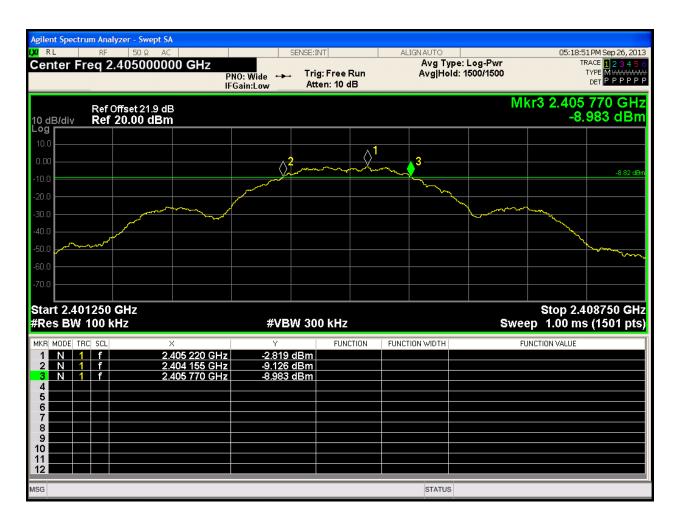
# Annex A: DTS (6 dB) Bandwidth

# 1 Result Table

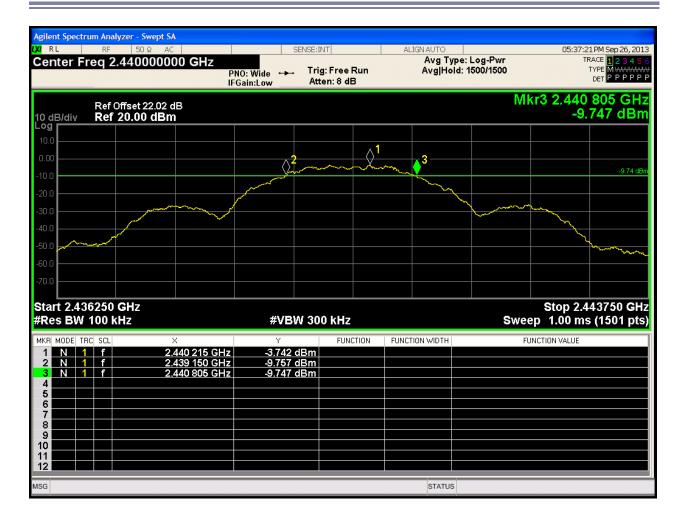
EUT Conf.	DTS (6 dB) Bandwidth [MHz]	Verdict
TX-B	1.615	Pass
TX-M	1.655	Pass
TX-T	1.62	Pass

#### 2 Test Plot

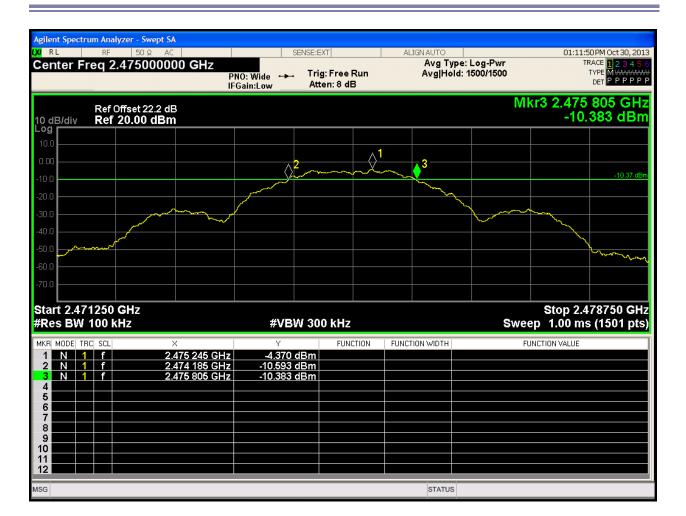
#### 2.1 TX-B



### 2.2 TX-M



# 2.3 TX-T



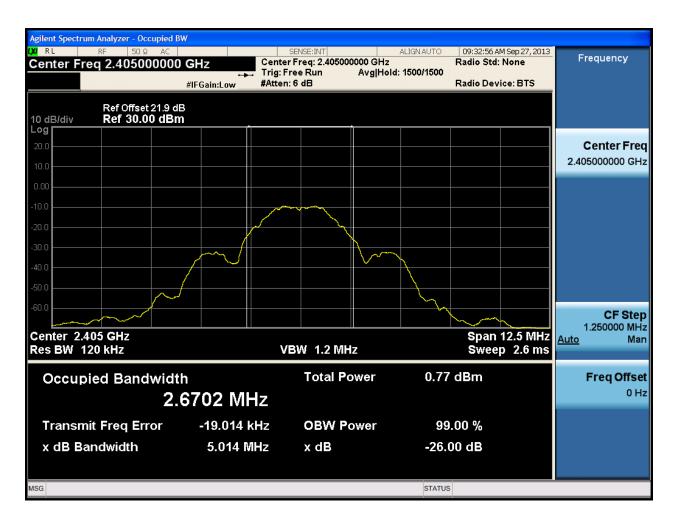
# **Annex B: Occupied Bandwidth**

# 1 Result Table

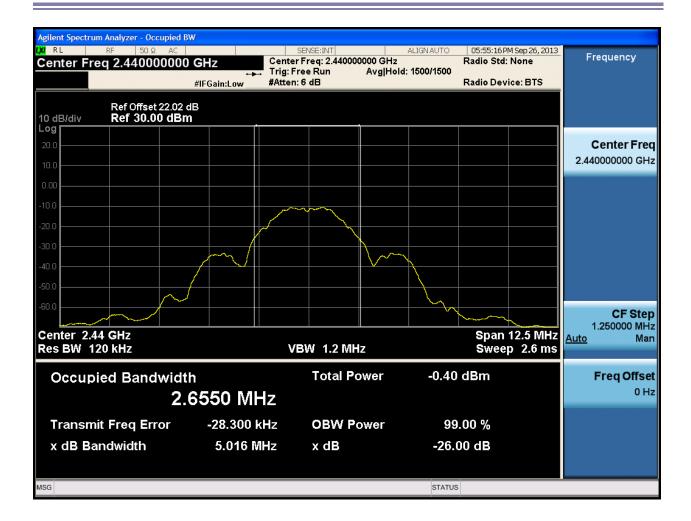
EUT Conf.	Occupied Bandwidth [MHz]	Verdict
TX-B	2.67019	Pass
TX-M	2.65497	Pass
TX-T	2.6345	Pass

#### 2 Test Plot

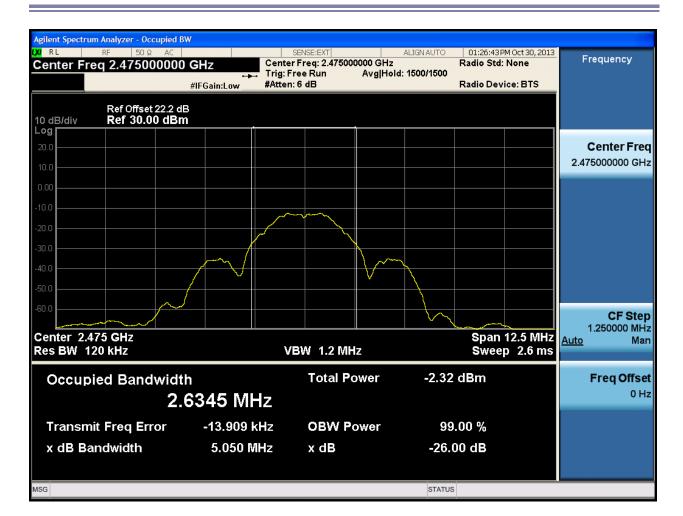
#### 2.1 TX-B



### 2.2 TX-M



# 2.3 TX-T



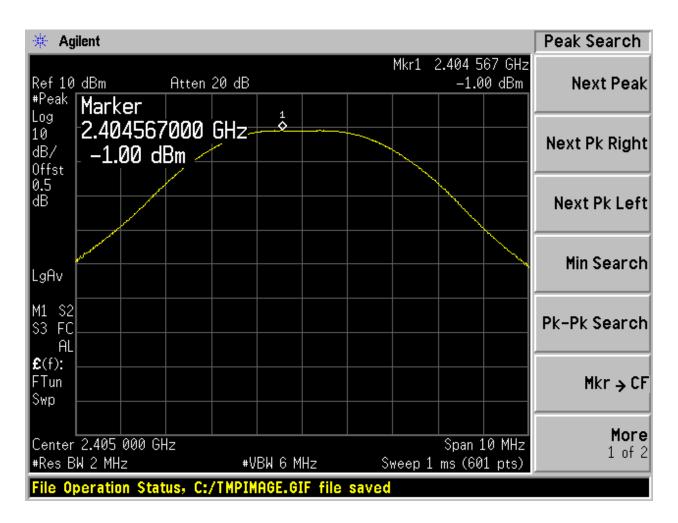
# Annex C: Maximum Peak Conducted Output Power

# 1 Result Table

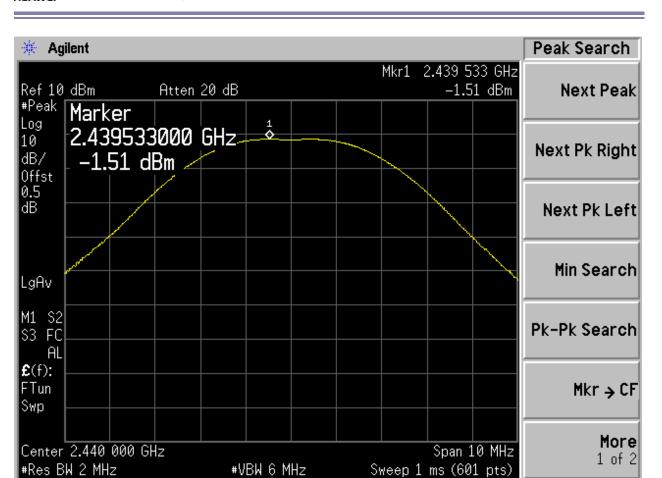
EUT Conf.	Maximum Peak Conducted Output Power [dBm]	Verdict
TX-B	-1.00	Pass
TX-M	-1.51	Pass
TX-T	-2.13	Pass

#### 2 Test Plot

#### 2.1 TX-B



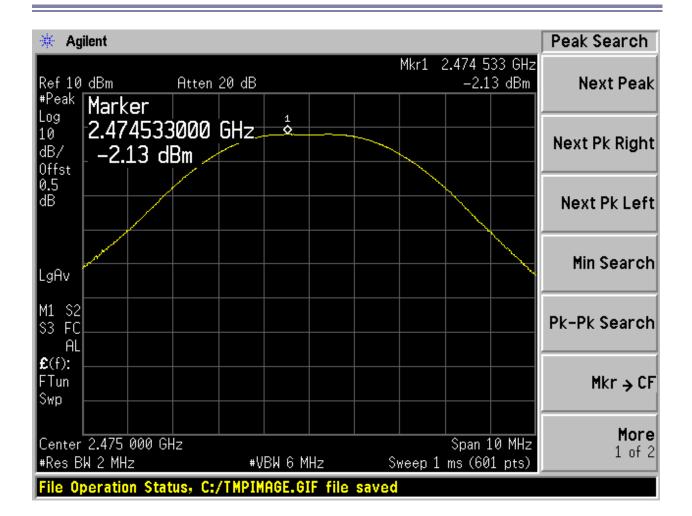
## 2.2 TX-M



### 2.3 TX-T

Report No: SYBH(R)01424348EB-1

File Operation Status, C:/TMPIMAGE.GIF file saved



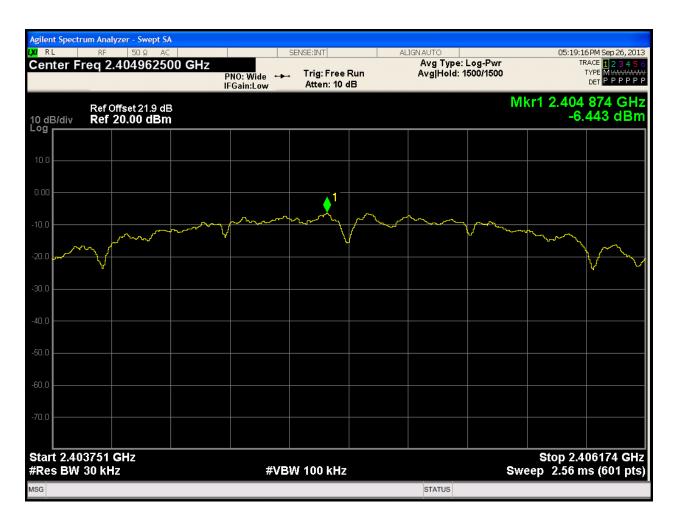
# Annex D: Maximum Power Spectral Density Level

# 1 Result Table

EUT Conf.	Maximum Power Spectral Density Level [dBm]	Verdict
TX-B	-6.44	Pass
TX-M	-6.94	Pass
TX-T	-8.06	Pass

#### 2 Test Plot

#### 2.1 TX-B



## 2.2 TX-M



# 2.3 TX-T



# **Annex E: Unwanted Emissions into Non-Restricted Frequency Bands**

In this Annex, the "Pref", which is used as the reference level, refers to the peak power level in any 100 kHz bandwidth within the fundamental emission, the "Puw" referrers to the maximum emission power in 100 kHz band segments outside of the authorized frequency band.

Considering that the higher ratio of RBW to the span for the frequency ranges below 30 MHz makes the results determination be complicated, a narrower RBW other than 100 kHz is used for these ranges. The measured value should add a RBW correction factor (RBWCF) where RBWCF [dB] =  $10 \times lg(100 \text{ [kHz]/narrower RBW [kHz]})$ . As to this Annex, the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

In the result table, the "< Limit" denotes that "The Puw [dBm] is less than Pref [dBm] – 20 [dB], see test plots for detailed".

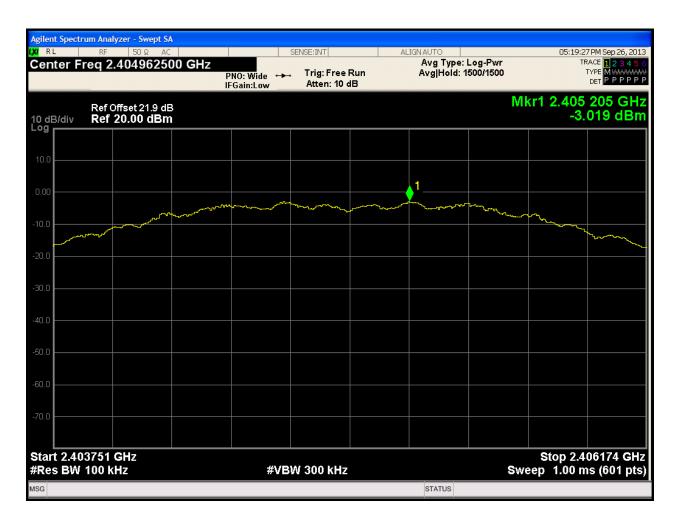
#### 1 Result Table

EUT Conf.	Pref [dBm]	Puw [dBm]	Verdict
TX-B	-3.02	< Limit	Pass
TX-M	-3.65	< Limit	Pass
TX-T	-4.41	< Limit	Pass

#### 2 Test Plot

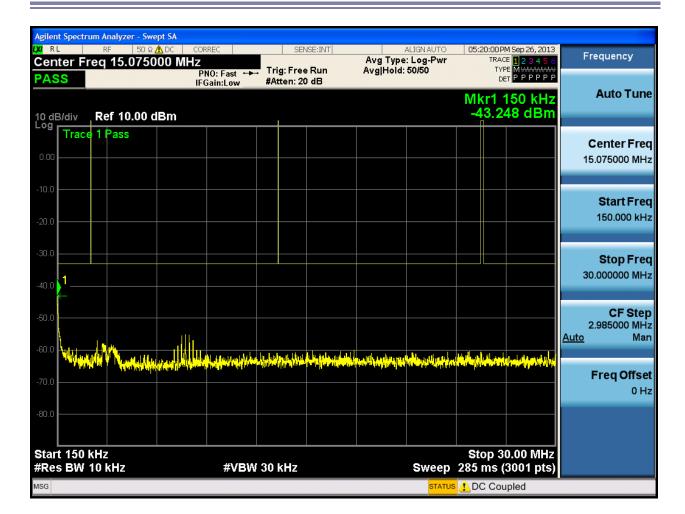
#### 2.1 TX-B

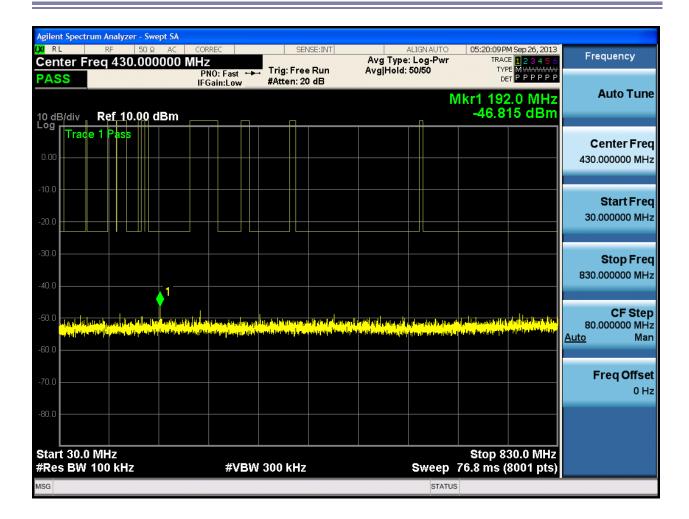
#### 2.1.1 Pref

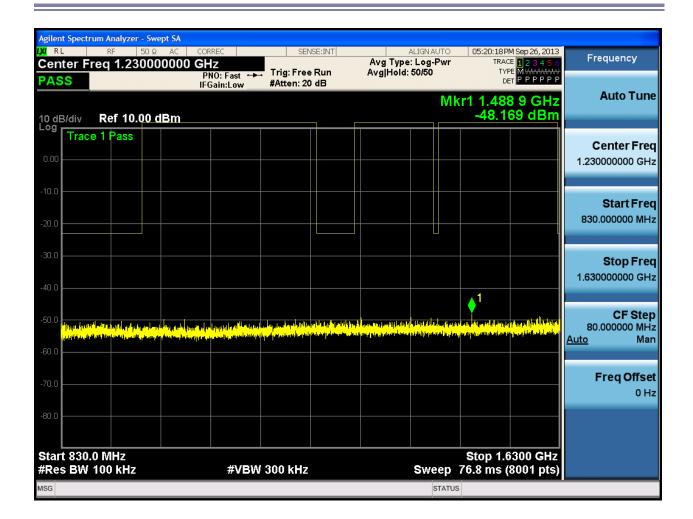


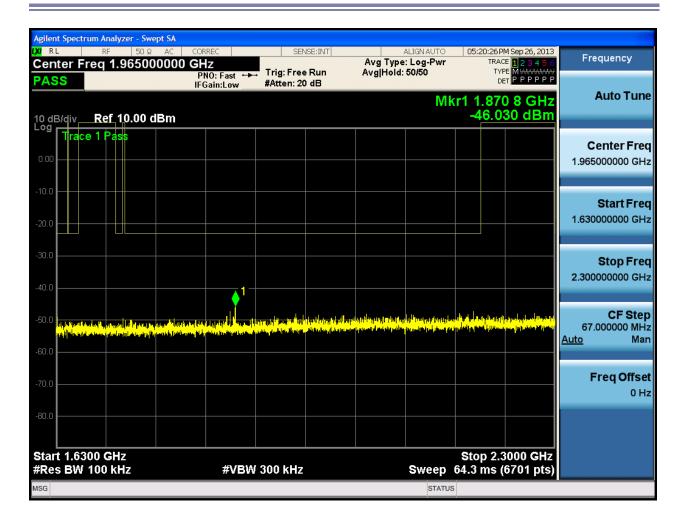
# 2.1.2 Puw

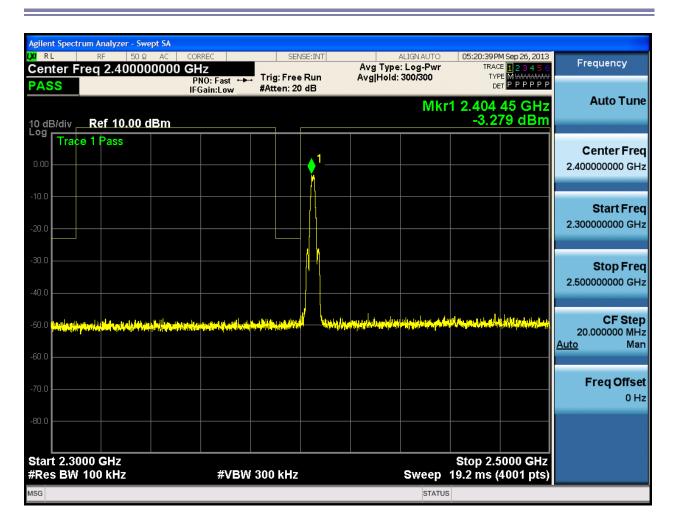


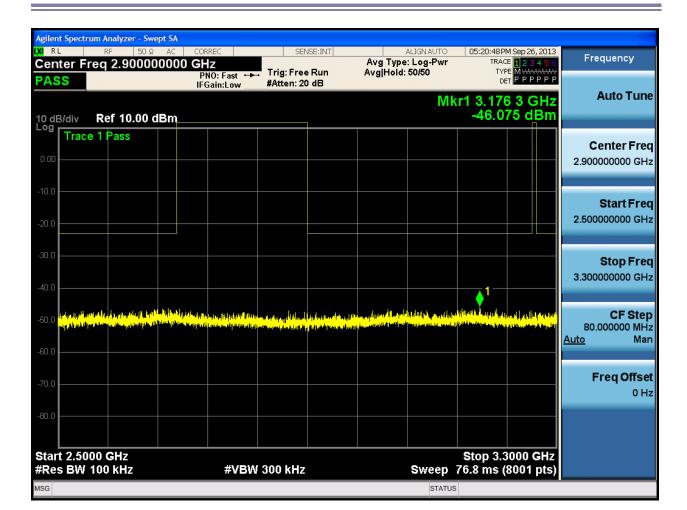












Sweep 76.8 ms (8001 pts)

STATUS

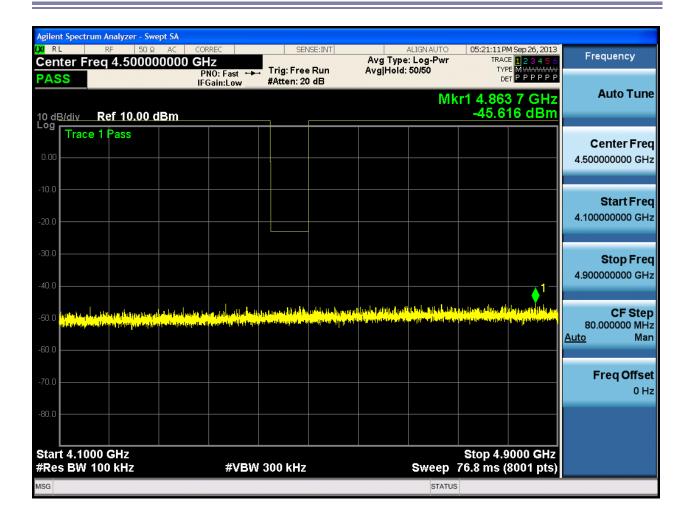
#Res BW 100 kHz

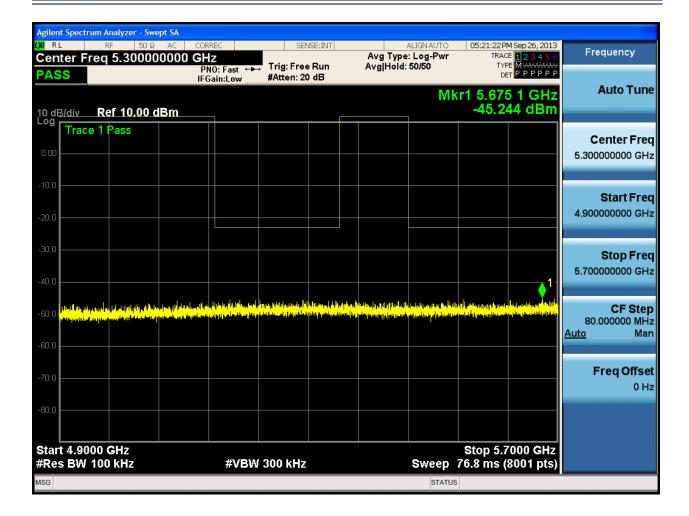
Report No: SYBH(R)01424348EB-1

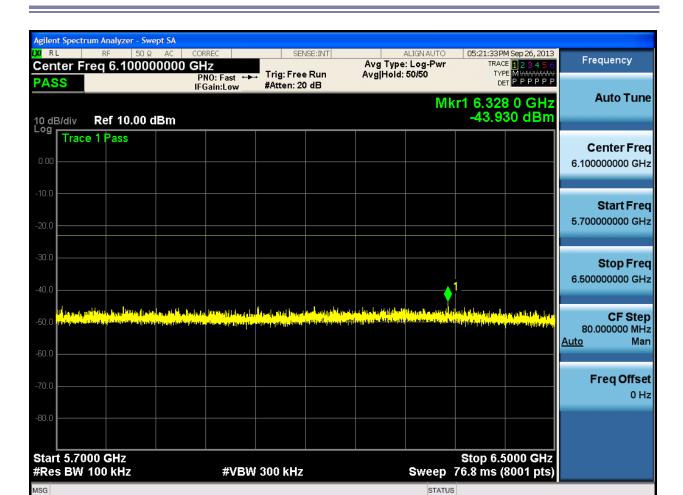
MSG



**#VBW** 300 kHz







Stop 7.3000 GHz

Sweep 76.8 ms (8001 pts)

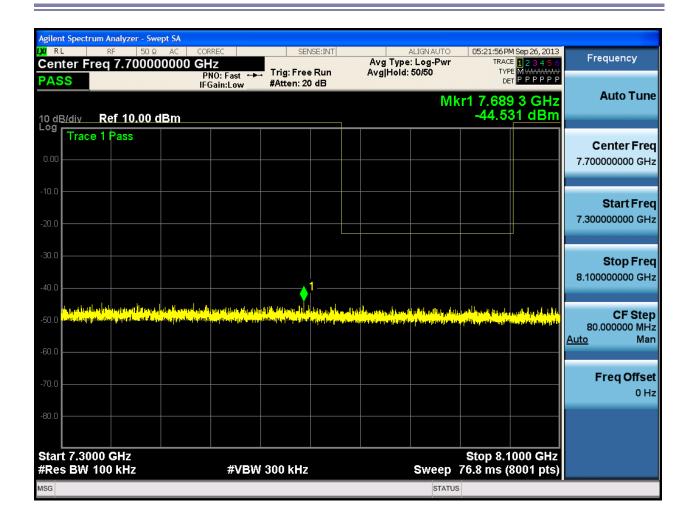
STATUS

Start 6.5000 GHz #Res BW 100 kHz

MSG

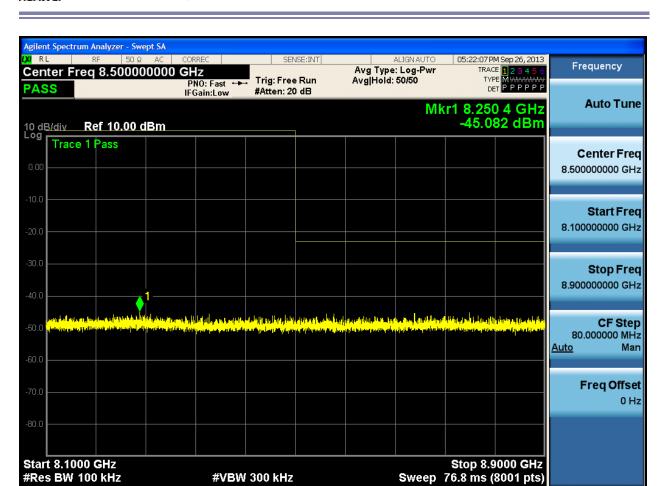
Agilent Spectrum Analyzer - Swept SA 05:21:45 PM Sep 26, 2013 Frequency Avg Type: Log-Pwr Avg|Hold: 50/50 TRACE 1 2 3 4 5 6
TYPE M WWWWW
DET P P P P P P Center Freq 6.900000000 GHz Trig: Free Run PNO: Fast IFGain:Low **PASS** #Atten: 20 dB **Auto Tune** Mkr1 7.213 5 GHz -43.504 dBm 10 dB/div Log Ref 10.00 dBm Trace 1 Pass Center Freq 6.900000000 GHz Start Freq 6.500000000 GHz Stop Freq 7.300000000 GHz **CF Step** 80.000000 MHz Man <u>Auto</u> Freq Offset 0 Hz

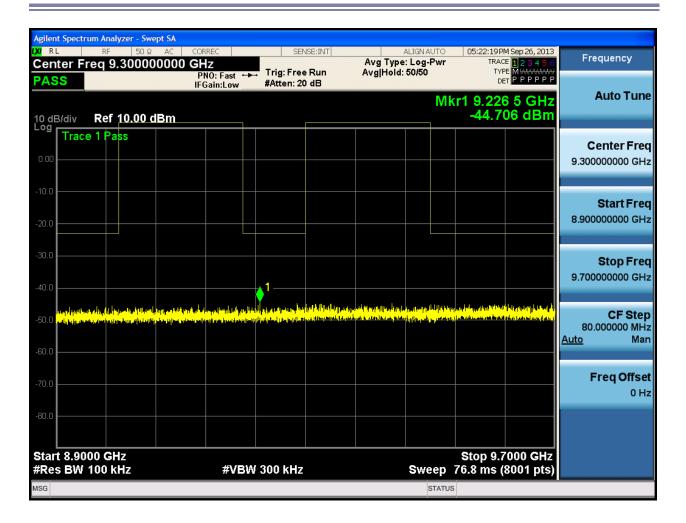
**#VBW** 300 kHz

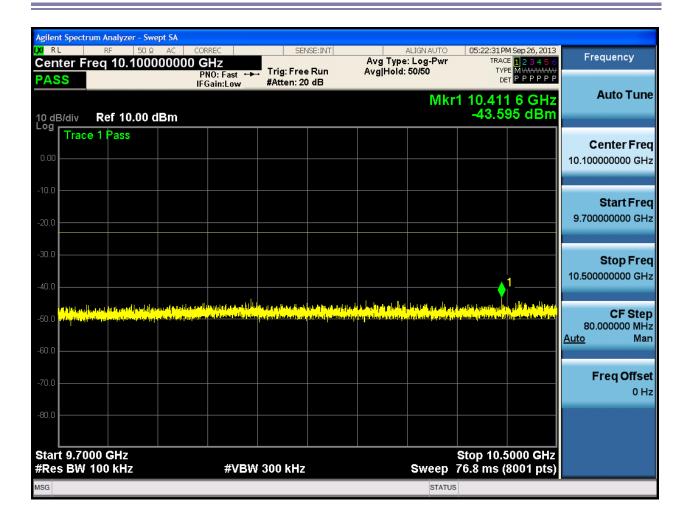


STATUS

MSG

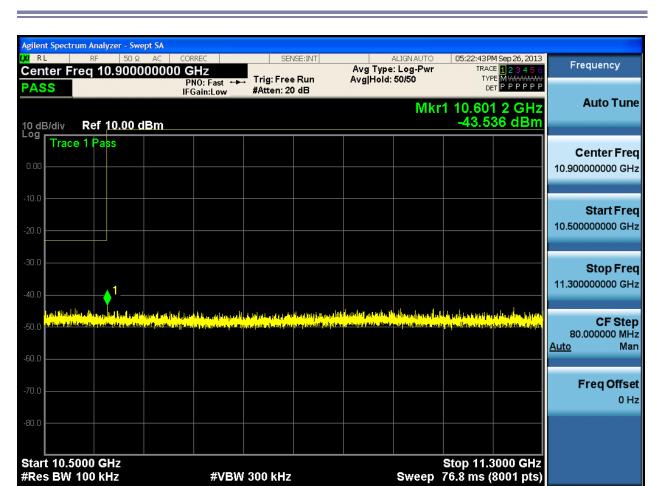




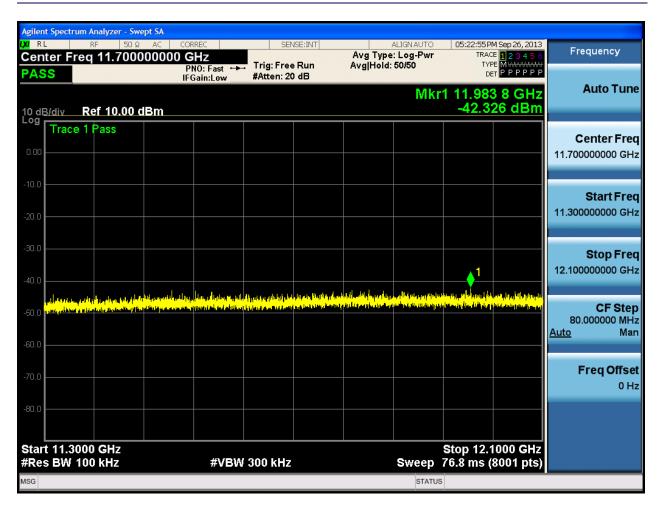


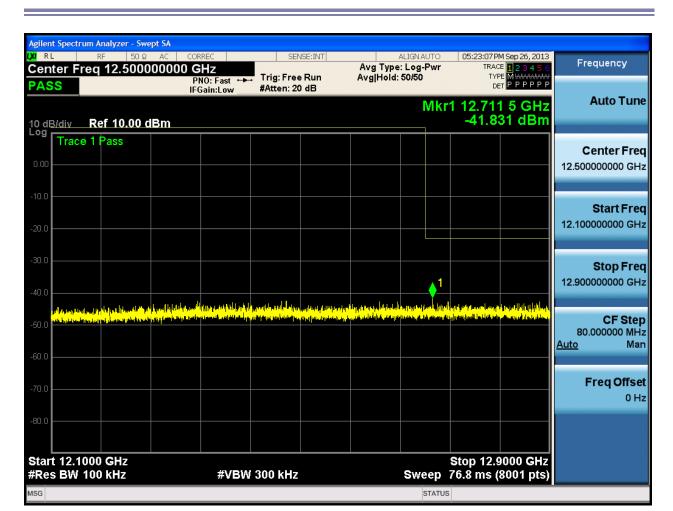
MSG

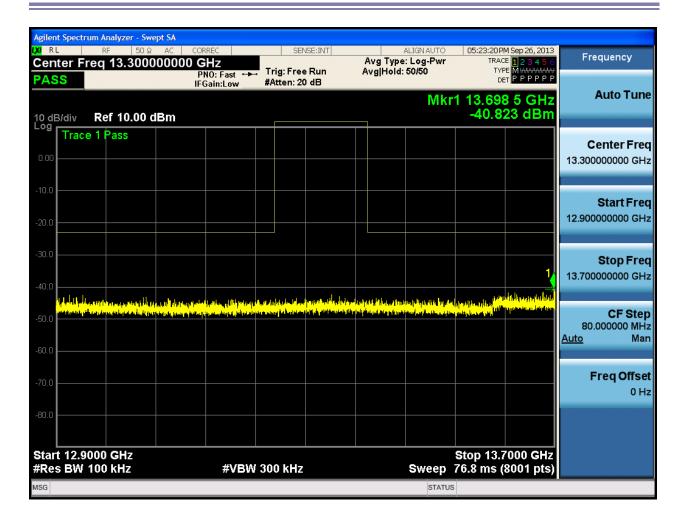
Report No: SYBH(R)01424348EB-1

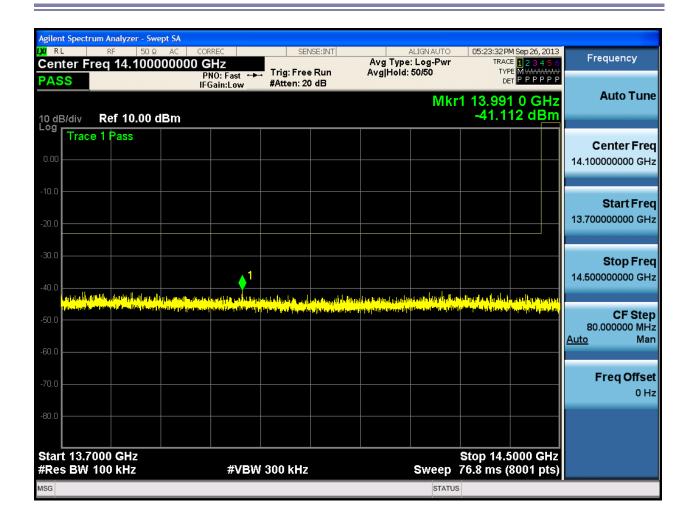


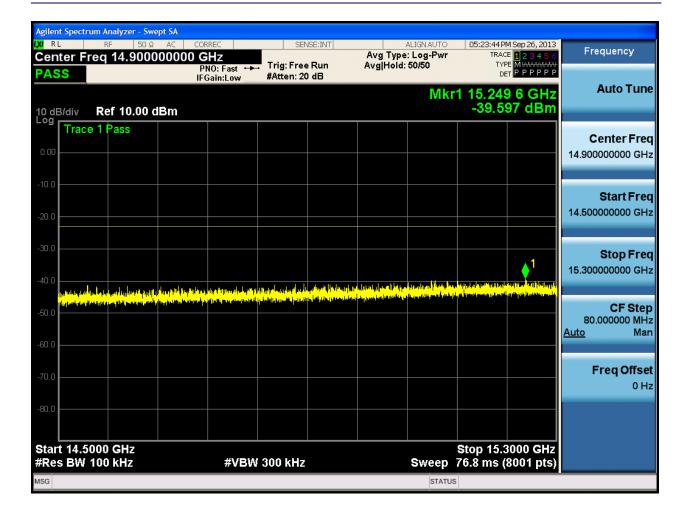
STATUS

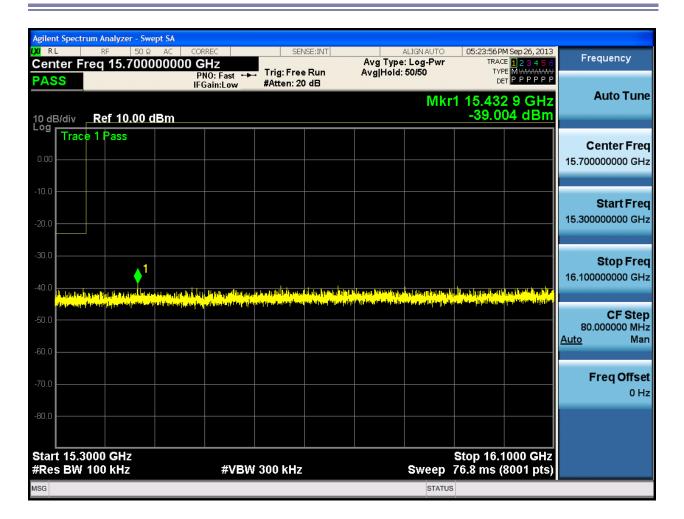


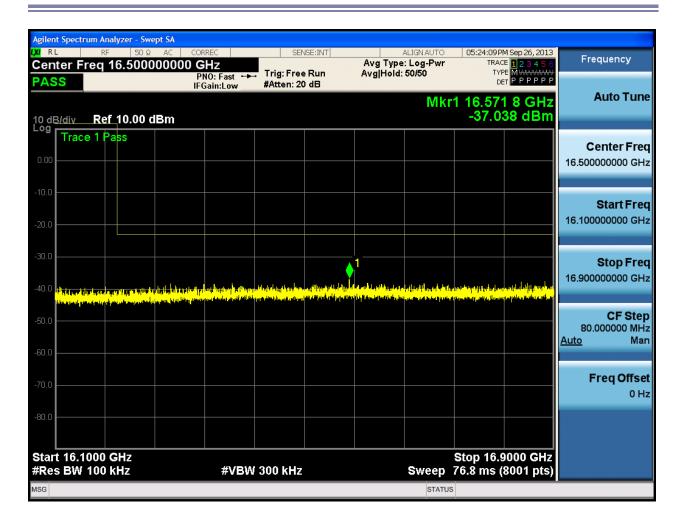


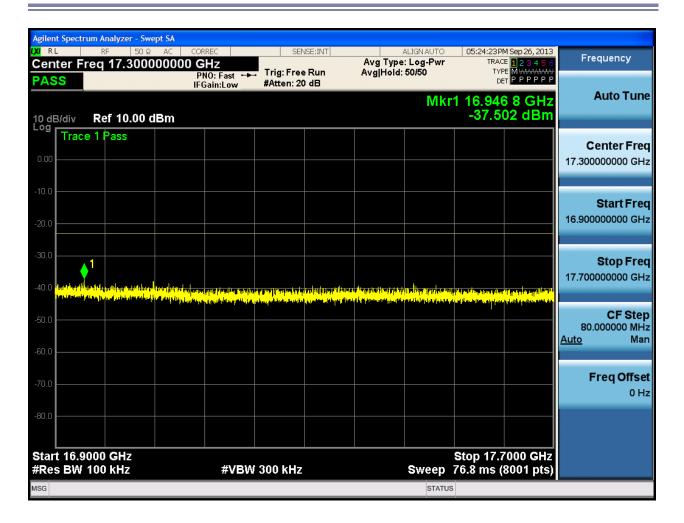


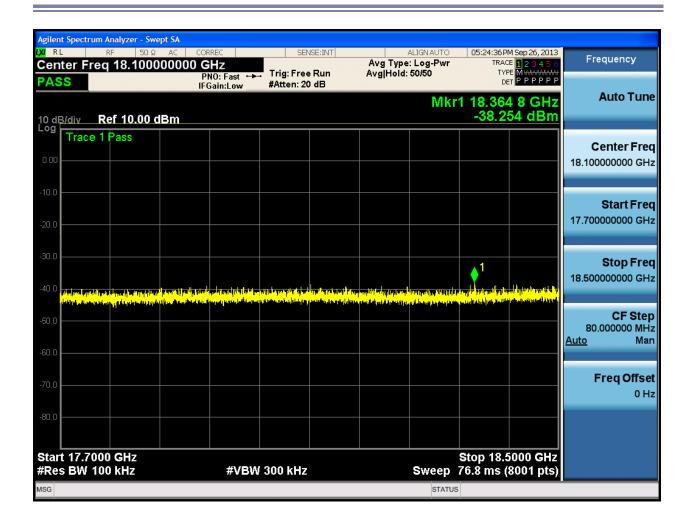


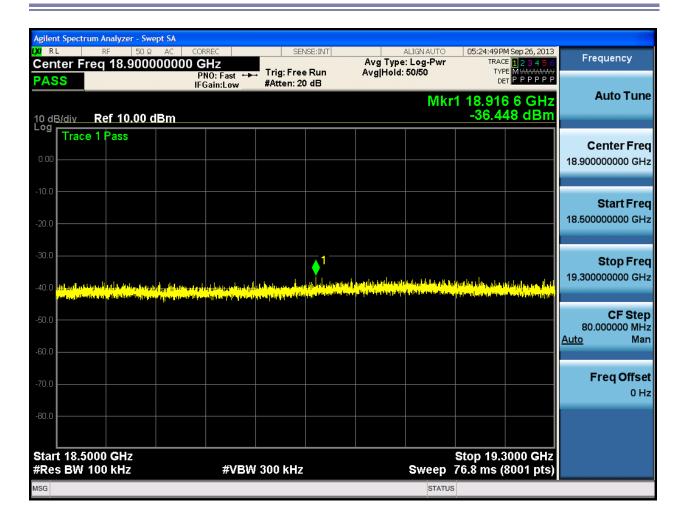


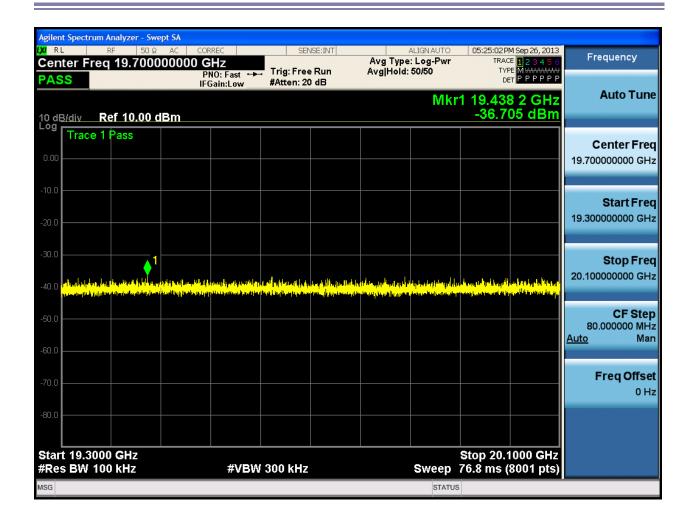


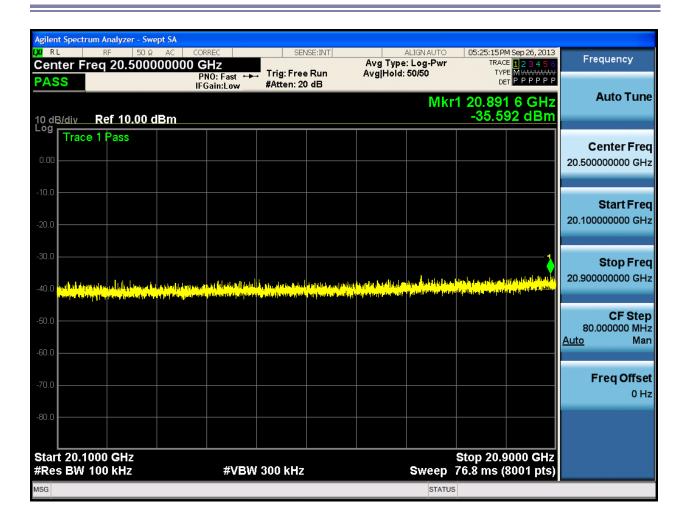


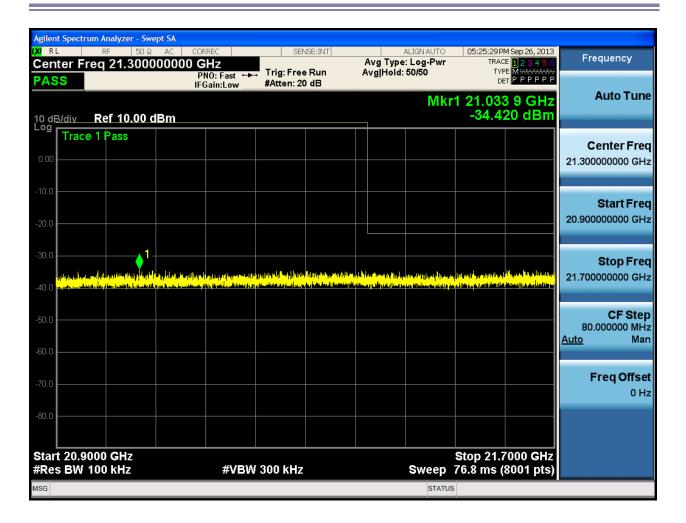


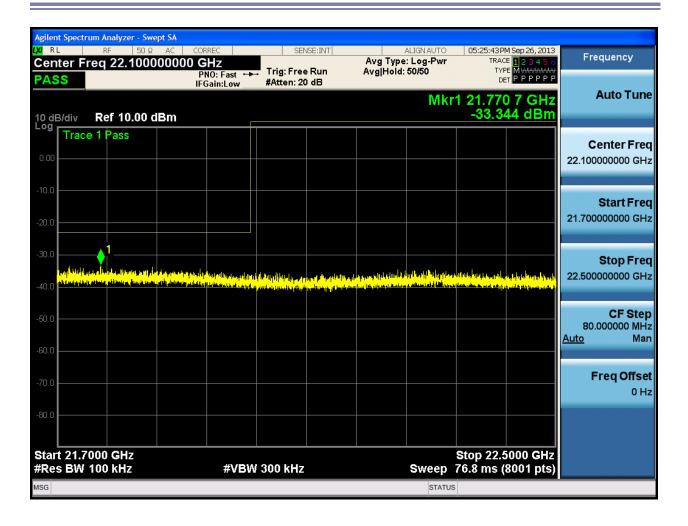


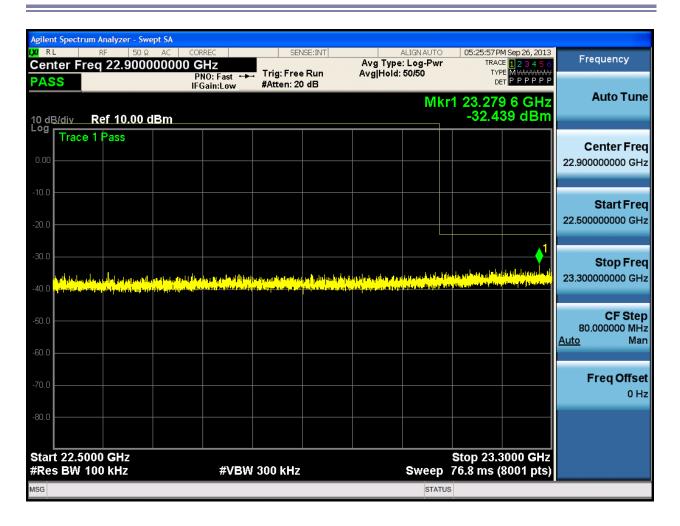


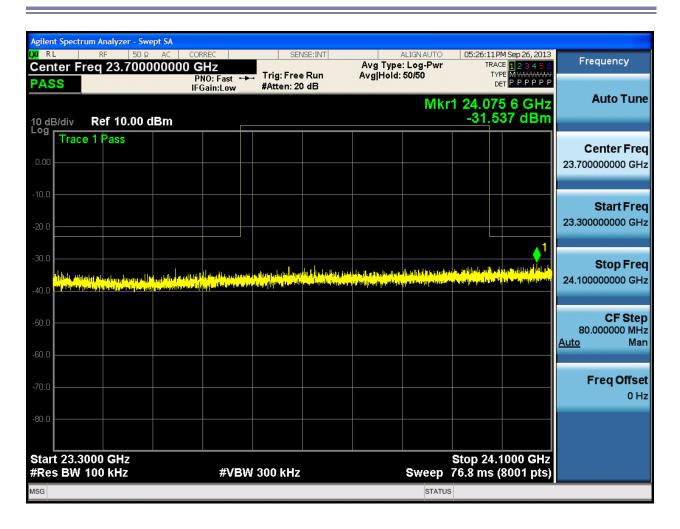


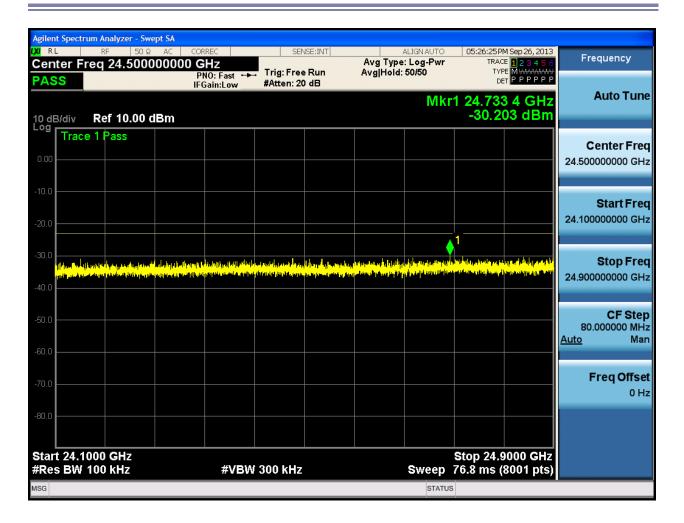


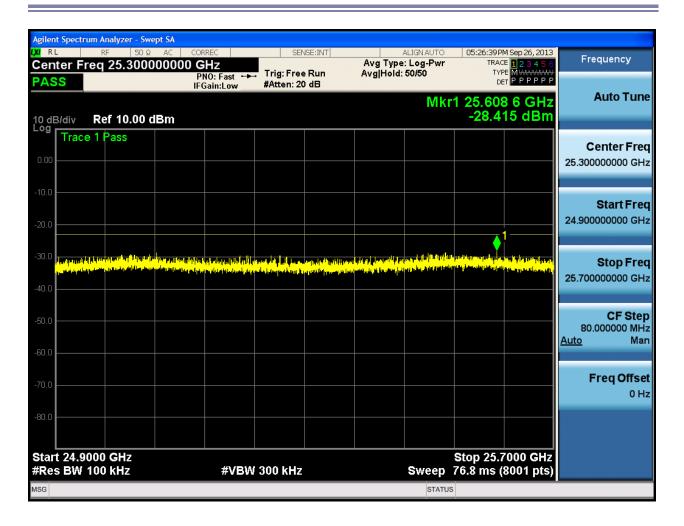


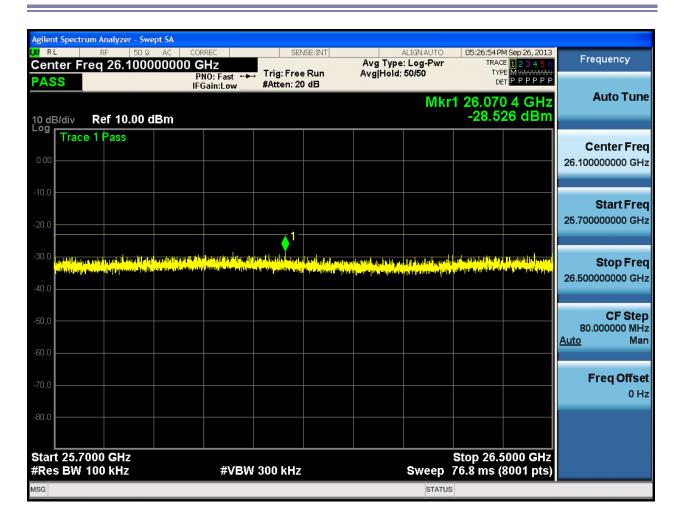










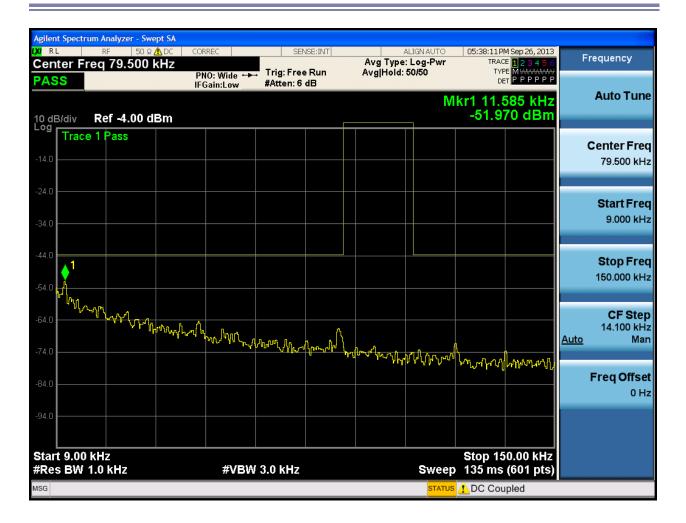


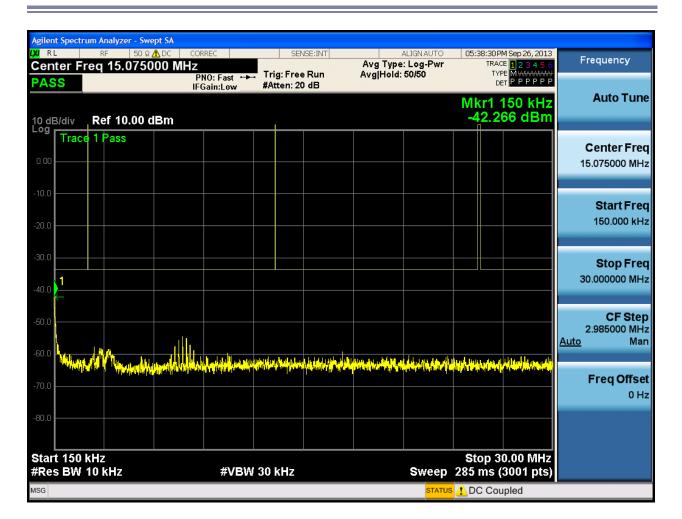
## 2.2 TX-M

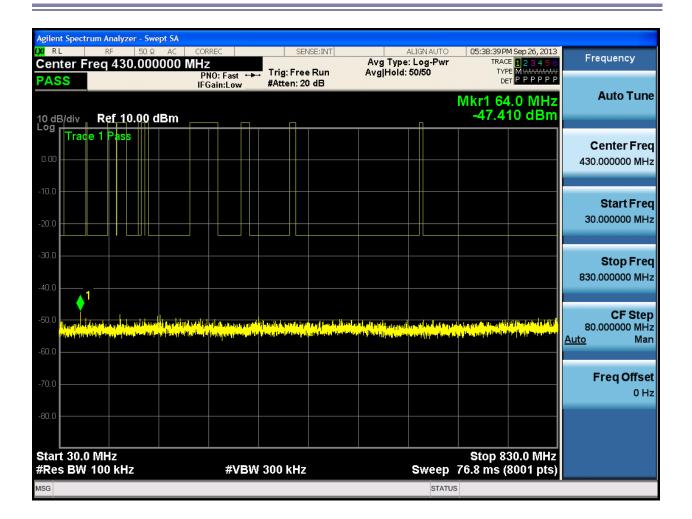
## 2.2.1 Pref

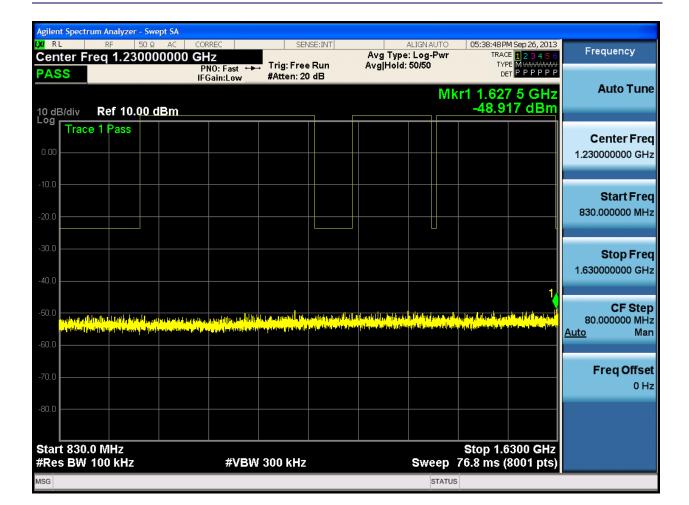


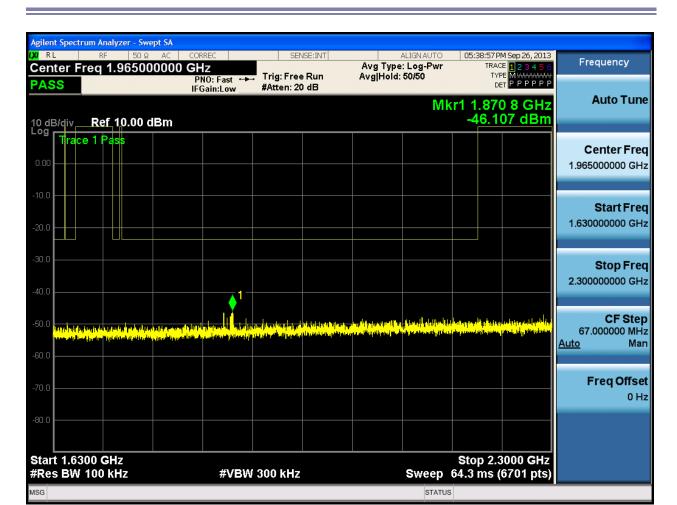
## 2.2.2 Puw

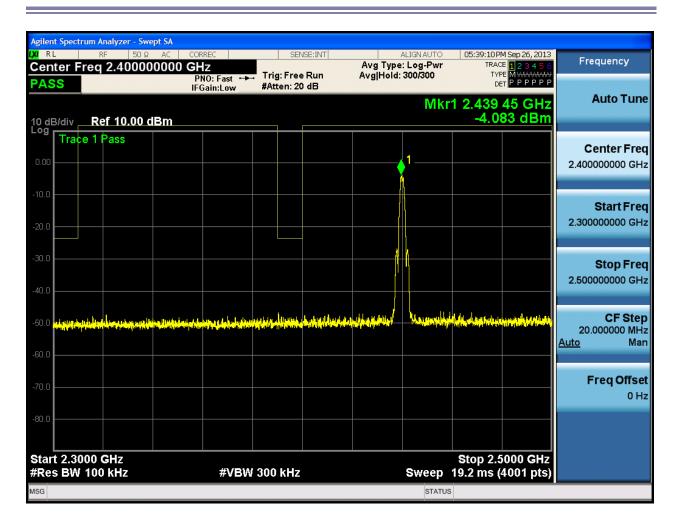


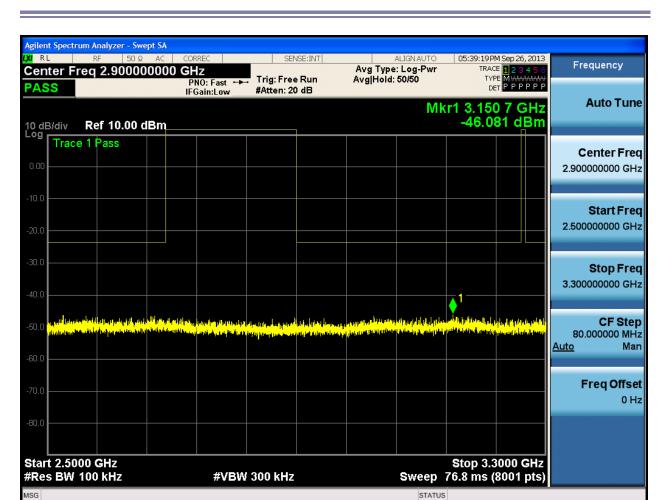


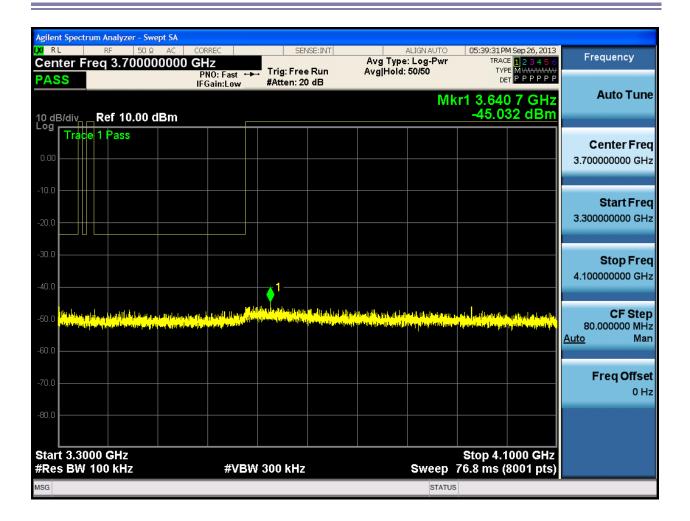


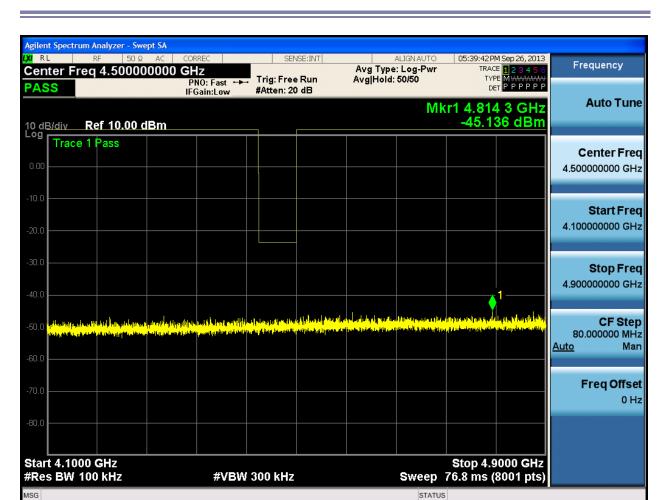


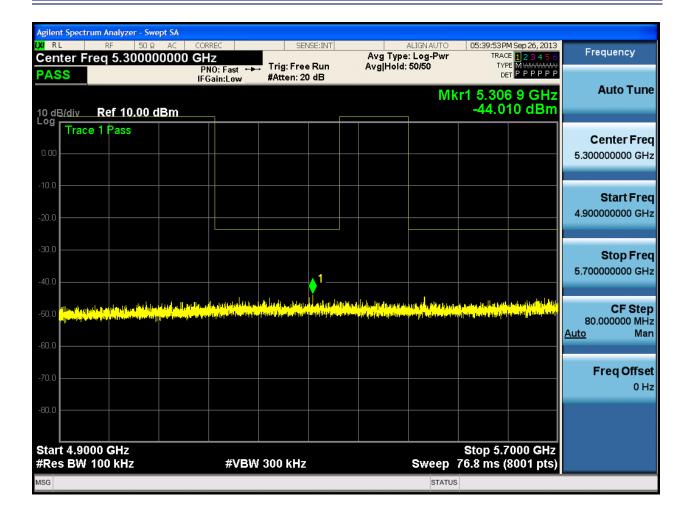


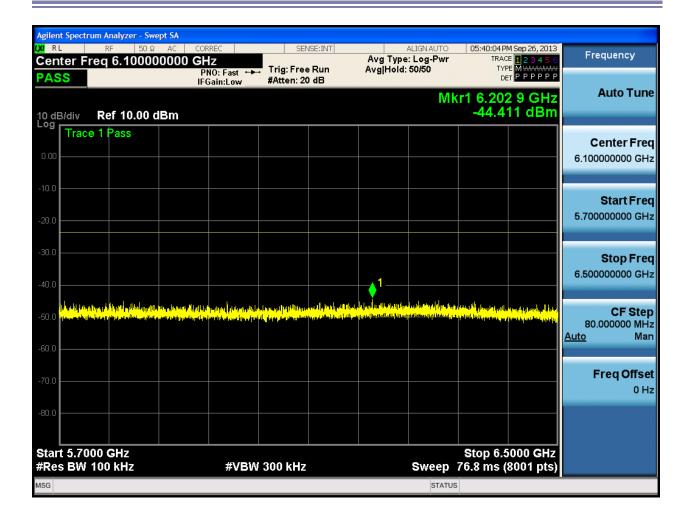


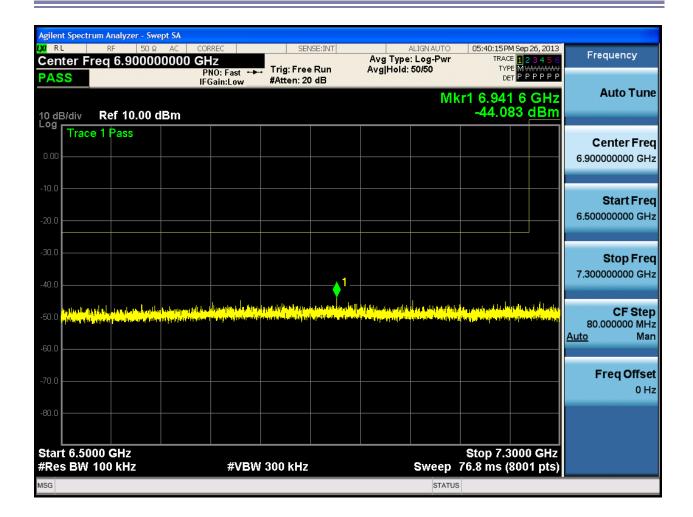


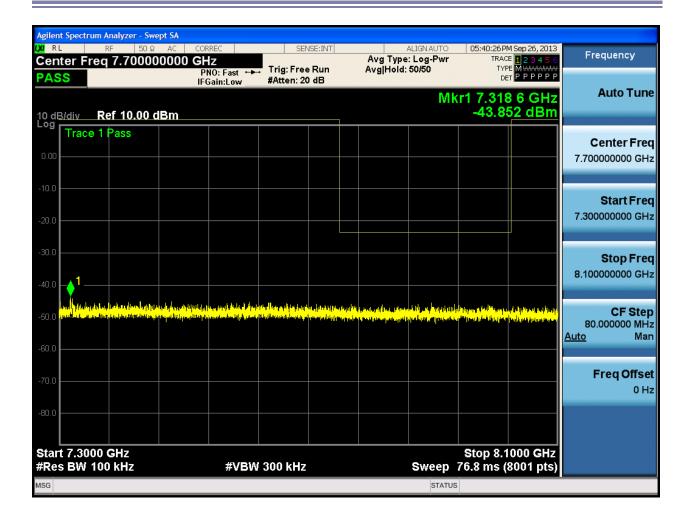


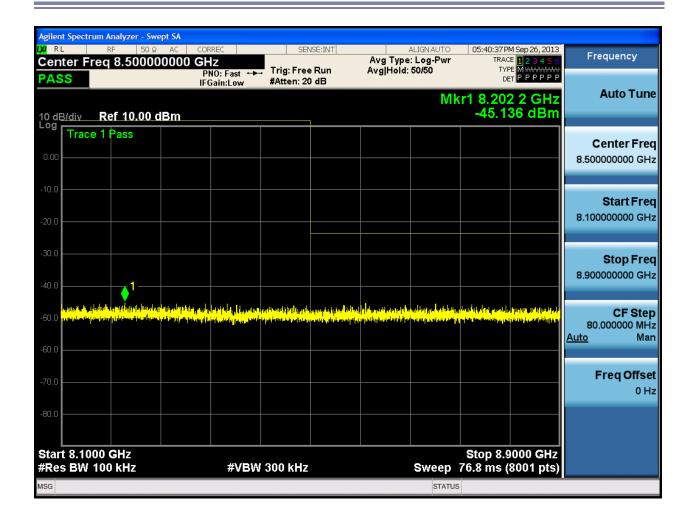


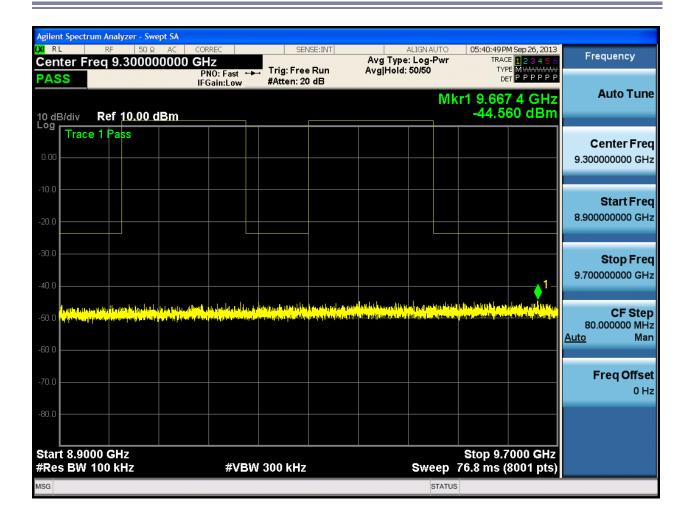


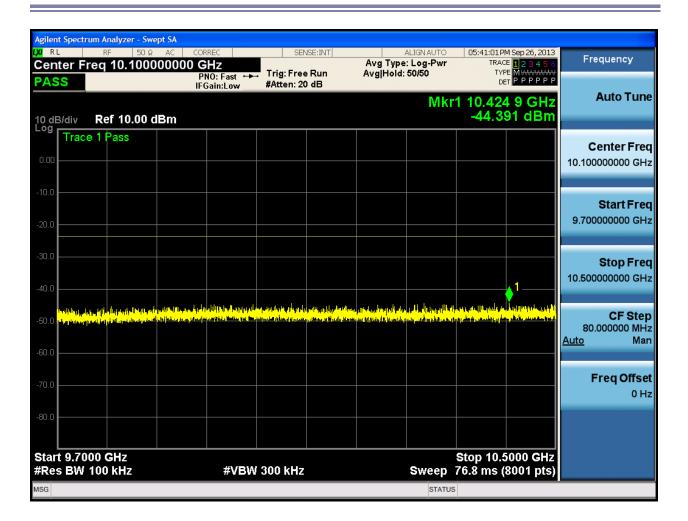


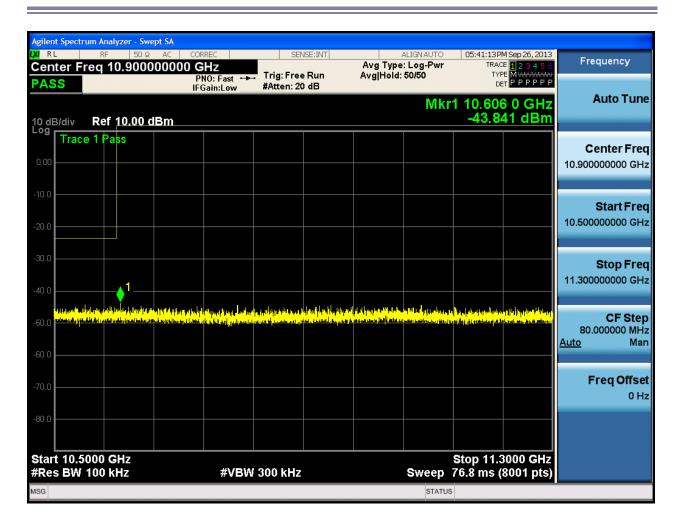


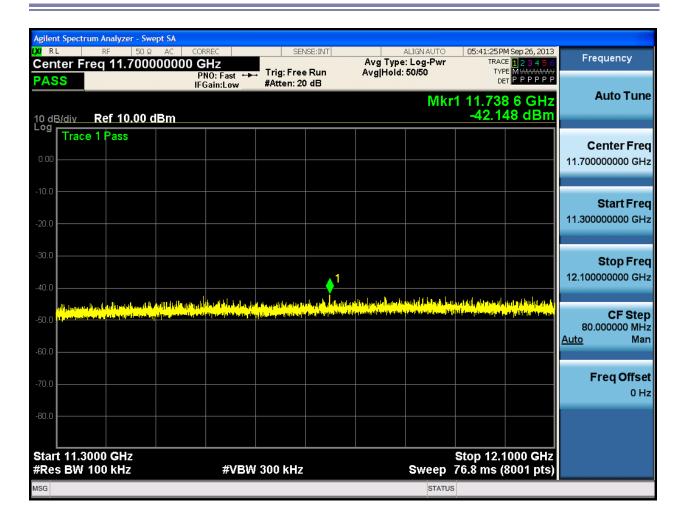


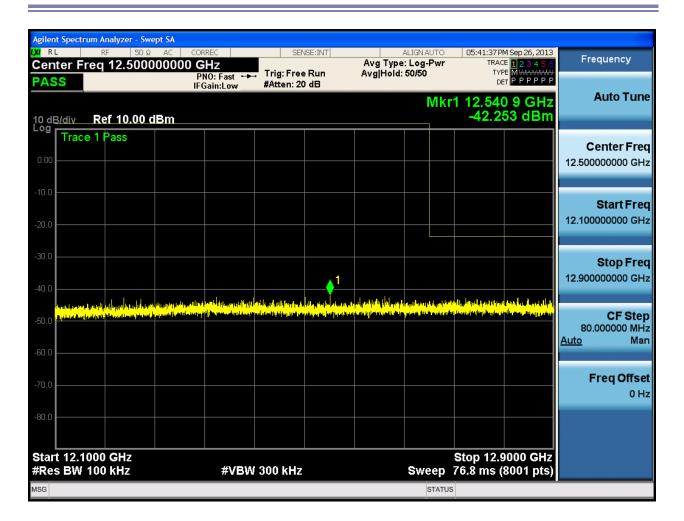


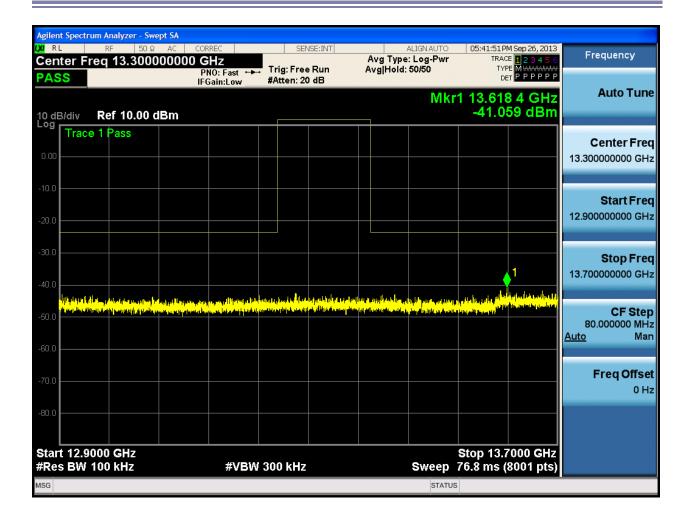


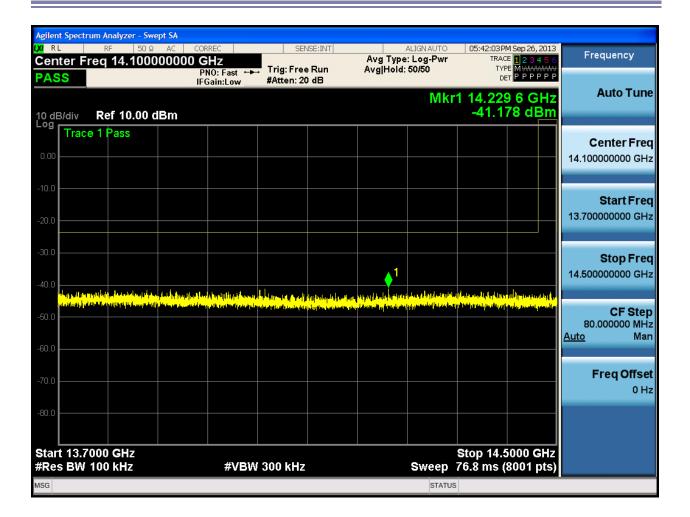


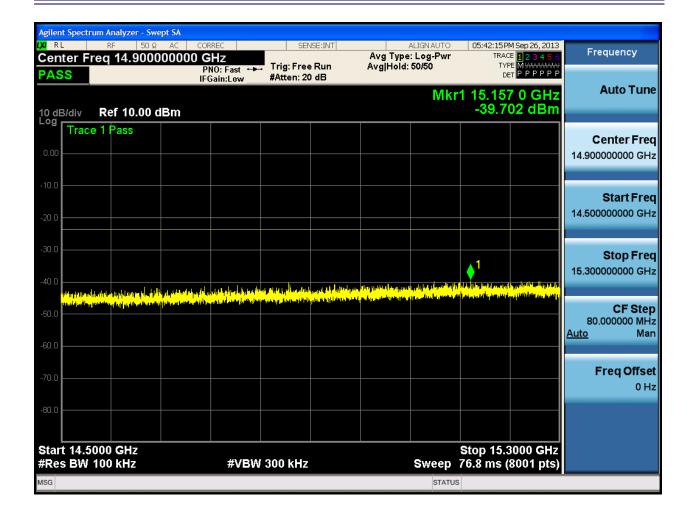


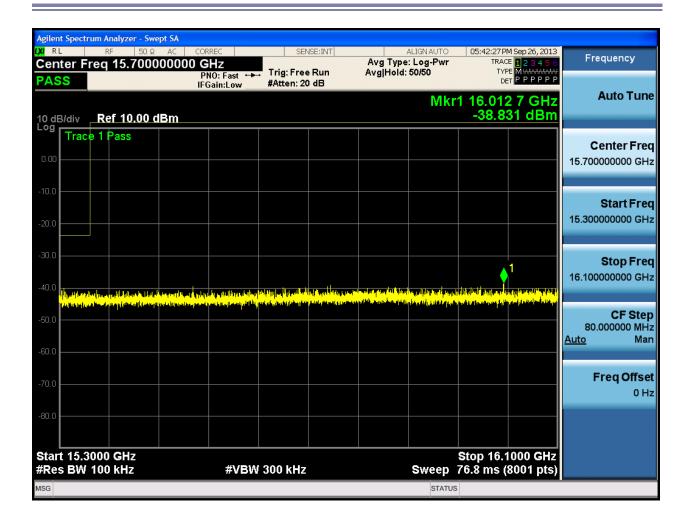








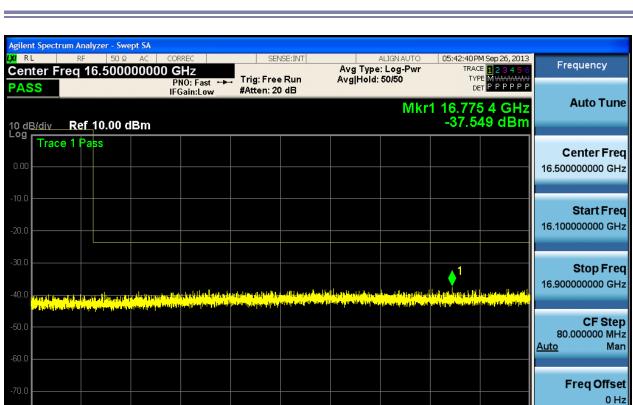




Start 16.1000 GHz #Res BW 100 kHz

Report No: SYBH(R)01424348EB-1

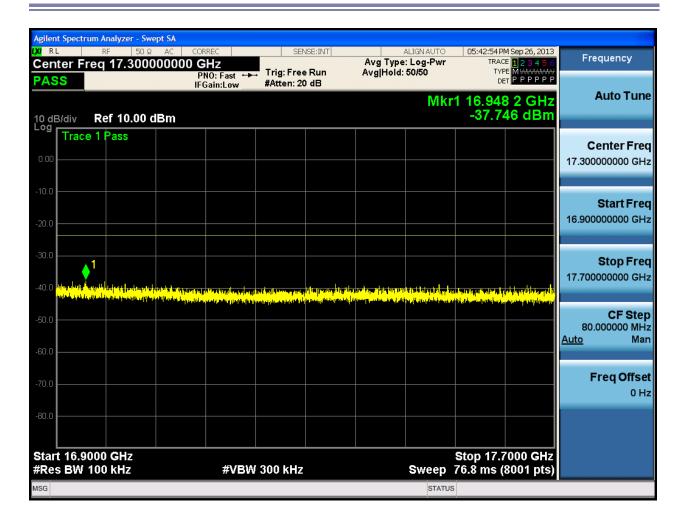
MSG

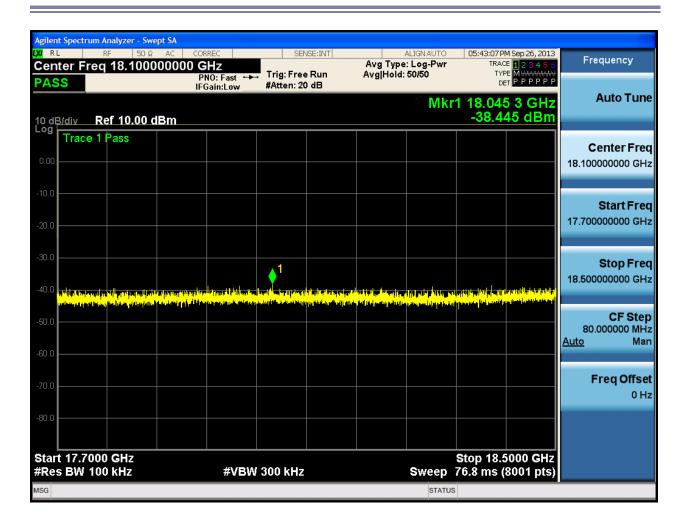


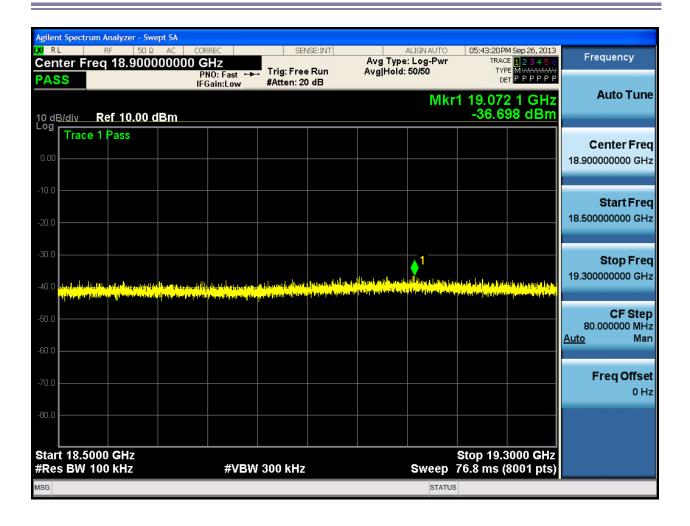
**#VBW** 300 kHz

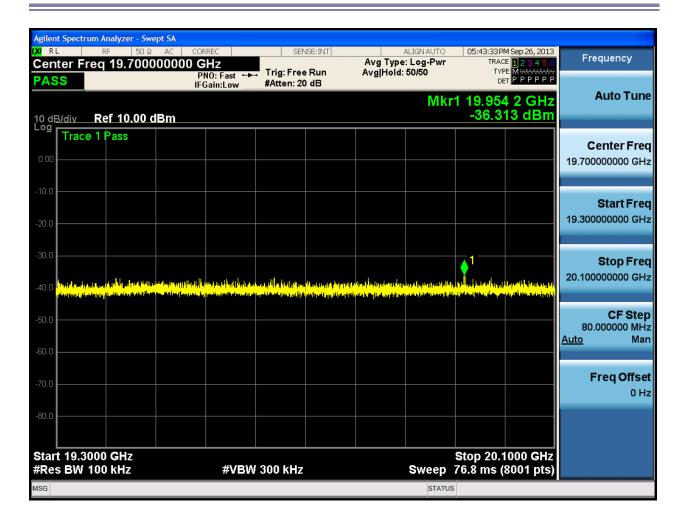
Stop 16.9000 GHz Sweep 76.8 ms (8001 pts)

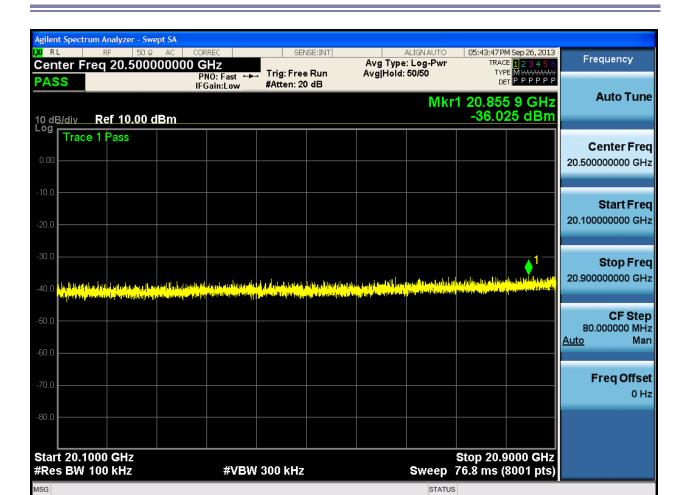
STATUS

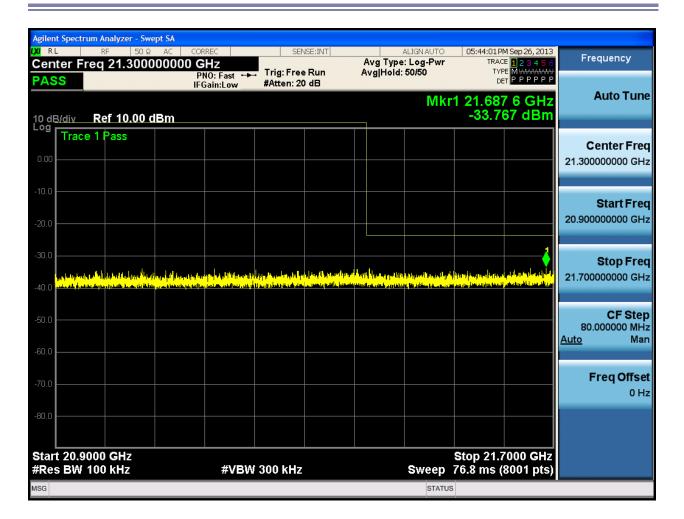


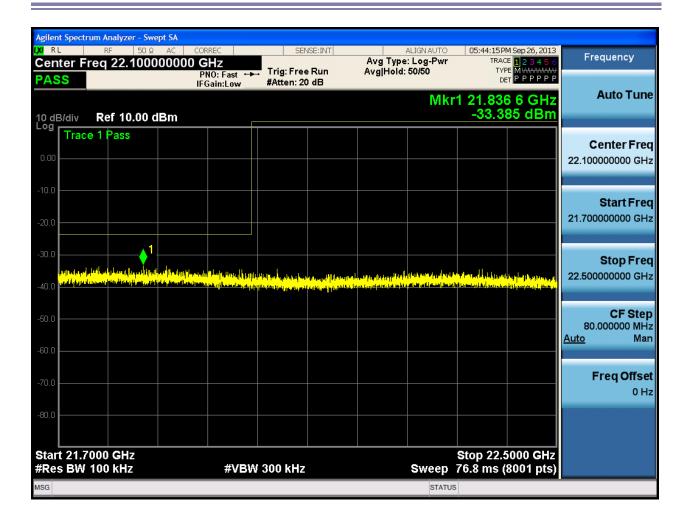


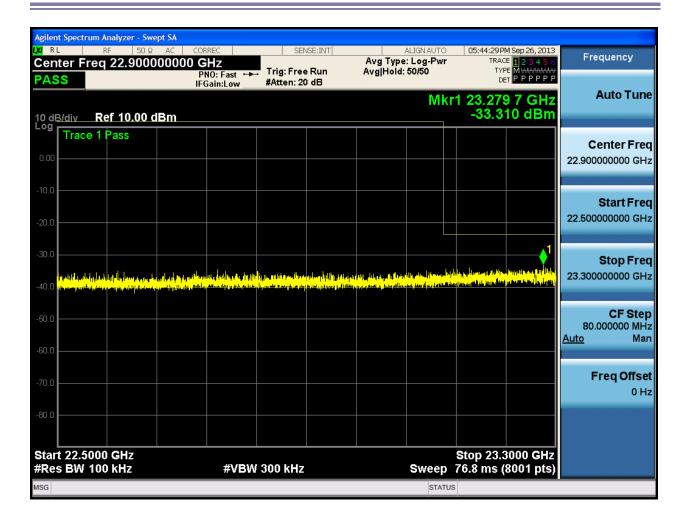


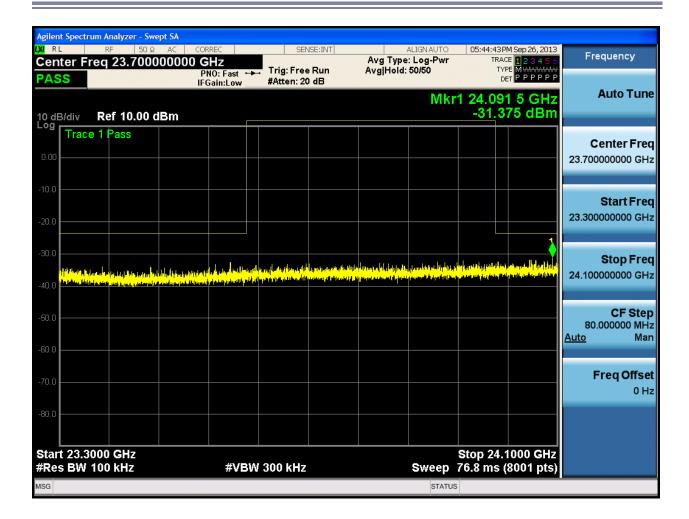


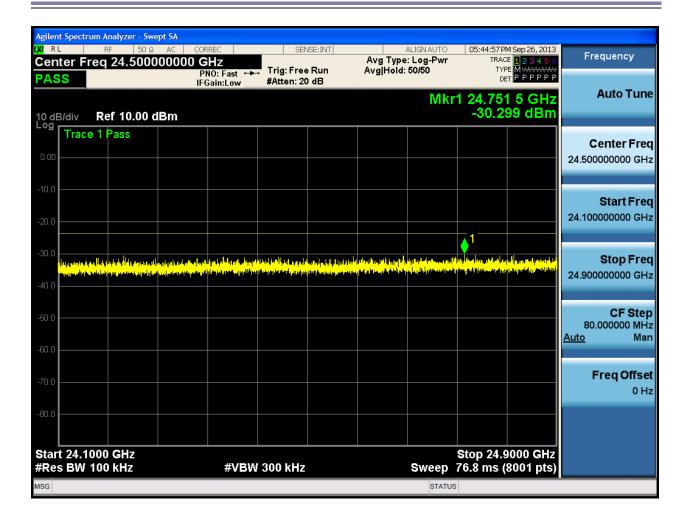


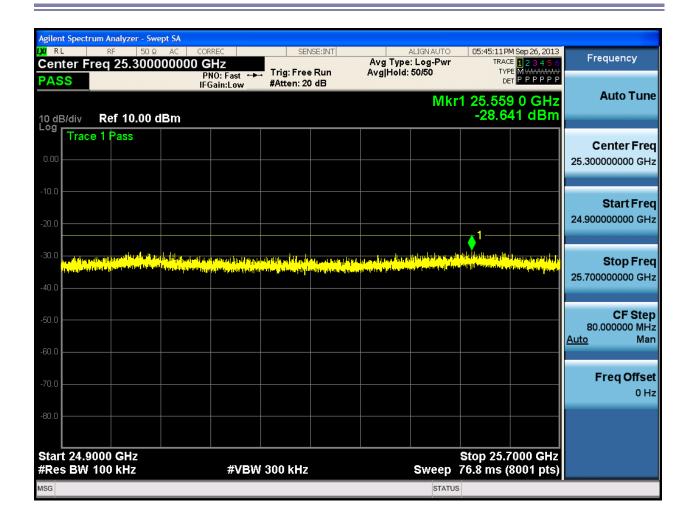


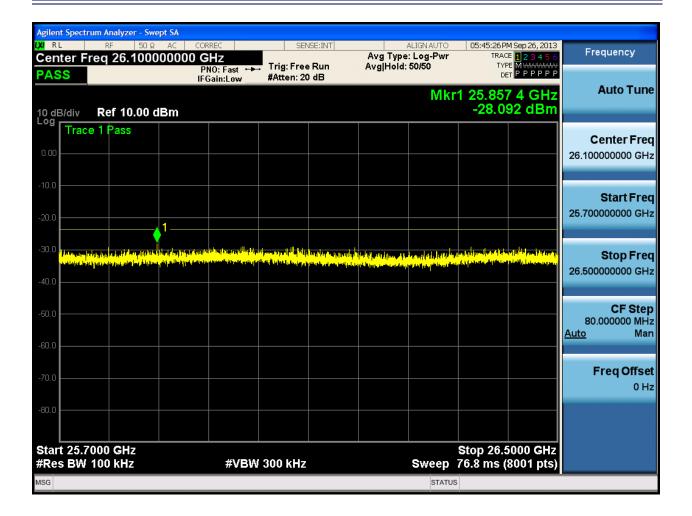












## 2.3 TX-T

## 2.3.1 Pref



## 2.3.2 Puw

Stop 150.00 kHz

Sweep 135 ms (601 pts)

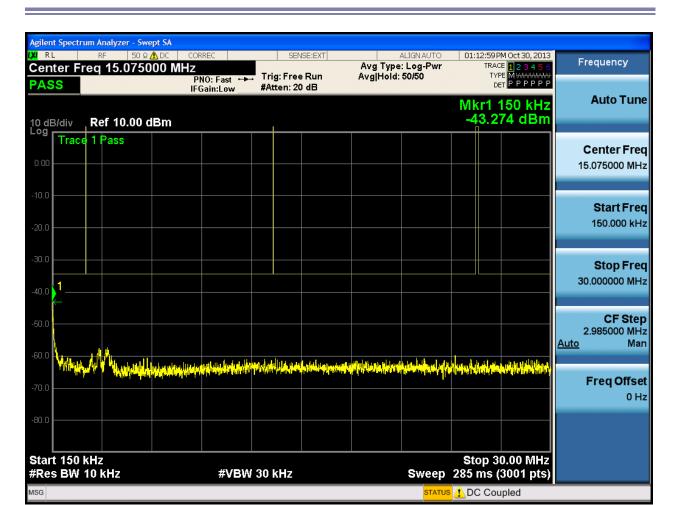
STATUS 1 DC Coupled

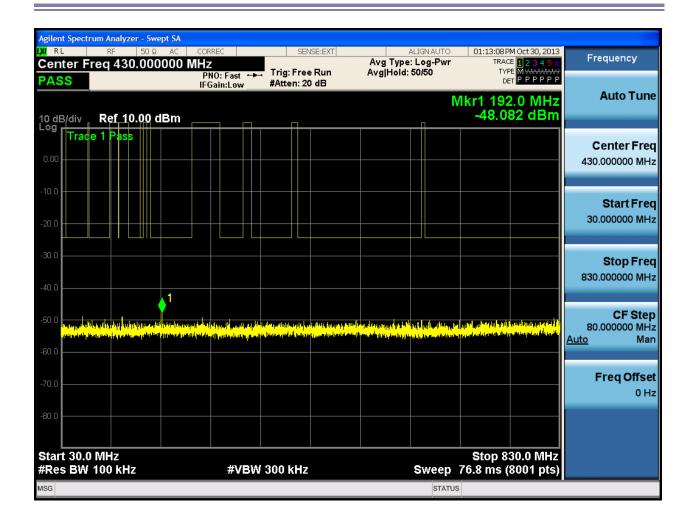
Start 9.00 kHz

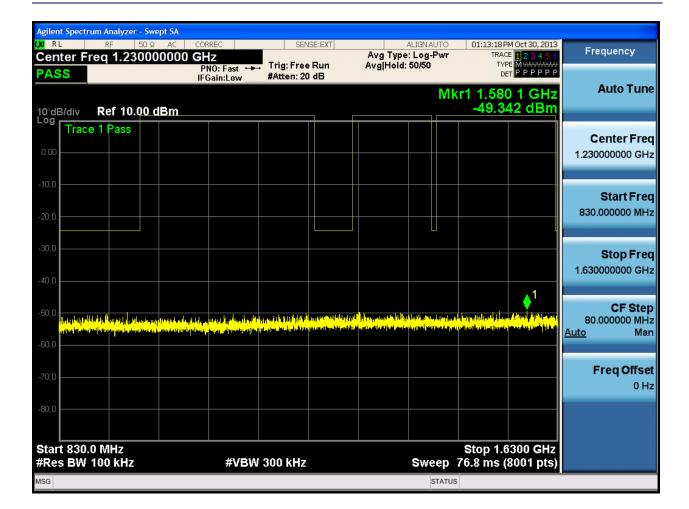
MSG

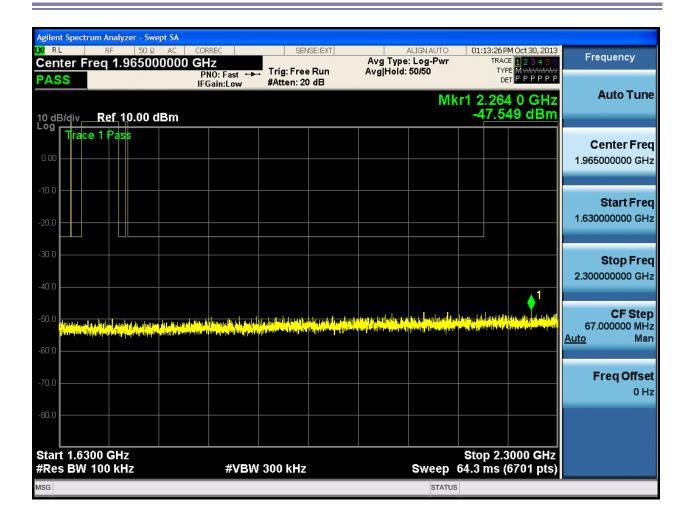
#Res BW 1.0 kHz

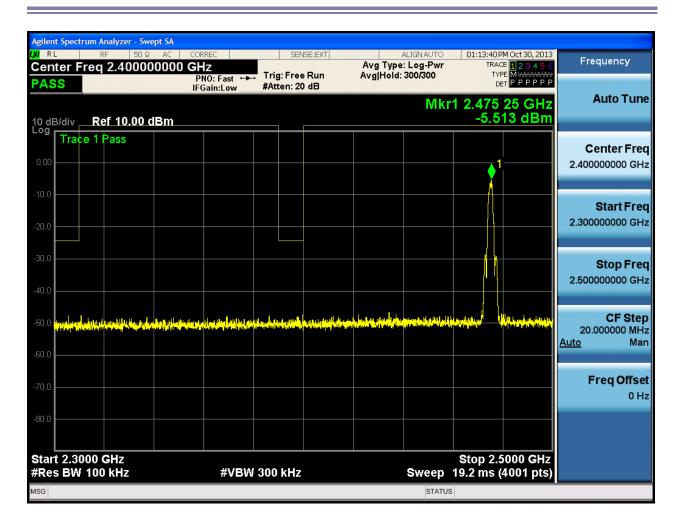
**#VBW 3.0 kHz** 

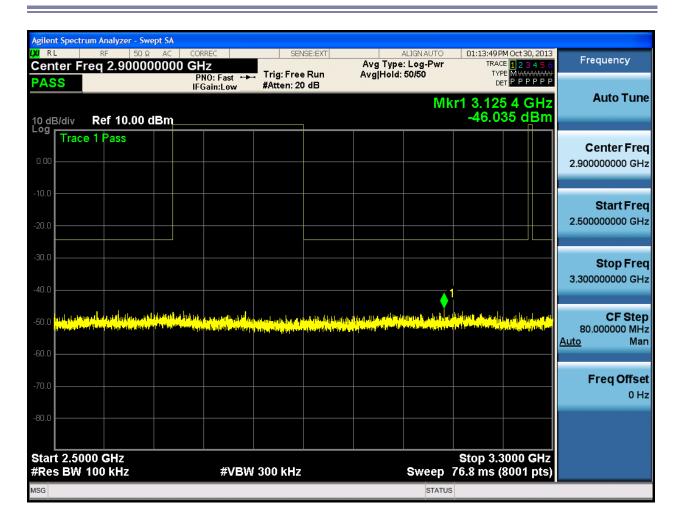


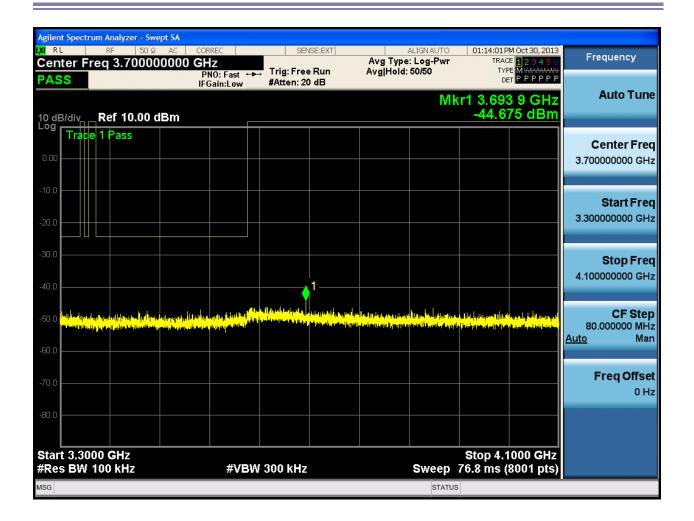


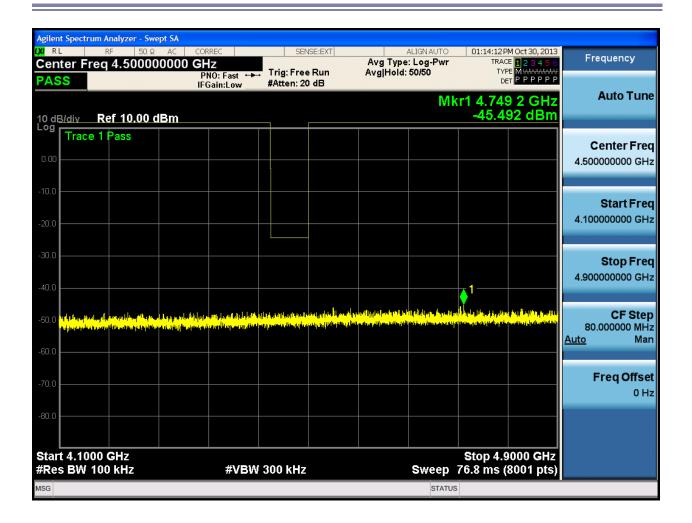


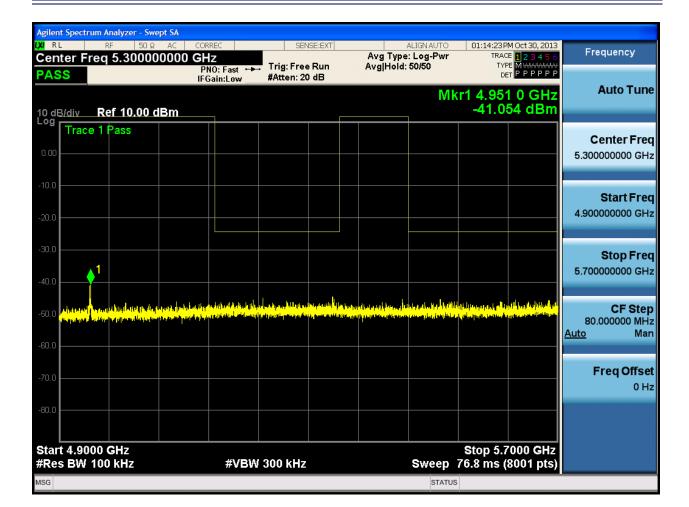


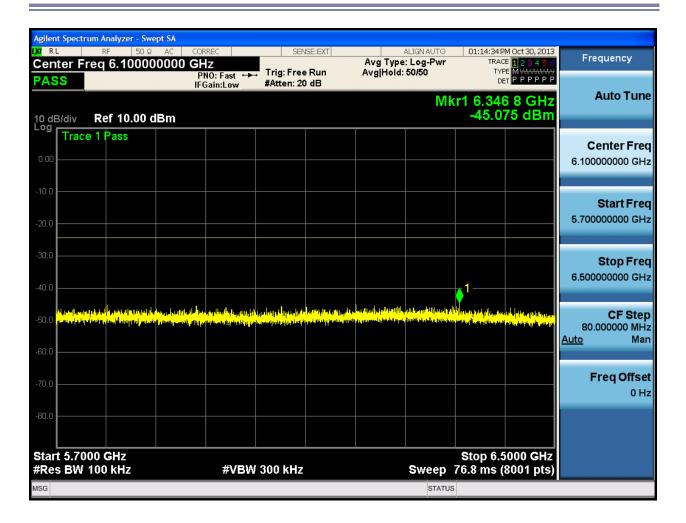


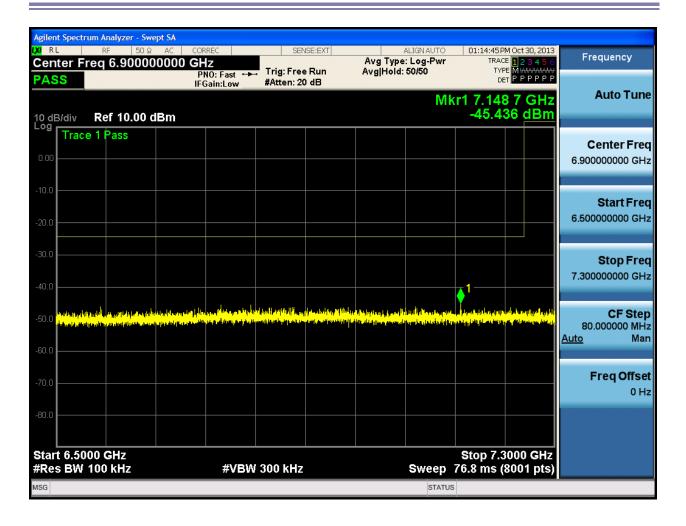


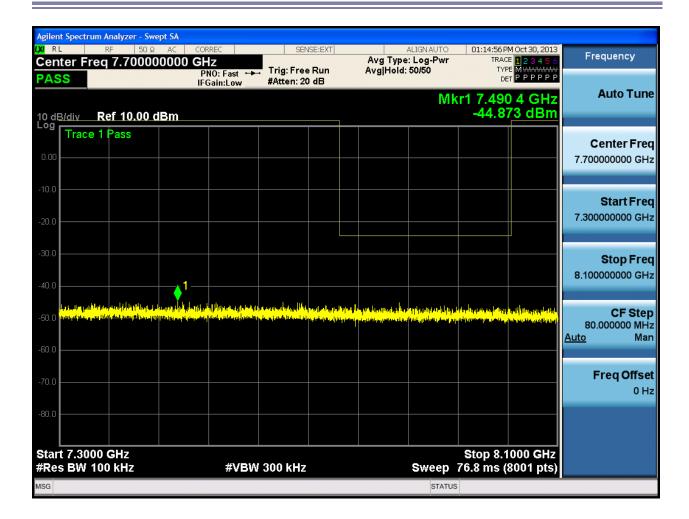


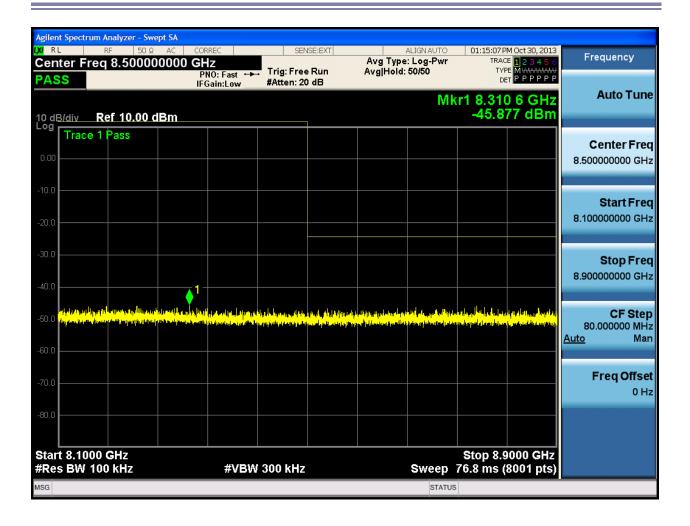


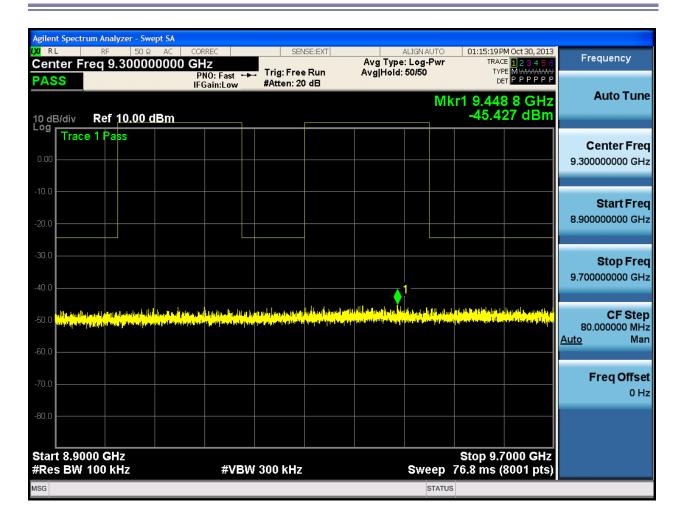


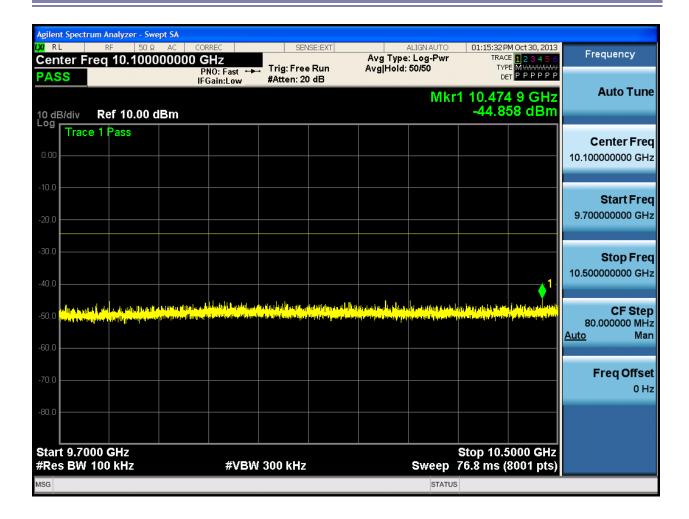


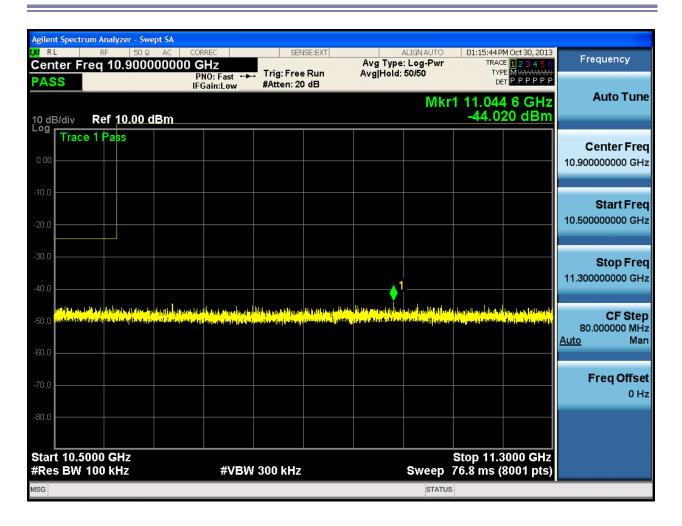


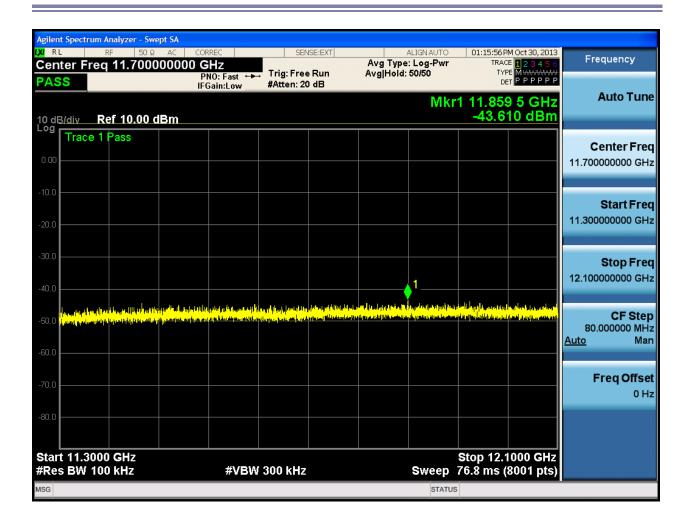


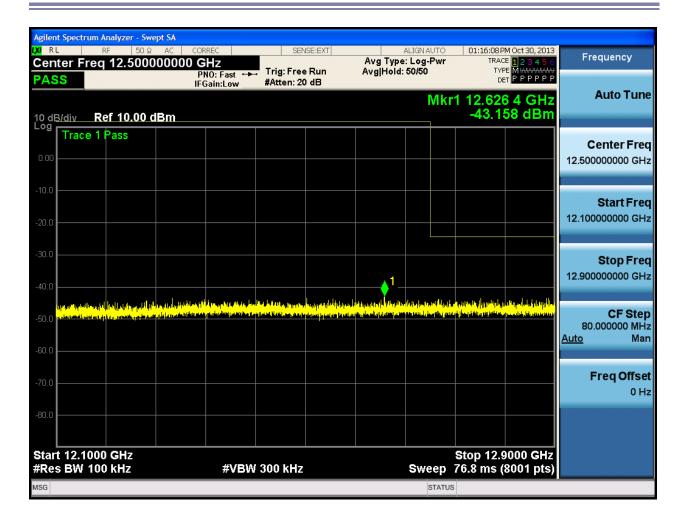


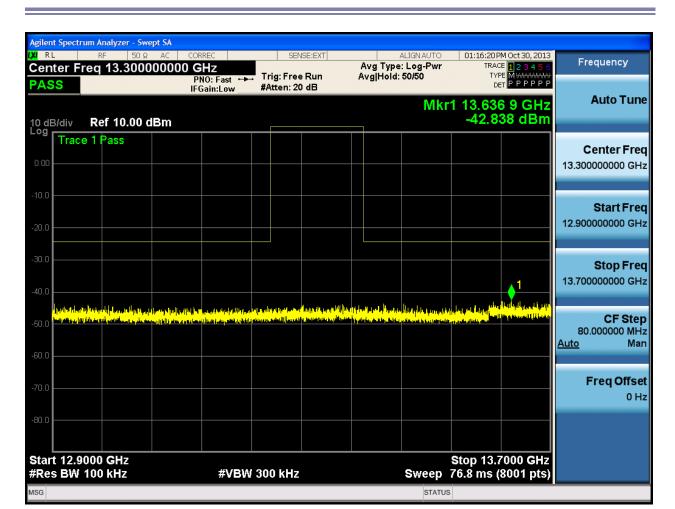


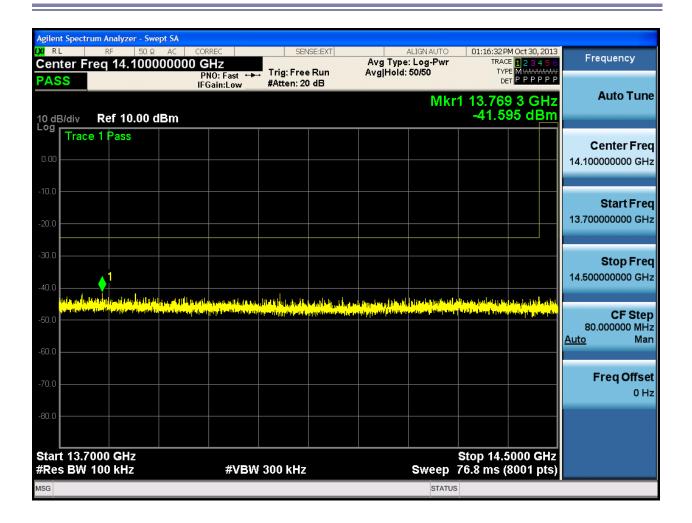


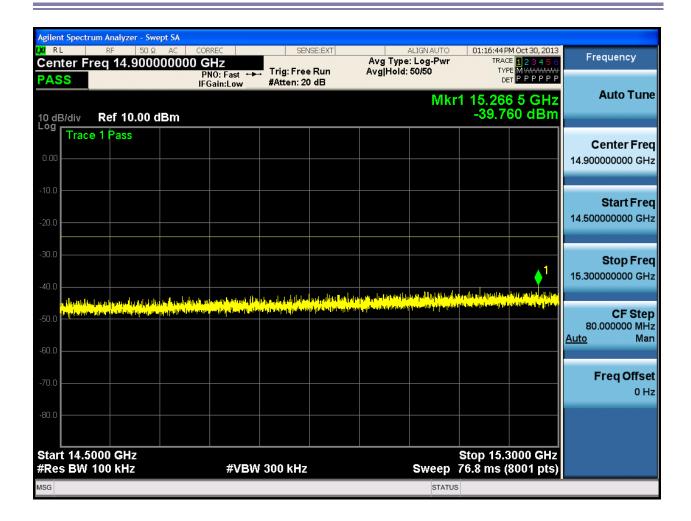


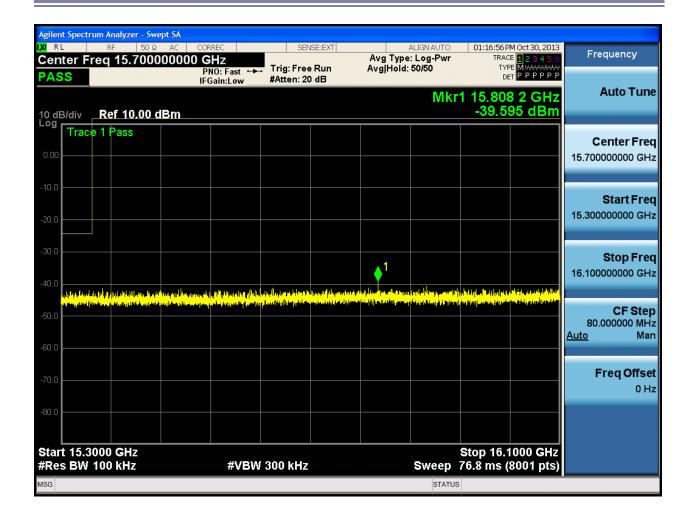


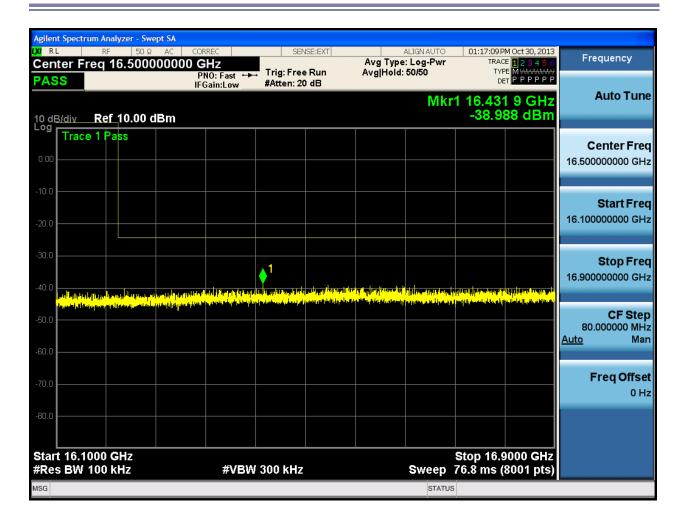


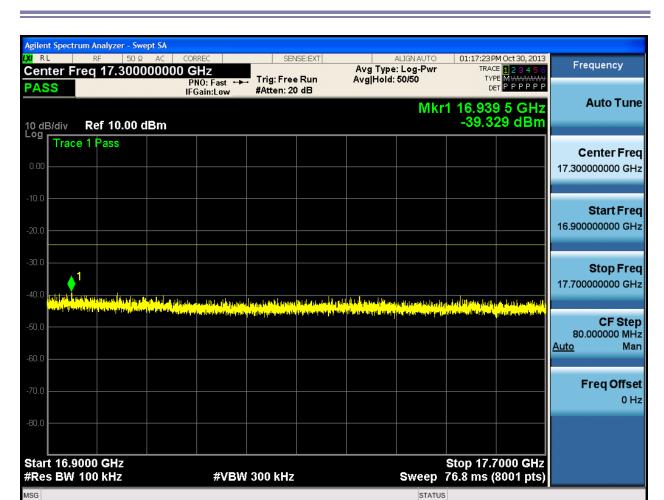


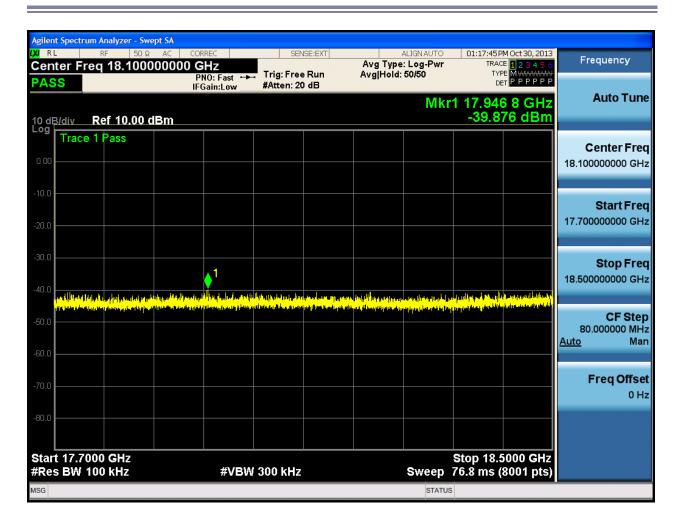


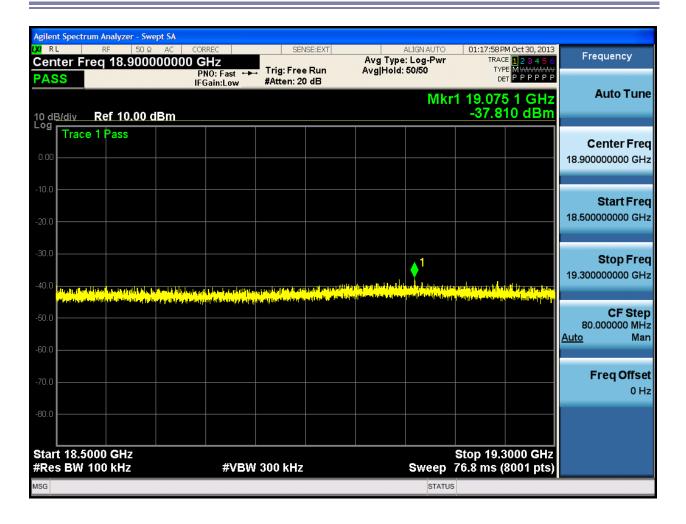


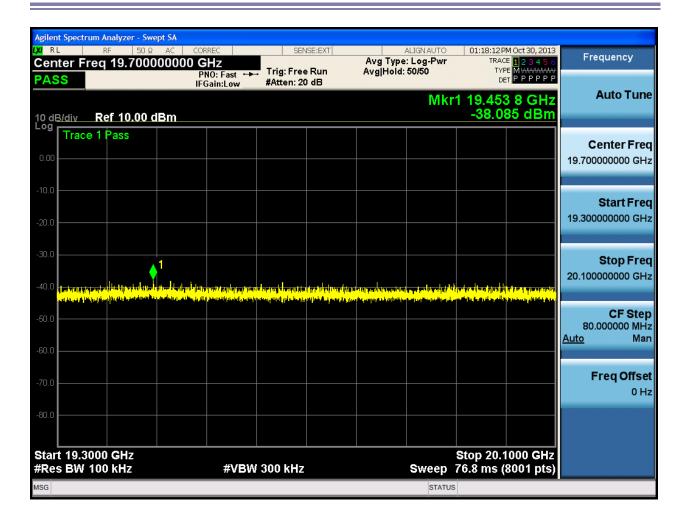


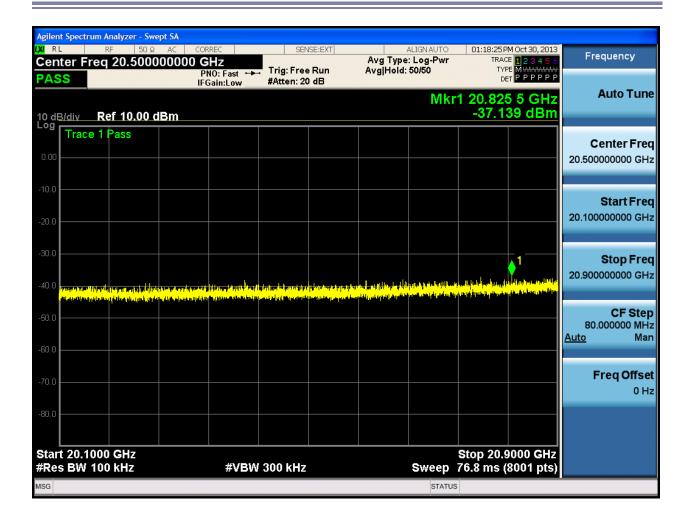










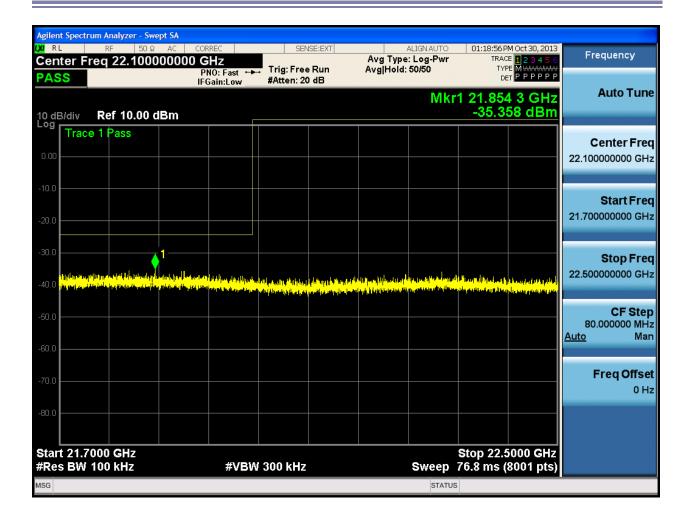


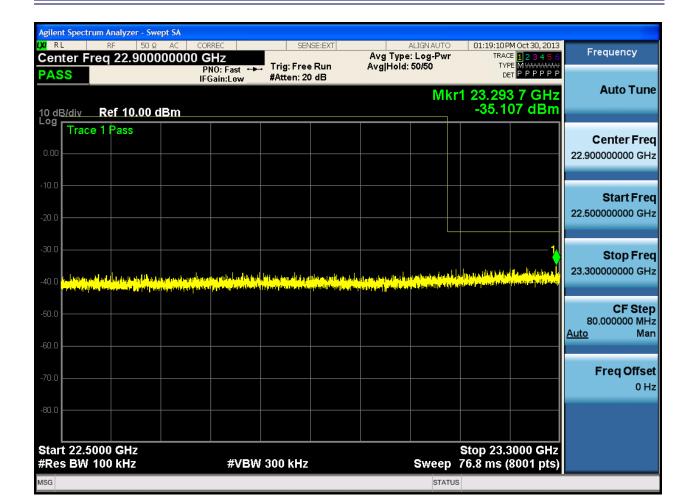
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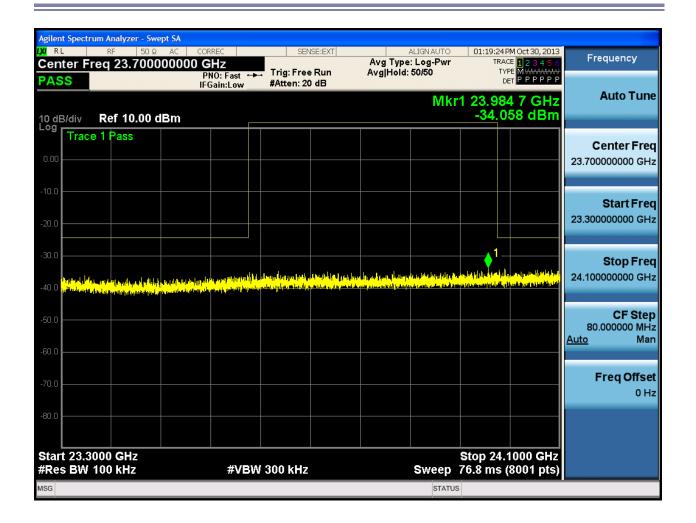
Report No: SYBH(R)01424348EB-1

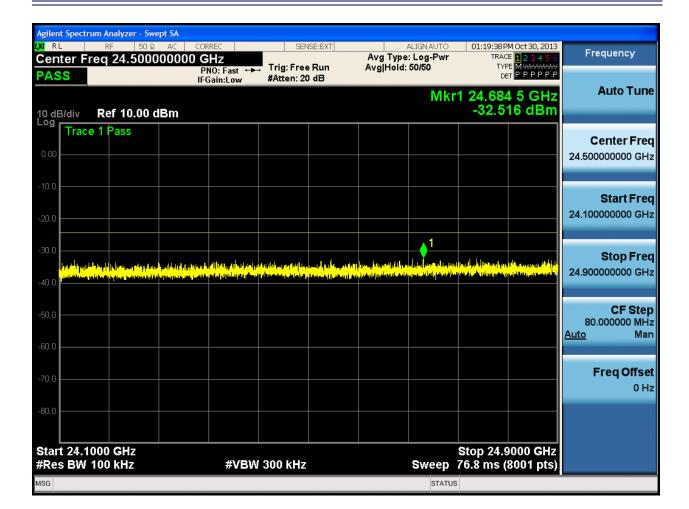
Agilent Spectrum Analyzer - Swept SA 01:18:39 PM Oct 30, 2013 Frequency Avg Type: Log-Pwr Avg|Hold: 50/50 TRACE 1 2 3 4 5 6
TYPE M WWW DET P P P P P P Center Freq 21.300000000 GHz Trig: Free Run PNO: Fast ↔ IFGain:Low **PASS** #Atten: 20 dB **Auto Tune** Mkr1 21.342 8 GHz -35.524 dBm 10 dB/div Ref 10.00 dBm Trace 1 Pass **Center Freq** 21.300000000 GHz Start Freq 20.900000000 GHz Stop Freq 21.700000000 GHz **CF Step** 80.000000 MHz Man <u>Auto</u> Freq Offset 0 Hz Stop 21.7000 GHz Sweep 76.8 ms (8001 pts) Start 20.9000 GHz #Res BW 100 kHz **#VBW** 300 kHz

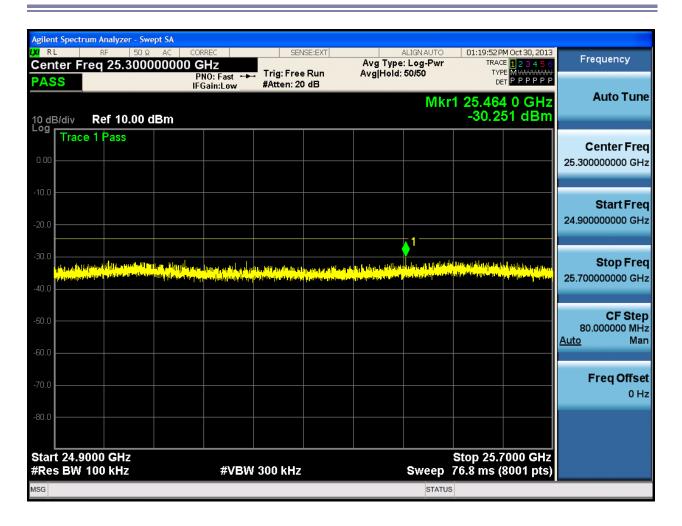
STATUS

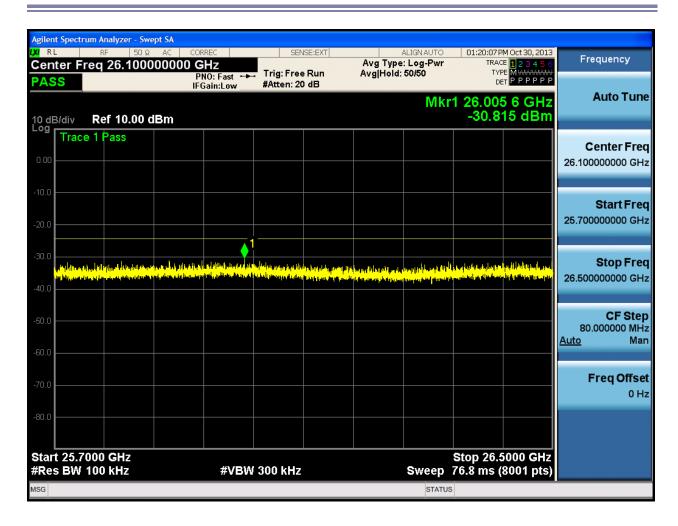












# **Annex F: Unwanted Emissions into Restricted Frequency Bands**

The whole testing range is divided into several parts according to the test site settings for radiated measurement, which are:

- Test range of "30 MHz to 1 GHz",
- Test range of "1 GHz to 3 GHz",
- Test range of "3 GHz to 18 GHz", and
- Test range of "18 GHz to 26.5 GHz".

According to FCC KDB 558074, the limit for antenna-port conducted measurement may be converted by the formula of "Plim [dB $\mu$ V/m] + 20 x lg(d [m]) – 104.8 [dB] – G [dBi] – factor [dB]", where:

- "Plim" denotes the antenna-port conducted limit,
- "Elim" denotes the electric field strength limit,
- "d" denotes the measurement distance for radiated measurement,
- "G" denotes the antenna gain (max per port), or 2 dBi, whichever is greater, and
- "factor" denotes the factor to model worst-case ground reflections, that is 6.0 dB for emissions ≤ 30 MHz, 4.7 dB for emissions > 30 MHz and ≤ 1000 MHz, and 0.0 dB for emissions > 1000 MHz.

#### The measurement contains two steps:

- For the measurement below 1 GHz:
  - (Step 1): Pre-measurement with Peak detector and CISPR Quasi-peak limit;
  - (Step 2): if needed, measurement with CISPR Quasi-peak detector and limit based on the Step 1.
- For the measurement above 1 GHz:
  - (Step 1): measurement with Average detector and Average limit;
  - (Step 2): measurement with Peak detector and Peak limit.

The measurement of unwanted emissions at the edge of the authorized frequency bands can be complicated by the leakage of RF energy from the fundamental emission into the RBW passband. For measurements at the band edges, a narrower RBW is used within the first 1 MHz beyond the fundamental emissions (in this Annex it refers to the range 2483.5 MHz to 2484.5 MHz) and the measured energy is subsequently integrated over the appropriate reference bandwidth (i.e. 1 MHz).

In the result table, the "< Limit" denotes that "Not found obvious spikes or see marked spikes on plots and listed emissions records".

#### 1 Result Table

Test Range	EUT Conf.	Emissions	Verdict
30 MHz to 1 GHz	Worst Case (TX-B)	< Limit	Pass
1 GHz to 3 GHz	TX-B	< Limit	Pass
	TX-M	< Limit	Pass
	TX-T	< Limit	Pass
3 GHz to 18 GHz	TX-B	< Limit	Pass
	TX-M	< Limit	Pass
	TX-T	< Limit	Pass

Security Level: Public

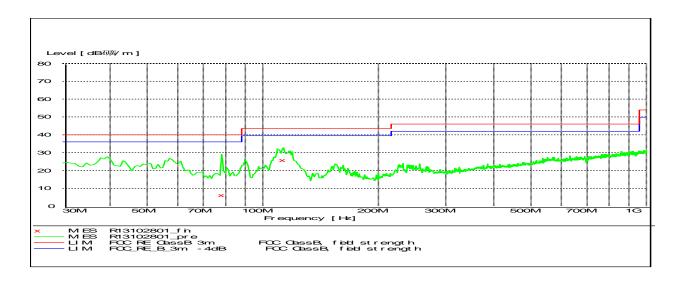


Test Range	EUT Conf.	Emissions	Verdict
18 GHz to 26.5 GHz	Worst Case (TX-B)	< Limit	Pass

#### 1 Result Plot

#### 1.1 Test range of "30 MHz to 1 GHz"

#### 1.1.1 Worst Case (TX-B)



#### MEASUREMENT RESULT: "R13102801\_fin"

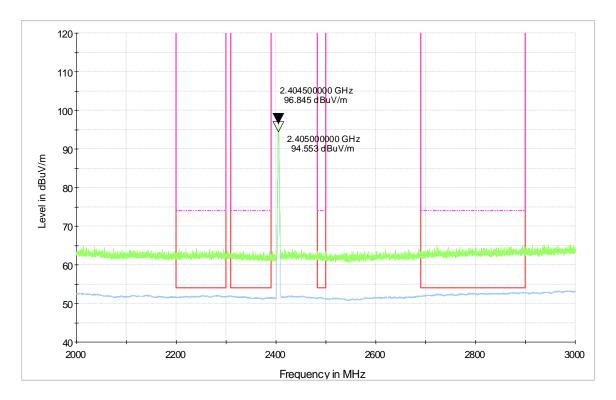
2013-10-28 9:23

Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBµV/n	n dE	3 dBµ\	V/m	dB		cm	deg
78.240000	6.30	-17.6	40.0	33.7	QP	100.0	87.00	VERTICAL
112.680000	25.70	-14.1	43.5	17.8	QP	100.0	198.00	VERTICAL

#### 1.2 Test range of "1 GHz to 3 GHz"

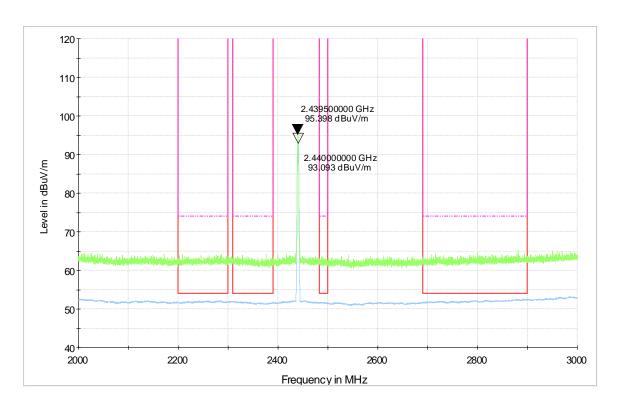
Report No: SYBH(R)01424348EB-1

#### 1.2.1 TX-B



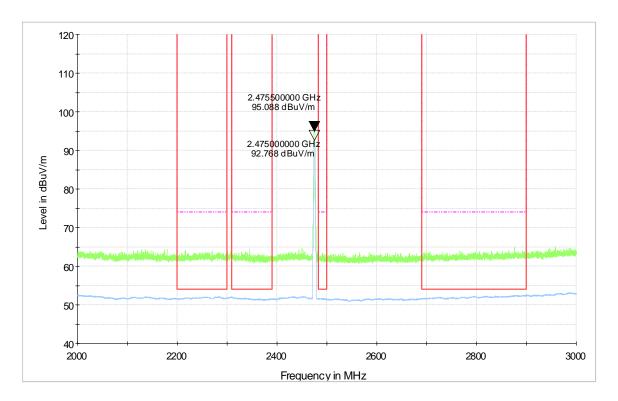
NOTE: Only the ranges near the fundamental frequency are listed.

#### 1.2.2 TX-M



NOTE: Only the ranges near the fundamental frequency are listed.

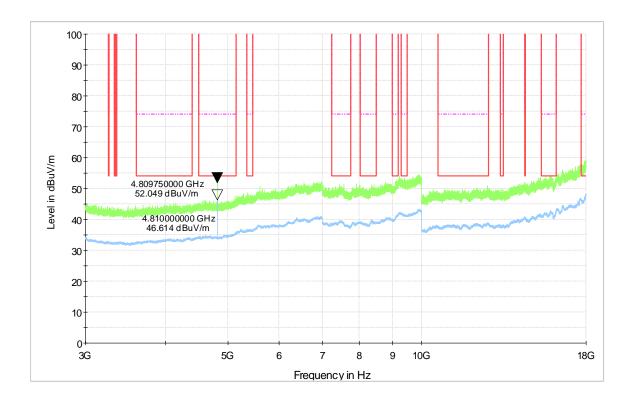
#### 1.2.3 TX-T



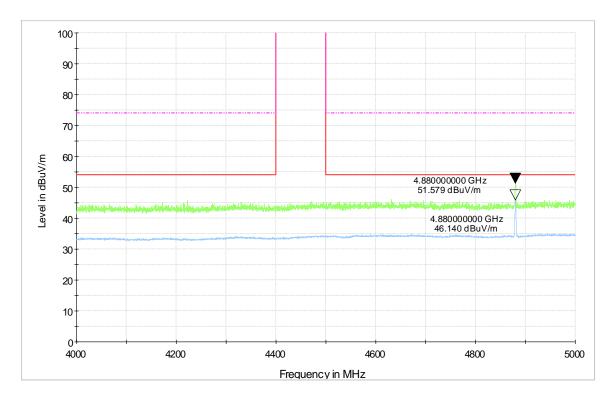
NOTE: Only the ranges near the fundamental frequency are listed.

#### 1.3 Test range of "3 GHz to 18 GHz"

#### 1.3.1 TX-B

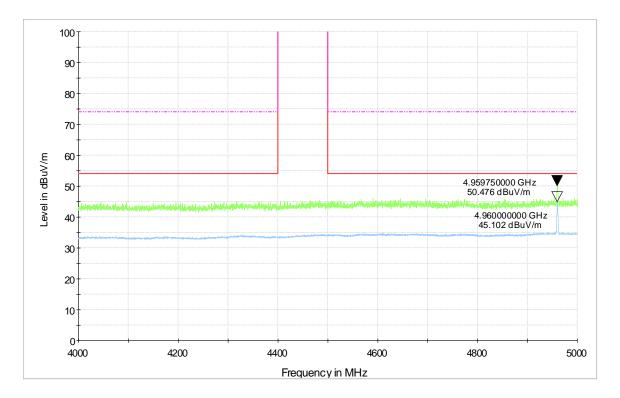


#### 1.3.2 TX-M



NOTE: Only the ranges near the harmonic frequency are listed.

#### 1.3.3 TX-T



NOTE: Only the ranges near the harmonic frequency are listed.

#### 1.4 Test range of "18 GHz to 26.5 GHz"

#### 1.4.1 Worst Case (TX-B)

(No obvious emissions found)

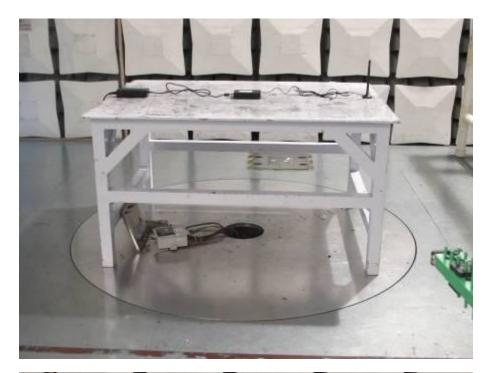
## Annex G: AC Power Line Conducted Emissions

(Not applicable for EUT that is not AC powered.)

### **Annex H: Photos of Test Setups**

#### 1 Test Setup 2

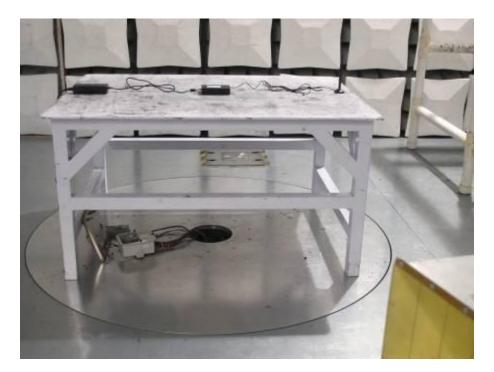
#### 1.1 Measurement Setup below 1 GHz

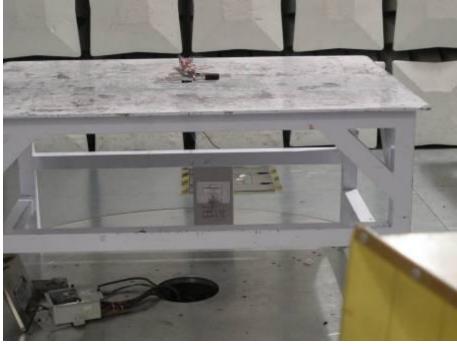




#### 1.2 Measurement Setup above 1 GHz







2	Test Setu	a	3
2	i est Setu	р	,

(Not applicable)

END