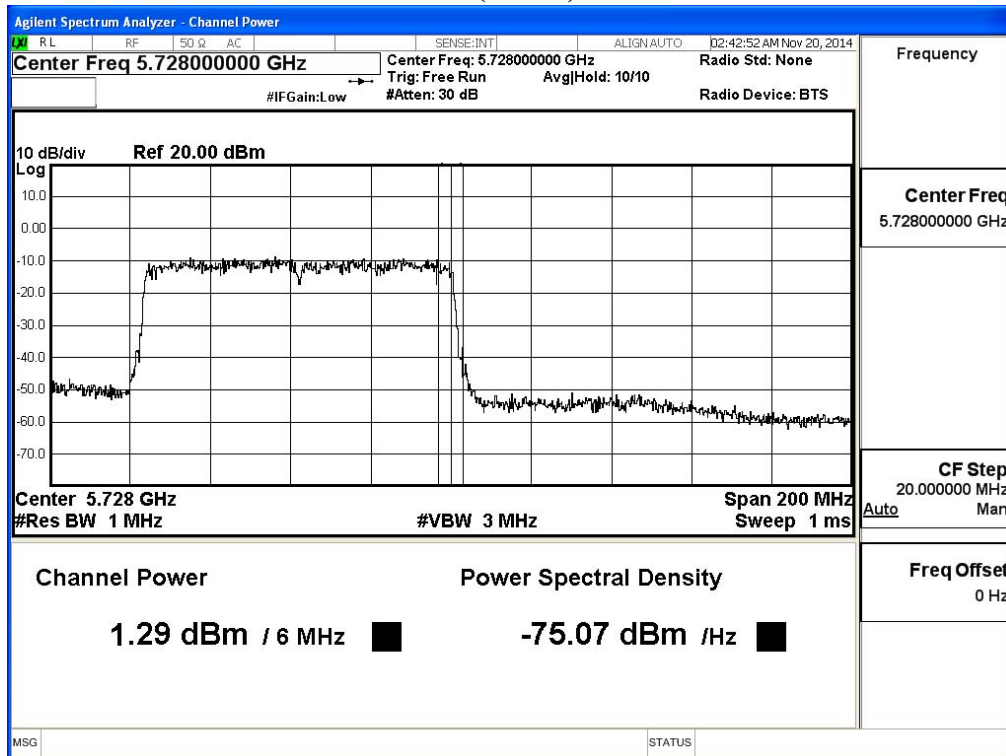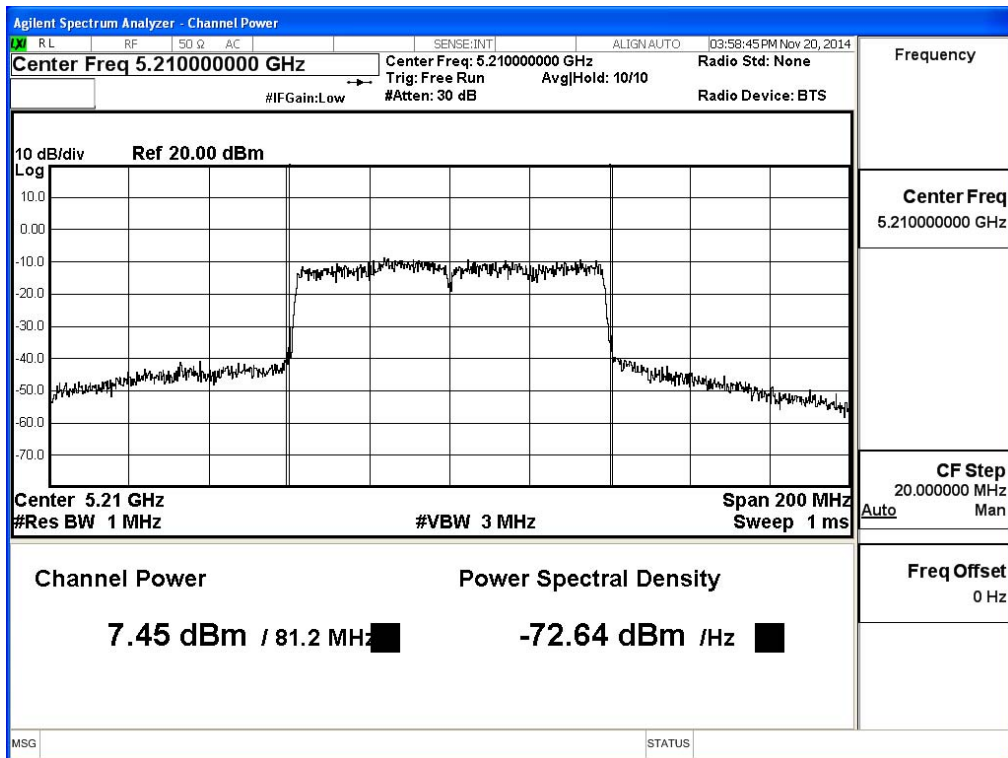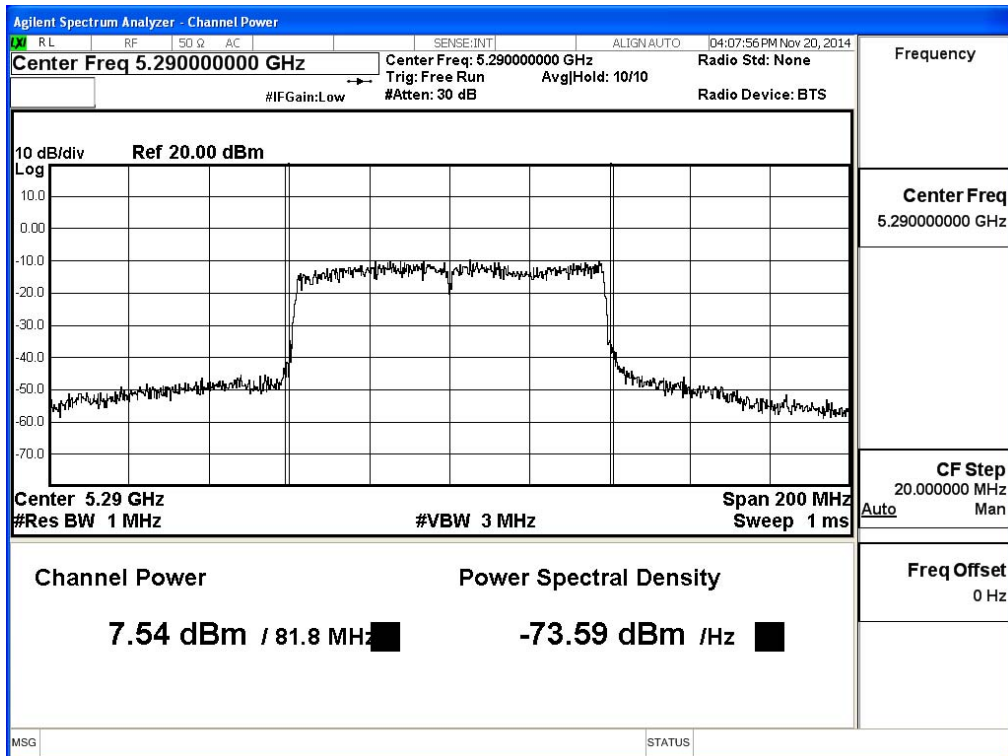**QuieTek**

Maximum conducted output power:

Channel 138 (Band4) – Chain A

Maximum conducted output power:
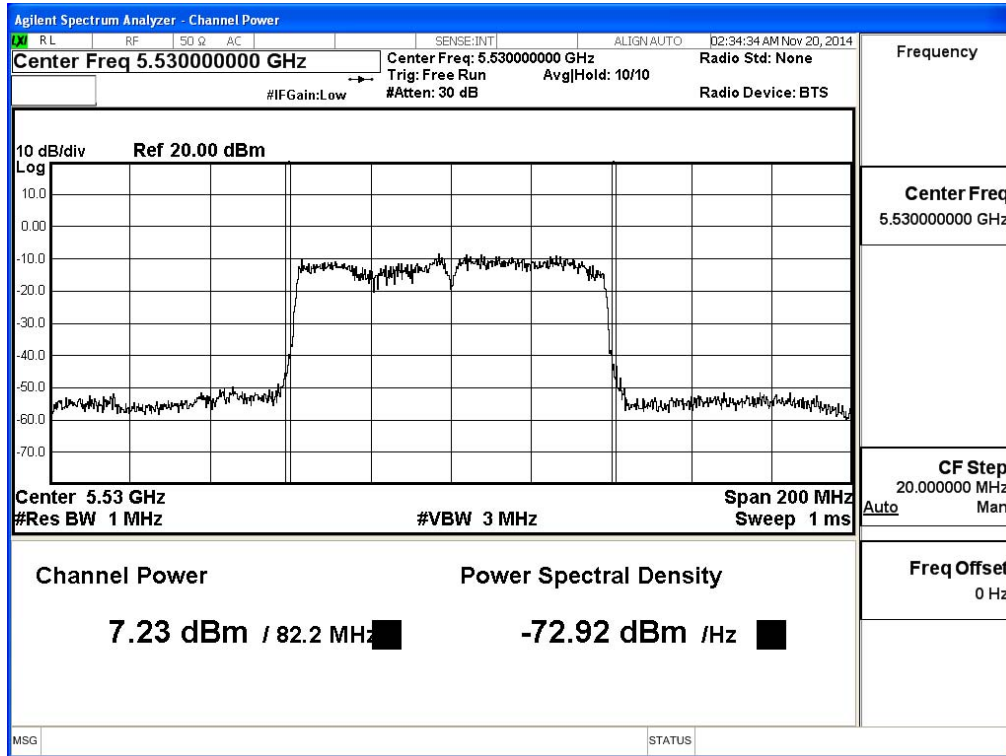
Channel 42 – Chain B

Maximum conducted output power:
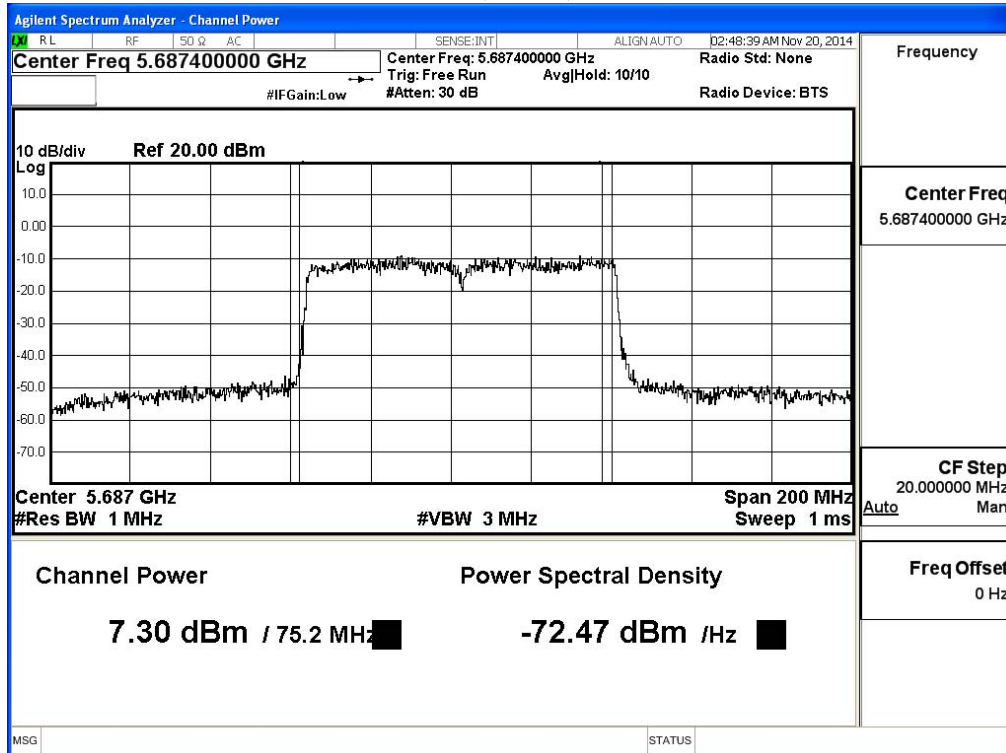
Channel 58 – Chain B

