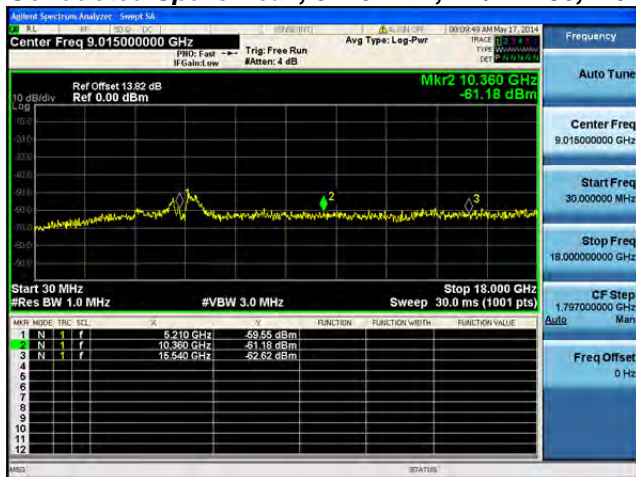
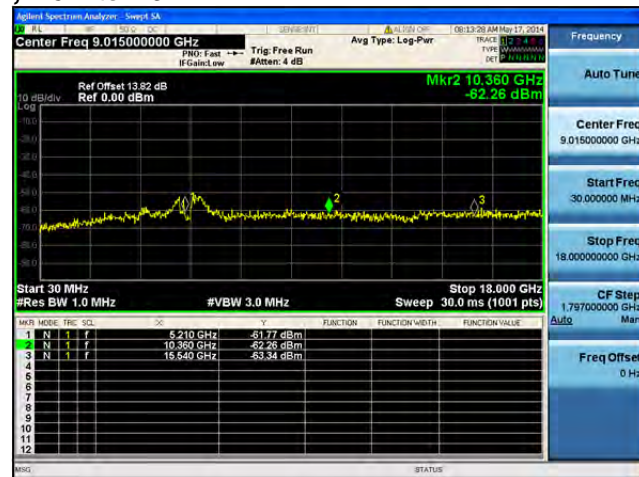
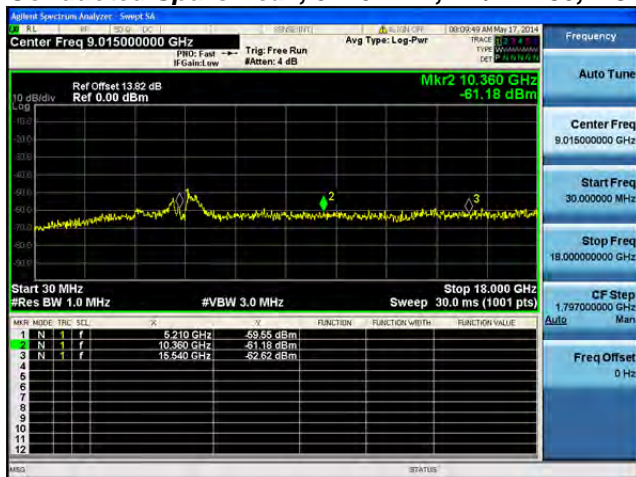
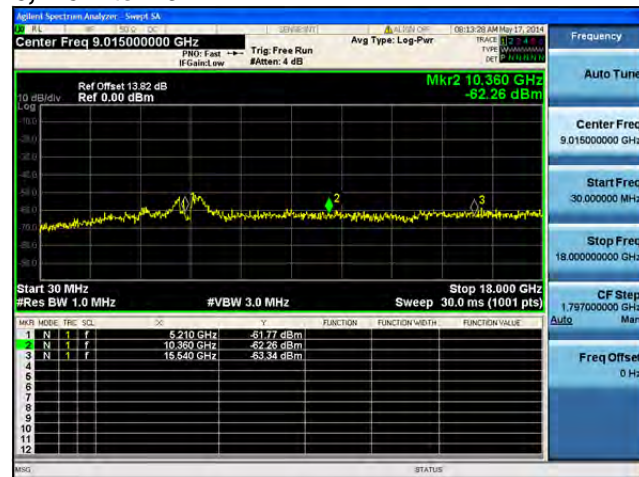
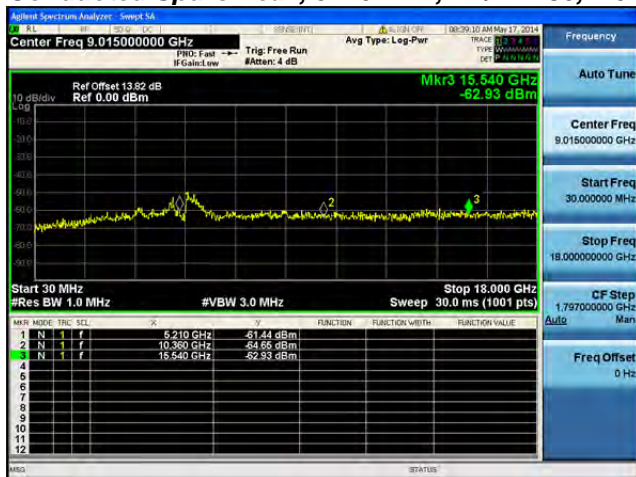
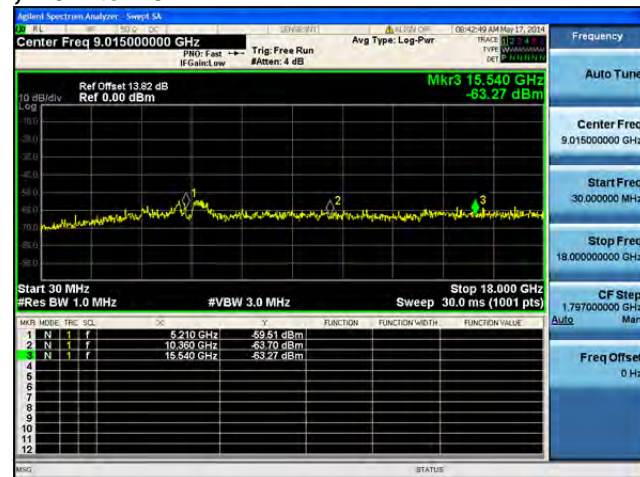
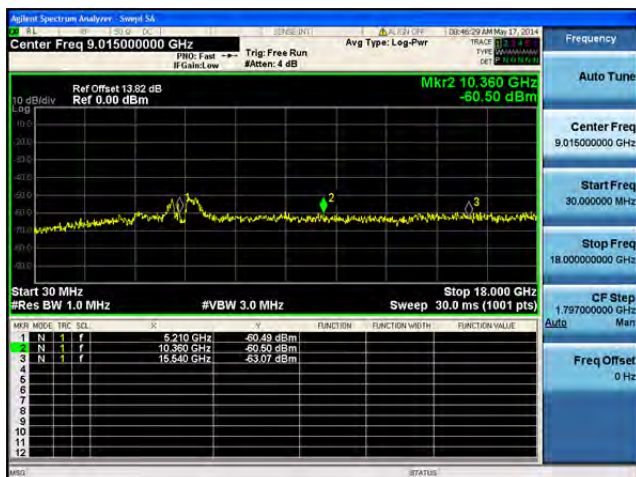
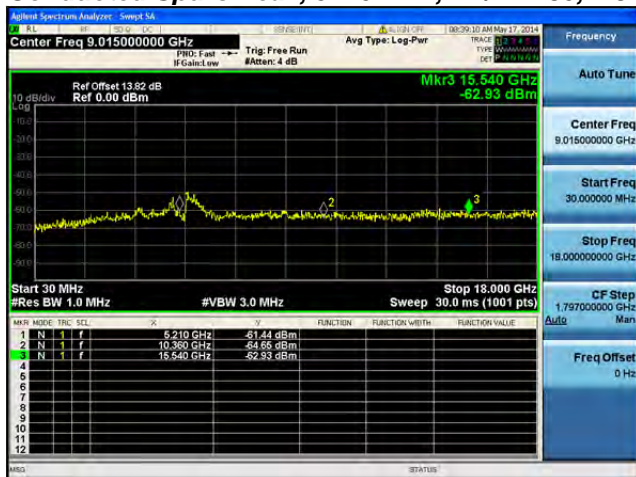
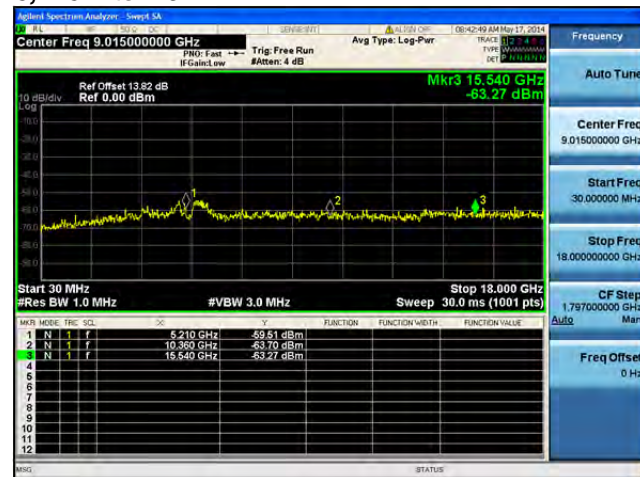
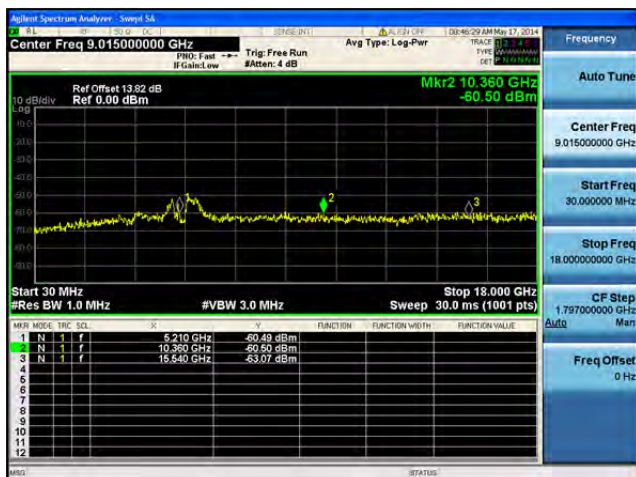
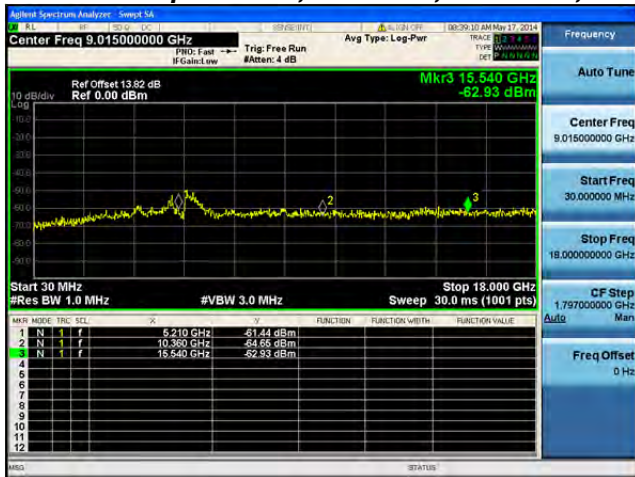
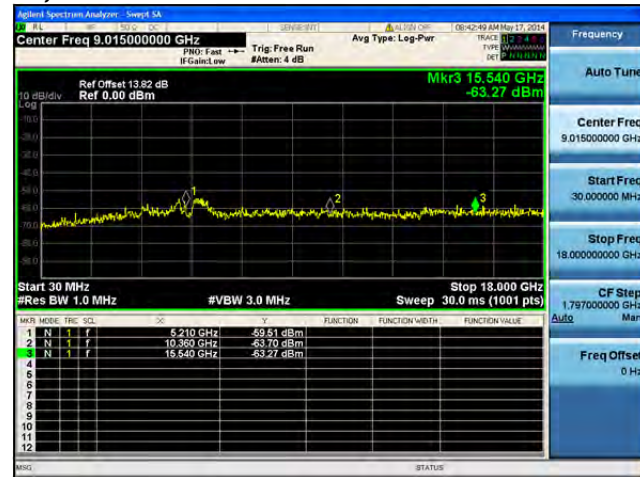
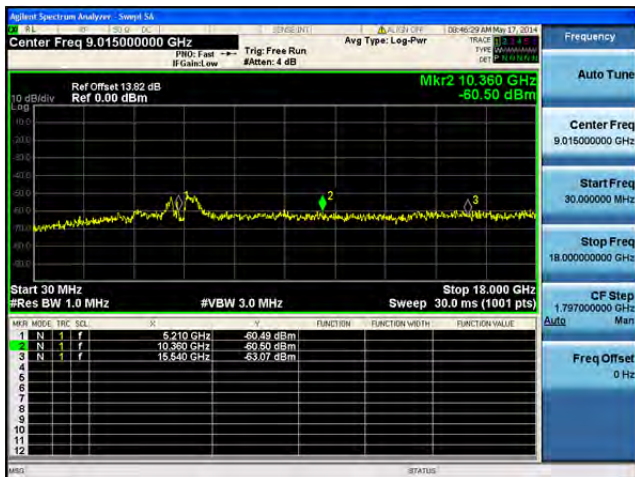


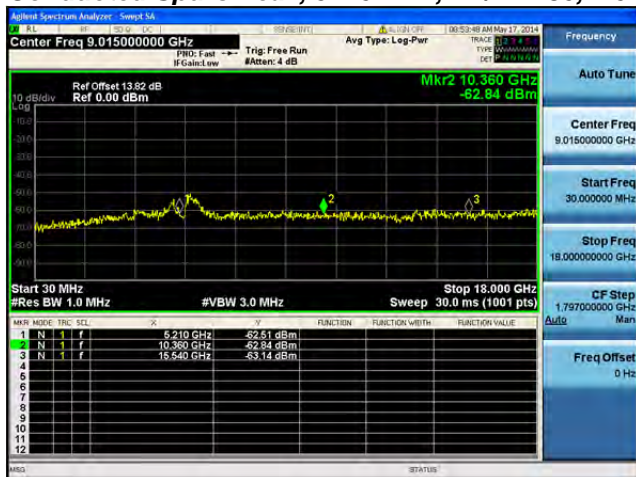
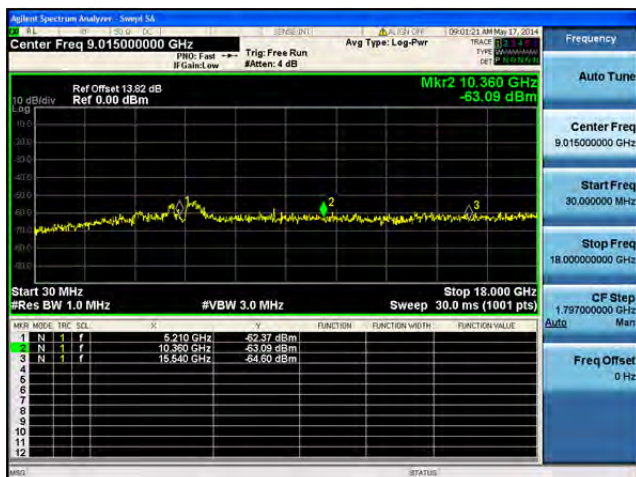
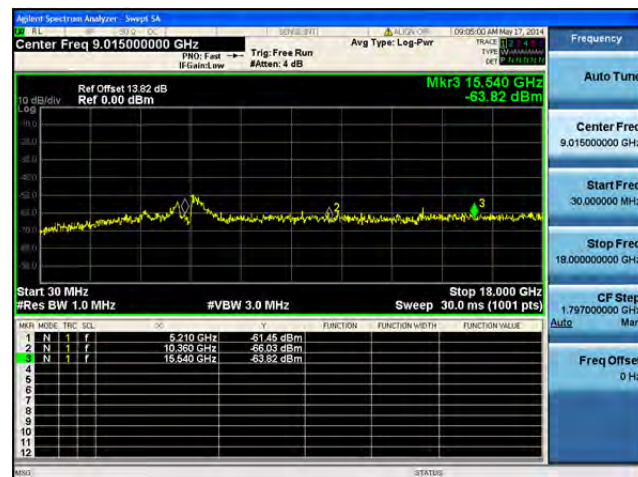
**Conducted Spurs Peak, 5210 MHz, HT/VHT80, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B**

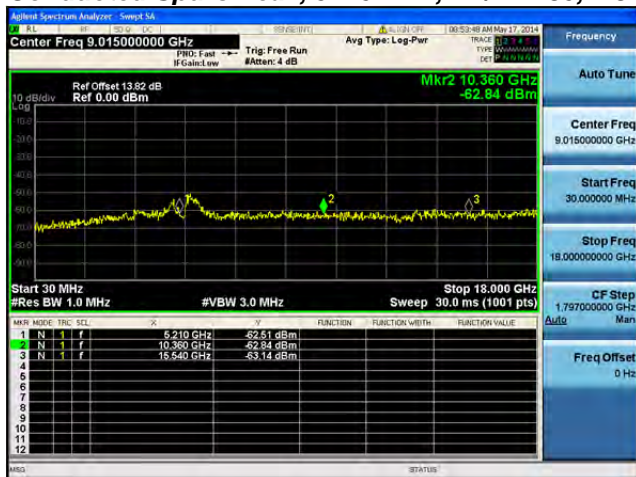
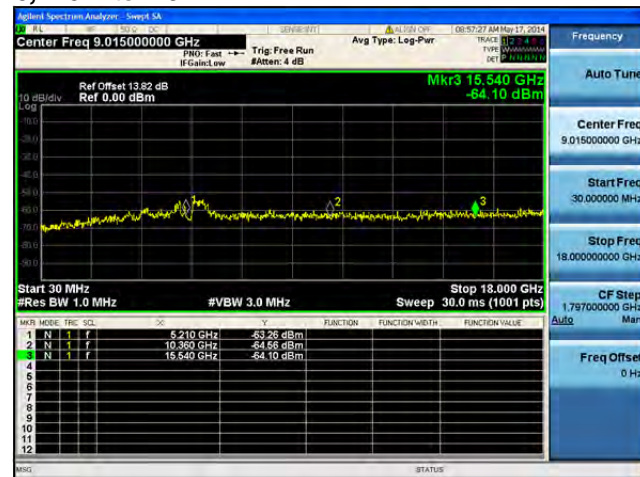
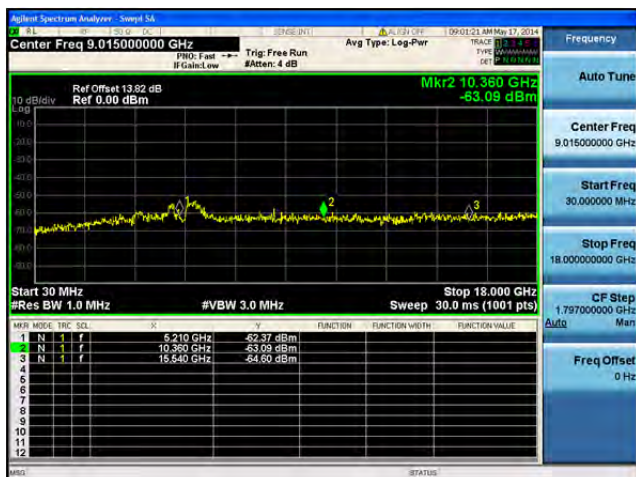
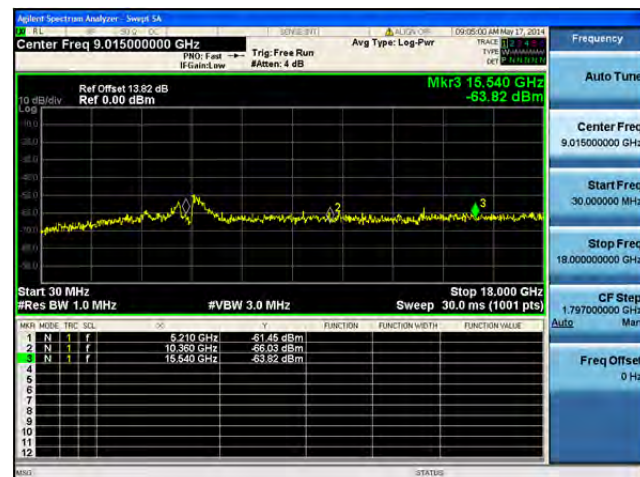
**Conducted Spurs Peak, 5210 MHz, HT/VHT80, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B**

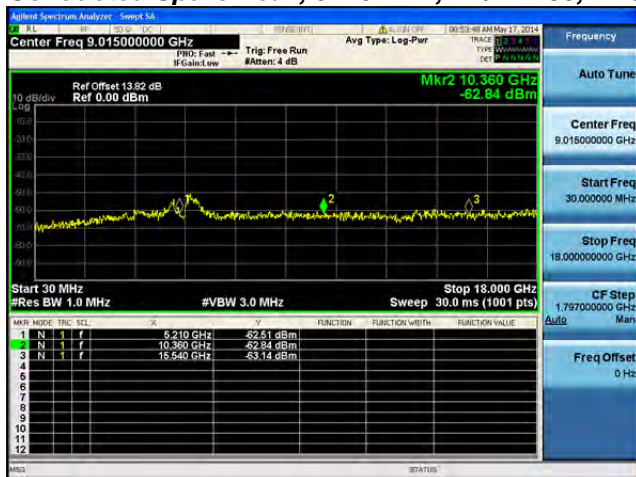
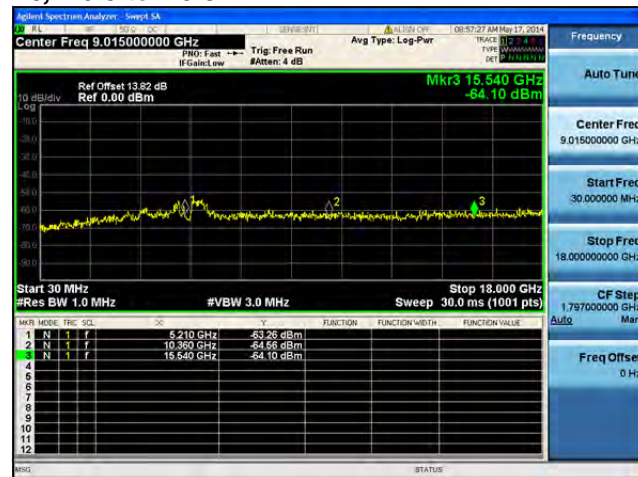
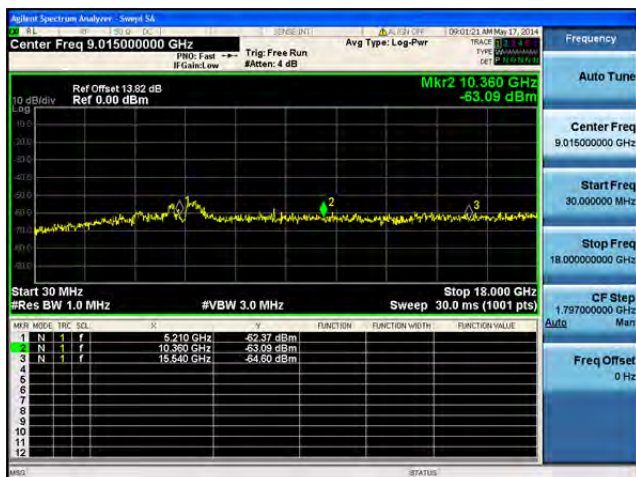
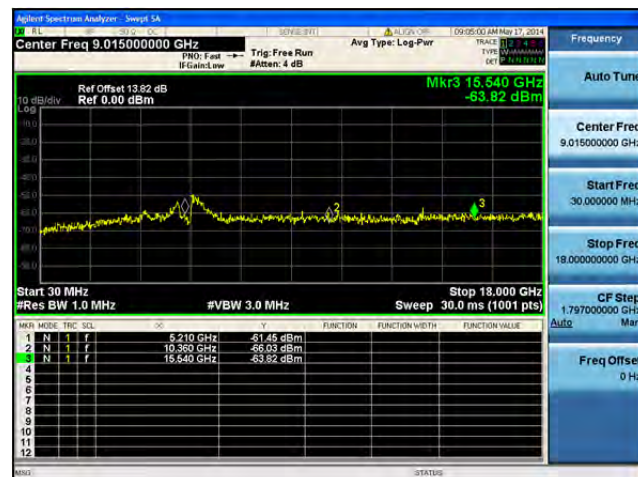
**Conducted Spurs Peak, 5210 MHz, HT/VHT80, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C**

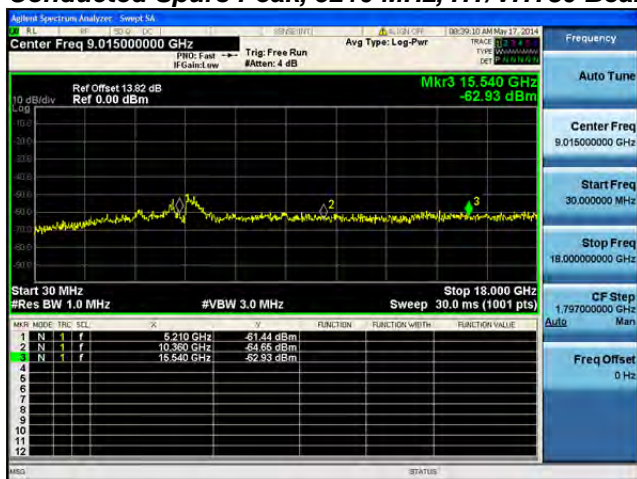
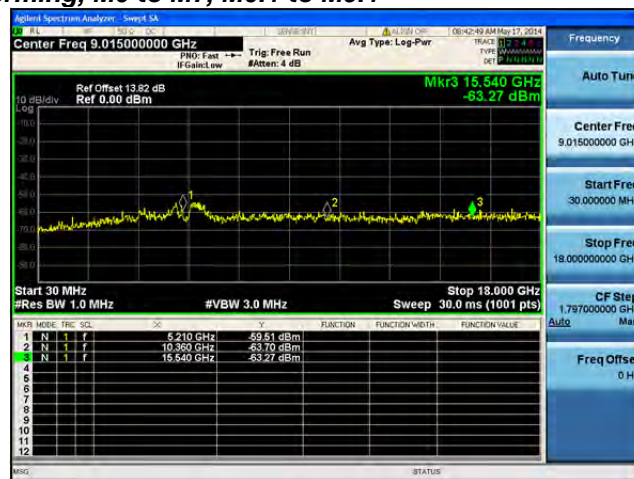
**Conducted Spurs Peak, 5210 MHz, HT/VHT80, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B****Antenna C**

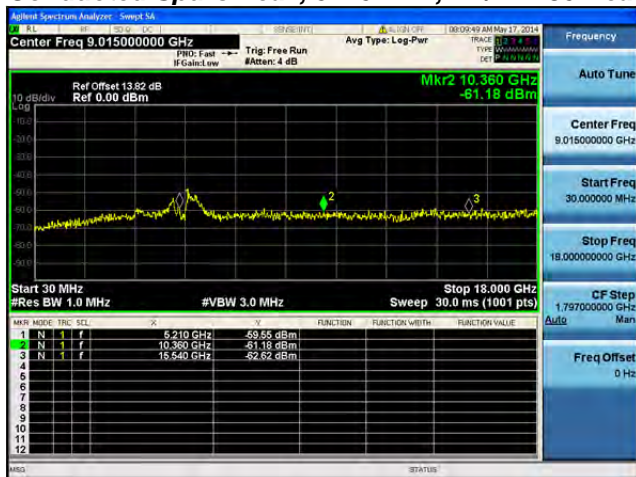
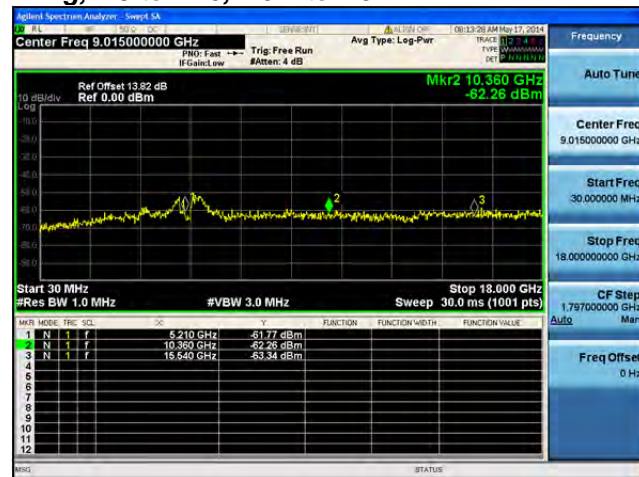
**Conducted Spurs Peak, 5210 MHz, HT/VHT80, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C**

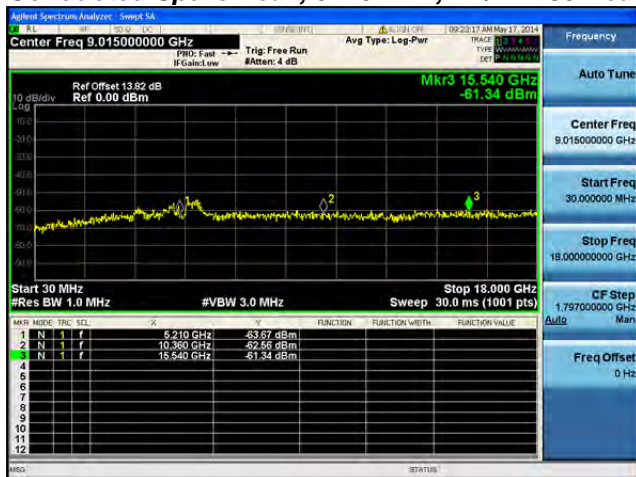
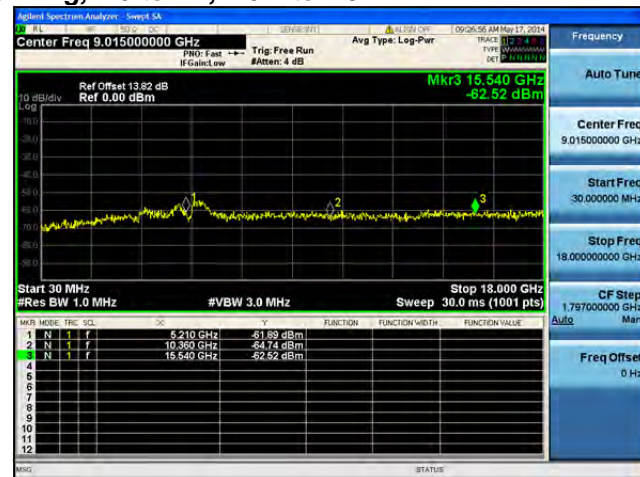
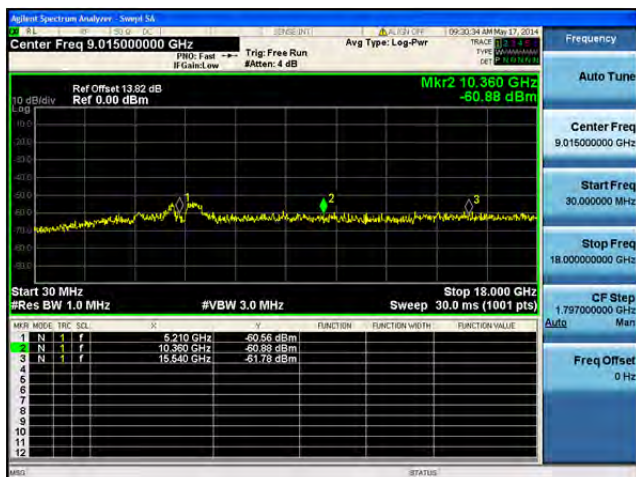
**Conducted Spurs Peak, 5210 MHz, HT/VHT80, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C****Antenna D**

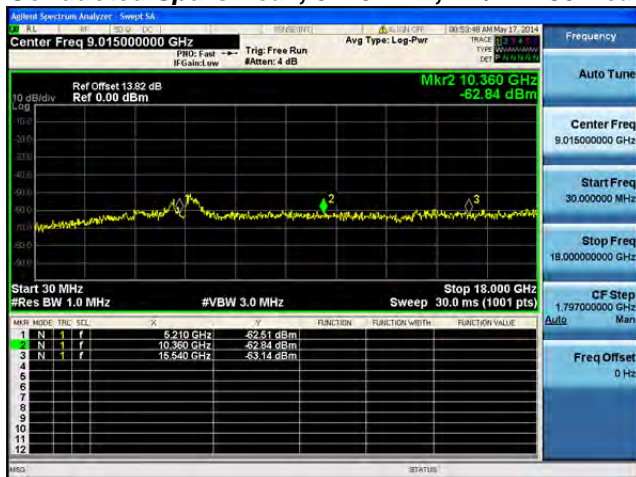
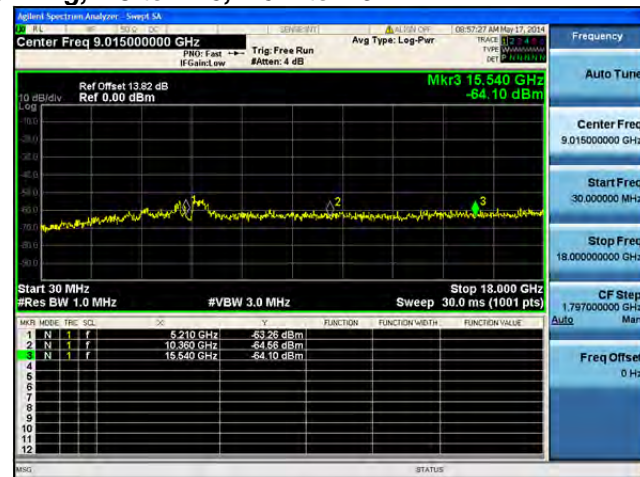
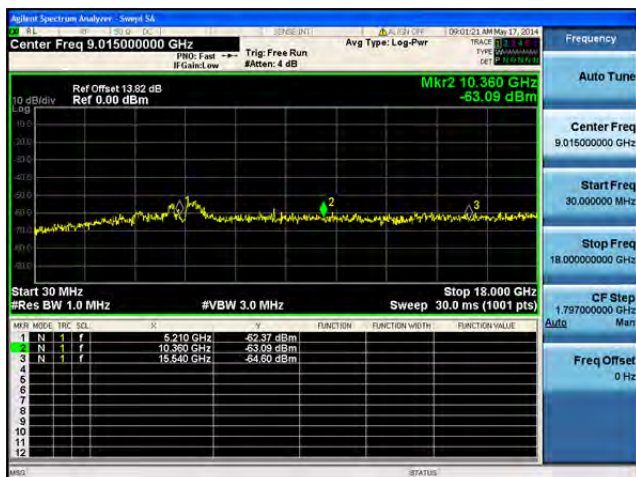
**Conducted Spurs Peak, 5210 MHz, HT/VHT80, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B****Antenna C****Antenna D**

