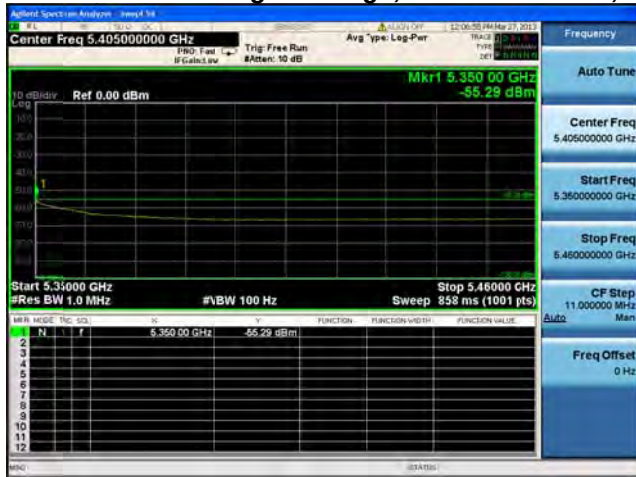
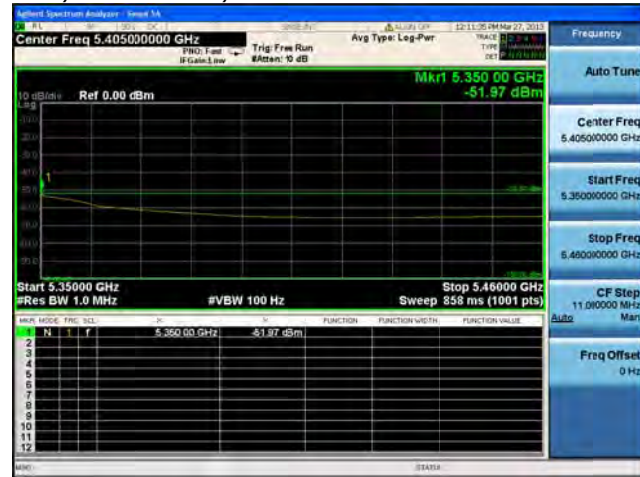
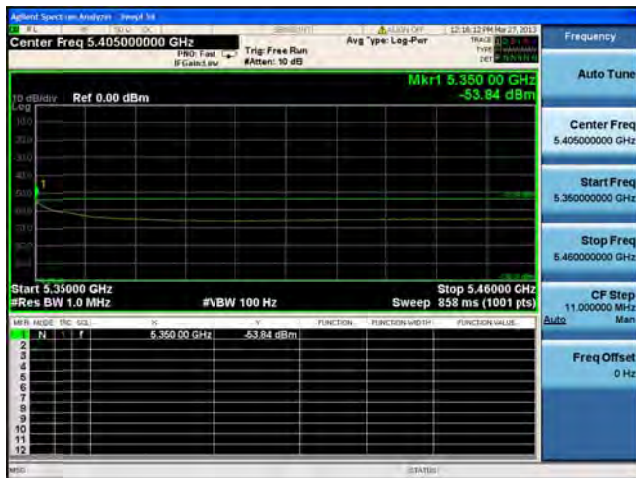
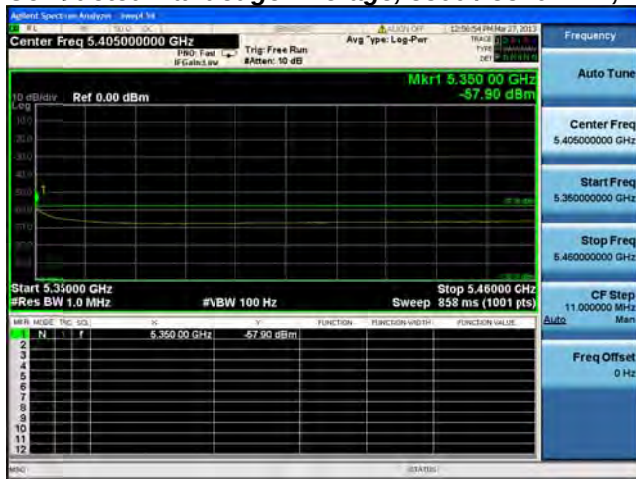
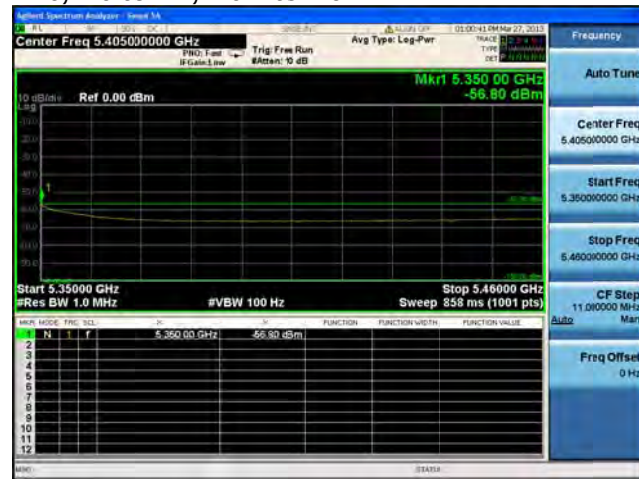
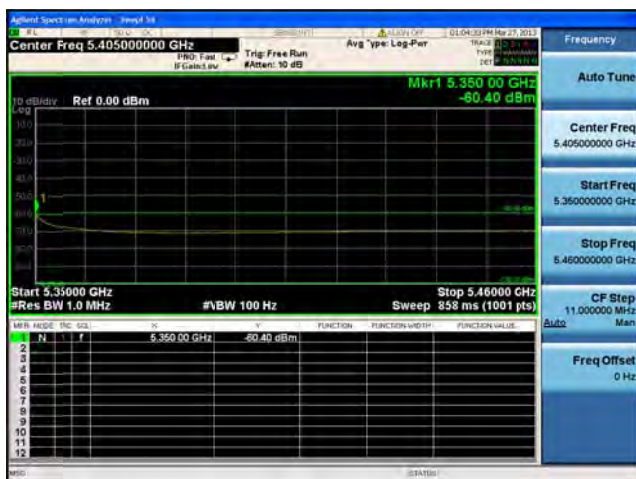
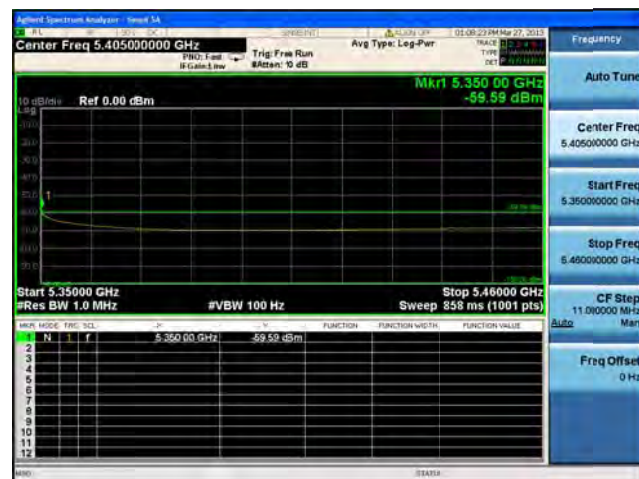
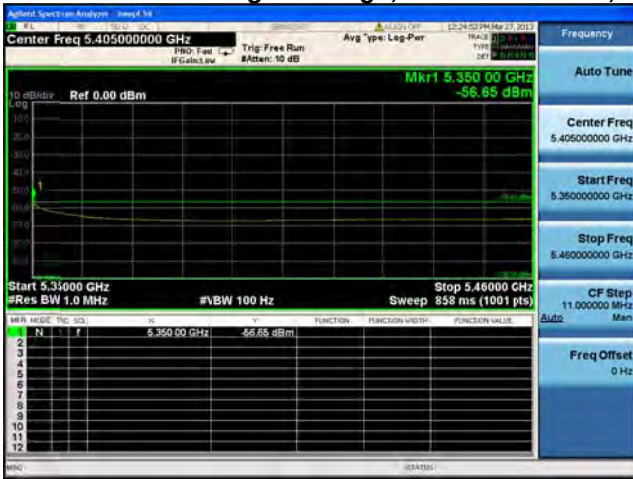
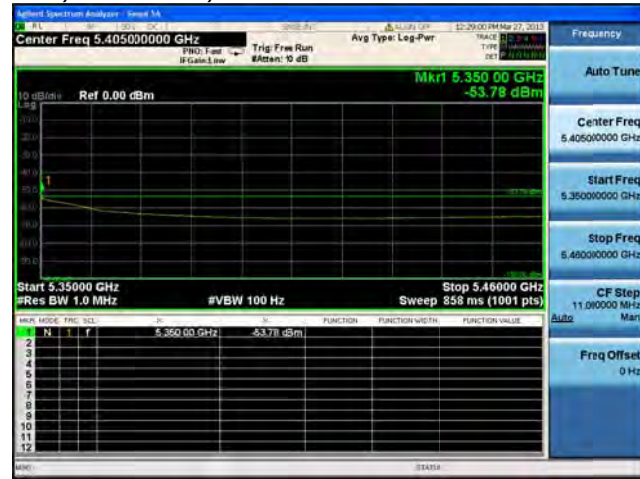
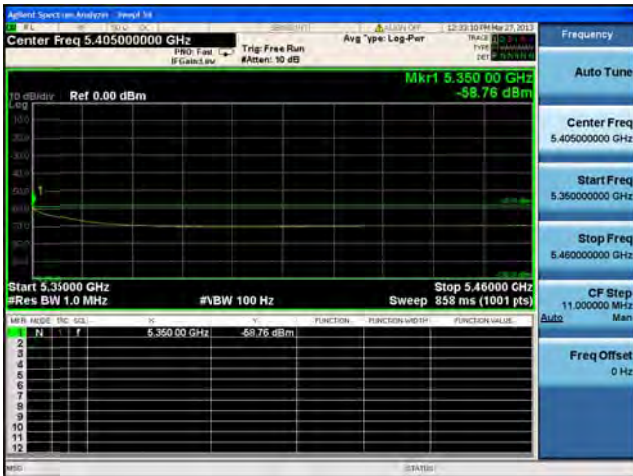
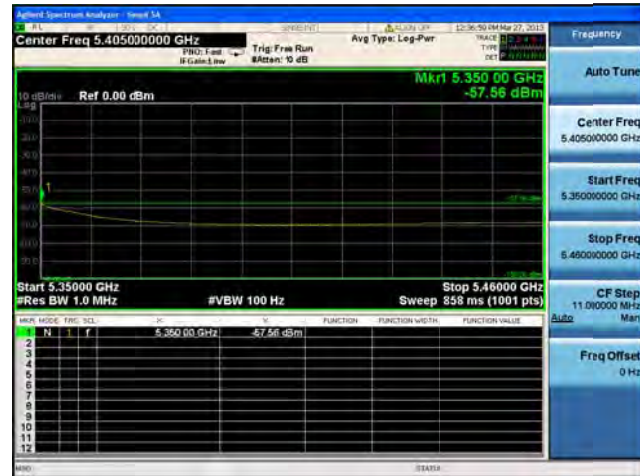
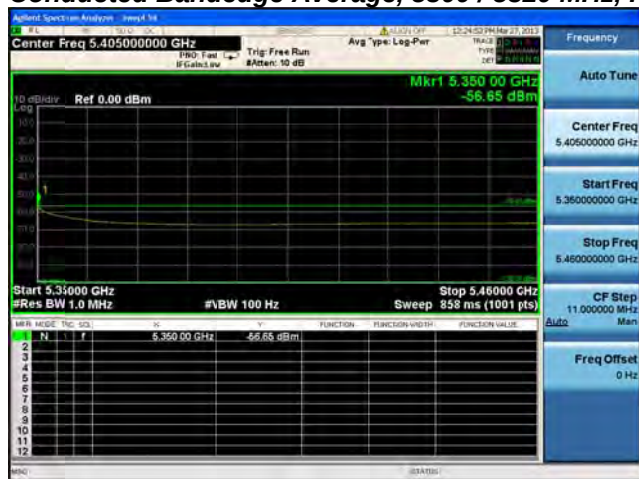
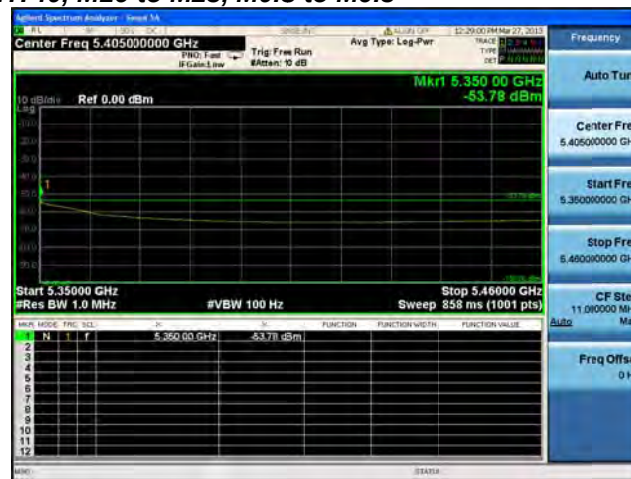
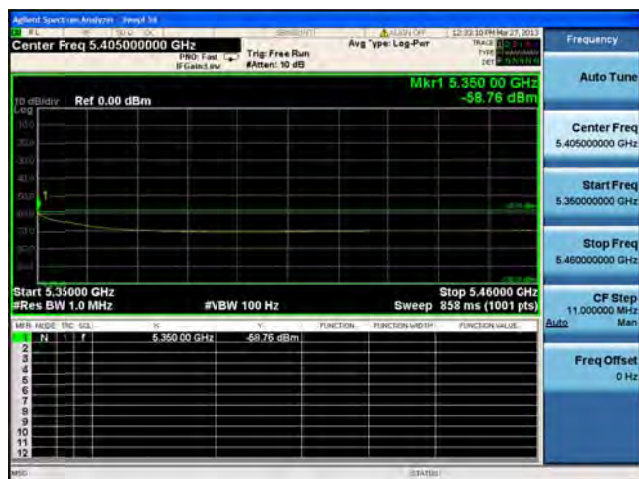


**Conducted Bandedge Average, 5300 / 5320 MHz, HT/VHT40, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C**

Conducted Bandedge Average, 5300 / 5320 MHz, HT/VHT40, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C****Antenna D**

**Conducted Bandedge Average, 5300 / 5320 MHz, HT/VHT40, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B****Antenna C****Antenna D**

Conducted Bandedge Average, 5300 / 5320 MHz, HT/VHT40, M16 to M23, M0.3 to M9.3**Antenna A****Antenna B****Antenna C****Antenna D**

Agilent Spectrum Analyzer - Sample 3a

Center Freq 5.405000000 GHz

Ref 0.00 dBm

Start 5.350000 GHz

Stop 5.460000 GHz

Res BW 1.0 MHz

#BW 100 Hz

Sweep 898 ms (1001 pts)

Mkr1 5.350000 GHz

-56.65 dBm

MN	Hz	dBm	FUNCTION	FUNCTION VALUE	FUNCTION VALUE
1	5.350000 GHz	-56.65 dBm			
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

Author: Spectrum Analyzer - Image 34

File: 12-29-00 12:29:00 PM 12/29/00

Center Freq 5.405000000 GHz

Auto Tune

Center Freq 5.405000000 GHz

Start Freq 5.360000000 GHz

Stop Freq 5.450000000 GHz

CF Stop 11.000000000 MHz

Freq Offset 0 Hz

10 dBm/Div

Ref 0.00 dBm

Mkr1 5.35000 GHz -53.78 dBm

Center Freq 5.405000000 GHz

Avg Type: Log-Per

Trace 1 5.35000 GHz

Type 1 5.35000 GHz

Det 1 5.35000 GHz

Start 5.35000 GHz

Stop 5.40000 GHz

Res BW 1.0 MHz

VBW 100 Hz

Sweep 898 ms (1001 pts)

Input Mode Pres SCL

5.35000 GHz -53.78 dBm

Function Function Width Function Value

Auto

Man

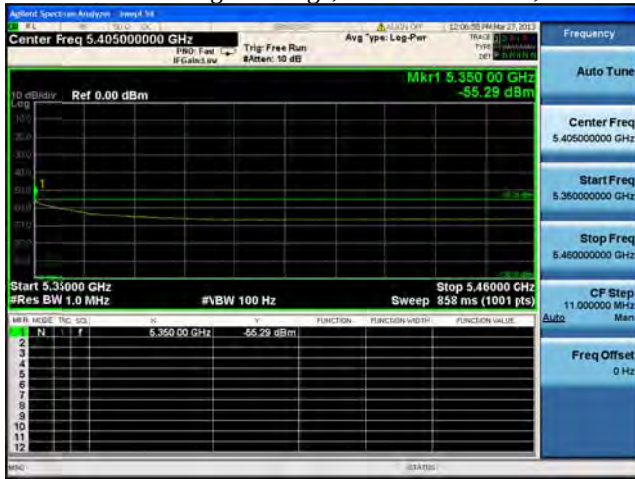
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STATUS

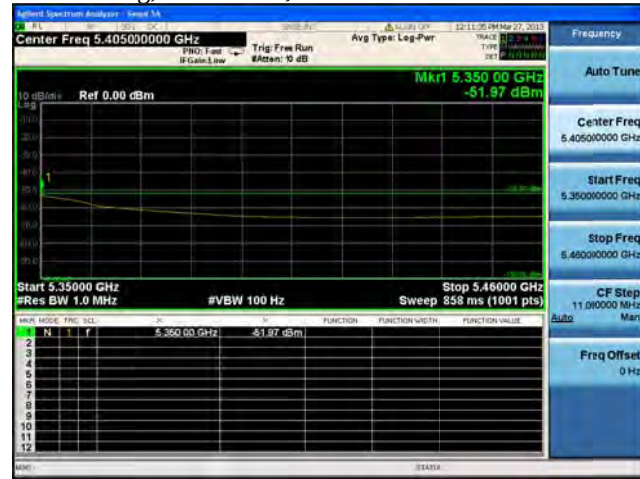
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Conducted Bandedge Average, 5300 / 5320 MHz, HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2



Antenna A



Antenna B

Keysight Spectrum Analyzer - Speed 1.0

Center Freq 5.405000000 GHz

Fwd: Fast B Calib: On Trig: Free Run Attenu: 10 dB Avg Type: Log-Pwr

03:26:57 PM Mar 23, 2013

TRACE 0.001 Hz TYPE F SPAN 10 GHz

Frequency

Auto Tune

Center Freq 5.405000000 GHz

Start Freq 5.360000000 GHz

Stop Freq 5.480000000 GHz

CF Step 11.000000 MHz

Auto

Man

Freq Offset 0 Hz

Start 5.36000 GHz Res BW 1.0 MHz #BW 100 Hz Stop 5.48000 GHz Sweep 858 ms (1001 pts)

Mkr Mode	Fz	Val	Function	Function Value	Function Value
N	F	Val			
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

Agilent Spectrum Analyzer - Screen 1A

Center Freq 5.405000000 GHz

Mkr1 5.350 00 GHz
-62.17 dBm

Start 5.350000 GHz
Stop 5.460000 GHz

Res BW 1.0 MHz
#VBW 100 Hz
Sweep 858 ms (1001 pts)

GROUP	MODE	FREQ	SPAN	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	5.350 00 GHz	-62.17 dBm			
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Agilent Spectrum Analyzer - Saved 3

Center Freq 5.405000000 GHz

Span 200 MHz

RBW 100 Hz

VBW 100 Hz

Trig: Free Run

Attenu: 10 dB

AvG Type: Log-Pwr

Trace 1: 5.350 GHz

Power: -61.08 dBm

Marker 1: 5.350 00 GHz, -61.08 dBm

Start 5.350000 GHz

Stop 5.400000 GHz

Res BW 1.0 MHz

Sweep 898 ms (1001 pts)

Marker	Freq (GHz)	Power (dBm)	Function	Function Width	Function Value
1	5.350 00	-61.08			
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

Frequency

Auto Tune

Center Freq 5.405000000 GHz

Start Freq 5.350000000 GHz

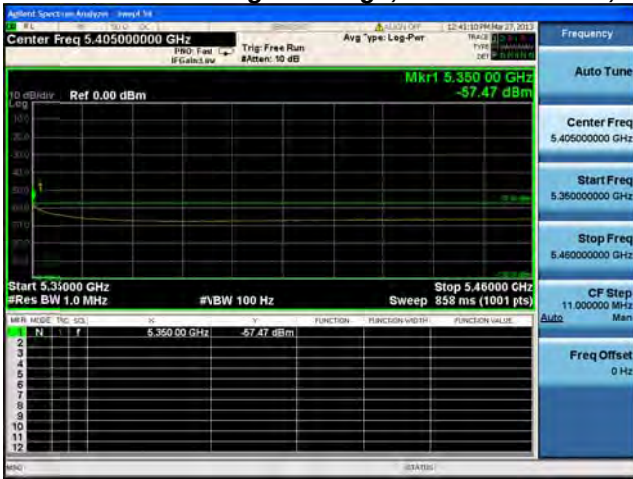
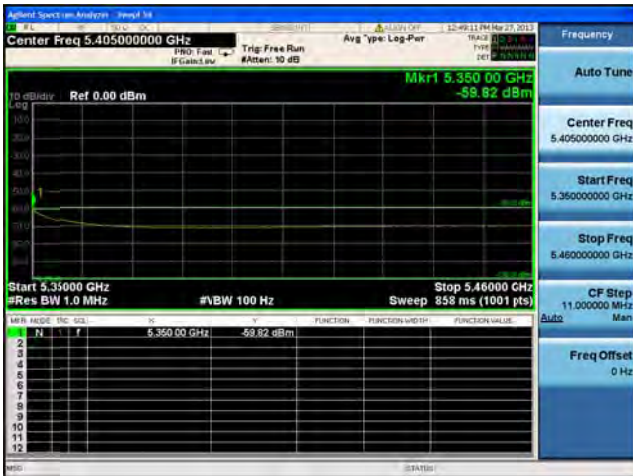
Stop Freq 5.480000000 GHz

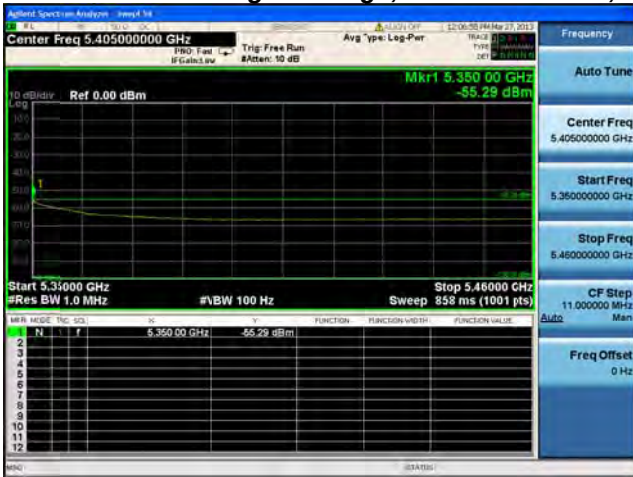
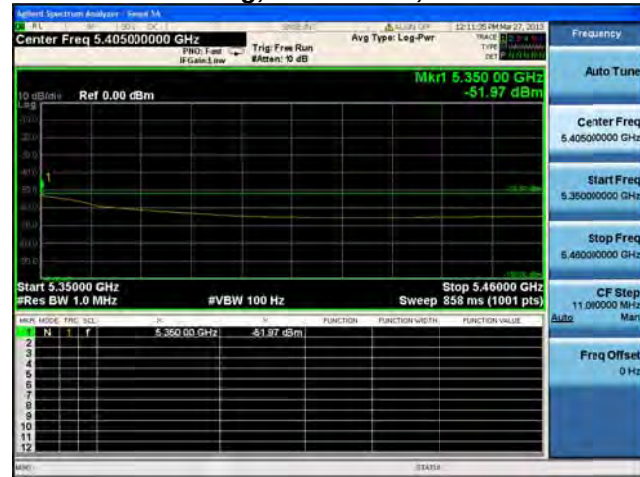
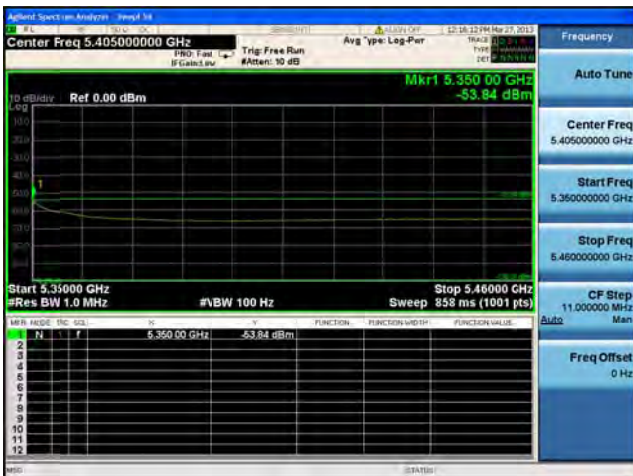
CF Step 11.000000 MHz

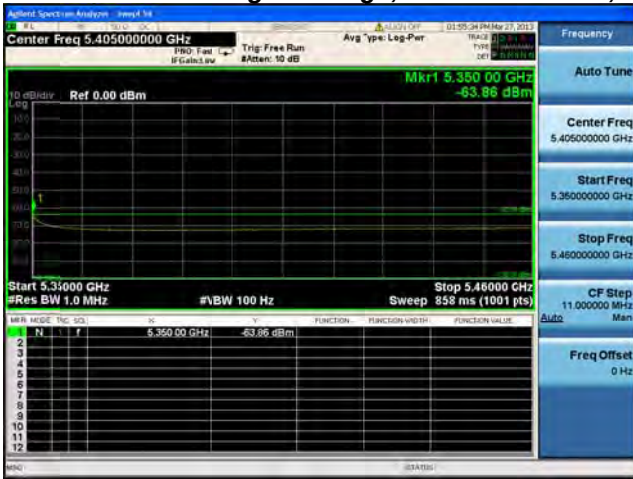
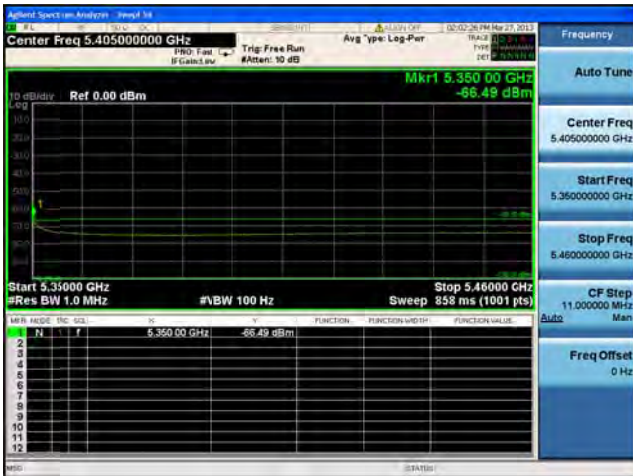
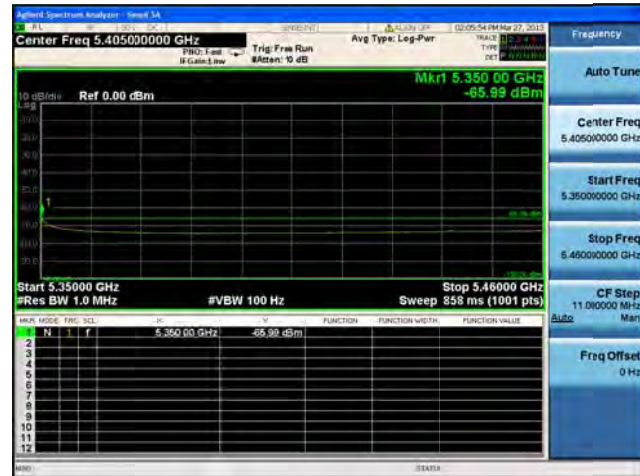
Auto

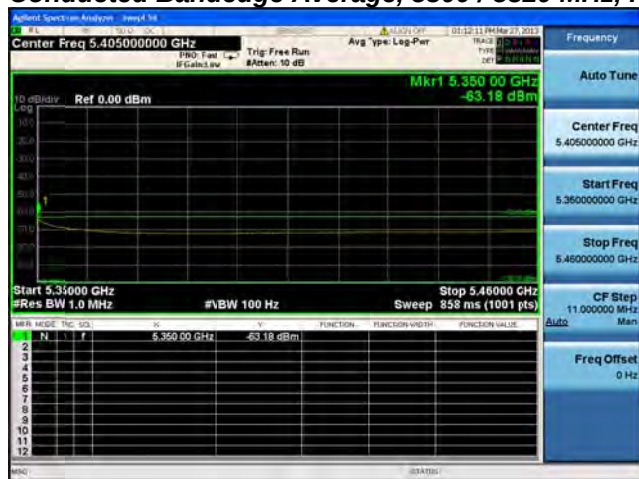
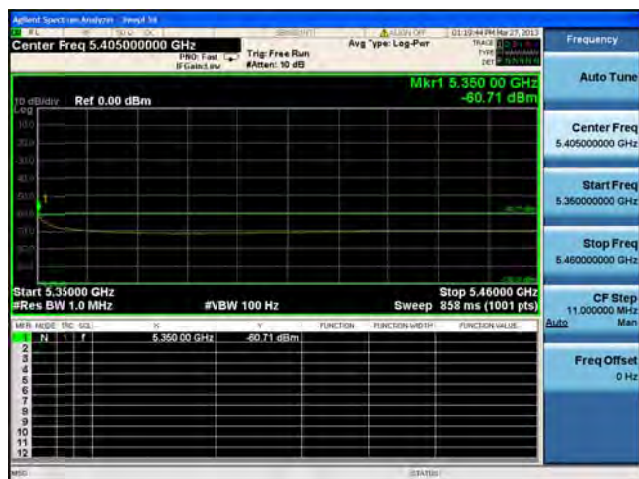
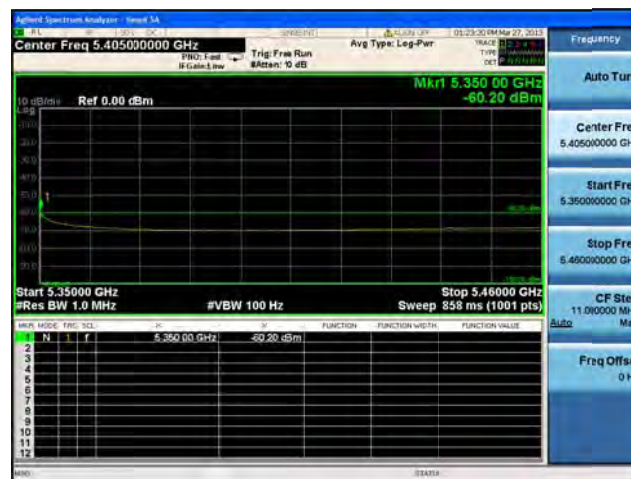
Freq Offset 0 Hz

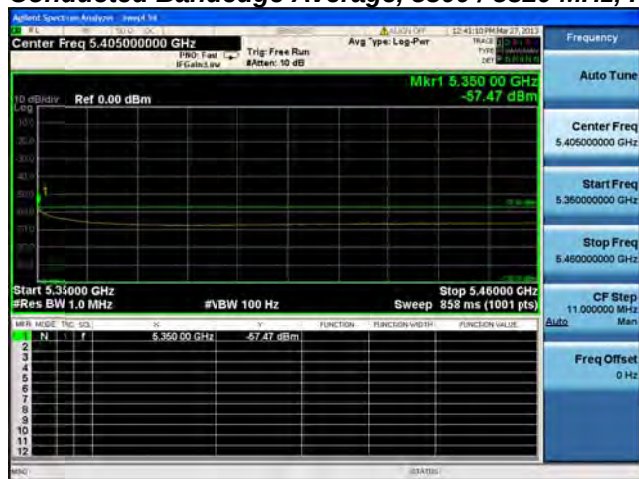
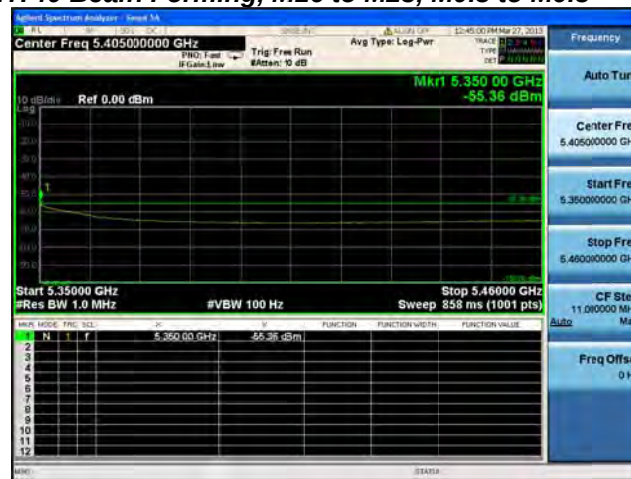
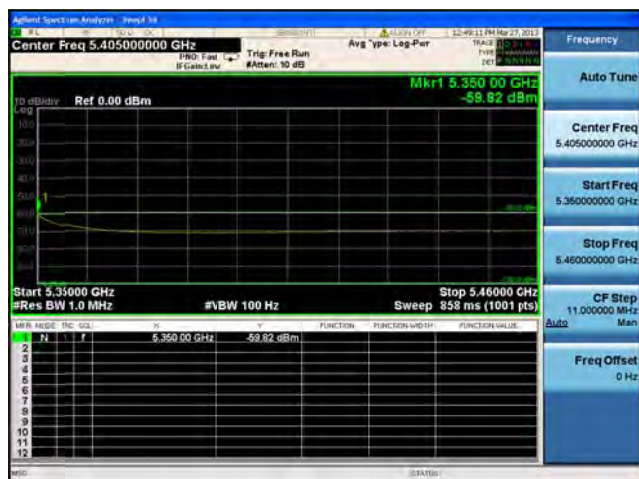
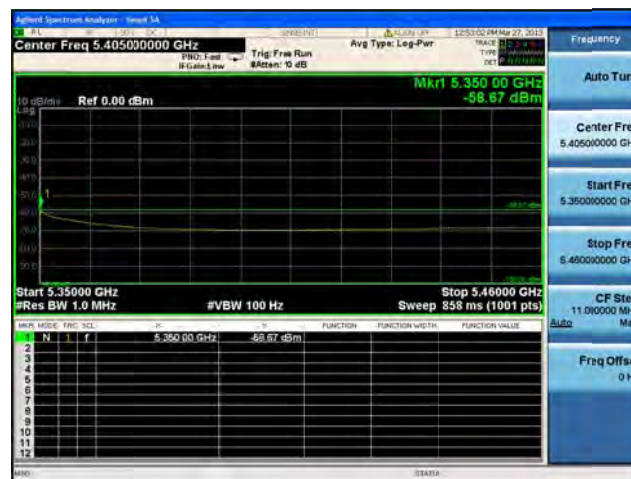
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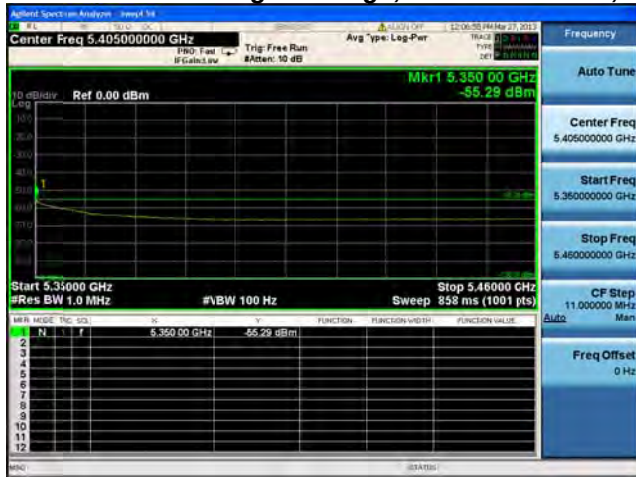
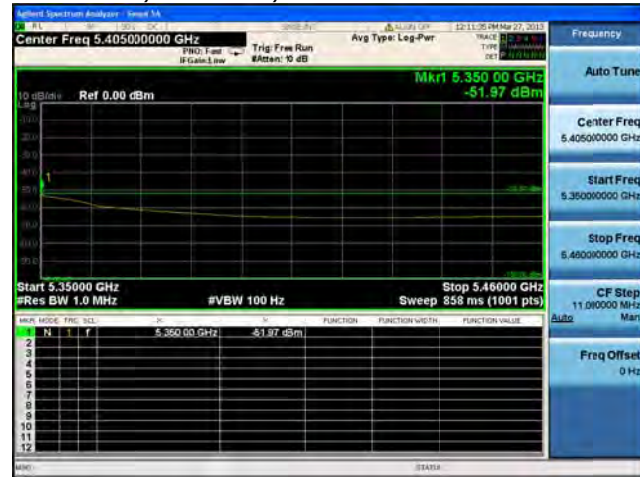
Conducted Bandedge Average, 5300 / 5320 MHz, HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B****Antenna C**

