Test Report

Product Name	MOXA IEEE 802.11 a/b/g/n PCI-e
Model No	WAPN002
FCC ID	SLE-WAPN002

Applicant	Moxa Inc.
Address	Fl.4. No.135. Lane 235, Baoqiao Rd. Xindian Dist, New Taipei City, Taiwan.

Date of Receipt	Oct. 21, 2011
Issued Date	Nov. 23, 2011
Report No.	11A306R-RFUSP32V01
Report Version	V1.0

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.
This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government

Test Report Certification

Issued Date: Nov. 23, 2011
Report No.: 11A306R-RFUSP32V01

Product Name	MOXA IEEE 802.11 a/b/g/n PCI-e
Applicant	Moxa Inc.
Address	Fl.4. No.135. Lane 235, Baoqiao Rd. Xindian Dist, New Taipei City, Taiwan.
Manufacturer	Moxa Inc.
Model No.	WAPN002
FCC ID.	SLE-WAPN002
EUT Rated Voltage	DC 3.3V (Power by PCI Express)
EUT Test Voltage	DC 3.3V (Power by PCI Express)
Trade Name	MOXA
Applicable Standard	FCC CFR Title 47 Part 15 Subpart E: 2010 ANSI C63.4: 2009 NVLAP Lab Code: 200533-0
Test Result	Complied

The Test Results relate only to the samples tested.
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Tested By : Vincent chu
(Engineer / Vincent Chu)

Approved By :
(Manager / Vincent Lin)

Testing Laboratory
0914

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Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	MOXA IEEE 802.11 a/b/g/n PCI-e
Trade Name	MOXA
FCC ID.	SLE-WAPN002
Model No.	WAPN002
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	Dipole Antenna
Antenna Gain	Refer to the table “Antenna List”

Antenna List

No.	Manufacturer	Model No.	Antenna Type	Peak Gain
1	KINSUN	ANT-WDB-O-2	Dipole	2dBi for 5GHz
2	KINSUN	ANT-WDB-ANM-0502	Dipole	2dBi for 5GHz

Note:

1. The antenna of EUT is conform to FCC 15.203
2. Only the higher gain antenna was tested and recorded in this report.

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 MOXA IEEE 802.11 a/b/g/n PCI-e with a built-in 2.4GHz and 5GHz WLAN transceiver.
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. (802.11b is 1Mbps、802.11g is 6Mbps、802.11n(20M-BW) is 14.4Mbps and 、802.11n(40M-BW) is 30Mbps).
4. 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.

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

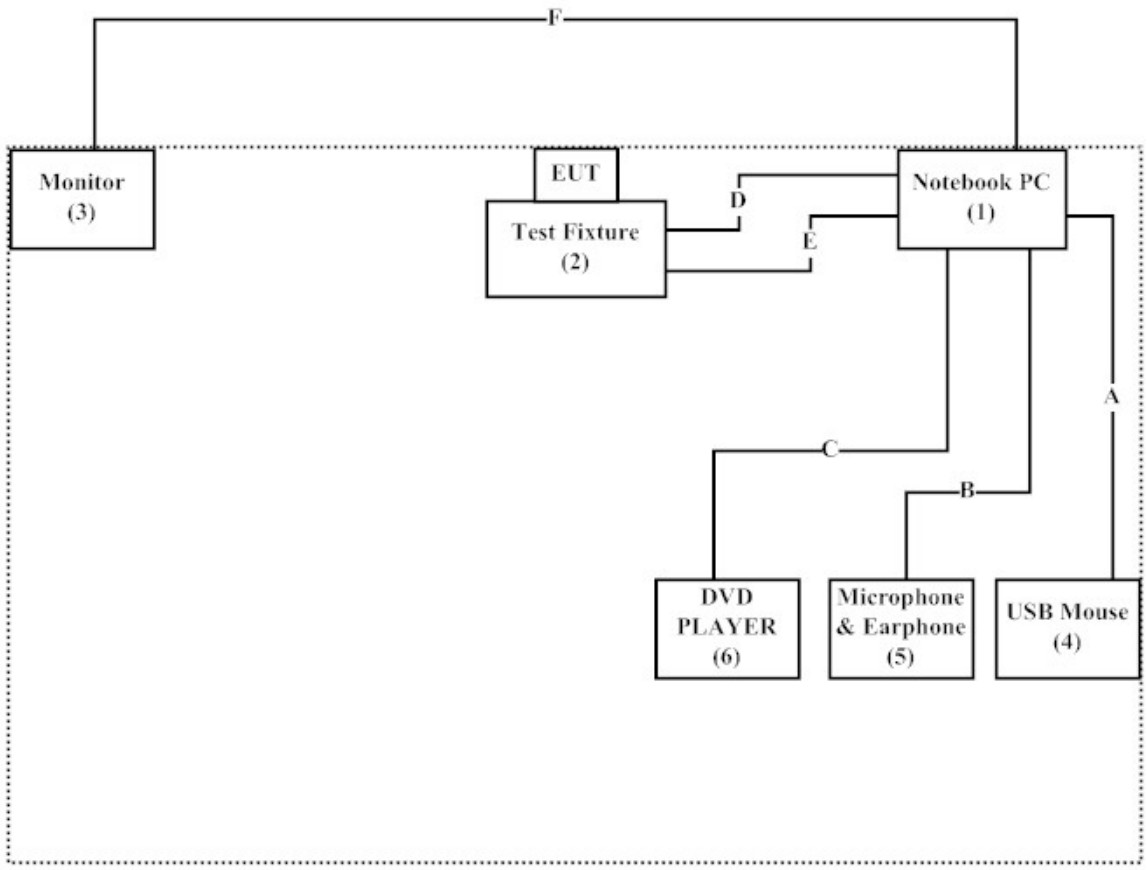
1.3. Tested System Datails

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)	Test Fixture	MOXA	N/A	N/A	N/A
(3)	Monitor	LG	W2261VT	907YHED07356	Non-Shielded, 1.8m
(4)	USB Mouse	DELL	M056U0A	F0Y01YEP	N/A
(5)	Microphone & Earphone	PCHOME	N/A	N/A	N/A
(6)	DVD PLAYER	DELL	PD01S	N/A	N/A

Signal Cable Type		Signal cable Description
A	USB Mouse Cable	Non-Shielded, 1.8m
B	Microphone & Earphone Cable	Non-Shielded, 2.5m
C	USB DVD PLAYER Cable	Non-Shielded, 1m
D	RS-232 to RJ-45 Cable	Non-Shielded, 1m
E	RJ45 Cable	Non-Shielded, 1.5m
F	VGA Cable	Non-Shielded, 1.5m,with one ferrite core bonded.

1.4. Configuration of tested System



1.5. EUT Exercise Software

(1) Setup the EUT as shown in Section 1.4

(2) Execute “ART v0.9.B27” program on the Notebook.

