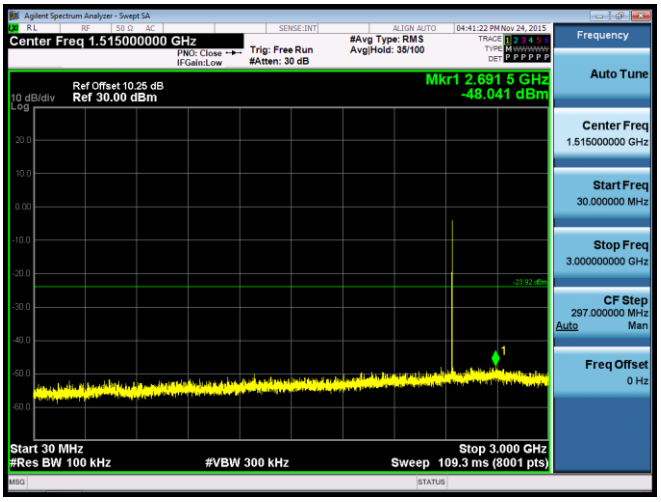
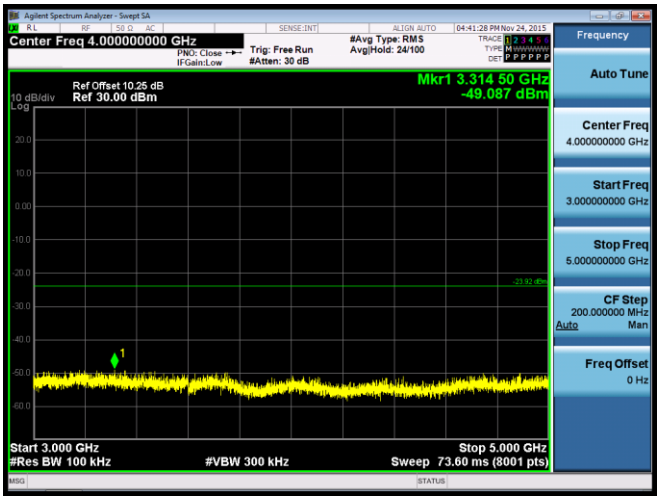
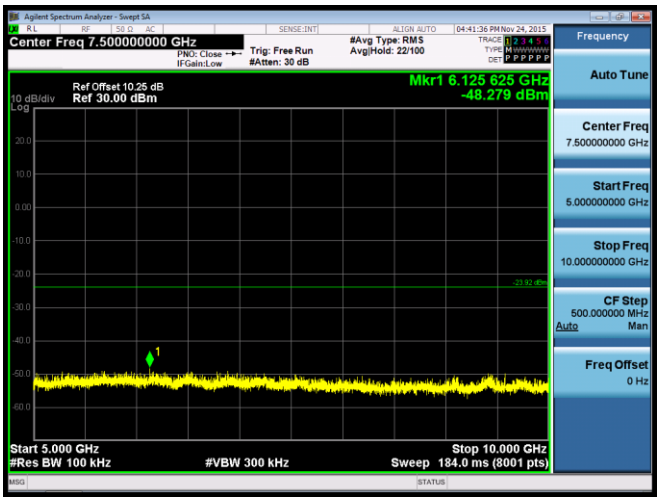
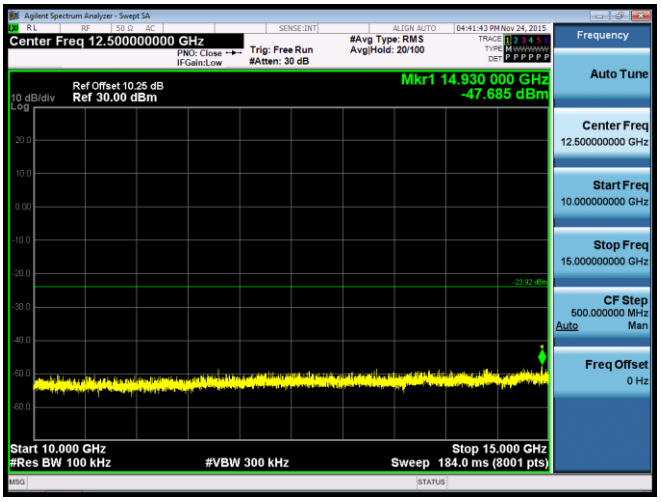
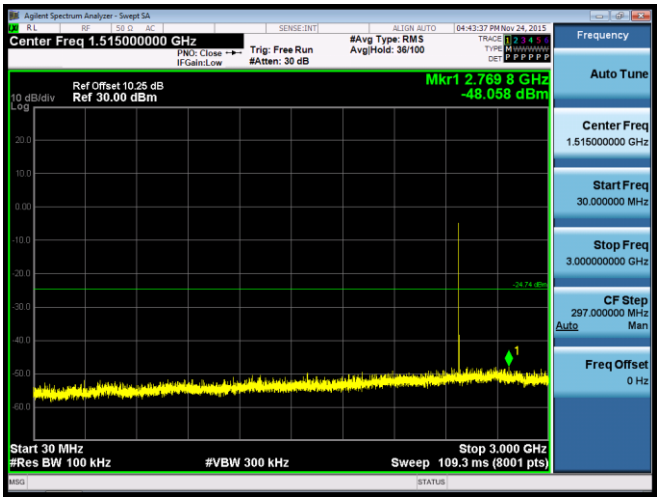
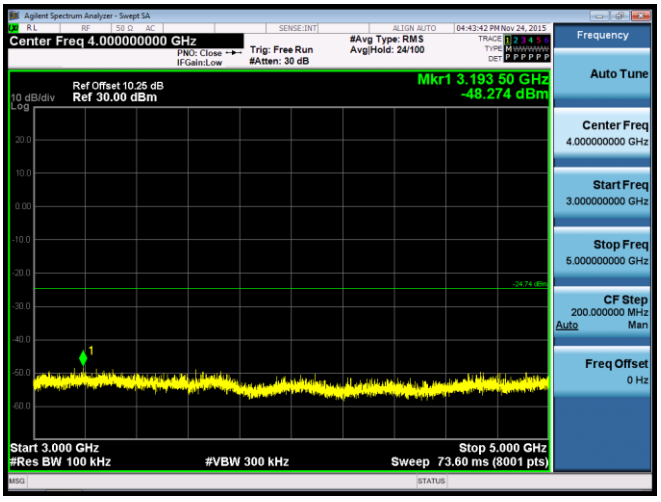
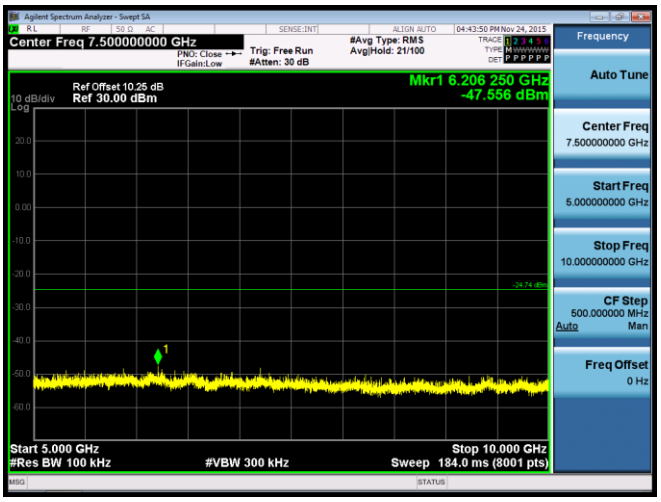
2441	 Agilent Spectrum Analyzer - Swept SA Center Freq 2.441000000 GHz PNO: Wide IFGain:Low Trig: Free Run #Atten: 40 dB #Avg Type: RMS Avg|Hold: 100/100 04:41:15 PM Nov 24, 2015 Frequency Ref Offset 10.25 dB 10 dB/div Ref 30.00 dBm Mkr1 2.440 841 875 GHz -3.918 dBm Auto Tune Center Freq 2.441000000 GHz Start Freq 2.438500000 GHz Stop Freq 2.443500000 GHz CF Step 500.000 kHz Auto Man Freq Offset 0 Hz Center 2.441000 GHz #Res BW 100 kHz #VBW 300 kHz Span 5.000 MHz Sweep 1.067 ms (8001 pts)
	 Agilent Spectrum Analyzer - Swept SA Center Freq 1.515000000 GHz PNO: Close IFGain:Low Trig: Free Run #Atten: 30 dB #Avg Type: RMS Avg|Hold: 35/100 04:41:22 PM Nov 24, 2015 Frequency Ref Offset 10.25 dB 10 dB/div Ref 30.00 dBm Mkr1 2.691 5 GHz -48.041 dBm Auto Tune Center Freq 1.515000000 GHz Start Freq 30.000000 MHz Stop Freq 3.000000000 GHz CF Step 297.000000 MHz Auto Man Freq Offset 0 Hz Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 3.000 GHz Sweep 109.3 ms (8001 pts)
	 Agilent Spectrum Analyzer - Swept SA Center Freq 4.000000000 GHz PNO: Close IFGain:Low Trig: Free Run #Atten: 30 dB #Avg Type: RMS Avg|Hold: 24/100 04:41:28 PM Nov 24, 2015 Frequency Ref Offset 10.25 dB 10 dB/div Ref 30.00 dBm Mkr1 3.314 50 GHz -49.087 dBm Auto Tune Center Freq 4.000000000 GHz Start Freq 3.000000000 GHz Stop Freq 5.000000000 GHz CF Step 200.000000 MHz Auto Man Freq Offset 0 Hz Start 3.000 GHz #Res BW 100 kHz #VBW 300 kHz Stop 5.000 GHz Sweep 73.60 ms (8001 pts)

