FCC Test Report

Product Name	TABLET PC
Model No	T10C
FCC ID	ZWMT10CA10

Applicant	Ubiqconn Technology,Inc.
Address	No. 300 Yang Guang St., NeiHu, Taipei, Taiwan 114

Date of Receipt	Nov. 16, 2012
Issued Date	June. 14, 2013
Report No.	135269R-RFUSP45V01
Report Version	V1.0

Testing Laboratory
0914

The test results relate only to the samples tested.
The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

Test Report Certification

Issued Date: June. 14, 2013
Report No.: 135269R-RFUSP45V01

Product Name	TABLET PC
Applicant	Ubiqconn Technology,Inc.
Address	No. 300 Yang Guang St., NeiHu, Taipei, Taiwan 114
Manufacturer	Ubiqconn Technology,Inc.
Model No.	T10C
FCC ID.	ZWMT10CA10
EUT Rated Voltage	AC 100-240V, 50-60Hz
EUT Test Voltage	AC 120V/60Hz
Trade Name	Ubiqconn,UTI
Applicable Standard	FCC CFR Title 47 Part 15 Subpart E: 2012 ANSI C63.4: 2003, ANSI C63.10: 2009, FCC KDB-789033
Test Result	Complied

The Test Results relate only to the samples tested.
The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

Documented By : Leven Huang

(Senior Adm. Specialist / Leven Huang)

Tested By : Nowal Kuo

(Engineer / Nowal Kuo)

Approved By :

(Manager / Vincent Lin)

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1. GENERAL INFORMATION

1.1. EUT Description

Product Name	TABLET PC
Trade Name	Ubiqconn,UTI
FCC ID.	ZWMT10CA10
Model No.	T10C
Frequency Range	802.11a/n-20MHz: 5180-5320MHz, 5500-5700MHz 802.11n-40MHz: 5190-5310, 5510-5670MHz
Number of Channels	802.11a/n-20MHz: 19; 802.11n-40MHz: 9
Data Rate	802.11a: 6 - 54Mbps 802.11n: up to 300Mbps
Channel Control	Auto
Type of Modulation	802.11a/n:OFDM, BPSK, QPSK, 16QAM, 64QAM
Antenna Type	PCB Antenna
Antenna Gain	Refer to the table “Antenna List”
Power Cable	Shielded, 1.7m
LAN to Mini USB	1 set
Power Adapter	MFR: FSP, M/N: FSP065-RAB Input: AC 100-240V, 50-60Hz, 1.5A Output: DC 19V, 3.42A Cable out: Shielded, 1.6m, with one ferrite core bonded.
Contain Module	Intel / 62205ANHMW

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	WIESON	GY196C098-C081 (Main) GY196C098-C082 (Aux)	PCB	2.24dBi For 5.15~5.35GHz 3.08dBi For 5.47~5.725GHz

Note: The antenna of EUT is conform to FCC 15.203

802.11a/n-20MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 36:	5180 MHz	Channel 40:	5200 MHz	Channel 44:	5220 MHz	Channel 48:	5240 MHz
Channel 52:	5260 MHz	Channel 56:	5280 MHz	Channel 60:	5300 MHz	Channel 64:	5320 MHz
Channel 100:	5500 MHz	Channel 104:	5520 MHz	Channel 108:	5540 MHz	Channel 112:	5560 MHz
Channel 116:	5580 MHz	Channel 120:	5600 MHz	Channel 124:	5620 MHz	Channel 128:	5640 MHz
Channel 132:	5660 MHz	Channel 136:	5680 MHz	Channel 140:	5700 MHz		

802.11n-40MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 38:	5190 MHz	Channel 46:	5230 MHz	Channel 54:	5270 MHz	Channel 62:	5310 MHz
Channel 102:	5510 MHz	Channel 110:	5550 MHz	Channel 118:	5590 MHz	Channel 126:	5630 MHz
Channel 134:	5670 MHz						

Note:

1. This device is a TABLET PC, Contains functions and so on WLAN、Bluetooth , This report for WLAN.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
3. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11a is 6Mbps、802.11n(20M-BW) is 14.4Mbps and 、802.11n(40M-BW) is 30Mbps).
4. At result of pretests, module supports dual-channel transmission, only the worst case is shown in the report. (802.11a is chain A)
5. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart E for Unlicensed National Information Infrastructure devices.
6. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

Test Mode	Mode 1: Transmit (802.11a-6Mbps) Mode 2: Transmit (802.11n-20BW 14.4Mbps) Mode 3: Transmit (802.11n-40BW 30Mbps)

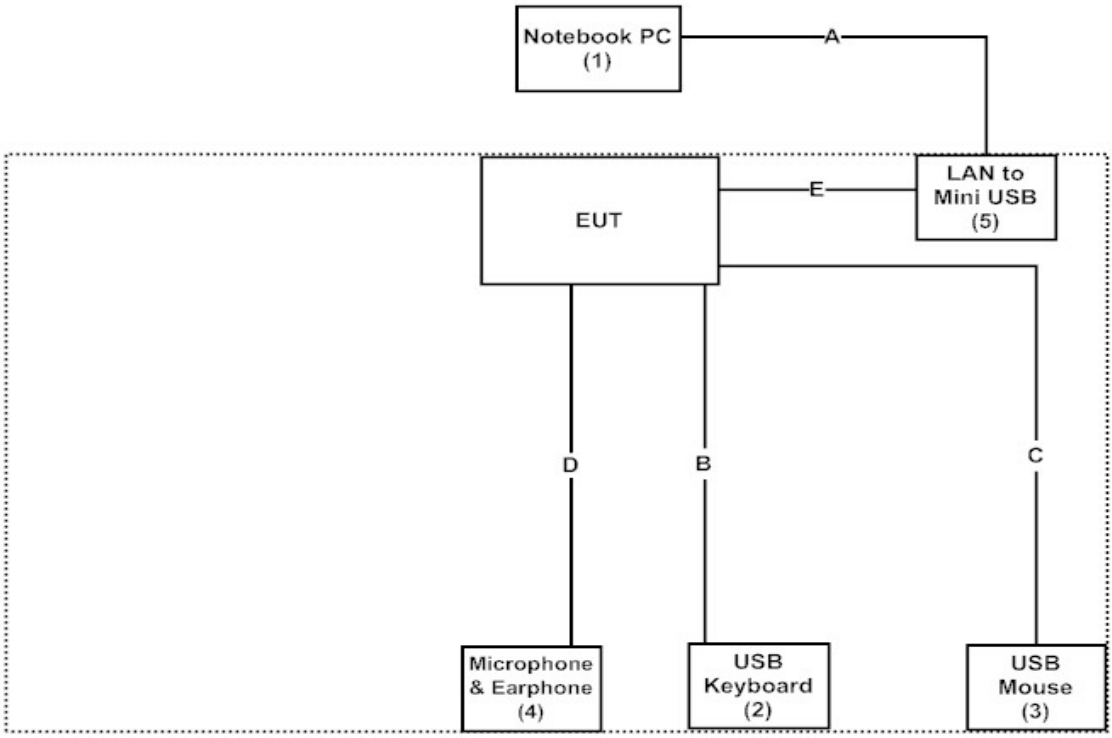
1.3. Tested System Datails

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
(1)	Notebook PC	DELL	PPT	N/A	Non-Shielded, 0.8m
(2)	USB Keyboard	Logitech	Y-UR83	8UK	N/A
(3)	USB Mouse	DELL	M056U0A	F0Y01YEC	N/A
(4)	Microphone & Earphone	Ubiqconn	N/A	N/A	N/A
(5)	LAN to Mini USB	Ubiqconn	N/A	N/A	N/A

Signal Cable Type		Signal cable Description
A	RJ45 Cable	Non-Shielded, 1.8m
B	USB Keyboard Cable	Shielded, 1.8m
C	USB Mouse Cable	Shielded, 1.8m
D	Microphone & Earphone Cable	Non-Shielded, 1.2m
E	LAN to Mini USB Cable	Non-Shielded, 0.1m

1.4. Configuration of tested System



1.5. EUT Exercise Software

(1) Setup the EUT as shown in Section 1.4

(2) Execute program “DRTU v1.5.3-0320” on the EUT.

(3) Configure the test mode, the test channel, and the data rate.

(4) Press “OK” to start the continuous Transmit.

(5) Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site : http://www.quietek.com/tw/ctg/cts/accreditations.htm

The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/

Site Description: File on
Federal Communications Commission
FCC Engineering Laboratory
7435 Oakland Mills Road
Columbia, MD 21046
Registration Number: 92195

Site Name: Quietek Corporation
Site Address: No.5-22, Ruishukeng Linkou Dist., New Taipei City
24451, Taiwan, R.O.C.
TEL: 886-2-8601-3788 / FAX : 886-2-8601-3789
E-Mail : service@quietek.com

FCC Accreditation Number: TW1014

2. Conducted Emission

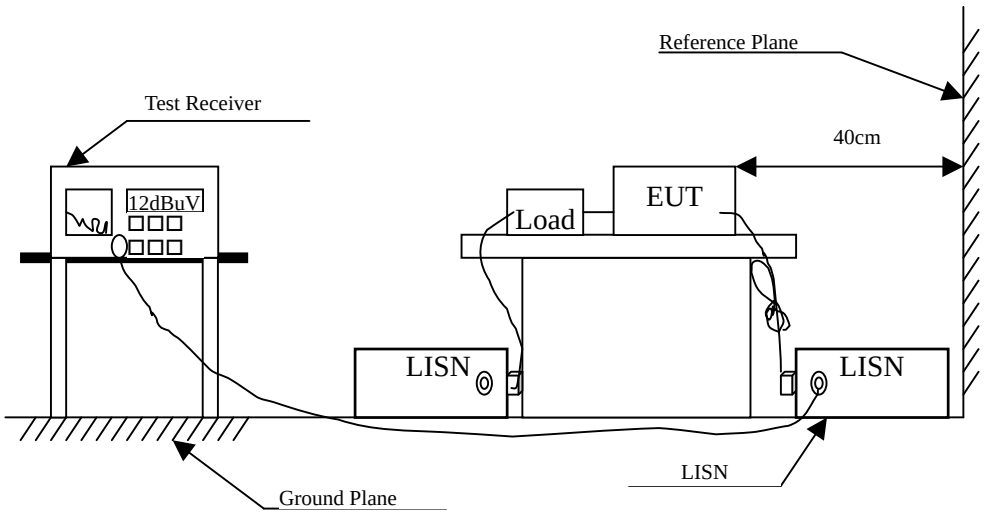
2.1. Test Equipment

	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.	Remark
X	Test Receiver	R & S	ESCS 30 / 825442/018	Sep., 2012	
X	Artificial Mains Network	R & S	ENV4200 / 848411/10	Feb., 2013	Peripherals
X	LISN	R & S	ESH3-Z5 / 825562/002	Feb., 2013	EUT
	DC LISN	Schwarzbeck	8226 / 176	Mar, 2013	EUT
X	Pulse Limiter	R & S	ESH3-Z2 / 357.8810.52	Feb., 2013	
	No.1 Shielded Room				

Note:

1. All equipments are calibrated every one year.
2. The test instruments marked by “X” are used to measure the final test results.

2.2. Test Setup



2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBuV) Limit		
Frequency MHz	Limits	
	QP	AV
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

Remarks : In the above table, the tighter limit applies at the band edges.

2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

2.5. Uncertainty

± 2.26 dB

2.6. Test Result of Conducted Emission

Product : TABLET PC
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5190MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
LINE 1					
Quasi-Peak					
0.212	9.830	33.820	43.650	-20.579	64.229
0.283	9.830	29.570	39.400	-22.800	62.200
0.427	9.830	28.070	37.900	-20.186	58.086
1.638	9.840	13.900	23.740	-32.260	56.000
5.130	9.880	21.060	30.940	-29.060	60.000
13.181	10.059	32.720	42.779	-17.221	60.000
Average					
0.212	9.830	23.330	33.160	-21.069	54.229
0.283	9.830	26.010	35.840	-16.360	52.200
0.427	9.830	23.960	33.790	-14.296	48.086
1.638	9.840	13.890	23.730	-22.270	46.000
5.130	9.880	15.630	25.510	-24.490	50.000
13.181	10.059	32.170	42.229	-7.771	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : TABLET PC
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5190MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.158	9.840	22.620	32.460	-33.311	65.771
0.173	9.836	15.630	25.466	-39.877	65.343
0.212	9.830	32.860	42.690	-21.539	64.229
0.283	9.831	26.440	36.271	-25.929	62.200
0.357	9.840	23.770	33.610	-26.476	60.086
0.427	9.840	25.060	34.900	-23.186	58.086
Average					
0.158	9.840	3.000	12.840	-42.931	55.771
0.173	9.836	9.030	18.866	-36.477	55.343
0.212	9.830	25.080	34.910	-19.319	54.229
0.283	9.831	26.430	36.261	-15.939	52.200
0.357	9.840	17.390	27.230	-22.856	50.086
0.427	9.840	23.240	33.080	-15.006	48.086

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : TABLET PC
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5270MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
LINE 1					
Quasi-Peak					
0.205	9.830	17.700	27.530	-36.899	64.429
0.287	9.830	26.640	36.470	-25.616	62.086
0.427	9.830	27.070	36.900	-21.186	58.086
0.638	9.830	24.830	34.660	-21.340	56.000
5.736	9.888	5.550	15.438	-44.562	60.000
12.970	10.056	29.910	39.966	-20.034	60.000
Average					
0.205	9.830	1.730	11.560	-42.869	54.429
0.287	9.830	23.130	32.960	-19.126	52.086
0.427	9.830	21.680	31.510	-16.576	48.086
0.638	9.830	17.190	27.020	-18.980	46.000
5.736	9.888	-3.630	6.258	-43.742	50.000
12.970	10.056	23.290	33.346	-16.654	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : TABLET PC
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5270MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.150	9.840	29.100	38.940	-27.060	66.000
0.216	9.830	31.370	41.200	-22.914	64.114
0.283	9.831	26.520	36.351	-25.849	62.200
0.357	9.840	26.230	36.070	-24.016	60.086
0.427	9.840	27.050	36.890	-21.196	58.086
5.060	9.889	18.980	28.869	-31.131	60.000
Average					
0.150	9.840	17.970	27.810	-28.190	56.000
0.216	9.830	27.900	37.730	-16.384	54.114
0.283	9.831	26.490	36.321	-15.879	52.200
0.357	9.840	23.870	33.710	-16.376	50.086
0.427	9.840	23.420	33.260	-14.826	48.086
5.060	9.889	9.150	19.039	-30.961	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : TABLET PC
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5550MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
LINE 1					
Quasi-Peak					
0.212	9.830	33.180	43.010	-21.219	64.229
0.283	9.830	26.420	36.250	-25.950	62.200
0.357	9.830	26.250	36.080	-24.006	60.086
0.615	9.830	24.530	34.360	-21.640	56.000
4.849	9.866	14.640	24.506	-31.494	56.000
13.045	10.057	30.420	40.477	-19.523	60.000
Average					
0.212	9.830	26.510	36.340	-17.889	54.229
0.283	9.830	25.790	35.620	-16.580	52.200
0.357	9.830	24.030	33.860	-16.226	50.086
0.615	9.830	8.110	17.940	-28.060	46.000
4.849	9.866	1.500	11.366	-34.634	46.000
13.045	10.057	14.310	24.367	-25.633	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : TABLET PC
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5550MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.220	9.830	21.240	31.070	-32.930	64.000
0.287	9.832	27.000	36.832	-25.254	62.086
0.427	9.840	27.290	37.130	-20.956	58.086
0.498	9.840	22.630	32.470	-23.587	56.057
5.482	9.905	20.660	30.565	-29.435	60.000
12.888	10.144	26.030	36.174	-23.826	60.000
Average					
0.220	9.830	7.550	17.380	-36.620	54.000
0.287	9.832	25.140	34.972	-17.114	52.086
0.427	9.840	24.190	34.030	-14.056	48.086
0.498	9.840	18.790	28.630	-17.427	46.057
5.482	9.905	12.310	22.215	-27.785	50.000
12.888	10.144	22.530	32.674	-17.326	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

3. Maximun conducted output power

3.1. Test Equipment

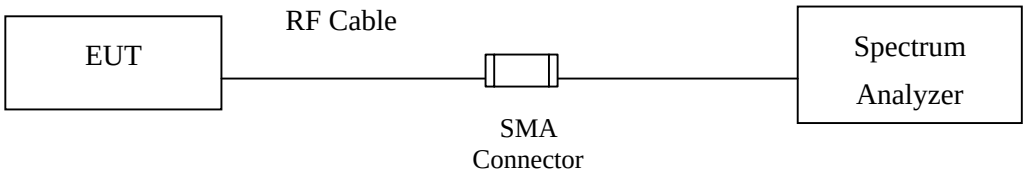
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Power Meter	Anritsu	ML2495A/6K00003357	May, 2013
X	Power Sensor	Anritsu	MA2411B/0738448	Jun, 2013
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2013

Note:

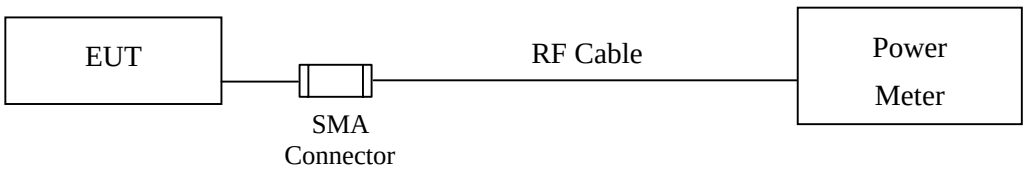
1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.

3.2. Test Setup

26dBc Occupied Bandwidth



Conduction Power Measurement



3.3. Limits

(1) For the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 50 mW or 4 dBm + 10log B, where B is the 26-dB emission bandwidth in MHz. If transmitting antenna of directional gain greater than 6 dBi are used, the Maximum conducted output power 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 maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10log B, where B is the 26-dB emission bandwidth in MHz. If transmitting antenna of directional gain greater than 6 dBi are used, the Maximum conducted output power 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 maximum conducted output power over the frequency band of operation shall not exceed the lesser of 1W or 17 dBm + 10log B, where B is the 26-dB emission bandwidth in MHz. If transmitting antenna of directional gain greater than 6 dBi are used, the Maximum conducted output power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

3.4. Test Procedure

As an alternative to FCC KDB-789033, the EUT maximum conducted output power was measured with an average power meter employing a video bandwidth greater than 6dB BW of the emission under test. Maximum conducted output power was read directly from the meter across all data rates, and across three channels within each sub-band. Special care was used to make sure that the EUT was transmitting in continuous mode. This method exceeds the limitations of FCC KDB-789033, and provides more accurate measurements.
The Maximum conducted output power using KDB 789033 section E)3)b) Method PM-G (Measurement using a gated RF average power meter).

3.5. Uncertainty

± 1.27 dB

3.6. Test Result of Maximum conducted output power

Product : TABLET PC
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11a-6Mbps)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		6	9	12	18	24	36	48	54	
		Measurement Level (dBm)								
36	5180	14.67	--	--	--	--	--	--	--	<17dBm
44	5220	14.58	14.42	14.36	14.28	14.16	14.05	13.92	13.81	<17dBm
48	5240	14.7	--	--	--	--	--	--	--	<17dBm
52	5260	14.49	--	--	--	--	--	--	--	<24dBm
60	5300	14.48	13.34	13.26	13.14	13.08	12.92	12.8	12.77	<24dBm
64	5320	14.69	--	--	--	--	--	--	--	<24dBm
100	5500	14.72	--	--	--	--	--	--	--	<24dBm
116	5580	14.75	14.61	14.52	14.48	14.34	14.26	14.16	14.03	<24dBm
140	5700	14.72	--	--	--	--	--	--	--	<24dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		6	9	12	18	24	36	48	54	
		Measurement Level (dBm)								
36	5180	14.60	--	--	--	--	--	--	--	<17dBm
44	5220	14.49	14.38	14.27	14.18	14.06	13.92	13.82	13.77	<17dBm
48	5240	14.57	--	--	--	--	--	--	--	<17dBm
52	5260	14.43	--	--	--	--	--	--	--	<24dBm
60	5300	14.43	14.39	14.35	14.28	14.15	14.05	13.82	13.77	<24dBm
64	5320	14.46	--	--	--	--	--	--	--	<24dBm
100	5500	14.45	--	--	--	--	--	--	--	<24dBm
116	5580	14.72	14.62	14.53	14.47	14.35	14.26	14.16	14.08	<24dBm
140	5700	14.71	--	--	--	--	--	--	--	<24dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

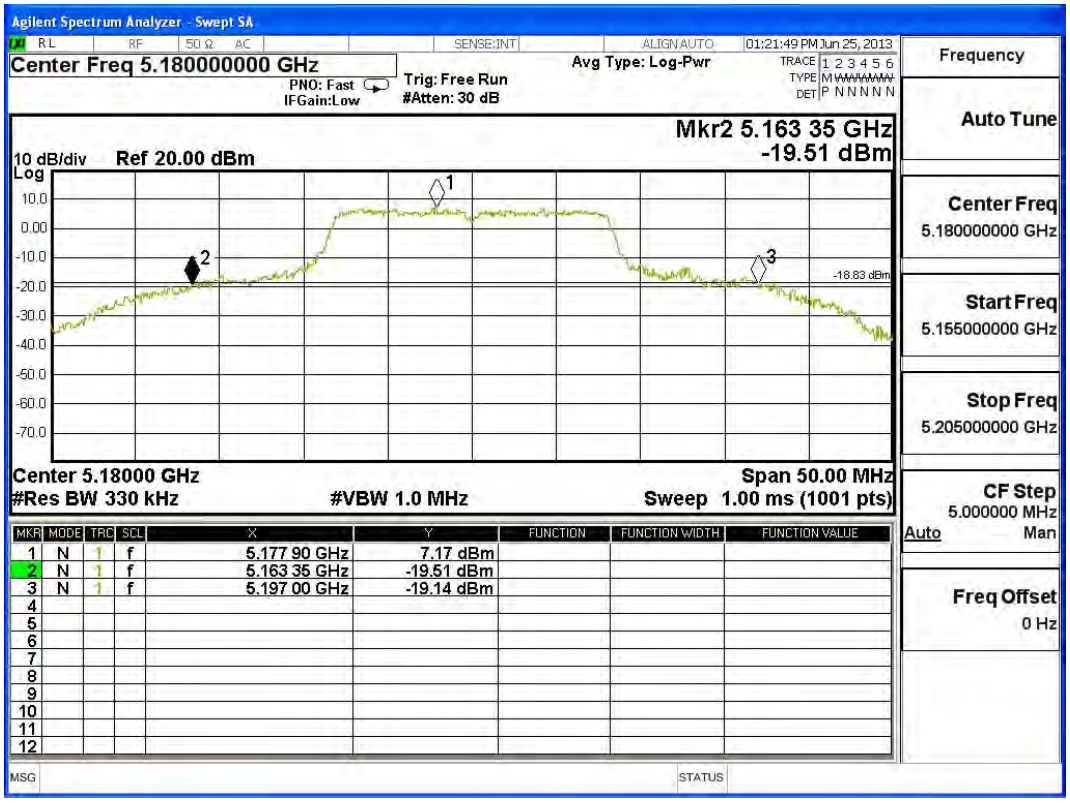
Maximum conducted output power Measurement:

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Output Power Limit	
				(dBm)	dBm+10log(BW)
36	5180	33.650	14.67	17	19.27
44	5220	34.750	14.58	17	19.41
48	5240	35.000	14.7	17	19.44
52	5260	36.500	14.49	24	26.62
60	5300	39.050	14.48	24	26.92
64	5320	37.800	14.69	24	26.77
100	5500	37.600	14.72	24	26.75
116	5580	35.550	14.75	24	26.51
140	5700	35.050	14.72	24	26.45

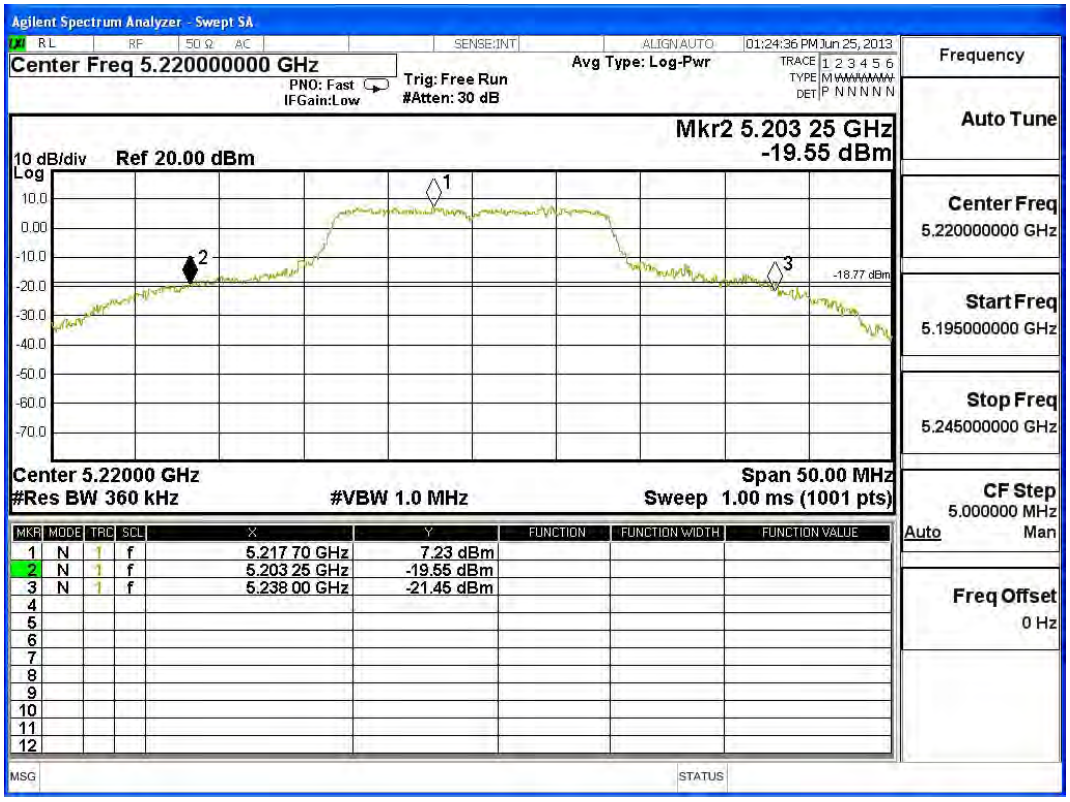
Note: Power Output Value =Reading value on average power meter + cable loss

26dBc Occupied Bandwidth:

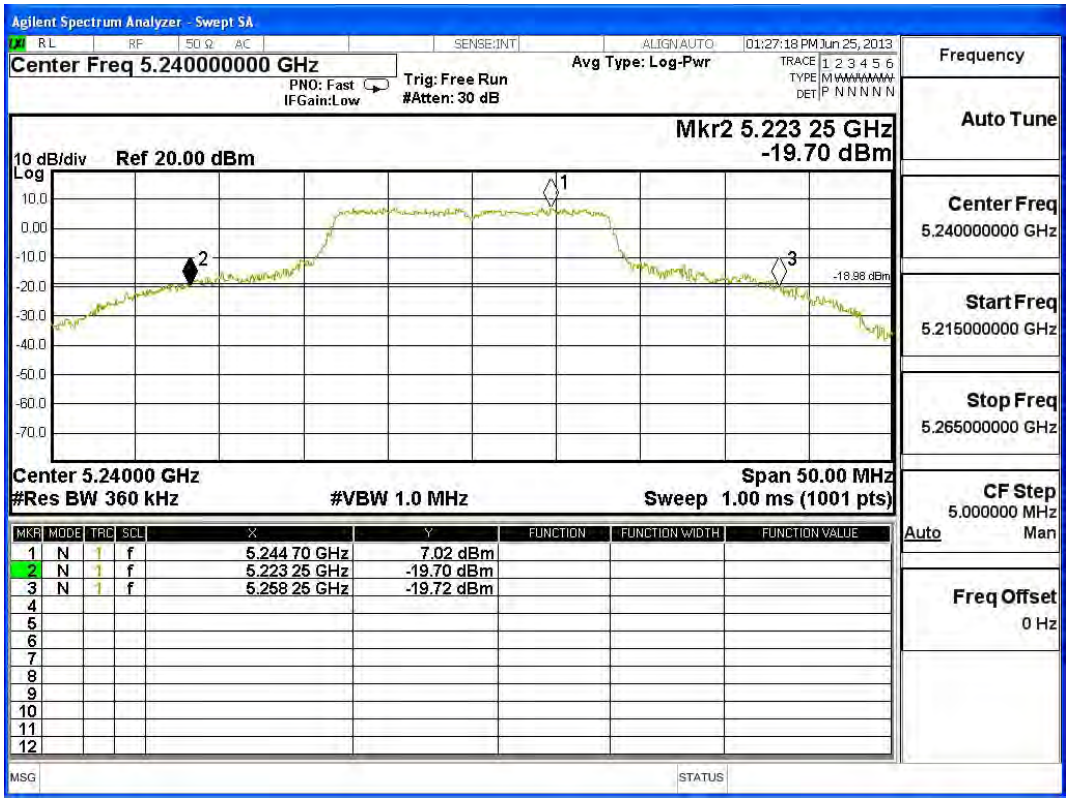
Channel 36



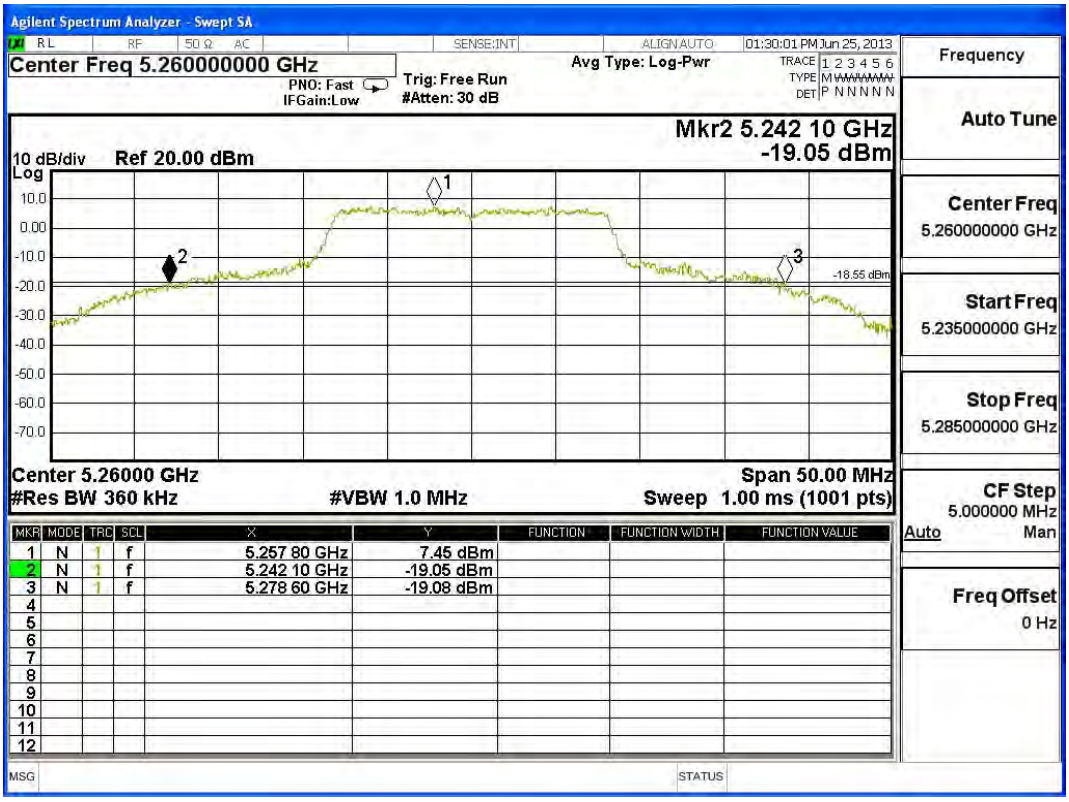
Channel 40



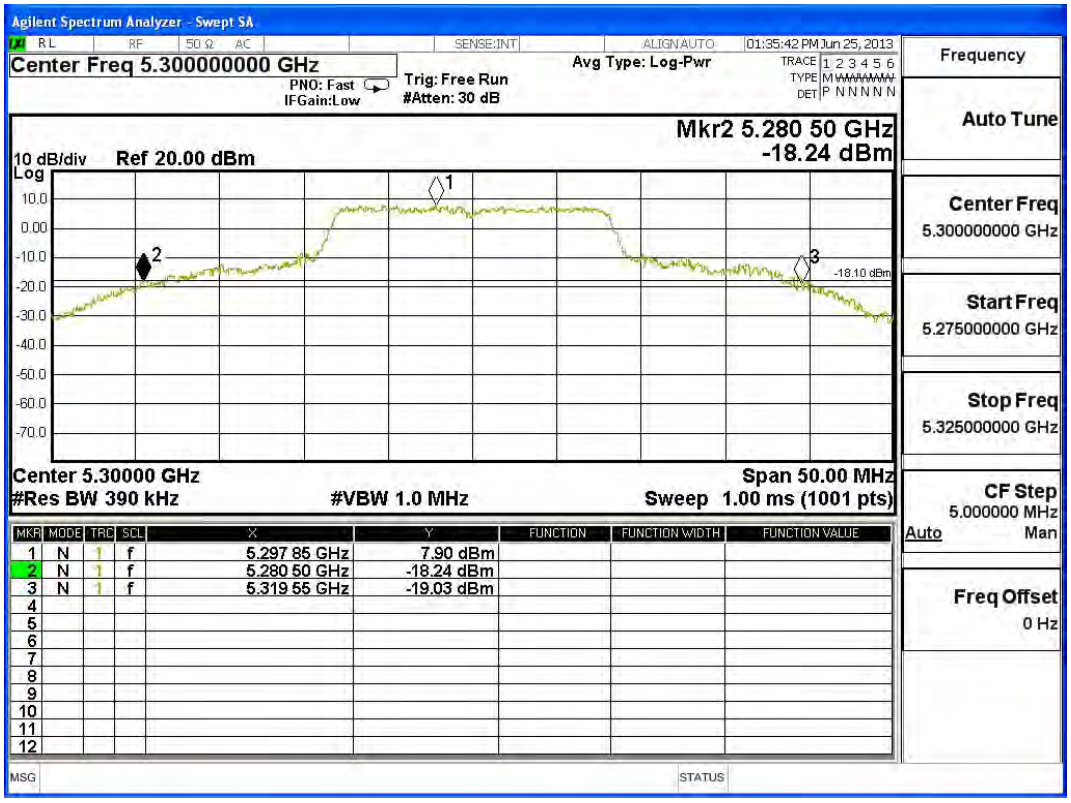
Channel 48



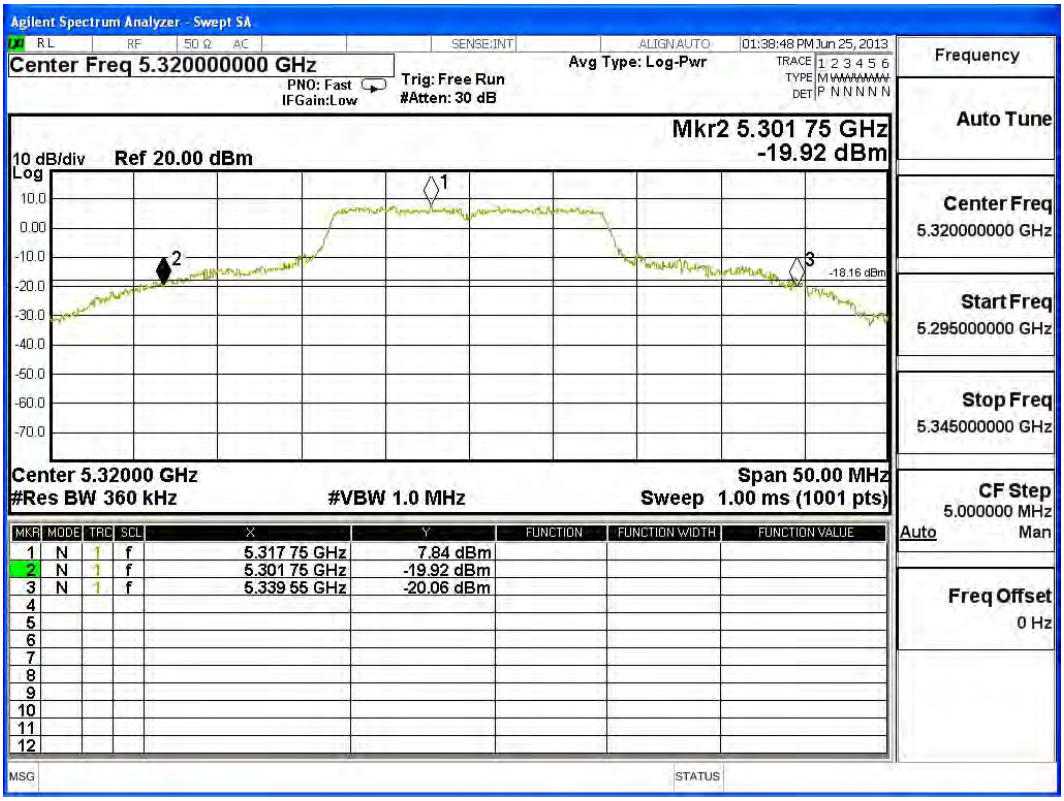
Channel 52



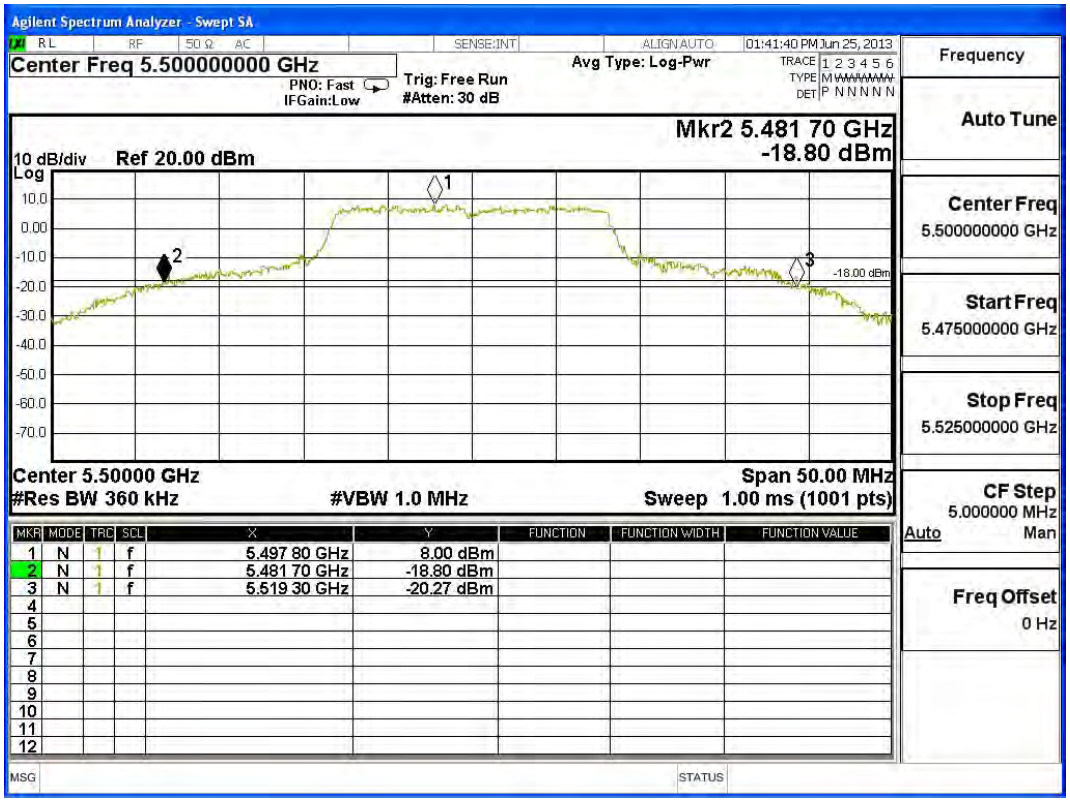
Channel 60



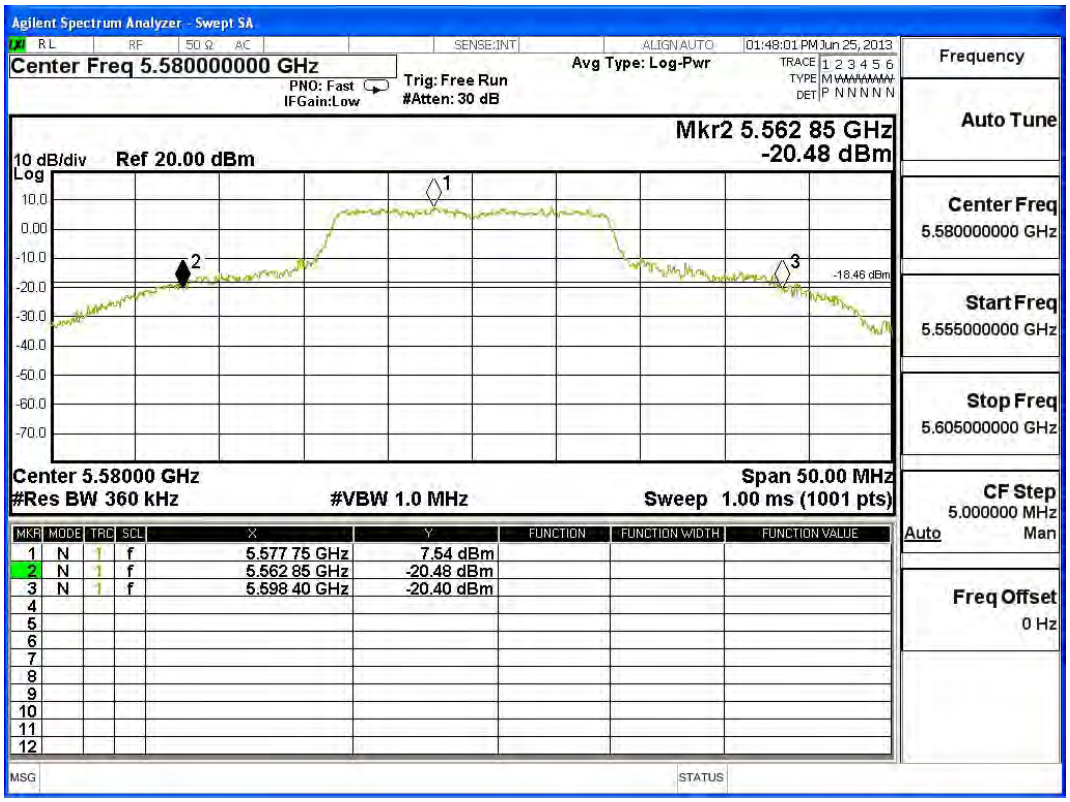
Channel 64



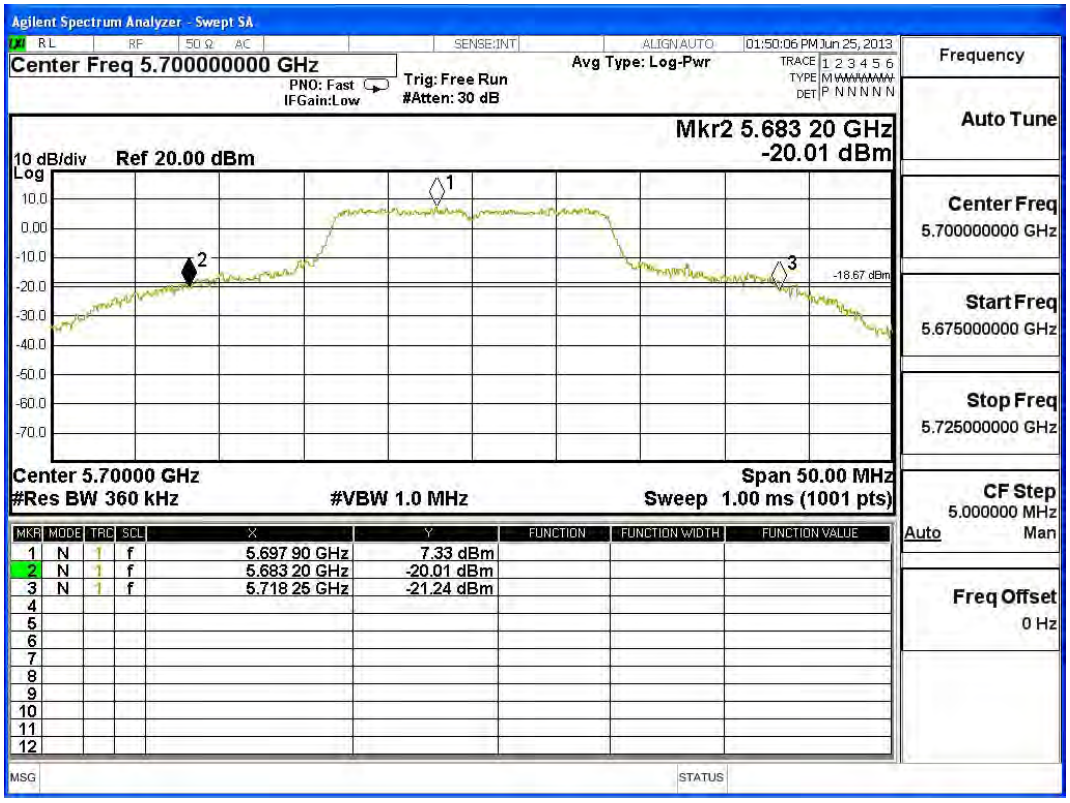
Channel 100



Channel 116



Channel 140


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.700000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
01:50:06 PM Jun 25, 2013
Mkr2 5.683 20 GHz
-20.01 dBm
10 dB/div
Log
Ref 20.00 dBm
-18.67 dBm
Center 5.70000 GHz
#Res BW 360 kHz
#VBW 1.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
1 N 1 f 5.697 90 GHz 7.33 dBm
2 N 1 f 5.683 20 GHz -20.01 dBm
3 N 1 f 5.718 25 GHz -21.24 dBm
Frequency
Auto Tune
Center Freq
5.700000000 GHz
Start Freq
5.675000000 GHz
Stop Freq
5.725000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product : TABLET PC
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		14.4	28.9	43.3	57.8	86.7	115.6	130	144.4	
		Measurement Level (dBm)								
36	5180	10.53	--	--	--	--	--	--	--	<17dBm
44	5220	10.54	10.38	10.28	10.12	10.06	9.95	9.81	9.75	<17dBm
48	5240	10.58	--	--	--	--	--	--	--	<17dBm
52	5260	10.29	--	--	--	--	--	--	--	<24dBm
60	5300	10.71	10.62	10.57	10.48	10.38	10.26	10.14	10.06	<24dBm
64	5320	11.51	--	--	--	--	--	--	--	<24dBm
100	5500	10.88	--	--	--	--	--	--	--	<24dBm
116	5580	11.04	10.93	10.82	10.68	10.54	10.46	10.33	10.18	<24dBm
140	5700	11.59	--	--	--	--	--	--	--	<24dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		14.4	28.9	43.3	57.8	86.7	115.6	130	144.4	
		Measurement Level (dBm)								
36	5180	10.51	--	--	--	--	--	--	--	<17dBm
44	5220	10.77	10.58	10.27	10.16	10.06	9.94	9.84	9.76	<17dBm
48	5240	10.54	--	--	--	--	--	--	--	<17dBm
52	5260	10.59	--	--	--	--	--	--	--	<24dBm
60	5300	10.37	10.26	10.16	10.06	9.92	9.83	9.73	9.62	<24dBm
64	5320	10.28	--	--	--	--	--	--	--	<24dBm
100	5500	10.75	--	--	--	--	--	--	--	<24dBm
116	5580	10.73	10.61	10.54	10.47	10.36	10.22	10.15	10.07	<24dBm
140	5700	11.19	--	--	--	--	--	--	--	<24dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

CHAIN A+B

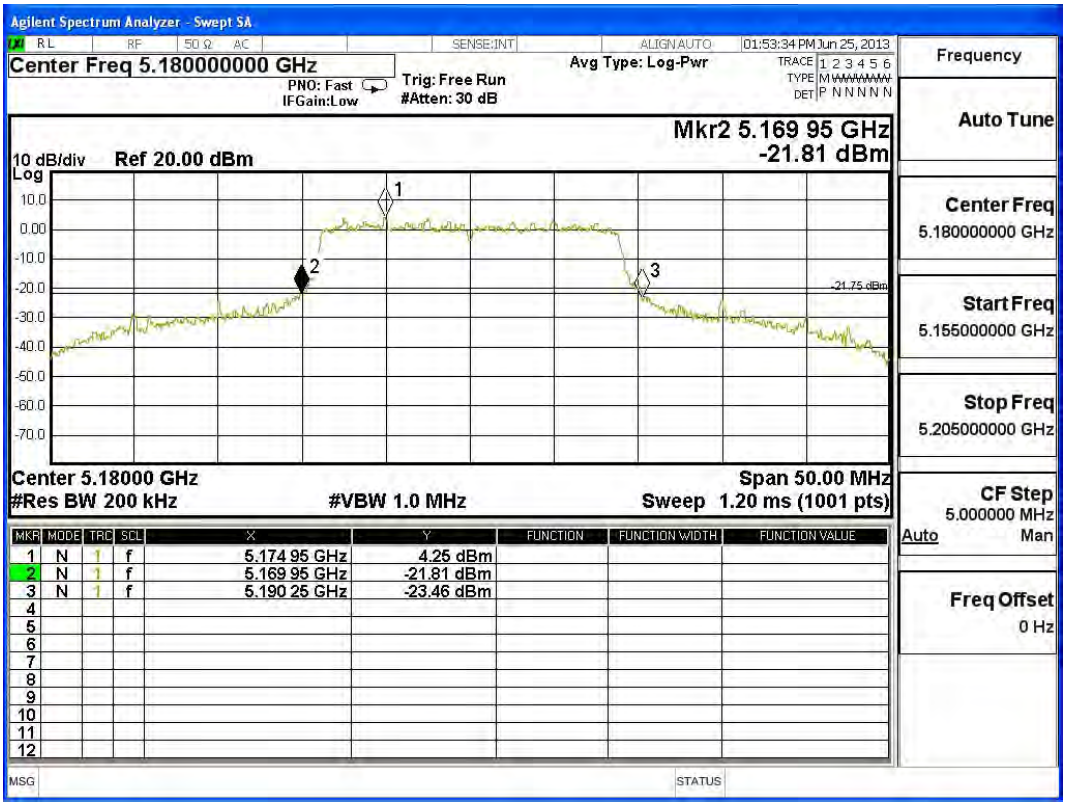
Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
36	5180	20.200	10.53	10.51	13.53	17	17.05
44	5220	20.100	10.54	10.77	13.67	17	17.03
48	5240	20.150	10.58	10.54	13.57	17	17.04
52	5260	20.000	10.29	10.59	13.45	24	24.01
60	5300	20.200	10.71	10.37	13.55	24	24.05
64	5320	20.400	11.51	10.28	13.95	24	24.10
100	5500	19.950	10.88	10.75	13.83	24	24.00
116	5580	20.150	11.04	10.73	13.90	24	24.04
140	5700	19.950	11.59	11.19	14.40	24	24.00

Note:

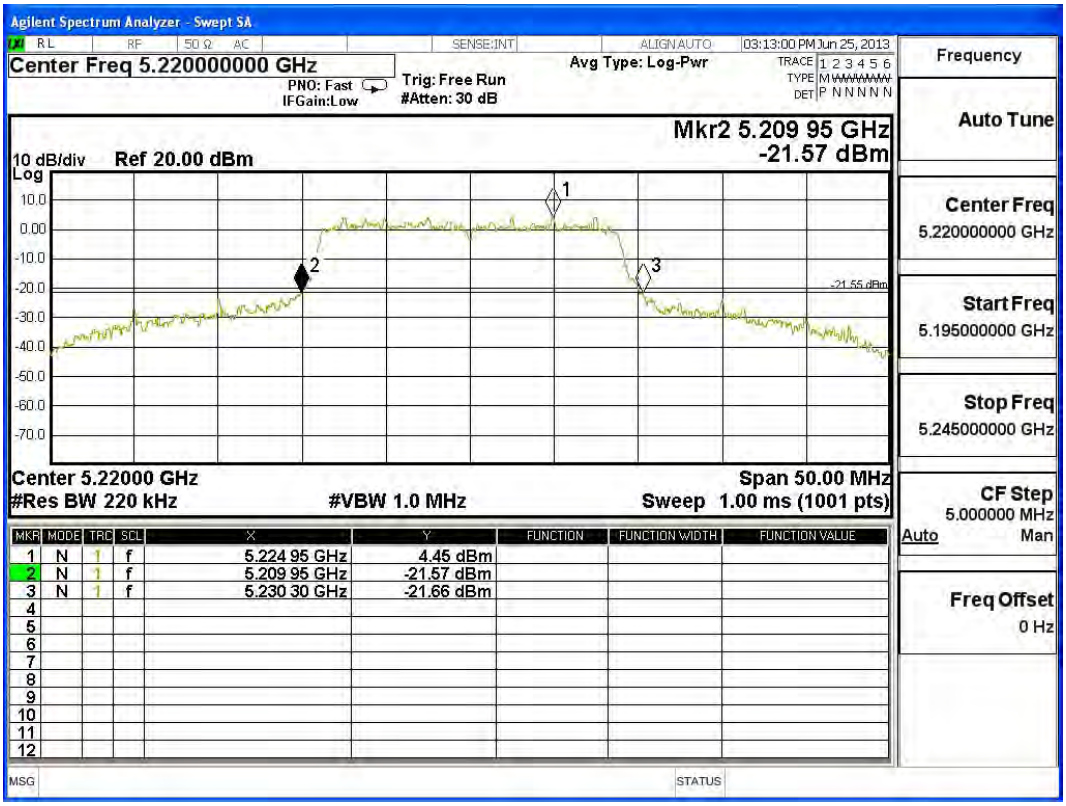
1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10*LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

26dBc Occupied Bandwidth:

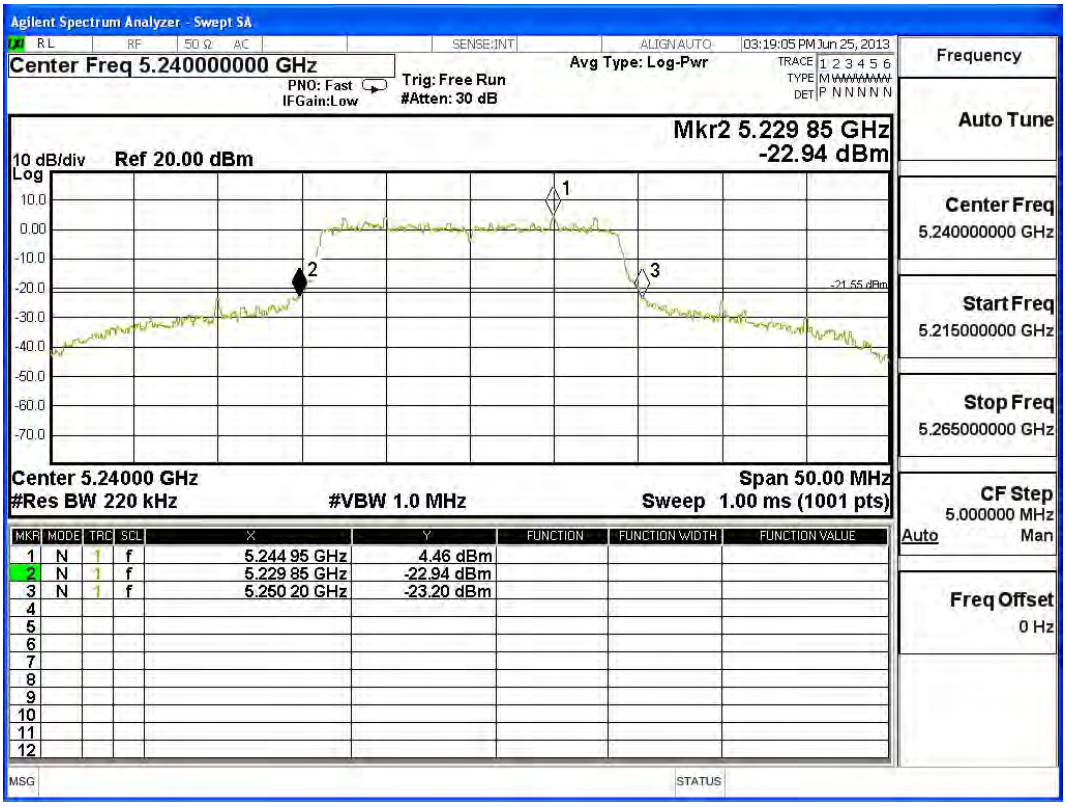
Channel 36 -Chain A



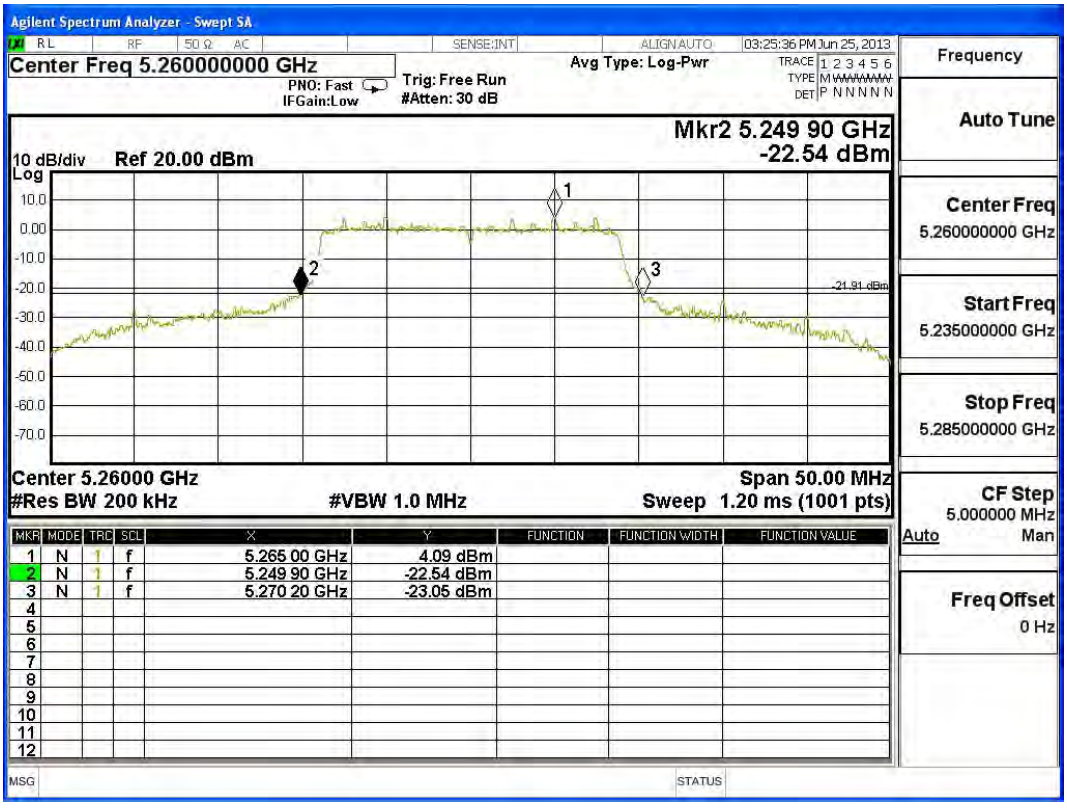
Channel 44 -Chain A



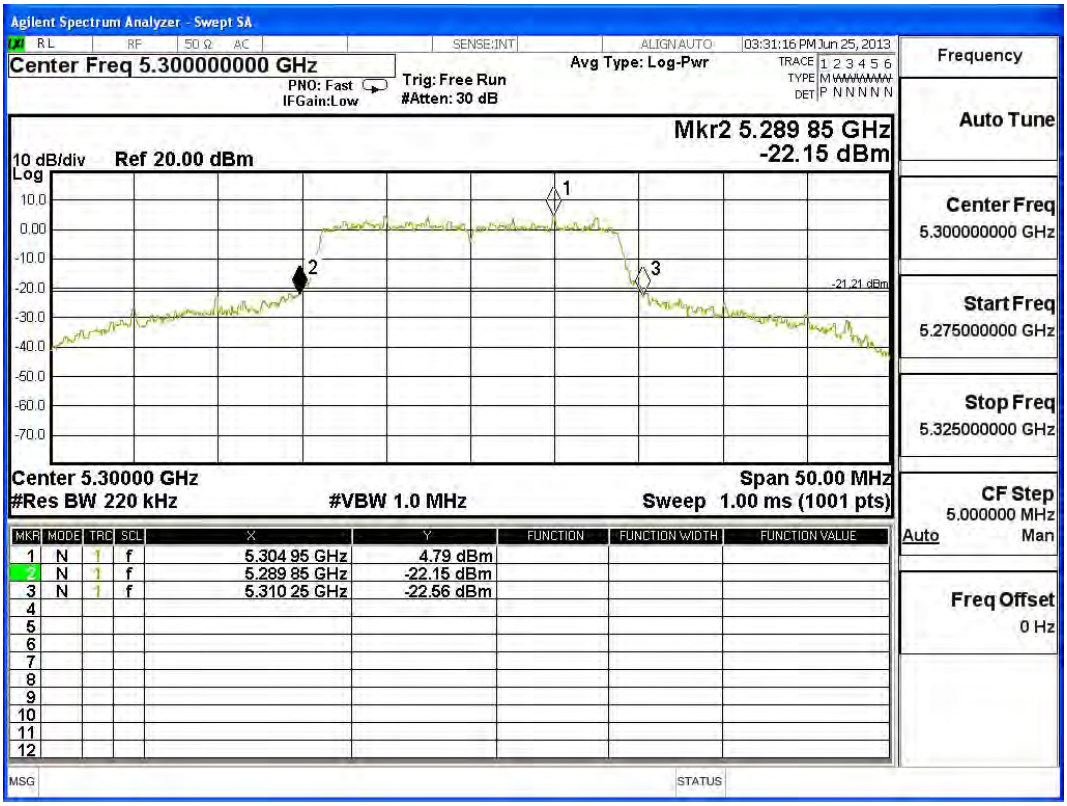
Channel 48 -Chain A



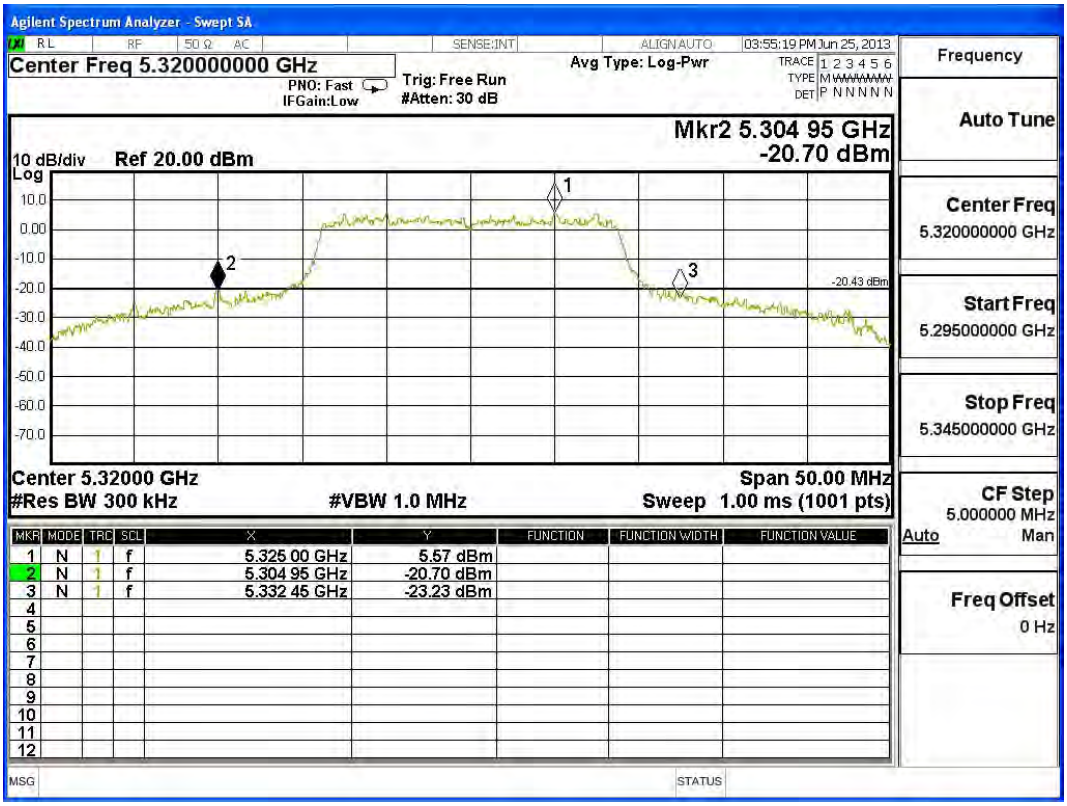
Channel 52 -Chain A



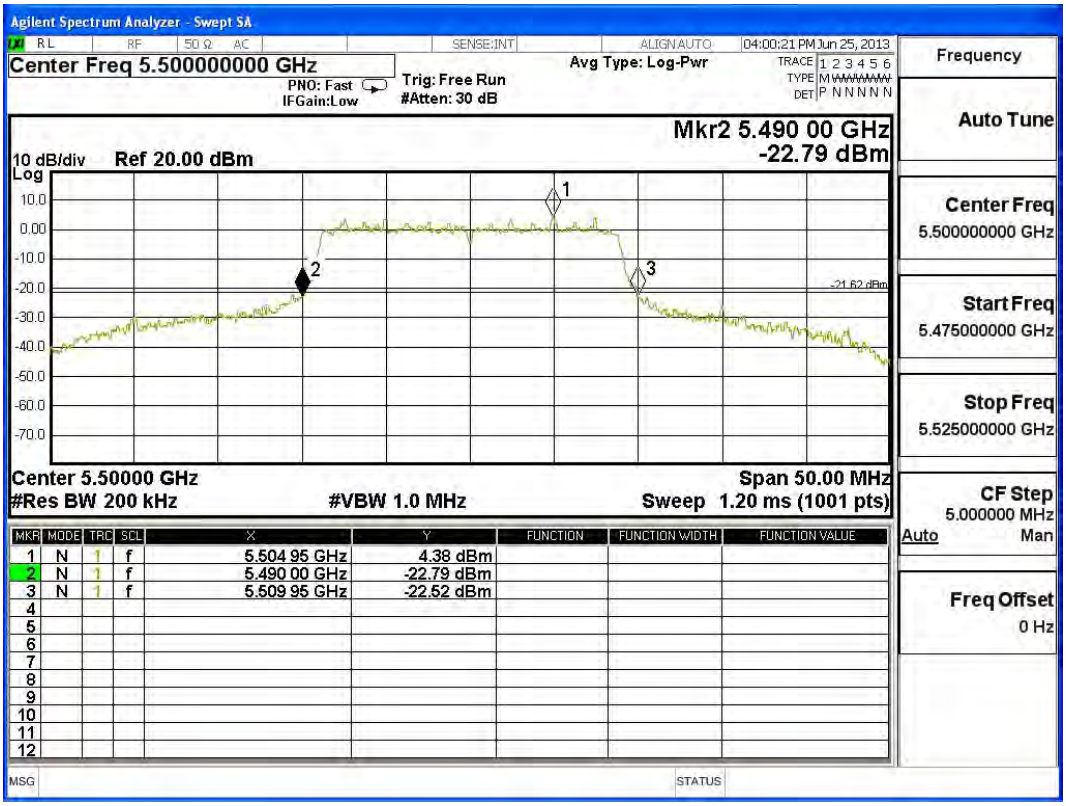
Channel 60 -Chain A



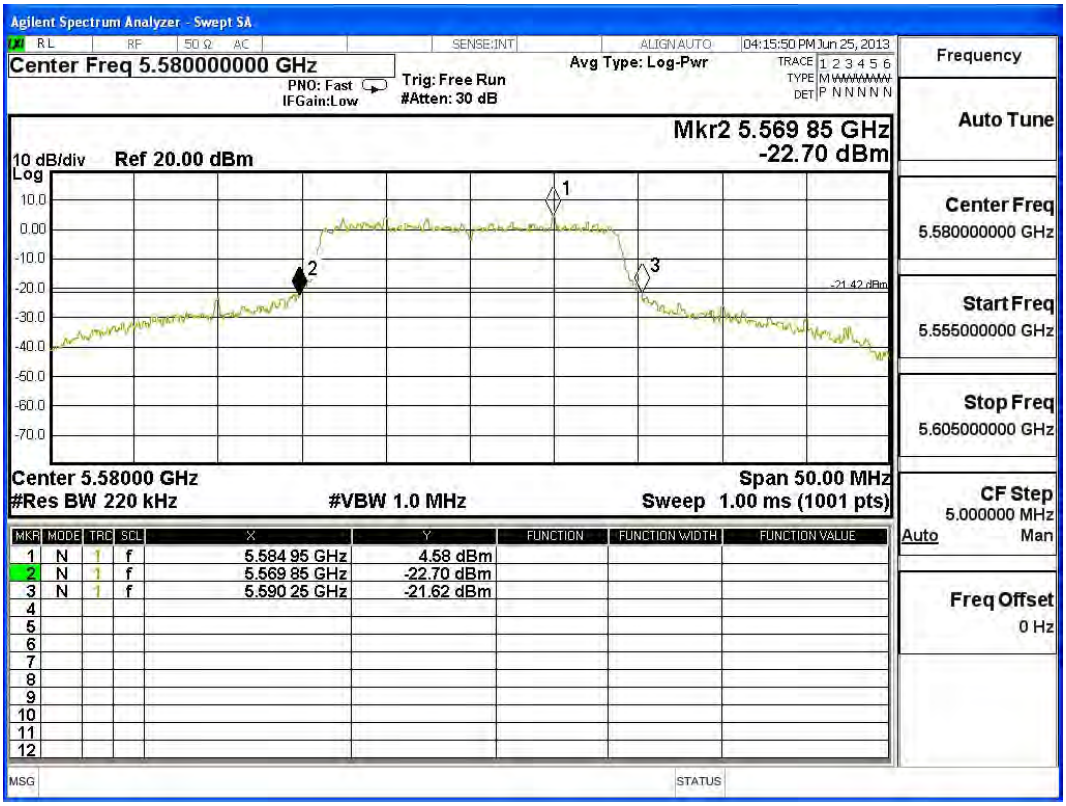
Channel 64 -Chain A



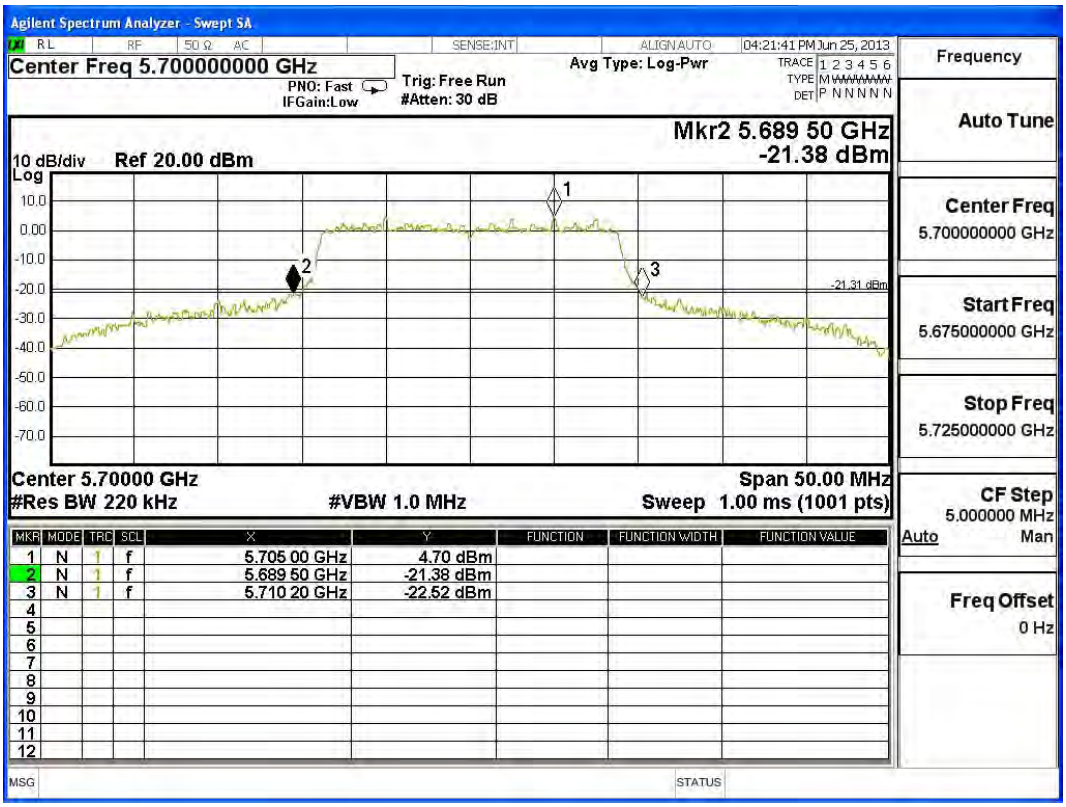
Channel 100 -Chain A



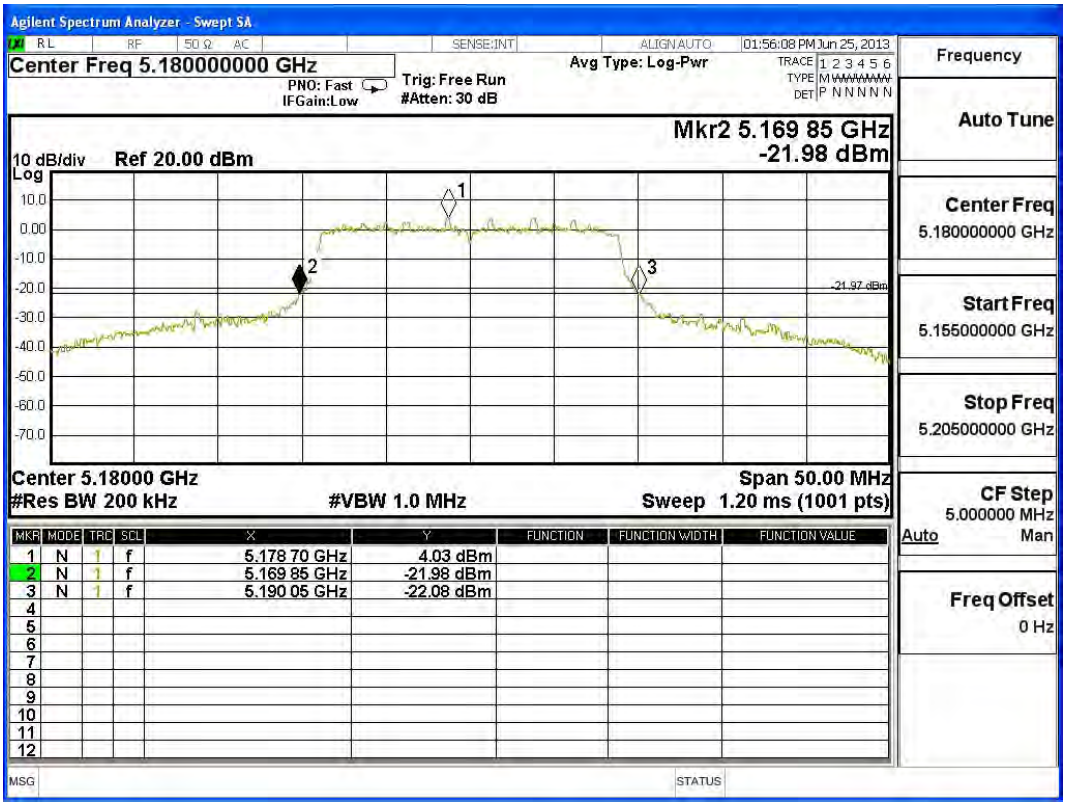
Channel 116 -Chain A



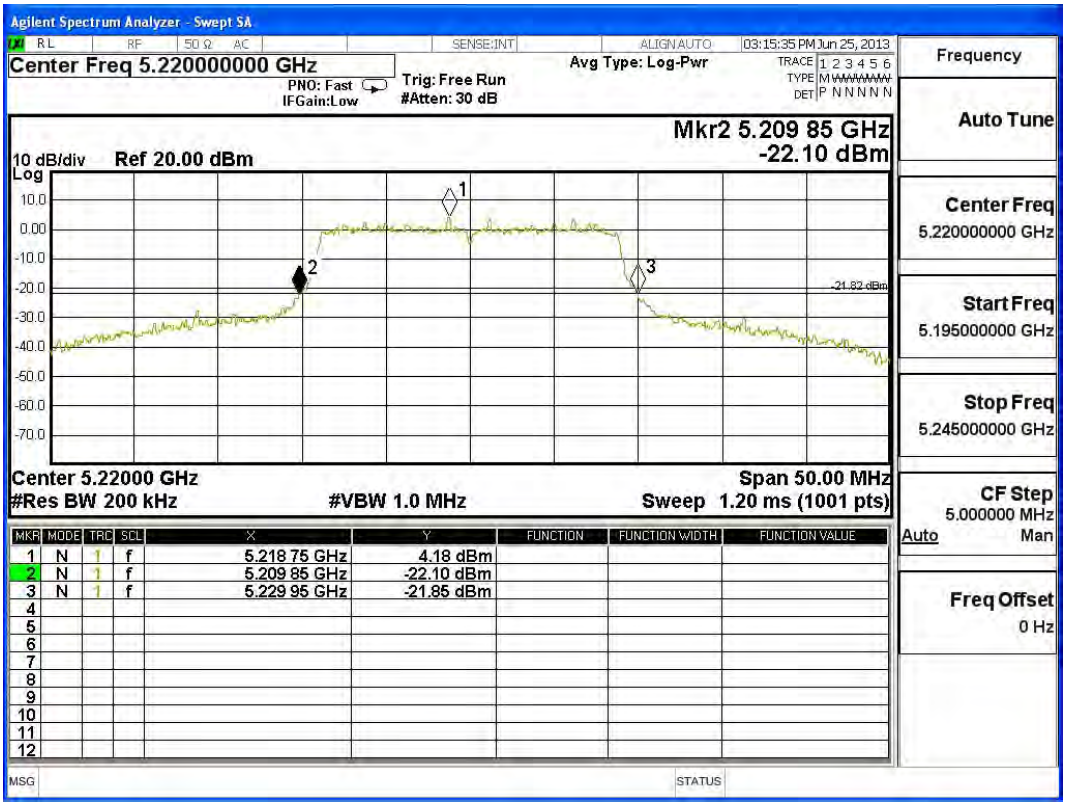
Channel 140 -Chain A



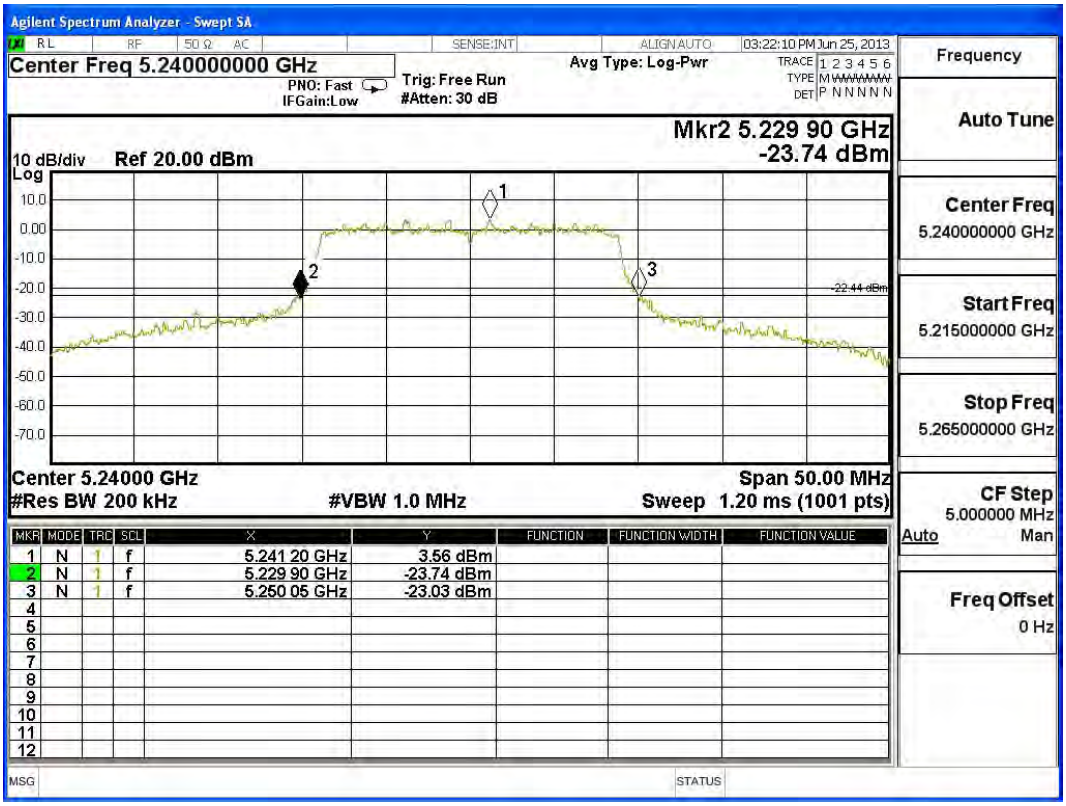
Channel 36 -Chain B



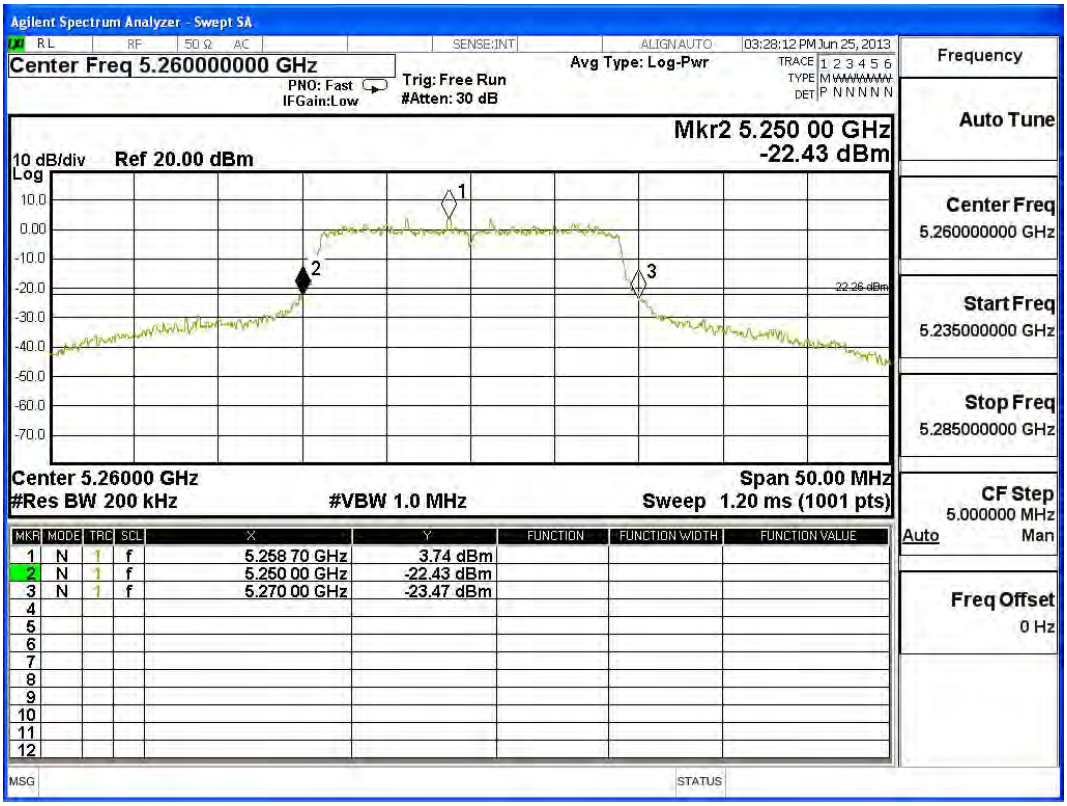
Channel 44 -Chain B



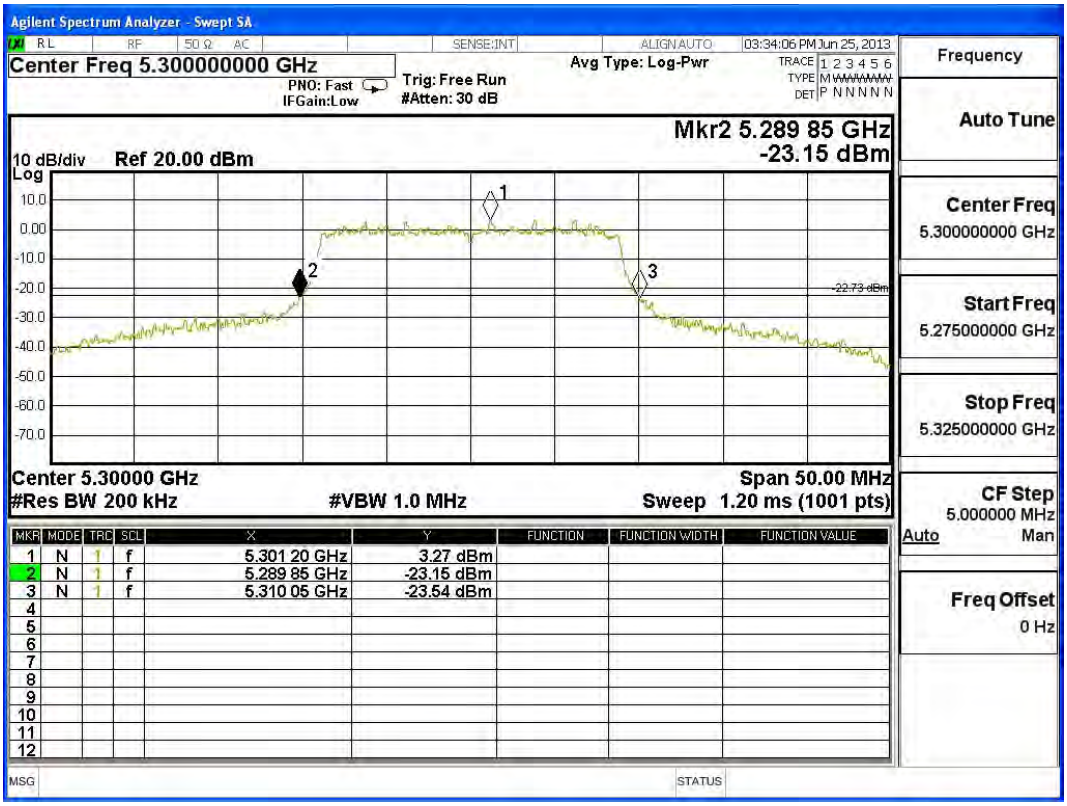
Channel 48 -Chain B



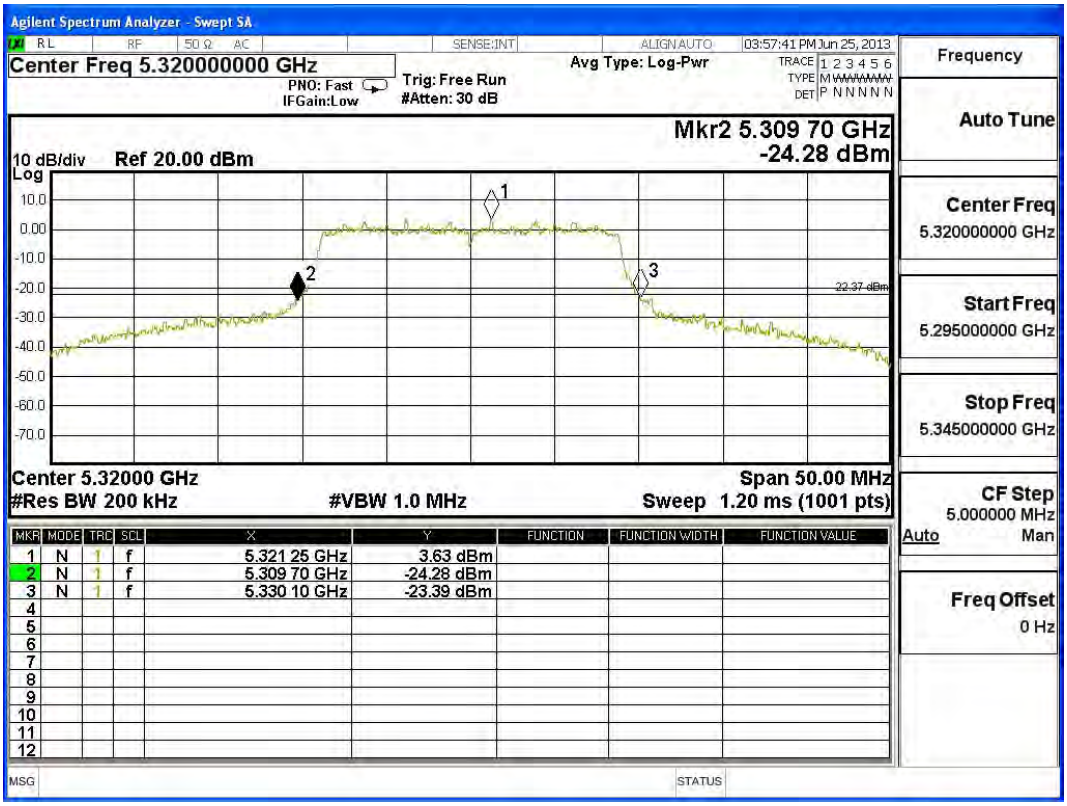
Channel 52 -Chain B



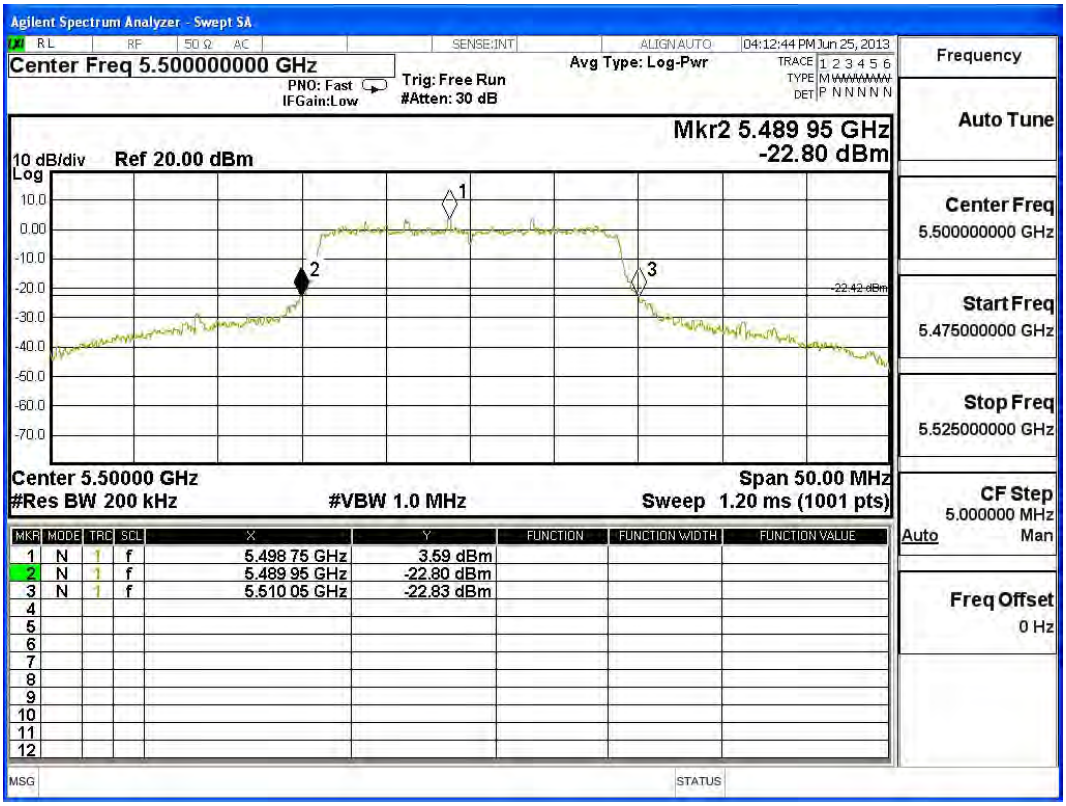
Channel 60 -Chain B



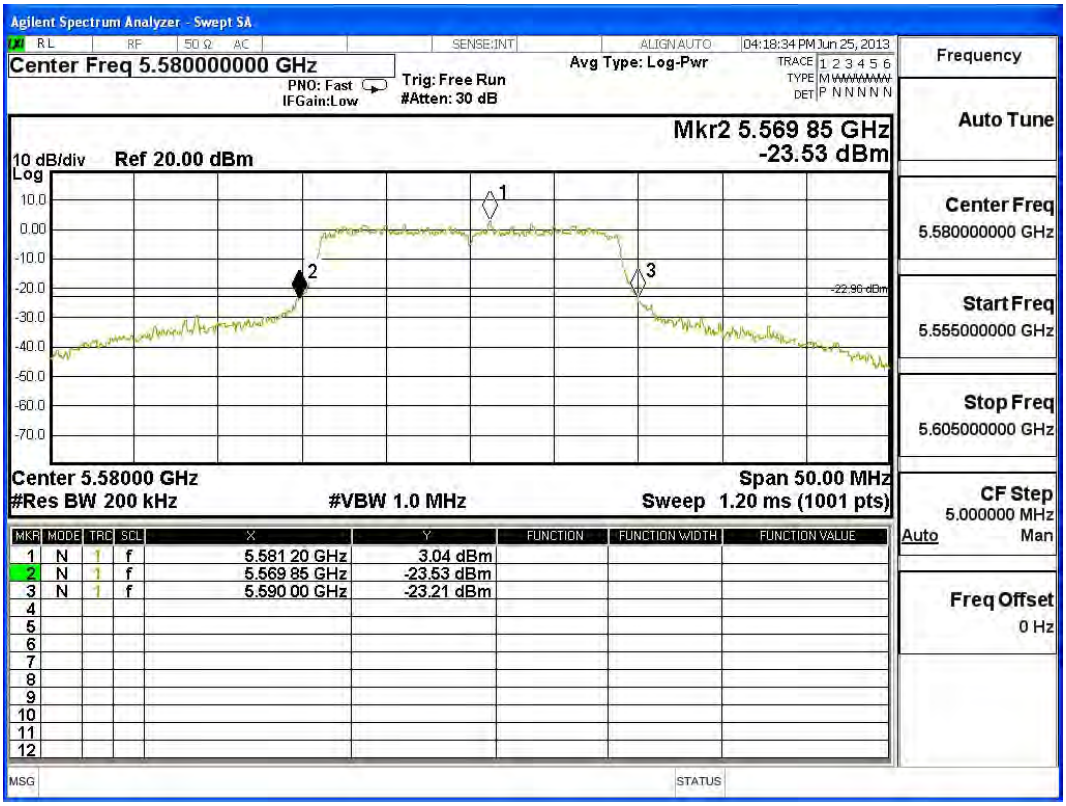
Channel 64 -Chain B



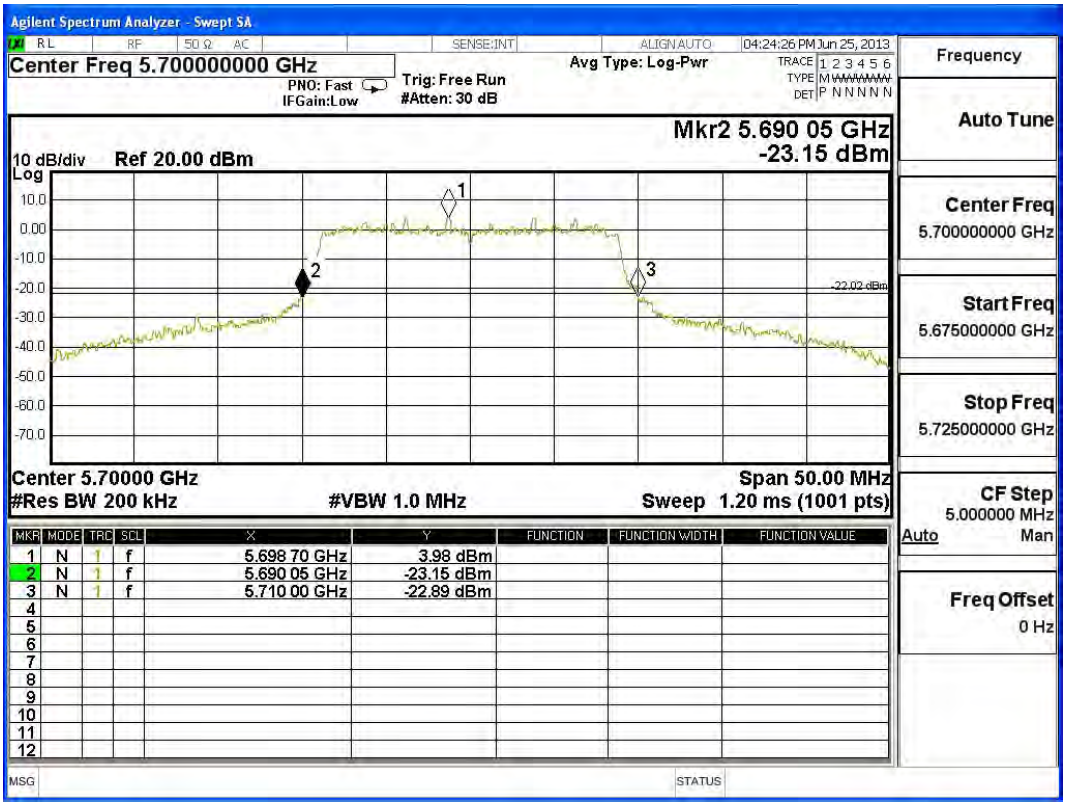
Channel 100 -Chain B



Channel 116 -Chain B



Channel 140 -Chain B



Product : TABLET PC
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		30	60	90	120	180	240	270	300	
		Measurement Level (dBm)								
38	5190	8.34	--	--	--	--	--	--	--	<17dBm
46	5230	11.49	11.34	11.23	11.15	11.03	10.95	10.81	10.73	<17dBm
54	5270	11.25	--	--	--	--	--	--	--	<17dBm
62	5310	8.23	8.16	8.03	7.95	7.82	7.73	7.67	7.51	<24dBm
102	5510	10.99	--	--	--	--	--	--	--	<24dBm
110	5550	11.13	11.06	10.92	10.84	10.76	10.65	10.55	10.46	<24dBm
134	5670	11.75	--	--	--	--	--	--	--	<24dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		30	60	90	120	180	240	270	300	
		Measurement Level (dBm)								
38	5190	8.08	--	--	--	--	--	--	--	<17dBm
46	5230	11.04	10.97	10.86	10.71	10.65	10.58	10.42	10.34	<17dBm
54	5270	11.41	--	--	--	--	--	--	--	<17dBm
62	5310	7.97	7.82	7.74	7.55	7.31	7.24	7.15	7.03	<24dBm
102	5510	10.67	--	--	--	--	--	--	--	<24dBm
110	5550	11.05	10.92	10.81	10.73	10.64	10.53	10.47	10.35	<24dBm
134	5670	11.12	--	--	--	--	--	--	--	<24dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

CHAIN A+B

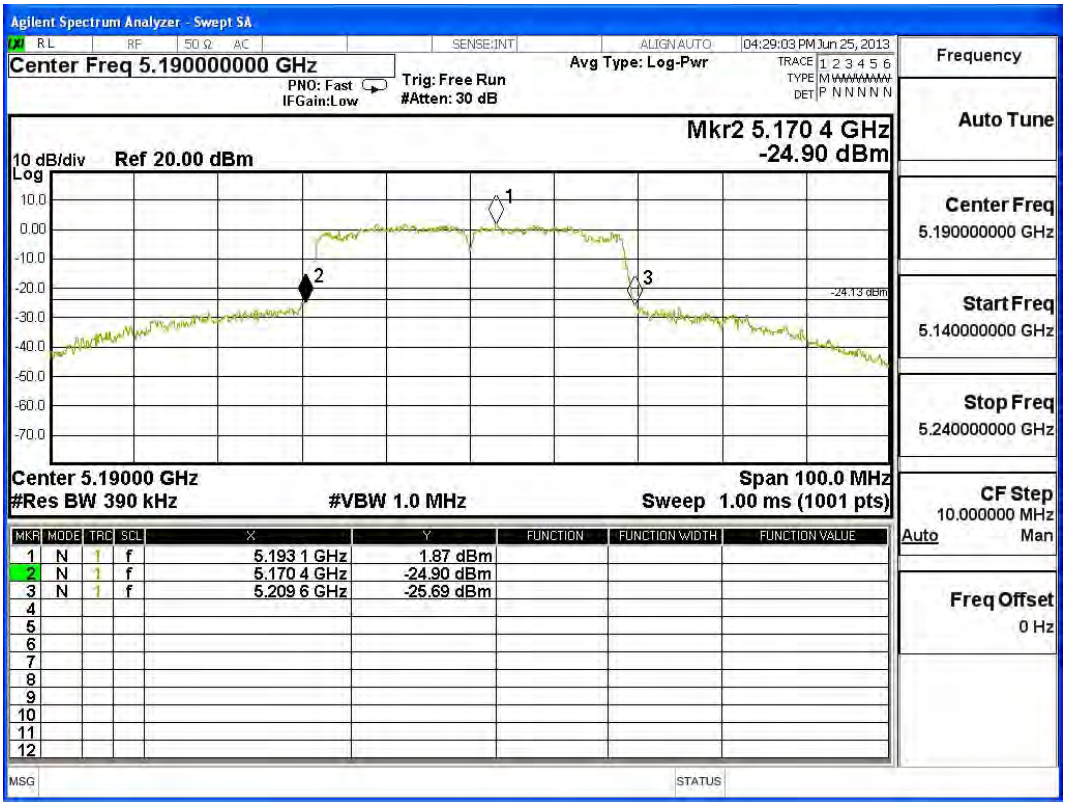
Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
38	5190	39.100	8.34	8.08	11.22	17	19.92
46	5230	39.000	11.49	11.04	14.28	17	19.91
54	5270	39.200	11.25	11.41	14.34	24	26.93
62	5310	39.200	8.23	7.97	11.11	24	26.93
102	5510	39.400	10.99	10.67	13.84	24	26.95
110	5550	39.300	11.13	11.05	14.10	24	26.94
134	5670	38.900	11.75	11.12	14.46	24	26.90

Note:

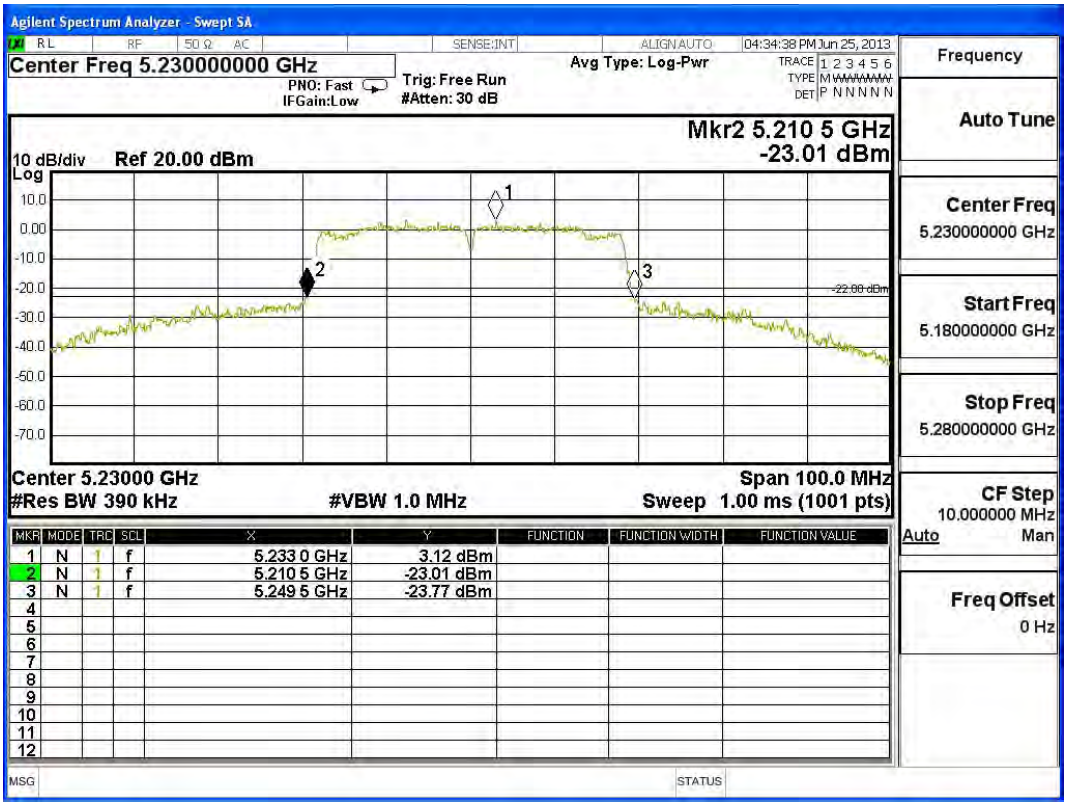
1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW)
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

26dBc Occupied Bandwidth:

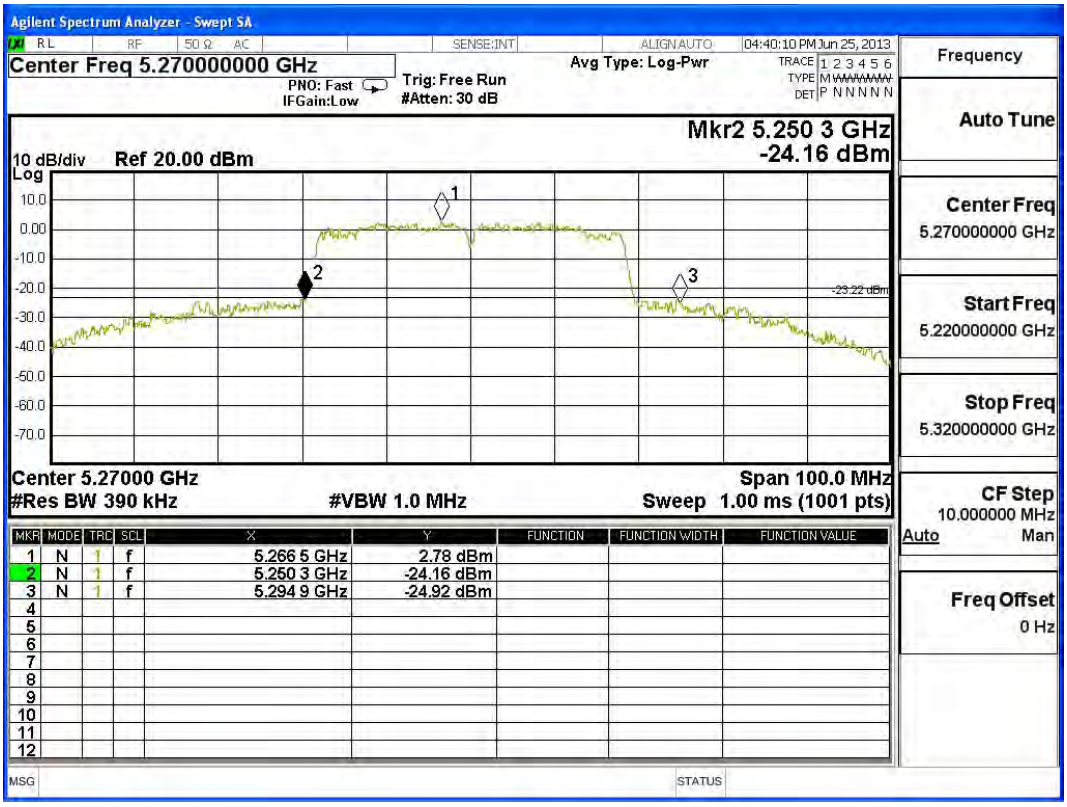
Channel 38 – Chain A



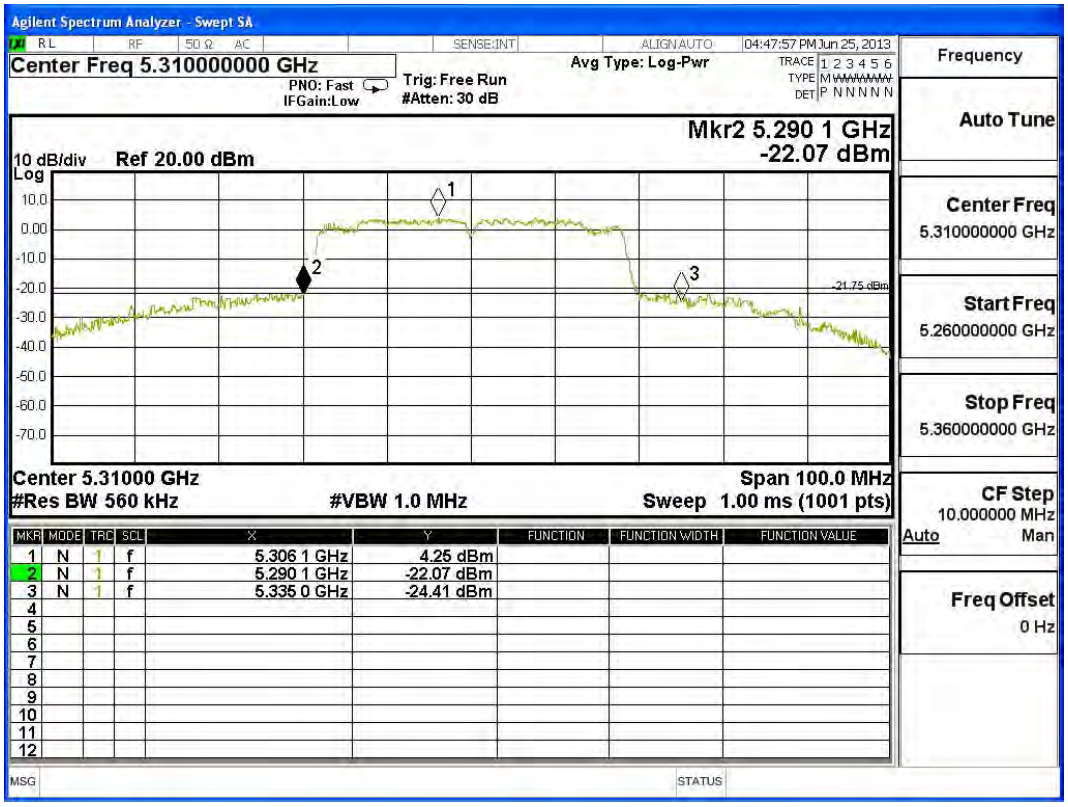
Channel 46 – Chain A



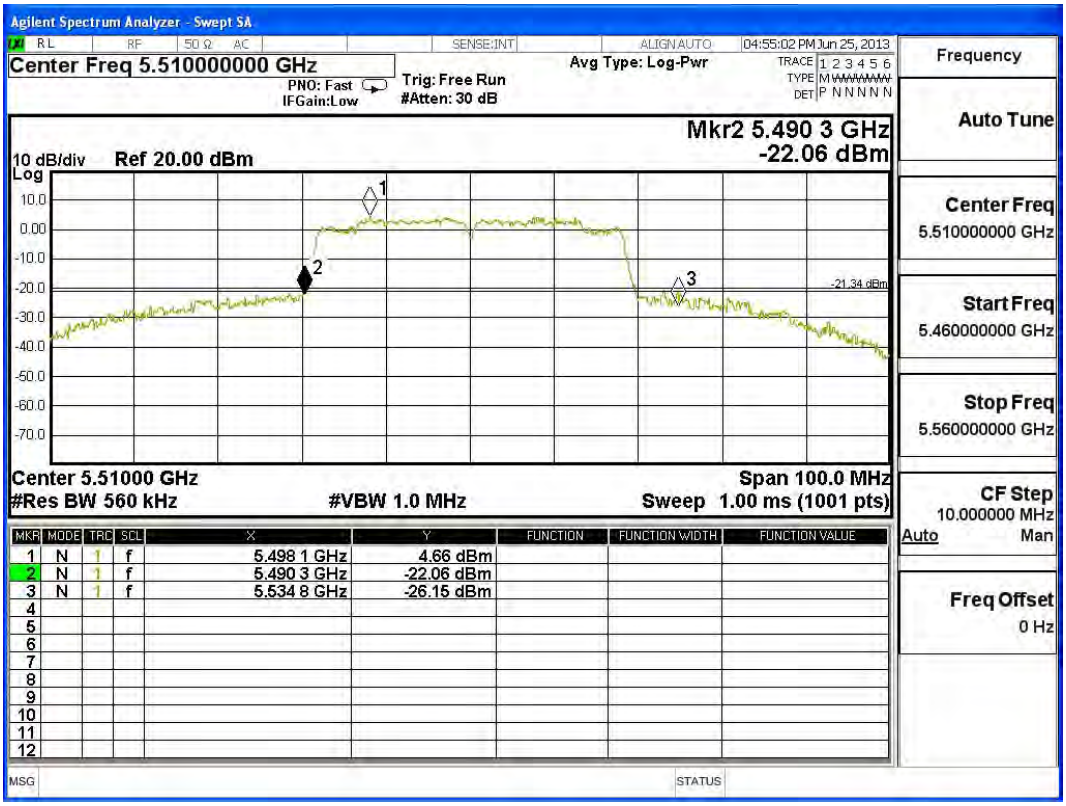
Channel 54 – Chain A



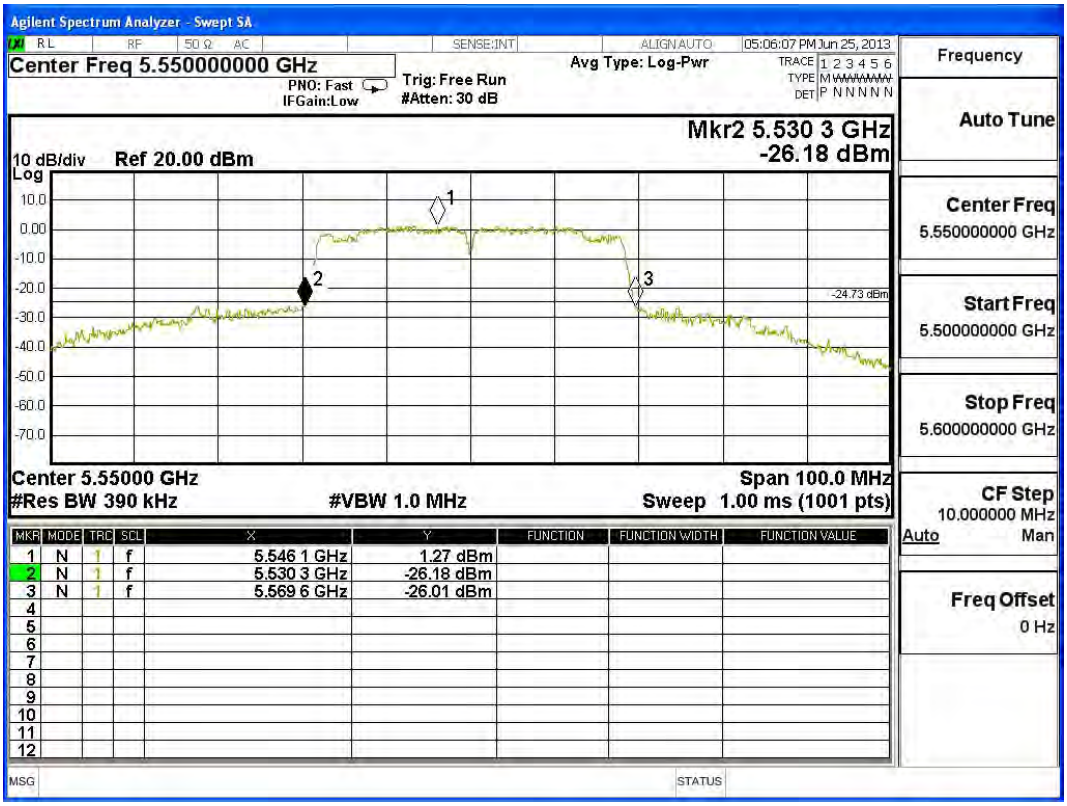
Channel 62 – Chain A



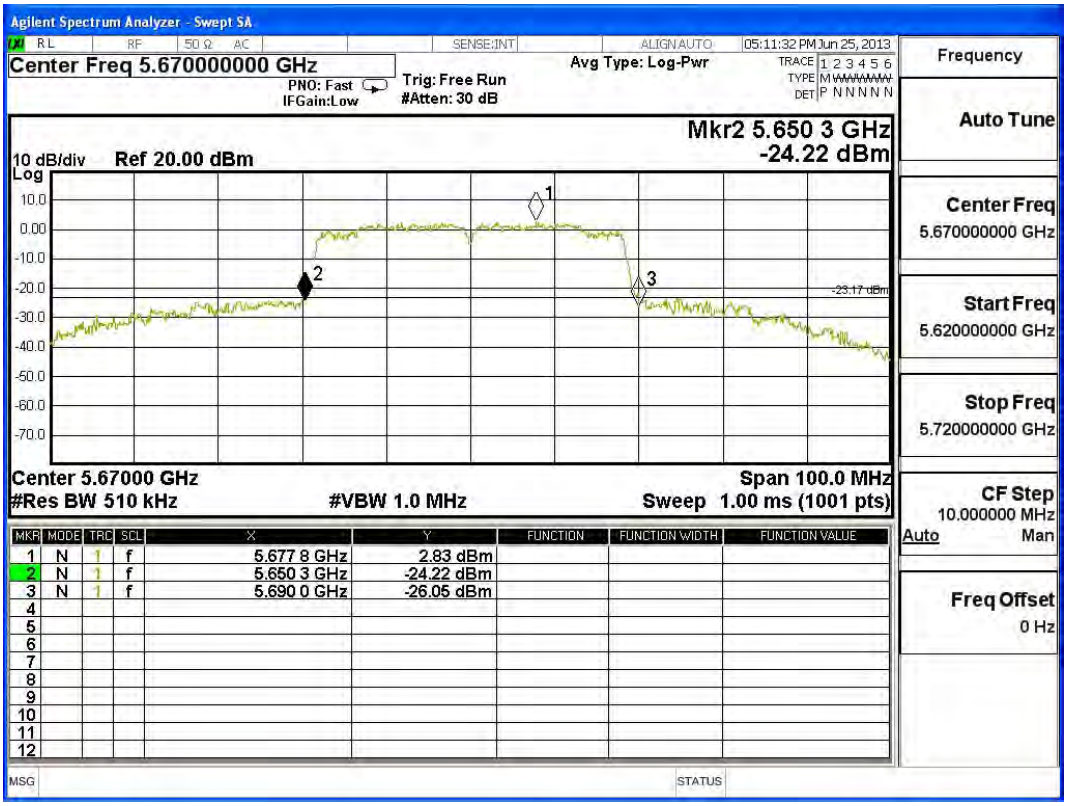
Channel 102 – Chain A



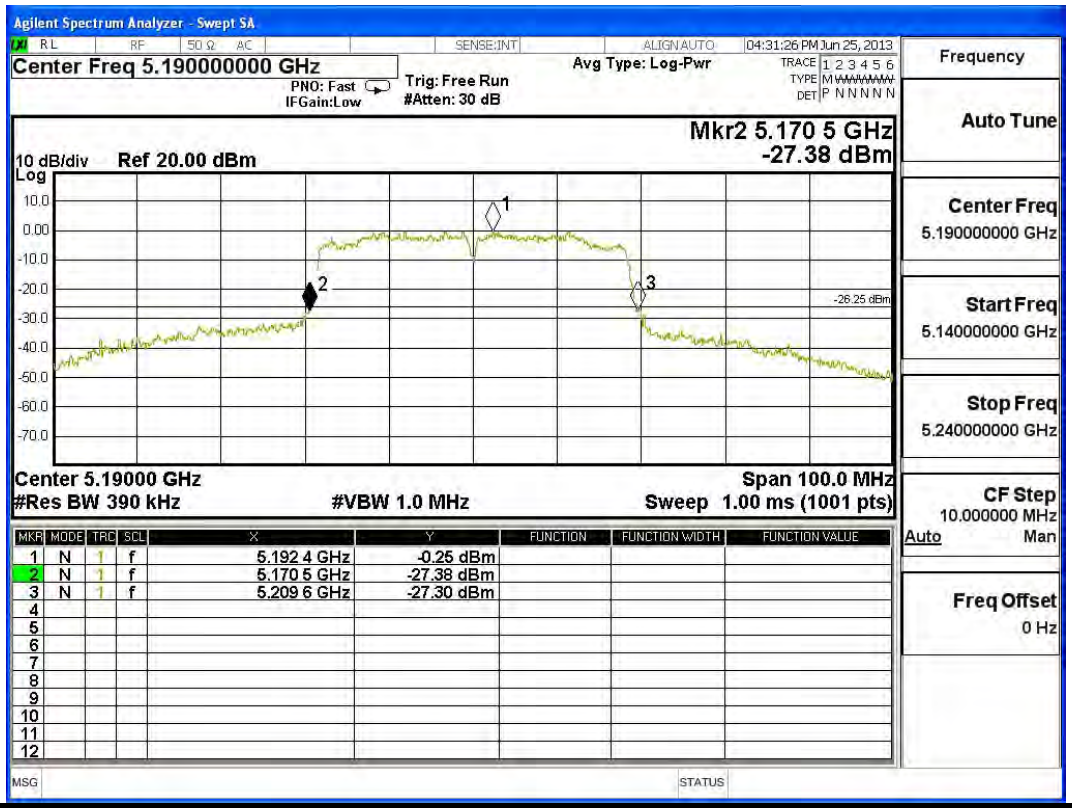
Channel 110 – Chain A



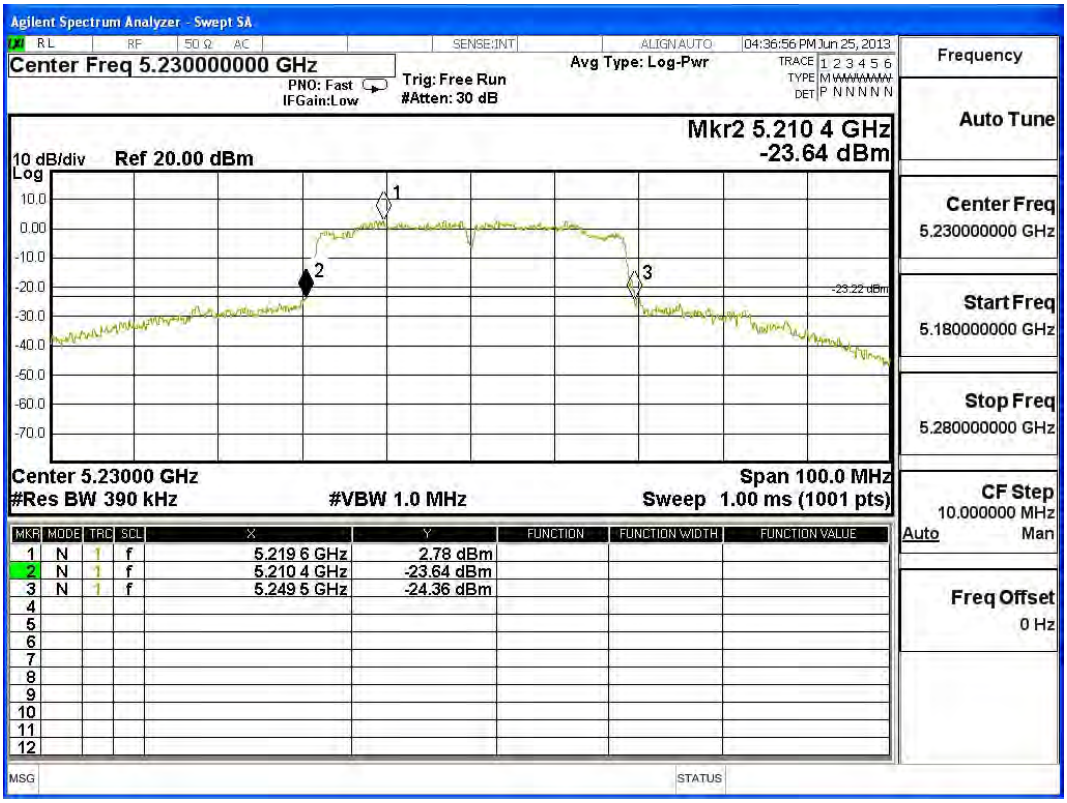
Channel 134 – Chain A



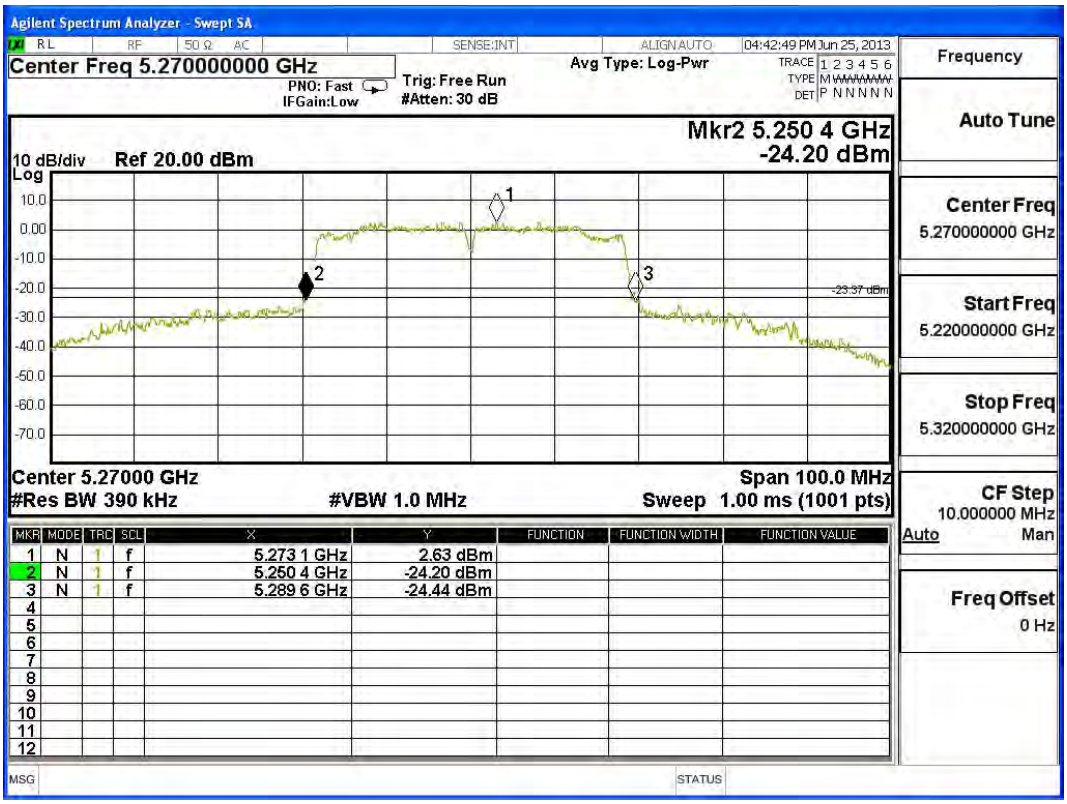
Channel 38 – Chain B



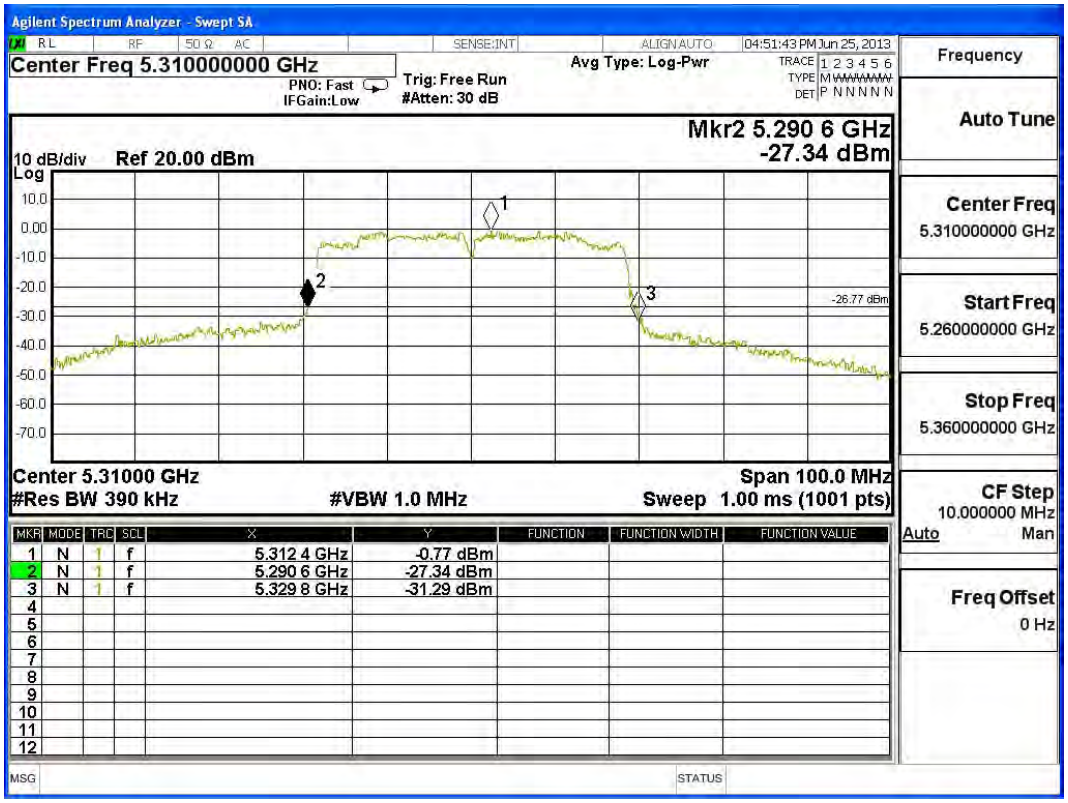
Channel 46 – Chain B



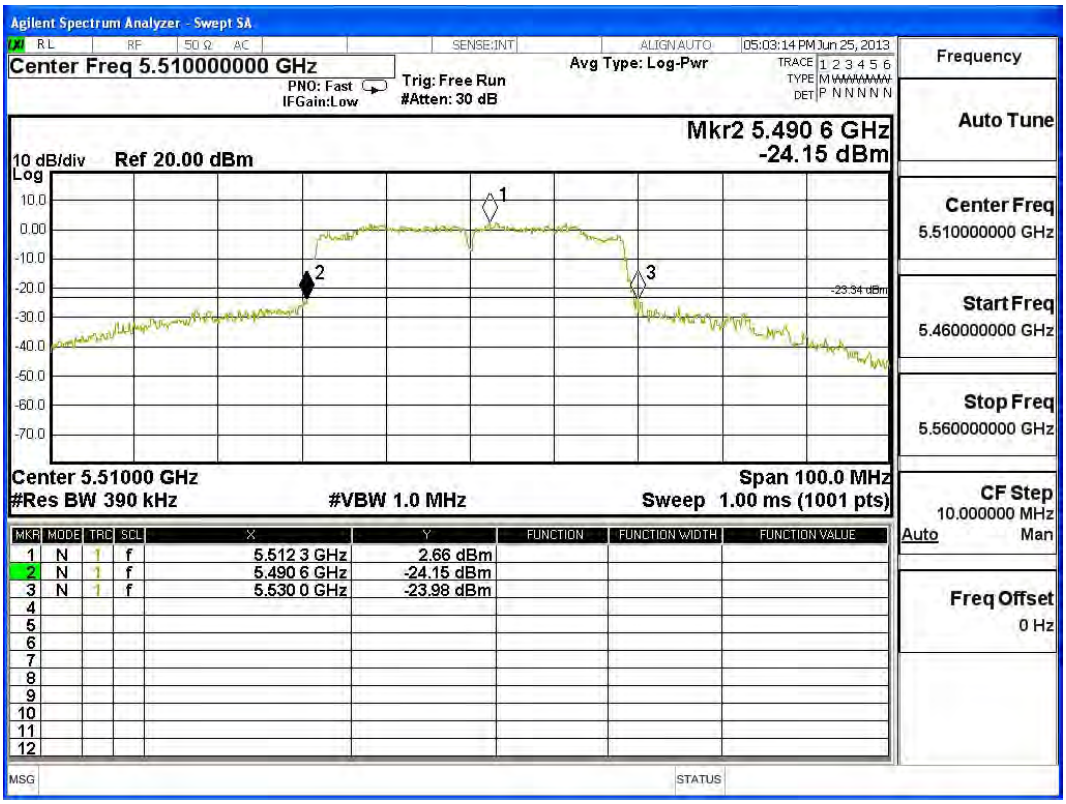
Channel 54 – Chain B



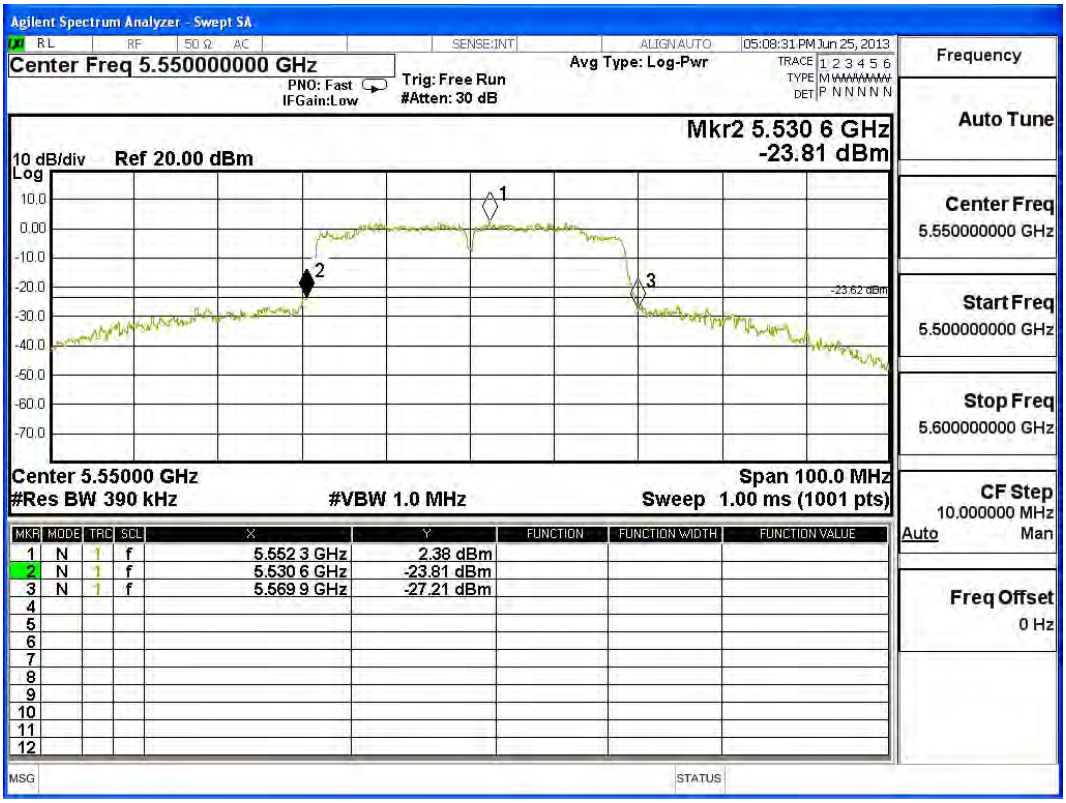
Channel 62 – Chain B



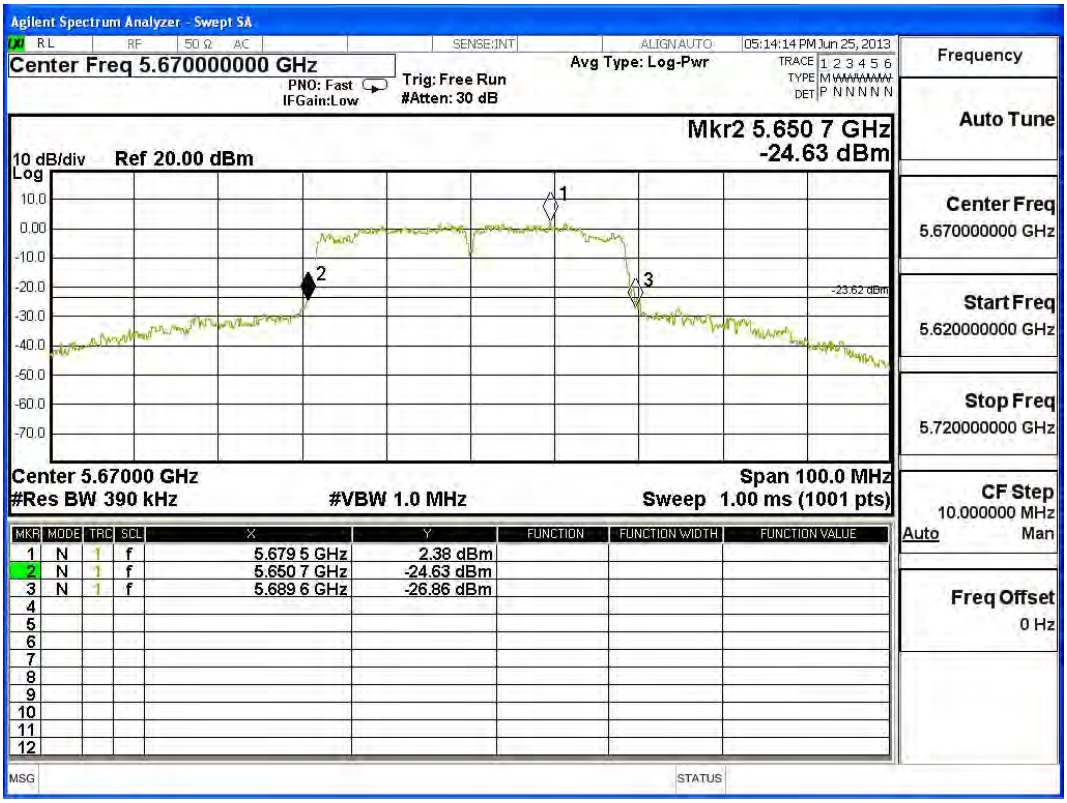
Channel 102 – Chain B



Channel 110 – Chain B



Channel 134 – Chain B



4. Peak Power Spectral Density

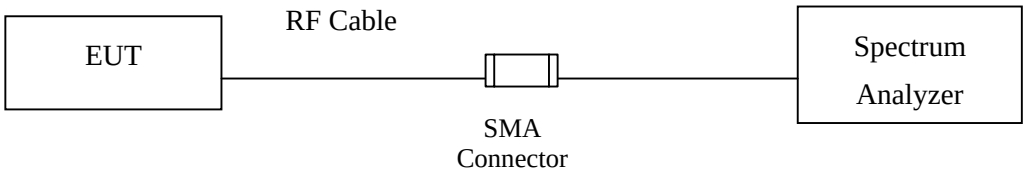
4.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2013
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2013
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr, 2013

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

(4) 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.

(5) 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.

(6) 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, 2009; 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

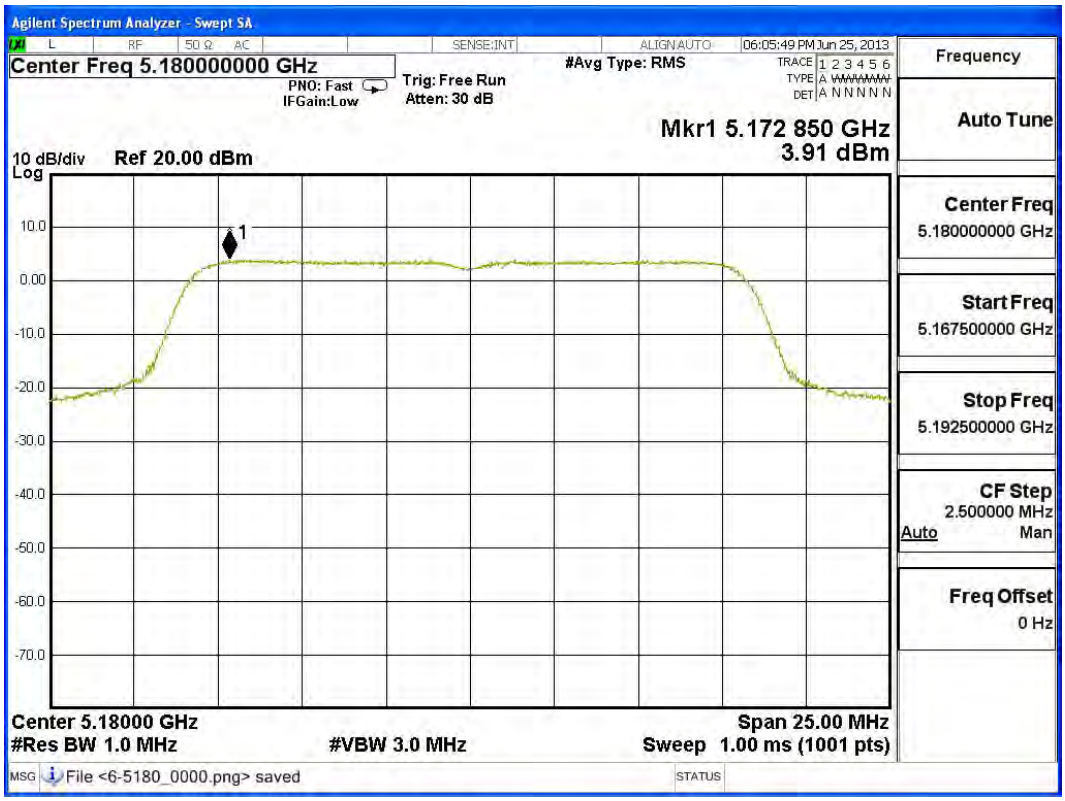
± 1.27 dB

4.6. Test Result of Peak Power Spectral Density

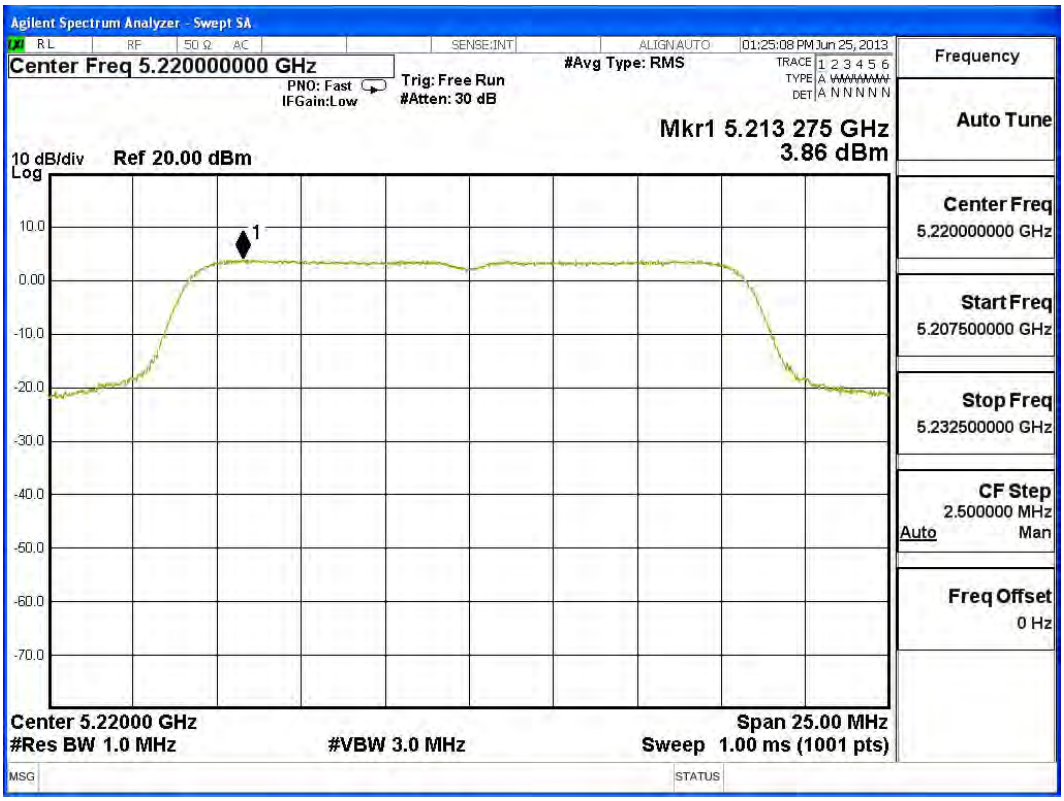
Product : TABLET PC
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11a-6Mbps)

Channel Number	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
36	5180	3.910	<4	Pass
44	5220	3.860	<4	Pass
48	5240	3.880	<4	Pass
52	5260	3.930	<11	Pass
60	5300	4.330	<11	Pass
64	5320	4.160	<11	Pass
100	5500	4.700	<11	Pass
116	5580	3.930	<11	Pass
140	5700	3.980	<11	Pass

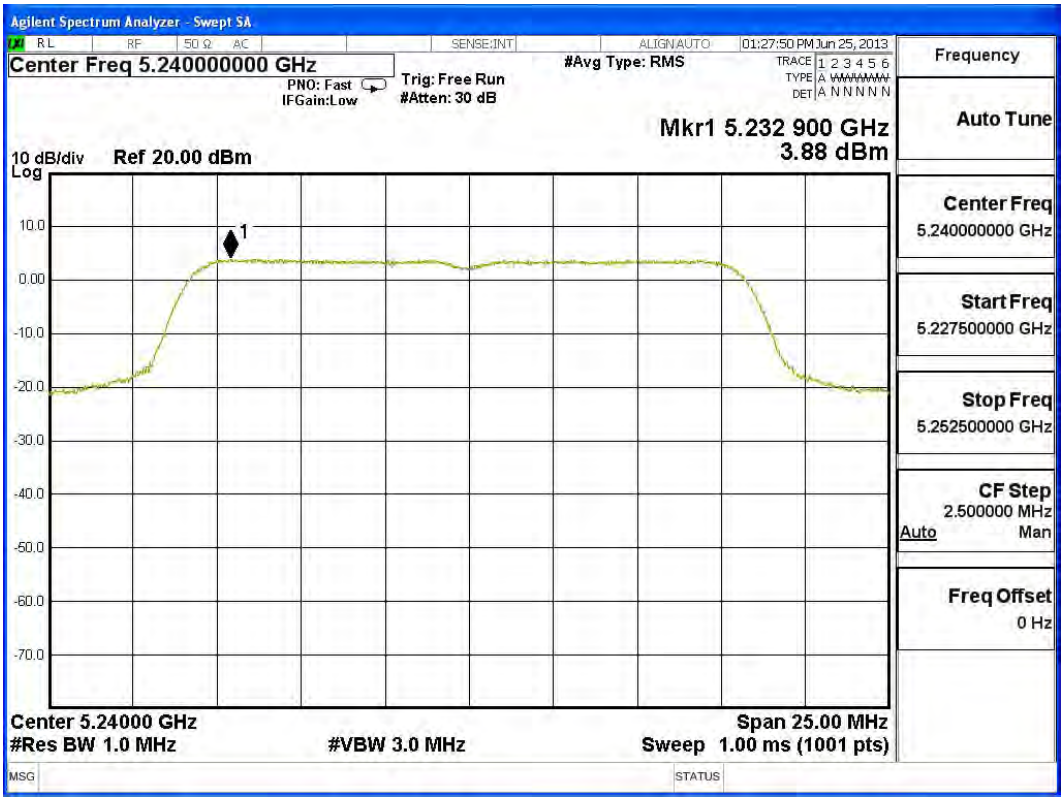
Channel 36:



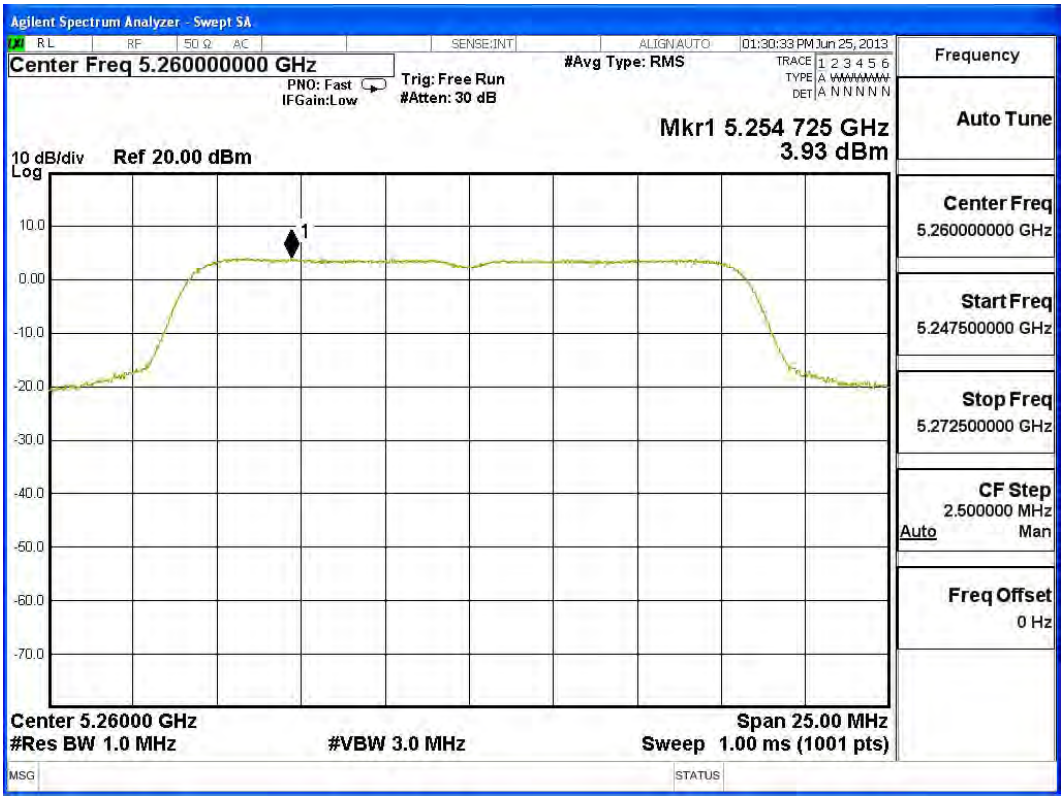
Channel 44:



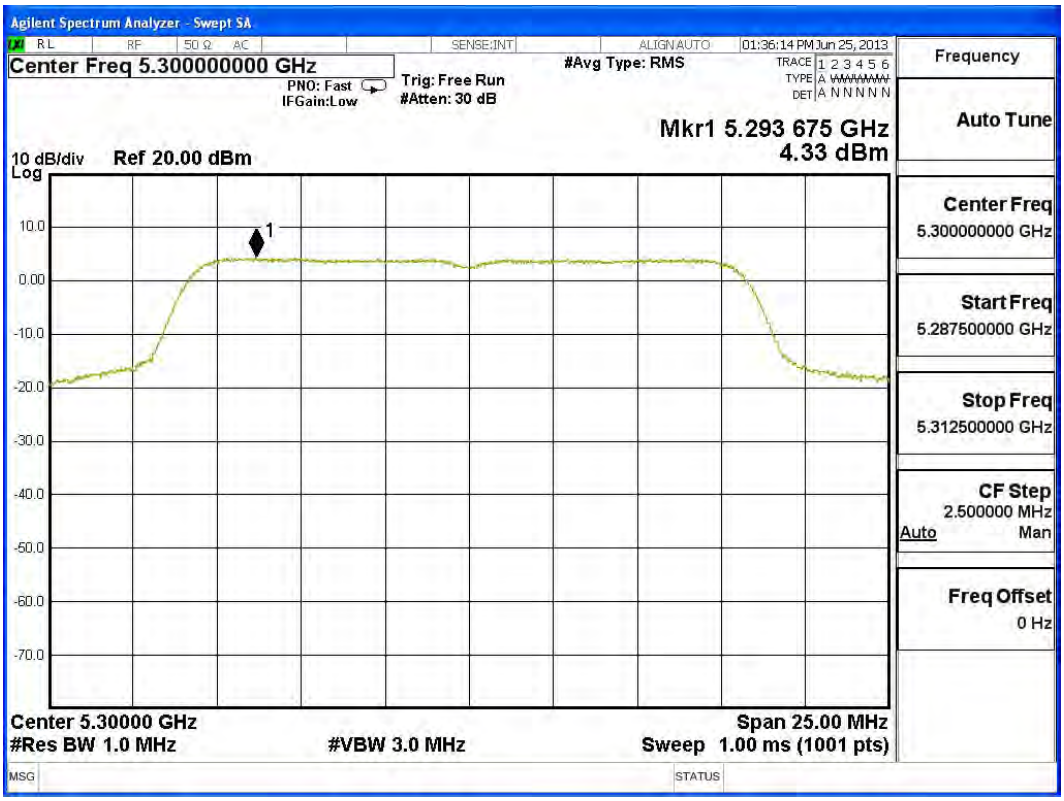
Channel 48:



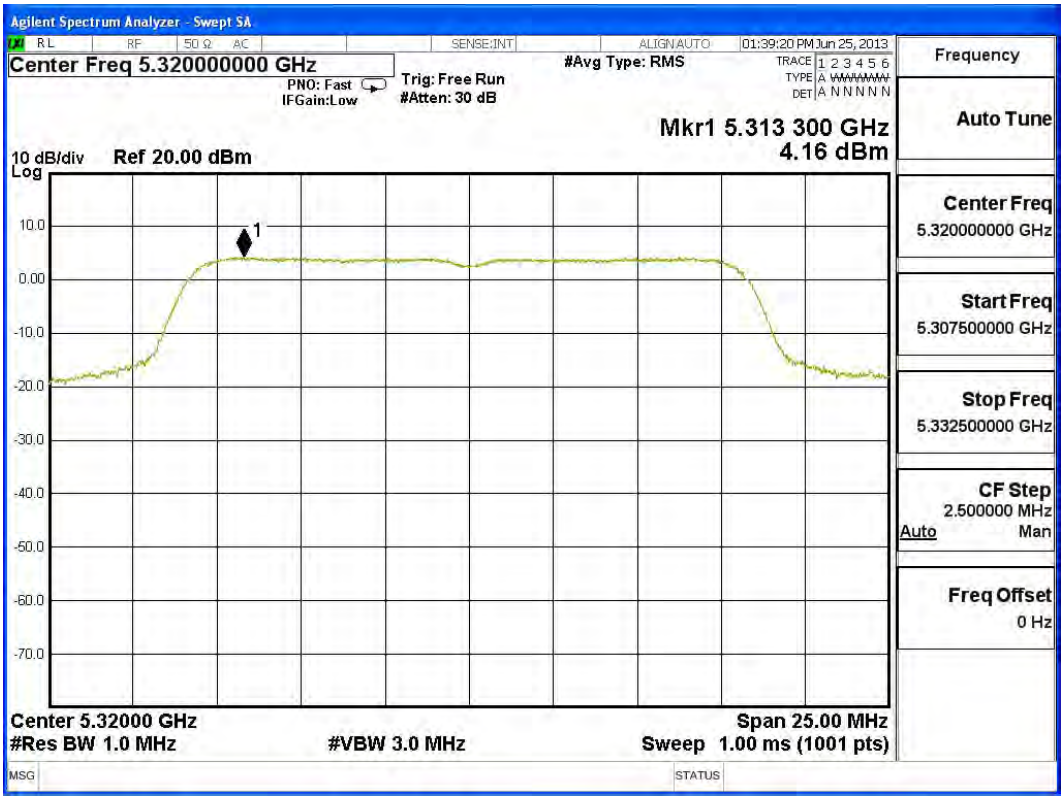
Channel 52:



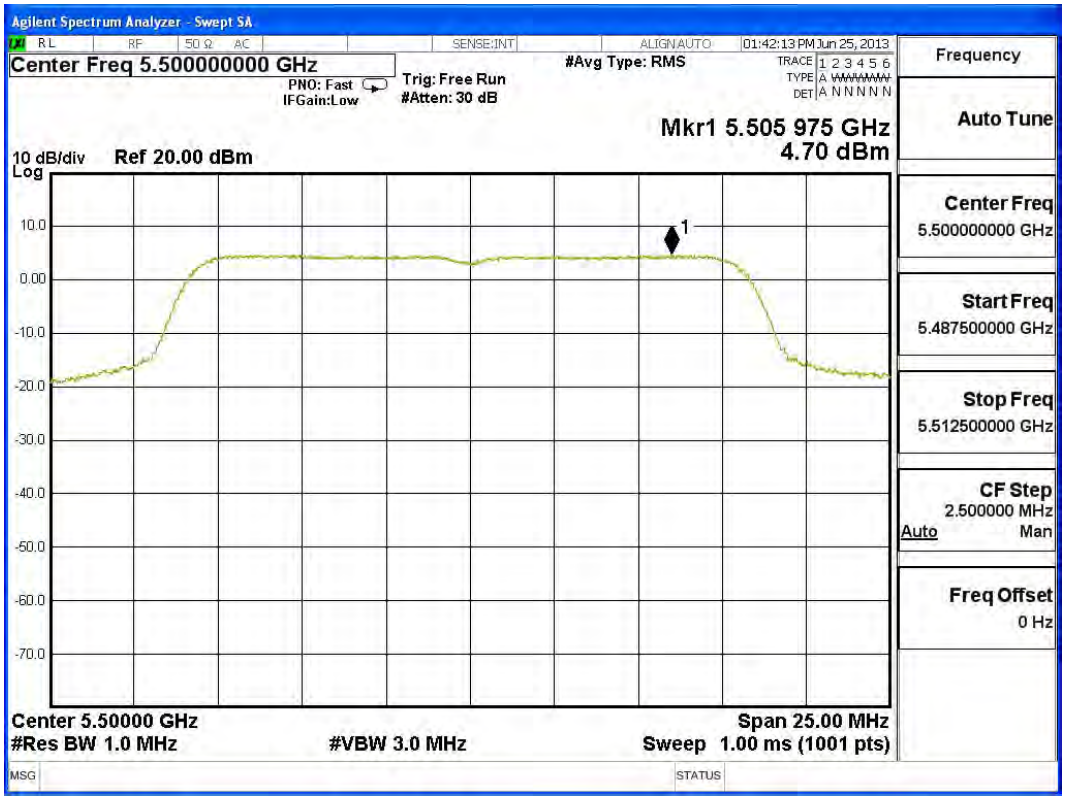
Channel 60:



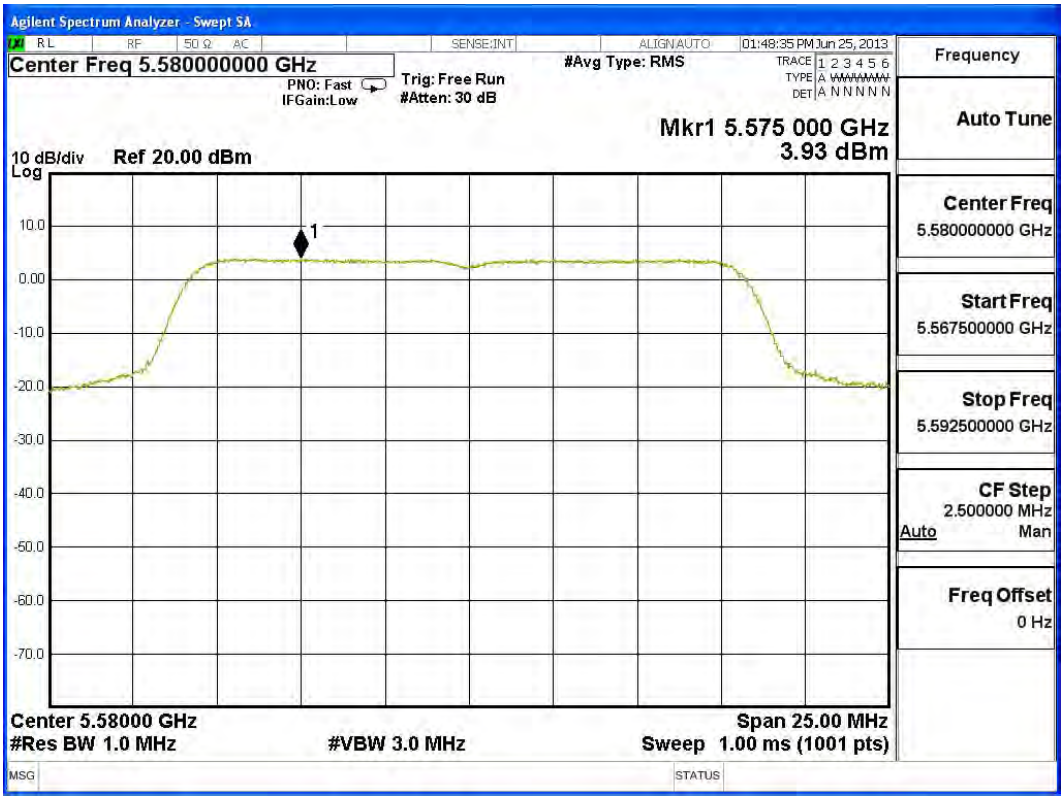
Channel 64:



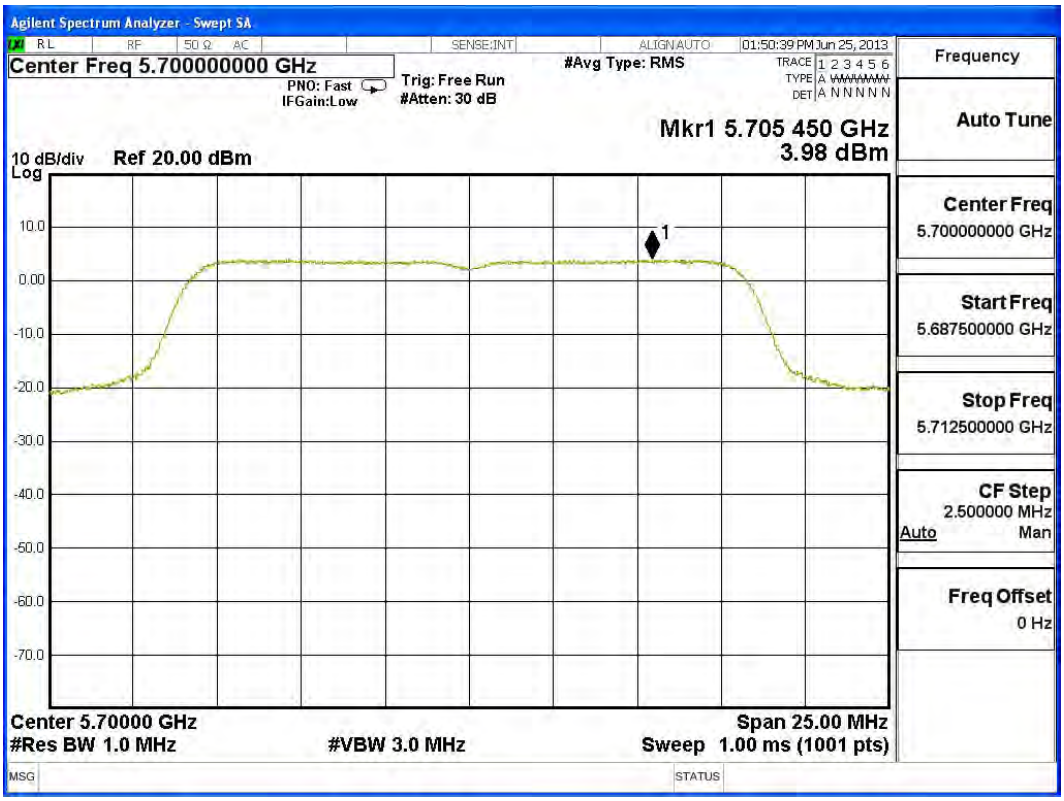
Channel 100:



Channel 116:



Channel 140:

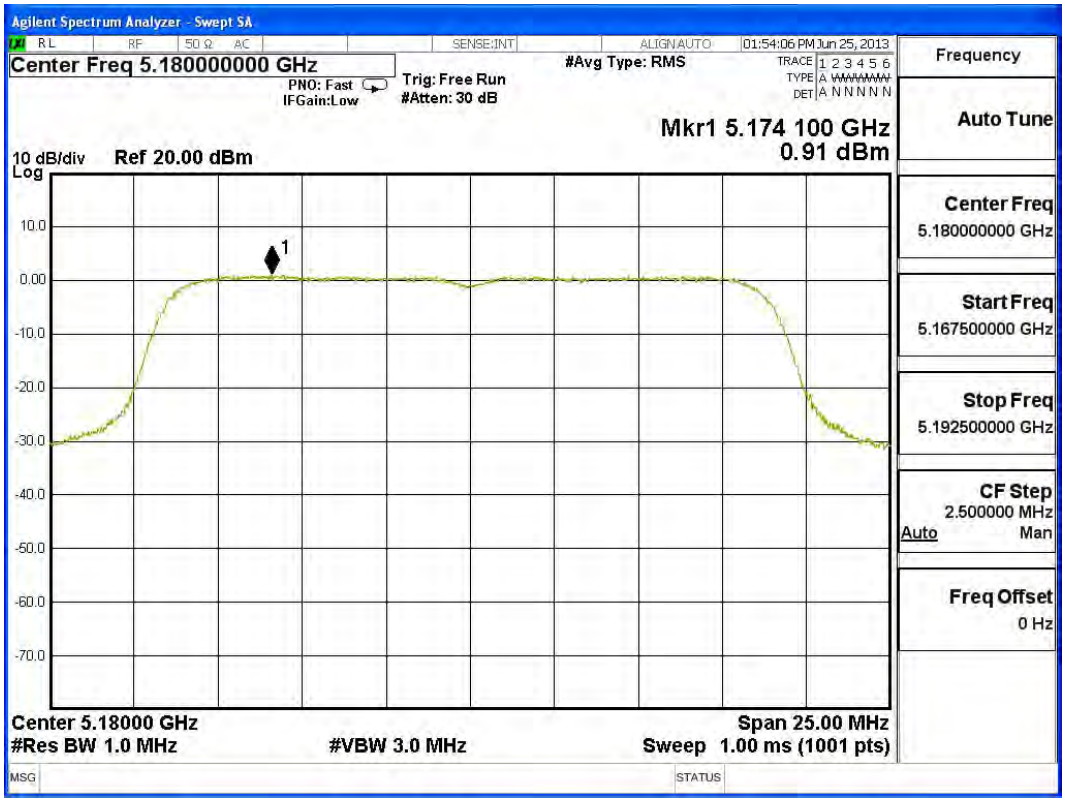


Product : TABLET PC
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)

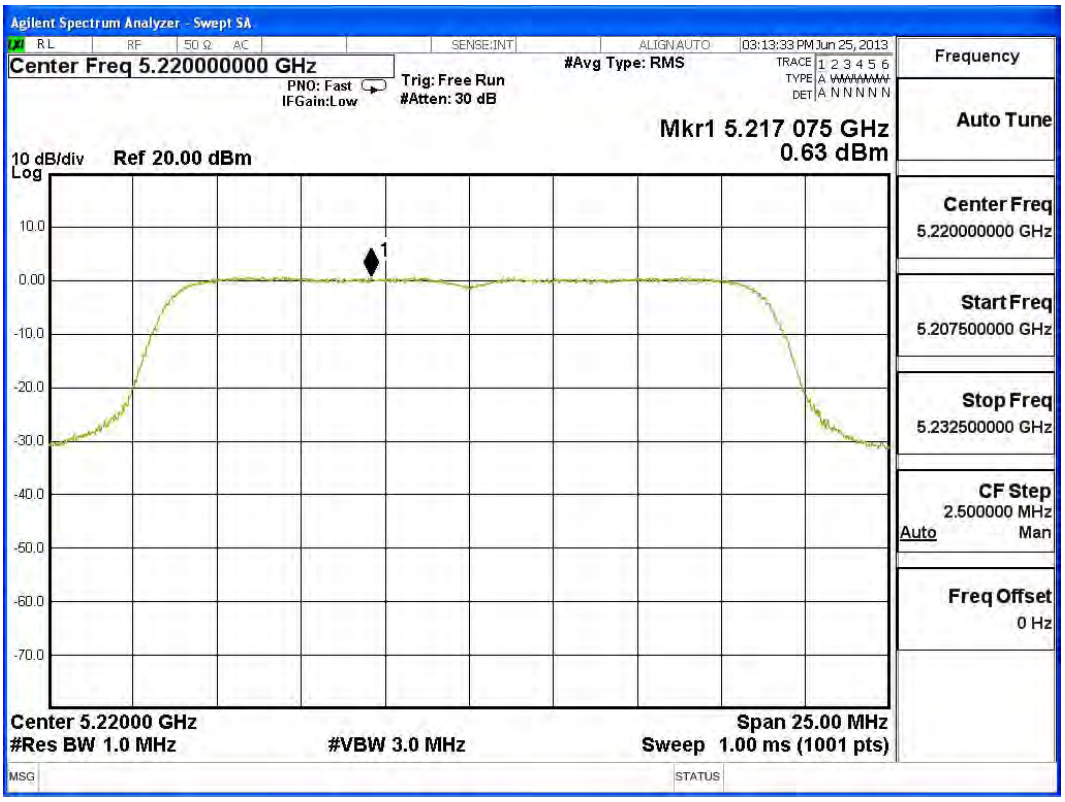
Channel Number	Frequency (MHz)	Chain	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)[1]	Required Limit (dBm)	Result
36	5180	A	0.91	3.92	<4	Pass
		B	0.22	3.23	<4	Pass
44	5220	A	0.63	3.64	<4	Pass
		B	0.24	3.25	<4	Pass
48	5240	A	0.63	3.64	<4	Pass
		B	0.11	3.12	<4	Pass
52	5260	A	0.39	3.40	<11	Pass
		B	-0.19	2.82	<11	Pass
60	5300	A	0.60	3.61	<11	Pass
		B	-0.27	2.74	<11	Pass
64	5320	A	1.15	4.16	<11	Pass
		B	0.08	3.09	<11	Pass
100	5500	A	0.60	3.61	<11	Pass
		B	-0.10	2.91	<11	Pass
116	5580	A	0.39	3.40	<11	Pass
		B	-0.51	2.50	<11	Pass
140	5700	A	0.83	3.84	<11	Pass
		B	0.11	3.12	<11	Pass