**Conducted Bandedge Average, 5300 / 5320 MHz, HT/VHT40 Beam Forming, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C**

**Conducted Bandedge Average, 5300 / 5320 MHz, HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C****Antenna D**

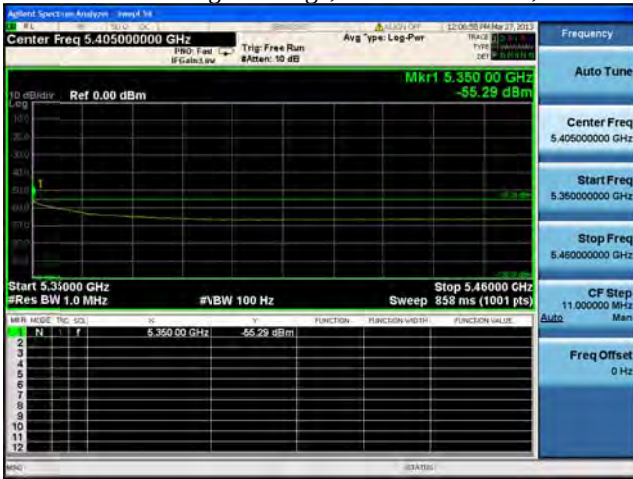
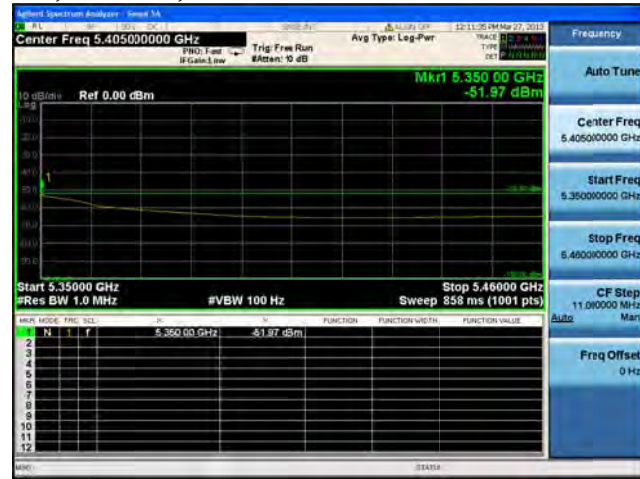
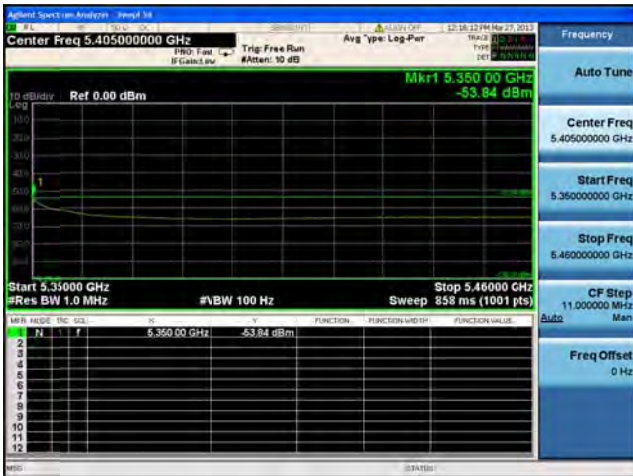
Conducted Bandedge Average, 5300 / 5320 MHz, HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B****Antenna C****Antenna D**

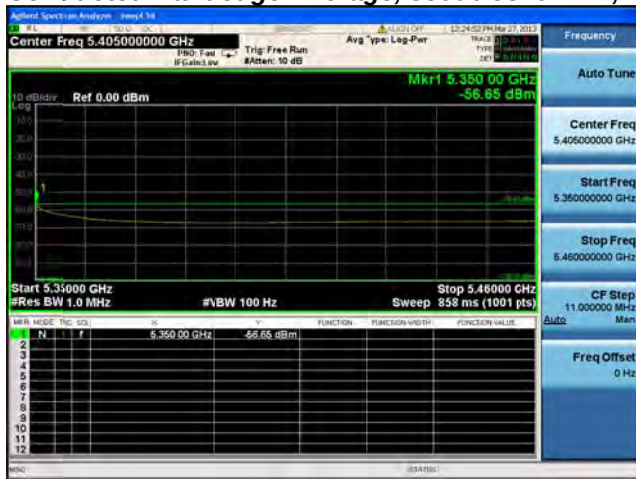
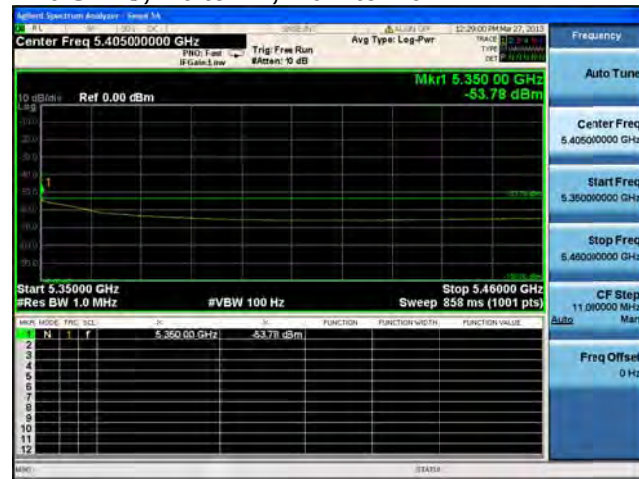
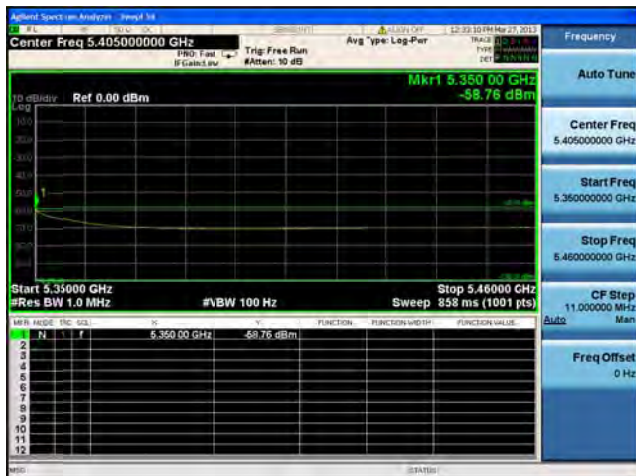
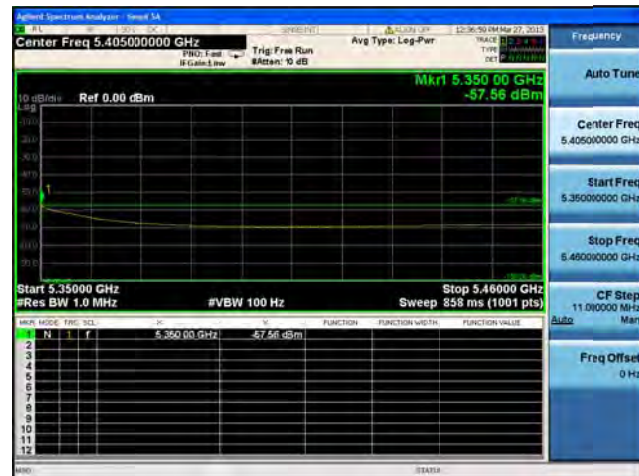
Conducted Bandedge Average, 5300 / 5320 MHz, HT/VHT40 Beam Forming, M16 to M23, M0.3 to M9.3**Antenna A****Antenna B****Antenna C****Antenna D**

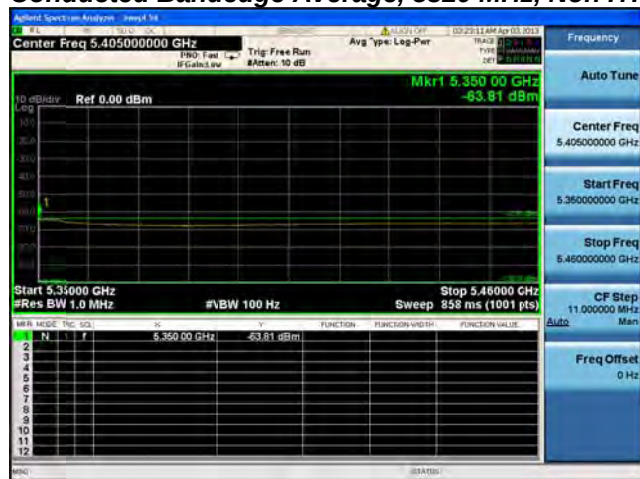
Conducted Bandedge Average, 5300 / 5320 MHz, HT/VHT40 STBC, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B**

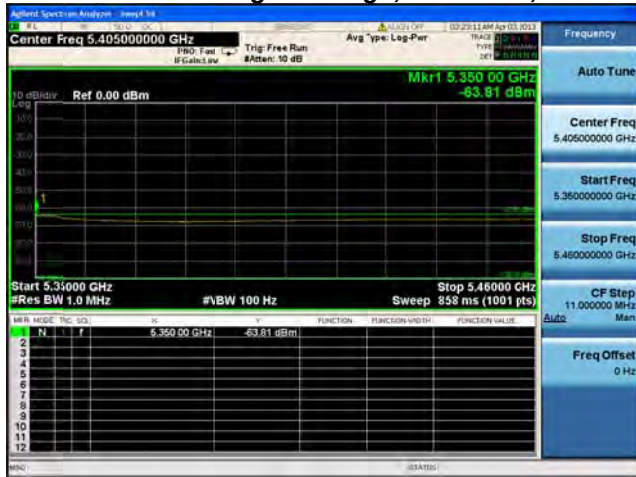
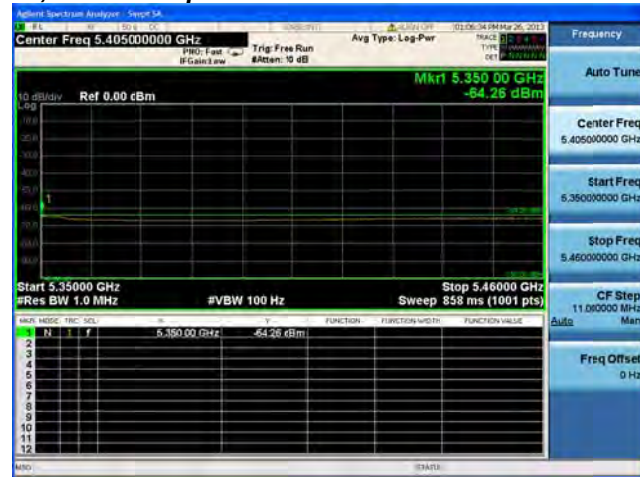


Conducted Bandedge Average, 5300 / 5320 MHz, HT/VHT40 STBC, M0 to M7, M0.1 to M9.1

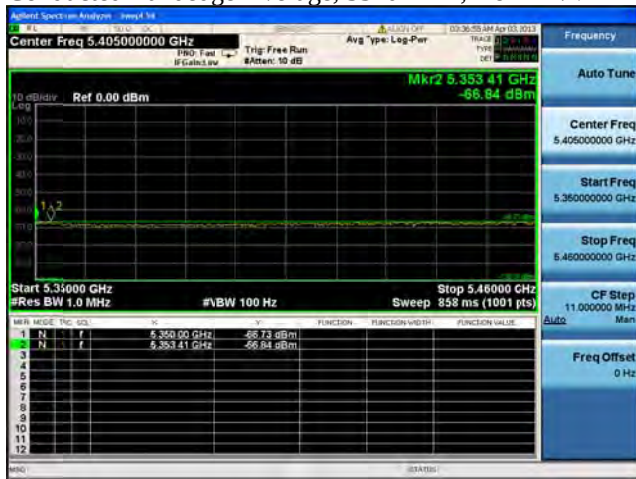
**Antenna A****Antenna B****Antenna C**

Conducted Bandedge Average, 5300 / 5320 MHz, HT/VHT40 STBC, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C****Antenna D**

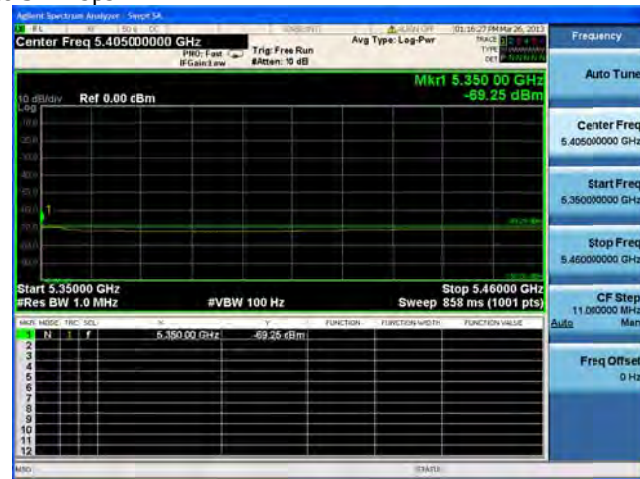
Conducted Bandedge Average, 5320 MHz, Non HT/VHT20, 6 to 54 Mbps**Antenna A**

**Conducted Bandedge Average, 5320 MHz, Non HT/VHT20, 6 to 54 Mbps****Antenna A****Antenna B**

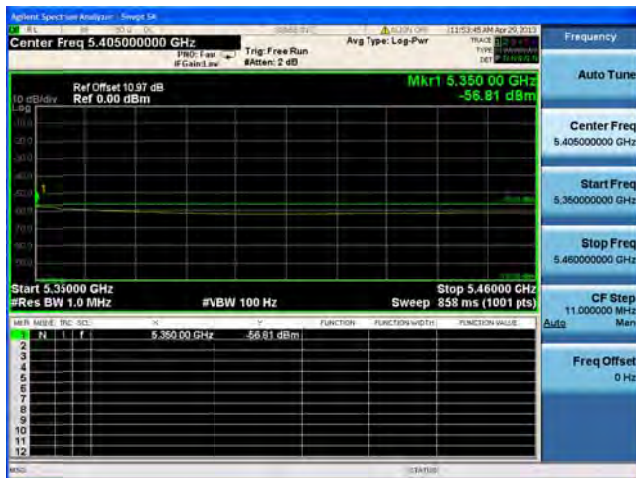
Conducted Bandedge Average, 5320 MHz, Non HT/VHT20, 6 to 54 Mbps



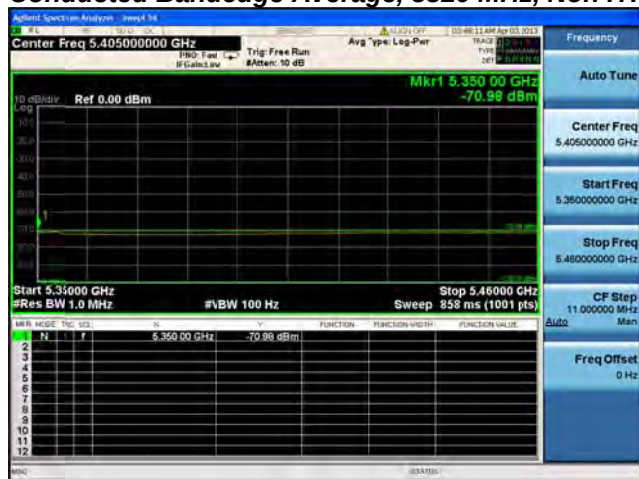
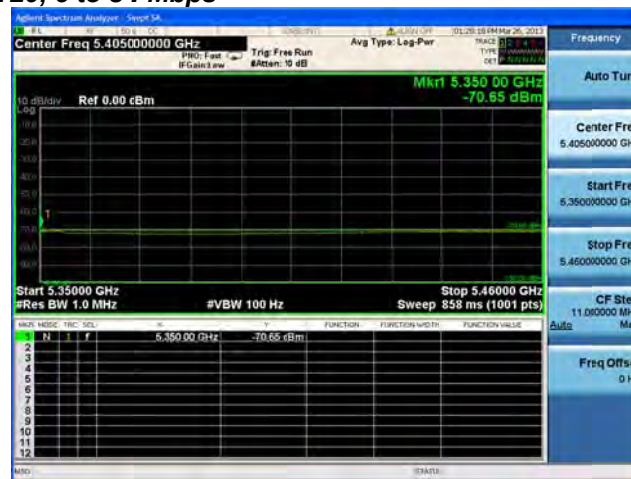
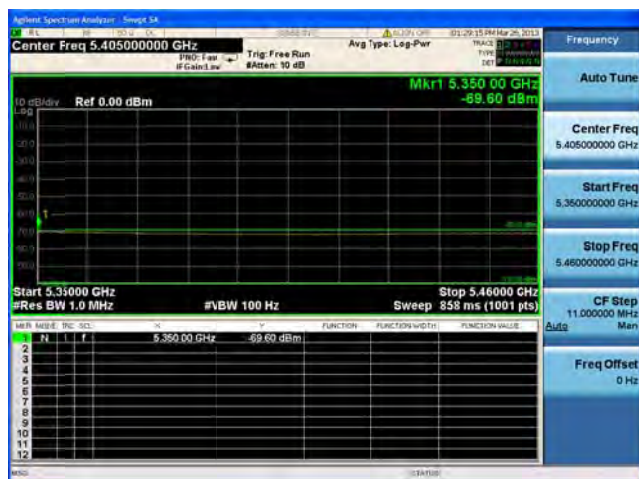
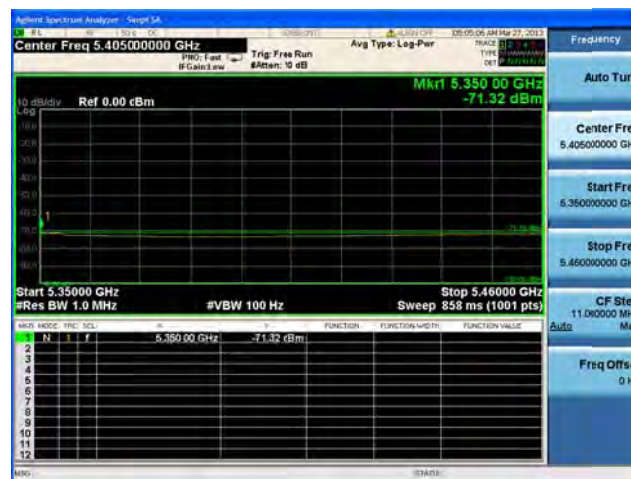
Antenna A

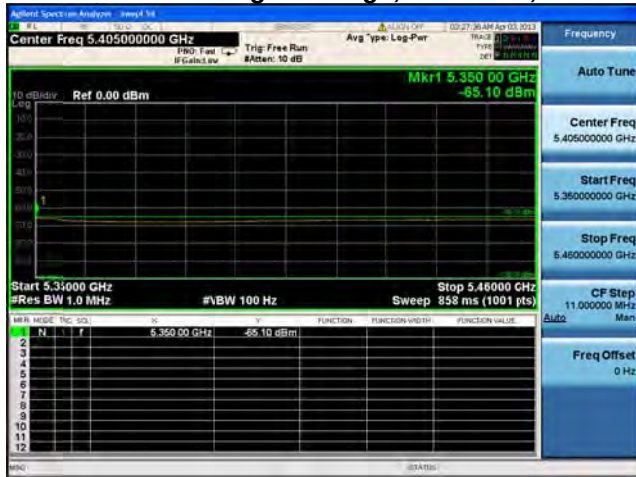
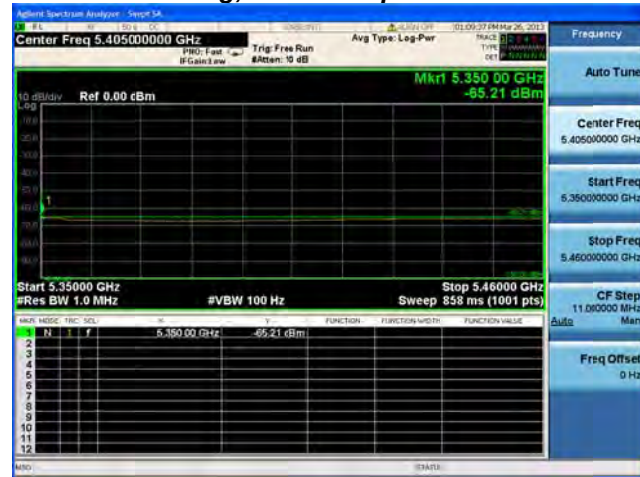


Antenna B



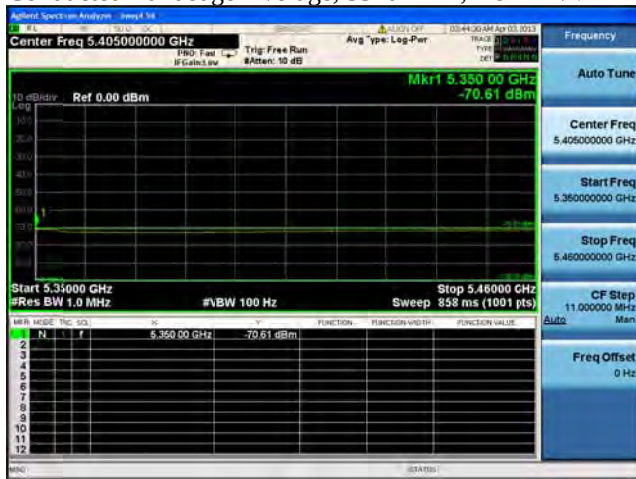
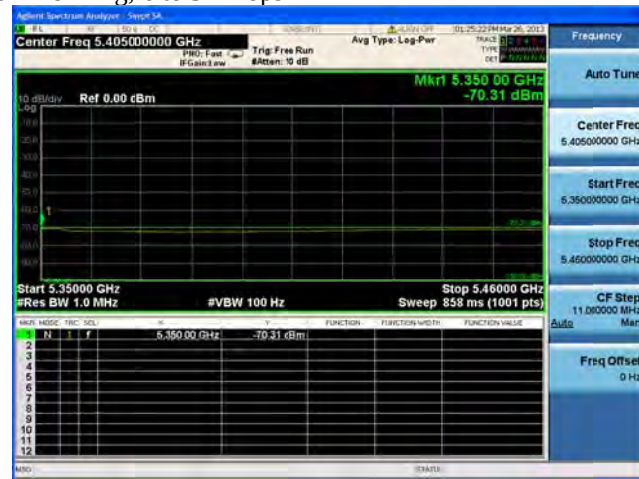
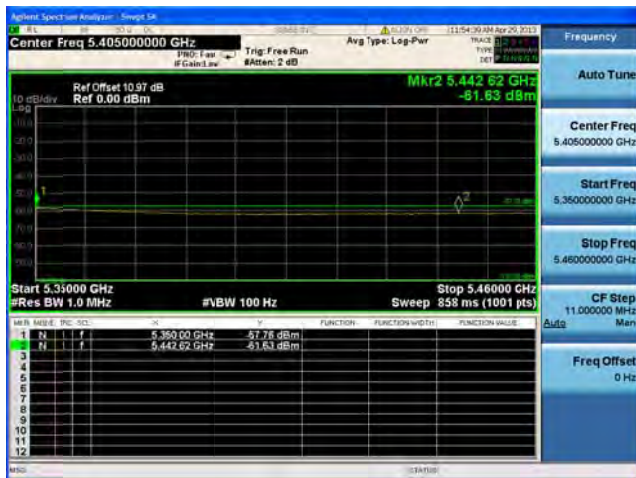
Antenna C

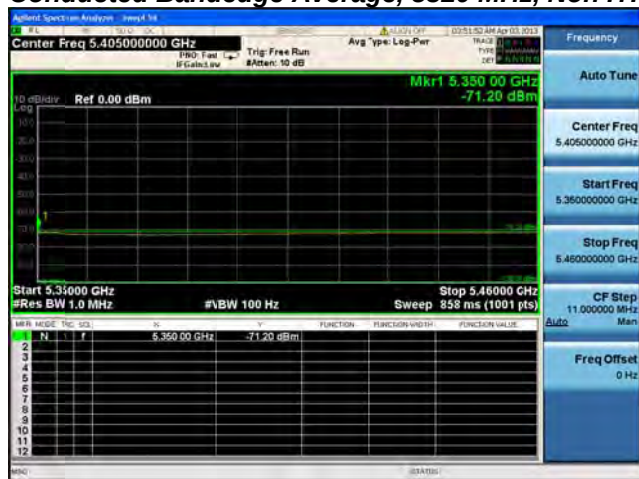
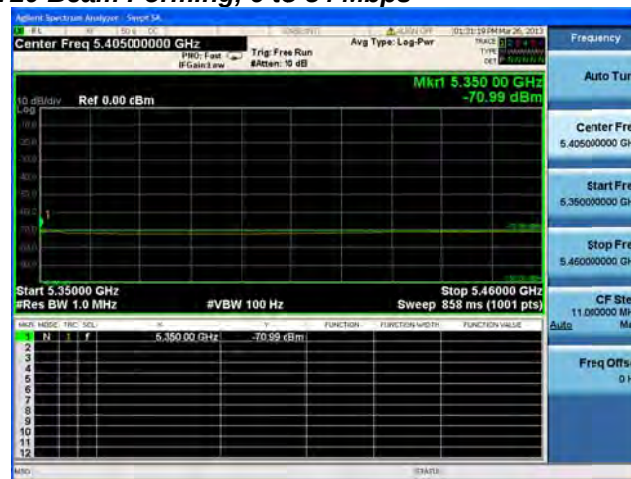
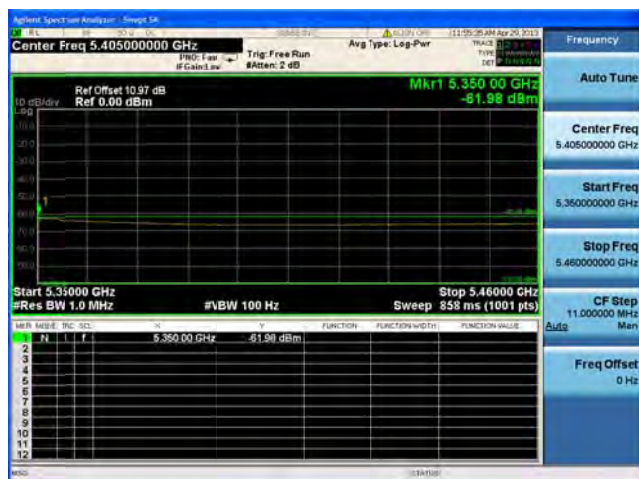
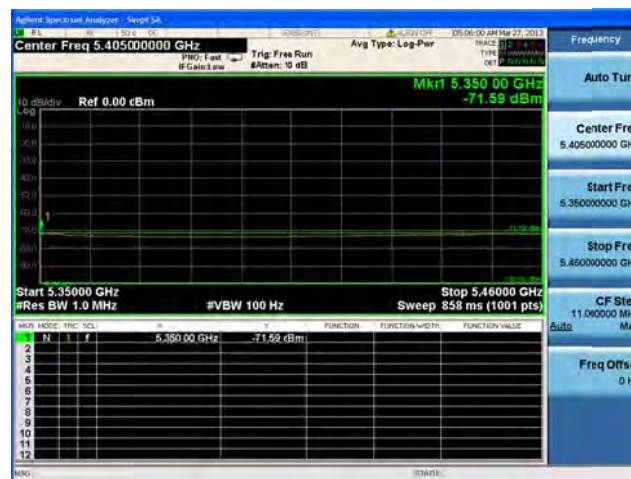
Conducted Bandedge Average, 5320 MHz, Non HT/VHT20, 6 to 54 Mbps**Antenna A****Antenna B****Antenna C****Antenna D**

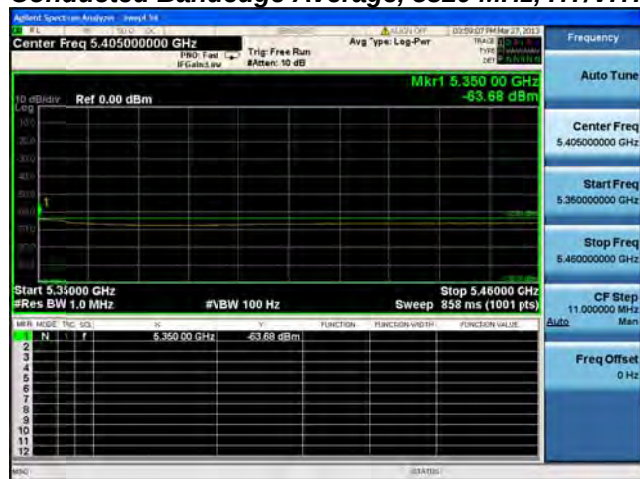
**Conducted Bandedge Average, 5320 MHz, Non HT/VHT20 Beam Forming, 6 to 54 Mbps****Antenna A****Antenna B**

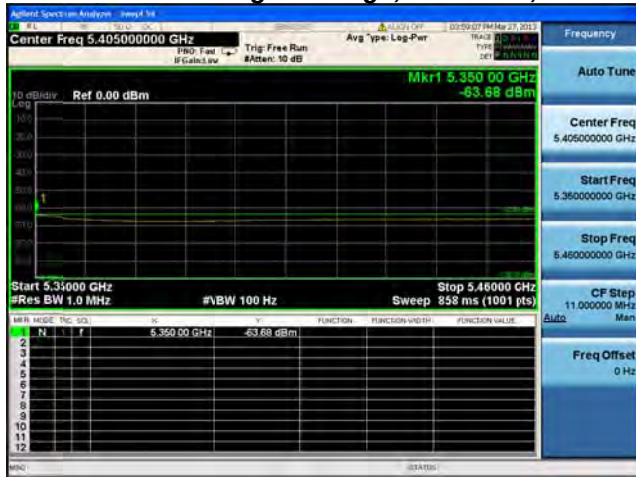
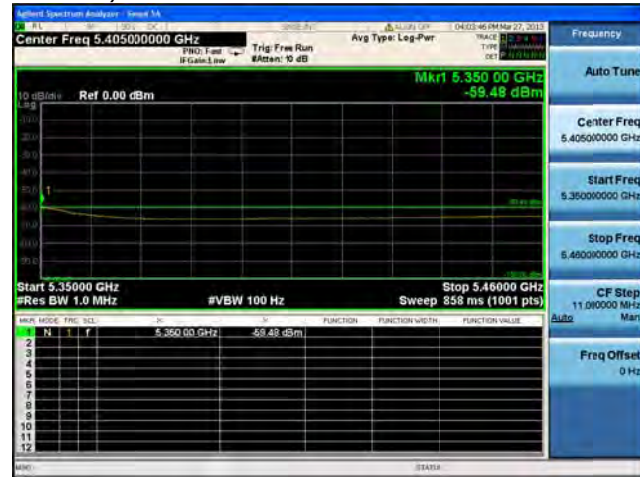