(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

Accreditation on NVLAP
NVLAP Lab Code: 200533-0

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

Testing Laboratory
0914

2. Conducted Emission

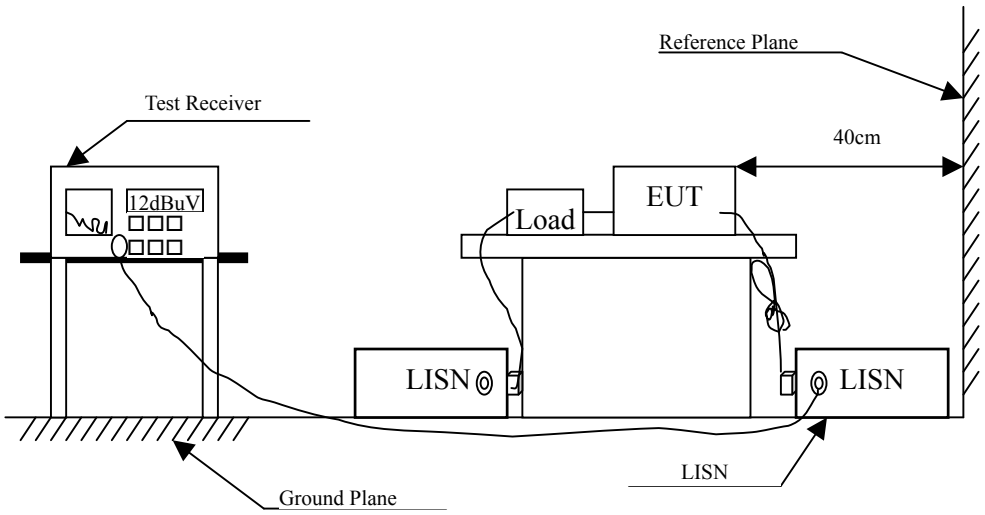
2.1. Test Equipment

	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.	Remark
X	Test Receiver	R & S	ESCS 30 / 825442/018	Sep., 2011	
X	Artificial Mains Network	R & S	ENV4200 / 848411/10	Feb., 2011	Peripherals
X	LISN	R & S	ESH3-Z5 / 825562/002	Feb., 2011	EUT
	DC LISN	Schwarzbeck	8226 / 176	Mar, 2011	EUT
X	Pulse Limiter	R & S	ESH3-Z2 / 357.8810.52	Feb., 2011	
	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: 2009 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, 2009; 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 : MOXA IEEE 802.11 a/b/g/n PCI-e
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	9.688	36.880	46.568	-17.661	64.229
0.279	9.657	35.970	45.627	-16.687	62.314
0.490	9.650	39.950	49.600	-6.686	56.286
1.474	9.690	26.700	36.390	-19.610	56.000
4.353	9.710	32.040	41.750	-14.250	56.000
17.197	9.900	30.480	40.380	-19.620	60.000
Average					
0.212	9.688	36.870	46.558	-7.671	54.229
0.279	9.657	35.960	45.617	-6.697	52.314
0.490	9.650	34.050	43.700	-2.586	46.286
1.474	9.690	24.160	33.850	-12.150	46.000
4.353	9.710	29.790	39.500	-6.500	46.000
17.197	9.900	27.960	37.860	-12.140	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 : MOXA IEEE 802.11 a/b/g/n PCI-e
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					
0.212	9.688	28.660	38.348	-25.881	64.229
0.494	9.650	34.120	43.770	-12.401	56.171
0.912	9.680	30.340	40.020	-15.980	56.000
1.545	9.690	29.420	39.110	-16.890	56.000
4.560	9.710	33.010	42.720	-13.280	56.000
18.107	10.050	31.290	41.340	-18.660	60.000
Average					
0.212	9.688	28.650	38.338	-15.891	54.229
0.494	9.650	29.680	39.330	-6.841	46.171
0.912	9.680	28.910	38.590	-7.410	46.000
1.545	9.690	28.620	38.310	-7.690	46.000
4.560	9.710	31.200	40.910	-5.090	46.000
18.107	10.050	26.910	36.960	-13.040	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 : MOXA IEEE 802.11 a/b/g/n PCI-e
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					
0.212	9.688	37.290	46.978	-17.251	64.229
0.279	9.657	35.970	45.627	-16.687	62.314
0.494	9.650	40.190	49.840	-6.331	56.171
0.560	9.650	37.920	47.570	-8.430	56.000
4.279	9.710	32.920	42.630	-13.370	56.000
18.244	9.910	31.700	41.610	-18.390	60.000
Average					
0.212	9.688	37.280	46.968	-7.261	54.229
0.279	9.657	35.960	45.617	-6.697	52.314
0.494	9.650	33.620	43.270	-2.901	46.171
0.560	9.650	33.580	43.230	-2.770	46.000
4.279	9.710	31.690	41.400	-4.600	46.000
18.244	9.910	26.670	36.580	-13.420	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 : MOXA IEEE 802.11 a/b/g/n PCI-e
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					
0.212	9.688	28.220	37.908	-26.321	64.229
0.490	9.650	35.320	44.970	-11.316	56.286
0.560	9.650	34.860	44.510	-11.490	56.000
1.263	9.688	30.770	40.458	-15.542	56.000
4.349	9.717	34.570	44.287	-11.713	56.000
16.416	10.000	29.630	39.630	-20.370	60.000
Average					
0.212	9.688	25.080	34.768	-19.461	54.229
0.490	9.650	31.510	41.160	-5.126	46.286
0.560	9.650	33.650	43.300	-2.700	46.000
1.263	9.688	29.580	39.268	-6.732	46.000
4.349	9.717	34.280	43.997	-2.003	46.000
16.416	10.000	26.230	36.230	-13.770	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 : MOXA IEEE 802.11 a/b/g/n PCI-e
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5590MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
LINE 1					
Quasi-Peak					
0.205	9.693	30.260	39.953	-24.476	64.429
0.279	9.657	36.100	45.757	-16.557	62.314
0.490	9.650	41.360	51.010	-5.276	56.286
1.545	9.700	26.270	35.970	-20.030	56.000
4.279	9.710	31.980	41.690	-14.310	56.000
18.306	9.910	31.650	41.560	-18.440	60.000
Average					
0.205	9.693	29.800	39.493	-14.936	54.429
0.279	9.657	36.090	45.747	-6.567	52.314
0.490	9.650	34.240	43.890	-2.396	46.286
1.545	9.700	23.780	33.480	-12.520	46.000
4.279	9.710	30.310	40.020	-5.980	46.000
18.306	9.910	27.760	37.670	-12.330	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 : MOXA IEEE 802.11 a/b/g/n PCI-e
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5590MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.212	9.688	28.140	37.828	-26.401	64.229
0.494	9.650	32.400	42.050	-14.121	56.171
0.560	9.650	34.310	43.960	-12.040	56.000
1.334	9.690	31.230	40.920	-15.080	56.000
4.349	9.717	34.050	43.767	-12.233	56.000
18.302	10.050	33.150	43.200	-16.800	60.000
Average					
0.212	9.688	27.510	37.198	-17.031	54.229
0.494	9.650	31.510	41.160	-5.011	46.171
0.560	9.650	34.260	43.910	-2.090	46.000
1.334	9.690	31.220	40.910	-5.090	46.000
4.349	9.717	34.040	43.757	-2.243	46.000
18.302	10.050	30.540	40.590	-9.410	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. Peak Transmit Power

3.1. Test Equipment

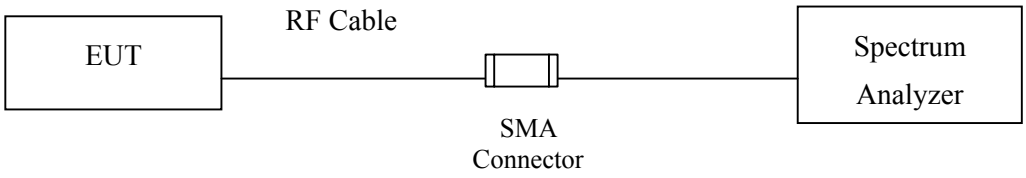
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Power Meter	Anritsu	ML2495A/6K00003357	May, 2011
X	Power Sensor	Anritsu	MA2411B/0738448	Jun, 2011
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2011

Note:

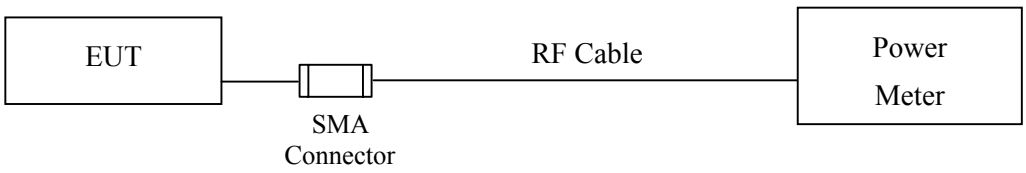
1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.

3.2. Test Setup

26dBc Occupied Bandwidth



Conduction Power Measurement



3.3. Limits

(1) For the band 5.15-5.25 GHz, the peak transmit 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 peak transmit 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 peak transmit 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 peak transmit 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 peak transmit 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 peak transmit power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

3.4. Test Procedur

As an alternative to FCC KDB-789033, the EUT peak power was measured with a peak power meter employing a video bandwidth greater than 6dB BW of the emission under test. Peak 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.

3.5. Uncertainty

± 1.27 dB

3.6. Test Result of Peak Transmit Power

Product : MOXA IEEE 802.11 a/b/g/n PCI-e
Test Item : Peak Transmit Power
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11a-6Mbps)

CHAIN A

Cable loss=1dB		Peak Power Output								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		6	9	12	18	24	36	48	54	
		Measurement Level (dBm)								
36	5180	16.4	--	--	--	--	--	--	--	<17dBm
44	5220	16.6	16.54	16.52	16.51	16.47	16.42	16.38	16.33	<17dBm
48	5240	16.8	--	--	--	--	--	--	--	<17dBm
52	5260	17	--	--	--	--	--	--	--	<24dBm
60	5300	17.4	17.34	17.31	17.28	17.25	17.22	17.18	17.15	<24dBm
64	5320	16.85	--	--	--	--	--	--	--	<24dBm
100	5500	16.8	--	--	--	--	--	--	--	<24dBm
120	5600	16.8	16.75	16.72	16.68	16.65	16.62	16.55	16.51	<24dBm
140	5700	10.03	--	--	--	--	--	--	--	<24dBm

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

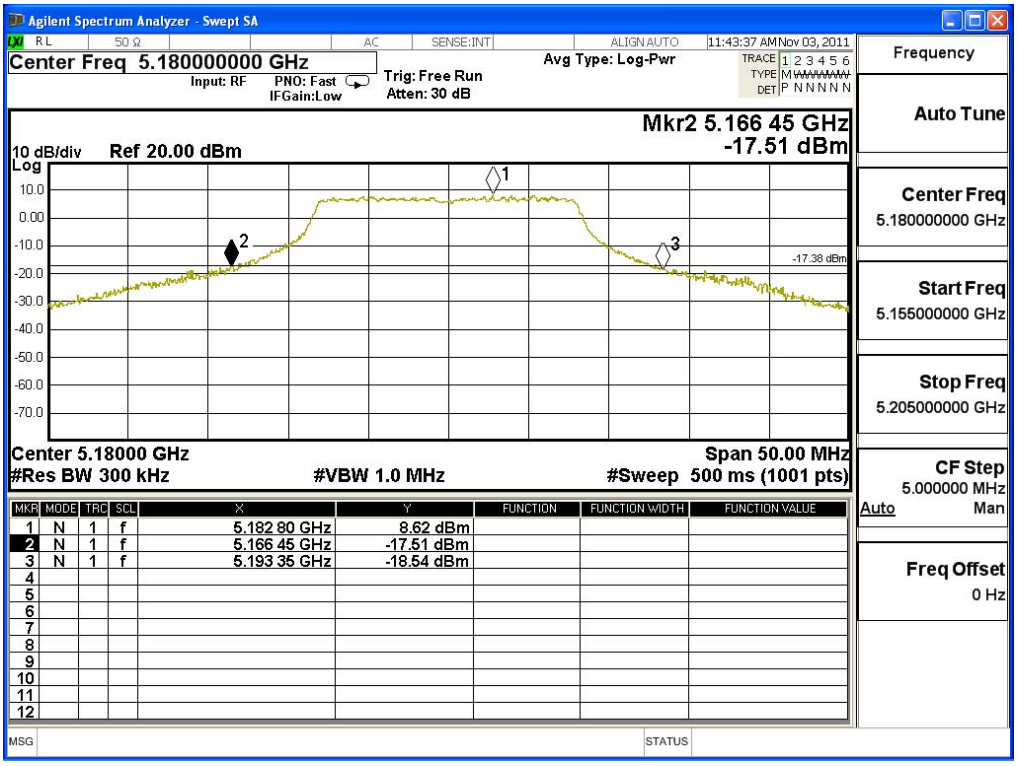
Peak Transmit Power Measurement:

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Output Power Limit	
				(dBm)	dBm+10log(BW)
36	5180	26.900	16.4	17	18.30
44	5220	27.150	16.6	17	18.34
48	5240	27.000	16.8	17	18.31
52	5260	27.050	17	24	25.32
60	5300	26.750	17.4	24	25.27
64	5320	26.700	16.85	24	25.27
100	5500	28.200	16.8	24	25.50
120	5600	28.700	16.8	24	25.58
140	5700	26.250	10.03	24	25.19

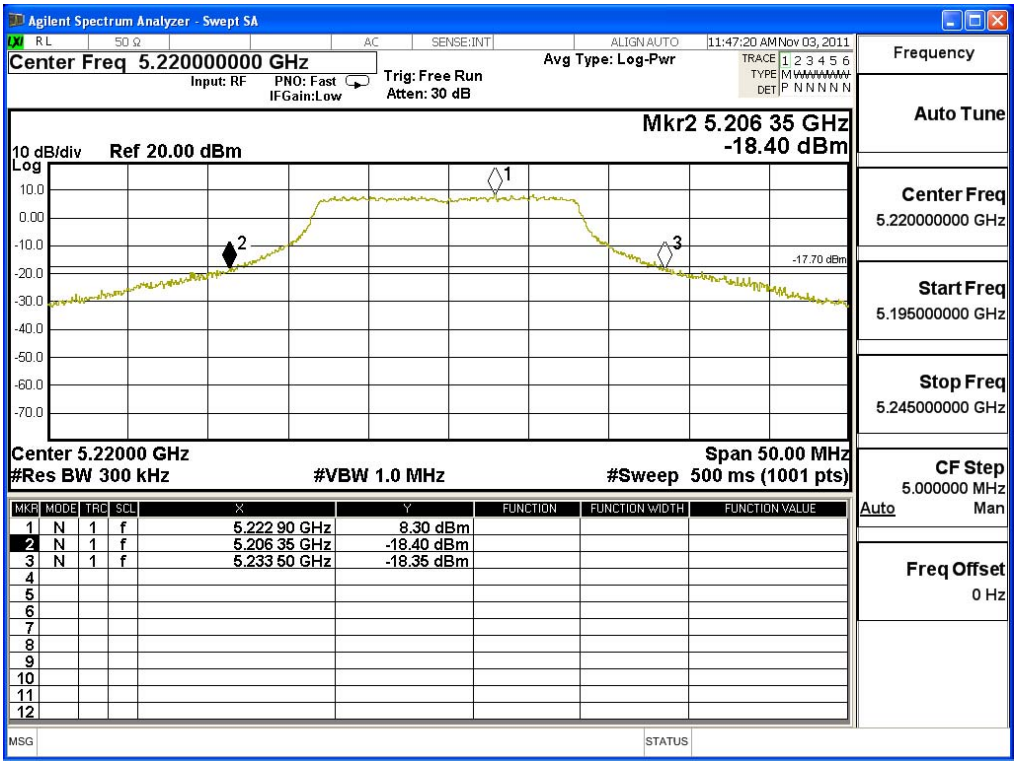
Note: Power Output Value =Reading value on peak power meter + cable loss

