

FC

Test Report

Product Name	Tablet PC
Model No.	xTablet [®] T7200, Fieldbook A2, T7Q, a7360X, a7380X
FCC ID.	FKGT7Q

Applicant	Twinhead International Corp
Address	10F, 550 Rueiguand Rd Neihu, Taipei, Taiwan 114, ROC

Date of Receipt	Feb. 21, 2012
Issued Date	Jun 25, 2012
Report No.	122393R-RFUSP43V01
Report Version	V1.0



The Test Results relate only to the samples tested.
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Test Report Certification

Issued Date: Jun 25, 2012

Report No.: 122393R-RFUSP43V01



Product Name	Tablet PC
Applicant	Twinhead International Corp
Address	10F, 550 Rueiguand Rd Neihu, Taipei, Taiwan 114, ROC
Manufacturer	Twinhead International Corp
Model No.	xTablet [®] T7200, Fieldbook A2, T7Q, a7360X, a7380X
FCC ID.	FKGT7Q
EUT Rated Voltage	AC 100-240V, 50-60Hz
EUT Test Voltage	AC 120V/60Hz
Trade Name	MobileDemand, LOGIC INSTRUMENT, DURABOOK, tabletkiosk
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2010 ANSI C63.4: 2003
Test Result	Complied

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Attachment 1: EUT Test Photographs
 Attachment 2: EUT Detailed Photographs

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Tablet PC
Trade Name	MobileDemand, LOGIC INSTRUMENT, DURABOOK, tabletkiosk
Model No.	xTablet [®] T7200, Fieldbook A2, T7Q, a7360X, a7380X
FCC ID.	FKGT7Q
Frequency Range	2402 – 2480MHz
Channel Number	V3.0+HS, V2.1+EDR: 79CH V4.0: 40CH
Type of Modulation	V3.0+HS, V2.1+EDR: GFSK(1Mbps) / π /4DQPSK(2Mbps) / 8DPSK(3Mbps) V4.0: GFSK(1Mbps)
Antenna Type	PIFA Antenna
Channel Control	Auto
Antenna Gain	Refer to the table “Antenna List”
Power Adapter	MFR: FSP GROUP, M/N: FSP065-RAB Input: AC 100-240V, 50-60Hz, 1.5A Output: DC 19V, 3.42A Cable out: Non-Shielded, 1.8m, with one ferrite core bonded. Power Cord: Non-Shielded, 1.8m
Contain Module	Intel/6235ANHMW

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	WGT	TWT7QWIPI02+A (Main) TWT7QWIPI01+A (Aux)	PIFA	-0.72dBi For 2.4GHz

Note:

1. The antenna of EUT is conform to FCC 15.203.
2. The Main antenna is for WLAN with TX/RX mode, the Aux antenna is for WLAN TX/RX mode and Bluetooth TX/RX function. (Maximum Gain for Bluetooth: -0.72dBi)

Frequency of Each Channel: (For V3.0+HS, V2.1+EDR)

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 00:	2402 MHz	Channel 20:	2422 MHz	Channel 40:	2442 MHz	Channel 60:	2462 MHz
Channel 01:	2403 MHz	Channel 21:	2423 MHz	Channel 41:	2443 MHz	Channel 61:	2463 MHz
Channel 02:	2404 MHz	Channel 22:	2424 MHz	Channel 42:	2444 MHz	Channel 62:	2464 MHz
Channel 03:	2405 MHz	Channel 23:	2425 MHz	Channel 43:	2445 MHz	Channel 63:	2465 MHz
Channel 04:	2406 MHz	Channel 24:	2426 MHz	Channel 44:	2446 MHz	Channel 64:	2466 MHz
Channel 05:	2407 MHz	Channel 25:	2427 MHz	Channel 45:	2447 MHz	Channel 65:	2467 MHz
Channel 06:	2408 MHz	Channel 26:	2428 MHz	Channel 46:	2448 MHz	Channel 66:	2468 MHz
Channel 07:	2409 MHz	Channel 27:	2429 MHz	Channel 47:	2449 MHz	Channel 67:	2469 MHz
Channel 08:	2410 MHz	Channel 28:	2430 MHz	Channel 48:	2450 MHz	Channel 68:	2470 MHz
Channel 09:	2411 MHz	Channel 29:	2431 MHz	Channel 49:	2451 MHz	Channel 69:	2471 MHz
Channel 10:	2412 MHz	Channel 30:	2432 MHz	Channel 50:	2452 MHz	Channel 70:	2472 MHz
Channel 11:	2413 MHz	Channel 31:	2433 MHz	Channel 51:	2453 MHz	Channel 71:	2473 MHz
Channel 12:	2414 MHz	Channel 32:	2434 MHz	Channel 52:	2454 MHz	Channel 72:	2474 MHz
Channel 13:	2415 MHz	Channel 33:	2435 MHz	Channel 53:	2455 MHz	Channel 73:	2475 MHz
Channel 14:	2416 MHz	Channel 34:	2436 MHz	Channel 54:	2456 MHz	Channel 74:	2476 MHz
Channel 15:	2417 MHz	Channel 35:	2437 MHz	Channel 55:	2457 MHz	Channel 75:	2477 MHz
Channel 16:	2418 MHz	Channel 36:	2438 MHz	Channel 56:	2458 MHz	Channel 76:	2478 MHz
Channel 17:	2419 MHz	Channel 37:	2439 MHz	Channel 57:	2459 MHz	Channel 77:	2479 MHz
Channel 18:	2420 MHz	Channel 38:	2440 MHz	Channel 58:	2460 MHz	Channel 78:	2480 MHz
Channel 19:	2421 MHz	Channel 39:	2441 MHz	Channel 59:	2461 MHz		

Frequency of Each Channel: (For V4.0)

Channel	Frequency	Channel	Frequency
Channel 00:	2402 MHz	Channel 20:	2442 MHz
Channel 01:	2404 MHz	Channel 21:	2444 MHz
Channel 02:	2406 MHz	Channel 22:	2446 MHz
Channel 03:	2408 MHz	Channel 23:	2448 MHz
Channel 04:	2410 MHz	Channel 24:	2450 MHz
Channel 05:	2412MHz	Channel 25:	2452 MHz
Channel 06:	2414 MHz	Channel 26:	2454 MHz
Channel 07:	2416 MHz	Channel 27:	2456 MHz
Channel 08:	2418 MHz	Channel 28:	2458 MHz
Channel 09:	2420 MHz	Channel 29:	2460 MHz
Channel 10:	2422 MHz	Channel 30:	2462 MHz
Channel 11:	2424 MHz	Channel 31:	2464 MHz
Channel 12:	2426 MHz	Channel 32:	2466 MHz
Channel 13:	2428 MHz	Channel 33:	2468 MHz
Channel 14:	2430 MHz	Channel 34:	2470 MHz
Channel 15:	2432 MHz	Channel 35:	2472 MHz
Channel 16:	2434 MHz	Channel 36:	2474 MHz
Channel 17:	2436 MHz	Channel 37:	2476 MHz
Channel 18:	2438 MHz	Channel 38:	2478 MHz
Channel 19:	2440 MHz	Channel 39:	2480 MHz

Note:

1. This device is a Tablet PC, Contains functions and so on WiFi 、Bluetooth 、RFID 、GPS , This report for Bluetooth.
2. These tests were conducted on a sample for the purpose of demonstrating compliance of Bluetooth transmitter with Part 15 Subpart C Paragraph 15.247 for spread spectrum devices.
3. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
4. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.
5. The different of the each model is shown as below:

Model	Trademark
xTablet®T7200	MobileDemand
Fieldbook A2	LOGIC INSTRUMENT
T7Q	DURABOOK
a7360X/a7380X	tabletkiosk

NOTE: 1. I/O Port and appearance of buttons in each model is not the same.

(See internal photos)

2. Each model through the pretest, only the worst case (T7Q) is shown in the test report.

Test Mode	Mode 1: Transmit - 1Mbps (GFSK) Mode 2: Transmit - 3Mbps (8DPSK) Mode 3: Transmit - BLE (GFSK)
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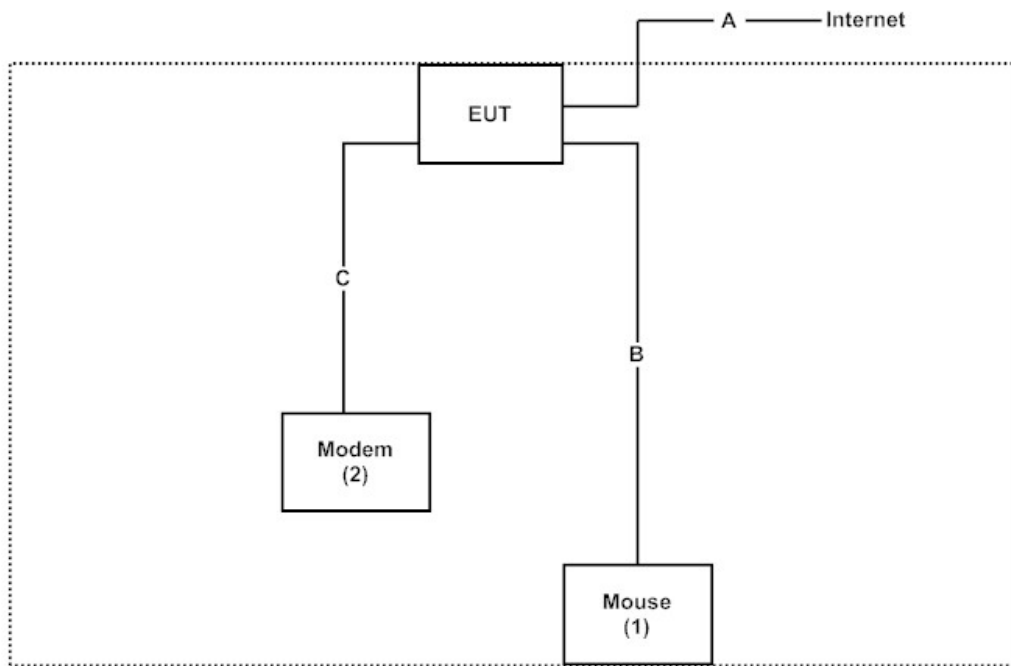
1.3. Tested System Details