Conducted Bandedge Average, 5320 MHz, Non HT/VHT20 Beam Forming, 6 to 54 Mbps

**Antenna A****Antenna B****Antenna C**

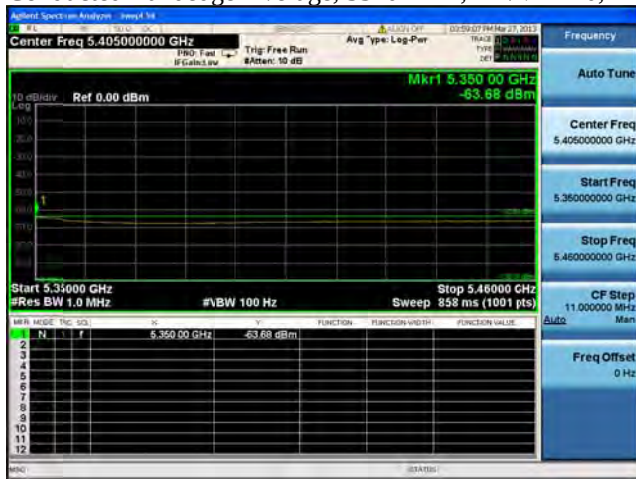
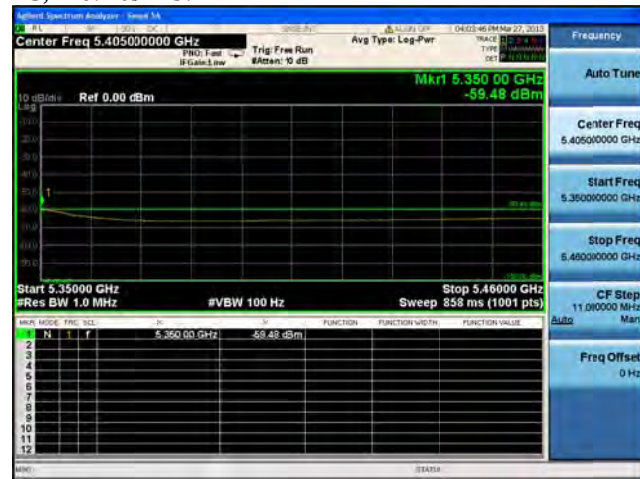
Conducted Bandedge Average, 5320 MHz, Non HT/VHT20 Beam Forming, 6 to 54 Mbps**Antenna A****Antenna B****Antenna C****Antenna D**

Conducted Bandedge Average, 5320 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1**Antenna A**

Conducted Bandedge Average, 5320 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B**

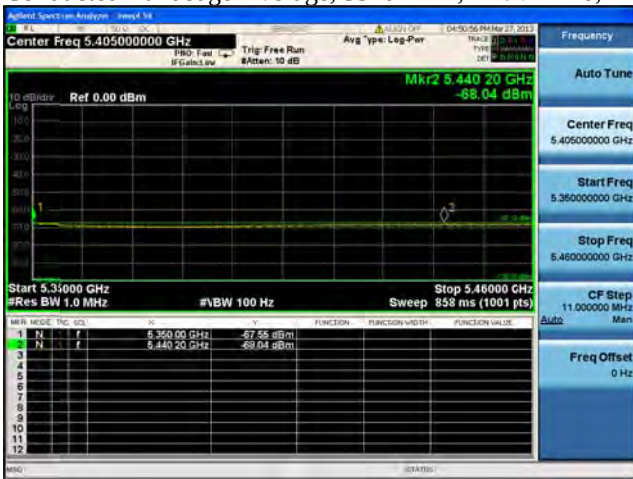
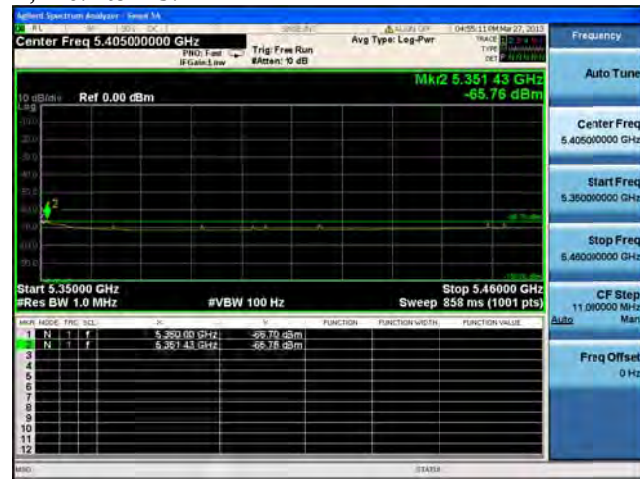
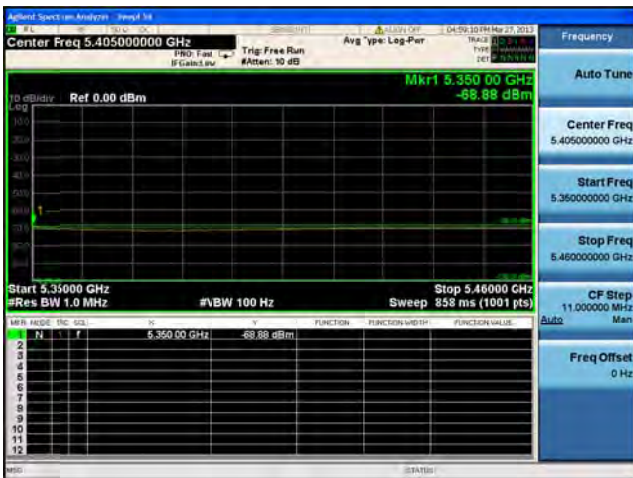


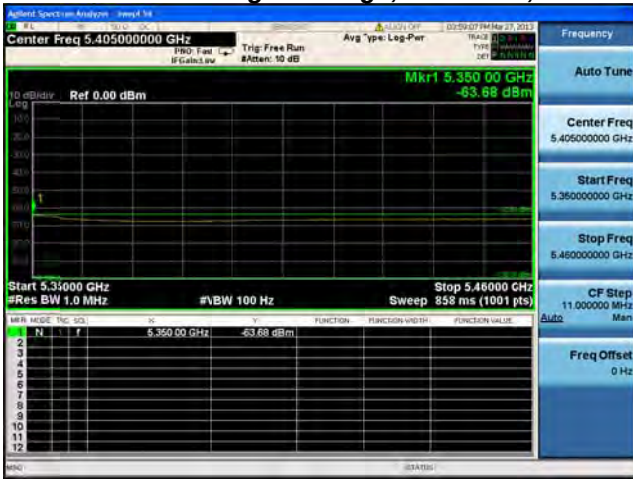
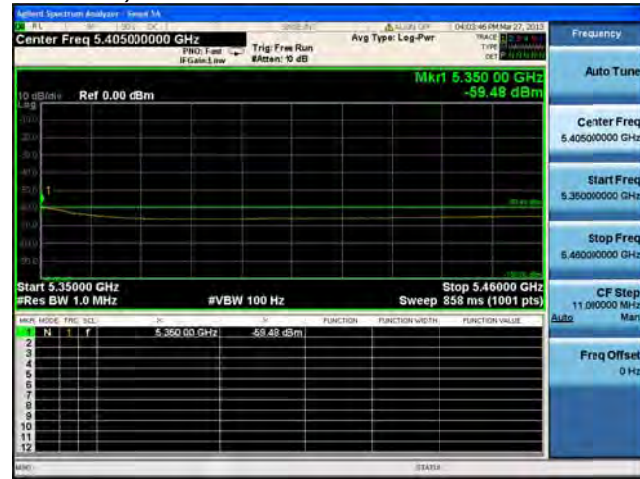
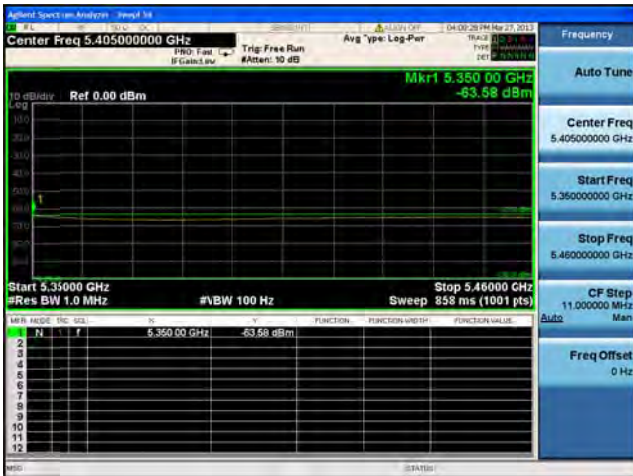
Conducted Bandedge Average, 5320 MHz, HT/VHT20, M8 to M15, M0.2 to M9.2

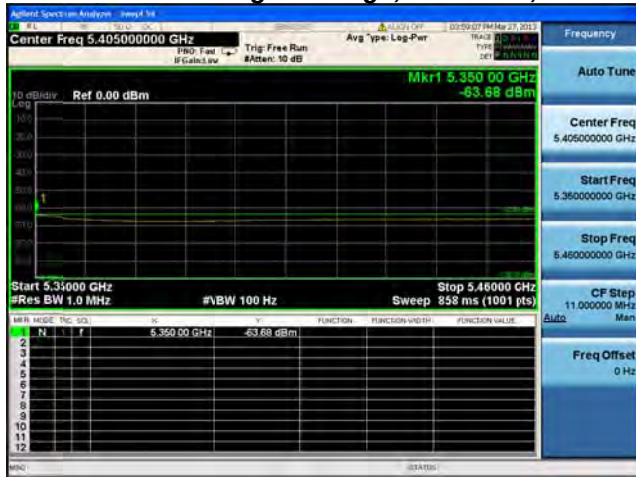
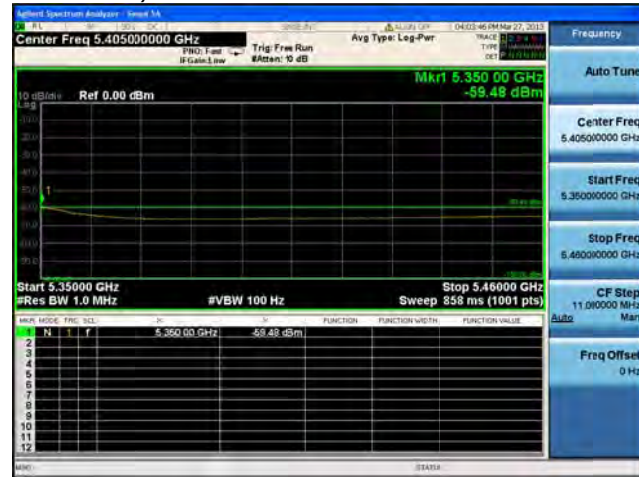
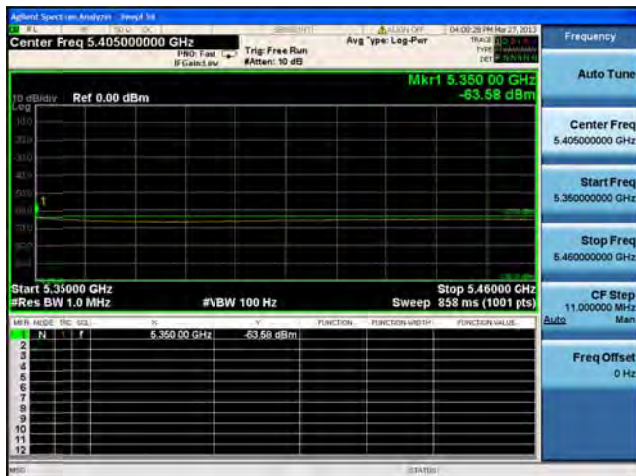
**Antenna A****Antenna B**

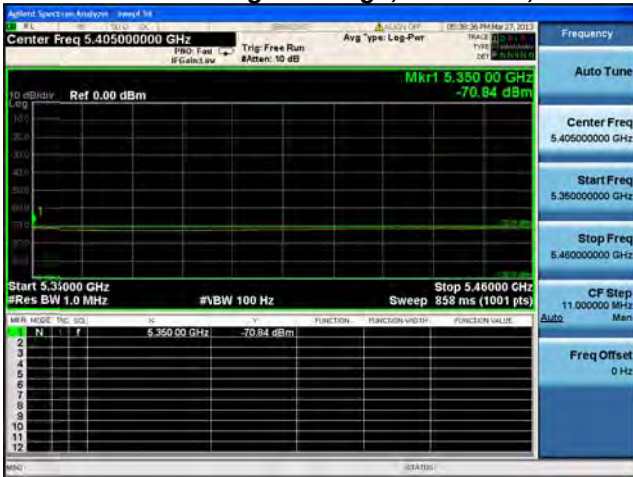
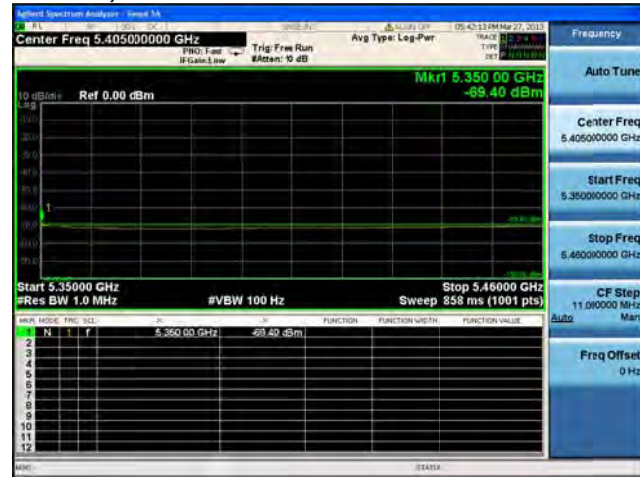
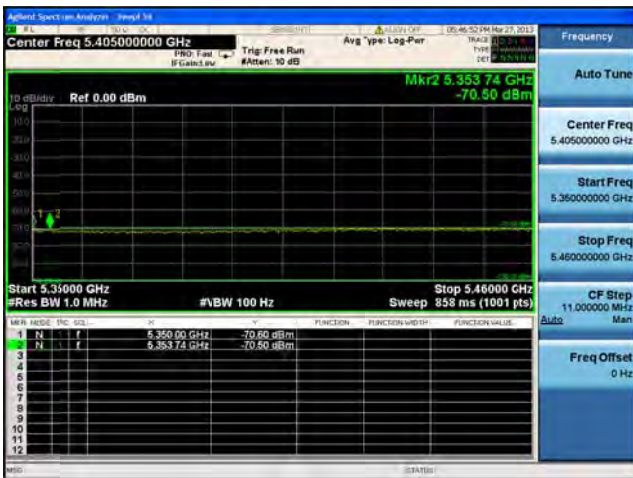
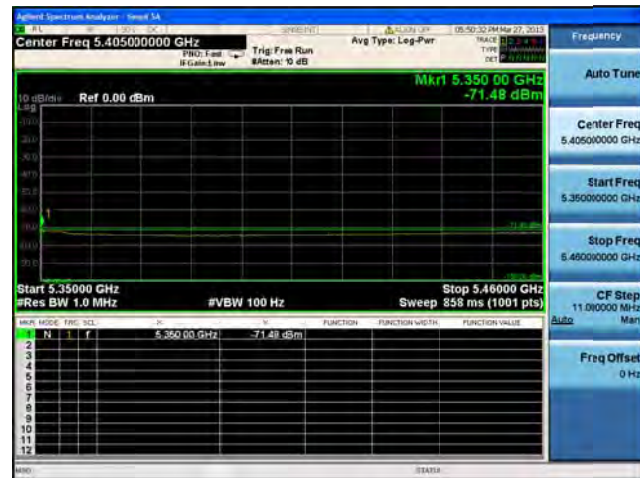


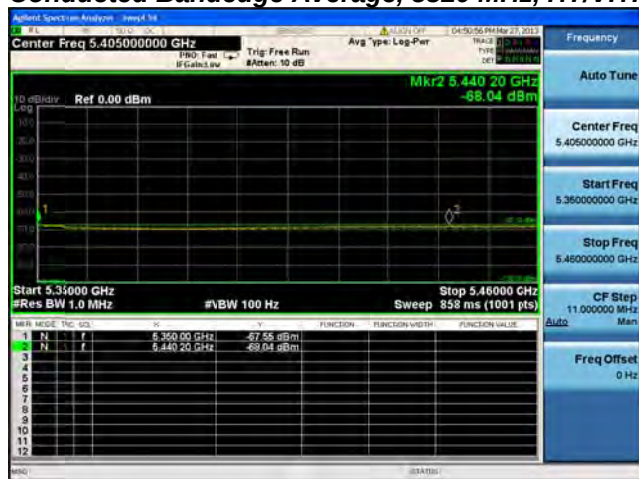
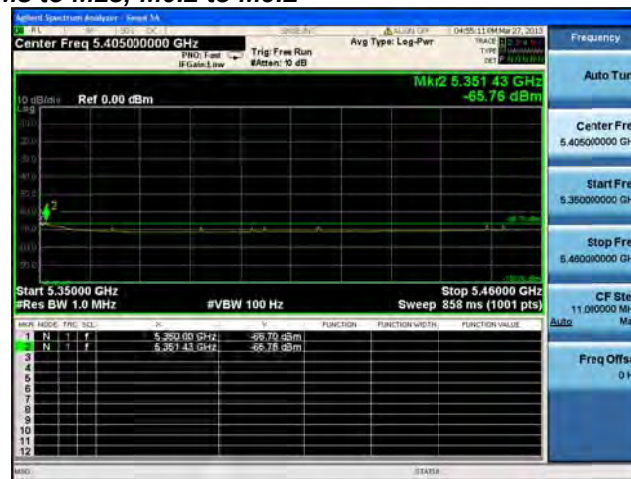
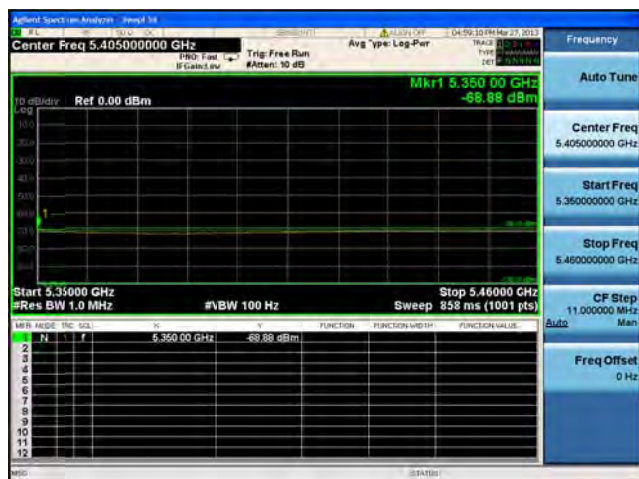
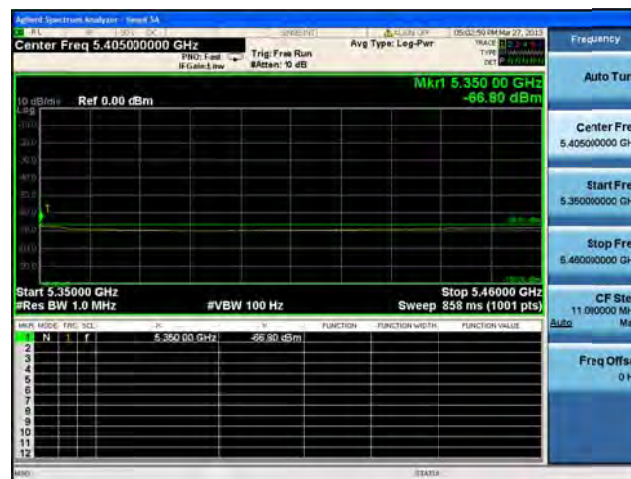
Conducted Bandedge Average, 5320 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1

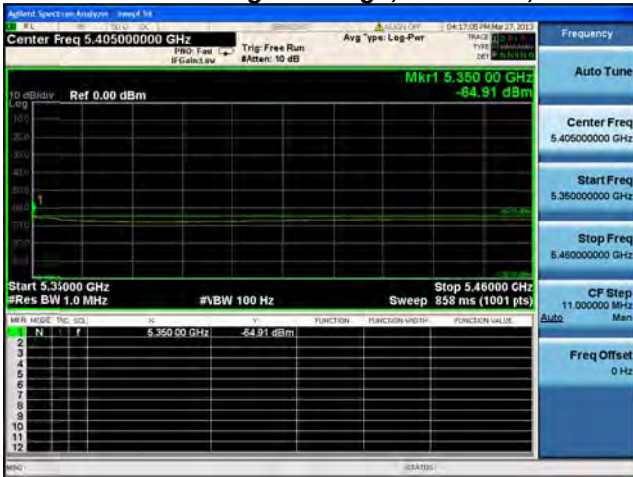
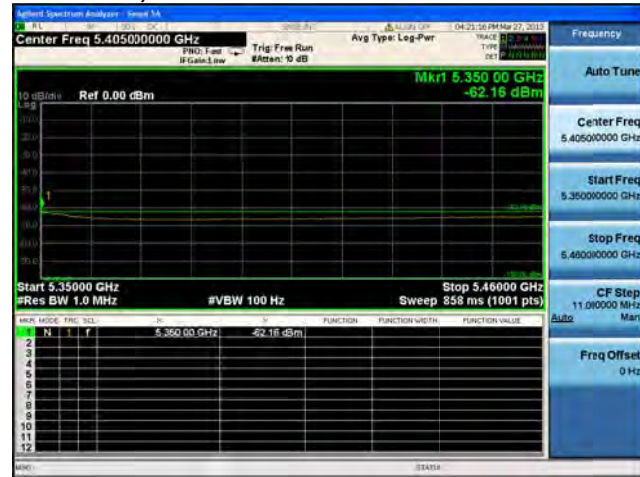
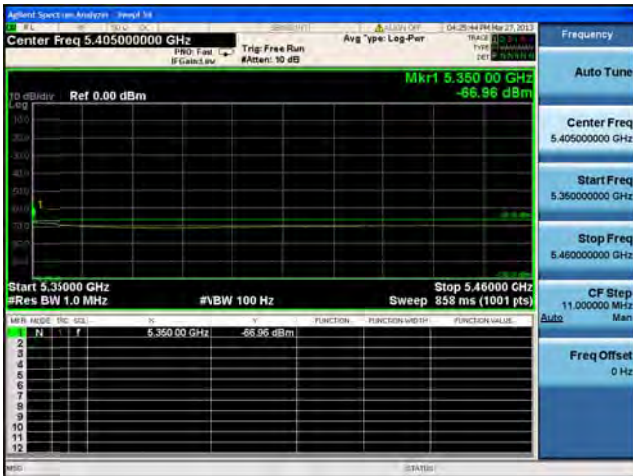
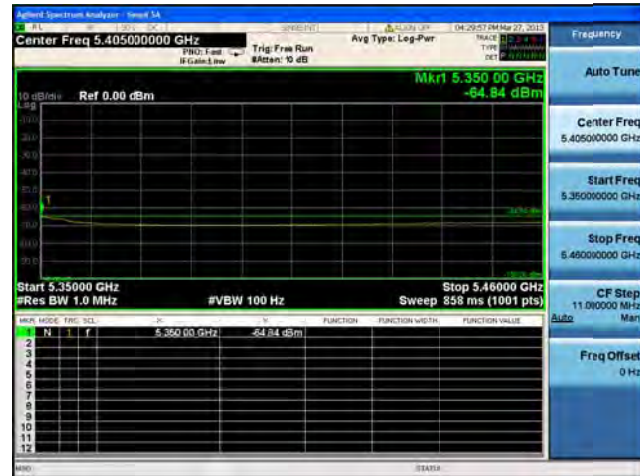
**Antenna A****Antenna B****Antenna C**

**Conducted Bandedge Average, 5320 MHz, HT/VHT20, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B****Antenna C**

Conducted Bandedge Average, 5320 MHz, HT/VHT20, M16 to M23, M0.3 to M9.3**Antenna A****Antenna B****Antenna C**

Conducted Bandedge Average, 5320 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C****Antenna D**

Conducted Bandedge Average, 5320 MHz, HT/VHT20, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B****Antenna C****Antenna D**

**Conducted Bandedge Average, 5320 MHz, HT/VHT20, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C****Antenna D**

Vector Signal Analyzer - Sweep 1a

Center Freq 5.405000000 GHz

PROF. Test (B-Gates) on

Trig: Free Run

Attenu: 10 dB

Avrg Type: Log-Pwr

04/17/2014 PM 04:25:03

TRACE 0: 5.350000 GHz

TYPE: P

SET: P

Frequency

Auto Tune

Center Freq 5.405000000 GHz

Start Freq 5.350000000 GHz

Stop Freq 5.480000000 GHz

CF Step 11.000000 MHz

Auto

Man

Freq Offset 0 Hz

10 dBm Ref 0.00 dBm

5.3500 00 GHz -64.91 dBm

Start 5.350000 GHz

Stop 5.480000 GHz

Res BW 1.0 MHz

#BW 100 Hz

Sweep 858 ms (1001 pts)

WNR MODE: Pch: 0.0

5.3500 00 GHz -64.91 dBm

FUNCTION

FUNCTION WDR

FUNCTION VALUE

1

2

3

4

5

6

7

8

9

10

11

12

WNR

0.000000

Agilent Spectrum Analyzer - Screen 1A

Center Freq 5.405000000 GHz

Span 100 MHz

Resolution BW 1.0 MHz

Video BW 12.0 MHz

Trig: Free Run

Avg Type: Log-Pwr

Marker 1: 5.350 00 GHz, -62.16 dBm

Start 5.350000 GHz

Stop 5.460000 GHz

Sweep 858 ms (1001 pts)

Auto

Frequency

Auto Tune

Center Freq 5.405000000 GHz

Start Freq 5.350000000 GHz

Stop Freq 5.460000000 GHz

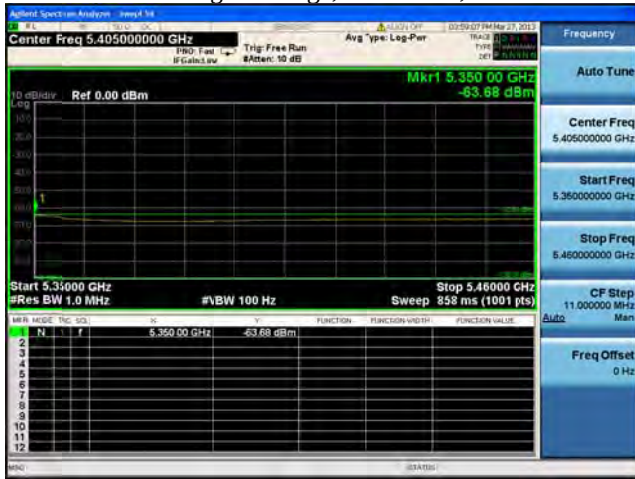
CF Stop 11.000000 MHz

Freq Offset 0 Hz

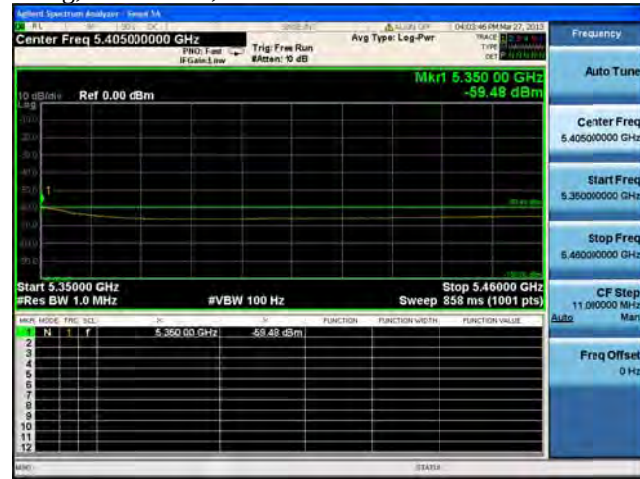
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Conducted Bandedge Average, 5320 MHz, HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2



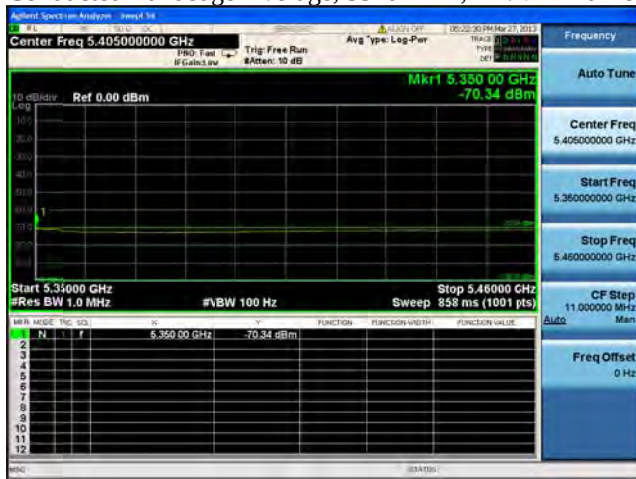
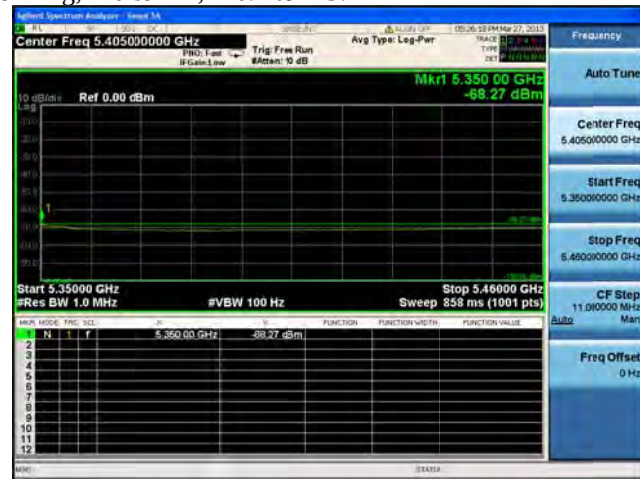
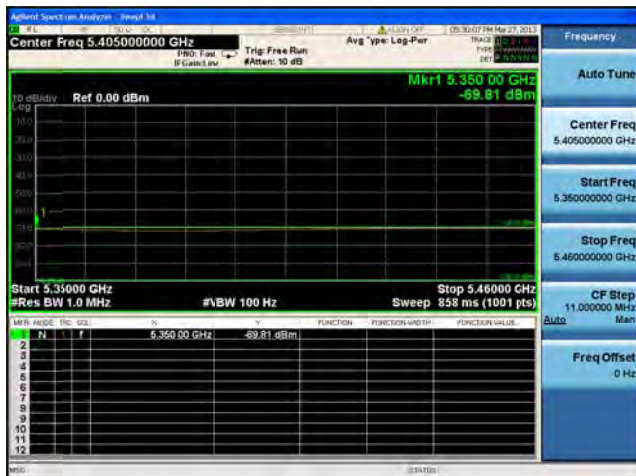
Antenna A



Antenna B



Conducted Bandedge Average, 5320 MHz, HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1

**Antenna A****Antenna B****Antenna C**

Keysight Spectrum Analyzer - Speed 34
 04:34:18 PM Mar 23, 2013
 Center Freq 5.405000000 GHz
 Span 10.000 GHz
 Ref 0.00 dBm
 Trg: Free Run
 Attenu: 10 dB
 Avg Type: Log-Pwr
 TRACE 0: F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12
 TYPE: P
 DET: P
 MARKER 1
 Auto Tune
 Center Freq 5.405000000 GHz
 Start Freq 5.360000000 GHz
 Stop Freq 5.480000000 GHz
 CF Step 11.000000 MHz
 Freq Offset 0 Hz
 Marker 1 5.35000000 GHz -65.76 dBm
 Start 5.350000 GHz Stop 5.480000 GHz
 Res BW 1.0 MHz #BW 100 Hz Sweep 858 ms (1001 pts)
 Marker Mode: Freq, Vol, R, Y
 X: 5.350000 GHz Y: -65.76 dBm
 Function: Function Width: Function Value:
 N: 1 2 3 4 5 6 7 8 9 10 11 12
 1 5.350000 GHz -65.76 dBm
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12

Vector Signal Analyzer - Setup 1A

Center Freq 5.405000000 GHz

Trace 1: Fwd 10 Calen 1.0 dB

Trig: Free Run

Avg Type: Log-Pwr

Trace 1: 5.35000 GHz -63.29 dBm

Start 5.350000 GHz

Stop 5.460000 GHz

SRes BW 1.0 MHz

#VBW 100 Hz

Sweep 898 ms (1001 pts)

TRUP	MODE	FREQ	DB	FUNCTION	FUNCTION WITH	FUNCTION VALUE
1	N	5.350000 GHz	-63.29 dBm			
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Agilent Spectrum Analyzer - Saved Job

Center Freq 5.405000000 GHz

Span 100.000 MHz

Res 1.000 MHz

Ref 0.00 dBm

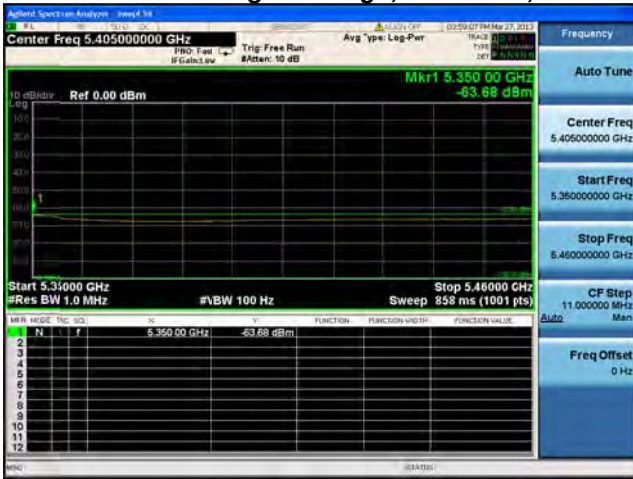
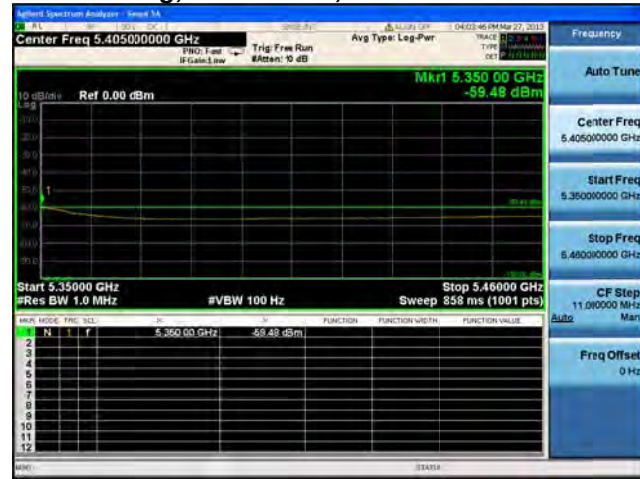
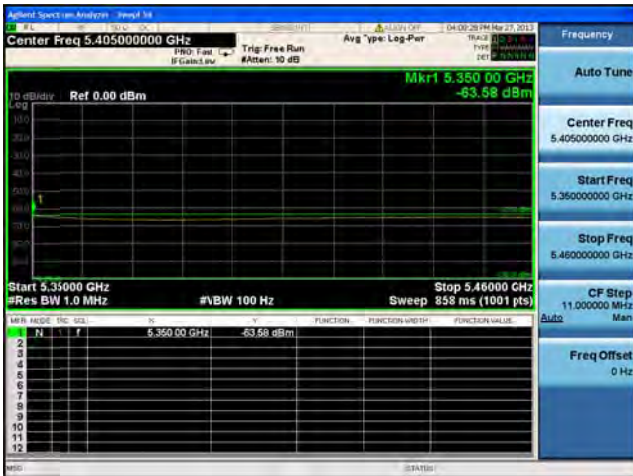
Marker 1: 5.350 00 GHz, -88.15 dBm