26dBc Occupied Bandwidth:

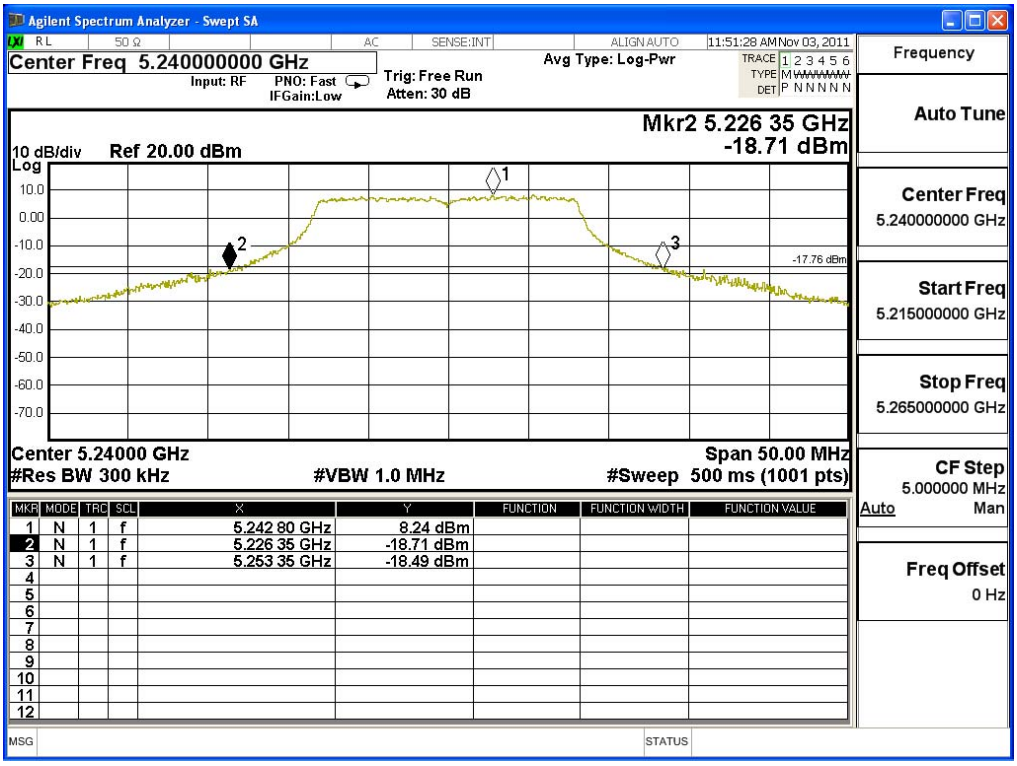
Channel 36



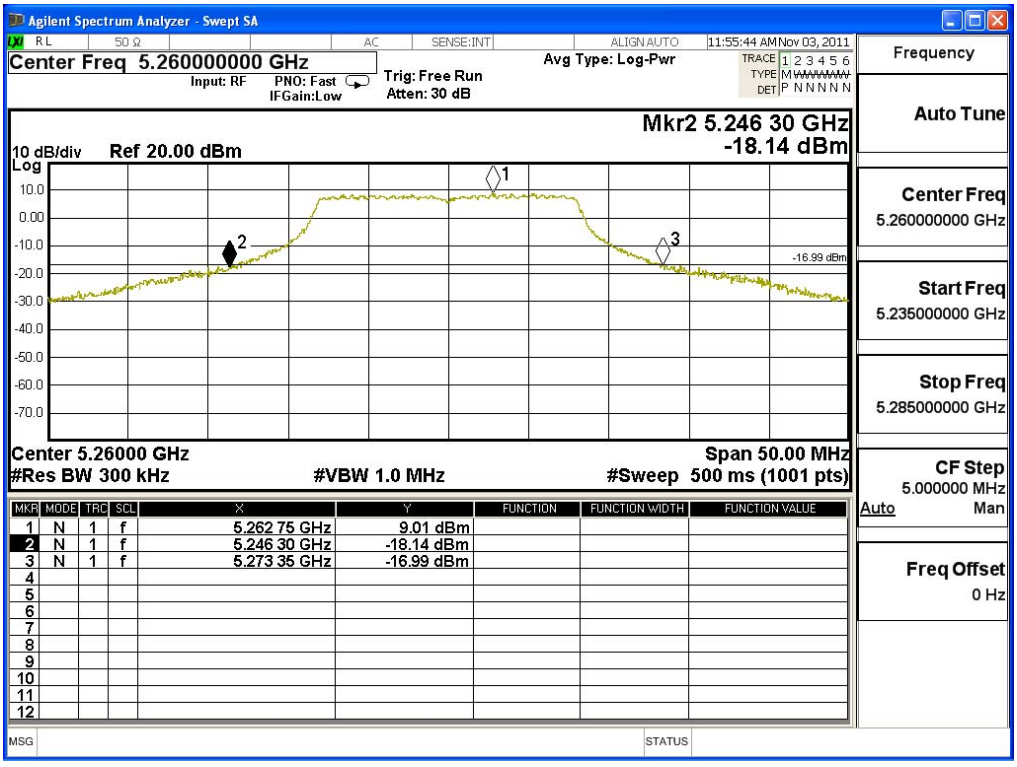
Channel 40



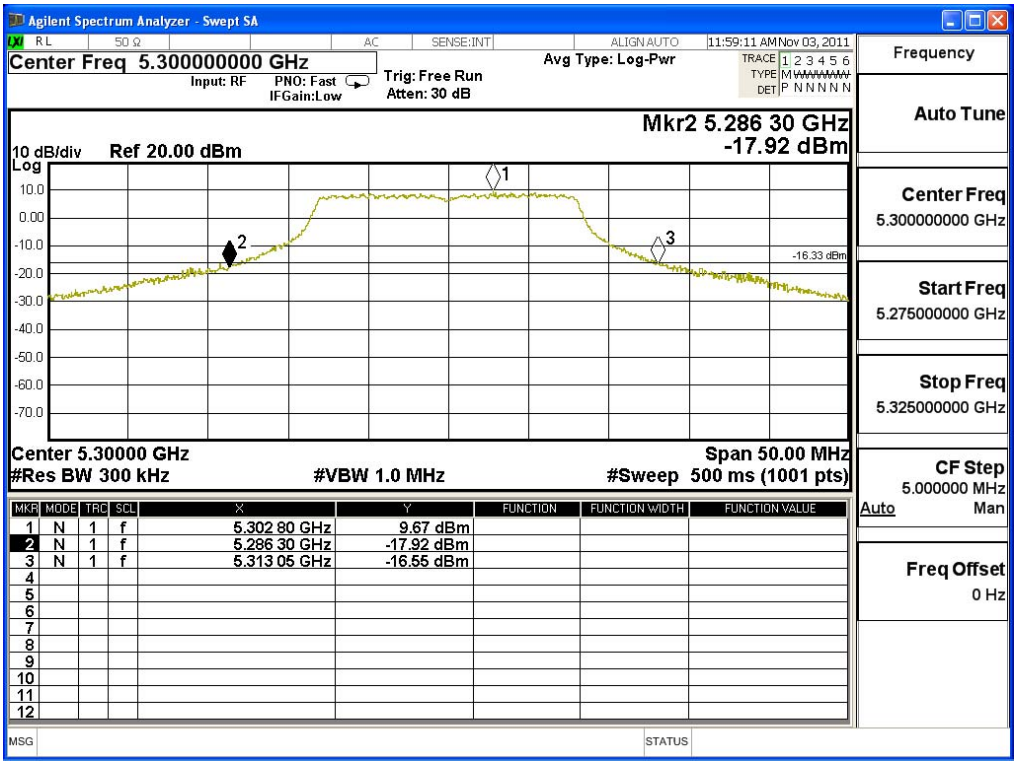
Channel 48



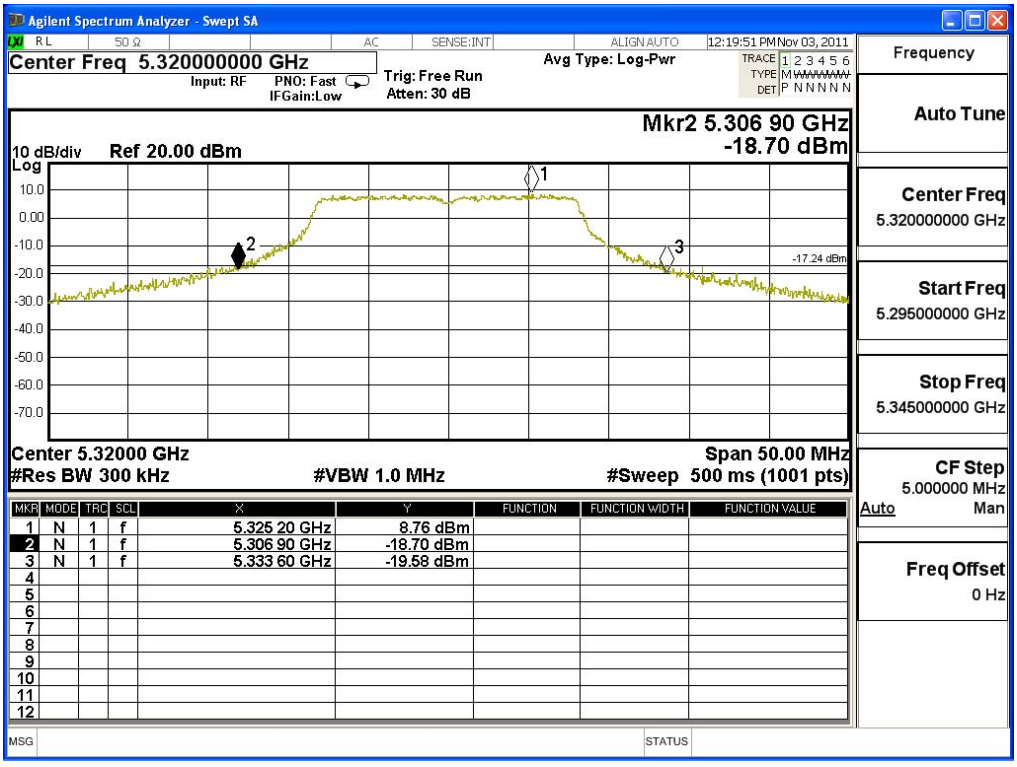
Channel 52



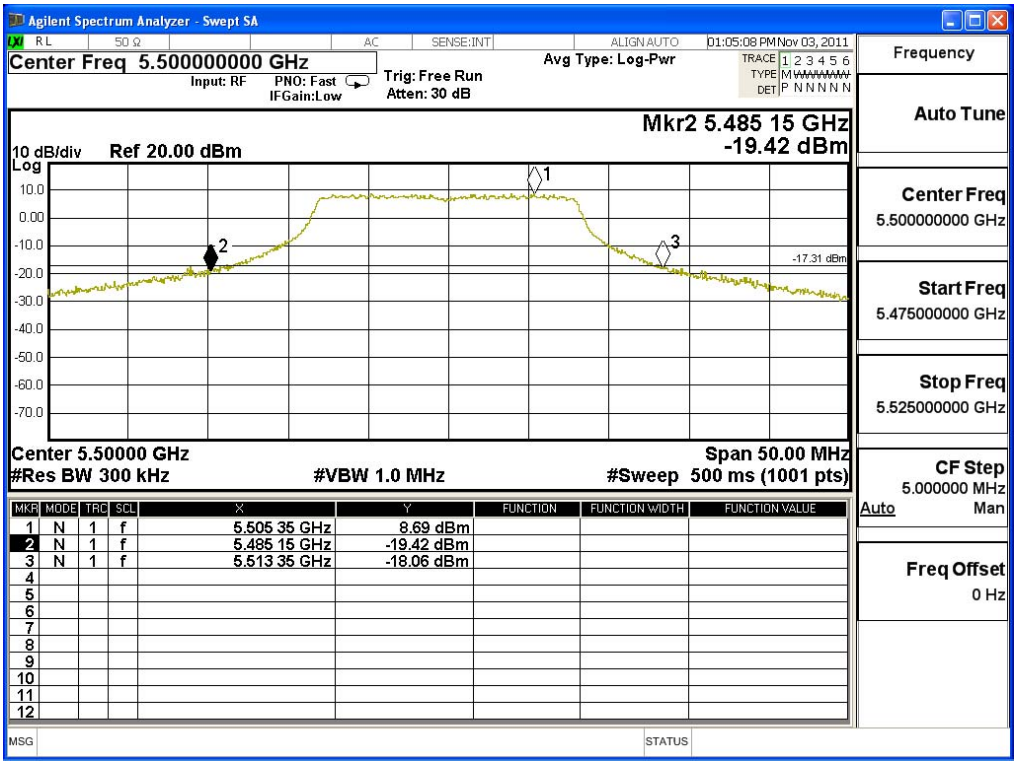
Channel 60



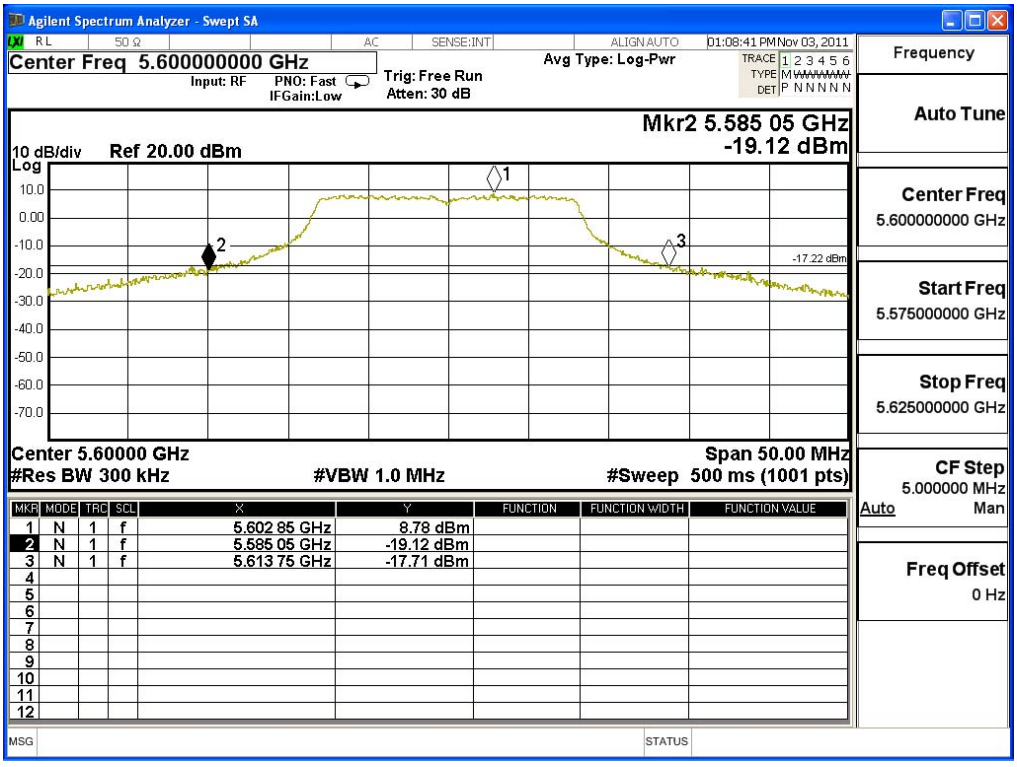
Channel 64



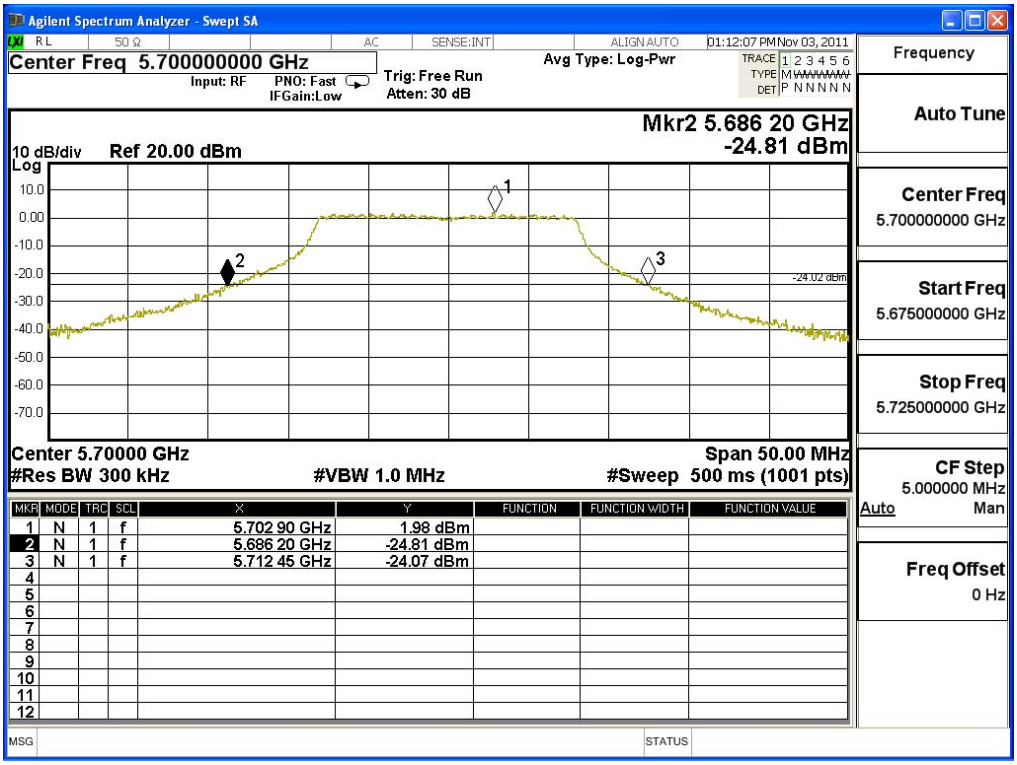
Channel 100



Channel 120



Channel 140


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.700000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
01:12:07 PM Nov 03, 2011
Mkr2 5.686 20 GHz
-24.81 dBm
10 dB/div
Log
Ref 20.00 dBm
-24.02 dBm
Center 5.70000 GHz
#Res BW 300 kHz
#VBW 1.0 MHz
Span 50.00 MHz
#Sweep 500 ms (1001 pts)
1 N 1 f 5.702 90 GHz 1.98 dBm
2 N 1 f 5.686 20 GHz -24.81 dBm
3 N 1 f 5.712 45 GHz -24.07 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 : MOXA IEEE 802.11 a/b/g/n PCI-e
Test Item : Peak Transmit Power
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)

CHAIN A

Cable loss=1dB		Peak Power Output								
