



Test Report

Product Name	Notebook PC
Model No	TAICHI31
FCC ID	MSQTAICHI31

Applicant	ASUSTeK COMPUTER INC.
Address	4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan

Date of Receipt	Oct. 02, 2012
Issued Date	Nov. 09, 2012
Report No.	12A070R-RFUSP46V01
Report Version	V1.0



The test results relate only to the samples tested.

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Test Report Certification

Issued Date: Nov. 09, 2012

Report No.: 12A070R-RFUSP46V01



Product Name	Notebook PC
Applicant	ASUSTeK COMPUTER INC.
Address	4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan
Manufacturer	1. PEGATRON CORPORATION Taoyuan Mfg 2. Protek (Shanghai) Limited. 3. Tech-Com(Shanghai) Computer Co. Ltd. 4. Tech-Front (Chongqing) Computer Co.,Ltd. 5. Compal Information Technology (Kunshan) Co., Ltd 6. Digitek (Chongqing) Limited
Model No.	TAICHI31
FCC ID.	MSQTAICHI31
EUT Rated Voltage	19Vdc, 2.37A
EUT Test Voltage	AC 120V/60Hz
Trade Name	ASUS
Applicable Standard	FCC CFR Title 47 Part 15 Subpart E: 2010 ANSI C63.4: 2003, FCC KDB-789033
Test Result	Complied

The Test Results relate only to the samples tested.

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(Assistant Engineer / Nowal Kuo)

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(Manager /Vincent Lin)

TABLE OF CONTENTS

Description	Page
1. GENERAL INFORMATION	5
1.1. EUT Description.....	5
1.2. Operational Description	8
1.3. Tested System Details.....	9
1.4. Configuration of tested System	9
1.5. EUT Exercise Software	10
1.6. Test Facility	11
2. Conducted Emission.....	12
2.1. Test Equipment.....	12
2.2. Test Setup	12
2.3. Limits	13
2.4. Test Procedure	13
2.5. Uncertainty	13
2.6. Test Result of Conducted Emission.....	14
3. Maximun conducted output power	20
3.1. Test Equipment.....	20
3.2. Test Setup	20
3.3. Limits	21
3.4. Test Procedur	21
3.5. Uncertainty	21
3.6. Test Result of Maximum conducted output power.....	22
4. Peak Power Spectral Density.....	49
4.1. Test Equipment.....	49
4.2. Test Setup	49
4.3. Limits	49
4.4. Test Procedure	50
4.5. Uncertainty	50
4.6. Test Result of Peak Power Spectral Density	51
5. Peak Excursion	74
5.1. Test Equipment.....	74
5.2. Test Setup	74
5.3. Limits	74
5.4. Test Procedure	74
5.5. Uncertainty	74
5.6. Test Result of Peak Excursion.....	75
6. Radiated Emission.....	98
6.1. Test Equipment.....	98
6.2. Test Setup	98
6.3. Limits	99
6.4. Test Procedure	100
6.5. Uncertainty	100
6.6. Test Result of Radiated Emission.....	101
7. Band Edge	135

7.1.	Test Equipment.....	135
7.2.	Test Setup	136
7.3.	Limits	137
7.4.	Test Procedure	137
7.5.	Uncertainty	137
7.6.	Test Result of Band Edge	138
8.	Frequency Stability.....	172
8.1.	Test Equipment.....	172
8.2.	Test Setup	172
8.3.	Limits	172
8.4.	Test Procedure	172
8.5.	Uncertainty	172
8.6.	Test Result of Frequency Stability.....	173
9.	EMI Reduction Method During Compliance Testing	179
Attachment 1: EUT Test Photographs		
Attachment 2: EUT Detailed Photographs		

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Notebook PC
Trade Name	ASUS
FCC ID.	MSQTAICH131
Model No.	TAICH131
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	PIFA
Antenna Gain	Refer to the table "Antenna List"
USB to D-SUB Adapter	1 set
USB to LAN Adapter	1 set
Power Adapter	MFR: Delta (ASUS), M/N: ADP-45AW A Input: AC 100-240V~1.2A, 50-60Hz Output: DC 19V, 2.37A Cable Out: Non-Shielded, 2.5m
Battery	ASUS, C41-TAICH131 (+14.8V, 3500mAh, 51Wh)
Contain Module	Intel / 6235ANHMW

Antenna List

No.	Manufacturer	Model No.	Peak Gain
1	INPAQ	WA-F-LBLB-04-004	1.22dBi For 5.15~5.35GHz 1.43dBi For 5.47~5.725GHz

Note:

The antenna of EUT is conform to FCC 15.203

Note:

1. This device is a Notebook PC , Contains functions and so on WiFi 、Bluetooth , This report for WiFi.
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 、802.11n is chain A+ chain B)
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.
7. At result of pretests, EUT support NB mode and PAD mode, only the worst case (NB mode) is shown in the 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						

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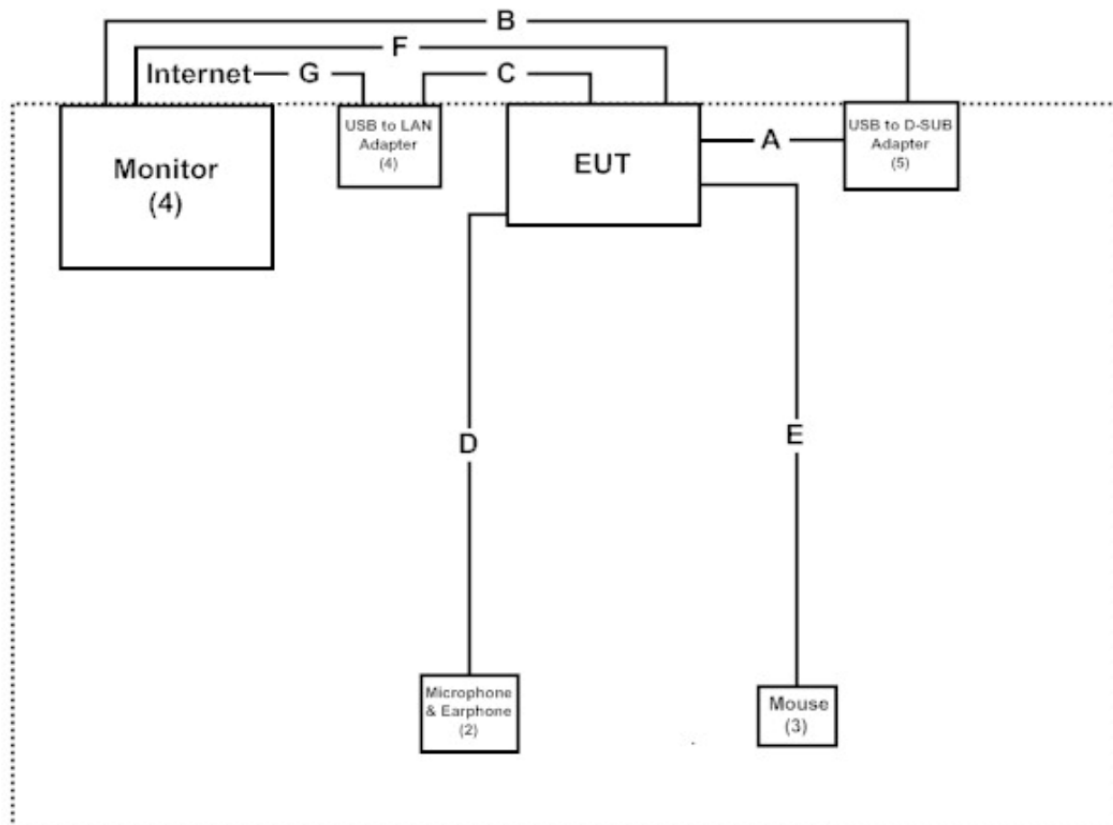
1.3. Tested System Details

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) USB Mouse	DELL	ST2320LF	CN-OM2NN6-72872-22I-CV9V	N/A
(2) Microphone & Earphone	PCHOME	N/A	N/A	N/A
(3) USB Mouse	DELL	MO56UOA	G0Y02ES8	N/A
(4) USB to D-SUB Adapter	ASUS	N/A	N/A	N/A
(5) USB to LAN Adapter	ASUS	N/A	N/A	N/A

Signal Cable Type	Signal cable Description
A USB to D-SUB Cable	Non-Shielded, 0.025m
B D-SUB Cable	Non-Shielded, 1.8m
C USB to LAN Cable	Non-Shielded, 0.08m
D Earphone & Microphone Cable	Non-Shielded, 1.8m
E Mouse Cable	Non-Shielded, 1.8m
F HDMI Cable	Non-Shielded, 1.7m
G RJ45 Cable	Non-Shielded, 2.0m

1.4. Configuration of tested System



1.5. EUT Exercise Software

- (1) Setup the EUT as shown in Section 1.4
- (2) Execute software “ DRTU v1.5.5-0427 ”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