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

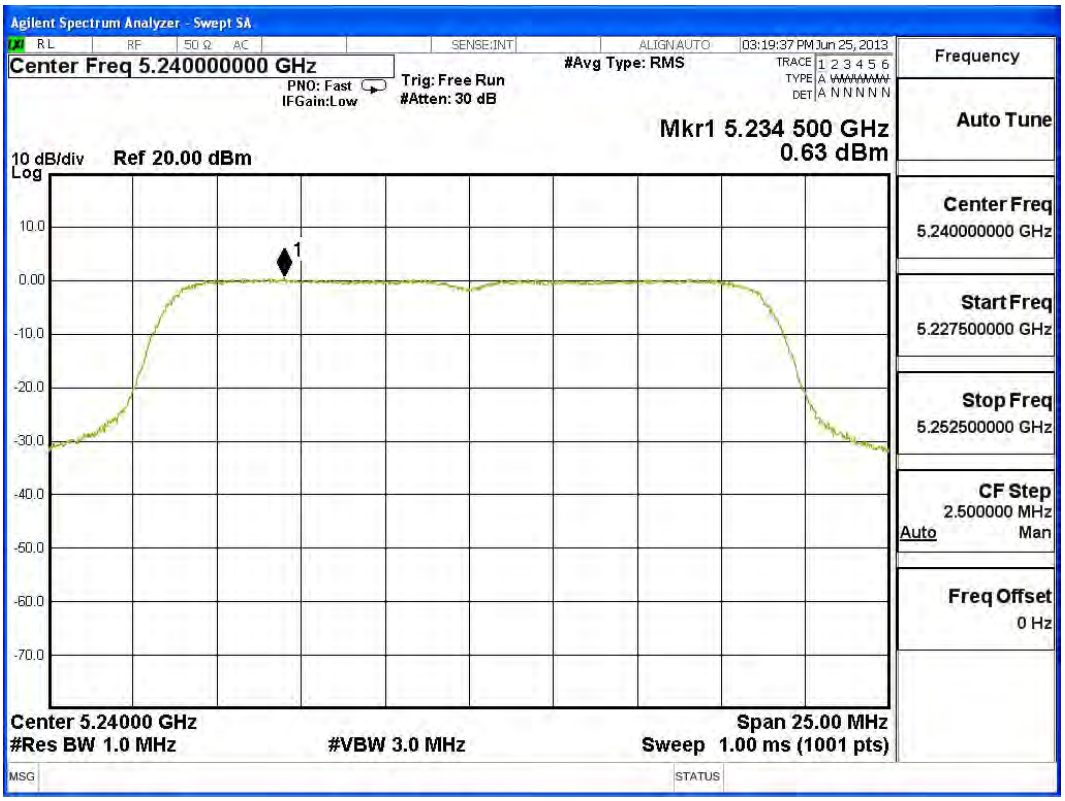
Channel 36 – Chain A



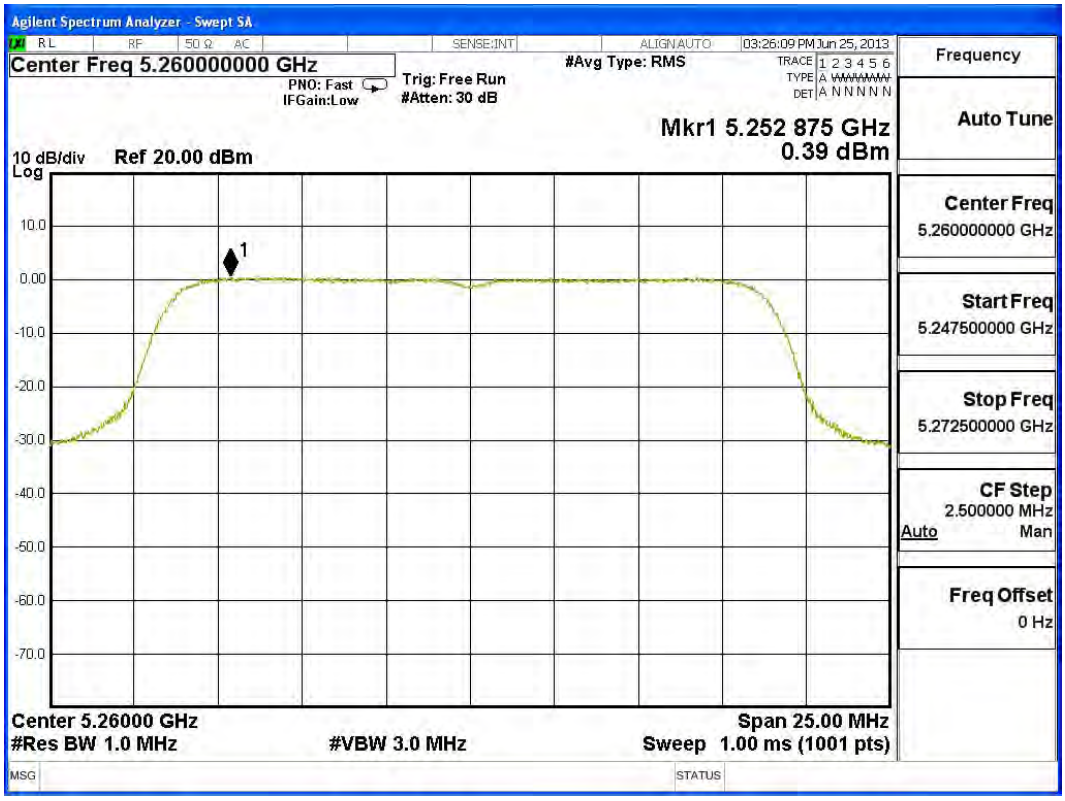
Channel 44 – Chain A



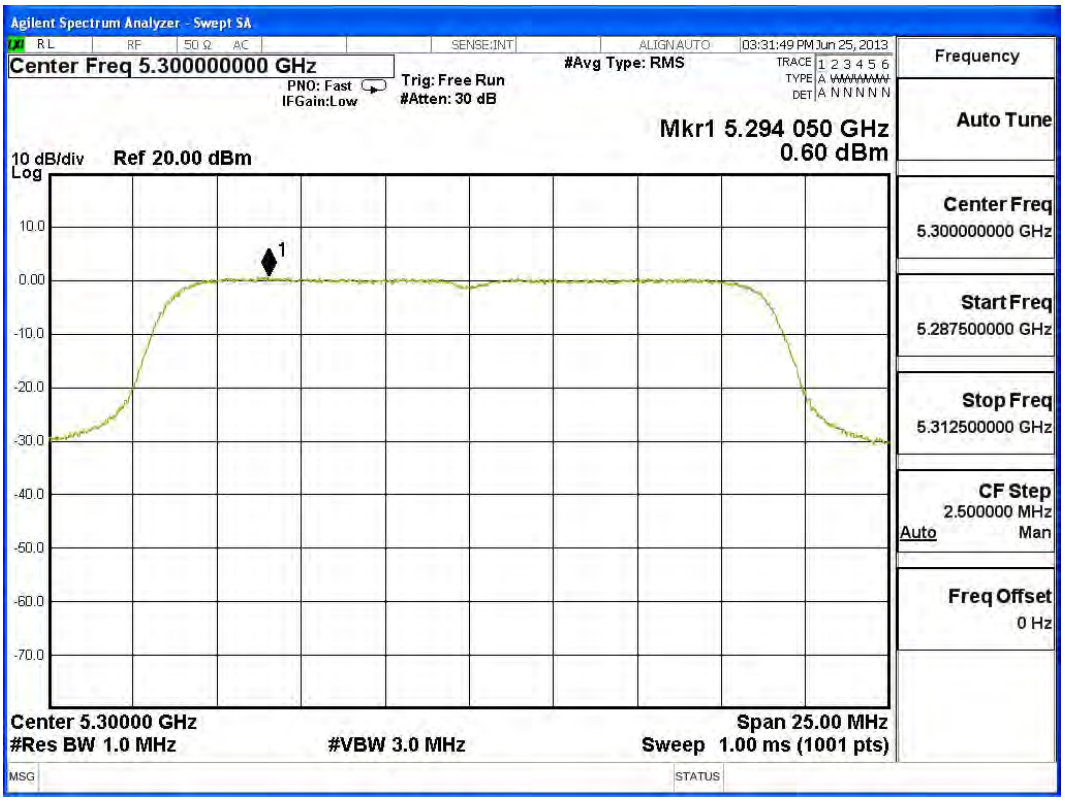
Channel 48 – Chain A



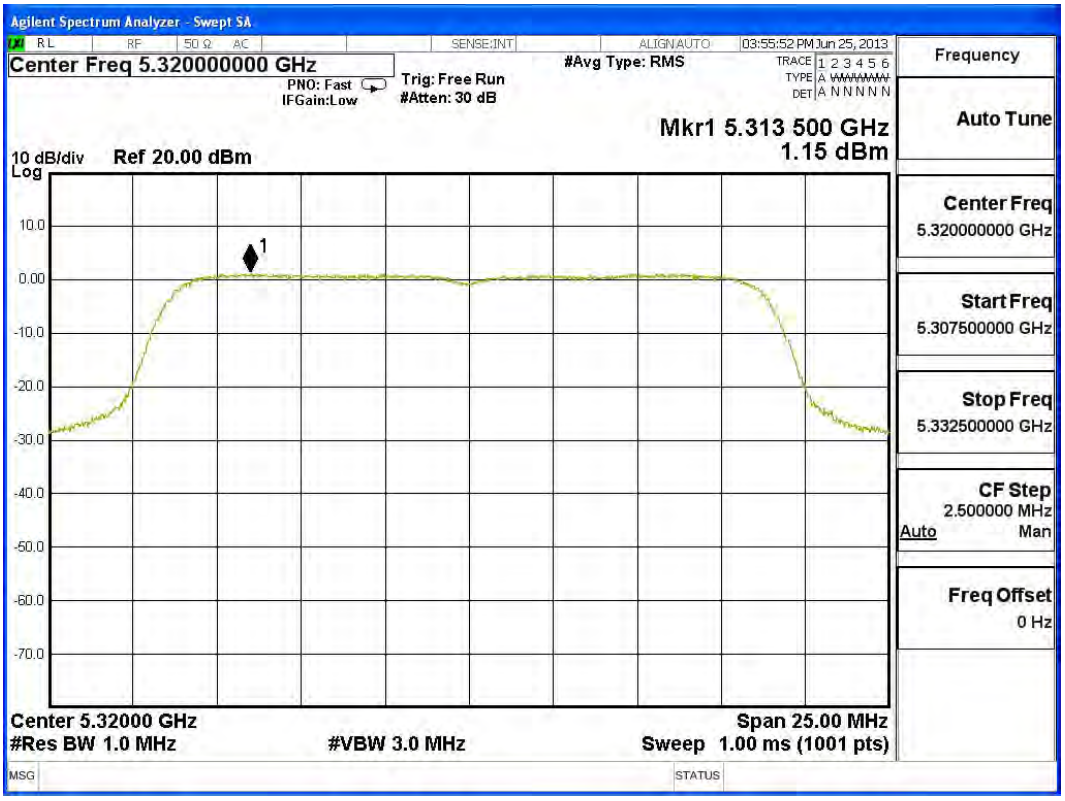
Channel 52 – Chain A



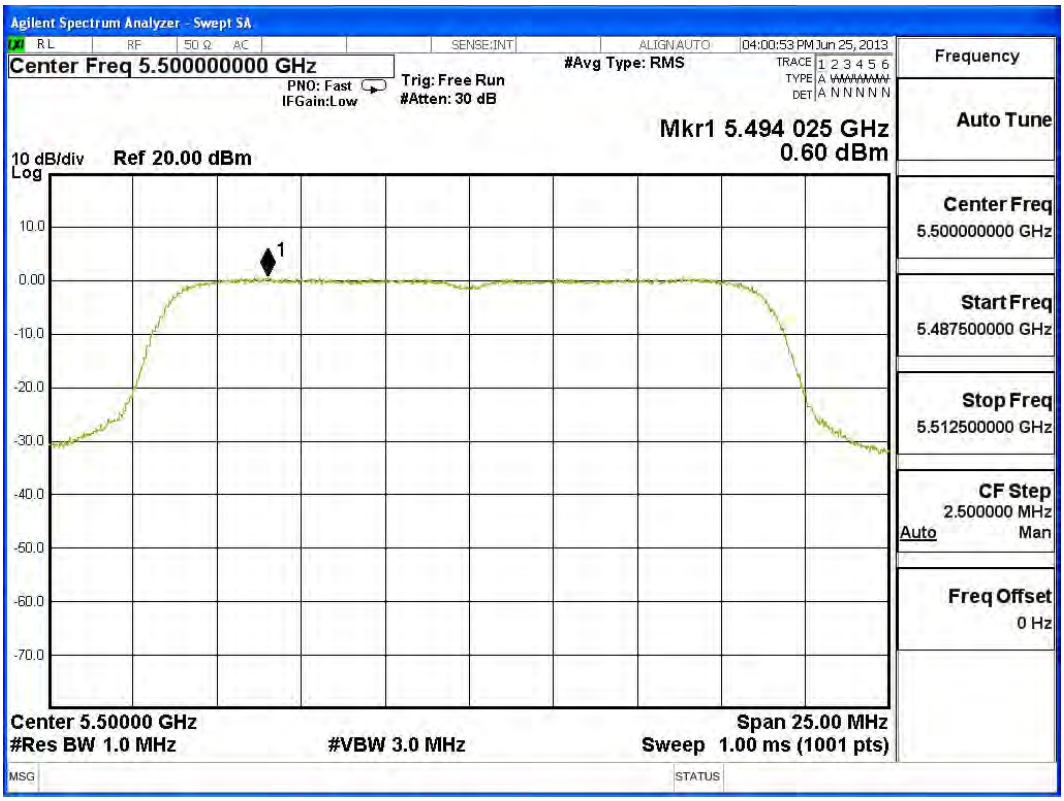
Channel 60 – Chain A



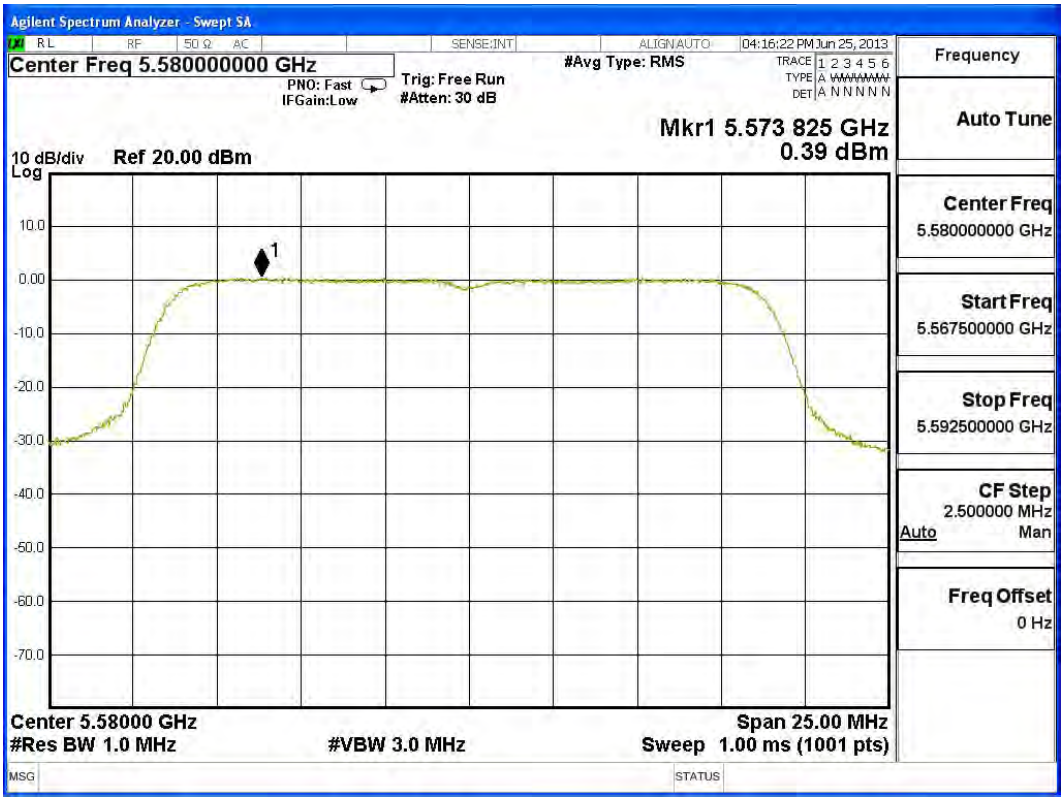
Channel 64 – Chain A



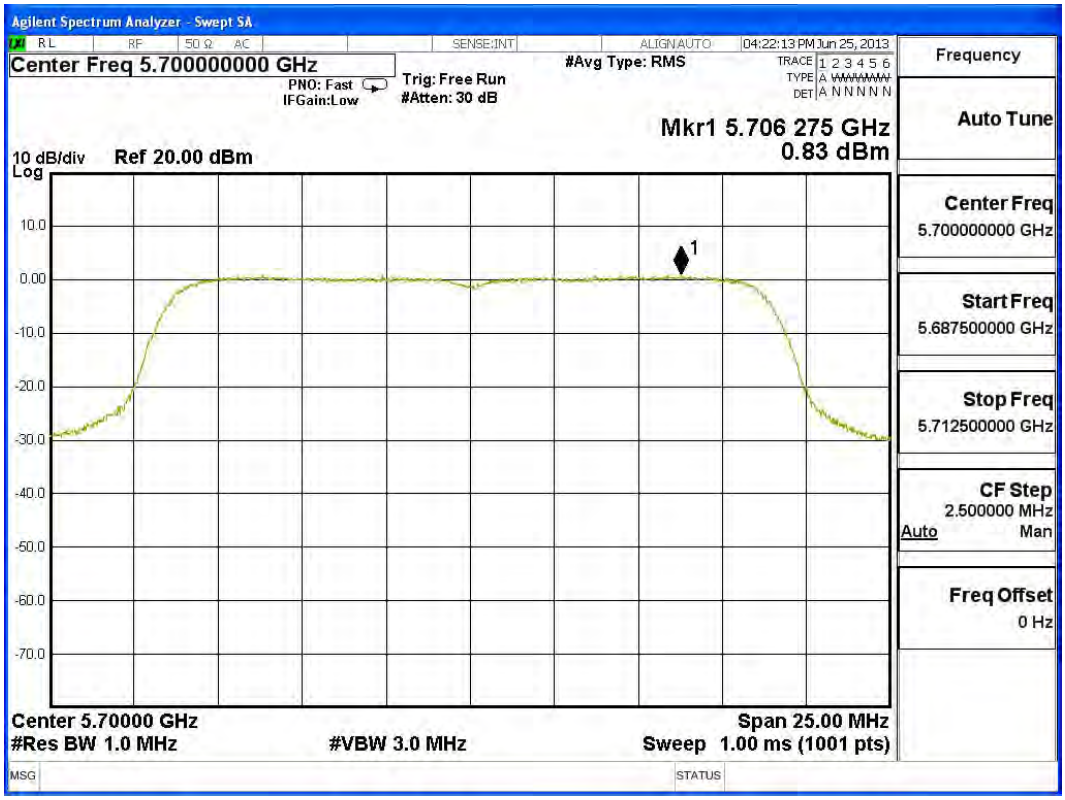
Channel 100 – Chain A



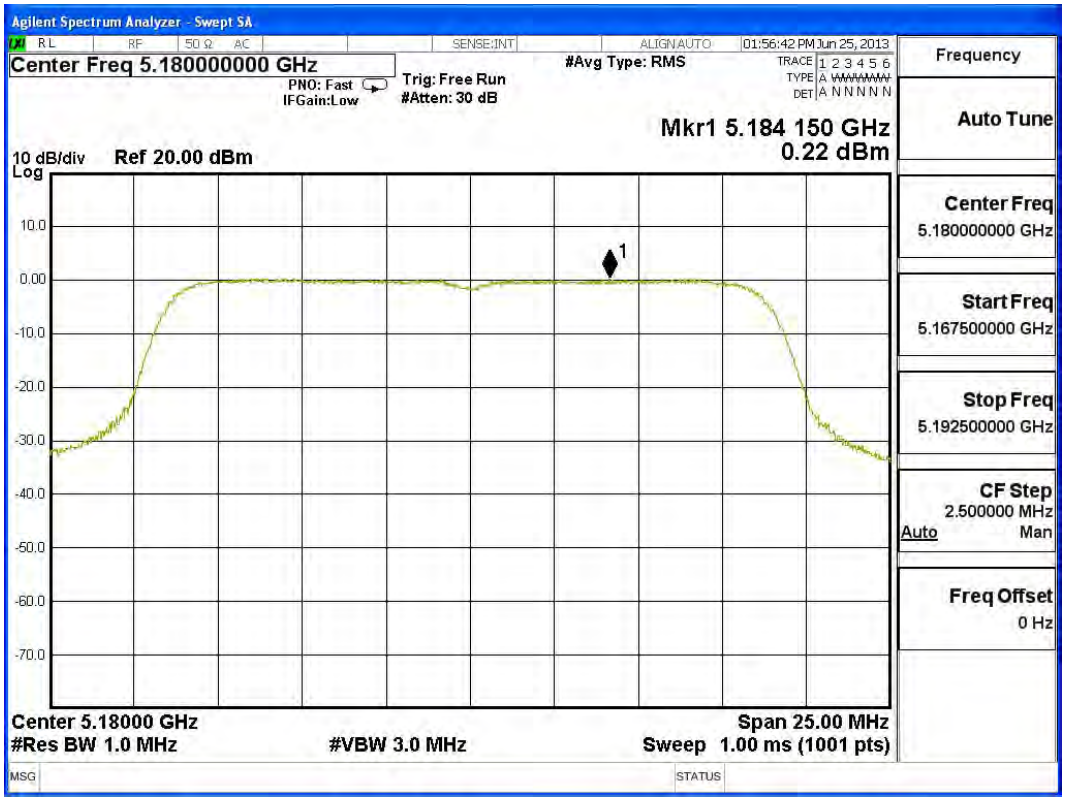
Channel 116 – Chain A



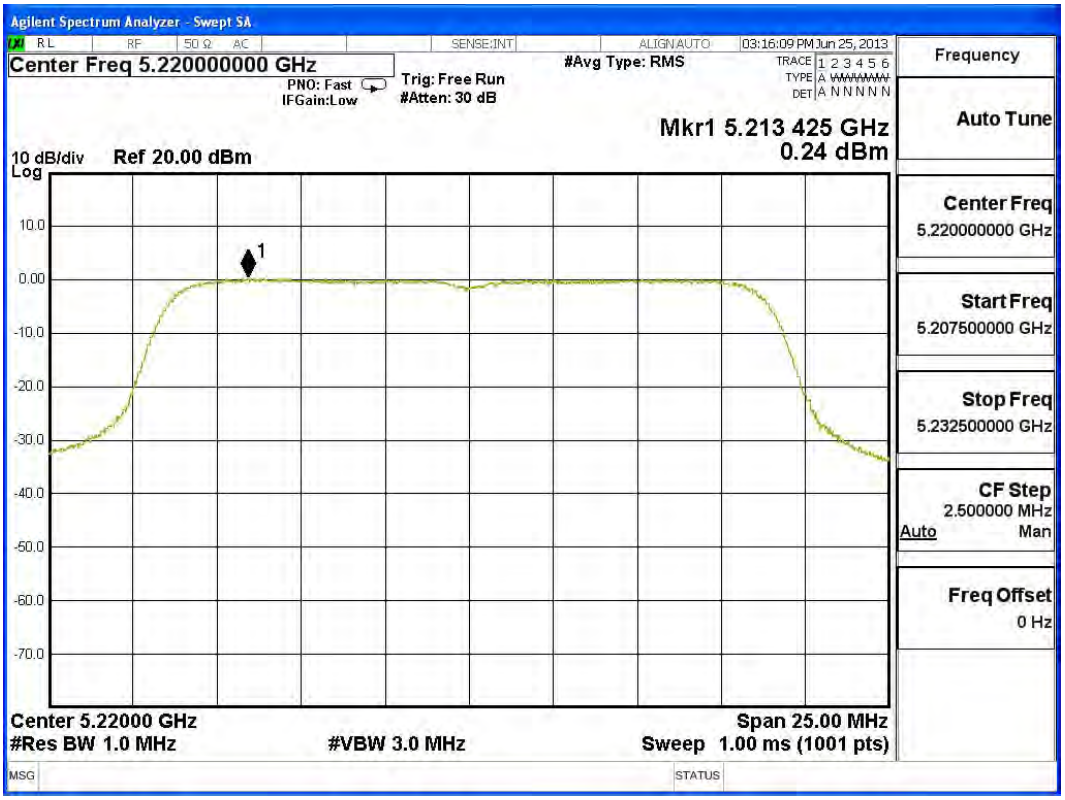
Channel 140 – Chain A



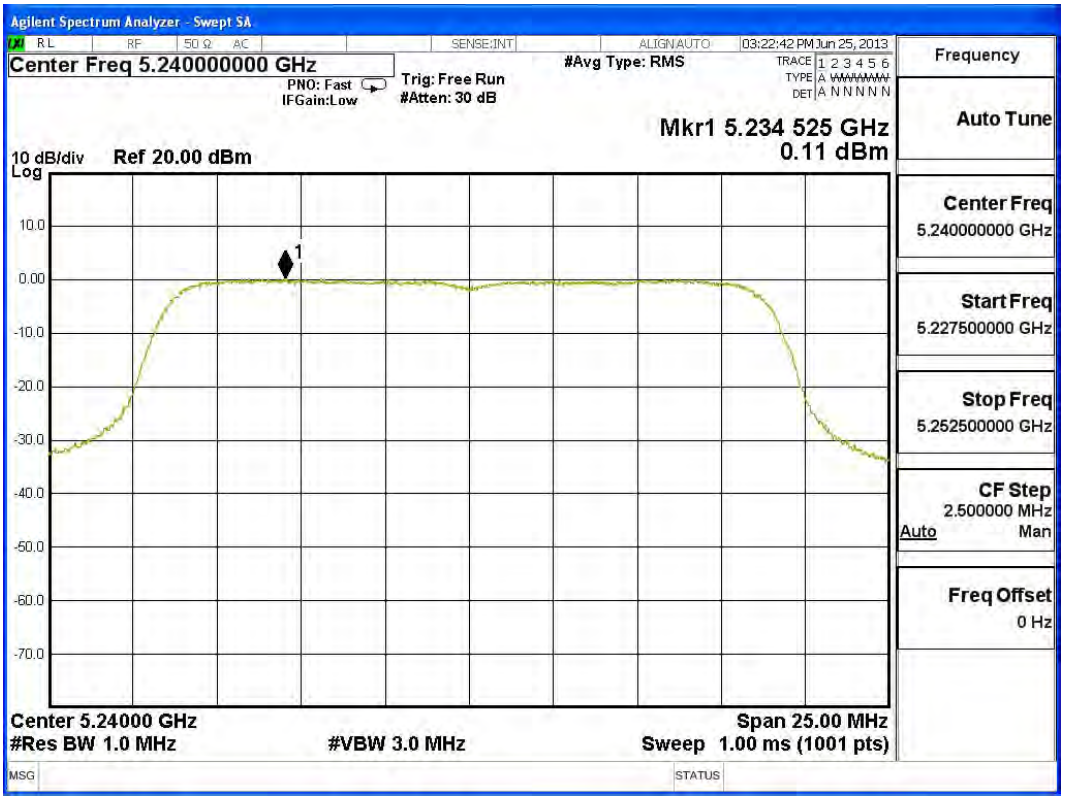
Channel 36 – Chain B



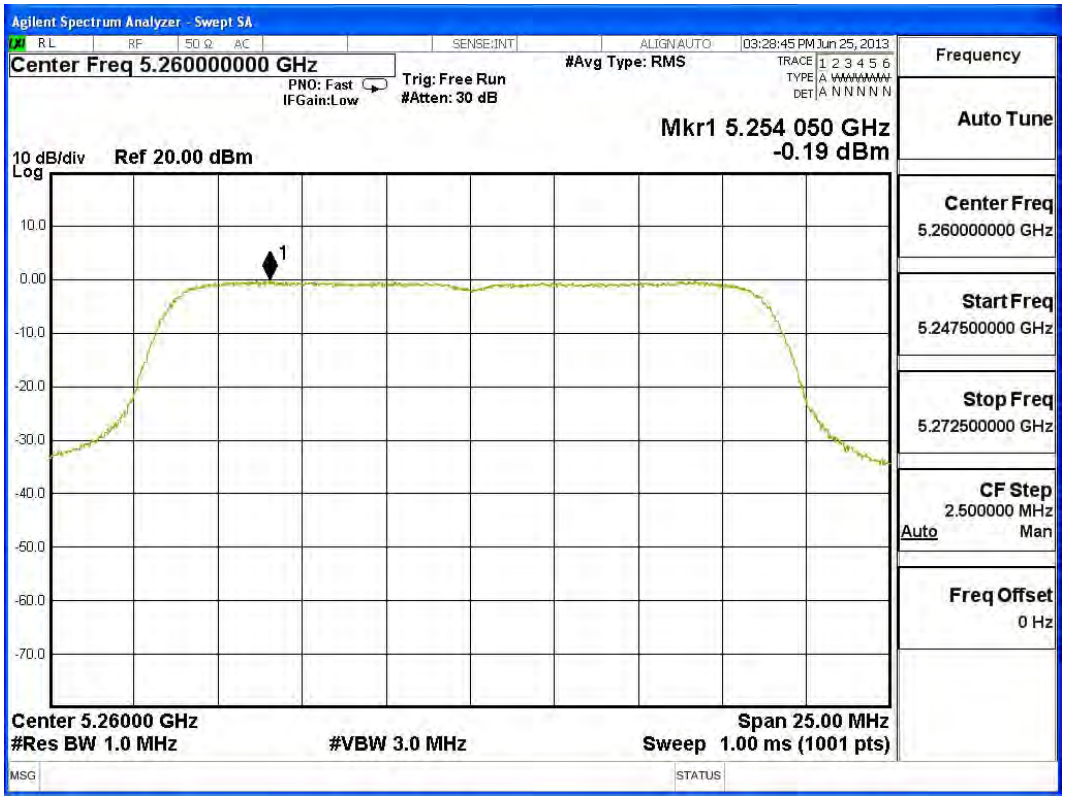
Channel 44 – Chain B



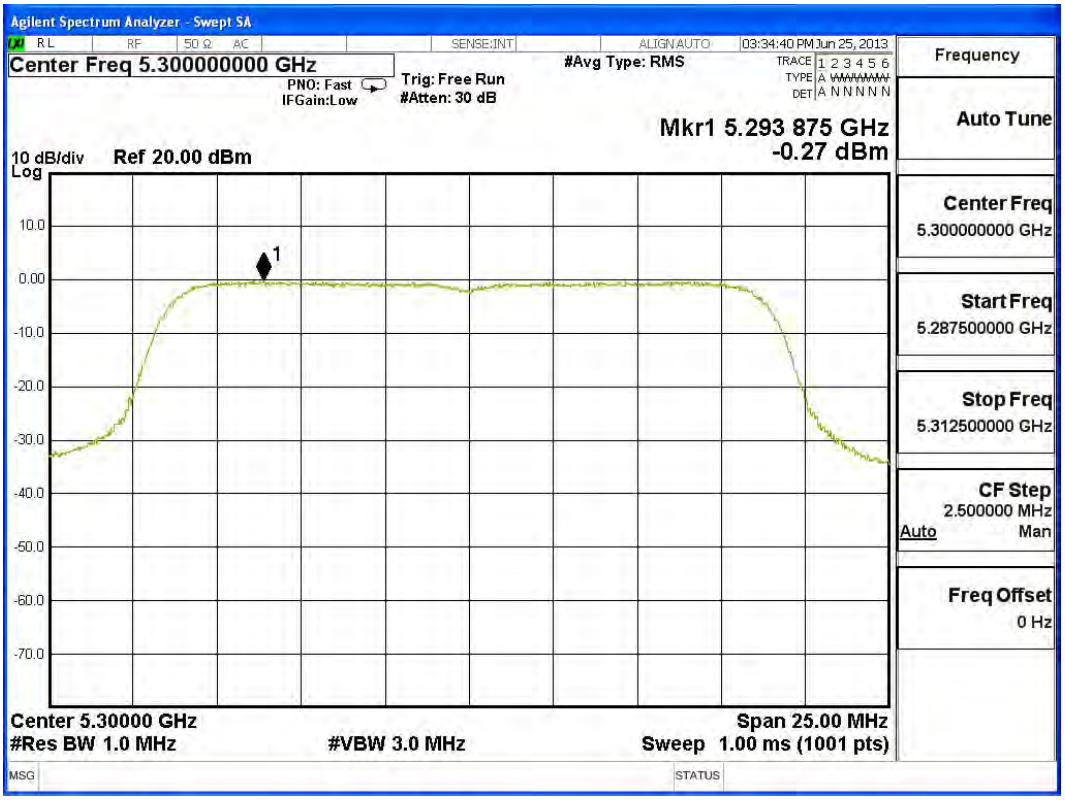
Channel 48 – Chain B



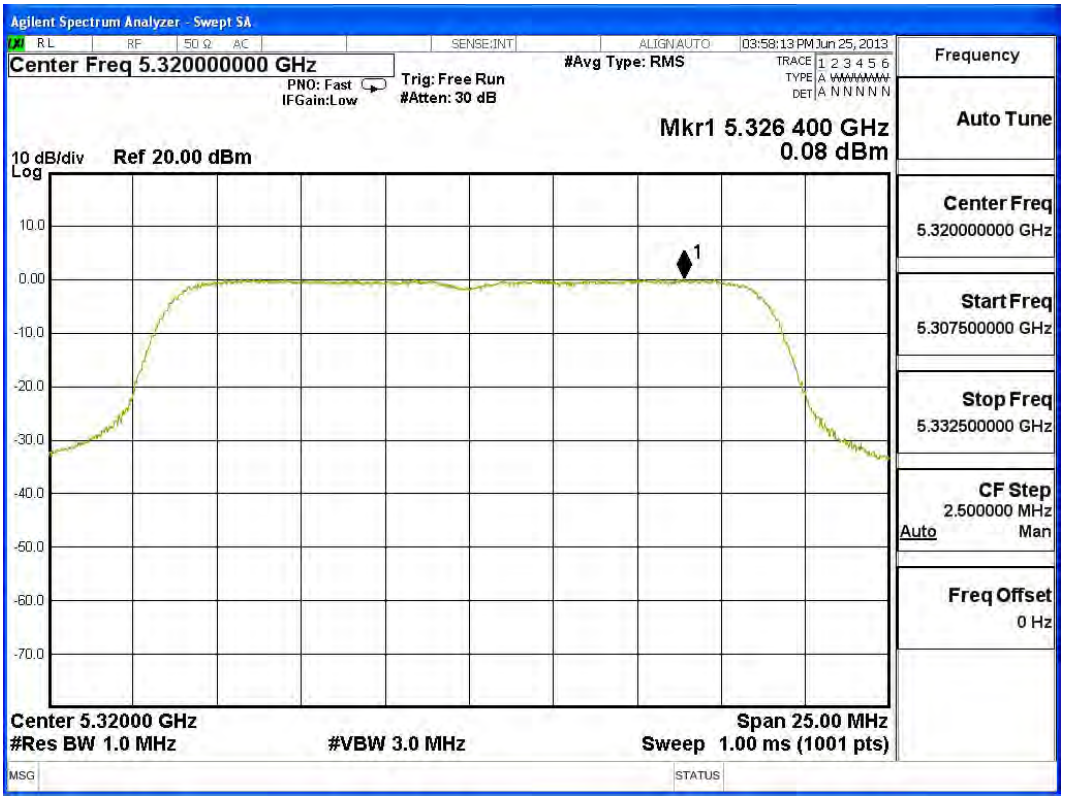
Channel 52 – Chain B



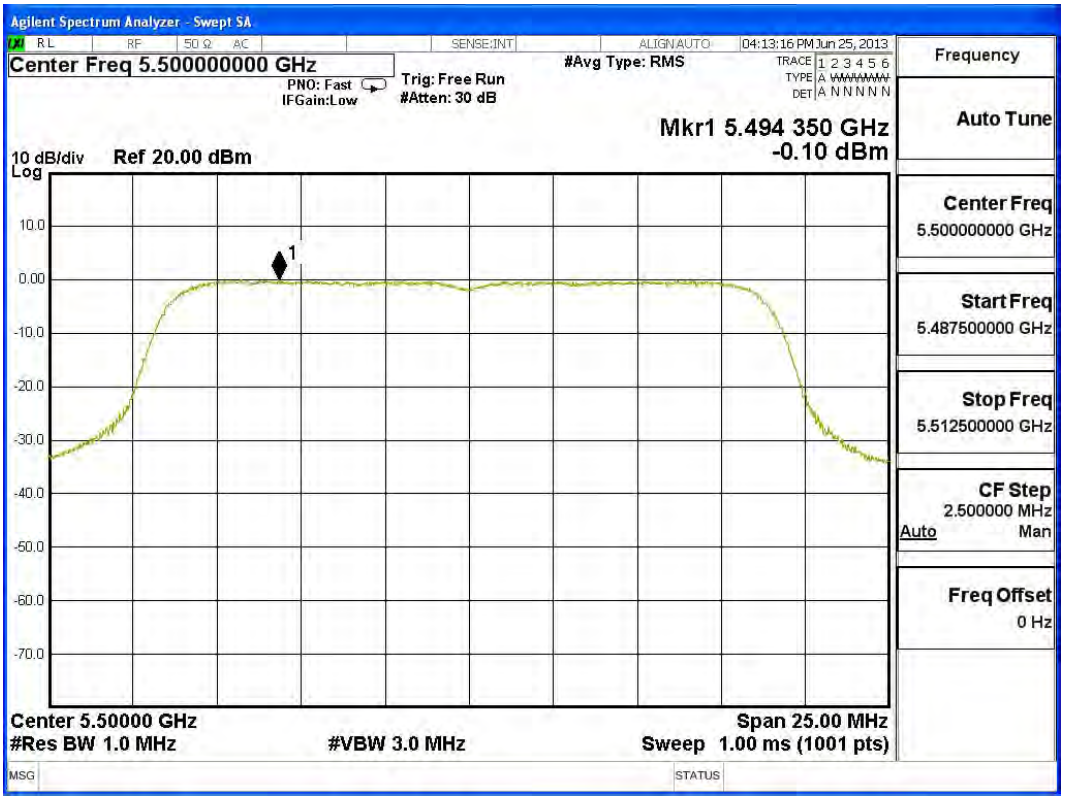
Channel 60 – Chain B



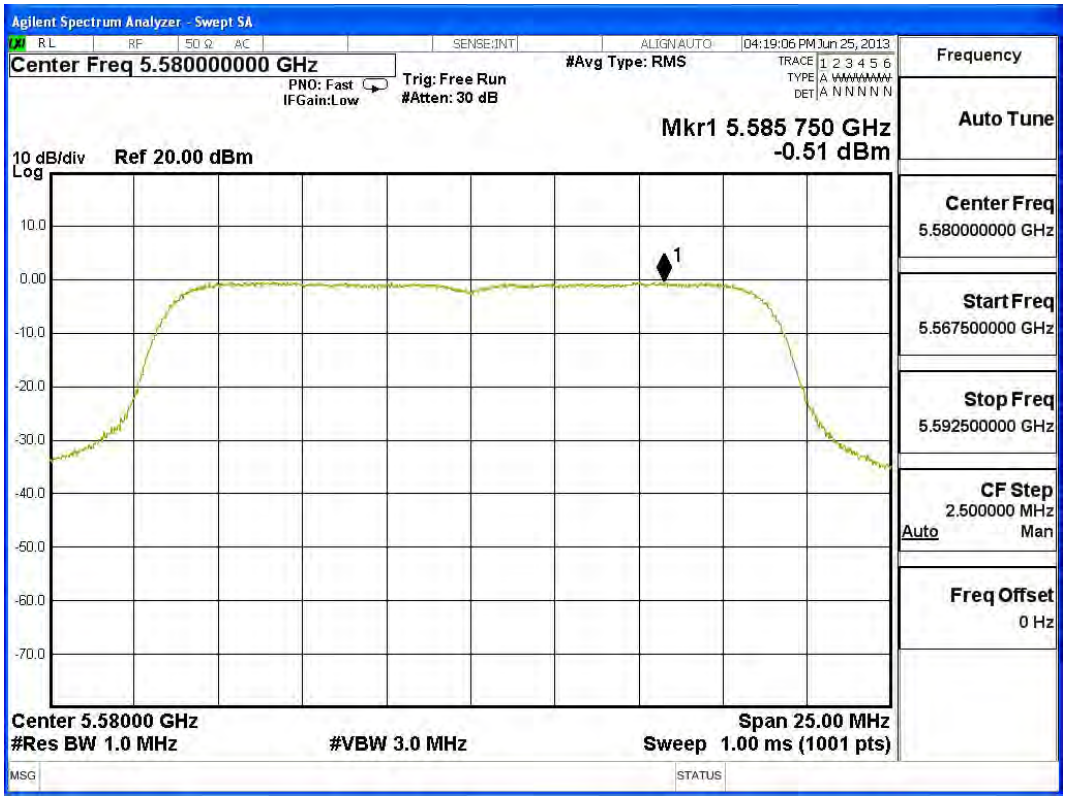
Channel 64 – Chain B



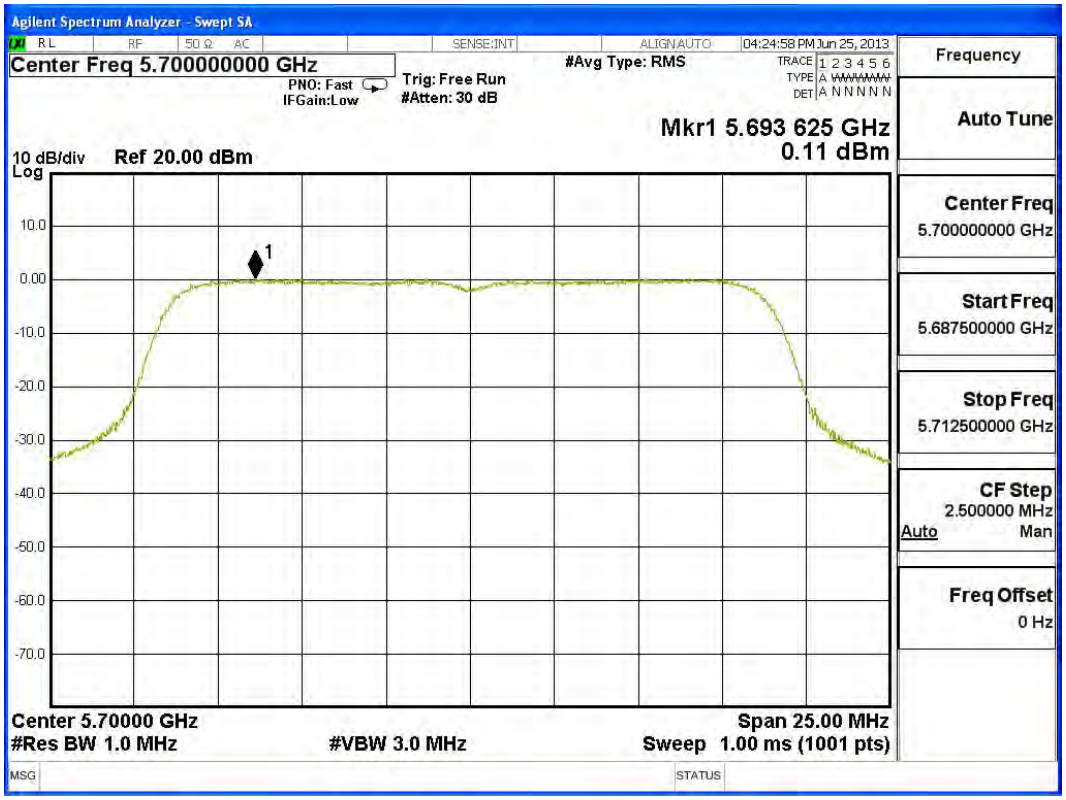
Channel 100 – Chain B



Channel 116 – Chain B



Channel 140 – Chain B

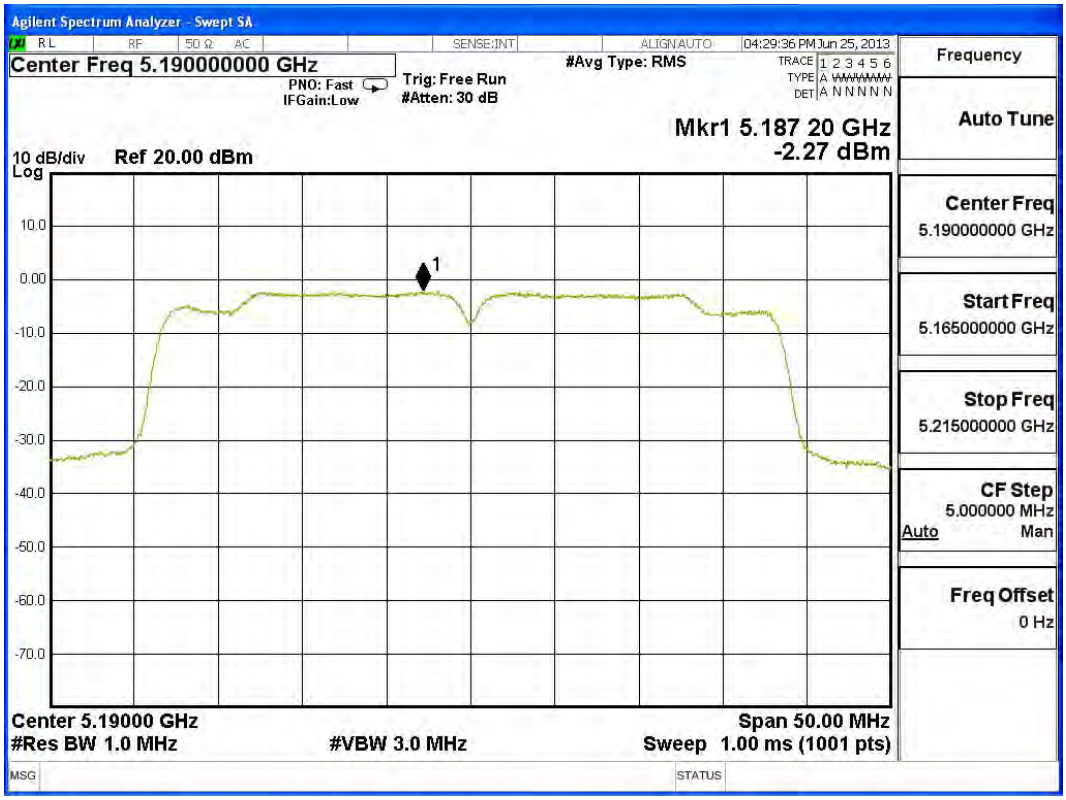


Product : TABLET PC
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)

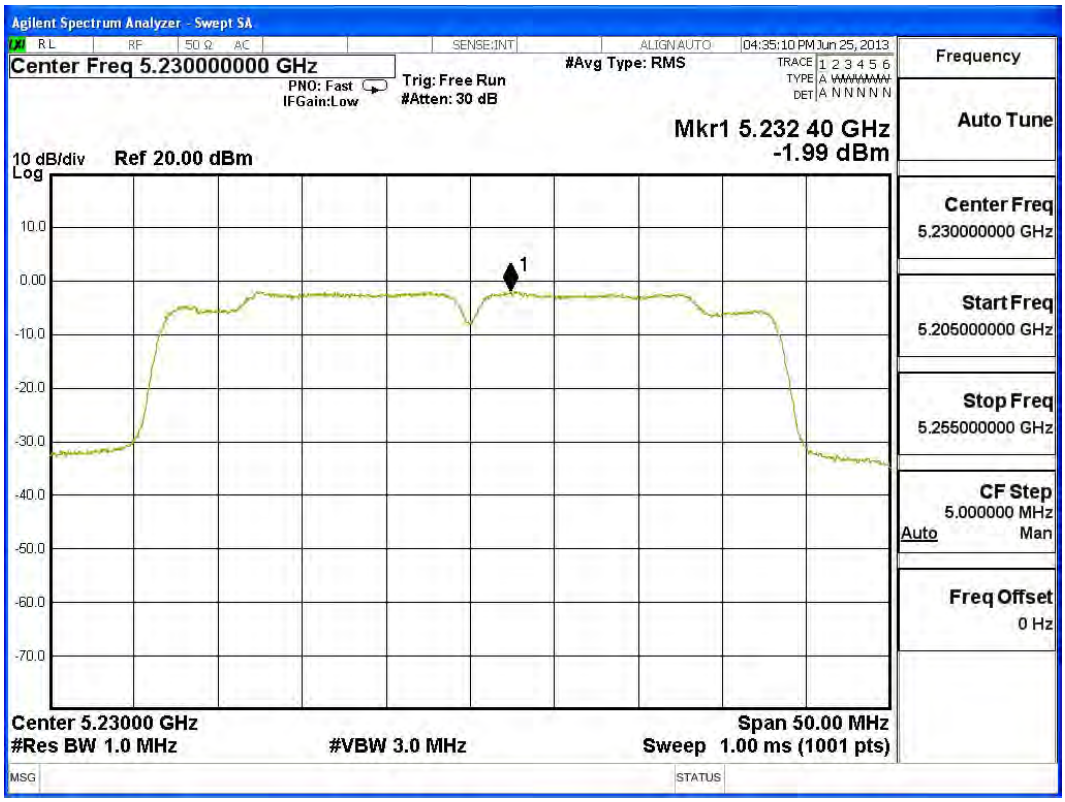
Channel Number	Frequency (MHz)	Chain	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)[1]	Required Limit (dBm)	Result
38	5190	A	-2.27	0.74	<4	Pass
		B	-4.91	-1.90	<4	Pass
46	5230	A	-1.99	1.02	<4	Pass
		B	-1.77	1.24	<4	Pass
54	5270	A	-1.69	1.32	<11	Pass
		B	-2.18	0.83	<11	Pass
62	5310	A	-1.40	1.61	<11	Pass
		B	-5.46	-2.45	<11	Pass
102	5510	A	-1.42	1.59	<11	Pass
		B	-2.25	0.76	<11	Pass
110	5550	A	-2.62	0.39	<11	Pass
		B	-2.27	0.74	<11	Pass
134	5670	A	-2.49	0.52	<11	Pass
		B	-2.74	0.27	<11	Pass