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	10.1	--	--	--	--	--	--	--	<17dBm
44	5220	10	9.7	9.58	9.52	9.45	9.41	9.38	9.2	<17dBm
48	5240	10	--	--	--	--	--	--	--	<17dBm
52	5260	10	--	--	--	--	--	--	--	<24dBm
60	5300	10.2	9.81	9.79	9.77	9.65	9.62	9.54	9.43	<24dBm
64	5320	10.1	--	--	--	--	--	--	--	<24dBm
100	5500	10.3	--	--	--	--	--	--	--	<24dBm
120	5600	10.3	9.85	9.82	9.72	9.62	9.59	9.52	9.41	<24dBm
140	5700	10.7	--	--	--	--	--	--	--	<24dBm

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

CHAIN B

Cable loss=1dB		Peak Power Output								
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	10.1	--	--	--	--	--	--	--	<17dBm
44	5220	10.3	10.21	10.19	10.15	10.12	10.08	10.06	10.01	<17dBm
48	5240	10.4	--	--	--	--	--	--	--	<17dBm
52	5260	10.3	--	--	--	--	--	--	--	<24dBm
60	5300	10.6	10.51	10.48	10.41	10.37	10.32	10.29	10.25	<24dBm
64	5320	10.6	--	--	--	--	--	--	--	<24dBm
100	5500	10.4	--	--	--	--	--	--	--	<24dBm
120	5600	10.31	10.29	10.27	10.21	10.18	10.16	10.11	10.05	<24dBm
140	5700	9.5	--	--	--	--	--	--	--	<24dBm

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

Peak Transmit Power Measurement:

CHAIN A+B

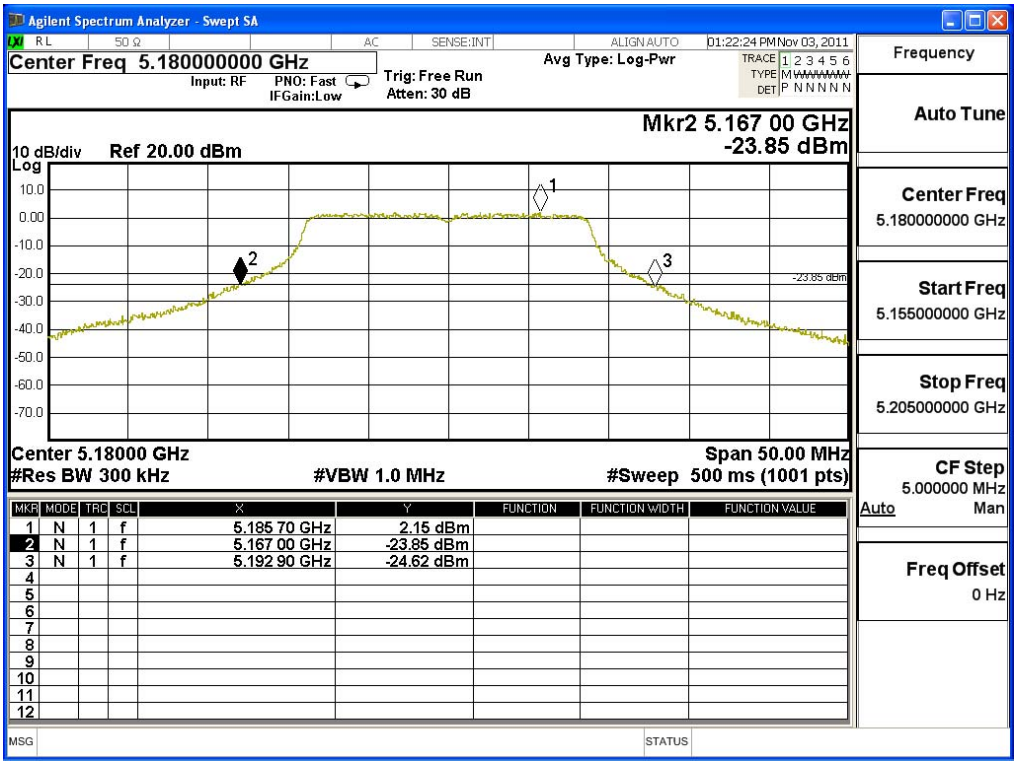
Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
36	5180	25.550	10.10	10.10	13.11	17	18.07
44	5220	25.600	10.00	10.30	13.16	17	18.08
48	5240	25.450	10.00	10.40	13.21	17	18.06
52	5260	25.550	10.00	10.30	13.16	24	25.07
60	5300	25.400	10.20	10.60	13.41	24	25.05
64	5320	25.850	10.10	10.60	13.37	24	25.12
100	5500	25.900	10.30	10.40	13.36	24	25.13
120	5600	25.700	10.30	10.31	13.32	24	25.10
140	5700	25.000	10.70	9.50	13.15	24	24.98

Note:

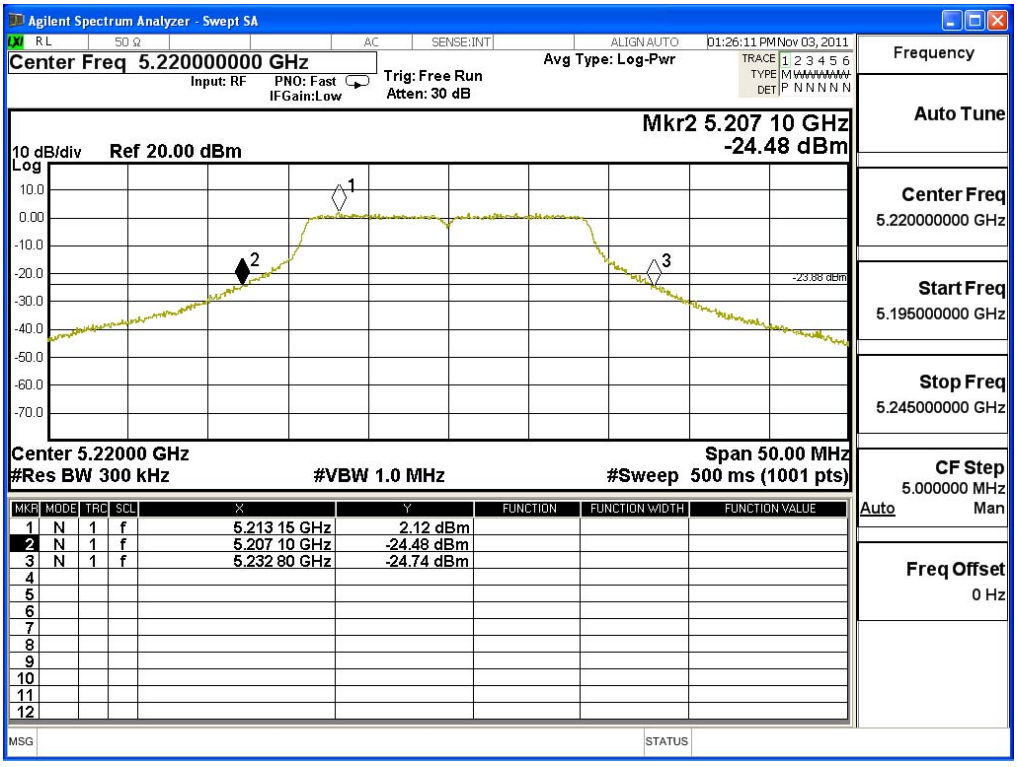
1. Power Output Value =Reading value on peak power meter + cable loss
2. Output Power (dBm) = 10*LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

26dBc Occupied Bandwidth:

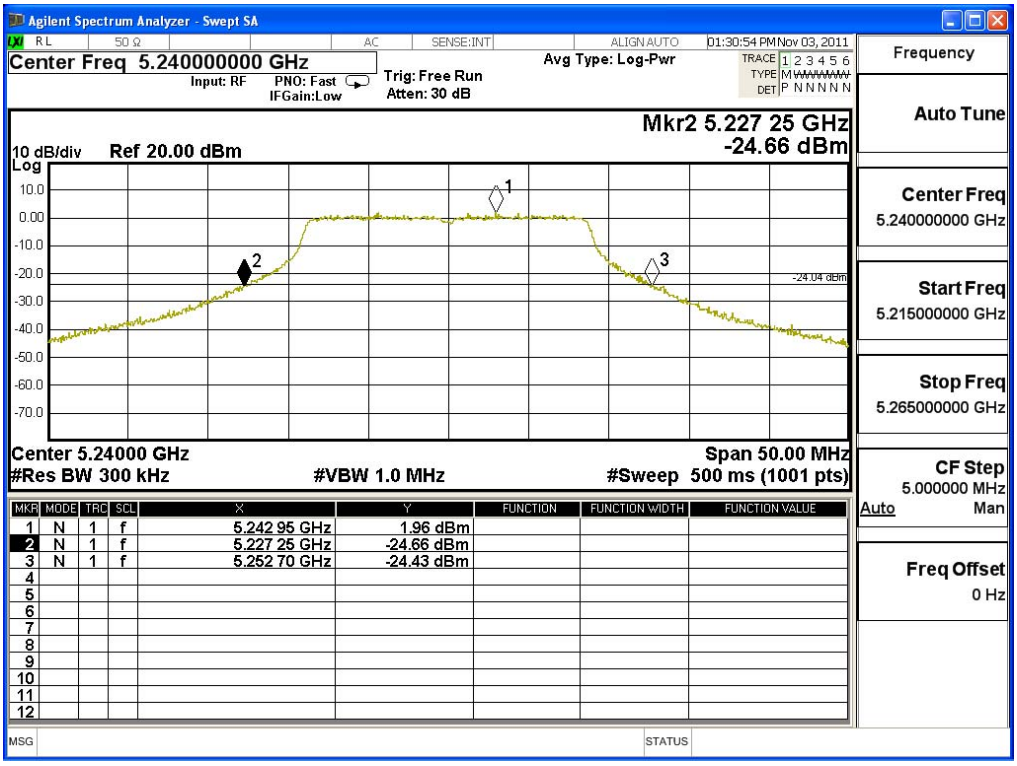
Channel 36 -Chain A



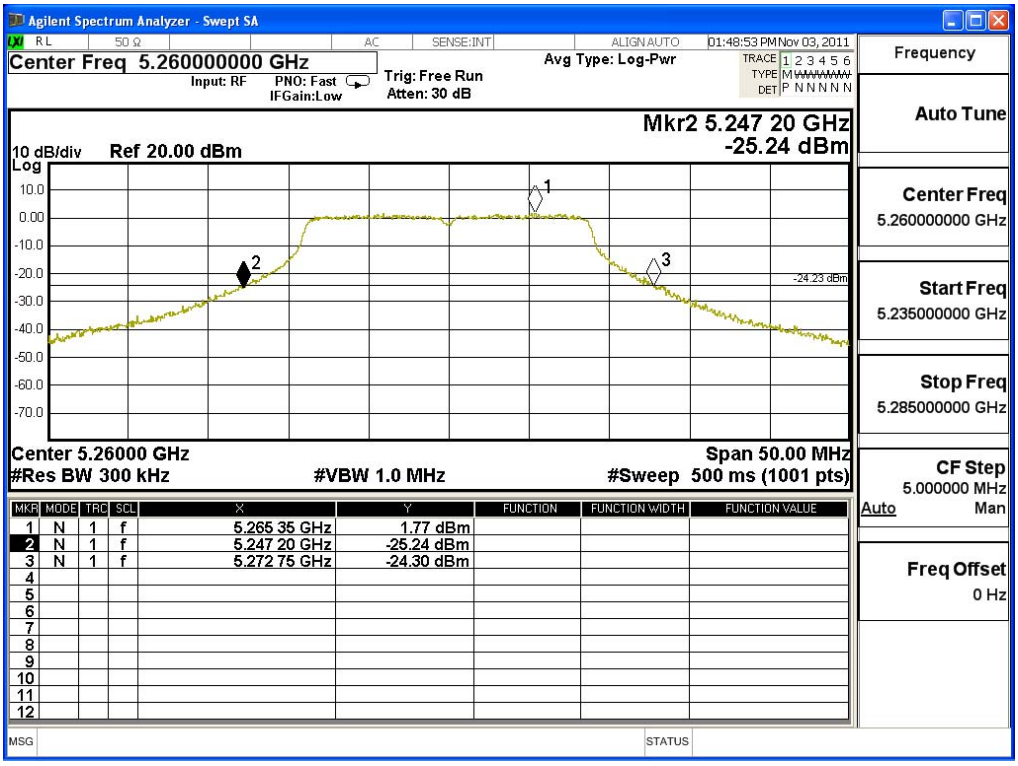
Channel 44 -Chain A



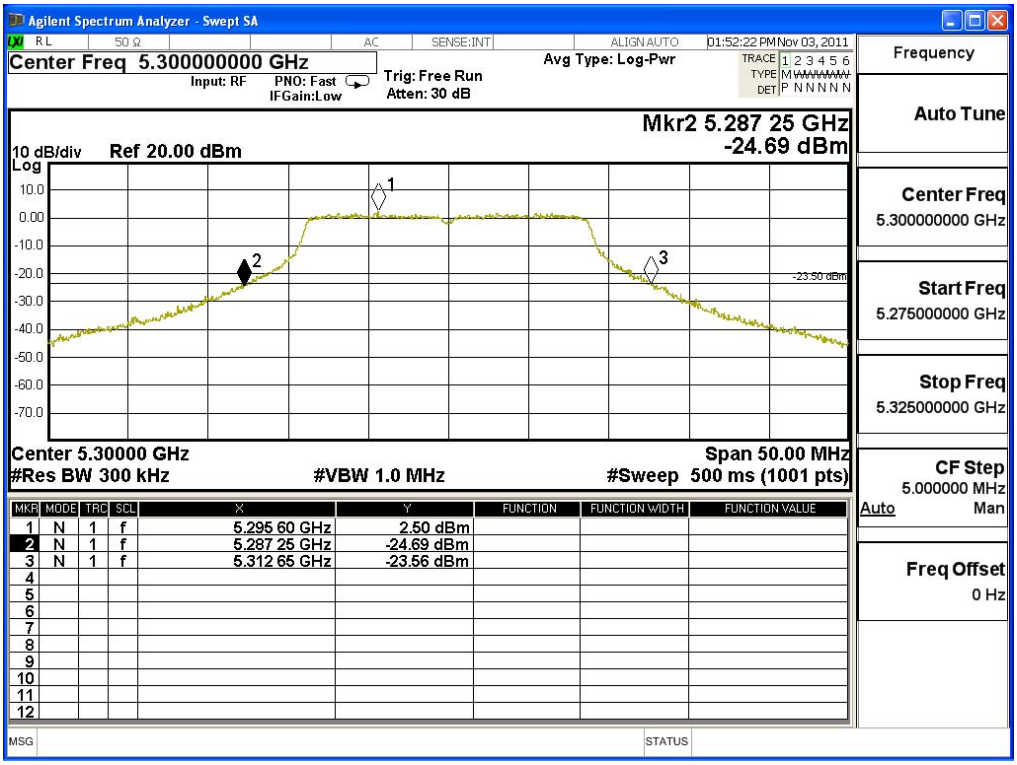
Channel 48 -Chain A



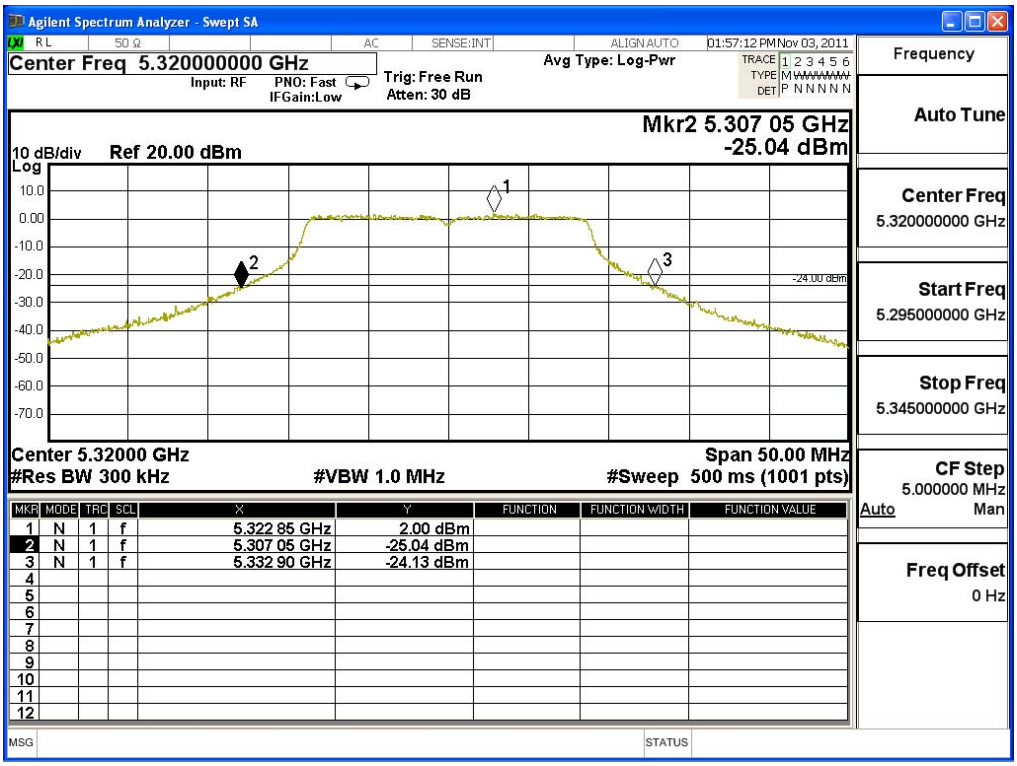
Channel 52 -Chain A



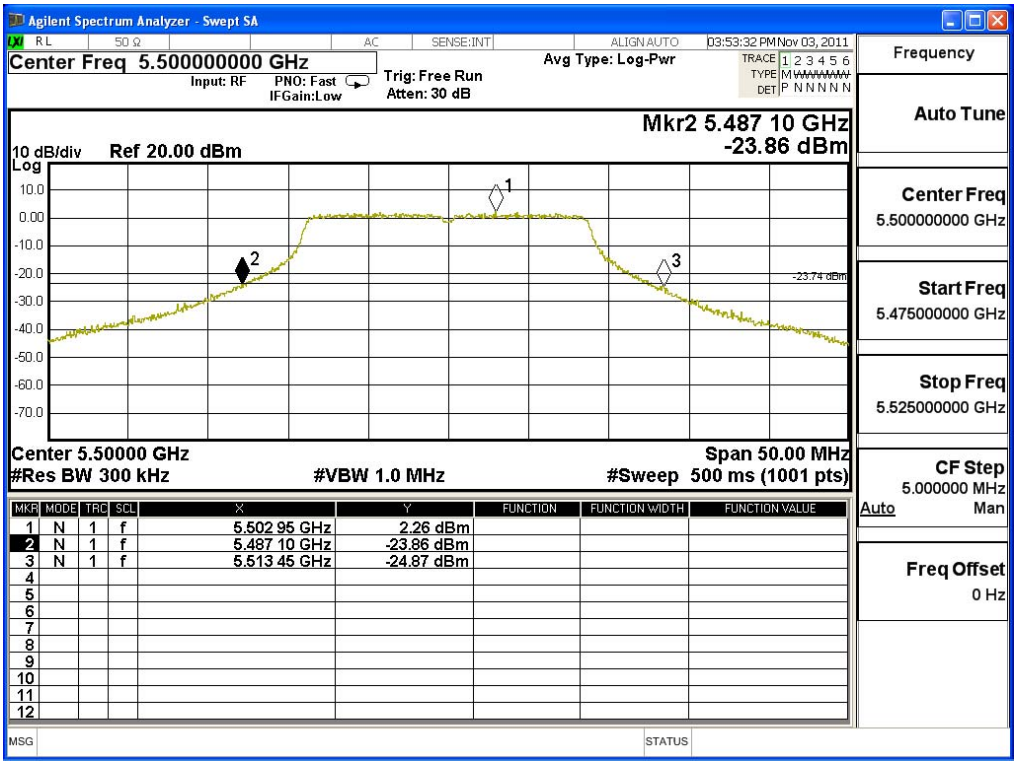
Channel 60 -Chain A



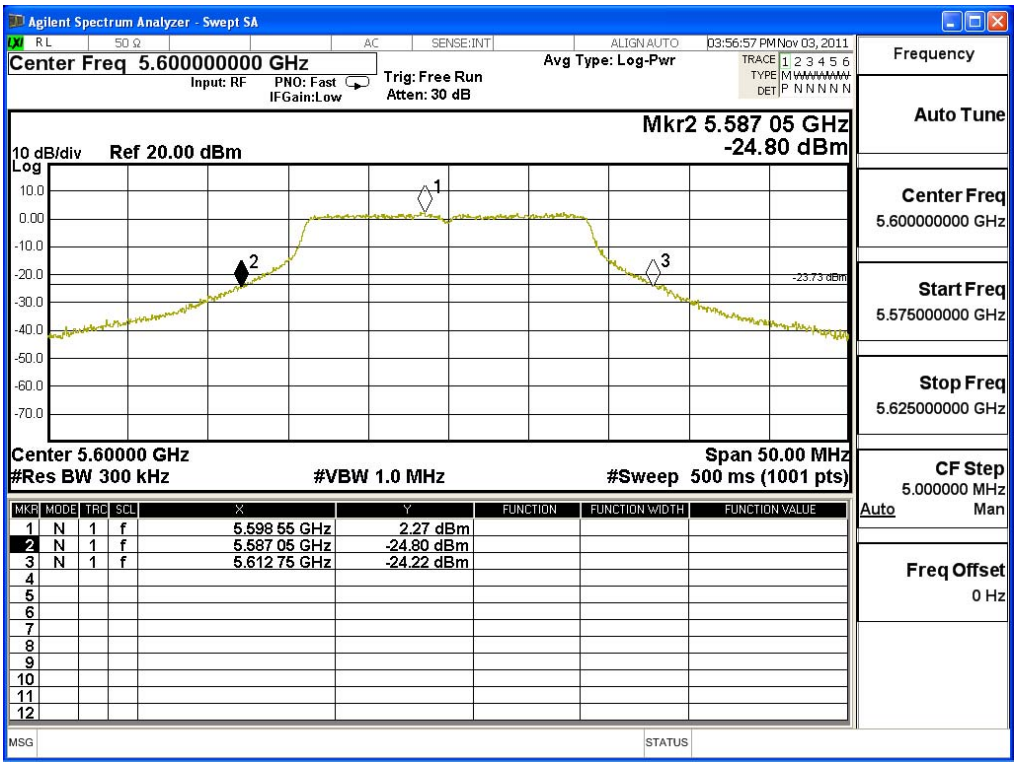