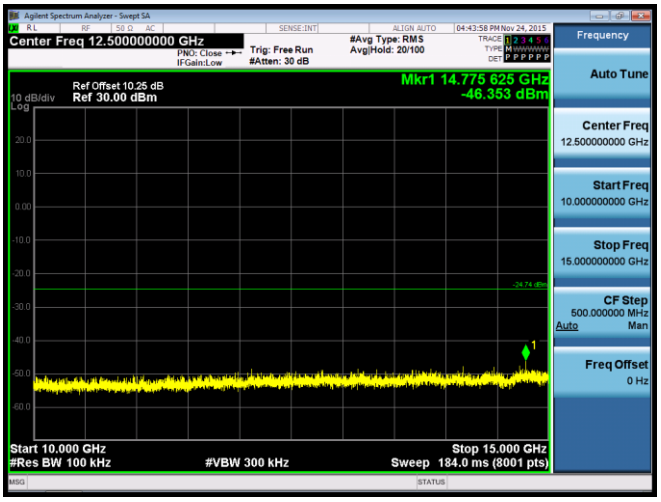

Agilent Spectrum Analyzer - Swept SA
Center Freq 7.500000000 GHz
PNO: Close
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 22/100
04:41:36 PM Nov 24, 2015
Frequency
Ref Offset 10.25 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr1 6.125 625 GHz
-48.279 dBm
Auto Tune
Center Freq
7.500000000 GHz
Start Freq
5.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
500.000000 MHz
Auto
Man
Freq Offset
0 Hz
Start 5.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 184.0 ms (8001 pts)


Agilent Spectrum Analyzer - Swept SA
Center Freq 12.500000000 GHz
PNO: Close
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 20/100
04:41:43 PM Nov 24, 2015
Frequency
Ref Offset 10.25 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr1 14.930 000 GHz
-47.685 dBm
Auto Tune
Center Freq
12.500000000 GHz
Start Freq
10.000000000 GHz
Stop Freq
15.000000000 GHz
CF Step
500.000000 MHz
Auto
Man
Freq Offset
0 Hz
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 184.0 ms (8001 pts)

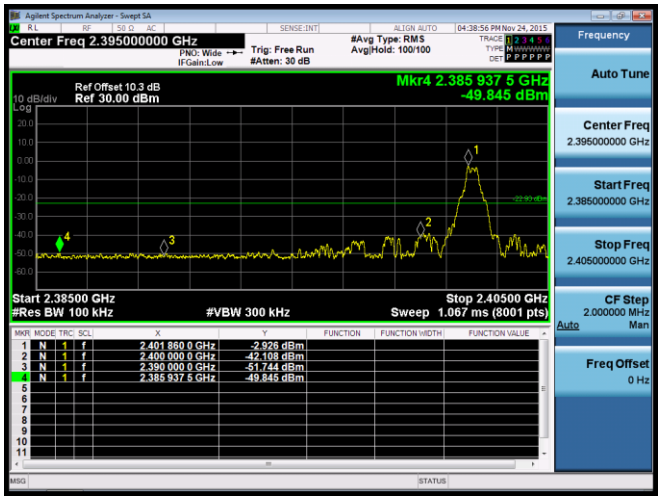
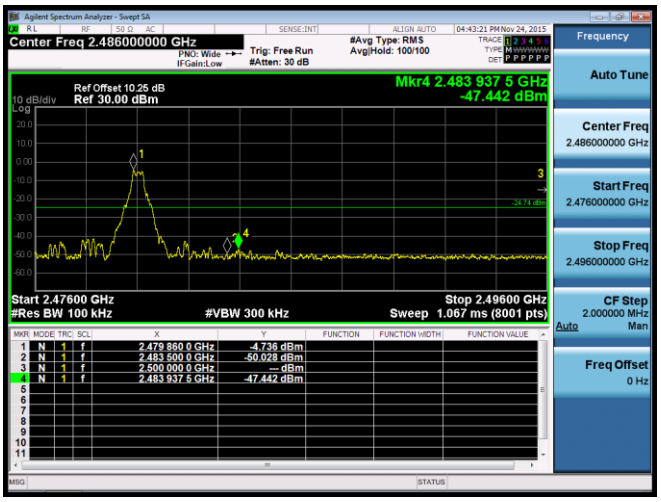
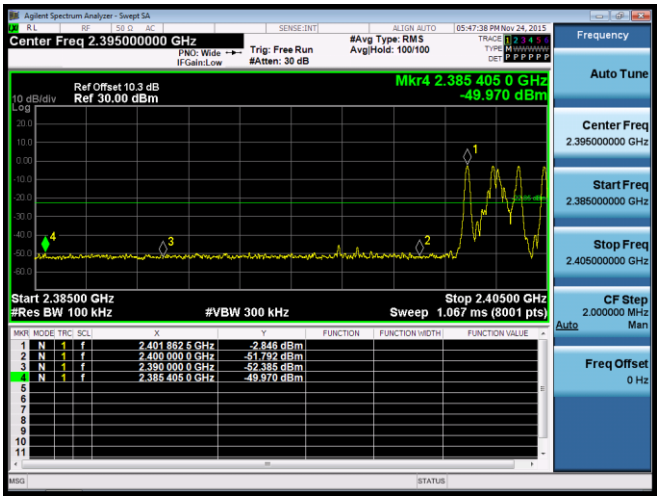

Agilent Spectrum Analyzer - Swept SA
Center Freq 20.000000000 GHz
PNO: Close
IFGain:Low
Trig: Free Run
#Atten: 32 dB
#Avg Type: RMS
Avg|Hold: 11/100
04:41:51 PM Nov 24, 2015
Frequency
Ref Offset 10.25 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr1 24.866 25 GHz
-37.675 dBm
Auto Tune
Center Freq
20.000000000 GHz
Start Freq
15.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.000000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 368.0 ms (8001 pts)

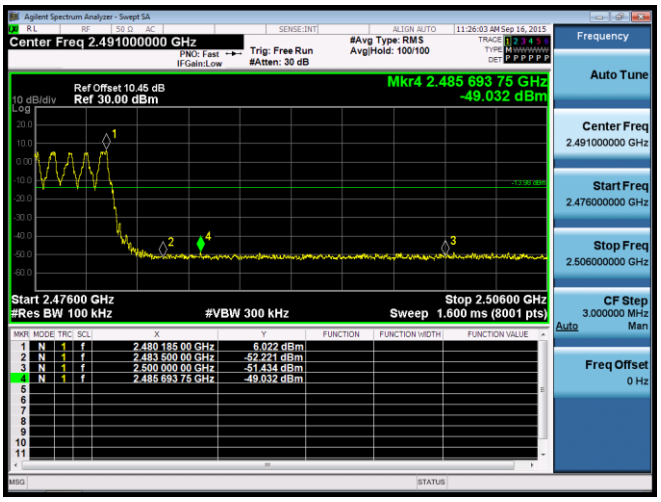
2480	 Agilent Spectrum Analyzer - Swept SA Center Freq 2.480000000 GHz PNO: Wide IFGain:Low Trig: Free Run #Atten: 40 dB #Avg Type: RMS Avg|Hold: 100/100 04:43:30 PM Nov 24, 2015 Frequency Ref Offset 10.25 dB 10 dB/div Ref 30.00 dBm Log Mkr1 2.479 843 750 GHz -4.740 dBm Auto Tune Center Freq 2.480000000 GHz Start Freq 2.477500000 GHz Stop Freq 2.482500000 GHz CF Step 500.000 kHz Auto Man Freq Offset 0 Hz Center 2.480000 GHz #Res BW 100 kHz #VBW 300 kHz Span 5.000 MHz Sweep 1.067 ms (8001 pts)  Agilent Spectrum Analyzer - Swept SA Center Freq 1.515000000 GHz PNO: Close IFGain:Low Trig: Free Run #Atten: 30 dB #Avg Type: RMS Avg|Hold: 36/100 04:43:37 PM Nov 24, 2015 Frequency Ref Offset 10.25 dB 10 dB/div Ref 30.00 dBm Log Mkr1 2.769 8 GHz -48.058 dBm Auto Tune Center Freq 1.515000000 GHz Start Freq 30.000000 MHz Stop Freq 3.000000000 GHz CF Step 297.000000 MHz Auto Man Freq Offset 0 Hz Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 3.000 GHz Sweep 109.3 ms (8001 pts)  Agilent Spectrum Analyzer - Swept SA Center Freq 4.000000000 GHz PNO: Close IFGain:Low Trig: Free Run #Atten: 30 dB #Avg Type: RMS Avg|Hold: 24/100 04:43:42 PM Nov 24, 2015 Frequency Ref Offset 10.25 dB 10 dB/div Ref 30.00 dBm Log Mkr1 3.193 50 GHz -48.274 dBm Auto Tune Center Freq 4.000000000 GHz Start Freq 3.000000000 GHz Stop Freq 5.000000000 GHz CF Step 200.000000 MHz Auto Man Freq Offset 0 Hz Start 3.000 GHz #Res BW 100 kHz #VBW 300 kHz Stop 5.000 GHz Sweep 73.60 ms (8001 pts)

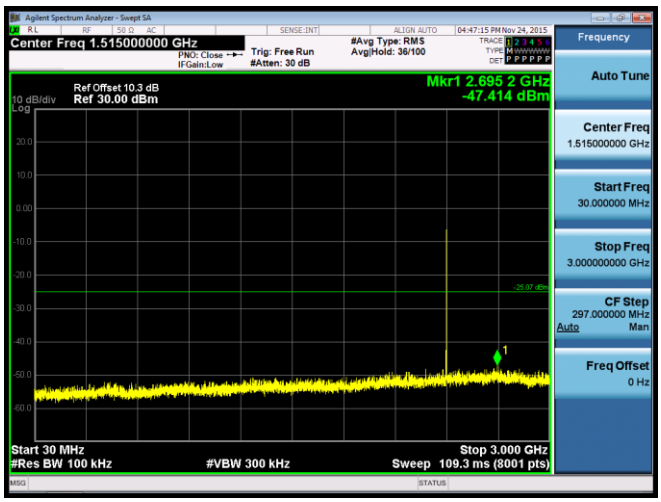

Agilent Spectrum Analyzer - Swept SA
Center Freq 7.500000000 GHz
PNO: Close
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 21/100
04:43:50 PM Nov 24, 2015
Frequency
Ref Offset 10.25 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr1 6.206 250 GHz
-47.556 dBm
Auto Tune
Center Freq
7.500000000 GHz
Start Freq
5.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
500.000000 MHz
Auto
Man
Freq Offset
0 Hz
Start 5.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 184.0 ms (8001 pts)

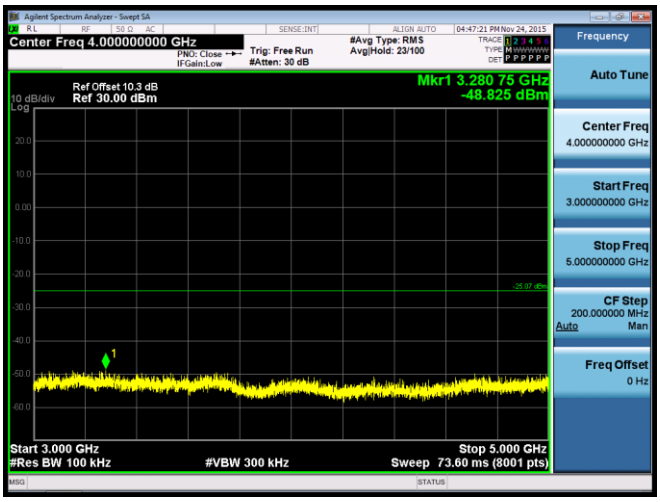

Agilent Spectrum Analyzer - Swept SA
Center Freq 12.500000000 GHz
PNO: Close
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 20/100
04:43:58 PM Nov 24, 2015
Frequency
Ref Offset 10.25 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr1 14.775 625 GHz
-46.353 dBm
Auto Tune
Center Freq
12.500000000 GHz
Start Freq
10.000000000 GHz
Stop Freq
15.000000000 GHz
CF Step
500.000000 MHz
Auto
Man
Freq Offset
0 Hz
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 184.0 ms (8001 pts)

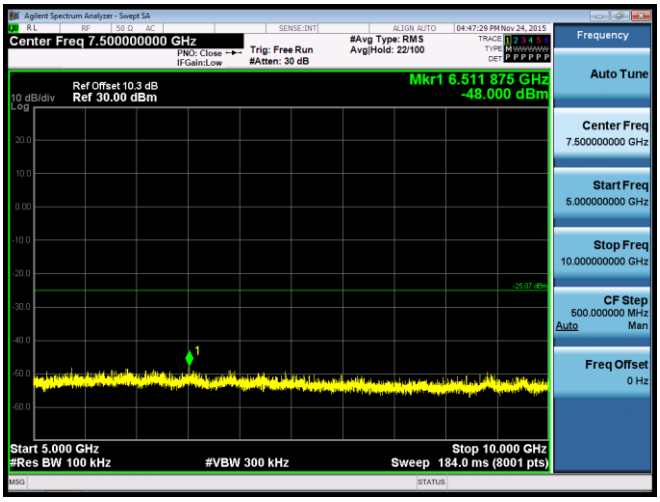

Agilent Spectrum Analyzer - Swept SA
Center Freq 20.000000000 GHz
PNO: Close
IFGain:Low
Trig: Free Run
#Atten: 32 dB
#Avg Type: RMS
Avg|Hold: 11/100
04:44:06 PM Nov 24, 2015
Frequency
Ref Offset 10.25 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr1 24.470 00 GHz
-37.730 dBm
Auto Tune
Center Freq
20.000000000 GHz
Start Freq
15.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.000000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 368.0 ms (8001 pts)

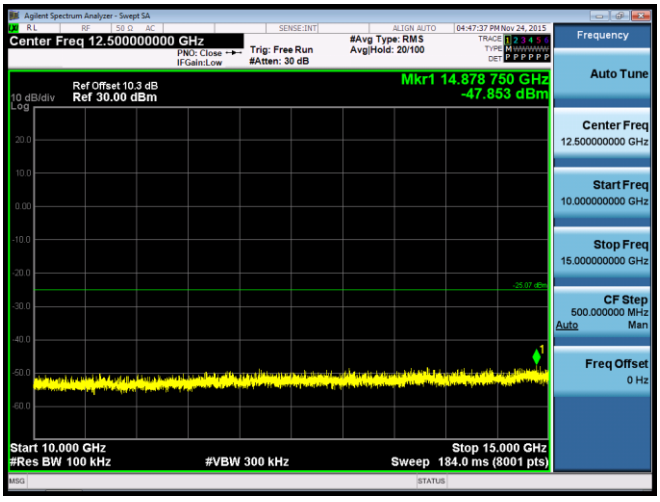
Mode 2/2402	
Mode 2/2480	
Mode 5/Hopping-2402	

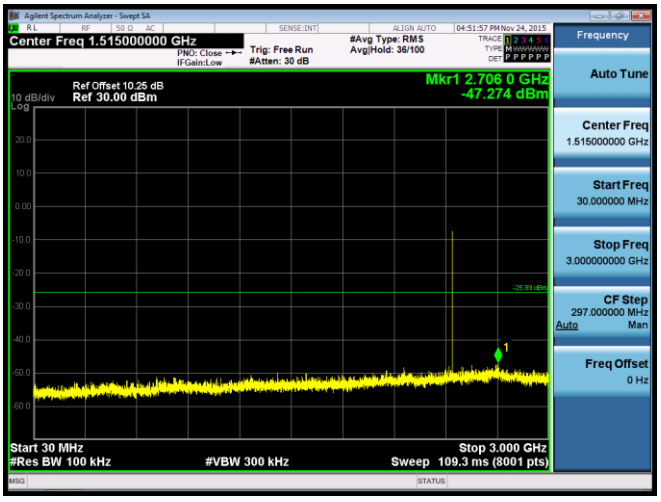
Mode 5/Hopping-2480	

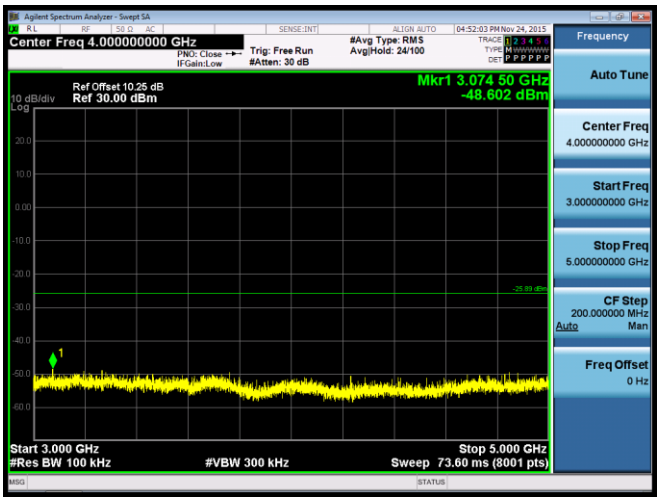
Mode 4	
2402	
	

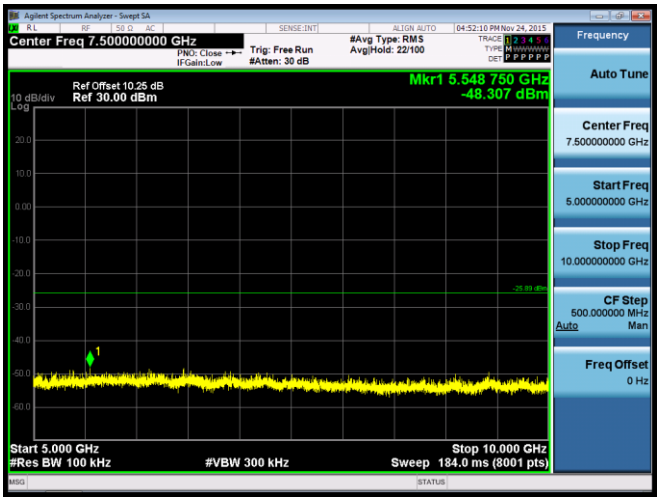

Agilent Spectrum Analyzer - Swept SA
Center Freq 4.000000000 GHz
PNO: Close
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 23/100
04:47:21 PM Nov 24, 2015
Frequency
Mkr1 3.280 75 GHz
-48.825 dBm
Ref Offset 10.3 dB
10 dB/div
Ref 30.00 dBm
Log
Auto Tune
Center Freq
4.000000000 GHz
Start Freq
3.000000000 GHz
Stop Freq
5.000000000 GHz
CF Step
200.000000 MHz
Auto
Man
Freq Offset
0 Hz
Start 3.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 5.000 GHz
Sweep 73.60 ms (8001 pts)