Maximum conducted output power:
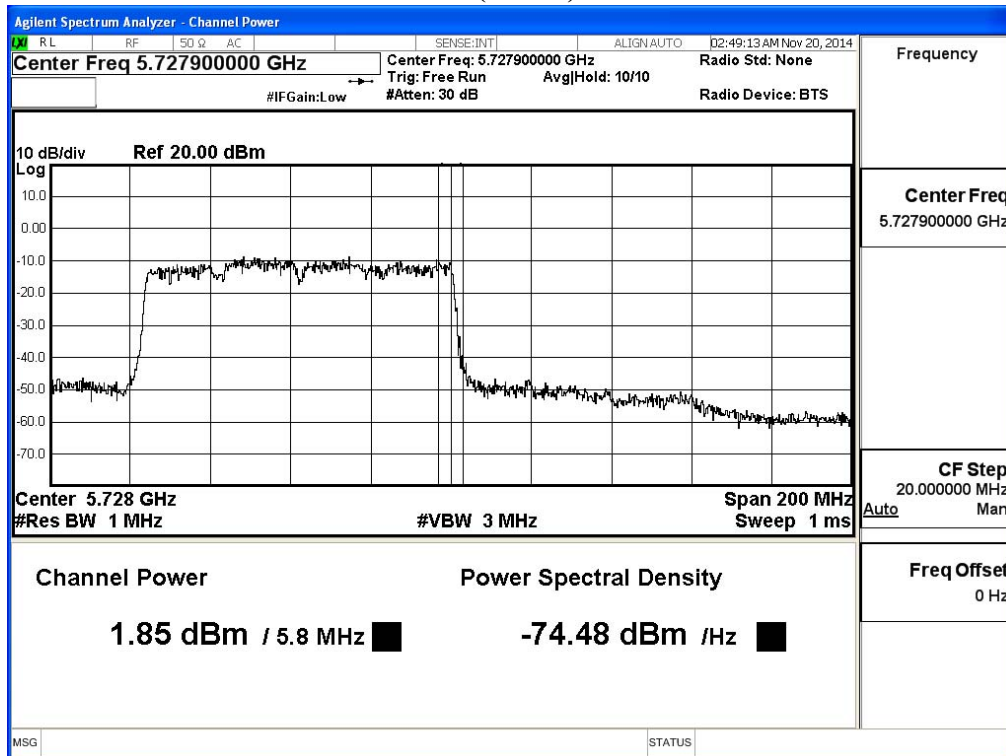
Channel 106 – Chain B

Maximum conducted output power:

Channel 138 (Band3) – Chain B

Maximum conducted output power:

Channel 138 (Band4) – Chain B

4. Peak Power Spectral Density

4.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2014
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr, 2014

Note:
1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.

4.2. Test Setup
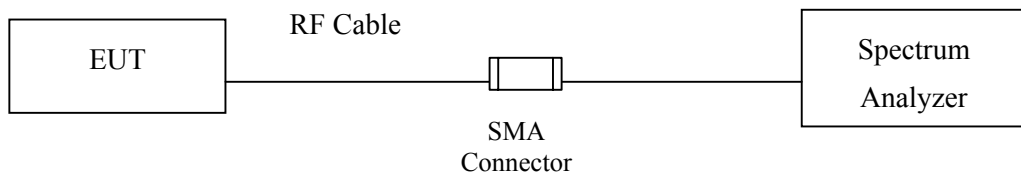
4.3. Limits

(1) For the band 5.15-5.25 GHz, the peak power spectral density shall not exceed 4 dBm in any 1-MHz band. If transmitting antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

(2) For the band 5.25-5.35 GHz, the peak power spectral density shall not exceed 11 dBm in any 1-MHz band. If transmitting antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

(3) For the band 5.725-5.825 GHz, the peak power spectral density shall not exceed 17 dBm in any 1-MHz band. If transmitting antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

4.4. Test Procedure

The EUT was setup to ANSI C63.10, 2014; tested to DTS test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

The Peak Power Spectral Density using KDB 789033 section F) procedure, Create an average power spectrum for the EUT operating mode being tested by following the instructions in section E)2) for measuring maximum conducted output power using a spectrum analyzer.

SA-1 method is selected to run the test.

4.5. Uncertainty

$\pm$ 1.27 dB
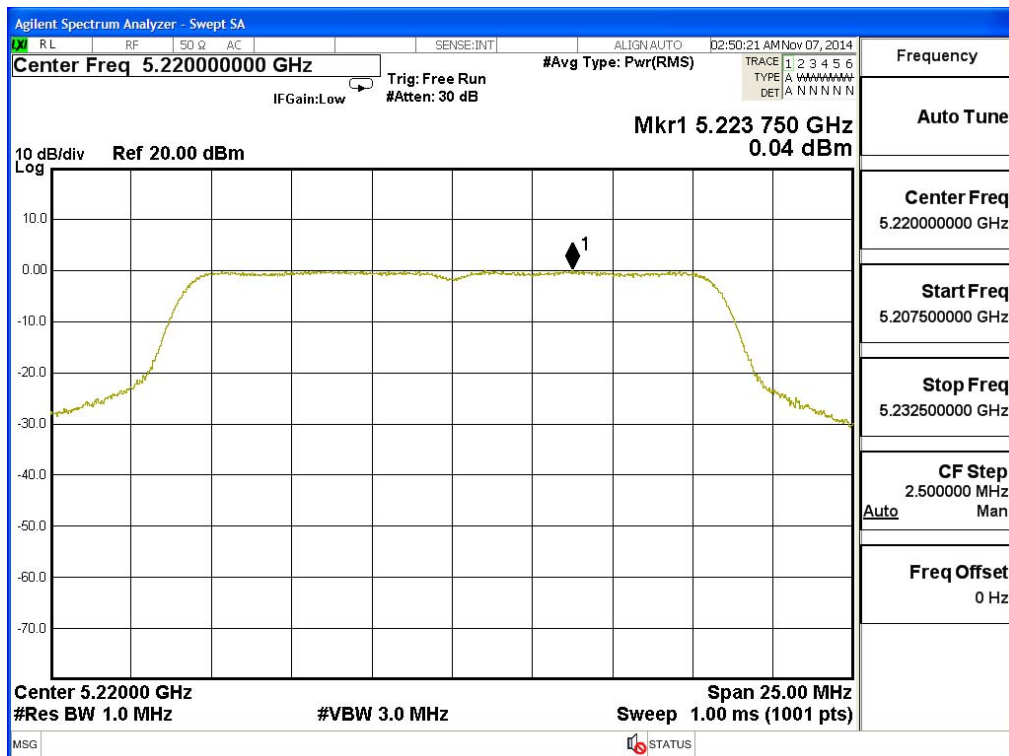
4.6. Test Result of Peak Power Spectral Density

Product : TABLET PC
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11a-6Mbps)

Channel Number	Frequency (MHz)	Data Rata (Mbps)	Measurement Level (dBm)	Required Limit (dBm)	Result
36	5180	6	-0.150	4	Pass
44	5220	6	0.040	4	Pass
48	5240	6	-0.560	4	Pass
52	5260	6	-4.180	11	Pass
60	5300	6	-1.940	11	Pass
64	5320	6	-3.150	11	Pass
100	5500	6	-0.480	11	Pass
116	5580	6	2.440	11	Pass
140	5700	6	-1.740	11	Pass

QuieTek
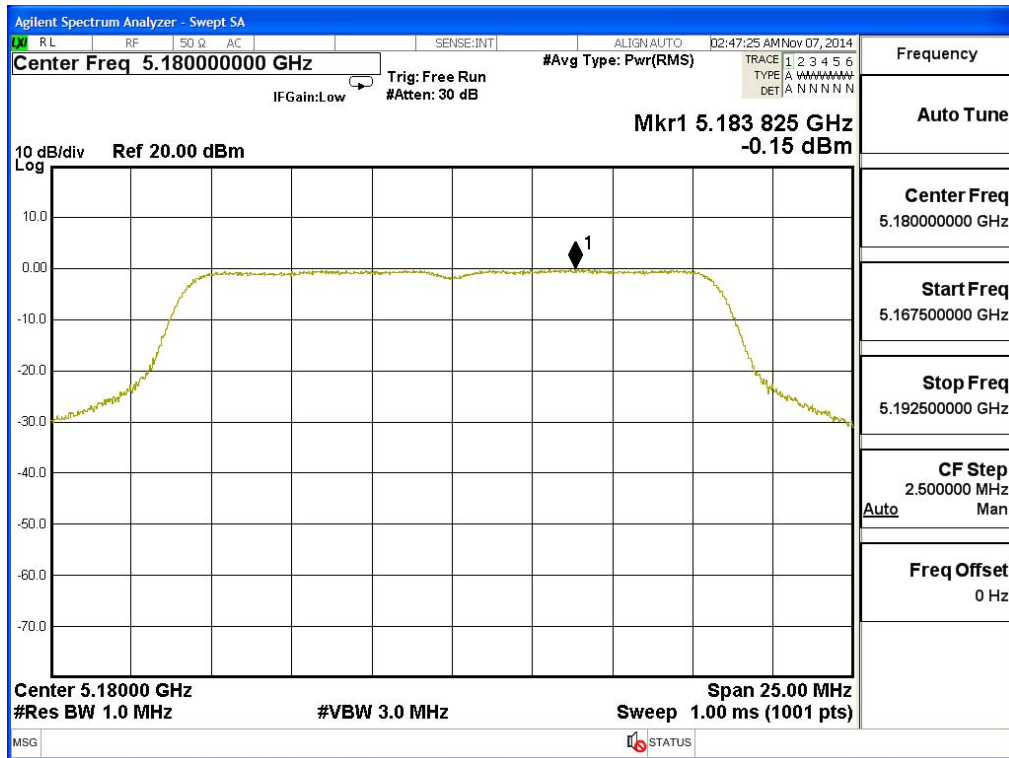
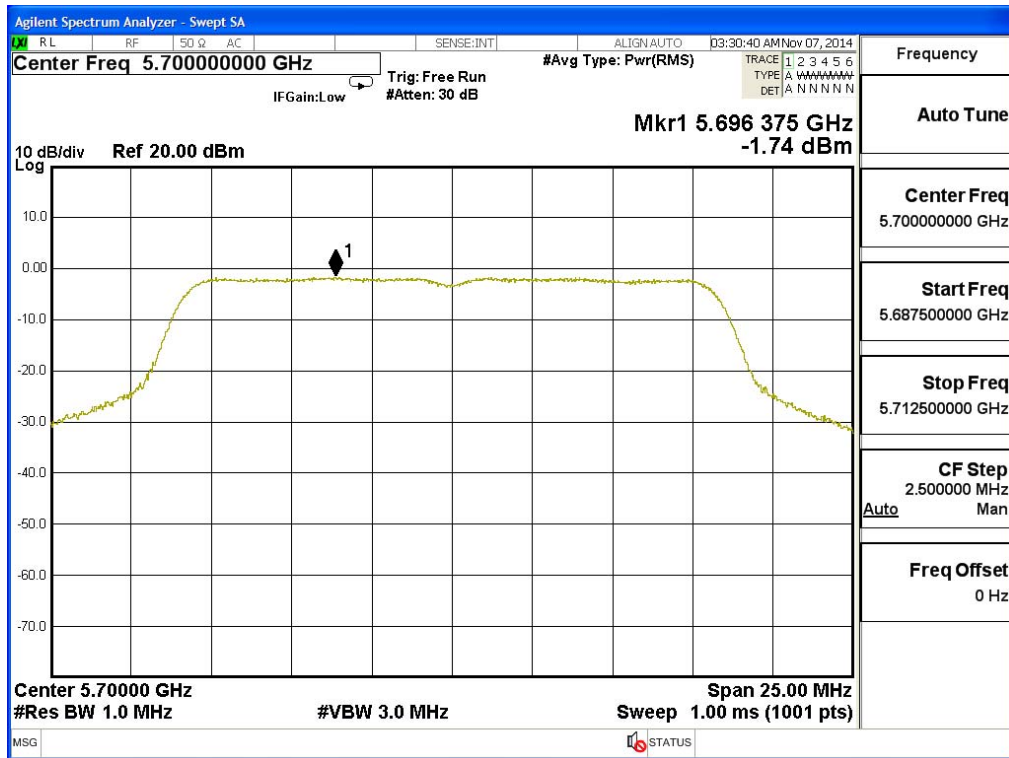## Channel 36:

Channel 44:

Channel 48:
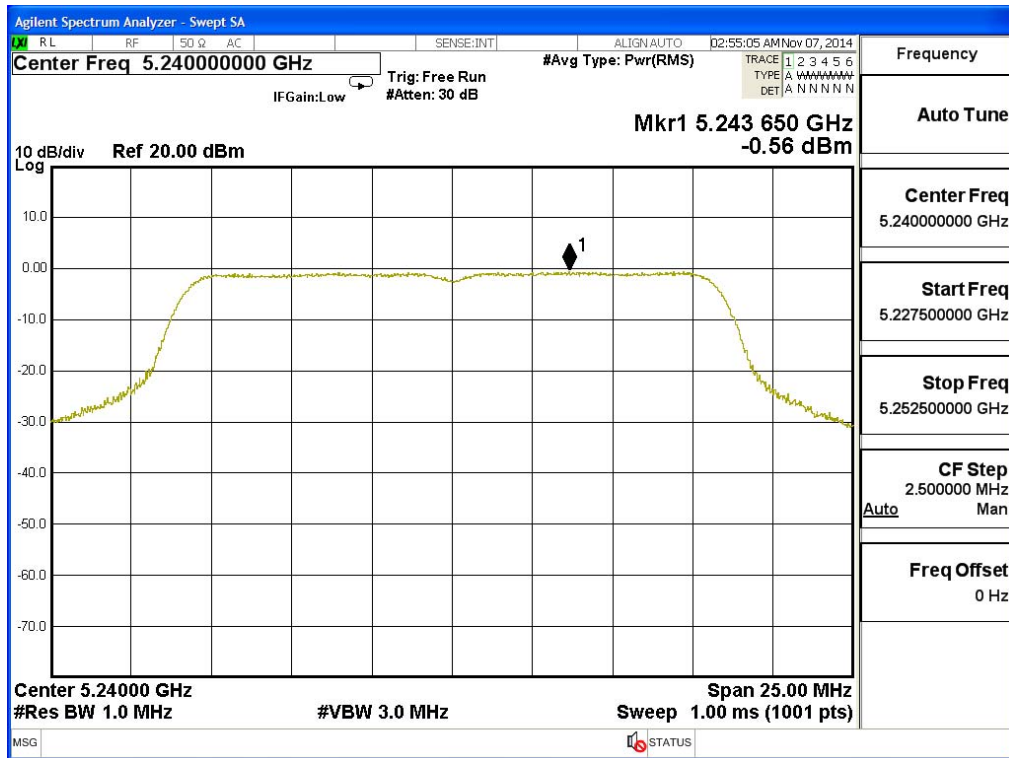
Channel 52:
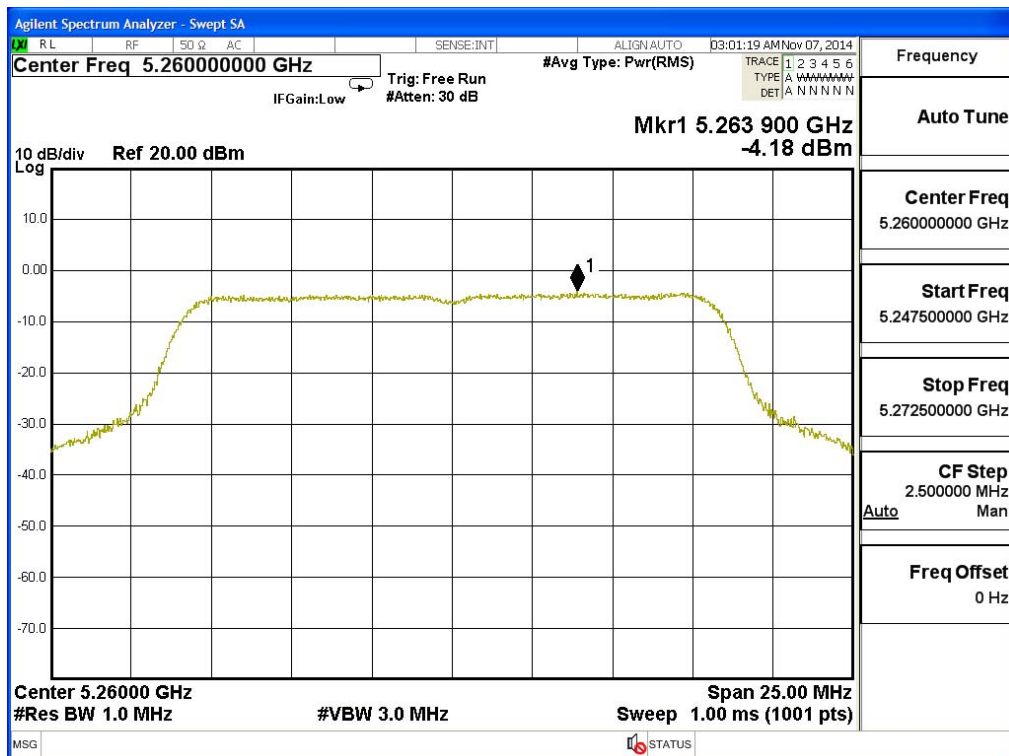
Channel 60:
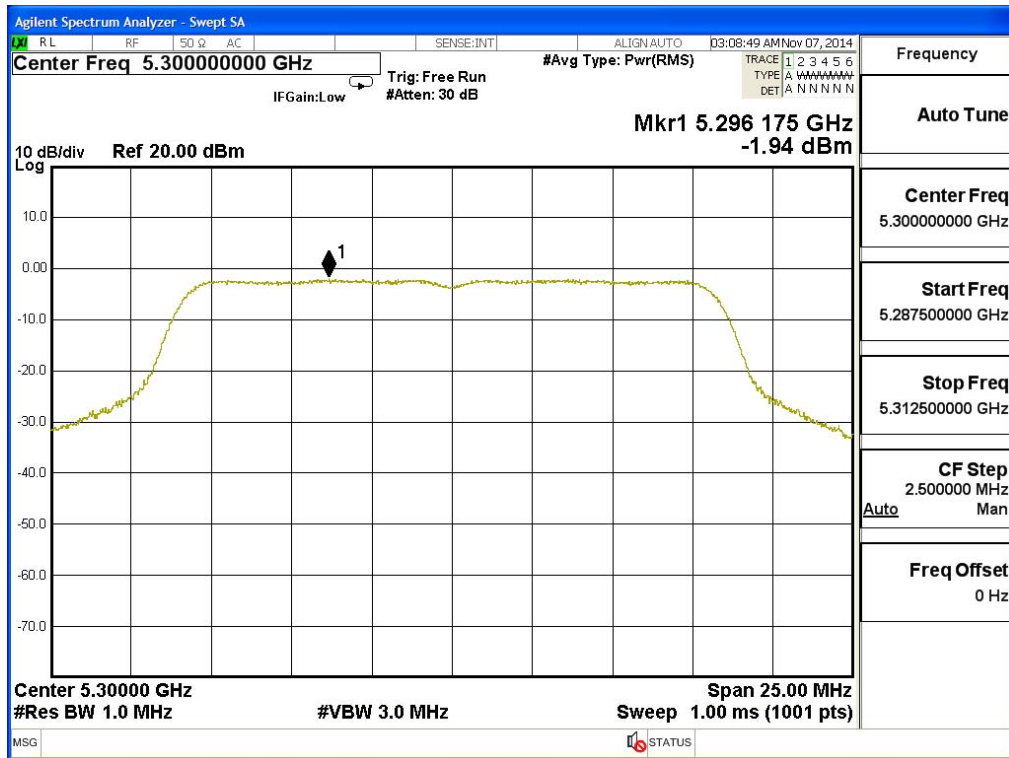
Channel 64:
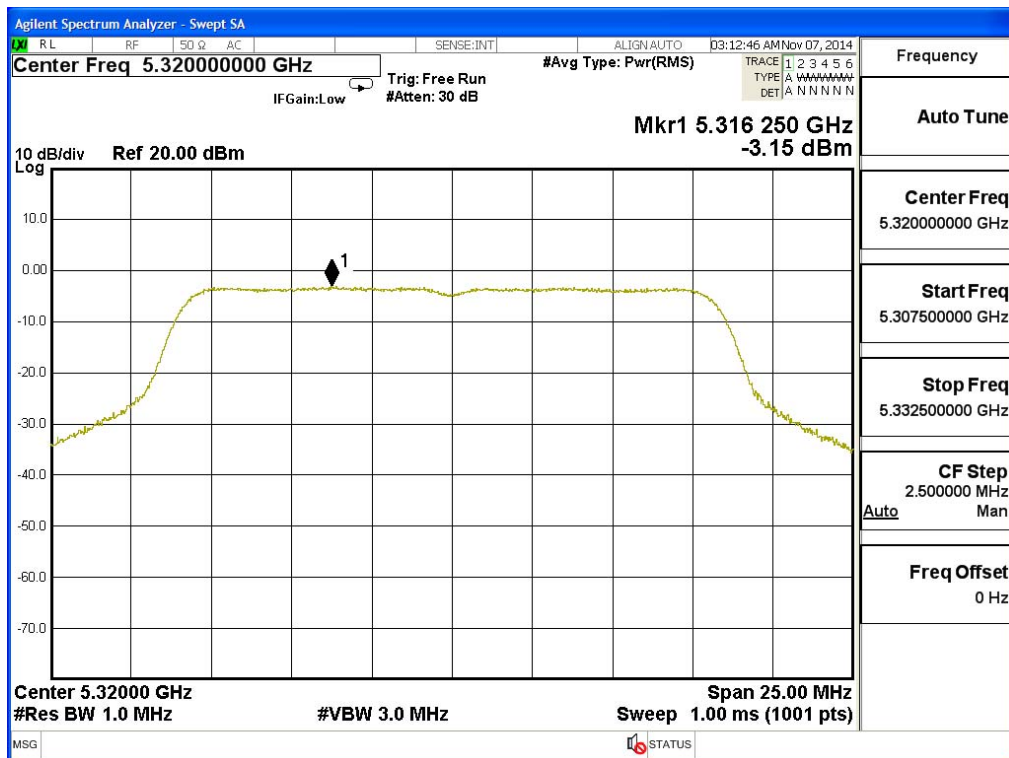
Channel 100:

Channel 116:

Channel 140:

Agilent Spectrum Analyzer - Swept SA

R L	RF	50 Ω	AC	SENSE:INT	ALIGN AUTO	03:30:40 AM Nov 07, 2014

Center Freq 5.700000000 GHz

#Avg Type: Pwr(RMS)

TRACE 1 2 3 4 5 6
TYPE A WWWWWW
DET A N N N N N

Trig: Free Run
IFGain:Low   #Atten: 30 dB

Mkr1 5.696 375 GHz
-1.74 dBm

10 dB/div   Ref 20.00 dBm
Log

10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0

Center 5.70000 GHz   Span 25.00 MHz
#Res BW 1.0 MHz   #VBW 3.0 MHz   Sweep 1.00 ms (1001 pts)

MSG   STATUS

Frequency

Auto Tune

Center Freq
5.700000000 GHz

Start Freq
5.687500000 GHz

Stop Freq
5.712500000 GHz

CF Step
2.500000 MHz
Auto   Man

Freq Offset
0 Hz

Product   :   TABLET PC
Test Item   :   Peak Power Spectral Density
Test Site   :   No.3 OATS
Test Mode   :   Mode 2: Transmit (802.11n-20BW 14.4Mbps)
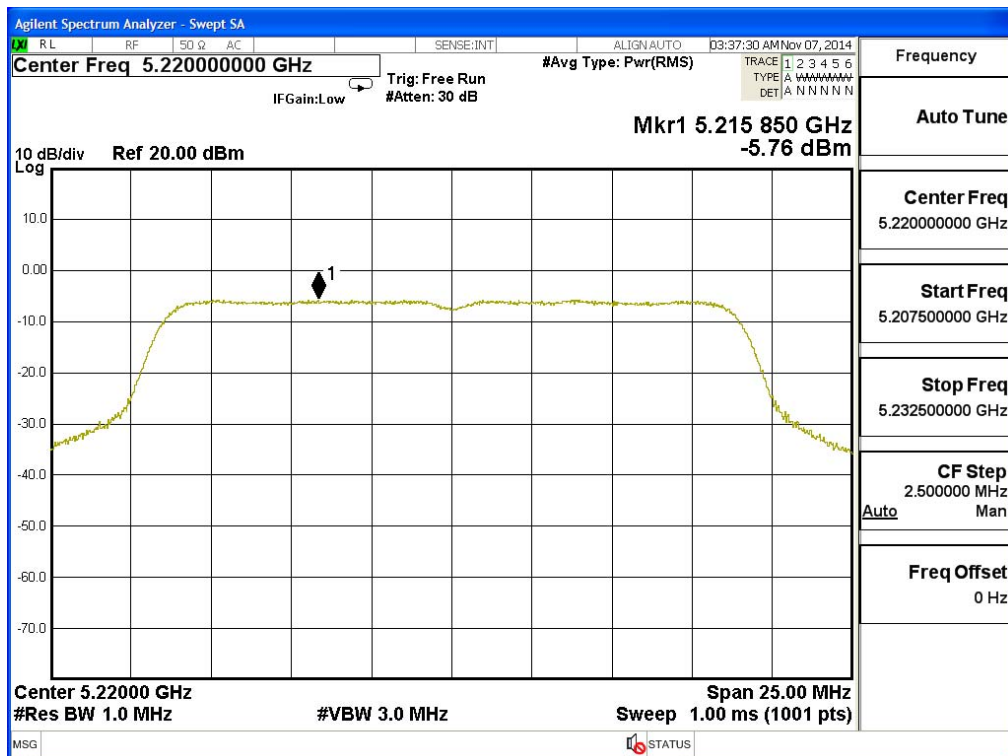
Channel Number	Frequency (MHz)	Chain	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Required Limit (dBm)	Result
36	5180	A	-5.690	-2.680	4	Pass
		B	-6.060	-3.050	4	Pass
44	5220	A	-5.760	-2.750	4	Pass
		B	-5.760	-2.750	4	Pass
48	5240	A	-6.000	-2.990	4	Pass
		B	-6.020	-3.010	4	Pass
52	5260	A	-5.690	-2.680	11	Pass
		B	-6.320	-3.310	11	Pass
60	5300	A	-4.360	-1.350	11	Pass
		B	-5.000	-1.990	11	Pass
64	5320	A	-6.240	-3.230	11	Pass
		B	-8.210	-5.200	11	Pass
100	5500	A	-6.640	-3.630	11	Pass
		B	-4.520	-1.510	11	Pass
116	5580	A	-2.840	0.170	11	Pass
		B	-2.130	0.880	11	Pass
140	5700	A	-5.370	-2.360	11	Pass
		B	-5.270	-2.260	11	Pass

Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 36 – Chain A
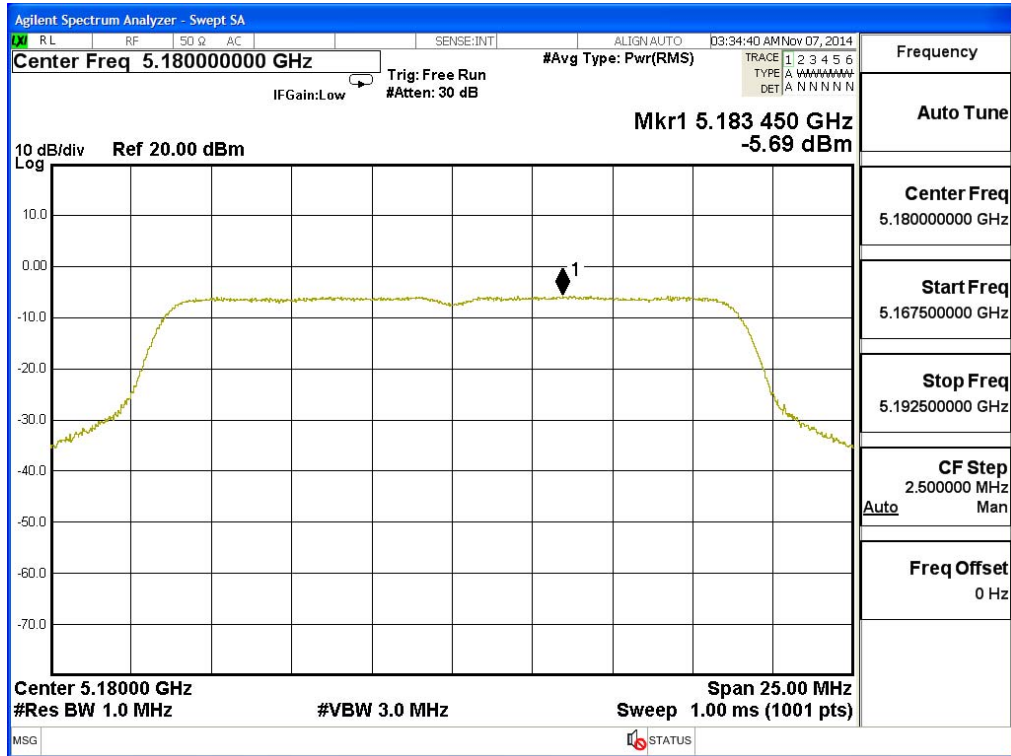
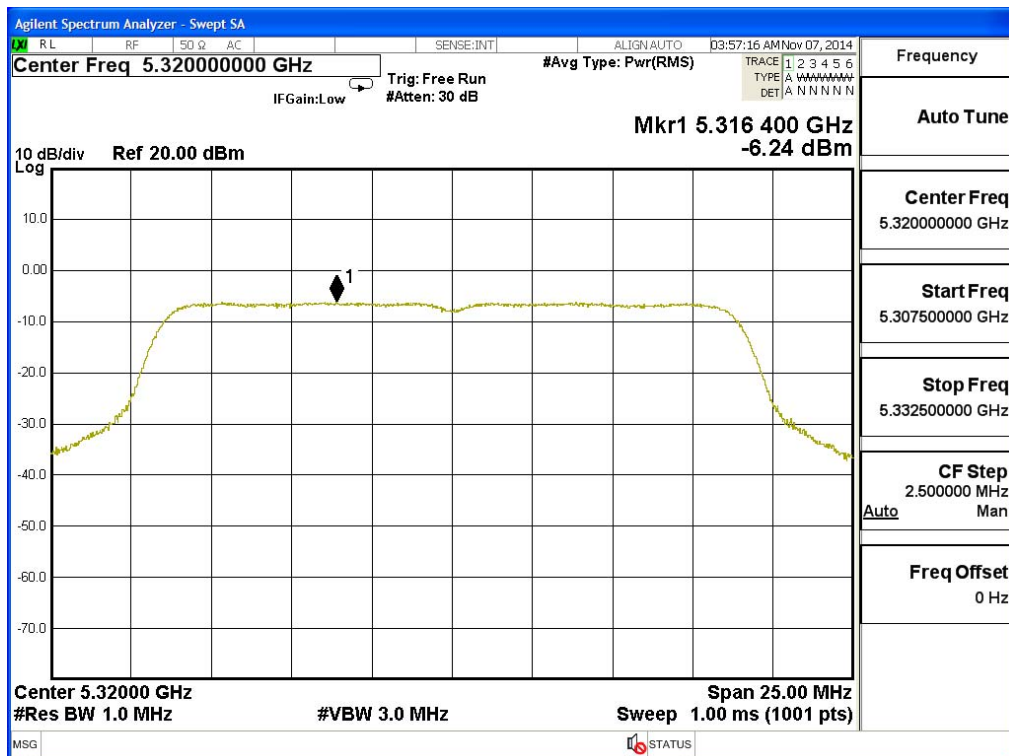## Channel 44 – Chain A
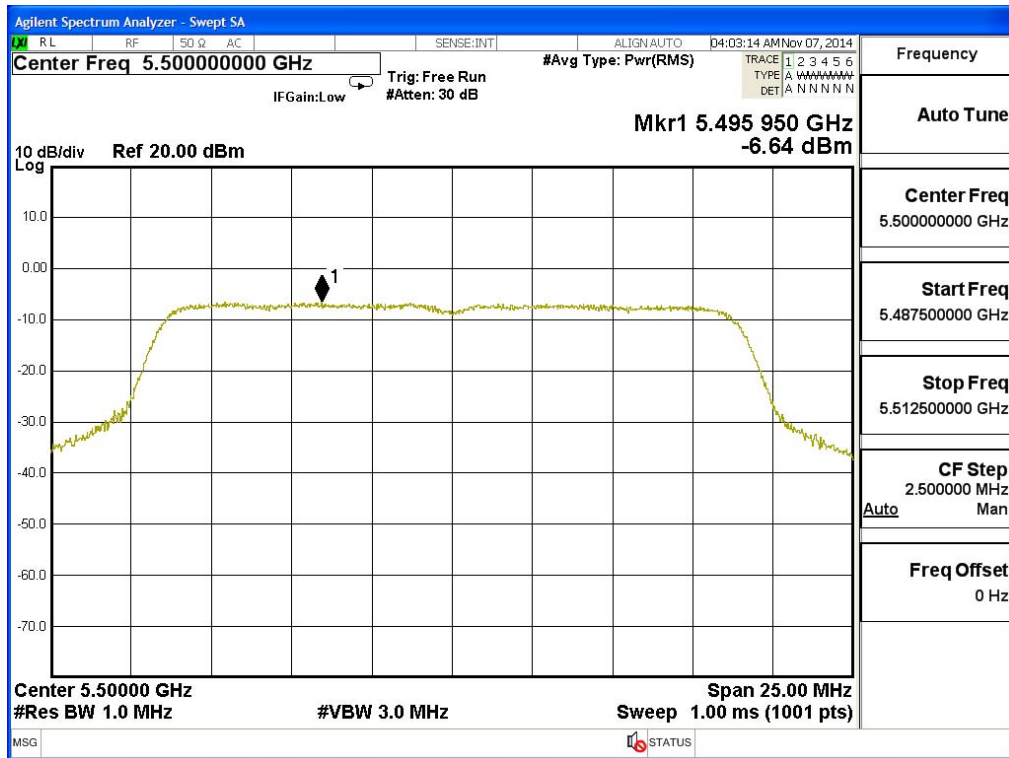
Channel 48 – Chain A
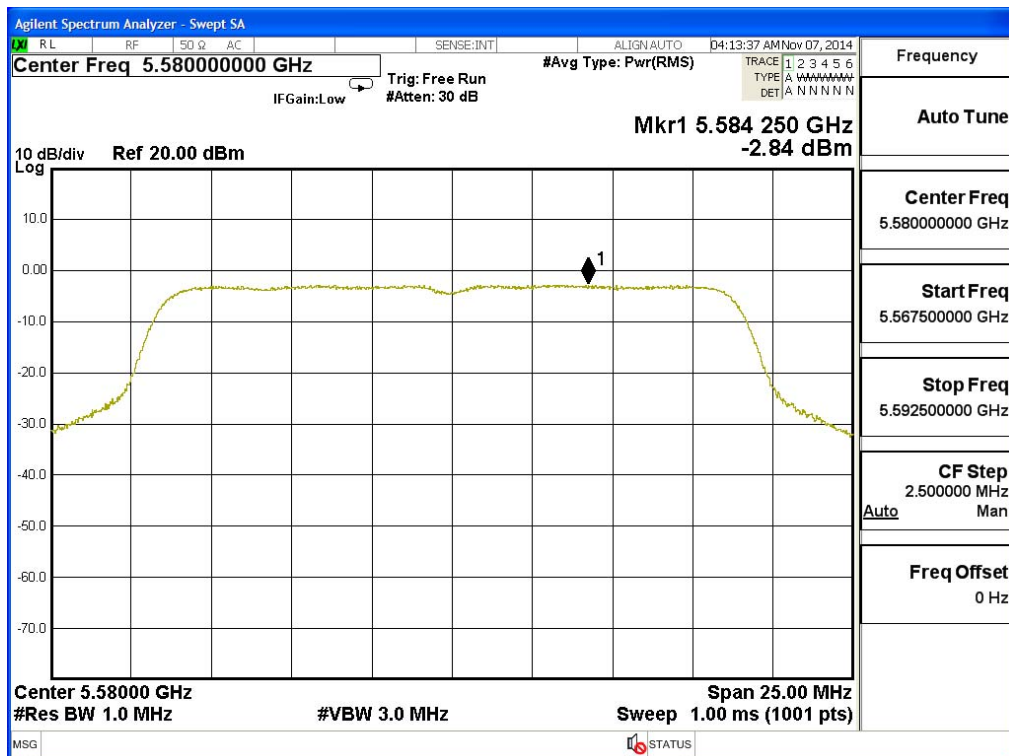