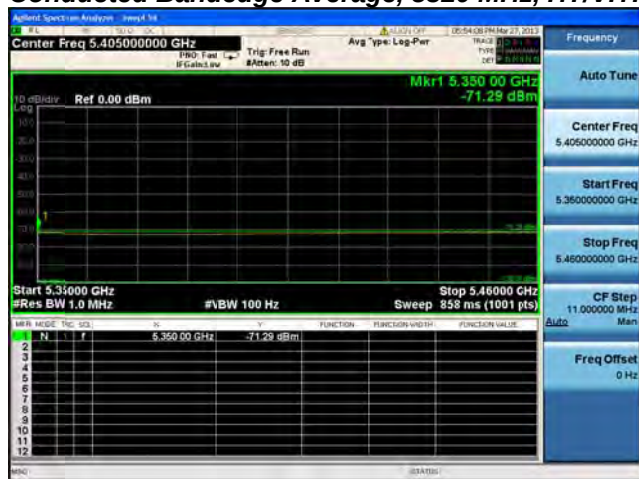
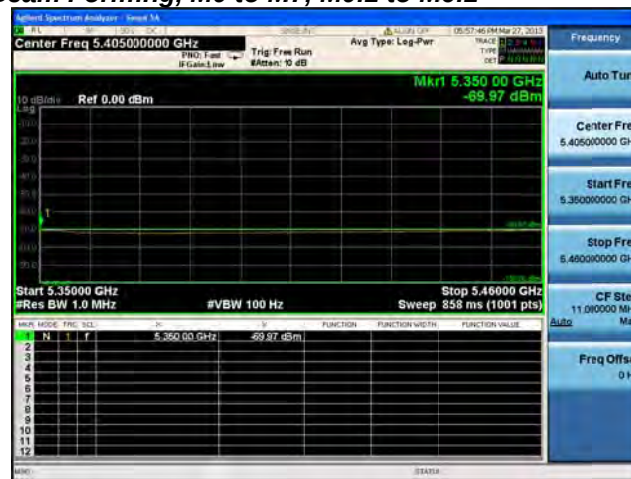
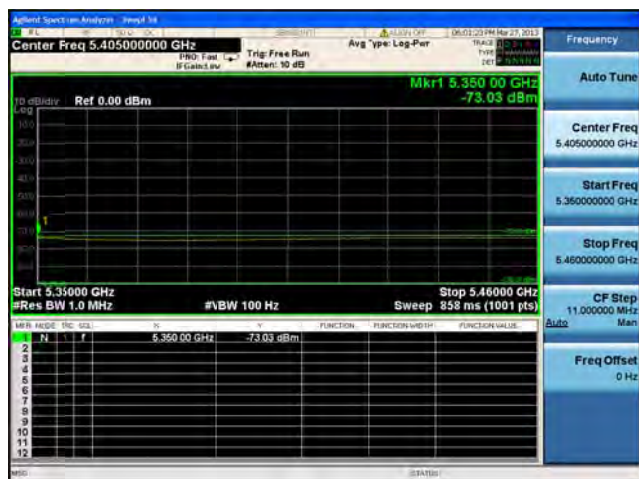
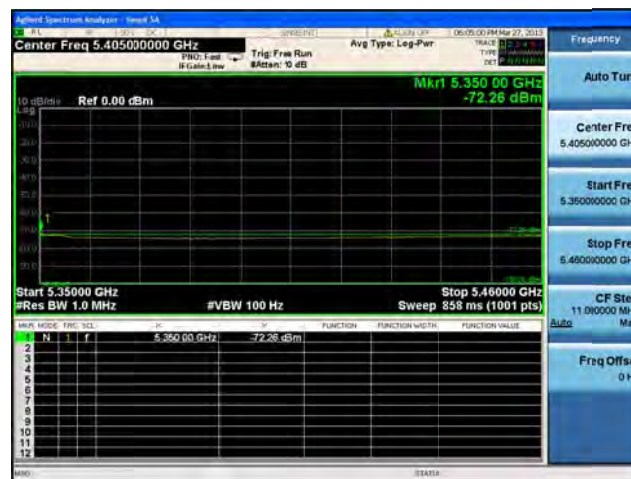
Marker	Freq (GHz)	Mag (dBm)
1	5.350 00	-88.15

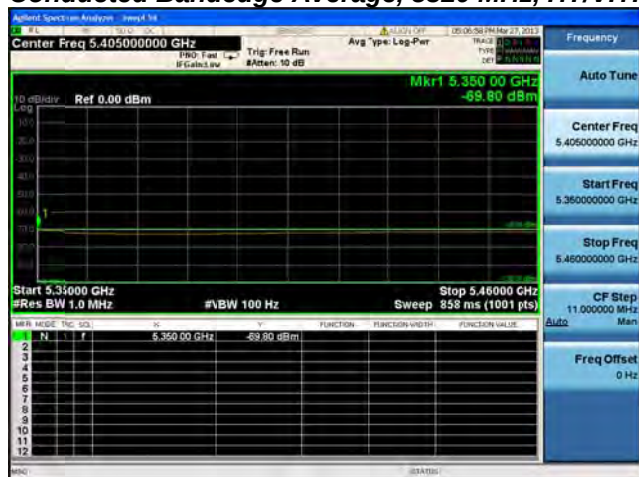
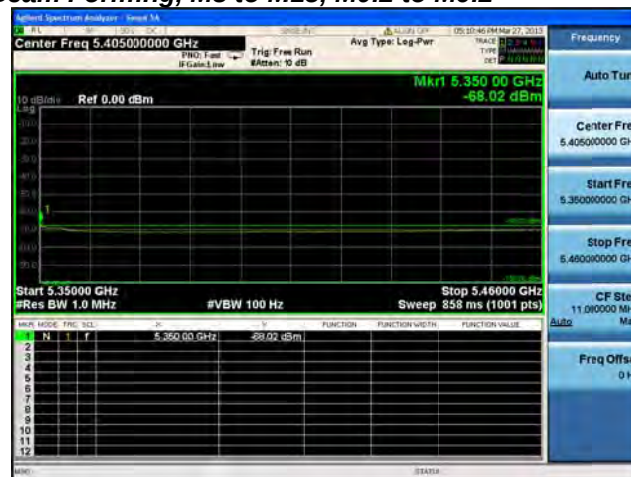
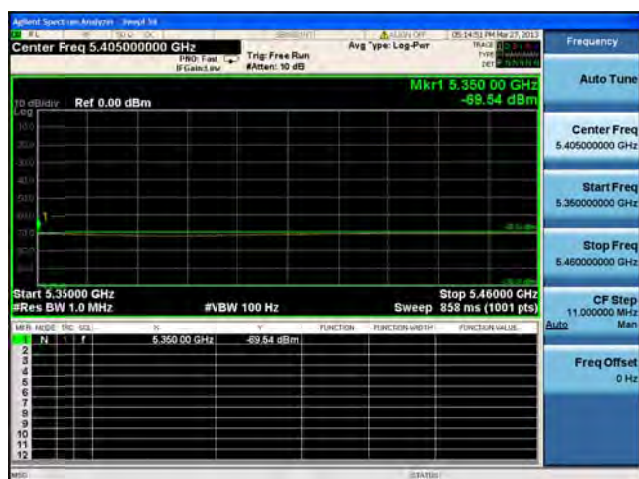
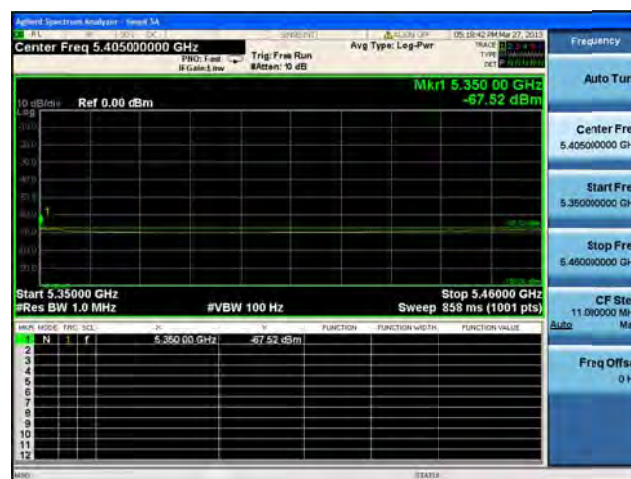
Start 5.350000 GHz, Stop 5.400000 GHz, Sweep 858 ms (1001 pts)

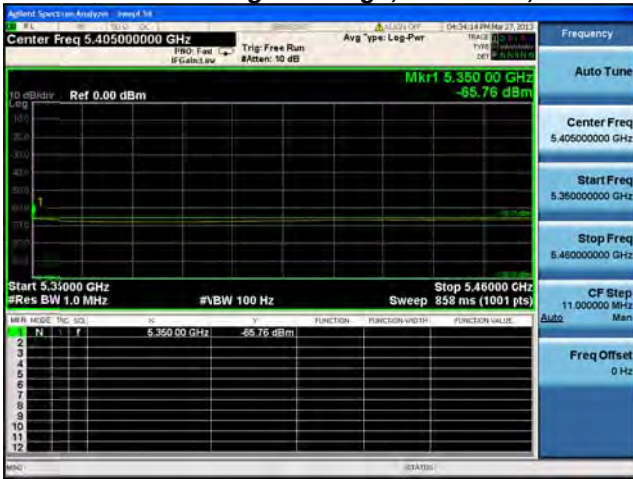
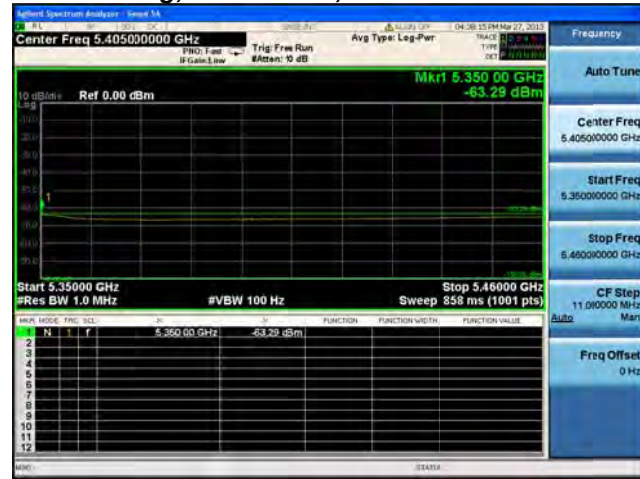
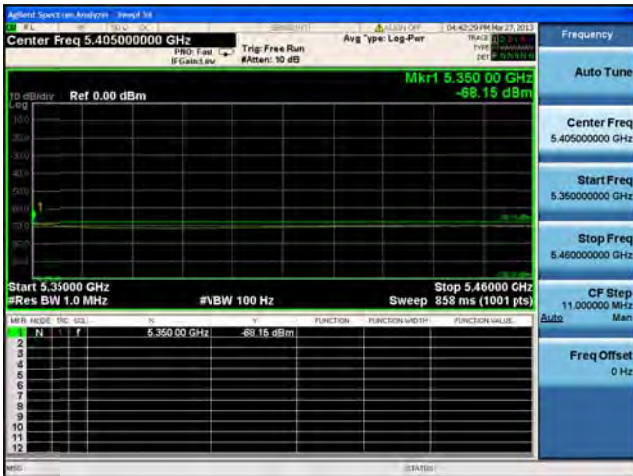
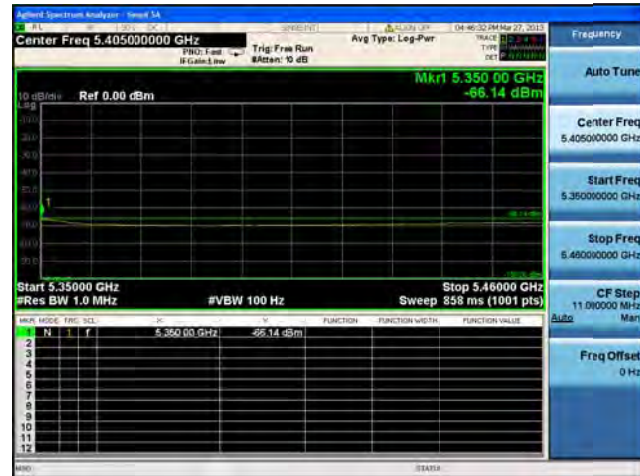
Marker	Freq (GHz)	Mag (dBm)	Function	Function Width	Function Value
1	5.350 00	-88.15			
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

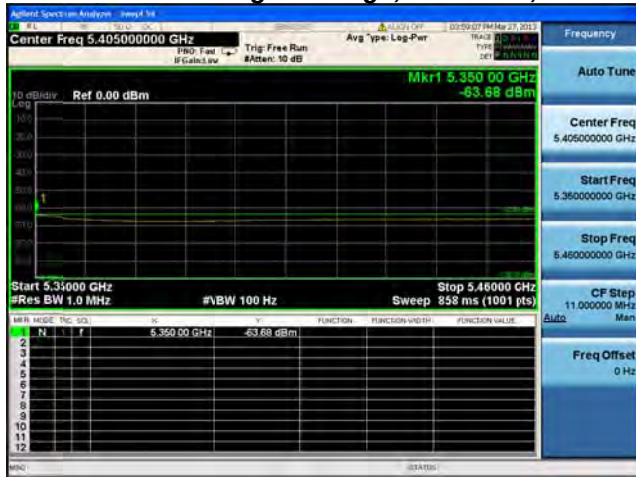
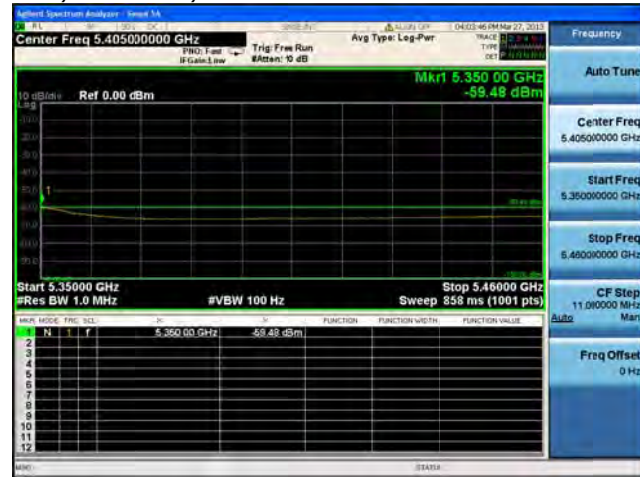
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**Conducted Bandedge Average, 5320 MHz, HT/VHT20 Beam Forming, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C**

Conducted Bandedge Average, 5320 MHz, HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C****Antenna D**

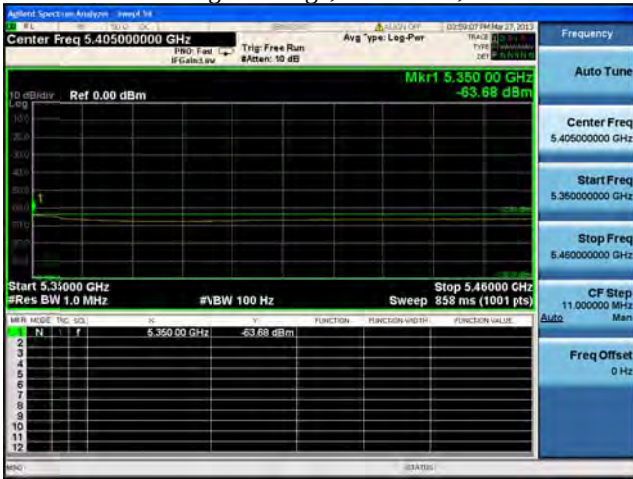
Conducted Bandedge Average, 5320 MHz, HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B****Antenna C****Antenna D**

**Conducted Bandedge Average, 5320 MHz, HT/VHT20 Beam Forming, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C****Antenna D**

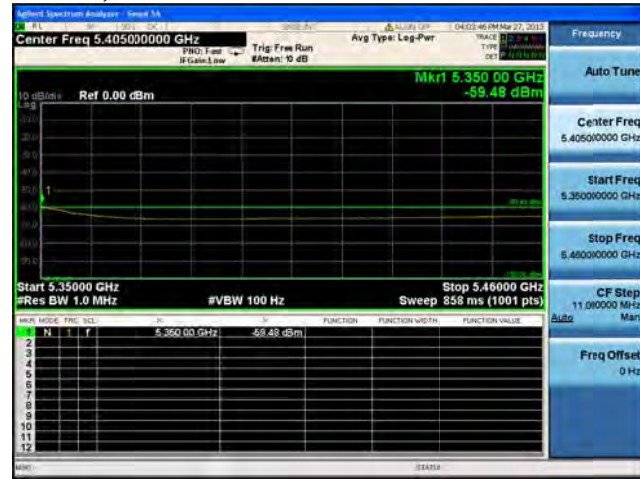
Conducted Bandedge Average, 5320 MHz, HT/VHT20 STBC, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B**



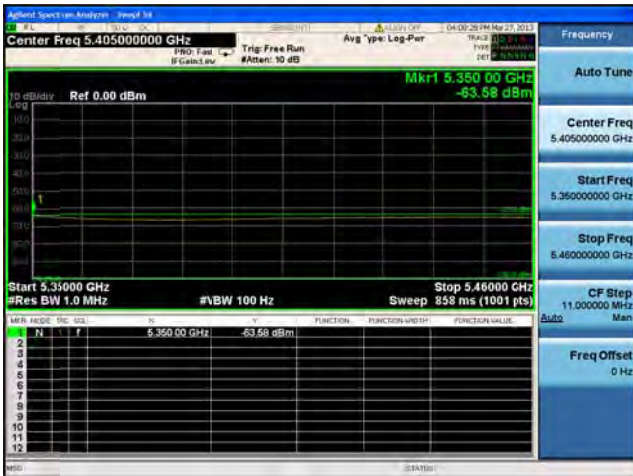
Conducted Bandedge Average, 5320 MHz, HT/VHT20 STBC, M0 to M7, M0.1 to M9.1



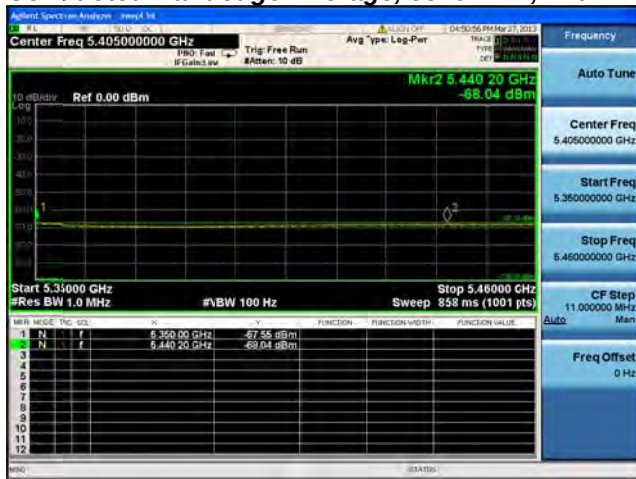
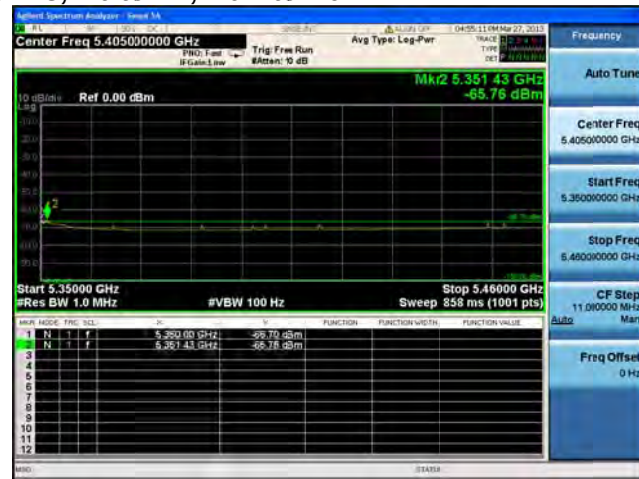
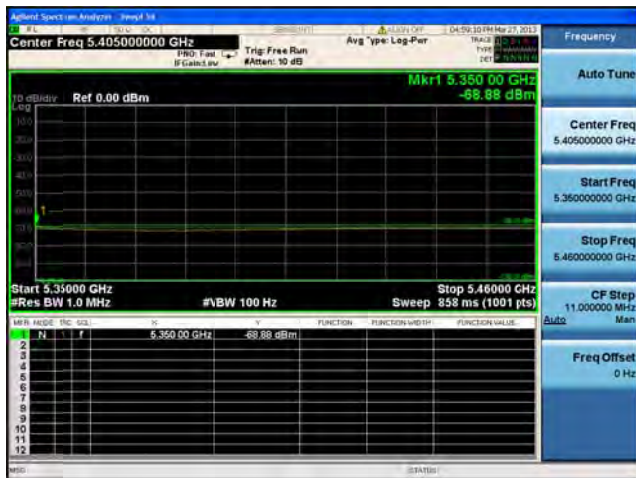
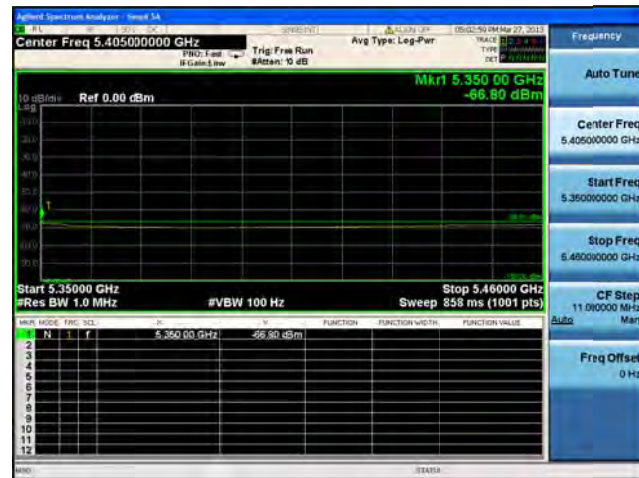
Antenna A

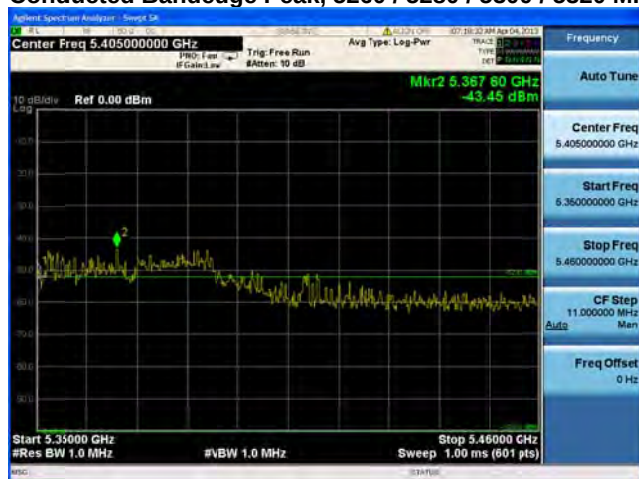


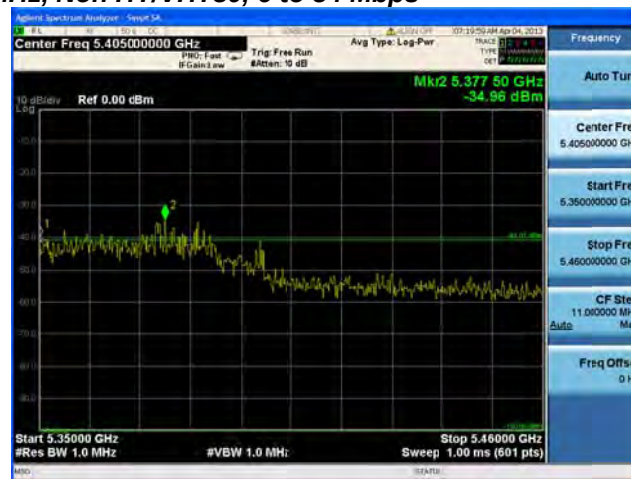
Antenna B

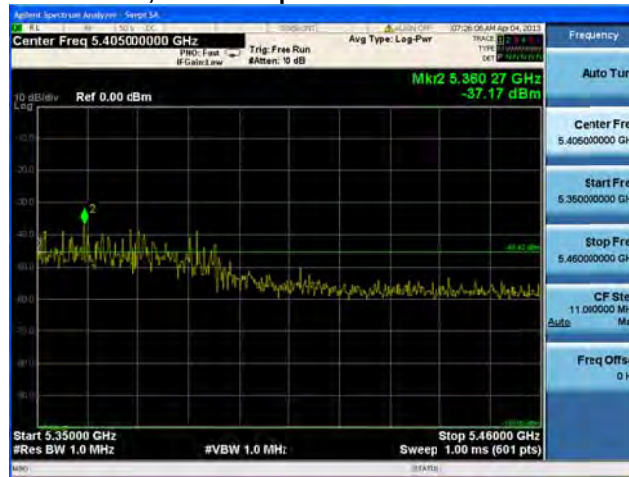
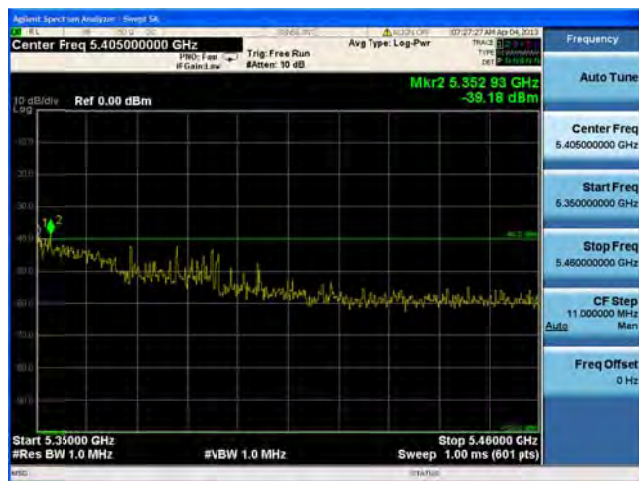


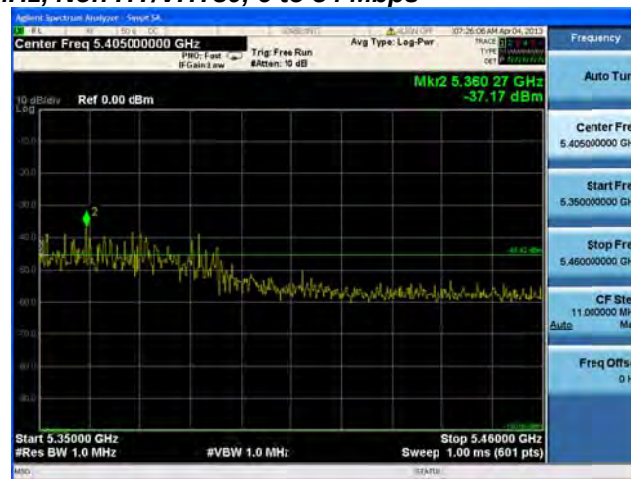
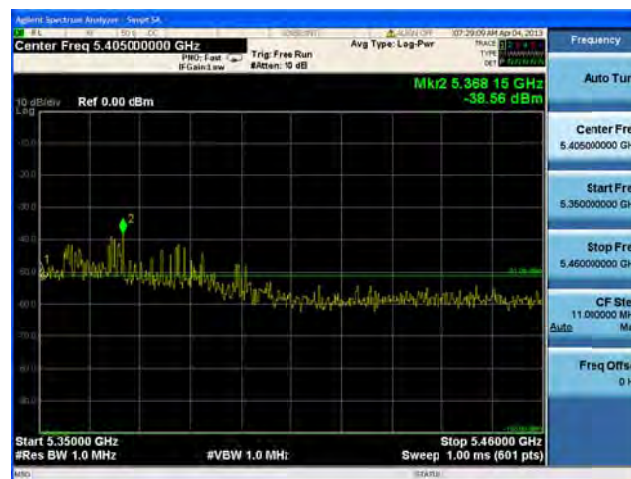
Antenna C

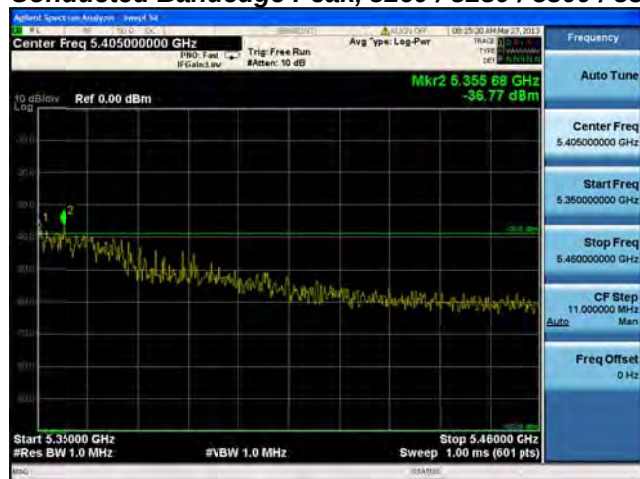
**Conducted Bandedge Average, 5320 MHz, HT/VHT20 STBC, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C****Antenna D**

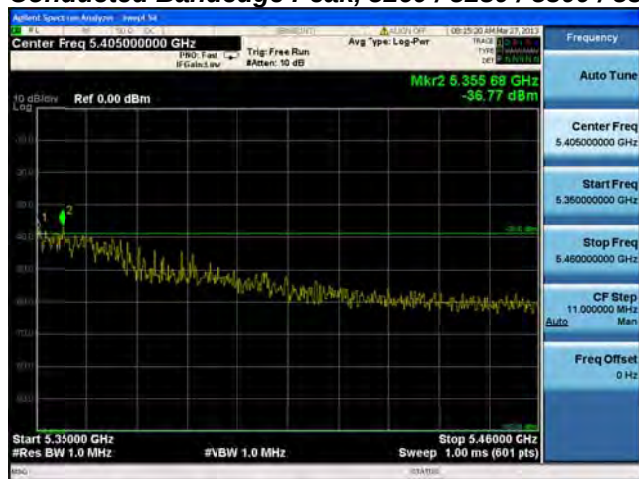
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, Non HT/VHT80, 6 to 54 Mbps**Antenna A**

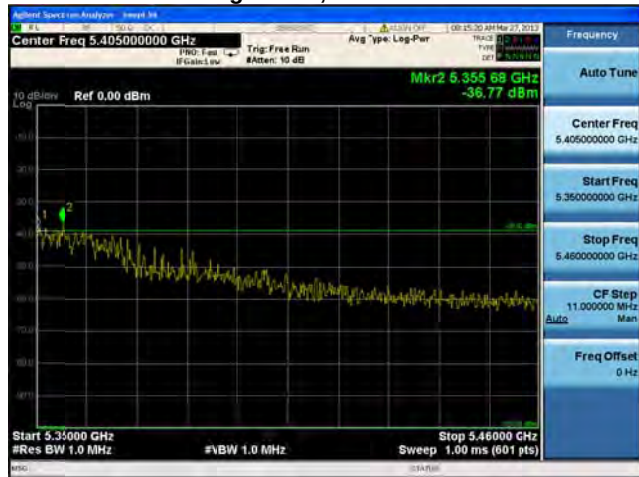
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, Non HT/VHT80, 6 to 54 Mbps**Antenna A****Antenna B**

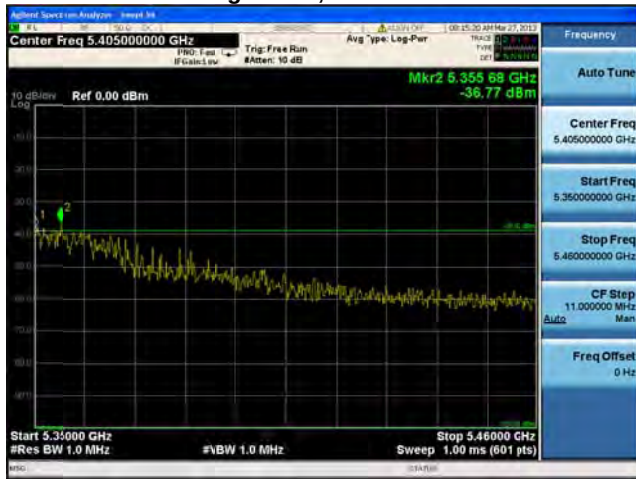
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, Non HT/VHT80, 6 to 54 Mbps**Antenna A****Antenna B****Antenna C**

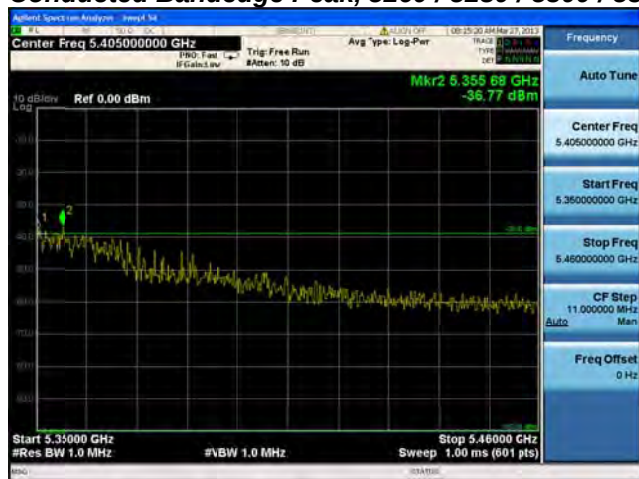
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, Non HT/VHT80, 6 to 54 Mbps**Antenna A****Antenna B****Antenna C****Antenna D**

