Test Report

Product Name	iDEA+ Docking Station
Model No	PTI-7011N
FCC ID.	YHYPTI-7011N

Applicant	PARADIGM TECHNOLOGY INC.
Address	3F.-1, No.49, Ln. 35, Jihu Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

Date of Receipt	Dec. 26, 2011
Issue Date	Feb. 09, 2012
Report No.	121009R-RFUSP42V01
Report Version	V1.0

Testing Laboratory
0914

The test results relate only to the samples tested.
The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.
This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government

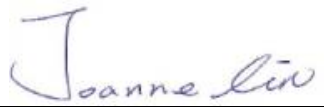
Test Report Certification

Issue Date: Feb. 09, 2012
Report No.: 121009R-RFUSP42V01

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

Product Name	iDEA+ Docking Station
Applicant	PARADIGM TECHNOLOGY INC.
Address	3F.-1, No.49, Ln. 35, Jihu Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)
Manufacturer	PARADIGM TECHNOLOGY INC.
Model No.	PTI-7011N
FCC ID.	YHYPTI-7011N
EUT Rated Voltage	AC 100-240V, 50-60Hz
EUT Test Voltage	AC 120V/60Hz
Trade Name	PTI
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2010 ANSI C63.4: 2003
Test Result	Complied

The test results relate only to the samples tested.
The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.
This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government

Documented By : 
(Adm. Specialist / Joanne Lin)

Tested By : 
(Assistant Engineer / Vincent Chu)

Approved By : 
(Manager / Vincent Lin)

TABLE OF CONTENTS

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	iDEA+ Docking Station
Trade Name	PTI
Model No.	PTI-7011N
FCC ID.	YHYPTI-7011N
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	Chip Antenna
Antenna Gain	Refer to the table “Antenna List”
Channel Control	Auto

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Walsin	RFANT3216120A5T	Chip Antenna	2 dBi for 2.4 GHz

Note: 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-40MHz Center Frequency of Each 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		

Note:

1. The EUT is an iDEA^{+} Docking Station 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 、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.

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)

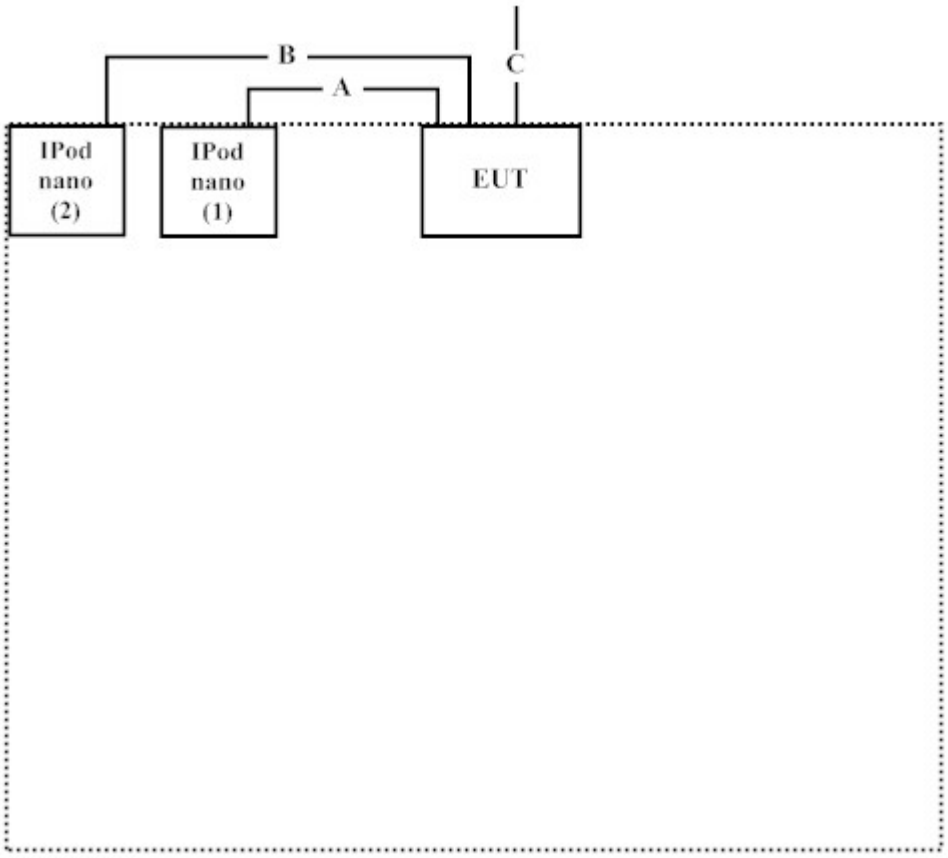
1.3. Tested System Details

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	IPod nano	Apple	A1236	7K823DWSY0P	N/A
2	IPod nano	Apple	A1236	7K818WWTY0P	N/A

Signal Cable Type		Signal cable Description
A	USB Cable	Non-Shielded, 1.2m
B	USB Cable	Non-Shielded, 1.2m
C	RJ45 Cable	Non-Shielded, 1.5m

1.4. Configuration of Tested System



1.5. EUT Exercise Software

(1) Connect EUT and Notebook via test fixture.
(2) Execute “MP Test (Ver1.0)” on the Notebook.
(3) Configure the test mode, the test channel, and the data rate to start the continuous transmit
(4) Remove notebook and test fixture, Setup the EUT as shown in Section 1.4
(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

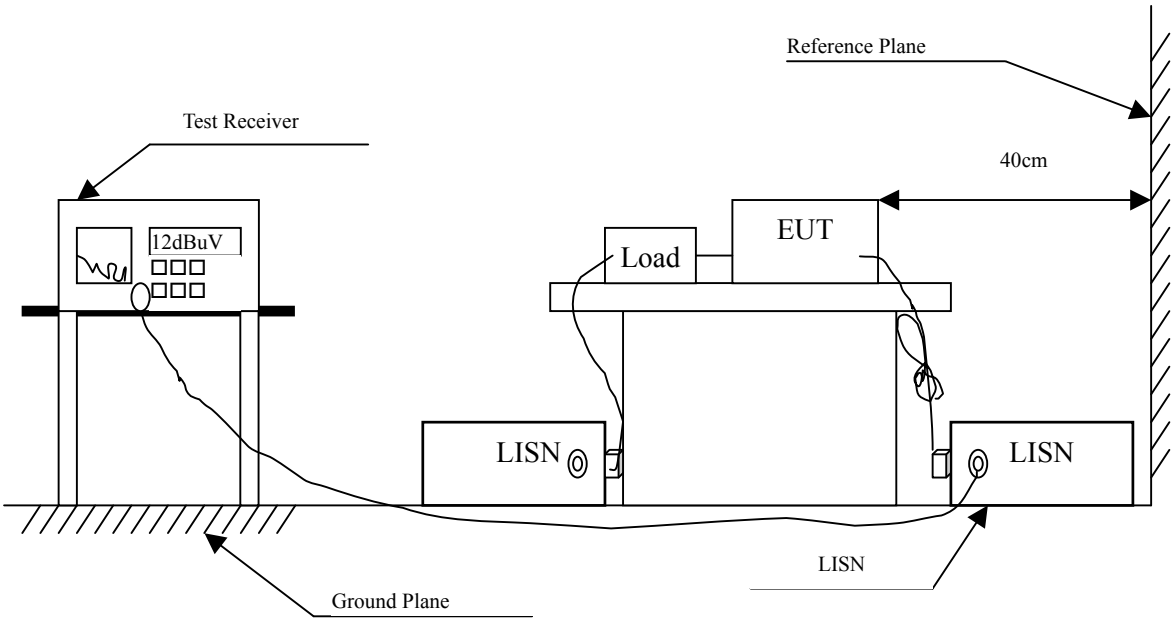
2.1. Test Equipment

	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.	Remark
X	Test Receiver	R & S	ESCS 30 / 825442/018	Sep., 2011	
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, 2011	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	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: 2003 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 : iDEA+ Docking Station
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.166	9.840	29.860	39.700	-25.843	65.543
0.404	9.840	27.080	36.920	-21.823	58.743
1.330	9.850	21.500	31.350	-24.650	56.000
2.408	9.860	23.440	33.300	-22.700	56.000
9.388	9.998	29.800	39.798	-20.202	60.000
21.849	10.140	20.460	30.600	-29.400	60.000
Average					
0.166	9.840	23.250	33.090	-22.453	55.543
0.404	9.840	21.760	31.600	-17.143	48.743
1.330	9.850	14.200	24.050	-21.950	46.000
2.408	9.860	14.680	24.540	-21.460	46.000
9.388	9.998	19.790	29.788	-20.212	50.000
21.849	10.140	14.370	24.510	-25.490	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 : iDEA+ Docking Station
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.166	9.840	27.230	37.070	-28.473	65.543
0.408	9.840	26.390	36.230	-22.399	58.629
0.713	9.840	35.450	45.290	-10.710	56.000
2.646	9.860	15.120	24.980	-31.020	56.000
9.713	10.054	23.650	33.704	-26.296	60.000
22.431	10.320	23.390	33.710	-26.290	60.000
Average					
0.166	9.840	17.350	27.190	-28.353	55.543
0.408	9.840	21.940	31.780	-16.849	48.629
0.713	9.840	24.590	34.430	-11.570	46.000
2.646	9.860	8.150	18.010	-27.990	46.000
9.713	10.054	12.260	22.314	-27.686	50.000
22.431	10.320	16.940	27.260	-22.740	50.000

Note:

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

3. Peak Power Output

3.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Power Meter	Anritsu	ML2495A/6K00003357	May, 2011
X	Power Sensor	Anritsu	MA2411B/0738448	Jun, 2011

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

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

± 1.27 dB

3.6. Test Result of Peak Power Output

Product : iDEA+ Docking Station
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)				Peak Power	Required Limit	Result
		1	2	5.5	11	1		
		Measurement Level (dBm)						
01	2412	14.53	--	--	--	16.65	<30dBm	Pass
06	2437	14.75	14.7	14.64	14.6	16.85	<30dBm	Pass
11	2462	14.83	--	--	--	16.89	<30dBm	Pass

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

Product : iDEA+ Docking Station
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		6	9	12	18	24	36	48	54	6		
		Measurement Level (dBm)										
01	2412	12.54	--	--	--	--	--	--	--	20.16	<30dBm	Pass
06	2437	12.78	12.71	12.64	12.54	12.46	12.41	12.35	12.3	20.2	<30dBm	Pass
11	2462	13.01	--	--	--	--	--	--	--	20.29	<30dBm	Pass

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

Product : iDEA+ Docking Station
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		7.2	14.4	21.7	28.9	43.3	57.8	65	72.2	7.2		
		Measurement Level (dBm)										
01	2412	12.56	--	--	--	--	--	--	--	19.86	<30dBm	Pass
06	2437	12.73	12.7	12.68	12.64	12.61	12.58	12.55	12.52	19.94	<30dBm	Pass
11	2462	12.72	--	--	--	--	--	--	--	19.92	<30dBm	Pass

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

Product : iDEA+ Docking Station
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		15	30	45	60	90	120	135	150	15		
		Measurement Level (dBm)										
03	2422	12.45	--	--	--	--	--	--	--	19.93	<30dBm	Pass
06	2437	12.51	12.48	12.46	12.44	12.42	12.39	12.37	12.35	19.67	<30dBm	Pass
09	2452	12.4	--	--	--	--	--	--	--	19.38	<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:

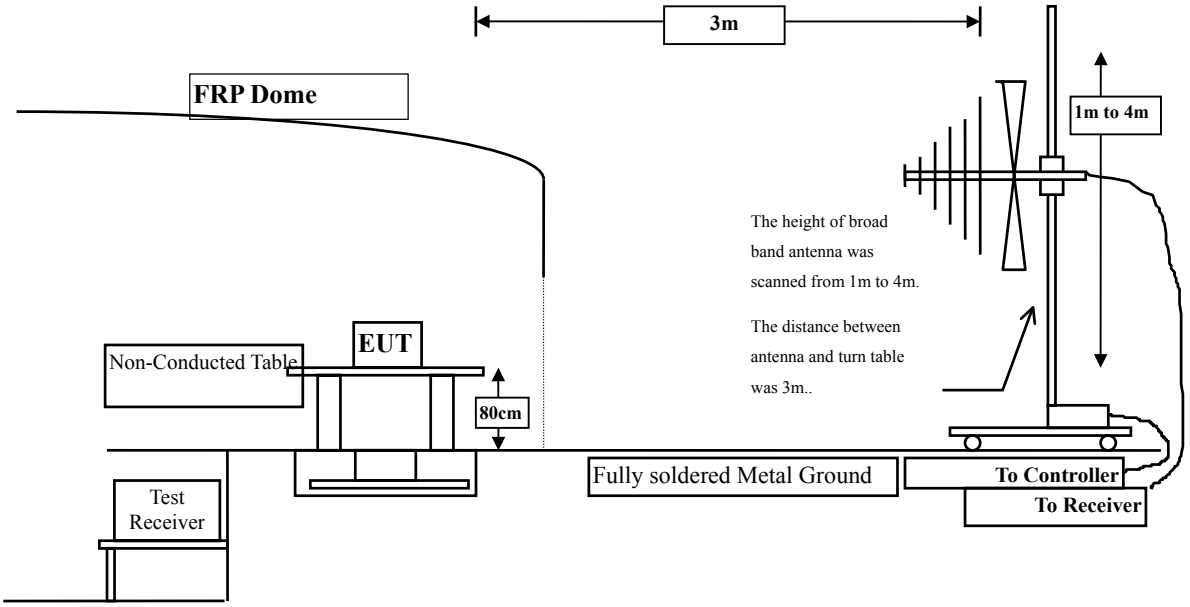
Test Site	Equipment		Manufacturer	Model No./Serial No.	Last Cal.
☒Site # 3	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2011
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2011
	X	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2011
	X	Pre-Amplifier	Agilent	8447D/2944A09549	Sep., 2011
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2011
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2011
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2012
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	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.