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

Product	Manufacturer	Model No.	Serial No.	Power Cord
(1) USB Mouse	Logitech	M-U0003	LZ024HR	N/A
(2) Modem	ACEEX	DM-1414	0102027558	Non-Shielded, 1.8m

Signal Cable Type	Signal cable Description
A LAN Cable	Non-Shielded, 2m
B Mouse Cable	Non-Shielded, 1.8m
C Modem Cable	Non-Shielded, 1.5m

1.4. Configuration of Tested System



1.5. EUT Exercise Software

- (1) Setup the EUT as shown in Section 1.4.
- (2) Execute program on the EUT.
- (3) Configure the test mode, the test channel, and the data rate.
- (4) Press “OK” to start the continuous Transmit.
- (5) Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	30-65
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
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7435 Oakland Mills Road
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Registration Number: 92195

Accreditation on NVLAP
NVLAP Lab Code: 200533-0

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FCC Accreditation Number: TW1014

2. Conducted Emission

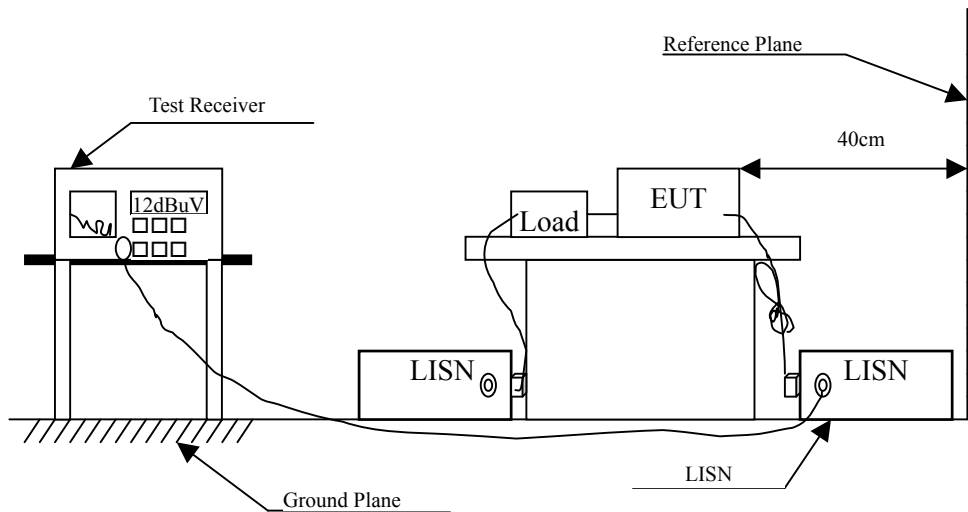
2.1. Test Equipment

	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, 2012	EUT
X	Pulse Limiter	R & S	ESH3-Z2 / 357.8810.52	Feb., 2012	
	No.1 Shielded Room				

Note:

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

2.2. Test Setup



2.3. Limits

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

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

2.4. Test Procedure

The EUT and Peripherals 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 refer 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 the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.

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

The EUT was setup to ANSI C63.4, 2003; tested to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.

2.5. Uncertainty

± 2.26 dB

2.6. Test Result of Conducted Emission

Product : Tablet PC
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 2: Transmit - 3Mbps (8DPSK) (2441MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
LINE 1					
Quasi-Peak					
0.185	9.840	39.350	49.190	-15.810	65.000
0.295	9.840	28.490	38.330	-23.527	61.857
0.420	9.840	31.140	40.980	-17.306	58.286
0.783	9.850	30.460	40.310	-15.690	56.000
8.388	9.977	16.270	26.247	-33.753	60.000
14.541	10.112	17.950	28.062	-31.938	60.000
Average					
0.185	9.840	24.030	33.870	-21.130	55.000
0.295	9.840	15.490	25.330	-26.527	51.857
0.420	9.840	21.300	31.140	-17.146	48.286
0.783	9.850	16.120	25.970	-20.030	46.000
8.388	9.977	5.590	15.567	-34.433	50.000
14.541	10.112	8.400	18.512	-31.488	50.000

Note:

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

Product : Tablet PC
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 2: Transmit - 3Mbps (8DPSK) (2441MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
LINE 2					
Quasi-Peak					
0.185	9.840	41.010	50.850	-14.150	65.000
0.295	9.840	28.350	38.190	-23.667	61.857
0.439	9.840	29.620	39.460	-18.283	57.743
0.759	9.840	30.310	40.150	-15.850	56.000
14.142	10.184	17.980	28.164	-31.836	60.000
27.252	10.350	21.490	31.840	-28.160	60.000
Average					
0.185	9.840	23.940	33.780	-21.220	55.000
0.295	9.840	15.960	25.800	-26.057	51.857
0.439	9.840	18.310	28.150	-19.593	47.743
0.759	9.840	16.880	26.720	-19.280	46.000
14.142	10.184	7.970	18.154	-31.846	50.000
27.252	10.350	15.240	25.590	-24.410	50.000

Note:

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

Product : Tablet PC
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 3: Transmit - BLE (GFSK) (2442MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
LINE 1					
Quasi-Peak					
0.185	9.696	33.270	42.966	-22.034	65.000
0.310	9.640	25.120	34.760	-26.669	61.429
0.455	9.640	28.910	38.550	-18.736	57.286
0.662	9.640	33.530	43.170	-12.830	56.000
1.392	9.670	22.110	31.780	-24.220	56.000
27.486	9.970	25.480	35.450	-24.550	60.000
Average					
0.185	9.696	18.330	28.026	-26.974	55.000
0.310	9.640	11.860	21.500	-29.929	51.429
0.455	9.640	20.880	30.520	-16.766	47.286
0.662	9.640	23.450	33.090	-12.910	46.000
1.392	9.670	7.580	17.250	-28.750	46.000
27.486	9.970	17.910	27.880	-22.120	50.000

Note:

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

Product : Tablet PC
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 3: Transmit - BLE (GFSK) (2442MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
LINE 2					
Quasi-Peak					
0.181	9.702	31.080	40.782	-24.332	65.114
0.459	9.650	31.560	41.210	-15.961	57.171
0.658	9.650	34.820	44.470	-11.530	56.000
1.045	9.690	27.090	36.780	-19.220	56.000
1.771	9.700	22.430	32.130	-23.870	56.000
26.779	10.200	25.510	35.710	-24.290	60.000
Average					
0.181	9.702	16.190	25.892	-29.222	55.114
0.459	9.650	21.680	31.330	-15.841	47.171
0.658	9.650	24.420	34.070	-11.930	46.000
1.045	9.690	12.970	22.660	-23.340	46.000
1.771	9.700	10.890	20.590	-25.410	46.000
26.779	10.200	18.570	28.770	-21.230	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

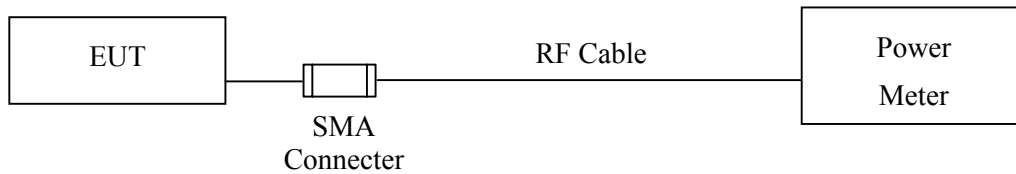
3. Peak Power Output

3.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Power Meter	Anritsu	ML2495A/6K00003357	May, 2012
X	Power Sensor	Anritsu	MA2411B/0738448	Jun, 2012

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

3.2. Test Setup



3.3. Limit

The maximum peak power shall be less 1Watt.

3.4. Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.