Channel 52 – Chain A
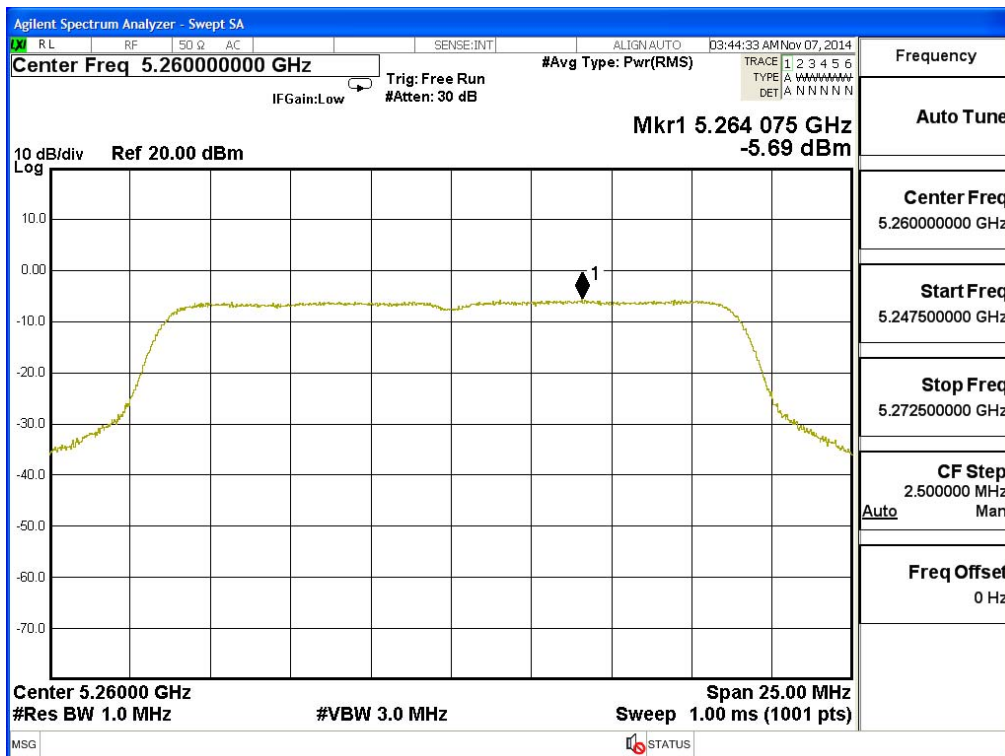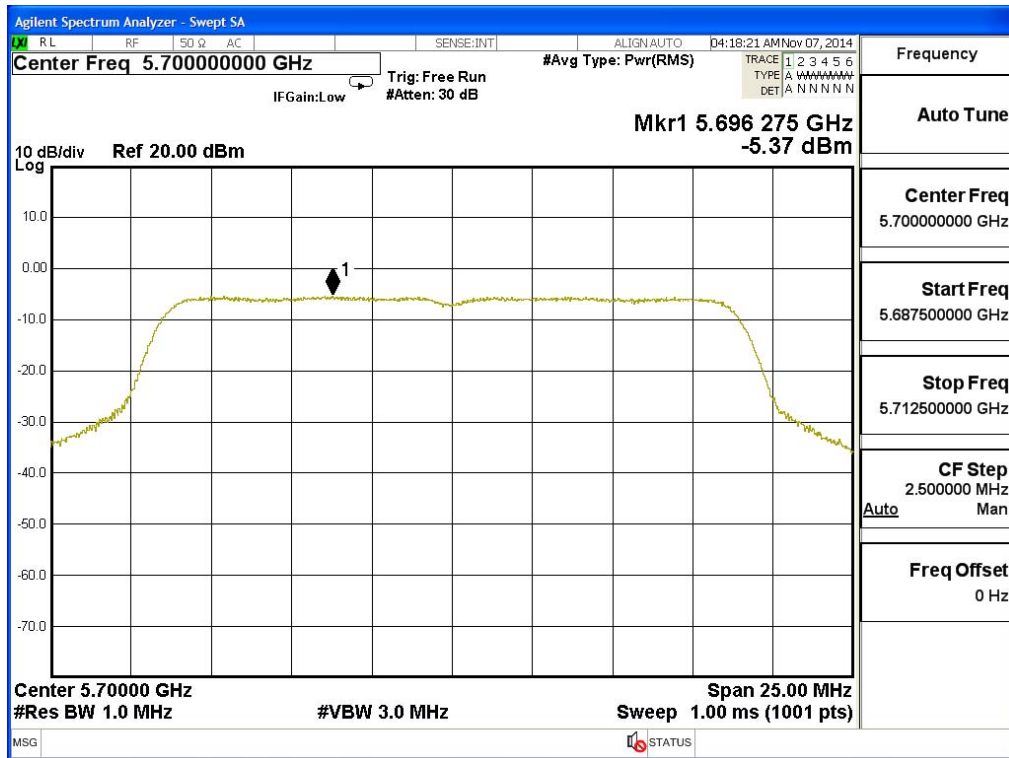
Channel 60 – Chain A
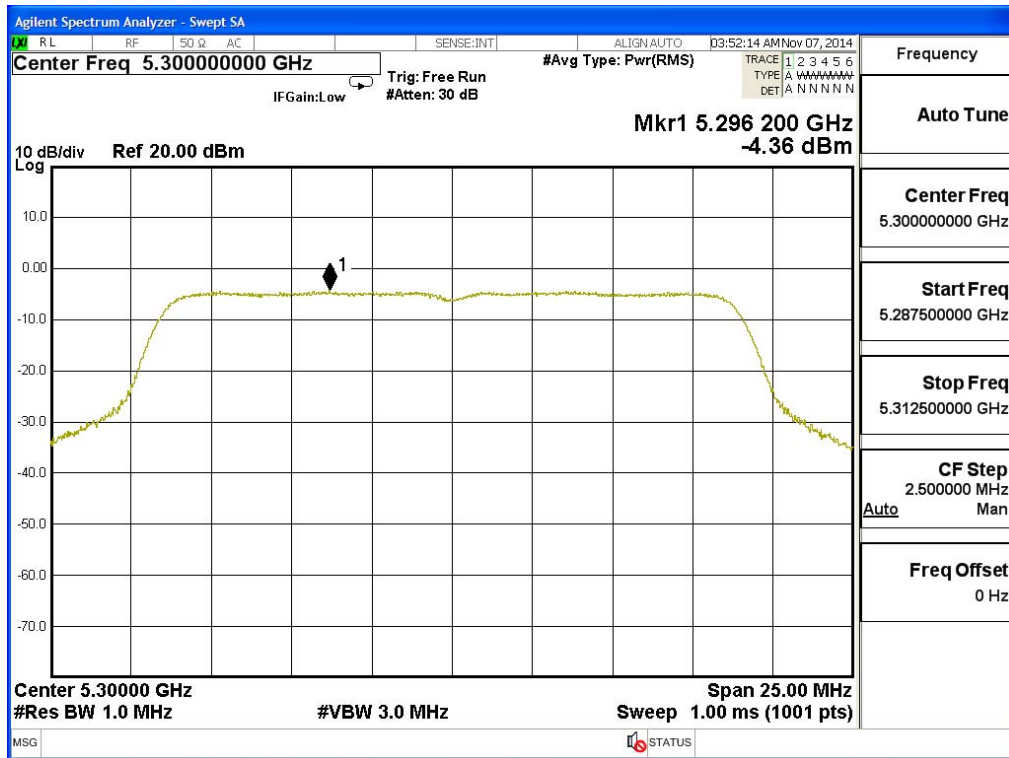
Channel 64 – Chain A

Channel 100 – Chain A

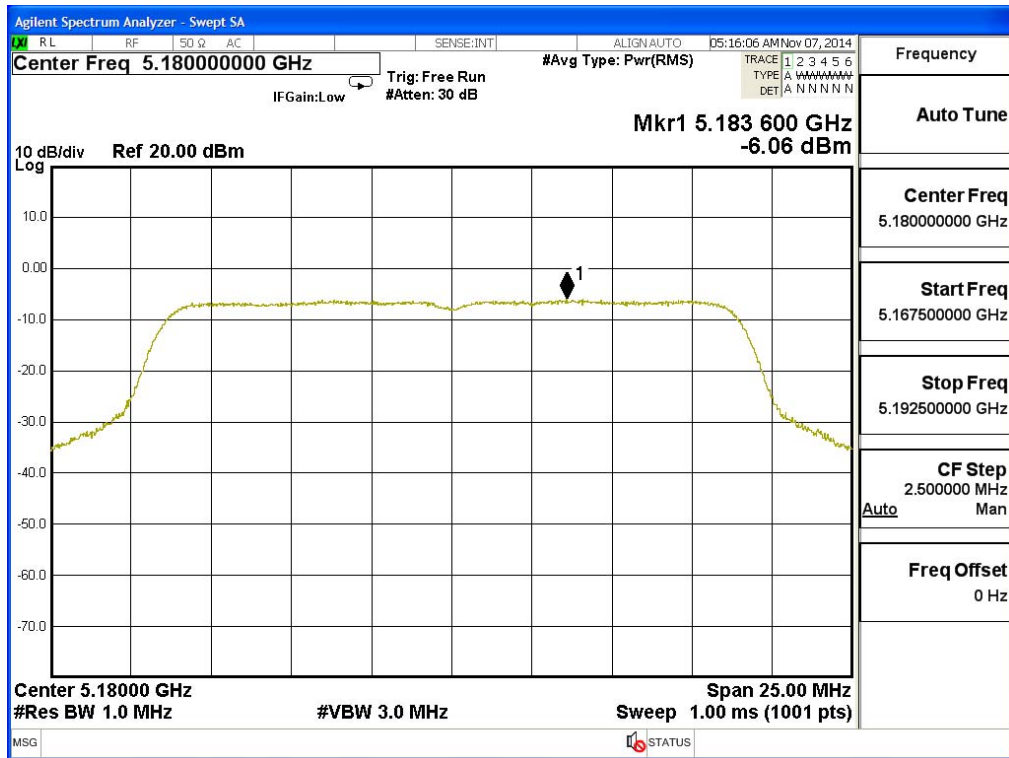## Channel 116 – Chain A
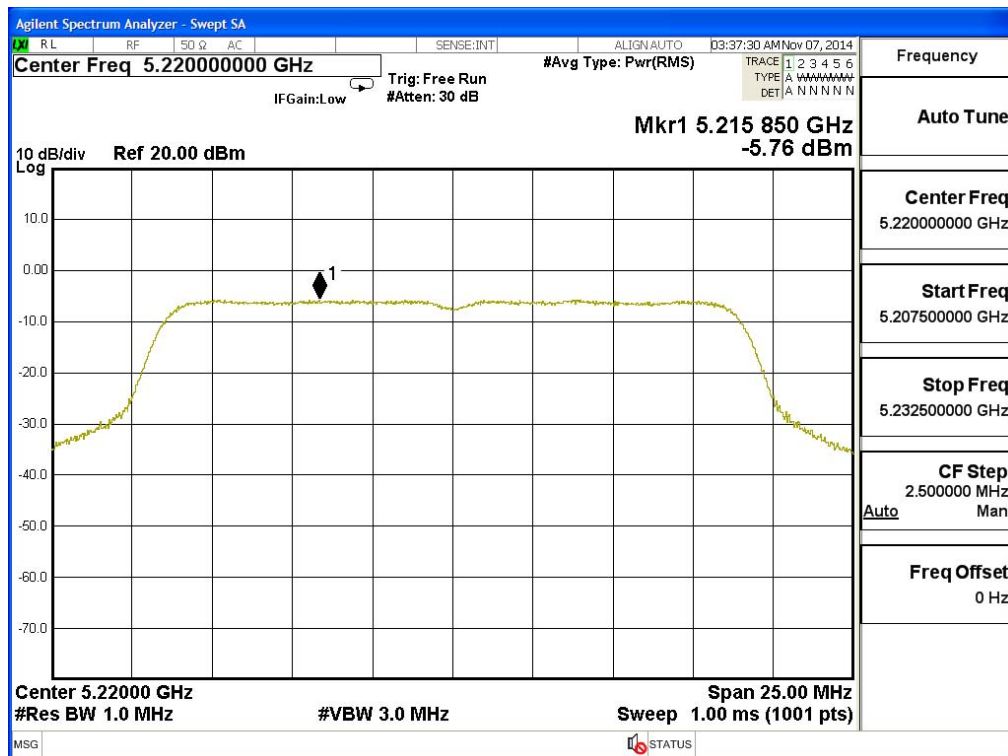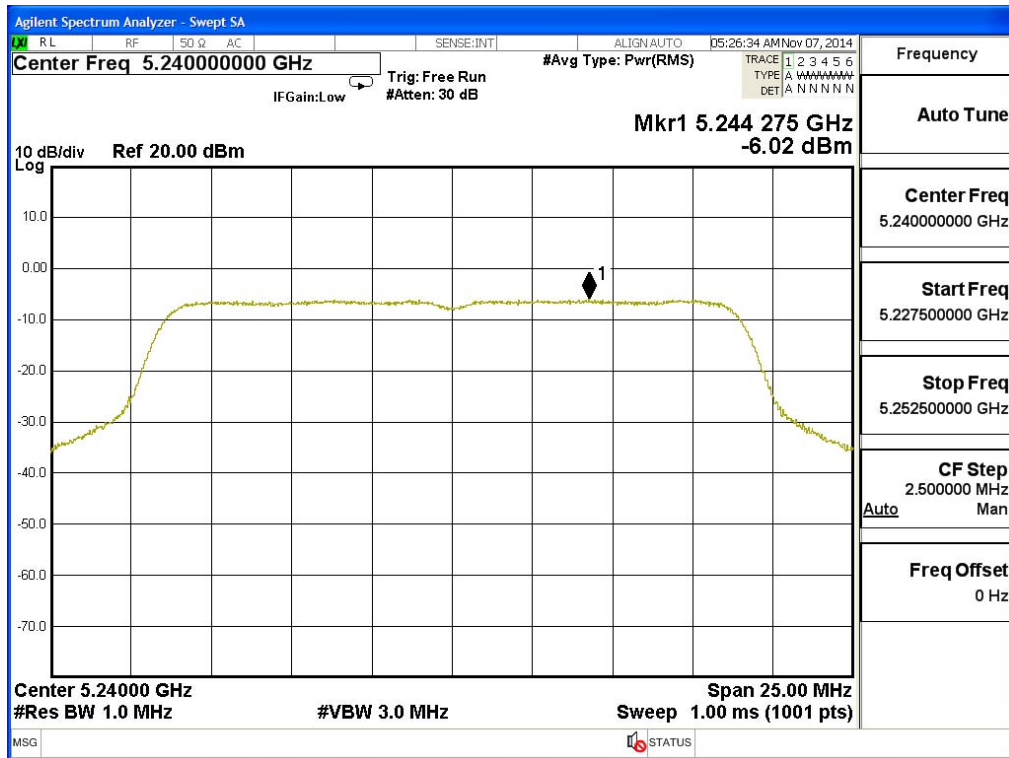
Channel 140 – Chain A

Channel 36 – Chain B

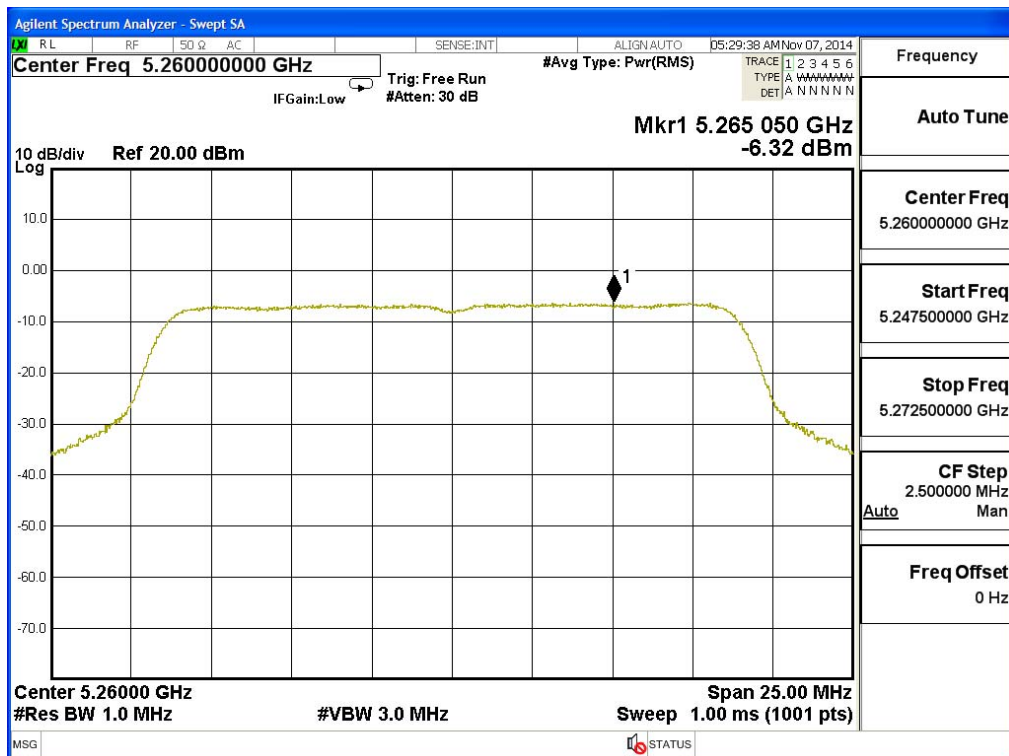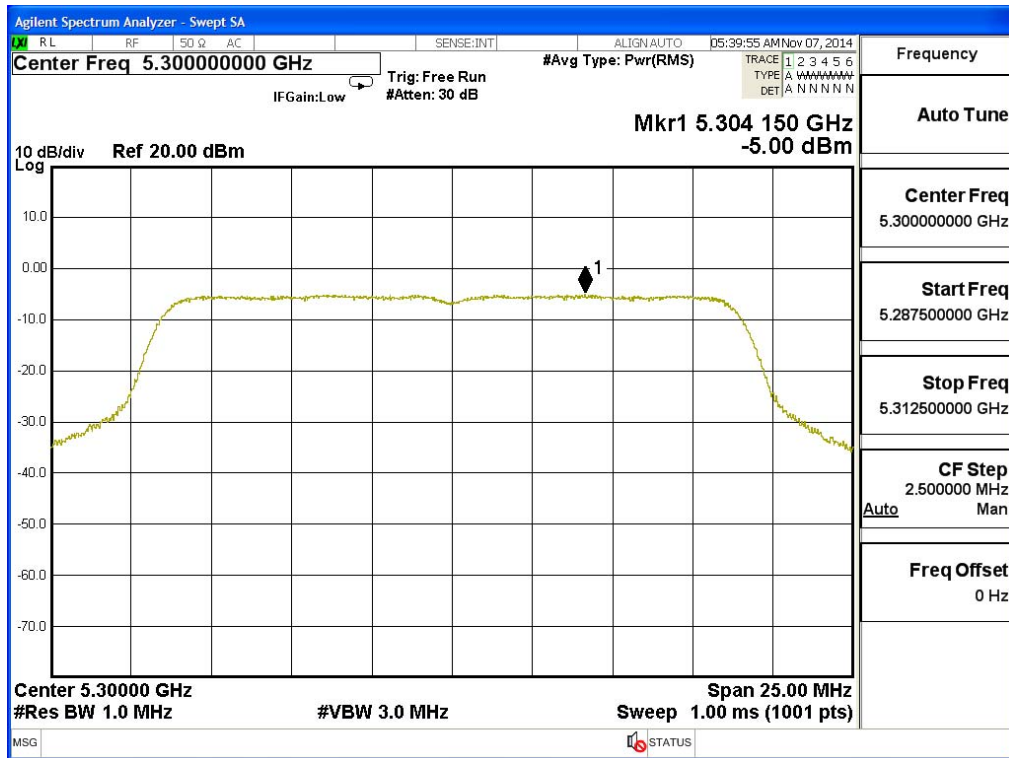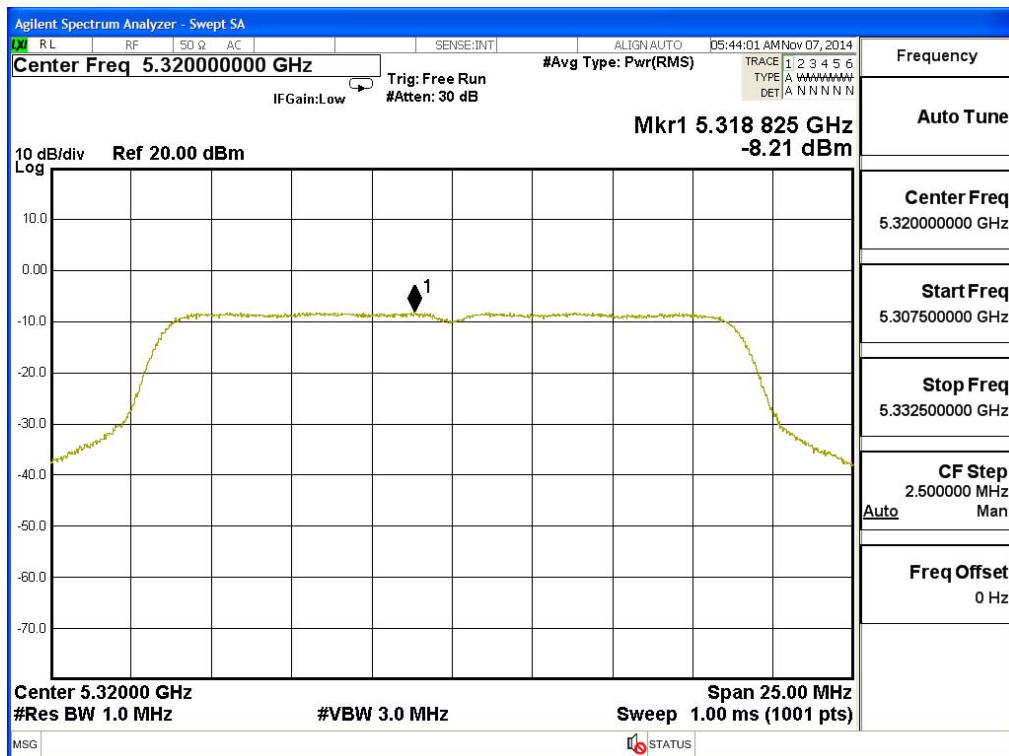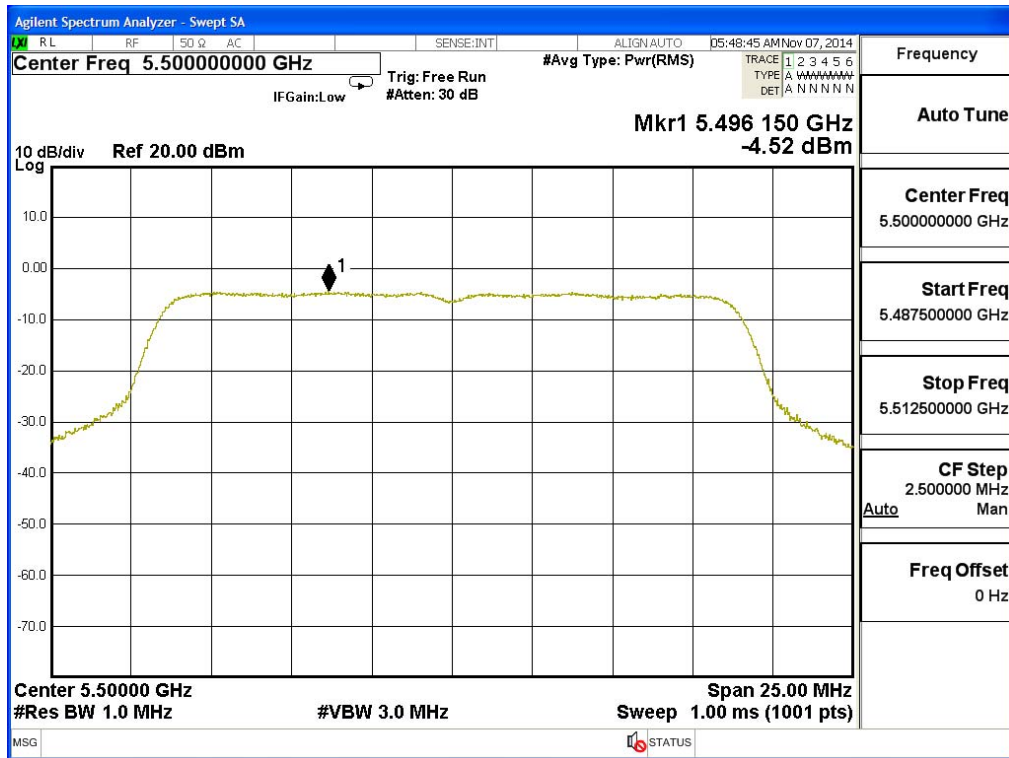
Channel 44 – Chain B