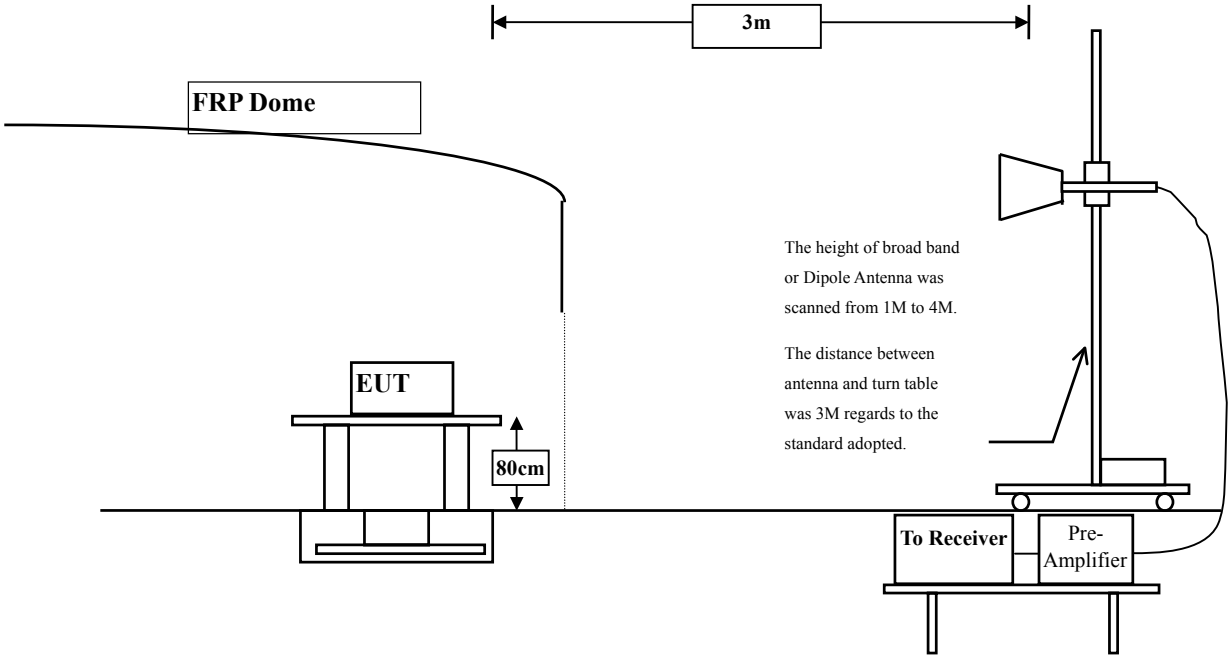
2. The test instruments marked with "X" are used to measure the final test results.

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, 2003 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 C63.4:2003 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

4.6. Test Result of Radiated Emission

Product : iDEA+ Docking Station
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	3.261	44.310	47.571	-26.429	74.000
7236.000	10.650	40.210	50.860	-23.140	74.000
9648.000	13.337	36.080	49.416	-24.584	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	6.421	41.970	48.391	-25.609	74.000
7236.000	11.495	38.110	49.605	-24.395	74.000
9648.000	13.807	35.560	49.366	-24.634	74.000
Average Detector:					
--					

Note:

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 : iDEA+ Docking Station
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.038	45.660	48.697	-25.303	74.000
7311.000	11.795	39.740	51.534	-22.466	74.000
9748.000	12.635	36.590	49.225	-24.775	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	5.812	43.780	49.591	-24.409	74.000
7311.000	12.630	38.440	51.069	-22.931	74.000
9748.000	13.126	36.660	49.786	-24.214	74.000
Average Detector:					
--					

Note:

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 : iDEA+ Docking Station
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462 MHz))

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	2.858	48.310	51.167	-22.833	74.000
7386.000	12.127	38.290	50.418	-23.582	74.000
9848.000	12.852	36.630	49.483	-24.517	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	47.110	52.630	-21.370	74.000
7386.000	13.254	38.620	51.874	-22.126	74.000
9848.000	13.367	37.300	50.667	-23.333	74.000
Average Detector:					
--					

Note:
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 : iDEA+ Docking Station
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	3.261	38.590	41.851	-32.149	74.000
7236.000	10.650	36.680	47.330	-26.670	74.000
9648.000	13.337	36.133	49.469	-24.531	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	6.421	38.800	45.221	-28.779	74.000
7236.000	11.495	36.530	48.025	-25.975	74.000
9648.000	13.807	35.560	49.366	-24.634	74.000
Average Detector:					
--					

Note:

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 : iDEA+ Docking Station
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.038	44.770	47.807	-26.193	74.000
7311.000	11.795	38.370	50.164	-23.836	74.000
9748.000	12.635	36.540	49.175	-24.825	74.000
Average Detector:					
--					
Peak Detector:					
4874.000	5.812	41.530	47.341	-26.659	74.000
7311.000	12.630	38.630	51.259	-22.741	74.000
9748.000	13.126	36.110	49.236	-24.764	74.000
Average Detector:					
--					

Note:
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 : iDEA+ Docking Station
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	2.858	45.120	47.977	-26.023	74.000
7386.000	12.127	38.250	50.378	-23.622	74.000
9848.000	12.852	36.710	49.563	-24.437	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	44.440	49.960	-24.040	74.000
7386.000	13.254	38.700	51.954	-22.046	74.000
9848.000	13.367	37.490	50.857	-23.143	74.000
Average Detector:					
--					

Note:
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 : iDEA+ Docking Station
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	3.261	42.050	45.311	-28.689	74.000
7236.000	10.650	41.290	51.940	-22.060	74.000
9648.000	13.337	36.130	49.466	-24.534	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	6.421	39.840	46.261	-27.739	74.000
7236.000	11.495	35.570	47.065	-26.935	74.000
9648.000	13.807	35.670	49.476	-24.524	74.000
Average Detector:					
--					

Note:

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 : iDEA+ Docking Station
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 Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.038	43.350	46.387	-27.613	74.000
7311.000	11.795	38.880	50.674	-23.326	74.000
9748.000	12.635	36.580	49.215	-24.785	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	5.812	42.240	48.051	-25.949	74.000
7311.000	12.630	37.810	50.439	-23.561	74.000
9748.000	13.126	36.850	49.976	-24.024	74.000
Average Detector:					
--					

Note:
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 : iDEA+ Docking Station
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 Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	2.858	46.490	49.347	-24.653	74.000
7386.000	12.127	39.480	51.608	-22.392	74.000
9848.000	12.852	36.850	49.703	-24.297	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	45.330	50.850	-23.150	74.000
7386.000	13.254	37.570	50.824	-23.176	74.000
9848.000	13.367	36.690	50.057	-23.943	74.000
Average Detector:					
--					

Note:

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 : iDEA+ Docking Station
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 Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4844.000	3.171	39.520	42.691	-31.309	74.000
7266.000	11.162	37.330	48.492	-25.508	74.000
9688.000	12.964	36.560	49.525	-24.475	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4844.000	6.178	38.170	44.348	-29.652	74.000
7266.000	11.982	36.540	48.522	-25.478	74.000
9688.000	13.507	36.480	49.988	-24.012	74.000
Average Detector:					
--					

Note:

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 : iDEA+ Docking Station
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 Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.038	39.890	42.927	-31.073	74.000
7311.000	11.795	37.280	49.074	-24.926	74.000
9748.000	12.635	36.690	49.325	-24.675	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	5.812	38.170	43.981	-30.019	74.000
7311.000	12.630	35.870	48.499	-25.501	74.000
9748.000	13.126	36.850	49.976	-24.024	74.000
Average Detector:					
--					

Note:
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 : iDEA+ Docking Station
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 Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4904.000	2.914	37.860	40.775	-33.225	74.000
7356.000	11.995	35.400	47.394	-26.606	74.000
9808.000	12.475	36.230	48.705	-25.295	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4904.000	5.530	38.210	43.741	-30.259	74.000
7356.000	13.005	35.180	48.184	-25.816	74.000
9808.000	12.901	36.380	49.281	-24.719	74.000
Average Detector:					
--					

Note:

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 : iDEA+ Docking Station
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)(2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
152.220	-10.135	40.391	30.256	-13.244	43.500
249.220	-6.014	37.528	31.514	-14.486	46.000
305.480	-2.929	33.238	30.309	-15.691	46.000
398.600	-2.268	36.684	34.416	-11.584	46.000
532.460	1.957	29.720	31.677	-14.323	46.000
800.180	5.141	36.103	41.244	-4.756	46.000
Vertical					
132.820	-4.440	41.768	37.328	-6.172	43.500
249.220	-7.634	34.243	26.609	-19.391	46.000
396.660	-4.356	30.924	26.568	-19.432	46.000
610.060	-1.579	29.259	27.680	-18.320	46.000
804.060	3.587	29.267	32.854	-13.146	46.000
930.160	6.477	24.080	30.557	-15.443	46.000

Note:

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 : iDEA+ Docking Station
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps)(2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
113.420	-8.339	40.184	31.845	-11.655	43.500
156.100	-10.461	40.934	30.472	-13.028	43.500
305.480	-2.929	33.403	30.474	-15.526	46.000
398.600	-2.268	29.591	27.323	-18.677	46.000
612.000	3.819	26.747	30.566	-15.434	46.000
800.180	5.141	37.094	42.235	-3.765	46.000
Vertical					
111.480	-0.954	40.384	39.430	-4.070	43.500
156.100	-6.201	35.702	29.500	-14.000	43.500
249.220	-7.634	32.053	24.419	-21.581	46.000
400.540	-5.156	32.838	27.683	-18.317	46.000
610.060	-1.579	32.169	30.590	-15.410	46.000
796.300	2.831	30.281	33.112	-12.888	46.000

Note:

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 : iDEA+ Docking Station
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
113.420	-8.339	40.657	32.318	-11.182	43.500
156.100	-10.461	40.104	29.642	-13.858	43.500
305.480	-2.929	33.858	30.929	-15.071	46.000
396.660	-2.296	30.407	28.111	-17.889	46.000
612.000	3.819	25.855	29.674	-16.326	46.000
800.180	5.141	37.492	42.633	-3.367	46.000
Vertical					
109.540	-0.418	39.652	39.234	-4.266	43.500
156.100	-6.201	35.066	28.864	-14.636	43.500
305.480	-6.809	30.006	23.197	-22.803	46.000
398.600	-4.678	29.718	25.040	-20.960	46.000
532.460	-0.563	26.920	26.357	-19.643	46.000
798.240	2.808	30.030	32.838	-13.162	46.000

Note:

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 : iDEA+ Docking Station
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
109.540	-7.488	39.453	31.965	-11.535	43.500
156.100	-10.461	41.576	31.114	-12.386	43.500
315.180	-4.186	35.217	31.031	-14.969	46.000
398.600	-2.268	31.024	28.756	-17.244	46.000
612.000	3.819	26.038	29.857	-16.143	46.000
804.060	5.027	35.914	40.941	-5.059	46.000
Vertical					
109.540	-0.418	39.216	38.798	-4.702	43.500
156.100	-6.201	35.528	29.326	-14.174	43.500
249.220	-7.634	31.763	24.129	-21.871	46.000
398.600	-4.678	29.530	24.852	-21.148	46.000
610.060	-1.579	29.490	27.911	-18.089	46.000
800.180	2.801	30.453	33.254	-12.746	46.000

Note:

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

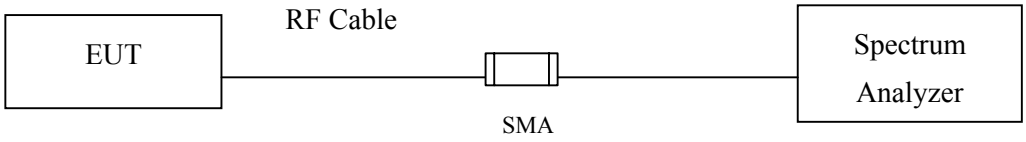
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2011
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2011
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2011

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

2. The test instruments marked with "X" are used to measure the final test results.

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.

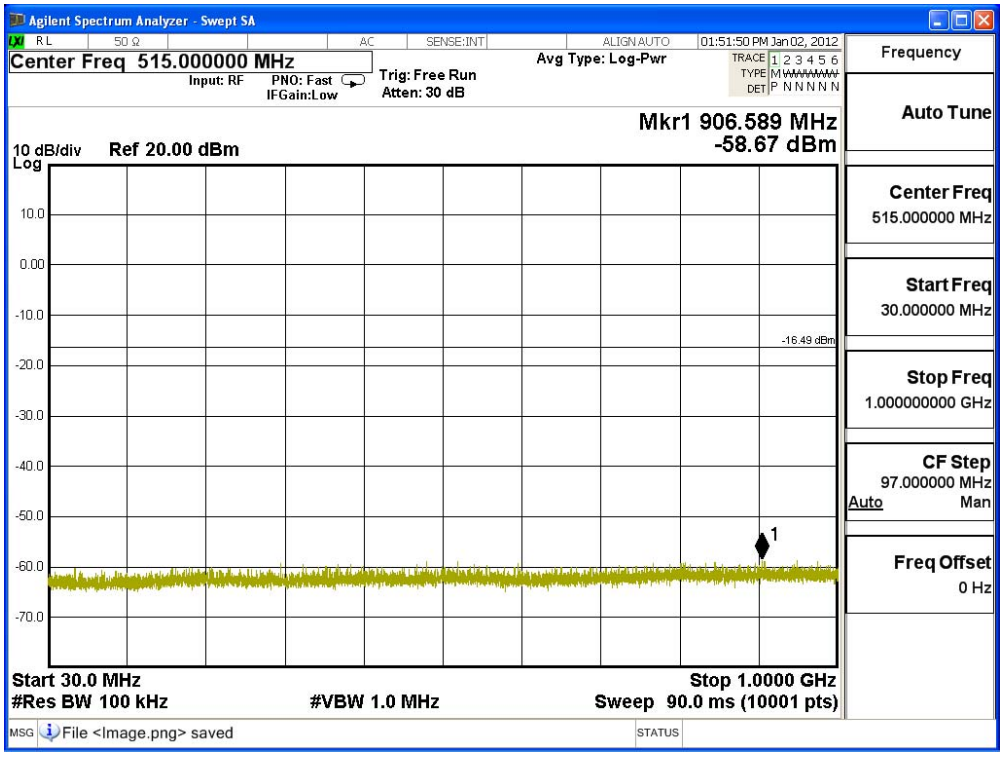
5.5. Uncertainty

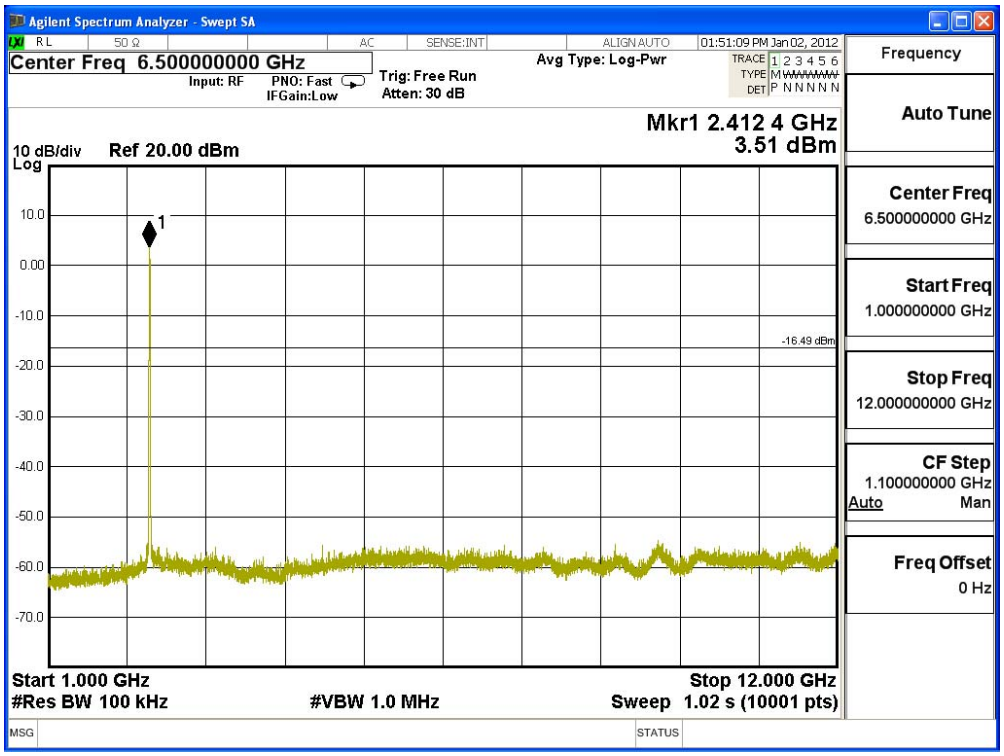
The measurement uncertainty
Conducted is defined as ± 1.27dB

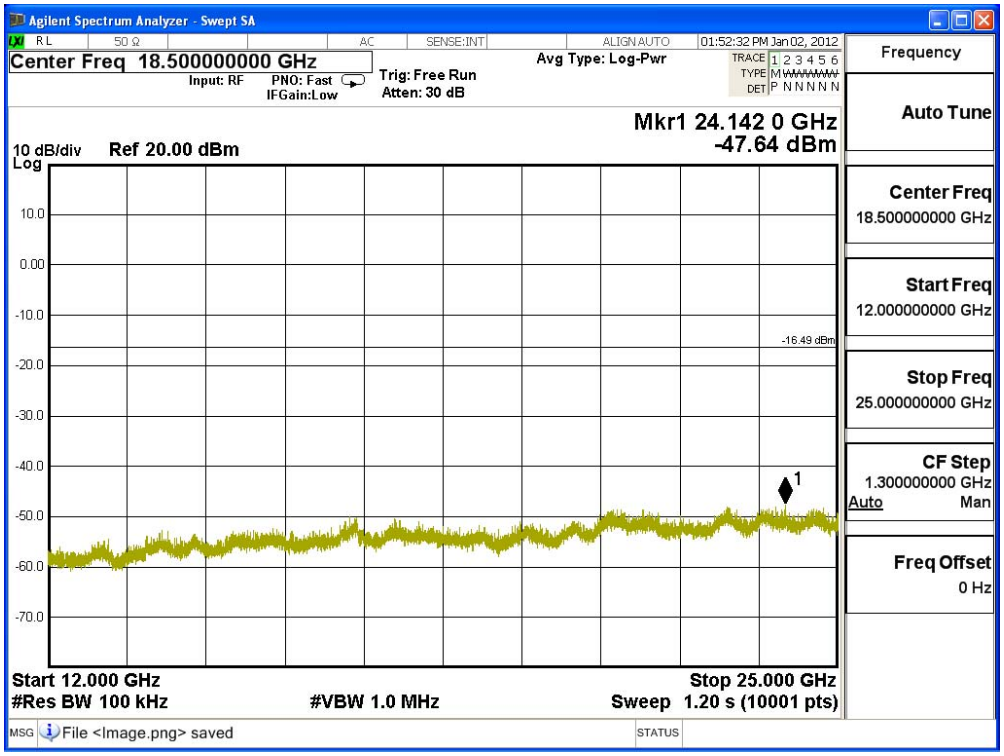
5.6. Test Result of RF antenna conducted test

Product : iDEA+ Docking Station
Test Item : RF antenna conducted test
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)

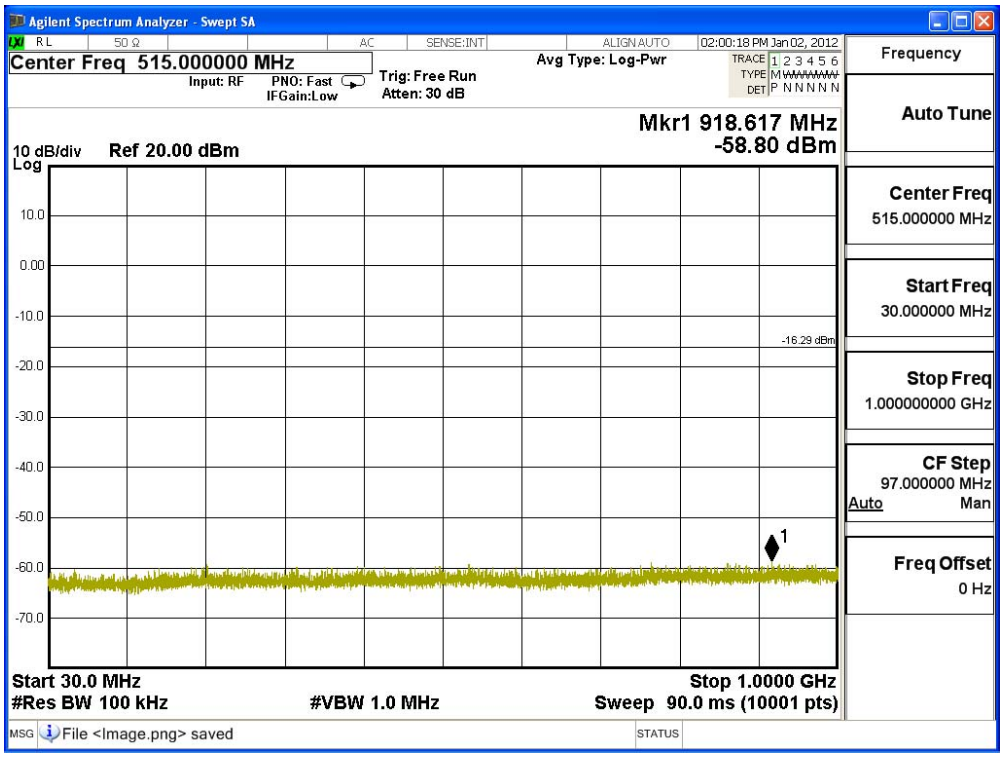
Channel 01 (2412MHz)

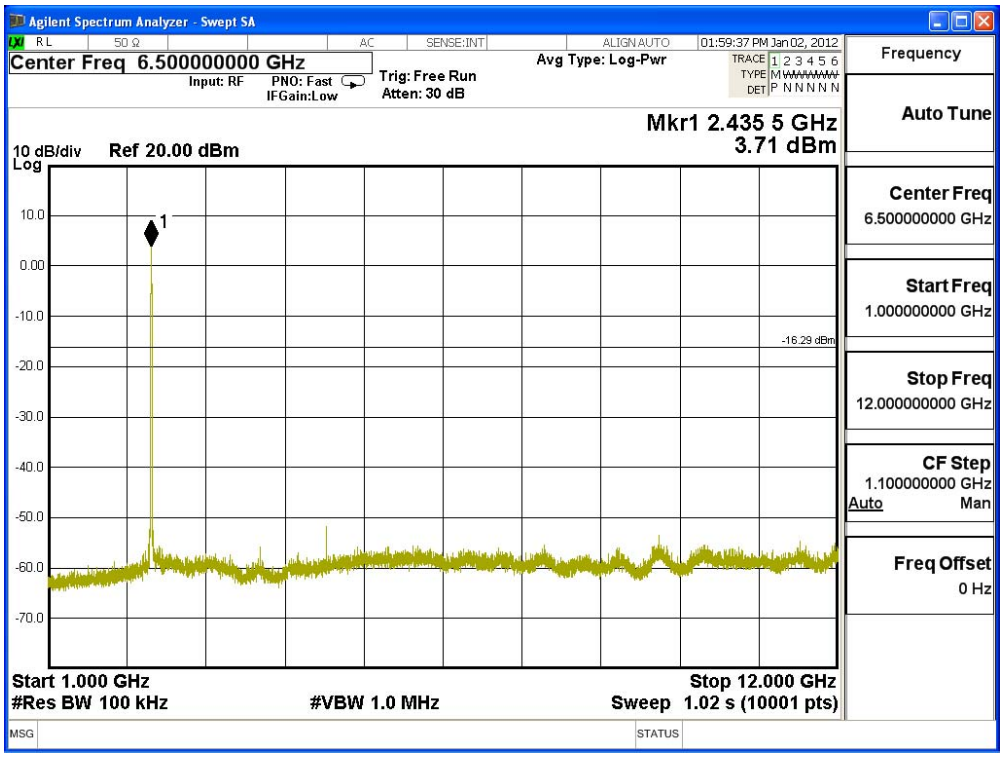


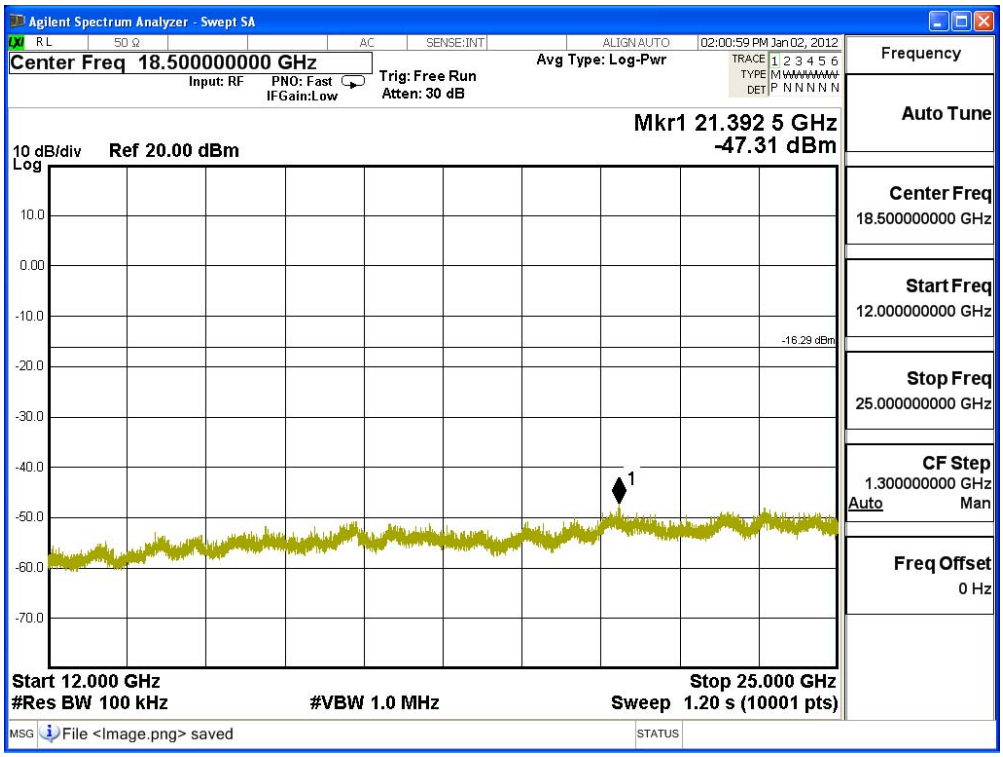

Agilent Spectrum Analyzer - Swept SA
Center Freq 6.500000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
01:51:09 PM Jan 02, 2012
Mkr1 2.412 4 GHz
3.51 dBm
10 dB/div
Log
Ref 20.00 dBm
-16.49 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 12.000 GHz
Sweep 1.02 s (10001 pts)
Frequency
Auto Tune
Center Freq
6.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
12.000000000 GHz
CF Step
1.100000000 GHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Center Freq 18.500000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
01:52:32 PM Jan 02, 2012
Mkr1 24.142 0 GHz
-47.64 dBm
10 dB/div
Log
Ref 20.00 dBm
-16.49 dBm
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz
MSG
File <Image.png> saved
STATUS

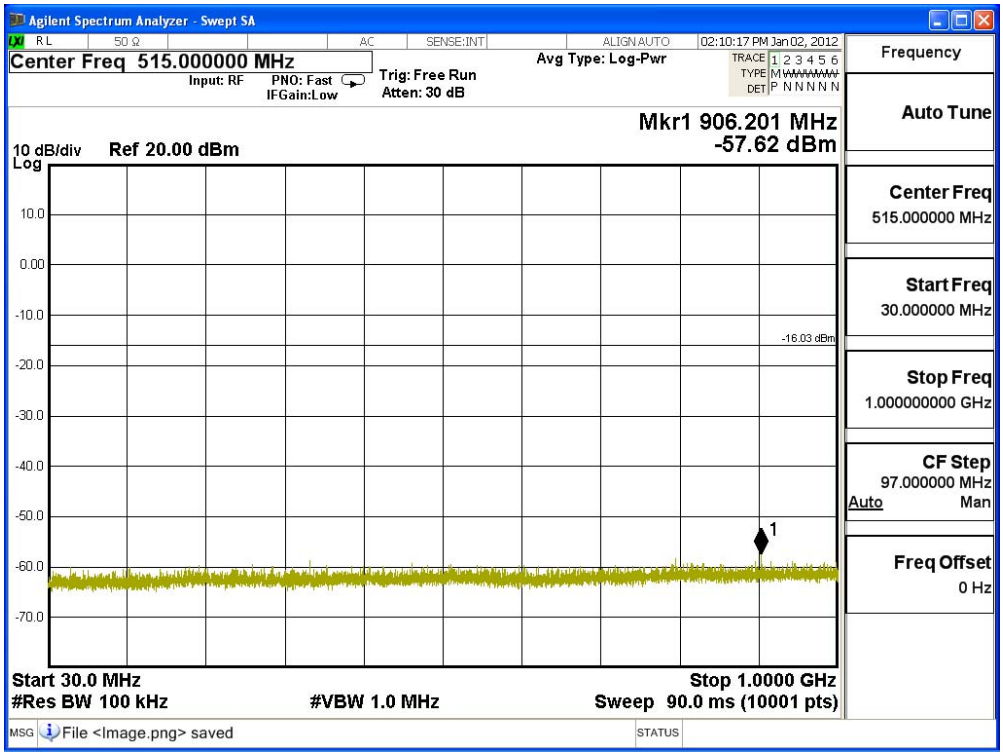
Channel 06 (2437MHz)

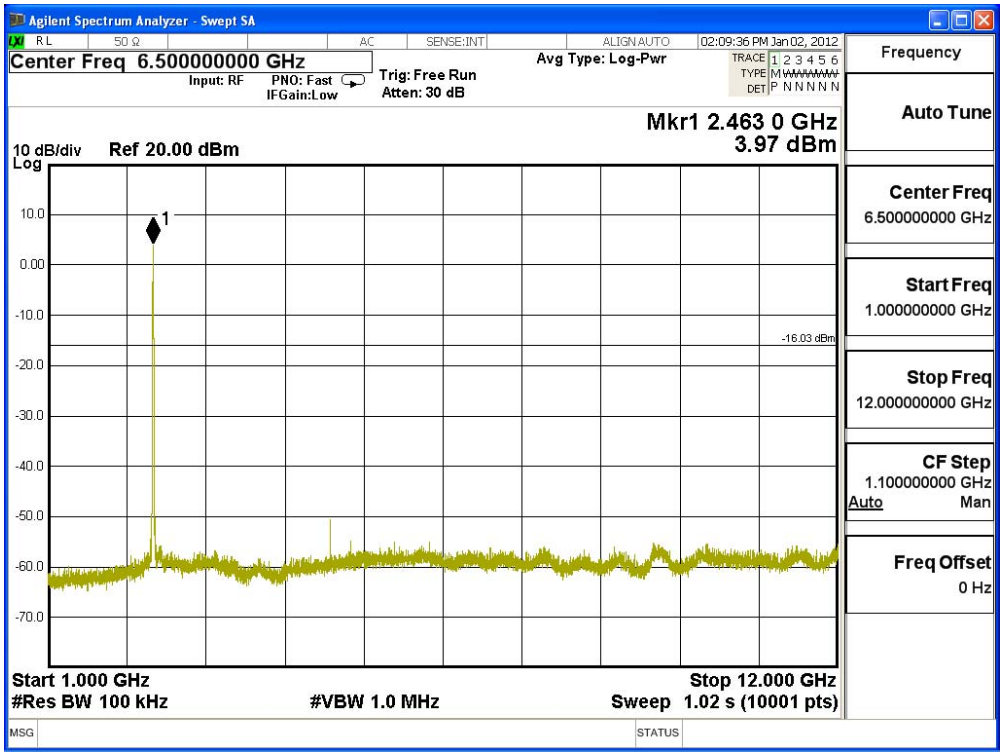


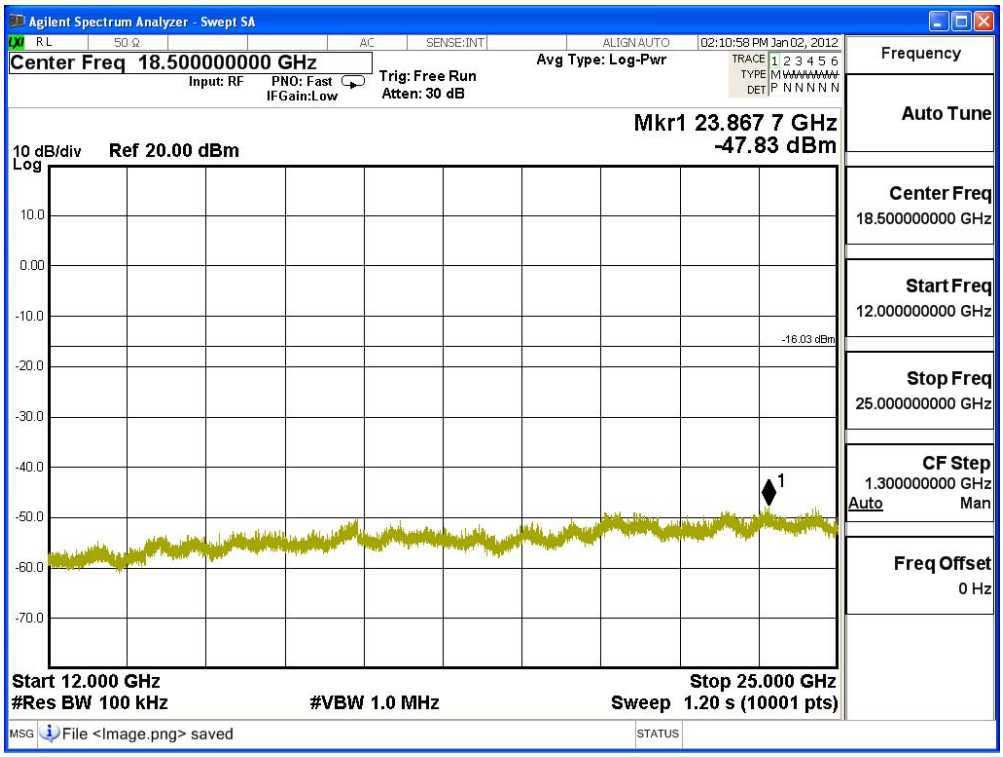



Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
02:00:59 PM Jan 02, 2012
Center Freq 18.500000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
TRACE 1 2 3 4 5 6
TYPE M WWWWWW
DET P N N N N N
Mkr1 21.392 5 GHz
-47.31 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-16.29 dBm
1
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
MSG
File <Image.png> saved
STATUS
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz

Channel 11 (2462MHz)

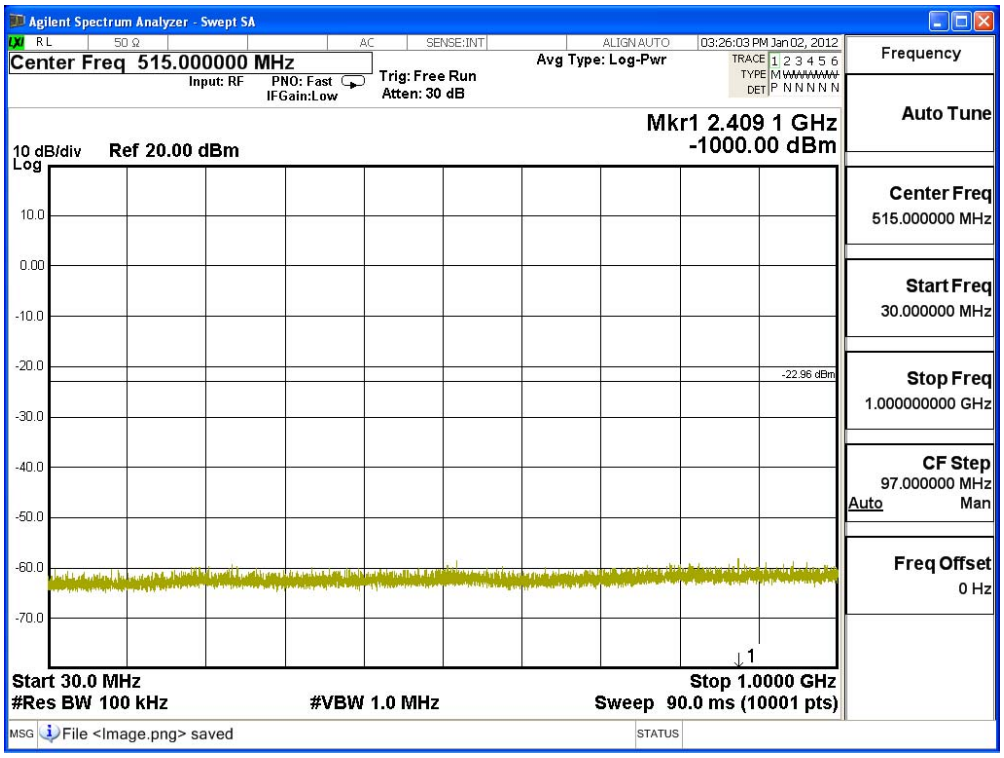


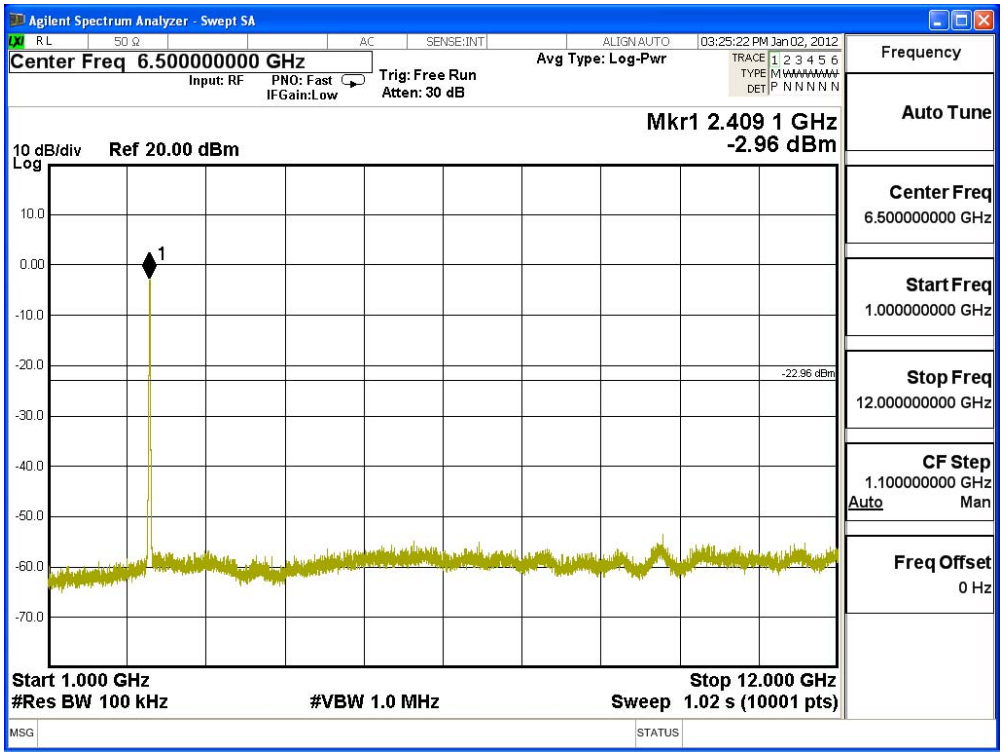


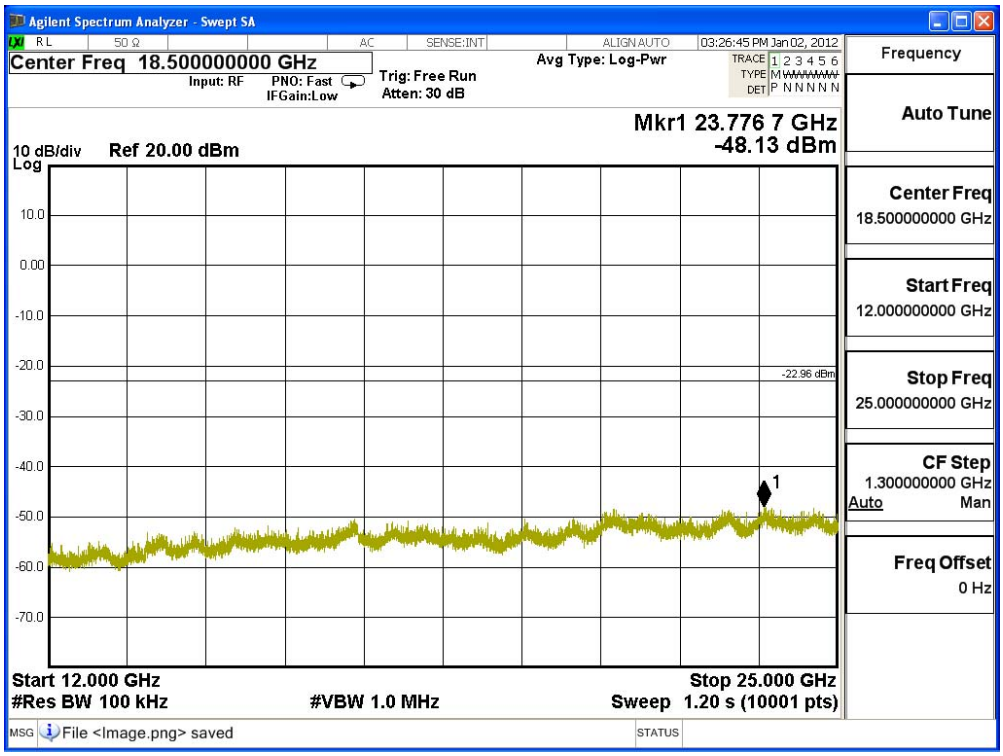

Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
02:10:58 PM Jan 02, 2012
Center Freq 18.500000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
TRACE 1 2 3 4 5 6
TYPE M WWWWW
DET P N N N N N
Mkr1 23.867 7 GHz
-47.83 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-16.03 dBm
1
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
MSG
File <Image.png> saved
STATUS
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz

Product : iDEA+ Docking Station
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps)

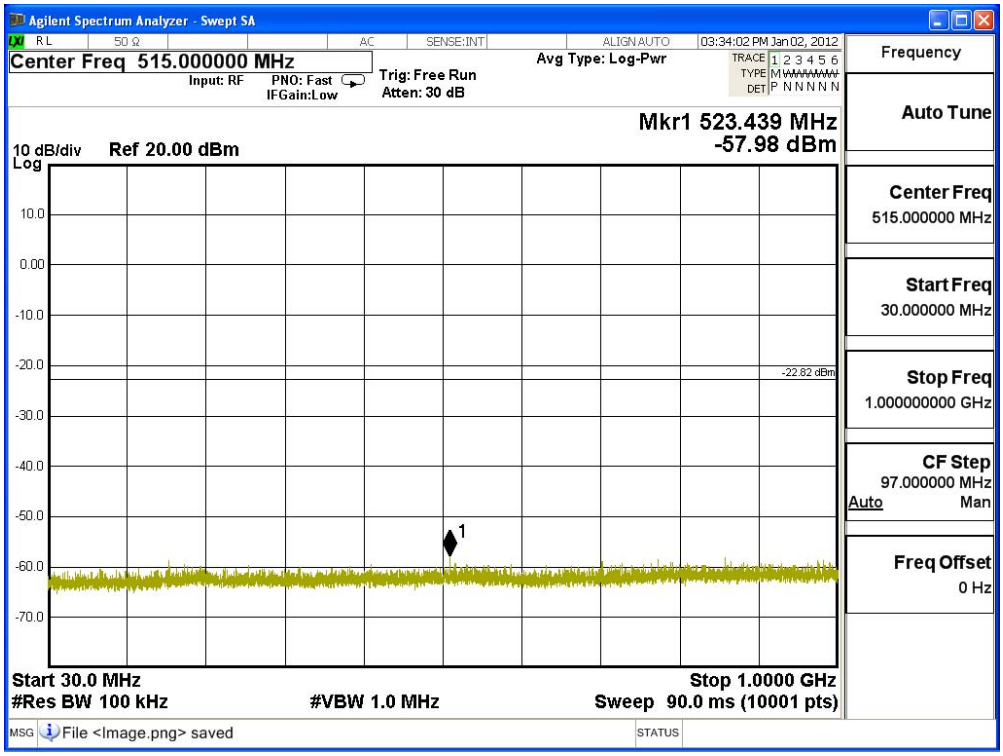
Channel 01 (2412MHz)

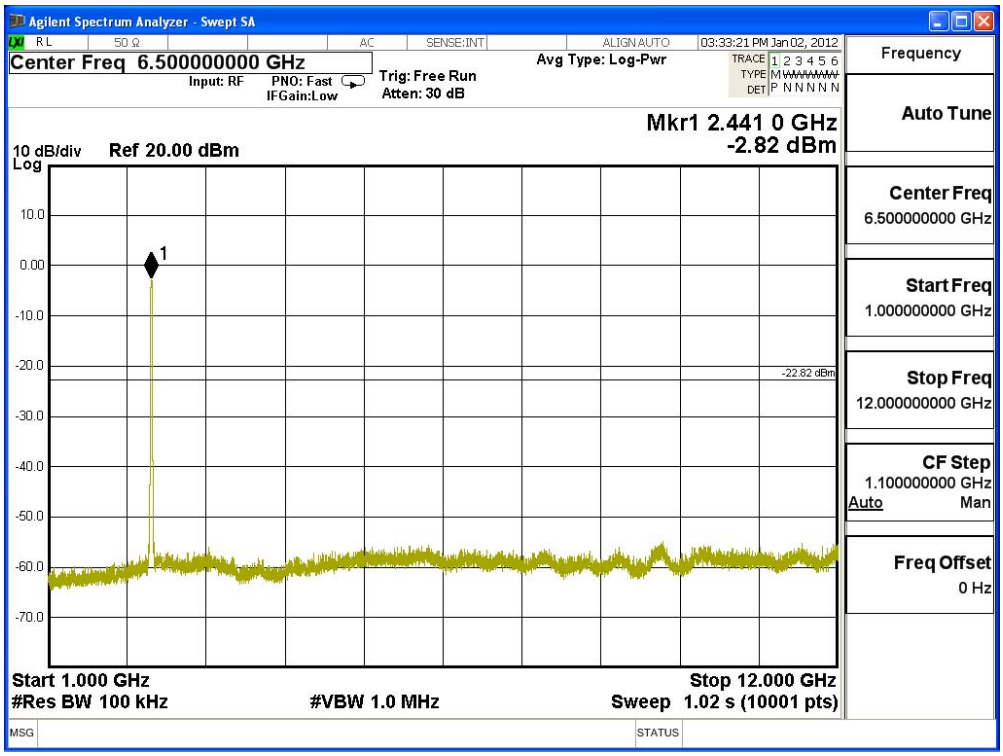


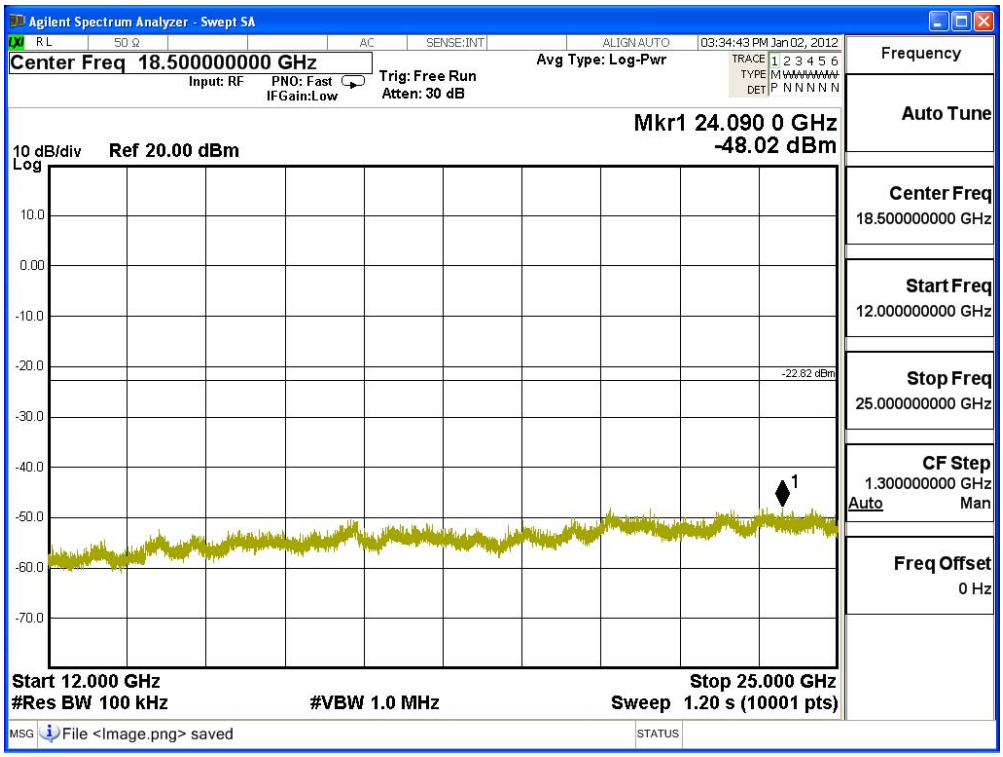

Agilent Spectrum Analyzer - Swept SA
Center Freq 6.500000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
03:25:22 PM Jan 02, 2012
Mkr1 2.409 1 GHz
-2.96 dBm
10 dB/div
Log
Ref 20.00 dBm
-22.96 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 12.000 GHz
Sweep 1.02 s (10001 pts)
Frequency
Auto Tune
Center Freq
6.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
12.000000000 GHz
CF Step
1.100000000 GHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 18.500000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
03:26:45 PM Jan 02, 2012
Mkr1 23.776 7 GHz
-48.13 dBm
10 dB/div
Log
Ref 20.00 dBm
-22.96 dBm
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
File <Image.png> saved
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz

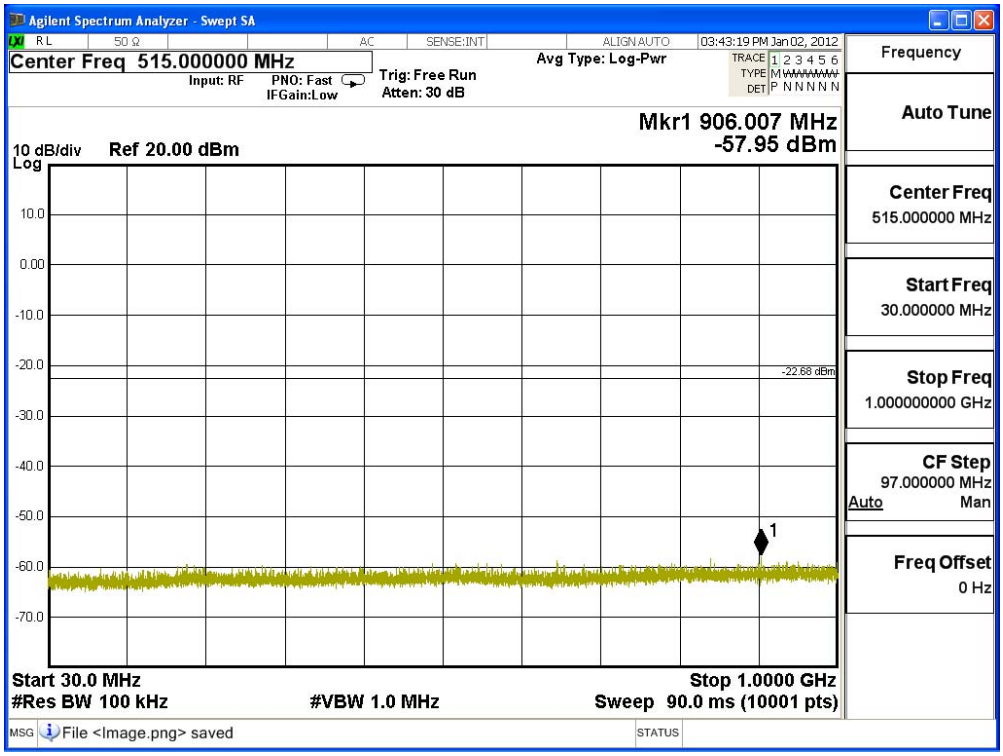
Channel 06 (2437MHz)

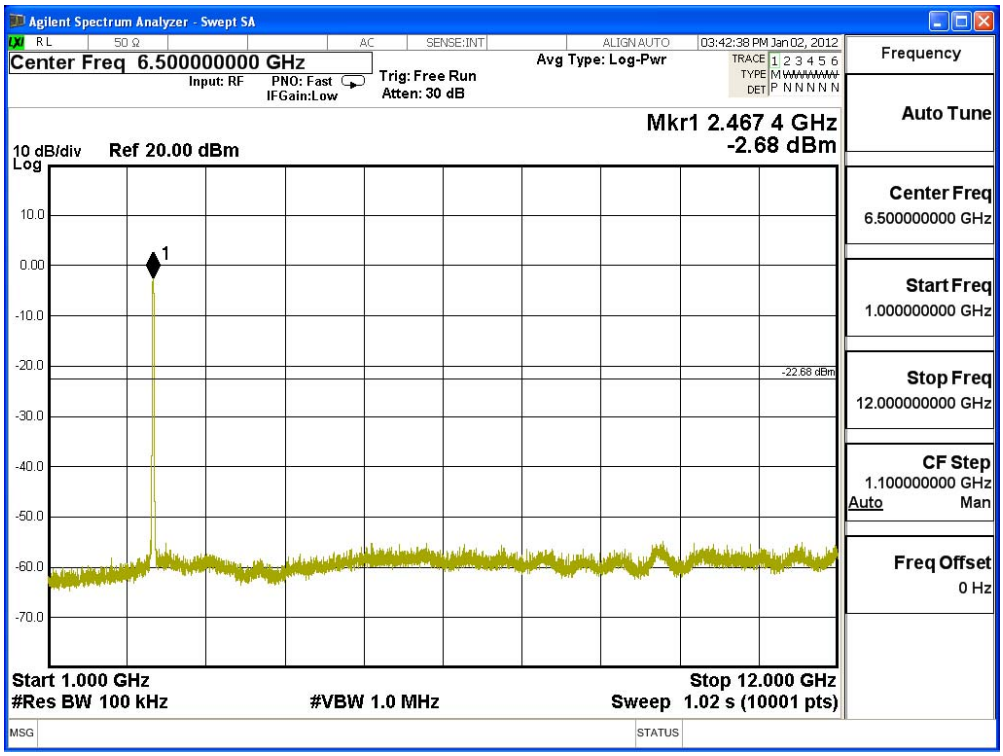


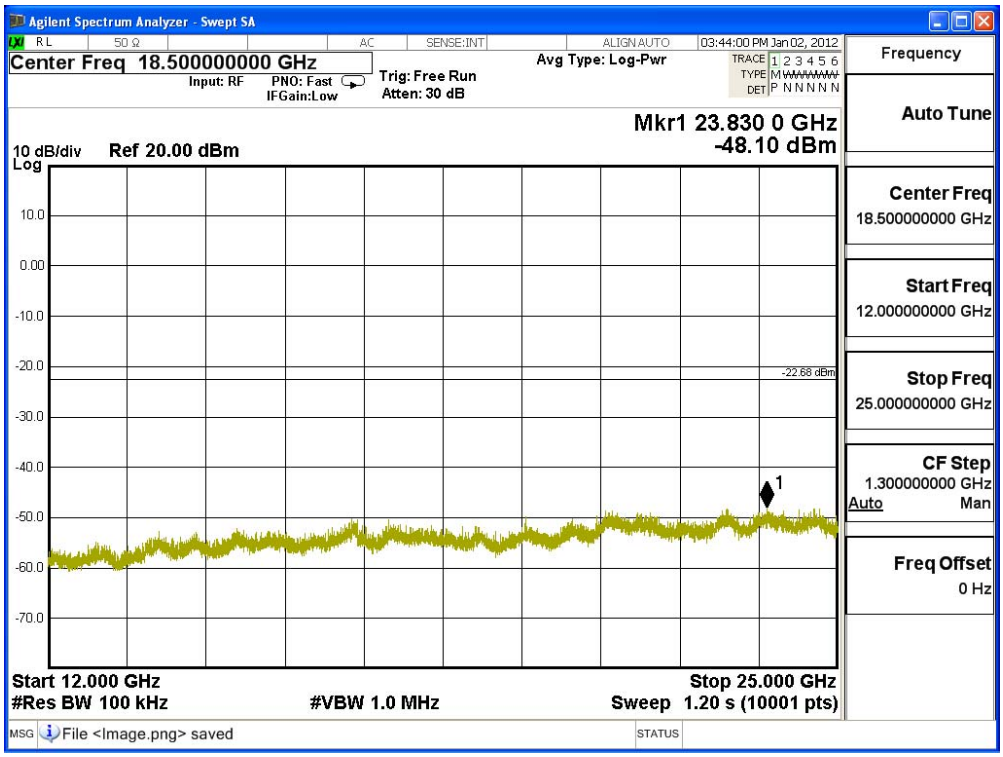



Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
03:34:43 PM Jan 02, 2012
Center Freq 18.500000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
TRACE 1 2 3 4 5 6
TYPE M WWWWW
DET P N N N N N
Mkr1 24.090 0 GHz
-48.02 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-22.82 dBm
1
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
MSG
File <Image.png> saved
STATUS
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz

Channel 11 (2462MHz)

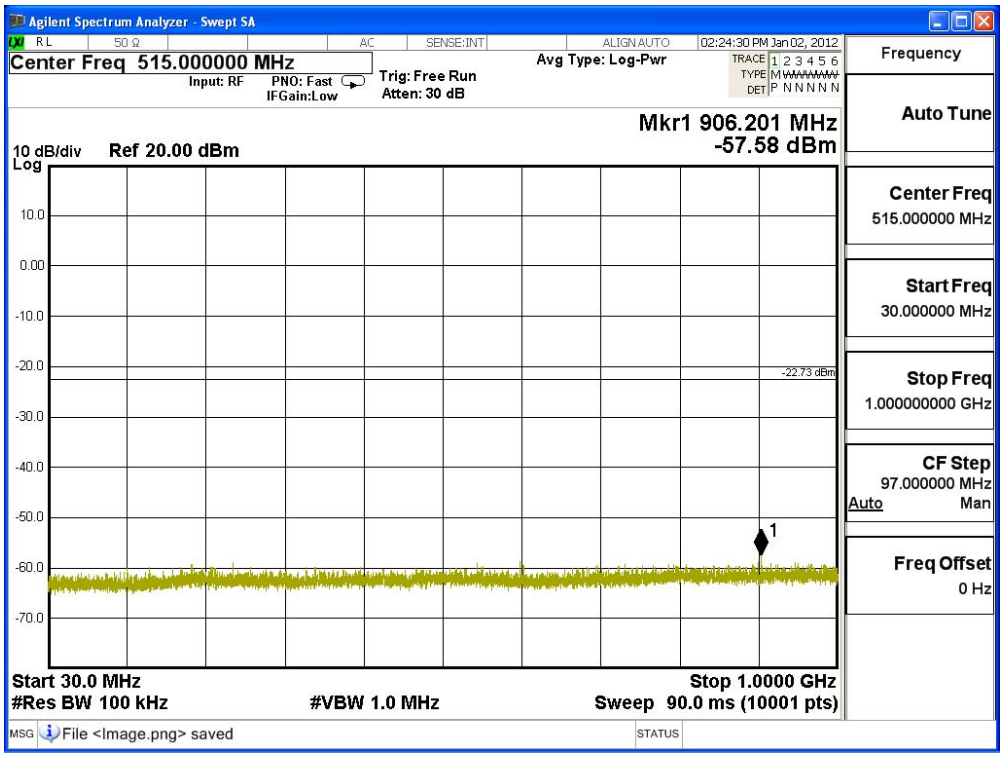


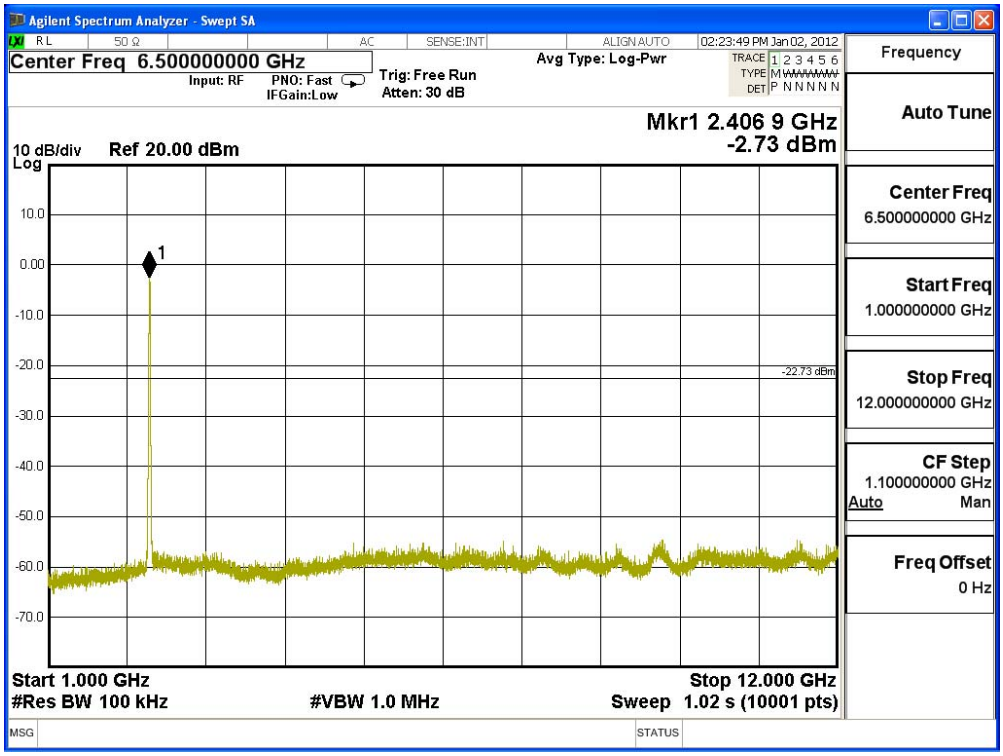


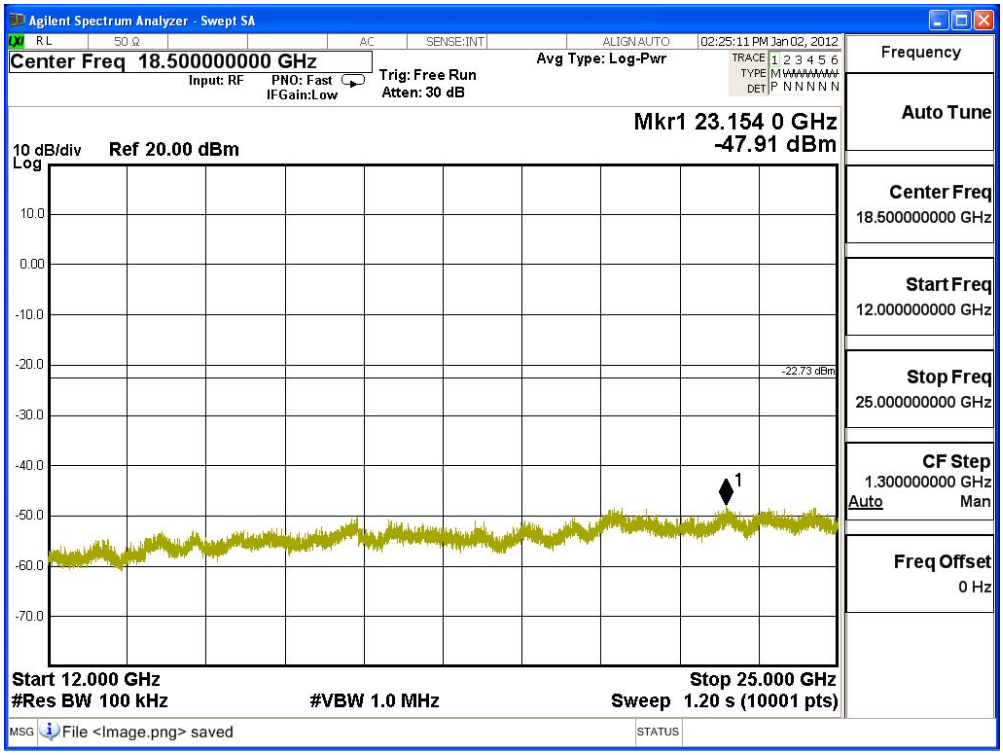

Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
03:44:00 PM Jan 02, 2012
Center Freq 18.500000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
TRACE 1 2 3 4 5 6
TYPE M WWWWW
DET P N N N N N
Mkr1 23.830 0 GHz
-48.10 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-22.68 dBm
1
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
MSG
File <Image.png> saved
STATUS
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz

Product : iDEA+ Docking Station
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

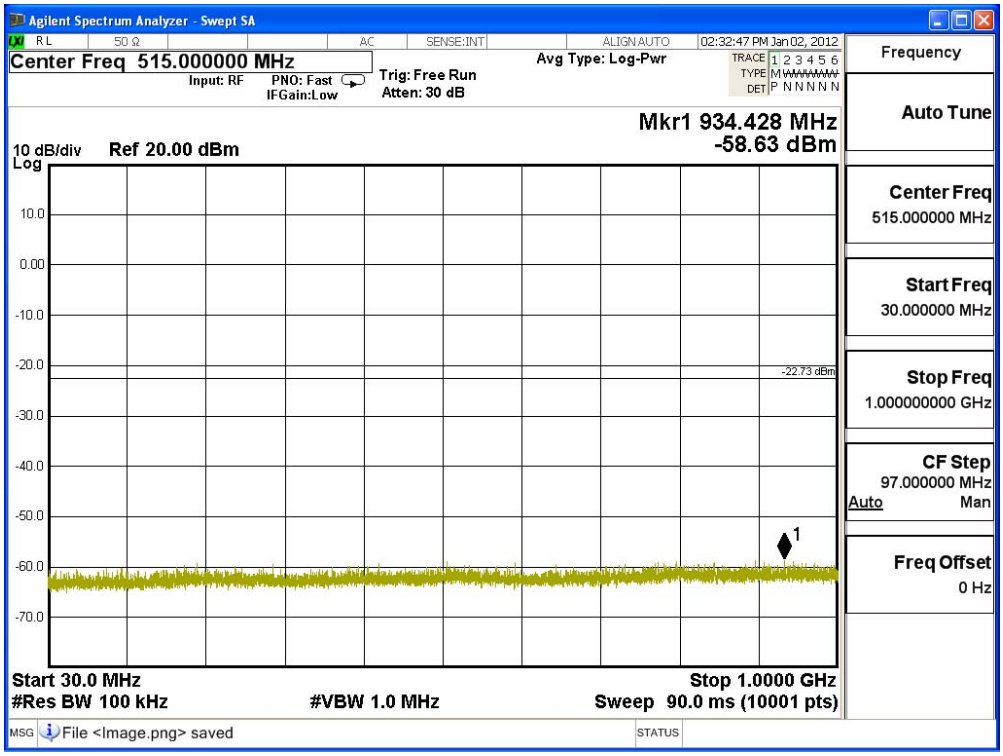
Channel 01 (2412MHz)

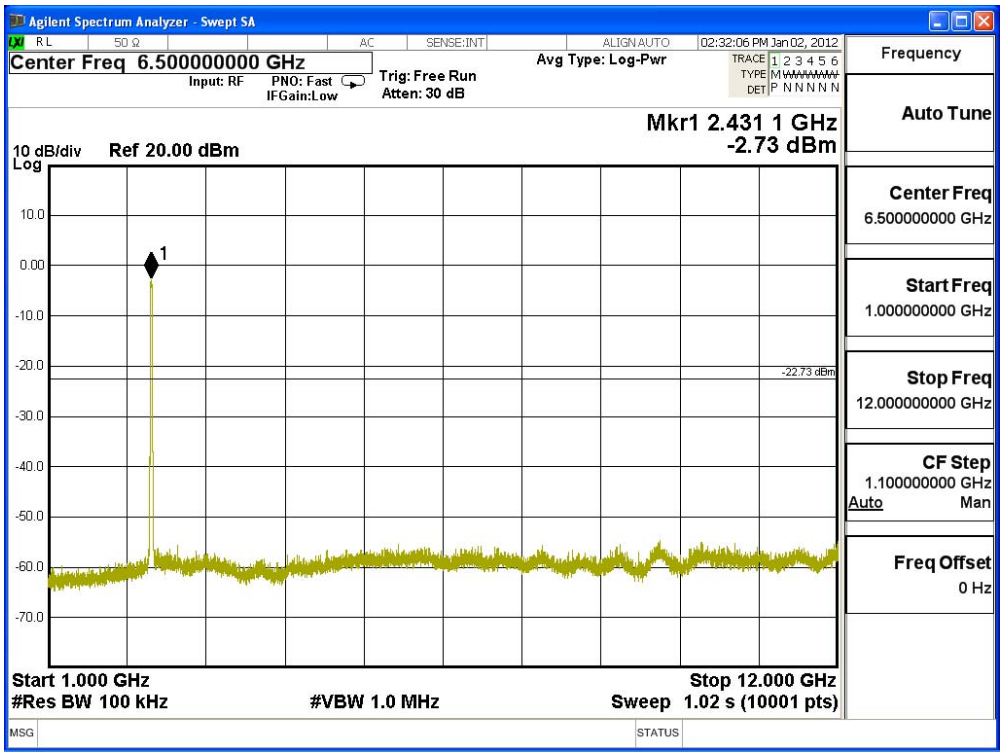


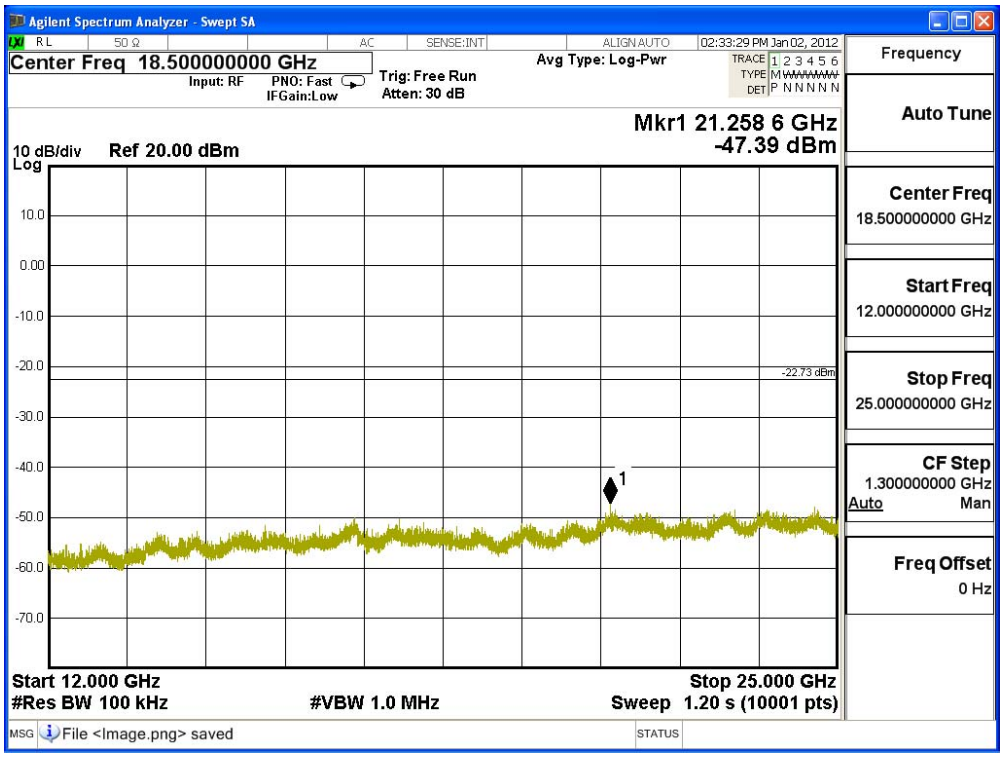

Agilent Spectrum Analyzer - Swept SA
Center Freq 6.500000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
02:23:49 PM Jan 02, 2012
Mkr1 2.406 9 GHz
-2.73 dBm
10 dB/div
Log
Ref 20.00 dBm
-22.73 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 12.000 GHz
Sweep 1.02 s (10001 pts)
Frequency
Auto Tune
Center Freq
6.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
12.000000000 GHz
CF Step
1.100000000 GHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Center Freq 18.500000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
02:25:11 PM Jan 02, 2012
Mkr1 23.154 0 GHz
-47.91 dBm
10 dB/div
Log
Ref 20.00 dBm
-22.73 dBm
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz
MSG
File <Image.png> saved
STATUS

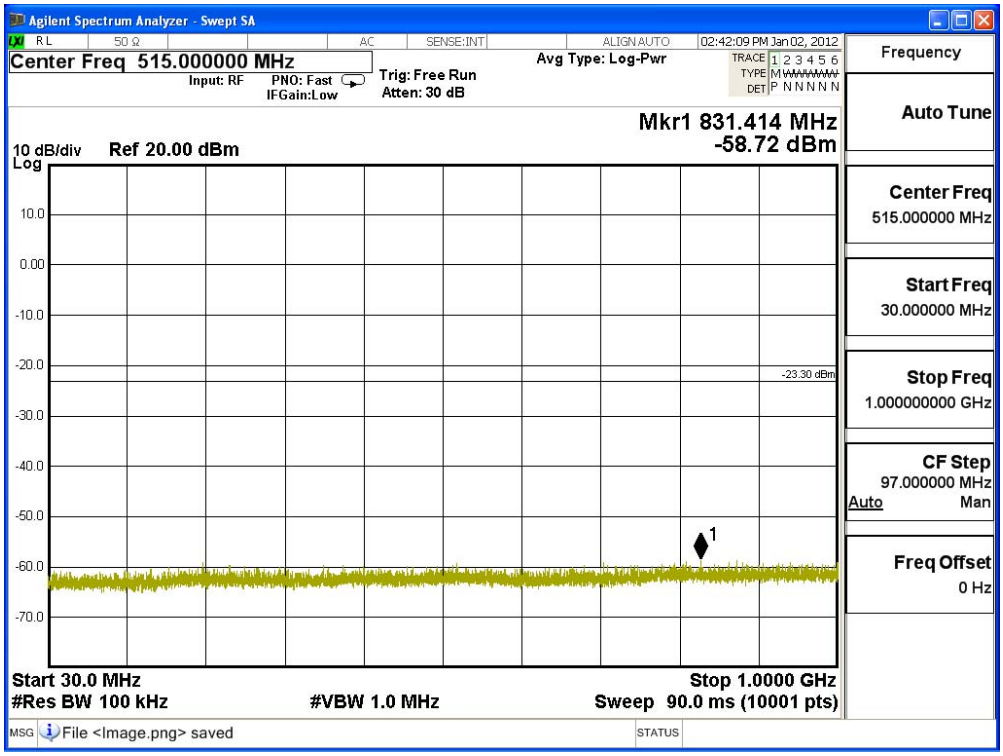
Channel 06 (2437MHz)

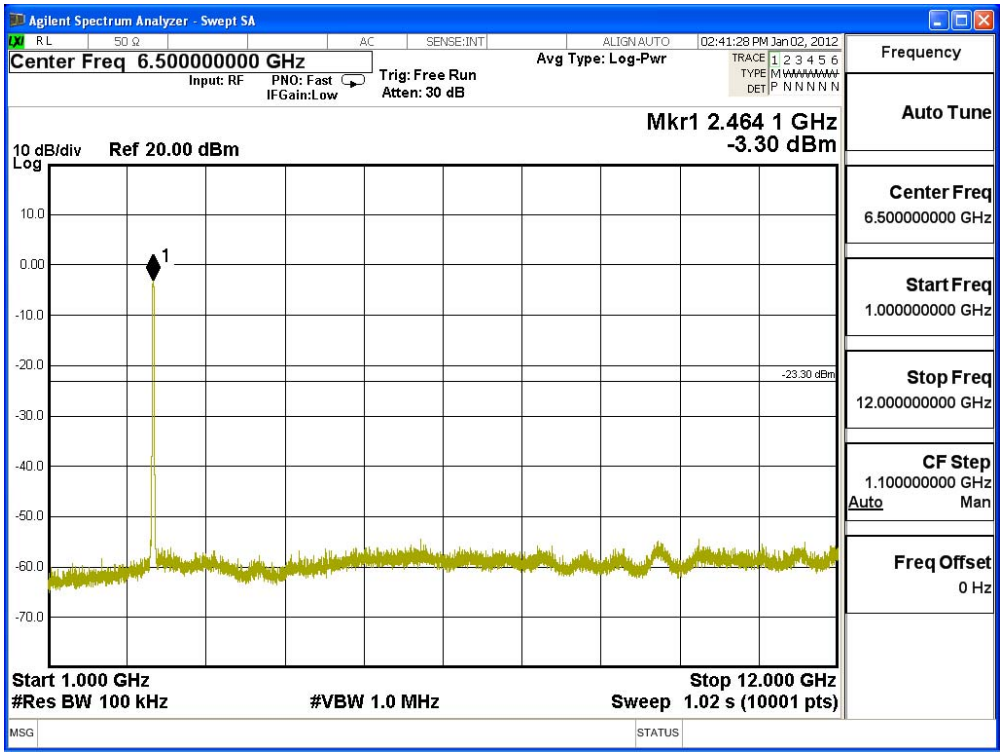


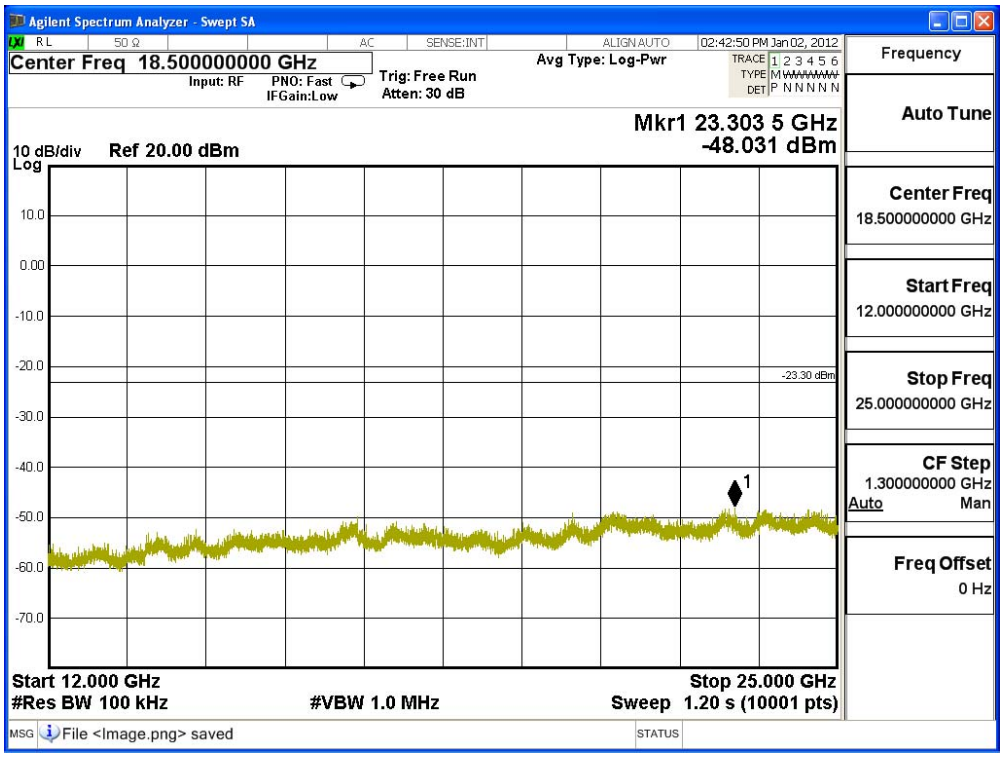



Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
02:33:29 PM Jan 02, 2012
Center Freq 18.500000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
Mkr1 21.258 6 GHz
-47.39 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-22.73 dBm
1
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
MSG
File <Image.png> saved
STATUS
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz

Channel 11 (2462MHz)

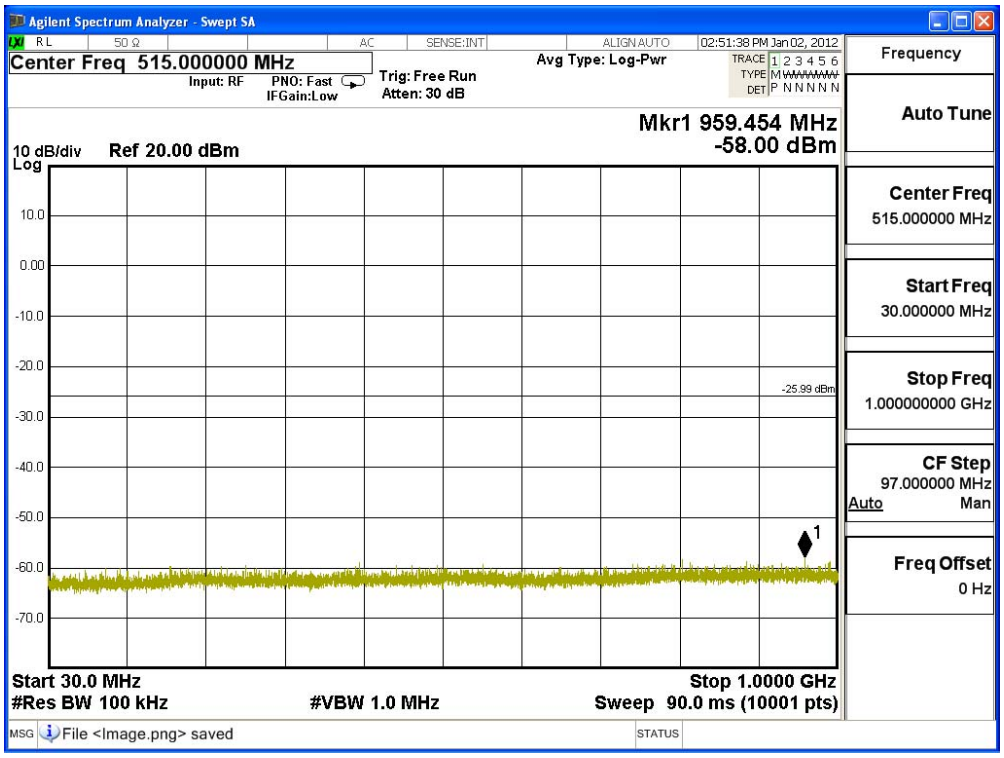


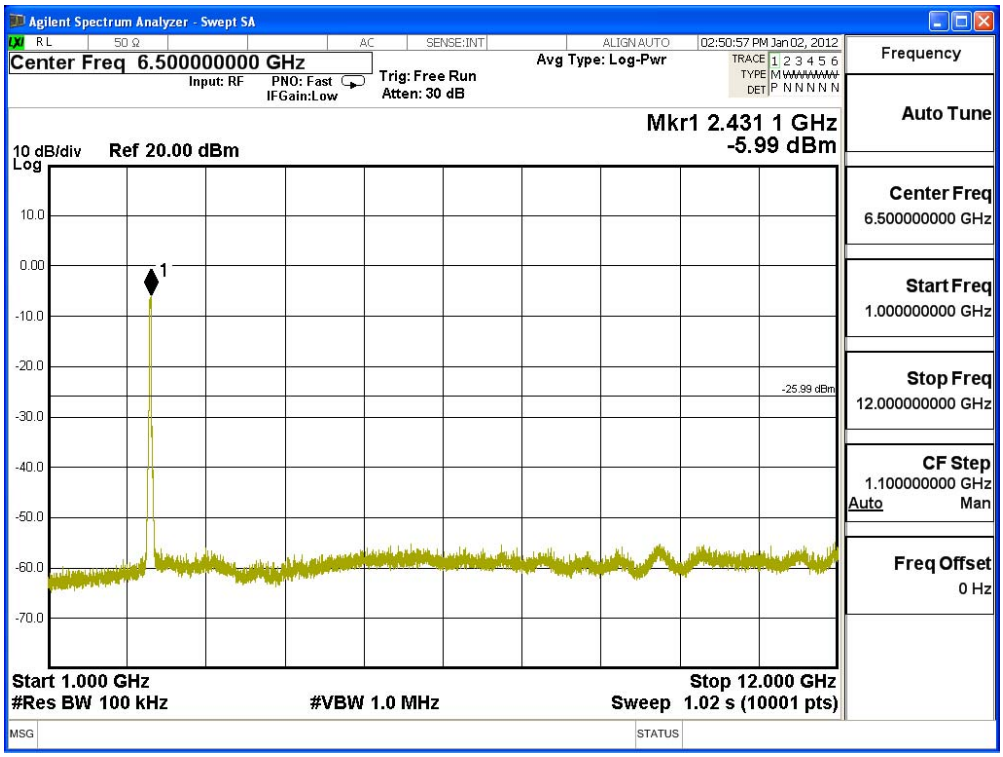


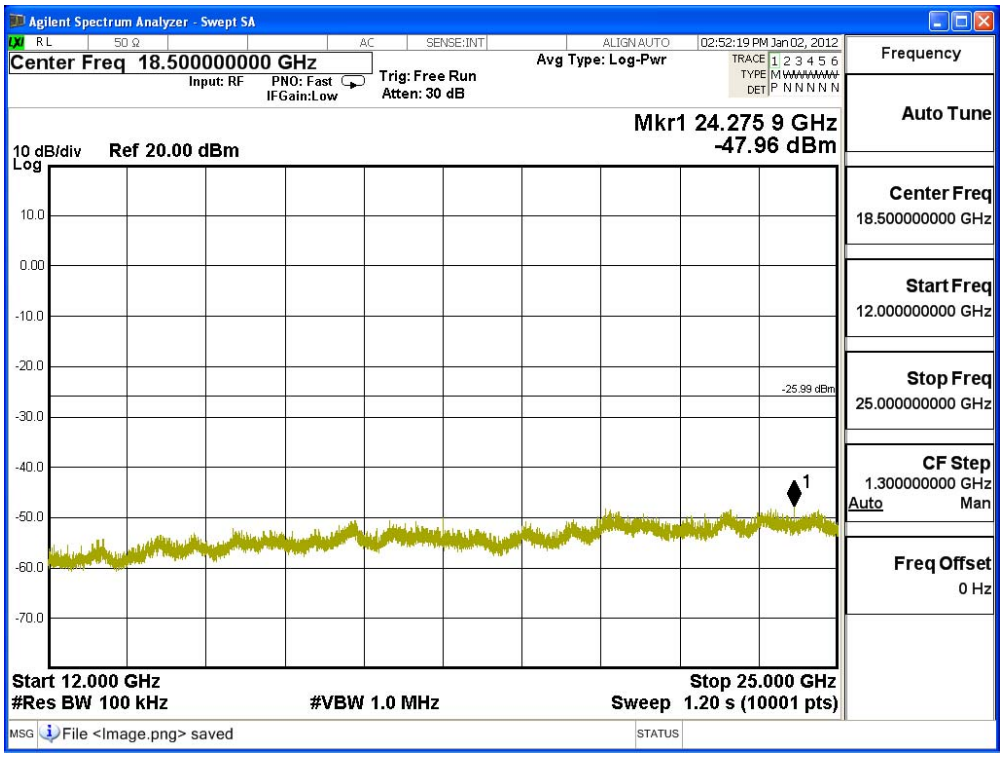

Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
02:42:50 PM Jan 02, 2012
Center Freq 18.500000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
TRACE 1 2 3 4 5 6
TYPE M WWWWW
DET P N N N N N
Mkr1 23.303 5 GHz
-48.031 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-23.30 dBm
1
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
MSG
File <Image.png> saved
STATUS
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz

Product : iDEA+ Docking Station
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

Channel 01 (2422MHz)




Agilent Spectrum Analyzer - Swept SA
Center Freq 6.500000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
02:50:57 PM Jan 02, 2012
Mkr1 2.431 1 GHz
-5.99 dBm
10 dB/div
Log
Ref 20.00 dBm
-25.99 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 12.000 GHz
Sweep 1.02 s (10001 pts)
Frequency
Auto Tune
Center Freq
6.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
12.000000000 GHz
CF Step
1.100000000 GHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 18.500000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
02:52:19 PM Jan 02, 2012
Mkr1 24.275 9 GHz
-47.96 dBm
10 dB/div
Log
Ref 20.00 dBm
-25.99 dBm
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
File <Image.png> saved
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz

Channel 04 (2437MHz)