3.5. Uncertainty

± 1.27 dB

3.6. Test Result of Peak Power Output

Product : Tablet PC
Test Item : Peak Power Output
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 1Mbps (GFSK)

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
Channel 00	2402.00	7.74	1 Watt= 30 dBm	Pass
Channel 39	2441.00	8.42	1 Watt= 30 dBm	Pass
Channel 78	2480.00	6.95	1 Watt= 30 dBm	Pass

Product : Tablet PC
Test Item : Peak Power Output
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 3Mbps (8DPSK)

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
Channel 00	2402.00	6.22	1 Watt= 30 dBm	Pass
Channel 39	2441.00	7.37	1 Watt= 30 dBm	Pass
Channel 78	2480.00	7.76	1 Watt= 30 dBm	Pass

Product : Tablet PC
Test Item : Peak Power Output
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - BLE (GFSK)

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
Channel 00	2402.00	4.98	1 Watt= 30 dBm	Pass
Channel 20	2442.00	5.65	1 Watt= 30 dBm	Pass
Channel 39	2480.00	6.52	1 Watt= 30 dBm	Pass

4. Radiated Emission

4.1. Test Equipment

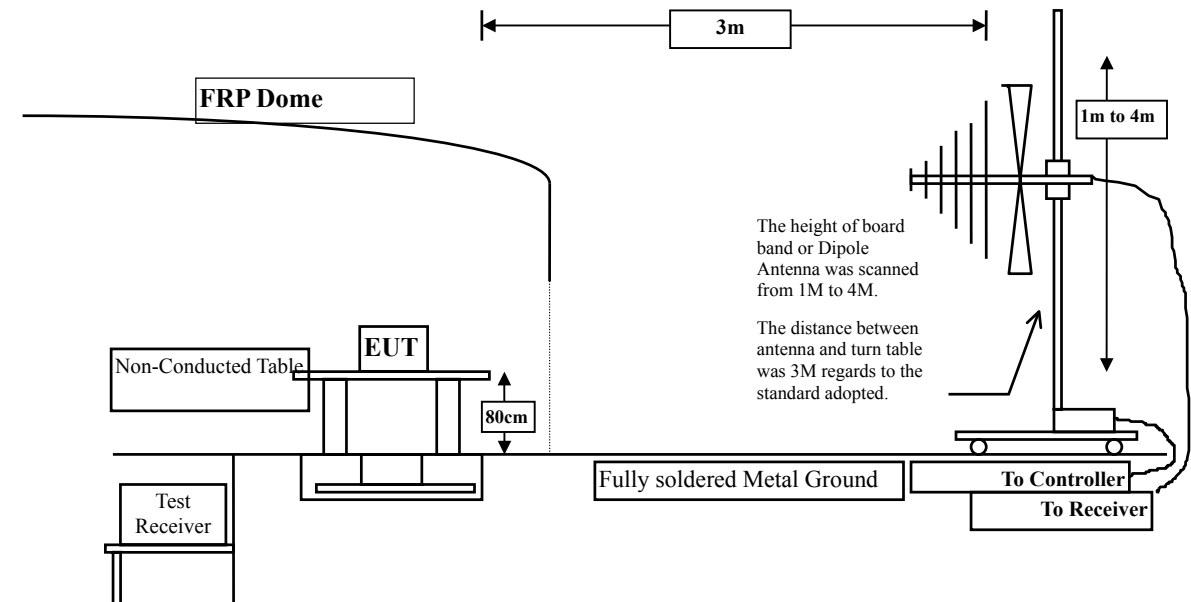
The following test equipments are used during the radiated emission test:

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, 2012
	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

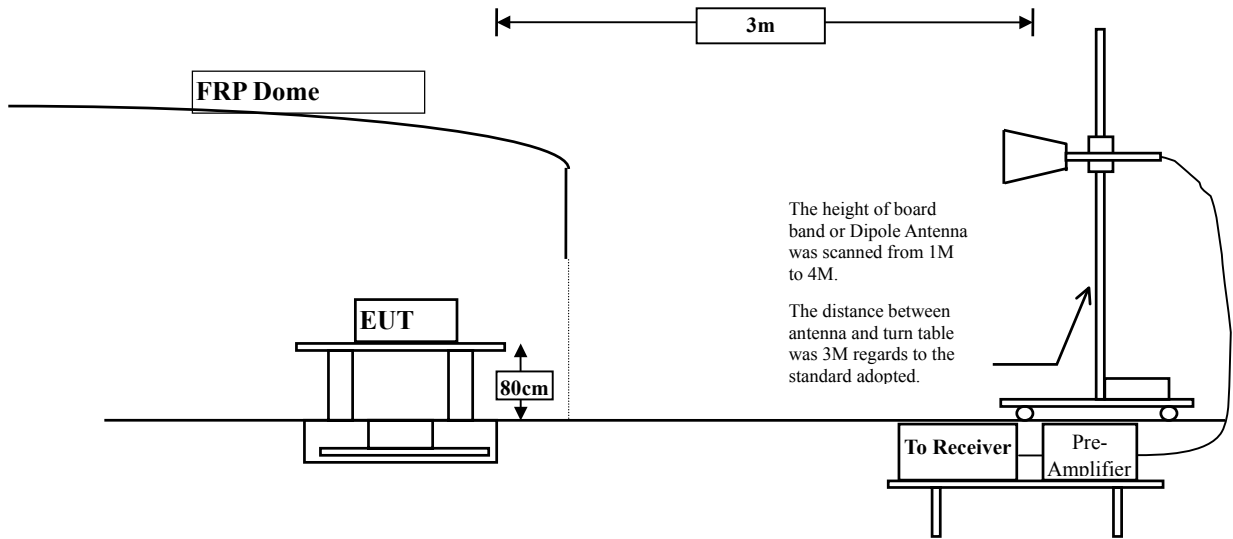
- Note: 1. All equipments are calibrated every one year.
 2. The test instruments marked by "X" are used to measure the final test results.

4.2. Test Setup

Below 1GHz



Above 1GHz



4.3. Limits

➤ General Radiated Emission 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 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:
1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
 2. In the Above Table, the tighter limit applies at the band edges.
 3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

4.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 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 from 1 meter to 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 on the Final Measurement.

The measurement frequency range form 30MHz - 10th Harmonic of fundamental was investigated.

4.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

4.6. Test Result of Radiated Emission

Product : Tablet PC
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit - 1Mbps (GFSK)(2402MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4804.000	3.327	40.490	43.817	-30.183	74.000
7206.000	10.136	37.120	47.256	-26.744	74.000
9608.000	13.706	35.750	49.456	-24.544	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4804.000	6.638	45.750	52.387	-21.613	74.000
7206.000	11.005	37.090	48.095	-25.905	74.000
9608.000	14.103	36.150	50.253	-23.747	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 : Tablet PC
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit - 1Mbps (GFSK)(2441MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4882.000	3.001	40.400	43.401	-30.599	74.000
7323.000	11.846	36.380	48.227	-25.773	74.000
9764.000	12.563	37.650	50.213	-23.787	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4882.000	5.713	44.970	50.684	-23.316	74.000
7323.000	12.727	36.800	49.528	-24.472	74.000
9764.000	13.028	38.220	51.248	-22.752	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 : Tablet PC
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit - 1Mbps (GFSK)(2480MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4960.000	2.760	38.290	41.050	-32.950	74.000
7440.000	12.567	35.610	48.176	-25.824	74.000
9920.000	13.456	36.430	49.886	-24.114	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4960.000	5.557	42.700	48.257	-25.743	74.000
7440.000	13.426	36.350	49.775	-24.225	74.000
9920.000	13.958	37.450	51.408	-22.592	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 : Tablet PC
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit - 3Mbps (8DPSK)(2402MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4804.000	3.327	39.120	42.447	-31.553	74.000
7206.000	10.136	37.480	47.616	-26.384	74.000
9608.000	13.706	36.460	50.166	-23.834	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4804.000	6.638	44.520	51.157	-22.843	74.000
7206.000	11.005	37.680	48.685	-25.315	74.000
9608.000	14.103	37.000	51.103	-22.897	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 : Tablet PC
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit - 3Mbps (8DPSK) (2441MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4882.000	3.001	39.560	42.561	-31.439	74.000
7323.000	11.846	36.150	47.997	-26.003	74.000
9764.000	12.563	37.340	49.903	-24.097	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4882.000	5.713	43.800	49.514	-24.486	74.000
7323.000	12.727	36.530	49.258	-24.742	74.000
9764.000	13.028	37.190	50.218	-23.782	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 : Tablet PC
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit - 3Mbps (8DPSK) (2480MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4960.000	2.760	38.110	40.870	-33.130	74.000
7440.000	12.567	35.640	48.206	-25.794	74.000
9920.000	13.456	37.100	50.556	-23.444	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4960.000	5.557	38.270	43.827	-30.173	74.000
7440.000	13.426	36.340	49.765	-24.235	74.000
9920.000	13.958	37.310	51.268	-22.732	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 : Tablet PC
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - BLE (GFSK)(2402MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4804.000	0.511	44.450	44.960	-29.040	74.000
7206.000	7.511	39.220	46.731	-27.269	74.000
9608.000	8.394	40.060	48.454	-25.546	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4804.000	0.923	44.040	44.962	-29.038	74.000
7206.000	7.988	39.450	47.439	-26.561	74.000
9608.000	8.847	40.430	49.277	-24.723	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 : Tablet PC
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - BLE (GFSK) (2442MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4884.000	0.013	44.200	44.212	-29.788	74.000
7326.000	7.824	39.090	46.913	-27.087	74.000
9768.000	7.698	39.930	47.628	-26.372	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4884.000	0.477	43.270	43.747	-30.253	74.000
7386.000	9.180	39.740	48.920	-25.080	74.000
9768.000	8.330	38.690	47.020	-26.980	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 : Tablet PC
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - BLE (GFSK) (2480MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4960.000	0.582	42.420	43.002	-30.998	74.000
7440.000	8.555	38.580	47.135	-26.865	74.000
9920.000	8.206	38.740	46.946	-27.054	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4960.000	1.398	42.750	44.149	-29.851	74.000
7440.000	9.214	38.830	48.044	-25.956	74.000
9920.000	9.245	39.890	49.135	-24.865	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 : Tablet PC
 Test Item : General Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit - 1Mbps (GFSK) (2441MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
107.600	-7.058	32.868	25.810	-17.690	43.500
299.660	-3.585	31.969	28.384	-17.616	46.000
501.420	0.105	38.394	38.499	-7.501	46.000
606.180	4.666	29.189	33.855	-12.145	46.000
724.520	3.485	30.793	34.278	-11.722	46.000
815.700	5.271	29.953	35.224	-10.776	46.000
Vertical					
72.680	-5.622	33.148	27.525	-12.475	40.000
181.320	-9.512	35.770	26.258	-17.242	43.500
365.620	-2.179	29.030	26.851	-19.149	46.000
497.540	-1.393	32.675	31.282	-14.718	46.000
724.520	-0.135	31.180	31.045	-14.955	46.000
965.080	7.932	29.803	37.735	-16.265	54.000