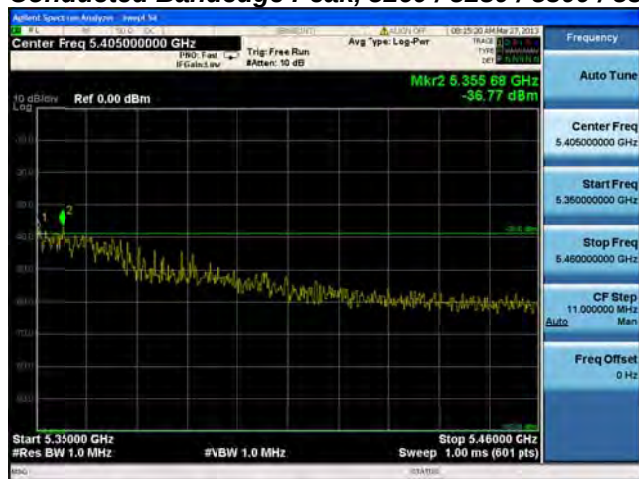
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80, M0 to M7, M0.1 to M9.1**Antenna A**

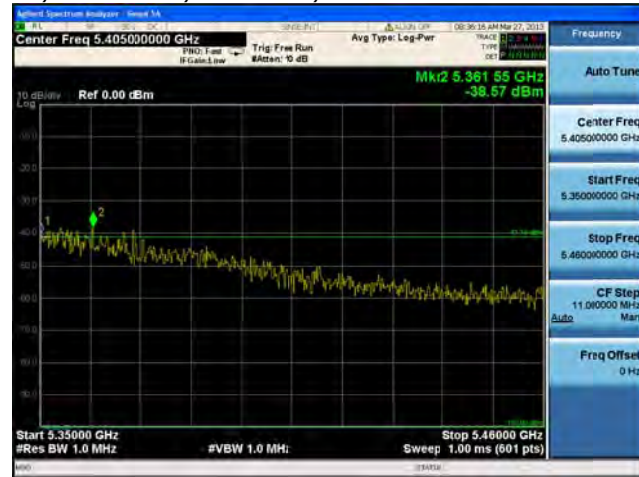
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B**

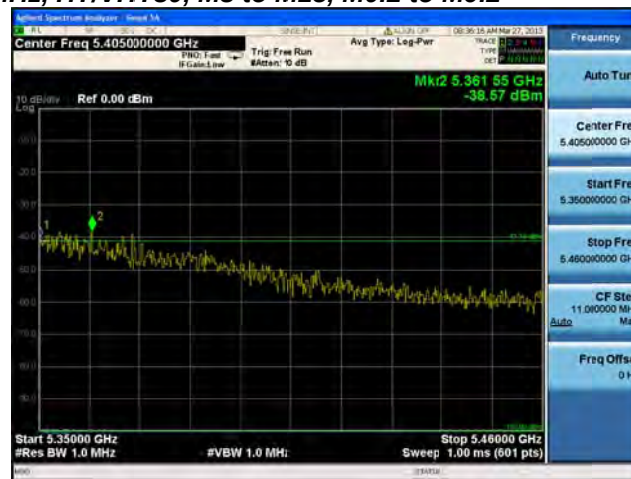
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B**

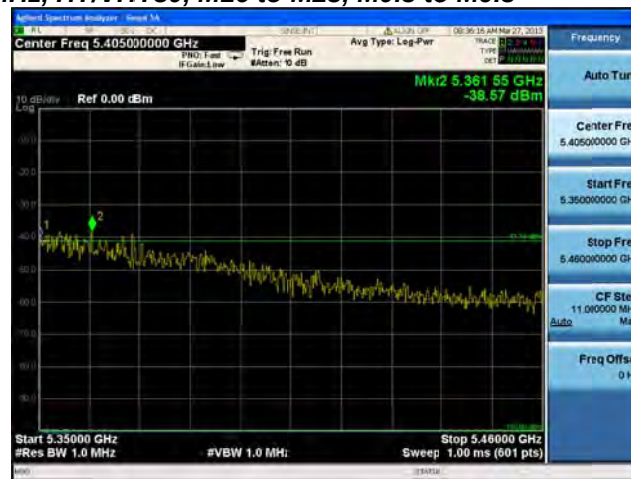
**Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C**

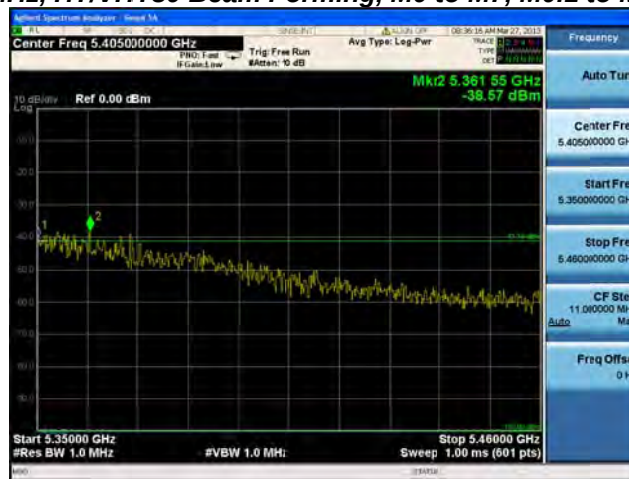
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B****Antenna C**

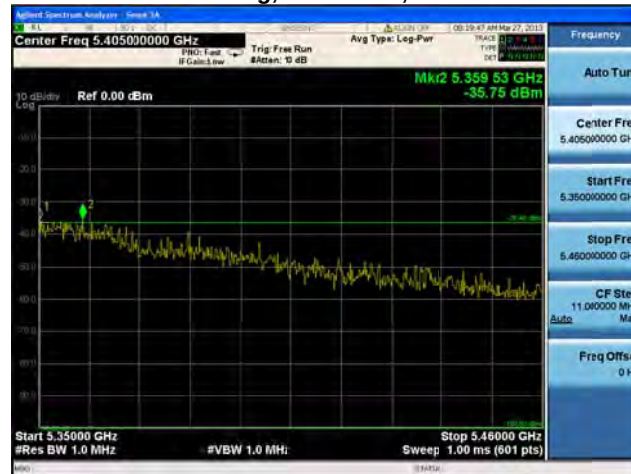
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80, M16 to M23, M0.3 to M9.3**Antenna A****Antenna B****Antenna C**

Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C****Antenna D**

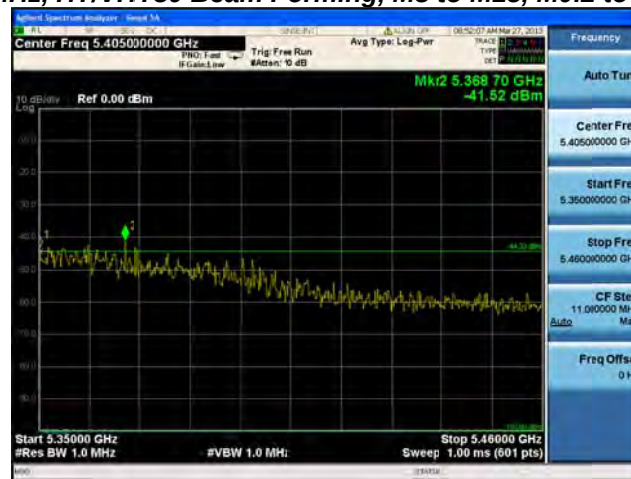
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B****Antenna C****Antenna D**

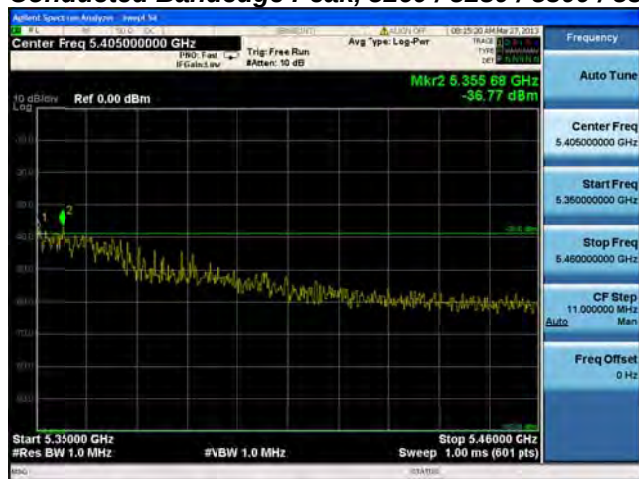
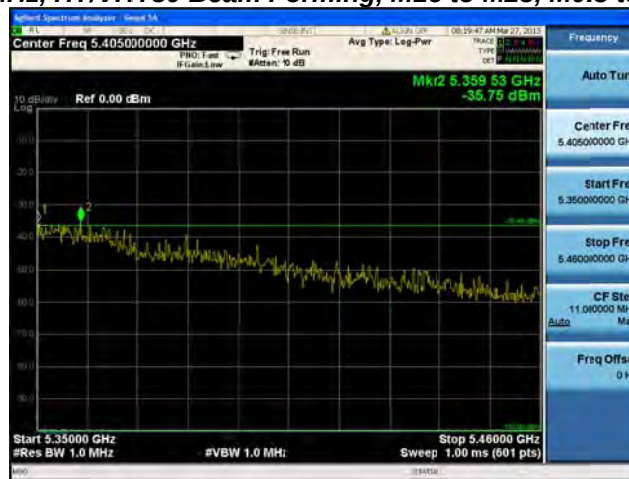
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80, M16 to M23, M0.3 to M9.3**Antenna A****Antenna B****Antenna C****Antenna D**

Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80 Beam Forming, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B**

Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80 Beam Forming, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B**

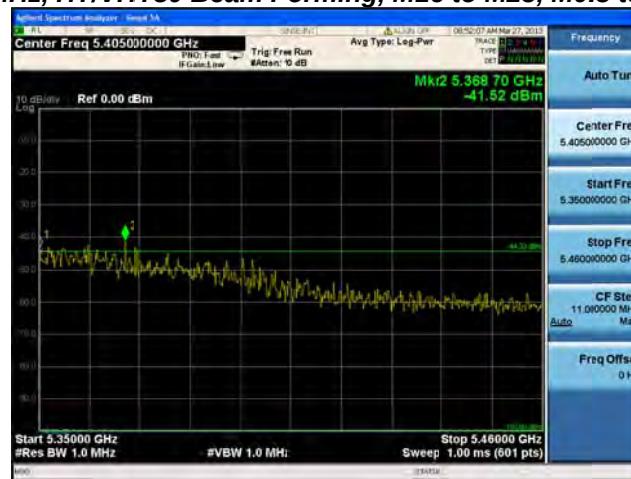
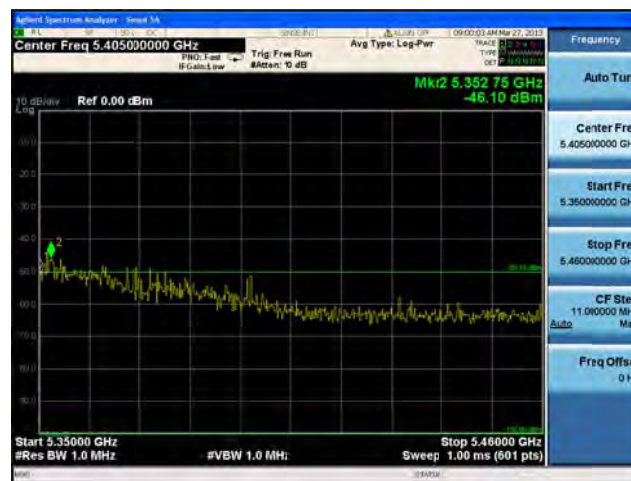
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80 Beam Forming, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C**

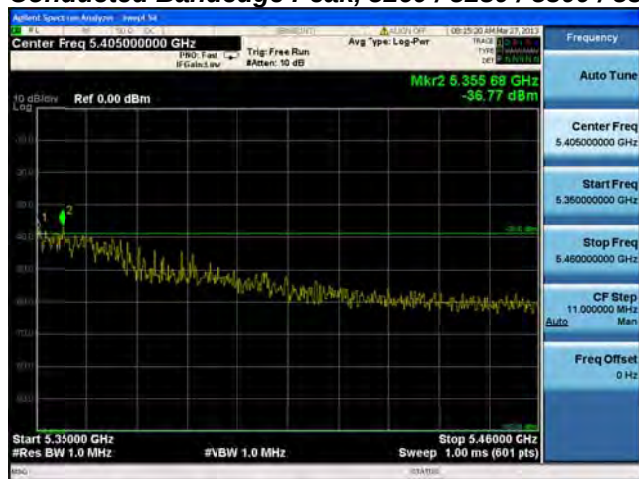
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80 Beam Forming, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B****Antenna C**

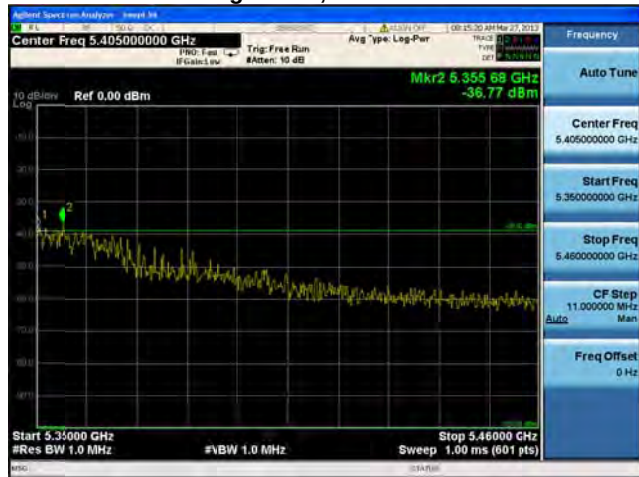
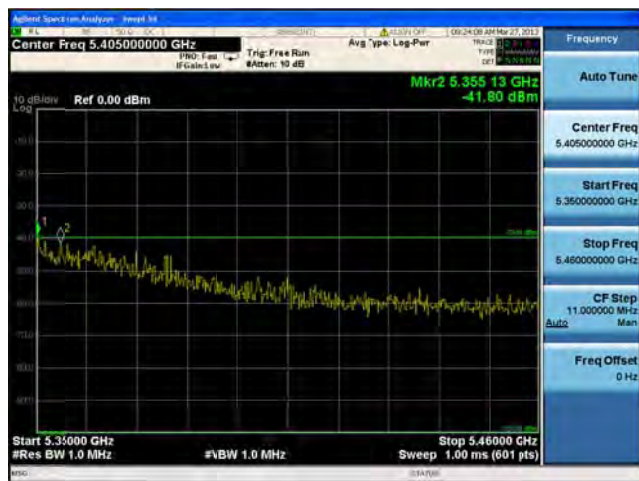
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80 Beam Forming, M16 to M23, M0.3 to M9.3**Antenna A****Antenna B****Antenna C**

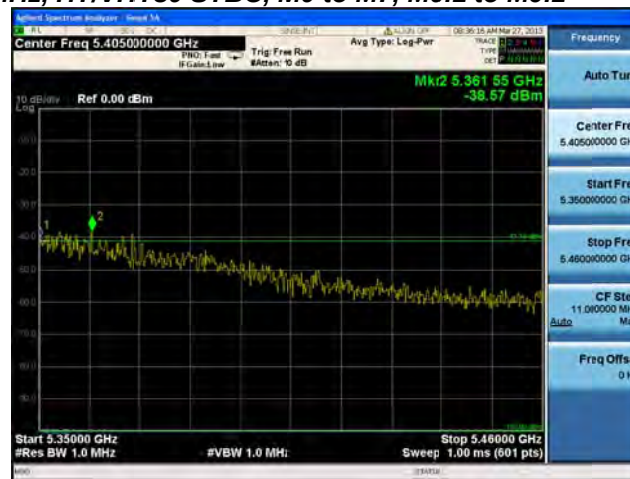
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80 Beam Forming, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C****Antenna D**

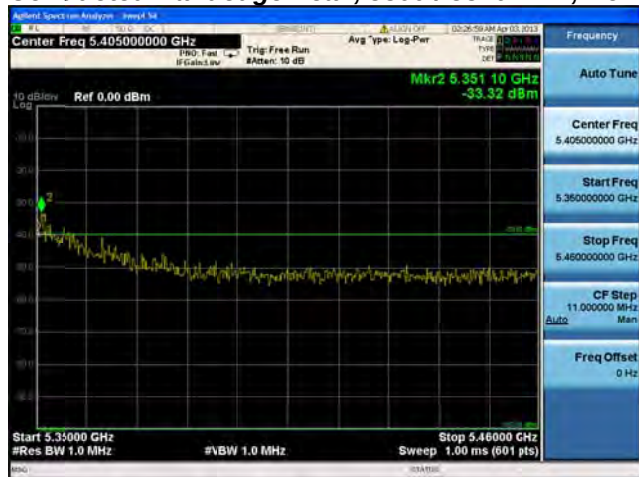
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80 Beam Forming, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B****Antenna C****Antenna D**

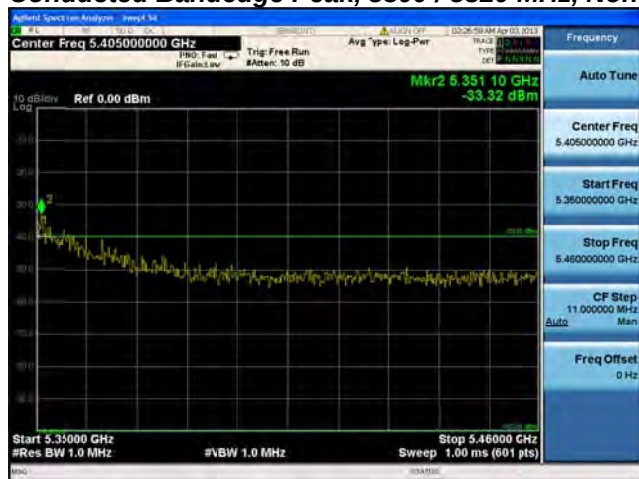
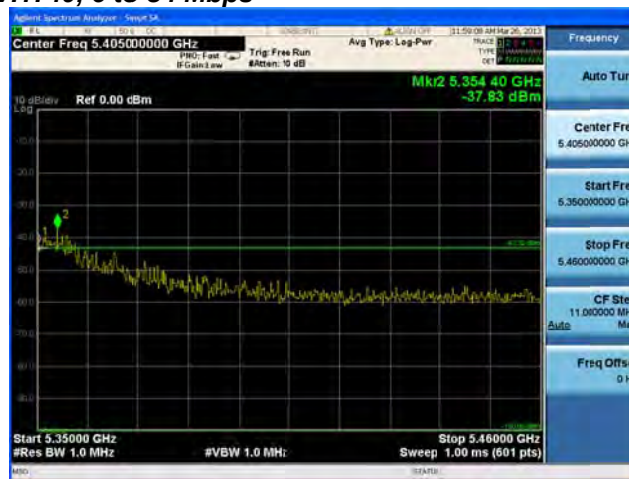
**Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80 Beam Forming, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C****Antenna D**

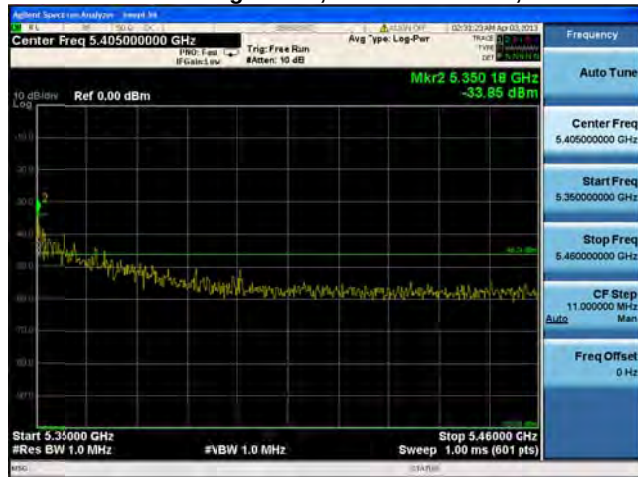
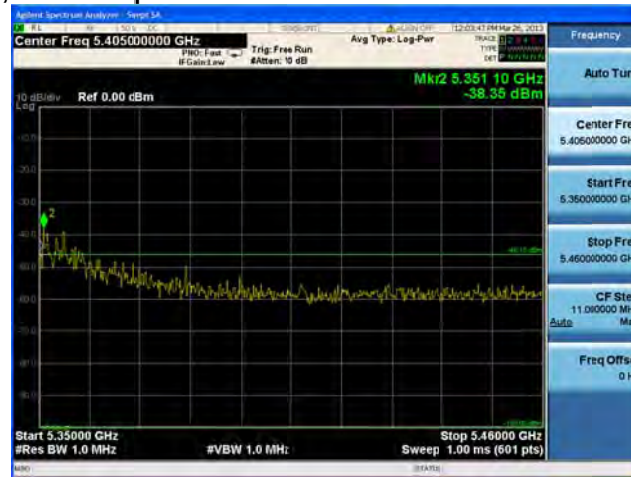
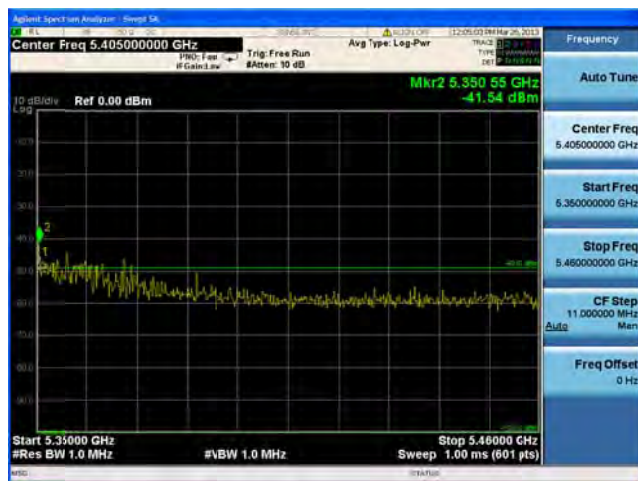
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80 STBC, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B**

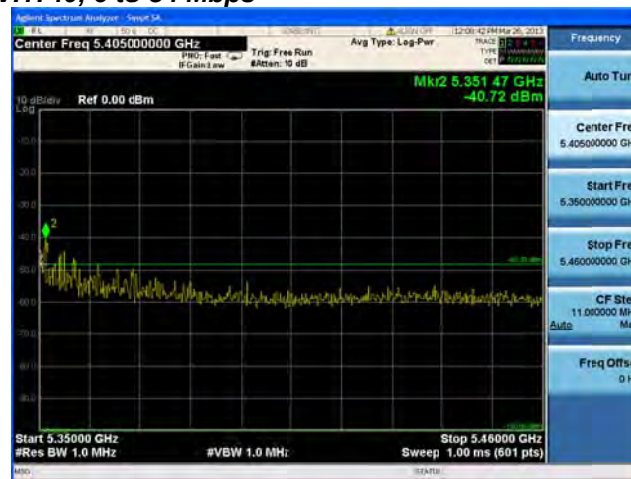
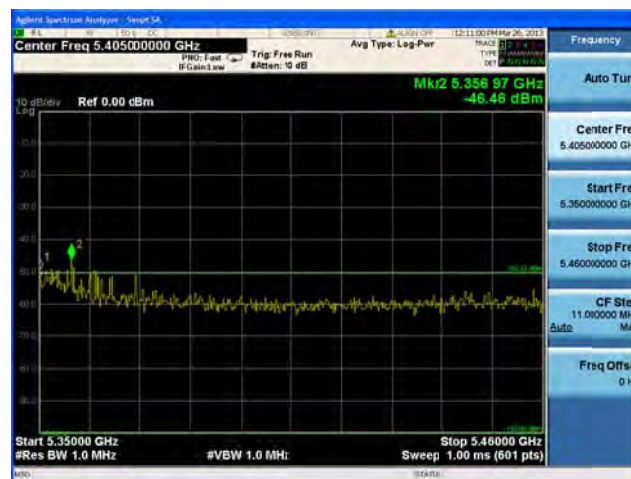
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80 STBC, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C**

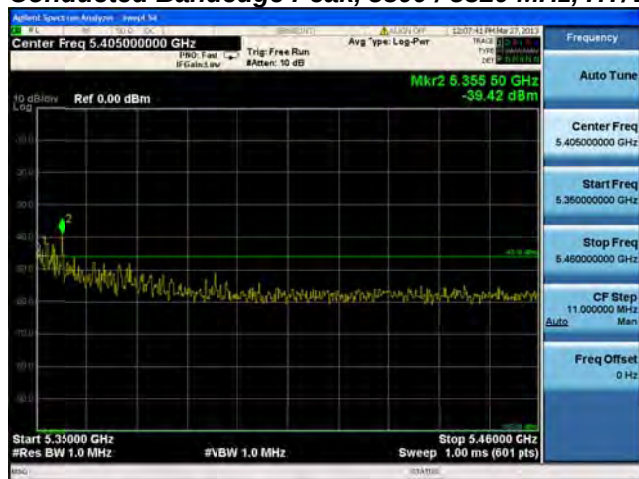
Conducted Bandedge Peak, 5260 / 5280 / 5300 / 5320 MHz, HT/VHT80 STBC, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C****Antenna D**

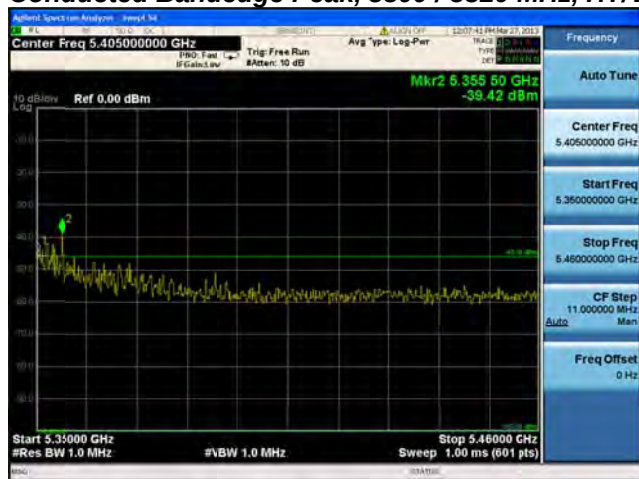
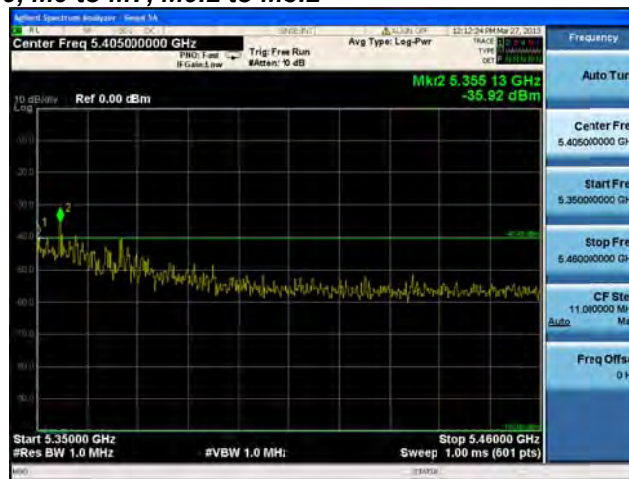
Conducted Bandedge Peak, 5300 / 5320 MHz, Non HT/VHT40, 6 to 54 Mbps**Antenna A**

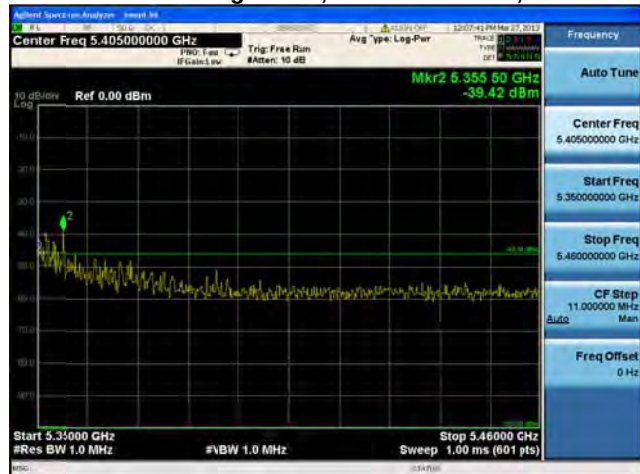
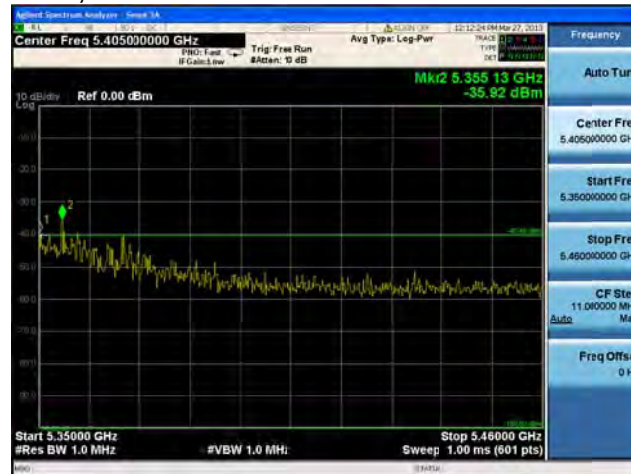
Conducted Bandedge Peak, 5300 / 5320 MHz, Non HT/VHT40, 6 to 54 Mbps**Antenna A****Antenna B**

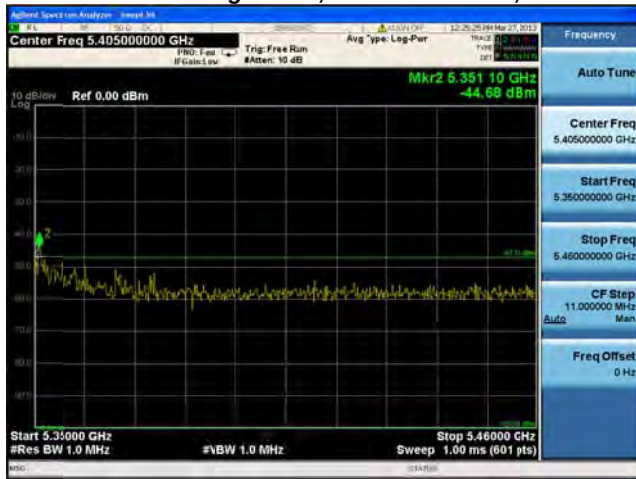
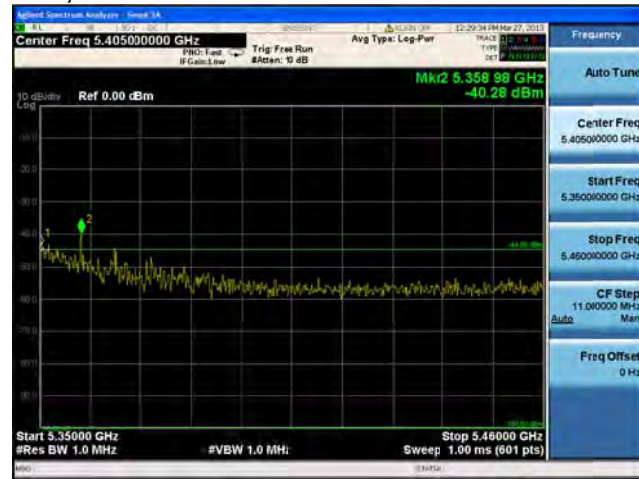
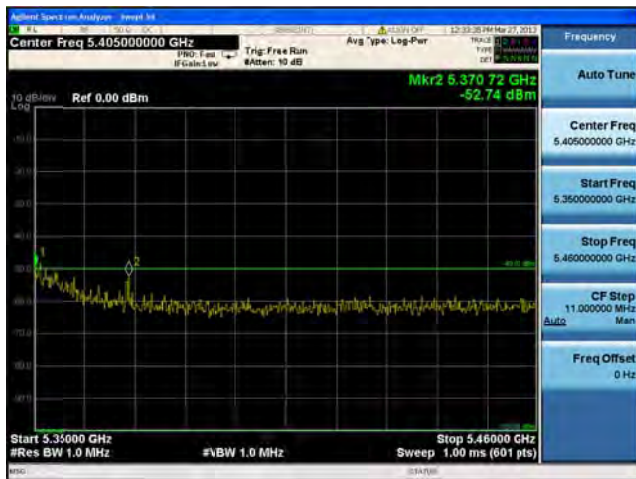
Conducted Bandedge Peak, 5300 / 5320 MHz, Non HT/VHT40, 6 to 54 Mbps**Antenna A****Antenna B****Antenna C**

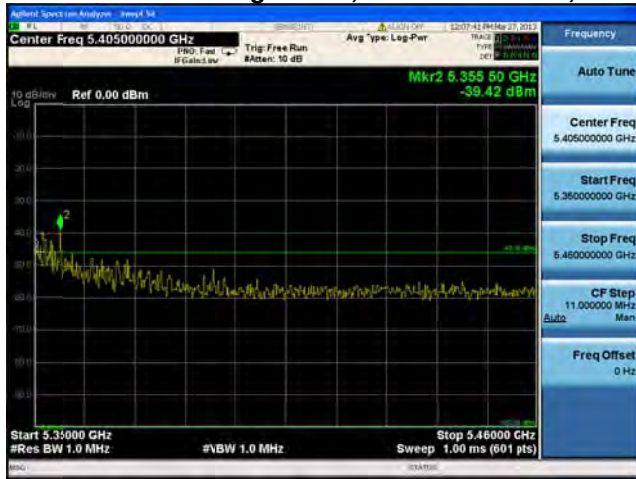
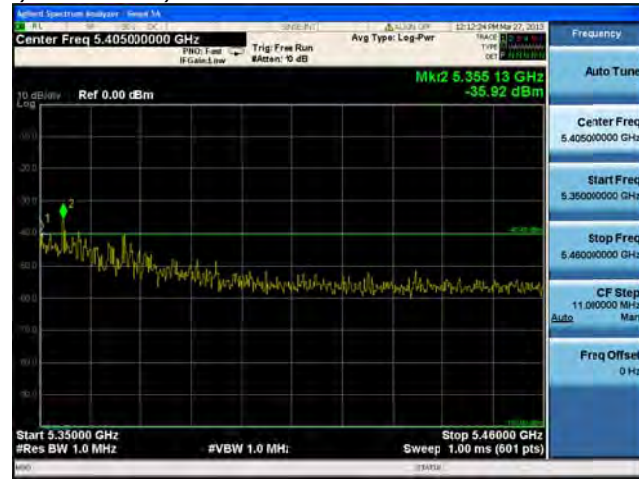
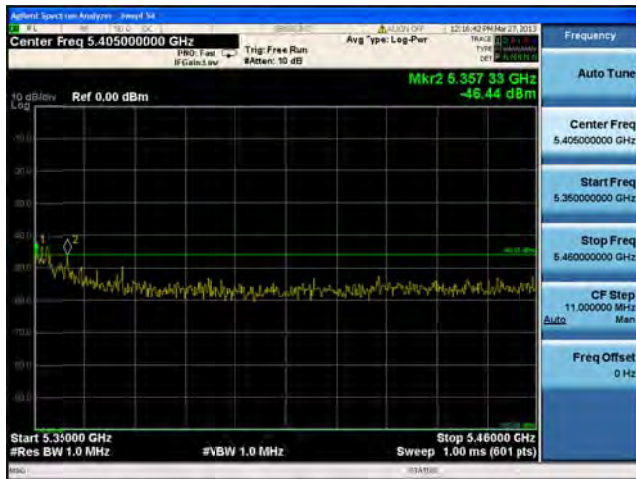
Conducted Bandedge Peak, 5300 / 5320 MHz, Non HT/VHT40, 6 to 54 Mbps**Antenna A****Antenna B****Antenna C****Antenna D**

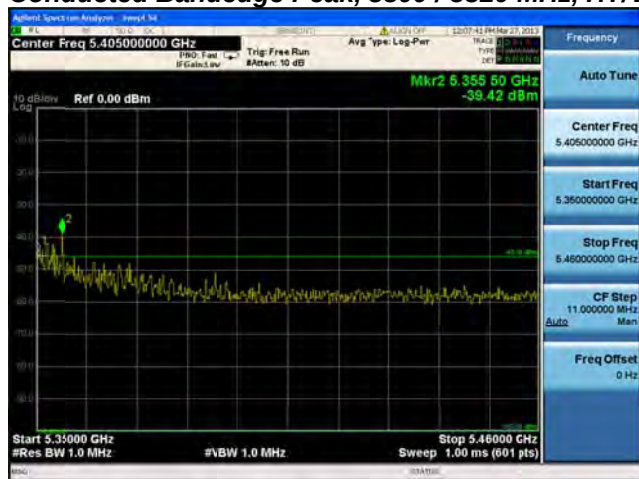
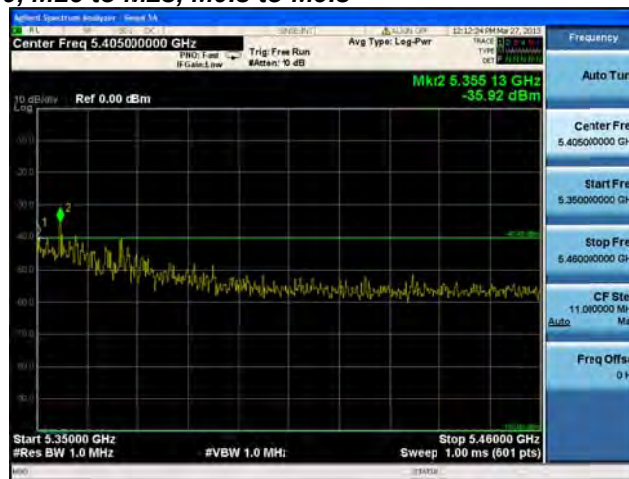
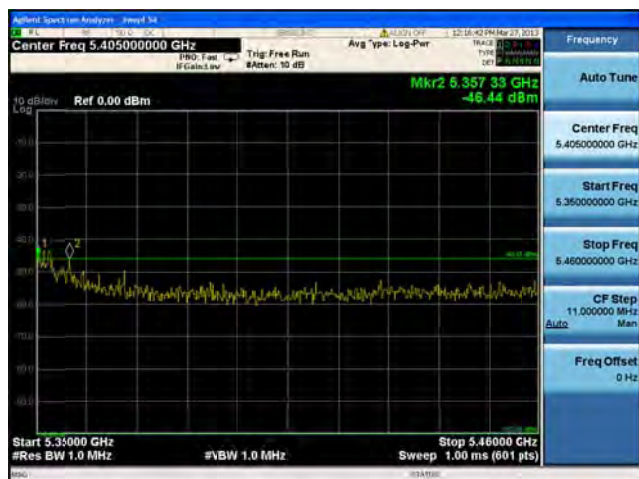
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40, M0 to M7, M0.1 to M9.1**Antenna A**

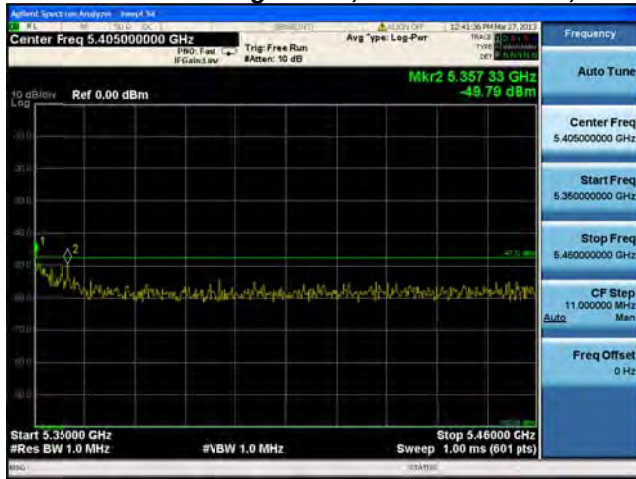
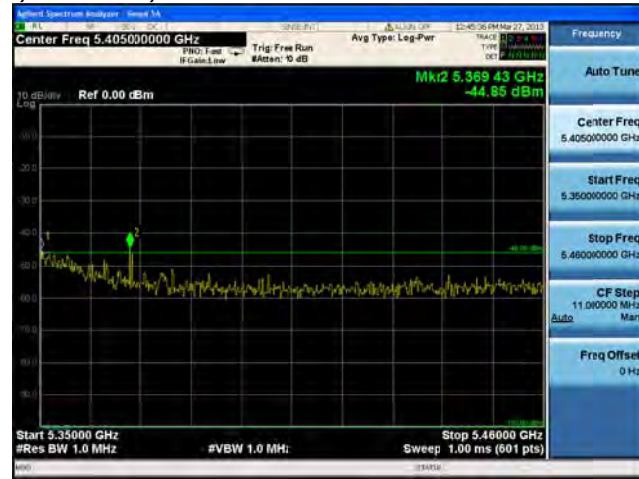
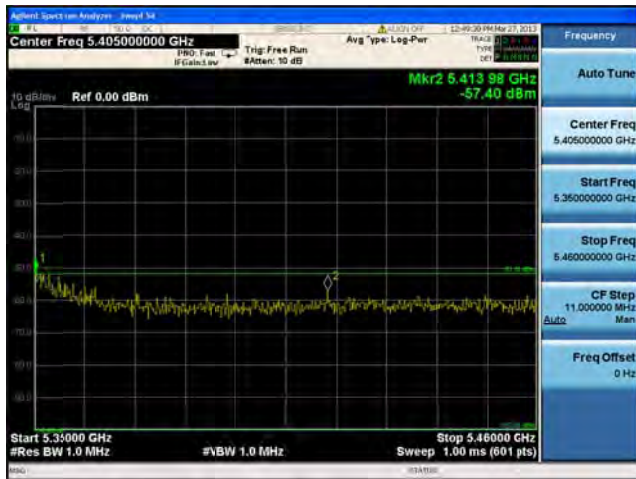
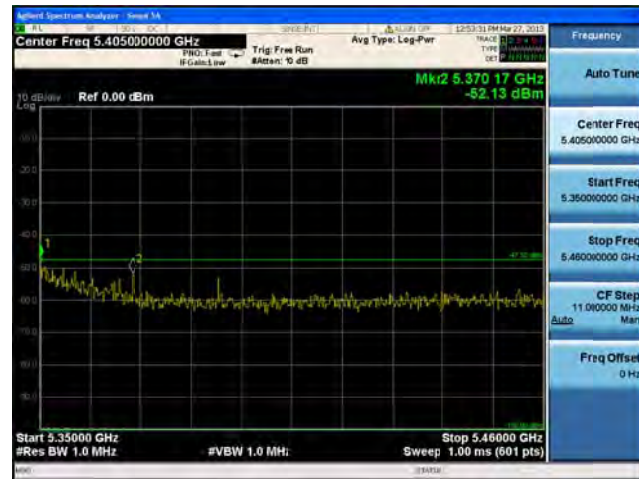
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B**

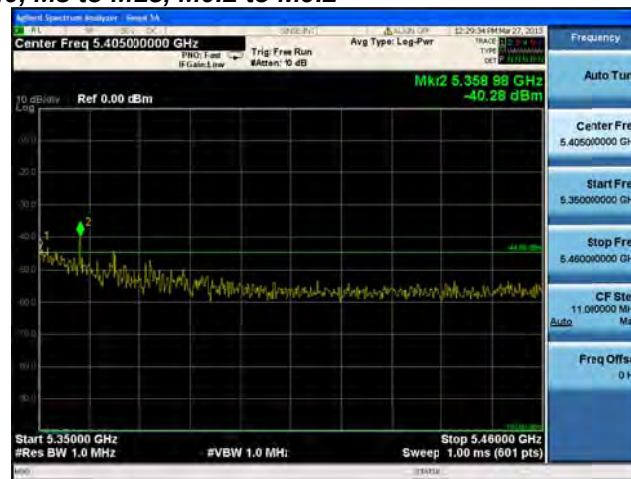
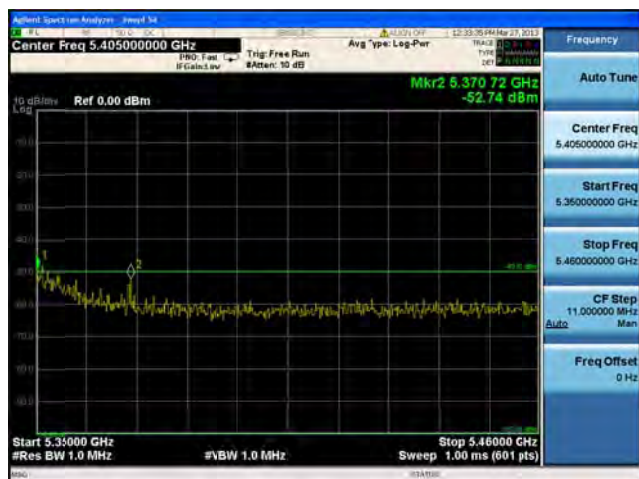
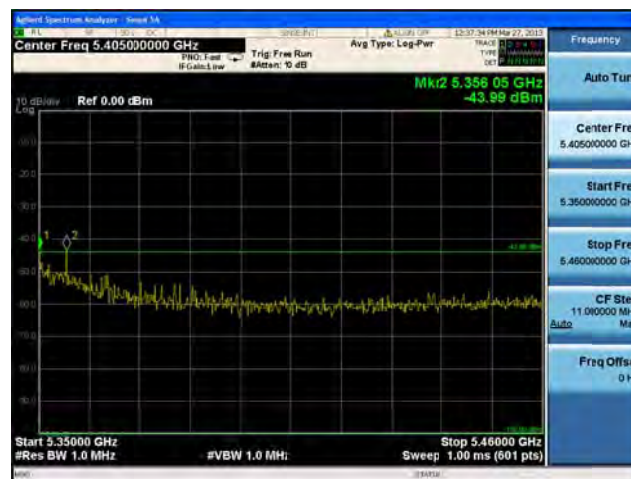
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B**

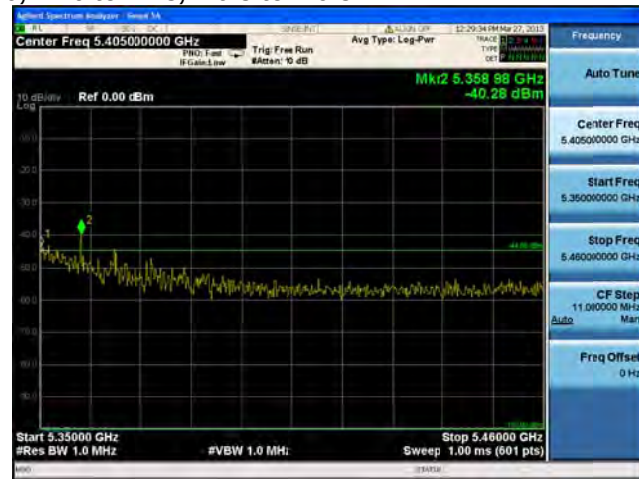
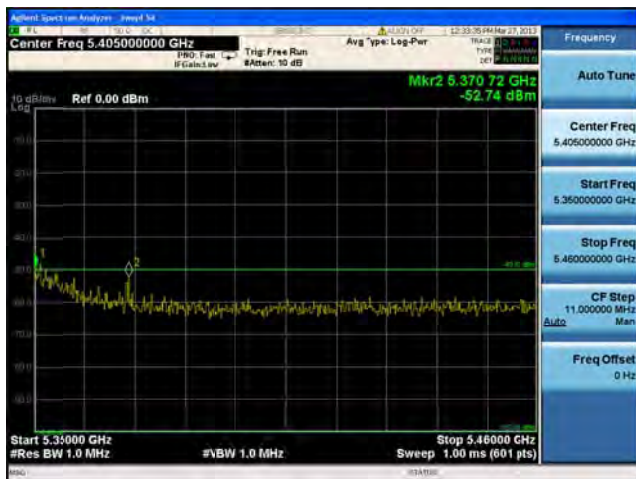
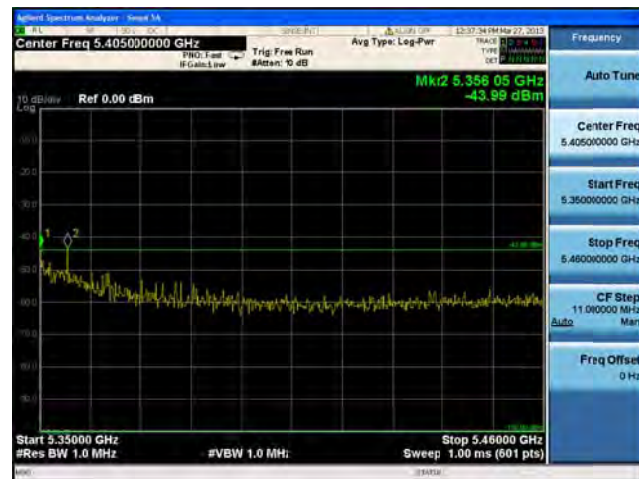
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C**

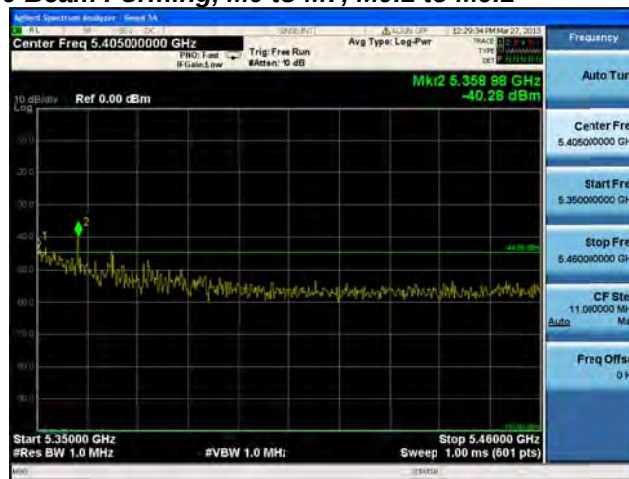
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B****Antenna C**

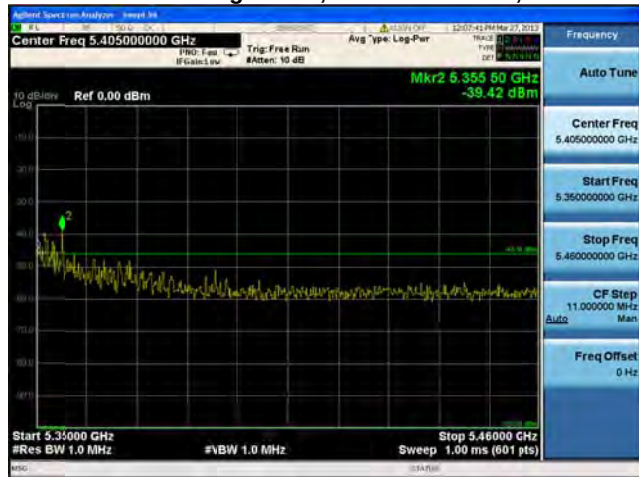
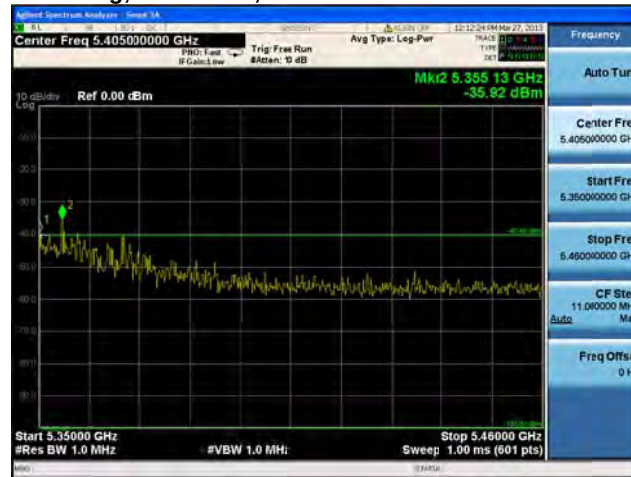
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40, M16 to M23, M0.3 to M9.3**Antenna A****Antenna B****Antenna C**

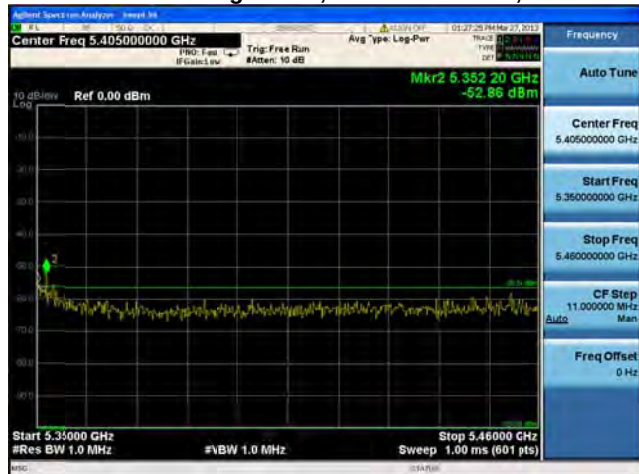
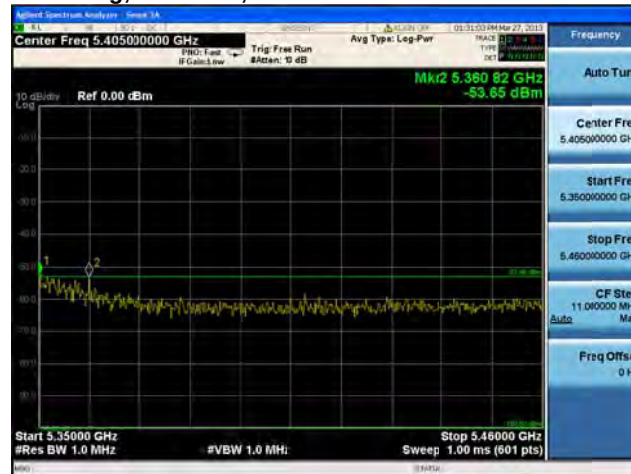
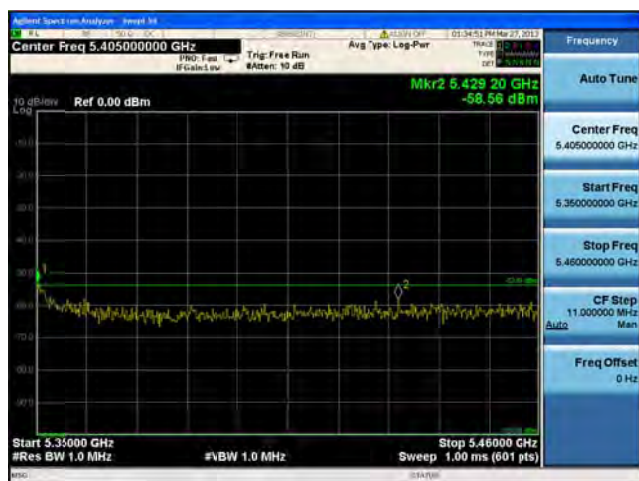
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C****Antenna D**

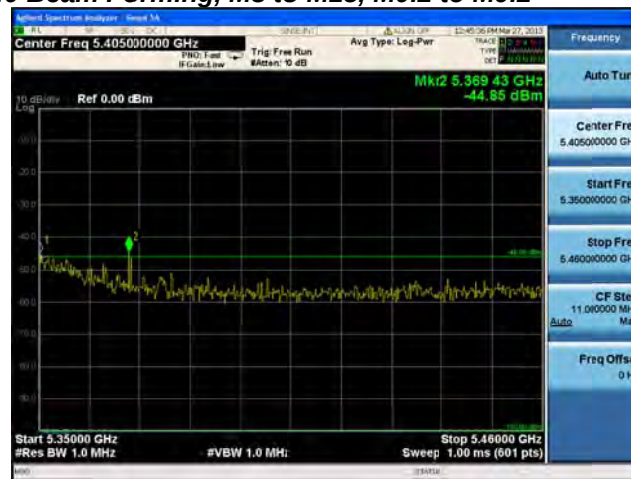
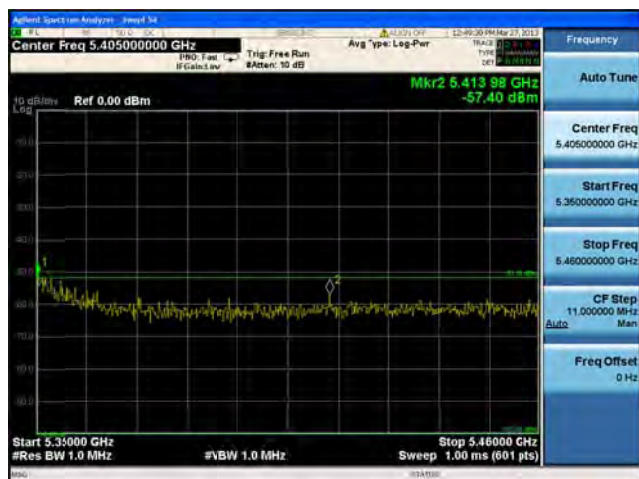
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B****Antenna C****Antenna D**

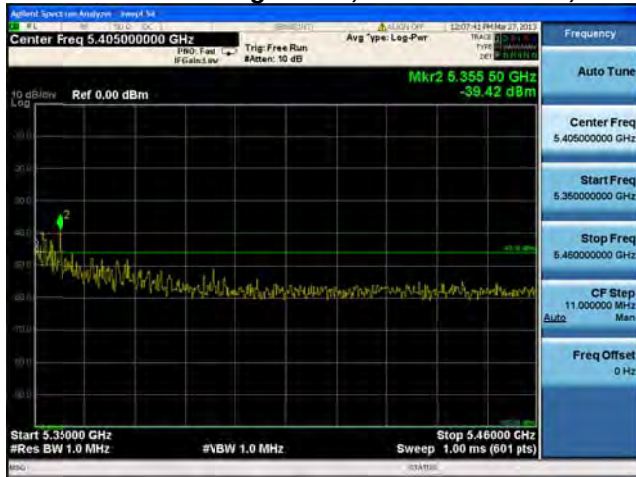
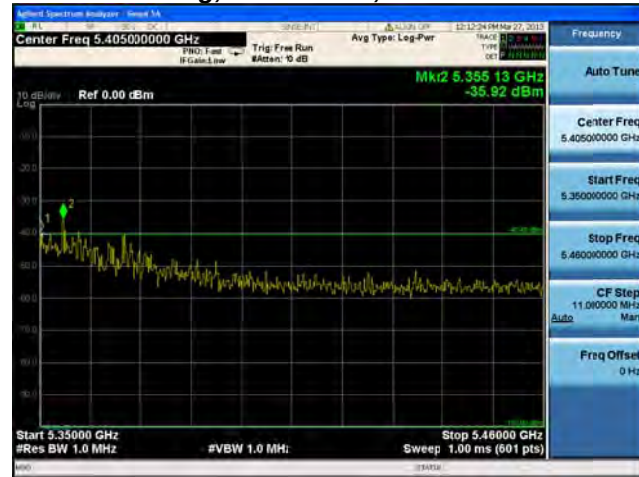
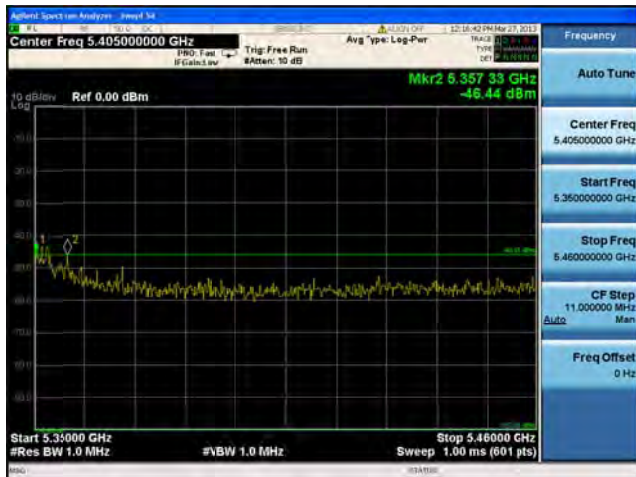
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40, M16 to M23, M0.3 to M9.3**Antenna A****Antenna B****Antenna C****Antenna D**

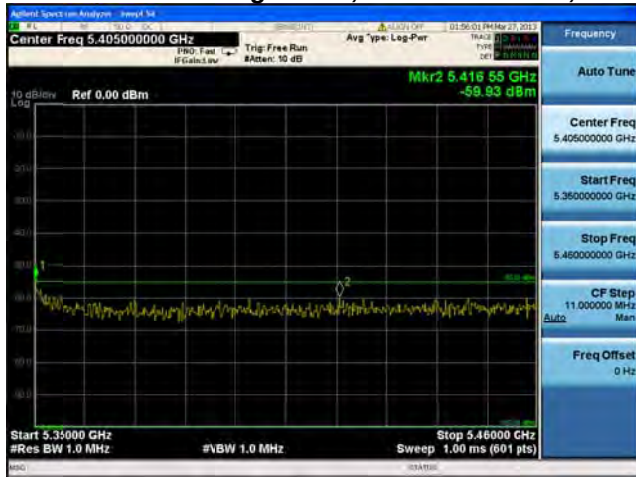
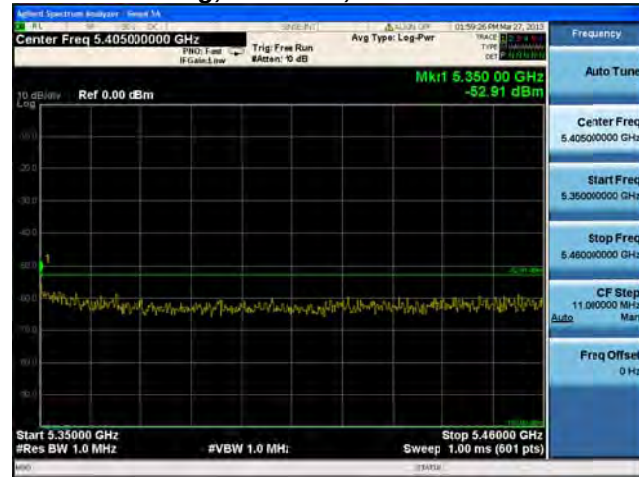
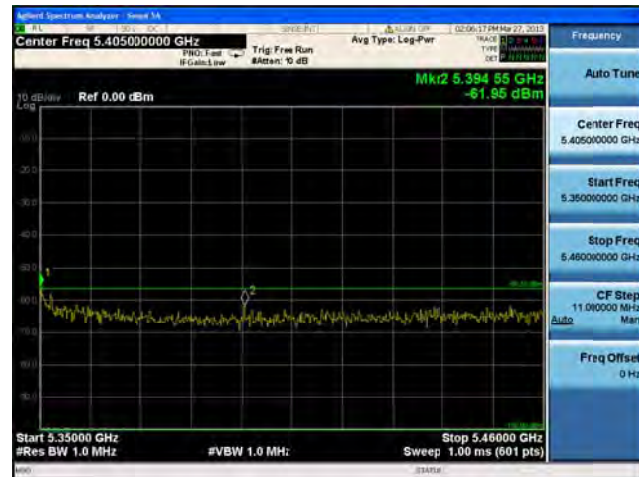
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1

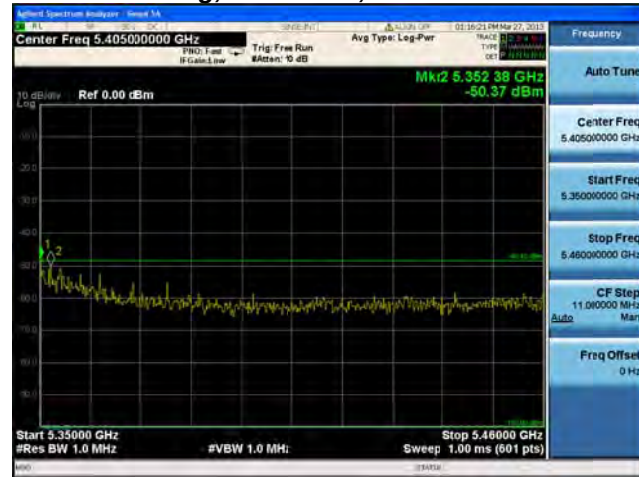
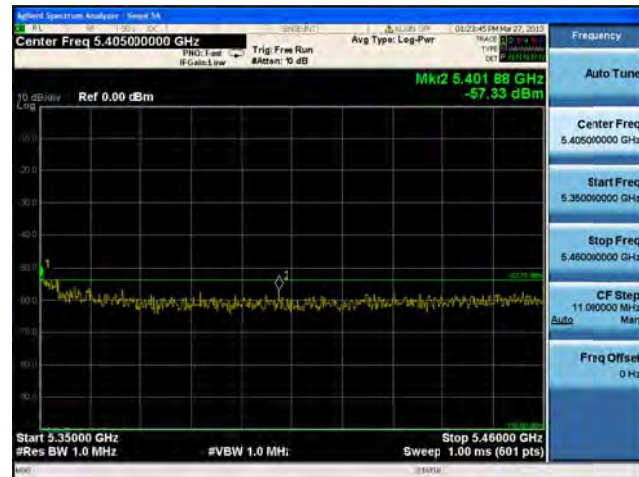
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B**

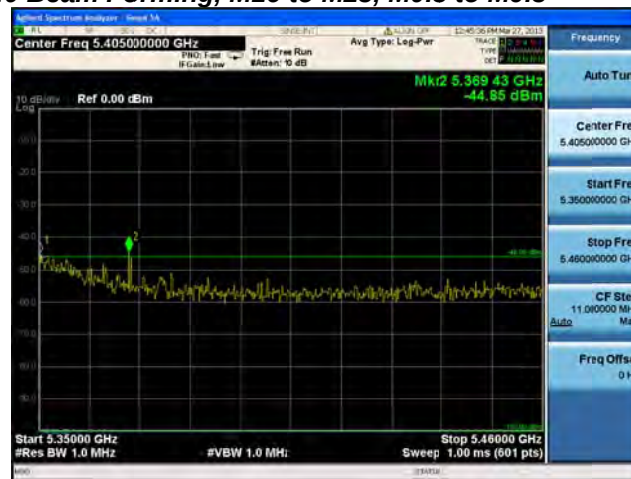
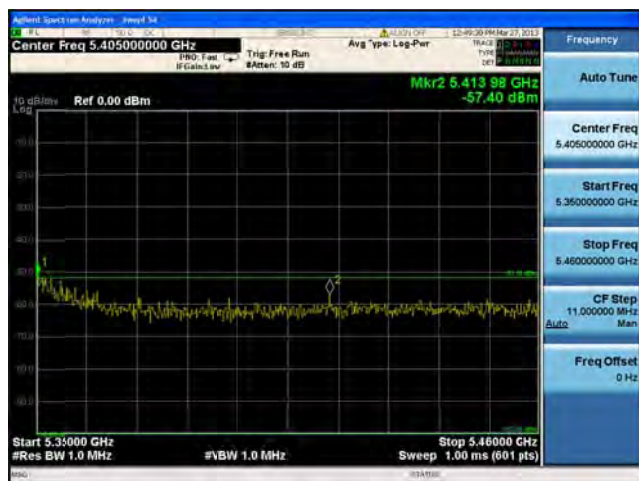
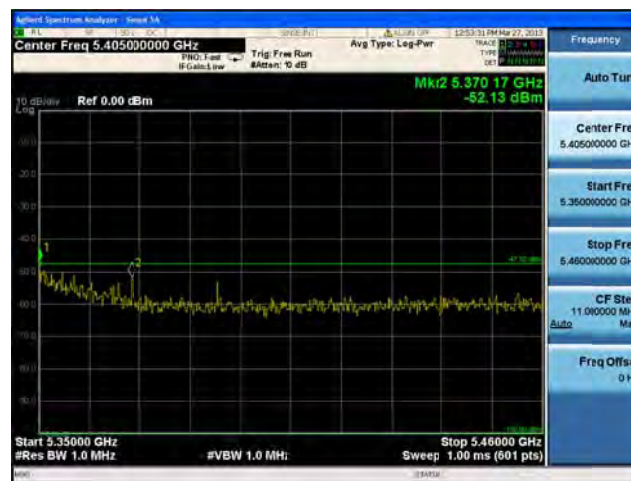
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C**

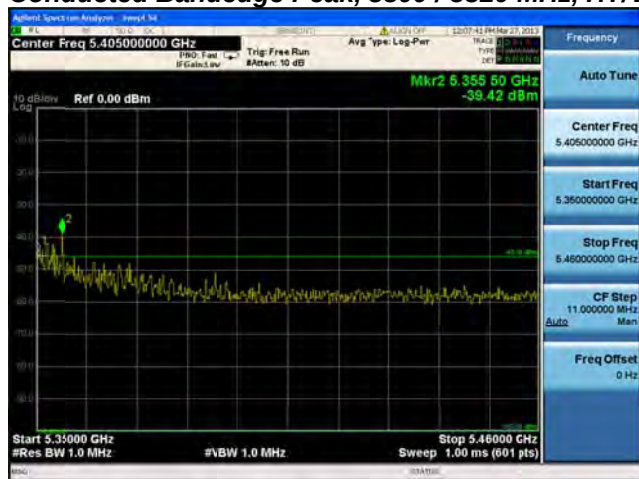
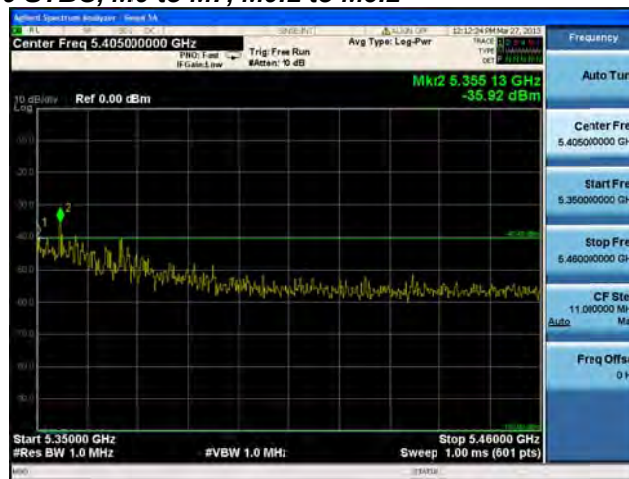
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B****Antenna C**

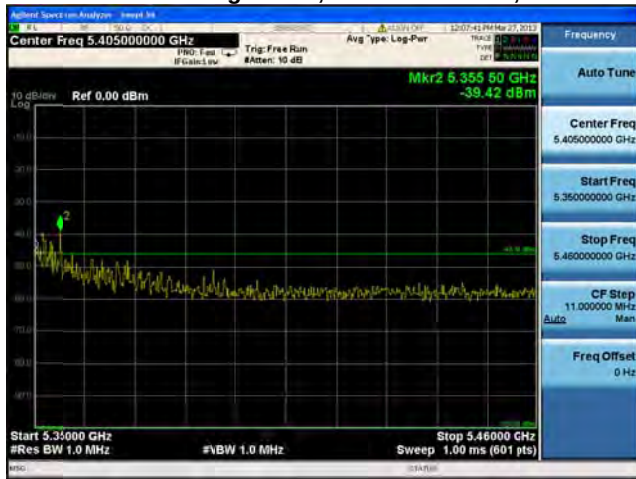
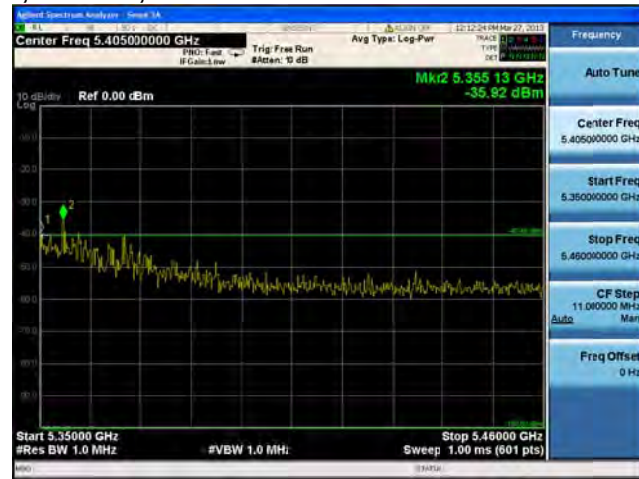
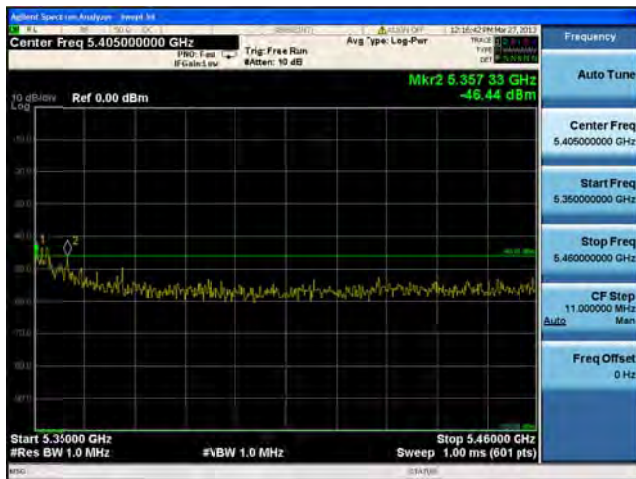
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40 Beam Forming, M16 to M23, M0.3 to M9.3**Antenna A****Antenna B****Antenna C**

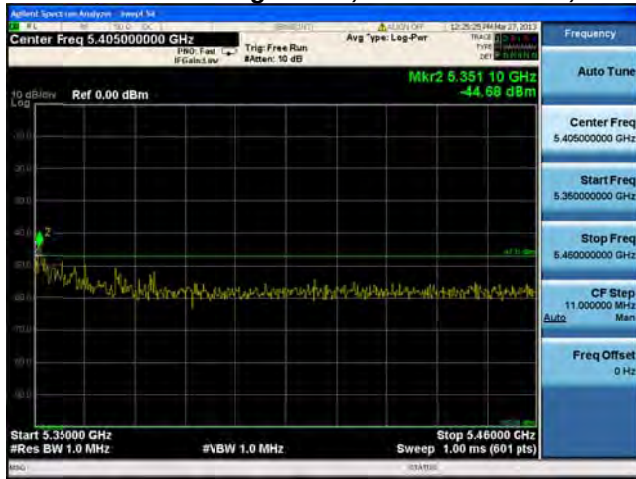
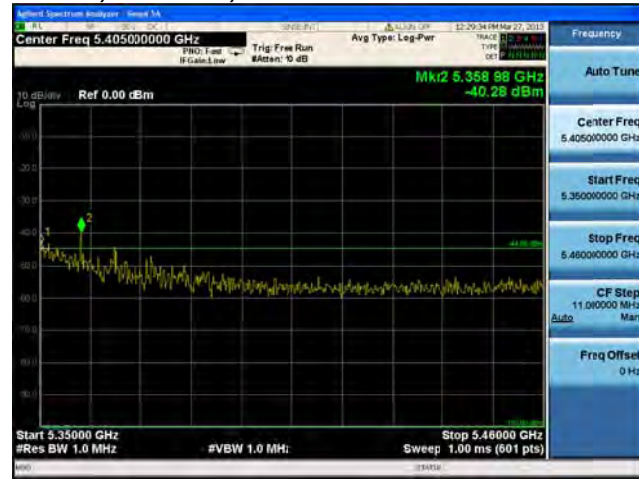
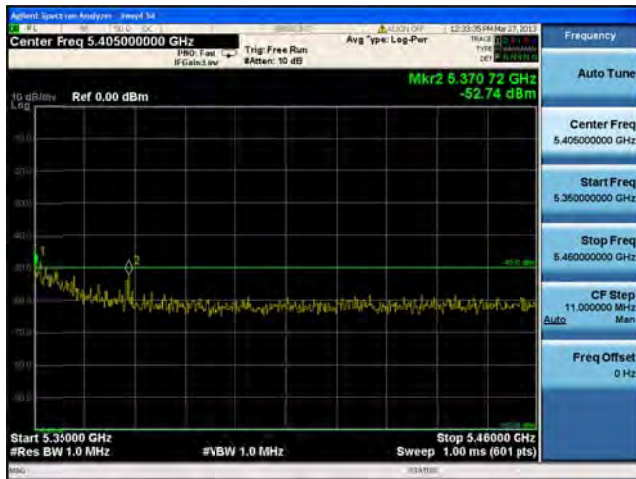
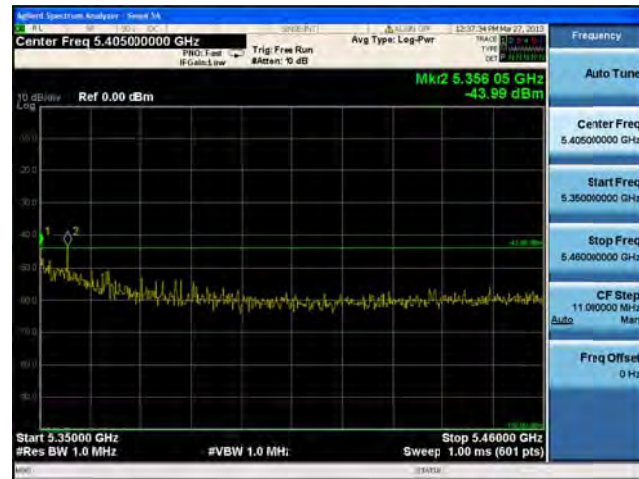
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C****Antenna D**

**Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B****Antenna C****Antenna D**

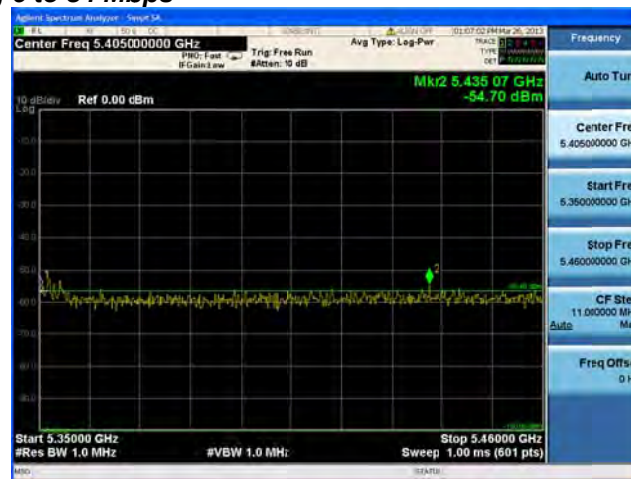
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40 Beam Forming, M16 to M23, M0.3 to M9.3**Antenna A****Antenna B****Antenna C****Antenna D**

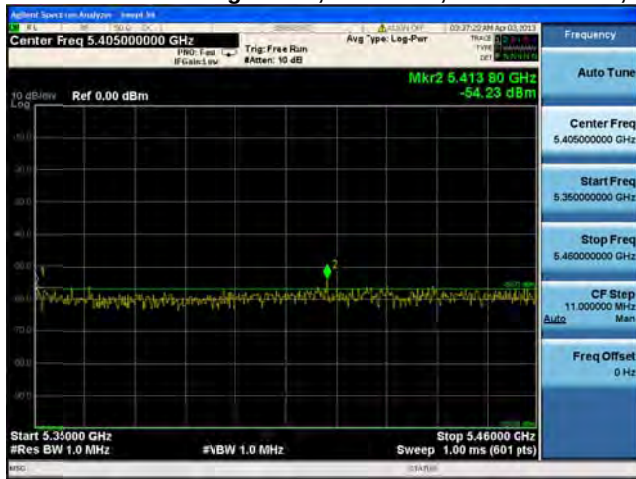
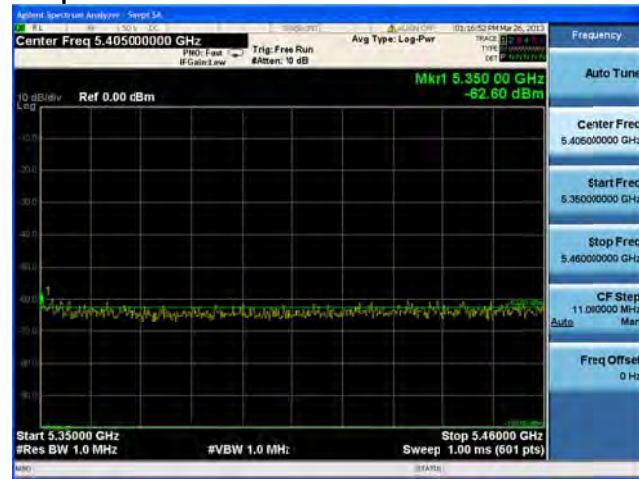
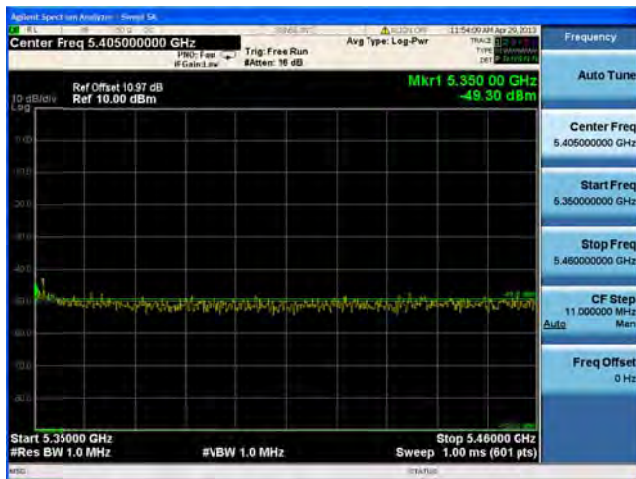
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40 STBC, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B**

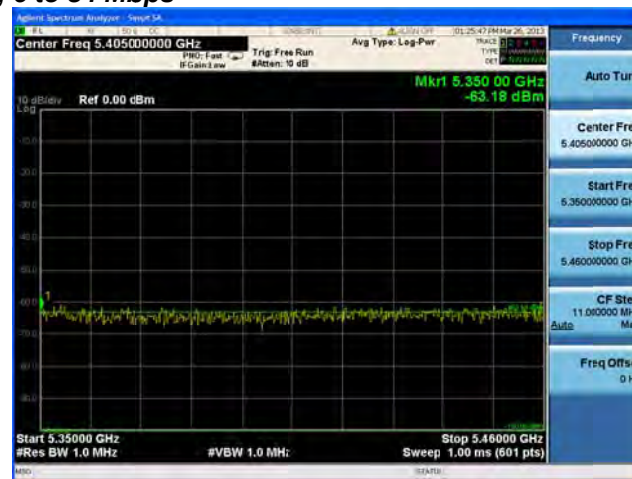
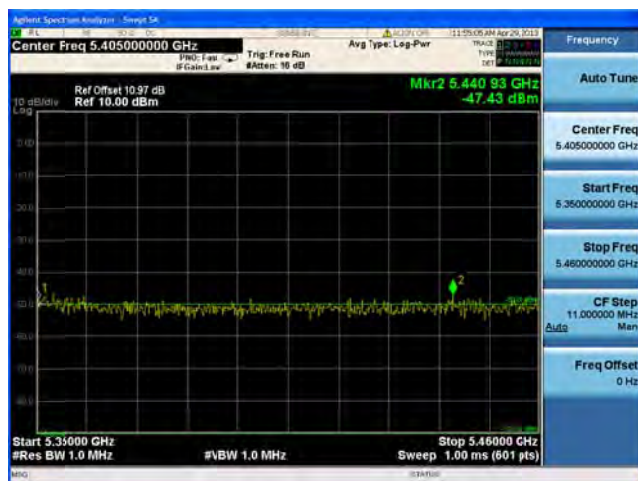
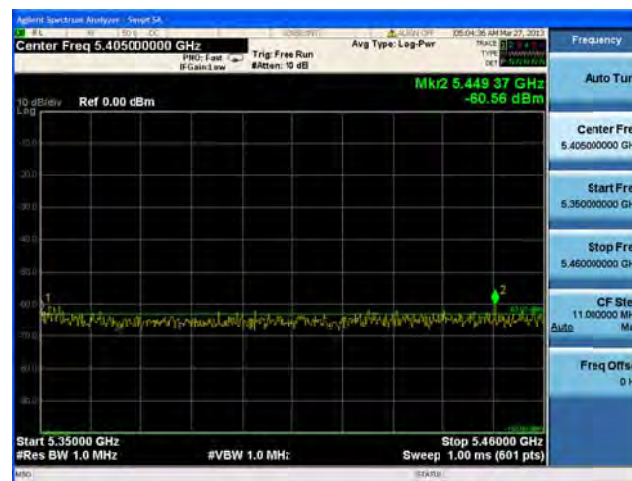
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40 STBC, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C**

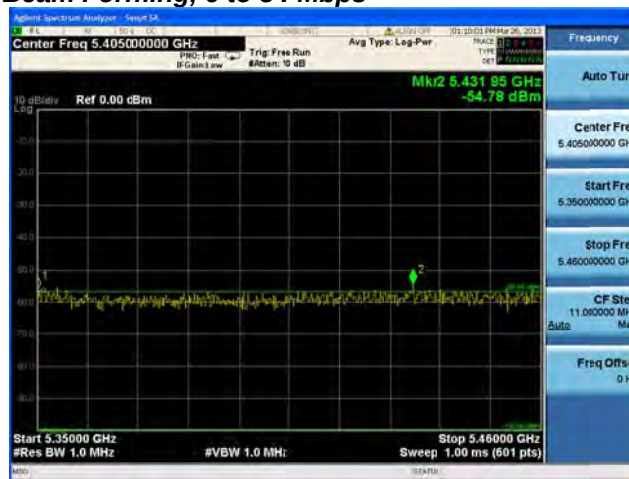
Conducted Bandedge Peak, 5300 / 5320 MHz, HT/VHT40 STBC, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C****Antenna D**

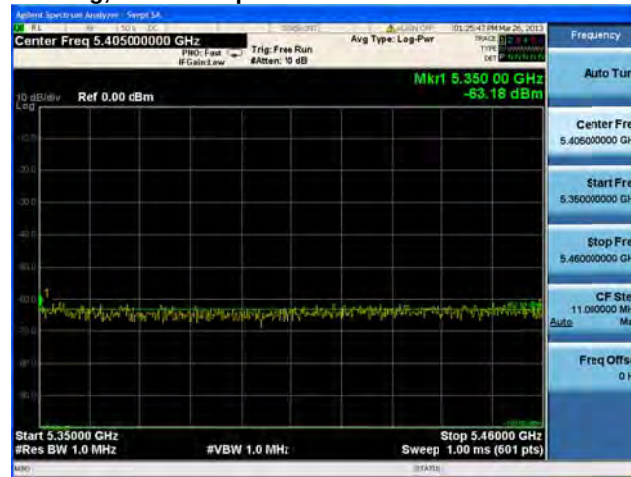
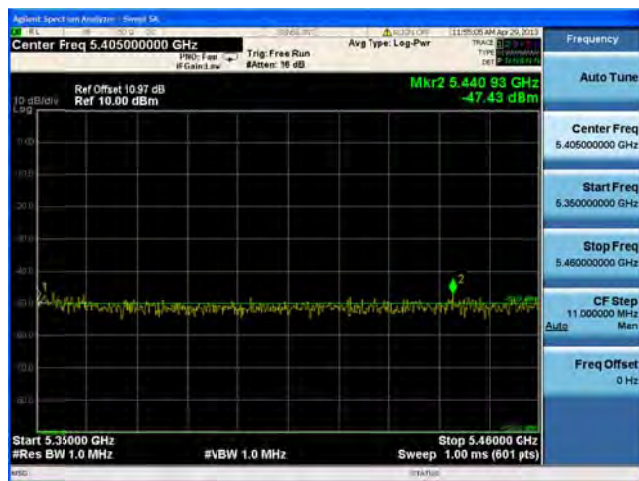
Conducted Bandedge Peak, 5320 MHz, Non HT/VHT20, 6 to 54 Mbps**Antenna A**

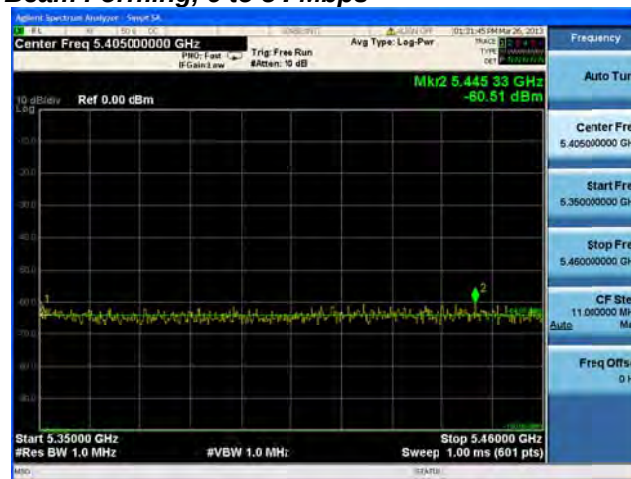
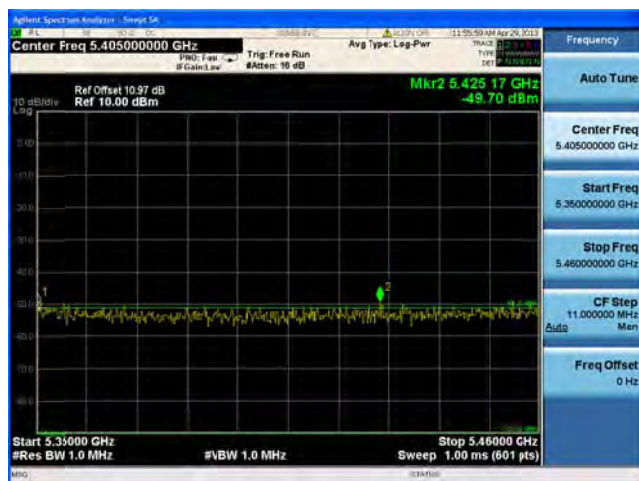
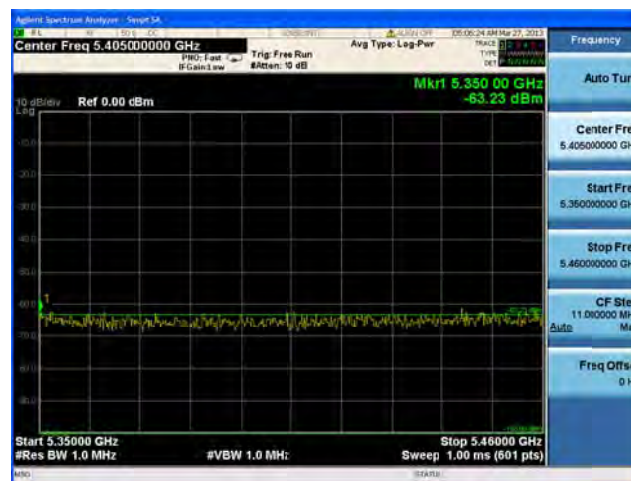
Conducted Bandedge Peak, 5320 MHz, Non HT/VHT20, 6 to 54 Mbps**Antenna A****Antenna B**

**Conducted Bandedge Peak, 5320 MHz, Non HT/VHT20, 6 to 54 Mbps****Antenna A****Antenna B****Antenna C**

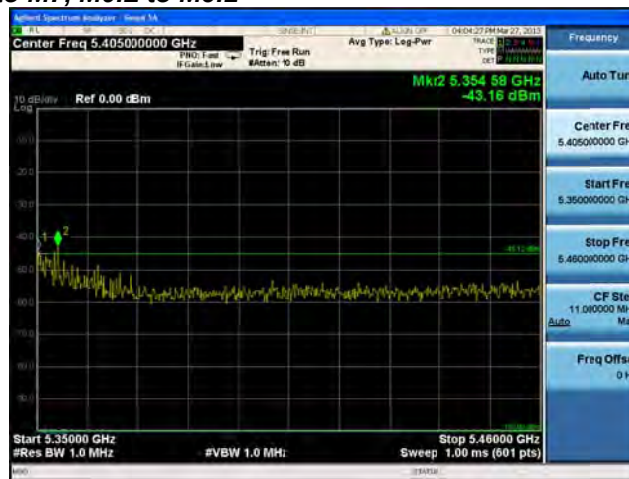
Conducted Bandedge Peak, 5320 MHz, Non HT/VHT20, 6 to 54 Mbps**Antenna A****Antenna B****Antenna C****Antenna D**

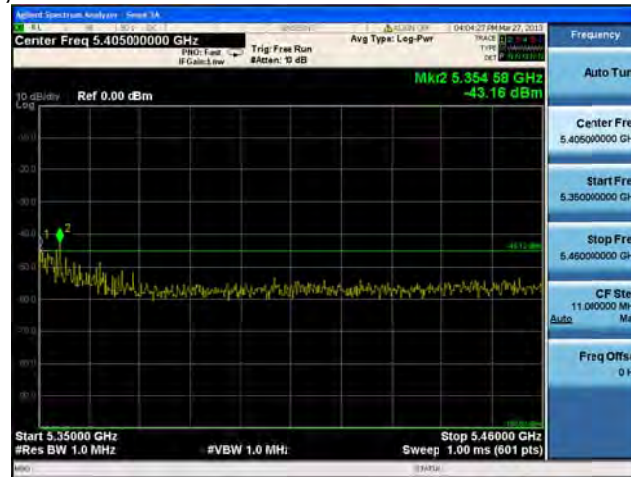
Conducted Bandedge Peak, 5320 MHz, Non HT/VHT20 Beam Forming, 6 to 54 Mbps**Antenna A****Antenna B**

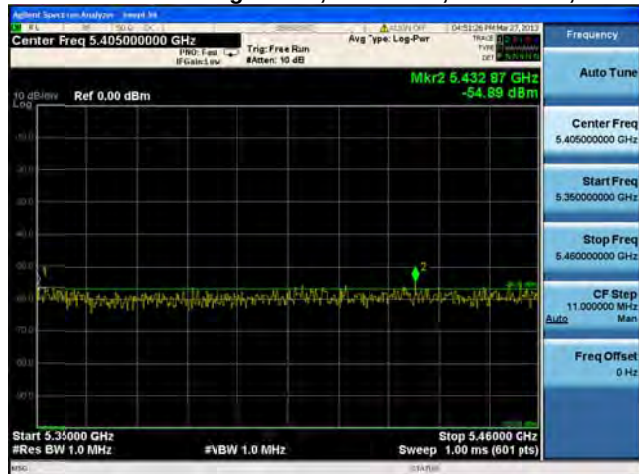
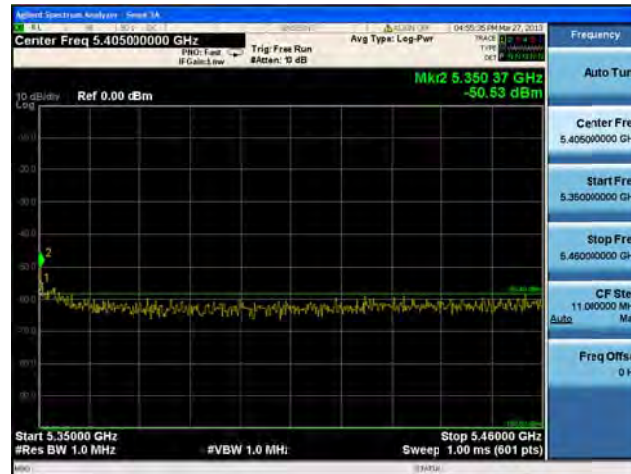
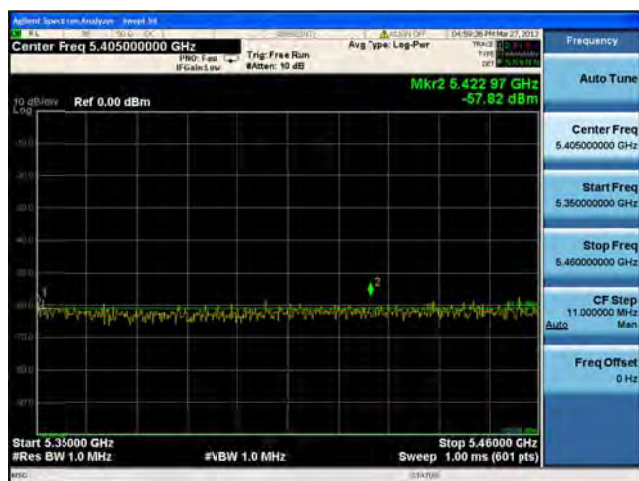
Conducted Bandedge Peak, 5320 MHz, Non HT/VHT20 Beam Forming, 6 to 54 Mbps**Antenna A****Antenna B****Antenna C**

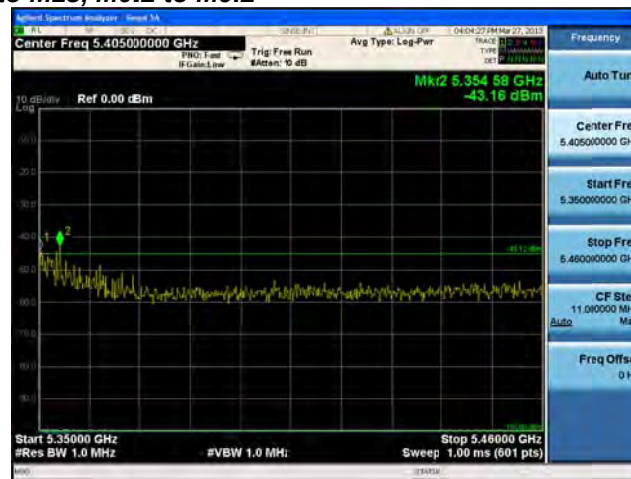
Conducted Bandedge Peak, 5320 MHz, Non HT/VHT20 Beam Forming, 6 to 54 Mbps**Antenna A****Antenna B****Antenna C****Antenna D**

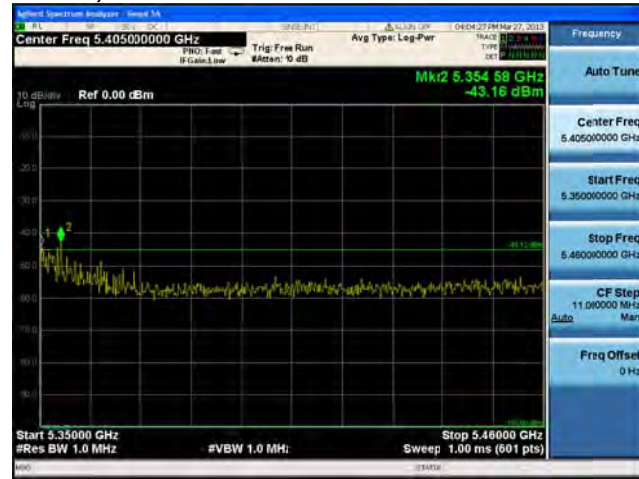
Conducted Bandedge Peak, 5320 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1**Antenna A**

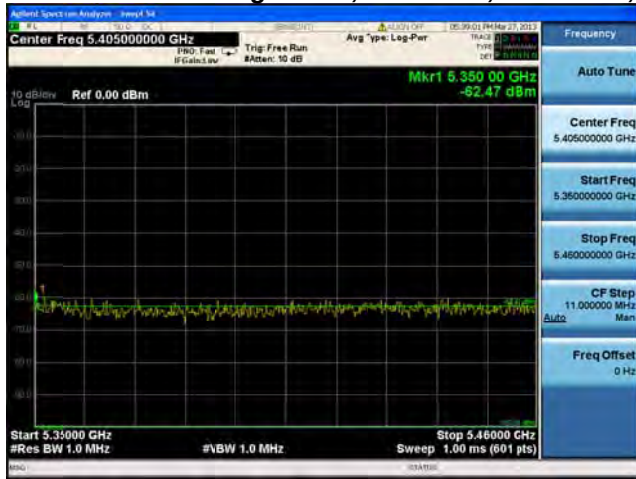
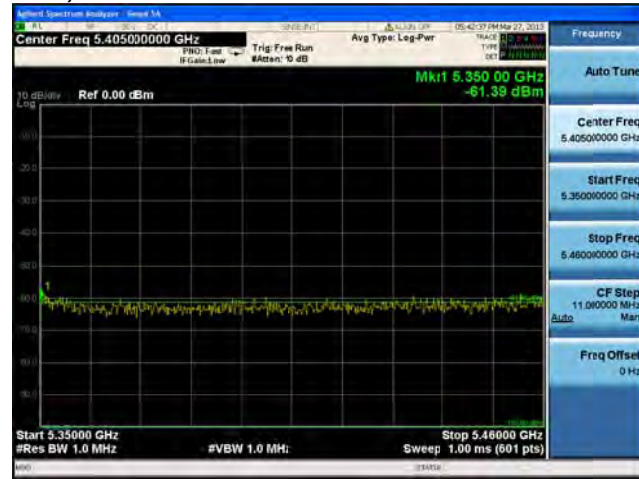
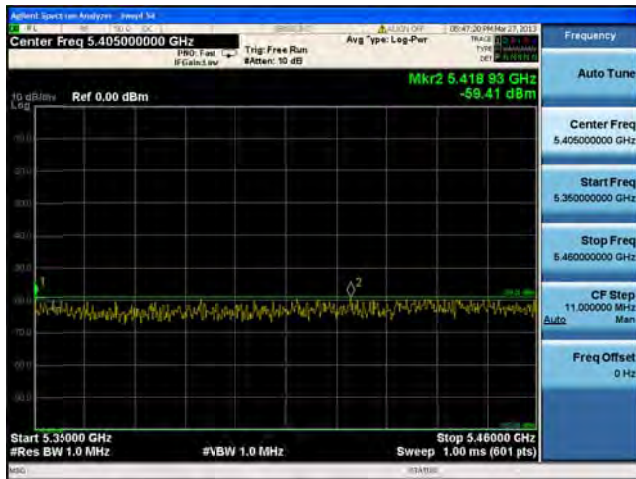
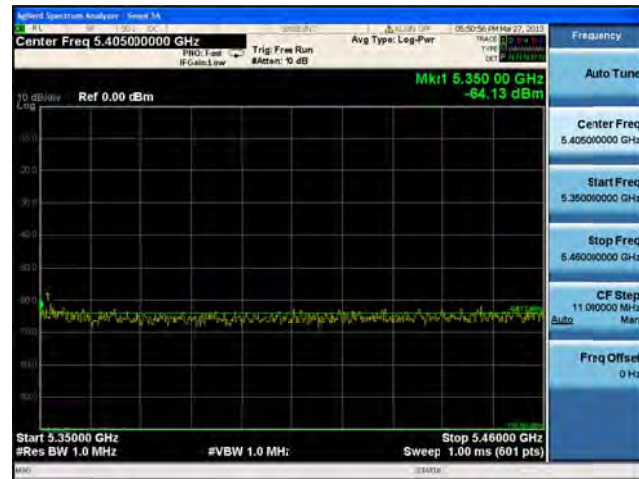
Conducted Bandedge Peak, 5320 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B**