Channel 48 – Chain B

Channel 52 – Chain B

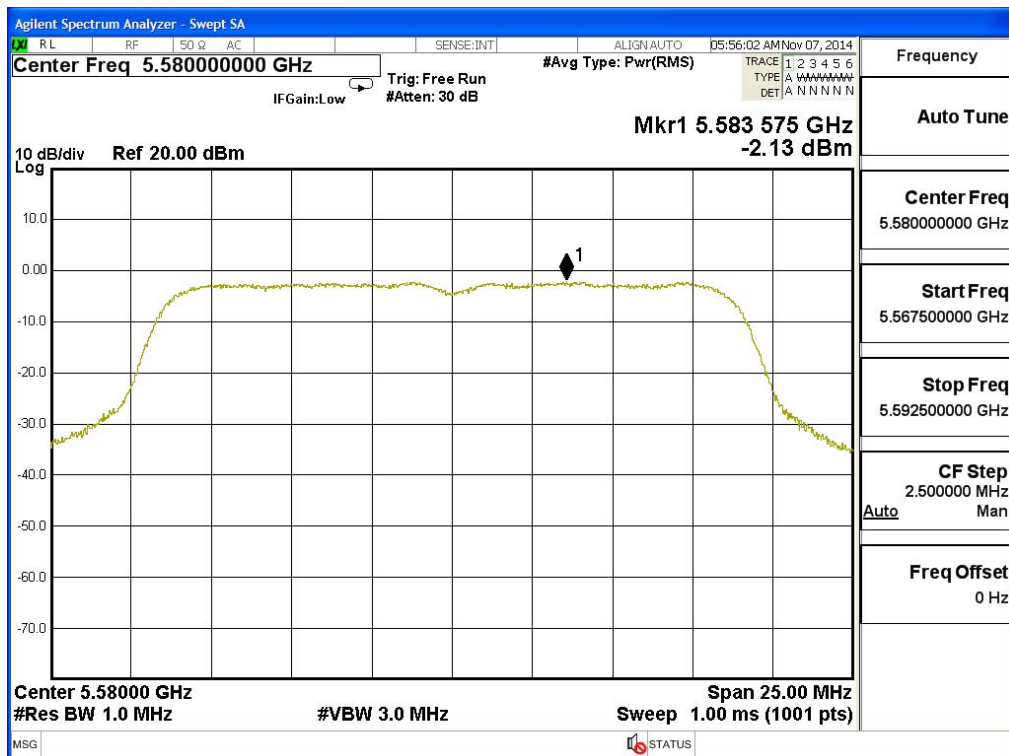## Channel 60 – Chain B

Channel 64 – Chain B

Channel 100 – Chain B

Channel 116 – Chain B

Channel 140 – Chain B
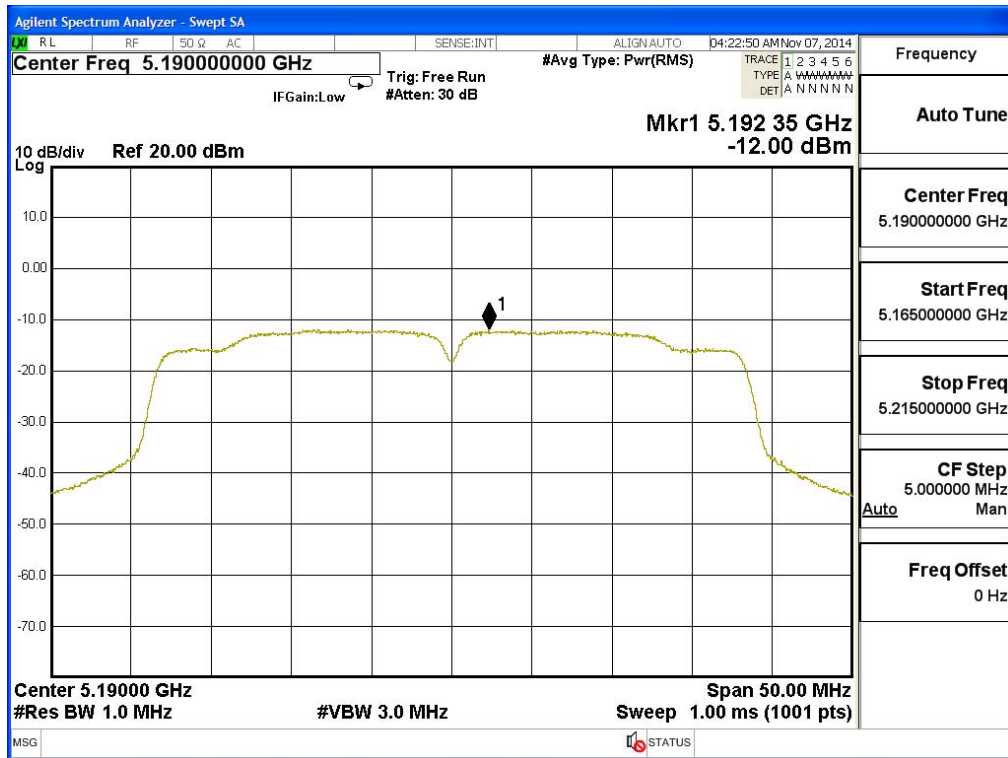
Product   :   TABLET PC
Test Item   :   Peak Power Spectral Density
Test Site   :   No.3 OATS
Test Mode   :   Mode 3: Transmit (802.11n-40BW 30Mbps)

Channel Number	Frequency (MHz)	Chain	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Required Limit (dBm)	Result
38	5190	A	-12.000	-8.990	4	Pass
		B	-11.410	-8.400	4	Pass
46	5230	A	-8.460	-5.450	4	Pass
		B	-7.920	-4.910	4	Pass
54	5270	A	-10.700	-7.690	11	Pass
		B	-10.700	-7.690	11	Pass
62	5310	A	-10.150	-7.140	11	Pass
		B	-10.430	-7.420	11	Pass
102	5510	A	-10.450	-7.440	11	Pass
		B	-10.710	-7.700	11	Pass
110	5550	A	-6.360	-3.350	11	Pass
		B	-5.550	-2.540	11	Pass
134	5670	A	-5.110	-2.100	11	Pass
		B	-6.660	-3.650	11	Pass

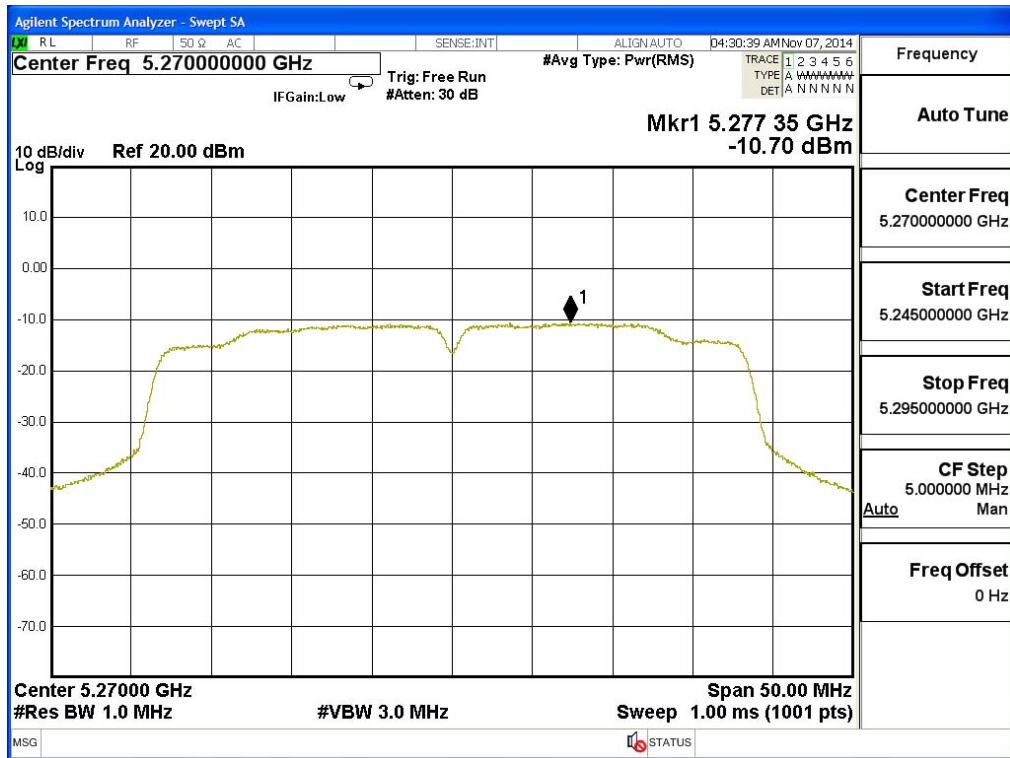Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.
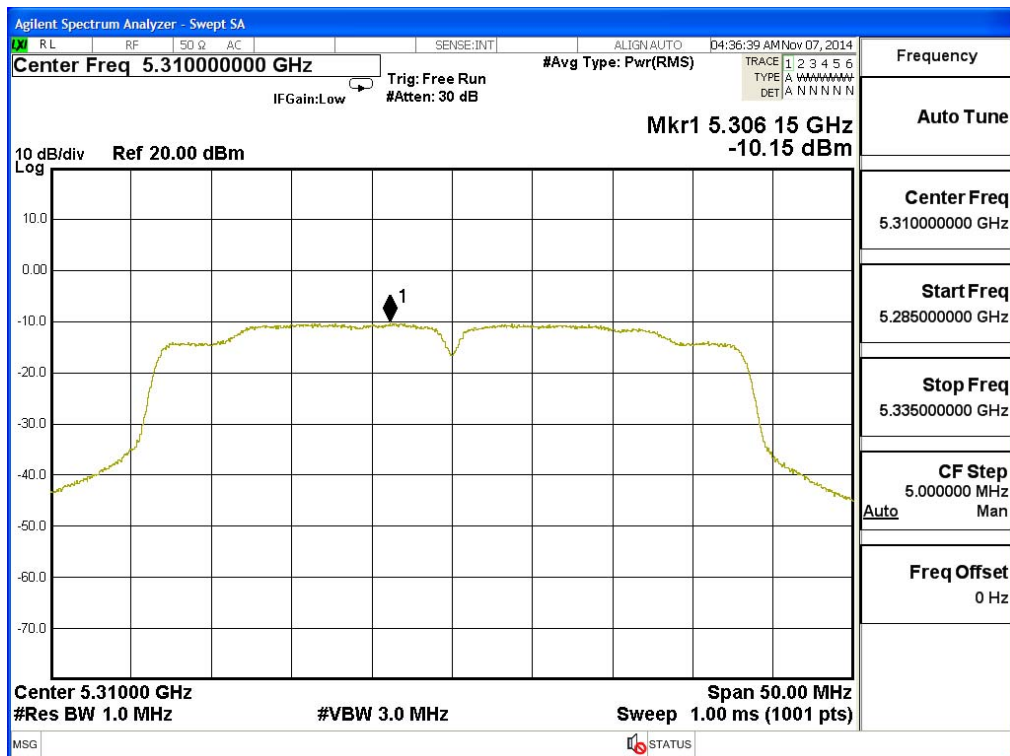
QuieTek

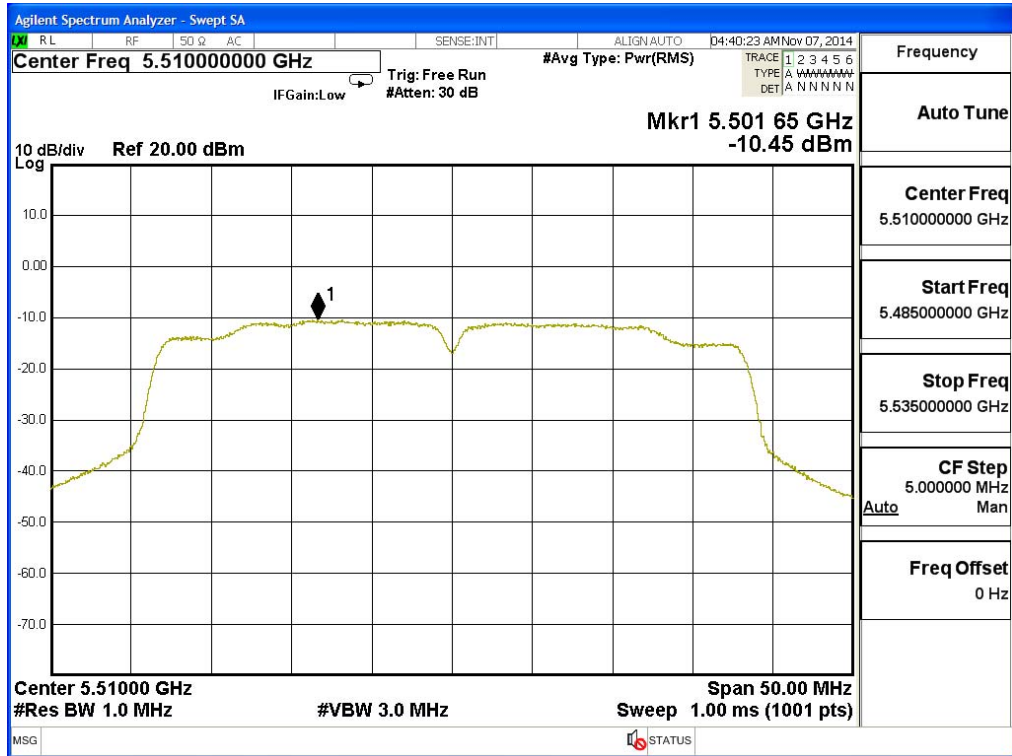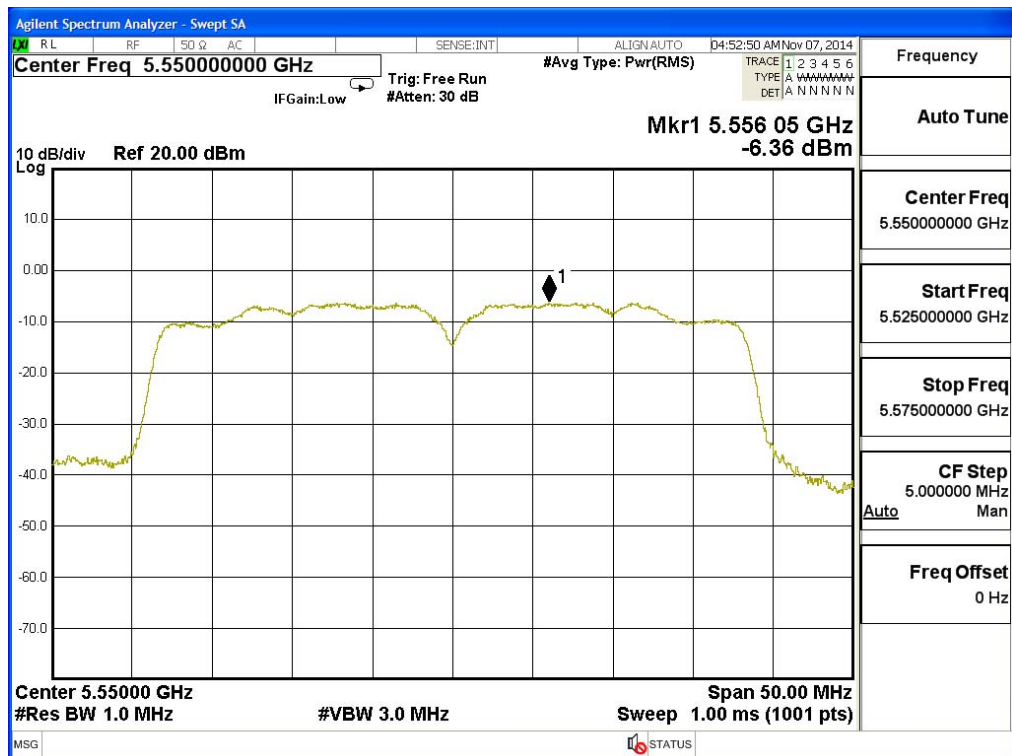## Channel 38 – Chain A