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 : Tablet PC
 Test Item : General Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit - 3Mbps (8DPSK) (2441MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
181.320	-12.152	43.979	31.827	-11.673	43.500
433.520	-1.972	35.181	33.209	-12.791	46.000
501.420	0.105	36.785	36.890	-9.110	46.000
674.080	2.799	29.144	31.943	-14.057	46.000
827.340	6.302	28.809	35.111	-10.889	46.000
920.460	6.467	29.221	35.688	-10.312	46.000
Vertical					
101.780	-0.021	37.252	37.230	-6.270	43.500
336.520	-4.630	32.602	27.972	-18.028	46.000
499.480	-0.852	35.392	34.540	-11.460	46.000
598.420	-2.979	33.815	30.836	-15.164	46.000
765.260	2.313	30.355	32.668	-13.332	46.000
967.020	8.071	29.418	37.489	-16.511	54.000

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 : Tablet PC
 Test Item : General Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - BLE (GFSK) (2442MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
150.280	-7.870	37.831	29.961	-13.539	43.500
385.020	1.209	31.424	32.633	-13.367	46.000
480.080	1.870	29.374	31.244	-14.756	46.000
598.420	3.524	32.842	36.366	-9.634	46.000
823.460	7.241	23.557	30.798	-15.202	46.000
899.120	5.717	24.907	30.624	-15.376	46.000
Vertical					
97.900	-6.437	39.387	32.950	-10.550	43.500
336.520	-1.999	31.400	29.401	-16.599	46.000
598.420	1.114	35.270	36.384	-9.616	46.000
672.140	-0.561	33.587	33.026	-12.974	46.000
769.140	2.558	26.645	29.203	-16.797	46.000
897.180	0.937	26.359	27.296	-18.704	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.

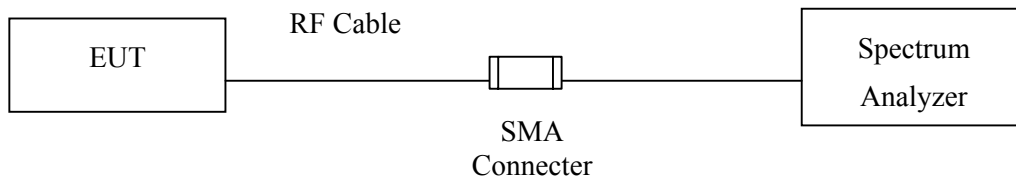
5. RF Antenna Conducted Test

5.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2012
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2012
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2012

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

5.2. Test Setup



5.3. Limits

According to FCC Section 15.247(d). In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated 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 measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

5.4. Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.

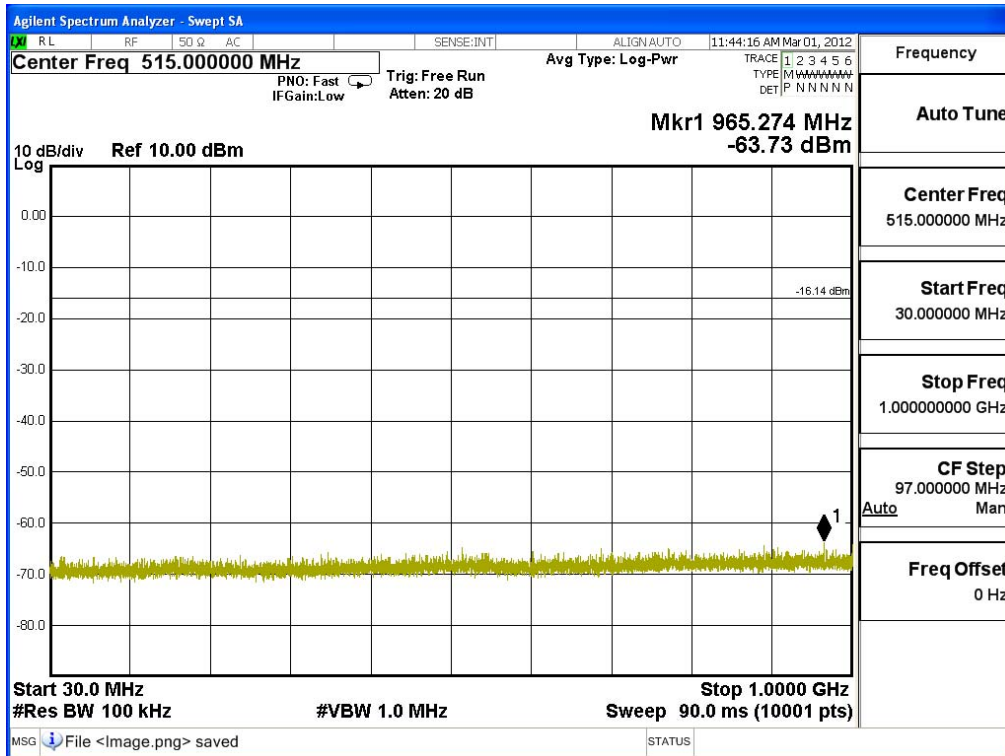
5.5. Uncertainty

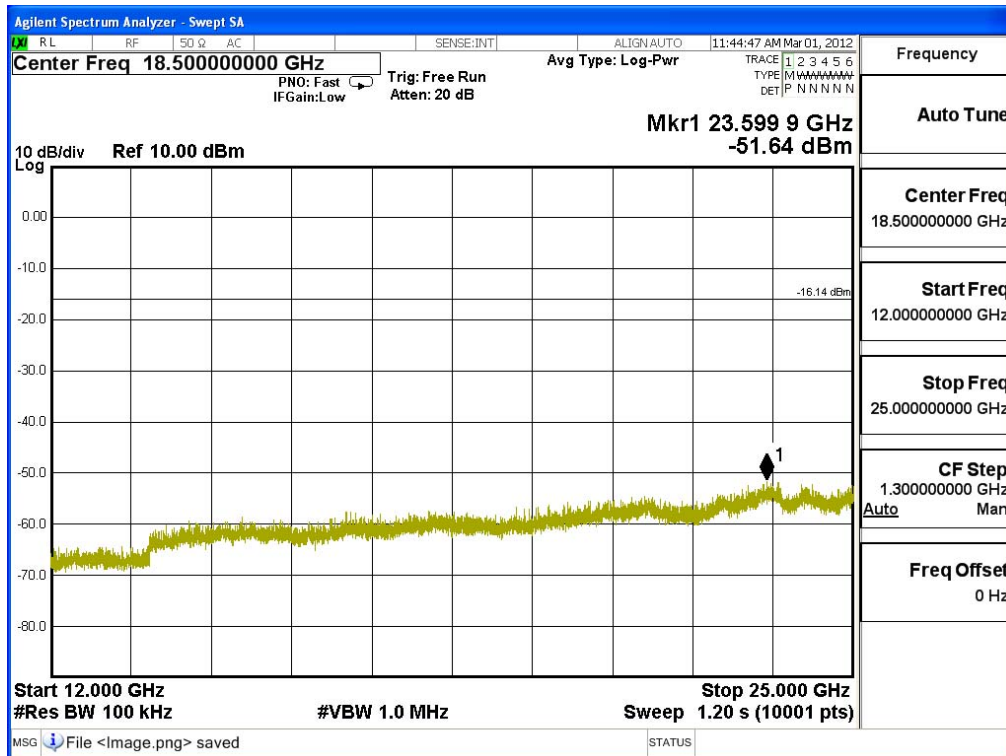
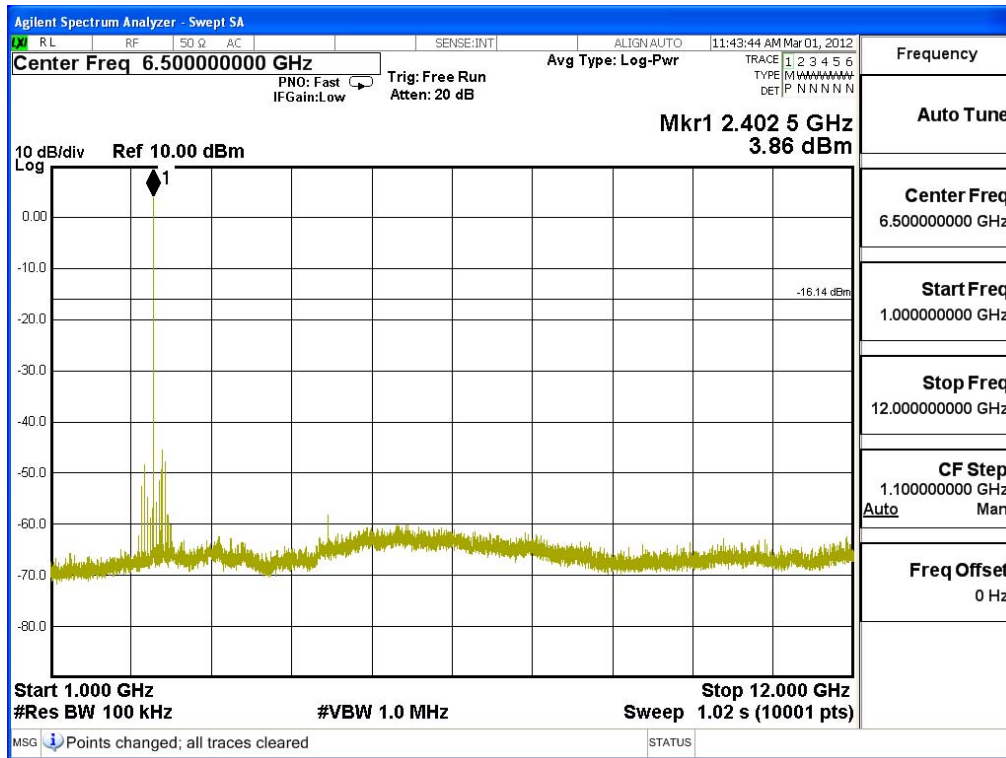
± 150Hz