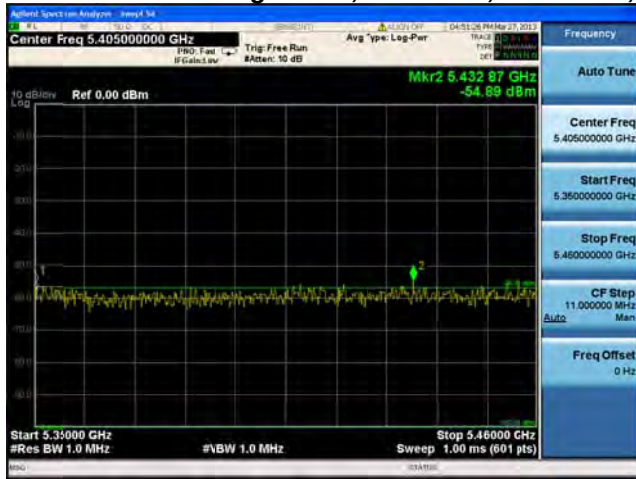
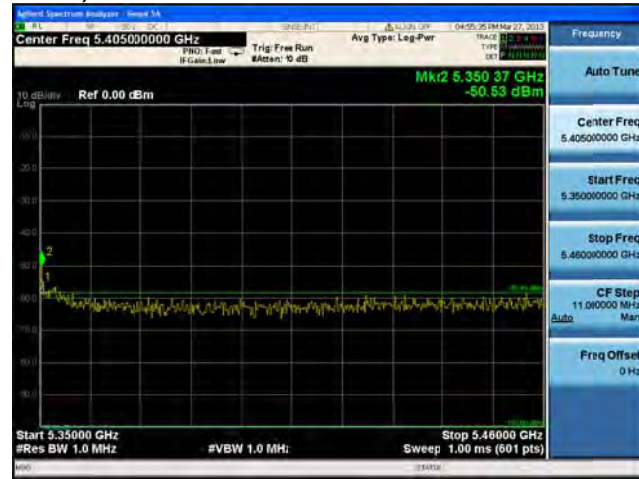
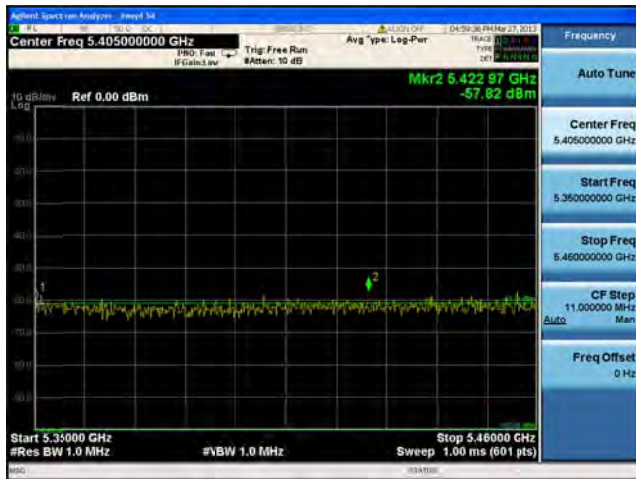
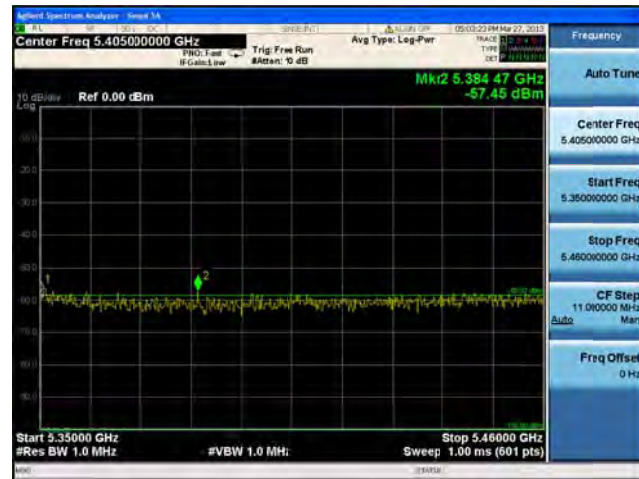
Conducted Bandedge Peak, 5320 MHz, HT/VHT20, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B**

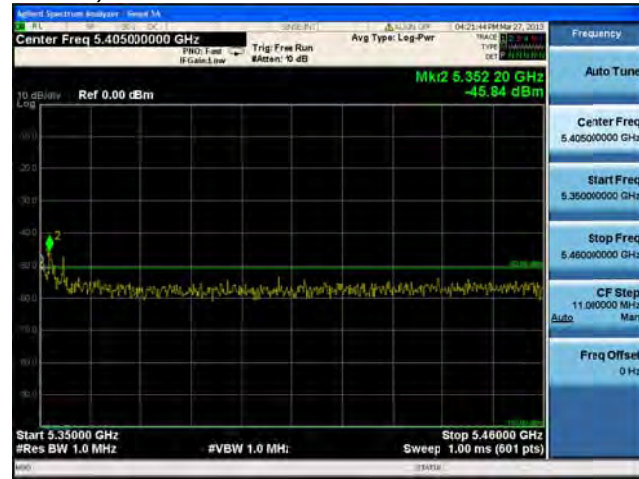
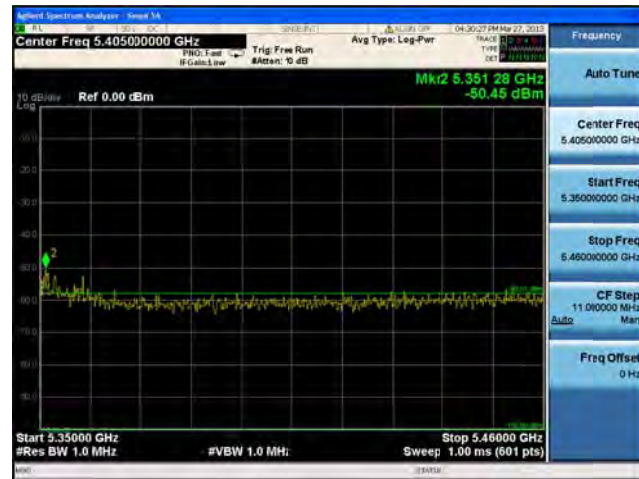
Conducted Bandedge Peak, 5320 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C**

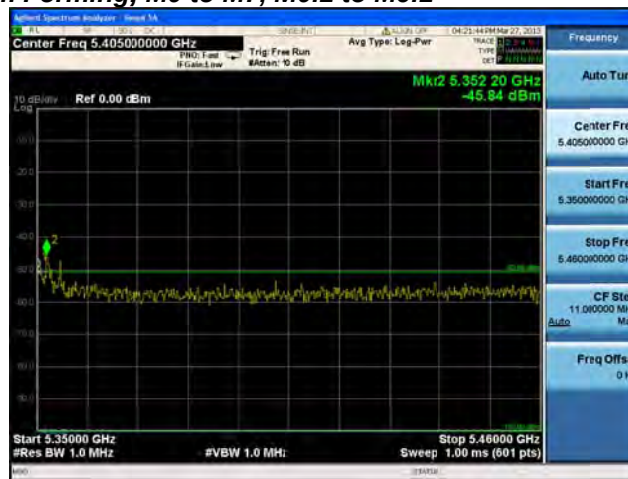
Conducted Bandedge Peak, 5320 MHz, HT/VHT20, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B****Antenna C**

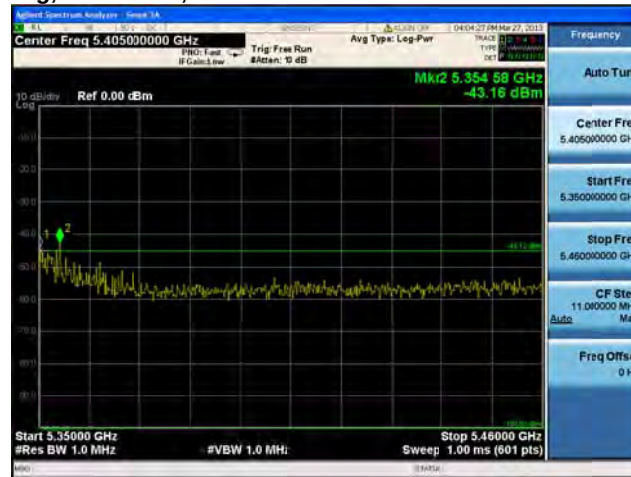
Conducted Bandedge Peak, 5320 MHz, HT/VHT20, M16 to M23, M0.3 to M9.3**Antenna A****Antenna B****Antenna C**

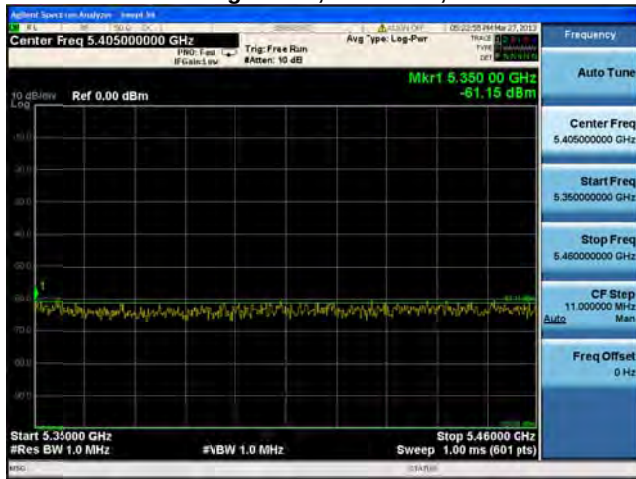
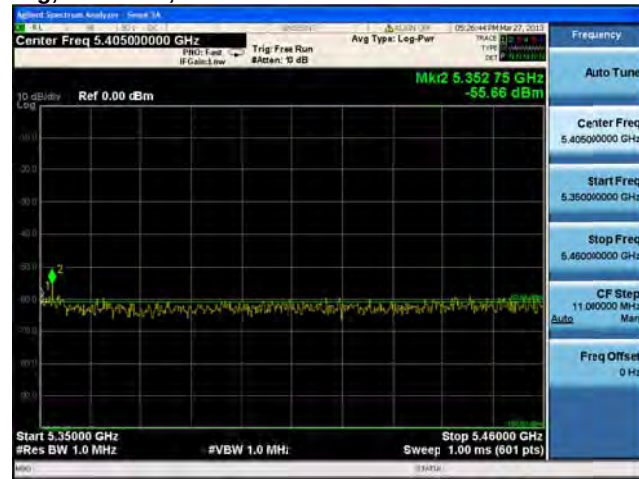
**Conducted Bandedge Peak, 5320 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C****Antenna D**

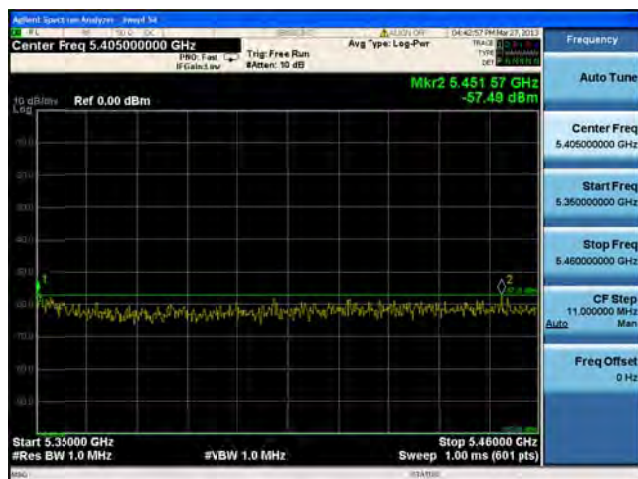
**Conducted Bandedge Peak, 5320 MHz, HT/VHT20, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B****Antenna C****Antenna D**

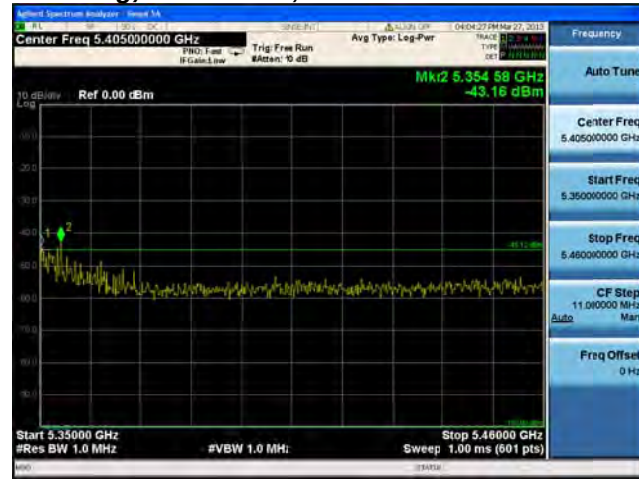
**Conducted Bandedge Peak, 5320 MHz, HT/VHT20, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C****Antenna D**

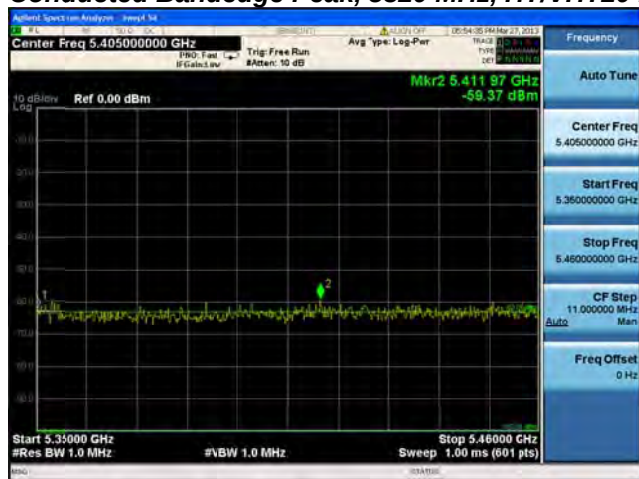
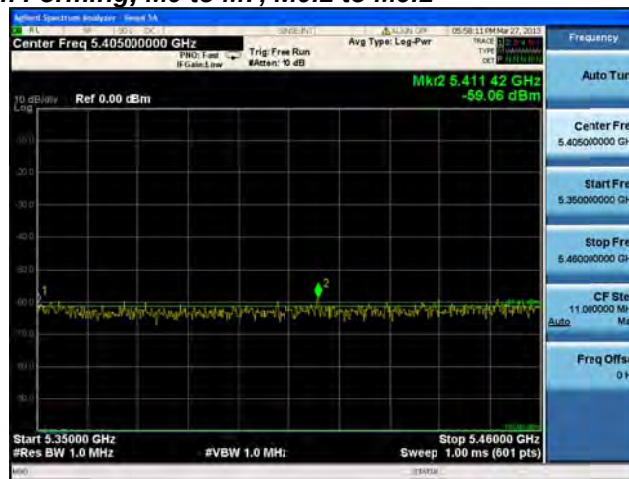
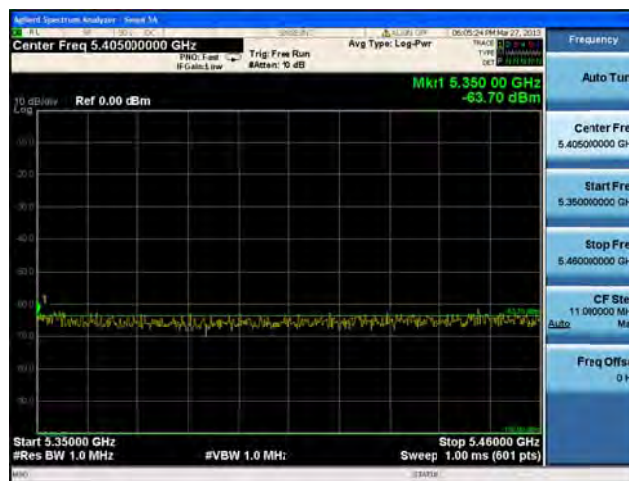
Conducted Bandedge Peak, 5320 MHz, HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B**

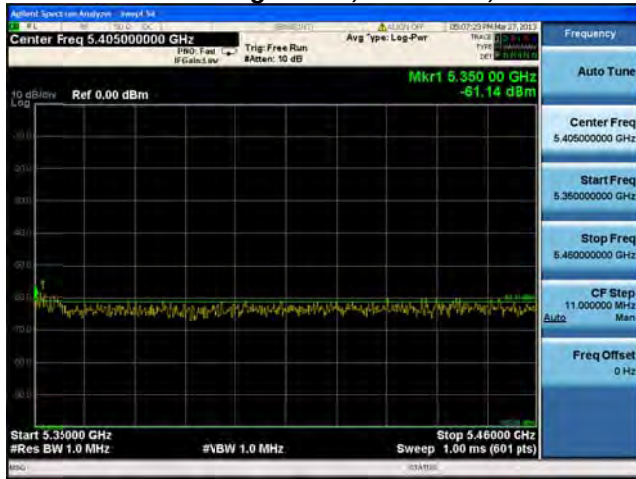
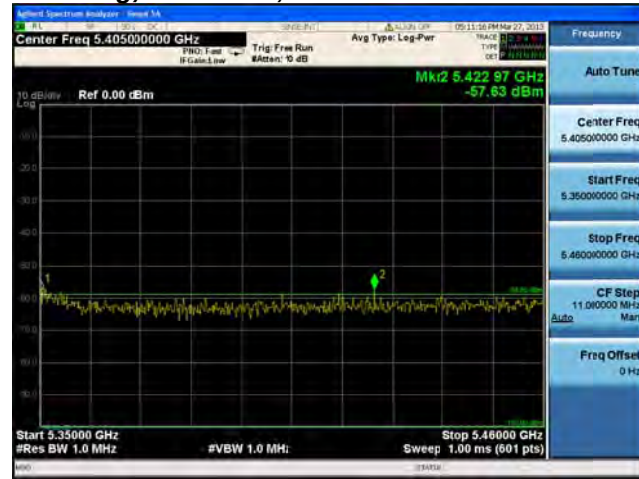
Conducted Bandedge Peak, 5320 MHz, HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B**

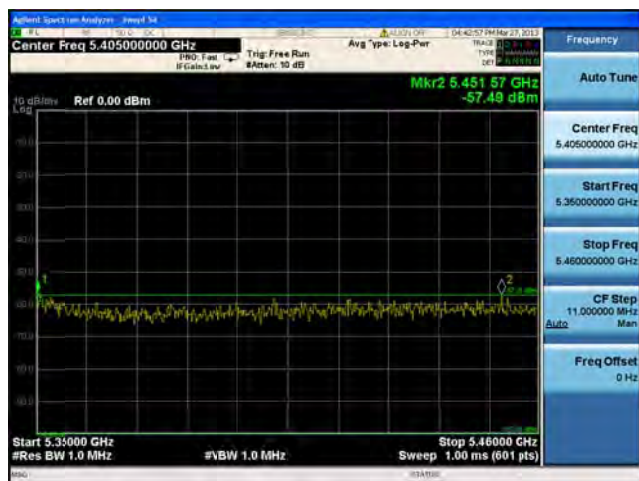
Conducted Bandedge Peak, 5320 MHz, HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C**

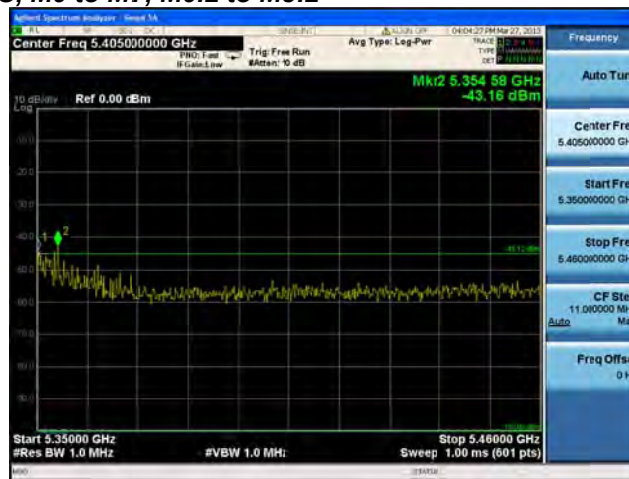
Conducted Bandedge Peak, 5320 MHz, HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2**Antenna A****Antenna B****Antenna C**

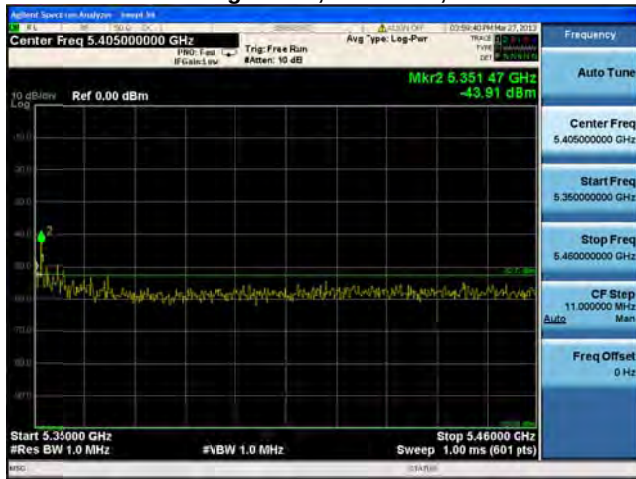
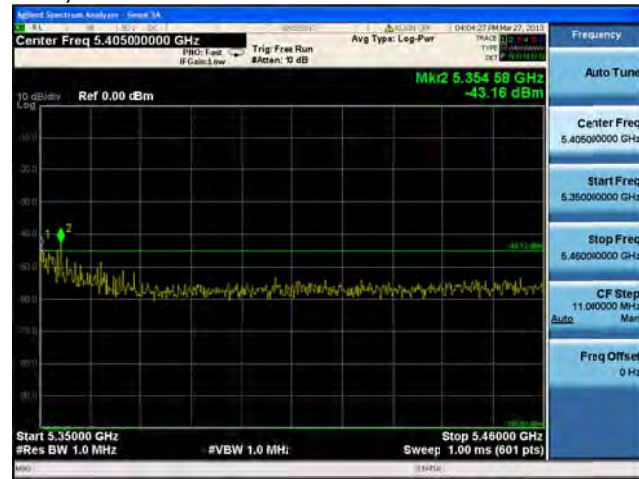
Conducted Bandedge Peak, 5320 MHz, HT/VHT20 Beam Forming, M16 to M23, M0.3 to M9.3**Antenna A****Antenna B****Antenna C**

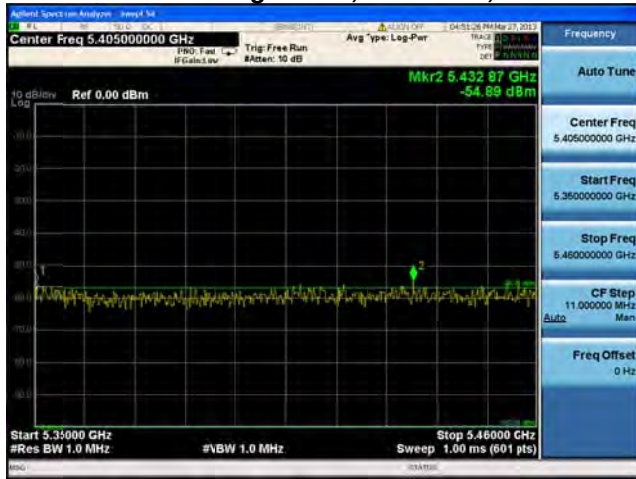
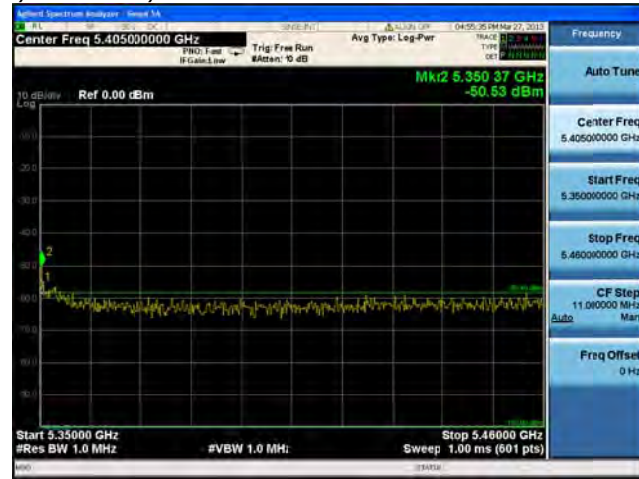
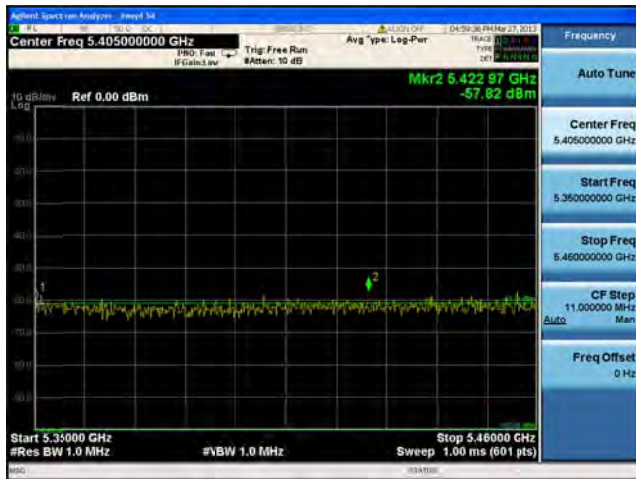
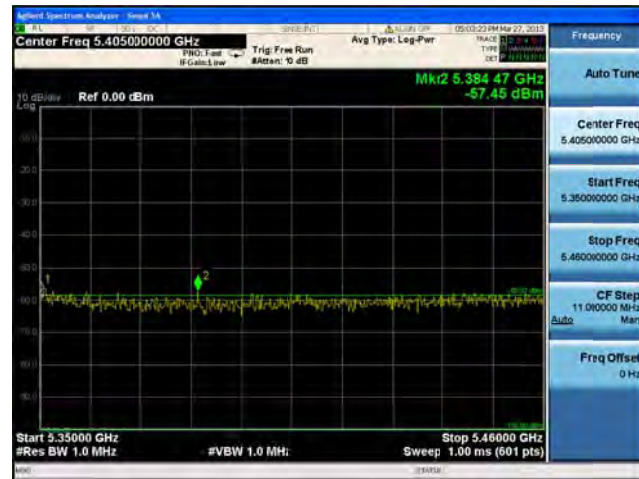
Conducted Bandedge Peak, 5320 MHz, HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C****Antenna D**

**Conducted Bandedge Peak, 5320 MHz, HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B****Antenna C****Antenna D**

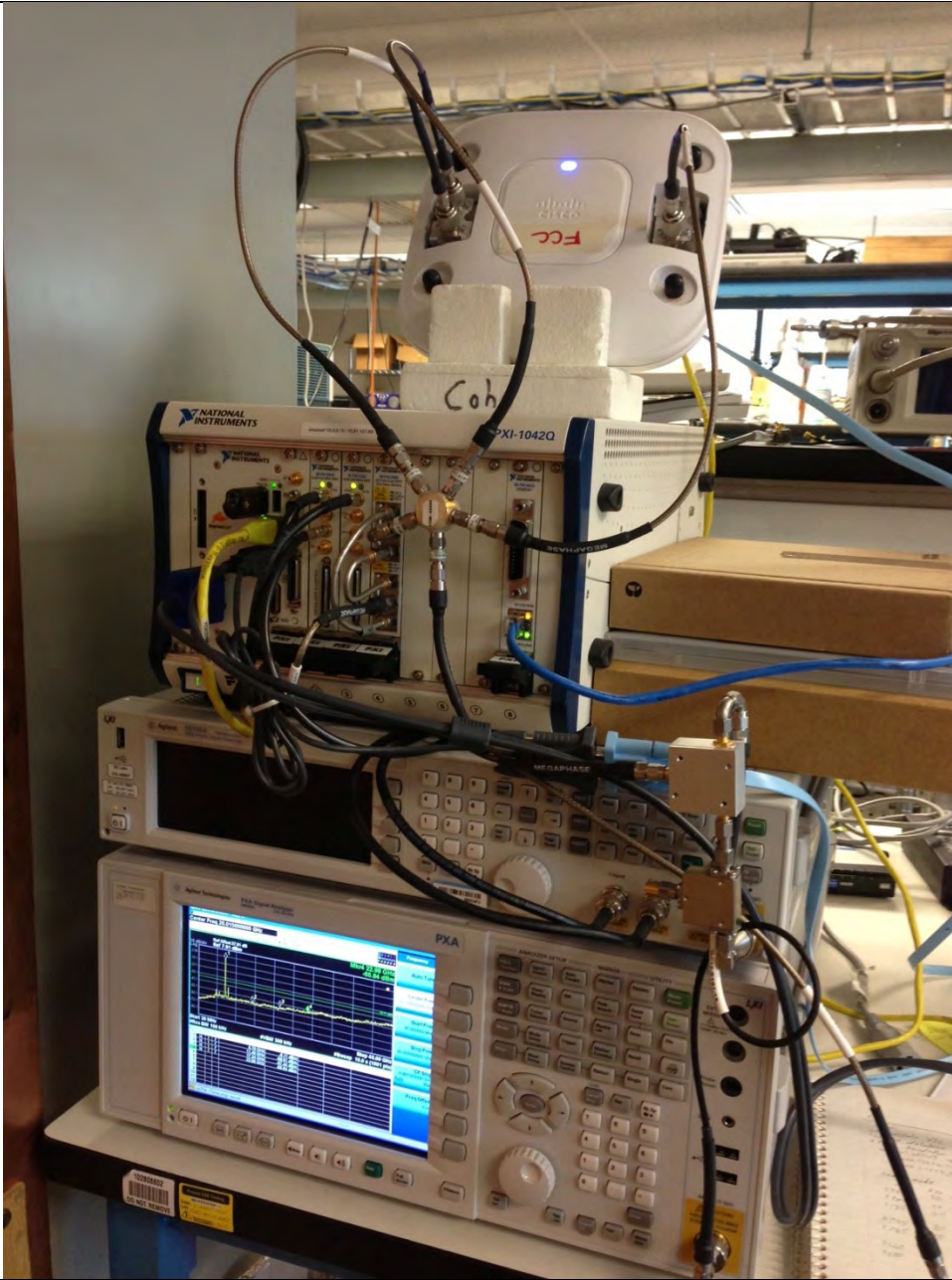
Conducted Bandedge Peak, 5320 MHz, HT/VHT20 Beam Forming, M16 to M23, M0.3 to M9.3**Antenna A****Antenna B****Antenna C****Antenna D**

Conducted Bandedge Peak, 5320 MHz, HT/VHT20 STBC, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B**

Conducted Bandedge Peak, 5320 MHz, HT/VHT20 STBC, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C**

Conducted Bandedge Peak, 5320 MHz, HT/VHT20 STBC, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C****Antenna D**

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Title: Conducted Test Setup

Maximum Permissible Exposure (MPE) Calculations

15.407: U-NII devices are subject to the radio frequency radiation exposure requirements specified in Sec. 1.1307(b), Sec. 2.1091 and Sec. 2.1093 of this chapter, as appropriate. All equipment shall be considered to operate in a "general population/uncontrolled" environment. Applications for equipment authorization of devices operating under this section must contain a statement confirming compliance with these requirements for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request.

Given

$$E = \sqrt{(30 \cdot P \cdot G)/d} \quad \text{and} \quad S = E^2/3770$$

where

E=Field Strength in Volts/meter

P=Power in Watts

G=Numeric Antenna Gain

d=Distance in meters

S=Power Density in mW/cm²

Combine equations and rearrange the terms to express the distance as a function of the remaining variables:

$$d = \sqrt{((30 \cdot P \cdot G)/(3770 \cdot S))}$$

Changing to units of power in mW and distance in cm, using:

$$P(\text{mW}) = P(\text{W})/1000 \quad d(\text{cm}) = 100 \cdot d(\text{m})$$

yields

$$d = 100 \cdot \sqrt{((30 \cdot (P/1000) \cdot G)/(3770 \cdot S))}$$

$$d = 0.282 \cdot \sqrt{(P \cdot G/S)}$$

where

d=Distance in cm

P=Power in mW

G=Numeric Antenna Gain

S=Power Density in mW/cm²

Substituting the logarithmic form of power and gain using:

$$P(\text{mW}) = 10^{(P(\text{dBm})/10)} \quad G(\text{numeric}) = 10^{(G(\text{dBi})/10)}$$

yields

$$d = 0.282 \cdot 10^{((P+G)/20)} / \sqrt{S} \quad \text{Equation (1)}$$

and

$$S = ((0.282 \cdot 10^{((P+G)/20)})/d)^2 \quad \text{Equation (2)}$$

where

d=MPE distance in cm

P=Power in dBm

G=Antenna Gain in dBi

S=Power Density in mW/cm²



Equation (1) and the measured peak power are used to calculate the MPE distance. Note that for mobile or fixed location transmitters such as an access point, the minimum separation distance is 20 cm even if the calculations indicate that the MPE distance may be less.

$S=1\text{mW/cm}^2$ maximum. The highest supported antenna gain is 5 dBi. Using the peak power levels recorded in the test report along with Equation 1 above, the MPE distances are calculated as follows.

Frequency (MHz)	Bit Rate (Mbps)	Power Density (mW/cm ²)	Peak Transmit Power (dBm)	Antenna Gain (dBi)	MPE Distance (cm)	Limit (cm)	Margin (cm)
5260/5280	M0	1	22.2	5	6.46	20	13.54

MPE Calculations

To maintain compliance, installations will assure a separation distance of at least 20cm.

Using Equation 2, the MPE levels (s) at 20 cm are calculated as follows:

Frequency (MHz)	Bit Rate (Mbps)	MPE Distance (cm)	Peak Transmit Power (dBm)	Antenna Gain (dBi)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Margin (mW/cm ²)
5260/5280	M0	20	22.2	5	0.10	1	0.90



Appendix C: Test Equipment/Software Used to perform the test

Equip #	Manufacturer	Model	Description	Last Cal	Next Due
CIS049381	Agilent	N9030A	Spectrum Analyzer	28-Aug-12	28-Aug-13