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

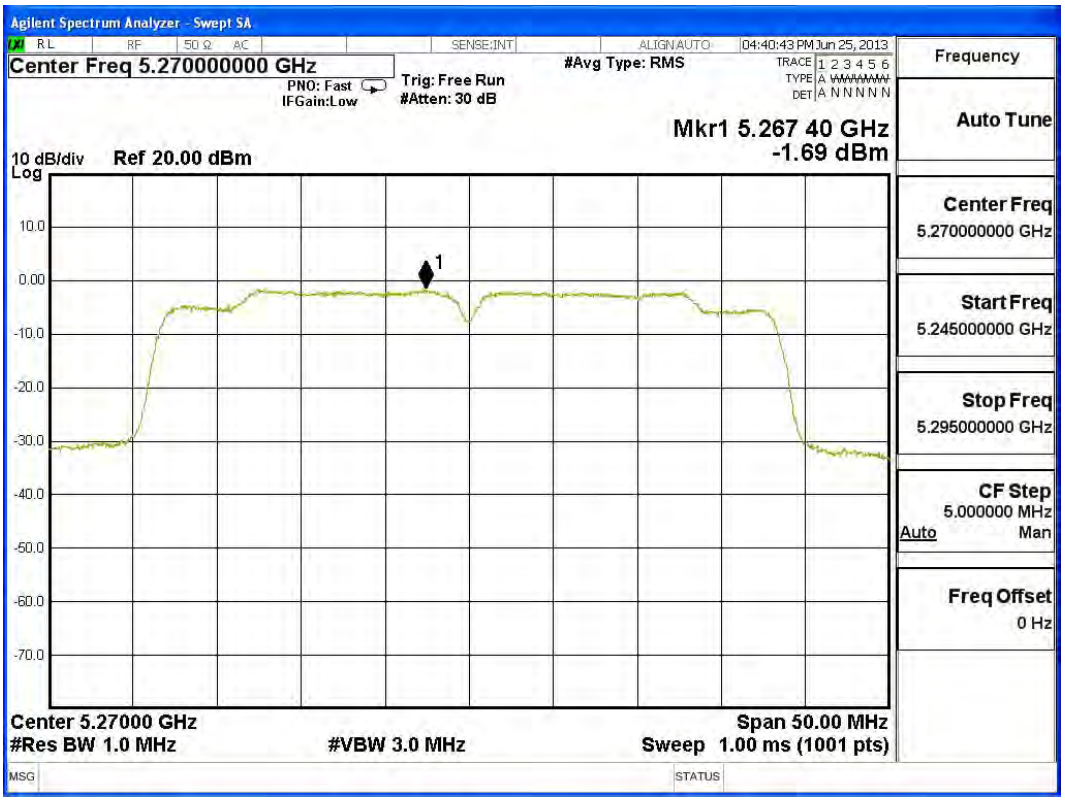
Channel 38 – Chain A



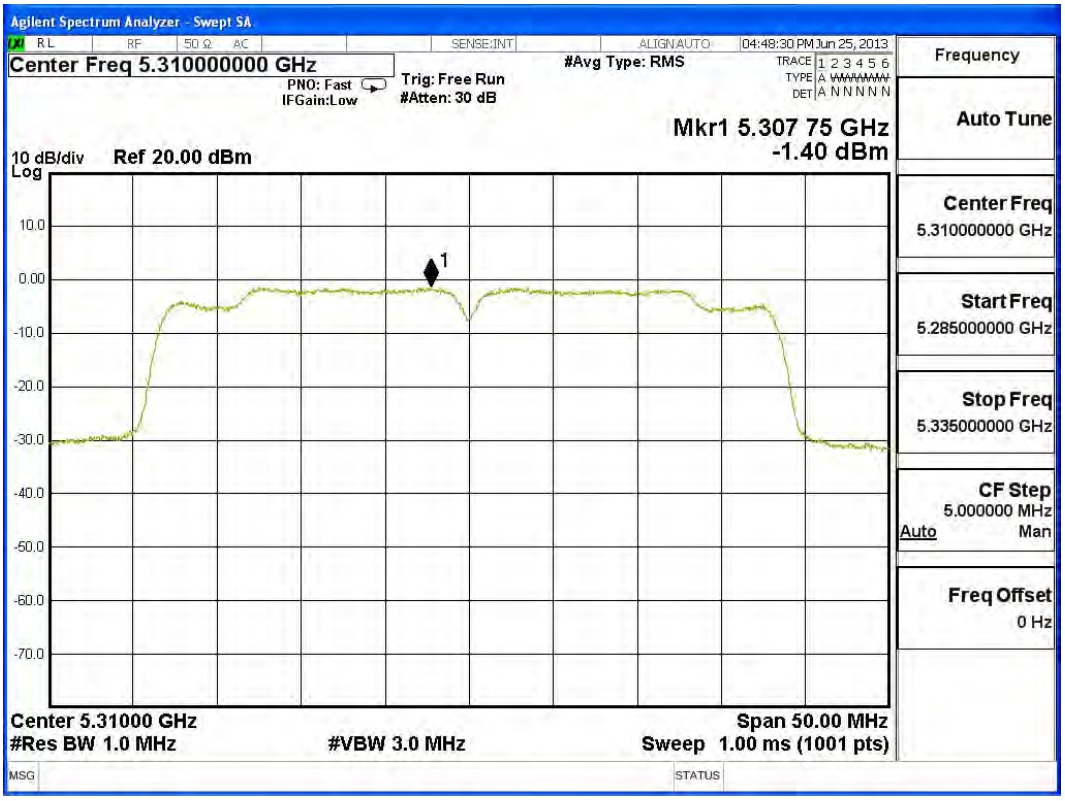
Channel 46 – Chain A



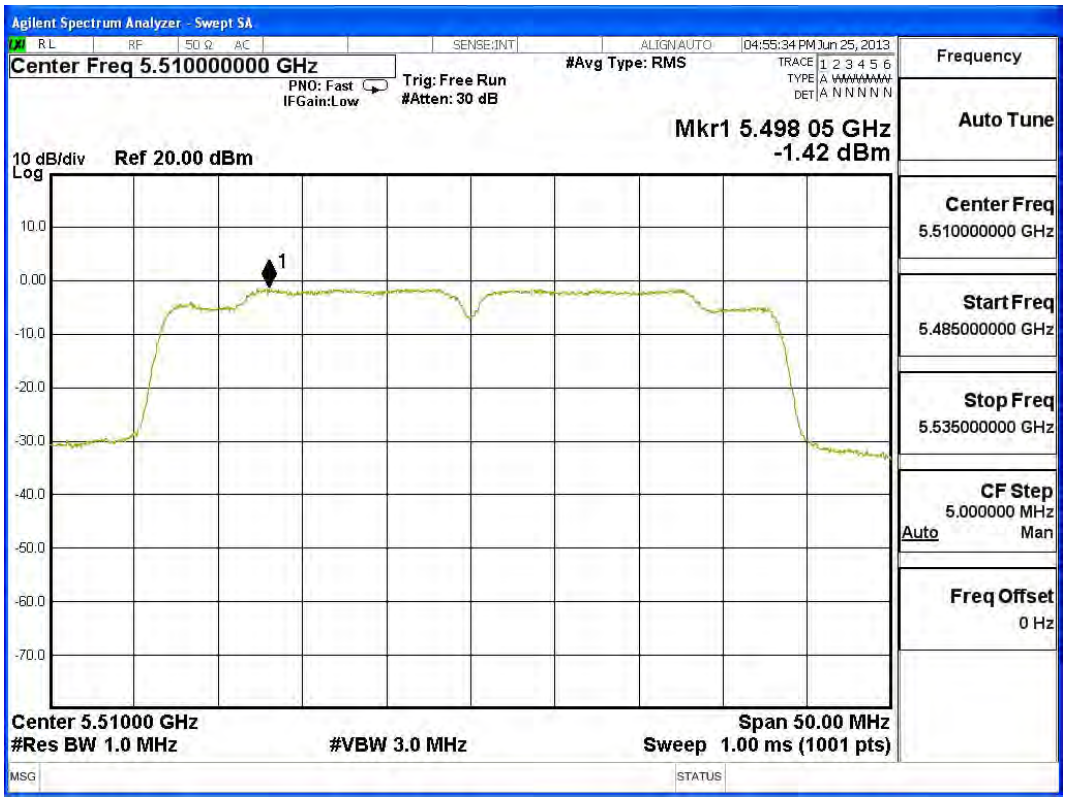
Channel 54 – Chain A



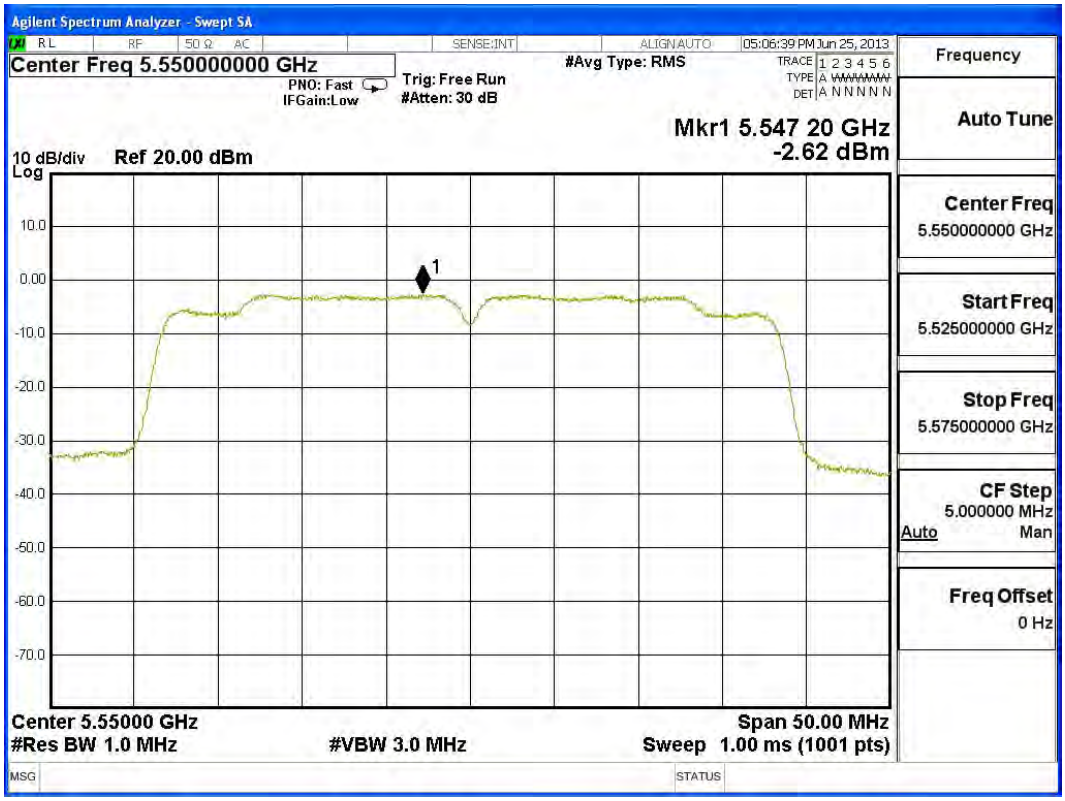
Channel 62 – Chain A



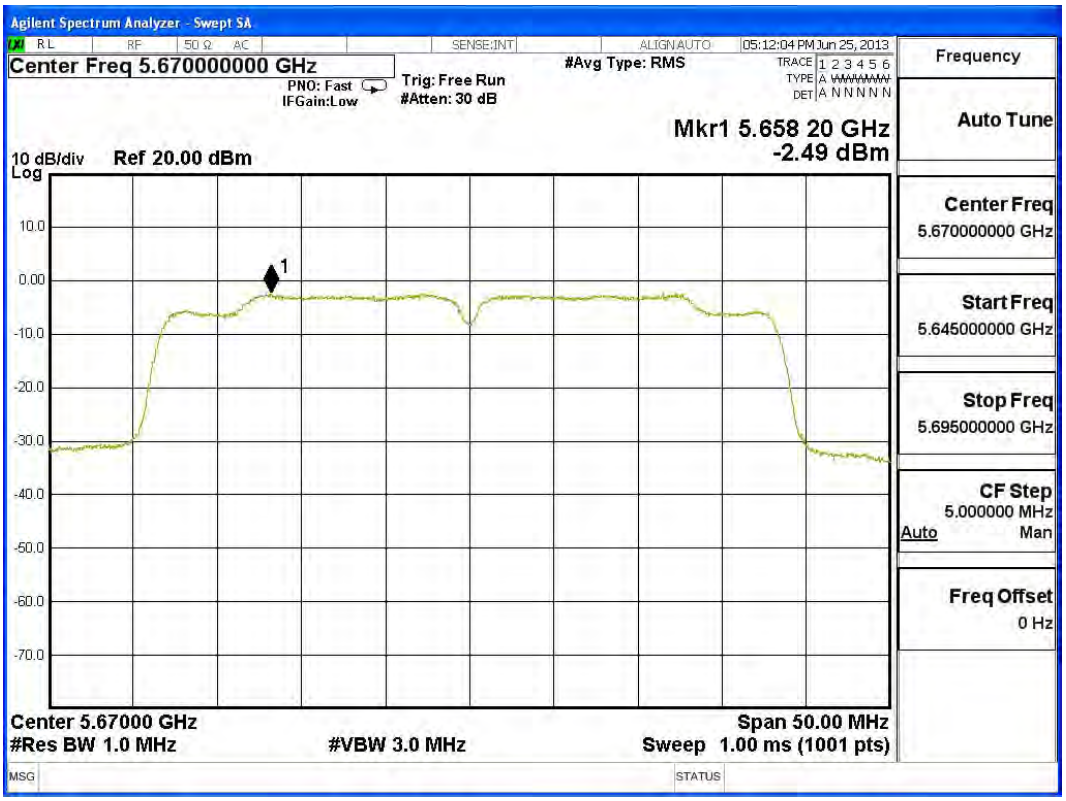
Channel 102 – Chain A



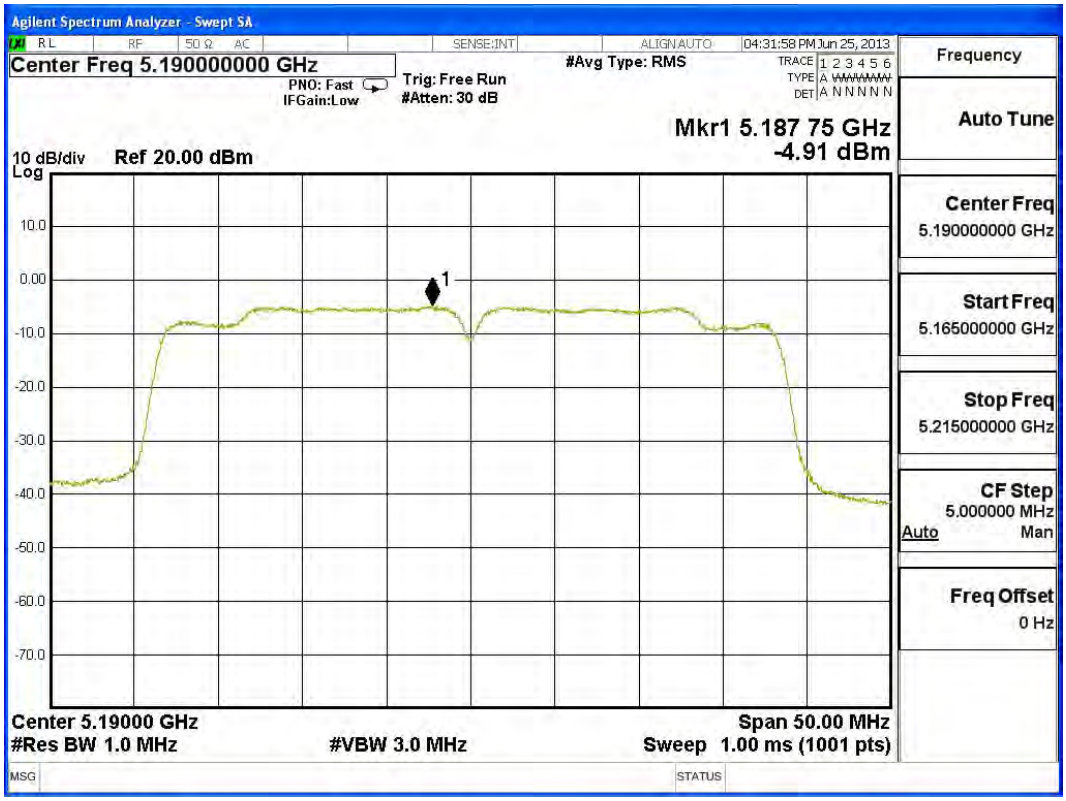
Channel 110 – Chain A



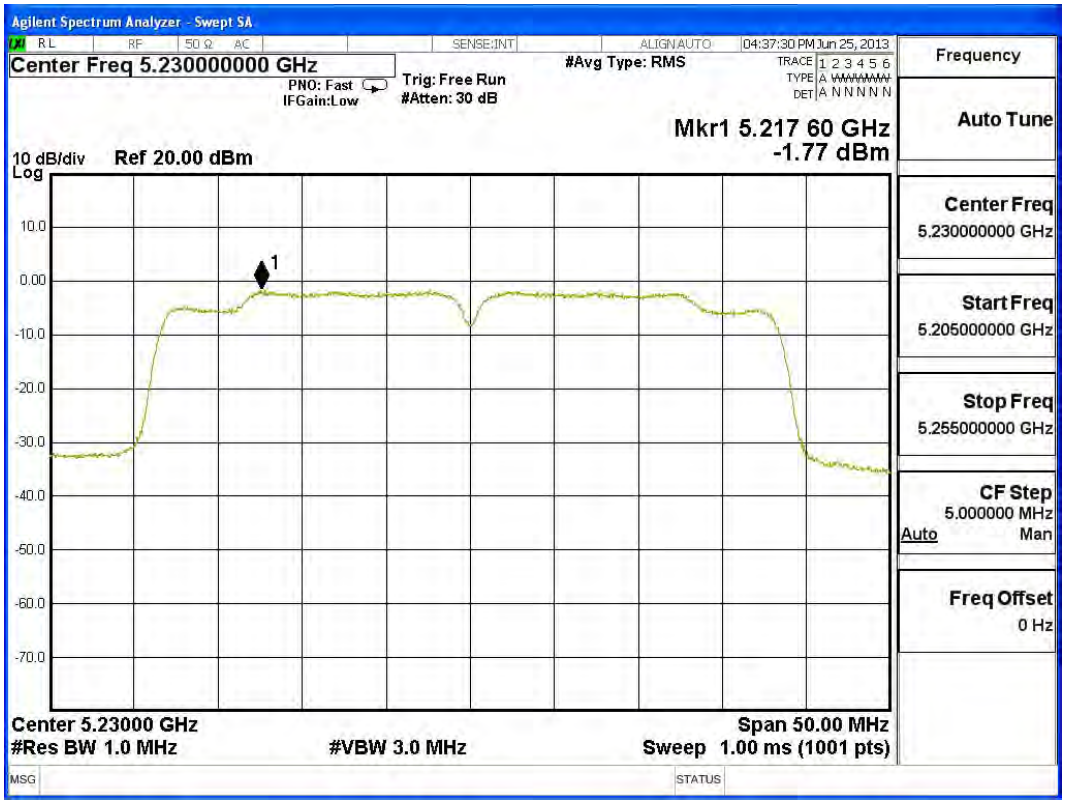
Channel 134 – Chain A



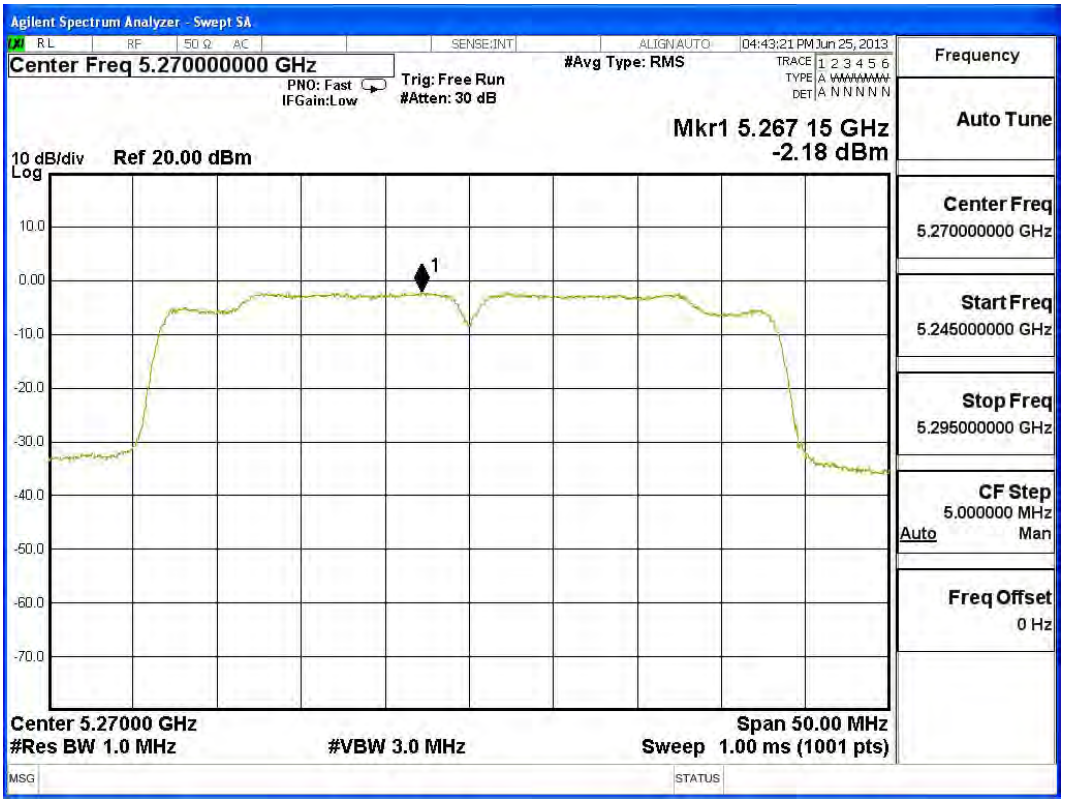
Channel 38 – Chain B



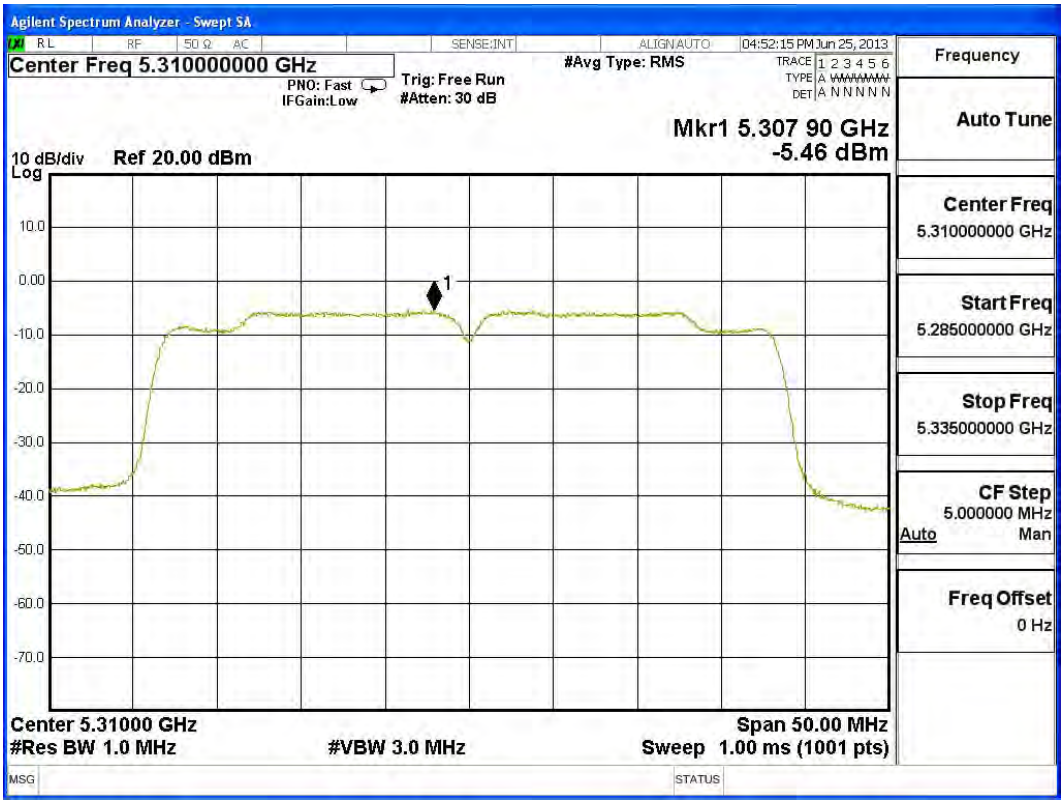
Channel 46 – Chain B



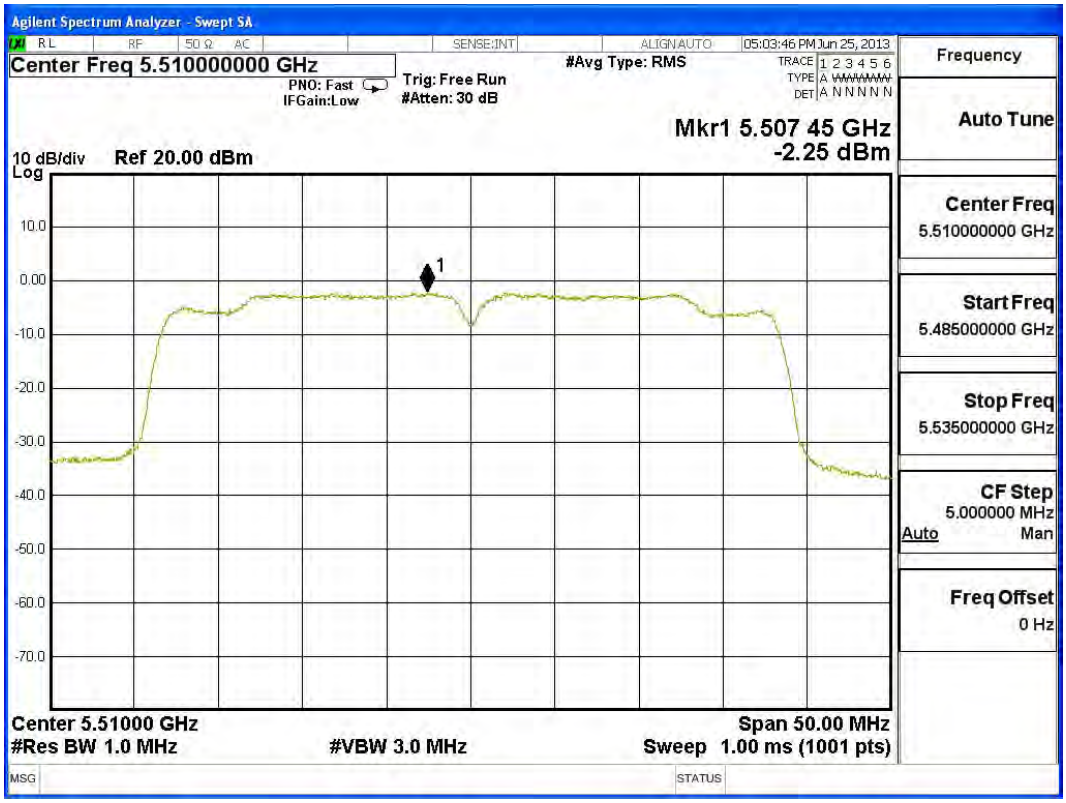
Channel 54 – Chain B



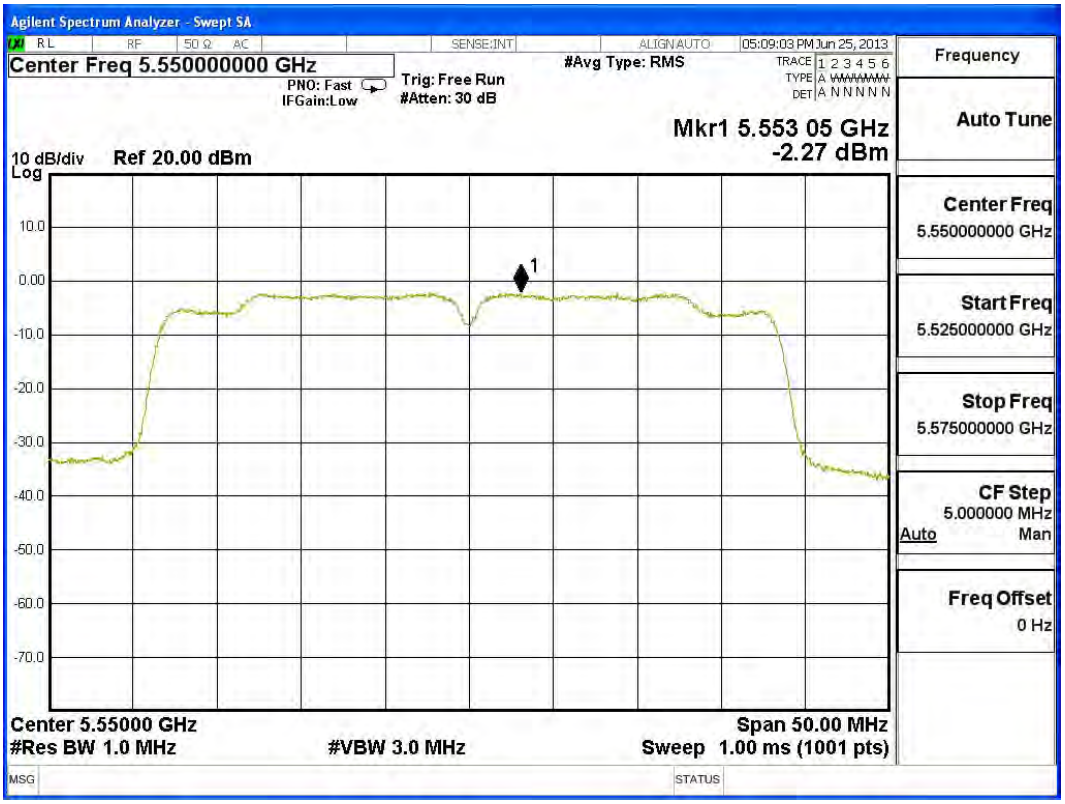
Channel 62 – Chain B



Channel 102 – Chain B

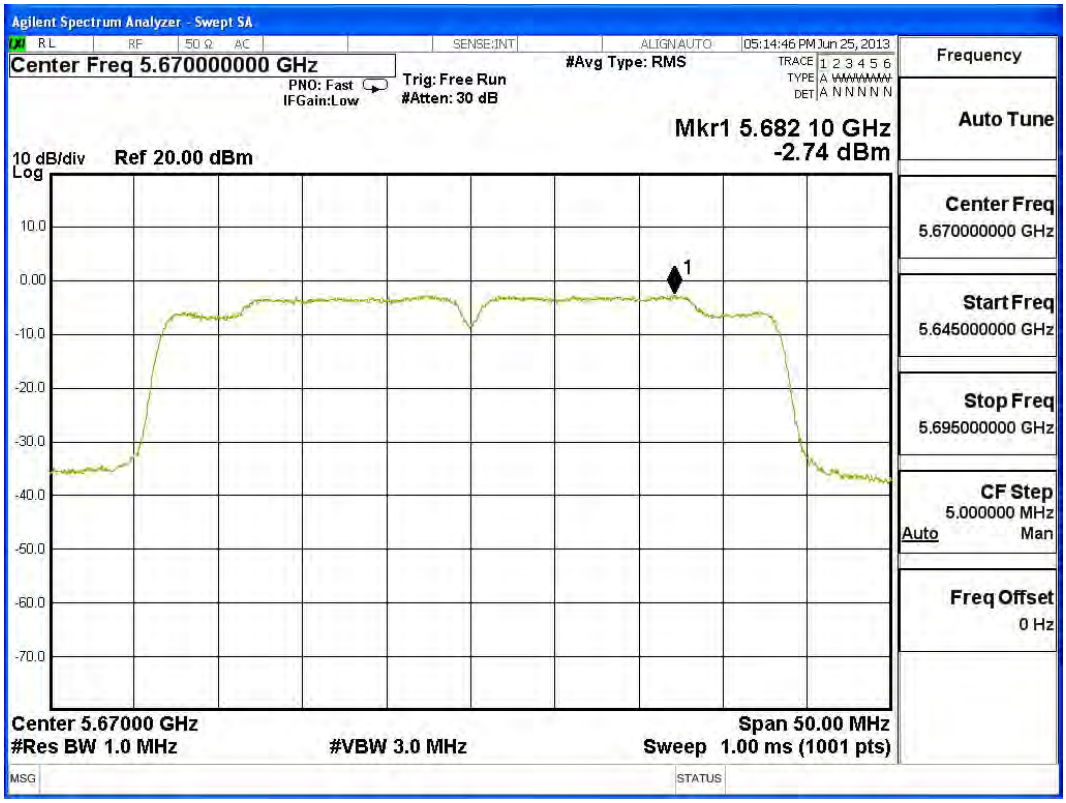


Channel 110 – Chain B



Channel 134 – Chain B

\\



5. Peak Excursion

5.1. Test Equipment

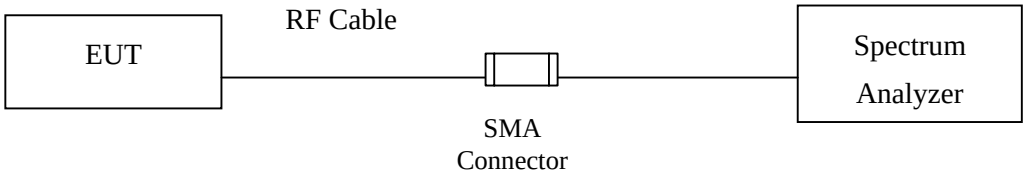
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2013
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2013
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2013

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.

5.2. Test Setup

Conduction Power Measurement



5.3. Limits

The ratio of the peak excursion of the modulation envelope (measured suing a peak hold function) to the peak transmit power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

5.4. Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

5.5. Uncertainty

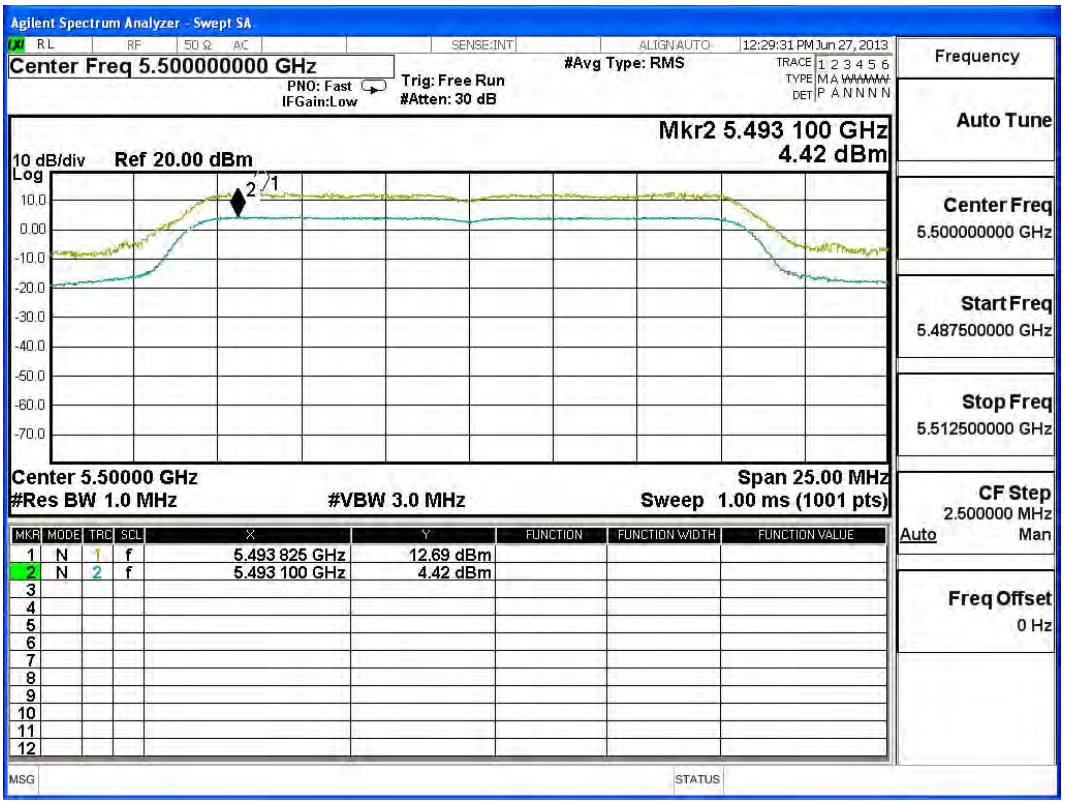
± 1.27 dB

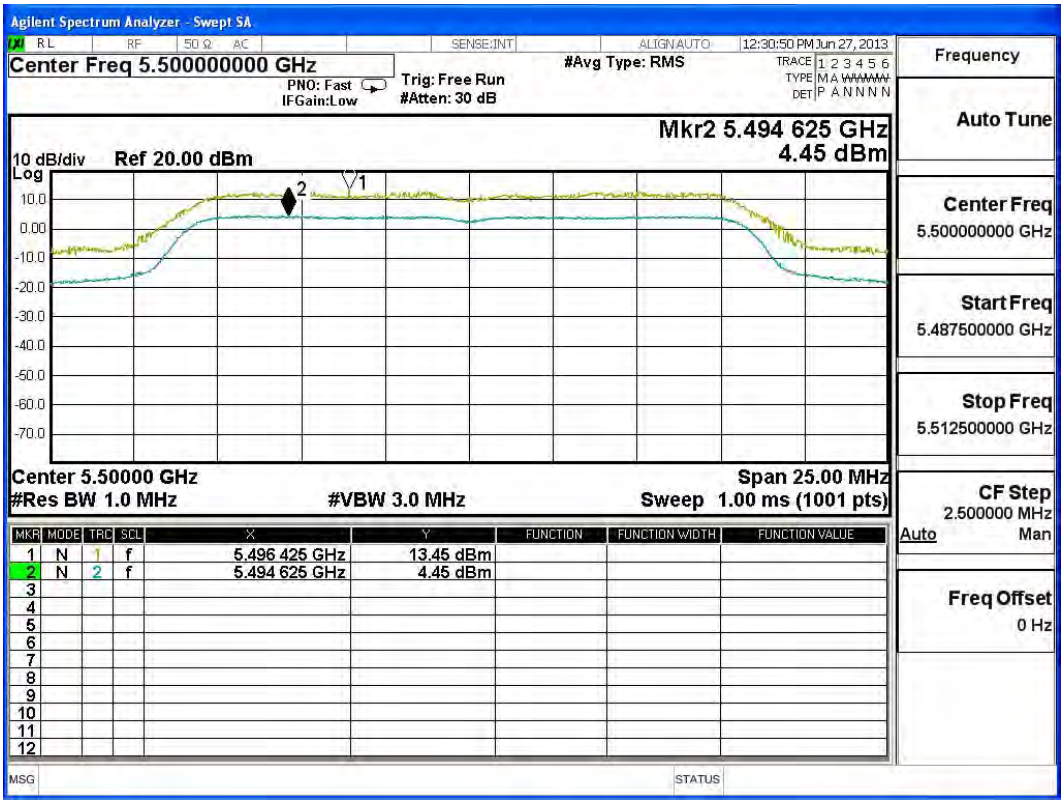
5.6. Test Result of Peak Excursion

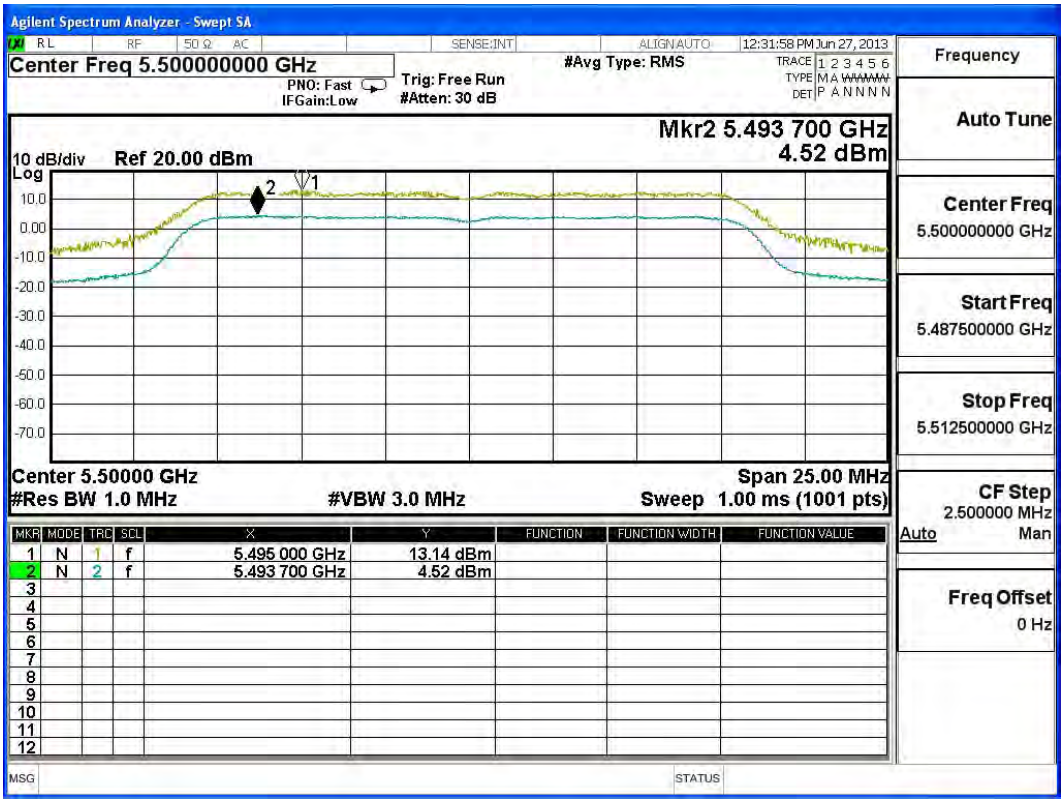
Product : TABLET PC
Test Item : Peak Excursion
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11a-6Mbps)

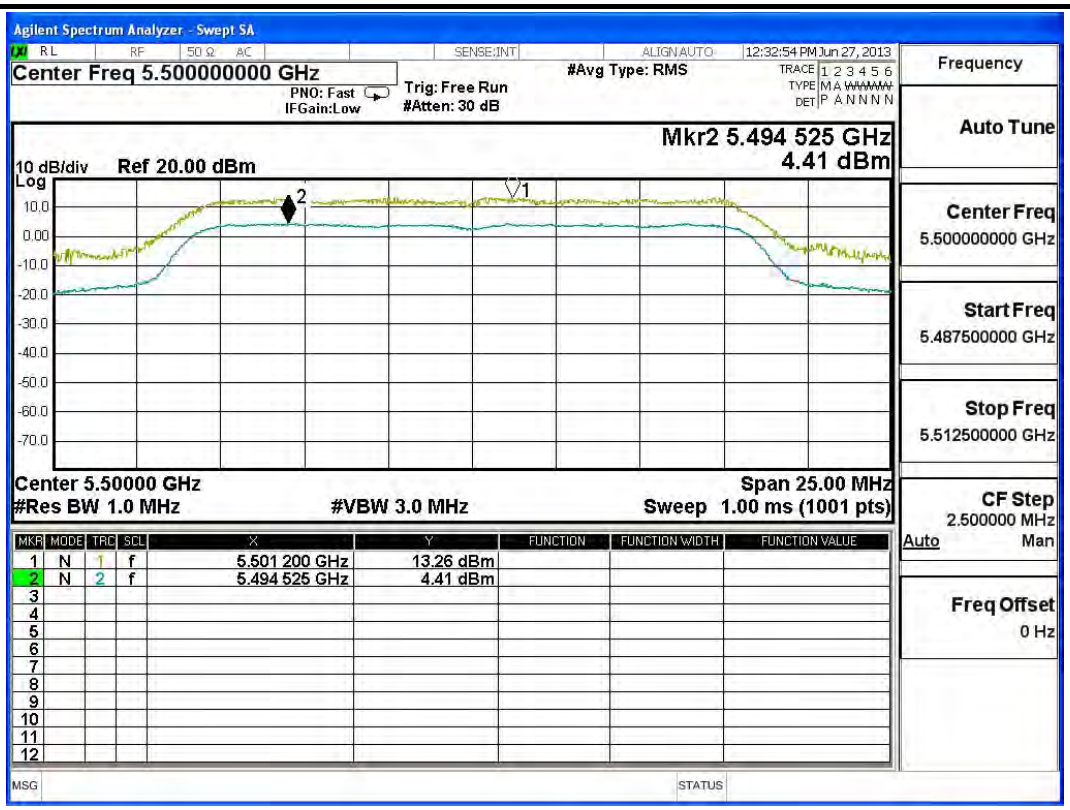
Channel No.	Frequency (MHz)	Data Rate (Mbps)	Measurement Level (dB)	Required Limit (dB)	Result
100	5500	MCS (0)	8.270	<13	Pass
		MCS (2)	9.000	<13	Pass
		MCS (4)	8.620	<13	Pass
		MCS (7)	8.850	<13	Pass

Channel 100:




Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
12:30:50 PM Jun 27, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE M A WWWWW
DET P A N N N N
Mkr2 5.494 625 GHz
4.45 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 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 5.496 425 GHz 13.45 dBm
2 N 2 f 5.494 625 GHz 4.45 dBm
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
12:31:58 PM Jun 27, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE M A WWWWW
DET P A N N N N
Mkr2 5.493 700 GHz
4.52 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 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 5.495 000 GHz 13.14 dBm
2 N 2 f 5.493 700 GHz 4.52 dBm
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

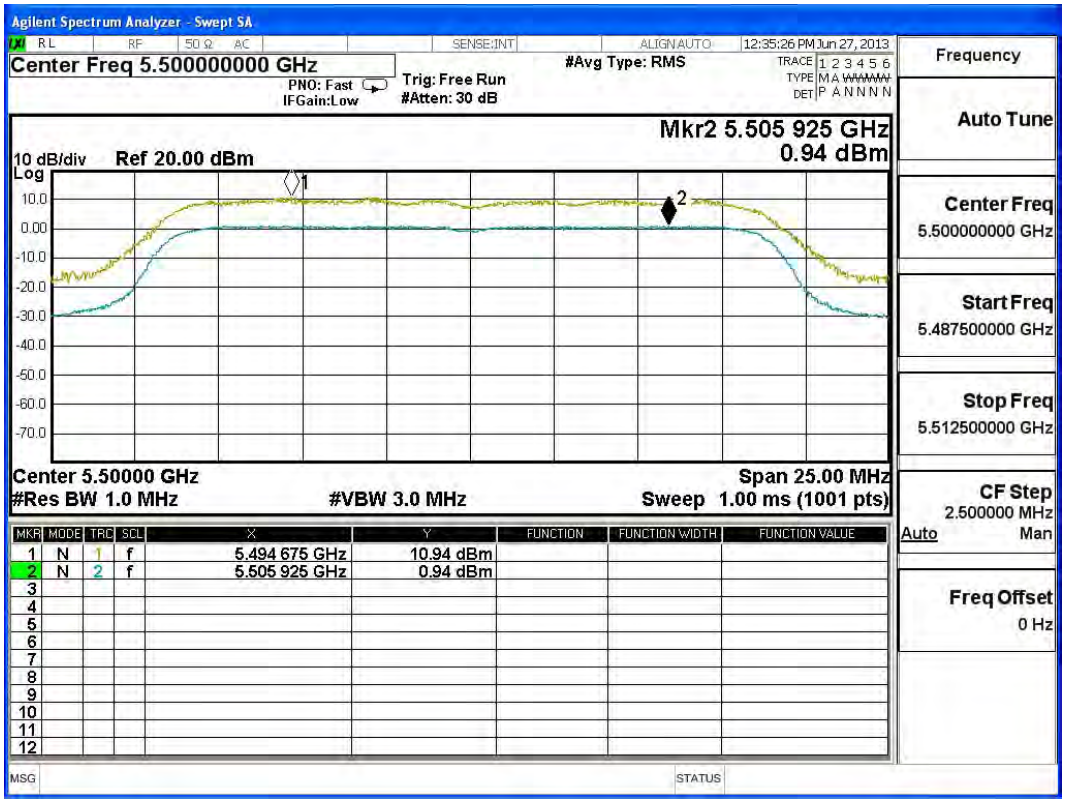

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
12:32:54 PM Jun 27, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE M A WWWWW
DET P A N N N N
Mkr2 5.494 525 GHz
4.41 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 5.501 200 GHz 13.26 dBm
2 N 2 f 5.494 525 GHz 4.41 dBm
3
4
5
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

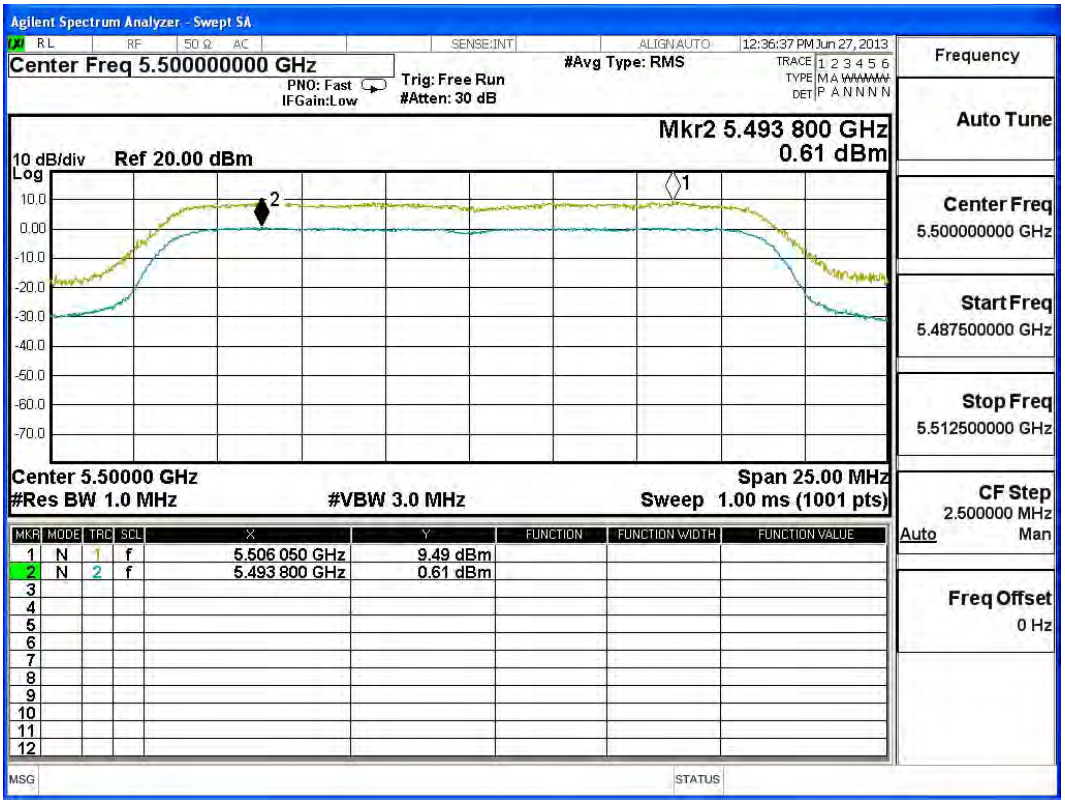
Product : TABLET PC
Test Item : Peak Excursion
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)

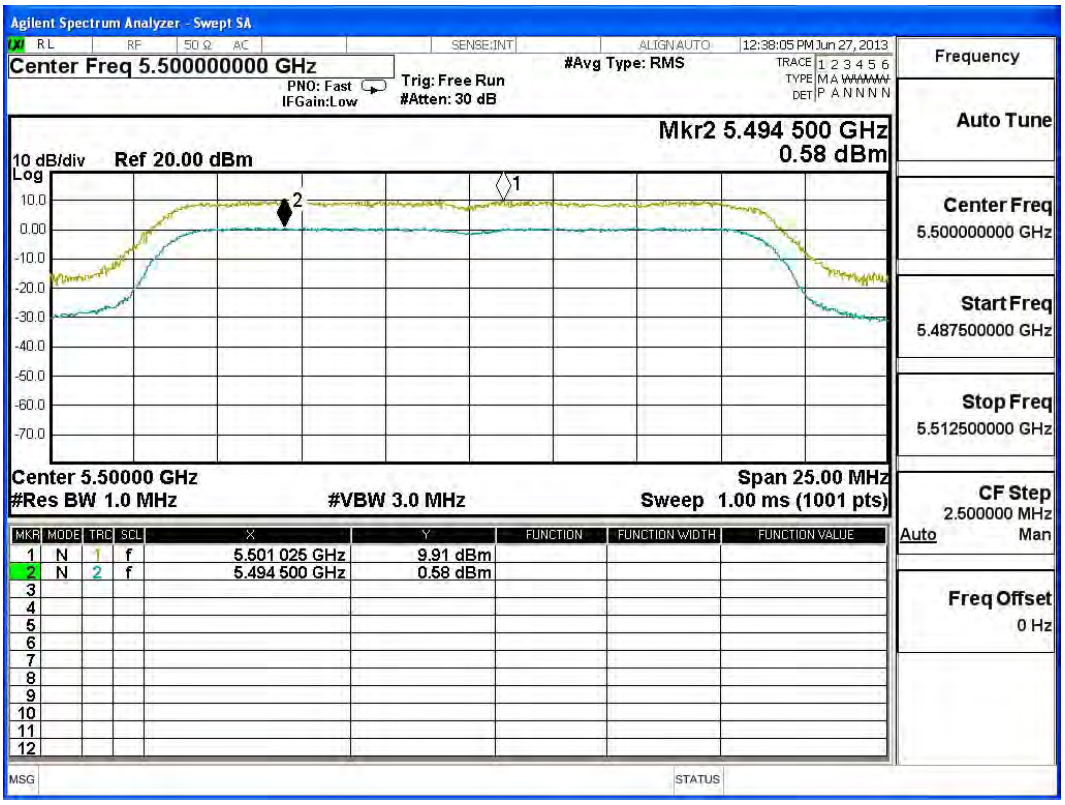
Chain A

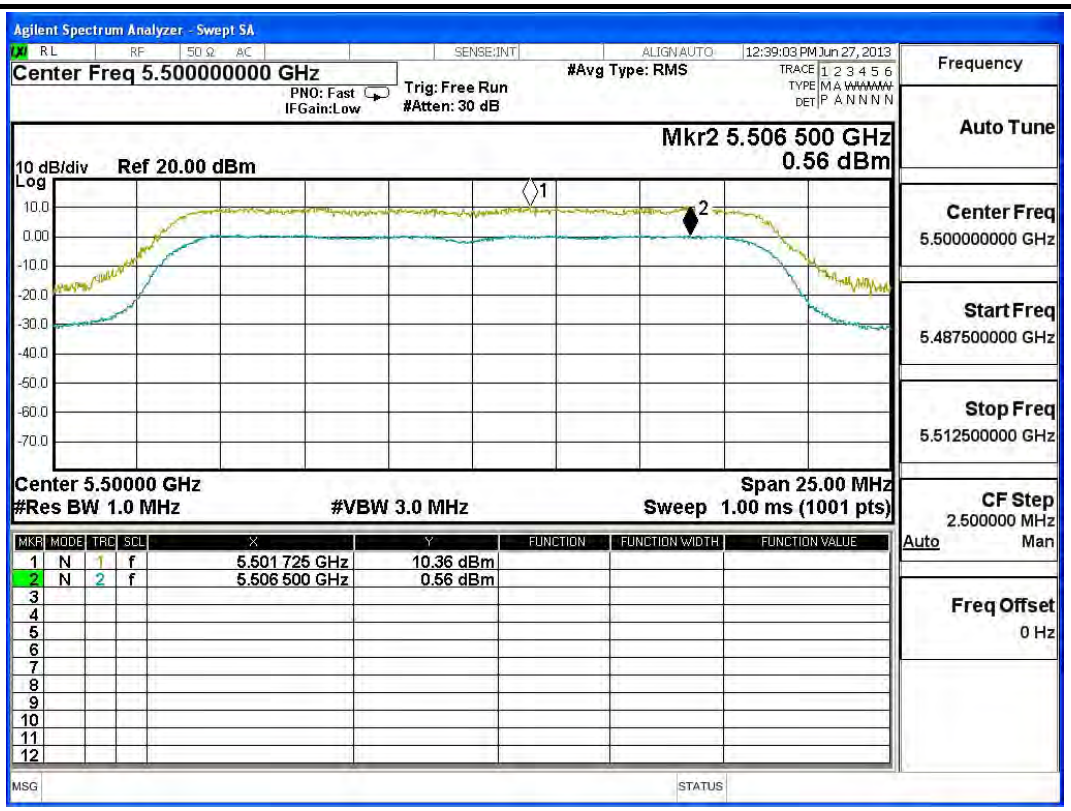
Channel No.	Frequency (MHz)	Data Rate (Mbps)	Measurement Level (dB)	Required Limit (dB)	Result
100	5500	MCS (0)	10.000	<13	Pass
		MCS (2)	8.880	<13	Pass
		MCS (4)	9.330	<13	Pass
		MCS (7)	9.800	<13	Pass