5.6. Test Result of RF Antenna Conducted Test

Product : Tablet PC
 Test Item : RF Antenna Conducted Test
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit - 1Mbps (GFSK)

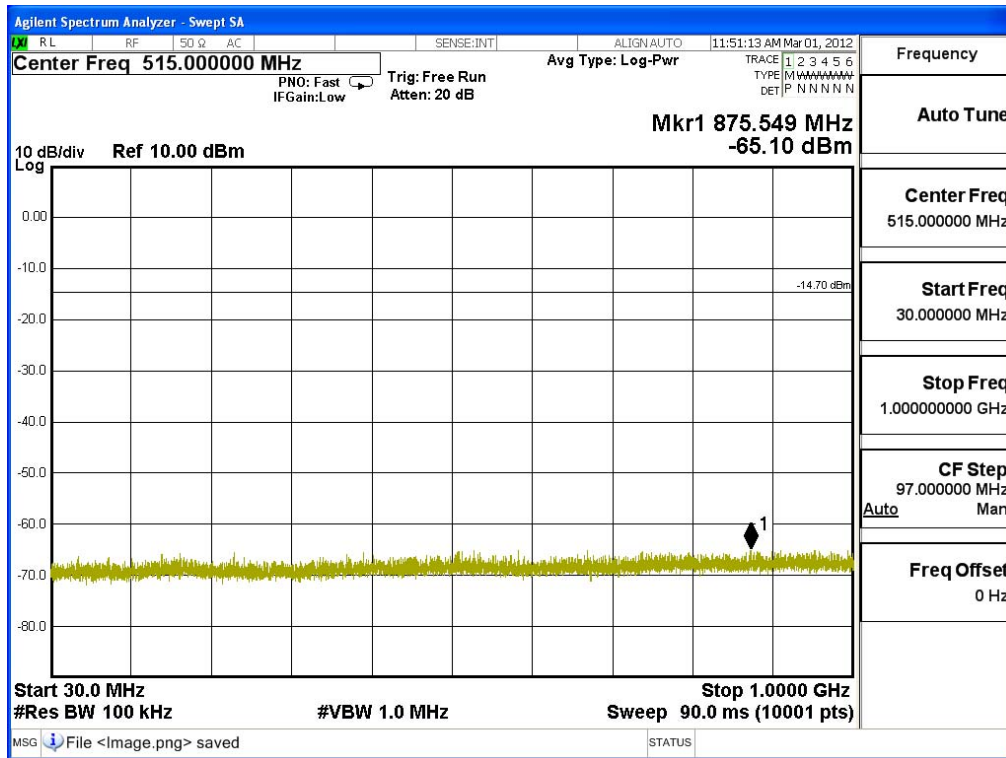
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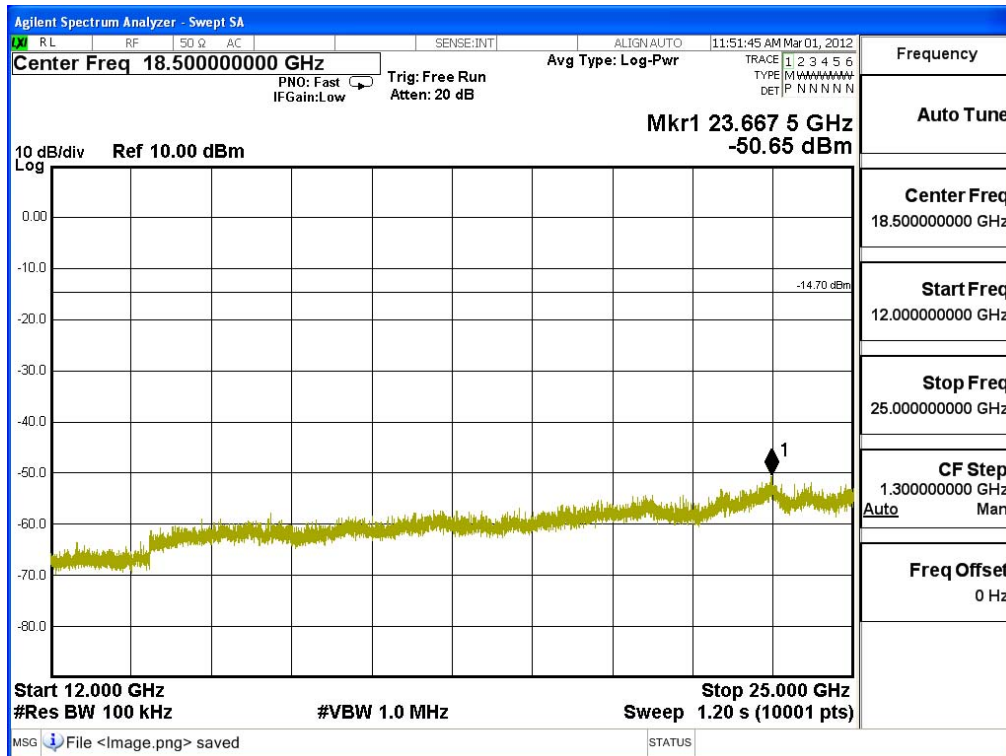
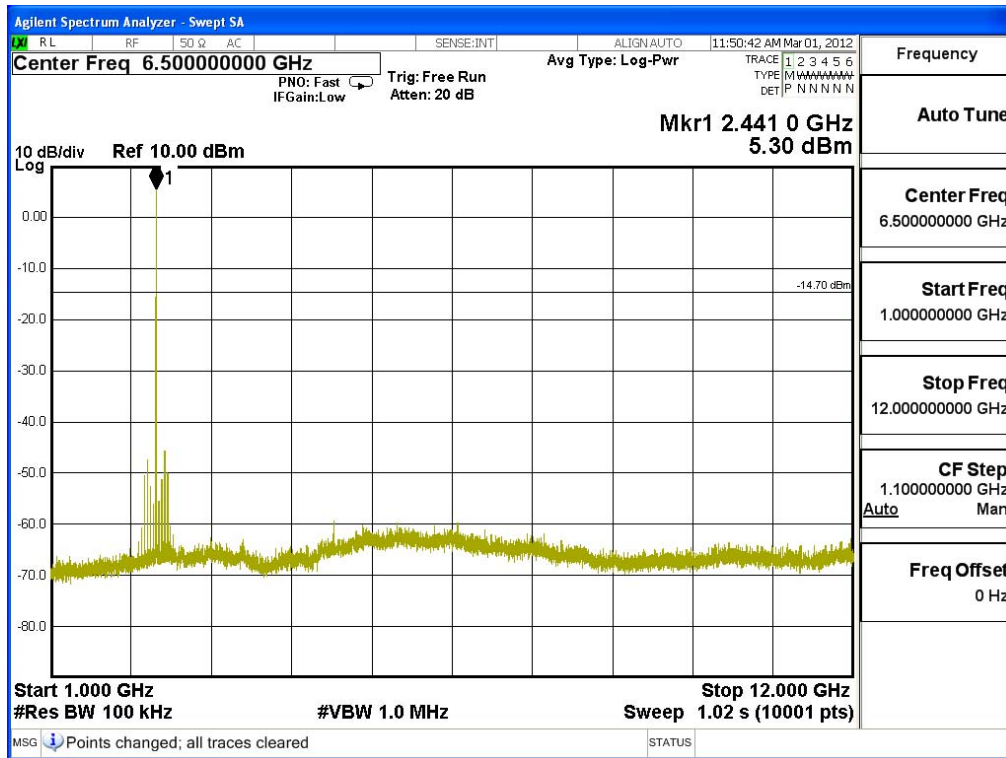