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

2. Conducted Emission

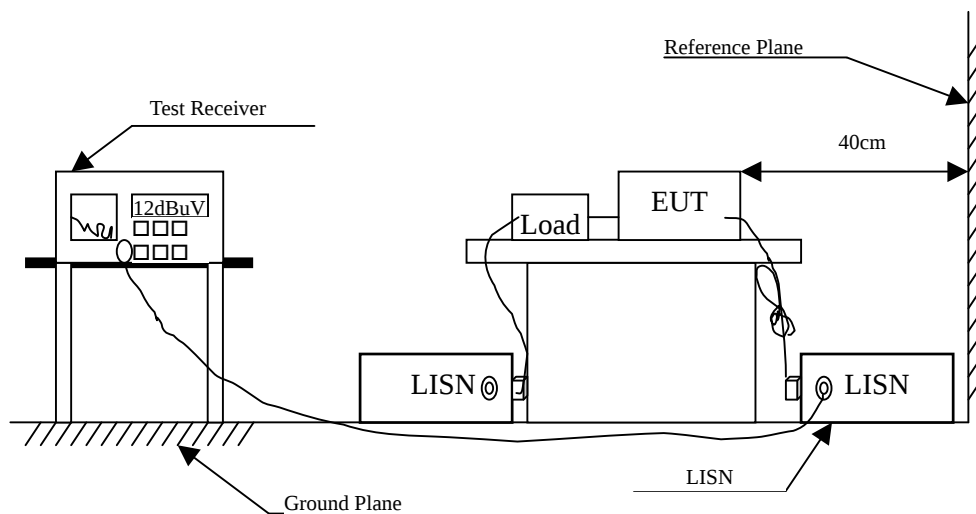
2.1. Test Equipment

	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., 2012	Peripherals
X	LISN	R & S	ESH3-Z5 / 825562/002	Feb., 2012	EUT
	DC LISN	Schwarzbeck	8226 / 176	Mar, 2012	EUT
X	Pulse Limiter	R & S	ESH3-Z2 / 357.8810.52	Feb., 2012	
	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 investigated 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 : Notebook PC
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5190MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 1					
Quasi-Peak					
0.158	9.830	34.900	44.730	-21.041	65.771
0.216	9.830	27.730	37.560	-26.554	64.114
0.443	9.830	26.160	35.990	-21.639	57.629
0.666	9.830	28.100	37.930	-18.070	56.000
1.353	9.830	20.170	30.000	-26.000	56.000
10.806	10.006	15.960	25.966	-34.034	60.000
Average					
0.158	9.830	25.390	35.220	-20.551	55.771
0.216	9.830	8.560	18.390	-35.724	54.114
0.443	9.830	21.370	31.200	-16.429	47.629
0.666	9.830	23.060	32.890	-13.110	46.000
1.353	9.830	15.680	25.510	-20.490	46.000
10.806	10.006	11.570	21.576	-28.424	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 : Notebook PC
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5190MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.181	9.833	31.860	41.693	-23.421	65.114
0.259	9.830	23.890	33.720	-29.166	62.886
0.435	9.840	24.960	34.800	-23.057	57.857
0.638	9.840	27.730	37.570	-18.430	56.000
1.826	9.860	17.080	26.940	-29.060	56.000
13.838	10.181	13.700	23.881	-36.119	60.000
Average					
0.181	9.833	15.950	25.783	-29.331	55.114
0.259	9.830	10.330	20.160	-32.726	52.886
0.435	9.840	21.270	31.110	-16.747	47.857
0.638	9.840	22.960	32.800	-13.200	46.000
1.826	9.860	12.080	21.940	-24.060	46.000
13.838	10.181	8.510	18.691	-31.309	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 : Notebook PC
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5270MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 1					
Quasi-Peak					
0.166	9.830	34.970	44.800	-20.743	65.543
0.228	9.830	25.790	35.620	-28.151	63.771
0.431	9.830	24.690	34.520	-23.451	57.971
0.666	9.830	25.550	35.380	-20.620	56.000
1.306	9.830	19.280	29.110	-26.890	56.000
11.298	10.015	14.990	25.005	-34.995	60.000
Average					
0.166	9.830	25.540	35.370	-20.173	55.543
0.228	9.830	9.930	19.760	-34.011	53.771
0.431	9.830	20.210	30.040	-17.931	47.971
0.666	9.830	15.430	25.260	-20.740	46.000
1.306	9.830	15.240	25.070	-20.930	46.000
11.298	10.015	9.250	19.265	-30.735	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 : Notebook PC
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5270MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.154	9.840	35.770	45.610	-20.276	65.886
0.240	9.830	25.250	35.080	-28.349	63.429
0.447	9.840	25.690	35.530	-21.984	57.514
0.638	9.840	29.460	39.300	-16.700	56.000
3.658	9.870	12.550	22.420	-33.580	56.000
10.595	10.072	16.390	26.462	-33.538	60.000
Average					
0.154	9.840	10.770	20.610	-35.276	55.886
0.240	9.830	5.340	15.170	-38.259	53.429
0.447	9.840	20.180	30.020	-17.494	47.514
0.638	9.840	25.380	35.220	-10.780	46.000
3.658	9.870	3.460	13.330	-32.670	46.000
10.595	10.072	12.290	22.362	-27.638	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 : Notebook PC
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5550MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 1					
Quasi-Peak					
0.170	9.830	34.780	44.610	-20.819	65.429
0.435	9.830	25.300	35.130	-22.727	57.857
0.634	9.830	26.720	36.550	-19.450	56.000
1.576	9.840	20.330	30.170	-25.830	56.000
3.732	9.860	13.380	23.240	-32.760	56.000
10.455	10.000	15.540	25.540	-34.460	60.000
Average					
0.170	9.830	11.570	21.400	-34.029	55.429
0.435	9.830	19.920	29.750	-18.107	47.857
0.634	9.830	20.570	30.400	-15.600	46.000
1.576	9.840	16.470	26.310	-19.690	46.000
3.732	9.860	5.350	15.210	-30.790	46.000
10.455	10.000	8.750	18.750	-31.250	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 : Notebook PC
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5550MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.162	9.839	36.110	45.949	-19.708	65.657
0.216	9.830	28.420	38.250	-25.864	64.114
0.439	9.840	25.490	35.330	-22.413	57.743
0.662	9.840	28.140	37.980	-18.020	56.000
1.361	9.850	18.650	28.500	-27.500	56.000
11.017	10.090	15.620	25.710	-34.290	60.000
Average					
0.162	9.839	16.090	25.929	-29.728	55.657
0.216	9.830	5.910	15.740	-38.374	54.114
0.439	9.840	18.220	28.060	-19.683	47.743
0.662	9.840	22.540	32.380	-13.620	46.000
1.361	9.850	13.520	23.370	-22.630	46.000
11.017	10.090	10.360	20.450	-29.550	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

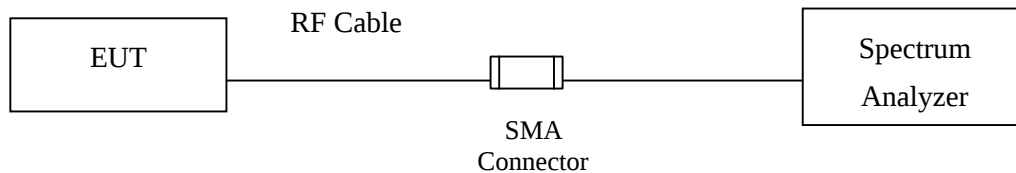
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Power Meter	Anritsu	ML2495A/6K00003357	May, 2012
X	Power Sensor	Anritsu	MA2411B/0738448	Jun, 2012
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2012

Note:

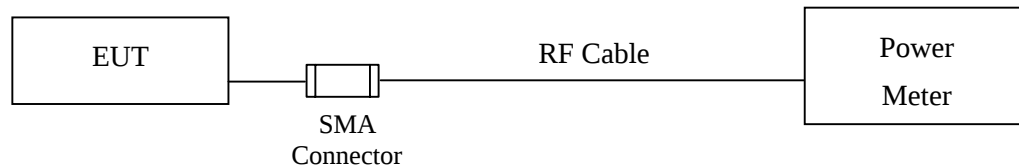
1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with “X” are used to measure the final test results.

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 $4 \text{ dBm} + 10\log B$, 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 $11 \text{ dBm} + 10\log B$, 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 $17 \text{ dBm} + 10\log B$, 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.

3.5. Uncertainty

$\pm 1.27 \text{ dB}$

3.6. Test Result of Maximum conducted output power

Product : Notebook 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	10.9	--	--	--	--	--	--	--	<17dBm
44	5220	11.08	10.92	10.88	10.83	10.79	10.77	10.75	10.7	<17dBm
48	5240	10.98	--	--	--	--	--	--	--	<17dBm
52	5260	10.83	--	--	--	--	--	--	--	<24dBm
60	5300	11	10.81	10.78	10.73	10.7	10.64	10.61	10.58	<24dBm
64	5320	11.11	--	--	--	--	--	--	--	<24dBm
100	5500	10.63	--	--	--	--	--	--	--	<24dBm
116	5580	11.19	10.87	10.84	10.8	10.78	10.73	10.68	10.64	<24dBm
140	5700	11.01	--	--	--	--	--	--	--	<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	10.78	--	--	--	--	--	--	--	<17dBm
44	5220	10.98	10.94	10.89	10.85	10.79	10.72	10.7	10.68	<17dBm
48	5240	10.8	--	--	--	--	--	--	--	<17dBm
52	5260	10.82	--	--	--	--	--	--	--	<24dBm
60	5300	10.87	10.84	10.77	10.71	10.69	10.67	10.62	10.57	<24dBm
64	5320	10.81	--	--	--	--	--	--	--	<24dBm
100	5500	10.63	--	--	--	--	--	--	--	<24dBm
116	5580	10.9	10.87	10.81	10.77	10.73	10.69	10.64	10.55	<24dBm
140	5700	10.8	--	--	--	--	--	--	--	<24dBm

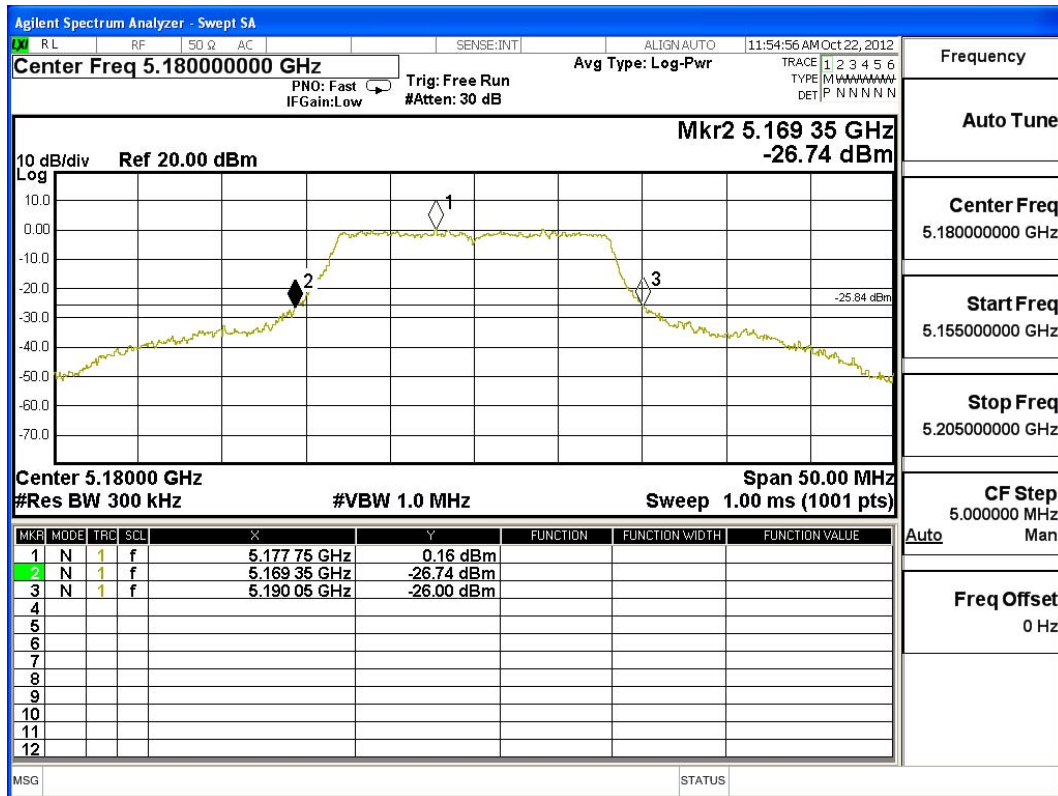
Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

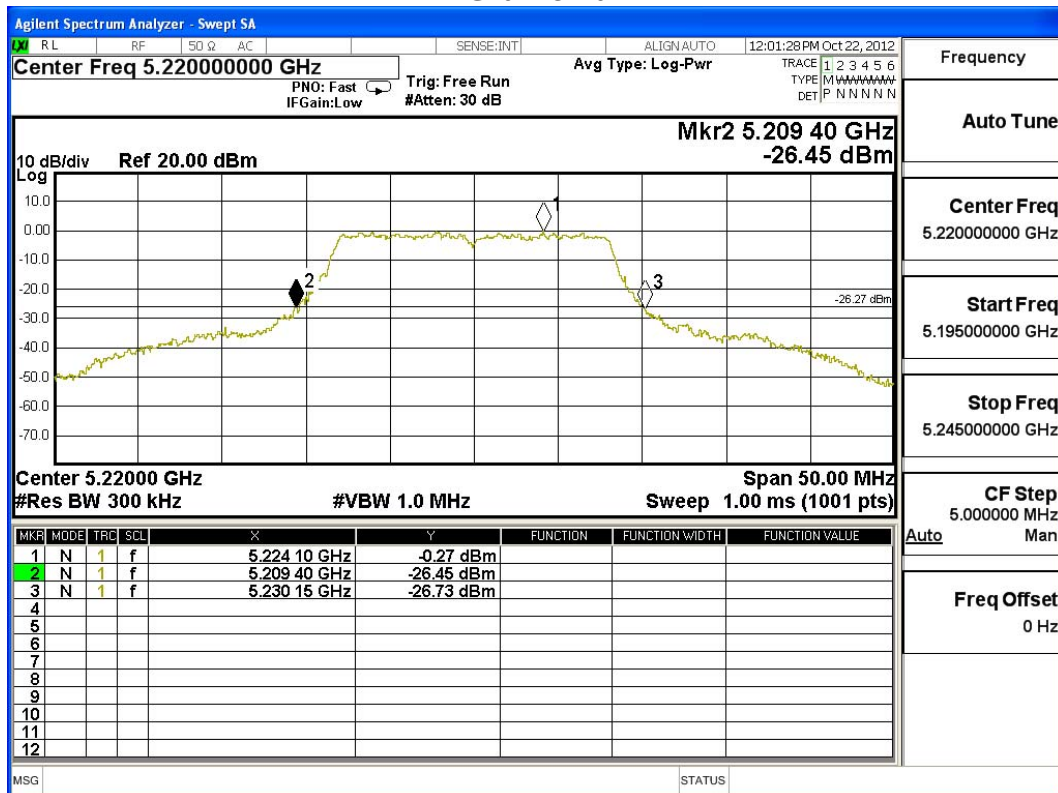
Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Output Power Limit	
				(dBm)	dBm+10log(BW)
36	5180	20.700	10.9	17	17.16
44	5220	20.750	11.08	17	17.17
48	5240	20.750	10.98	17	17.17
52	5260	20.750	10.83	24	24.17
60	5300	20.700	11	24	24.16
64	5320	20.750	11.11	24	24.17
100	5500	20.650	10.63	24	24.15
116	5580	20.650	11.19	24	24.15
140	5700	20.750	11.01	24	24.17

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

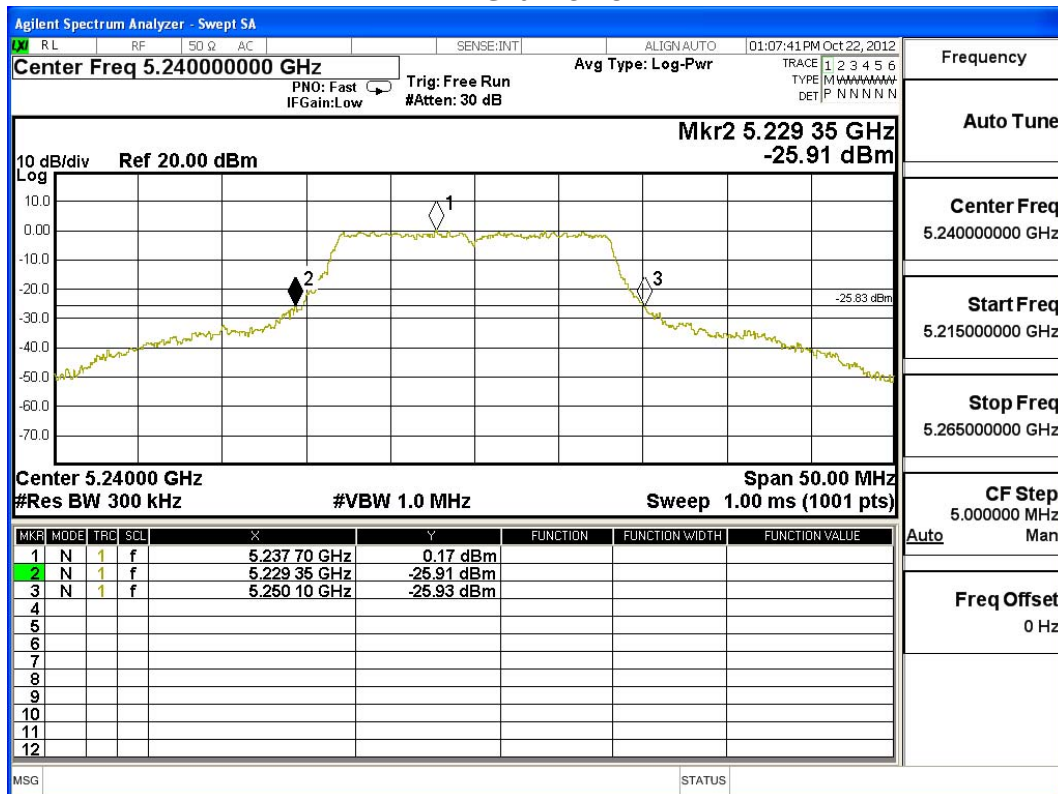
26dBc Occupied Bandwidth: Channel 36



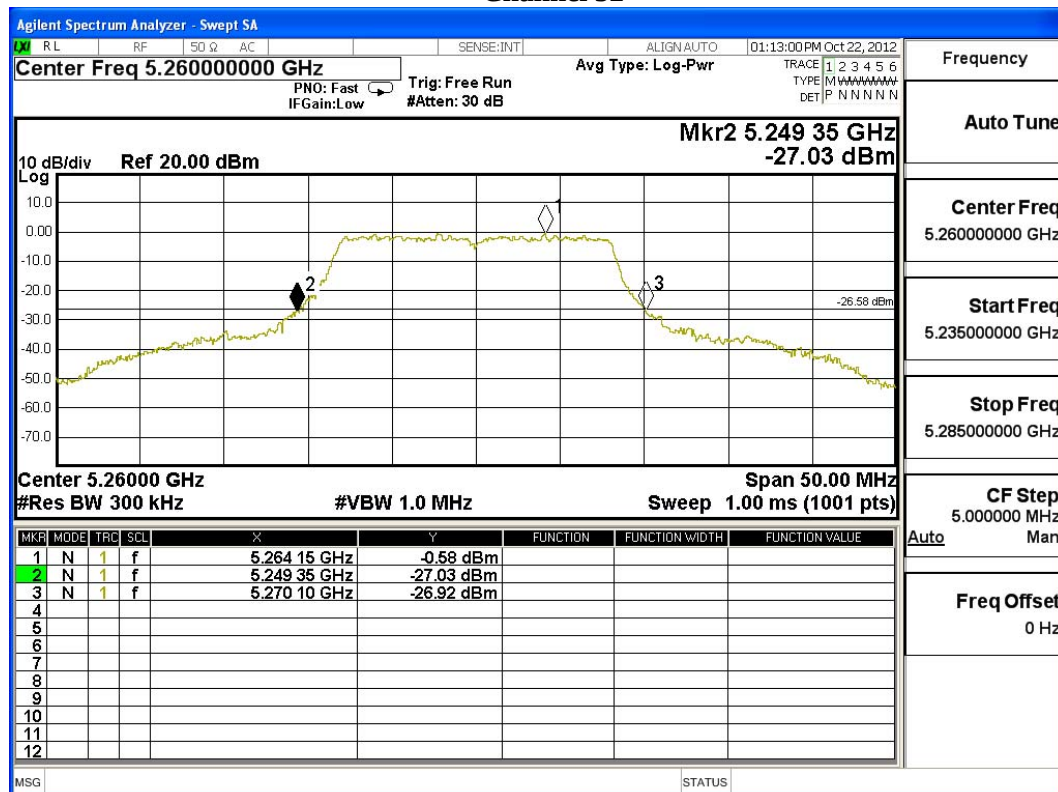
Channel 40



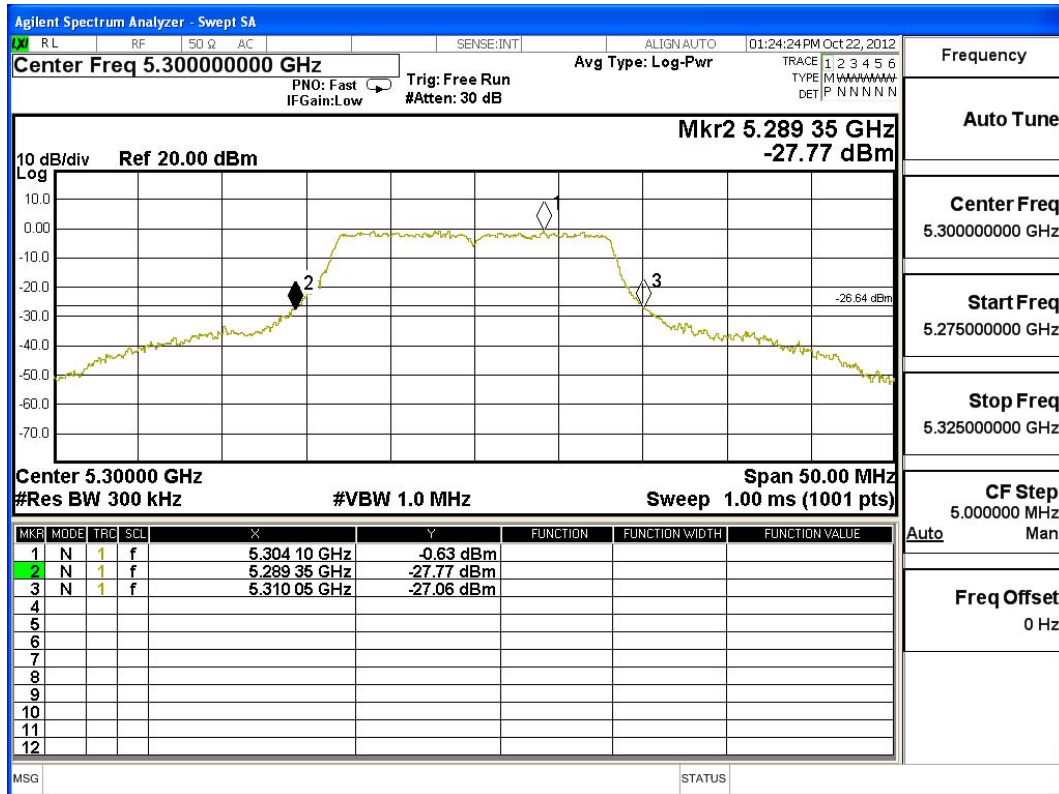
Channel 48



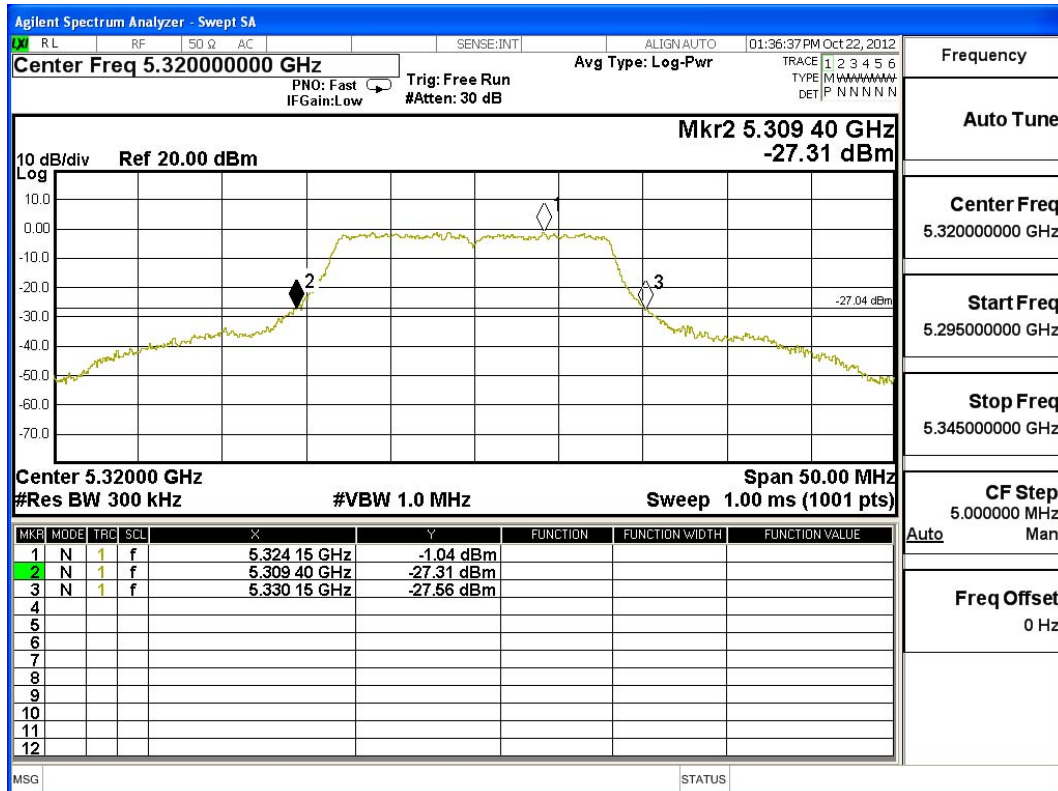
Channel 52



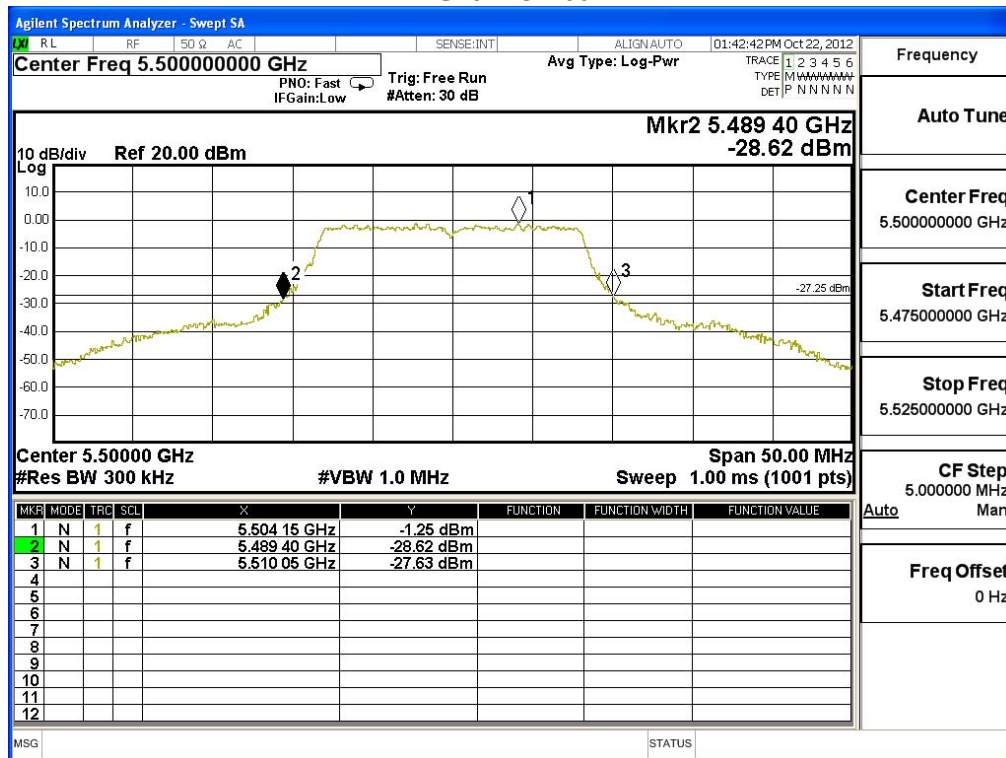
Channel 60



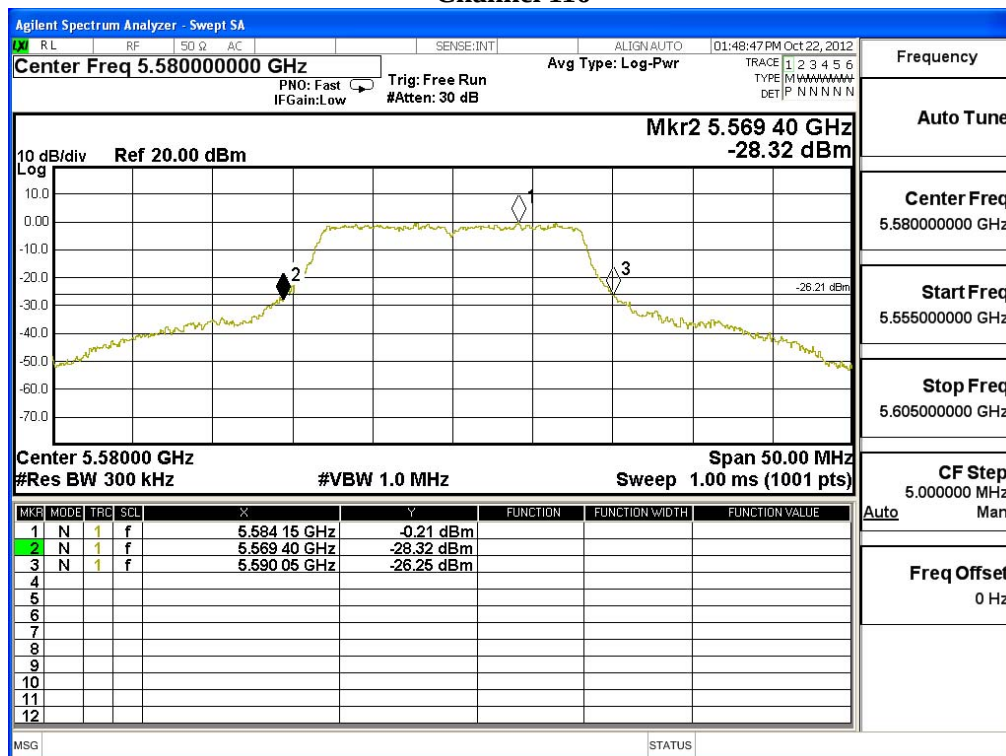
Channel 64



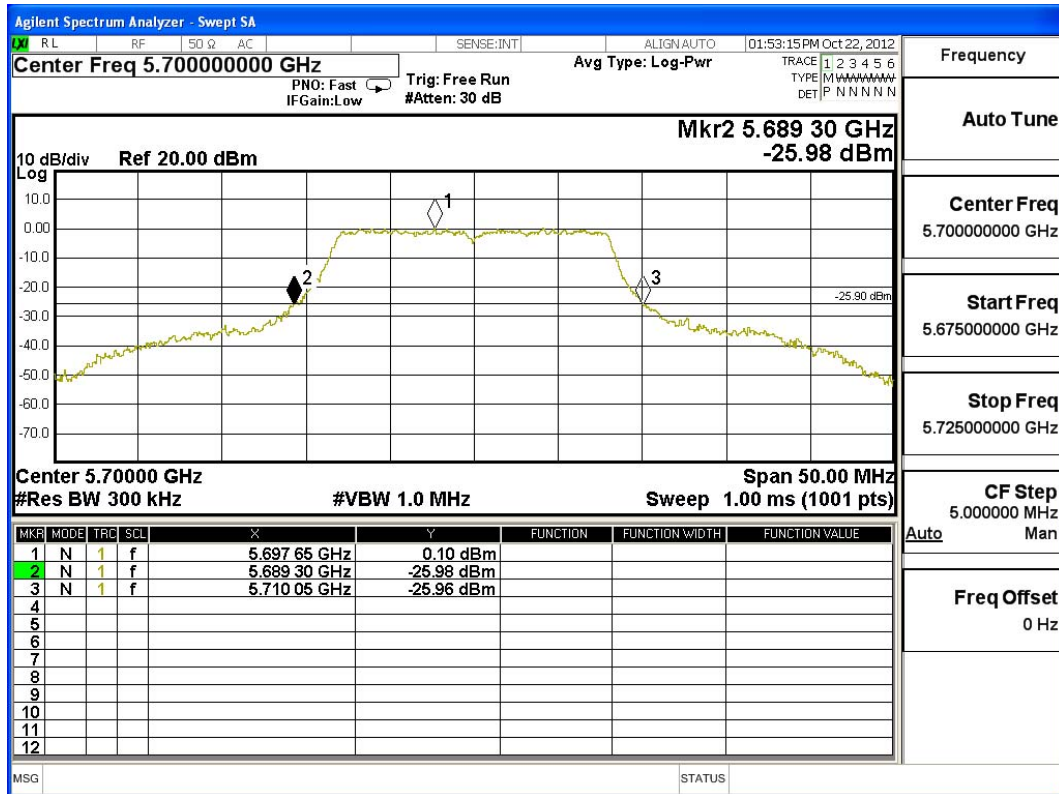
Channel 100



Channel 116



Channel 140



Product : Notebook 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	7.54	--	--	--	--	--	--	--	<17dBm
44	5220	7.45	7.43	7.39	7.37	7.35	7.31	7.27	7.22	<17dBm
48	5240	7.3	--	--	--	--	--	--	--	<17dBm
52	5260	7.3	--	--	--	--	--	--	--	<24dBm
60	5300	7.41	7.39	7.37	7.32	7.29	7.24	7.18	7.14	<24dBm
64	5320	7.43	--	--	--	--	--	--	--	<24dBm
100	5500	7.46	--	--	--	--	--	--	--	<24dBm
116	5580	7.39	7.37	7.33	7.28	7.24	7.19	7.17	7.15	<24dBm
140	5700	7.4	--	--	--	--	--	--	--	<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	7.41	--	--	--	--	--	--	--	<17dBm
44	5220	7.61	7.58	7.54	7.51	7.49	7.44	7.41	7.38	<17dBm
48	5240	7.58	--	--	--	--	--	--	--	<17dBm
52	5260	7.65	--	--	--	--	--	--	--	<24dBm
60	5300	7.41	7.37	7.32	7.27	7.25	7.21	7.17	7.1	<24dBm
64	5320	7.62	--	--	--	--	--	--	--	<24dBm
100	5500	7.45	--	--	--	--	--	--	--	<24dBm
116	5580	7.54	7.49	7.46	7.41	7.38	7.32	7.28	7.22	<24dBm
140	5700	7.39	--	--	--	--	--	--	--	<24dBm

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

Maximum conducted output power Measurement:

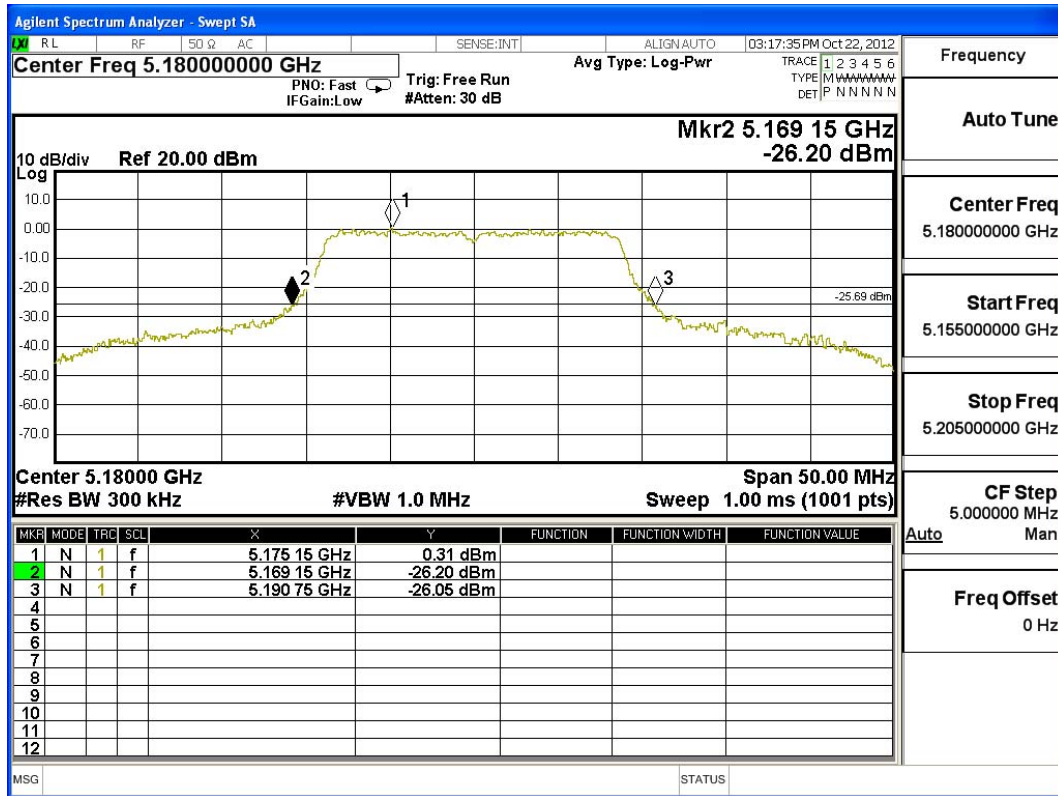
CHAIN A+B

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	21.600	7.54	7.41	10.49	17	17.34
44	5220	20.750	7.45	7.61	10.54	17	17.17
48	5240	20.850	7.30	7.58	10.45	17	17.19
52	5260	20.650	7.30	7.65	10.49	24	24.15
60	5300	20.600	7.41	7.41	10.42	24	24.14
64	5320	20.800	7.43	7.62	10.54	24	24.18
100	5500	20.750	7.46	7.45	10.47	24	24.17
116	5580	20.700	7.39	7.54	10.48	24	24.16
140	5700	20.900	7.40	7.39	10.41	24	24.20

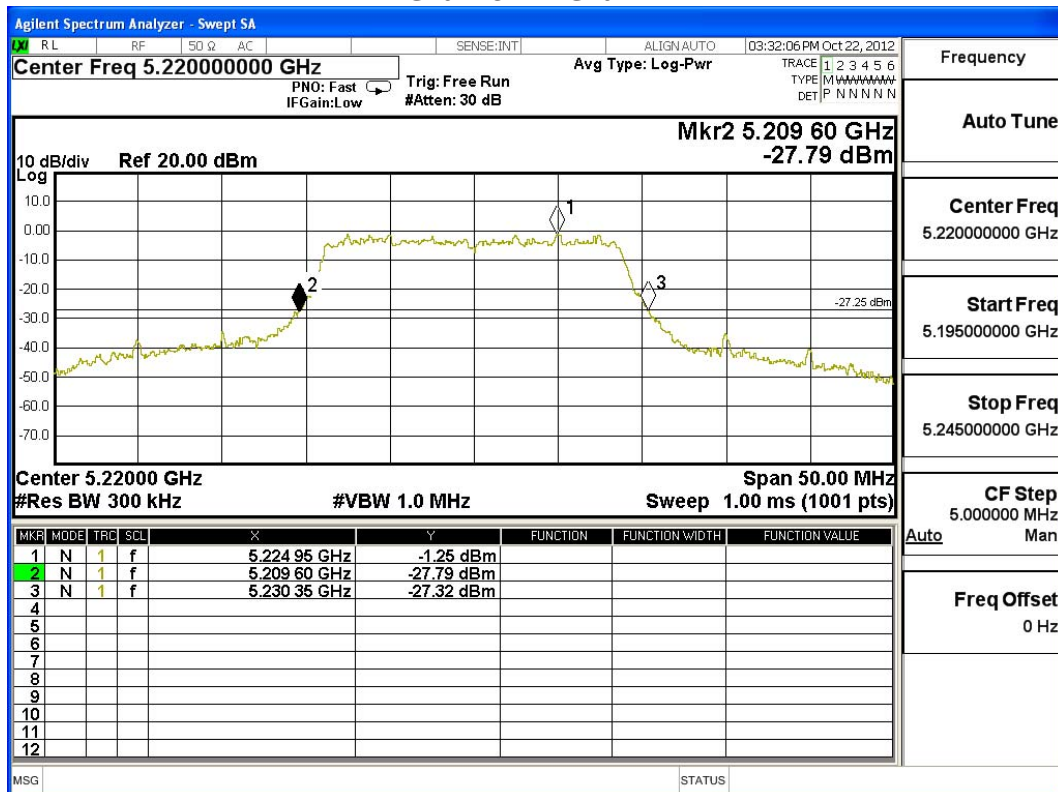
Note:

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.

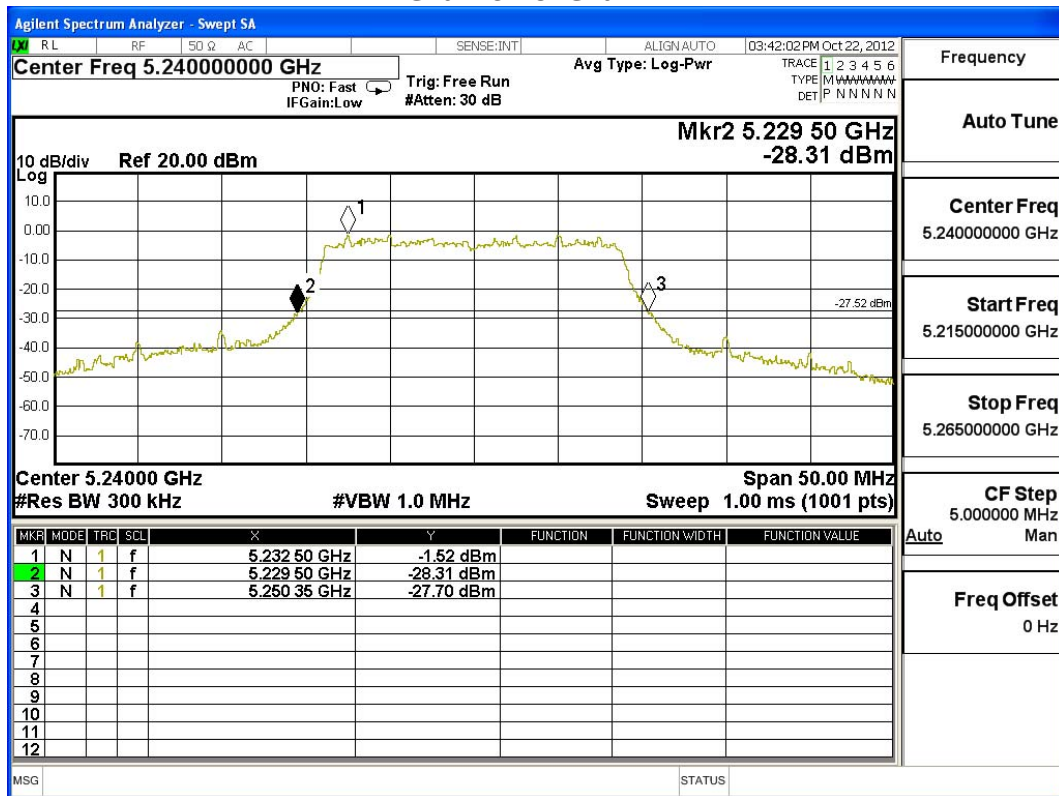
26dBc Occupied Bandwidth: Channel 36 -Chain A



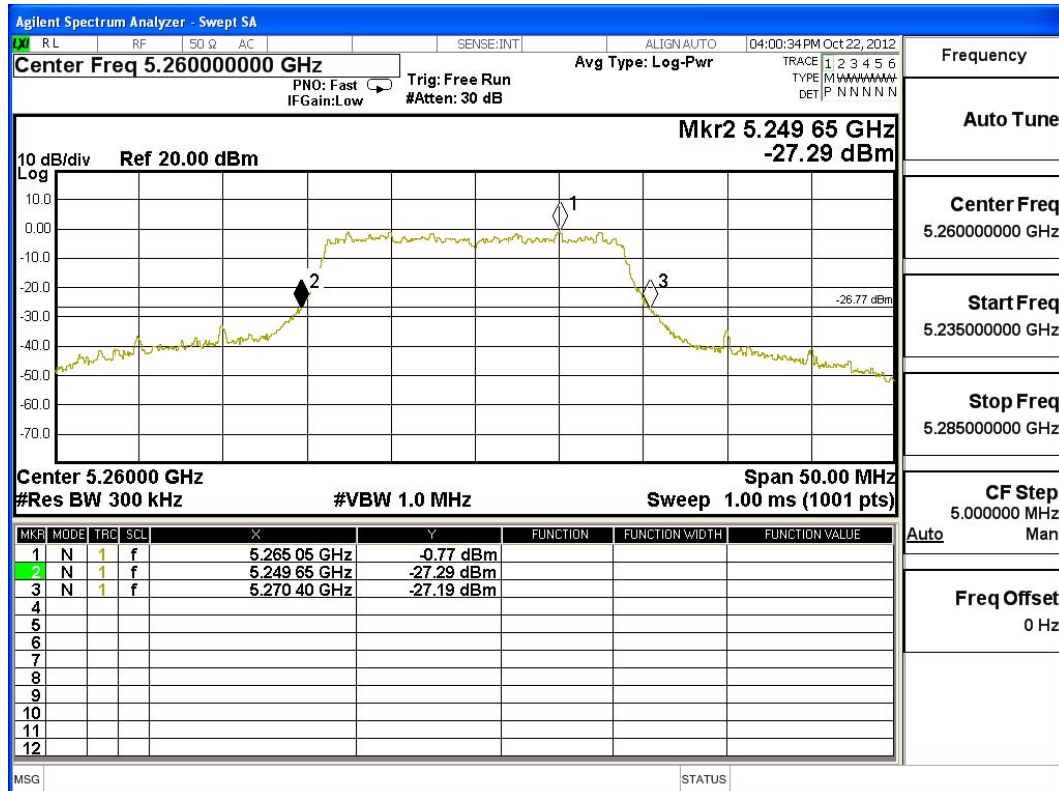
Channel 44 -Chain A



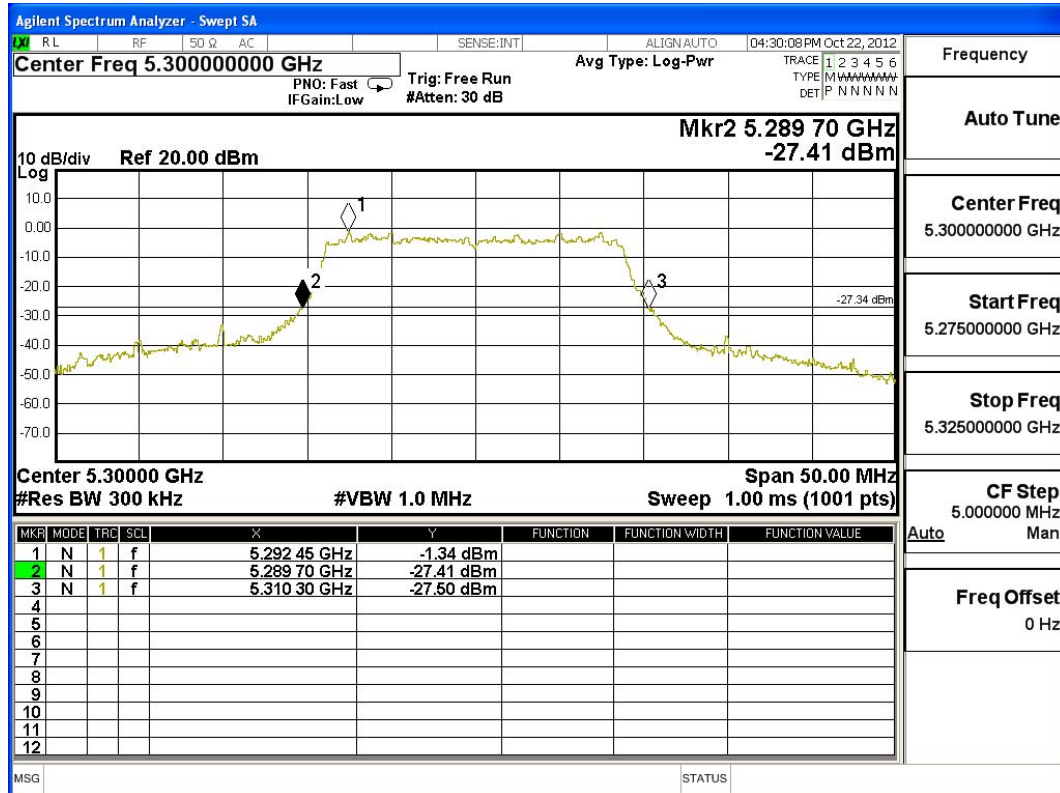
Channel 48 -Chain A



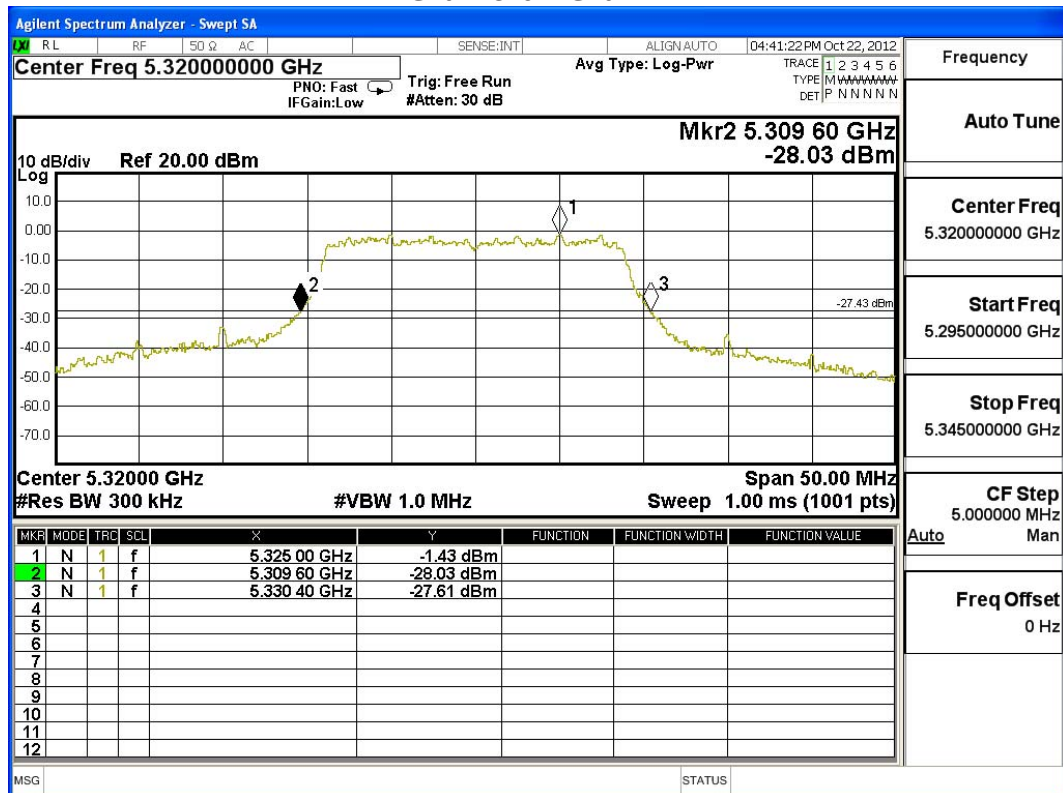
Channel 52 -Chain A



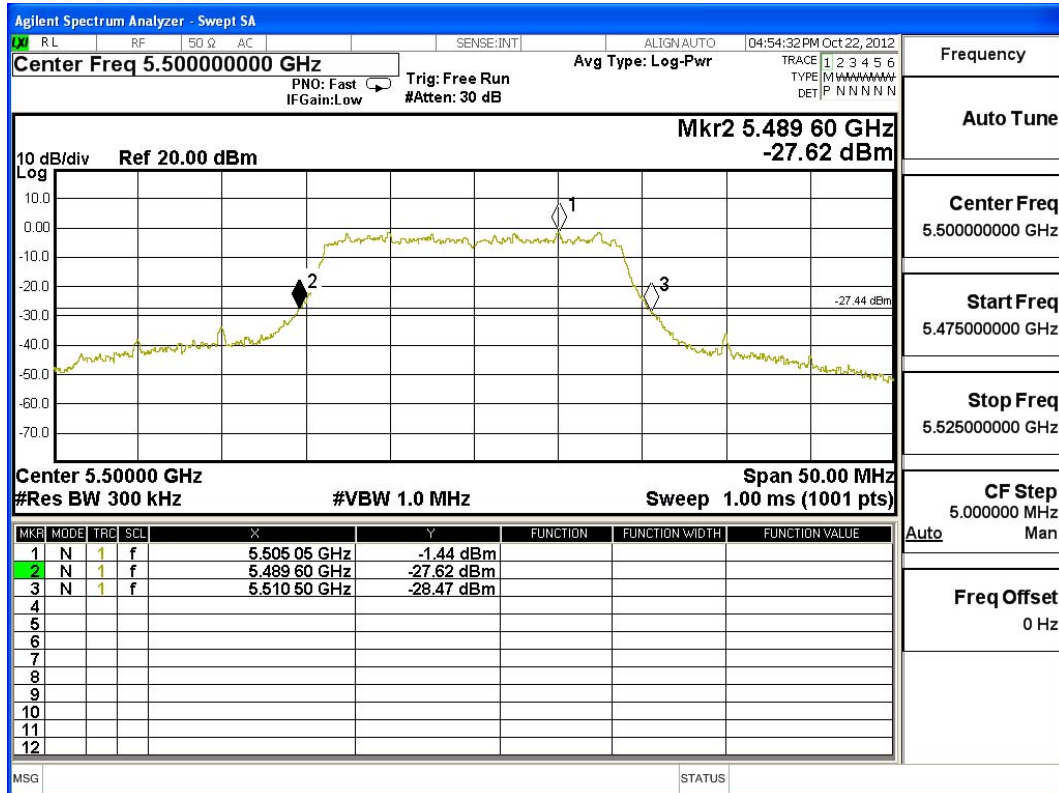
Channel 60 -Chain A



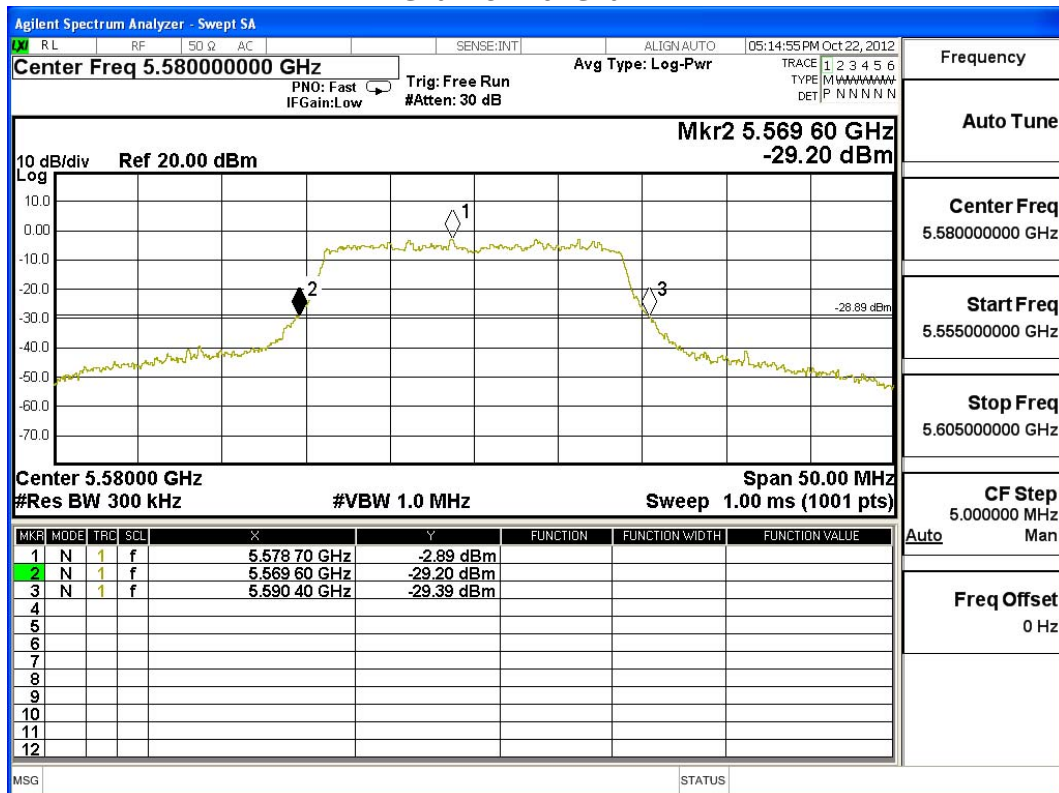
Channel 64 -Chain A



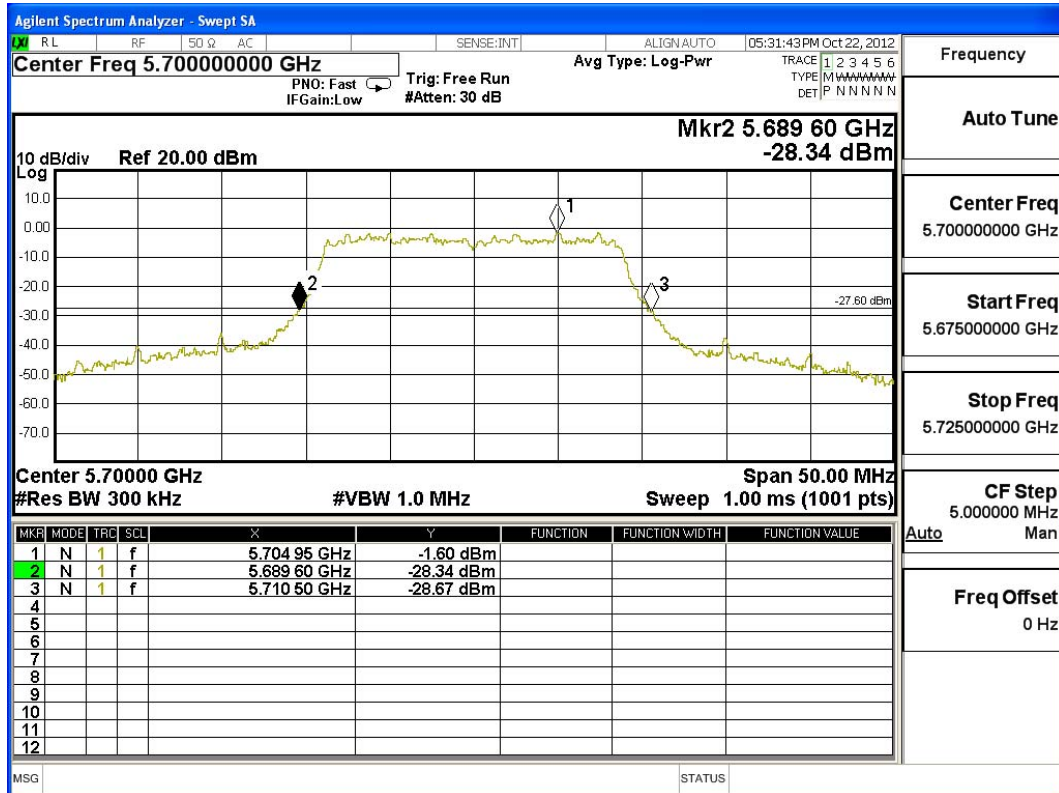
Channel 100 -Chain A



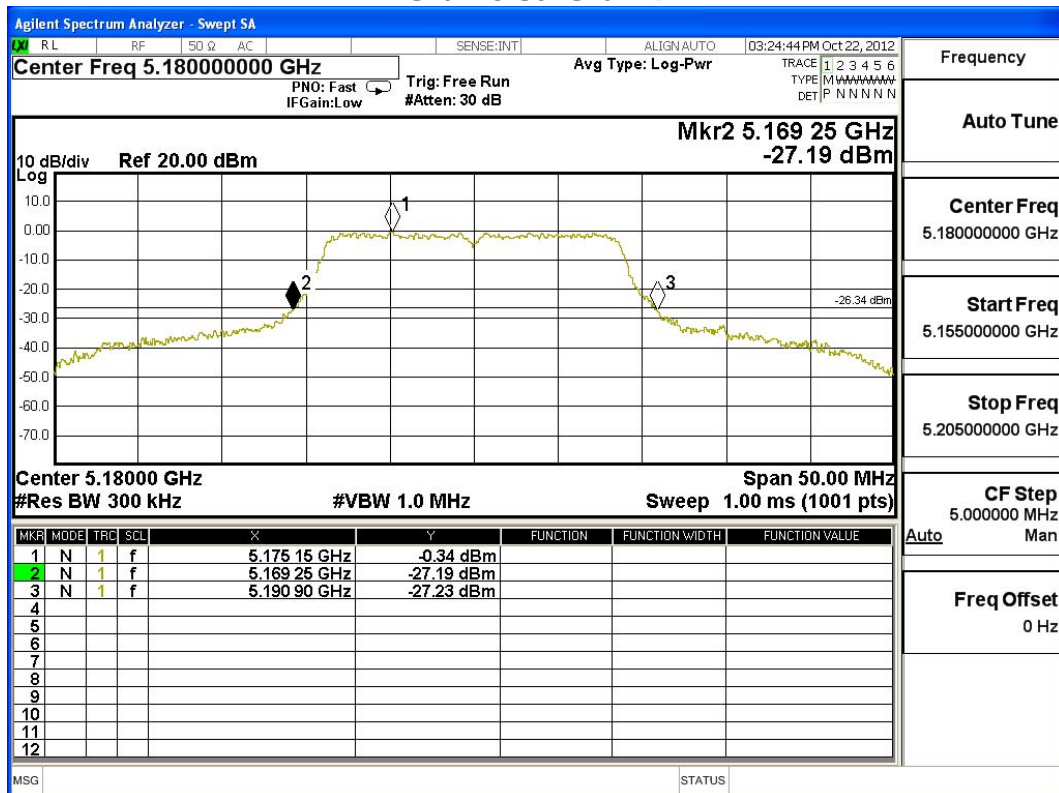
Channel 116 -Chain A



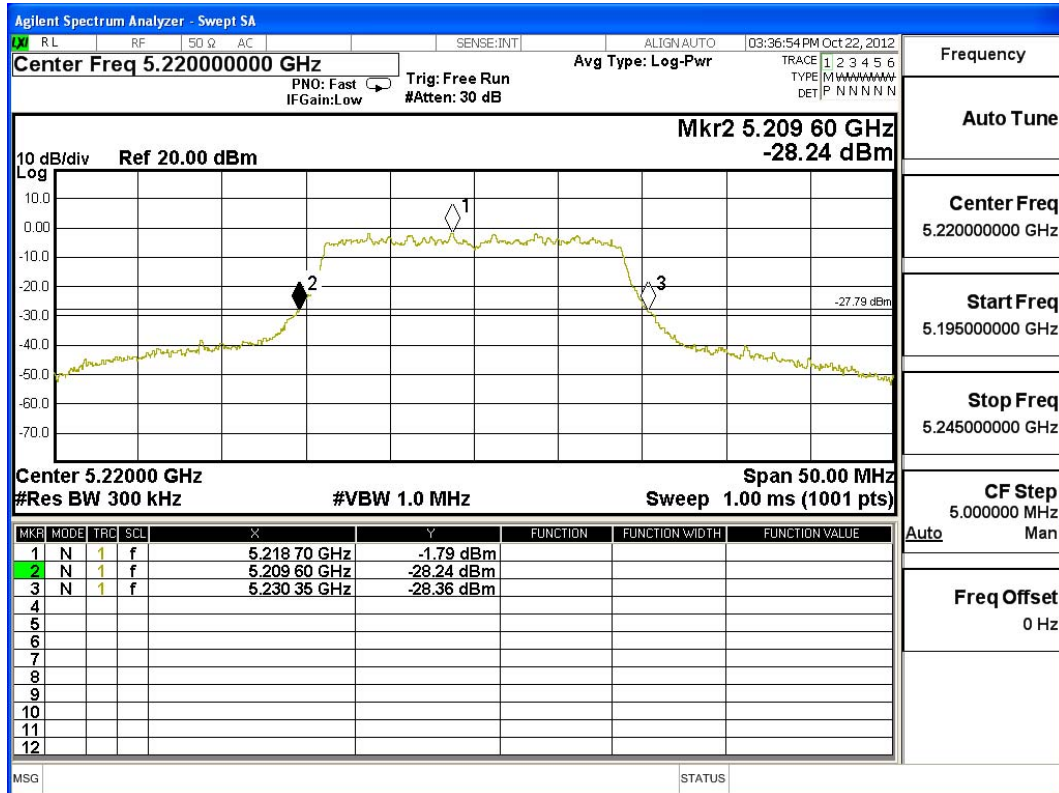
Channel 140 -Chain A



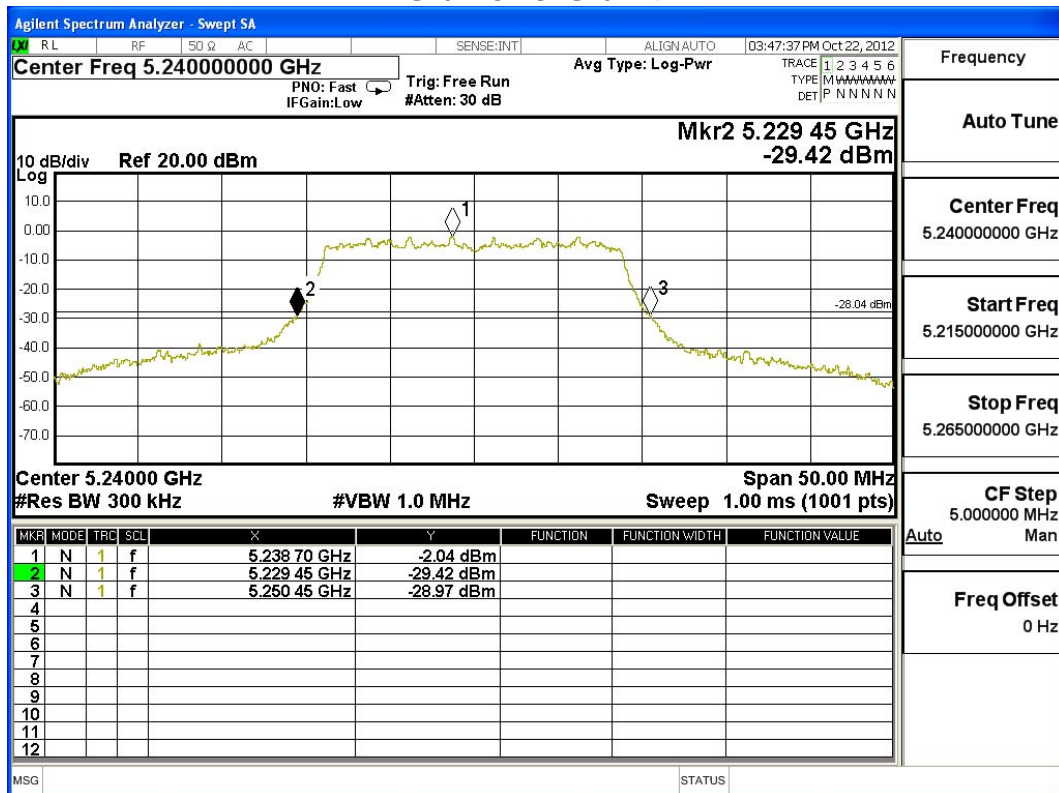
Channel 36 -Chain B



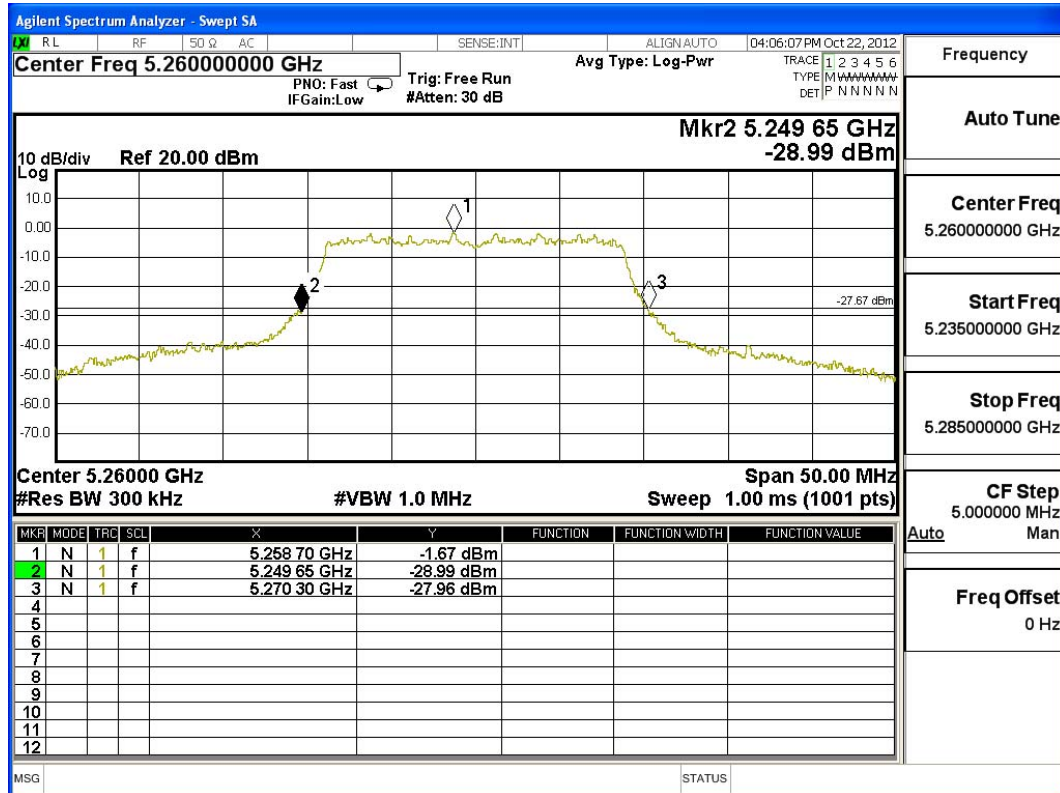
Channel 44 -Chain B



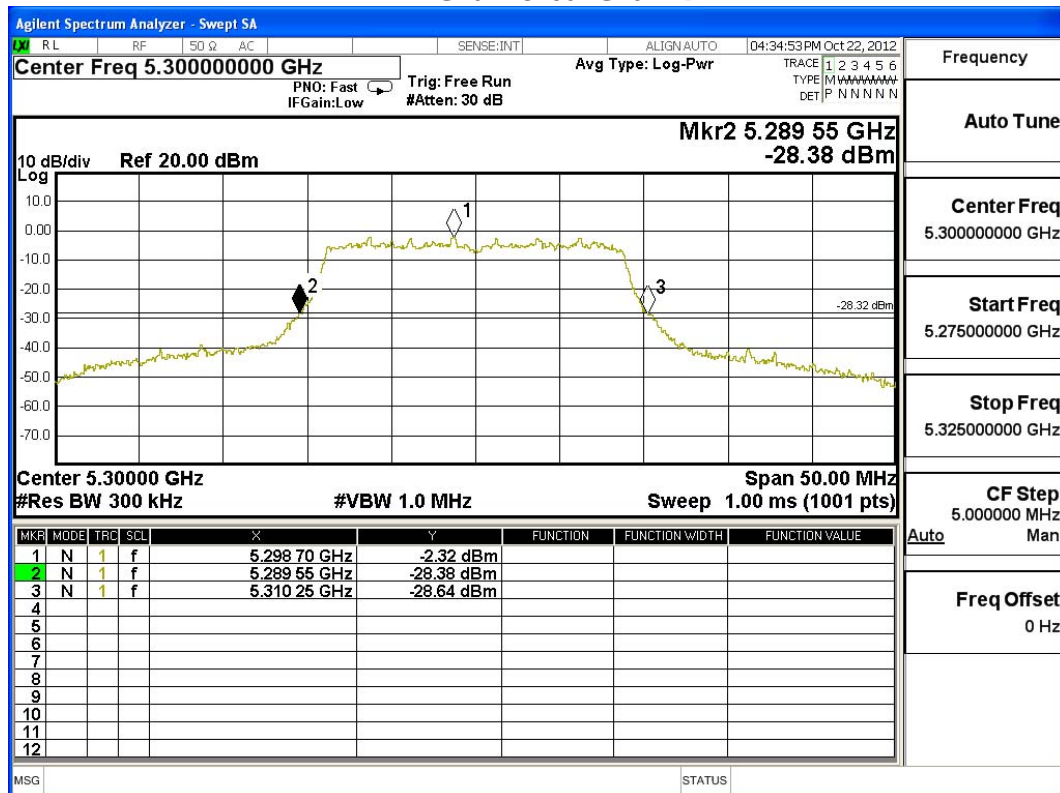
Channel 48 -Chain B



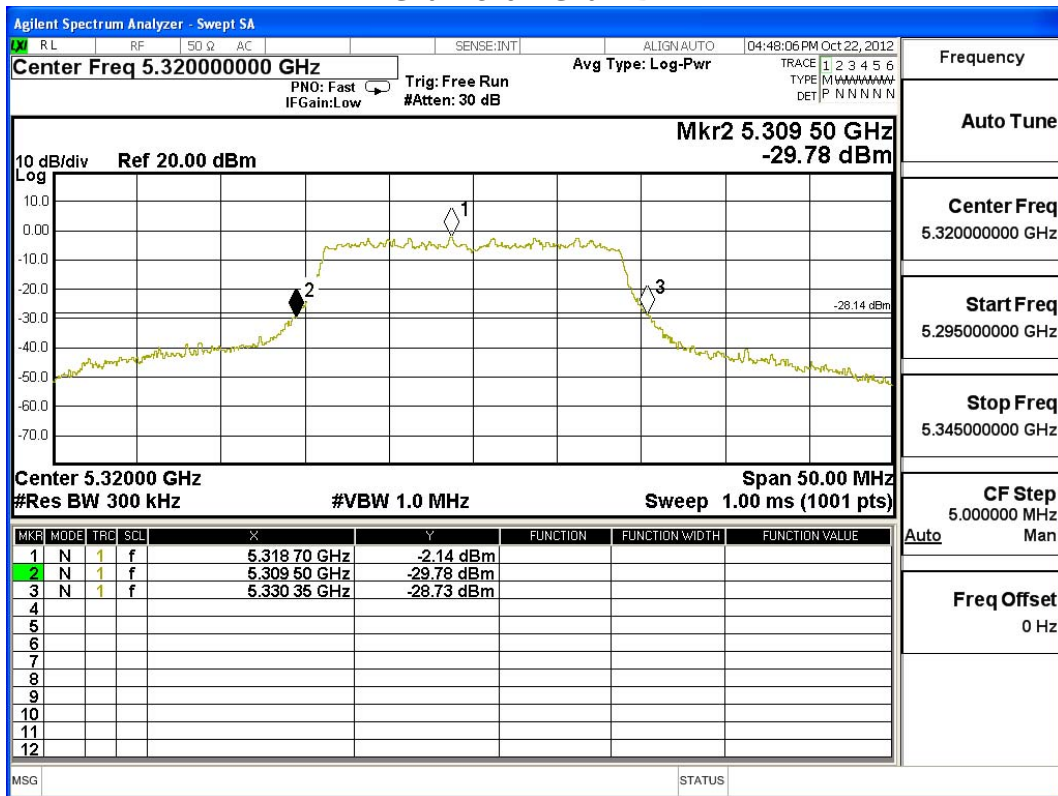
Channel 52 -Chain B



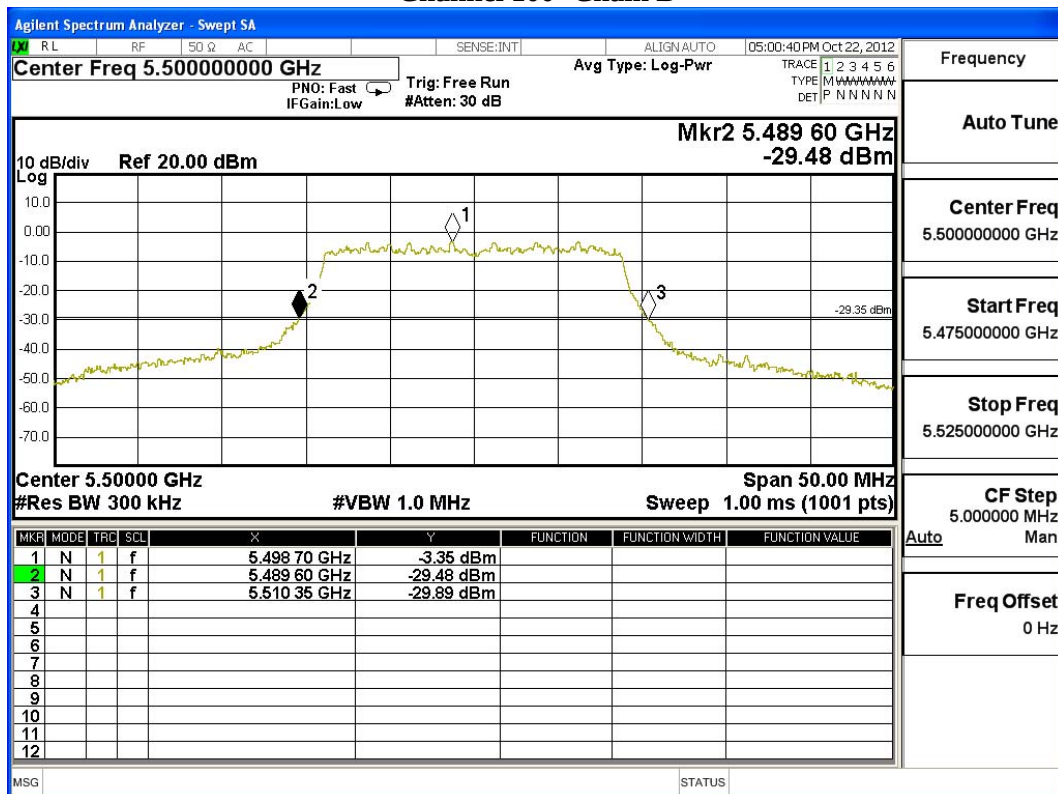
Channel 60 -Chain B



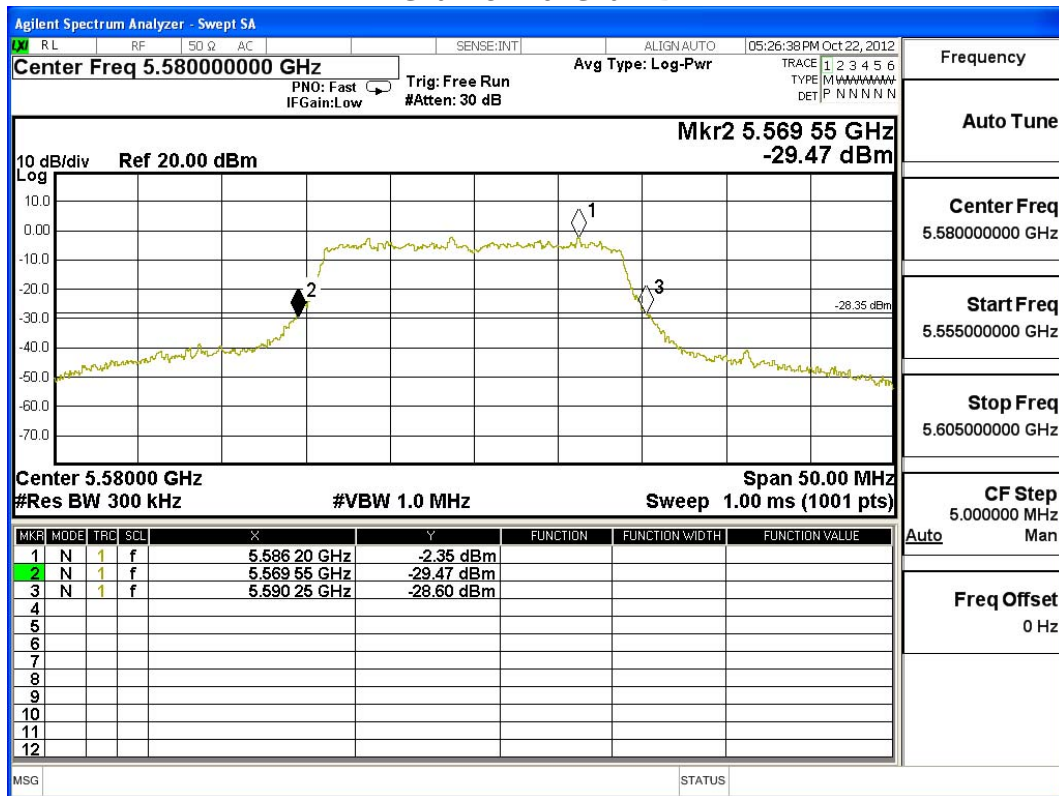
Channel 64 -Chain B



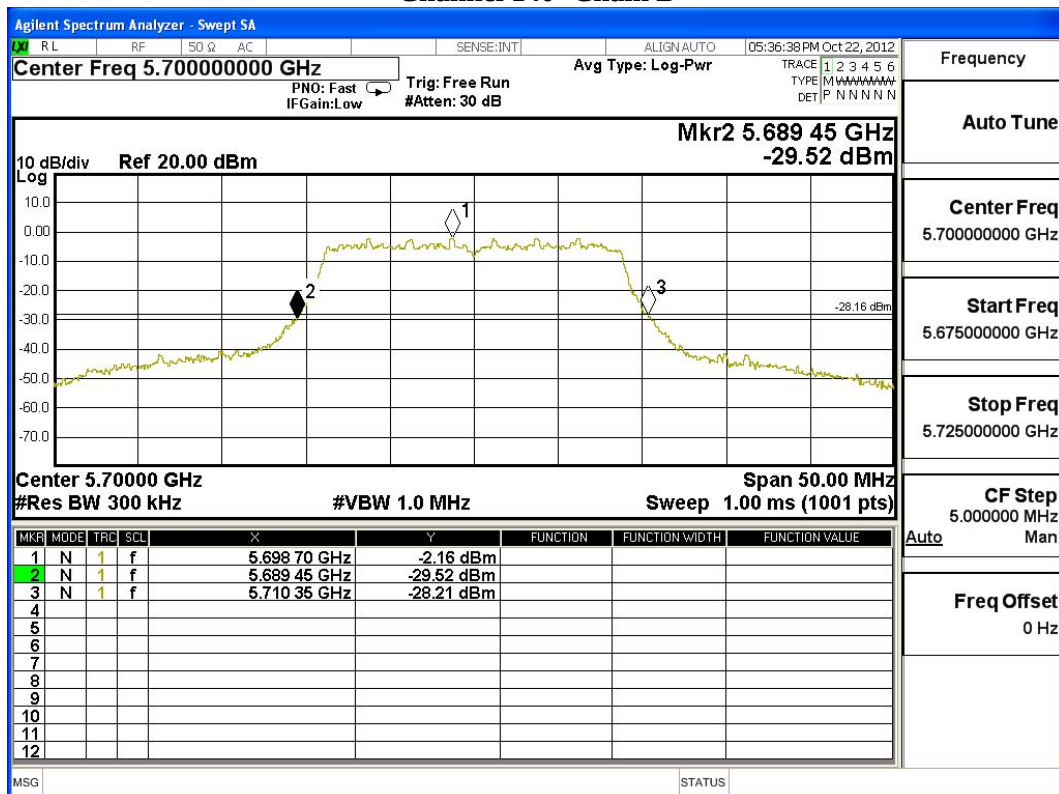
Channel 100 -Chain B



Channel 116 -Chain B



Channel 140 -Chain B



Product : Notebook 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	7.49	--	--	--	--	--	--	--	<17dBm
46	5230	7.26	7.24	7.19	7.15	7.09	7.04	7.01	6.99	<17dBm
54	5270	7.7	--	--	--	--	--	--	--	<17dBm
62	5310	7.32	7.28	7.24	7.19	7.17	7.14	7.09	7.07	<24dBm
102	5510	7.47	--	--	--	--	--	--	--	<24dBm
118	5590	7.56	7.53	7.48	7.44	7.41	7.38	7.34	7.32	<24dBm
134	5670	7.4	--	--	--	--	--	--	--	<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	7.74	--	--	--	--	--	--	--	<17dBm
46	5230	7.55	7.53	7.5	7.48	7.44	7.39	7.37	7.31	<17dBm
54	5270	7.56	--	--	--	--	--	--	--	<17dBm
62	5310	7.45	7.41	7.38	7.36	7.29	7.26	7.21	7.18	<24dBm
102	5510	7.41	--	--	--	--	--	--	--	<24dBm
118	5590	7.3	7.28	7.24	7.17	7.16	7.14	7.11	7.08	<24dBm
134	5670	7.39	--	--	--	--	--	--	--	<24dBm

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