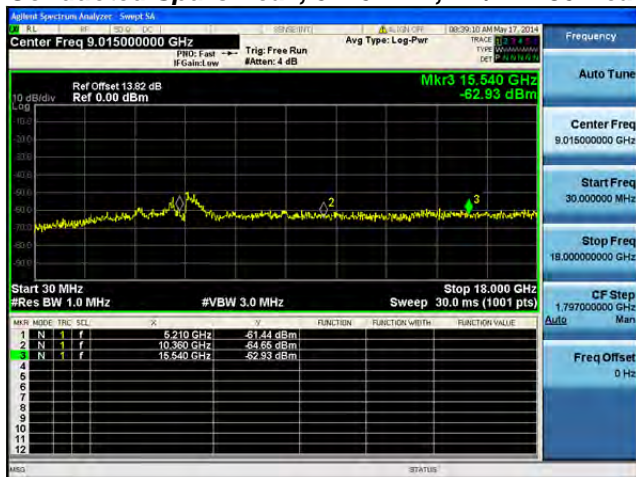
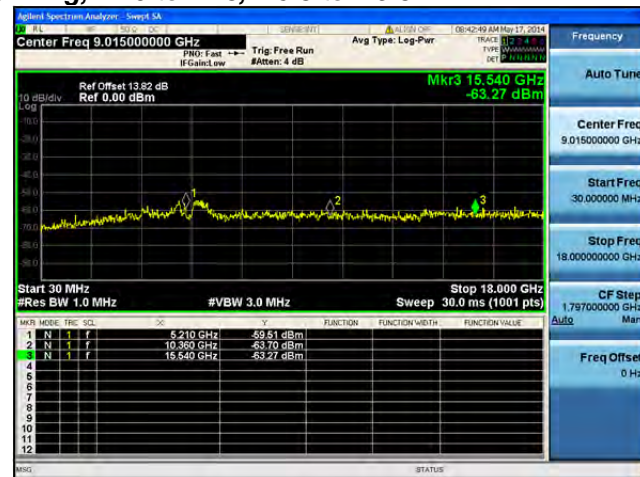
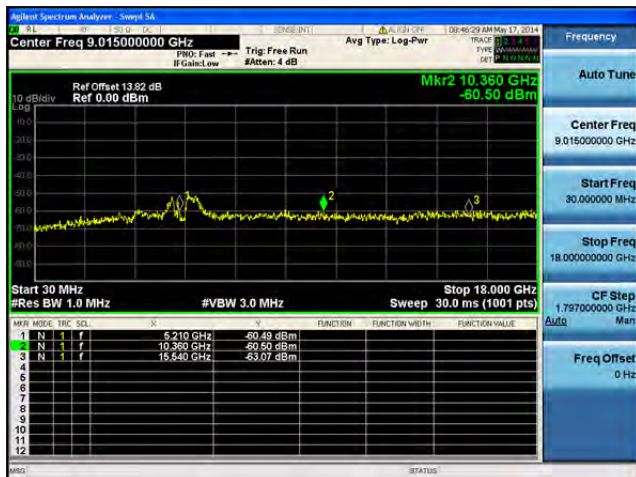
**Conducted Spurs Peak, 5210 MHz, HT/VHT80, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C****Antenna D**

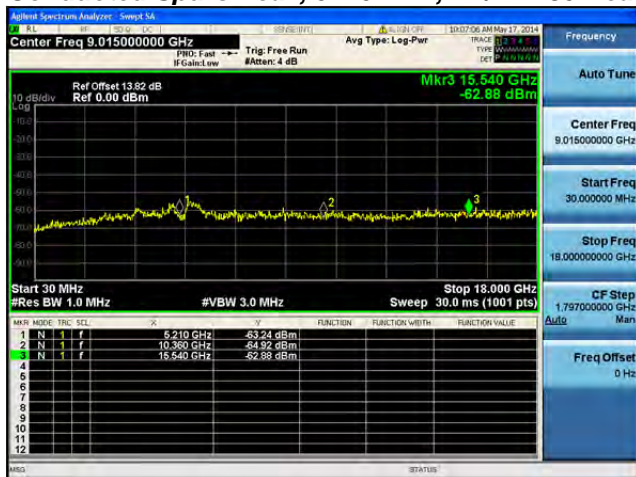
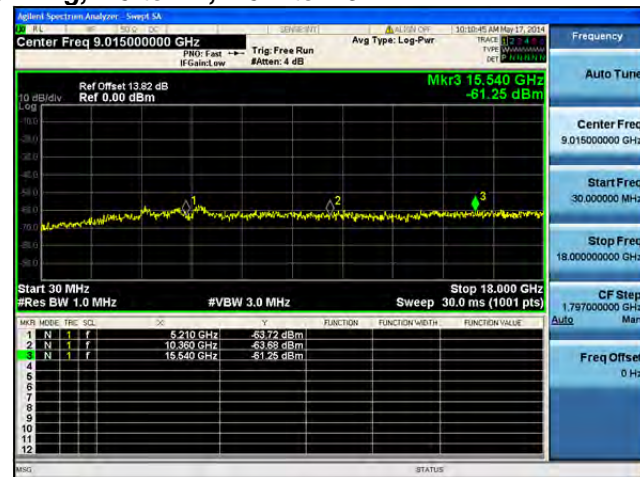
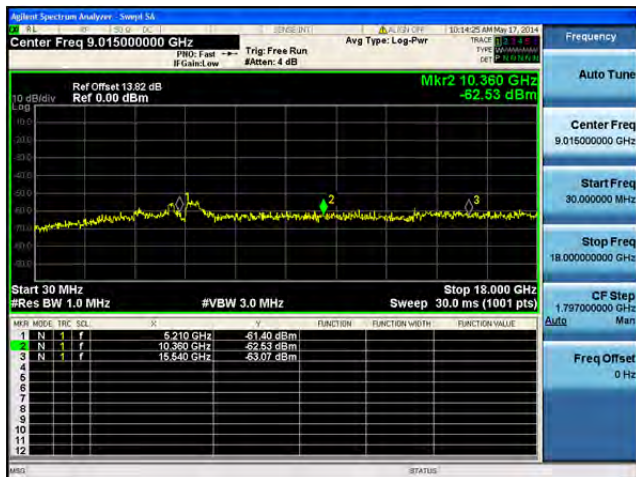
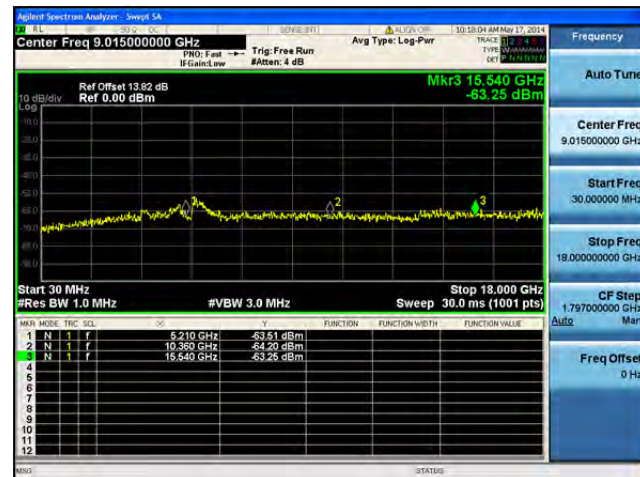
**Conducted Spurs Peak, 5210 MHz, HT/VHT80 Beam Forming, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B**

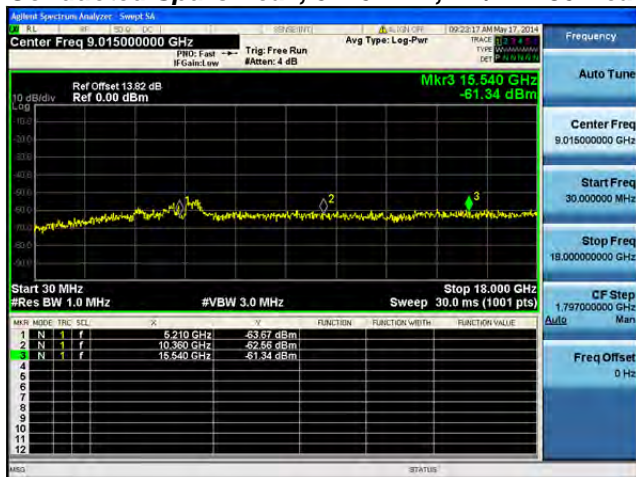
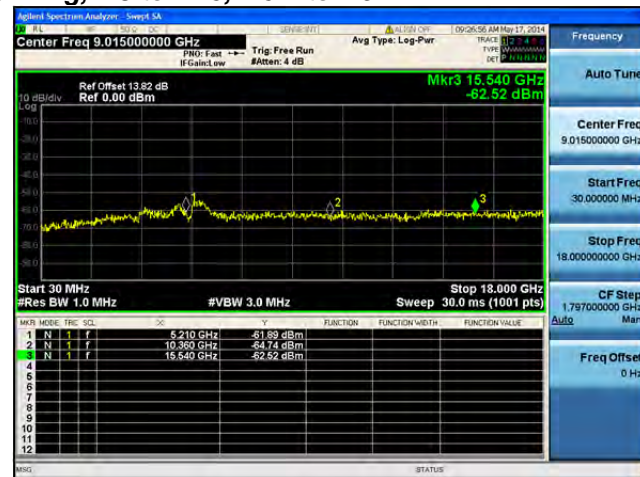
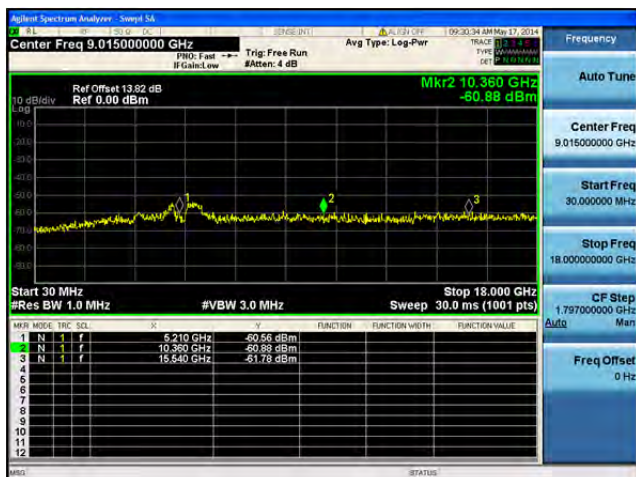
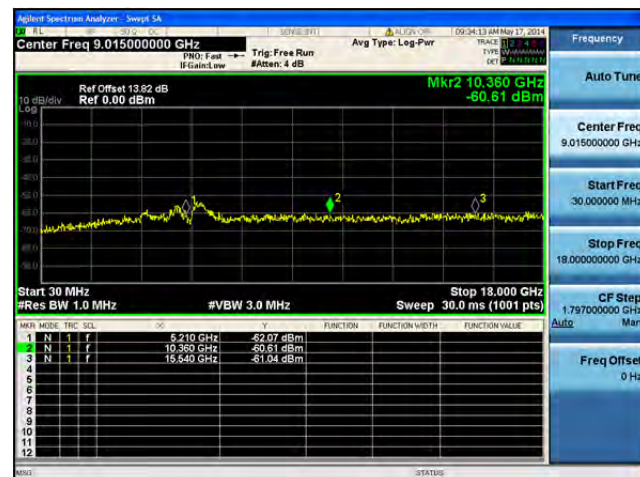
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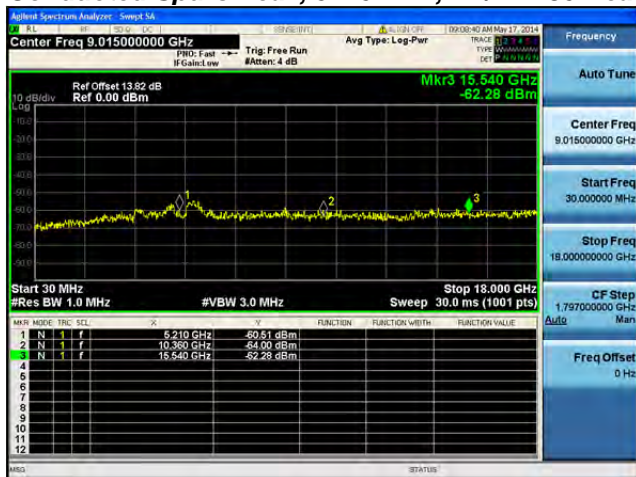
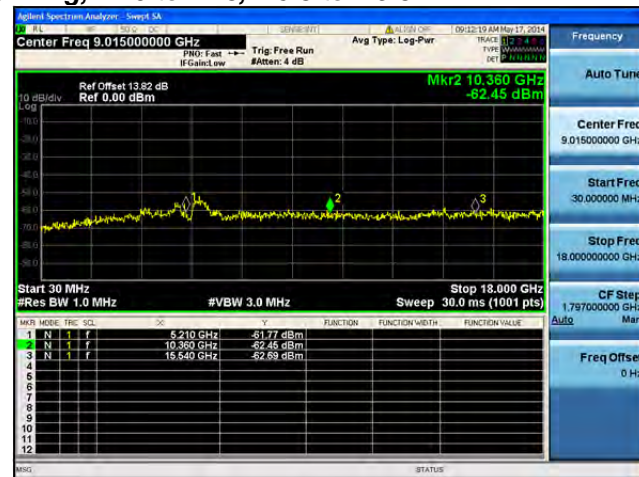
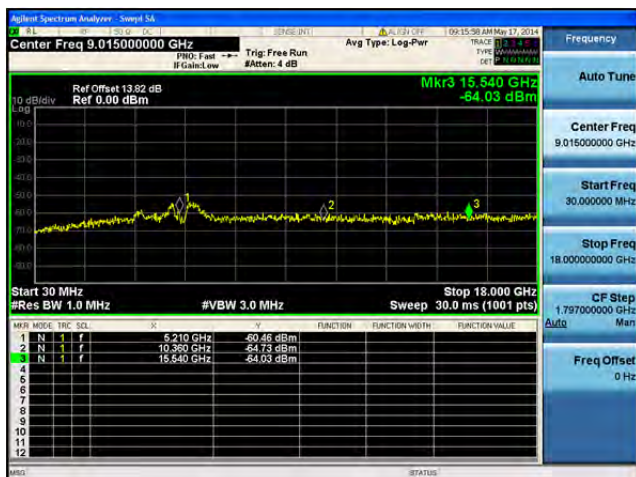
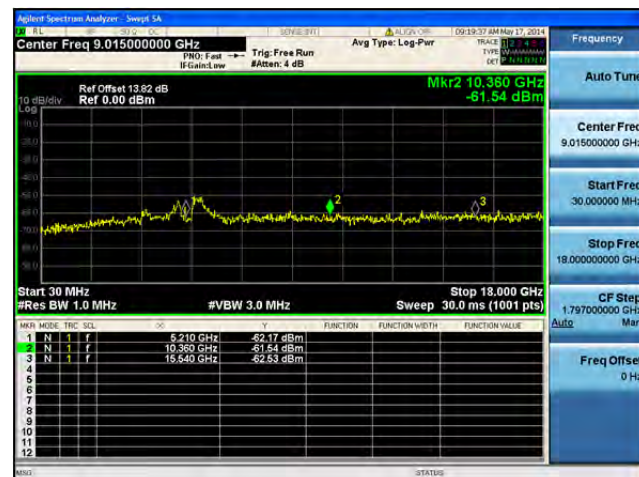
**Conducted Spurs Peak, 5210 MHz, HT/VHT80 Beam Forming, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C**

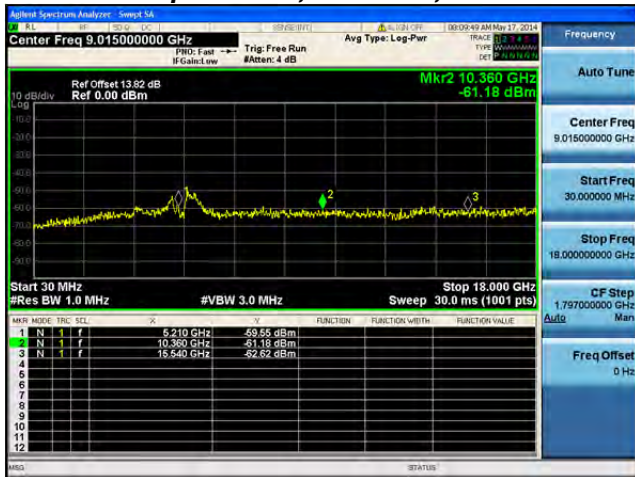
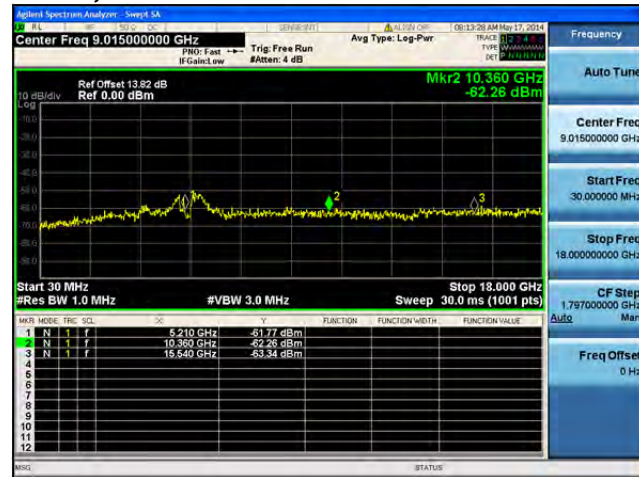
**Conducted Spurs Peak, 5210 MHz, HT/VHT80 Beam Forming, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B****Antenna C**

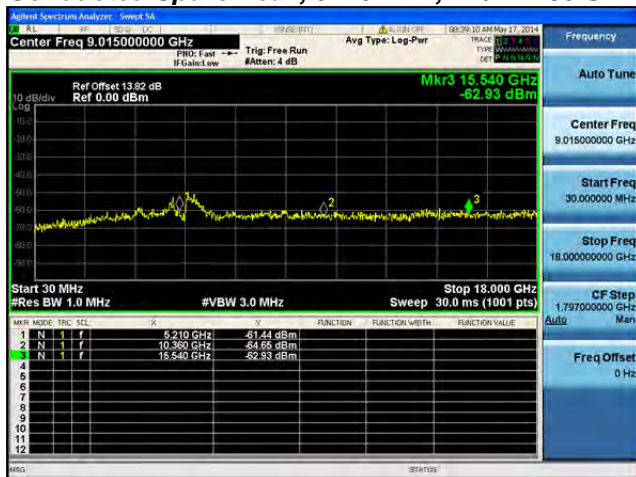
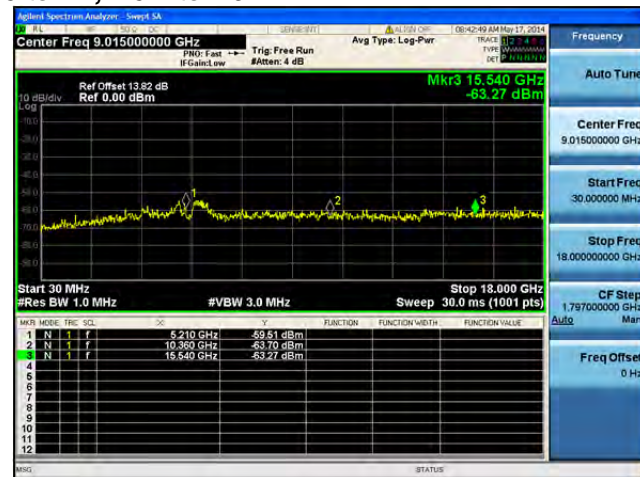
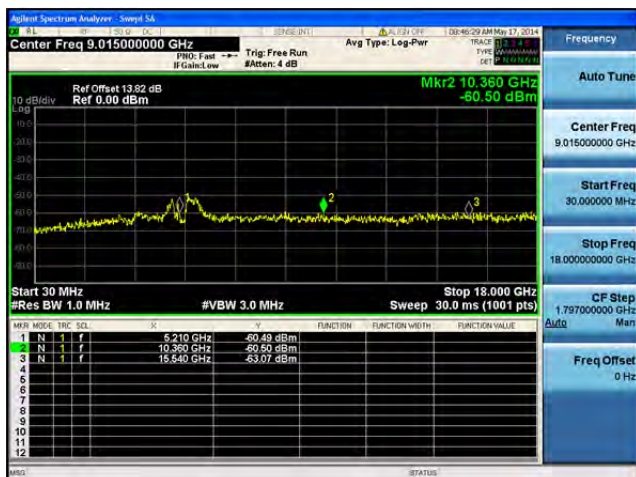
**Conducted Spurs Peak, 5210 MHz, HT/VHT80 Beam Forming, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C**

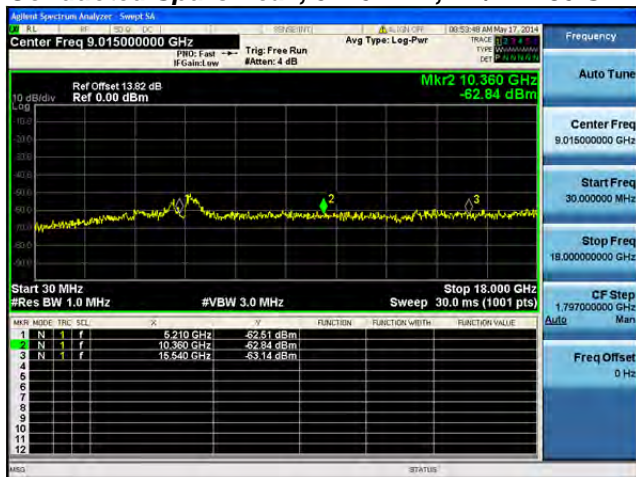
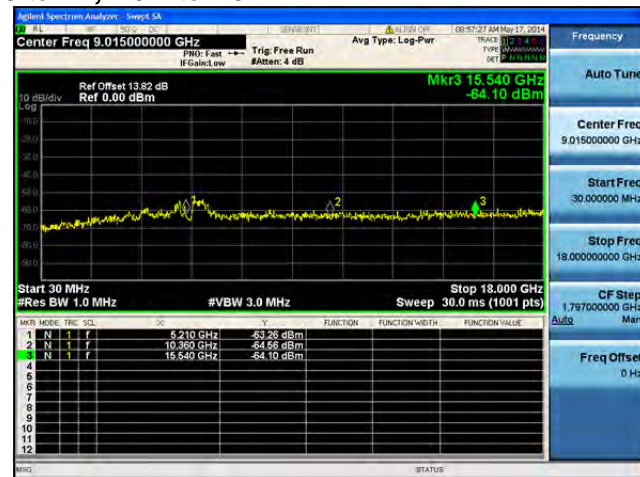
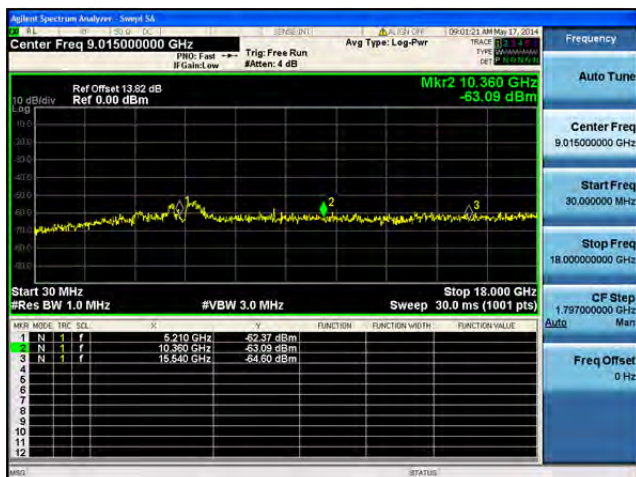
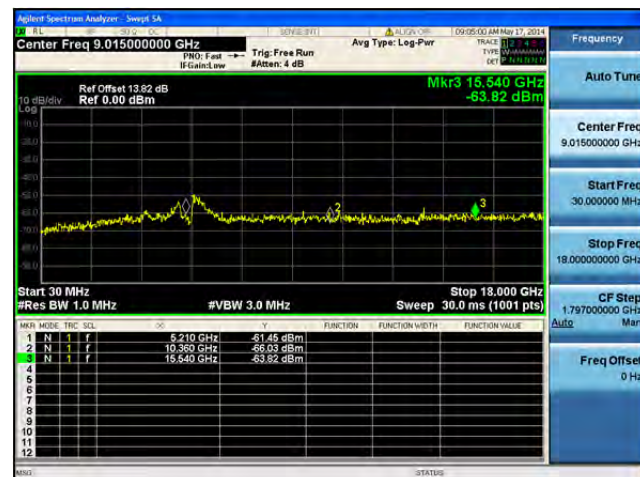
**Conducted Spurs Peak, 5210 MHz, HT/VHT80 Beam Forming, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C****Antenna D**

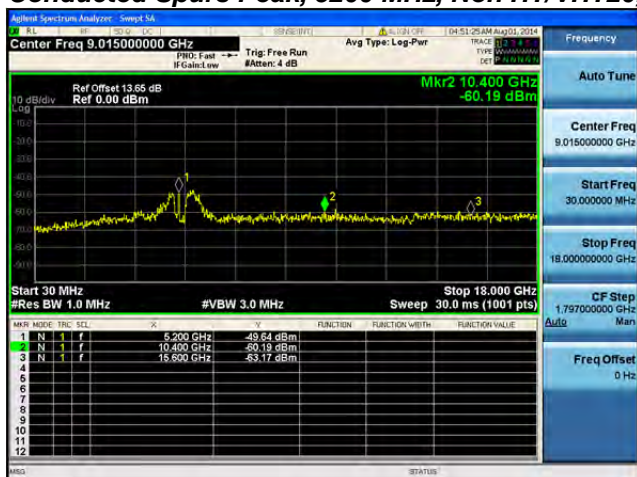
**Conducted Spurs Peak, 5210 MHz, HT/VHT80 Beam Forming, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B****Antenna C****Antenna D**

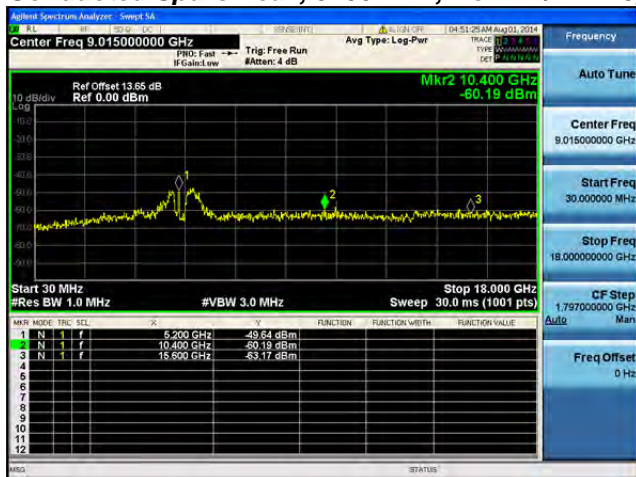
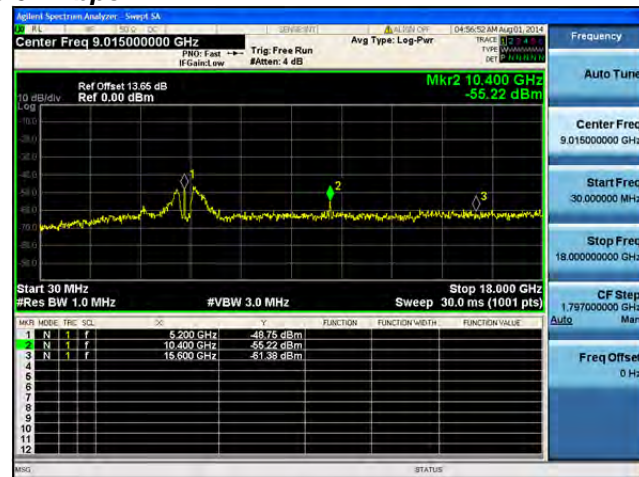
**Conducted Spurs Peak, 5210 MHz, HT/VHT80 Beam Forming, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C****Antenna D**

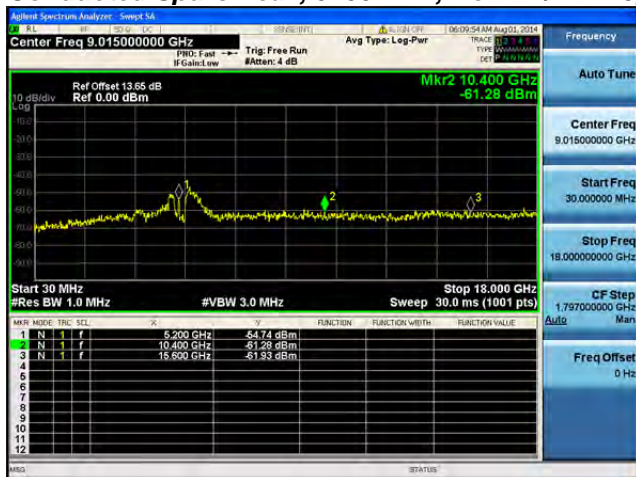
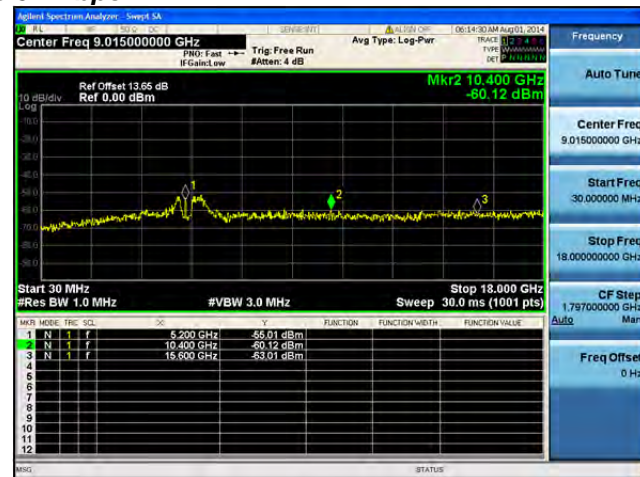
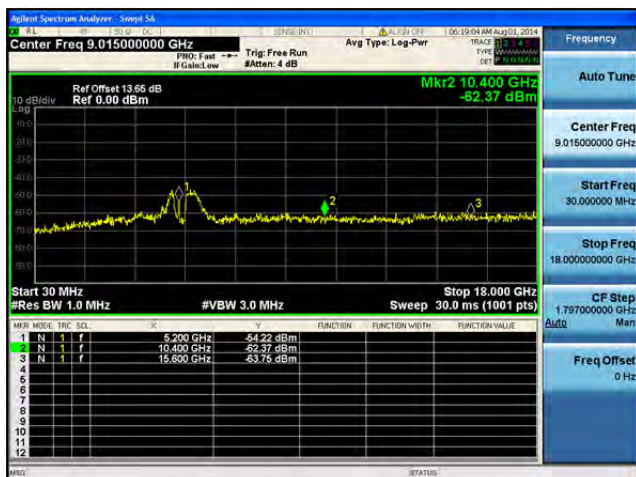
**Conducted Spurs Peak, 5210 MHz, HT/VHT80 STBC, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B**

**Conducted Spurs Peak, 5210 MHz, HT/VHT80 STBC, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C**

**Conducted Spurs Peak, 5210 MHz, HT/VHT80 STBC, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C****Antenna D**

**Conducted Spurs Peak, 5200 MHz, Non HT/VHT20, 6 to 54 Mbps****Antenna A**

**Conducted Spurs Peak, 5200 MHz, Non HT/VHT20, 6 to 54 Mbps****Antenna A****Antenna B**

**Conducted Spurs Peak, 5200 MHz, Non HT/VHT20, 6 to 54 Mbps****Antenna A****Antenna B****Antenna C**

Spectrum Analyzer | Screenshot 10-10-14

Center Freq: 9.015000000 GHz
 Ref Offset: 13.65 dB
 Ref: 0.00 dBm

Mkr2: 10.400 GHz
 -62.60 dBm

Start: 30 MHz
 Stop: 18,000 GHz
 Res BW: 1.0 MHz
 #VBW: 3.0 MHz
 Sweep: 30.0 ms (1001 pts)

MARK	MODE	FREQ	CLL	A	B	FUNCTION	FUNCTION WITH	FUNCTION VALUE
1	N		f	-	-			
2	N	10.400 GHz	f	-57.11 dBm	-			
3	N	15.600 GHz	f	-63.09 dBm	-			

Agilent Spectrum Analyzer - Sweep 1A

Center Freq 9.015000000 GHz

Ref Offset 13.65 dB
Ref 0.00 dBm

Mkr2 10.400 GHz
-60.51 dBm

Start 30 MHz
#Res BW 1.0 MHz

#VBW 3.0 MHz

Sweep 30.0 ms (1001 pts)

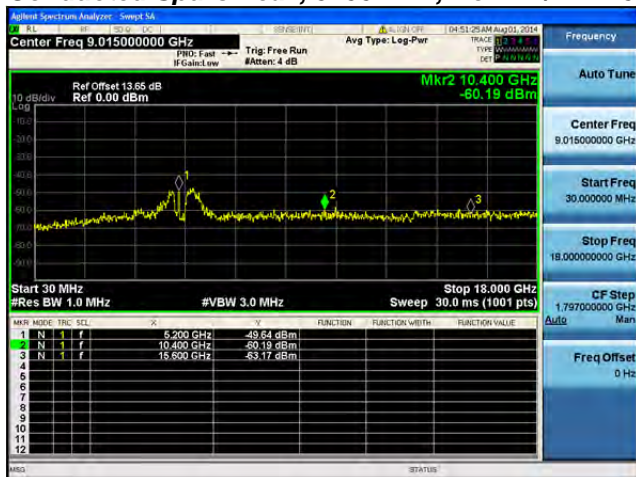
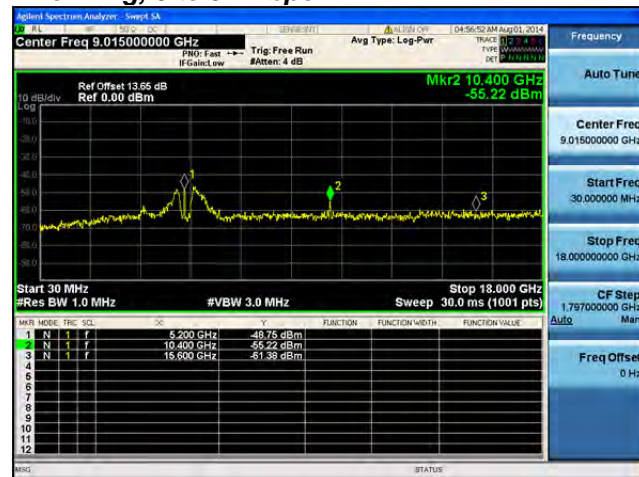
MkR	MODE	FREQ	SQL	dB	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	5.200 GHz	-55.93 dBm			
2	N	1	f	10.400 GHz	-60.51 dBm			
3	N	1	f	15.600 GHz	-62.03 dBm			