Product : Tablet PC
 Test Item : RF Antenna Conducted Test
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit - 1Mbps (GFSK)

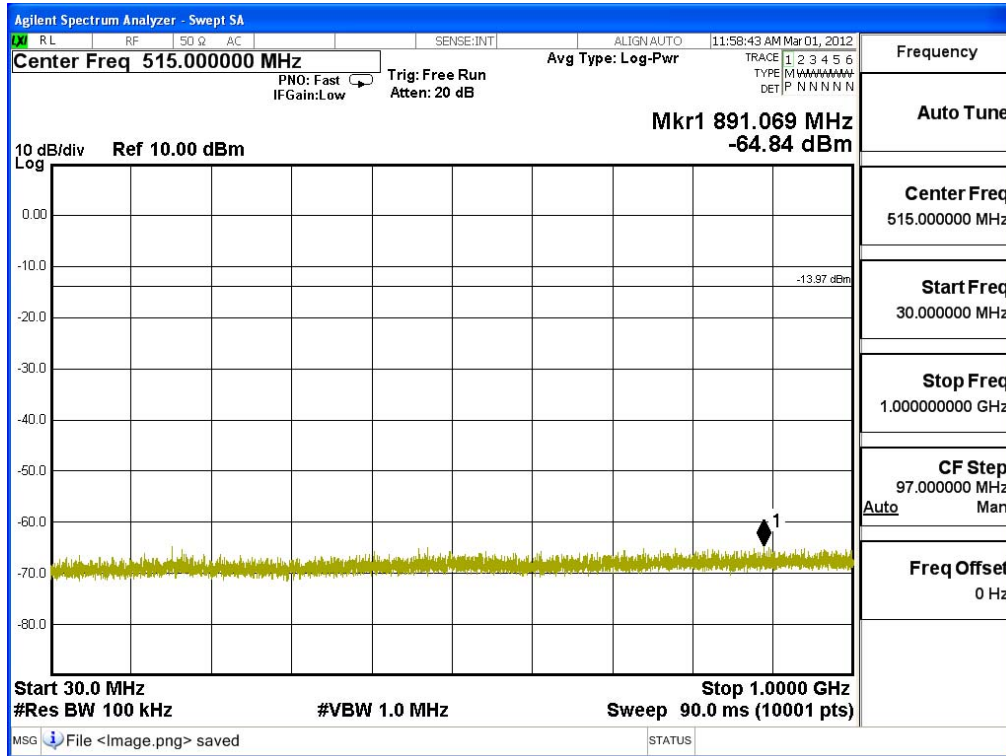
Figure Channel 39:

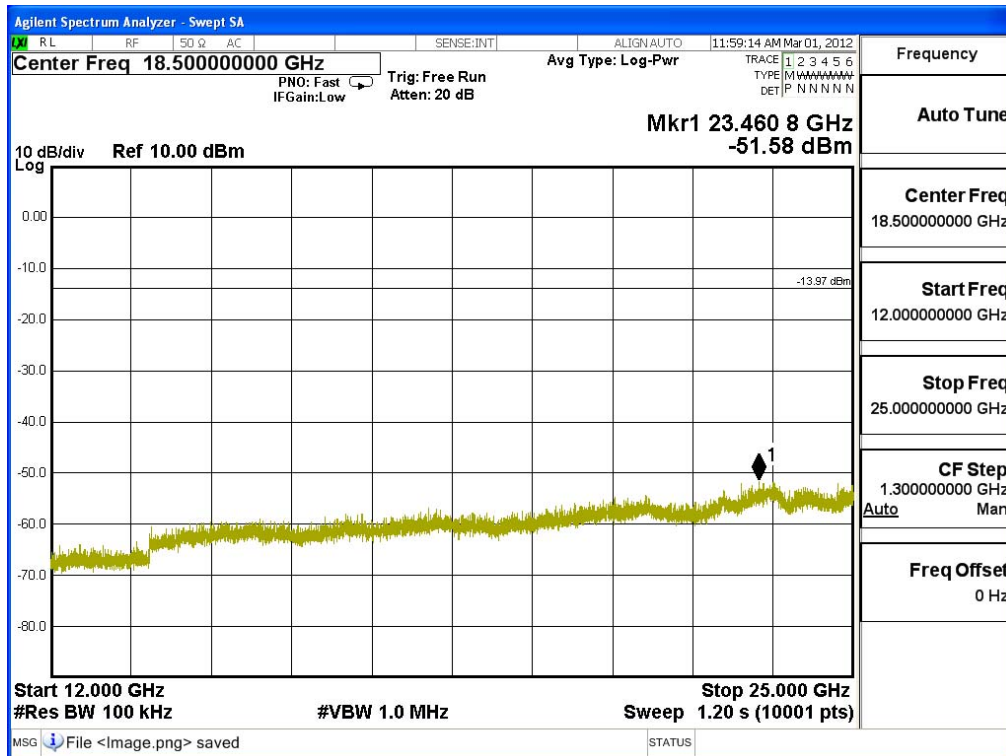
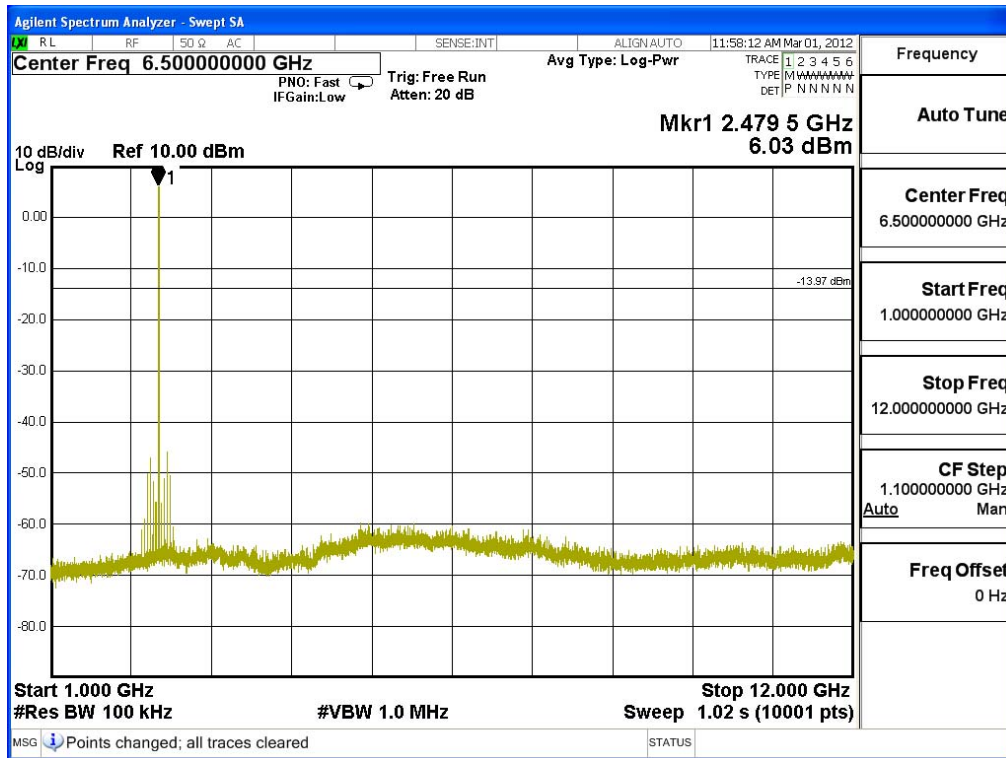




Product : Tablet PC
 Test Item : RF Antenna Conducted Test
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit - 1Mbps (GFSK)