Channel 64 -Chain A



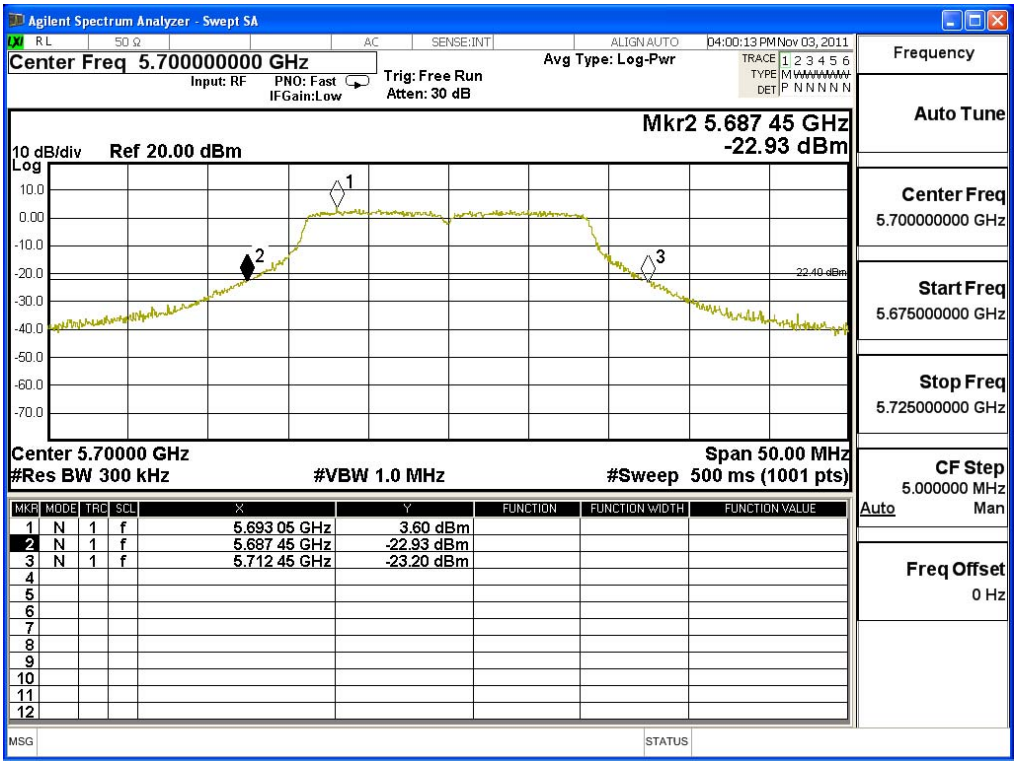
Channel 100 -Chain A



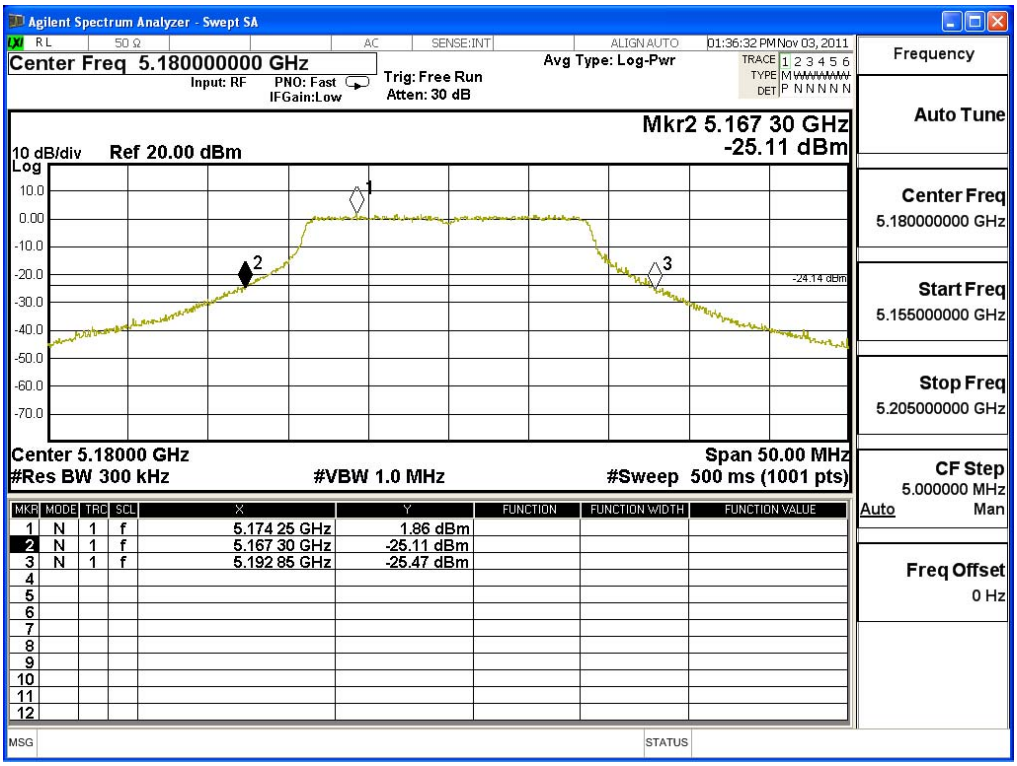
Channel 120 -Chain A



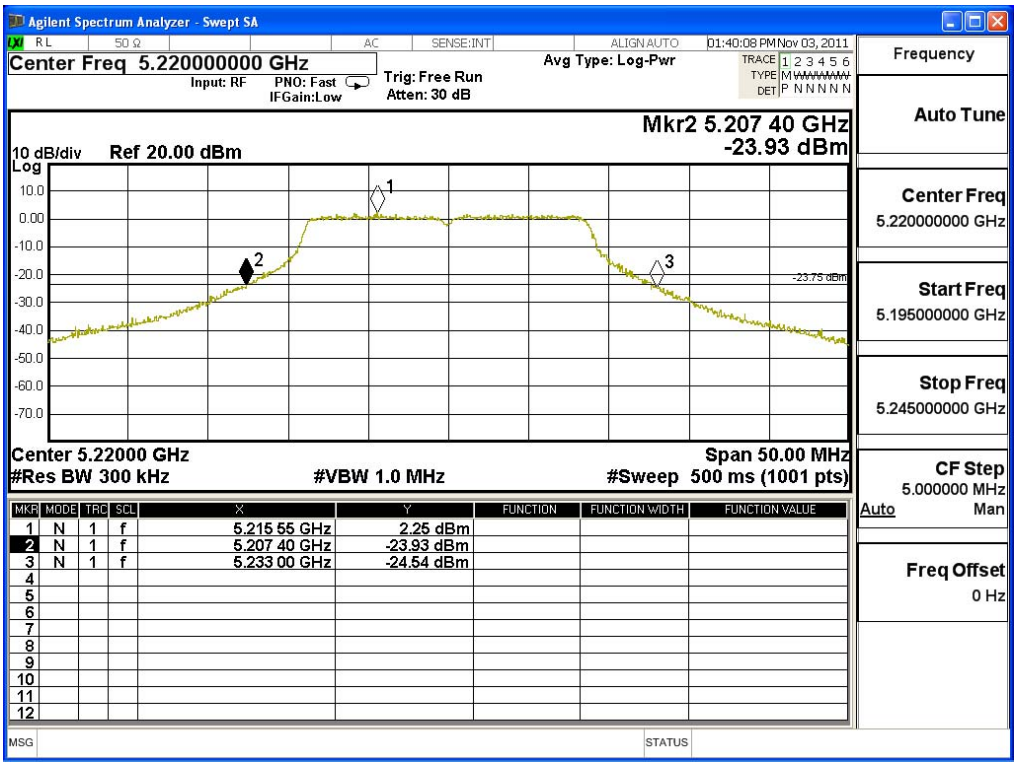
Channel 140 -Chain A



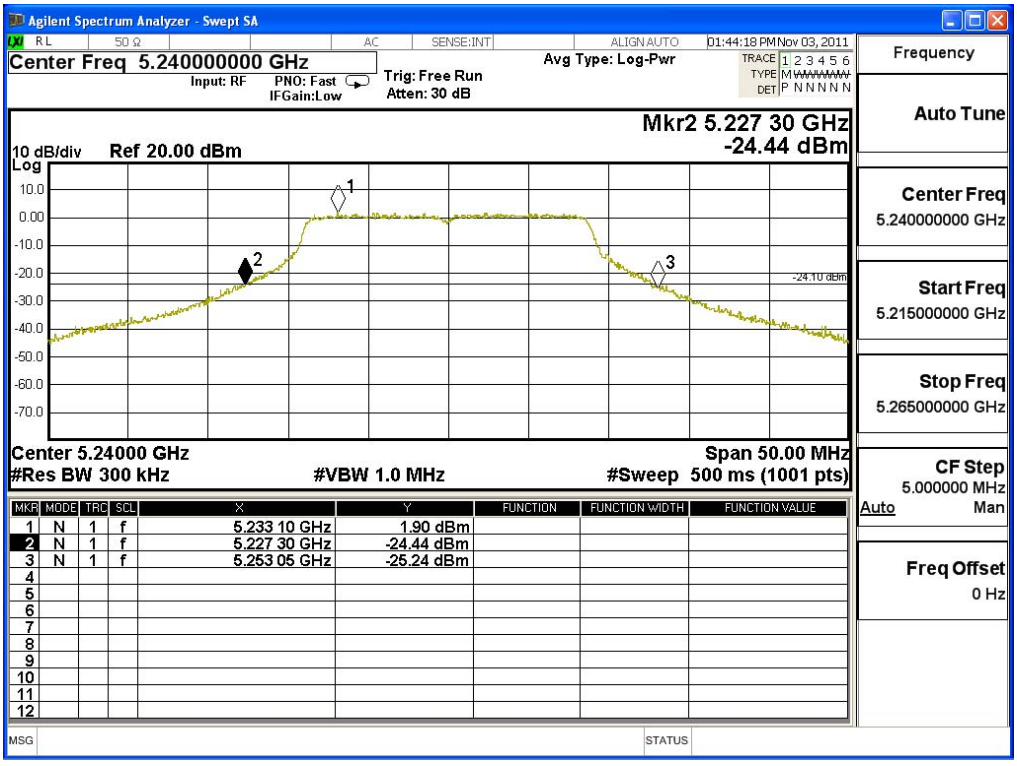
Channel 36 -Chain B



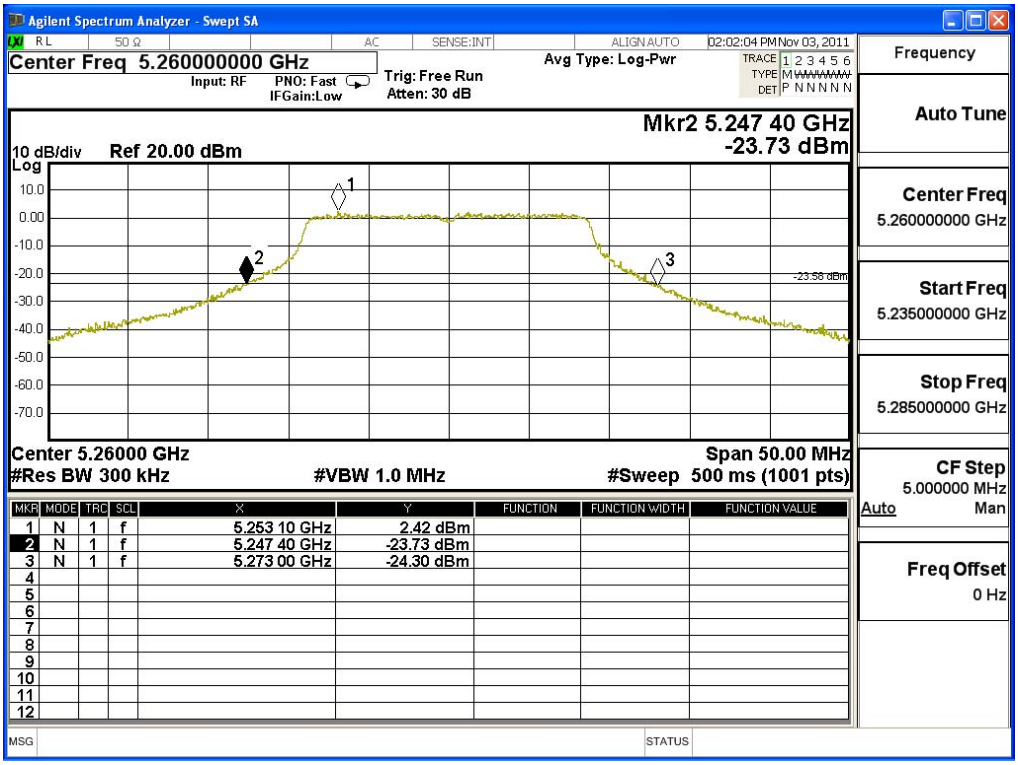