Channel 46 – Chain A
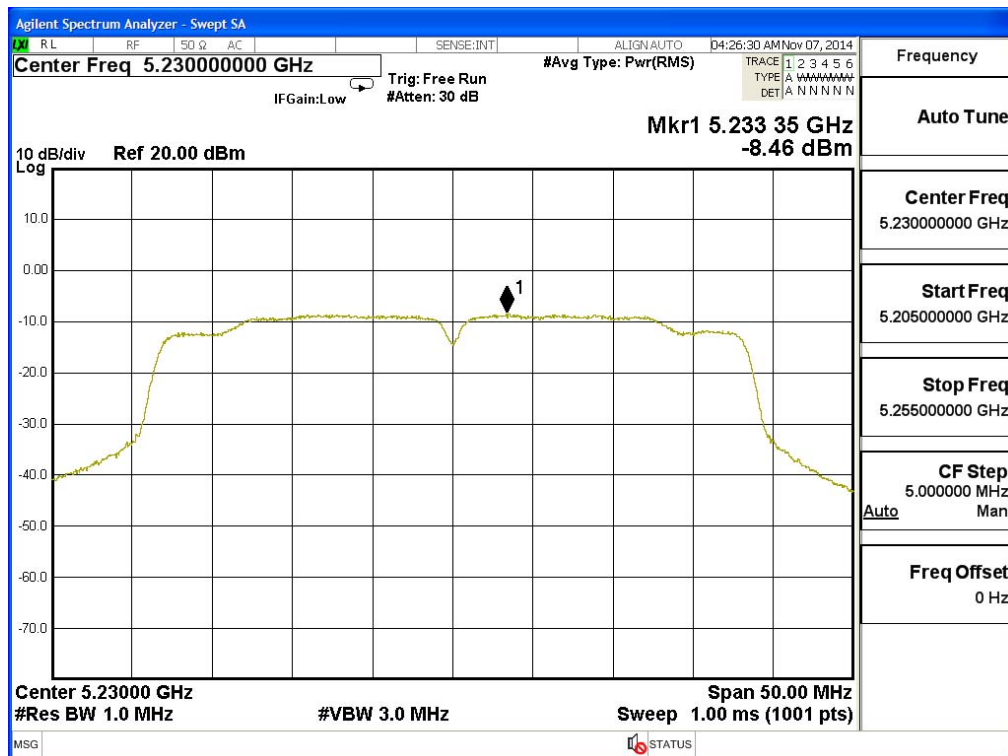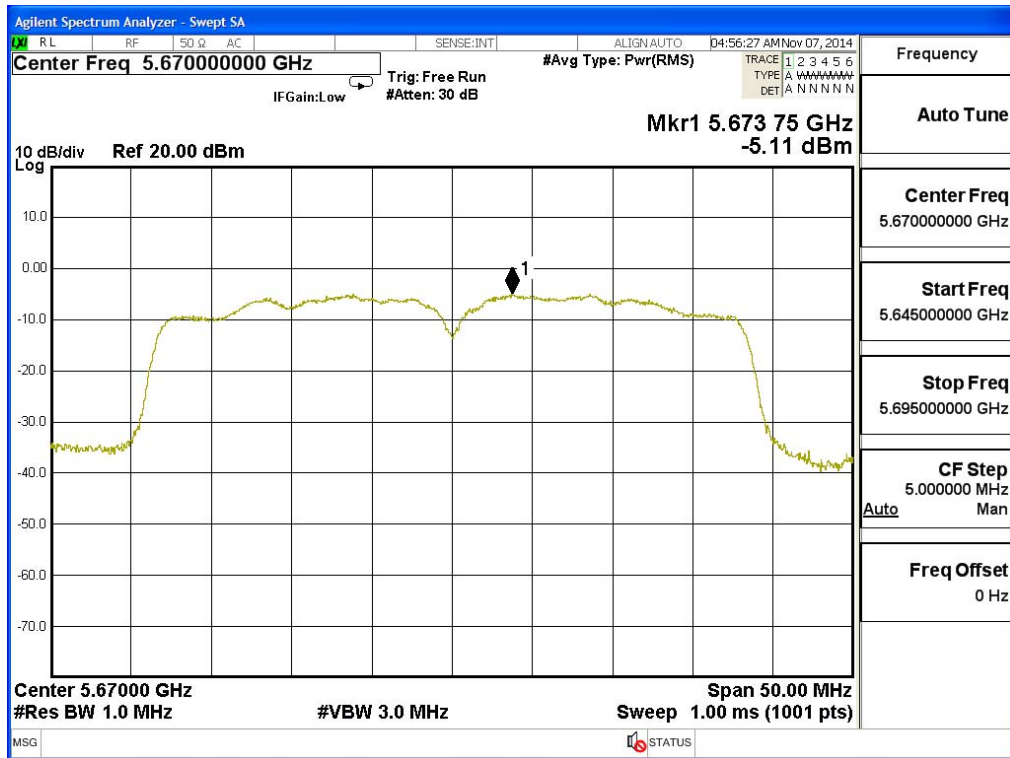
Channel 54 – Chain A

Channel 62 – Chain A

Channel 102 – Chain A

Channel 110 – Chain A

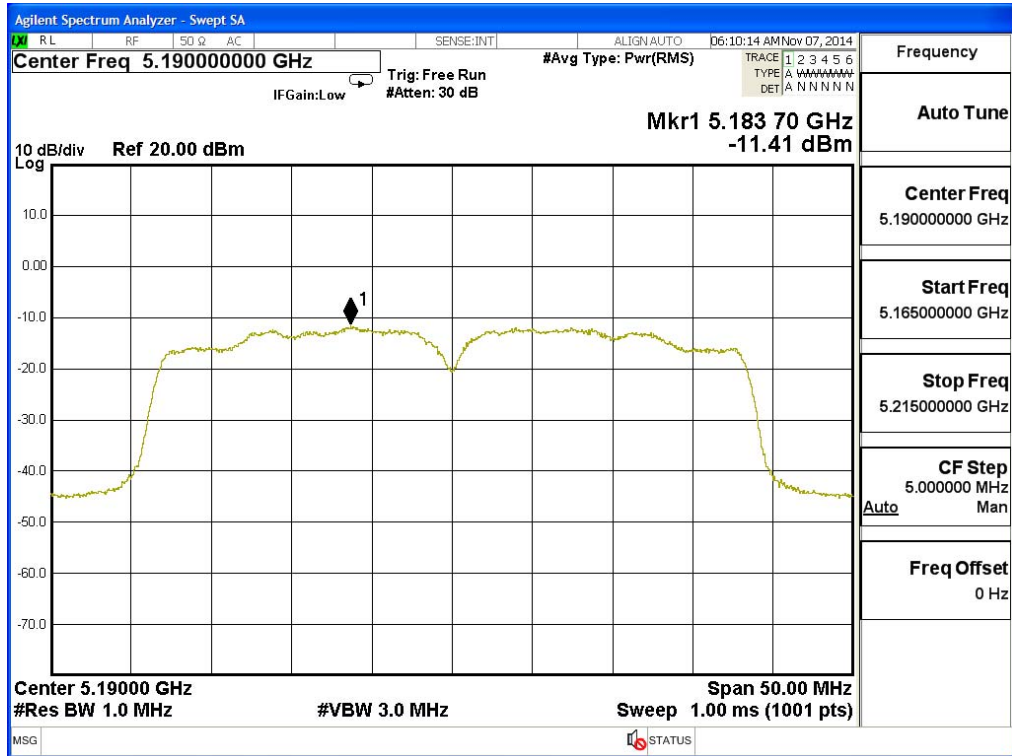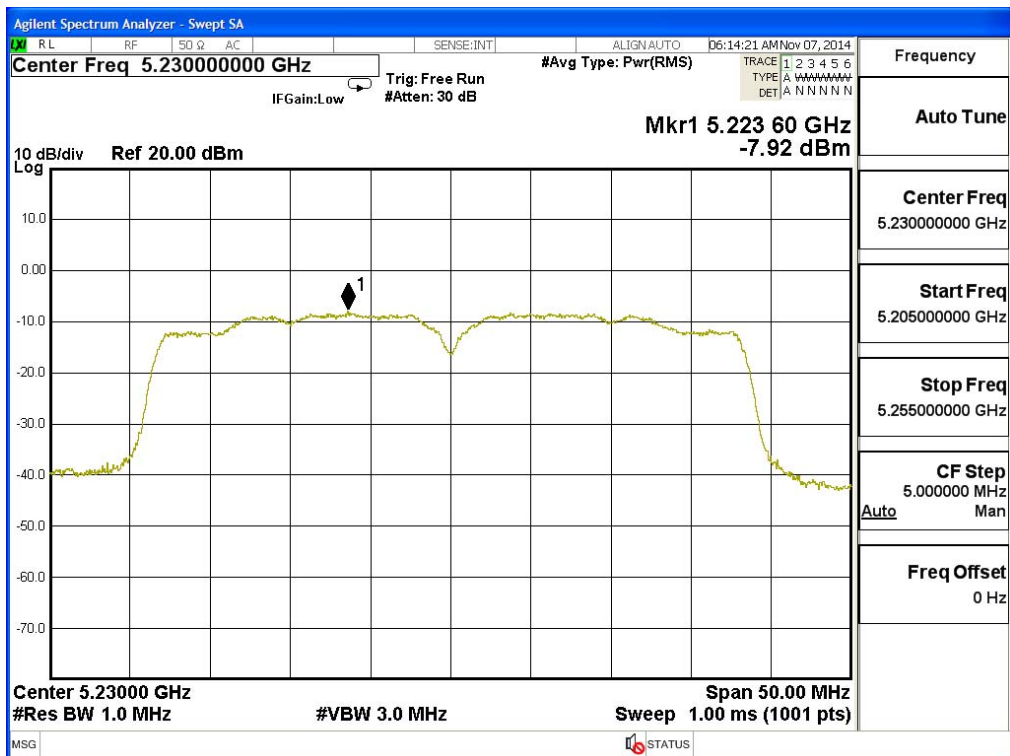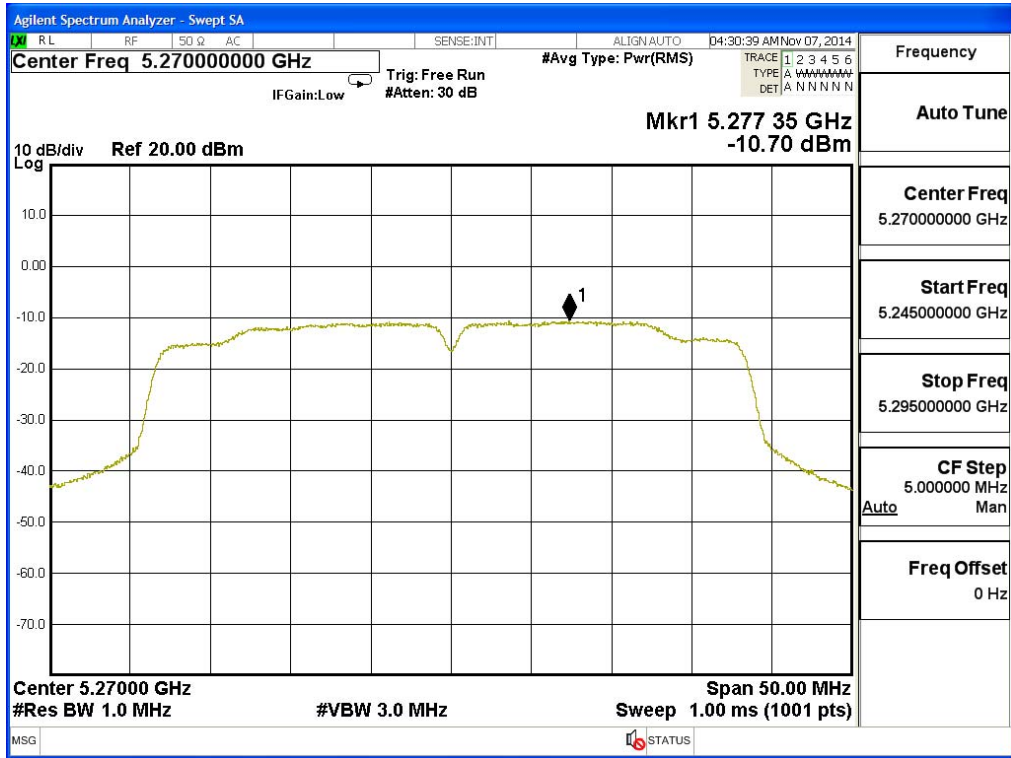## Channel 134 – Chain A

Channel 38 – Chain B

Channel 46 – Chain B

Channel 54 – Chain B

Channel 62 – Chain B