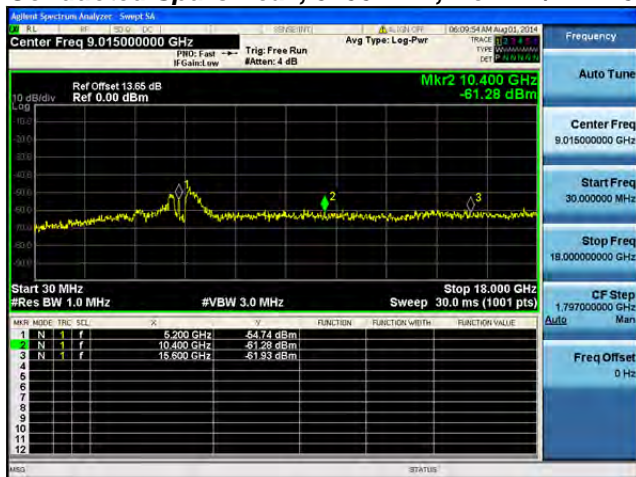
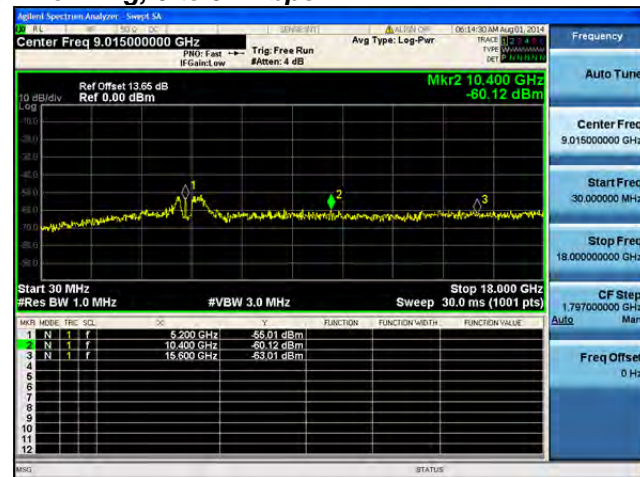
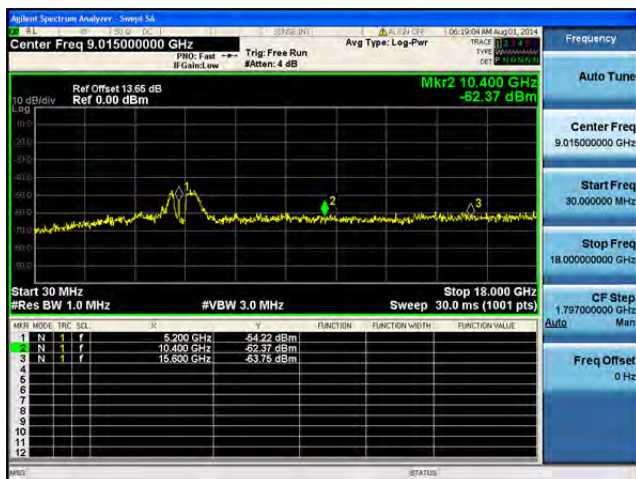
Rohde & Schwarz Spectrum Analyzer, Swept 54
 Center Freq 9.015000000 GHz
 Ref Offset 13.65 dB
 Ref 0.00 dBm
 Mkr3 15.600 GHz
 -60.42 dBm
 Start 30 MHz
 Res BW 1.0 MHz
 Stop 18.000 GHz
 Sweep 30.0 ms (1001 pts)
 Mkr3 15.600 GHz
 -60.42 dBm

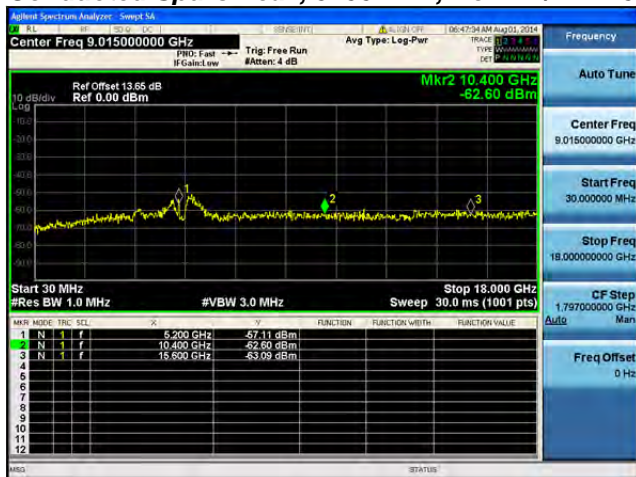
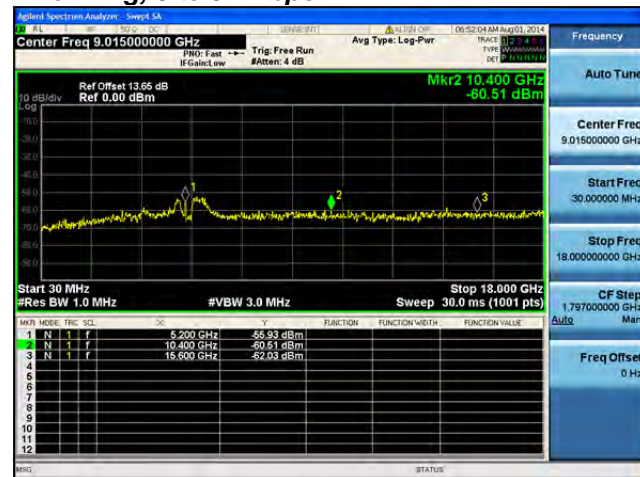
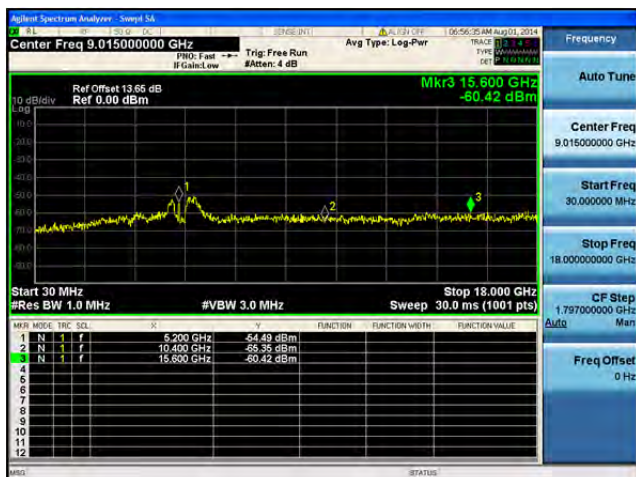
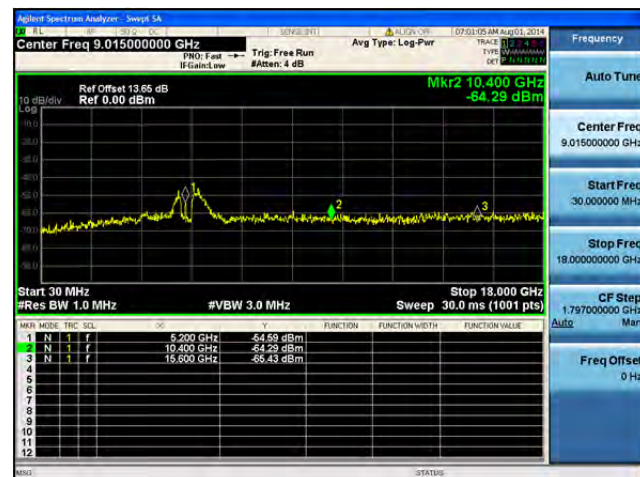
Advant Spectrum Analyzer - Sweep 1A
 Center Freq 9.015000000 GHz
 Ref Offset 13.65 dB
 Ref 0.00 dBm
 Mkr2 10.400 GHz
 -84.29 dBm
 Start 30 MHz
 #Res BW 1.0 MHz
 #VBW 3.0 MHz
 Sweep 30.0 ms (1001 pts)

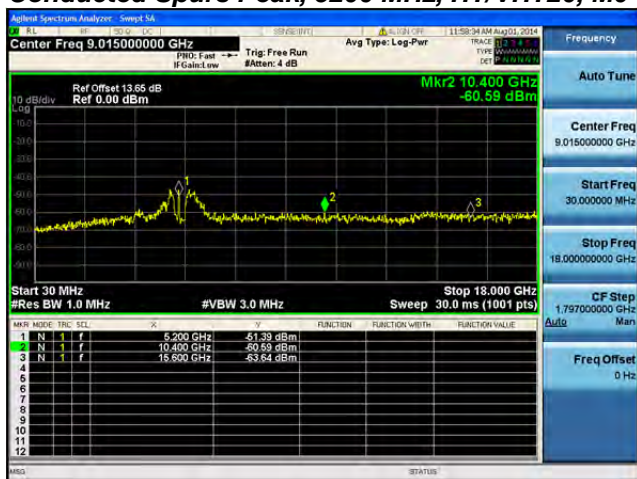
Mkr	Mode	Trc	SCL	dB	F	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f		5.200 GHz			-44.59 dBm
2	N	1	f		10.400 GHz			-42.29 dBm
3	N	1	f		15.600 GHz			-45.43 dBm

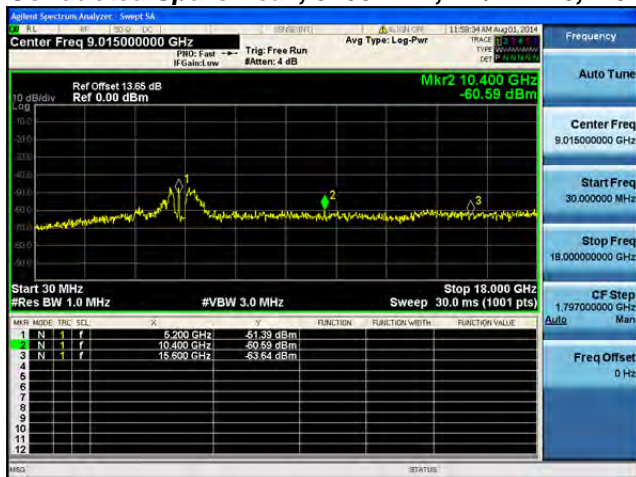
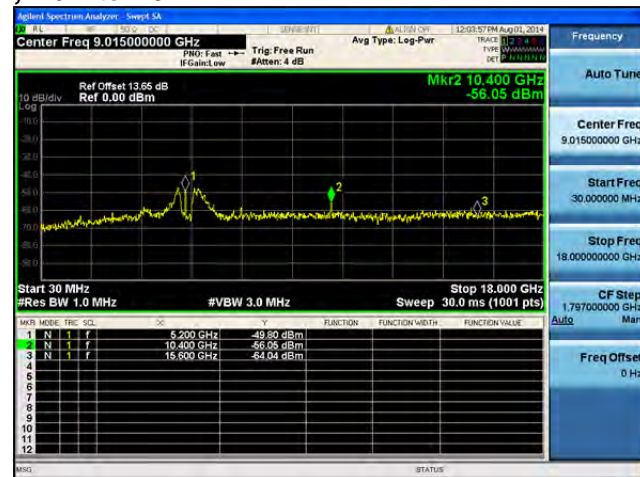
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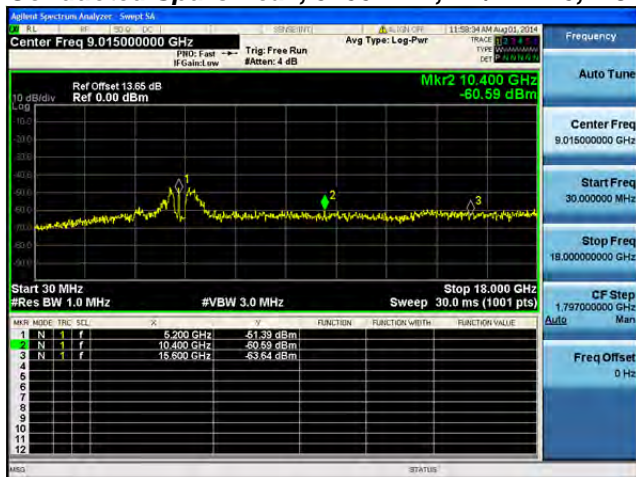
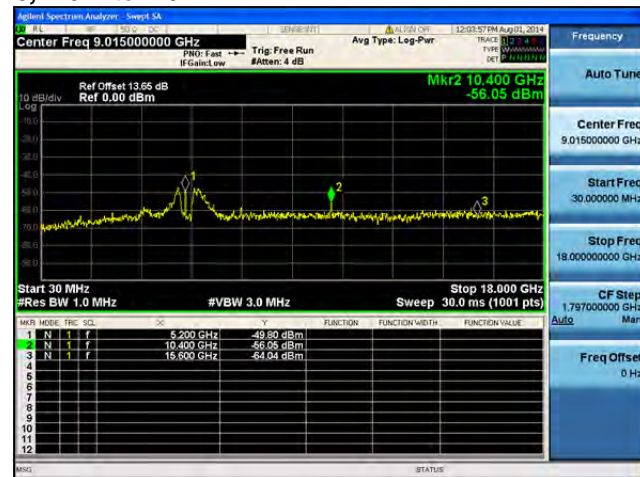
Conducted Spurs Peak, 5200 MHz, Non HT/VHT20 Beam Forming, 6 to 54 Mbps**Antenna A****Antenna B**

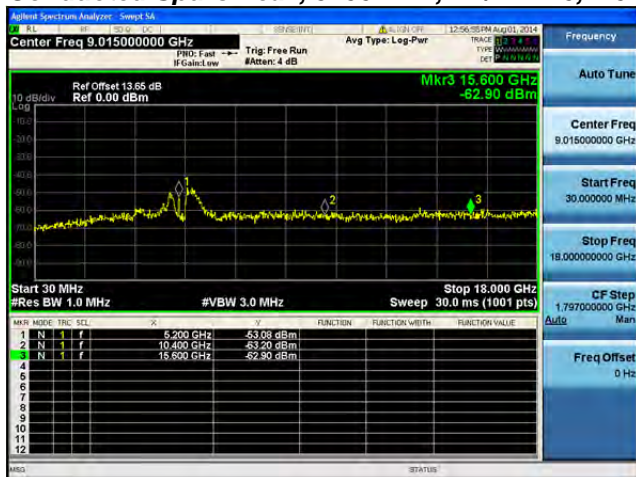
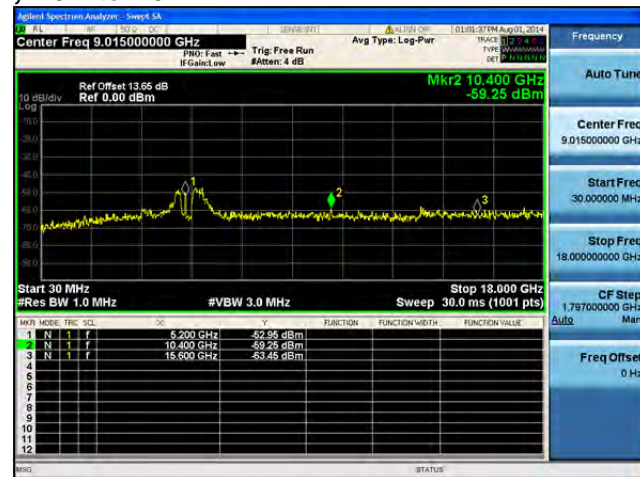
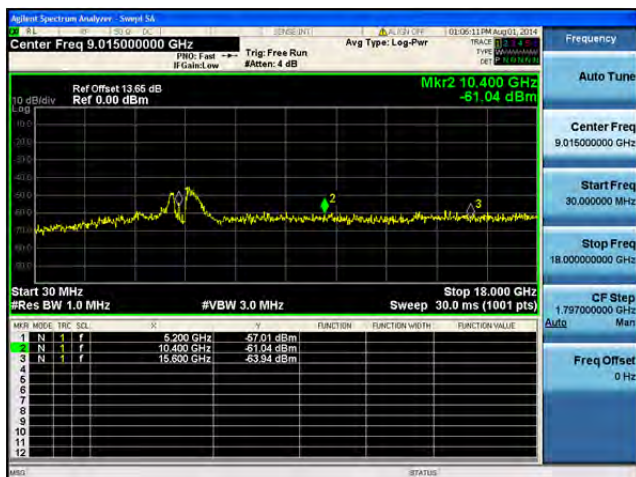
**Conducted Spurs Peak, 5200 MHz, Non HT/VHT20 Beam Forming, 6 to 54 Mbps****Antenna A****Antenna B****Antenna C**

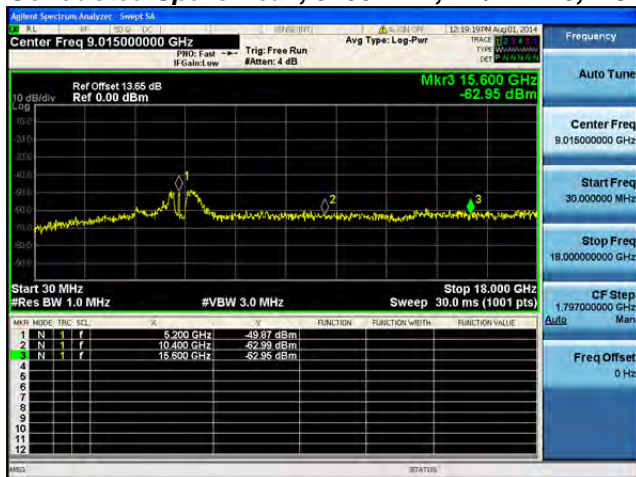
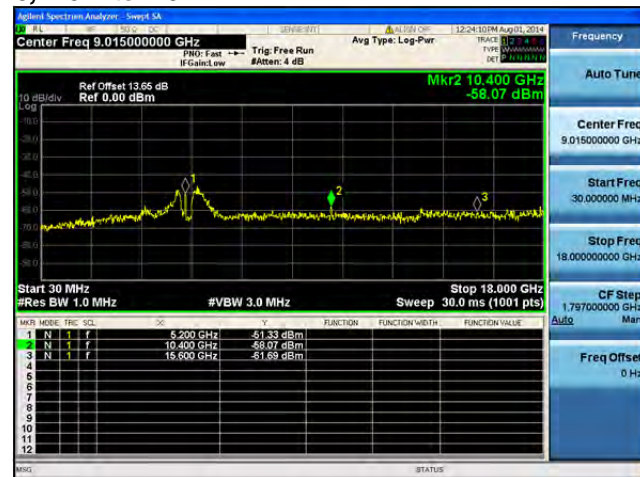
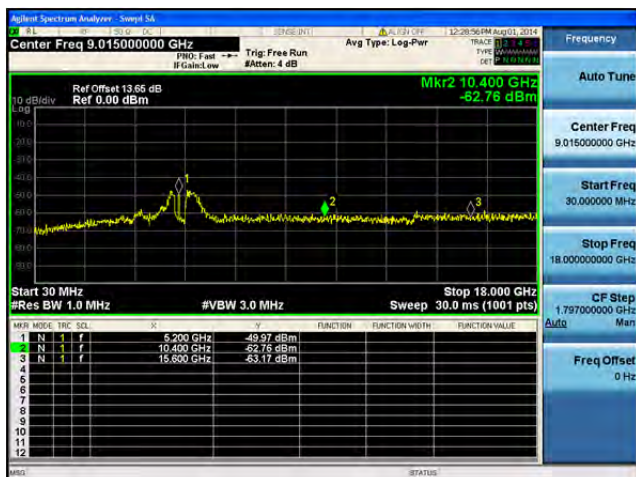
**Conducted Spurs Peak, 5200 MHz, Non HT/VHT20 Beam Forming, 6 to 54 Mbps****Antenna A****Antenna B****Antenna C****Antenna D**

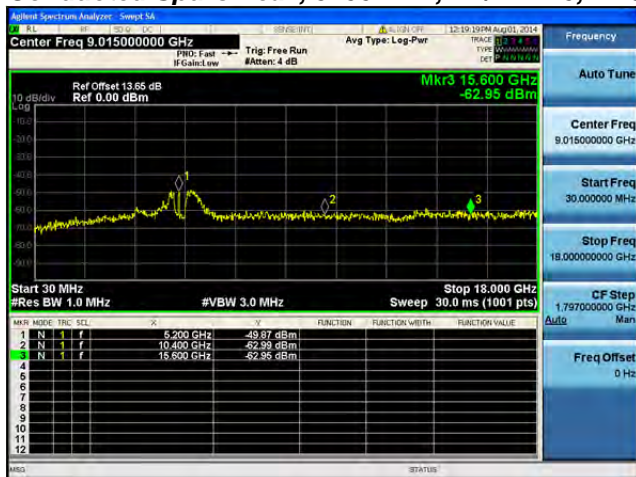
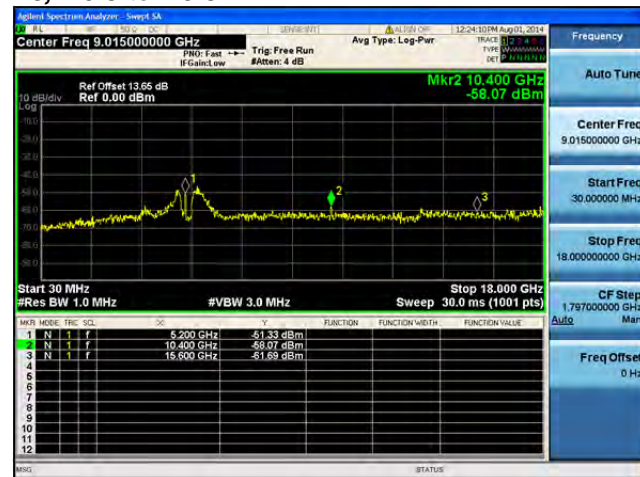
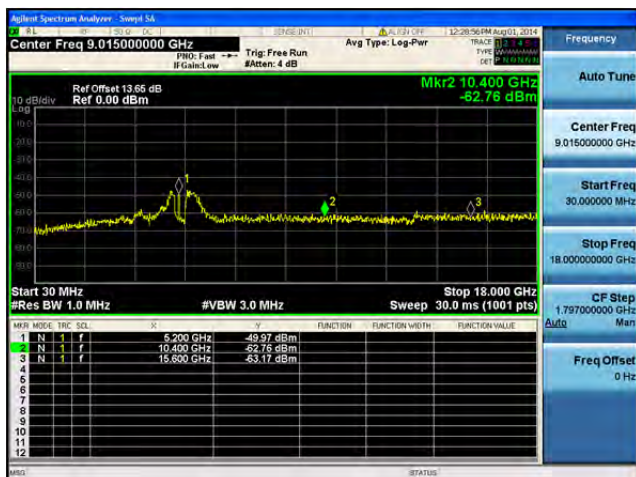
**Conducted Spurs Peak, 5200 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1****Antenna A**

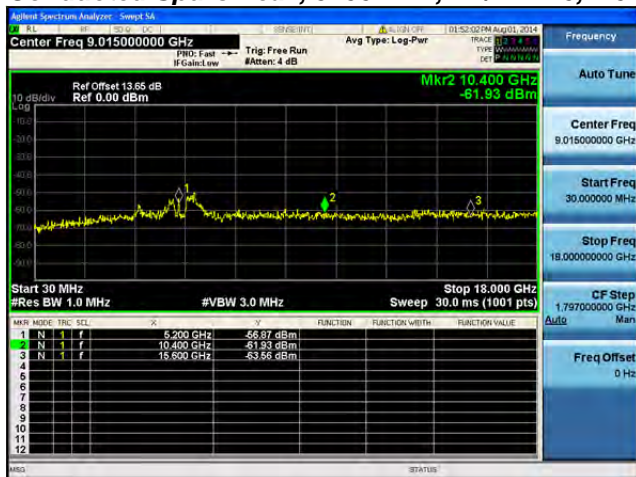
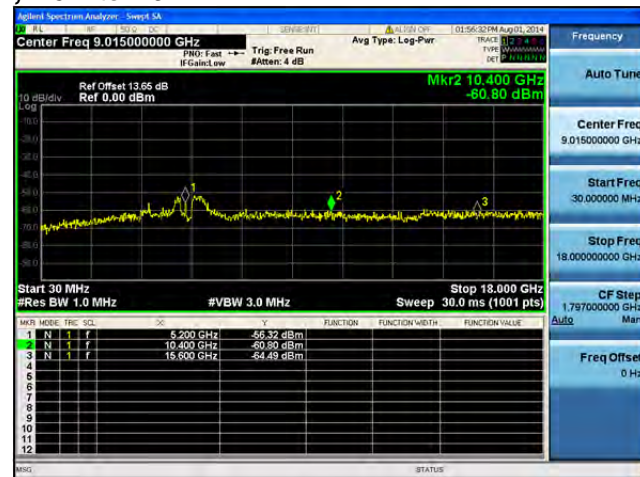
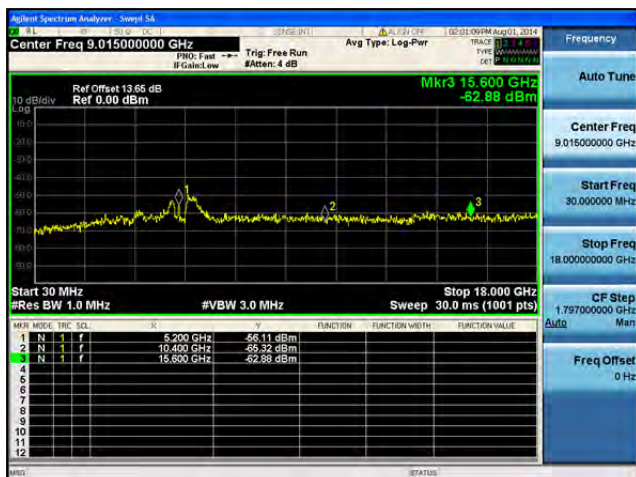
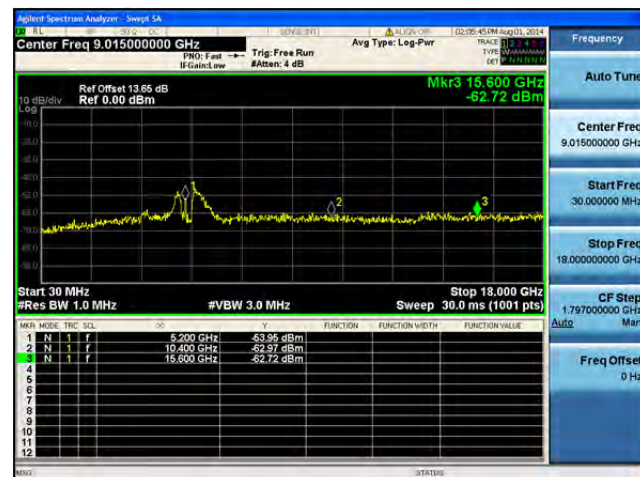
**Conducted Spurs Peak, 5200 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B**

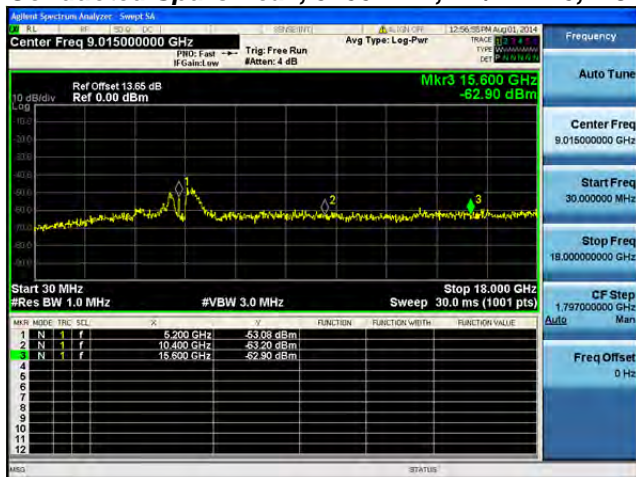
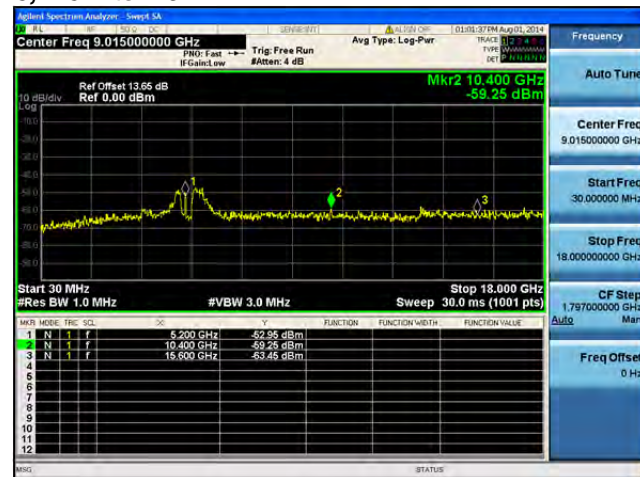
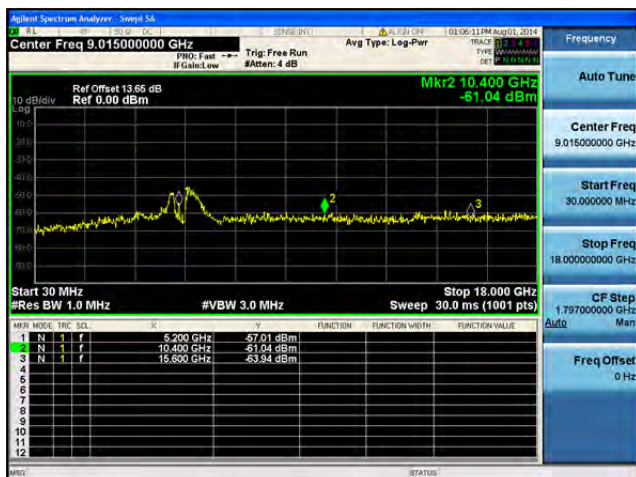
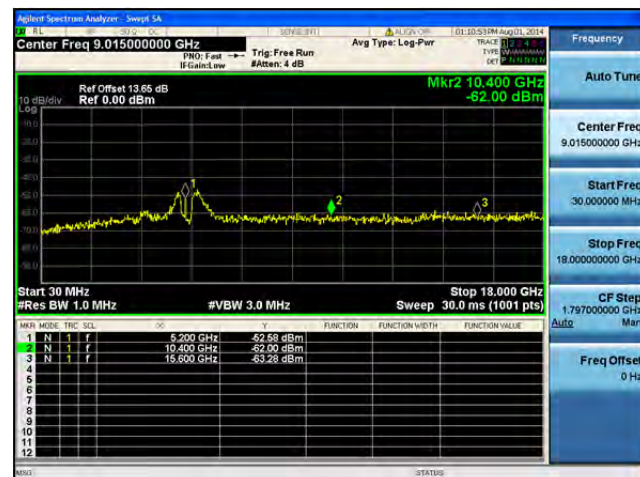
**Conducted Spurs Peak, 5200 MHz, HT/VHT20, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B**

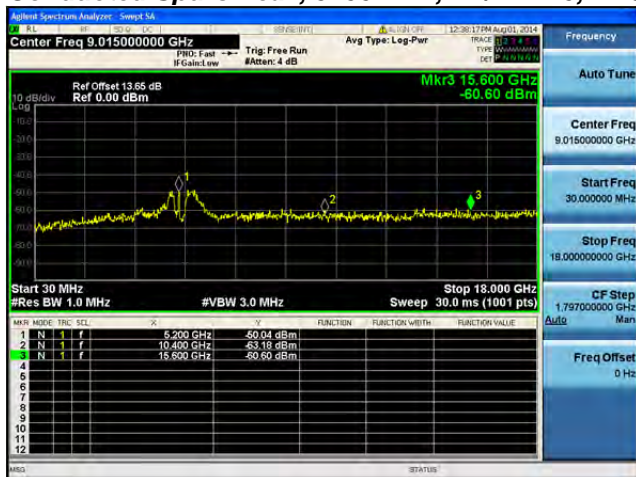
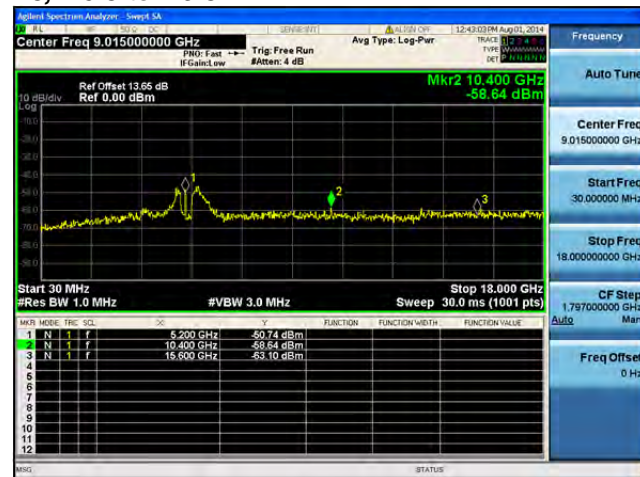
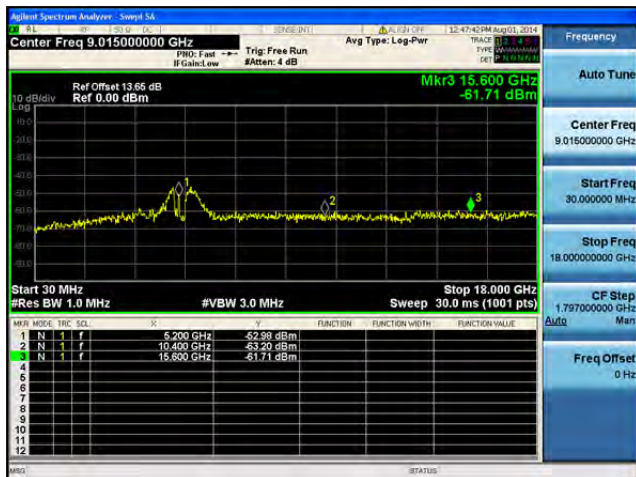
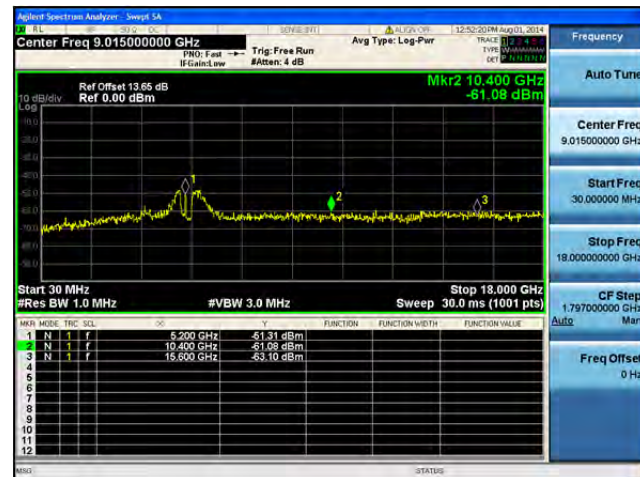
**Conducted Spurs Peak, 5200 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C**

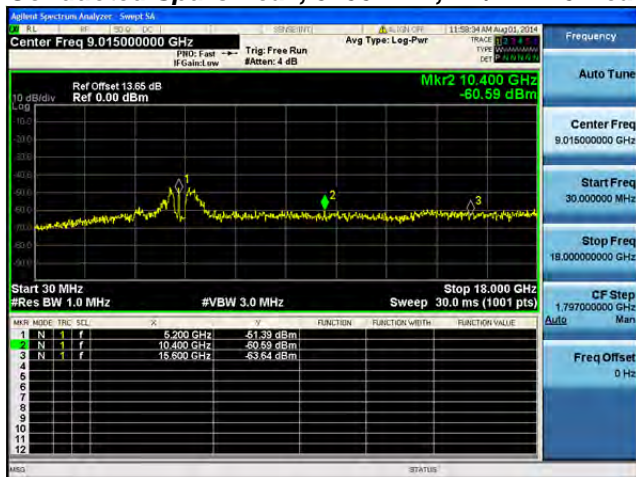
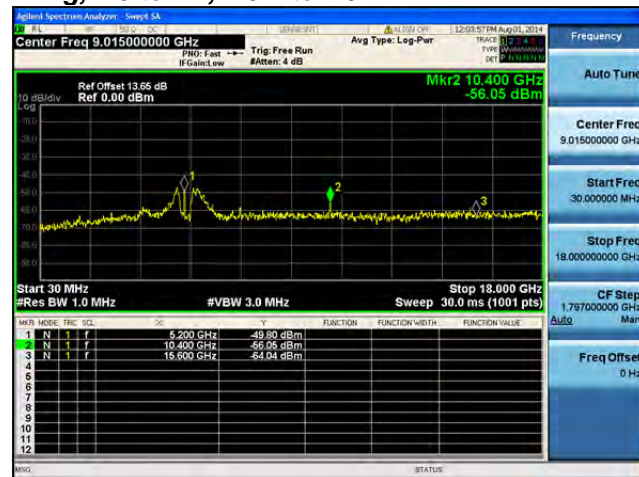
**Conducted Spurs Peak, 5200 MHz, HT/VHT20, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B****Antenna C**

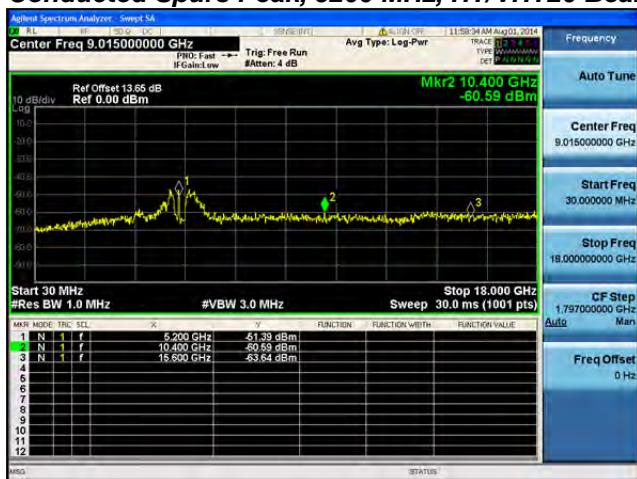
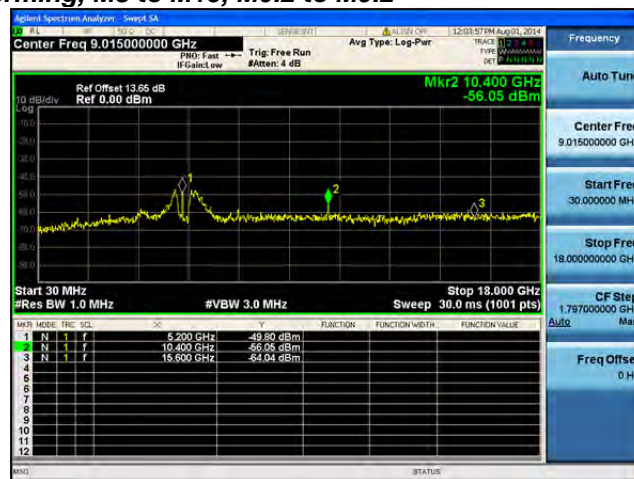
**Conducted Spurs Peak, 5200 MHz, HT/VHT20, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C**

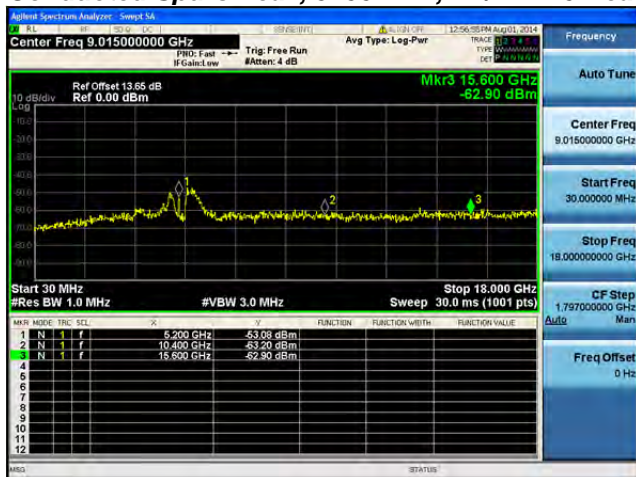
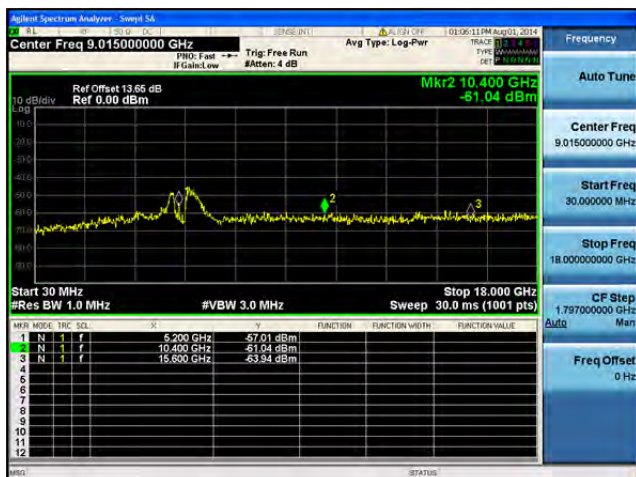
Conducted Spurs Peak, 5200 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1**Antenna A****Antenna B****Antenna C****Antenna D**

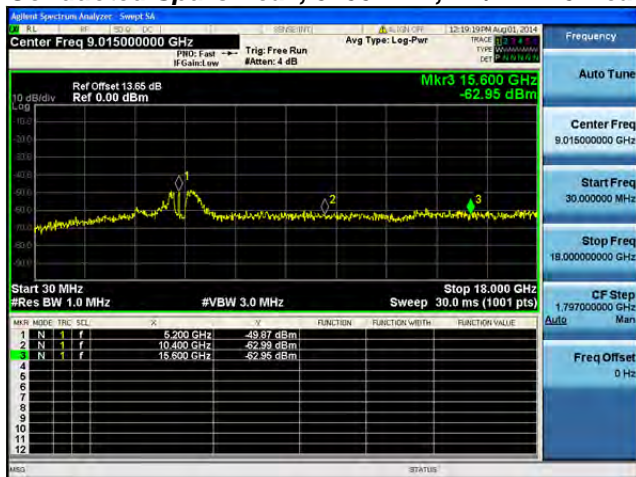
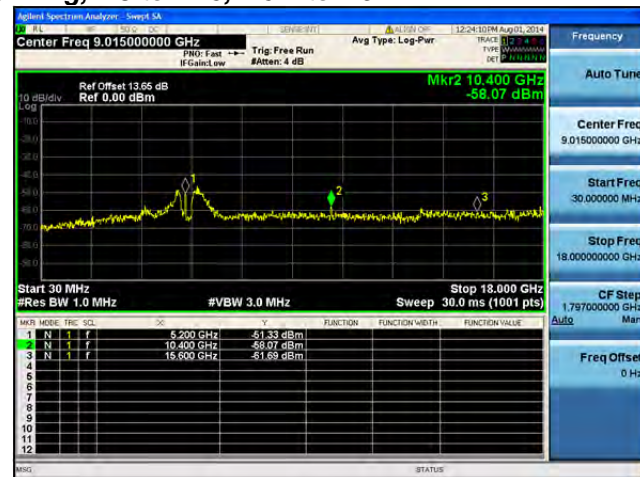
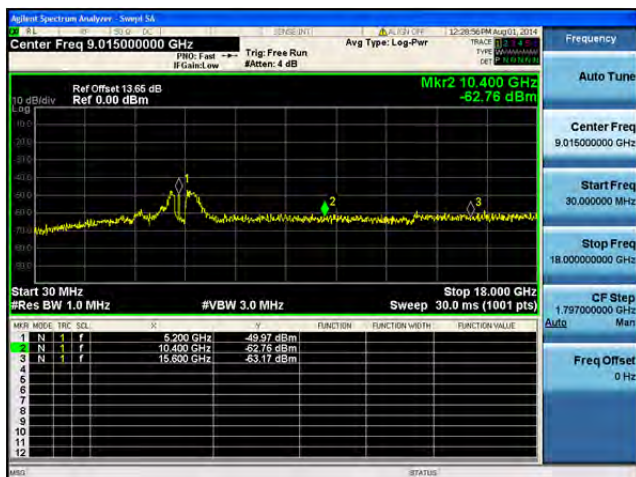
**Conducted Spurs Peak, 5200 MHz, HT/VHT20, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B****Antenna C****Antenna D**

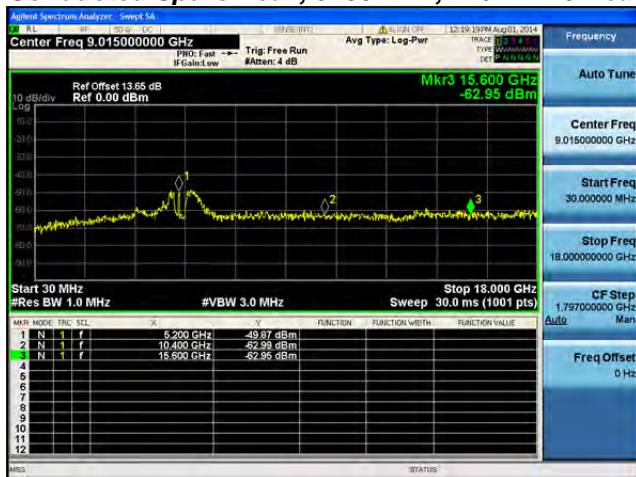
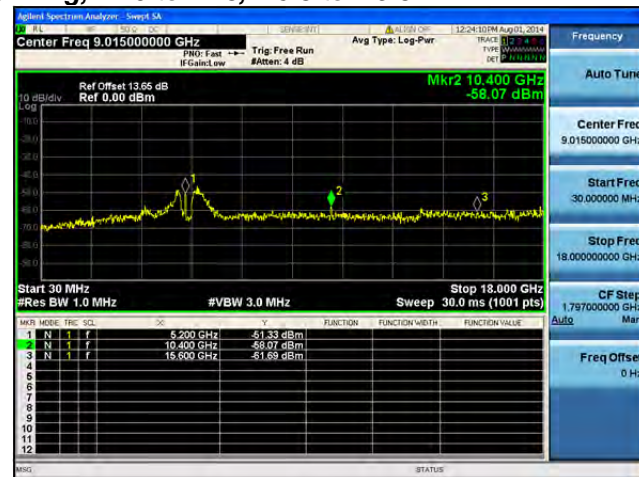
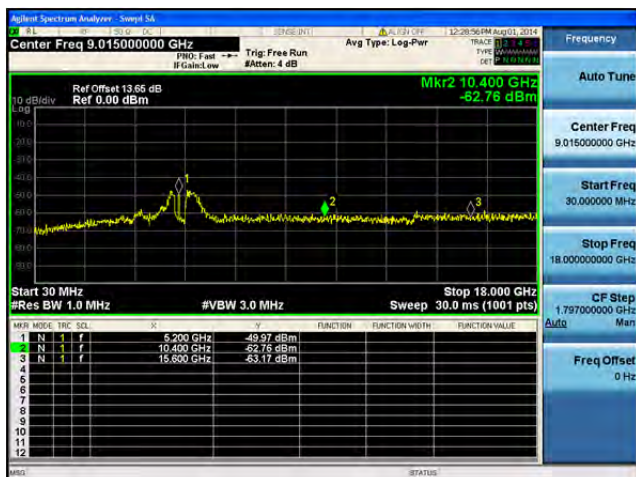
**Conducted Spurs Peak, 5200 MHz, HT/VHT20, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C****Antenna D**

**Conducted Spurs Peak, 5200 MHz, HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B**

**Conducted Spurs Peak, 5200 MHz, HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B**

**Conducted Spurs Peak, 5200 MHz, HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C**

**Conducted Spurs Peak, 5200 MHz, HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B****Antenna C**

**Conducted Spurs Peak, 5200 MHz, HT/VHT20 Beam Forming, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C**

MARK	MODE	TRC	SCN	F	P	FUNCTION	FUNCTION WITH	FUNCTION VALUE
1	N	1	f	5.000 GHz	-55.97 dBm			
2	N	1	f	10.400 GHz	-61.93 dBm			
3	N	1	f	15.600 GHz	-63.56 dBm			

[illegible]

Rohde & Schwarz Spectrum Analyzer

Center Freq 9.015000000 GHz
 PRIQ: Fast #Gain: low
 Trig: Free Run #Atten: 4 dB
 Avg Type: Log-Pwr
 TRACE 1: F F F F
 TYPE: WWHW
 SET P: 10.00 MHz

Ref Offset 13.65 dB
 Ref 0.00 dBm

Mkr3 15.600 GHz
 -72.88 dBm

Start 30 MHz
 #Res BW 1.0 MHz
 #VBW 3.0 MHz
 Stop 18.000 GHz
 Sweep 30 ms (1001 pts)

MKR	MODE	FREQ	SCL	UNIT	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f				5.200 GHz -56.11 dBm
2	N	1	f				10.400 GHz -65.32 dBm
3	N	1	f				15.600 GHz -72.88 dBm
4							
5							
6							
7							
8							
9							
10							
11							
12							

Frequency Auto Tune Center Freq 9.015000000 GHz Start Freq 30.000000 MHz Stop Freq 18.000000000 GHz CF Step 1.797000000 GHz Auto Menu Freq Offset 0 Hz STATUS

Agilent Spectrum Analyzer - Sweep 1A

Center Freq 9.015000000 GHz

Ref Offset 13.65 dB
Ref 0.00 dBm

Mkr3 15.600 GHz
-52.72 dBm

Start 30 MHz
#Res BW 1.0 MHz

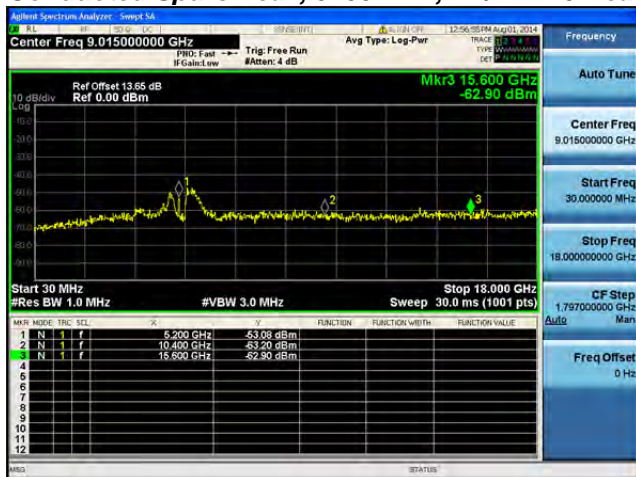
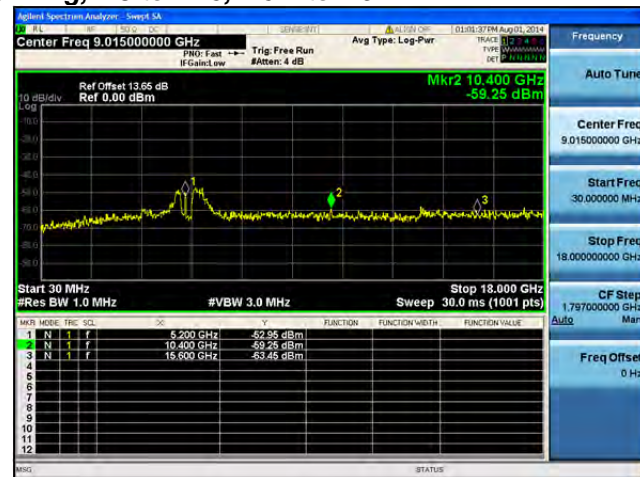
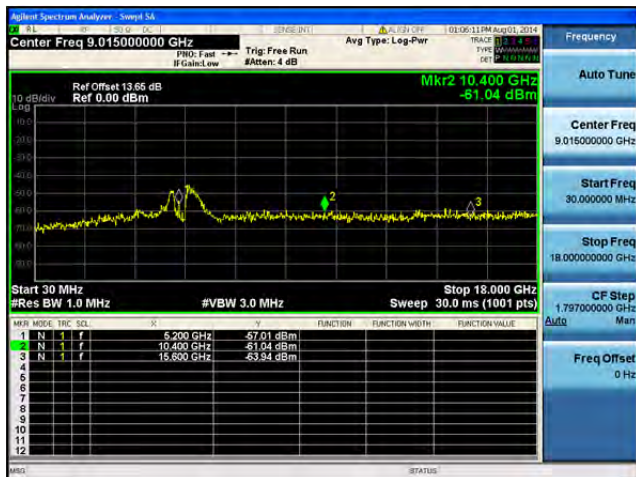
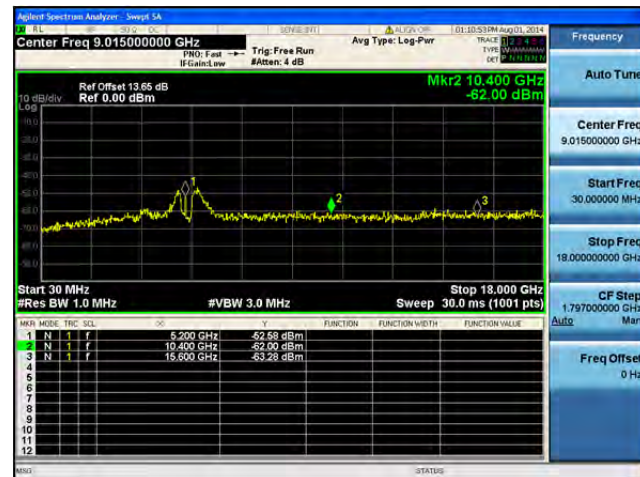
#VBW 3.0 MHz

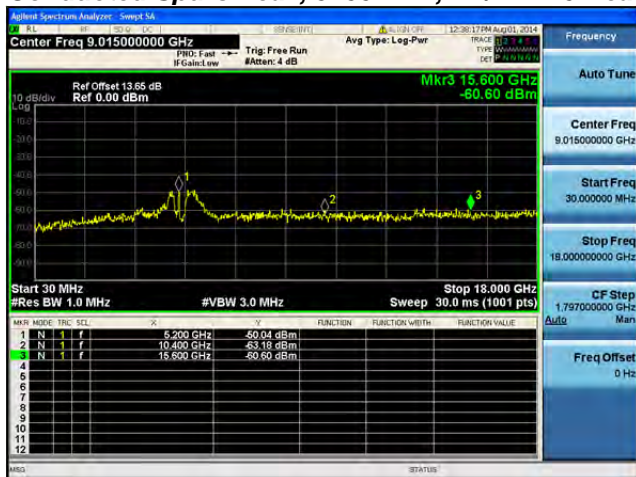
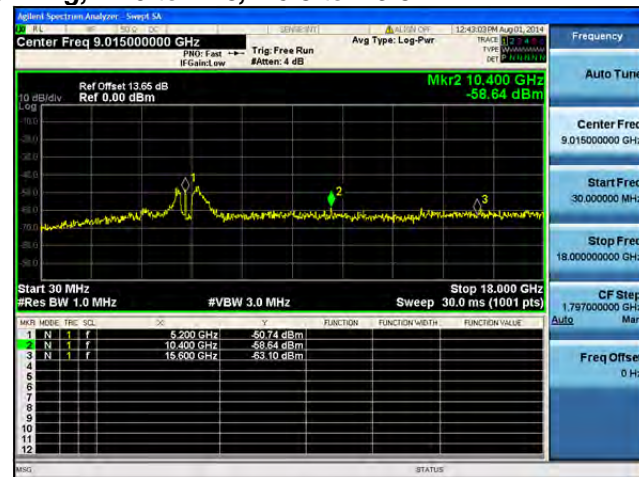
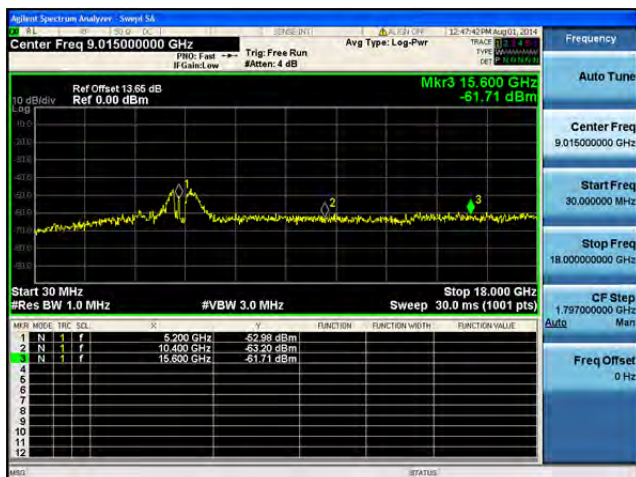
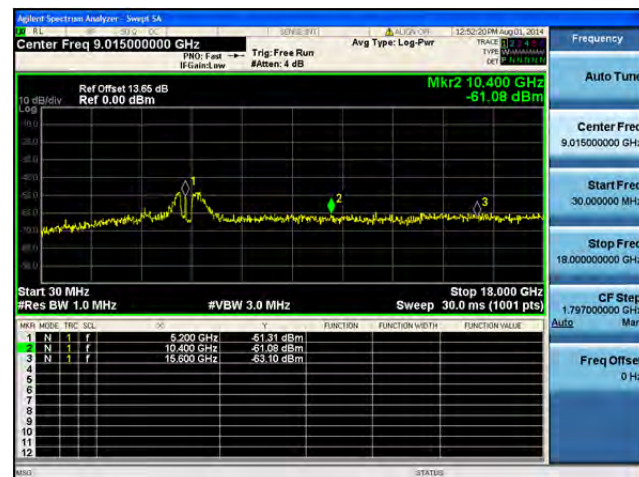
Stop 18.000 GHz
Sweep 30.0 ms (1001 pts)

Table:

Mkr	Mode	Trc	SL	DB	F	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f		5.200 GHz			-53.95 dBm
2	N	1	f		10.400 GHz			-52.97 dBm
3	N	1	f		15.600 GHz			-52.72 dBm

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**Conducted Spurs Peak, 5200 MHz, HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B****Antenna C****Antenna D**

**Conducted Spurs Peak, 5200 MHz, HT/VHT20 Beam Forming, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C****Antenna D**

Spectrum Analyzer - Smpt4
 SMB (101) 11:58:34 AM Aug 10, 2014
 Center Freq 9.015000000 GHz
 Trig: Free Run
 #Gain: low
 Avg Type: Log-Pwr
 TRACE 0 1 4
 TYPE WWhwWhw
 DET 2.0/1.0/0.0
 Frequency
 Auto Tune
 Center Freq 9.015000000 GHz
 Start Freq 30.000000 MHz
 Stop Freq 18.000000000 GHz
 CF Step 1.797000000 GHz
 Auto Man
 Freq Offset 0 Hz
 (STATUS)

Ref Offset 13.65 dB
 Ref 0.00 dBm
 Mkr2 10.400 GHz
 -60.59 dBm
 10 dB/div
 100
 300
 400
 500
 600
 700
 800
 900
 Start 30 MHz
 #Res BW 1.0 MHz
 #VBW 3.0 MHz
 Stop 18.000 GHz
 Sweep 30.0 ms (1001 pts)

MARK	MODE	TRIG	SL	F	F	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	5.000 GHz	-61.93 dBm			
2	N	1	f	10.400 GHz	-60.59 dBm			
3	N	1	f	16.600 GHz	-63.64 dBm			
4								
5								
6								
7								
8								
9								
10								
11								
12								

Signal Spectrum Analyzer - Setup 5A

Center Freq 9.015000000 GHz

Ref Offset 13.65 dB
Ref 0.00 dBm

PRF: Fast → Trig: Free Run #Amen: 4 dB

Avg Type: Log-Pwr

TRACE 1 [2.4.4.4]
TYPE: FREQ
RES: 0.000000000

Frequency

Auto Tun

Center Freq 9.015000000 GHz

Start Freq 30.000000 MHz

Stop Freq 18.000000000 GHz

CF Stop 1.797000000 GHz

Auto

Freq Offset 0 Hz

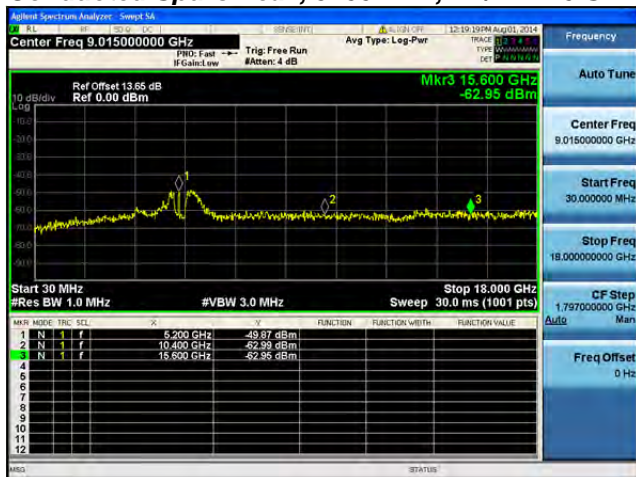
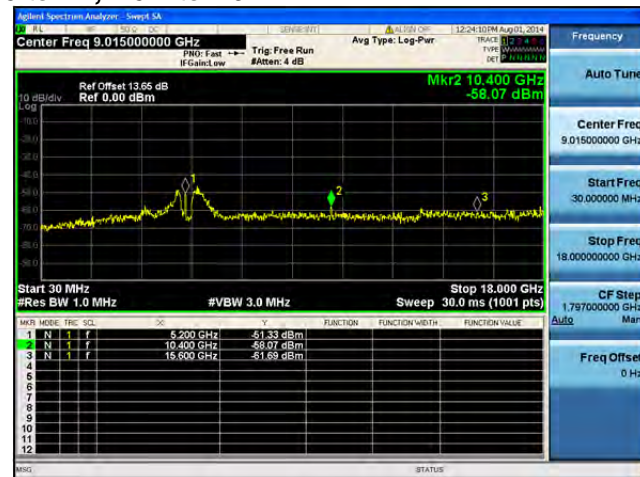
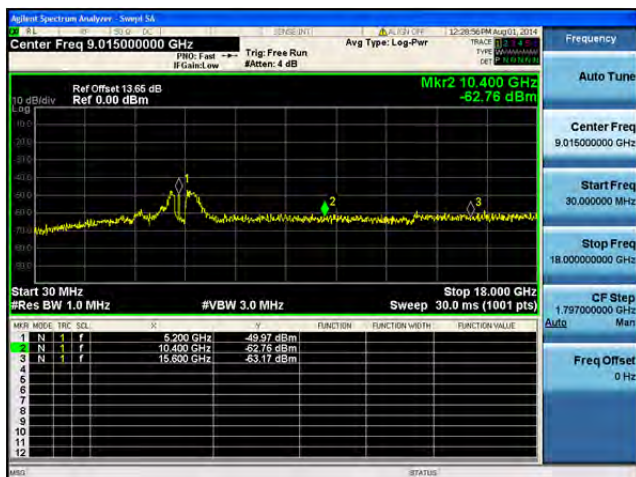
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Sweep 30.0 ms (1001 pts)

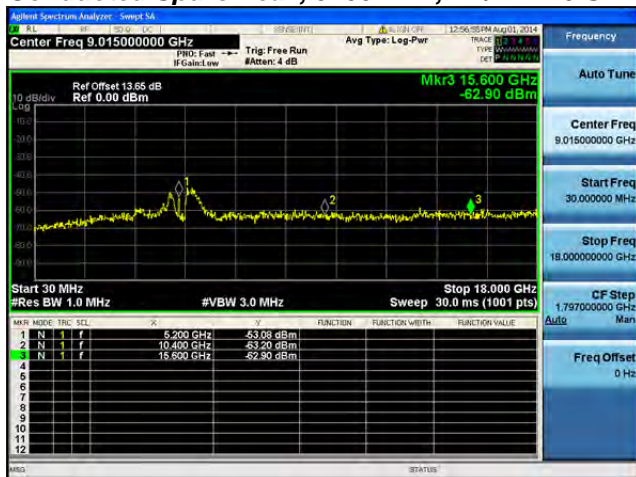
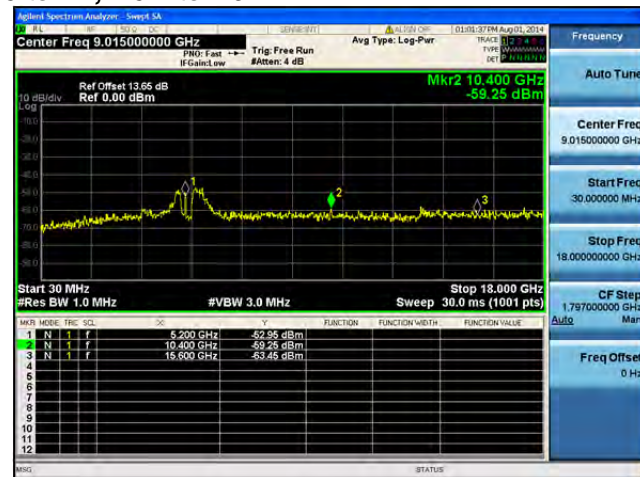
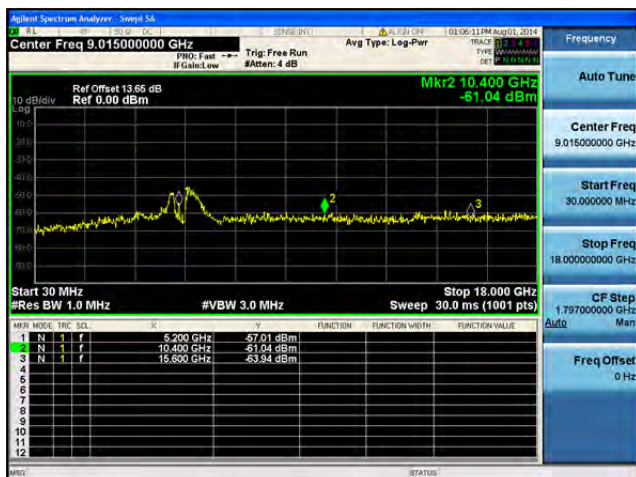
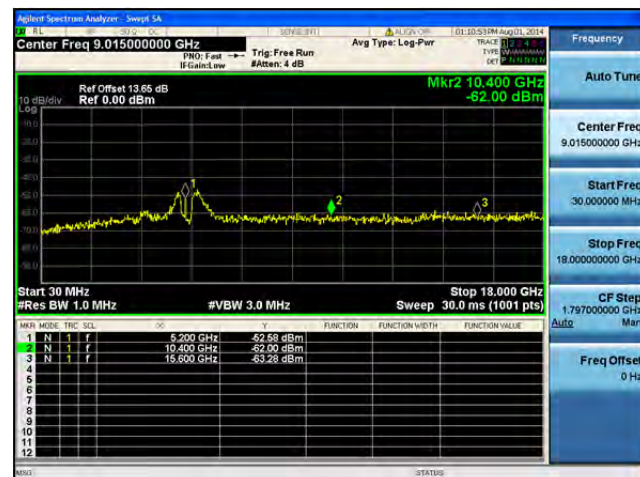
Stop 18.000 GHz

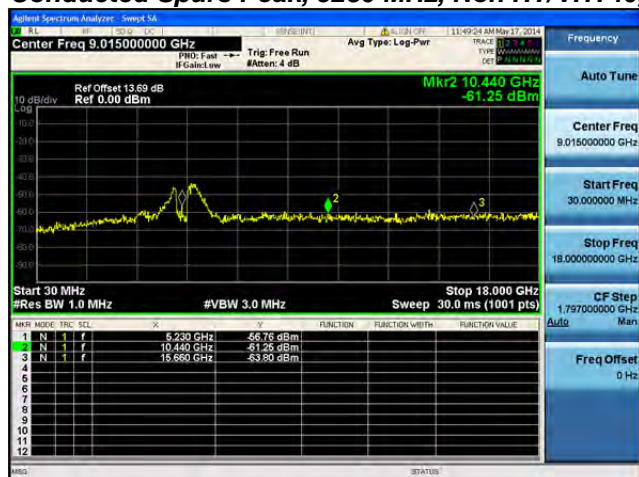
Mkr2 10.400 GHz
-56.05 dBm

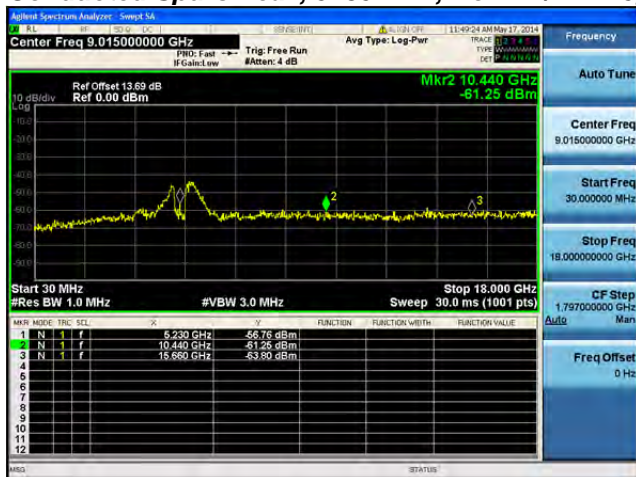
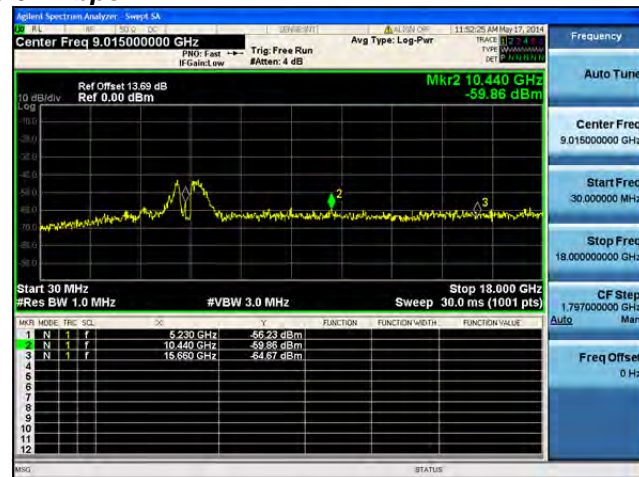
MKR	MODE	FREQ	SCN	DB	UNIT	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
2	N	1	f	10.400 GHz	-56.05 dBm			
3	N	1	f	15.600 GHz	-64.04 dBm			

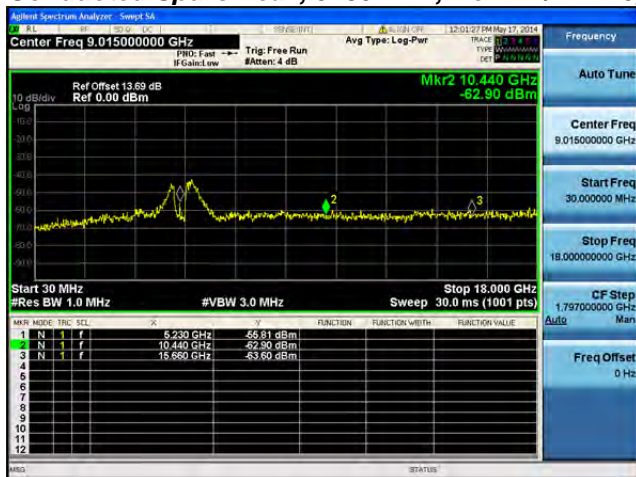
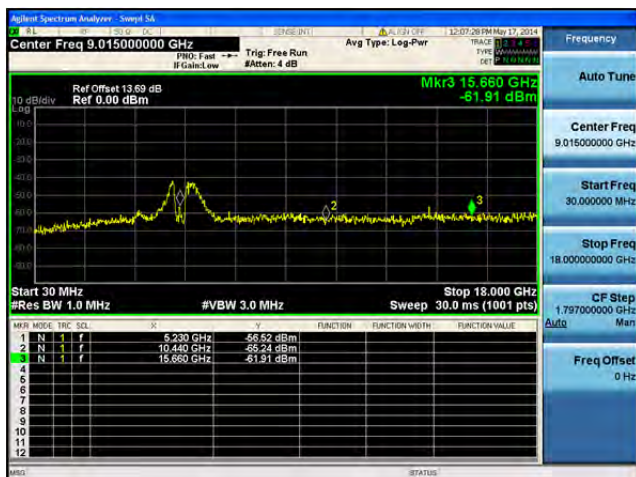
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**Conducted Spurs Peak, 5200 MHz, HT/VHT20 STBC, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C**

**Conducted Spurs Peak, 5200 MHz, HT/VHT20 STBC, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C****Antenna D**

**Conducted Spurs Peak, 5230 MHz, Non HT/VHT40, 6 to 54 Mbps****Antenna A**

**Conducted Spurs Peak, 5230 MHz, Non HT/VHT40, 6 to 54 Mbps****Antenna A****Antenna B**

**Conducted Spurs Peak, 5230 MHz, Non HT/VHT40, 6 to 54 Mbps****Antenna A****Antenna B****Antenna C**

Ref Offset 13.69 dB
Ref 0.00 dBm

Mkr3 15.660 GHz
-64.33 dBm

Start 30 MHz
#Res BW 1.0 MHz

Stop 18,000 GHz
#VBW 3.0 MHz
Sweep 30.0 ms (1001 pts)

MARK	MODE	TRC	SL	F	F	FUNCTION	FUNCTION WITH	FUNCTION VALUE
1	N	1	f	6.230 GHz	-57.33 dBm			
2	N	1	f	10.440 GHz	-55.35 dBm			
3	N	1	f	15.660 GHz	-64.33 dBm			

MR	MODE	FREQ	SQL	dB	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	5.230 GHz	-69.28 dBm			
2	N	1	f	10.440 GHz	-63.11 dBm			
3	N	1	f	15.660 GHz	-62.77 dBm			

Agilent Spectrum Analyzer - View2.S4

Center Freq 9.015000000 GHz

Ref Offset 13.69 dB

Ref 0.00 dBm

Mkr3 15.680 GHz

-62.16 dBm

Start 30 MHz

Stop 18.000 GHz

Res BW 1.0 MHz

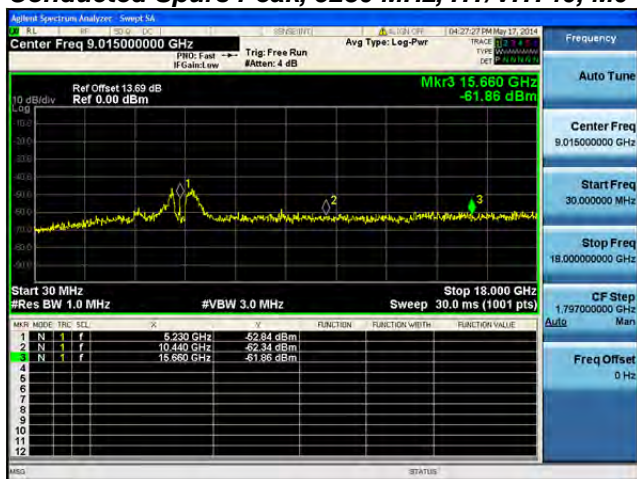
#VBW 3.0 MHz

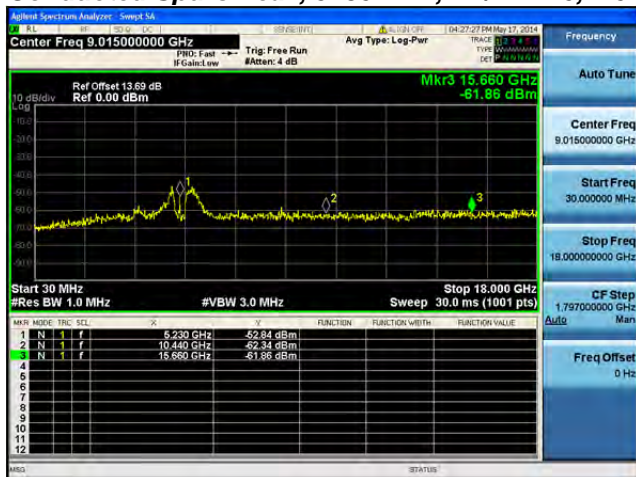
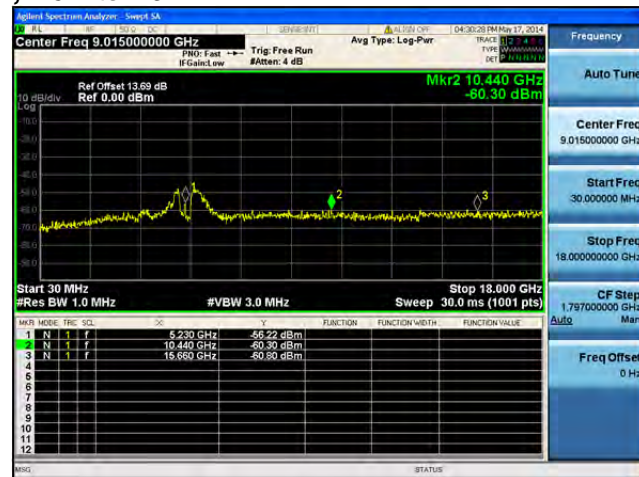
Sweep 30.0 ms (1001 pts)

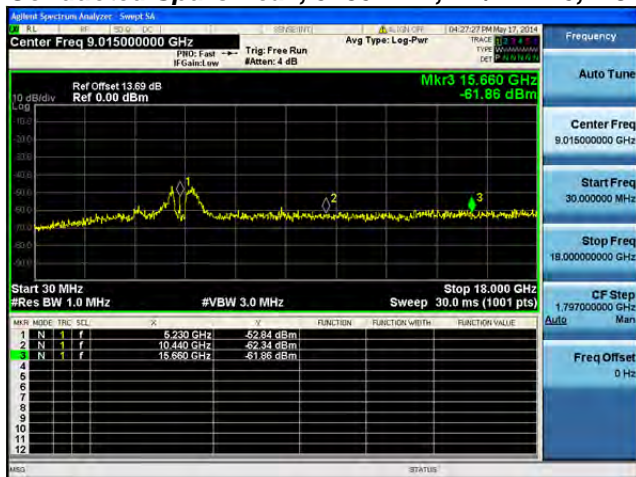
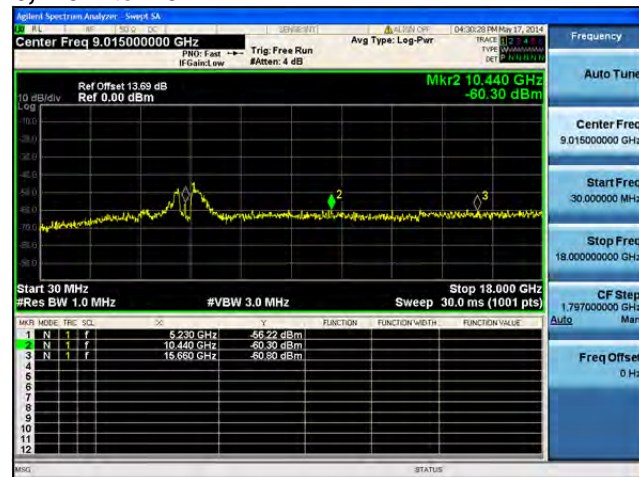
MNR	MODE	TRC	SCN	F	F	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	5.230 GHz	-68.63 dBm			
2	N	1	f	10.440 GHz	-64.24 dBm			
3	N	1	f	15.680 GHz	-62.16 dBm			

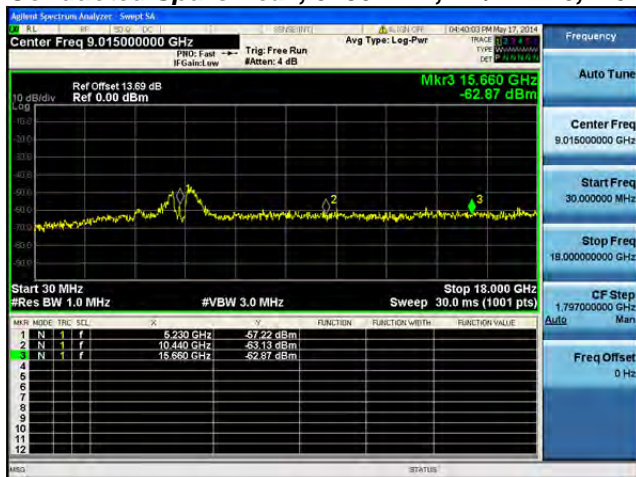
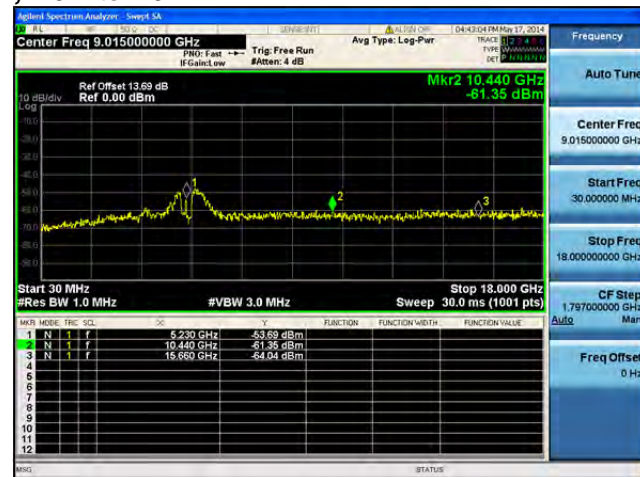
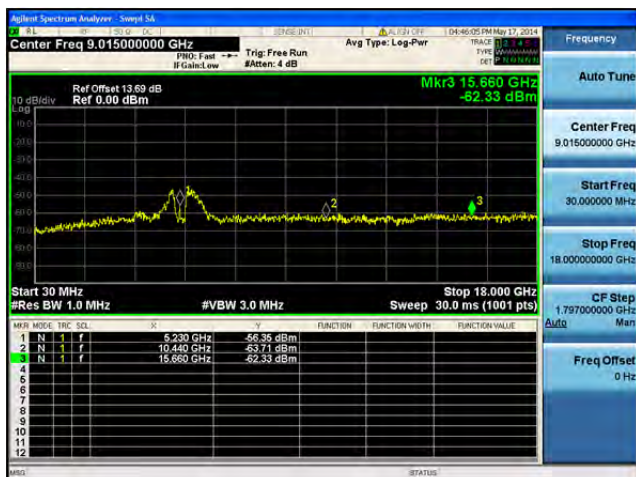
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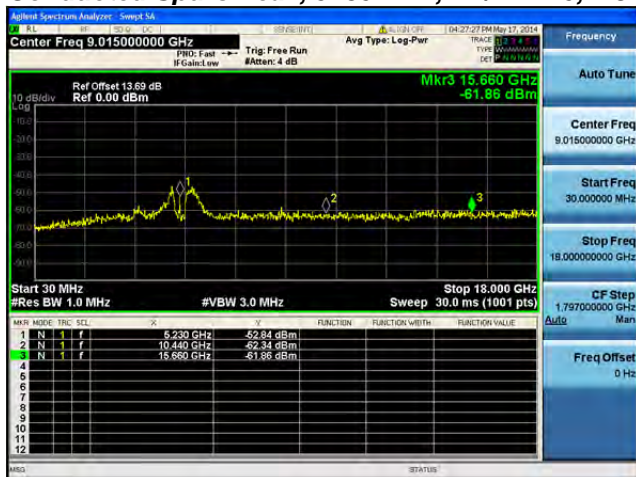
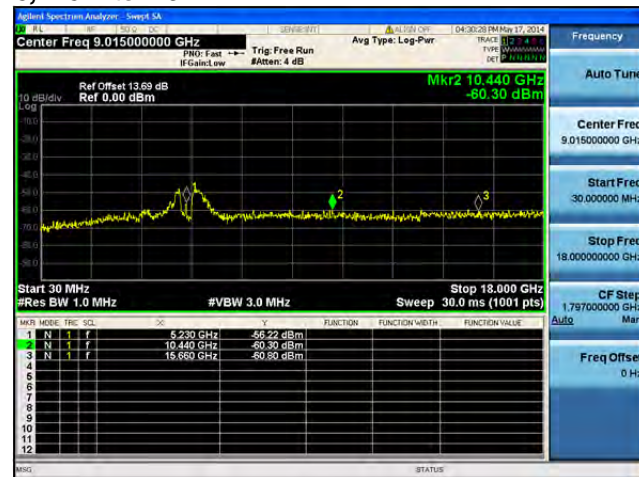
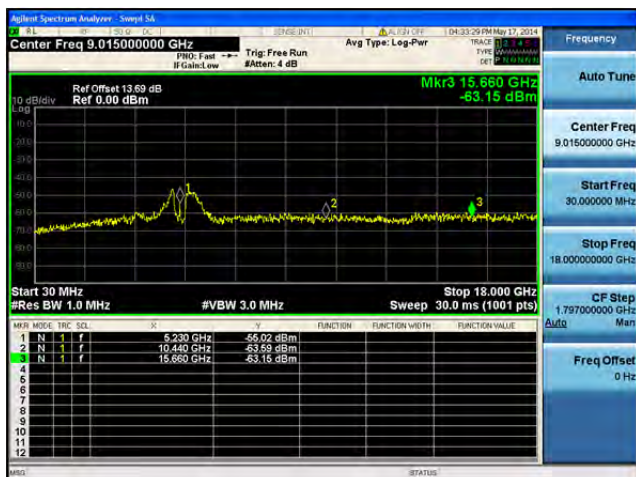
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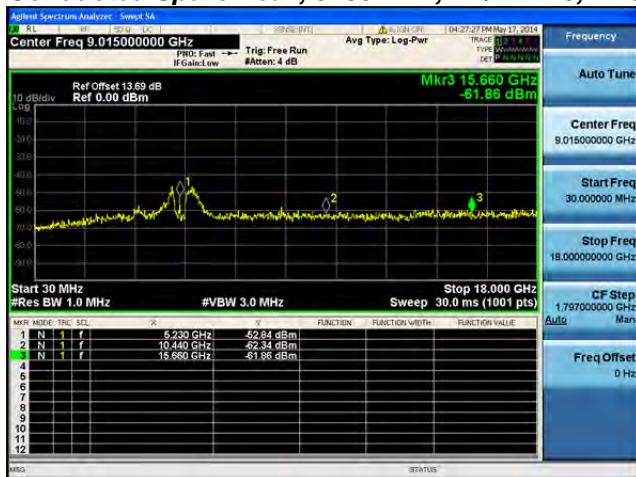
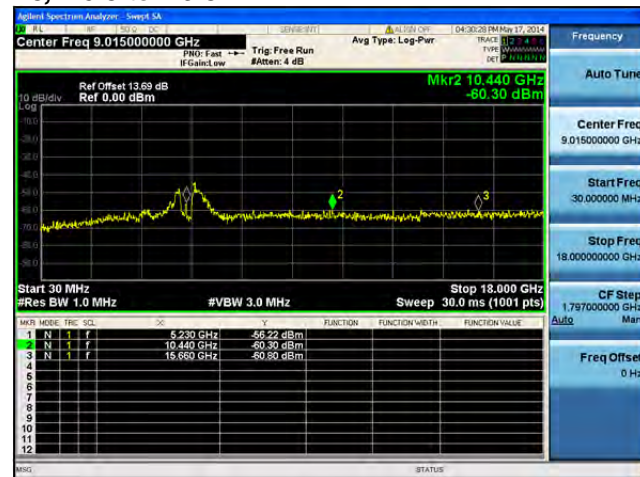
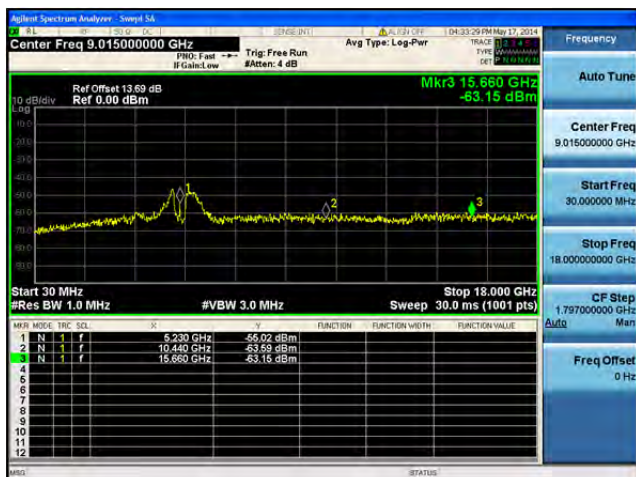
**Conducted Spurs Peak, 5230 MHz, HT/VHT40, M0 to M7, M0.1 to M9.1****Antenna A**

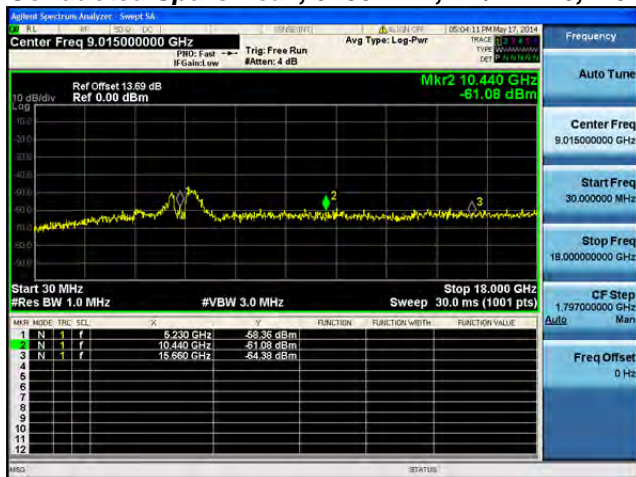
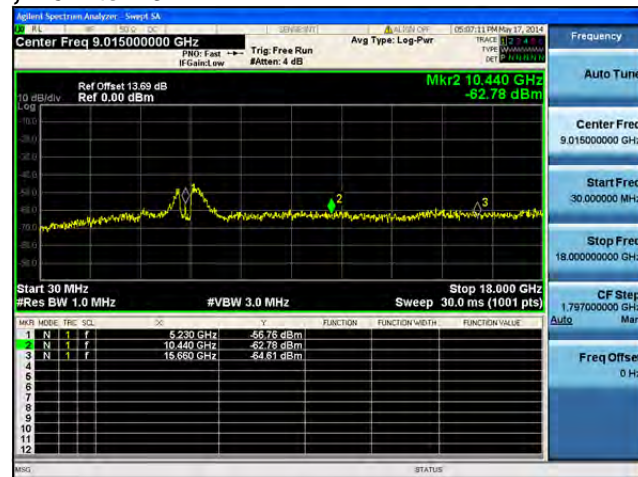
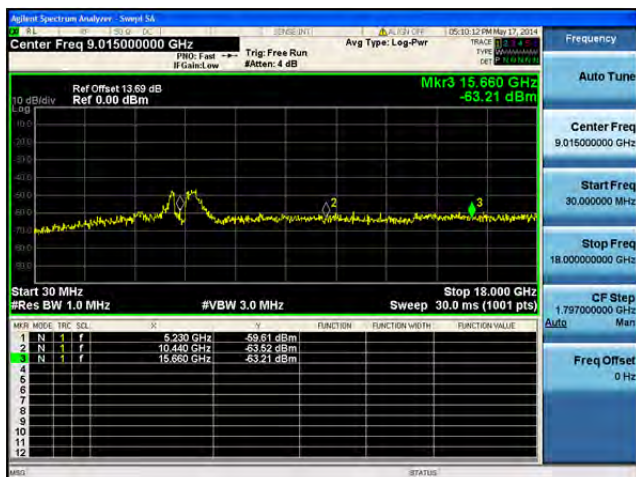
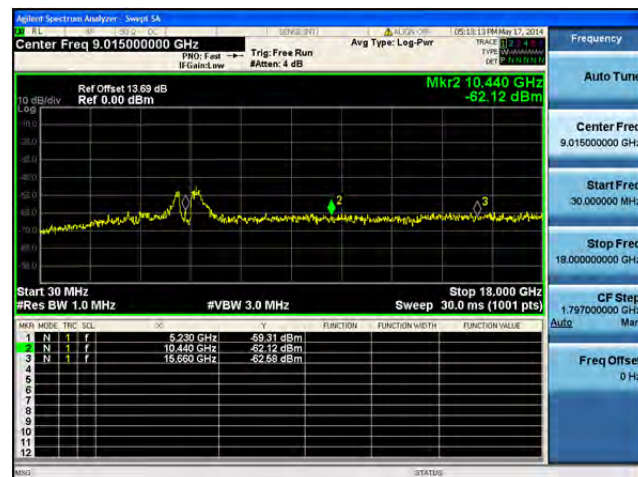
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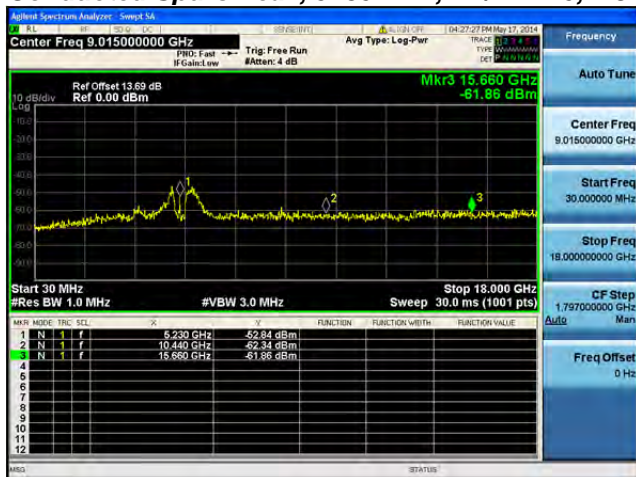
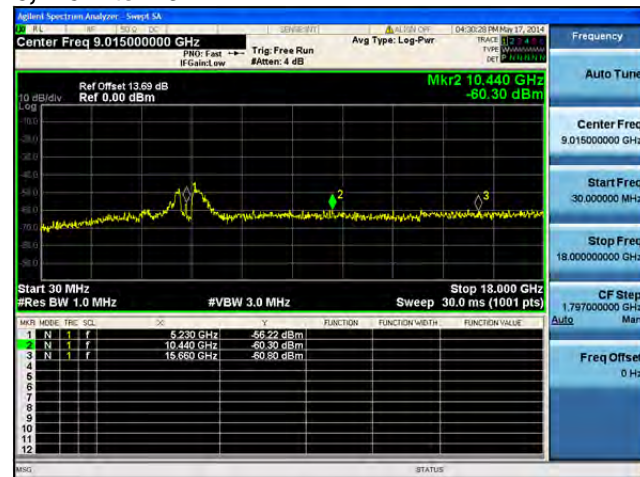
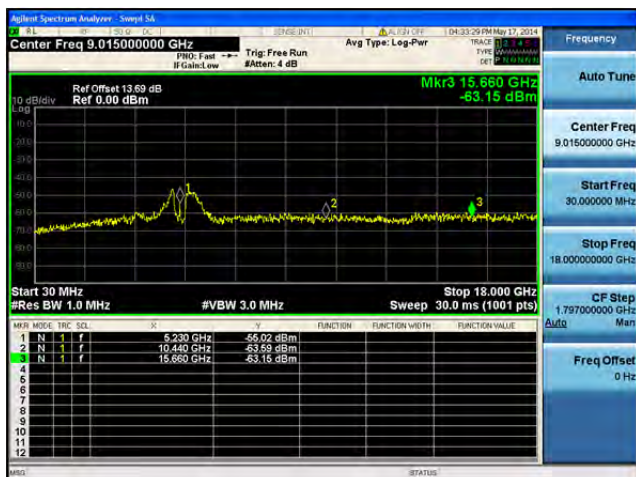
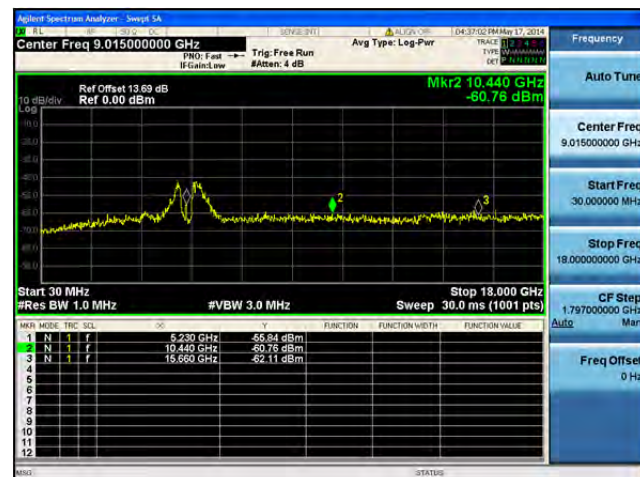
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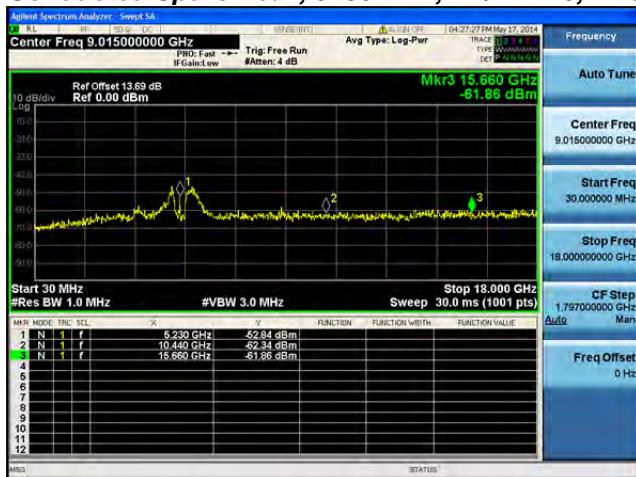
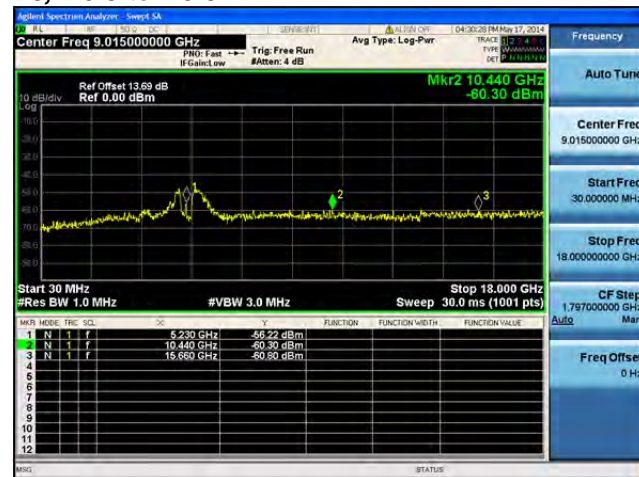
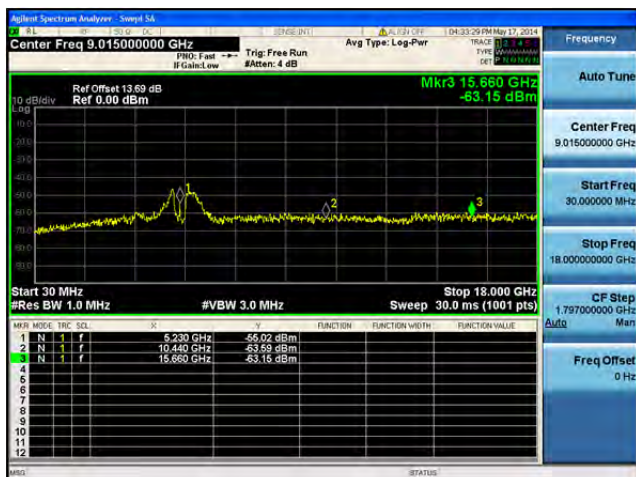
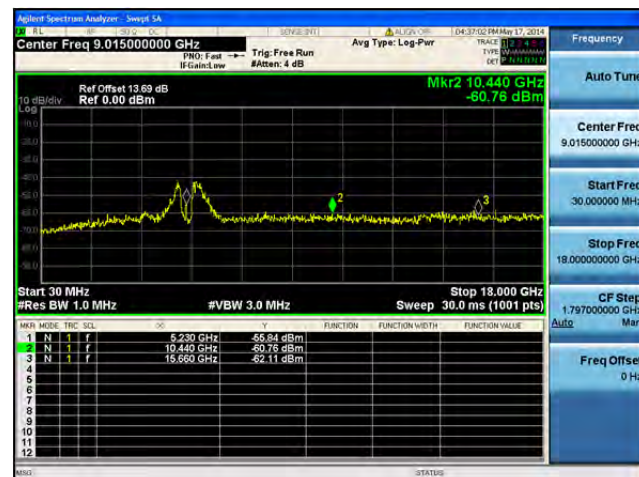
**Conducted Spurs Peak, 5230 MHz, HT/VHT40, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C**

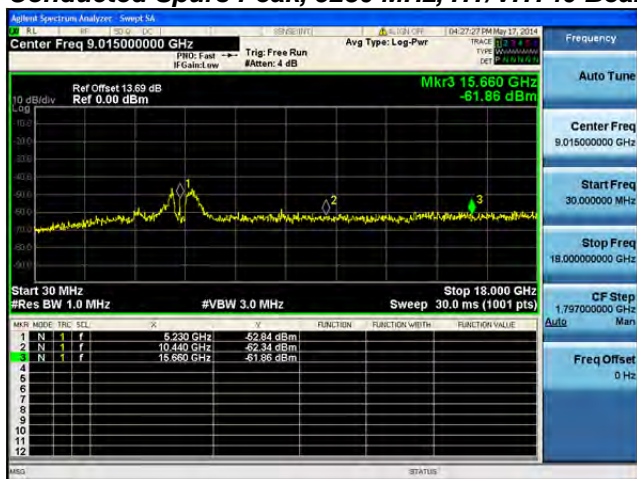
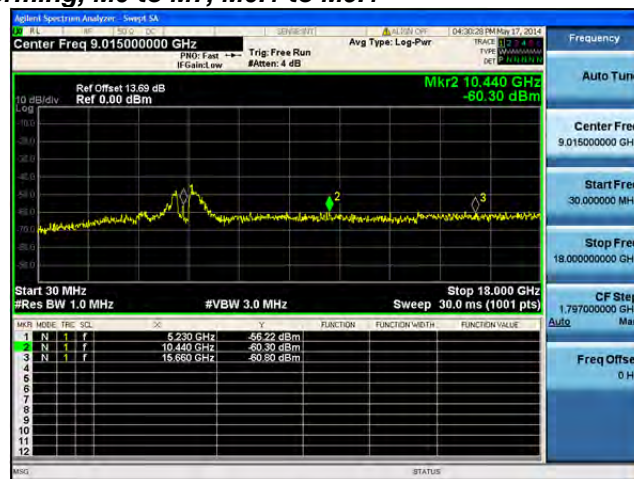
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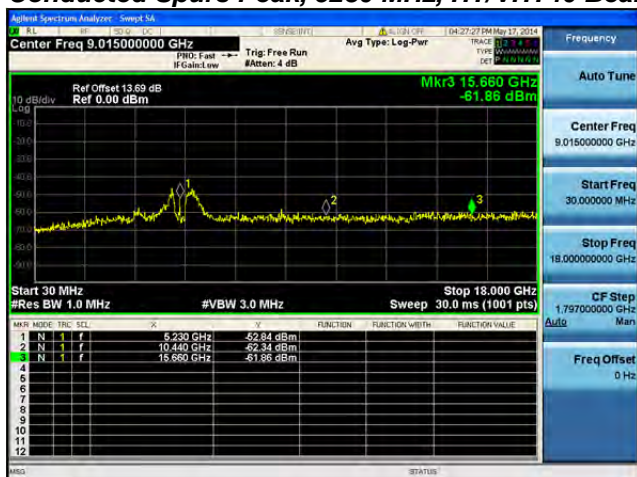
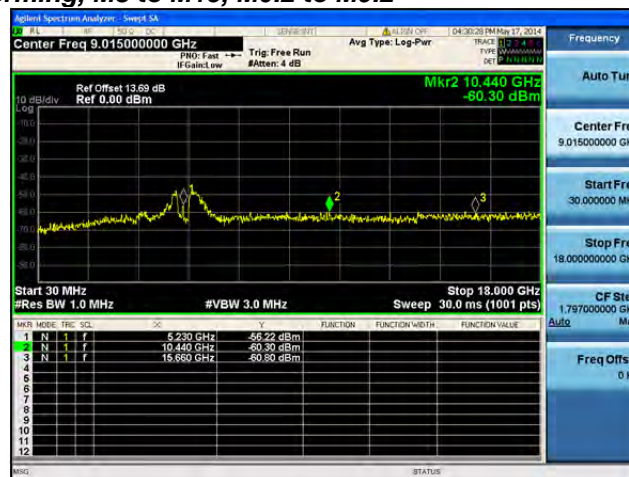
**Conducted Spurs Peak, 5230 MHz, HT/VHT40, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C**

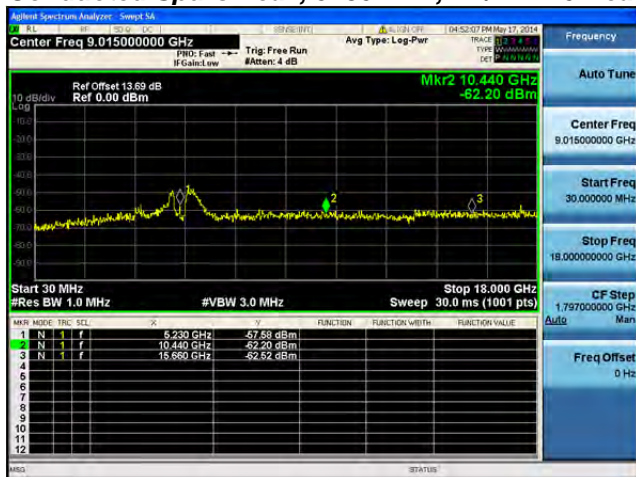
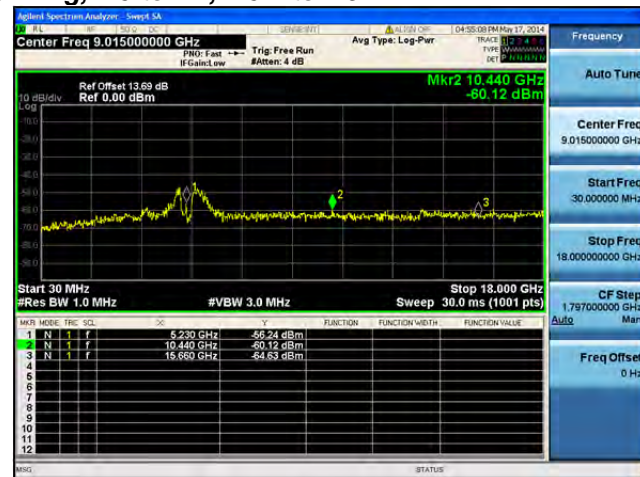
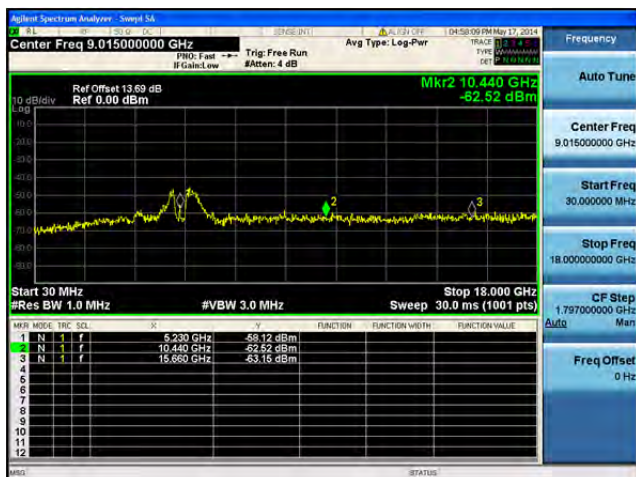
**Conducted Spurs Peak, 5230 MHz, HT/VHT40, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C****Antenna D**

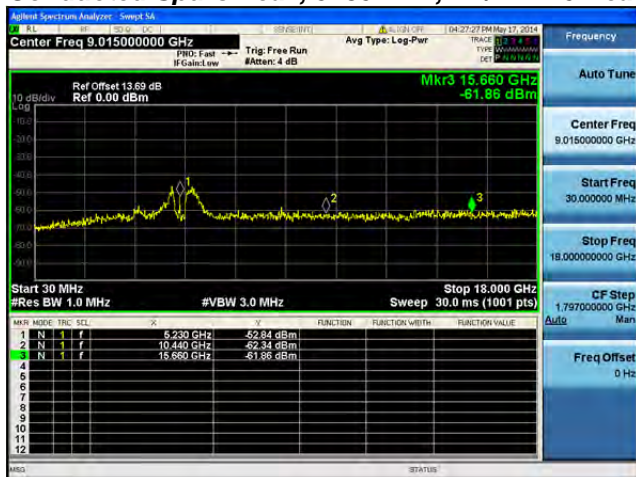
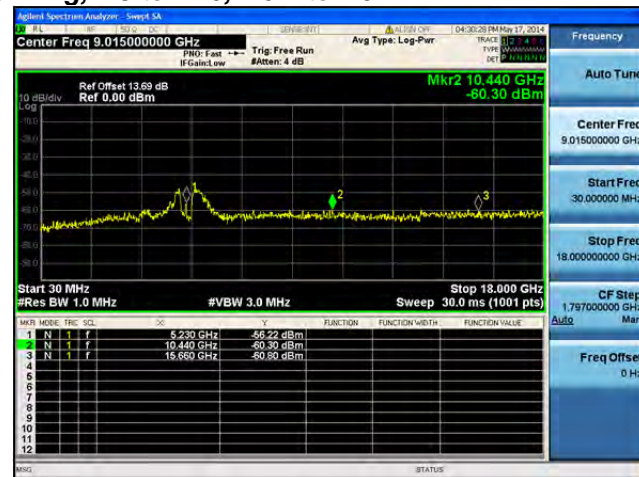
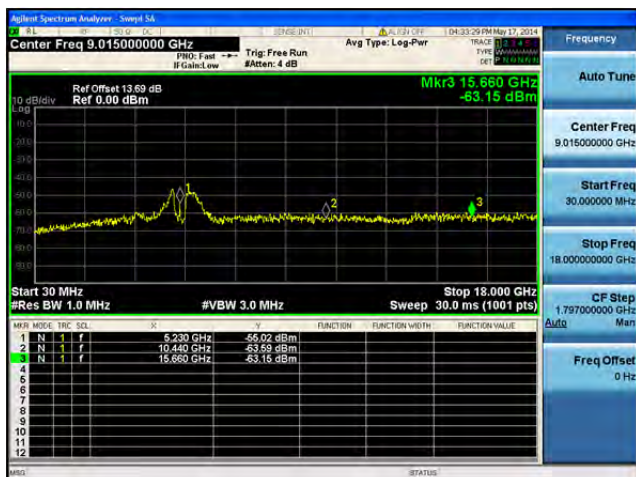
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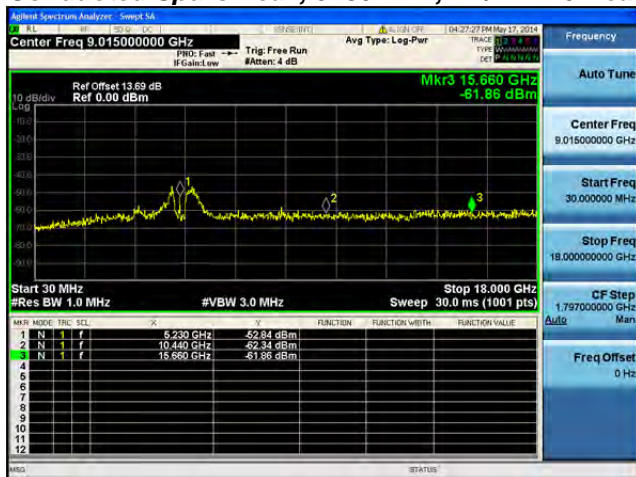
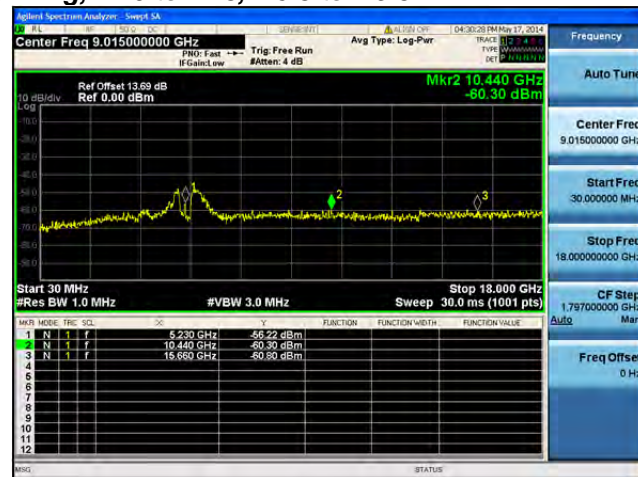
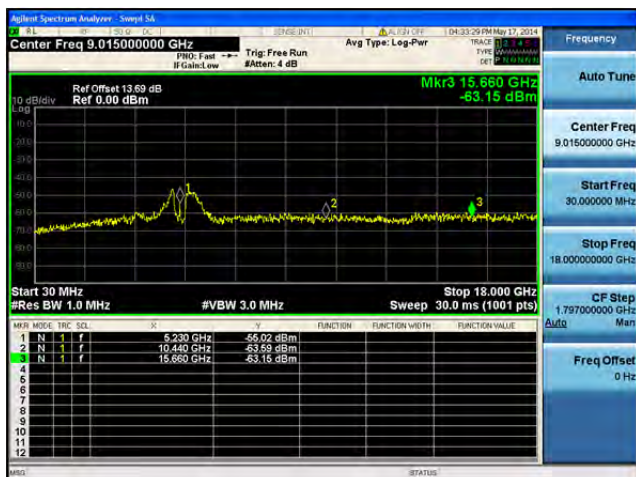
**Conducted Spurs Peak, 5230 MHz, HT/VHT40, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C****Antenna D**

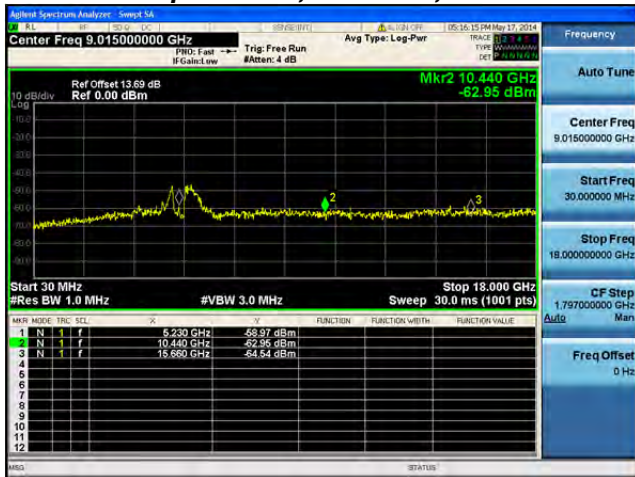
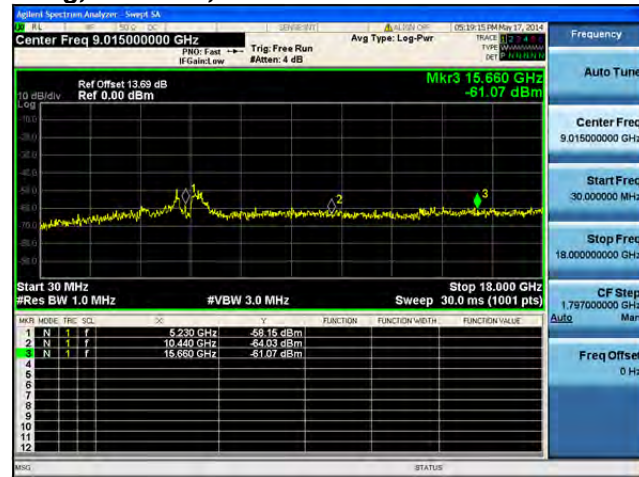
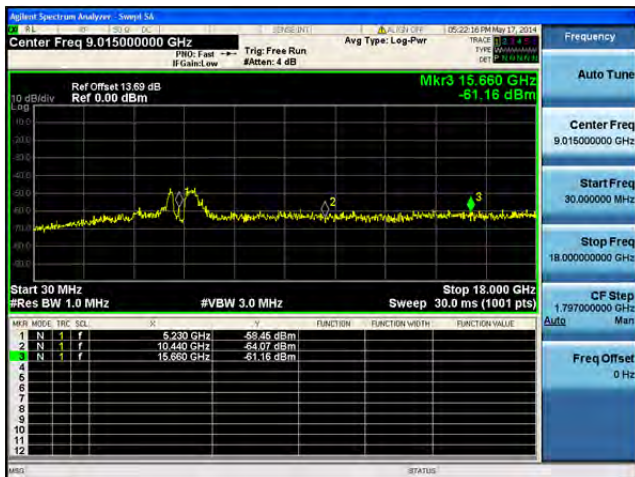
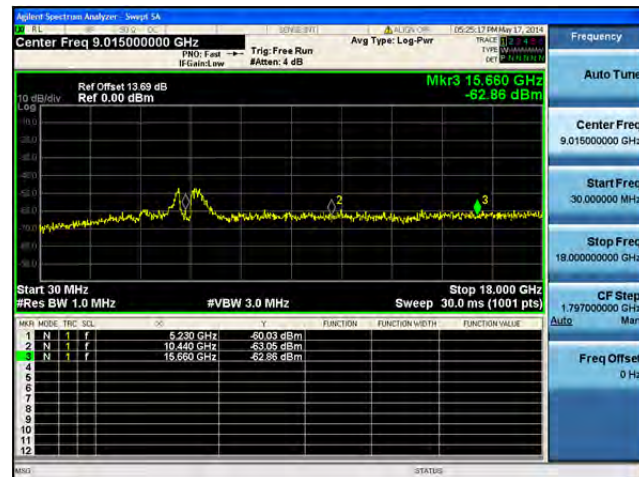
**Conducted Spurs Peak, 5230 MHz, HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B**

**Conducted Spurs Peak, 5230 MHz, HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B**

**Conducted Spurs Peak, 5230 MHz, HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C**

**Conducted Spurs Peak, 5230 MHz, HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B****Antenna C**

**Conducted Spurs Peak, 5230 MHz, HT/VHT40 Beam Forming, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C**

**Conducted Spurs Peak, 5230 MHz, HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C****Antenna D**

Ref Offset 13.69 dB
Ref 0.00 dBm

Mkr3 15.660 GHz
-62.87 dBm

Start 30 MHz
#Res BW 1.0 MHz

Stop 18,000 GHz
Sweep 30.0 ms (1001 pts)

MARK	MODE	TRC	SCN	F	dBm	FUNCTION	FUNCTION WITH	FUNCTION VALUE
1	N	1	f	6.230 GHz	-57.22 dBm			
2	N	1	f	10.440 GHz	-63.13 dBm			
3	N	1	f	15.660 GHz	-62.87 dBm			

Agilent Spectrum Analyzer - Sweep 1A

Center Freq 9.015000000 GHz

Ref Offset 13.69 dB
Ref 0.00 dBm

Mkr2 10.440 GHz
-61.35 dBm

Start 30 MHz
#Res BW 1.0 MHz

#VBW 3.0 MHz

Stop 18.000 GHz
Sweep 30.0 ms (1001 pts)

Mkr	Mode	Freq	SCL	dB	V	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	5.230 GHz	1	53.58 dBm				
2	N	10.440 GHz	1	-61.35 dBm				
3	N	15.660 GHz	1	-64.04 dBm				

Agilent Spectrum Analyzer - View 2

Center Freq 9.015000000 GHz Avg Type: Log-Pwr Trace 1: F Freq 15.660 GHz Auto Tune

Ref Offset 13.69 dB Ref 0.00 dBm Mkr 3 15.660 GHz -62.33 dBm

Start 30 MHz Stop 18.000 GHz Sweep 30.0 ms (1001 pts)

#Res BW 1.0 MHz #VBW 3.0 MHz

Mk	Mode	Freq	Power	Function	Function Width	Function Value
1	N	1	f			
2	N	1	f			
3	N	1	f			

Frequency

Center Freq 9.015000000 GHz

Start Freq 30.000000 MHz

Stop Freq 18.000000000 GHz

CF Step 1.797000000 GHz

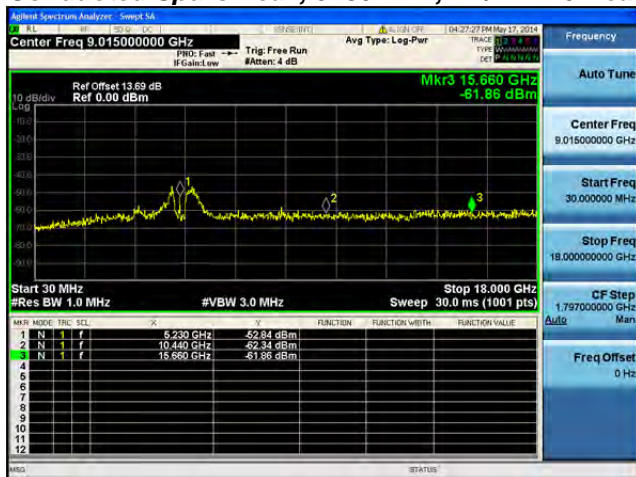
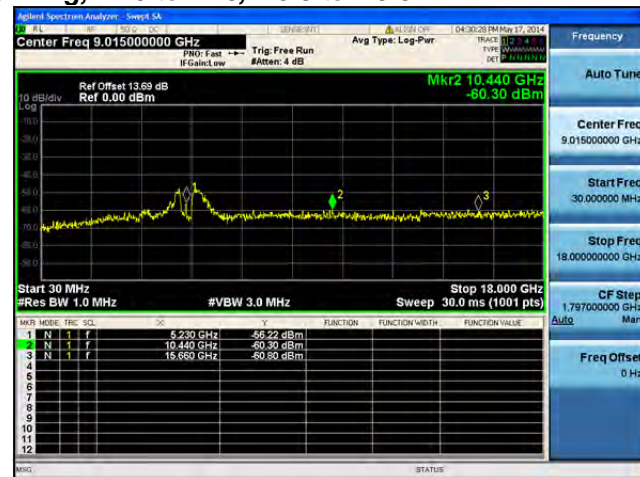
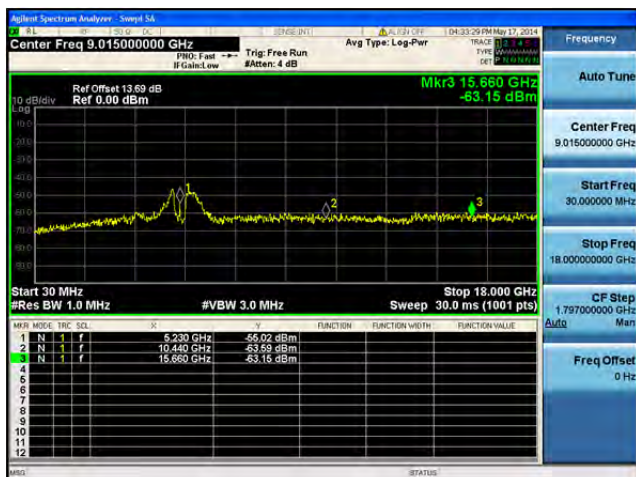
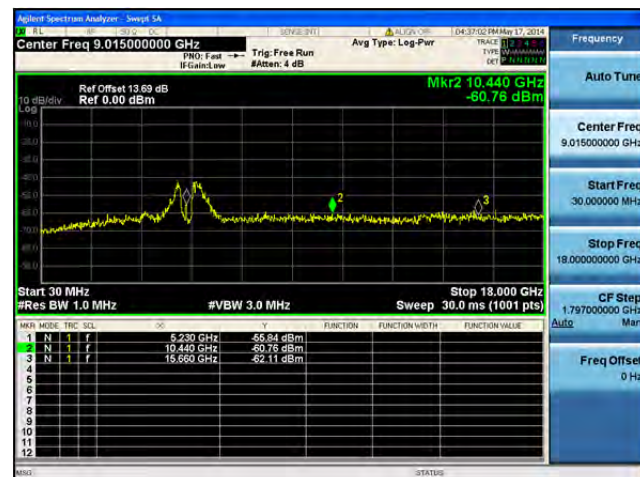
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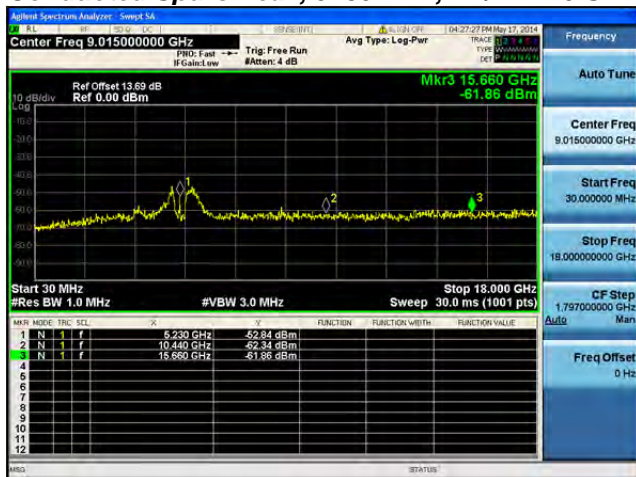
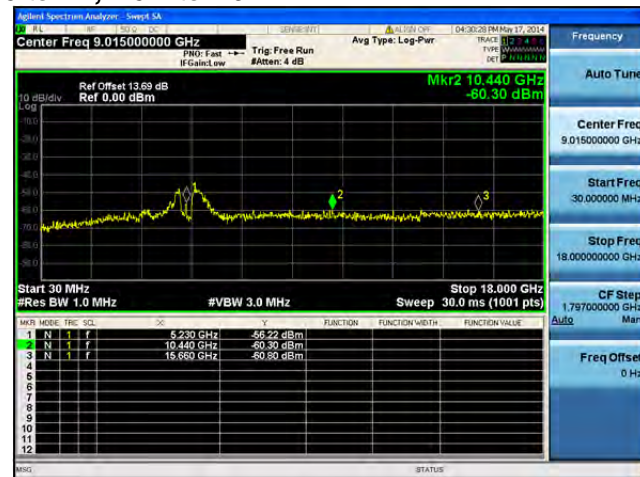
Freq Offset 0 Hz

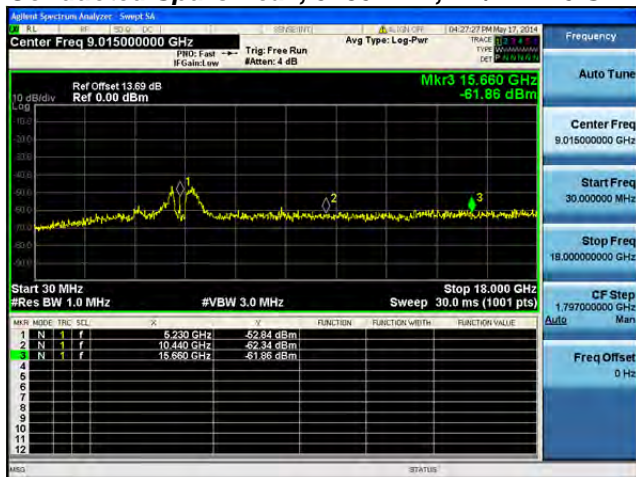
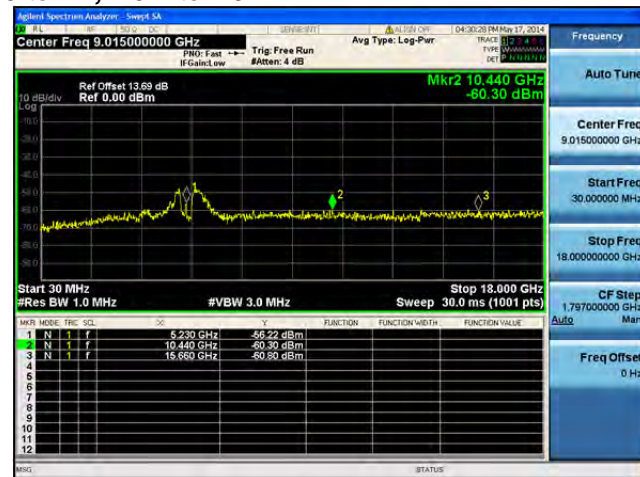
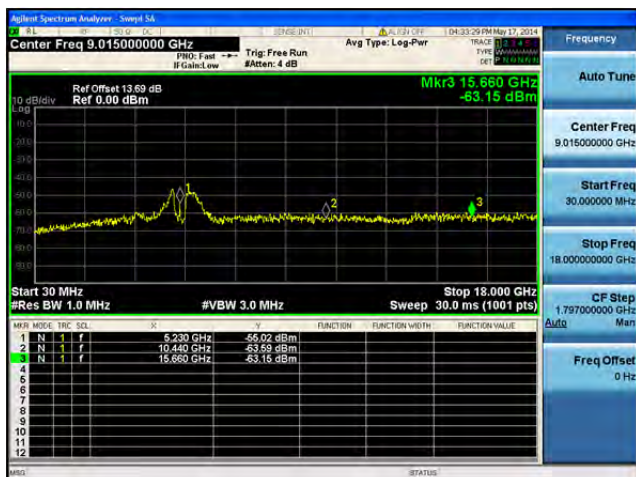
Center Freq 9.015000000 GHz
Span 30 MHz
Resolution BW 1.0 MHz
Sweep 30.0 ms (1001 pts)
Auto Tune
Frequency 9.015000000 GHz
Stop Freq 30.000000 GHz
CF Step 1.797000000 GHz
Autz

MNR	MODE	FREQ	LEVEL	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f	9.230 GHz	-51.22 dBm		
2	N	f	10.440 GHz	-61.25 dBm		
3	N	f	15.660 GHz	-62.81 dBm		

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**Conducted Spurs Peak, 5230 MHz, HT/VHT40 Beam Forming, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C****Antenna D**

**Conducted Spurs Peak, 5230 MHz, HT/VHT40 STBC, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B**

**Conducted Spurs Peak, 5230 MHz, HT/VHT40 STBC, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C**

Ref Offset 13.69 dB
Ref 0.00 dBm

Mkr3 15.660 GHz
-61.86 dBm

Start 30 MHz
#Res BW 1.0 MHz

#VBW 3.0 MHz

Stop 18,000 GHz
Sweep 30.0 ms (1001 pts)

MkR	Mode	Freq	dBm	FUNCTION	FUNCTION WITH	FUNCTION VALUE
1	N	6.230 GHz	-52.84 dBm			
2	N	10.440 GHz	-62.34 dBm			
3	N	15.660 GHz	-61.86 dBm			

Agilent Spectrum Analyzer - Sweep 1A

Center Freq 9.015000000 GHz

Ref Offset 13.69 dB
Ref 0.00 dBm

Mkr2 10.440 GHz
-60.30 dBm

Start 30 MHz
#Res BW 1.0 MHz

#VBW 3.0 MHz

Sweep 18.000 GHz
30.0 ms (1001 pts)

MkR	MODE	FREQ	SQL	dB	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	5.230 GHz	-65.22 dBm			
2	N	1	f	10.440 GHz	-60.30 dBm			
3	N	1	f	15.660 GHz	-60.80 dBm			

Agilent Spectrum Analyzer - Setup 54

15.680 GHz 10.000 MHz (SPAN)

Center Freq 9.015000000 GHz **Span 10.000 MHz** **Auto Tune**

PHN: Fast **Trig: Free Run** **Avg Type: Log-Pwr** **Trace 1** **File 000000000** **Ref 10.000 dB**

PHN: Low **Attenu: 4 dB**

Ref Offset 13.69 dB **Ref 0.00 dBm** **Mkr3 15.680 GHz -63.15 dBm**

Start 30 MHz **Stop 18.000 GHz**
Res BW 1.0 MHz **#VBW 3.0 MHz** **Sweep 30.0 ms (1001 pts)**

MNR	MODE	FREQ	SCL	dBm	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	5.420 GHz	-65.02 dBm		
2	N	1	f	10.440 GHz	-63.69 dBm		
3	N	1	f	15.680 GHz	-63.15 dBm		

Frequency

Auto Tune

Center Freq 9.015000000 GHz

Start Freq 30.000000 MHz

Stop Freq 18.000000000 GHz

CF Step 1.797000000 GHz

Auto Man

Freq Offset 0 Hz

STATUS

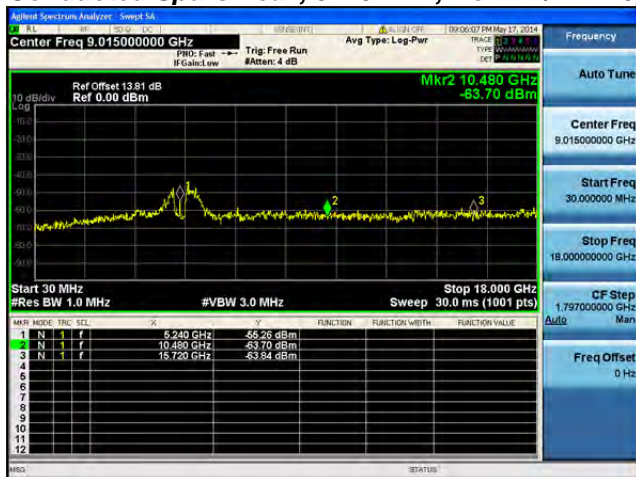
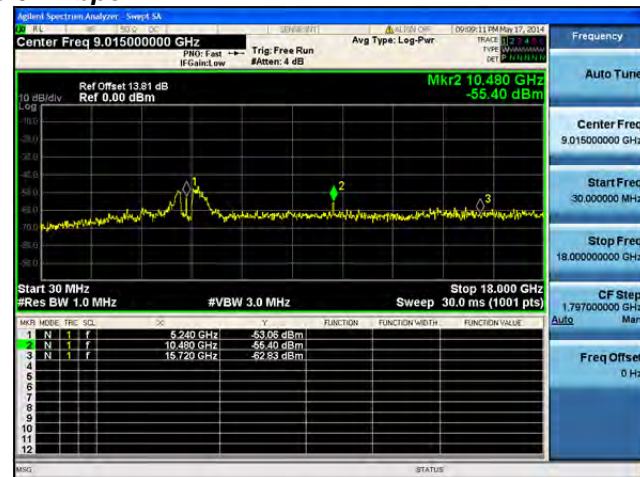
Center Freq 9.015000000 GHz

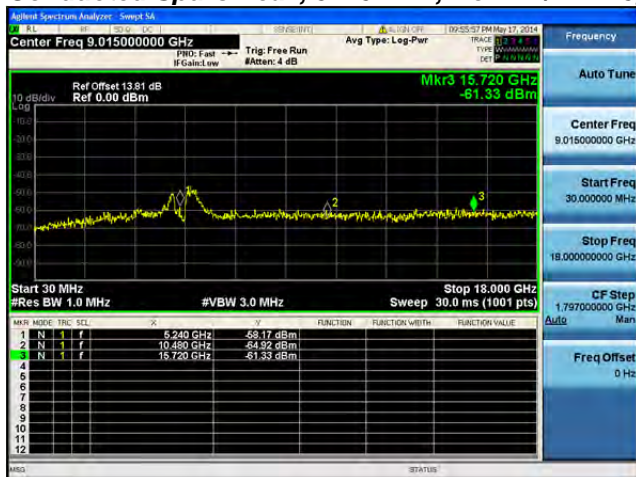
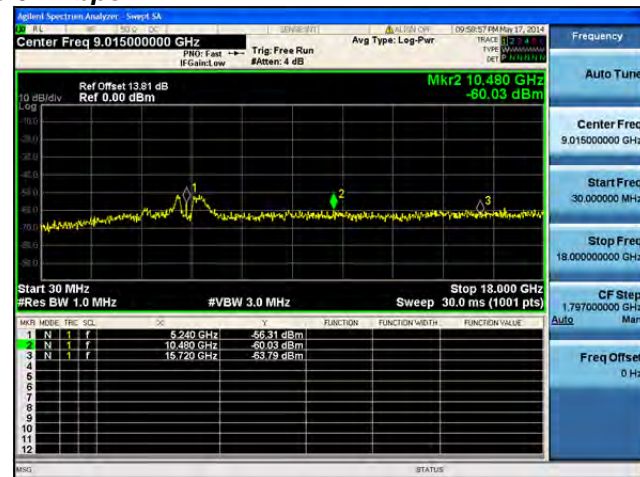
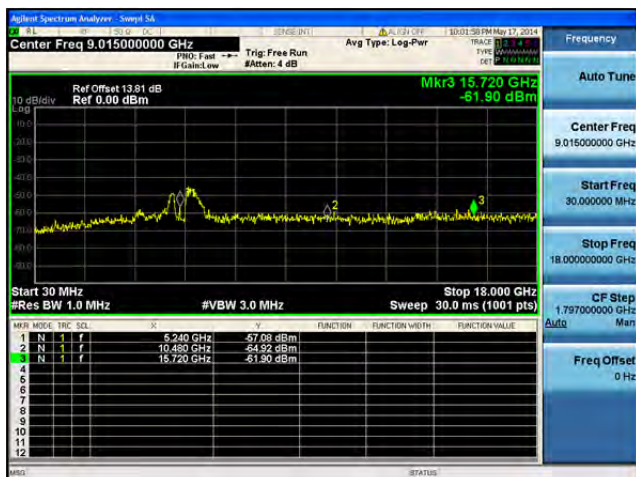
**Mkr2 10.440 GHz
-80.76 dBm**

MKR	MODE	FREQ	PWR
1	N	9.230 GHz	-55.84 dBm
2	N	10.440 GHz	-80.76 dBm
3	N	15.660 GHz	-82.11 dBm

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Conducted Spurs Peak, 5240 MHz, Non HT/VHT20, 6 to 54 Mbps**Antenna A**

**Conducted Spurs Peak, 5240 MHz, Non HT/VHT20, 6 to 54 Mbps****Antenna A****Antenna B**

**Conducted Spurs Peak, 5240 MHz, Non HT/VHT20, 6 to 54 Mbps****Antenna A****Antenna B****Antenna C**

Ref Offset 13.81 dB
Ref 0.00 dBm

Mkr3 15.720 GHz
-61.45 dBm

Start 30 MHz
#Res BW 1.0 MHz

#VBW 3.0 MHz

Stop 18.000 GHz
Sweep 30.0 ms (1001 pts)

MARK	MODE	FREQ	AMPL	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	6.240 GHz	-60.07 dBm			
2	N	10.480 GHz	-62.02 dBm			
3	N	15.720 GHz	-61.45 dBm			

Agilent Spectrum Analyzer - Sweep 5A

FREQ 15.720 GHz 10.000 MHz

Center Freq 9.015000000 GHz

PBW: Fast Trig: Free Run
IF Gain: Low #Att: 4 dB

Avg Type: Log-Pwr

TRACE 1 15.720 GHz
TYPE Continuous
DET PPKEN LIM

Frequency Auto Tune

Ref Offset 13.81 dB
Ref 0.00 dBm

Mkr3 15.720 GHz
-62.63 dBm

Start 30 MHz Stop 16.015 GHz
#Res BW 1.0 MHz #VBW 3.0 MHz Sweep 30.0 ms (1001 pts)

MKR	MODE	FREQ	SCL	DB	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	-	f					
2	N	9.480 GHz	f		-67.33 dBm			
3	N	10.480 GHz	f		-63.43 dBm			
4	N	15.720 GHz	f		-62.63 dBm			

MSG STATUS

Agilent Spectrum Analyzer - View 54

Center Freq 9.015000000 GHz

Ref Offset 13.81 dBm

Ref 0.00 dBm

Mkr3 15.720 GHz -63.94 dBm

Start 30 MHz

Stop 18.000 GHz

Res BW 1.0 MHz

#VBW 3.0 MHz

Sweep 30.0 ms (1001 pts)

Mk	Mode	Freq	Level	Function	Function Width	Function Value
1	N	1	f			
2	N	1	f			
3	N	1	f			

Agilent Spectrum Analyzer - Sweep SA

10:29:33 PM May 17, 2014

Center Freq 9.015000000 GHz

Auto Tune

PRO: Fast → Trig: Free Run

Avg Type: Log-Pwr

TRACE 1 1 4 4

TYPE: Spectrum

IF Gain: Low

#Att: 4 dB

15.720 GHz

-61.98 dBm

Ref Offset 13.81 dB

Ref 0.00 dBm

10 dB/div

Start 30 MHz

Stop 18.000 GHz

#Res BW 1.0 MHz

#VBW 3.0 MHz

Sweep 30.0 ms (1001 pts)

Mk1 3

1

2

3

4

5

6

7

8

9

10

11

12

MNR	MODE	TRF	SL	Q	F	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f		9.240 GHz	-59.83 dBm		
2	N	1	f		10.480 GHz	-53.97 dBm		
3	N	1	f		15.720 GHz	-61.98 dBm		
4								
5								
6								
7								
8								
9								
10								
11								
12								

Frequency

Auto Tune

Center Freq 9.015000000 GHz

Start Freq 30.000000 GHz

Stop Freq 18.000000000 GHz

CF Step 1.797000000 GHz

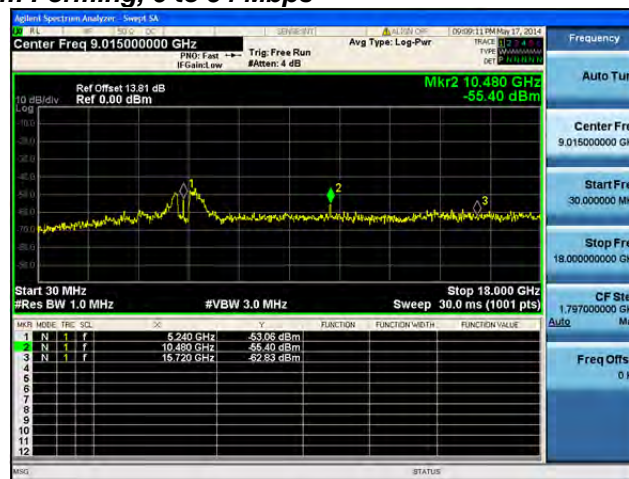
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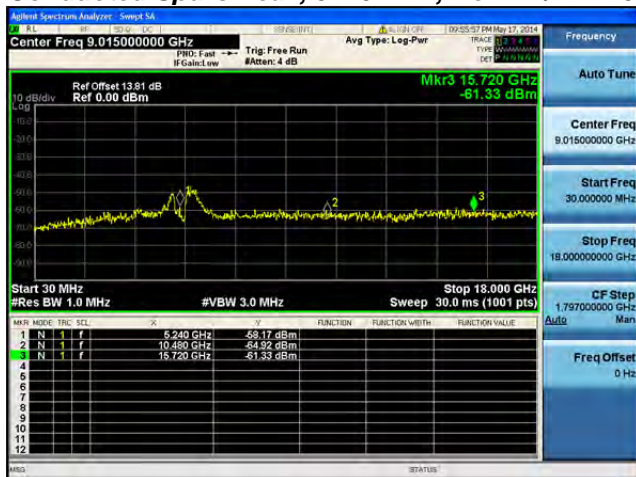
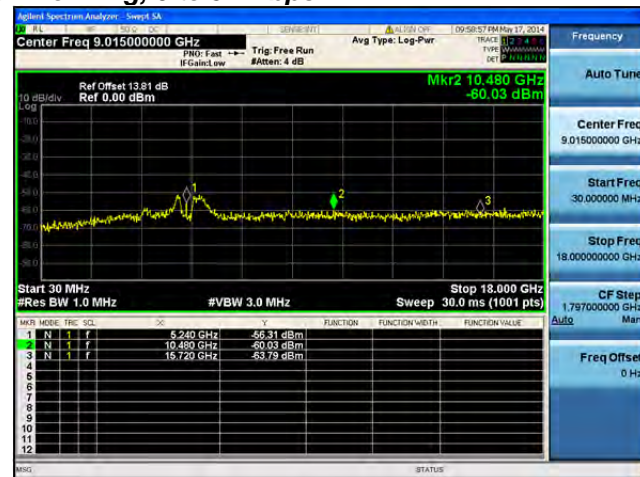
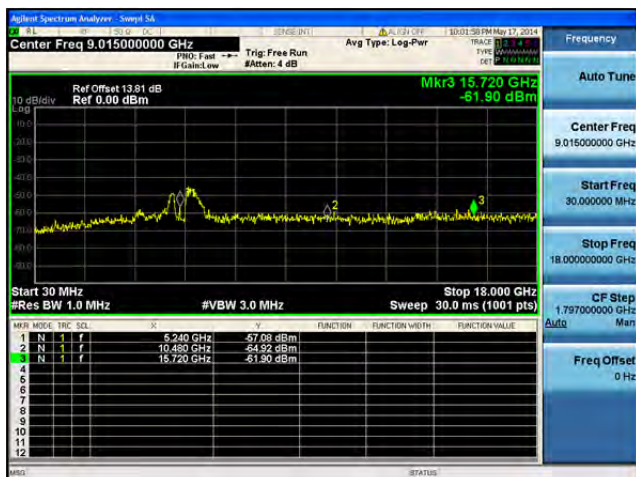
Man

Freq Offset 0 Hz

STATUS

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**Conducted Spurs Peak, 5240 MHz, Non HT/VHT20 Beam Forming, 6 to 54 Mbps****Antenna A****Antenna B**

**Conducted Spurs Peak, 5240 MHz, Non HT/VHT20 Beam Forming, 6 to 54 Mbps****Antenna A****Antenna B****Antenna C**

MARK	MODE	TRIG	SL	F	F	FUNCTION	FUNCTION WITH	FUNCTION VALUE
1	N	1	f		5.240 GHz	-59.07 dBm		
2	N	1	f		10.480 GHz	-52.02 dBm		
3	N	1	f		15.720 GHz	-61.45 dBm		

Agilent Spectrum Analyzer - Swept SA

Center Freq 9.015000000 GHz

Ref Offset 13.81 dB
Ref 0.00 dBm

Mkr3 15.720 GHz
-62.63 dBm

Start 30 MHz
#Res BW 1.0 MHz

#VBW 3.0 MHz

Sweep 30.0 ms (1001 pts)

Stop 18.000 GHz

MNR	MODE	FREQ	SCL	DB	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	5.210 GHz	-57.53 dBm			
2	N	1	f	10.480 GHz	-53.43 dBm			
3	N	1	f	15.720 GHz	-62.63 dBm			

Rohde & Schwarz Spectrum Analyzer Sweep 54

Center Freq 9.015000000 GHz Avg Type: Log-Pwr Ref Offset 13.81 dB Ref 0.00 dBm

Mkr3 15.720 GHz
-63.94 dBm

Start 30 MHz Stop 18.000 GHz
#Res BW 1.0 MHz #VBW 3.0 MHz Sweep 30.0 ms (1001 pts)

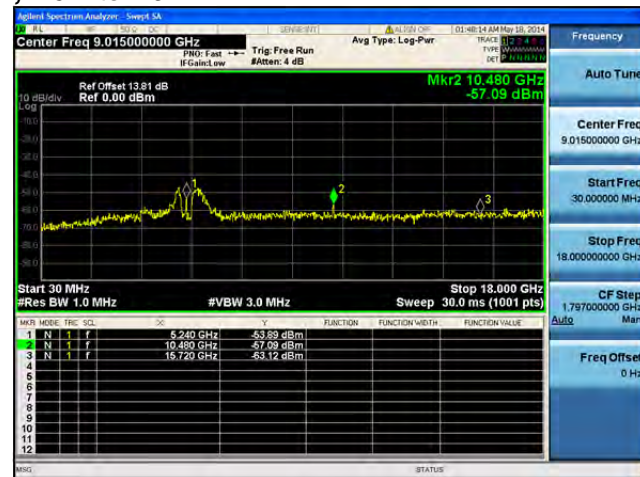
MNR	MODE	FREQ	SCL	UNIT	V	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f		6.240 GHz	-57.53 dBm		
2	N	1	f		10.480 GHz	-64.98 dBm		
3	N	1	f		15.720 GHz	-63.94 dBm		

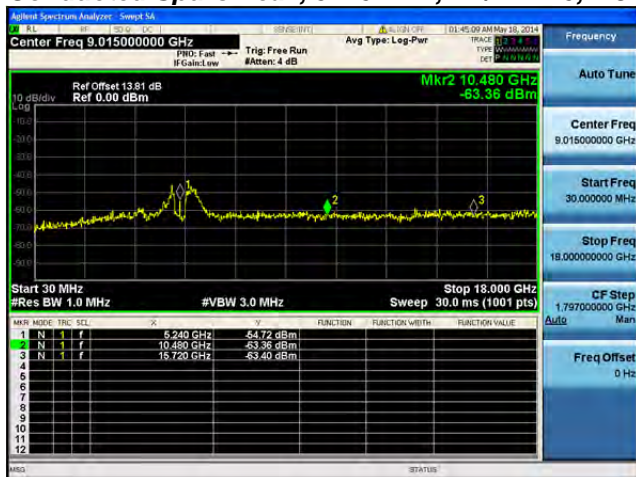
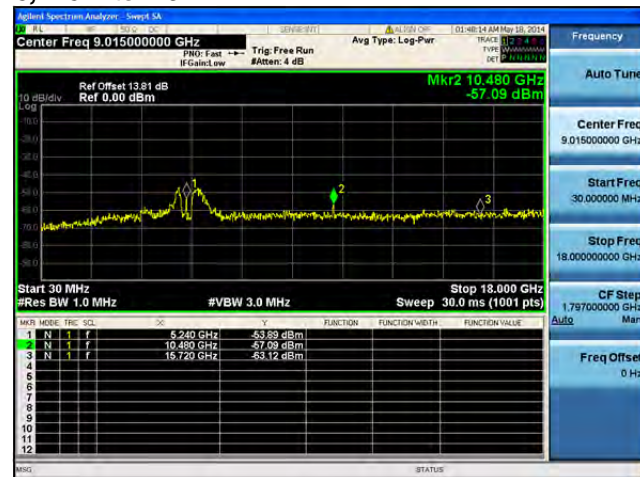
Frequency Auto Tune Center Freq 9.015000000 GHz Start Freq 30.000000 MHz Stop Freq 18.000000000 GHz CF Step 1.797000000 GHz Auto Men Freq Offset 0 Hz

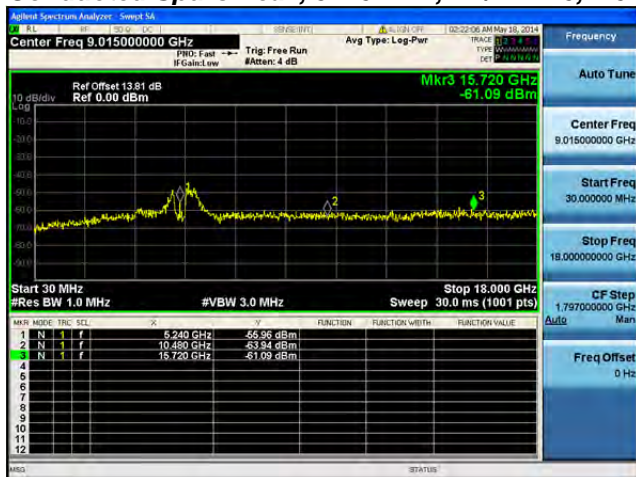
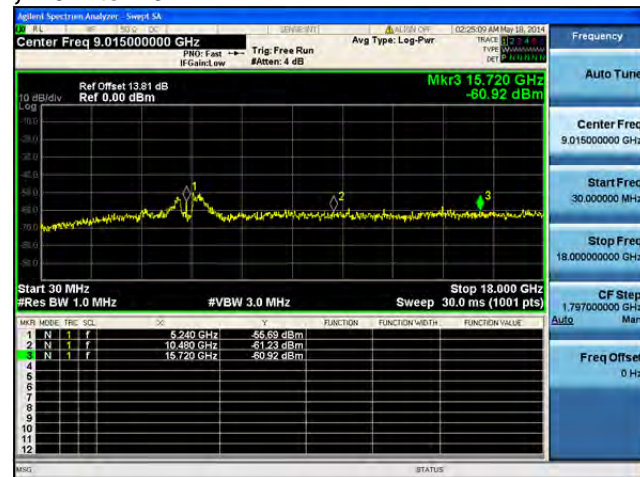
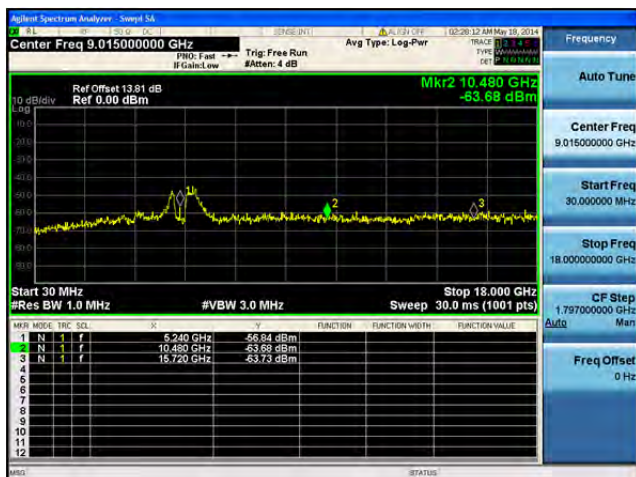
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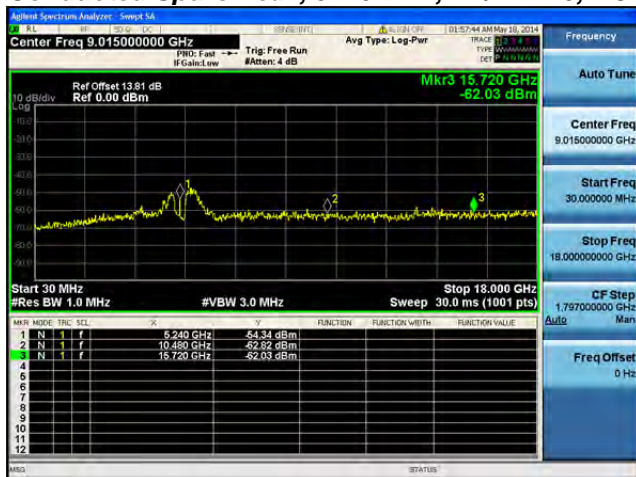
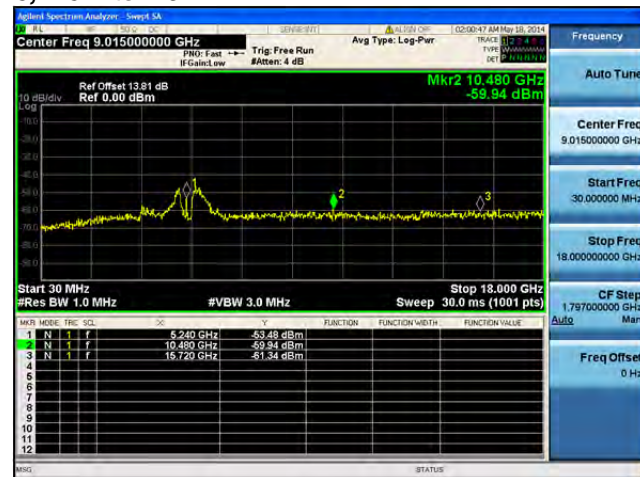
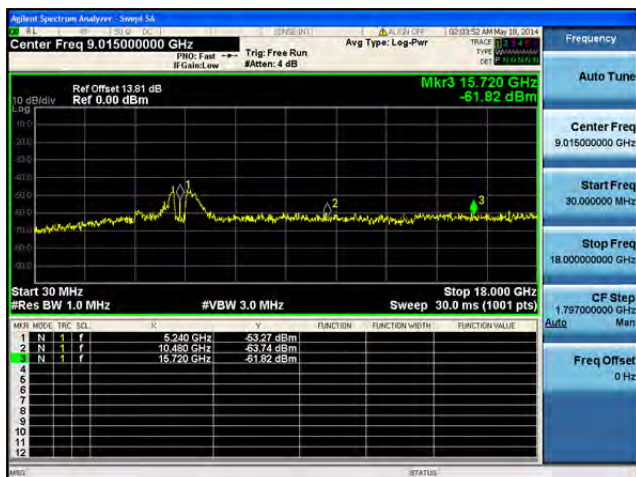
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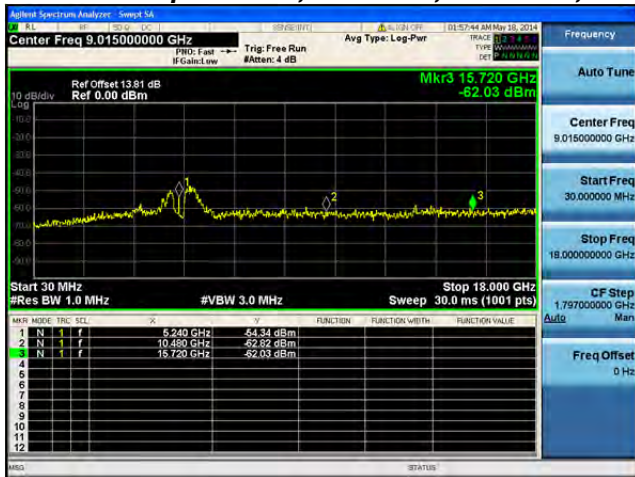
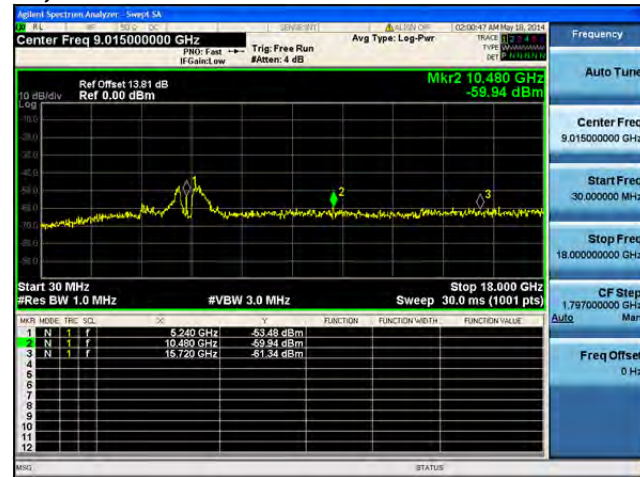
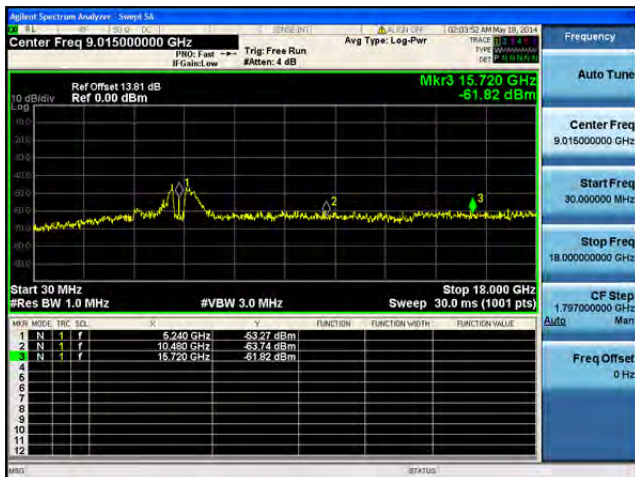
**Conducted Spurs Peak, 5240 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1****Antenna A**

**Conducted Spurs Peak, 5240 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B**

**Conducted Spurs Peak, 5240 MHz, HT/VHT20, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B**

**Conducted Spurs Peak, 5240 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C**

**Conducted Spurs Peak, 5240 MHz, HT/VHT20, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B****Antenna C**

**Conducted Spurs Peak, 5240 MHz, HT/VHT20, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C**

Ref Offset 13.81 dB
Ref 0.00 dBm

Mkr3 15.720 GHz
-63.33 dBm

Start 30 MHz
#Res BW 1.0 MHz

#VBW 3.0 MHz

Stop 18,000 GHz
Sweep 30.0 ms (1001 pts)

MARK	MODE	TRIG	SCL	F	FUNCTION	FUNCTION WITH	FUNCTION VALUE
1	N	1	f	5.240 GHz			-59.58 dBm
2	N	1	f	10.480 GHz			-64.39 dBm
3	N	1	f	15.720 GHz			-63.33 dBm
4							
5							
6							
7							
8							
9							
10							
11							
12							

Agilent Spectrum Analyzer - Sweep 1A

15.720 GHz

Center Freq 9.015000000 GHz

PBW: Fast → Trig: Free Run

W Colect: on #Att: 4 dB

Avg Type: Log-Pwr

Trace 1 1 2 3 4 5 6 7 8 9 10 11 12

Frequency

Auto Tune

Center Freq 9.015000000 GHz

Start Freq 30.000000 MHz

Stop Freq 18.000000000 GHz

CF Stop 1.797000000 GHz

Auto

Man

Freq Offset 0 Hz

10 dB/div

Ref Offset 13.81 dB

Ref 0.00 dBm

Mkr 3 15.720 GHz -63.49 dBm

Start 30 MHz

#Res BW 1.0 MHz

#VBW 3.0 MHz

Sweep 30.0 ms (1001 pts)

Stop 18.000 GHz

MR	MODE	FREQ	SQL	dB	V	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	1	5.210 GHz	-61.51 dBm			
2	N	1	1	10.480 GHz	-63.83 dBm			
3	N	1	1	15.720 GHz	-63.49 dBm			
4	N							
5	N							
6	N							
7	N							
8	N							
9	N							
10	N							
11	N							
12	N							

MSG

STATUS

Signal Spectrum Analyzer - View 5a

15.720 GHz 100.000000000 GHz

Center Freq 9.015000000 GHz Avg Type: Log-Pwr

Ref Offset 13.81 dB Ref 0.00 dBm

Mkr3 15.720 GHz -62.17 dBm

Start 30 MHz Stop 18.000 GHz

Res BW 1.0 MHz #VBW 3.0 MHz Sweep 30.0 ms (1001 pts)

Mkrs	Mode	Type	SQL	Unit	Value	Function	Function Width	Function Value
1	N	1	f		5.480 GHz	-69.63 dBm		
2	N	1	f		10.480 GHz	-62.67 dBm		
3	N	1	f		15.720 GHz	-62.17 dBm		

Agilent Spectrum Analyzer - Swept SA

Center Freq 9.015000000 GHz

Ref Offset 13.81 dB
Ref 0.00 dBm

Mkr3 15.720 GHz
-62.99 dBm

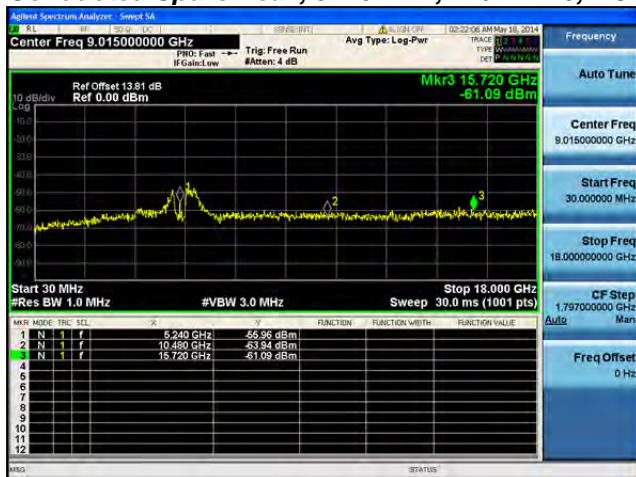
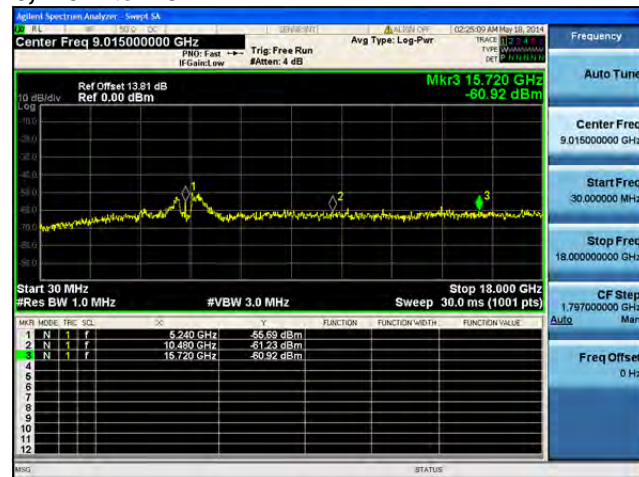
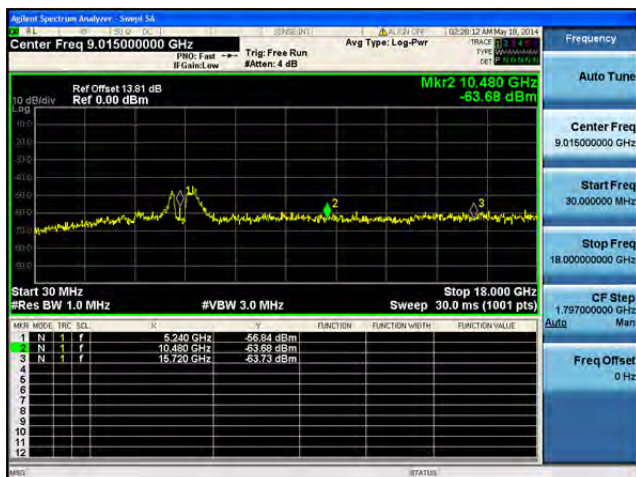
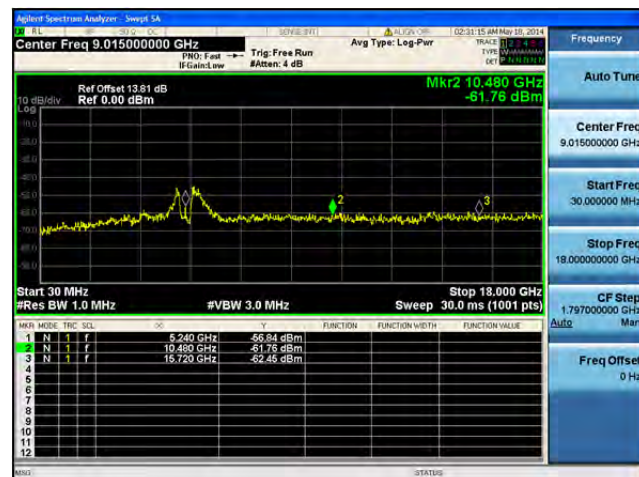
Start 30 MHz
#Res BW 1.0 MHz

#VBW 3.0 MHz

Sweep 30.0 ms (1001 pts)

MNR	MODE	TRF	SL	Q	F	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f		9.240 GHz			-53.54 dBm
2	N	1	f		10.480 GHz			-54.14 dBm
3	N	1	f		15.720 GHz			-62.99 dBm

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**Conducted Spurs Peak, 5240 MHz, HT/VHT20, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B****Antenna C****Antenna D**

[illegible][illegible]

Ref Offset 13.81 dB
Ref 0.00 dBm

Center Freq 9.015000000 GHz
PRIO: Fast
#Gain: low

Trig: Free Run
#Atten: 4 dB

Avg Type: Log-Pwr

02:35:04 AM May 18, 2014
TRACE 0
TYPE Waveform
SET 10 MHz

Frequency

Auto Tune

Center Freq
9.015000000 GHz

Start Freq
30.000000 MHz

Stop Freq
18.000000000 GHz

CF Stop
1.797000000 GHz

Auto

Freq Offset
0 Hz

Start 30 MHz
#Res BW 1.0 MHz

#VBW 3.0 MHz

Stop 18.000 GHz
Sweep 30.0 ms (1001 pts)

Mkr3 15.720 GHz
-82.82 dBm

MNR	MODE	TRC	SEL	UNIT	F	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f		5.240 GHz	-56.81 dBm		
2	N	1	f		10.480 GHz	-83.91 dBm		
3	N	1	f		15.720 GHz	-82.82 dBm		
4								
5								
6								
7								
8								
9								
10								
11								
12								

MSO

STATUS

Agilent Spectrum Analyzer - Sweep SA

Center Freq 9.015000000 GHz
 PWD: Fast → Trig: Free Run
 B Gain Low #Atten: 4 dB

Avg Type: Log-Pwr
 TRACE 1: ON, Type: OFF, Det: RMS, Video BW: 10 Hz

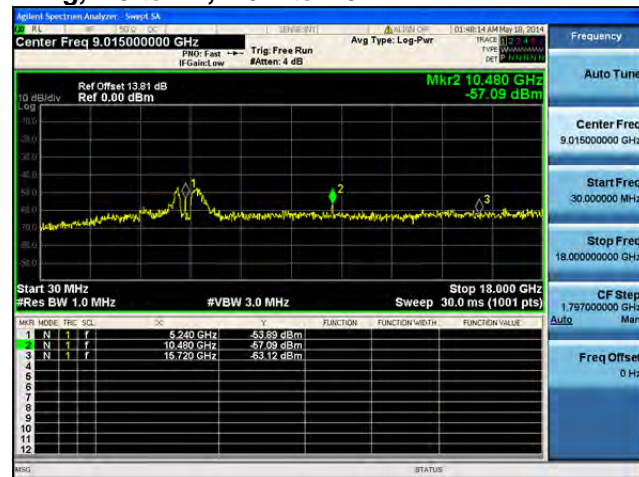
Ref Offset 13.81 dB
 Ref 0.00 dBm

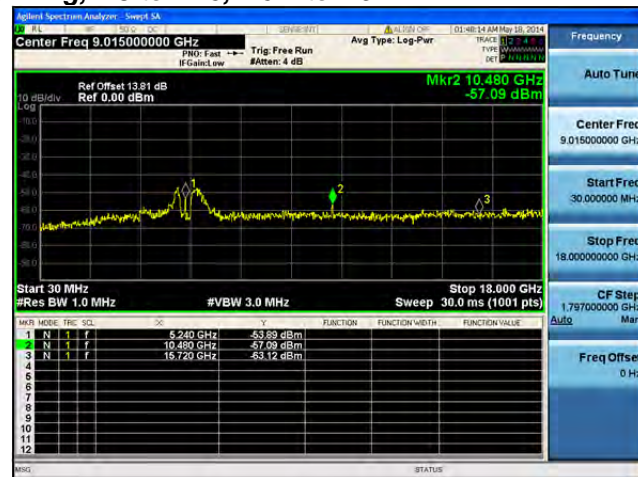
Mkr3 15.720 GHz
 -81.17 dBm

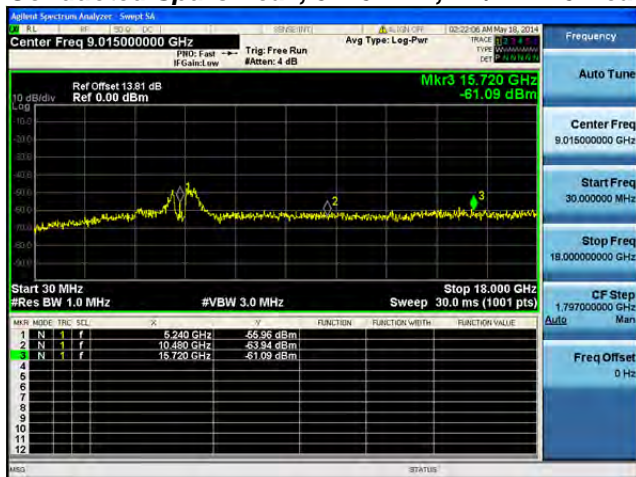
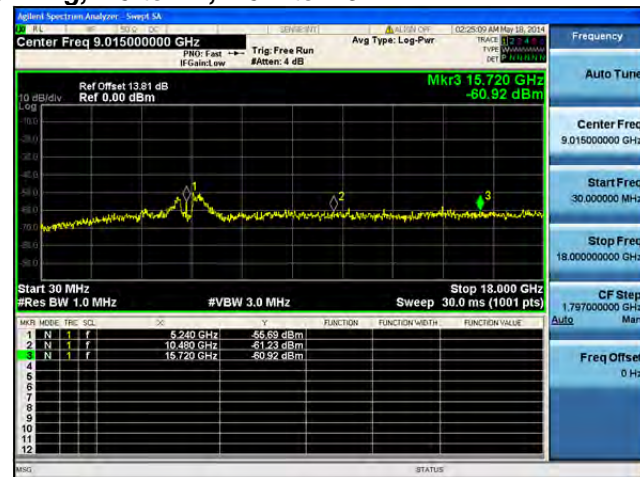
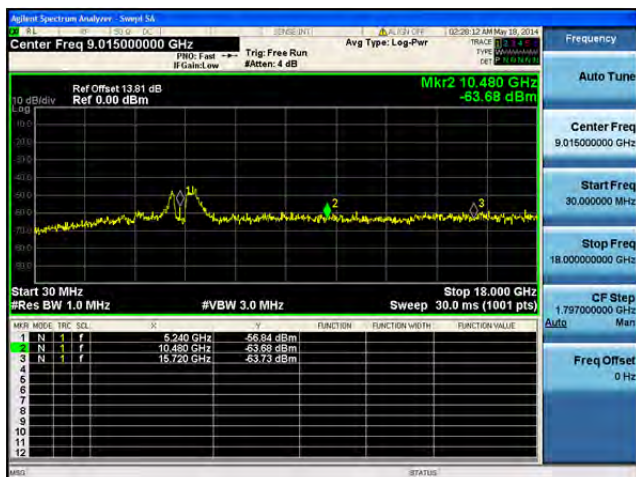
MKR MODE	TRC SCL	FREQ	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1 N	f	5.240 GHz	-53.70 dBm		
2 N	f	10.480 GHz	-52.80 dBm		
3 N	f	15.720 GHz	-81.17 dBm		
4					
5					
6					
7					
8					
9					
10					
11					
12					

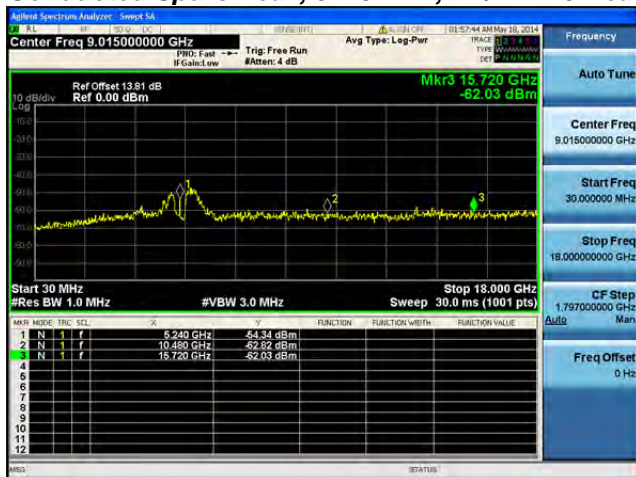
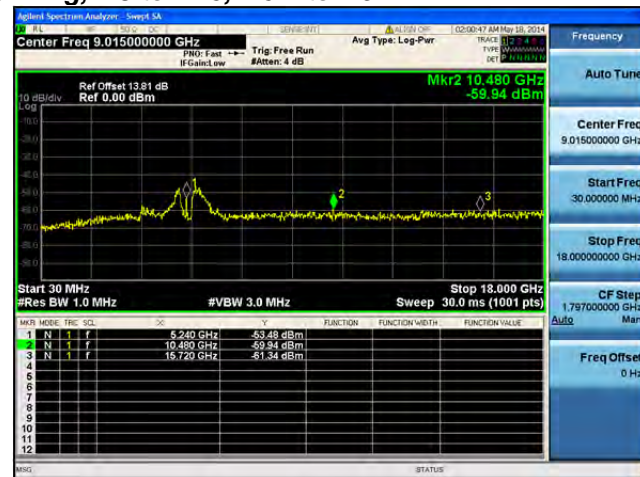
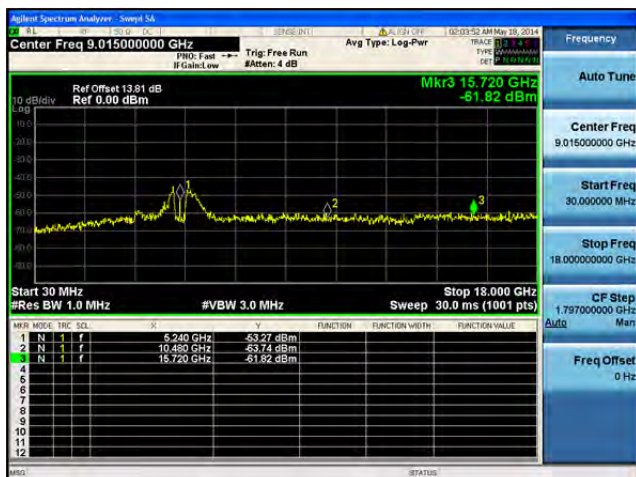
Start 30 MHz
 #Res BW 1.0 MHz
 #VBW 3.0 MHz
 Stop 18.000 GHz
 Sweep 30.0 ms (1001 pts)

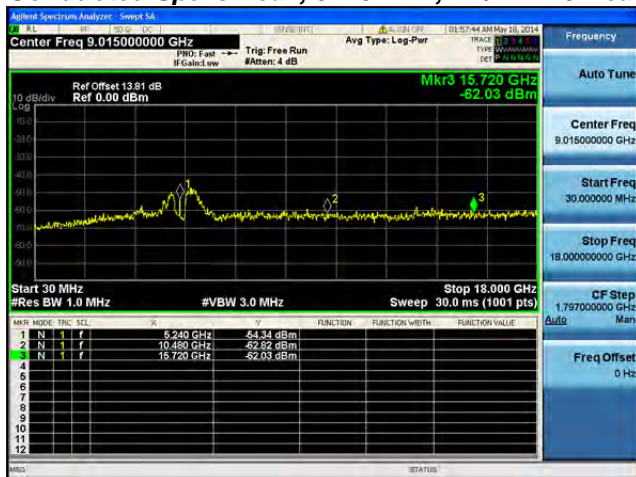
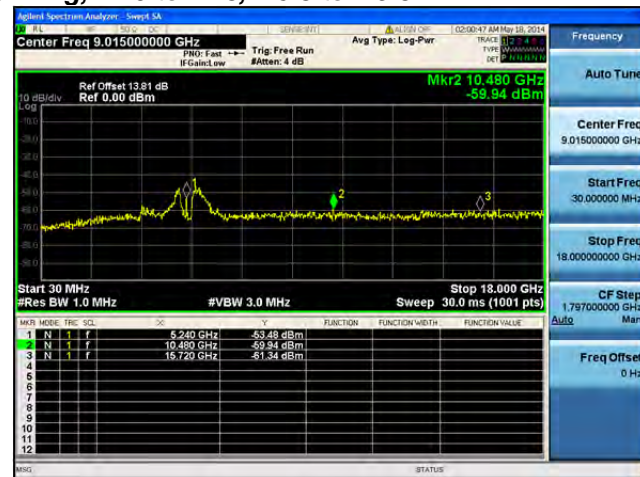
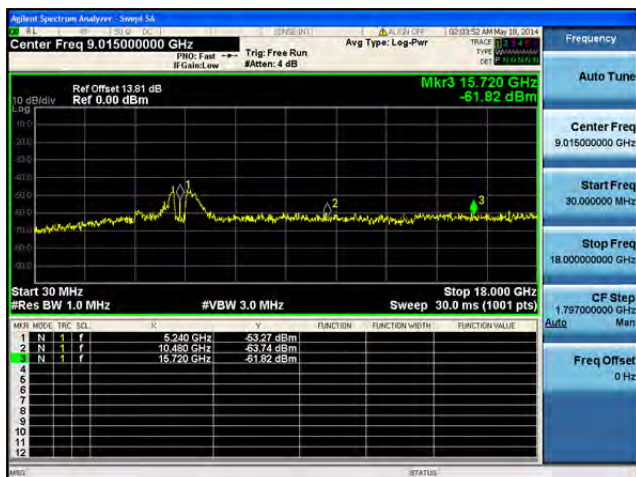
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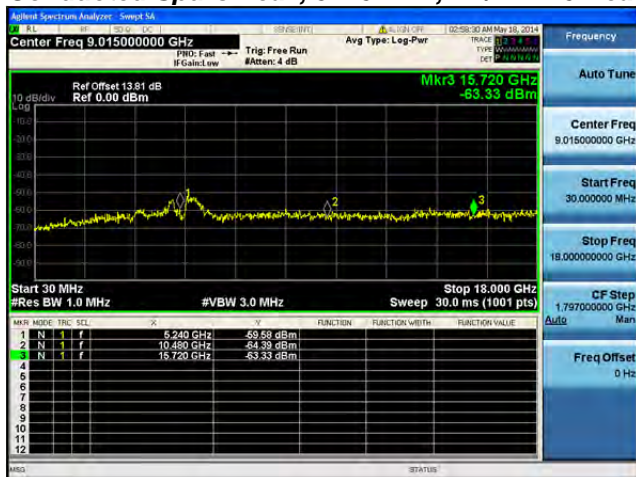
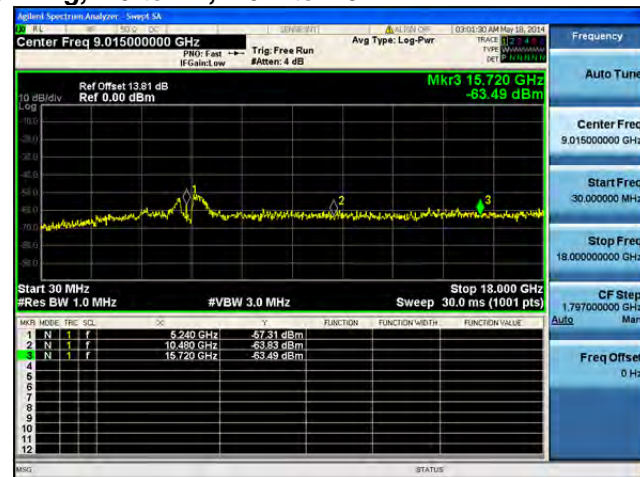
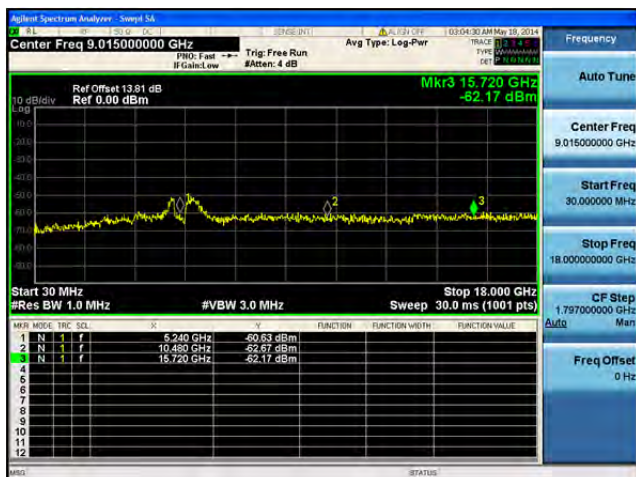
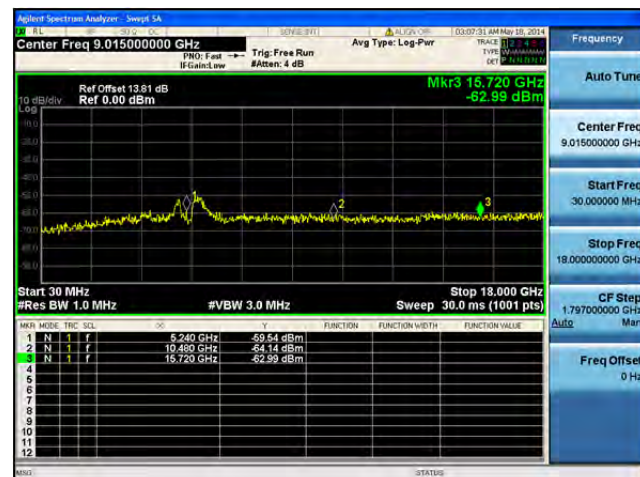
**Conducted Spurs Peak, 5240 MHz, HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B**

**Conducted Spurs Peak, 5240 MHz, HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B**

**Conducted Spurs Peak, 5240 MHz, HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C**

**Conducted Spurs Peak, 5240 MHz, HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2****Antenna A****Antenna B****Antenna C**

**Conducted Spurs Peak, 5240 MHz, HT/VHT20 Beam Forming, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C**

**Conducted Spurs Peak, 5240 MHz, HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C****Antenna D**

Ref Offset 13.81 dB
Ref 0.00 dBm

Mkr3 15.720 GHz
-61.09 dBm

Start 30 MHz
#Res BW 1.0 MHz

#VBW 3.0 MHz

Stop 18.000 GHz
Sweep 30.0 ms (1001 pts)

MNR	MODE	FREQ	FLC	VAL	FUNCTION	FUNCTION WITH	FUNCTION VALUE
1	N	6.240	Hz	-55.96	dBm		
2	N	10.480	GHz	-53.84	dBm		
3	N	15.720	GHz	-61.09	dBm		

[illegible]

Agilent Spectrum Analyzer - Span 54

Center Freq 9.015000000 GHz

Ref Offset 13.81 dB
Ref 0.00 dBm

Mkr2 10.480 GHz
-53.68 dBm

Start 30 MHz
#Res BW 1.0 MHz

#VBW 3.0 MHz

Stop 18.000 GHz
Sweep 30.0 ms (1001 pts)

MNR	MODE	FREQ	SCN	VAL	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	5.240 GHz	-55.84 dBm		
2	N	1	f	10.480 GHz	-53.68 dBm		
3	N	1	f	15.720 GHz	-53.73 dBm		

Agilent Spectrum Analyzer - Swept SA

10:21:15 AM May 18, 2014

Center Freq 9.015000000 GHz

Auto Tune

PRO: Fast → Trig: Free Run #Atten: 4 dB Avg Type: Log-Pwr

Trace 1: F 4.0 Type: Spectrum Ref: MIN MAX

Ref Offset 13.81 dB Ref 0.00 dBm

Mkr2 10.480 GHz -61.76 dBm

Start 30 MHz Stop 18.000 GHz
#Res BW 1.0 MHz #VBW 3.0 MHz Sweep 30.0 ms (1001 pts)

MNR	MODE	TRC	SL	F	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	9.240 GHz			-56.84 dBm
2	N	1	f	10.480 GHz			-61.76 dBm
3	N	1	f	15.720 GHz			-62.45 dBm
4							
5							
6							
7							
8							
9							
10							
11							
12							

Frequency

Auto Tune

Center Freq 9.015000000 GHz

Start Freq 30.000000 MHz

Stop Freq 18.000000000 GHz

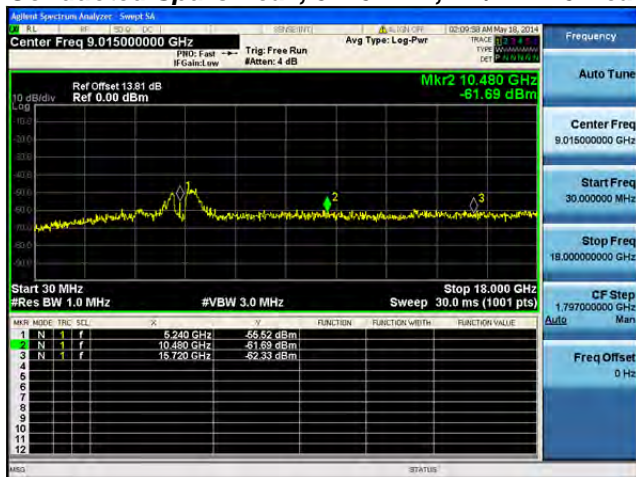
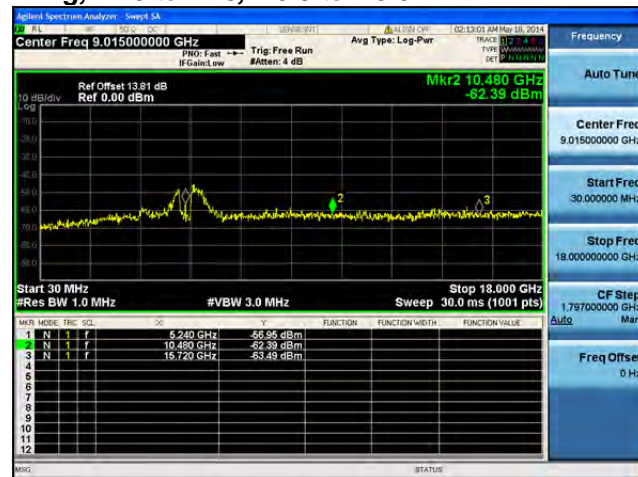
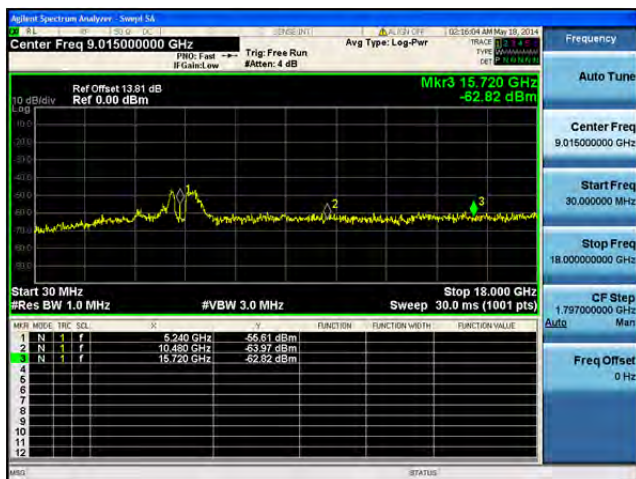
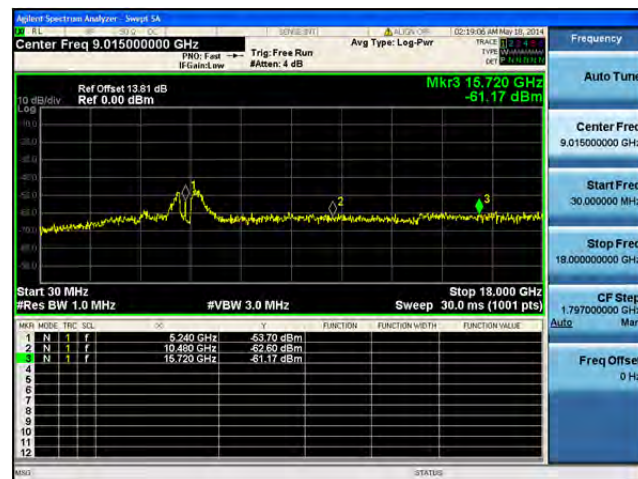
CF Stop 1.797000000 GHz

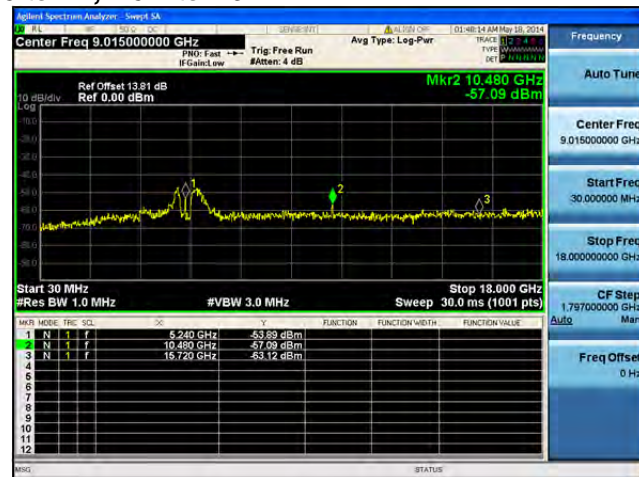
Autz Man

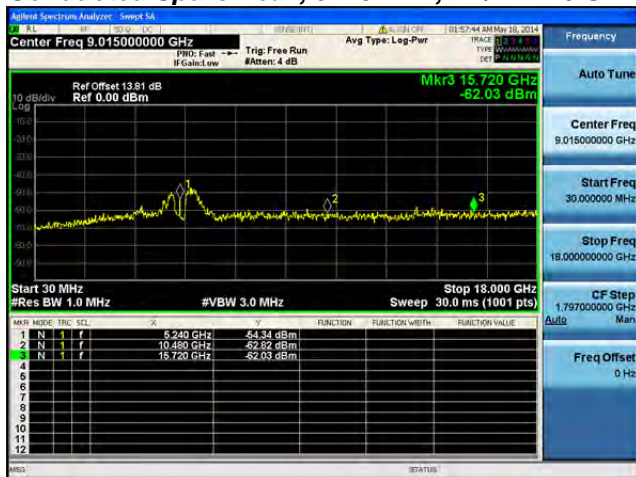
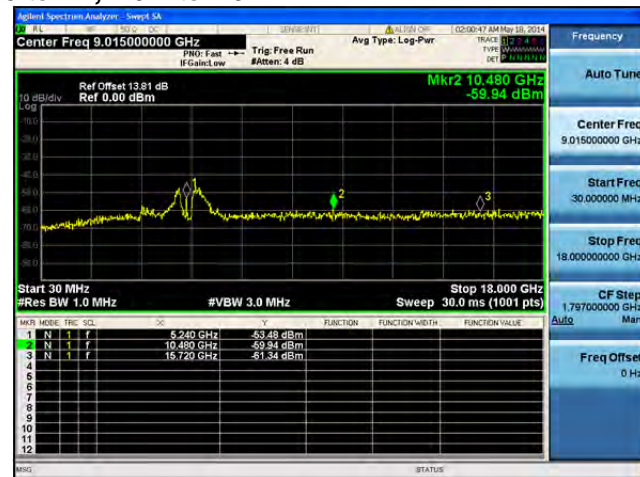
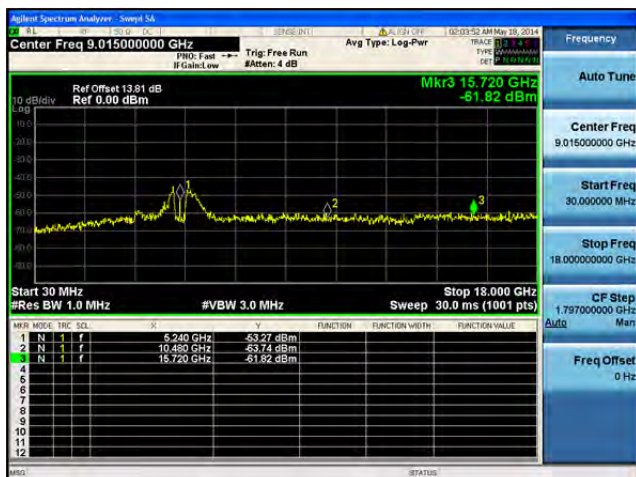
Freq Offset 0 Hz

STATUS

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**Conducted Spurs Peak, 5240 MHz, HT/VHT20 Beam Forming, M16 to M23, M0.3 to M9.3****Antenna A****Antenna B****Antenna C****Antenna D**

**Conducted Spurs Peak, 5240 MHz, HT/VHT20 STBC, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B**

**Conducted Spurs Peak, 5240 MHz, HT/VHT20 STBC, M0 to M7, M0.1 to M9.1****Antenna A****Antenna B****Antenna C**

Ref Offset 13.81 dB
Ref 0.00 dBm

Mkr3 15.720 GHz
-61.09 dBm

Start 30 MHz
#Res BW 1.0 MHz

#VBW 3.0 MHz

Stop 18.000 GHz
Sweep 30.0 ms (1001 pts)

MARK	MODE	FREQ	AMPL	FUNCTION	FUNCTION WITH	FUNCTION VALUE
1	N	6.240 GHz	-55.96 dBm			
2	N	10.480 GHz	-53.84 dBm			
3	N	15.720 GHz	-61.09 dBm			

Agilent Spectrum Analyzer - Sweep 54

Center Freq 9.015000000 GHz

Ref Offset 13.81 dB
Ref 0.00 dBm

Mkr3 15.720 GHz
-60.92 dBm

Start 30 MHz
#Res BW 1.0 MHz

Stop 18.000 GHz
Sweep 30.0 ms (1001 pts)

PRB: Fast
IF Filter: Low

Trig: Free Run
#Att: 4 dB

Avg Type: Log-Pwr

TRACE 1 [2] 4.0
TYPE: dBm (dBm)
DET: P

Frequency
Auto Tune

Center Freq
9.015000000 GHz

Start Freq
30.000000 MHz

Stop Freq
18.000000000 GHz

CF Step
1.797000000 GHz

Freq Offset
0 Hz

MKR	MODE	FREQ	SQL	dB	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	5.240 GHz	-56.92 dBm				
2	N	10.480 GHz	-51.23 dBm				
3	N	15.720 GHz	-60.92 dBm				

Agilent Spectrum Analyzer - Span 54

Center Freq 9.015000000 GHz

Ref Offset 13.81 dB
Ref 0.00 dBm

Mkr2 10.480 GHz
-53.68 dBm

Start 30 MHz
#Res BW 1.0 MHz

#VBW 3.0 MHz

Stop 18.000 GHz
Sweep 30.0 ms (1001 pts)

MNR	MODE	FREQ	SCN	VAL	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	5.240 GHz	-55.84 dBm		
2	N	1	f	10.480 GHz	-53.68 dBm		
3	N	1	f	15.720 GHz	-53.73 dBm		

Agilent Spectrum Analyzer - Sleep 5A

02:31:15 AM May 18, 2014

Center Freq 9.015000000 GHz

Ref Offset 13.81 dB

Ref 0.00 dBm

Mkr2 10.480 GHz

-61.76 dBm

Start 30 MHz

#Res BW 1.0 MHz

#VBW 3.0 MHz

Sweep 30.0 ms (1001 pts)

MNR	MODE	TRF	SL	dB	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f		9.240 GHz	-53.34 dBm		
2	N	1	f		10.480 GHz	-61.76 dBm		
3	N	1	f		15.720 GHz	-62.45 dBm		

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Conducted Bandedge

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

Connect the antenna port(s) to the spectrum analyzer input. Place the radio in continuous transmit mode. Be sure to enter all losses between the transmitter output and the spectrum analyzer.

Reference Level:	10 dBm
Attenuation:	4 dB
Sweep Time:	Coupled
Resolution Bandwidth:	1MHz
Video Bandwidth:	100 Hz for average
Detector:	Peak

Save 2 plots: 1) Average Plot (Vertical and Horizontal), Limit= -41.25 dBm eirp (54dBuV @3m)
2) Peak plot (Vertical and Horizontal), Limit = -27 dBm eirp (68dBuV @3m)

Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands.

The "measure-and-sum technique" is used for measuring in-band transmit power of a device. In the measure-and-sum approach, the conducted emission level is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically to determine the total emission level from the device. Summing is performed in linear power units.

This report represents the worst case data for all supported operating modes and antennas.



Conducted Bandedge – Average

Frequency (MHz)	Mode	Tx Paths	Correlated Antenna Gain (dBi)	Tx 1 Bandedge Level (dBm)	Tx 2 Bandedge Level (dBm)	Tx 3 Bandedge Level (dBm)	Tx 4 Bandedge Level (dBm)	Total Tx Bandedge Level (dBm)	Limit (dBm)	Margin (dB)
5180	Non HT/VHT20, 6 to 54 Mbps	1	4	-46.5				-42.5	-41.25	1.3
	Non HT/VHT20, 6 to 54 Mbps	2	4	-51.2	-49.0			-43.0	-41.25	1.7
	Non HT/VHT20, 6 to 54 Mbps	3	4	-52.7	-53.2	-51.2		-43.5	-41.25	2.3
	Non HT/VHT20, 6 to 54 Mbps	4	4	-56.5	-55.8	-56.5	-57.7	-46.6	-41.25	5.3
	Non HT/VHT20 Beam Forming, 6 to 54 Mbps	2	7	-52.7	-53.2			-42.9	-41.25	1.7
	Non HT/VHT20 Beam Forming, 6 to 54 Mbps	3	9	-57.2	-58.0	-56.9		-43.8	-41.25	2.5
	Non HT/VHT20 Beam Forming, 6 to 54 Mbps	4	10	-57.5	-58.1	-58.3	-57.0	-41.7	-41.25	0.4
	HT/VHT20, M0 to M7, M0.1 to M9.1	1	4	-47.0				-43.0	-41.25	1.8
	HT/VHT20, M0 to M7, M0.1 to M9.1	2	4	-50.0	-48.4			-42.1	-41.25	0.9
	HT/VHT20, M8 to M15, M0.2 to M9.2	2	4	-50.0	-48.4			-42.1	-41.25	0.9
	HT/VHT20, M0 to M7, M0.1 to M9.1	3	4	-52.1	-52.5	-50.5		-42.8	-41.25	1.6
	HT/VHT20, M8 to M15, M0.2 to M9.2	3	4	-52.1	-52.5	-50.5		-42.8	-41.25	1.6
	HT/VHT20, M16 to M23, M0.3 to M9.3	3	4	-52.1	-52.5	-50.5		-42.8	-41.25	1.6
	HT/VHT20, M0 to M7, M0.1 to M9.1	4	4	-57.6	-57.3	-55.8	-54.3	-46.0	-41.25	4.8
	HT/VHT20, M8 to M15, M0.2 to M9.2	4	4	-54.0	-54.0	-52.9	-52.0	-43.1	-41.25	1.9
	HT/VHT20, M16 to M23, M0.3 to M9.3	4	4	-54.0	-54.0	-52.9	-52.0	-43.1	-41.25	1.9
	HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1	2	7	-52.1	-52.5			-42.3	-41.25	1.0
	HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2	2	4	-50.0	-48.4			-42.1	-41.25	0.9
	HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1	3	9	-57.6	-57.3	-55.8		-43.3	-41.25	2.0
	HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2	3	6	-54.0	-54.0	-52.9		-43.0	-41.25	1.8
	HT/VHT20 Beam Forming, M16 to M23, M0.3 to M9.3	3	4	-52.1	-52.5	-50.5		-42.8	-41.25	1.6
	HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1	4	10	-58.9	-58.3	-56.7	-56.8	-41.6	-41.25	0.3
	HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2	4	7	-57.6	-57.3	-55.8	-54.3	-43.0	-41.25	1.8
	HT/VHT20 Beam Forming, M16 to M23, M0.3 to M9.3	4	5	-54.0	-54.0	-52.9	-52.0	-41.9	-41.25	0.7
	HT/VHT20 STBC, M0 to M7, M0.1 to M9.1	2	4	-50.0	-48.4			-42.1	-41.25	0.9
	HT/VHT20 STBC, M0 to M7, M0.1 to M9.1	3	4	-52.1	-52.5	-50.5		-42.8	-41.25	1.6
	HT/VHT20 STBC, M0 to M7, M0.1 to M9.1	4	4	-54.0	-54.0	-52.9	-52.0	-43.1	-41.25	1.9
5190	Non HT/VHT40, 6 to 54 Mbps	1	4	-45.7				-41.7	-41.25	0.5
	Non HT/VHT40, 6 to 54 Mbps	2	4	-49.1	-49.6			-42.3	-41.25	1.1
	Non HT/VHT40, 6 to 54 Mbps	3	4	-50.6	-51.4	-49.0		-41.4	-41.25	0.2
	Non HT/VHT40, 6 to 54 Mbps	4	4	-53.6	-52.9	-51.3	-50.2	-41.8	-41.25	0.5



	HT/VHT40, M0 to M7, M0.1 to M9.1	1	4	-45.7				-41.7	-41.25	0.5
	HT/VHT40, M0 to M7, M0.1 to M9.1	2	4	-48.4	-48.2			-41.3	-41.25	0.0
	HT/VHT40, M8 to M15, M0.2 to M9.2	2	4	-48.4	-48.2			-41.3	-41.25	0.0
	HT/VHT40, M0 to M7, M0.1 to M9.1	3	4	-51.9	-51.2	-48.9		-41.7	-41.25	0.4
	HT/VHT40, M8 to M15, M0.2 to M9.2	3	4	-51.9	-51.2	-48.9		-41.7	-41.25	0.4
	HT/VHT40, M16 to M23, M0.3 to M9.3	3	4	-51.9	-51.2	-48.9		-41.7	-41.25	0.4
	HT/VHT40, M0 to M7, M0.1 to M9.1	4	4	-53.0	-53.1	-51.0	-50.8	-41.8	-41.25	0.6
	HT/VHT40, M8 to M15, M0.2 to M9.2	4	4	-53.0	-53.1	-51.0	-50.8	-41.8	-41.25	0.6
	HT/VHT40, M16 to M23, M0.3 to M9.3	4	4	-53.0	-53.1	-51.0	-50.8	-41.8	-41.25	0.6
	HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1	2	7	-51.9	-51.2			-41.5	-41.25	0.3
	HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2	2	4	-48.4	-48.2			-41.3	-41.25	0.0
	HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1	3	9	-56.5	-55.5	-54.0		-41.6	-41.25	0.4
	HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2	3	6	-53.0	-53.1	-51.0		-41.7	-41.25	0.4
	HT/VHT40 Beam Forming, M16 to M23, M0.3 to M9.3	3	4	-51.9	-51.2	-48.9		-41.7	-41.25	0.4
	HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1	4	10	-58.6	-58.7	-57.6	-56.7	-41.8	-41.25	0.6
	HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2	4	7	-56.5	-55.5	-54.0	-53.5	-41.7	-41.25	0.4
	HT/VHT40 Beam Forming, M16 to M23, M0.3 to M9.3	4	5	-54.5	-53.8	-52.4	-51.8	-41.8	-41.25	0.5
	HT/VHT40 STBC, M0 to M7, M0.1 to M9.1	2	4	-48.4	-48.2			-41.3	-41.25	0.0
	HT/VHT40 STBC, M0 to M7, M0.1 to M9.1	3	4	-51.9	-51.2	-48.9		-41.7	-41.25	0.4
	HT/VHT40 STBC, M0 to M7, M0.1 to M9.1	4	4	-53.0	-53.1	-51.0	-50.8	-41.8	-41.25	0.6
5210	Non HT/VHT80, 6 to 54 Mbps	1	4	-46.1				-42.1	-41.25	0.9
	Non HT/VHT80, 6 to 54 Mbps	2	4	-48.8	-49.3			-42.0	-41.25	0.8
	Non HT/VHT80, 6 to 54 Mbps	3	4	-52.1	-50.5	-50.5		-42.2	-41.25	0.9
	Non HT/VHT80, 6 to 54 Mbps	4	4	-54.0	-52.6	-52.2	-53.0	-42.9	-41.25	1.6
	HT/VHT80, M0 to M7, M0.1 to M9.1	1	4	-46.4				-42.4	-41.25	1.2
	HT/VHT80, M0 to M7, M0.1 to M9.1	2	4	-49.3	-47.7			-41.4	-41.25	0.2
	HT/VHT80, M8 to M15, M0.2 to M9.2	2	4	-49.3	-47.7			-41.4	-41.25	0.2
	HT/VHT80, M0 to M7, M0.1 to M9.1	3	4	-51.9	-51.2	-49.6		-42.0	-41.25	0.8
	HT/VHT80, M8 to M15, M0.2 to M9.2	3	4	-51.9	-51.2	-49.6		-42.0	-41.25	0.8
	HT/VHT80, M16 to M23, M0.3 to M9.3	3	4	-51.9	-51.2	-49.6		-42.0	-41.25	0.8
	HT/VHT80, M0 to M7, M0.1 to M9.1	4	4	-52.9	-52.4	-50.6	-50.5	-41.5	-41.25	0.2
	HT/VHT80, M8 to M15, M0.2 to M9.2	4	4	-52.9	-52.4	-50.6	-50.5	-41.5	-41.25	0.2
	HT/VHT80, M16 to M23, M0.3 to M9.3	4	4	-52.9	-52.4	-50.6	-50.5	-41.5	-41.25	0.2
	HT/VHT80 Beam Forming, M0 to M7, M0.1 to M9.1	2	7	-51.9	-51.2			-41.5	-41.25	0.3
	HT/VHT80 Beam Forming, M8 to M15, M0.2 to M9.2	2	4	-49.3	-47.7			-41.4	-41.25	0.2
	HT/VHT80 Beam Forming, M0 to M7, M0.1 to M9.1	3	9	-56.4	-55.0	-54.3		-41.6	-41.25	0.3
	HT/VHT80 Beam Forming, M8 to M15, M0.2 to M9.2	3	6	-52.9	-52.4	-50.6		-41.3	-41.25	0.0
	HT/VHT80 Beam Forming, M16 to M23, M0.3 to M9.3	3	4	-51.9	-51.2	-49.6		-42.0	-41.25	0.8
	HT/VHT80 Beam Forming, M0 to M7, M0.1 to M9.1	4	10	-58.9	-58.7	-57.4	-58.2	-42.2	-41.25	1.0
	HT/VHT80 Beam Forming, M8 to M15, M0.2 to M9.2	4	7	-56.4	-55.0	-54.3	-52.9	-41.4	-41.25	0.2