Channel 44 -Chain B



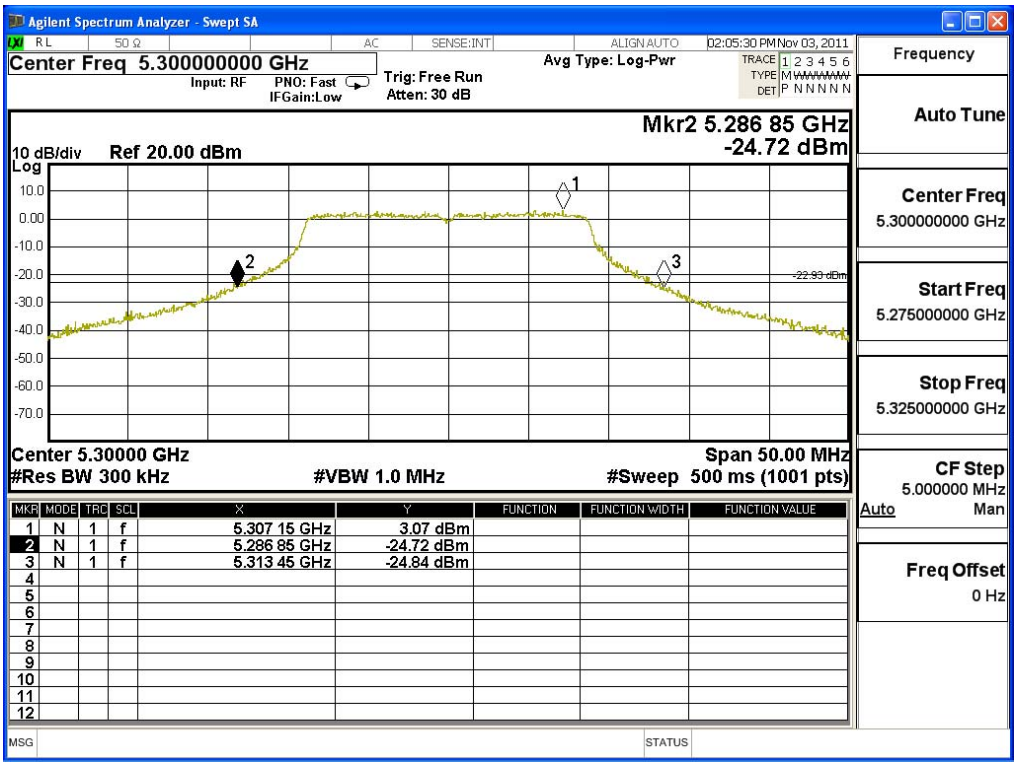
Channel 48 -Chain B



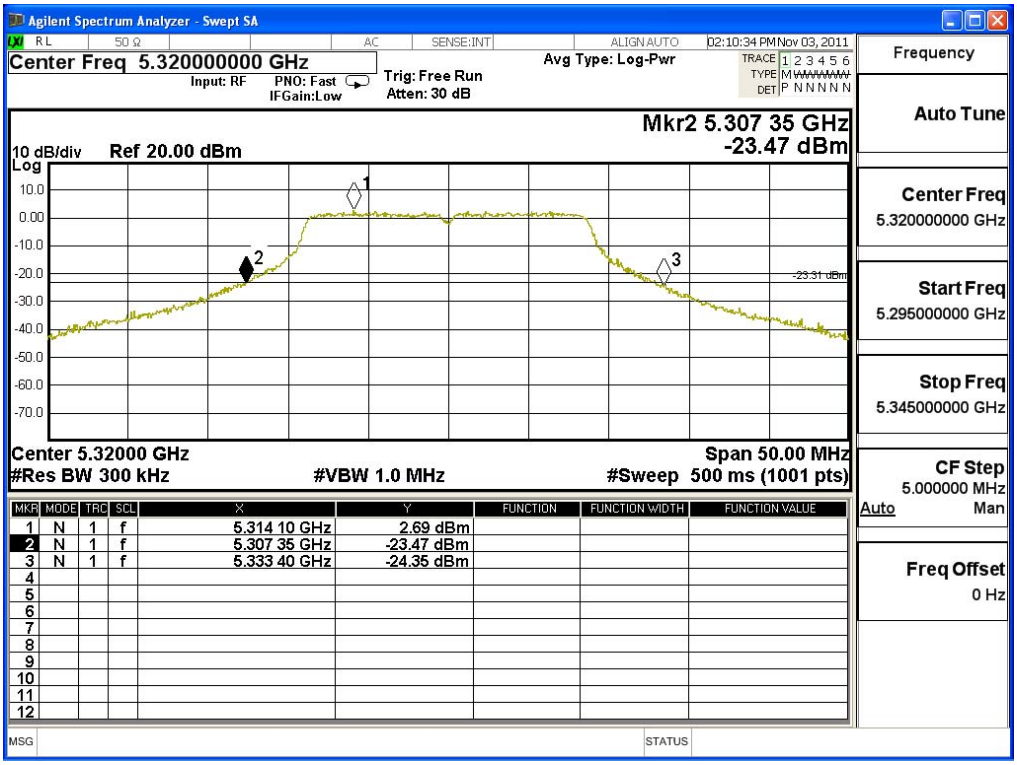
Channel 52 -Chain B



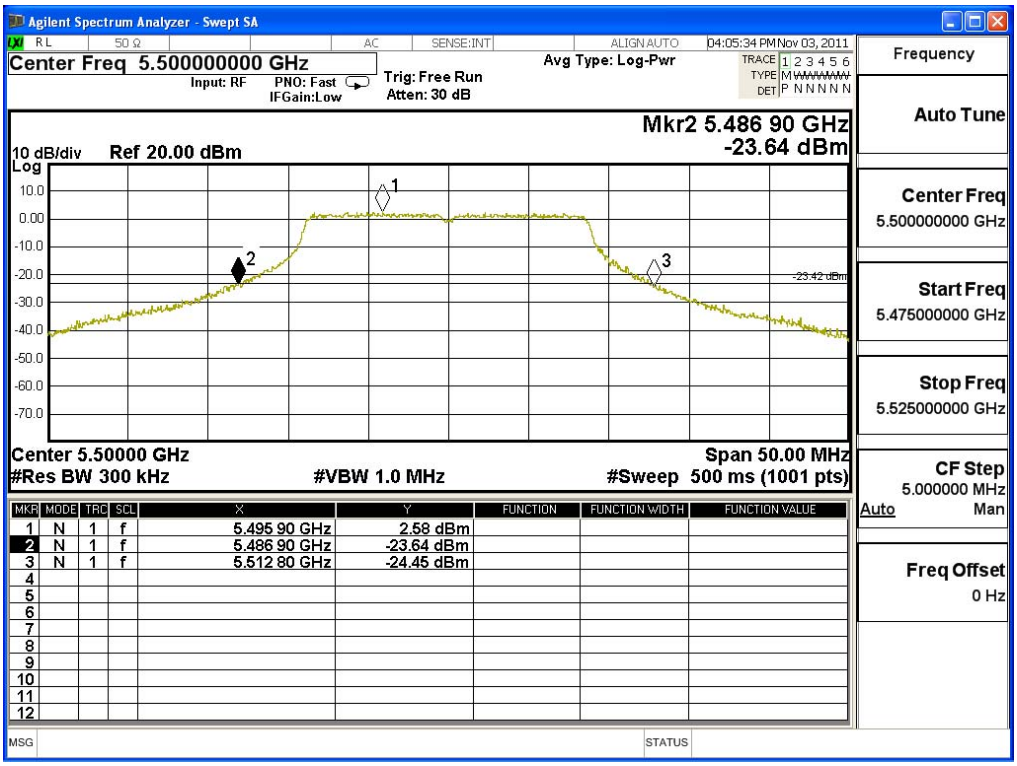
Channel 60 -Chain B



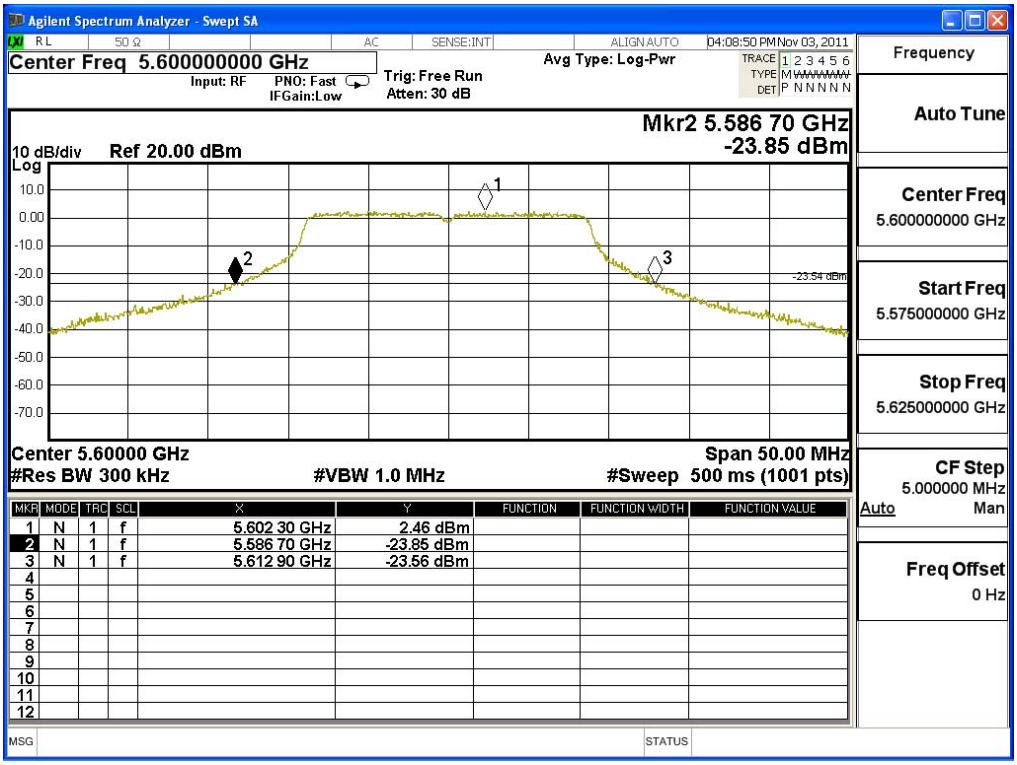
Channel 64 -Chain B



Channel 100 -Chain B



Channel 120 -Chain B



Channel 140 -Chain B