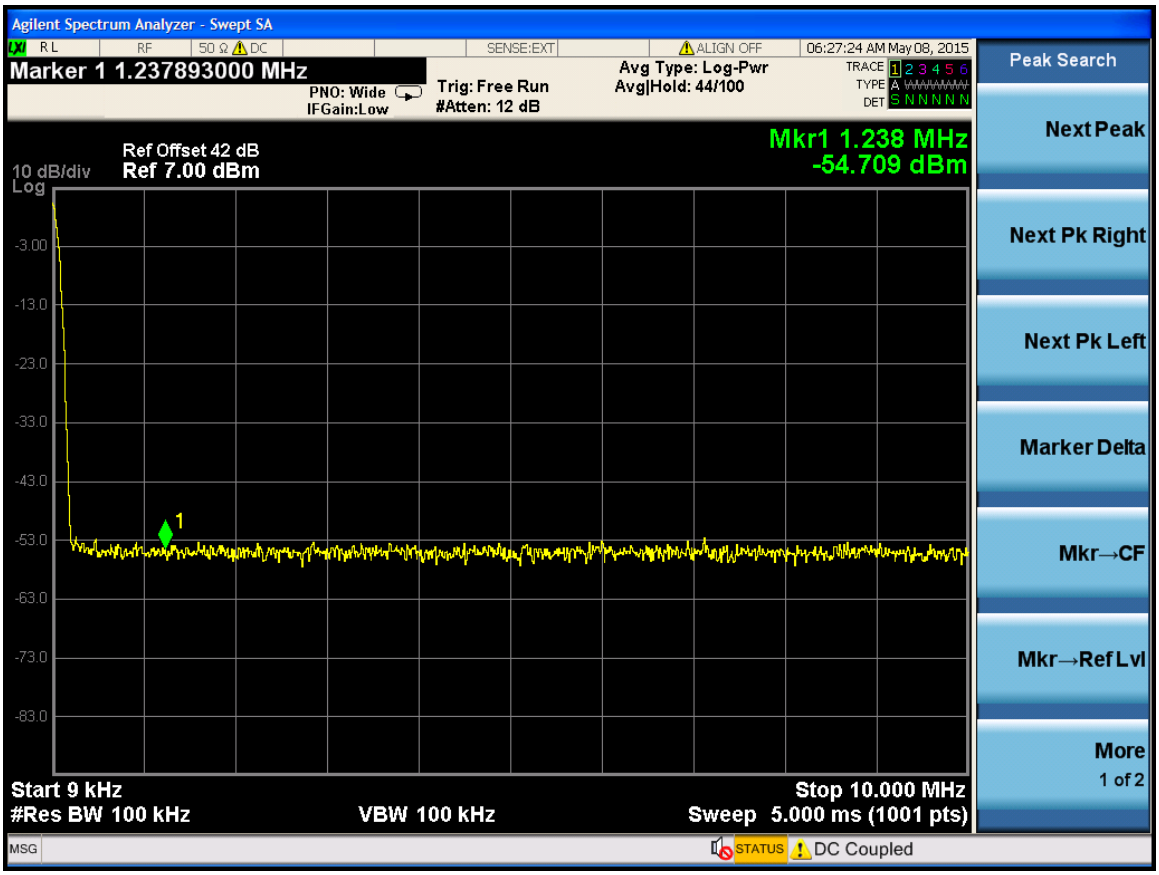

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
06:28:16 AM May 08, 2015
Marker 1 5.514041000 MHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 28/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 5.514 MHz
-55.041 dBm
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
-63.0
-73.0
-83.0
1
Start 9 kHz
#Res BW 100 kHz
VBW 100 kHz
Stop 10.000 MHz
Sweep 5.000 ms (1001 pts)
MSG
STATUS
DC Coupled
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

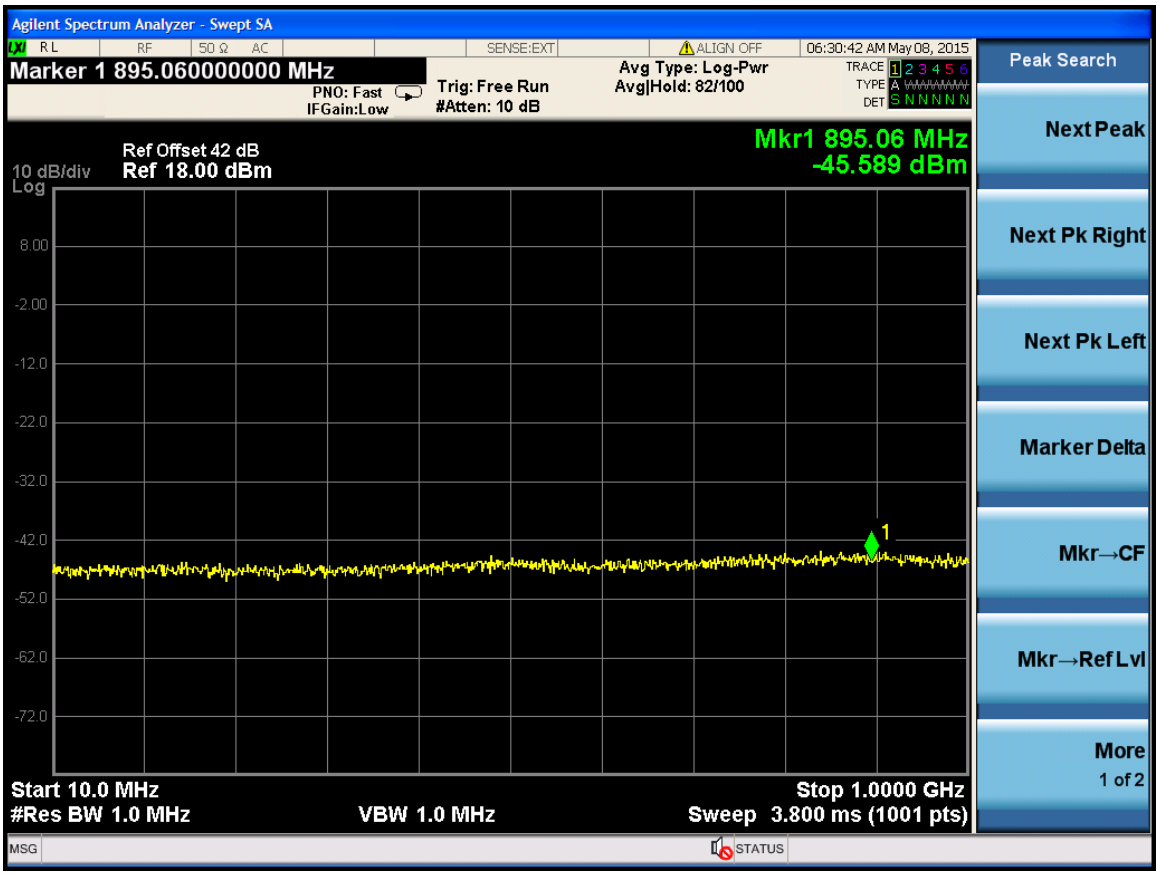

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
06:31:26 AM May 08, 2015
Marker 1 842.590000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 18.00 dBm
Mkr1 842.59 MHz
-44.905 dBm
8.00
-2.00
-12.0
-22.0
-32.0
-42.0
-52.0
-62.0
-72.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 1.0000 GHz
Sweep 3.800 ms (1001 pts)
MSG
STATUS
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

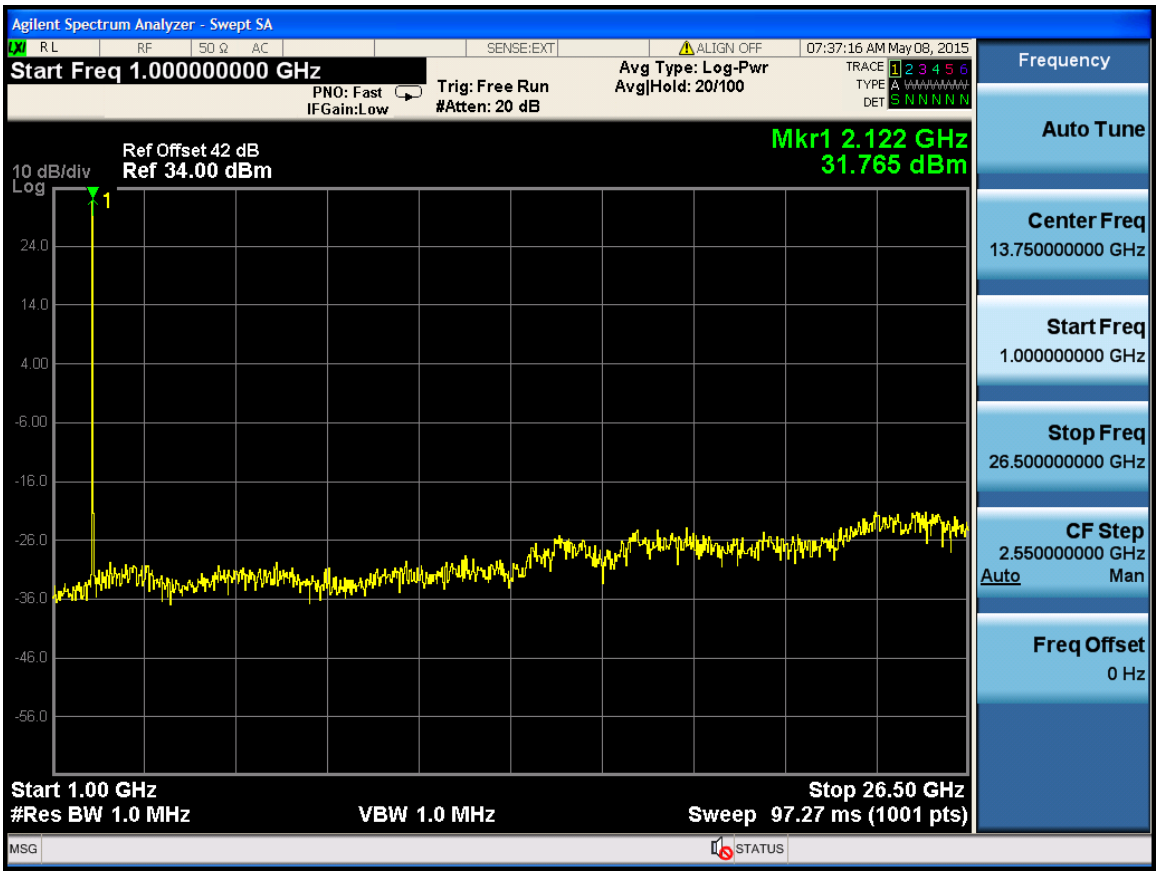


Configrution3:
Port 1

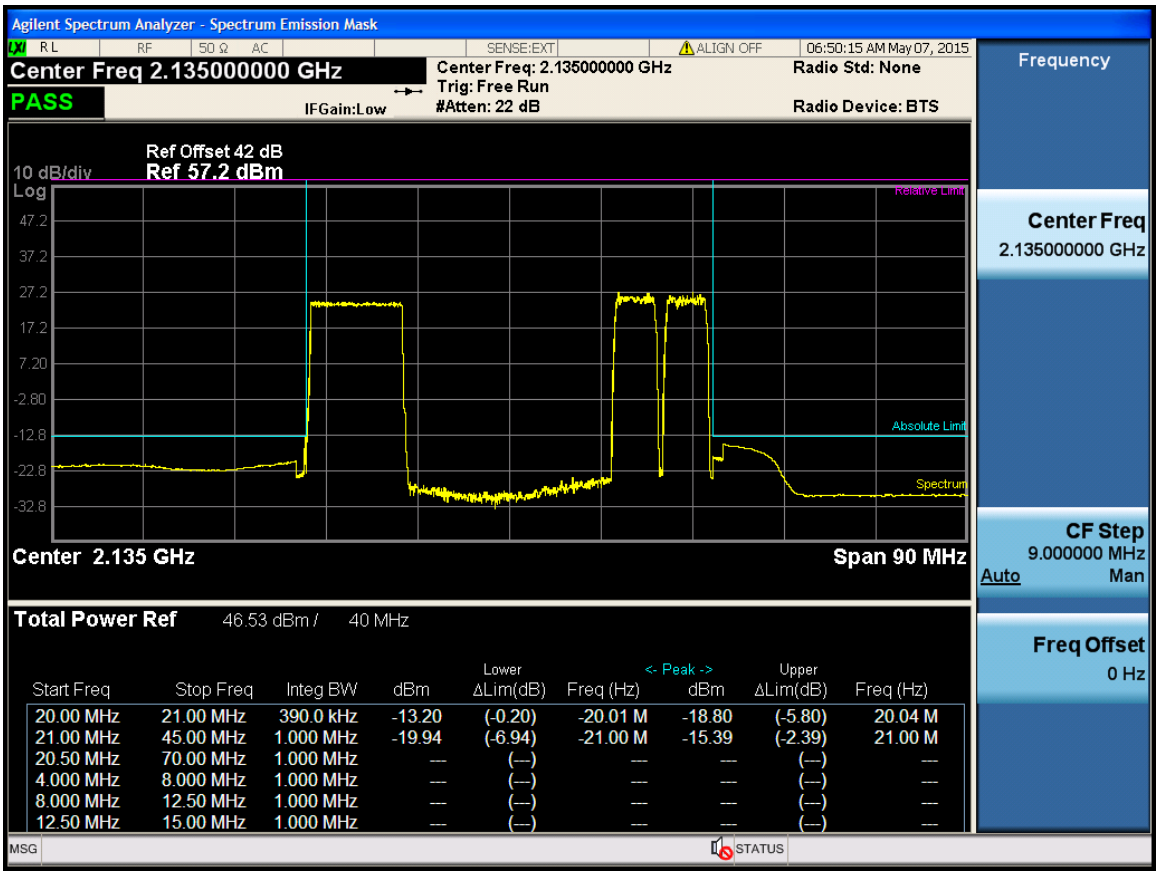

Agilent Spectrum Analyzer - Spectrum Emission Mask
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
07:46:30 AM May 07, 2015
Center Freq 2.135000000 GHz
PASS
IFGain:Low
Center Freq: 2.135000000 GHz
Trig: Free Run
#Atten: 22 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 42 dB
10 dB/div
Log
Ref 57.2 dBm
47.2
37.2
27.2
17.2
7.20
-2.80
-12.8
-22.8
-32.8
Relative Limit
Absolute Limit
Spectrum
Center Freq
2.135000000 GHz
Center 2.135 GHz
Span 90 MHz
CF Step
9.000000 MHz
Auto
Man
Freq Offset
0 Hz
Total Power Ref
46.57 dBm / 40 MHz
Lower
<- Peak ->
Upper
Start Freq
Stop Freq
Integ BW
dBm
ΔLim(dB)
Freq (Hz)
dBm
ΔLim(dB)
Freq (Hz)
20.00 MHz 21.00 MHz 390.0 kHz -13.22 (-0.22) -20.01 M -18.44 (-5.44) 20.32 M
21.00 MHz 45.00 MHz 1.000 MHz -19.57 (-6.57) -21.24 M -16.38 (-3.38) 21.00 M
20.50 MHz 70.00 MHz 1.000 MHz --- (---) --- --- (---) ---
4.000 MHz 8.000 MHz 1.000 MHz --- (---) --- --- (---) ---
8.000 MHz 12.50 MHz 1.000 MHz --- (---) --- --- (---) ---
12.50 MHz 15.00 MHz 1.000 MHz --- (---) --- --- (---) ---
MSG
STATUS

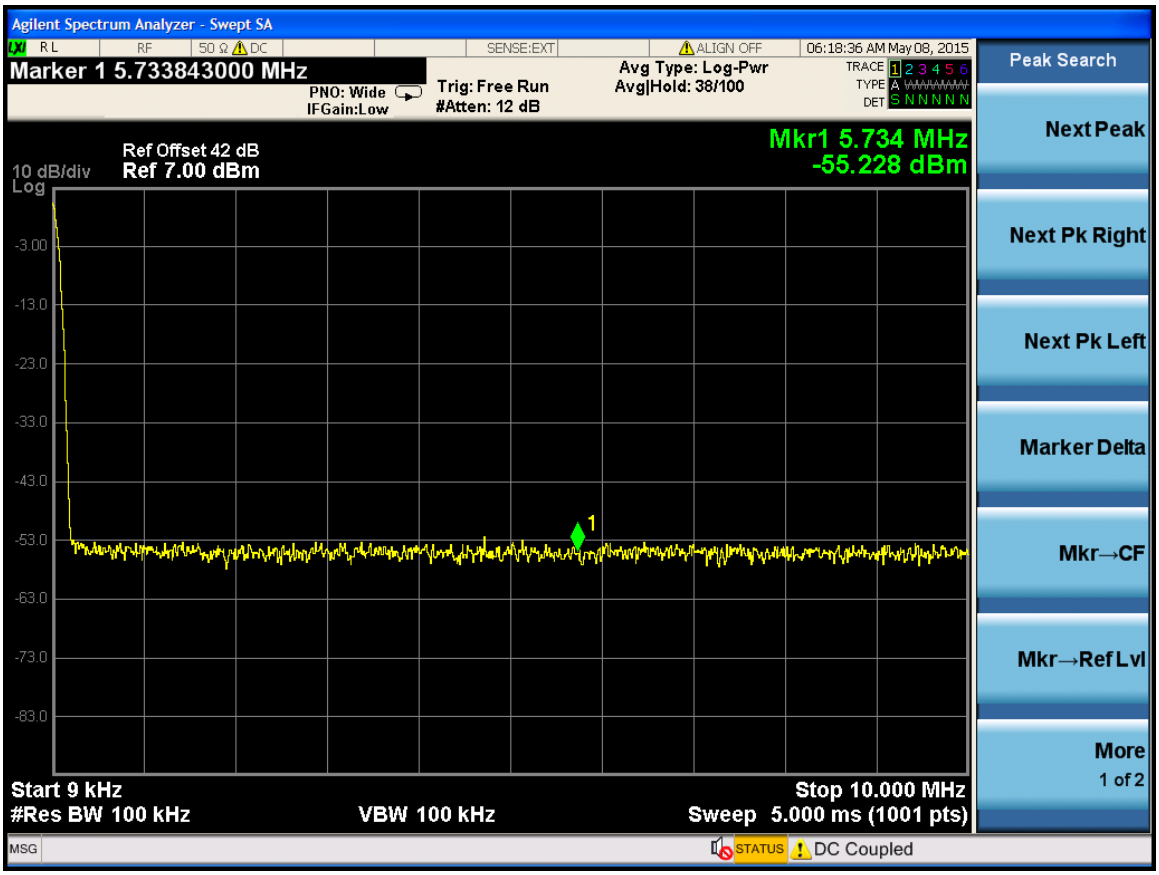

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
06:27:24 AM May 08, 2015
Marker 1 1.237893000 MHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 44/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 1.238 MHz
-54.709 dBm
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
-63.0
-73.0
-83.0
1
Start 9 kHz
#Res BW 100 kHz
VBW 100 kHz
Stop 10.000 MHz
Sweep 5.000 ms (1001 pts)
MSG
STATUS
DC Coupled
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

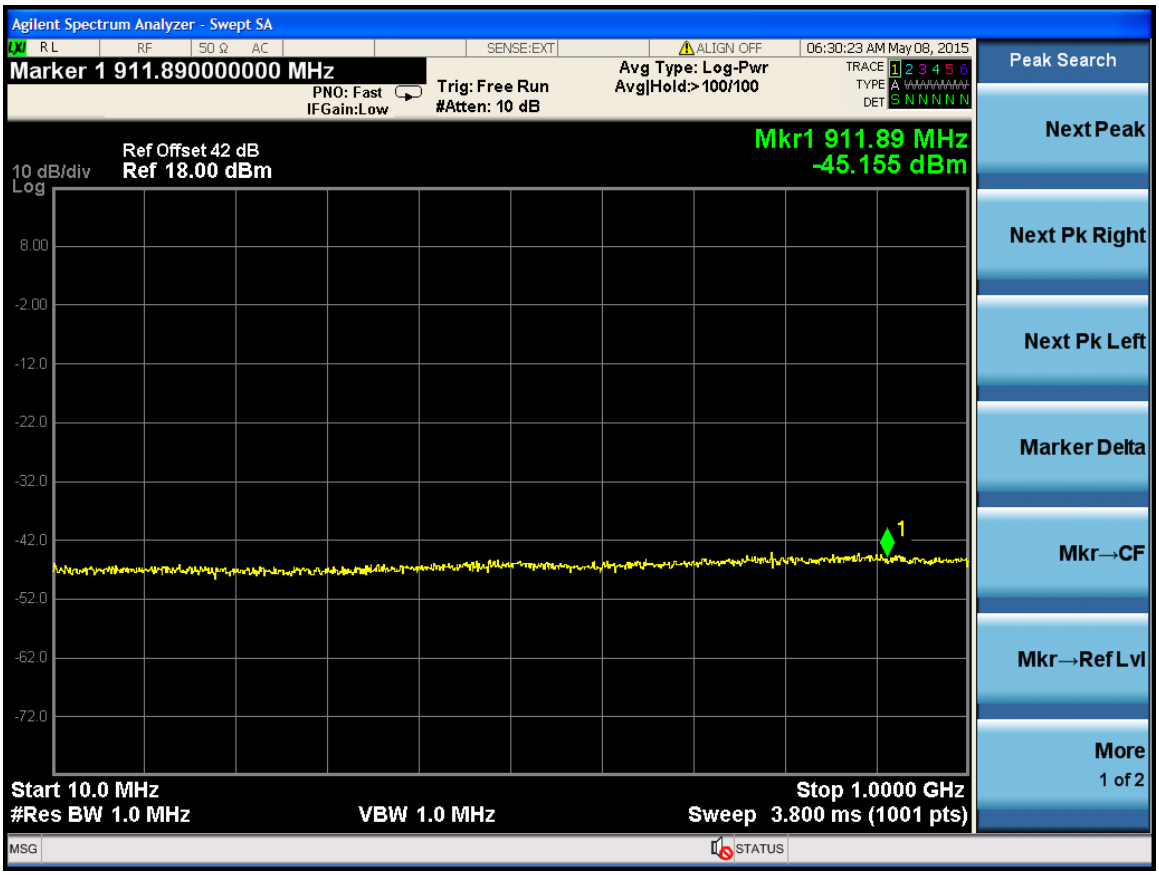

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
06:30:42 AM May 08, 2015
Marker 1 895.060000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 82/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 18.00 dBm
Mkr1 895.06 MHz
-45.589 dBm
8.00
-2.00
-12.0
-22.0
-32.0
-42.0
-52.0
-62.0
-72.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 1.0000 GHz
Sweep 3.800 ms (1001 pts)
MSG
STATUS
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

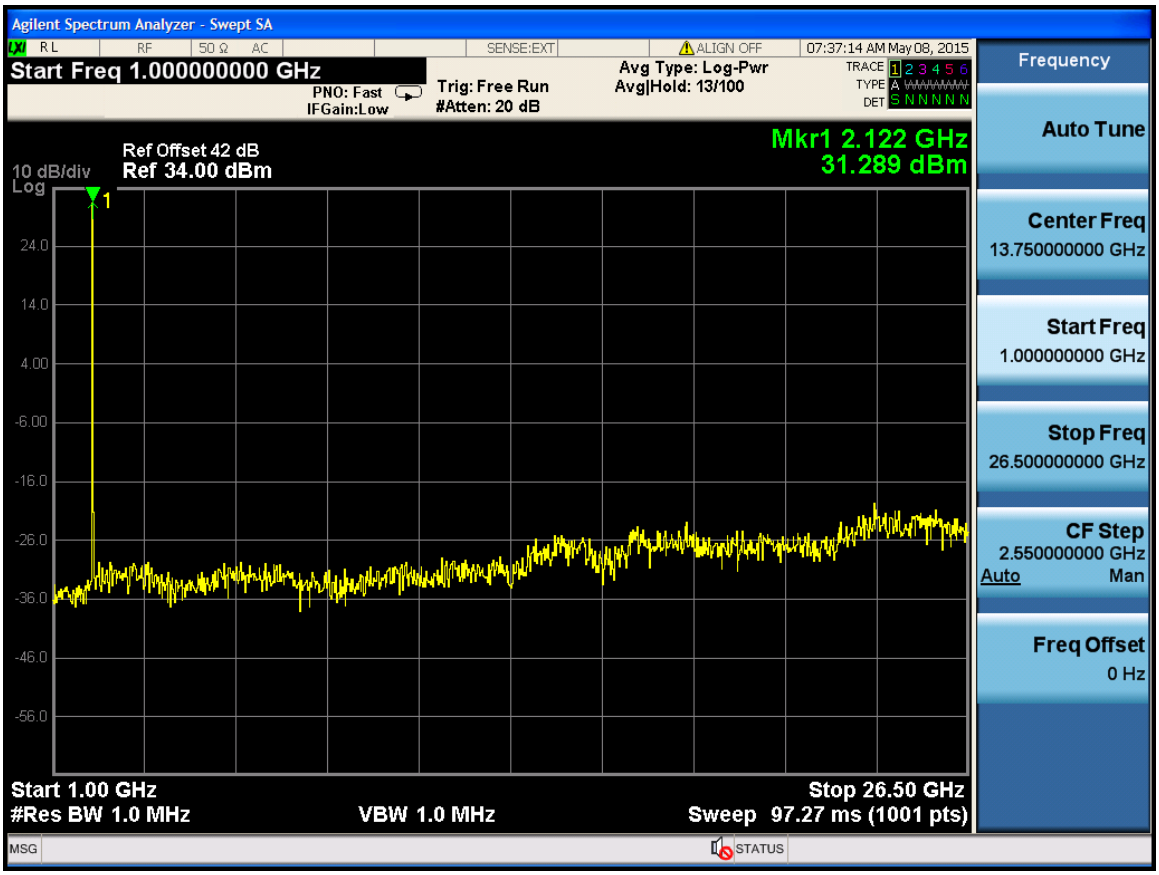

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
07:37:16 AM May 08, 2015
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 20/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 34.00 dBm
Mkr1 2.122 GHz
31.765 dBm
24.0
14.0
4.00
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
Start 1.00 GHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 26.50 GHz
Sweep 97.27 ms (1001 pts)
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
MSG
STATUS

Port 2

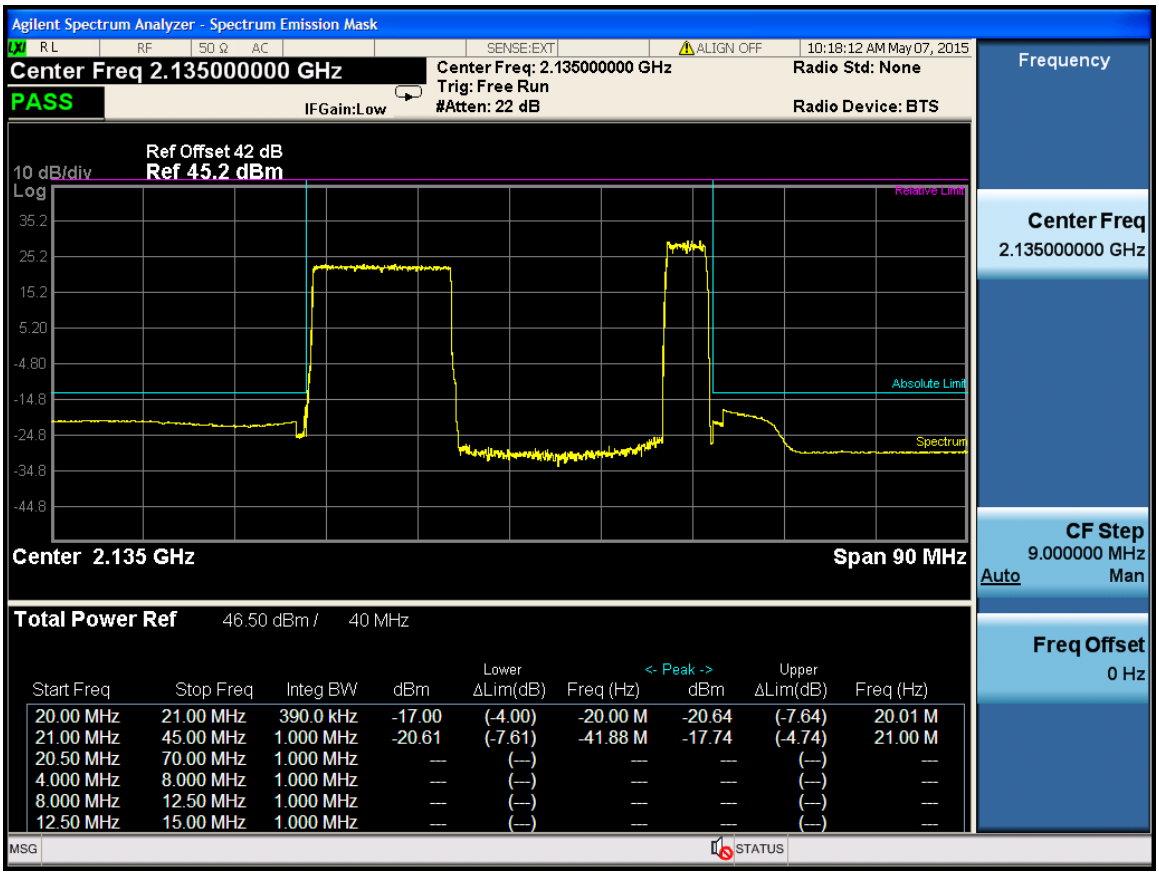

Agilent Spectrum Analyzer - Spectrum Emission Mask
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
06:50:15 AM May 07, 2015
Center Freq 2.135000000 GHz
PASS
IFGain:Low
Center Freq: 2.135000000 GHz
Trig: Free Run
#Atten: 22 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 42 dB
10 dB/div
Log
Ref 57.2 dBm
47.2
37.2
27.2
17.2
7.20
-2.80
-12.8
-22.8
-32.8
Relative Limit
Absolute Limit
Spectrum
Center Freq
2.135000000 GHz
Center 2.135 GHz
Span 90 MHz
CF Step
9.000000 MHz
Auto
Man
Total Power Ref
46.53 dBm /
40 MHz
Freq Offset
0 Hz
Lower
<- Peak ->
Upper
Start Freq
Stop Freq
Integ BW
dBm
ΔLim(dB)
Freq (Hz)
dBm
ΔLim(dB)
Freq (Hz)
20.00 MHz 21.00 MHz 390.0 kHz -13.20 (-0.20) -20.01 M -18.80 (-5.80) 20.04 M
21.00 MHz 45.00 MHz 1.000 MHz -19.94 (-6.94) -21.00 M -15.39 (-2.39) 21.00 M
20.50 MHz 70.00 MHz 1.000 MHz --- (---) --- --- (---) ---
4.000 MHz 8.000 MHz 1.000 MHz --- (---) --- --- (---) ---
8.000 MHz 12.50 MHz 1.000 MHz --- (---) --- --- (---) ---
12.50 MHz 15.00 MHz 1.000 MHz --- (---) --- --- (---) ---
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
06:18:36 AM May 08, 2015
Marker 1 5.733843000 MHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 38/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 5.734 MHz
-55.228 dBm
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
-63.0
-73.0
-83.0
1
Start 9 kHz
#Res BW 100 kHz
VBW 100 kHz
Stop 10.000 MHz
Sweep 5.000 ms (1001 pts)
MSG
STATUS
DC Coupled
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

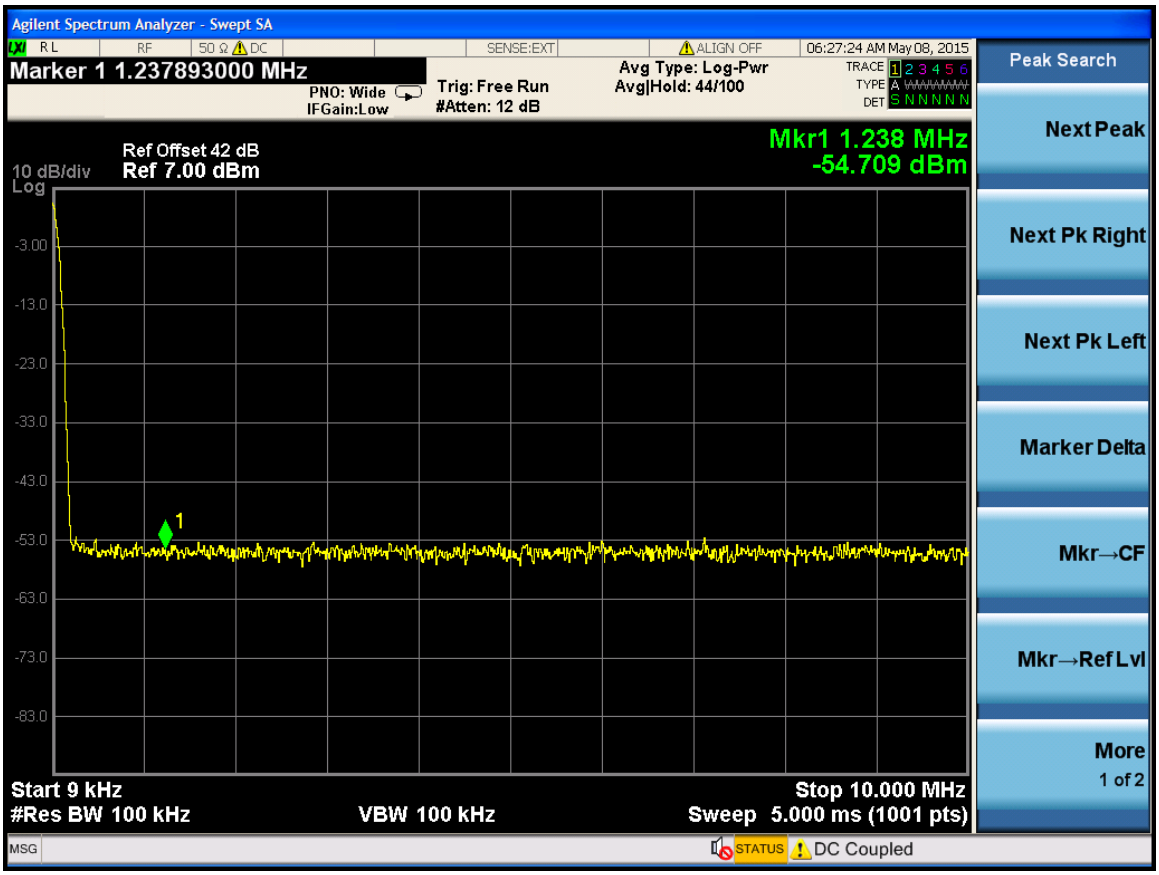

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
06:30:23 AM May 08, 2015
Marker 1 911.890000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 18.00 dBm
Mkr1 911.89 MHz
-45.155 dBm
8.00
-2.00
-12.0
-22.0
-32.0
-42.0
-52.0
-62.0
-72.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 1.0000 GHz
Sweep 3.800 ms (1001 pts)
MSG
STATUS
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

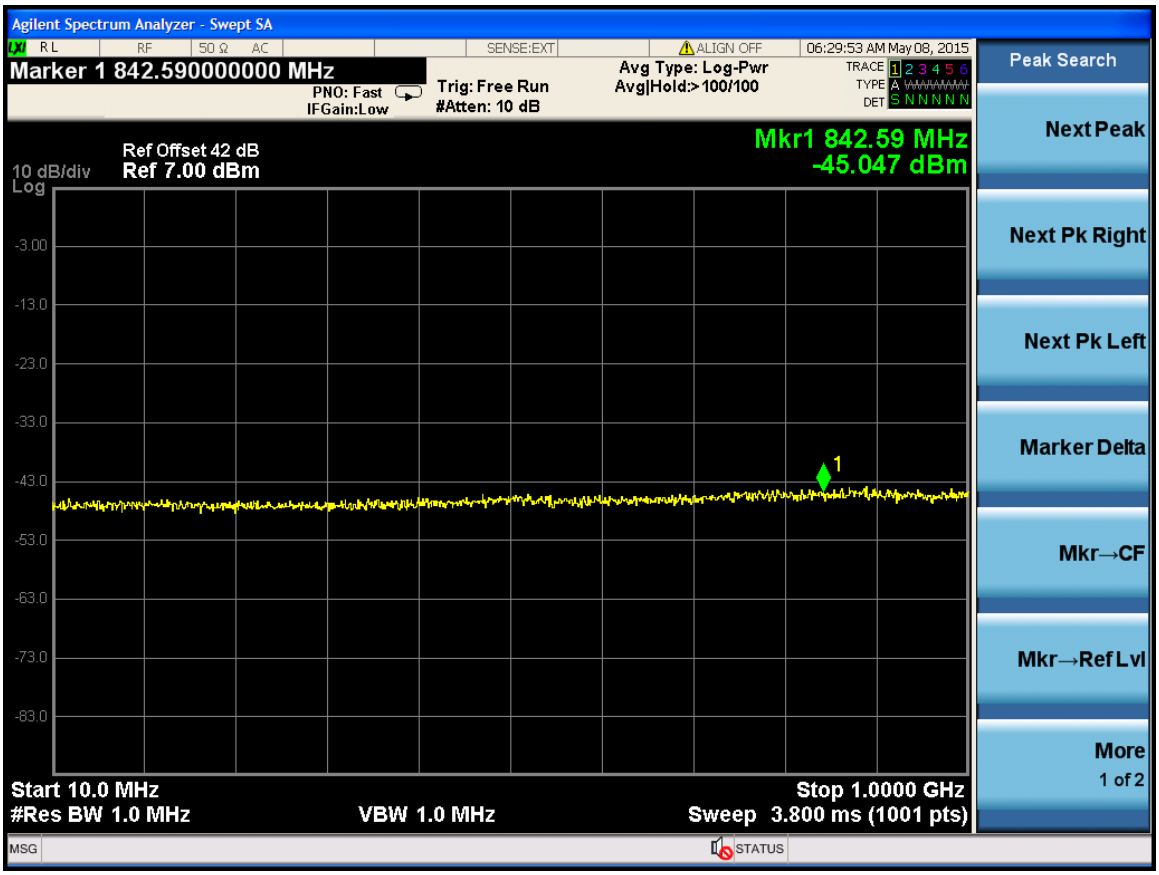


Configrution4:
Port 1



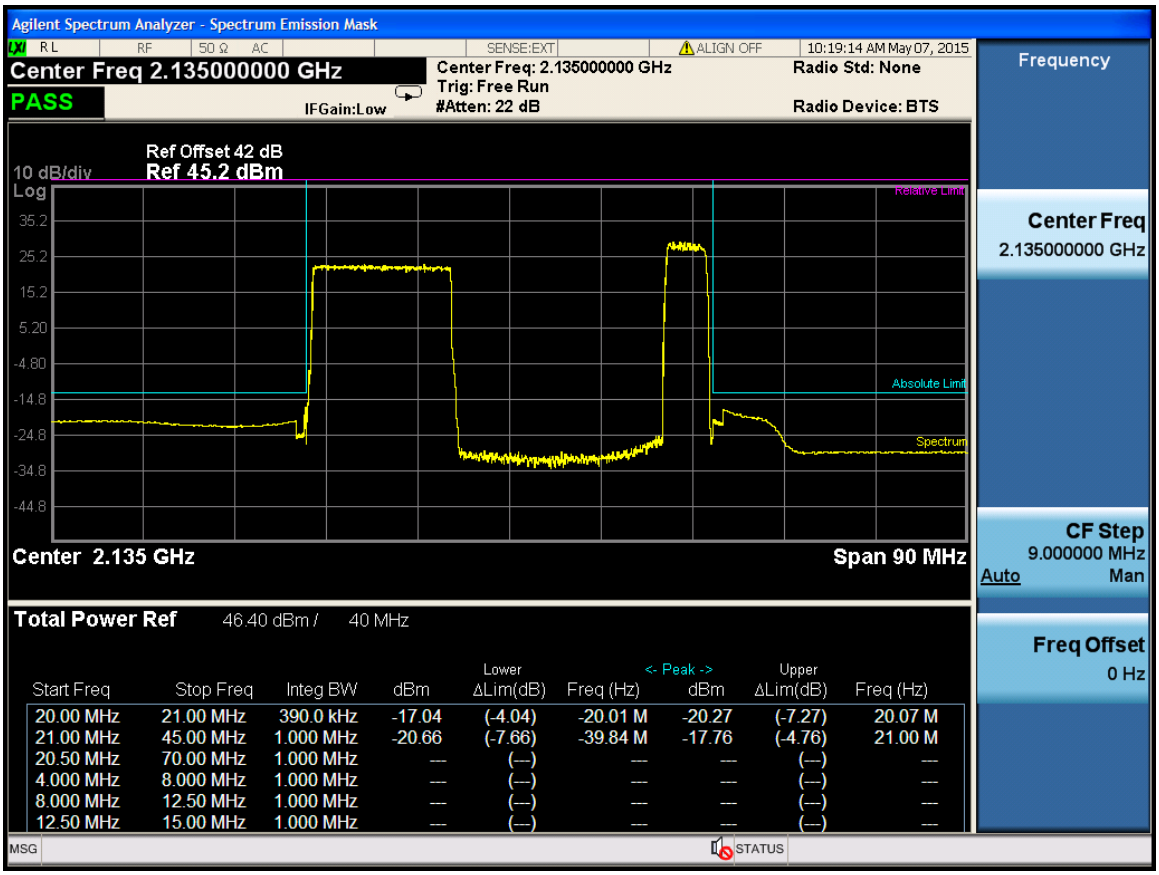
Start Freq	Stop Freq	Integ BW	Lower dBm	Lower ΔLim(dB)	<- Peak -> Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Upper Freq (Hz)
20.00 MHz	21.00 MHz	390.0 kHz	-17.00	(-4.00)	-20.00 M	-20.64	(-7.64)	20.01 M
21.00 MHz	45.00 MHz	1.000 MHz	-20.61	(-7.61)	-41.88 M	-17.74	(-4.74)	21.00 M
20.50 MHz	70.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
4.000 MHz	8.000 MHz	1.000 MHz	---	(---)	---	---	(---)	---
8.000 MHz	12.50 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

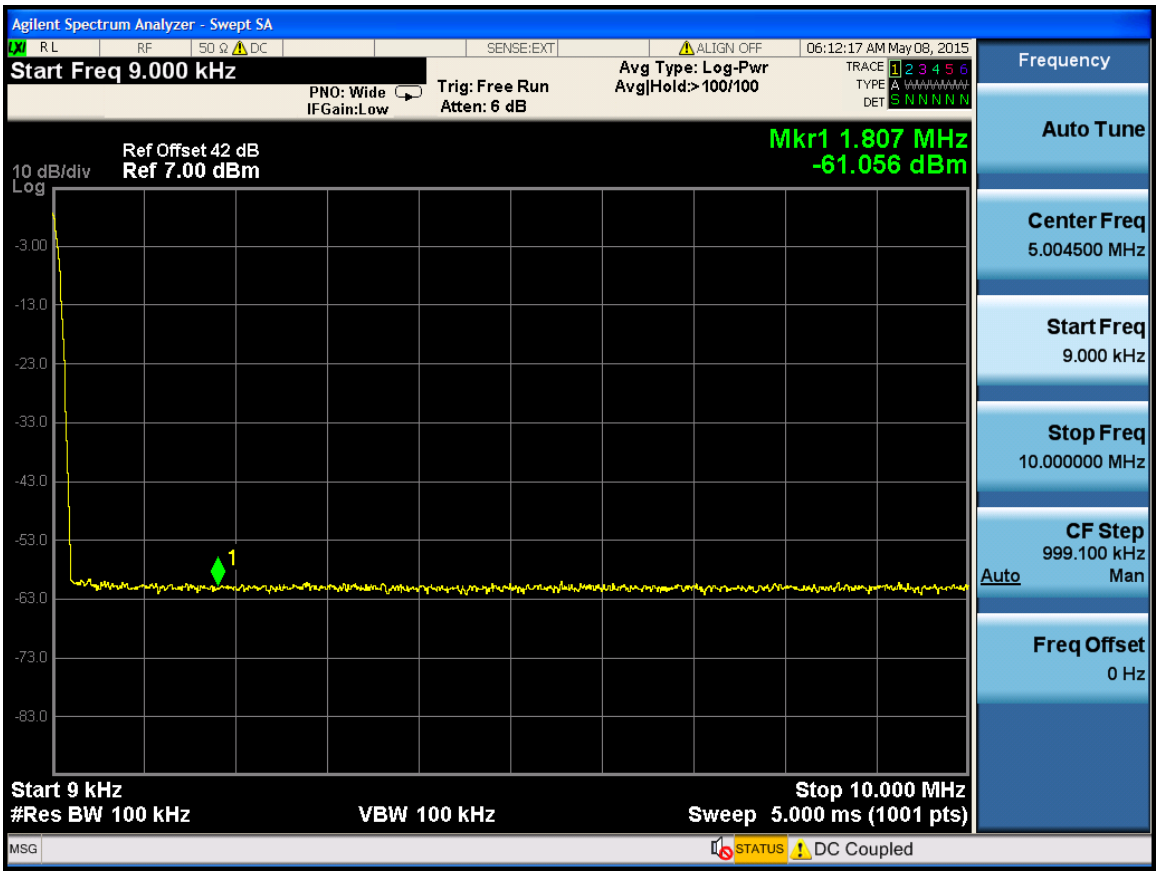

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
06:27:24 AM May 08, 2015
Marker 1 1.237893000 MHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 44/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 1.238 MHz
-54.709 dBm
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
-63.0
-73.0
-83.0
1
Start 9 kHz
#Res BW 100 kHz
VBW 100 kHz
Stop 10.000 MHz
Sweep 5.000 ms (1001 pts)
MSG
STATUS
DC Coupled
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

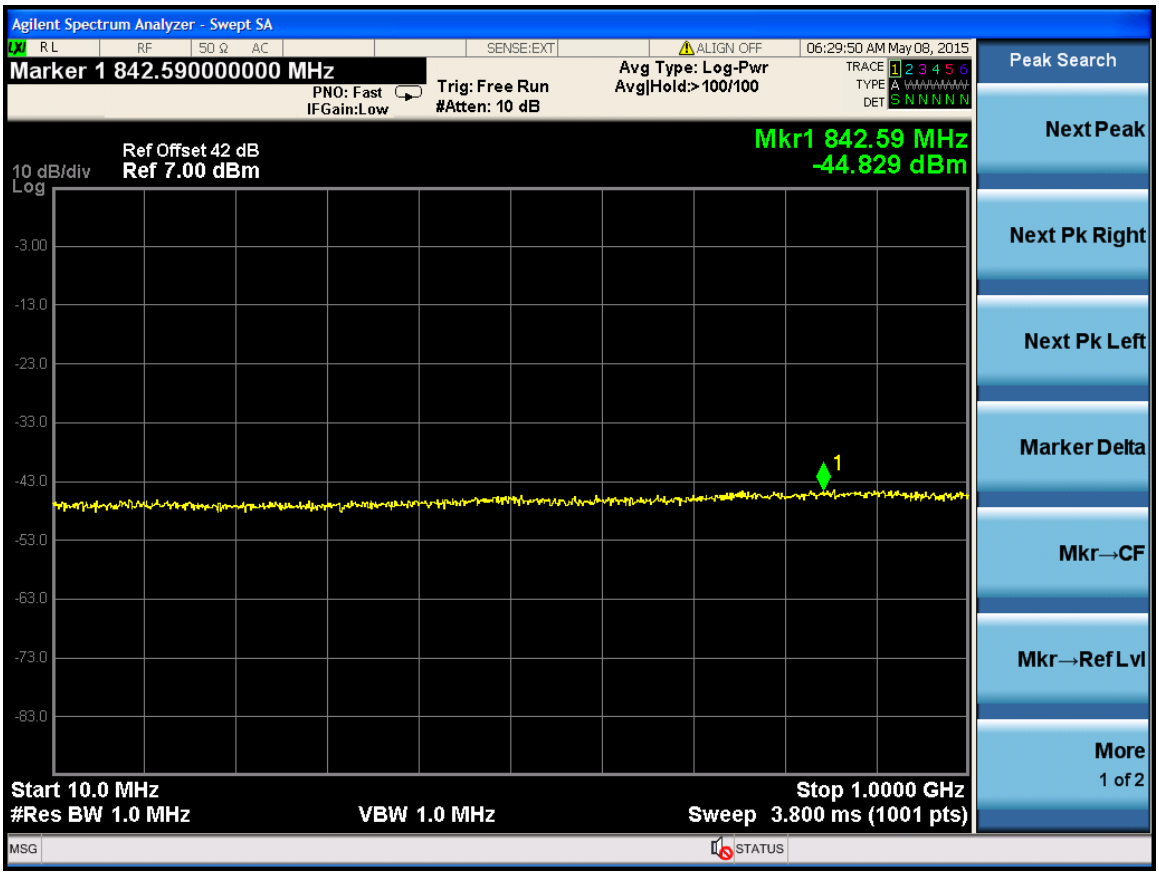

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
06:29:53 AM May 08, 2015
Marker 1 842.590000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 842.59 MHz
-45.047 dBm
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
-63.0
-73.0
-83.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 1.0000 GHz
Sweep 3.800 ms (1001 pts)
MSG
STATUS
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

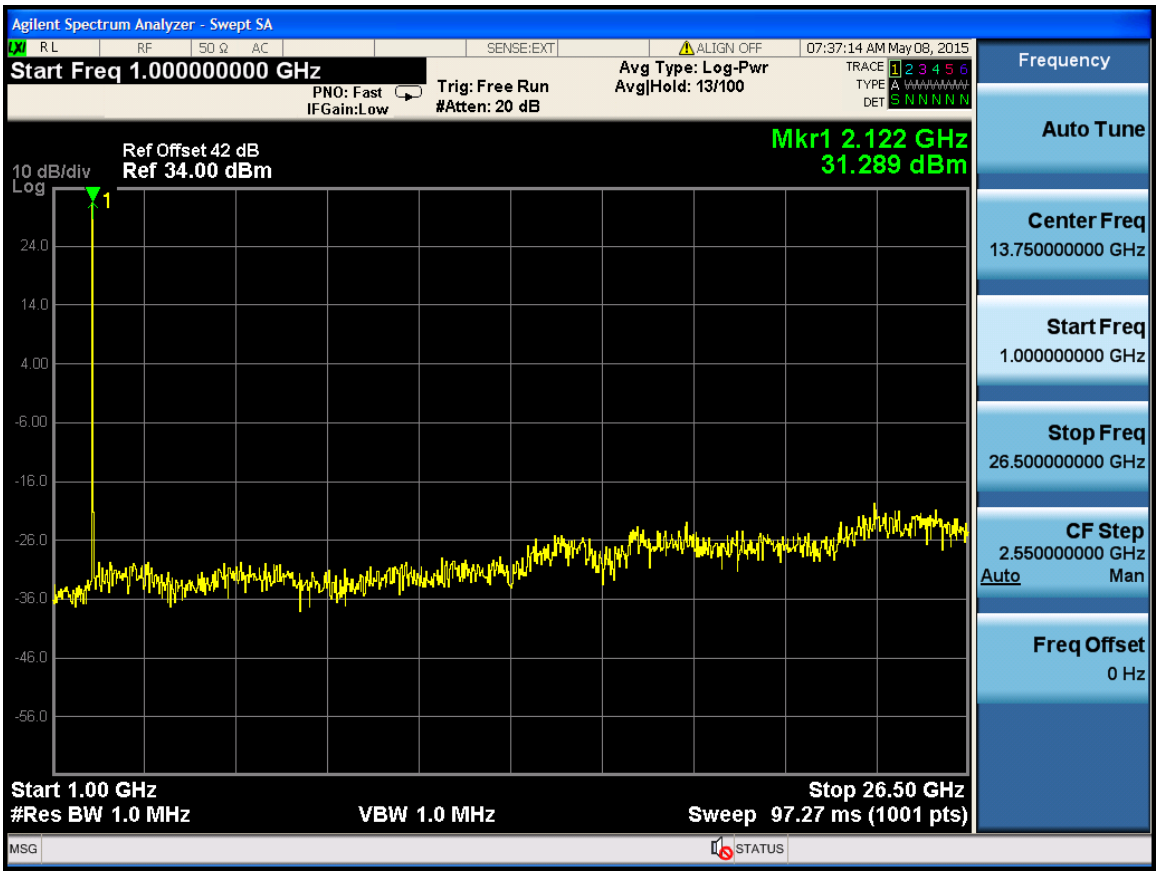

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
07:37:08 AM May 08, 2015
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 34.00 dBm
Mkr1 2.122 GHz
30.361 dBm
24.0
14.0
4.00
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
Start 1.00 GHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 26.50 GHz
Sweep 97.27 ms (1001 pts)
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
MSG
STATUS

Port 2


Agilent Spectrum Analyzer - Spectrum Emission Mask
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
10:19:14 AM May 07, 2015
Center Freq 2.135000000 GHz
PASS
IFGain:Low
Center Freq: 2.135000000 GHz
Trig: Free Run
#Atten: 22 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 42 dB
10 dB/div
Log
Ref 45.2 dBm
35.2
25.2
15.2
5.20
-4.80
-14.8
-24.8
-34.8
-44.8
Relative Limit
Absolute Limit
Spectrum
Center 2.135 GHz
Span 90 MHz
Center Freq
2.135000000 GHz
CF Step
9.000000 MHz
Auto
Man
Freq Offset
0 Hz
Total Power Ref
46.40 dBm / 40 MHz
Start Freq
Stop Freq
Integ BW
dBm
Lower ΔLim(dB)
Freq (Hz)
<- Peak ->
dBm
Upper ΔLim(dB)
Freq (Hz)
20.00 MHz 21.00 MHz 390.0 kHz -17.04 (-4.04) -20.01 M -20.27 (-7.27) 20.07 M
21.00 MHz 45.00 MHz 1.000 MHz -20.66 (-7.66) -39.84 M -17.76 (-4.76) 21.00 M
20.50 MHz 70.00 MHz 1.000 MHz --- (---) --- --- (---) ---
4.000 MHz 8.000 MHz 1.000 MHz --- (---) --- --- (---) ---
8.000 MHz 12.50 MHz 1.000 MHz --- (---) --- --- (---) ---
12.50 MHz 15.00 MHz 1.000 MHz --- (---) --- --- (---) ---
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
06:12:17 AM May 08, 2015
Start Freq 9.000 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
Atten: 6 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 1.807 MHz
-61.056 dBm
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
-63.0
-73.0
-83.0
1
Start 9 kHz
#Res BW 100 kHz
VBW 100 kHz
Stop 10.000 MHz
Sweep 5.000 ms (1001 pts)
MSG
STATUS
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
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
06:29:50 AM May 08, 2015
Marker 1 842.590000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 842.59 MHz
-44.829 dBm
-3.00
-13.0
-23.0
-33.0
-43.0
-53.0
-63.0
-73.0
-83.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 1.0000 GHz
Sweep 3.800 ms (1001 pts)
MSG
STATUS
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
07:37:14 AM May 08, 2015
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 13/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET S N N N N N
Ref Offset 42 dB
10 dB/div
Log
Ref 34.00 dBm
Mkr1 2.122 GHz
31.289 dBm
24.0
14.0
4.00
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
Start 1.00 GHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 26.50 GHz
Sweep 97.27 ms (1001 pts)
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
MSG
STATUS

10 Receiver Spurious Emissions

Applicable Standard: RSS-Gen

Receivers, are required to comply with the limits of spurious emissions as set out in this section. Receiver emission measurements are to be performed as per the normative test method referenced in Section 3.
For emissions at frequencies below 1 GHz, measurements shall be performed using a CISPR quasi-peak detector and the related measurement bandwidth. At frequencies above 1 GHz, measurements shall be performed using a linear average detector with a minimum resolution bandwidth of 1 MHz.
As an alternative to CISPR quasi-peak or average measurements, compliance with the emission limit can be demonstrated using measuring equipment employing a peak detector function properly adjusted for factors such as pulse desensitization, as required, with a measurement bandwidth equal to, or greater than, the applicable CISPR quasi-peak bandwidth or 1 MHz bandwidth, respectively.

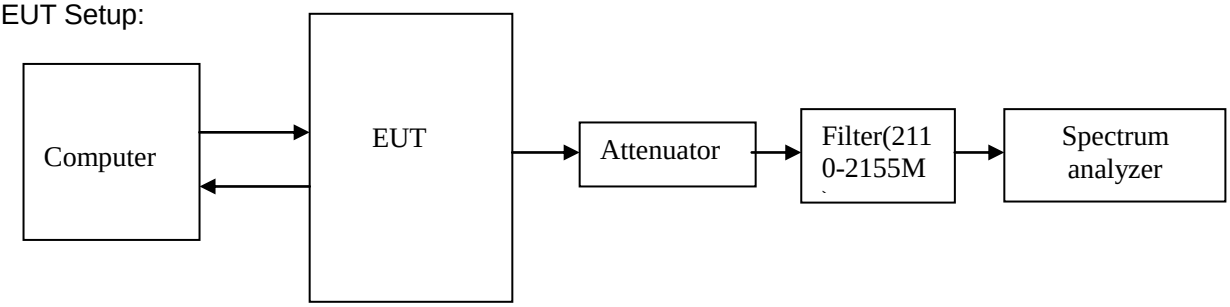
Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	PXA Series Spectrum Analyzer	N9030A	MY49431143	2014.09.16	2015.09.16
DTS	DTS 40dB Attenuator	DTS100-20-3-1	20131216010	2014.09.16	2015.09.16

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

Test Procedure

EUT Setup:



The Receiver Spurious emissions shall be measured at the frequencies of the highest and lowest channel of all bandwidths that the equipment can operate with a resolution bandwidth of 1 MHz or less, but at least 1% of the occupied bandwidth of the transmitter, provided that the measured power is integrated over a 1 MHz bandwidth.

When Receiver Spurious emissions test, configure R8882 S1700 output at rated power, the R8882 S1700 output antenna connected to spectrum analyzer, and testing emissions by spectrum analyzer one antenna by another.

When Receiver Spurious emissions test， configure R8882 S1700 output at rated power, the R8882 S1700 output antenna connected to load.

Test Data Environmental Conditions

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

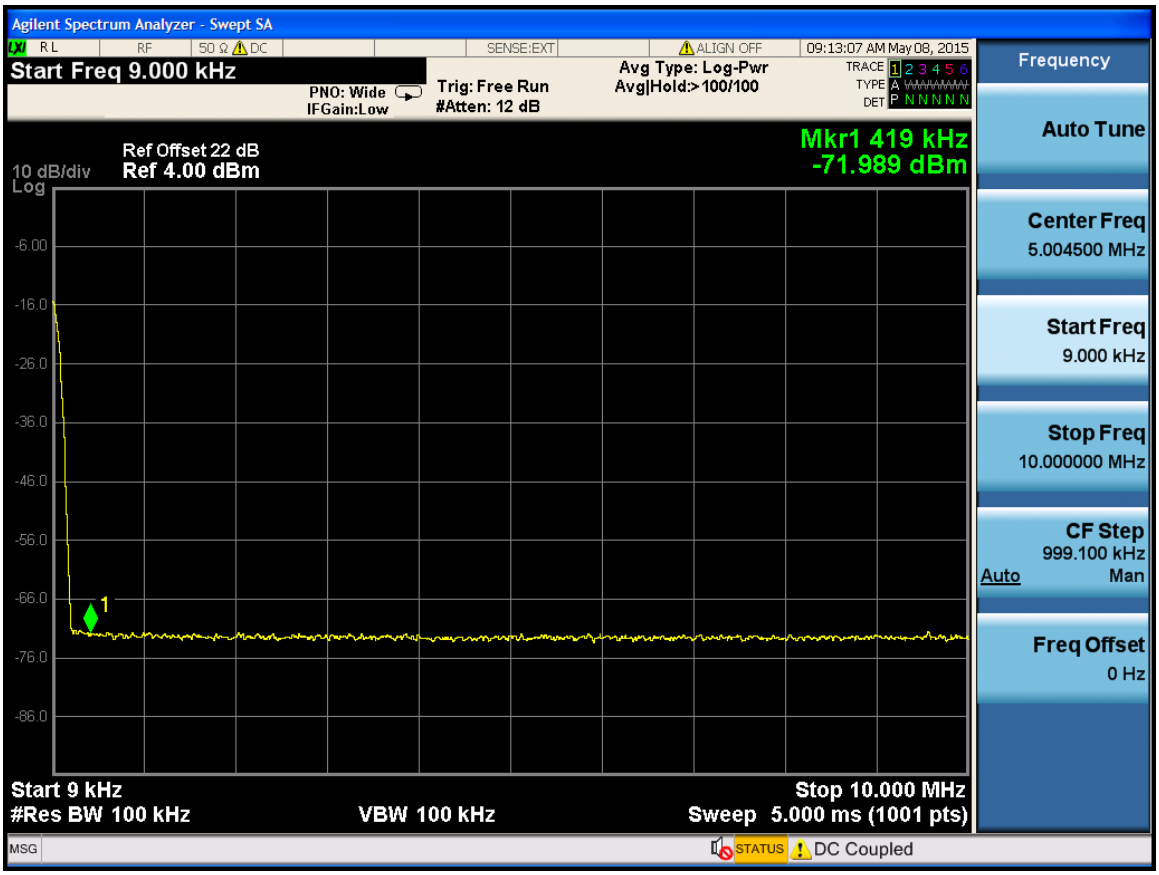
Test Result: Pass

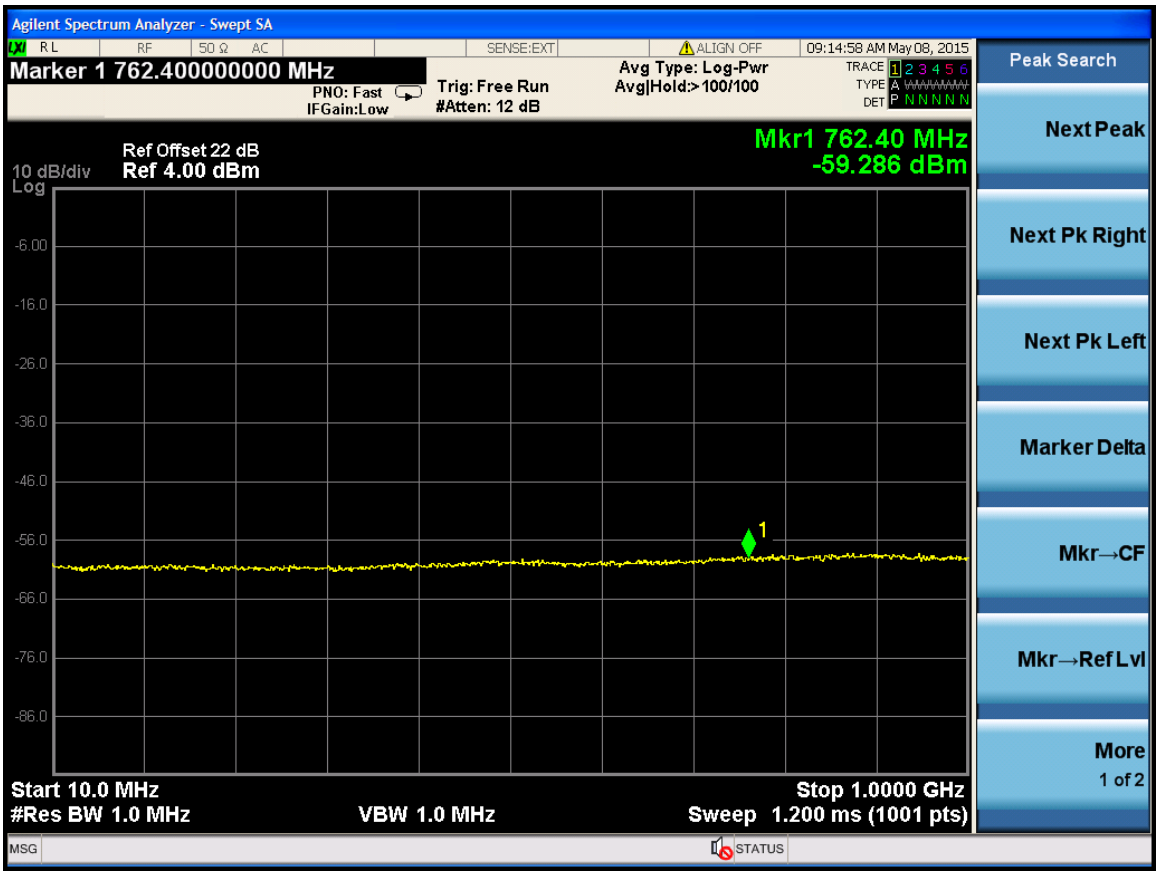
Test Mode: Transmitting UMTS+LTE

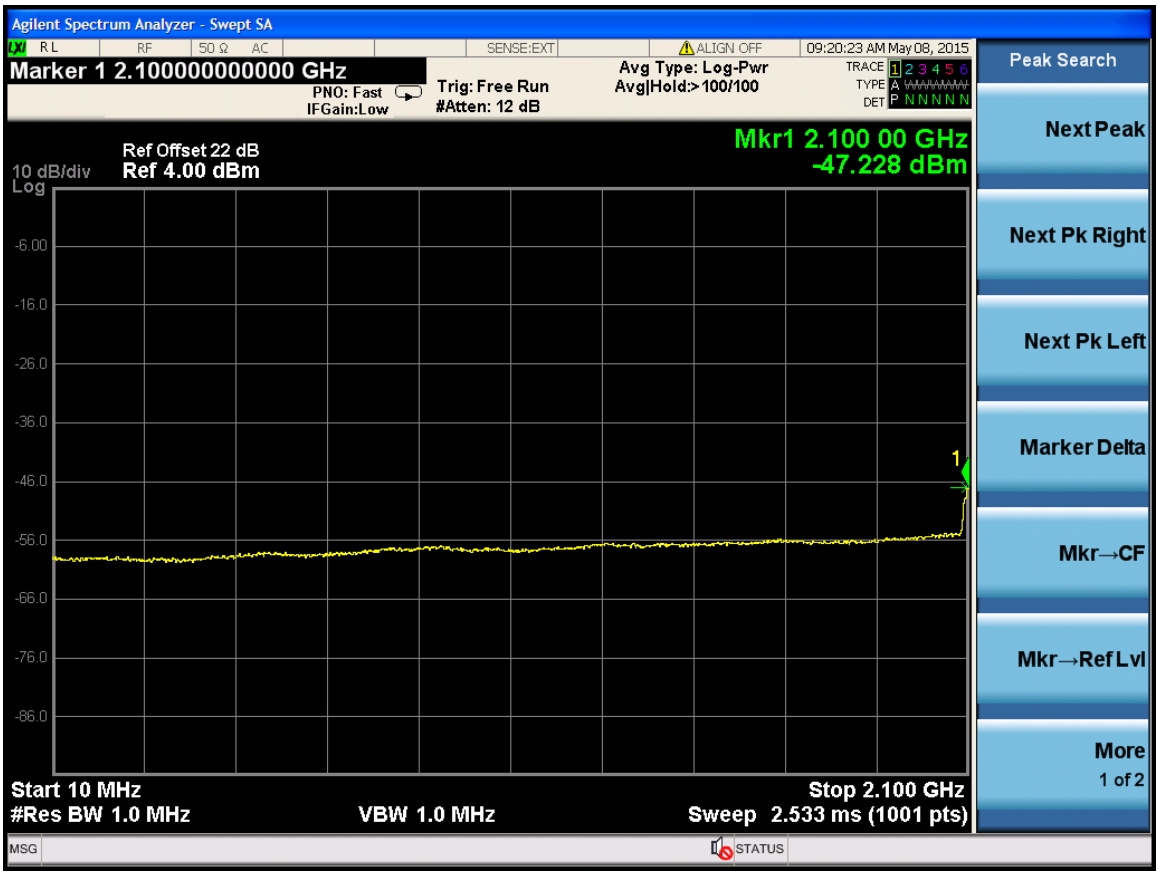
configuration	Radio mode	Bandwidth	LTE frequency And Power		UMTS 1 Carrier frequency And Power		UMTS 2 Carrier frequency And Power	
NO	UMTS+LTE	IBW:40MHz	Frequency (MHz)	Power/ Port	Frequency (MHz)	Power/ Port	Frequency (MHz)	Power /Port
1	1L+2U	2110-2150	2110-2130	20W	2139.9 -2144.9	15W	2144.9 -2149.9	15W
2	1L+2U	2110-2150	2110-2125	20W	2139.9 -2144.9	15W	2144.9 -2149.9	15W
3	1L+2U	2115-2155	2115-2125	20W	2144.9 -2149.9	15W	2149.9 -2154.9	15W
4	1L+1U	2115-2155	2115-2130	20W	2149.9 -2154.9	30W		

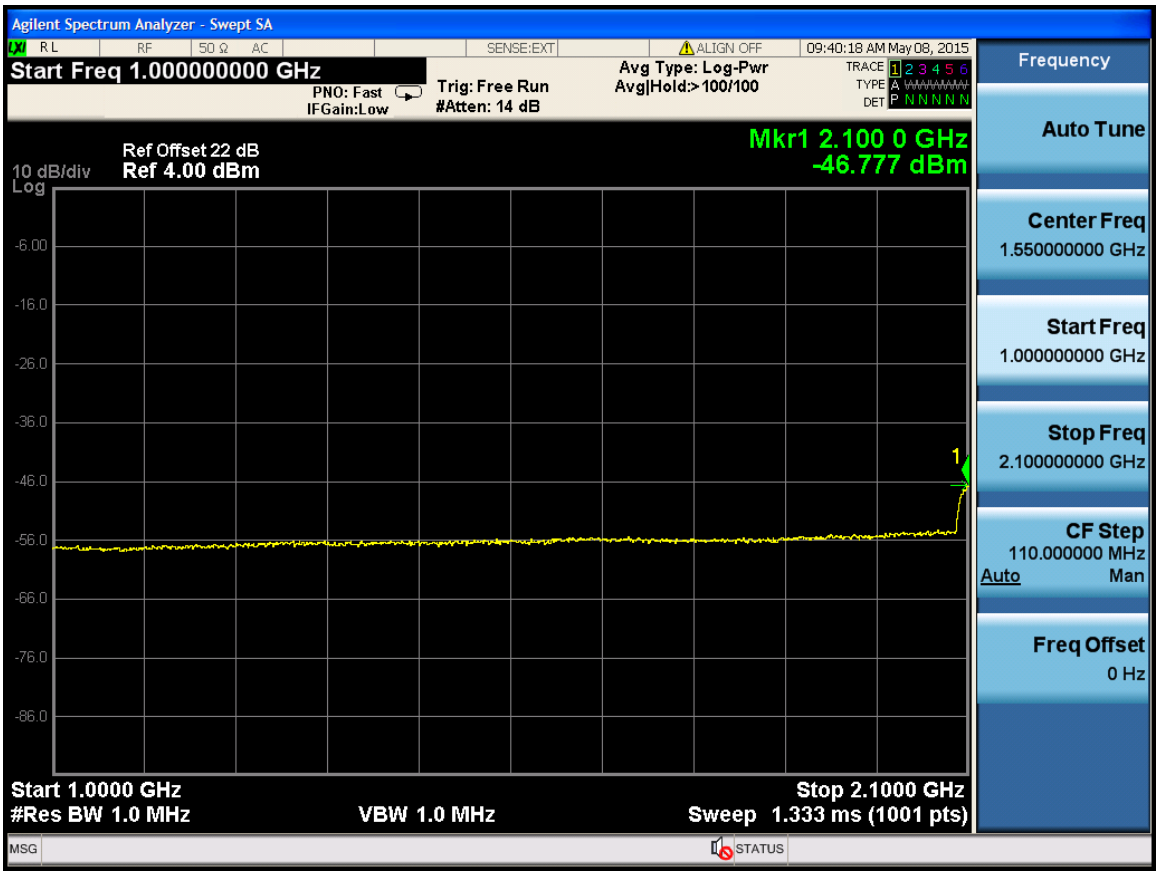
Test Data:

Configuration 1:
Port1:


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
09:13:07 AM May 08, 2015
Start Freq 9.000 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 419 kHz
-71.989 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 9 kHz
#Res BW 100 kHz
VBW 100 kHz
Stop 10.000 MHz
Sweep 5.000 ms (1001 pts)
MSG
STATUS
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

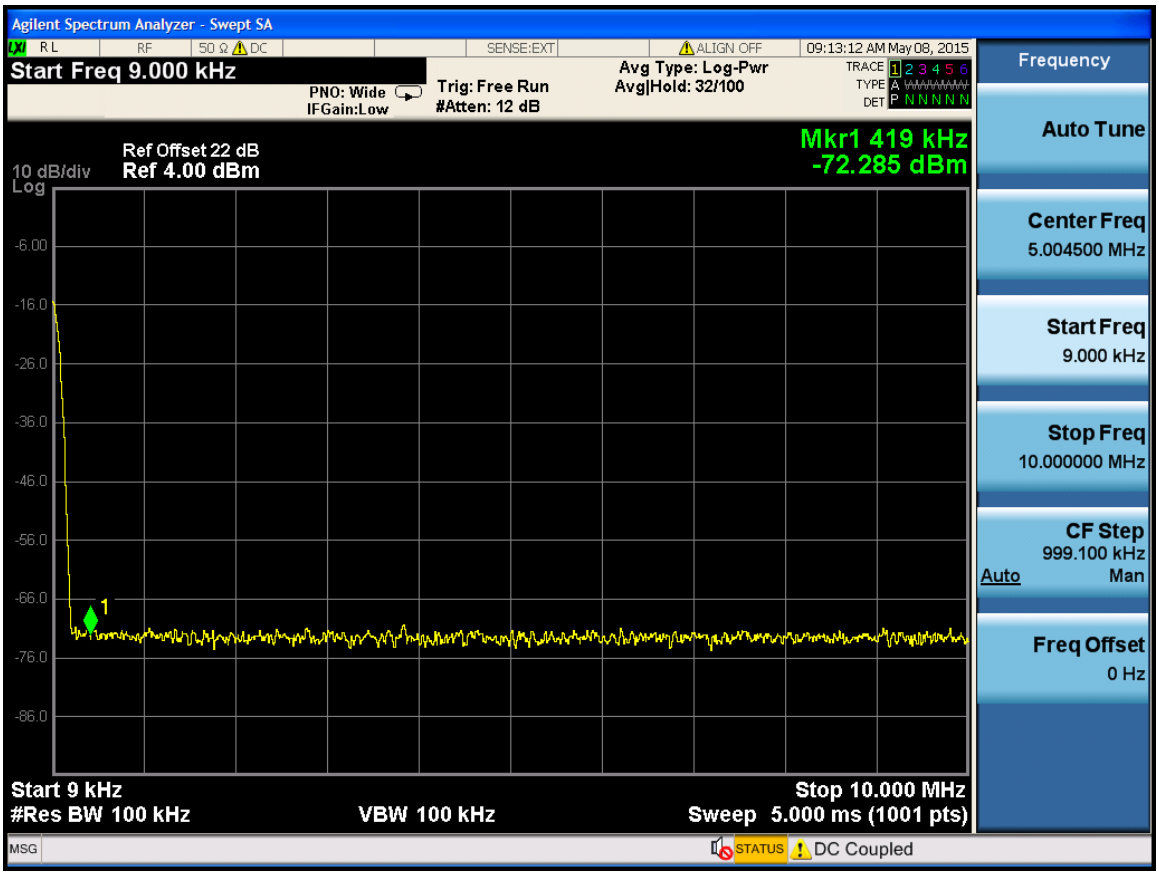

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:14:58 AM May 08, 2015
Marker 1 762.400000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 762.40 MHz
-59.286 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 1.0000 GHz
Sweep 1.200 ms (1001 pts)
MSG
STATUS
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

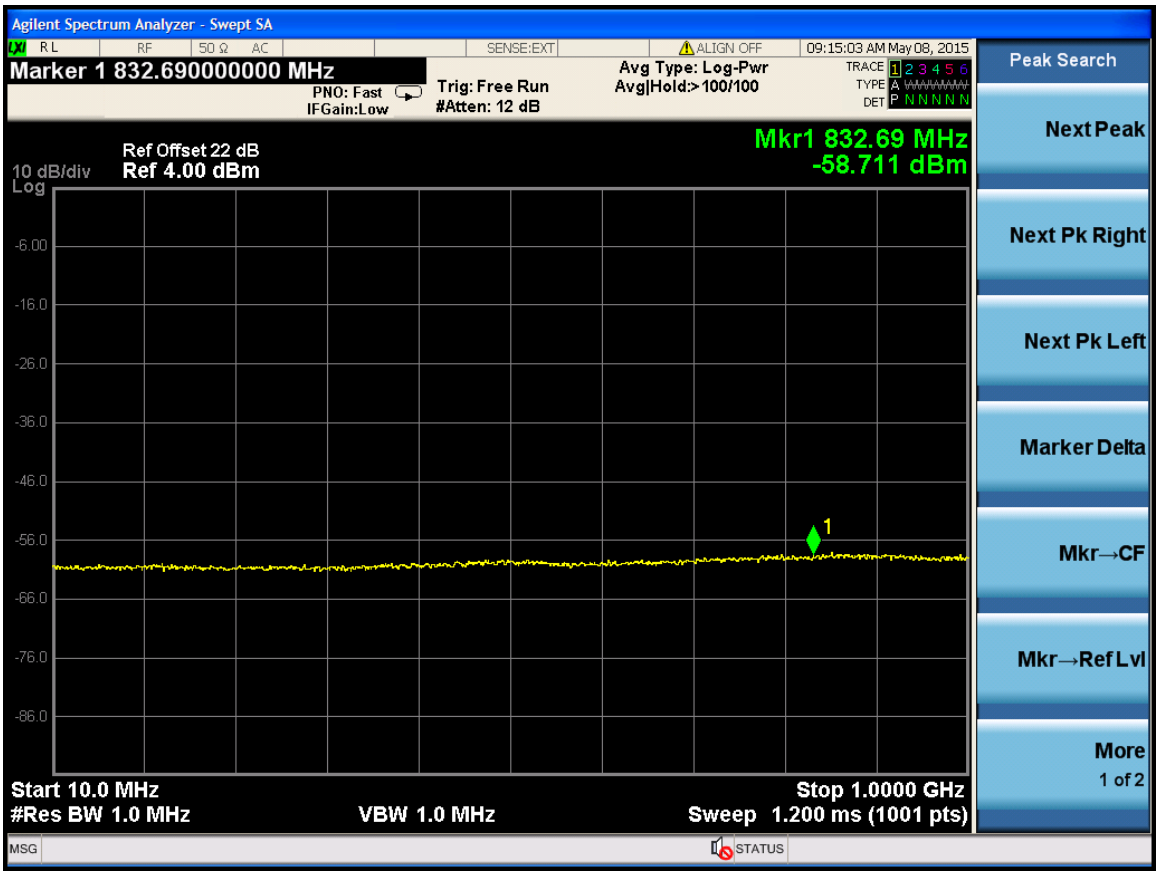

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:20:23 AM May 08, 2015
Marker 1 2.100000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 2.100 00 GHz
-47.228 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 10 MHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 2.100 GHz
Sweep 2.533 ms (1001 pts)
MSG
STATUS
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

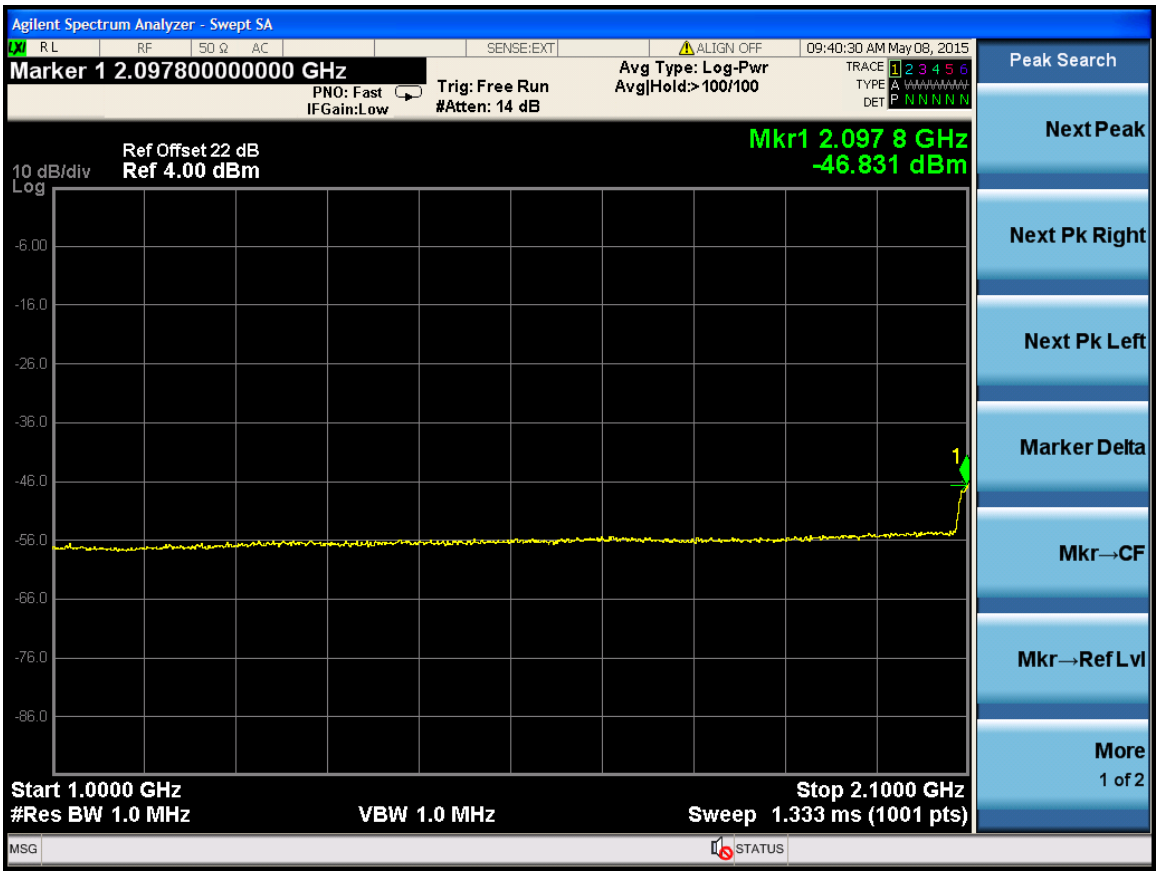

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:40:18 AM May 08, 2015
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 14 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 2.100 0 GHz
-46.777 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 1.0000 GHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 2.1000 GHz
Sweep 1.333 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
1.550000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
2.100000000 GHz
CF Step
110.000000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:27:23 AM May 08, 2015
Start Freq 2.165000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 25.137 GHz
-40.591 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 2.17 GHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 26.50 GHz
Sweep 60.87 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
14.332500000 GHz
Start Freq
2.165000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.433500000 GHz
Auto
Man
Freq Offset
0 Hz

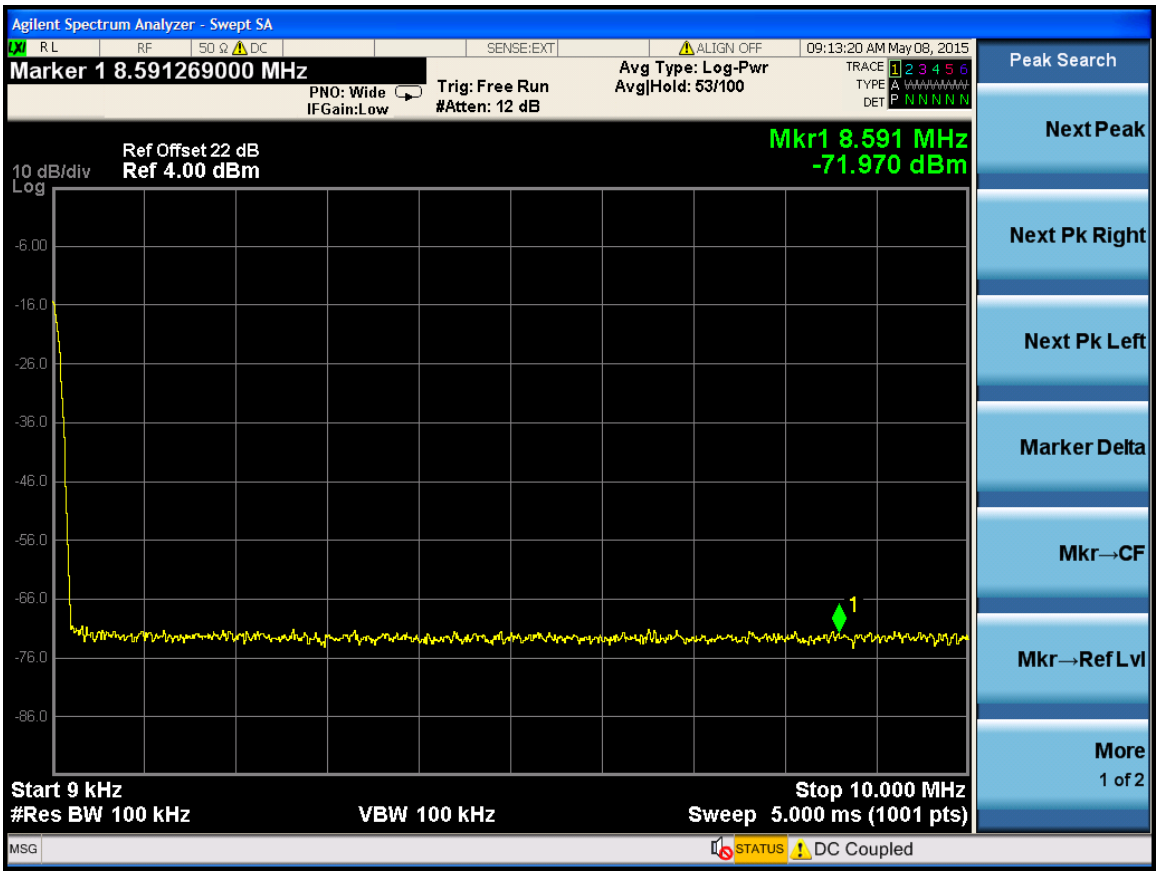
Port2:

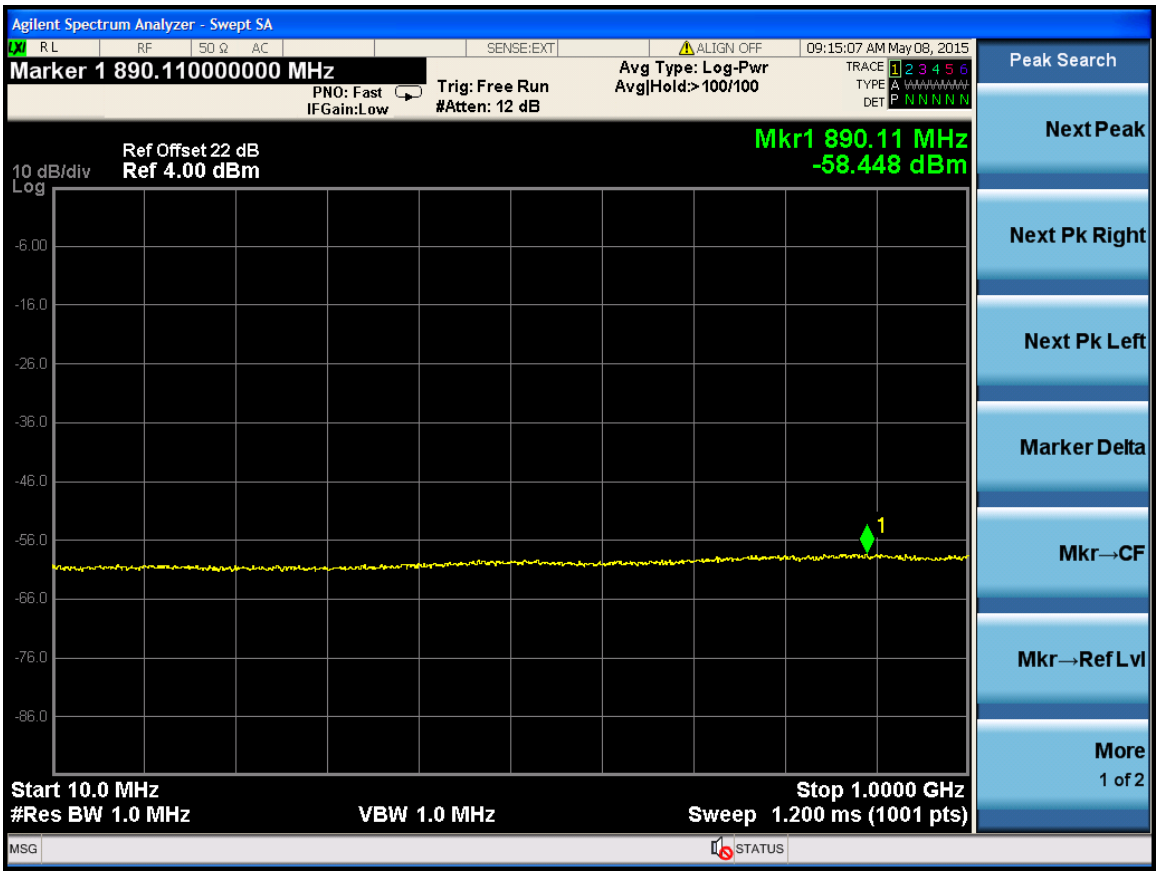

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
09:13:12 AM May 08, 2015
Start Freq 9.000 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 32/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 419 kHz
-72.285 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 9 kHz
#Res BW 100 kHz
VBW 100 kHz
Stop 10.000 MHz
Sweep 5.000 ms (1001 pts)
MSG
STATUS
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

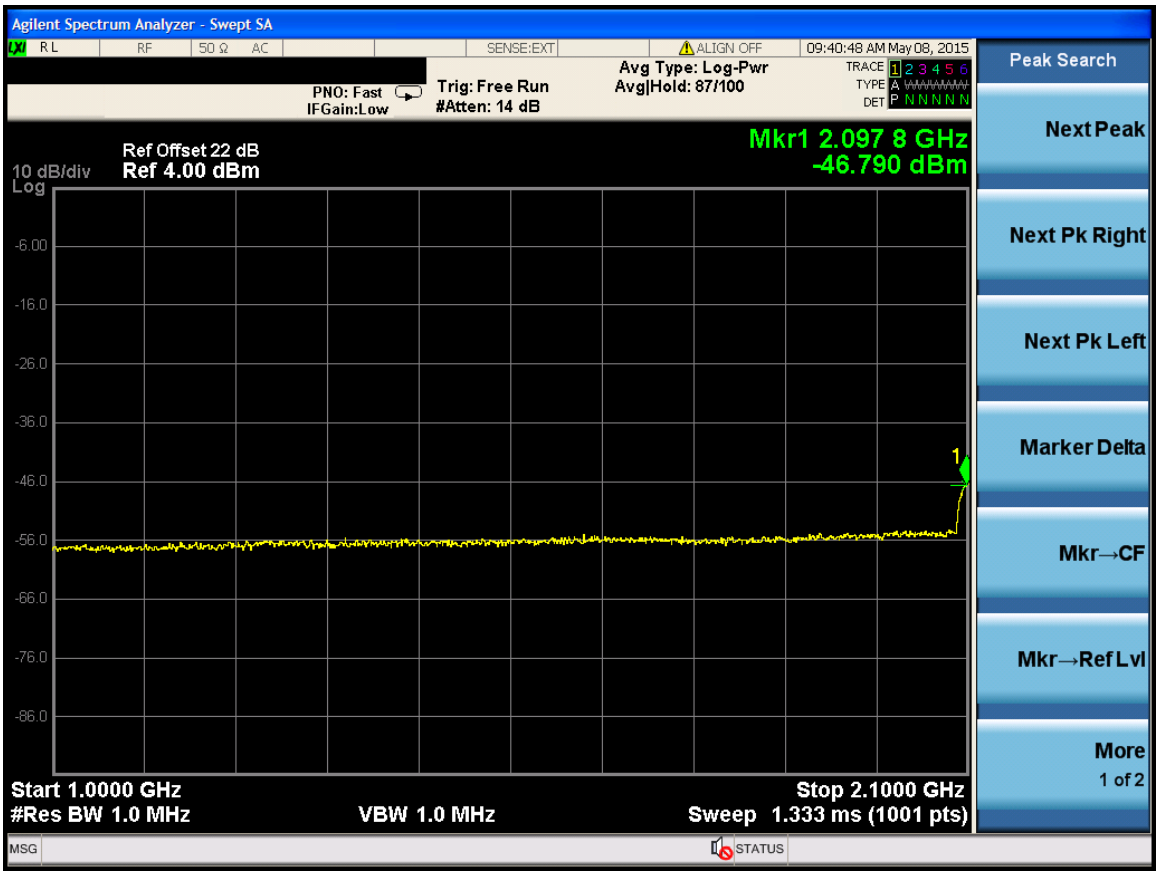

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:15:03 AM May 08, 2015
Marker 1 832.690000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 832.69 MHz
-58.711 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 1.0000 GHz
Sweep 1.200 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:40:30 AM May 08, 2015
Marker 1 2.097800000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 14 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 2.097 8 GHz
-46.831 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 1.0000 GHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 2.1000 GHz
Sweep 1.333 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

Configuration 2:
Port1:

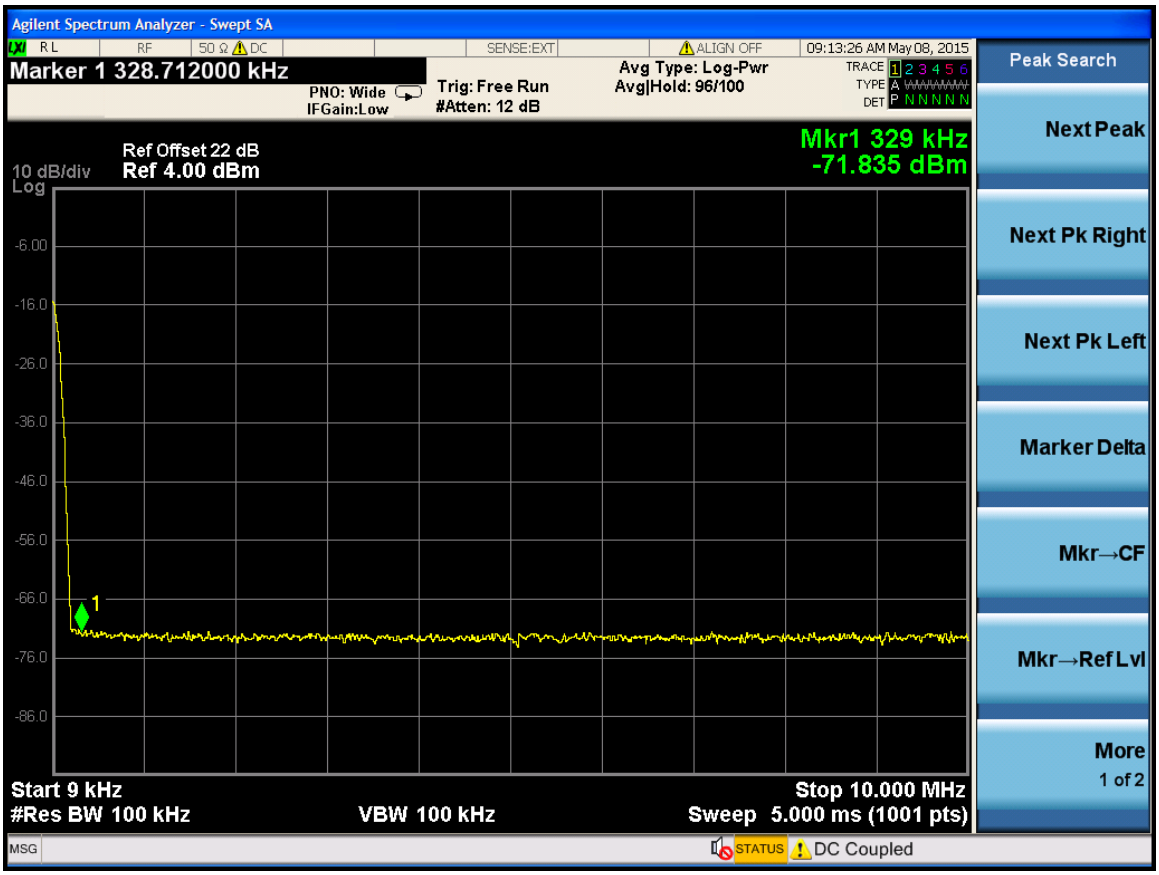

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
09:13:20 AM May 08, 2015
Marker 1 8.591269000 MHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 53/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 8.591 MHz
-71.970 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 9 kHz
#Res BW 100 kHz
VBW 100 kHz
Stop 10.000 MHz
Sweep 5.000 ms (1001 pts)
MSG
STATUS
DC Coupled
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

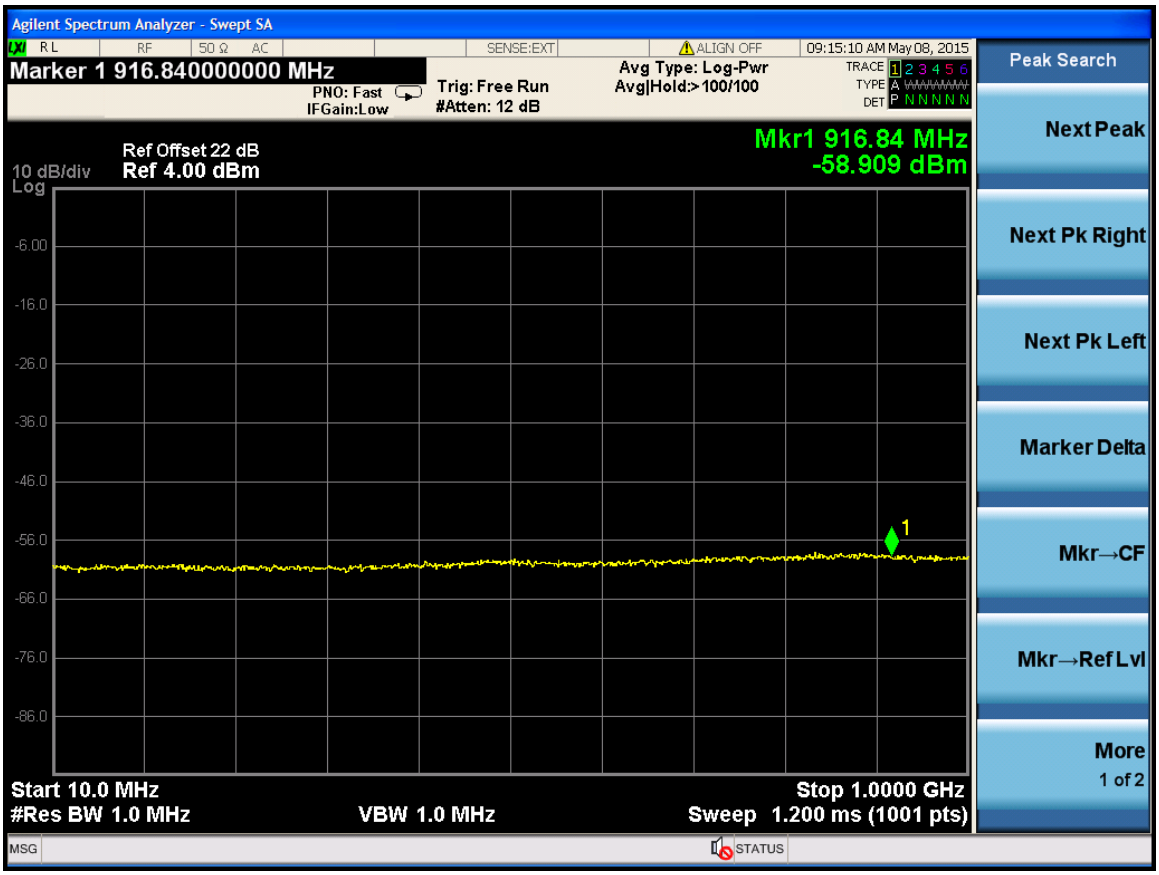

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:15:07 AM May 08, 2015
Marker 1 890.110000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 890.11 MHz
-58.448 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 1.0000 GHz
Sweep 1.200 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

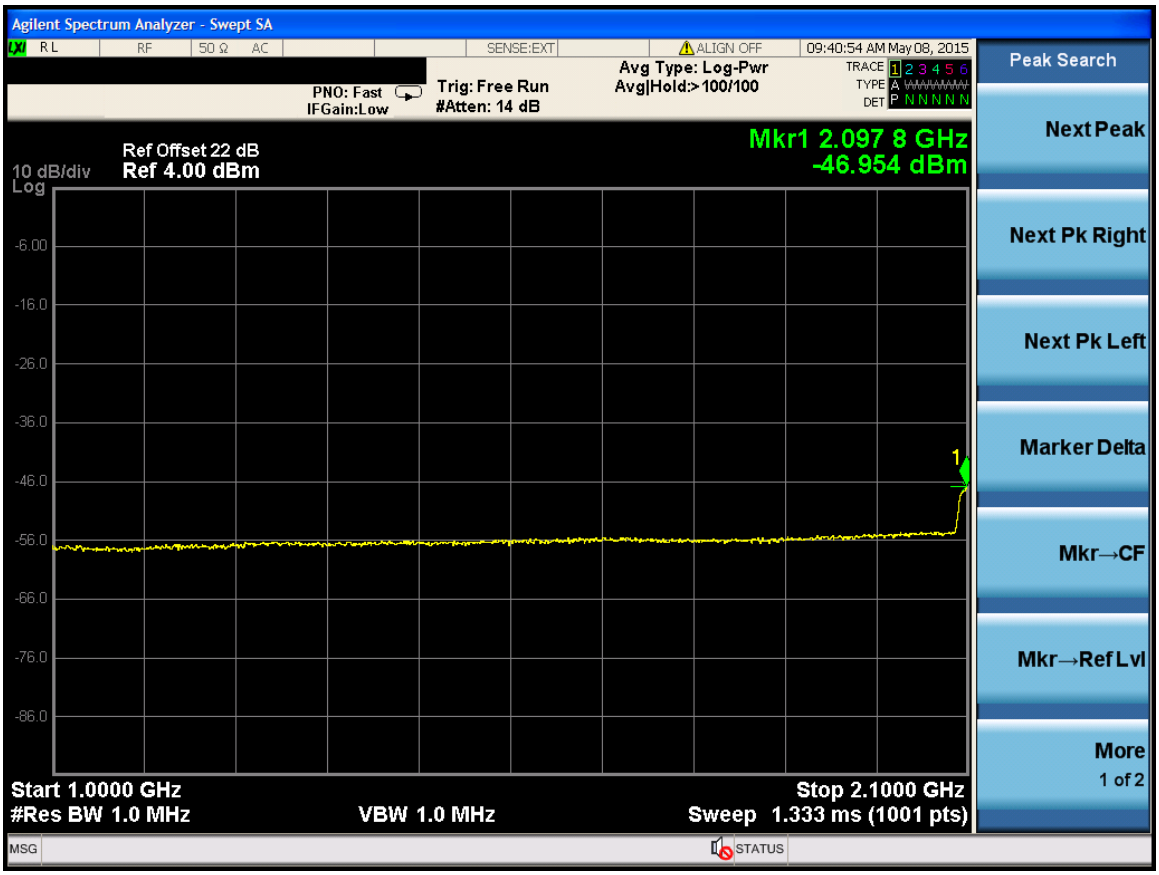

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:40:48 AM May 08, 2015
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 14 dB
Avg Type: Log-Pwr
Avg|Hold: 87/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 2.097 8 GHz
-46.790 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 1.0000 GHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 2.1000 GHz
Sweep 1.333 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:27:47 AM May 08, 2015
Start Freq 2.165000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 21/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 25.137 GHz
-40.776 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
Start 2.17 GHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 26.50 GHz
Sweep 60.87 ms (1001 pts)
Frequency
Auto Tune
Center Freq
14.332500000 GHz
Start Freq
2.165000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.433500000 GHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

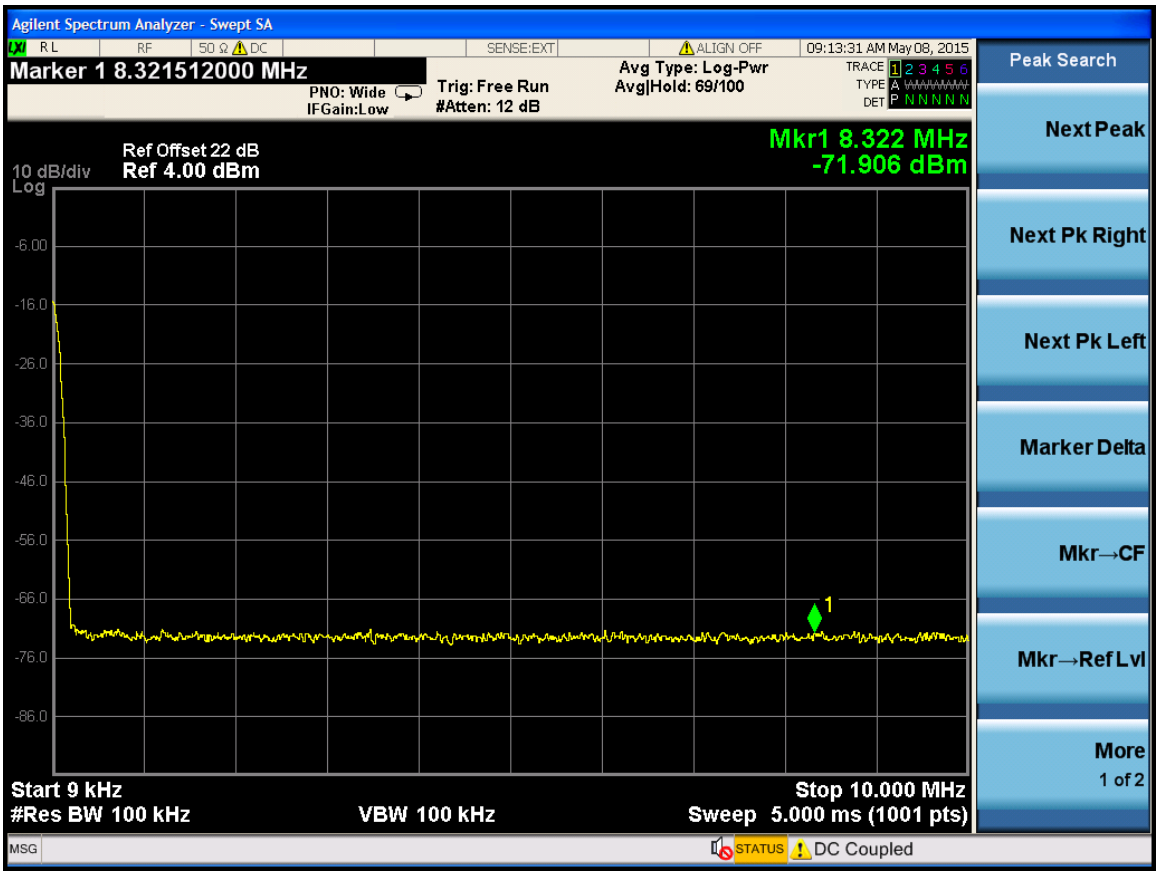
Port2:

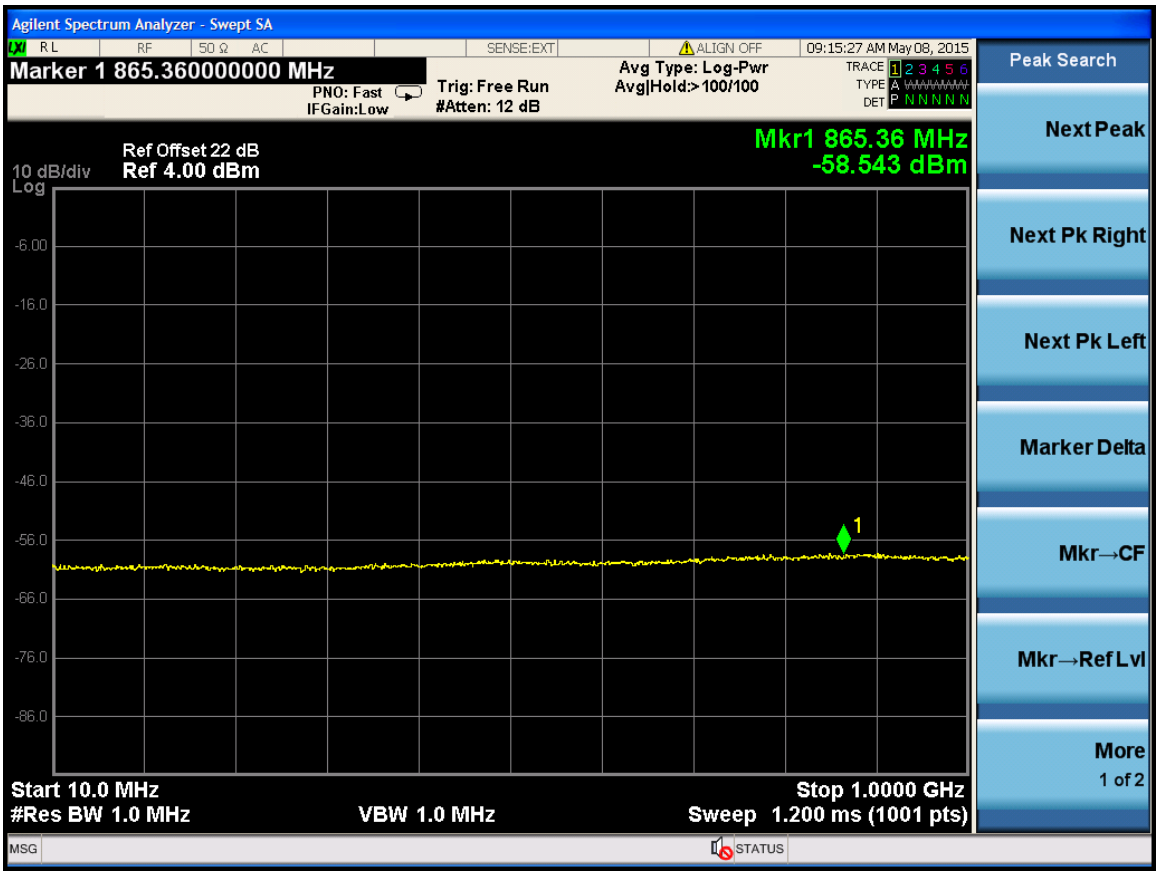

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
09:13:26 AM May 08, 2015
Marker 1 328.712000 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 96/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 329 kHz
-71.835 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 9 kHz
#Res BW 100 kHz
VBW 100 kHz
Stop 10.000 MHz
Sweep 5.000 ms (1001 pts)
MSG
STATUS
DC Coupled
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

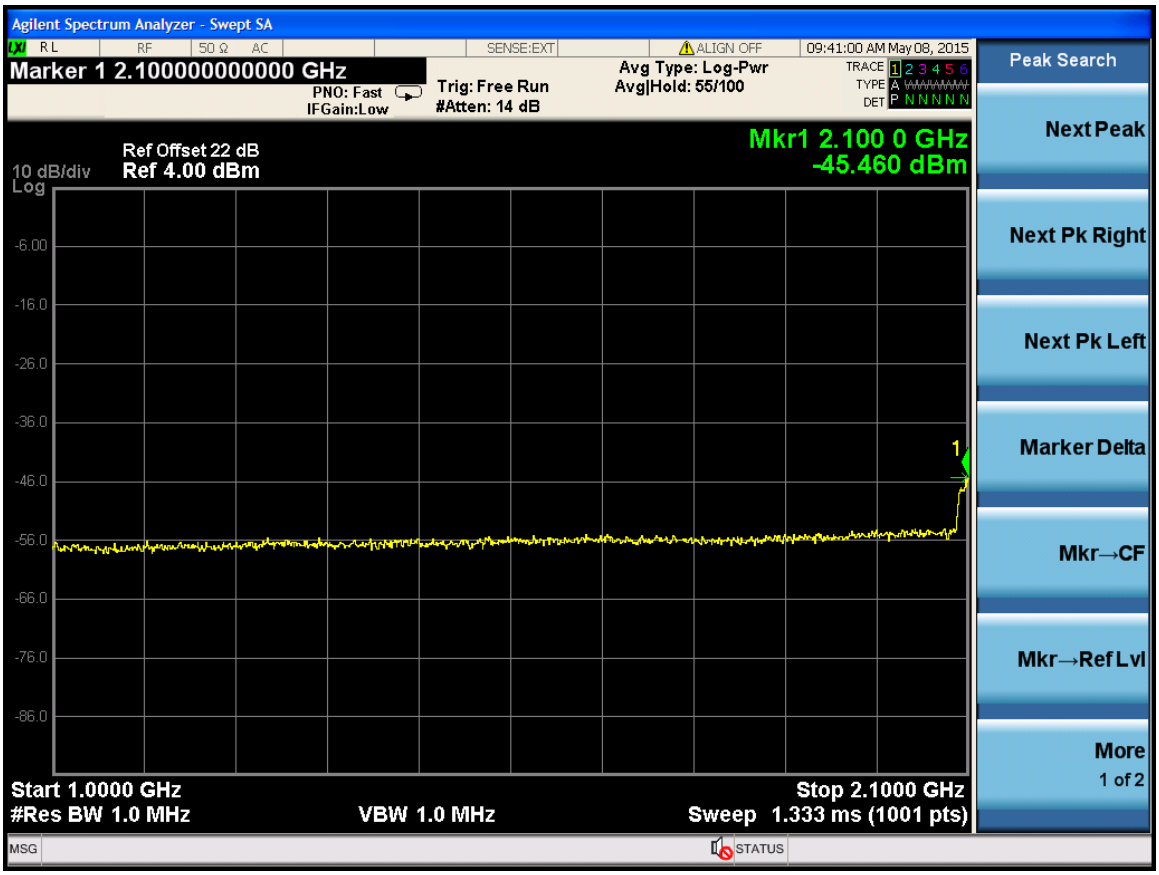

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:15:10 AM May 08, 2015
Marker 1 916.840000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 916.84 MHz
-58.909 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 1.0000 GHz
Sweep 1.200 ms (1001 pts)
MSG
STATUS
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:40:54 AM May 08, 2015
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 14 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 2.097 8 GHz
-46.954 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 1.0000 GHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 2.1000 GHz
Sweep 1.333 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

Configuration 3:
Port1:

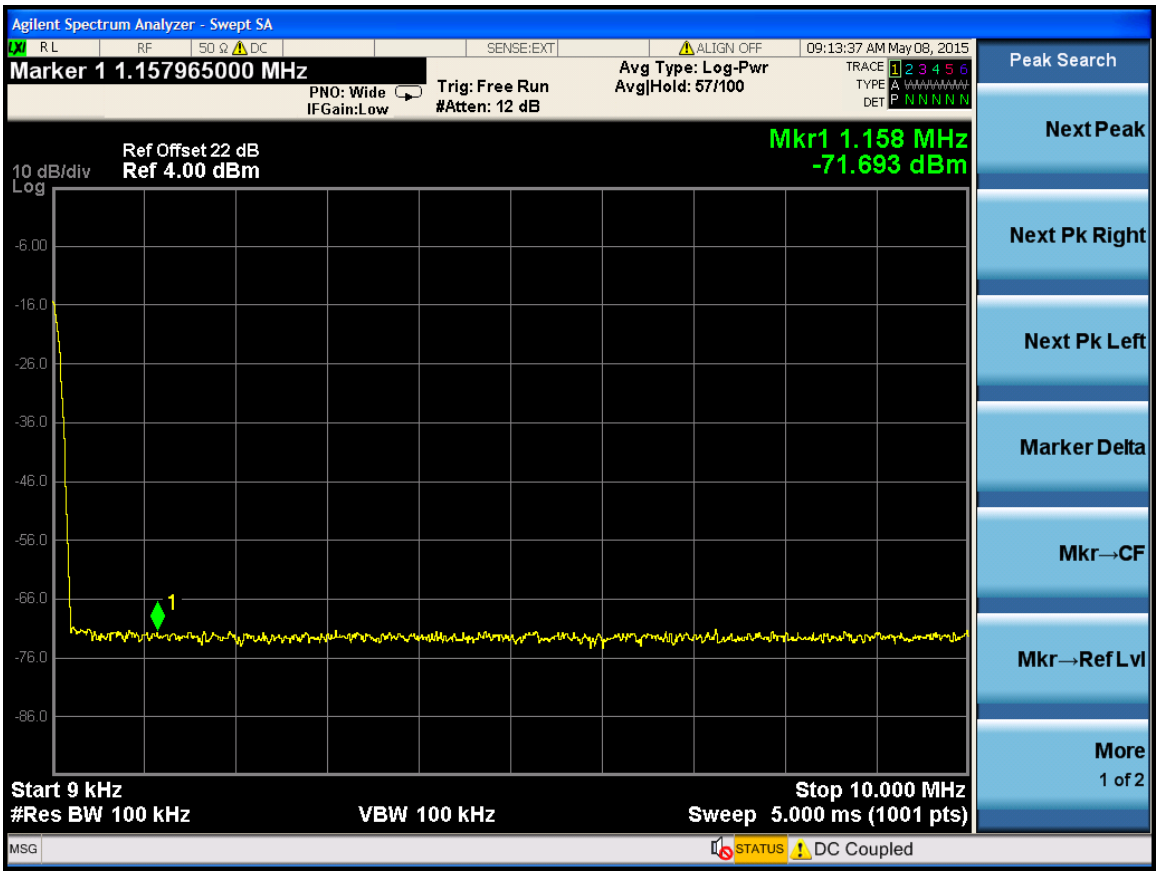

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
09:13:31 AM May 08, 2015
Marker 1 8.321512000 MHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 69/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 8.322 MHz
-71.906 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 9 kHz
#Res BW 100 kHz
VBW 100 kHz
Stop 10.000 MHz
Sweep 5.000 ms (1001 pts)
MSG
STATUS
DC Coupled
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

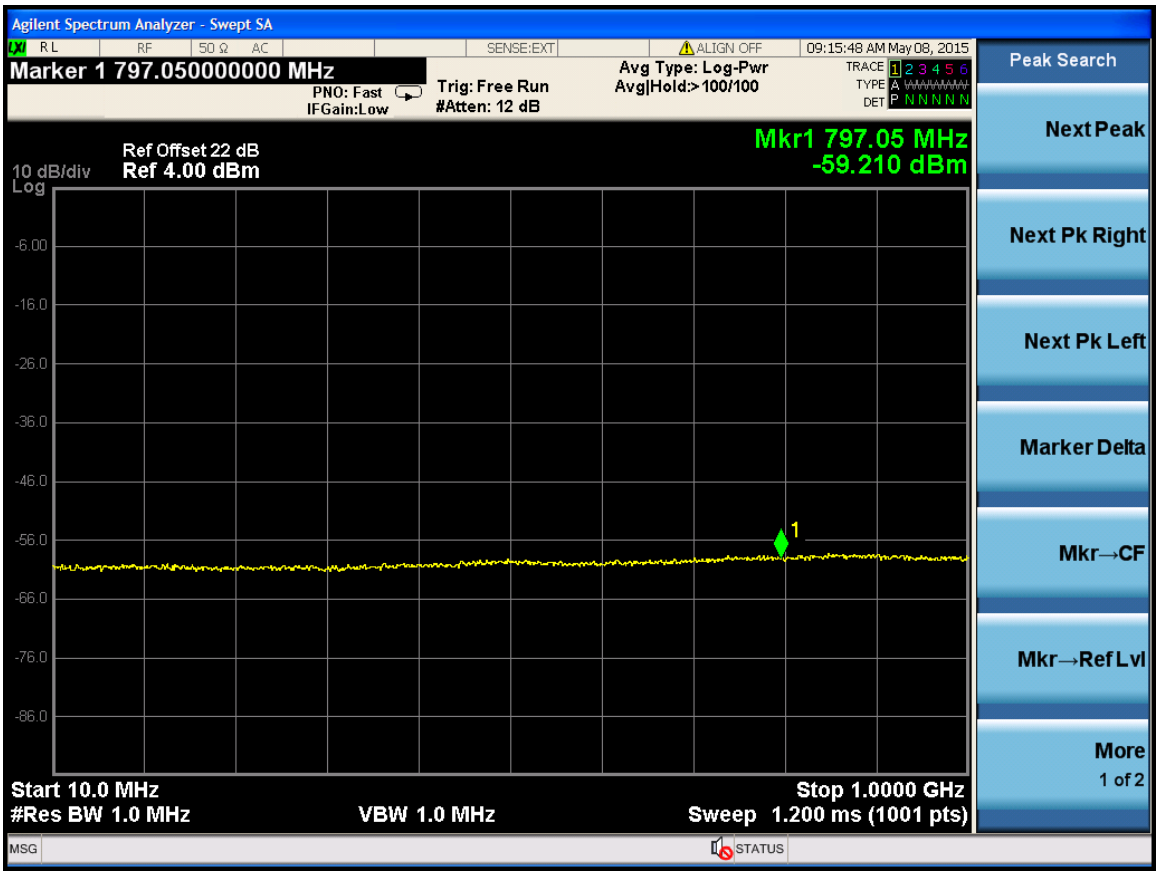

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:15:27 AM May 08, 2015
Marker 1 865.360000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 865.36 MHz
-58.543 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 1.0000 GHz
Sweep 1.200 ms (1001 pts)
MSG
STATUS
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

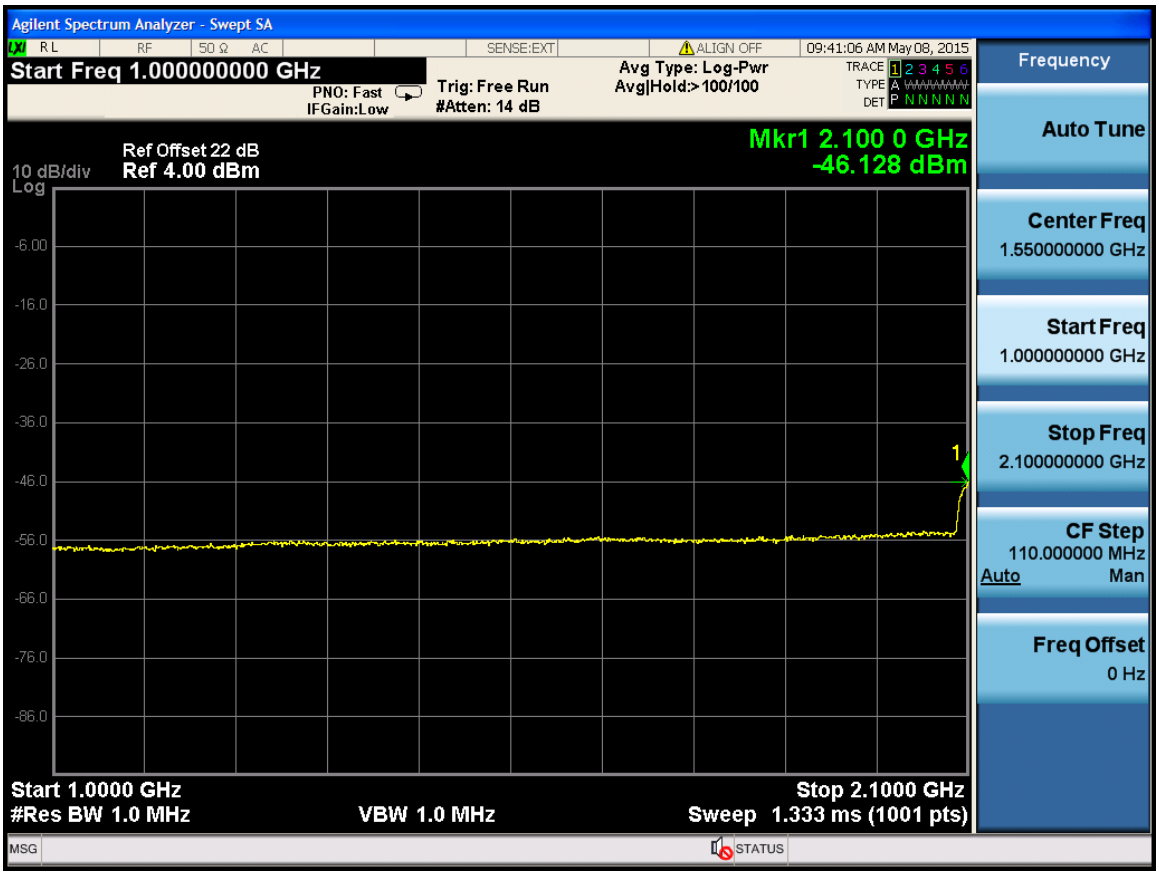

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:41:00 AM May 08, 2015
Marker 1 2.100000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 14 dB
Avg Type: Log-Pwr
Avg|Hold: 55/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 2.100 0 GHz
-45.460 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 1.0000 GHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 2.1000 GHz
Sweep 1.333 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:28:12 AM May 08, 2015
Start Freq 2.165000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 25.137 GHz
-40.207 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 2.17 GHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 26.50 GHz
Sweep 60.87 ms (1001 pts)
Frequency
Auto Tune
Center Freq
14.332500000 GHz
Start Freq
2.165000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.433500000 GHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

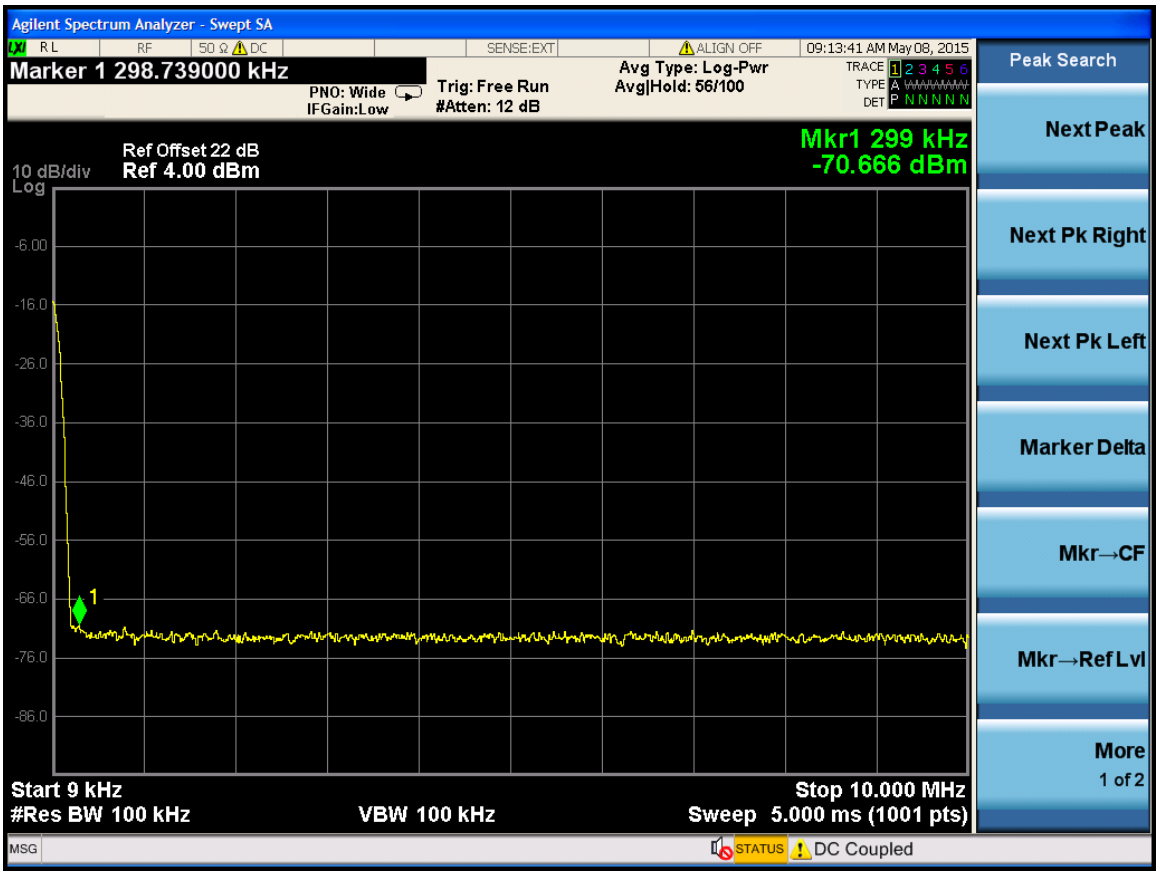
Port2:

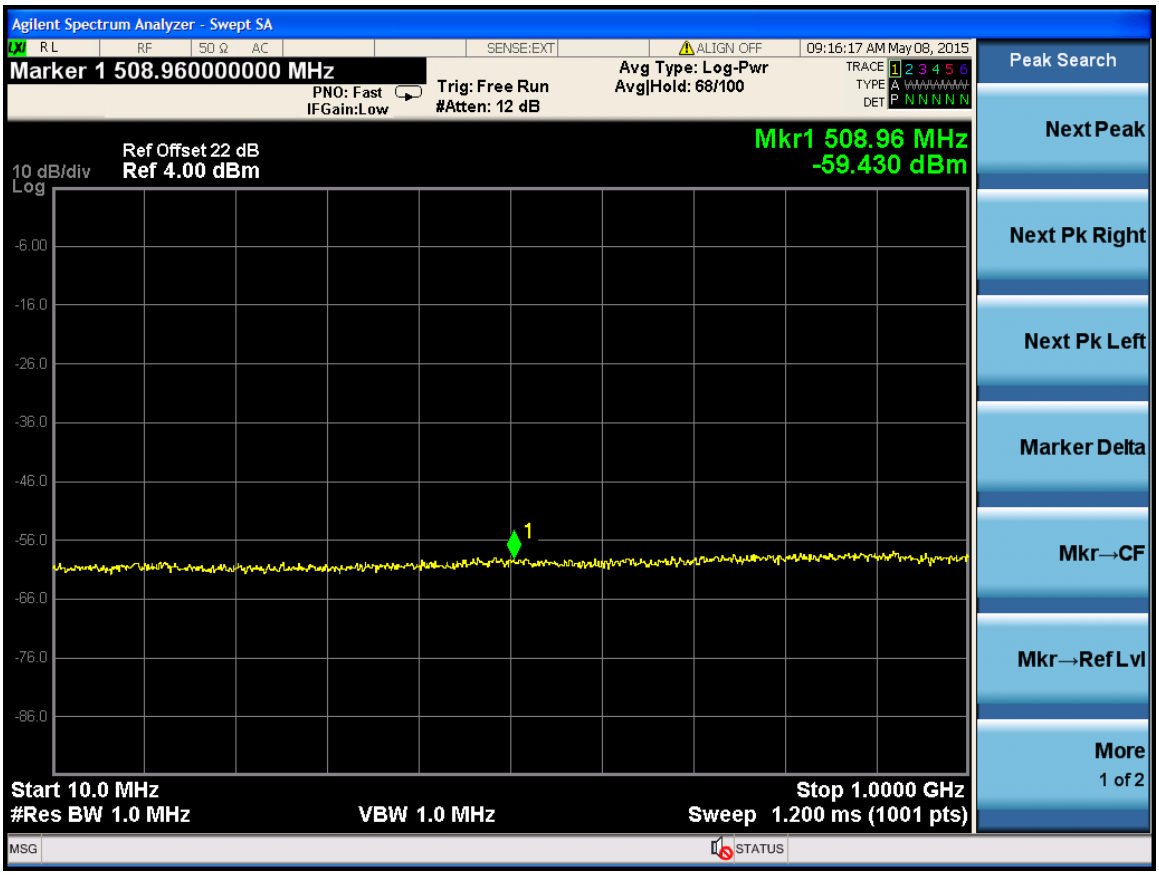

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
09:13:37 AM May 08, 2015
Marker 1 1.157965000 MHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 57/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Ref 4.00 dBm
Log
Mkr1 1.158 MHz
-71.693 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 9 kHz
#Res BW 100 kHz
VBW 100 kHz
Stop 10.000 MHz
Sweep 5.000 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS
DC Coupled

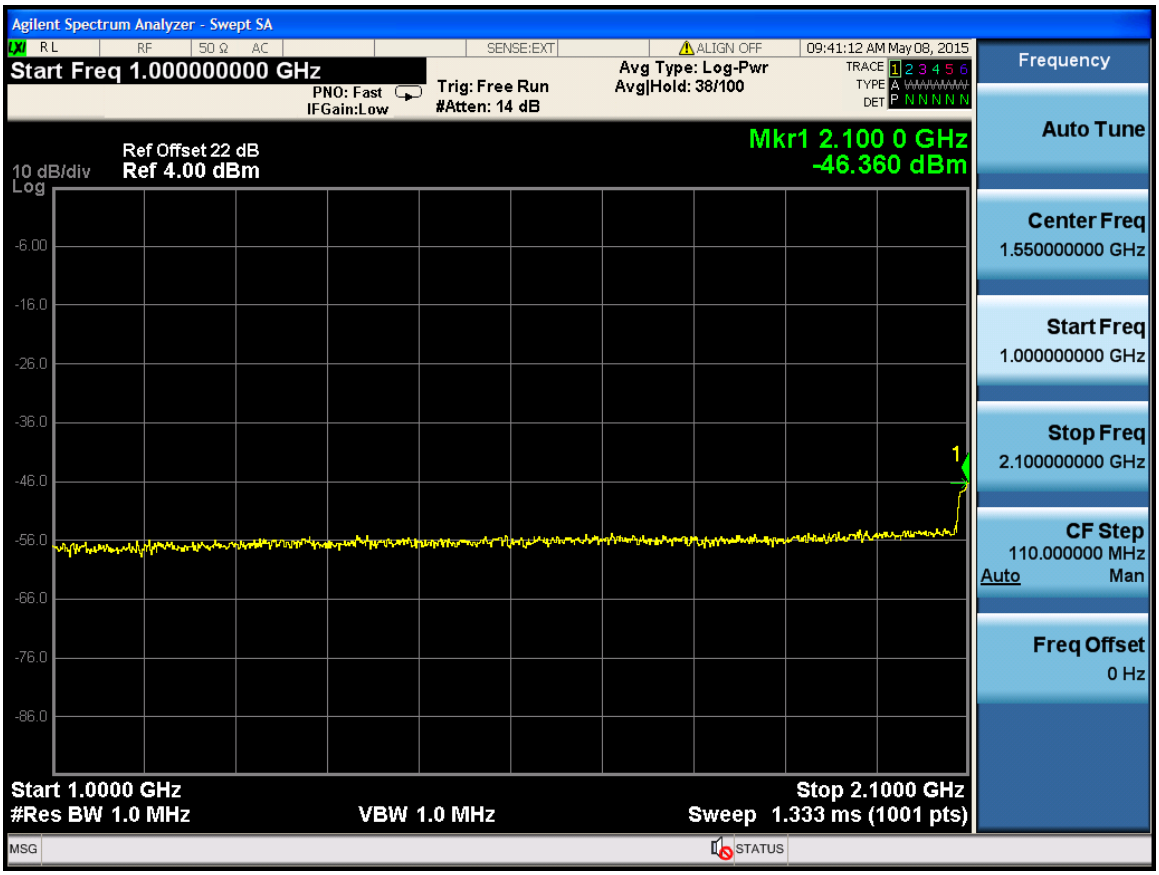

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:15:48 AM May 08, 2015
Marker 1 797.050000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 797.05 MHz
-59.210 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 1.0000 GHz
Sweep 1.200 ms (1001 pts)
MSG
STATUS
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:41:06 AM May 08, 2015
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 14 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 2.100 0 GHz
-46.128 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 1.0000 GHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 2.1000 GHz
Sweep 1.333 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
1.550000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
2.100000000 GHz
CF Step
110.000000 MHz
Auto
Man
Freq Offset
0 Hz

Configuration 4:
Port1:

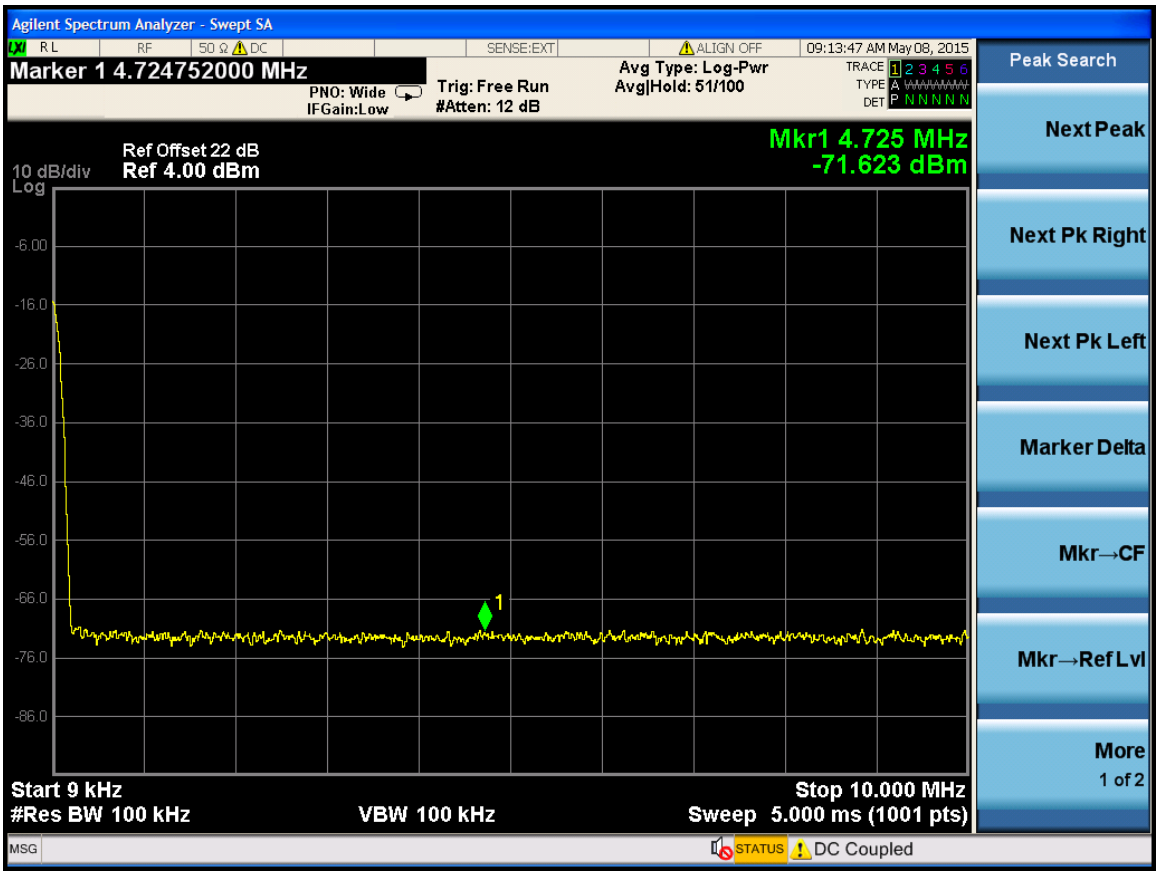

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
09:13:41 AM May 08, 2015
Marker 1 298.739000 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 56/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Ref 4.00 dBm
Log
Mkr1 299 kHz
-70.666 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 9 kHz
#Res BW 100 kHz
VBW 100 kHz
Stop 10.000 MHz
Sweep 5.000 ms (1001 pts)
MSG
STATUS
DC Coupled
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

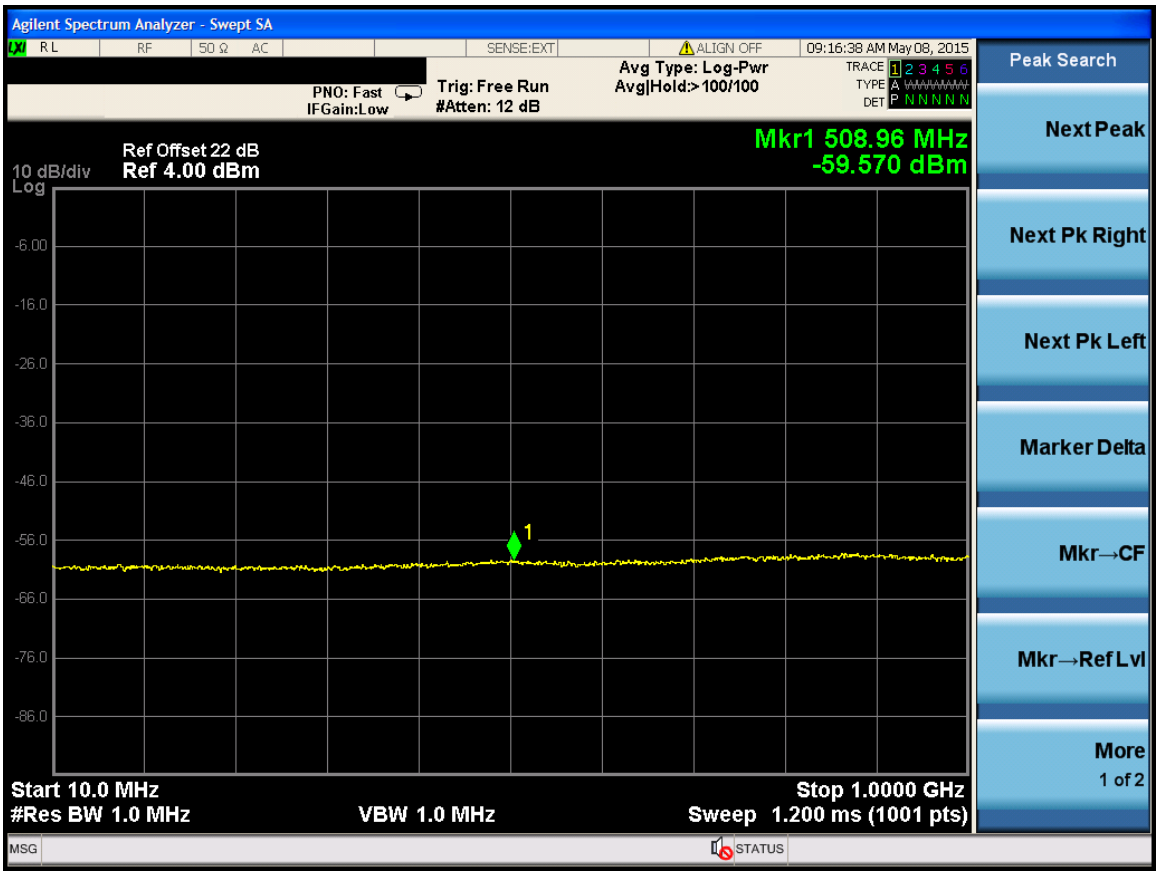

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:16:17 AM May 08, 2015
Marker 1 508.960000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 68/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 508.96 MHz
-59.430 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 1.0000 GHz
Sweep 1.200 ms (1001 pts)
MSG
STATUS
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

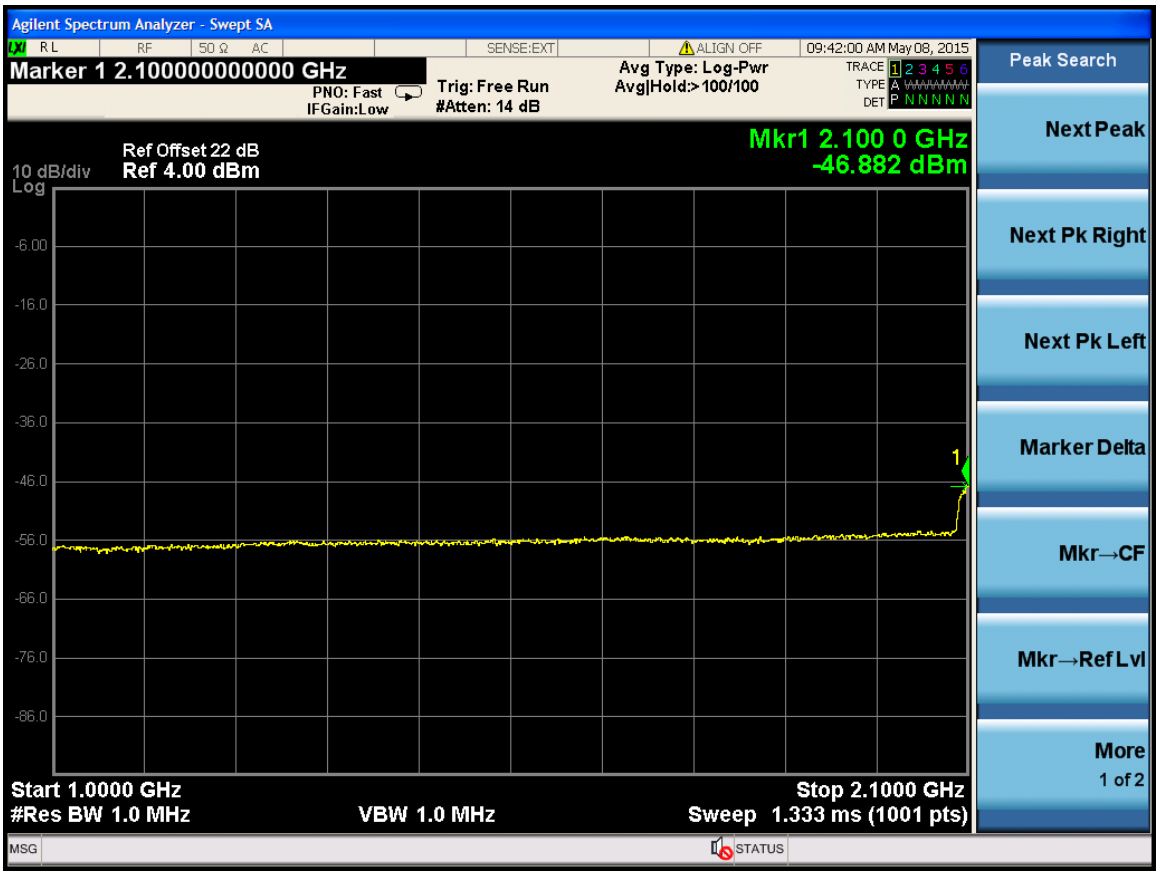

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:41:12 AM May 08, 2015
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 14 dB
Avg Type: Log-Pwr
Avg|Hold: 38/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 2.100 0 GHz
-46.360 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 1.0000 GHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 2.1000 GHz
Sweep 1.333 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
1.550000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
2.100000000 GHz
CF Step
110.000000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:28:42 AM May 08, 2015
Start Freq 2.165000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 22/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 24.967 GHz
-41.309 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
Start 2.17 GHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 26.50 GHz
Sweep 60.87 ms (1001 pts)
Frequency
Auto Tune
Center Freq
14.332500000 GHz
Start Freq
2.165000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.433500000 GHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

Port2:


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:EXT
ALIGN OFF
09:13:47 AM May 08, 2015
Marker 1 4.724752000 MHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 51/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 4.725 MHz
-71.623 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
Start 9 kHz
#Res BW 100 kHz
VBW 100 kHz
Stop 10.000 MHz
Sweep 5.000 ms (1001 pts)
MSG
STATUS
DC Coupled
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:16:38 AM May 08, 2015
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 508.96 MHz
-59.570 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 10.0 MHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 1.0000 GHz
Sweep 1.200 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:42:00 AM May 08, 2015
Marker 1 2.100000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 14 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 2.100 0 GHz
-46.882 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 1.0000 GHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 2.1000 GHz
Sweep 1.333 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:EXT
ALIGN OFF
09:29:26 AM May 08, 2015
Start Freq 2.165000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 12 dB
Avg Type: Log-Pwr
Avg|Hold: 31/100
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET P N N N N N
Ref Offset 22 dB
10 dB/div
Log
Ref 4.00 dBm
Mkr1 25.113 GHz
-40.890 dBm
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
-86.0
1
Start 2.17 GHz
#Res BW 1.0 MHz
VBW 1.0 MHz
Stop 26.50 GHz
Sweep 60.87 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
14.332500000 GHz
Start Freq
2.165000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.433500000 GHz
Auto
Man
Freq Offset
0 Hz