Channel 100:




Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
12:36:37 PM Jun 27, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE M A WWWWW
DET P A N N N N
Mkr2 5.493 800 GHz
0.61 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 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 5.506 050 GHz 9.49 dBm
2 N 2 f 5.493 800 GHz 0.61 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

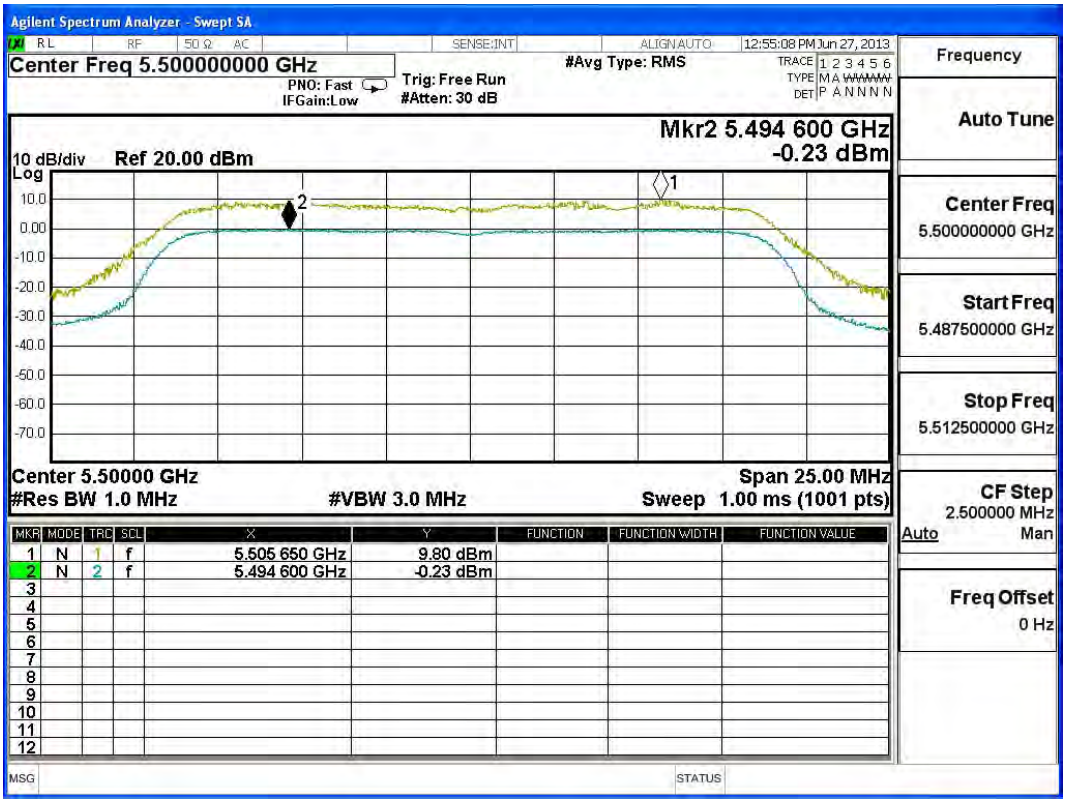

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
12:38:05 PM Jun 27, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE M A WWWWW
DET P A N N N N
Mkr2 5.494 500 GHz
0.58 dBm
10 dB/div
Ref 20.00 dBm
Log
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 5.501 025 GHz 9.91 dBm
2 N 2 f 5.494 500 GHz 0.58 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

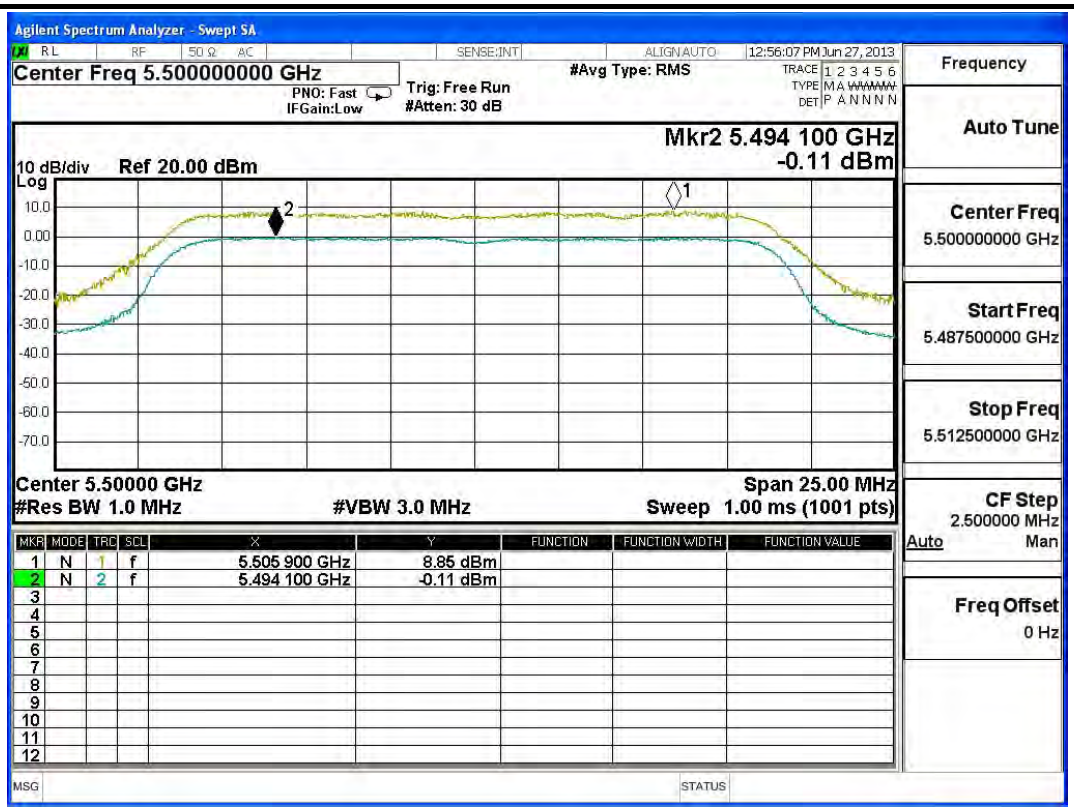

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
12:39:03 PM Jun 27, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE M A WWWWW
DET P A N N N N
Mkr2 5.506 500 GHz
0.56 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 5.501 725 GHz 10.36 dBm
2 N 2 f 5.506 500 GHz 0.56 dBm
3
4
5
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

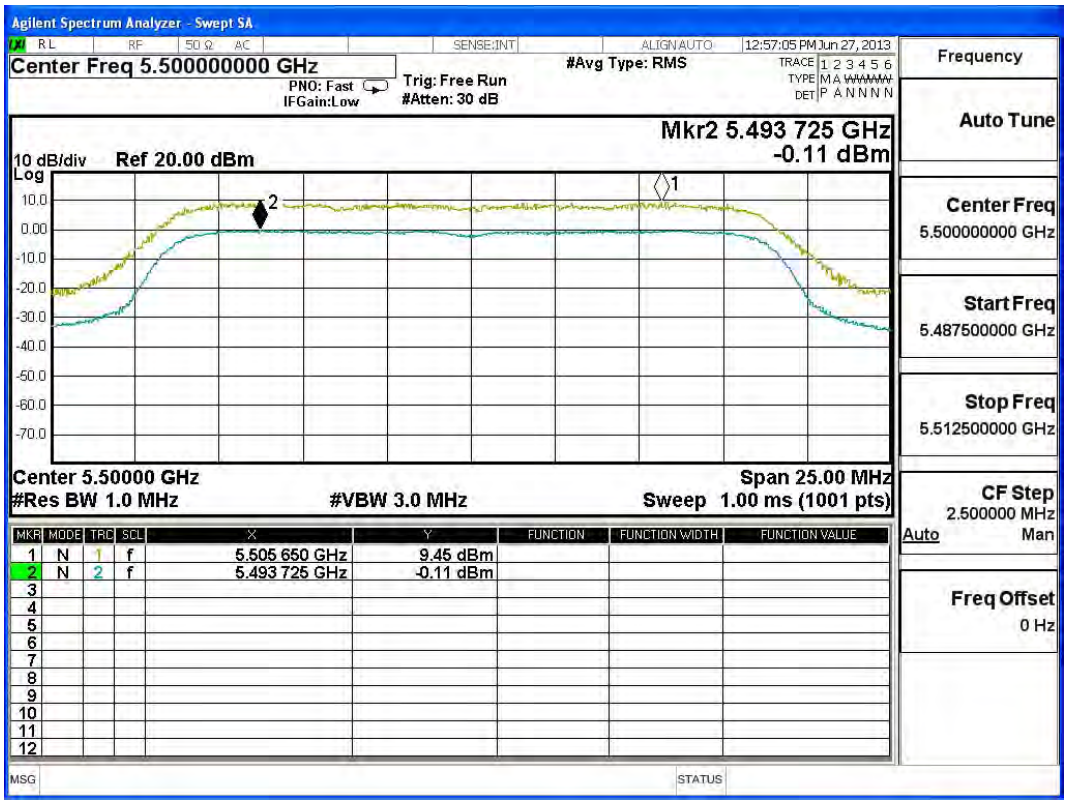
Chain B

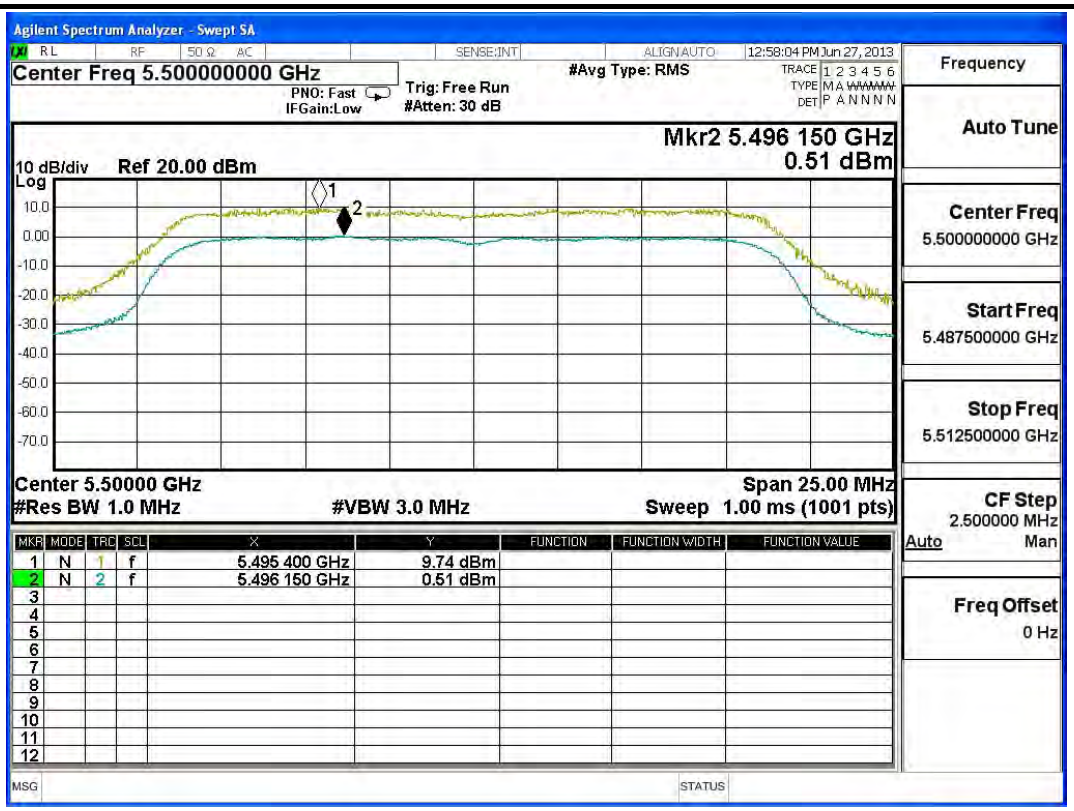
Channel No.	Frequency (MHz)	Data Rate (Mbps)	Measurement Level (dB)	Required Limit (dB)	Result
100	5500	MCS (0)	10.030	<13	Pass
		MCS (2)	8.960	<13	Pass
		MCS (4)	9.560	<13	Pass
		MCS (7)	9.230	<13	Pass

Channel 100:




Agilent Spectrum Analyzer - Swept SA
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
12:56:07 PM Jun 27, 2013
Mkr2 5.494 100 GHz
-0.11 dBm
10 dB/div
Log
Ref 20.00 dBm
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
1 N 1 f 5.505 900 GHz 8.85 dBm
2 N 2 f 5.494 100 GHz -0.11 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
12:57:05 PM Jun 27, 2013
Mkr2 5.493 725 GHz
-0.11 dBm
10 dB/div
Log
Ref 20.00 dBm
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
1 N 1 f 5.505 650 GHz 9.45 dBm
2 N 2 f 5.493 725 GHz -0.11 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

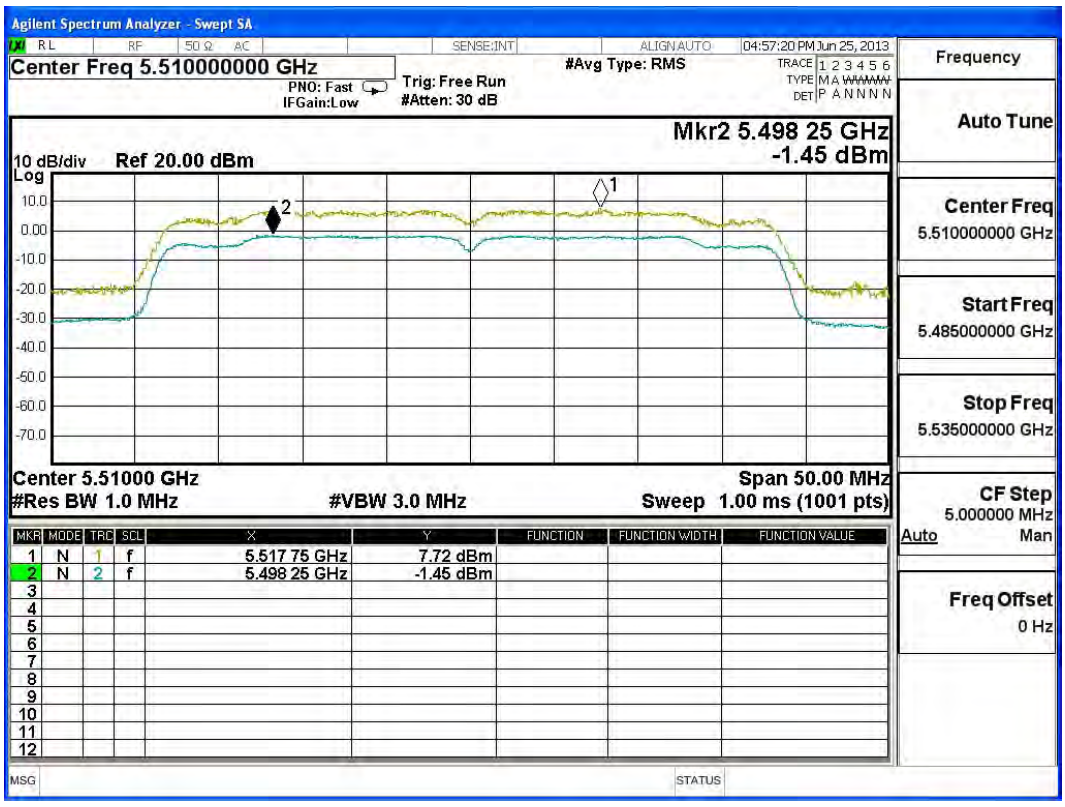

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
12:58:04 PM Jun 27, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE M A WWWWW
DET P A N N N N
Mkr2 5.496 150 GHz
0.51 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 5.495 400 GHz 9.74 dBm
2 N 2 f 5.496 150 GHz 0.51 dBm
3
4
5
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

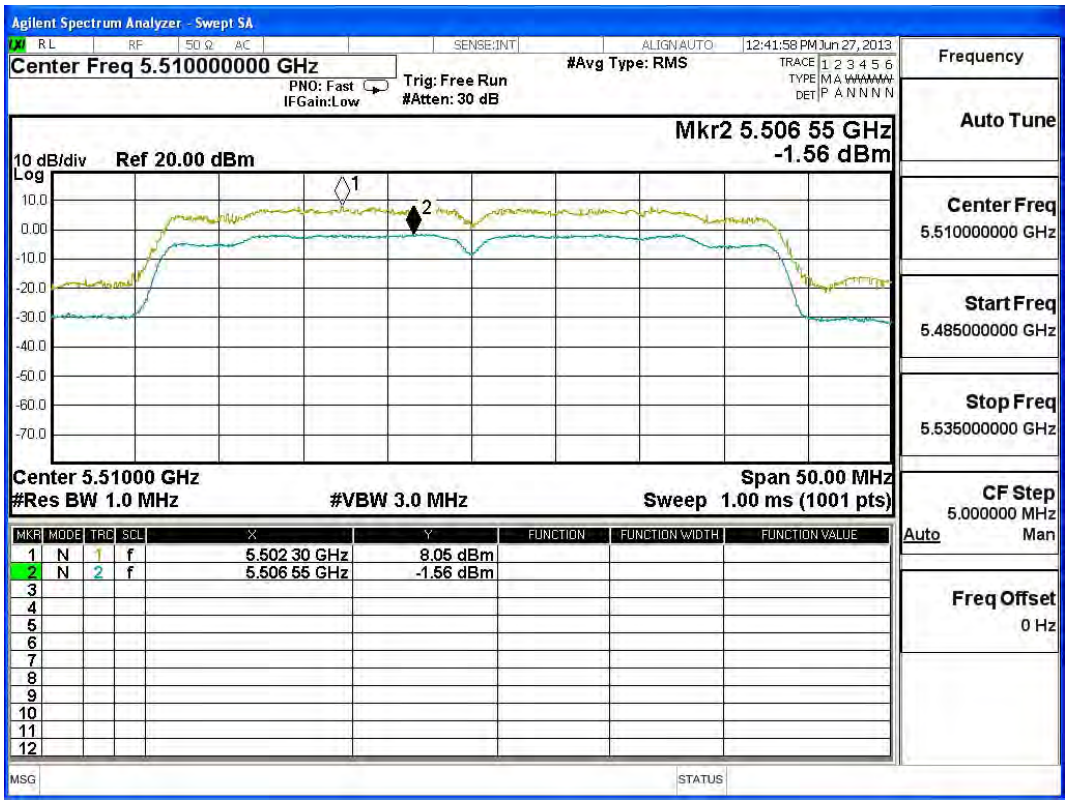
Product : TABLET PC
Test Item : Peak Excursion
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)

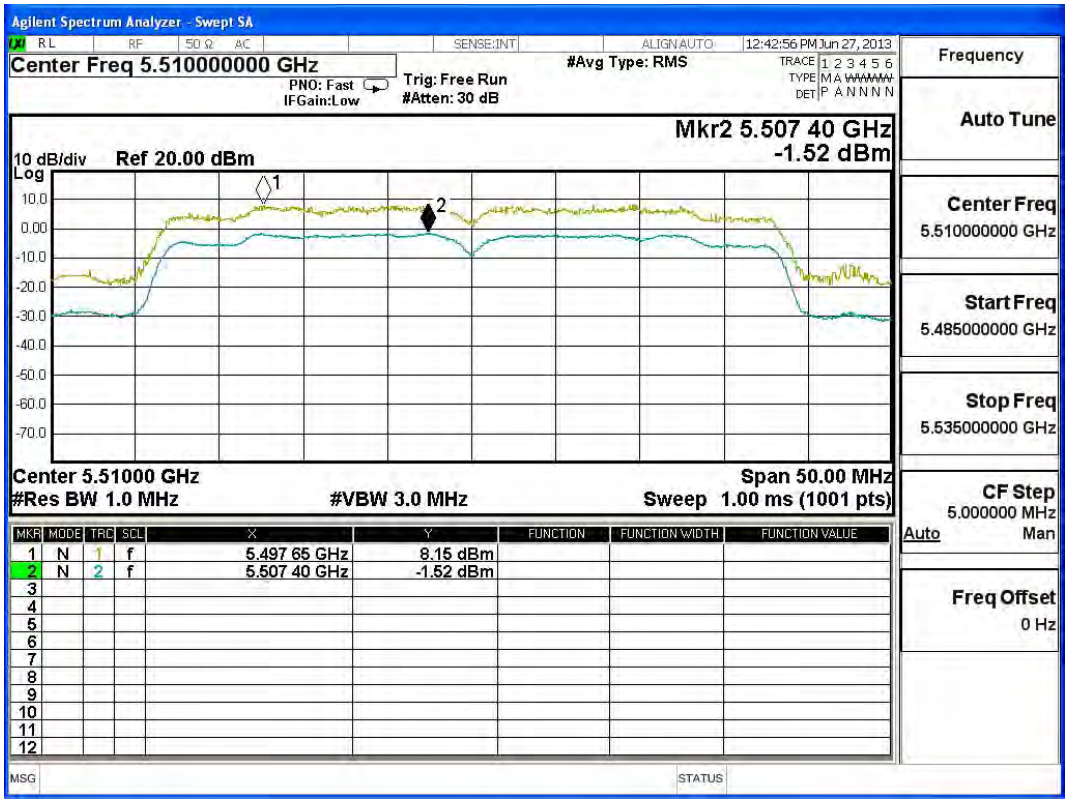
Chain A

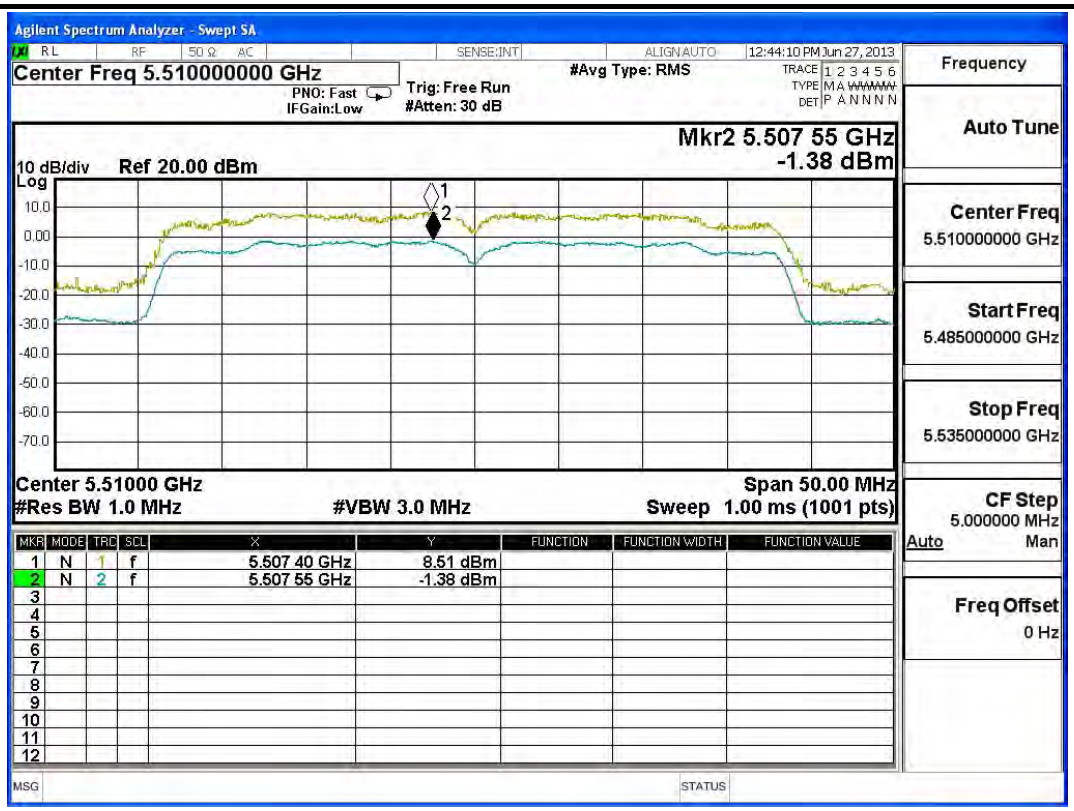
Channel No.	Frequency (MHz)	Data Rate (Mbps)	Measurement Level (dB)	Required Limit (dB)	Result
102	5510	MCS (0)	9.170	<13	Pass
		MCS (2)	9.610	<13	Pass
		MCS (4)	9.670	<13	Pass
		MCS (7)	9.890	<13	Pass

Channel 102:




Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
12:41:58 PM Jun 27, 2013
Center Freq 5.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE M A WWWWW
DET P A N N N N
Mkr2 5.506 55 GHz
-1.56 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 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 5.502 30 GHz 8.05 dBm
2 N 2 f 5.506 55 GHz -1.56 dBm
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.510000000 GHz
Start Freq
5.485000000 GHz
Stop Freq
5.535000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz

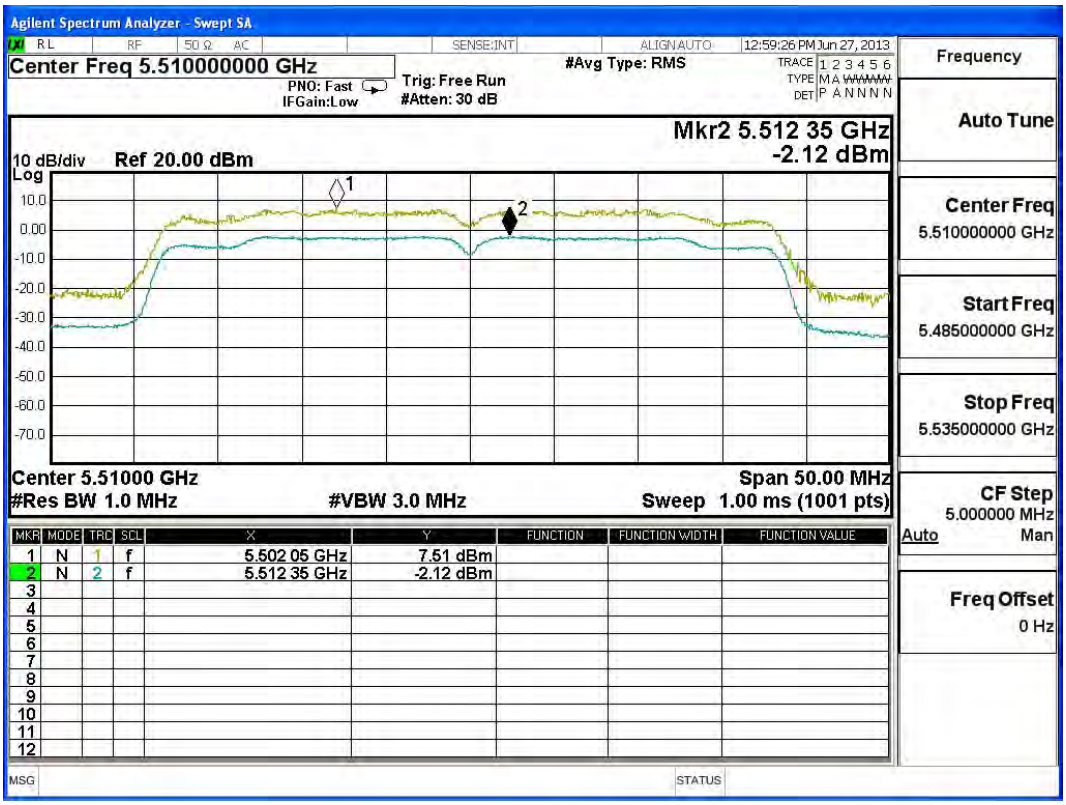

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
12:42:56 PM Jun 27, 2013
Center Freq 5.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE M A WWWWW
DET P A N N N N
Mkr2 5.507 40 GHz
-1.52 dBm
10 dB/div
Ref 20.00 dBm
Log
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 5.497 65 GHz 8.15 dBm
2 N 2 f 5.507 40 GHz -1.52 dBm
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.510000000 GHz
Start Freq
5.485000000 GHz
Stop Freq
5.535000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz

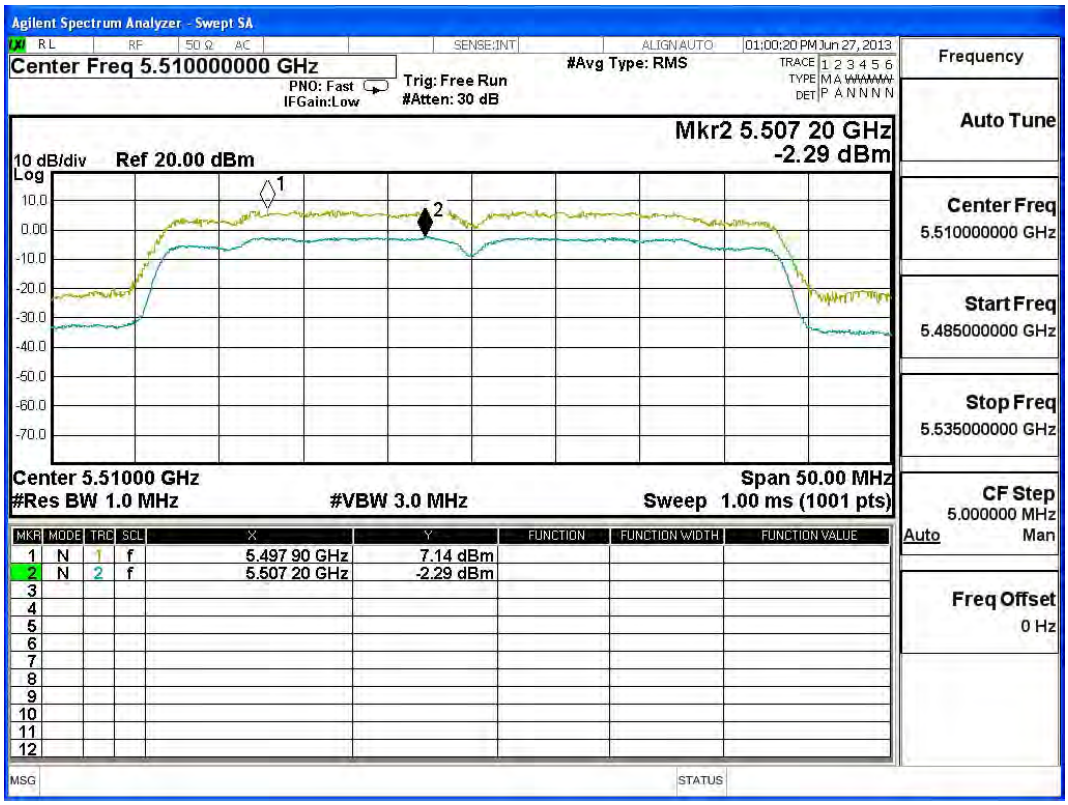

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
12:44:10 PM Jun 27, 2013
Center Freq 5.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE M A WWWWW
DET P A N N N N
Mkr2 5.507 55 GHz
-1.38 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 5.507 40 GHz 8.51 dBm
2 N 2 f 5.507 55 GHz -1.38 dBm
3
4
5
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.510000000 GHz
Start Freq
5.485000000 GHz
Stop Freq
5.535000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz

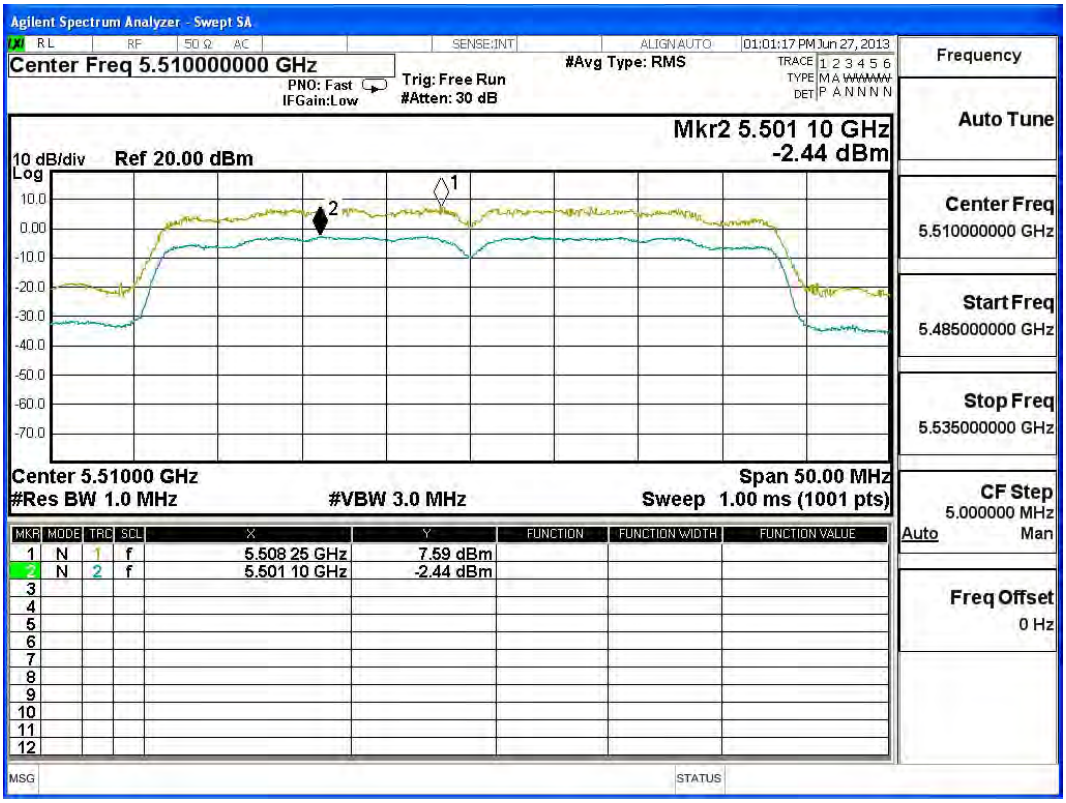
Chain B

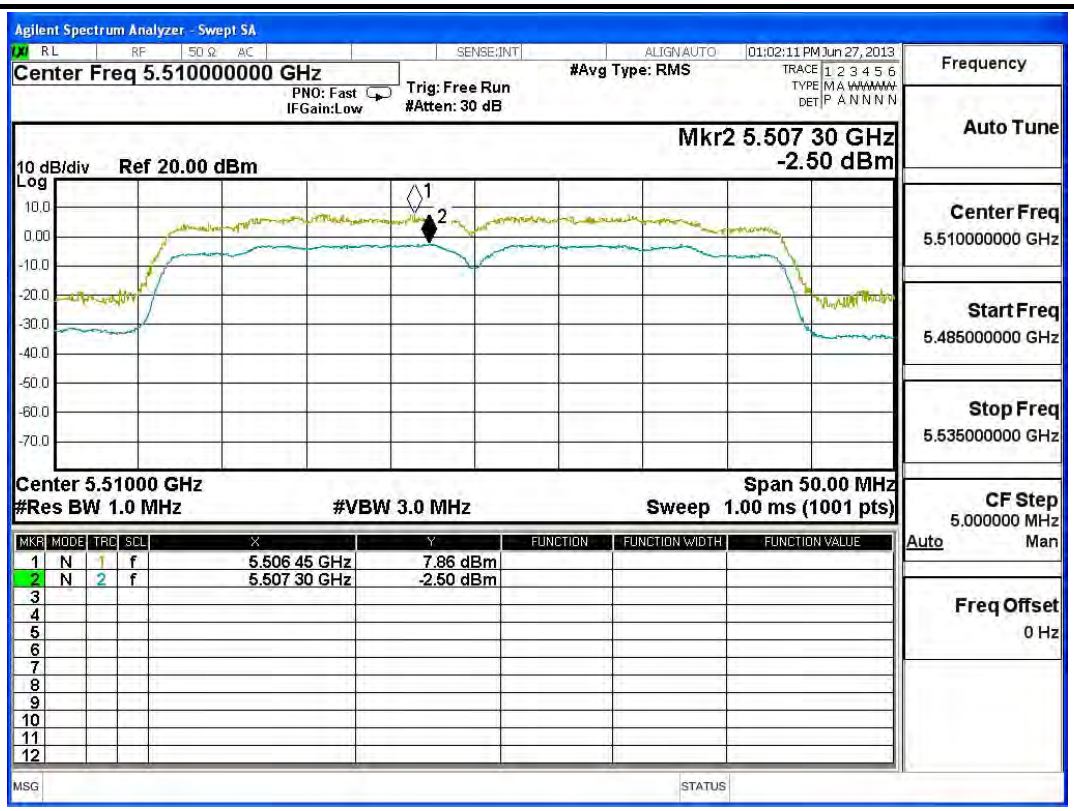
Channel No.	Frequency (MHz)	Data Rate (Mbps)	Measurement Level (dB)	Required Limit (dB)	Result
102	5510	MCS (0)	9.630	<13	Pass
		MCS (2)	9.450	<13	Pass
		MCS (4)	10.030	<13	Pass
		MCS (7)	10.360	<13	Pass

Channel 102:




Agilent Spectrum Analyzer - Swept SA
Center Freq 5.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
01:00:20 PM Jun 27, 2013
Mkr2 5.507 20 GHz
-2.29 dBm
10 dB/div
Log
Ref 20.00 dBm
Center 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
1 N 1 f 5.497 90 GHz 7.14 dBm
2 N 2 f 5.507 20 GHz -2.29 dBm
Frequency
Auto Tune
Center Freq
5.510000000 GHz
Start Freq
5.485000000 GHz
Stop Freq
5.535000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
01:01:17 PM Jun 27, 2013
Mkr2 5.501 10 GHz
-2.44 dBm
10 dB/div
Log
Ref 20.00 dBm
Center 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
1 N 1 f 5.508 25 GHz 7.59 dBm
2 N 2 f 5.501 10 GHz -2.44 dBm
Frequency
Auto Tune
Center Freq
5.510000000 GHz
Start Freq
5.485000000 GHz
Stop Freq
5.535000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
01:02:11 PM Jun 27, 2013
Center Freq 5.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE M A WWWWW
DET P A N N N N
Mkr2 5.507 30 GHz
-2.50 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 5.506 45 GHz 7.86 dBm
2 N 2 f 5.507 30 GHz -2.50 dBm
3
4
5
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.510000000 GHz
Start Freq
5.485000000 GHz
Stop Freq
5.535000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz