

Product Name	PC to TV Transmitter	
Model No	ZIN-2100T, BV-2100T	
FCC ID.	YG7ZIN2100T	

Applicant	ZINWELL Corporation
Address	7F 512, Yuan Shan Road, Zhonghe Dist, New Taipei City 235, Taiwan

Date of Receipt	Jul. 01, 2011
Issue Date	Sep. 08, 2011
Report No.	117086R-RFUSP28V01
Report Version	V1.0

The test results relate only to the samples tested.

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Test Report Certification

Issue Date: Sep. 08, 2011 Report No.: 117086R-RFUSP28V01



Accredited by NIST (NVLAP) NVLAP Lab Code: 200533-0

Product Name	PC to TV Transmitter			
Applicant	ZINWELL Corporation			
Address	7F 512, Yuan Shan Road, Zhonghe Dist, New Taipei City 235, Taiwan			
Manufacturer	ZINWELL Corporation			
Model No.	ZIN-2100T, BV-2100T			
FCC ID.	YG7ZIN2100T			
EUT Rated Voltage	DC 5V / 0.5A			
EUT Test Voltage	AC 120V/60Hz			
Trade Name	ZINWELL [®] , brite-View			
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2010			
	ANSI C63.4: 2009			
Test Result	t Result Complied			

The test results relate only to the samples tested.

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Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	PC to TV Transmitter			
Trade Name				
Model No.	ZIN-2100T, BV-2100T			
FCC ID.	YG7ZIN2100T			
Frequency Range	2412-2462MHz for 802.11b/g/n-20BW, 2422-2452MHz for 802.11n-40BW			
Number of Channels	802.11b/g/n-20MHz: 11, n-40MHz: 7			
Data Speed	802.11b: 1-11Mbps, 802.11g: 6-54Mbps, 802.11n: up to 150Mbps			
Type of Modulation 802.11b:DSSS (DBPSK, DQPSK, CCK)				
802.11g/n:OFDM (BPSK, QPSK, 16QAM, 64QAM)				
Antenna Type	Printed on PCB			
Antenna Gain	Refer to the table "Antenna List"			
Channel Control	Auto			

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	ZINWELL	N/A	Printed on PCB	2.97dBi for 2.4 GHz

Note:

1. The antenna of EUT is conform to FCC 15.203.

802.11b/g/n-20MHz Center Frequency of Each Channel:

•							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 01:	2412 MHz	Channel 02:	2417 MHz	Channel 03:	2422 MHz	Channel 04:	2427 MHz
Channel 05:	2432 MHz	Channel 06:	2437 MHz	Channel 07:	2442 MHz	Channel 08:	2447 MHz
Channel 09:	2452 MHz	Channel 10:	2457 MHz	Channel 11:	2462 MHz		
802.11n-40M	Hz Center Fre	equency of Ea	ch Channel:				
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 01:	2422 MHz	Channel 02:	2427 MHz	Channel 03:	2432 MHz	Channel 04:	2437 MHz
Channel 05:	2442 MHz	Channel 06:	2447 MHz	Channel 07:	2452 MHz		

- 1. The EUT is a PC to TV Transmitter with a built-in 2.4GHz 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 \$\$\sigma 802.11g is 6Mbps \$\$802.11n(20M-BW) is 7.2Mbps and \$\$802.11n(40M-BW) is 15Mbps)
- 4. These tests are conducted on a sample for the purpose of demonstrating compliance of 802.11b/g/n transmitter with Part 15 Subpart C Paragraph 15.247 of spread spectrum devices.
- 5. The different of each model is shown as below:

Model Number	Trade Name
ZIN-2100T	ZINWELL [®]
BV-2100T	brite-View

1.2. Operational Description

The EUT is a PC to TV Transmitter, This device provided four kinds of transmitting speed 1, 2, 5.5 and 11Mbps and the device of RF carrier is DBPSK, DQPSK and CCK (IEEE 802.11b). The device provided of eight kinds of transmitting speed 6, 9, 12, 18, 24, 36, 48 and 54Mbps the device of RF carrier is BPSK, QPSK, 16QAM and 64QAM (IEEE 802.11g).

The device provided of eight kinds of transmitting speed 7.2,14.4,21.7,28.9,43.3,57.8,65 and 72.2Mbps in 802.11n(20M-BW) mode and 15,30,45,60,90,120,135 and 150Mbps(40M-BW) the device of RF carrier is BPSK, QPSK, 16QAM and 64QAM (IEEE 802.11n), The IEEE 802.11n is Single In, Single Out" (SISO) technology and one antennas to support 1(Transmit) * 1(Receive) SISO technology.

This PC to TV Transmitter, compliant with IEEE 802.11b and IEEE 802.11g/n, is a high-efficiency Wireless LAN adapter. It allows your computer to connect to a wireless network and to share resources, such as files or printers without being bound to the network wires. Operation in 2.4GHz Direst Sequence Spread Spectrum (DSSS) and Orthogonal Frequency Division Multiplexing (OFDM) radio transmission, the PC to TV Transmitter Wired Equivalent Protection (WEP) algorithm is used. In addition, its standard compliance ensures that it can communicate with any IEEE 802.11b and IEEE 802.11g/n network.

Test Mode:	Mode 1: Transmit (802.11b 1Mbps)
	Mode 2: Transmit (802.11g 6Mbps)
	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)
	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

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	Notebook PC	DELL	РРТ	N/A	Non-Shielded, 0.8m
2	USB Mouse	DELL	MO56UC	G0X01JK0	N/A
3	Modem	ACEEX	DM-1414	0102027558	Non-Shielded, 1.8m
4	Monitor	LG	W2261VT	907YHED07299	Non-Shielded, 1.8m
5	Microphone &	Ergotech	ET-E201	N/A	
	Earphone				IN/A

Signa	l Cable Type	Signal cable Description		
А	Mouse Cable	Shielded, 1.8m		
В	Modem Cable	Shielded, 1.5m		
С	VGA Cable	Shielded, 1.8m, with two ferrite cores bonded.		
D	Microphone & Earphone Cable	Non-Shielded, 1.2m		

1.4. Configuration of Tested System



1.5. EUT Exercise Software

- (1) Setup the EUT and peripherals as shown in Section 1.4
- (2) Execute "RT5X7XQA.exe (v1.0.3.6)" on the Notebook.
- (3) Configure the test mode, the test channel, and the data rate to start the continuous transmit.
- (4) 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: <u>http://www.quietek.com/tw/ctg/cts/accreditations.htm</u> The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site: <u>http://www.quietek.com/</u>

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





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FCC Accreditation Number: TW1014



2. Conducted Emission

2.1. Test Equipment

The following test equipment are used during the conducted emission test:

Item	Instrument	Manufacturer	Type No./Serial No	Last Cal.	Remark
1	Test Receiver	R & S	ESCS 30/825442/17	May, 2011	
2	L.I.S.N.	R & S	ESH3-Z5/825016/6	May, 2011	EUT
3	L.I.S.N.	Kyoritsu	KNW-407/8-1420-3	May, 2011	Peripherals
4	Pulse Limiter	R & S	ESH3-Z2	May, 2011	
5	No.1 Shielded Roor	n		N/A	

Note: All instruments are calibrated every one year.

2.2. Test Setup



2.3. Limits

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

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.

2.5. Uncertainty

± 2.26 dB

2.6. Test Result of Conducted Emission

Product	:	PC to TV Transmitter
Test Item	:	Conducted Emission Test
Power Line	:	Line 1
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)

Frequency	Correct	Reading	ig Measurement Margin		Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.181	9.724	43.420	53.144	-11.970	65.114
0.244	9.679	35.120	44.799	-18.515	63.314
0.435	9.640	28.200	37.840	-20.017	57.857
0.658	9.630	38.680	48.310	-7.690	56.000
0.724	9.632	35.300	44.932	-11.068	56.000
4.107	4.107 9.700 20		29.700	-26.300	56.000
Average					
0.181	9.724	34.330	44.054	-11.060	55.114
0.244	9.679	26.420	36.099	-17.215	53.314
0.435	9.640	17.490	27.130	-20.727	47.857
0.658	9.630	25.640	35.270	-10.730	46.000
0.724	9.632	25.260	34.892	-11.108	46.000
4.107	9.700	9.390	19.090	-26.910	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.

2. " " means the worst emission level.

3. Measurement Level = Reading Level + Correct Factor

P	roduct	: PC to TV Transmitter										
Te	Test Item : Conducted Emission Test											
Р	ower Line	: Line 2										
Te	est Mode	: Mode 4:	Transmit (802.11	n MCS0 15Mbps 401	M-BW) (2437MH	Iz)						
				*		, ,						
Freque	ncy	Correct	Reading	Measurement	Margin	Limit						
		Factor	Level	Level								
MHz	Z	dB	dBuV	dBuV	dB	dBuV						
Line	2											
Quasi-P	eak											
0.18	1	9.732	41.800	51.532	-13.582	65.114						
0.244	4	9.689	33.740	43.429	-19.885	63.314						
0.300	6	9.660	27.700	37.360	-24.183	61.543						
0.423	3	9.650	29.800	39.450	-18.750	58.200						
0.69	7	9.650	42.500	52.150	-3.850	56.000						
4.18	5	9.700	19.300	29.000	-27.000	56.000						
Avera	ge											
0.18	1	9.732	32.910	42.642	-12.472	55.114						
0.244	4	9.689	24.870	34.559	-18.755	53.314						
0.300	6	9.660	19.170	28.830	-22.713	51.543						
0.423	3	9.650	20.060	29.710	-18.490	48.200						
0.69	7	9.650	32.650	42.300	-3.700	46.000						
4.18	5	9.700	8.500	18.200	-27.800	46.000						

- 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 Power Output

3.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.					
Х	Power Meter	Anritsu	ML2495A/6K00003357	May, 2011					
Х	Power Sensor	Anritsu	MA2411B/0738448	Jun, 2011					
Note:									
1.	All equipments are calibrated with traceable calibrations. Each calibration is traceable to the								
	national or international standards.								
2.	The test instrument	s marked with "X"	are used to measure the final te	est results.					

3.2. Test Setup

Conducted Measurement



3.3. Limits

The maximum peak power shall be less 1 Watt.

3.4. Test Procedure

The EUT was tested according to DTS test procedure of Mar. 2005 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

3.5. Uncertainty

 \pm 1.27 dB

3.6. Test Result of Peak Power Output

Product	:	PC to TV Transmitter
Test Item	:	Peak Power Output Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps)

Channal Na	Frequency	For d	Average ifferent Da	e Power ata Rate (N	(lbps)	Peak Power	Required	Result	
Channel No	(MHz)	1	2	5.5	11	1	Limit	Result	
			Measur						
01	2412	15.95				18.84	<30dBm	Pass	
06	2437	16.15	16.15	16.14	16.1	18.98	<30dBm	Pass	
11	2462	16.03				18.85	<30dBm	Pass	

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

Product	:	PC to TV Transmitter
Test Item	:	Peak Power Output Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps)

Channel No	Fraquanay		Average PowerPeakFor different Data Rate (Mbps)Power									
	(MHz)	6	9	12	18	24	36	48	54	6	Limit	Result
			Measurement Level (dBm)									
01	2412	14.02			-					24.22	<30dBm	Pass
06	2437	14.21	14.19	14.18	14.15	14.14	14.14	14.11	14.02	24.32	<30dBm	Pass
11	2462	14.11								24.64	<30dBm	Pass

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

Product	:	PC to TV Transmitter
Test Item	:	Peak Power Output Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

			Average PowerPeakFor different Data Rate (Mbps)Power									
Channel No	Frequency (MHz)	7.2	14.4	21.7	28.9	43.3	57.8	65	72.2	7.2	Required Limit	Result
				Ν	Aeasure	ement L	level (d	Bm)				
01	2412	12.74					-			23.35	<30dBm	Pass
06	2437	12.97	12.96	12.95	12.95	12.94	12.92	12.9	12.87	23.39	<30dBm	Pass
11	2462	12.51								23.44	<30dBm	Pass

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

Product	:	PC to TV Transmitter
Test Item	:	Peak Power Output Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

	Fraguanay		F	for diffe	Average erent Da	e Power ata Rate	r e (Mbps	5)		Peak Power	Paguirad	
Channel No	(MHz)	15	30	45	60	90	120	135	150	15	Limit	Result
				Ν	Aeasure	ement L	level (d	Bm)				
01	2422	12.71					-			23.08	<30dBm	Pass
04	2437	12.78	12.78	12.76	12.74	12.71	12.68	12.64	12.61	23.02	<30dBm	Pass
07	2452	12.51								23.21	<30dBm	Pass

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

4. Radiated Emission

4.1. Test Equipment

The following test equipment are used during the radiated emission test:

Test Site	Equipment		Manufacturer	Model No./Serial No.	Last Cal.
Site # 3	Х	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2011
	Х	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2011
	Х	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2011
	Х	Pre-Amplifier	Agilent	8447D/2944A09549	Sep., 2011
	Х	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2011
	Х	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2011
	Х	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2011
	Х	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	Х	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

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

Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



4.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209(a) Limits									
Frequency MHz	uV/m@3m	dBuV/m@3m							
30-88	100	40							
88-216	150	43.5							
216-960	200	46							
Above 960	500	54							

Remarks: E field strength $(dBuV/m) = 20 \log E$ field strength (uV/m)

4.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2009 and tested according to DTS test procedure of Mar. 2005 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2009 on radiated measurement.

The resolution bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

Radiated emission measurements below 1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement. The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna. The worst radiated emission is measured in the Open Area Test Site on the Final Measurement. The frequency range from 30MHz to 10th harminics is checked.

4.5. Uncertainty

- ± 3.9 dB above 1GHz
- ± 3.8 dB below 1GHz

74.000

-24.204

4.6. Test Result of Radiated Emission

Product	:	PC to TV Transmitter
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	3.261	39.740	43.001	-30.999	74.000
7236.000	10.650	36.530	47.180	-26.820	74.000
9648.000	13.337	36.760	50.096	-23.904	74.000
Average Detector:					
Vertical					
Peak Detector:					
4824.000	6.421	42.210	48.631	-25.369	74.000
7236.000	11.495	36.340	47.835	-26.165	74.000

Average Detector:

9648.000

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

49.796

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

35.990

4. Measurement Level = Reading Level + Correct Factor.

13.807

- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	PC to TV Transmitter[u1]							
Test Item	: Harmonic Radiated Emission Data							
Test Site	: No.3 OATS							
Test Mode	: Mode 1: Transmit (802.11b 1Mbps) (2437 MHz)							
Frequency	Correct	Reading	Measurement	Margin	Limit			
	Factor	Level	Level					
MHz	dB	dBuV	dBuV/m	dB	dBuV/m			
Horizontal								
Peak Detector:								
4874.000	3.038	39.940	42.977	-31.023	74.000			
7311.000	11.795	35.620	47.414	-26.586	74.000			
9748.000	12.635	36.900	49.535	-24.465	74.000			
Average Detector:								
Vertical								
Peak Detector:								
4874.000	5.812	42.280	48.091	-25.909	74.000			
7311.000	12.630	35.490	48.119	-25.881	74.000			
9748.000	13.126	37.560	50.686	-23.314	74.000			

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: PC to TV Transmitter[u2]							
Test Item	: Harmonic Radiated Emission Data							
Test Site	: No.3 OATS							
Test Mode	: Mode 1:	Transmit (802.11	b 1Mbps) (2462 MH	z)				
Frequency	Correct	Reading	Measurement	Margin	Limit			
	Factor	Level	Level					
MHz	dB	dBuV	dBuV/m	dB	dBuV/m			
Horizontal								
Peak Detector:								
4924.000	2.858	40.320	43.177	-30.823	74.000			
7386.000	12.127	35.420	47.548	-26.452	74.000			
9848.000	12.852	37.640	50.493	-23.507	74.000			
Average Detector:								
Vertical								
Peak Detector:								
4924.000	5.521	42.550	48.070	-25.930	74.000			
7386.000	13.254	35.170	48.424	-25.576	74.000			
9848.000	13.367	36.630	49.997	-24.003	74.000			

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- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: PC to TV Transmitter[u3]							
Test Item	: Harmonic Radiated Emission Data							
Test Site	: No.3 OATS							
Test Mode	: Mode 2	Transmit (802.11	g 6Mbps) (2412MHz	z)				
Frequency	Correct	Reading	Measurement	Margin	Limit			
	Factor	Level	Level					
MHz	dB	dBuV	dBuV/m	dB	dBuV/m			
Horizontal								
Peak Detector:								
4824.000	3.261	37.710	40.971	-33.029	74.000			
7236.000	10.650	36.050	46.700	-27.300	74.000			
9648.000	13.337	36.030	49.366	-24.634	74.000			
Average Detector:								
Vertical								
Peak Detector:								
4824.000	6.421	37.770	44.191	-29.809	74.000			
7236.000	11.495	36.090	47.585	-26.415	74.000			
9648.000	13.807	36.070	49.876	-24.124	74.000			

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	PC to TV Transmitter[u4]								
Test Item	: Harmonic Radiated Emission Data								
Test Site	: No.3 OATS								
Test Mode	: Mode 2:	Transmit (802.11	g 6Mbps) (2437 MH	z)					
Frequency	Correct	Reading	Measurement	Margin	Limit				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m				
Horizontal									
Peak Detector:									
4874.000	3.038	37.370	40.407	-33.593	74.000				
7311.000	11.795	35.920	47.714	-26.286	74.000				
9748.000	12.635	36.600	49.235	-24.765	74.000				
Average Detector:									
Peak Detector:									
4874.000	5.812	37.610	43.421	-30.579	74.000				
7311.000	12.630	35.480	48.109	-25.891	74.000				
9748.000	13.126	36.090	49.216	-24.784	74.000				

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- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: PC to TV Transmitter[u5]						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 2: Transmit (802.11g 6Mbps) (2462 MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
4924.000	2.858	36.990	39.847	-34.153	74.000		
7386.000	12.127	34.900	47.028	-26.972	74.000		
9848.000	12.852	36.650	49.503	-24.497	74.000		
Average Detector:							
Vertical							
Peak Detector:							
4924.000	5.521	39.600	45.120	-28.880	74.000		
7386.000	13.254	35.150	48.404	-25.596	74.000		
9848.000	13.367	36.310	49.677	-24.323	74.000		

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: PC to TV Transmitter[u6]						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 3:	Transmit (802.11	n MCS0 7.2Mbps 20	M-BW)(2412MH	Iz)		
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
4824.000	3.261	37.630	40.891	-33.109	74.000		
7236.000	10.650	35.850	46.500	-27.500	74.000		
9648.000	13.337	36.130	49.466	-24.534	74.000		
Average Detector:							
Vertical							
Peak Detector:							
4824.000	6.421	38.370	44.791	-29.209	74.000		
7236.000	11.495	36.240	47.735	-26.265	74.000		
9648.000	13.807	36.450	50.256	-23.744	74.000		

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	PC to TV Transmitter[u7]
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.038	37.090	40.127	-33.873	74.000
7311.000	11.795	35.250	47.044	-26.956	74.000
9748.000	12.635	36.680	49.315	-24.685	74.000
Average Detector:					
Vertical					
Peak Detector:					

4874.000

7311.000

9748.000

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Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

42.811

47.959

49.536

-31.189

-26.041

-24.464

74.000

74.000

74.000

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

37.000

35.330

36.410

4. Measurement Level = Reading Level + Correct Factor.

5.812

12.630

13.126

- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	PC to TV Transmitter[u8]
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2462 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	2.858	37.580	40.437	-33.563	74.000
7386.000	12.127	35.090	47.218	-26.782	74.000
9848.000	12.852	36.940	49.793	-24.207	74.000
Average Detector:					
Vertical					
Peak Detector:					

4924.000 5.521 38.920 44.440 -29.560 74.000 7386.000 34.890 48.144 -25.856 74.000 13.254 9848.000 74.000 13.367 36.100 49.467 -24.533

Average Detector:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	PC to TV Transmitter[u9]
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2422MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4844.000	3.171	39.340	42.511	-31.489	74.000
7266.000	11.162	36.170	47.332	-26.668	74.000
9688.000	12.964	36.910	49.875	-24.125	74.000
Average Detector:					
Vertical					
Peak Detector:					
4844.000	6.178	39.790	45.968	-28.032	74.000
7266.000	11.982	36.360	48.342	-25.658	74.000
9688.000	13.507	37.800	51.308	-22.692	74.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	PC to TV Transmitter[u10]						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2437 MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
4874.000	3.038	39.950	42.987	-31.013	74.000		
7311.000	11.795	35.850	47.644	-26.356	74.000		
9748.000	12.635	37.230	49.865	-24.135	74.000		
Average Detector:							
Vertical							
Peak Detector:							
4874.000	5.812	39.850	45.661	-28.339	74.000		
7311.000	12.630	36.170	48.799	-25.201	74.000		
9748.000	13.126	36.860	49.986	-24.014	74.000		

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: PC to TV Transmitter[u11]						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2452 MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
4904.000	2.914	40.500	43.415	-30.585	74.000		
7356.000	11.995	35.140	47.134	-26.866	74.000		
9808.000	12.475	36.950	49.425	-24.575	74.000		
Average Detector:							
Vertical							
Peak Detector:							
4904.000	5.530	41.660	47.191	-26.809	74.000		
7356.000	13.005	35.860	48.864	-25.136	74.000		
9808.000	12.901	36.730	49.631	-24.369	74.000		

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: PC to TV Transmitter[u12]						
Test Item	: General Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 1:	Transmit (802.11	b 1Mbps)(2437 MHz	z)			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
57.214	-13.820	39.064	25.244	-14.756	40.000		
241.884	-9.371	43.404	34.033	-11.967	46.000		
366.293	-4.134	38.508	34.374	-11.626	46.000		
409.058	-2.027	40.513	38.486	-7.514	46.000		
432.385	-1.754	35.535	33.781	-12.219	46.000		
961.122	3.701	40.367	44.068	-9.932	54.000		
Vertical							
57.214	-15.504	45.326	29.822	-10.178	40.000		
115.531	-9.208	38.857	29.649	-13.851	43.500		
409.058	-2.845	38.984	36.139	-9.861	46.000		
607.335	-0.077	31.892	31.815	-14.185	46.000		
747.295	0.621	33.882	34.503	-11.497	46.000		
961.122	4.452	35.943	40.395	-13.605	54.000		

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

: PC to TV Transmitter[u13]						
: General Radiated Emission Data						
: No.3 OATS						
: Mode 2:	Transmit (802.11	g 6Mbps)(2437 MHz				
Correct	Reading	Measurement	Margin	Limit		
Factor	Level	Level				
dB	dBuV	dBuV/m	dB	dBuV/m		
-13.820	39.313	25.493	-14.507	40.000		
-9.784	47.041	37.257	-8.743	46.000		
-3.224	36.300	33.076	-12.924	46.000		
-2.044	35.715	33.671	-12.329	46.000		
2.982	31.793	34.775	-11.225	46.000		
3.701	37.939	41.640	-12.360	54.000		
-15.148	48.490	33.342	-6.658	40.000		
-9.637	38.151	28.513	-14.987	43.500		
-2.884	37.891	35.007	-10.993	46.000		
-0.077	32.264	32.187	-13.813	46.000		
1.382	30.463	31.845	-14.155	46.000		
4.452	38.762	43.214	-10.786	54.000		
	 PC to TV General No.3 OA Mode 2: Correct Factor dB -13.820 -9.784 -3.224 -2.044 2.982 3.701 -15.148 -9.637 -2.884 -0.077 1.382 4.452 	 PC to TV Transmitter[u13 General Radiated Emissio No.3 OATS Mode 2: Transmit (802.11 Correct Reading Factor Level dB dBuV -13.820 39.313 -9.784 47.041 -3.224 36.300 -2.044 35.715 2.982 31.793 3.701 37.939 -15.148 48.490 -9.637 38.151 -2.884 37.891 -0.077 32.264 1.382 30.463 4.452 38.762 	 PC to TV Transmitter[u13] General Radiated Emission Data No.3 OATS Mode 2: Transmit (802.11g 6Mbps)(2437 MHz Correct Reading Measurement Factor Level Level dB dBuV dBuV/m -13.820 39.313 25.493 -9.784 47.041 37.257 -3.224 36.300 33.076 -2.044 35.715 33.671 2.982 31.793 34.775 3.701 37.939 41.640 -15.148 48.490 33.342 -9.637 38.151 28.513 -2.884 37.891 35.007 -0.077 32.264 32.187 1.382 30.463 31.845 4.452 38.762 43.214	 PC to TV Transmitter[u13] General Radiated Emission Data No.3 OATS Mode 2: Transmit (802.11g 6Mbps)(2437 MHz) Correct Reading Measurement Margin Factor Level Level dB dBuV dBuV/m dB -13.820 39.313 25.493 -14.507 -9.784 47.041 37.257 -8.743 -3.224 36.300 33.076 -12.924 -2.044 35.715 33.671 -12.329 2.982 31.793 34.775 -11.225 3.701 37.939 41.640 -12.360 -15.148 48.490 33.342 -6.658 -9.637 38.151 28.513 -14.987 -2.884 37.891 35.007 -10.993 -0.077 32.264 32.187 -13.813 1.382 30.463 31.845 -14.155 4.452 38.762 43.214 -10.786		

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: PC to TV Transmitter[u14]									
Test Item	: General	Radiated Emissio	on Data							
Test Site	: No.3 OA	ATS								
Test Mode	: Mode 3	: Transmit (802.11	n MCS0 7.2Mbps 20	M-BW)(2437 M	Hz)					
Frequency	Correct	Reading	Measurement	Margin	Limit					
	Factor	Level	Level							
MHz	dB	dBuV	dBuV/m	dB	dBuV/m					
Horizontal										
57.214	-13.820	40.586	26.766	-13.234	40.000					
232.164	-10.002	38.681	28.679	-17.321	46.000					
414.890	-2.044	39.573	37.529	-8.471	46.000					
430.441	-1.826	39.702	37.876	-8.124	46.000					
700.641	1.863	28.573	30.436	-15.564	46.000					
961.122	3.701	36.865	40.566	-13.434	54.000					
Vertical										
57.214	-15.504	45.835	30.331	-9.669	40.000					
117.475	-9.637	40.098	30.460	-13.040	43.500					
175.792	-6.301	41.215	34.914	-8.586	43.500					
414.890	-2.884	37.041	34.157	-11.843	46.000					
751.182	0.600	30.643	31.243	-14.757	46.000					
961.122	4.452	40.517	44.969	-9.031	54.000					

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: PC to TV Transmitter[u15]									
Test Item	: General	Radiated Emissio	on Data							
Test Site	: No.3 OA	ATS								
Test Mode	: Mode 4:	Transmit (802.11	n MCS0 15Mbps 401	M-BW)(2437 ME	Iz)					
			*		,					
Frequency	Correct	Reading	Measurement	Margin	Limit					
	Factor	Level	Level							
MHz	dB	dBuV	dBuV/m	dB	dBuV/m					
Horizontal										
120.004	-16.256	41.300	25.044	-18.456	43.500					
240.000	-14.770	50.400	35.630	-10.370	46.000					
360.001	-12.159	51.600	39.441	-6.559	46.000					
480.003	-9.212	30.400	21.188	-24.812	46.000					
720.001	-4.397	34.600	30.203	-15.797	46.000					
840.001	-3.279	45.400	42.121	-3.879	46.000					
Vertical										
120.001	-16.088	48.300	32.212	-11.288	43.500					
240.002	-17.136	55.500	38.364	-7.636	46.000					
360.000	-12.382	52.100	39.718	-6.282	46.000					
480.001	-9.212	43.100	33.888	-12.112	46.000					
720.003	-6.890	33.500	26.610	-19.390	46.000					
840.000	-3.279	39.600	36.321	-9.679	46.000					

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

5. **RF** antenna conducted test

5.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2011
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2011
Х	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.

5.2. Test Setup

RF antenna Conducted Measurement:



5.3. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.4. Test Procedure

The EUT was tested according to DTS test procedure of Mar. 2005 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Set VBW> RBW, scan up through 10th harmonic.

5.5. Uncertainty

The measurement uncertainty Conducted is defined as \pm 1.27dB

5.6. Test Result of RF antenna conducted test

Product	:	PC to TV Transmitter
Test Item	:	RF antenna conducted test
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps)

Channel 01 (2412MHz)

Agiler	nt Spectru	m Analyzer - Sv	vept SA								
⊯ Sto	p Freq	RF 50 9	2 AC 0000 GH	z	SEI		Avg Type	LIGNAUTO	12:20:55	AM Jul 14, 2011 E 1 2 3 4 5 6	Frequency
10 di	B/div	Ref 20.00	⊧ ⊮ dBm	PNO: Fast () Gain:Low	Atten: 30	dB	Avginoid.	Mk	r1 795.6 -54.1	21 MHz 19 dBm	Auto Tune
10.0											Center Freq 515.000000 MHz
0.00 -10.0										-15.01 dBm	Start Freq 30.000000 MHz
-20.0 -30.0											Stop Freq 1.000000000 GHz
-40.0 -50.0									1		CF Step 97.000000 MHz <u>Auto</u> Man
-60.0	a kalen oradi yang Ngang ta papapatan		ini na sa si ka ja ja a fi na para programa na para sa sa p		ulta para di Indonesi Interneti papa da na		a an			and a life of a life of the li	Freq Offset 0 Hz
-/0.0 Star #Re	t 30.0 s BW 1	VIHz 00 kHz		#VBW	1.0 MHz			Sweep 9	Stop 1.0 90.0 ms (1	0000 GHz 0001 pts)	
MSG								STATU	s		

Agilent S	Spectru	m Analyzer	- Swept SA									
w Start	Freq	RF 1.000	50 Ω AC	GHz		SEI	NSE:INT	Avg Type AvgIHold	ALIGNAUTO : Log-Pwr 29/100	12:20:07 / TRAC	AM Jul 14, 2011 E 1 2 3 4 5 6 E M MANAMAN	Frequency
10 dB/e	div	Ref 20.	00 dBm	IFGai	rast () n:Low	Atten: 30	dB		Mk	r1 2.413 4.98	3 5 GHz 87 dBm	Auto Tune
10.0 -		∳ ¹ ·		~								Center Freq 6.500000000 GHz
0.00											-15.01 dBm	Start Freq 1.000000000 GHz
-20.0 — -30.0 —												Stop Freq 12.00000000 GHz
-40.0 -								ามีเลก				CF Step 1.10000000 GHz <u>Auto</u> Man
-60.0	وللبيس						in the fight of the second			in a state of the second s Second second		Freq Offset 0 Hz
Start	1.000	GHz				4.0 MU-			Succes	Stop 12	.000 GHz	
#Res MSG	BW 1	UU KMZ			#VBW	1.0 MHZ			SWeep	1.02 S (1	oour prs)	

Start Freq	RF 50 Ω 12.0000000	AC 000 GHz PNO: Fast G	SE Tria: Free	NSE:INT	Aug Type	ALIGN AUTO	12:20:33/	AM Jul 14, 2011	Fragueness
		PNO: Fast G	1 119.1165	Dun	Avg Type	: Log-Pwr 8/100	TRAC	E 1 2 3 4 5 6	Frequency
10 dB/div	Ref 20.00 dB	m	Atten: 30	dB		Mkr	□ 1 23.694 -40.62	B GHz 0 dBm	Auto Tune
10.0									Center Freq 18.50000000 GHz
-10.0								-15.01 dBm	Start Freq 12.000000000 GHz
-20.0									Stop Freq 25.000000000 GHz
-40.0	Line Mephily	and the first of the first of the second							CF Step 1.30000000 GHz <u>Auto</u> Man
-60.0		i na kalanda da kalanda yang da kalanda da ka							Freq Offset 0 Hz
Start 12.00 #Res BW 1	0 GHz 00 kHz	#VB\				Sweep	Stop 25. 1.20 s (1	000 GHz 0001 pts)	



Agiler	nt Spectru	m Analyzer - S	wept SA								
LXI		RF 50	Ω AC		SEM	VSE:INT		ALIGN AUTO	0 12:17:55	AM Jul 14, 2011	E
Star	rt Frec	30.0000	00 MHz				Avg Type	: Log-Pwi	TRA	E 123456	Frequency
10 di	Bidiy	Ref 20.00	P IF	NO: Fast 😱 Gain:Low	¹ Trig: Free Atten: 30	Run dB	Avg Hold:	87/100 MI	kr1 869.1 -54.7	47 MHz 68 dBm	Auto Tune
Log		RCI 20.00		r							
10.0									-		Center Freq
0.00											
											Start Freq
-10.0											30.000000 MHz
-				6						-15.83 dBm	
-20.0											Stop Freq
											1.000000000 GHz
-30.0											
-40.0											CF Step
40.0											97.000000 MHz
-50.0									1		<u>Auto</u> Man
	50	22 10								and the late	
-60.0				المحمد المحمد المحمد المحمد إليان. محمد المحمد ا	1999 - 1999 -		مرافقان المعنية الألباني معرومة معروف وقايلة بالمراجع من والإست	en likste der formen en Kontender formen en der	all and a line of the second	na distanta any sidilari	Freq Offset
	1005 20203		1996 - 1998 - 196 - 196								0 Hz
-70.0						-					
Star	1 30.0	MHz					1		Ston 1	1000 GHz	
#Re	s BW '	100 kHz		#VBW	1.0 MHz		9	Sweep	90.0 ms (1	0001 pts)	
MSG								STAT	US		
-									1		

Channel 06 (2437MHz)

Agilen	it Spectri	ım Analy	zer - Sw	ept SA								
⊯ Star	t Free	RF 1.0 0	50 Ω 00000	AC 0000 GH	z	SE		Avg Type	ALIGNAUTO : Log-Pwr 54/100	12:16:42 TRAC	AM Jul 14, 2011 E 1 2 3 4 5 6	Frequency
10 de	3/div	Ref 2	:0.00 c	iBm	'NO: Fast (Gain:Low	Atten: 30	dB	Grafinoid.	Mk	r1 2.43 4.1	5 5 GHz 66 dBm	Auto Tune
10.0) ¹									Center Freq 6.50000000 GHz
0.00 -10.0											-15.83 dBm	Start Freq 1.000000000 GHz
-20.0 -30.0												Stop Freq 12.00000000 GHz
-40.0					.00	ti nerile () tot						CF Step 1.100000000 GHz <u>Auto</u> Man
-60.0		~	Niek lin						land de addaethad Segunder an de angel	lang lakin di kitan di Manana kana kana kana kana kana kana kan	and an and a second	Freq Offset 0 Hz
-70.0 Star	t 1.00	0 GHz								Stop 12	.000 GHz	
#Re: MSG	s BW	100 kH	lz		#VBW	1.0 MHz			Sweep STATUS	1.02 s (1	0001 pts)	

Agilen	it Spectru	m Analyzer - Si	wept SA								
بير Star	rt Frec	RF 50	Ω AC 00000 GI	Hz	SE	NSE:INT	Avg Type	ALIGNAUTO	12:17:21 TRAC	AM Jul 14, 2011 E 1 2 3 4 5 6	Frequency
10 di	B/div	Ref 20.00	P IF dBm	NO: Fast (Gain:Low	Atten: 30	dB	Avginoid.	Mkr	1 23.624 -41.3	4 6 GHz 59 dBm	Auto Tune
10.0											Center Freq 18.500000000 GHz
0.00 -10.0										-15.83 dBm	Start Freq 12.000000000 GHz
-20.0 -30.0											Stop Freq 25.00000000 GHz
-40.0 -50.0		La reference	and stated states and the	t - the state	antitudi kale yilin	an peritana dala	Hilling Langton	. a. da Kastelara (jurga, fra 1997 - Santa Santa (jurga), fra			CF Step 1.300000000 GHz <u>Auto</u> Man
-60.0	a la tildan karna Anger ett megnerale		and a feed of the second s								Freq Offset 0 Hz
-70.0 Star #Re:	t 12.00 s BW 1	00 GĤz 100 kHz		#VBW	1.0 MHz			Sweep	Stop 25 1.20 s (1	.000 GHz 0001 pts)	
MSG								STATUS			

Channel 11 (2462MHz)

Agilent Spectr	um Analyzer - Swep	t SA								
Start Fre	RF 50 Ω q 30.000000	AC MHz		SE	NSE:INT	Avg Type	ALIGNAUTO	12:23:08	AM Jul 14, 2011 E 1 2 3 4 5 6	Frequency
10 dB/div	Ref 20.00 dE	3m	PNO: Fast 😱 Gain:Low	Atten: 30	dB	Avginola.	Mk	r1 776.3 -54.3	18 MHz 30 dBm	Auto Tune
10.0										Center Freq 515.000000 MHz
-10.0									-14.97 dBm	Start Freq 30.000000 MHz
-20.0										Stop Freq 1.000000000 GHz
-40.0							1			CF Step 97.000000 MHz <u>Auto</u> Man
-60.0		t of a state from at	in te pa piète s ^{ub} ies (m Mangangangan su sa su	ad sind to a star of a	lollacio adlegno. Response de la compa	uk og bodlesjk ek skologi og og som over på ser og de	di talimirat			Freq Offset 0 Hz
-70.0	MU7							Stop 1 (
#Res BW	100 kHz		#VBW	1.0 MHz		9	Sweep 9	90.0 ms (1	0001 pts)	

Agilent Spectrum Analyzer - Swept SA												
ا ير Stai	rt Free	RF 1.0	50 Ω 00000	AC 0000 GH	z	SE	NSE:INT	Avg Type	ALIGNAUTO	12:21:59 TRAC	AM Jul 14, 2011 E 1 2 3 4 5 6	Frequency
10 di Log	B/div	Ref 2	:0.00 c	1Bm	PNO: Fast 🕞 FGain:Low	Atten: 30	dB	Avginoia.	Mk	r1 2.464 5.0	4 1 GHz 30 dBm	Auto Tune
10.0			1-									Center Freq 6.50000000 GHz
0.00 -10.0											-14.97 dBm	Start Freq 1.000000000 GHz
-20.0 -30.0												Stop Freq 12.000000000 GHz
-40.0 -50.0						it ne met et ar die						CF Step 1.10000000 GHz <u>Auto</u> Man
-60.0	مادونی (زرجی مربعات کوربری								e ord, na silila olitika prostani olitika	a di setta d Setta di setta di sett	U mining and a second	Freq Offset 0 Hz
Star #Re	t 1.00 s BW	0 GHz 100 kH	łz		#VBW	/ 1.0 MHz			Sweep	Stop 12 1.02 s (1	.000 GHz 0001 pts)	
MSG									STATUS			

Agilent Spectrum Analyzer - Swept SA				
	SENSE:IN	ALIGNAUTO	12:22:36 AM Jul 14, 2011 TRACE 1 2 3 4 5 6	Frequency
PNO: Fa	st 🕞 Trig: Free Run	Avg Hold: 9/100	TYPE MWWWWW	
IFGain:Lu	w Atten: 30 dB	Miles	4 02 040 2 011-	Auto Tune
		IVIKI	-40 304 dBm	
Log			-40.004 abiii	
				Center Freq
10.0				18.50000000 GHz
0.00				
				StartFreq
-10.0			-14 97 dBm	12.00000000 GHz
-20.0				Stop Freq
30.0				25.00000000 GHz
35.5			<u>1</u>	
-40.0			• •	CF Step
		ս ու երել է հանձեններերությո	والراح وبالأولين المراجع أفله والزاريهي	1.30000000 GHz
-50.0	ويتباريك ألاتأ ومحاقة لالمرب المعتمان	and the local distance of the second second second	and a second sec	<u>Auto</u> Man
il laine she all all all all all all all all all al	and the second			
-60.0				Freq Offset
				0 Hz
-70.0				
Start 12.000 GHz			Stop 25.000 GHz	
#Res BW 100 kHz #	VBW 1.0 MHz	Sweep	1.20 s (10001 pts)	
MSG		STATUS		

Product	:	PC to TV Transmitter [u16]
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps)

Channel 01 (2412MHz)

Agilent Spectru	m Analyzer - Swept SA								
LXI	RF 50 Ω AC	-	SEI	VSE:INT		ALIGN AUTO) 12:31:01	AM Jul 14, 2011	Frequency
Start Fred	1 30.000000 MH	HZ PNO: Fast 😱 IFGain:Low	Trig: Free Atten: 30	e Run dB	Avg Type Avg Hold:	: Log-Pwr >100/100	TYI	E 1 2 3 4 5 6 MWWWWW P N N N N N	
10 dB/div	Ref 20.00 dBm					MI	(r1 394.5 -54.1	26 MHz 39 dBm	Auto Tune
-									Center Freq
10.0									515.000000 MHz
0.00									Start Fred
-10.0									30.000000 MHz
-20.0								-20.98.dBm	Stop Freq
-30.0							-		1.000000000 GHz
-40.0									CF Step
-50.0		_1							<u>Auto</u> Man
	أوعط ومعالم ومناقع المراج والمرا	الاردام المعدل والال المحدول	an an an Arlandar An an Arlandar	السالية المراجع المراجع من المراجع المرا	م ـ و غريب ايكنيا الريا	ا الفلورية إيران			Freg Offset
-00.0		and district of the second							0 Hz
-70.0									
Start 30.0	MHz				<u> </u>		Stop 1.0	0000 GHz	
#Res BW '	IOO KHZ	#VBW	1.0 MHz			sweep	90.0 ms (1	0001 pts)	
MSG						STAT	US		

Agilen	t Spectri	um Analyzer - Si	wept SA								
⊯ Star	t Fred	RF 50	Ω AC	2	SEI	NSE:INT	Avg Type	ALIGNAUTO	12:29:16 / TRAC	AM Jul 14, 2011 E 1 2 3 4 5 6	Frequency
10 dE	3/div	Ref 20.00	PI IFC dBm	NO: Fast 😱 Gain:Low	Atten: 30	dB	Avg Hold:	Mk	r1 2.410 -0.9) 2 GHz 3 dBm	Auto Tune
10.0		1									Center Freq 6.50000000 GHz
0.00 -10.0											Start Freq 1.000000000 GHz
-20.0 -30.0										-20.98 dBm	Stop Freq 12.000000000 GHz
-40.0 -50.0					ant i sur ann an th	lates that are smaller as a sta	L.A				CF Step 1.10000000 GHz <u>Auto</u> Man
-60.0						discontraction of the second					Freq Offset 0 Hz
-/U.U Star #Re:	t 1.00 s BW	0 GHz 100 kHz		#VBW	1.0 MHz			Sweep	Stop 12 1.02 s (1	.000 GHz 0001 pts)	
MSG								STATUS			

Agiler	it Spectru	m Analyzer - Sw	ept SA								
₩ Stai	rt Frec	RF 50 Ω	AC 00000 GH	lz	SE	NSE:INT	Avg Type Avg Hold:	LIGNAUTO Log-Pwr 12/100	12:30:18 TRAC	AM Jul 14, 2011 E 1 2 3 4 5 6 E M WAAWAAW	Frequency
10 di Log	B/div	Ref 20.00	d B m	Gain:Low	Atten: 30	dB		Mkr	1 23.609 -40.93	9 0 GHz 34 dBm	Auto Tune
10.0					<u>.</u>						Center Freq 18.50000000 GHz
0.00 -10.0											Start Freq 12.000000000 GHz
-20.0 -30.0										-20.98.dBm	Stop Freq 25.000000000 GHz
-40.0 -50.0			and a state of the late of the			Annesi di Urbala	مر المراجع الم				CF Step 1.300000000 GHz <u>Auto</u> Man
-60.0	and a second		a an								Freq Offset 0 Hz
-70.0 Star #Re	t 12.00 s BW 1	0 GHz		#VBW	1.0 MHz			Sweep	Stop 25 1.20 s (1	.000 GHz 0001 pts)	
MSG								STATUS			



Agilent	t Spectri	ım Analyzer - Sv	vept SA								
uxu Stop	o Fred	RF 50 S	2 AC 0000 GH:	z	SE	NSE:INT	Avg Type	LIGNAUTO	12:28:05 / TRAC	AM Jul 14, 2011	Frequency
10 d⊟	3/div	Ref 20.00	P ⊮ dBm	NO: Fast () Gain:Low	Atten: 30	dB	Arginola	Mk	r1 874.2 -54.34	88 MHz 40 dBm	Auto Tune
10.0											Center Freq 515.000000 MHz
0.00											Start Freq 30.000000 MHz
-20.0 -30.0										-21.44 dBm	Stop Freq 1.000000000 GHz
-40.0									<u> </u>		CF Step 97.000000 MHz <u>Auto</u> Man
-60.0		mbela la patrik katila timo Diputri	Andriana () "Cathaire and An gar Suire ga star paraira		l a stá (, spáca i linka) Inneas di tang di sta pinak		dala kara biyopida ng anta analy pana			i mala da di a da d	Freq Offset 0 Hz
-70.0	t 30.0	MHz							Stop 1.0	000 GHz	
#Res	BW	100 KHZ		#VBW	1.0 MHz		5	Sweep 9	90.0 ms (1 s	0001 pts)	

Channel 06 (2437MHz)

Agilent Spect	rum Analyzer - Swept SA								
₩ Start Fre	RF 50Ω AC) GHz	SEI		Avg Type	ALIGNAUTO	12:26:41 / TRAC	AM Jul 14, 2011 E 1 2 3 4 5 6	Frequency
10 dB/div	Ref 20.00 dBm	PNO: Fast () IFGain:Low	Atten: 30	dB	Arginola.	Mk	r1 2.434 -1.44	^{TP NNNNN} 4 4 GHz 43 dBm	Auto Tune
10.0			5						Center Freq 6.500000000 GHz
0.00									Start Freq 1.000000000 GHz
-20.0								-21.44 dBm	Stop Freq 12.000000000 GHz
-40.0			n ditti kartara ka	sate to a					CF Step 1.100000000 GHz <u>Auto</u> Man
-60.0			al is a second second second			ergi aliyahisehidada di Mangga Shini Katara			Freq Offset 0 Hz
-70.0 Start 1.00 #Res BW	00 GHz 100 kHz	#VBW	1.0 MHz			Sweep	Stop 12 1.02 s (1	.000 GHz 0001 pts)	
MSG						STATUS			

Agilen	it Spectrun	n Analyzer - Sw	rept SA								
اللا Star	t Freq	RF 50 G	AC 00000 GI	Hz	SEI	NSE:INT	Avg Type	ALIGNAUTO	12:27:26 TRAC	AM Jul 14, 2011 E 1 2 3 4 5 6	Frequency
10 di Log	3/div	Ref 20.00	P IF dBm	NO: Fast 😱 Gain:Low	Atten: 30	dB	Avg Hold:	Mkr	1 23.66 -40.6	4 9 GHz 09 dBm	Auto Tune
10.0					<u>.</u>						Center Freq 18.50000000 GHz
0.00 -10.0											Start Freq 12.000000000 GHz
-20.0 -30.0										-21.44 dBm	Stop Freq 25.00000000 GHz
-40.0					the state of the s	de de configurat (à précider)					CF Step 1.300000000 GHz <u>Auto</u> Man
-60.0	la u Hine esta las 1997 - Para Para Para					hanna a fi gitara ya ni Diria					Freq Offset 0 Hz
-70.0 Star #Re:	t 12.00 s BW 1	0 GHz 00 kHz		#VBW	1.0 MHz			Sweep	Stop 25 1.20 s (1	.000 GHz 0001 pts)	
MSG								STATUS			

Channel 11 (2462MHz)

Agilen	it Spectru	m Analyzer - Si	wept SA								
uxu Star	t Fred	RF 50	Ω AC		SE	NSE:INT	Avg Type	ALIGNAUTO	12:25:33 TRA	AM Jul 14, 2011 E 1 2 3 4 5 6	Frequency
10 dE	3/div	Ref 20.00	dBm	PNO: Fast 😱 -Gain:Low	dtten: 30	e Run ∣dB	Avg Hold:	>100/100 Mł	(r1 833.1 -54.8	60 MHz 10 dBm	Auto Tune
10.0											Center Freq 515.000000 MHz
0.00 -10.0											Start Freq 30.000000 MHz
-20.0 -30.0										21.40 dBm	Stop Freq 1.000000000 GHz
-40.0 -50.0									<u> </u>		CF Step 97.000000 MHz <u>Auto</u> Man
-60.0	htelusterer er ki v 11 generation	ara lan at kina kati sin Man pangan panganan	a so and a star a s		l) ole is all the deleng	ulistr	n - testini di tini di mana		nen han die ten met het.	i and, più can di piniti ne mangine piniti na pini	Freq Offset 0 Hz
-70.0 Star #Re:	t 30.0 s BW 1	MHz 00 kHz		#VBW	1.0 MHz			Sweep	Stop 1.4 90.0 ms (1	0000 GHz 0001 pts)	
MSG								STATI	JS		

Agilent Spectrum An	alyzer - Swept SA								
Start Freq 1	50 Ω AC 0000000000 GH	Iz	SEI	NSE:INT	Avg Type	LIGNAUTO	12:24:22 TRAC	AM Jul 14, 2011	Frequency
10 dB/div Re	ہ f 20.00 dBm	PNO: Fast () FGain:Low	Atten: 30	dB	Avginoid.	Mk	r1 2.46 -1.4	3 0 GHz 02 dBm	Auto Tune
10.0	<u>a</u> 1								Center Freq 6.500000000 GHz
-10.0									Start Freq 1.000000000 GHz
-20.0								21.40 dBm	Stop Freq 12.000000000 GHz
-40.0									CF Step 1.100000000 GHz <u>Auto</u> Man
-60.0	Martin Martin		a di Manifesi di Angli da Angli di Ang Angli da Angli di Angl					le suine flag, a le malla fi	Freq Offset 0 Hz
Start 1.000 GF #Res BW 100	łz kHz	#VBW	1.0 MHz			Sweep	Stop 12 1.02 s (1	.000 GHz 0001 pts)	
MSG						STATUS			

Agiler	it Spectrum	1 Analyzer - Swe	ept SA								
₩ Stai	rt Freq	RF 50 Ω	AC 0000 GH	Iz	SEI		Avg Type AvgIHold:	ALIGNAUTO : Log-Pwr 8/100	12:24:59 TRAC TYP	AM Jul 14, 2011 E 1 2 3 4 5 6 E M WWWWWW	Frequency
10 di	B/div	Ref 20.00 c	IBm	Gain:Low	Atten: 30	dB		Mkr	1 23.609 -41.5	9 0 GHz 79 dBm	Auto Tune
10.0					0						Center Freq 18.50000000 GHz
0.00 -10.0											Start Freq 12.000000000 GHz
-20.0 -30.0										21.40 dBm	Stop Freq 25.000000000 GHz
-40.0 -50.0			tidea attica datab	the second state of the second		a al traci inde e se e di ji fandi i Per paga se se gang se fa fang					CF Step 1.30000000 GHz <u>Auto</u> Man
-60.0	in seini di di seli sui Ny sering terren (i Ser		ihu nen orași ana fan dan		, mudi						Freq Offset 0 Hz
Star #Re	t 12.000 s BW 10	0 GHz 00 kHz		#VBW	1.0 MHz			Sweep	Ŝtop 25 1.20 s (1	.000 GHz 0001 pts)	
MSG								STATUS			

Product	:	PC to TV Transmitter
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

Channel 01 (2412MHz)

Agilent Spectr	um Analyzer - Swept SA								
Kart Fre	RF 50Ω AC 30.000000 M	Hz _	SEI	NSE:INT	Avg Type Aug/Hold:	ALIGNAUTO	12:33:28	AM Jul 14, 2011 E 1 2 3 4 5 6	Frequency
10 dB/div	Ref 20.00 dBm	PNO: Fast () IFGain:Low	Atten: 30	dB	Avgiriou.	Mł	(r1 660.0 -54.3	15 MHz 23 dBm	Auto Tune
10.0									Center Freq 515.000000 MHz
-10.0									Start Freq 30.000000 MHz
-20.0								-20.30 dBm	Stop Freq 1.000000000 GHz
-40.0					_ 1				CF Step 97.000000 MH Auto Mar
-60.0		and to the building of the bui	an landa Landa aka se	ill de les les itente da			pilmelis (sociale) para de la social social Constante de la para de la constante de la para	listicies and the second s	Freq Offse 0 H:
-70.0 Start 30.0	MHz						Stop 1.0	0000 GHz	
#Res BW	100 kHz	#VBW	1.0 MHz		;	Sweep	90.0 ms (1	0001 pts)	

Page: 52 of 109

Agilen	t Spectru	m Analyzer	- Swept SA								
⊯ Star	t Frec	RF 1.000	50 Ω AC	GHz	SE	NSE:INT	Avg Type	ALIGNAUTO	12:32:08 TRAC	AM Jul 14, 2011	Frequency
10 dE	3/div	Ref 20.	00 dBm	PNO: Fast G	Atten: 30	dB	Avginoia.	Mk	r1 2.410 -0.3	0 2 GHz 03 dBm	Auto Tune
10.0		1									Center Freq 6.50000000 GHz
0.00 -10.0											Start Freq 1.000000000 GHz
-20.0 -30.0										-20.30 dBm	Stop Freq 12.000000000 GHz
-40.0 -50.0					Ma . Josefelt						CF Step 1.10000000 GHz <u>Auto</u> Man
-60.0	نامین (دی. پر مربعہ روز پر							an a 1, de la parte de la compañía			Freq Offset 0 Hz
-70.0 Stari	t 1.000) GHz		#\/P\/	V 1 0 MHz			Sween	Stop 12	.000 GHz	
MSG	5 014	IVO KIIZ		#100	• 1.0 IVINZ			STATUS	1.02 5 (1	000 i pisj	

Agilen	t Spectru	m Analyzer - S	wept SA								
₩ Star	t Frec	RF 50	Ω AC	Hz	SEI	NSE:INT	Avg Type	ALIGNAUTO	12:32:53 TRAC	AM Jul 14, 2011 E 1 2 3 4 5 6	Frequency
10 dE	3/div	Ref 20.00	dBm	PNO: Fast 🍙 Gain:Low	Atten: 30	dB	AVg Hold:	Mkr	1 23.69 -39.1	0 9 GHz 25 dBm	Auto Tune
10.0											Center Freq 18.50000000 GHz
0.00 -10.0											Start Freq 12.000000000 GHz
-20.0 -30.0										-20.30 dBm	Stop Freq 25.00000000 GHz
-40.0 -50.0		JIS IS MILE		a data da ana				ال من المالية المالية. من المالية الم			CF Step 1.30000000 GHz <u>Auto</u> Man
-60.0			and an every state)	and the second							Freq Offset 0 Hz
Start #Res	t 12.00 s BW 1	0 GHz 100 kHz		#VBW	1.0 MHz			Sweep	Stop 25 1.20 s (1	.000 GHz 0001 pts)	
Mag								STATUS			



Channel 06 (2437MHz)

Agiler	nt Spectrum Analyzer - Swept	SA							
w Sta	RF 50 Ω rt Freq 30.000000	AC MHz	SEI	Run	Avg Type Avg Hold:	ALIGNAUTO : Log-Pwr >100/100	12:35:28 TRAC TYF	AM Jul 14, 2011 E 1 2 3 4 5 6 E M WWWWW	Frequency
10 d	B/div Ref 20.00 dB	IFGain:Low	Atten: 30	dB		Mk	r1 941.5 -54.2	09 MHz 20 dBm	Auto Tune
10.0			<u>.</u>						Center Freq 515.000000 MHz
0.00 -10.0									Start Freq 30.000000 MHz
-20.0 -30.0								-21.67 dDm	Stop Freq 1.000000000 GHz
-40.0 -50.0								1	CF Step 97.000000 MHz <u>Auto</u> Man
-60.0	ראין ארייניאן אולייניאן און איז און איז און איז אין איז אין איז אין איז אין איז איז איז איז איז איז איז איז אי איז אין איז	file af parameter for an all a sign of particular and a side of the side of th	al formal and have been a second s	per Hallings (1993) proj (1944) Charles and public and form	rahang ta Latapag sadar mini panantan pagan	a Datai Indana Managiran	ih dan di _{Un d} u dan bag Anggang ng pangan bag		Freq Offset 0 Hz
Star #Re	t 30.0 MHz s BW 100 kHz	#VBW	1.0 MHz		Ę	Sweep 9	Stop 1.0 90.0 ms (1	0000 GHz 0001 pts)	
MSG						STATU	s		

Agilent S	Spectrum Ana	lyzer - Swe	ept SA								
₩ Start	Freq 1.	50 Ω 000000	AC 000 GH2	2	SEI	NSE:INT	Avg Type	ALIGNAUTO	12:34:28	AM Jul 14, 2011 E 1 2 3 4 5 6	Frequency
10 dB/0	div Ref	20.00 c	P IF(NO: Fast 🕞 Gain:Low	Atten: 30	dB	Avginou.	Mk	r1 2.43 -1.6	5 5 GHz 73 dBm	Auto Tune
10.0		▲1									Center Freq 6.50000000 GHz
0.00											Start Freq 1.000000000 GHz
-20.0 -30.0										-21.67 dDm	Stop Freq 12.000000000 GHz
-40.0											CF Step 1.100000000 GHz <u>Auto</u> Man
-60.0								nich, pairie di Mili Mangana di Kasara	an a		Freq Offset 0 Hz
Start	1.000 GH BW 100 I	z (Hz		#VBW	1.0 MHz			Sweep	Stop 12 1.02 s (1	.000 GHz 0001 pts)	
MSG	2010 PTE FEBRUAR - F	1929 A						STATUS			

Old RF SO & AC SENSE:INT ALIGNAUTO 12:35:02 AM Jil 4, 2011 Frequen Start Freq 12:000000000 GHz Trig: Free Run Atten: 30 dB Avg Type: Log-Pwr Avg Hold: 11/100 Trope Middle, 2016 Frequen 10 dB/div Ref 20:00 dBm -40.809 dBm -40.800 dBm -40.800 dBm -40.800 dBm </th <th></th>	
PNO: Fast Ing. Free Kun Avgindid. 11/100 Der P NNNNN Ib dB/div Ref 20.00 dBm Atten: 30 dB Mkr1 23.612 9 GHz Auto 10 dB/div Ref 20.00 dBm -40.809 dBm Center 10.0	псу
10.0 Cente 10.0 Star 10.0 Star 10.0 Star 10.0 Star 10.0 Star	Tune
-10.0 Star 12.0000000	e r Freq 00 GHz
	r t Freq 00 GHz
-200	p Freq 00 GHz
-40.0 -50.0	F Step 00 GHz Man
-60.0	Offset 0 Hz
Start 12.000 GHz Stop 25.000 GHz #Res BW 100 kHz #VBW 1.0 MHz Sweep 1.20 s (10001 pts)	

Channel 11 (2462MHz)

Agilent Sp	pectrum Analyzer -	Swept SA								
Start F	RF 5 Freq 30.000	0Ω AC 000 MHz		SE Taia: Eas	NSE:INT	Avg Type	ALIGNAUT	0 12:37:43 r TRAG	AM Jul 14, 2011 E 1 2 3 4 5 6	Frequency
10 dB/d	liv Ref 20.0	₽ IF 0 dBm	NO: Fast 🖵 Gain:Low	Atten: 30	dB	Avginola.	M	kr1 915.0 -54.0	28 MHz 86 dBm	Auto Tune
10.0 —										Center Freq 515.000000 MHz
-10.0										Start Freq 30.000000 MHz
-20.0 -30.0									-21.15 dBm	Stop Freq 1.000000000 GHz
-40.0									 1	CF Step 97.000000 MHz <u>Auto</u> Man
-60.0	na tida di kacama di Attada dan baraka Manga kanga dan kacama di kacama di kacama Manga kanga dan kacama di kacama di kacama di kacama di kacama di ka	instyleniskat bestelling program		and a second	al an an Arlanda an An Island An Island an Anna an Anna Island an Anna		Lail Alexad	la ja la sa di sa gu la si la si la si sa si	a laha tasutuna tu manan kangarapapap	Freq Offset 0 Hz
Start 3 #Res E	80.0 MHz 3W 100 kHz		#VBW	1.0 MHz			Sweep	Stop 1.0 90.0 ms (1)000 GHz 0001 pts)	
MSG							STAT	rus		

Agilen	t Spectru	ım Analyzei	r - Swept S	A								
₩ Star	t Fred	RF 1.000	50 Ω AC	0 GHz		SEI	NSE:INT	Avg Type	LIGNAUTO	12:36:37	AM Jul 14, 2011 E 1 2 3 4 5 6	Frequency
10 dE	3/div	Ref 20.	.00 dBn	PN IFG: N	0: Fast ⊆∟ ain:Low	Atten: 30	dB	Avginoia.	Mk	r1 2.459 -1.1	9 7 GHz 54 dBm	Auto Tune
10.0		<u></u> 1										Center Freq 6.50000000 GHz
0.00 -10.0												Start Freq 1.000000000 GHz
-20.0 -30.0											-21.15 dBm	Stop Freq 12.00000000 GHz
-40.0 -50.0						a. office and						CF Step 1.100000000 GHz <u>Auto</u> Man
-60.0	al al the third	A MARINA		Augusta a								Freq Offset 0 Hz
-70.0 Stari	t 1.000) GHz			#\/B\A	1.0 MHz			Sween	Stop 12	.000 GHz	
MSG					# ¥ 🖬 ¥ V	1.0 10112			STATUS	1.02.3 (1	000 i proj	

Diff PF SO & AC SENSE:INT ALLONAUTO 1237:13 AM Jult 2011 Frequency Start Freq 12.00000000 GHz Trig: Free Run IFGain.tow AvgType: Log.Por AvgHoid: 12/100 Trig: Free Run AvgHoid: 12/100 Auto Tu 10 dB/div Ref 20.00 dBm Center Fr 18.50000000 G Trig: Free Run AvgHoid: 12/100 Mkr1 23.649 3 GHz 18.50000000 G Auto Tu 10 dB/div Ref 20.00 dBm Center Fr 18.50000000 G Start Fr 12.0000000 G Start Fr 12.0000000 G Start Fr 12.0000000 G 200	Agilent Spectr	ım Analyzer - Swej	ot SA							
PNO: Fast IFGainLow Ing: Free Kun Atten: 30 dB Avginold: 12/10 Pree Kun Atten: 30 dB Auto Tu 10 dB/div Ref 20.00 dBm -40.824 dBm -50.0000000 G -40.924 dBm -40.824 dBm -50.0000000 G -50.0000000 G -50.0000000 G -50.0000000 G -50.00000000 G -50.000 GHz	Start Free	RF 50 Ω 12.000000	AC DOOD GHz	SEI	NSE:INT	Avg Type	ALIGNAUTO	12:37:13 A TRACE	M Jul 14, 2011	Frequency
10.0 Center Fr 10.0 Image: Control of the state of th	10 dB/div	Ref 20.00 di	PNO: Fast 🖵 IFGain:Low BM	Atten: 30	dB	Avg Hold:	Mkr	1 23.649 -40.82	3 GHz 4 dBm	Auto Tune
0.00 Image: Constraint of the second se	10.0									Center Freq 18.50000000 GHz
200 21.15.den Stop Fr. 300 1 1 25.00000000 G 400 1 1 1 400 1 1 1 1 400 1 1 1 1 1 400 1 1 1 1 1 1 400 1 1 1 1 1 1 1 1 1 30000000 G 1 1 1 1 300000000 G 1 1 30000000 G 1 1 30000000 G 1 1 30000000 G 1 1 30000000 G	-10.0									Start Freq 12.000000000 GHz
40.0 1 CF Store -50.0	-20.0								-21.15 dBm	Stop Freq 25.00000000 GHz
•60.0 Freq Offs -70.0 - Start 12.000 GHz #VBW 1.0 MHz #Res BW 100 kHz #VBW 1.0 MHz	-40.0	e e e la constant de	a deputite at a the a sum operational and	un els de se a libre	utada kon a seratak					CF Step 1.30000000 GHz <u>Auto</u> Man
YUU Stop 25.000 GHz Start 12.000 GHz Stop 25.000 GHz #Res BW 100 kHz #VBW 1.0 MHz Sweep 1.20 s (10001 pts)	-60.0		an in a second and a		1000					Freq Offset 0 Hz
	Start 12.00 #Res BW	00 GHz 100 kHz	#VBW	1.0 MHz			Sweep	Stop 25. 1.20 s (10	000 GHz 1001 pts)	