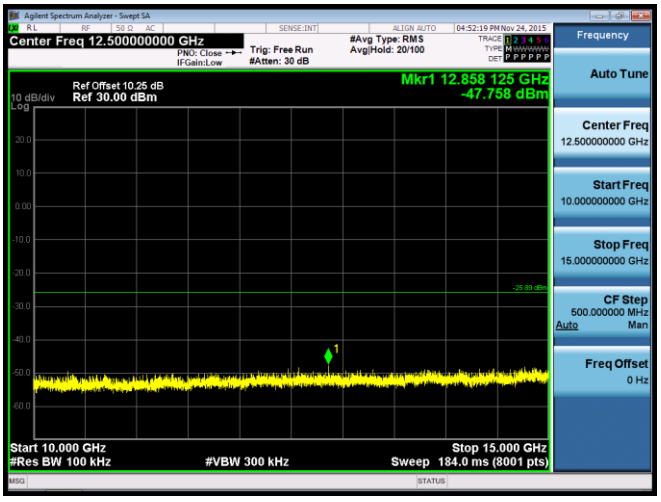

Agilent Spectrum Analyzer - Swept SA
Center Freq 7.500000000 GHz
PNO: Close
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 22/100
04:47:29 PM Nov 24, 2015
Frequency
Mkr1 6.511 875 GHz
-48.000 dBm
Ref Offset 10.3 dB
10 dB/div
Ref 30.00 dBm
Log
Auto Tune
Center Freq
7.500000000 GHz
Start Freq
5.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
500.000000 MHz
Auto
Man
Freq Offset
0 Hz
Start 5.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 184.0 ms (8001 pts)

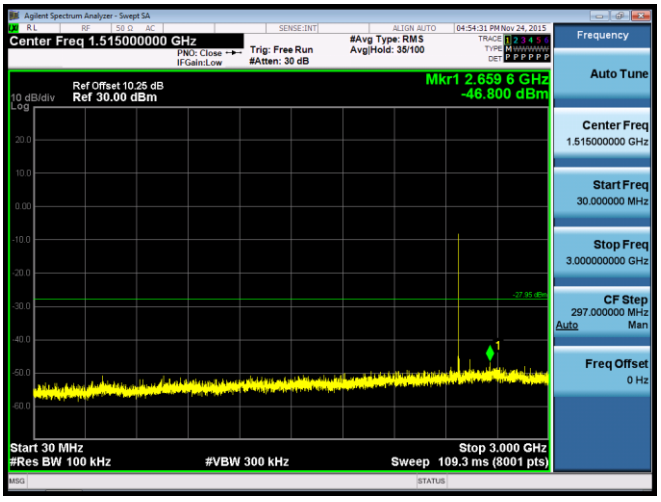

Agilent Spectrum Analyzer - Swept SA
Center Freq 12.500000000 GHz
PNO: Close
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 20/100
04:47:37 PM Nov 24, 2015
Frequency
Mkr1 14.878 750 GHz
-47.853 dBm
Ref Offset 10.3 dB
10 dB/div
Ref 30.00 dBm
Log
Auto Tune
Center Freq
12.500000000 GHz
Start Freq
10.000000000 GHz
Stop Freq
15.000000000 GHz
CF Step
500.000000 MHz
Auto
Man
Freq Offset
0 Hz
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 184.0 ms (8001 pts)

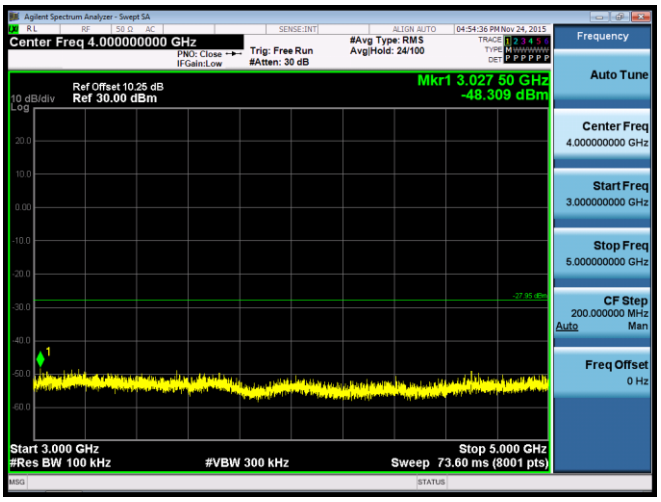
	 Agilent Spectrum Analyzer - Swept SA Center Freq 20.000000000 GHz PNO: Close IFGain:Low Trig: Free Run #Atten: 32 dB #Avg Type: RMS Avg|Hold: 11/100 04:47:44 PM Nov 24, 2015 Ref Offset 10.3 dB 10 dB/div Ref 30.00 dBm Log Mkr1 24.903 75 GHz -36.363 dBm -25.07 dBm Start 15.000 GHz #Res BW 100 kHz #VBW 300 kHz Stop 25.000 GHz Sweep 368.0 ms (8001 pts) Frequency Auto Tune Center Freq 20.000000000 GHz Start Freq 15.000000000 GHz Stop Freq 25.000000000 GHz CF Step 1.000000000 GHz Auto Man Freq Offset 0 Hz
2441	 Agilent Spectrum Analyzer - Swept SA Center Freq 2.441000000 GHz PNO: Wide IFGain:Low Trig: Free Run #Atten: 40 dB #Avg Type: RMS Avg|Hold: 100/100 04:51:51 PM Nov 24, 2015 Ref Offset 10.25 dB 10 dB/div Ref 30.00 dBm Log Mkr1 2.441 157 500 GHz -5.885 dBm -25.89 dBm Center 2.441000 GHz #Res BW 100 kHz #VBW 300 kHz Span 5.000 MHz Sweep 1.067 ms (8001 pts) Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.438500000 GHz Stop Freq 2.443500000 GHz CF Step 500.000 kHz Auto Man Freq Offset 0 Hz
	 Agilent Spectrum Analyzer - Swept SA Center Freq 1.515000000 GHz PNO: Close IFGain:Low Trig: Free Run #Atten: 30 dB #Avg Type: RMS Avg|Hold: 36/100 04:51:57 PM Nov 24, 2015 Ref Offset 10.25 dB 10 dB/div Ref 30.00 dBm Log Mkr1 2.706 0 GHz -47.274 dBm -25.89 dBm Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 3.000 GHz Sweep 109.3 ms (8001 pts) Frequency Auto Tune Center Freq 1.515000000 GHz Start Freq 30.000000 MHz Stop Freq 3.000000000 GHz CF Step 297.000000 MHz Auto Man Freq Offset 0 Hz

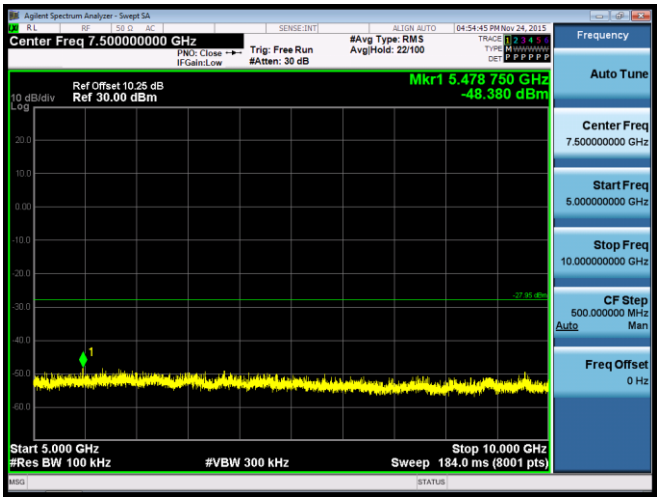

Agilent Spectrum Analyzer - Swept SA
Center Freq 4.000000000 GHz
PNO: Close
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 24/100
04:52:03 PM Nov 24, 2015
Frequency
Mkr1 3.074 50 GHz
-48.602 dBm
Ref Offset 10.25 dB
10 dB/div
Ref 30.00 dBm
Log
Start 3.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 5.000 GHz
Sweep 73.60 ms (8001 pts)
Auto Tune
Center Freq
4.000000000 GHz
Start Freq
3.000000000 GHz
Stop Freq
5.000000000 GHz
CF Step
200.000000 MHz
Auto
Man
Freq Offset
0 Hz

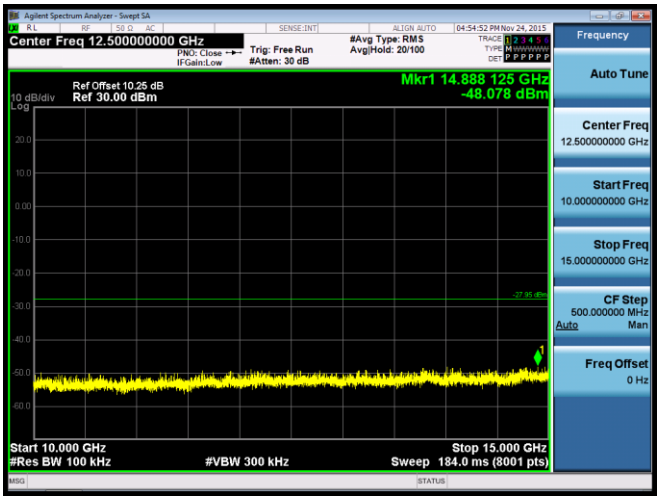

Agilent Spectrum Analyzer - Swept SA
Center Freq 7.500000000 GHz
PNO: Close
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 22/100
04:52:10 PM Nov 24, 2015
Frequency
Mkr1 5.548 750 GHz
-48.307 dBm
Ref Offset 10.25 dB
10 dB/div
Ref 30.00 dBm
Log
Start 5.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 184.0 ms (8001 pts)
Auto Tune
Center Freq
7.500000000 GHz
Start Freq
5.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
500.000000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 12.500000000 GHz
PNO: Close
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 20/100
04:52:19 PM Nov 24, 2015
Frequency
Mkr1 12.858 125 GHz
-47.758 dBm
Ref Offset 10.25 dB
10 dB/div
Ref 30.00 dBm
Log
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 184.0 ms (8001 pts)
Auto Tune
Center Freq
12.500000000 GHz
Start Freq
10.000000000 GHz
Stop Freq
15.000000000 GHz
CF Step
500.000000 MHz
Auto
Man
Freq Offset
0 Hz

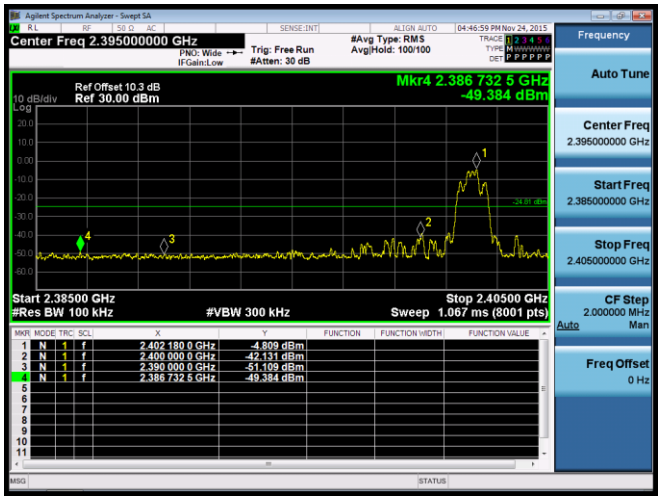
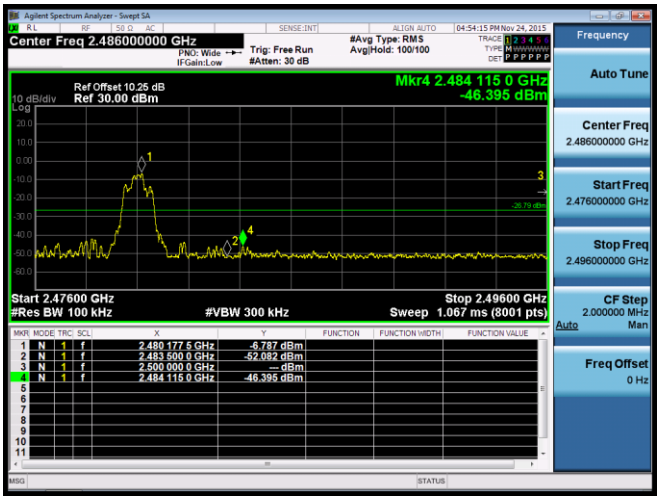
	 Agilent Spectrum Analyzer - Swept SA Center Freq 20.000000000 GHz PNO: Close IFGain:Low Trig: Free Run #Atten: 32 dB #Avg Type: RMS Avg|Hold: 11/100 04:52:26 PM Nov 24, 2015 Ref Offset 10.25 dB 10 dB/div Ref 30.00 dBm Log Mkr1 24.465 00 GHz -36.874 dBm Start 15.000 GHz #Res BW 100 kHz #VBW 300 kHz Stop 25.000 GHz Sweep 368.0 ms (8001 pts) Frequency Auto Tune Center Freq 20.000000000 GHz Start Freq 15.000000000 GHz Stop Freq 25.000000000 GHz CF Step 1.000000000 GHz Auto Man Freq Offset 0 Hz
2480	 Agilent Spectrum Analyzer - Swept SA Center Freq 2.480000000 GHz PNO: Wide IFGain:Low Trig: Free Run #Atten: 40 dB #Avg Type: RMS Avg|Hold: 100/100 04:54:24 PM Nov 24, 2015 Ref Offset 10.25 dB 10 dB/div Ref 30.00 dBm Log Mkr1 2.480 085 625 GHz -7.949 dBm Center 2.480000 GHz #Res BW 100 kHz #VBW 300 kHz Span 5.000 MHz Sweep 1.067 ms (8001 pts) Frequency Auto Tune Center Freq 2.480000000 GHz Start Freq 2.477500000 GHz Stop Freq 2.482500000 GHz CF Step 500.000 kHz Auto Man Freq Offset 0 Hz
	 Agilent Spectrum Analyzer - Swept SA Center Freq 1.515000000 GHz PNO: Close IFGain:Low Trig: Free Run #Atten: 30 dB #Avg Type: RMS Avg|Hold: 35/100 04:54:31 PM Nov 24, 2015 Ref Offset 10.25 dB 10 dB/div Ref 30.00 dBm Log Mkr1 2.659 6 GHz -46.800 dBm Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 3.000 GHz Sweep 109.3 ms (8001 pts) Frequency Auto Tune Center Freq 1.515000000 GHz Start Freq 30.000000 MHz Stop Freq 3.000000000 GHz CF Step 297.000000 MHz Auto Man Freq Offset 0 Hz

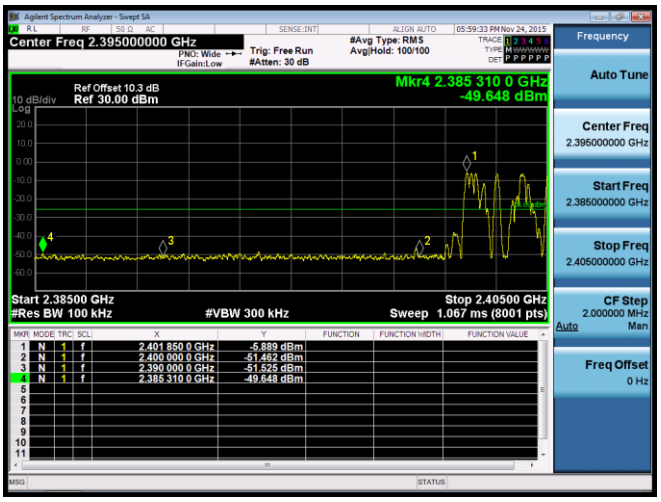
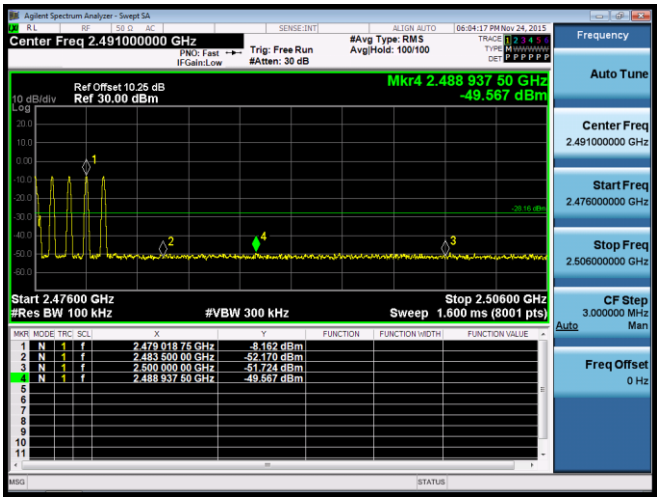

Agilent Spectrum Analyzer - Swept SA
Center Freq 4.000000000 GHz
PNO: Close
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 24/100
04:54:36 PM Nov 24, 2015
Frequency
Mkr1 3.027 50 GHz
-48.309 dBm
Ref Offset 10.25 dB
10 dB/div
Ref 30.00 dBm
Log
Start 3.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 5.000 GHz
Sweep 73.60 ms (8001 pts)
Auto Tune
Center Freq
4.000000000 GHz
Start Freq
3.000000000 GHz
Stop Freq
5.000000000 GHz
CF Step
200.000000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 7.500000000 GHz
PNO: Close
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 22/100
04:54:45 PM Nov 24, 2015
Frequency
Mkr1 5.478 750 GHz
-48.380 dBm
Ref Offset 10.25 dB
10 dB/div
Ref 30.00 dBm
Log
Start 5.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 184.0 ms (8001 pts)
Auto Tune
Center Freq
7.500000000 GHz
Start Freq
5.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
500.000000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 12.500000000 GHz
PNO: Close
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 20/100
04:54:52 PM Nov 24, 2015
Frequency
Mkr1 14.888 125 GHz
-48.078 dBm
Ref Offset 10.25 dB
10 dB/div
Ref 30.00 dBm
Log
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 184.0 ms (8001 pts)
Auto Tune
Center Freq
12.500000000 GHz
Start Freq
10.000000000 GHz
Stop Freq
15.000000000 GHz
CF Step
500.000000 MHz
Auto
Man
Freq Offset
0 Hz

8DPSK Mode (Bandedge)	
Mode 4/2402	
Mode 4/2480	

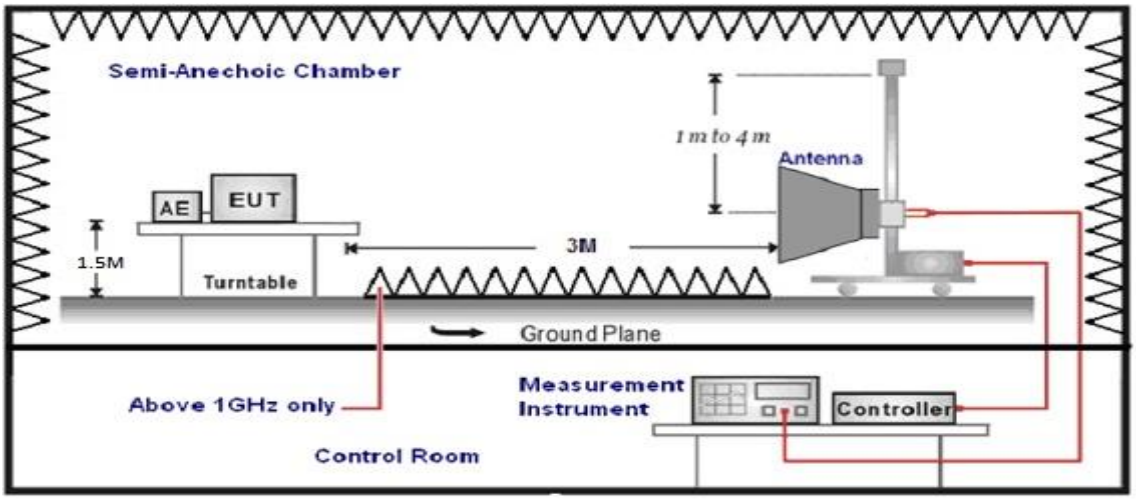
Mode 7/Hopping-2402	
Mode 7/Hopping-2480	

12 Band Edges Measurement

12.1. Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

12.2. Test Setup



12.3. Test Instruments

3 Meter Chamber					
Model No.	Equipment	Manufacturer	Serial Number	Cal. Date	Remark
9X6X6	3m Semi-anechoic chamber	Albatross Projects	SB3450/01	Oct.12, 2015	1Year
HF907	Horn Antenna	Rohde & Schwarz	100309	May.15,2015	1 Year
SCU26	Pre Amplifier	Rohde & Schwarz	10020	May.15.2015	1Year
SCU40	Pre Amplifier	Rohde & Schwarz	10015	May.15.2015	1Year
ESU40	Test Receiver	Rohde & Schwarz	100263	May.15.2015	1Year
---	RF cable	WOKEN	S02-1404-09-065	May.11.2015	1 year
---	RF cable	WOKEN	S02-1404-09-047	May.11.2015	1 year
---	RF cable	WOKEN	S02-1404-09-052	May.11.2015	1 year

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.
NOTE: N.C.R. = No Calibration Request. All the RF cables apply to 9 KHz to 40GHz.

12.4. Test Procedure

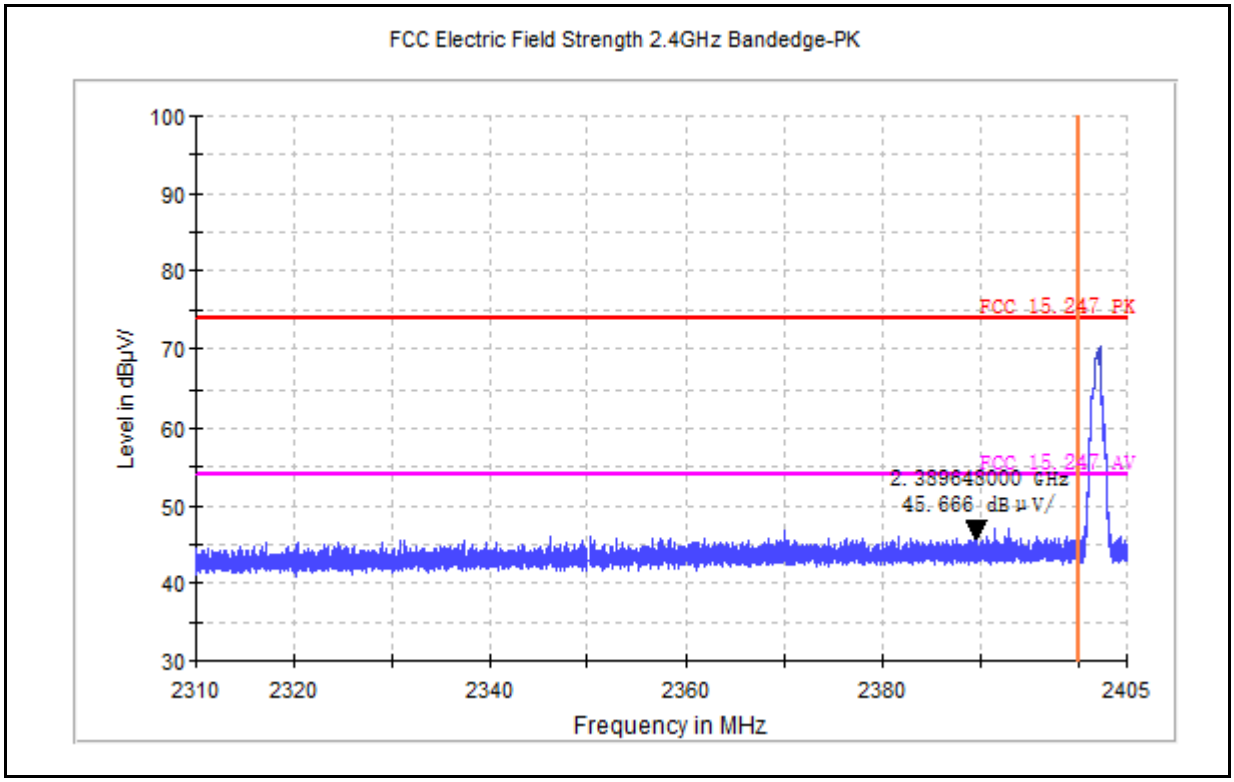
Testing must be done according to this procedure. This is the only method recognized by the FCC. The emissions on the harmonics frequencies, the limits, and the margin of compliance are presented. These tests were made when the transmitter was in full radiated power. The additional test was performed to show compliance with the requirement at the band-edge frequency 2483.5 MHz and up to 2500 MHz and at 2390.0 MHz.
The transmitter was configured with the worst case antenna and setup to transmit at the highest channel. Then the field strength was measured at 2483.5 MHz.
The transmitter was then configured with the worst case antenna and setup to transmit at the lowest channel. Then the field strength was measured at 2390.0 MHz.
For measurements the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

Note: We tests were performed in different modulation to find the worst case. And show the worst-case here.

12.5. Test Result

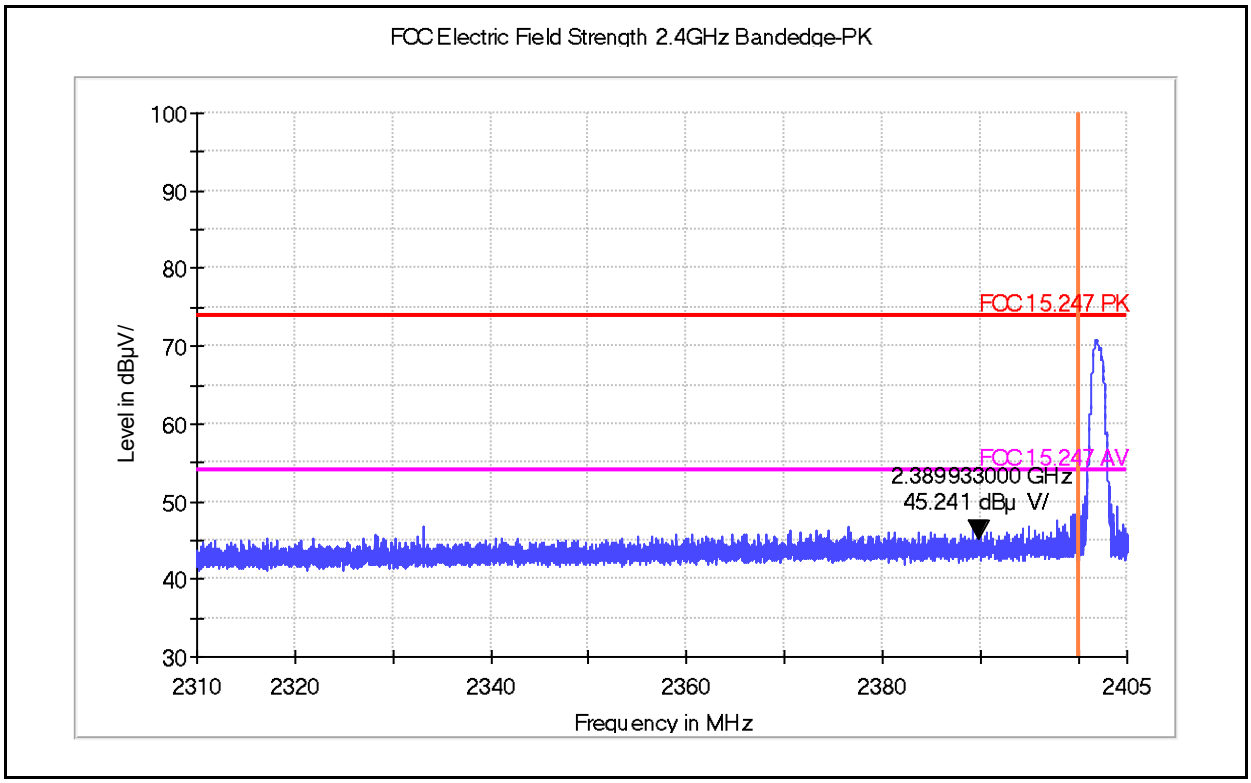
Note：We have test both un-hopping and hopping mode for the radiated bandedge test, and the un-hopping mode is worse case.

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model Number:	ZeSplash^2	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	2015/11/24
Frequency:	2402 MHz		
Ant.Polar.:	Horizontal		



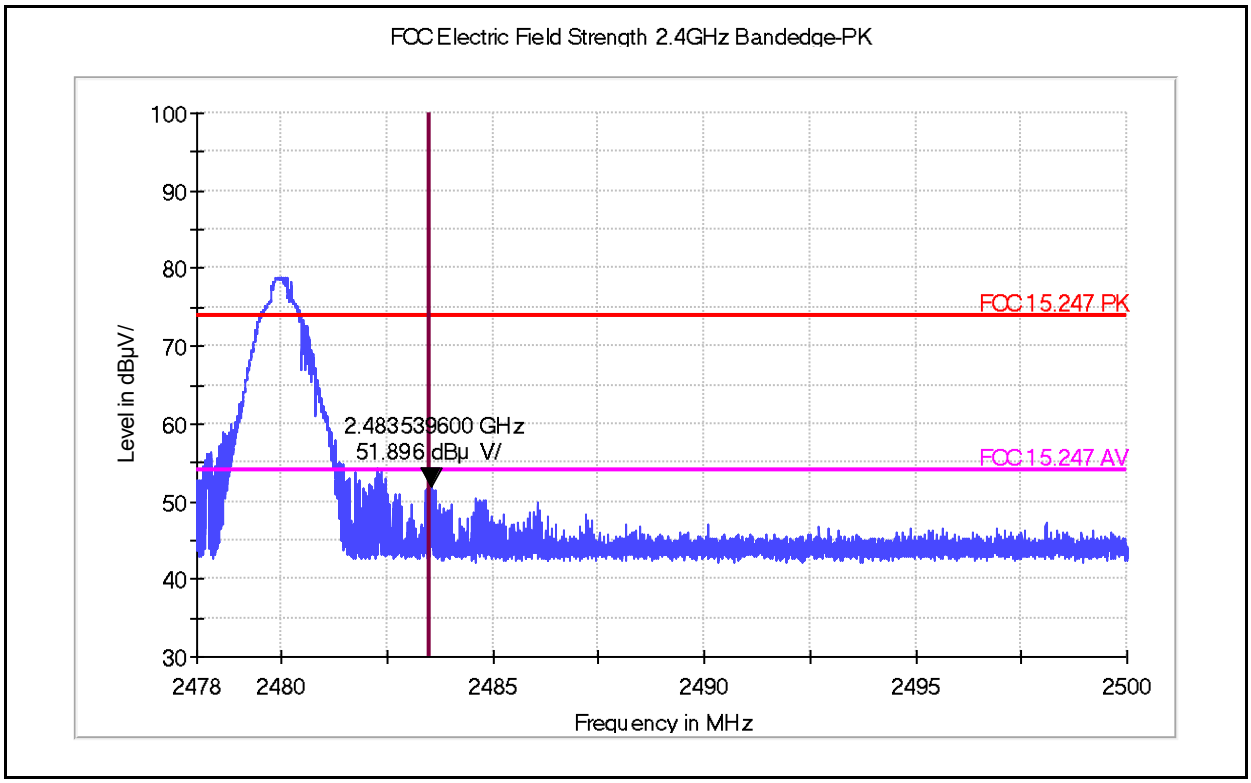
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.648	45.32	0.35	45.67	74.00	28.33	peak

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model Number:	ZeSplash^2	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	2015/11/24
Frequency:	2402 MHz		
Ant.Polar.:	Vertical		



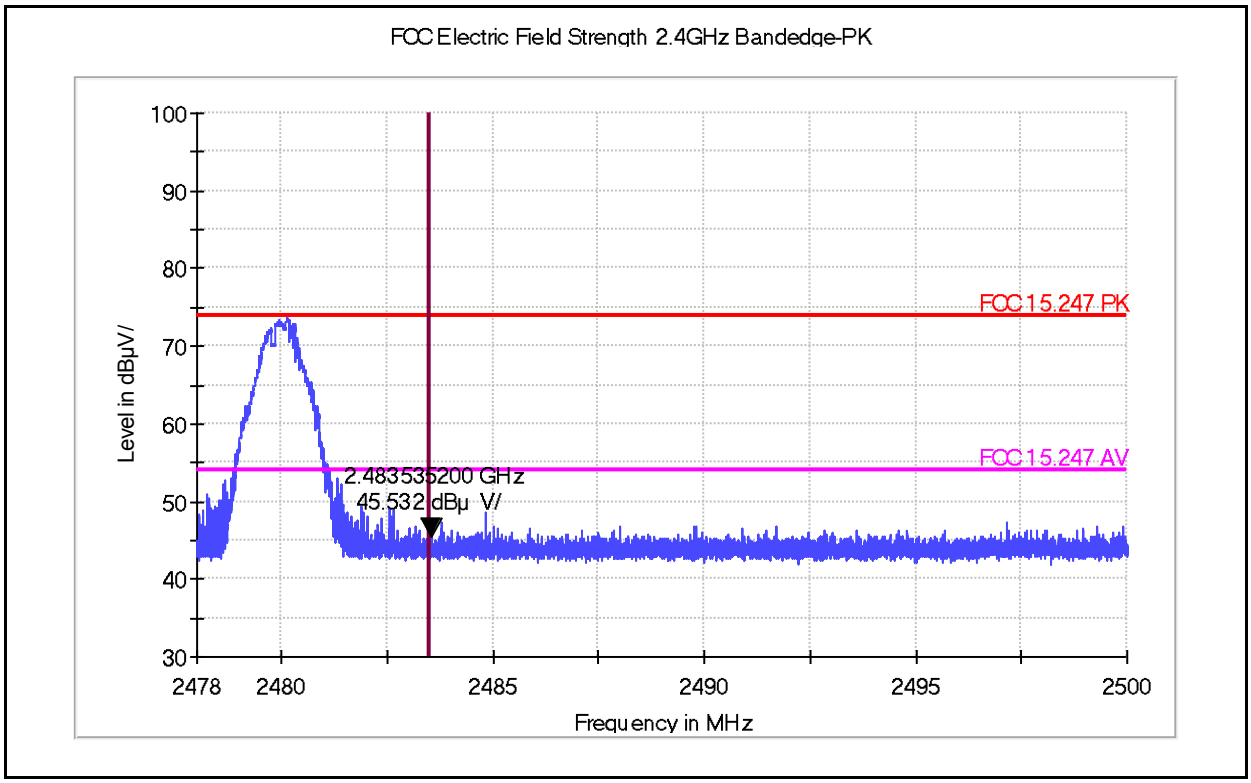
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.933	44.89	0.35	45.24	74.00	28.76	peak

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model Number:	ZeSplash^2	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	2015/11/24
Frequency:	2480 MHz		
Ant.Polar.:	Horizontal		



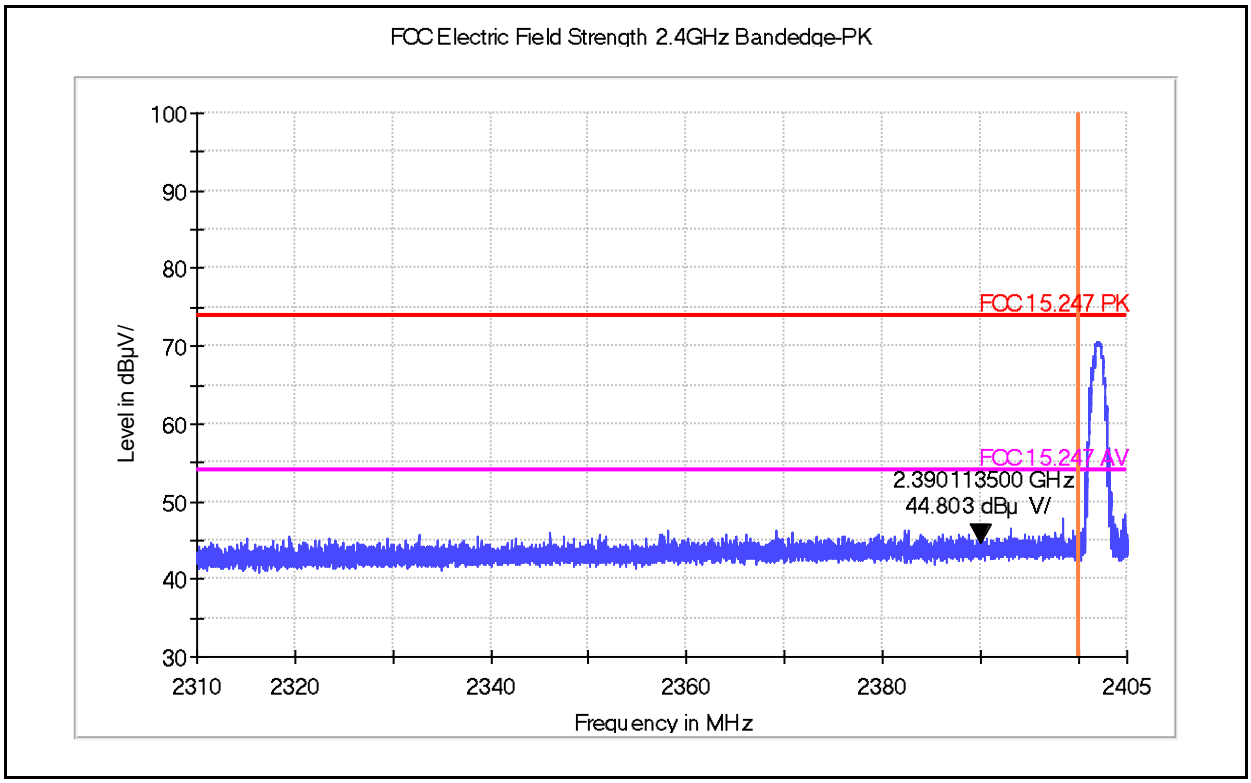
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.540	51.44	0.46	51.90	74.00	22.10	peak

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model Number:	ZeSplash^2	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	2015/11/24
Frequency:	2480 MHz		
Ant.Polar.:	Vertical		



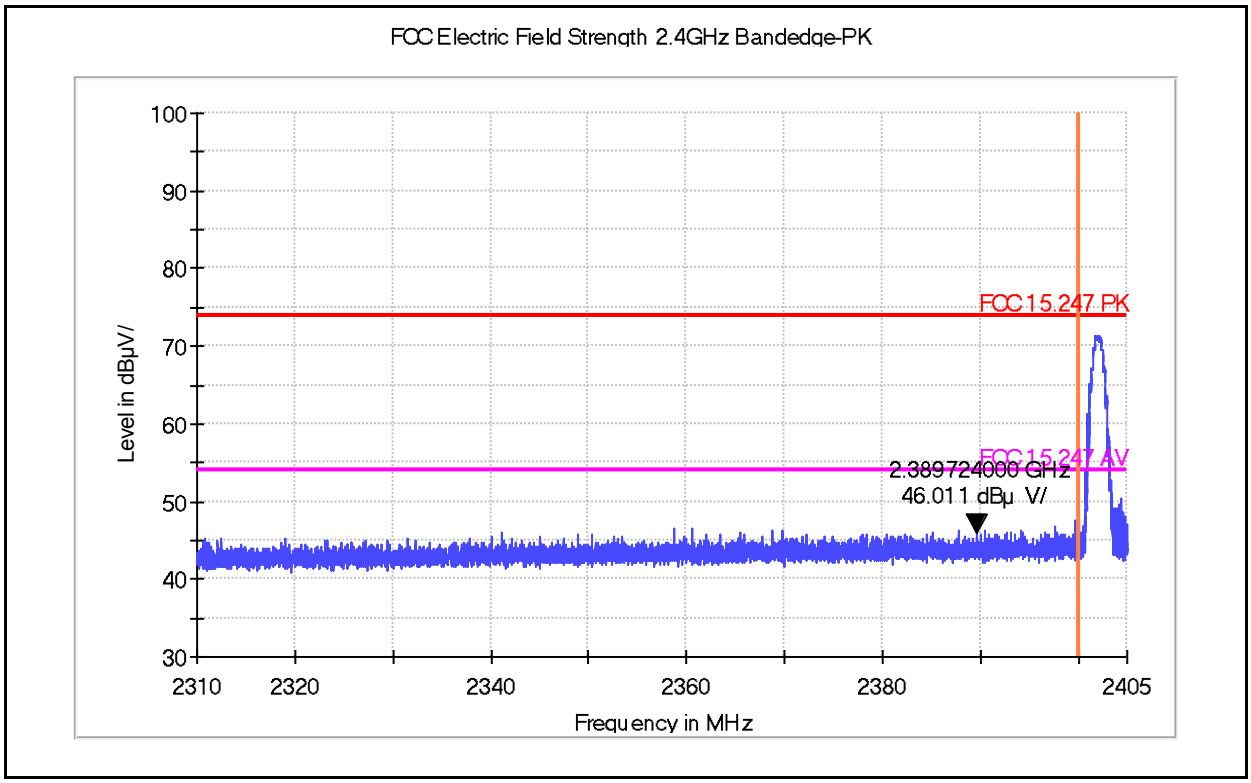
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.535	45.07	0.46	45.53	74.00	28.47	peak

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model Number:	ZeSplash^2	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	2015/11/24
Frequency:	2402 MHz		
Ant.Polar.:	Horizontal		



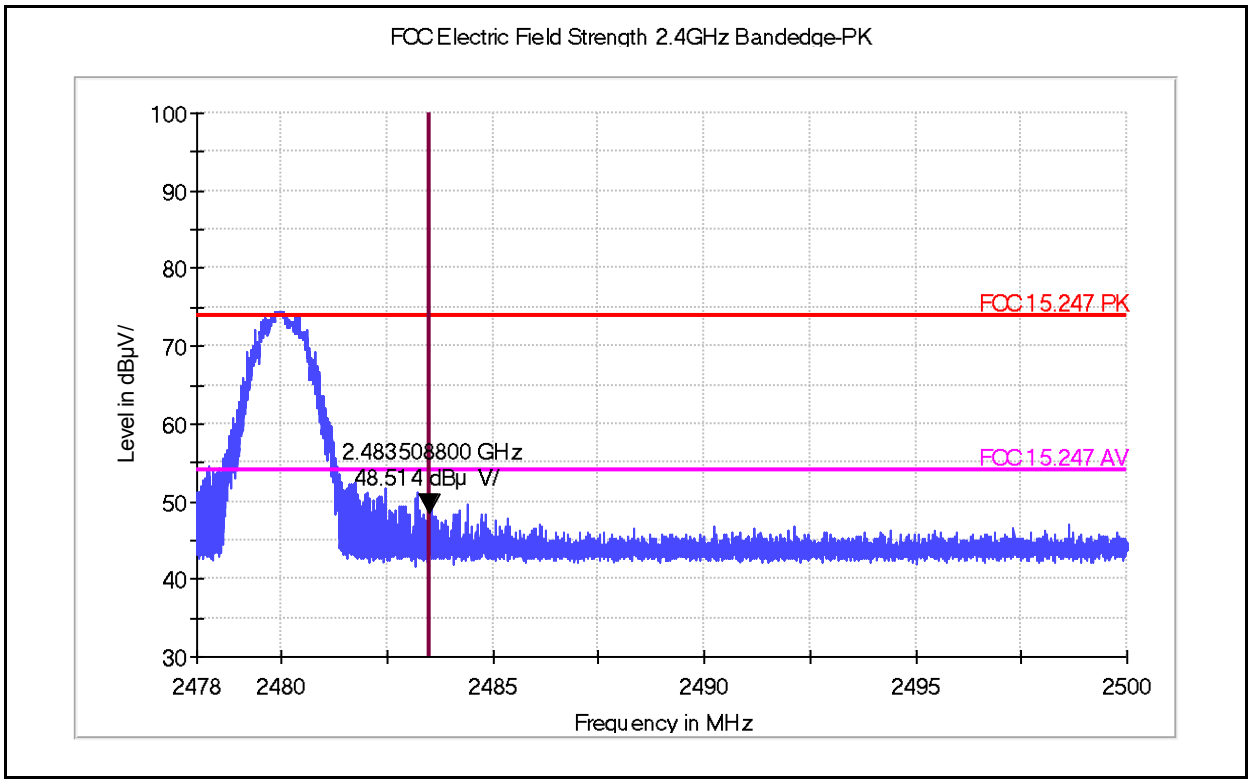
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.114	44.45	0.35	44.80	74.00	29.20	peak

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model Number:	ZeSplash^2	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	2015/11/24
Frequency:	2402 MHz		
Ant.Polar.:	Vertical		



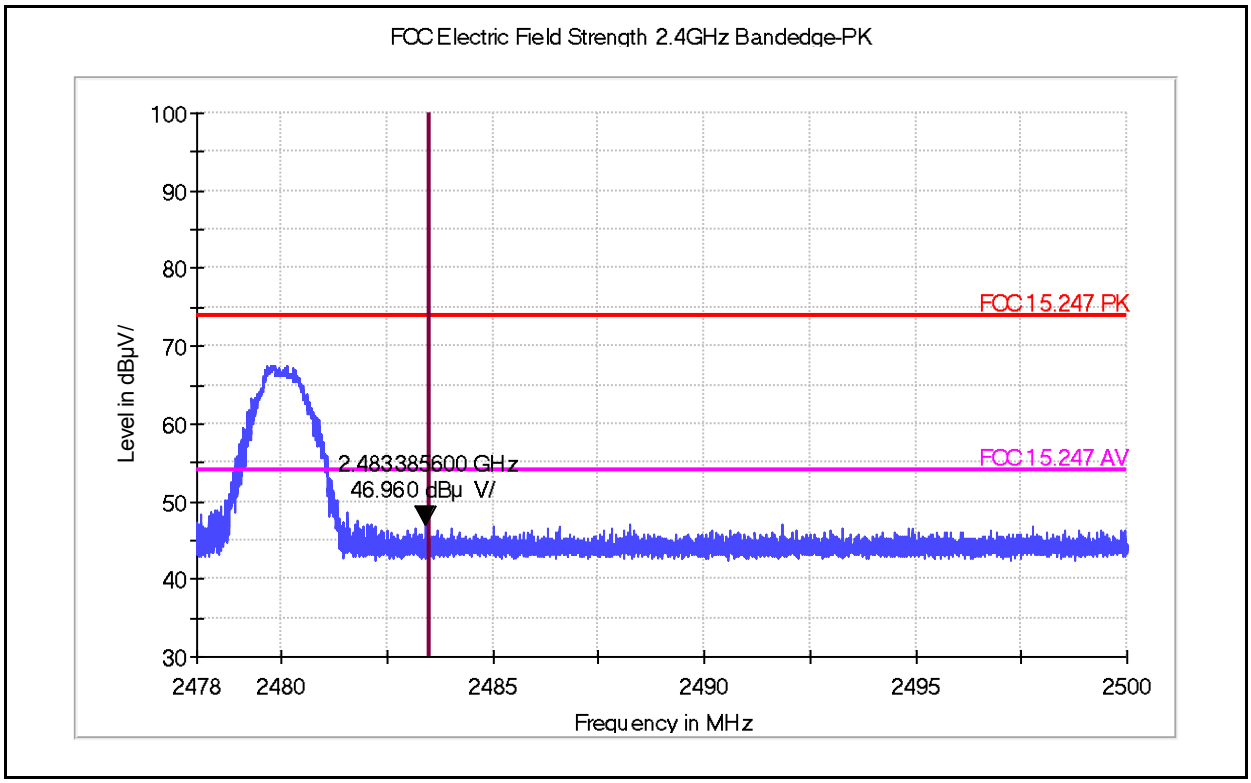
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.724	45.66	0.35	46.01	74.00	27.99	peak

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model Number:	ZeSplash^2	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	2015/11/24
Frequency:	2480 MHz		
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.509	48.05	0.46	48.51	74.00	25.49	peak

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model Number:	ZeSplash^2	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	2015/11/24
Frequency:	2480 MHz		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	46.50	0.46	46.96	74.00	27.04	Peak

Note: 1. Result (dBuV) = Correction factor (dB) + Reading(dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

13 Antenna Measurement

13.1. Limit

For intentional device, according to 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.
And According to 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

13.2. Antenna Connector Construction

The antenna used in this product is VLG Antenna. And the maximum Gain of this antenna is as below:
Bluetooth: 2.0 dBi

Antenna Type	VLG Antenna

--END OF REPORT--