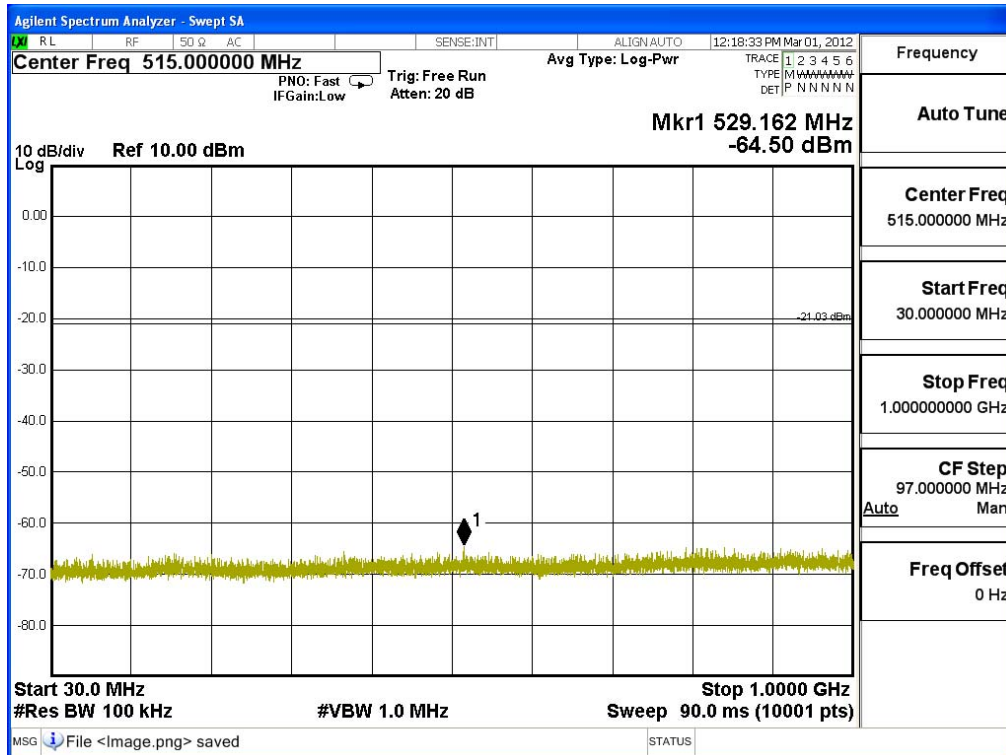
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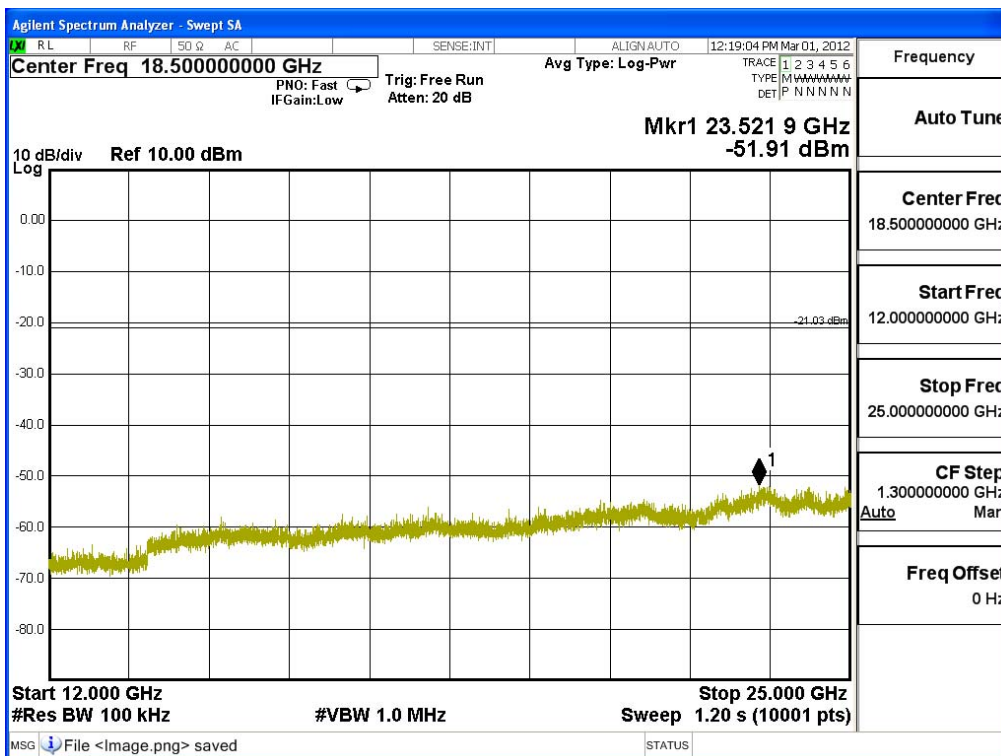
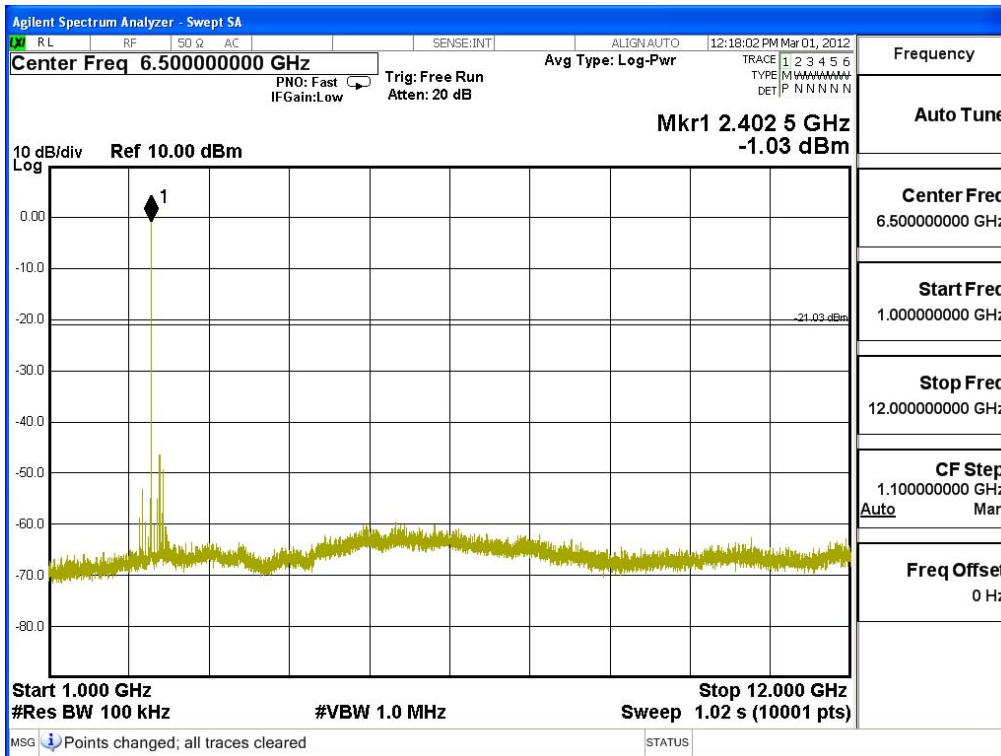




Product : Tablet PC
 Test Item : RF Antenna Conducted Test
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit - 3Mbps (8DPSK)

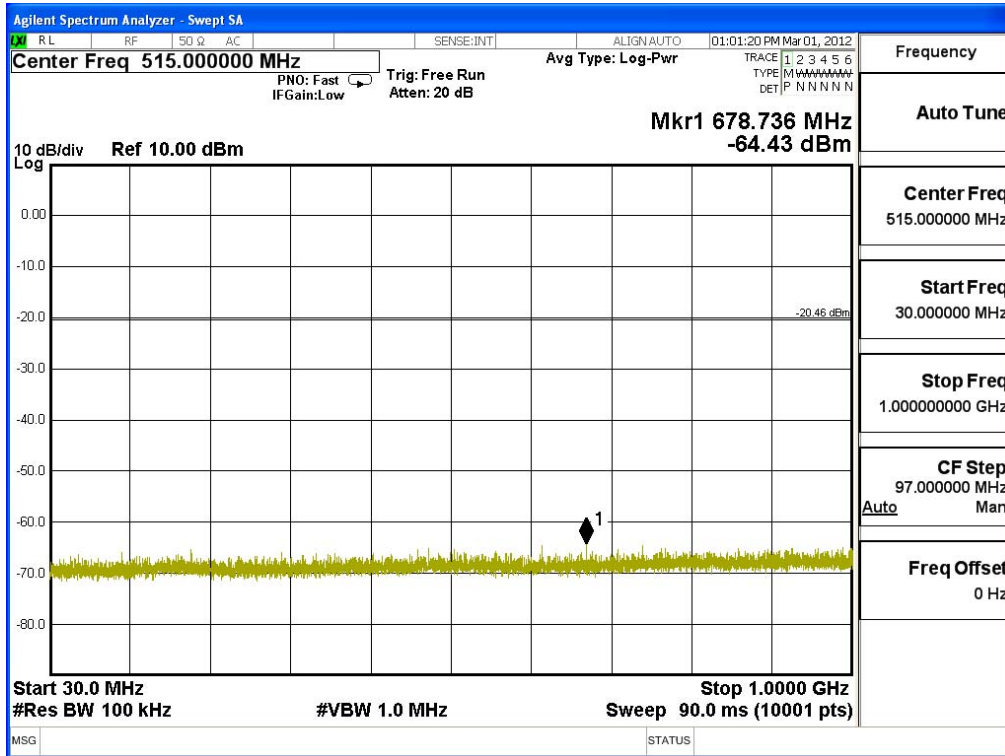
Figure Channel 00:

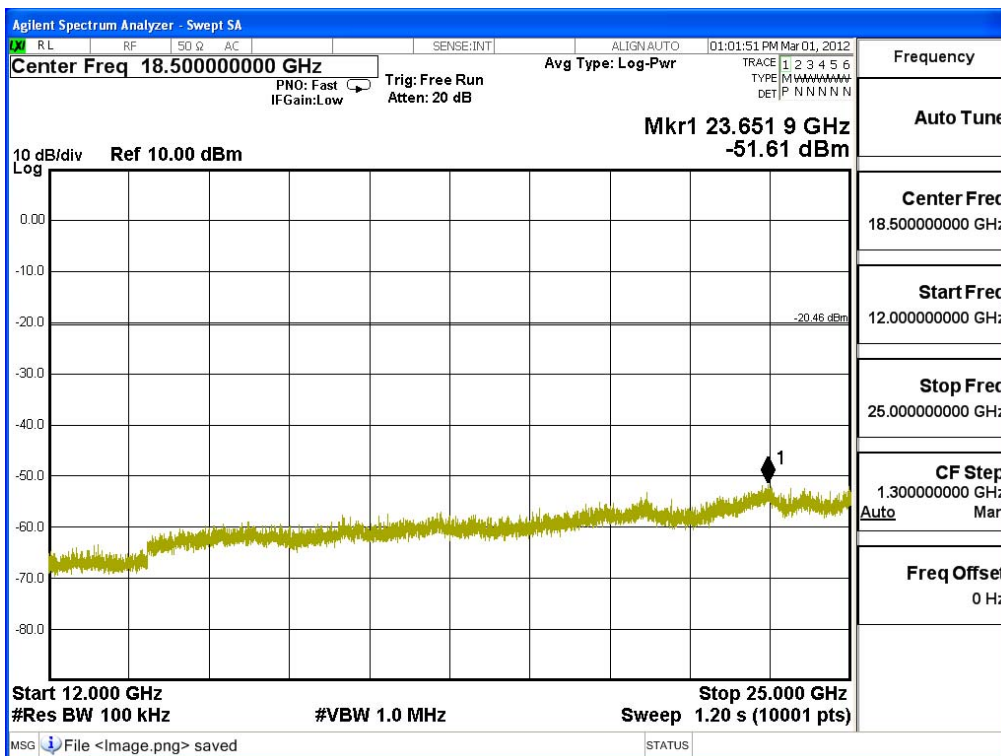
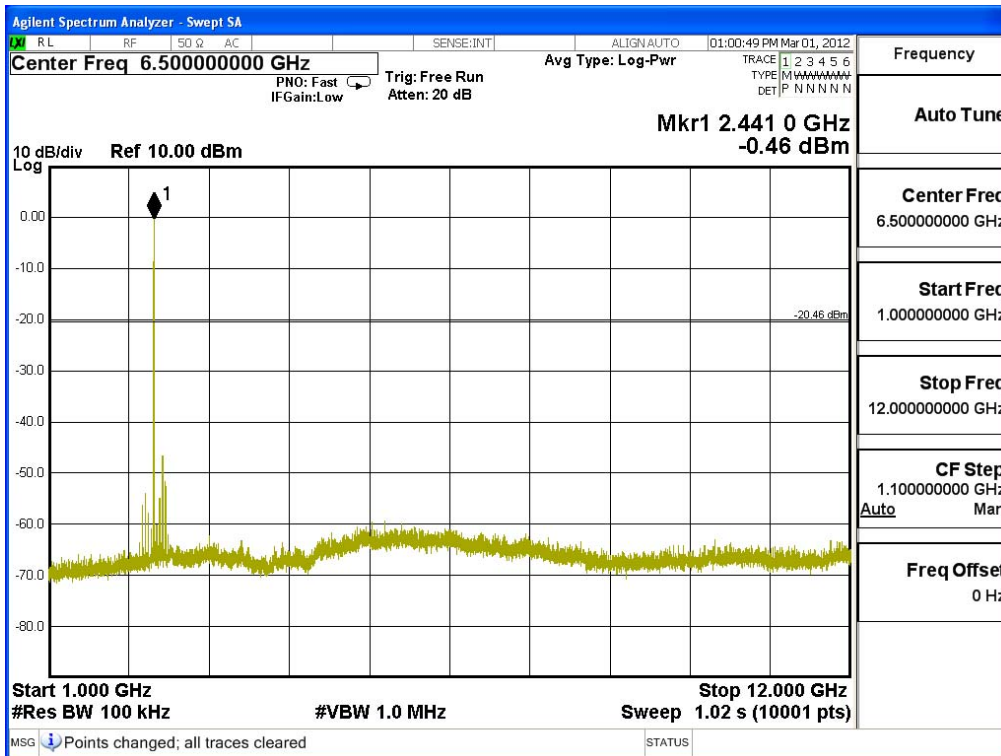




Product : Tablet PC
 Test Item : RF Antenna Conducted Test
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit - 3Mbps (8DPSK)

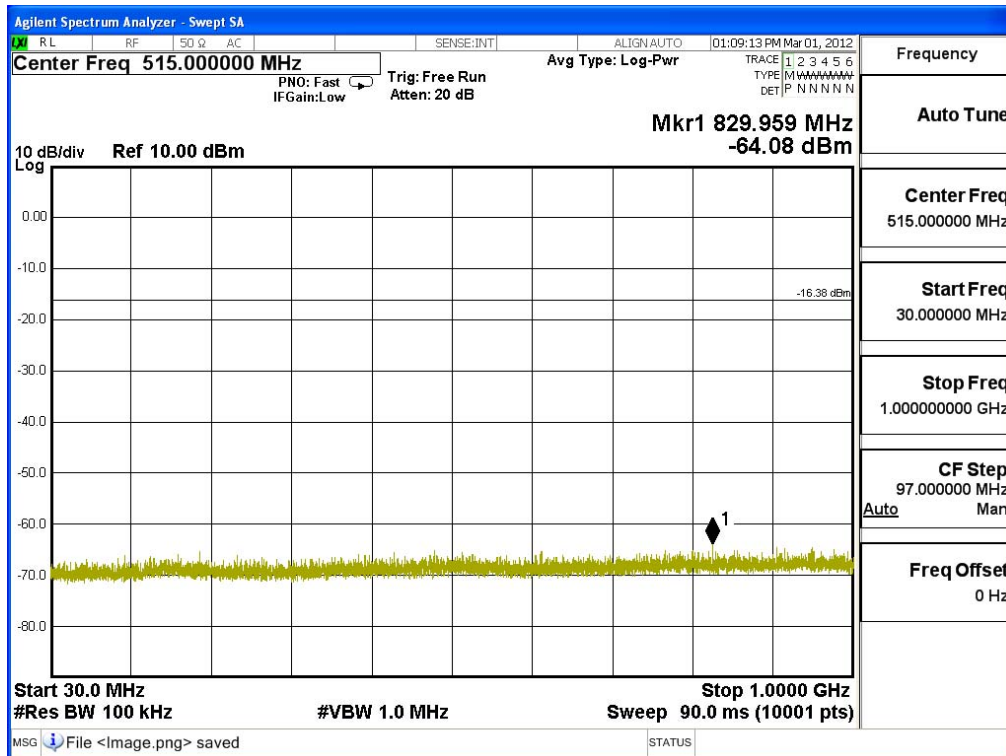
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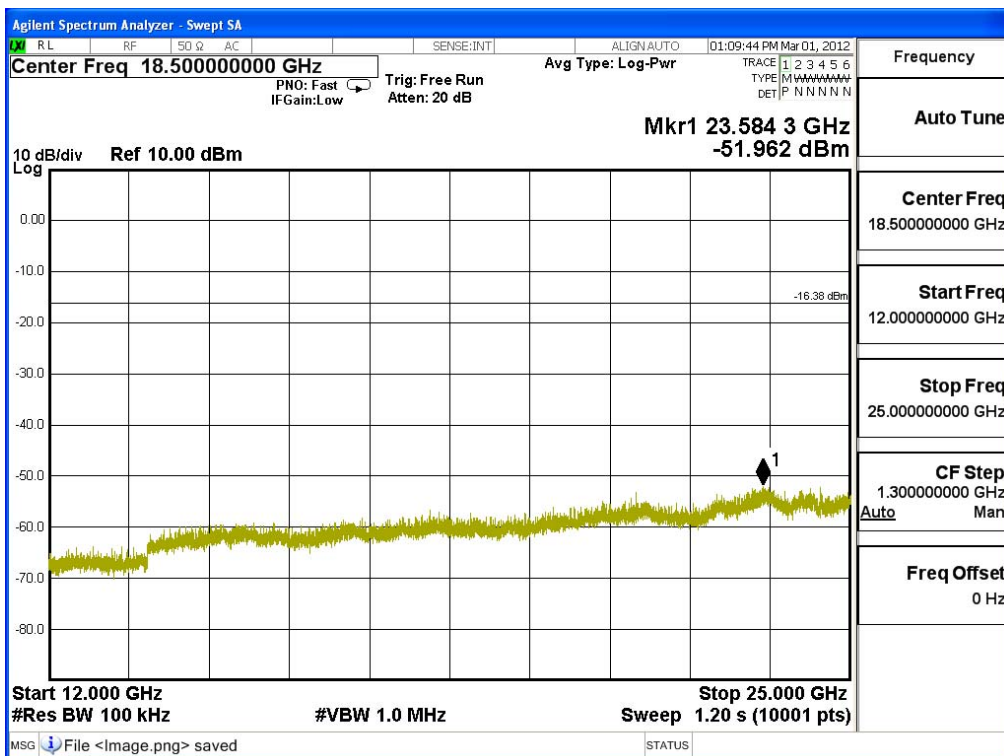
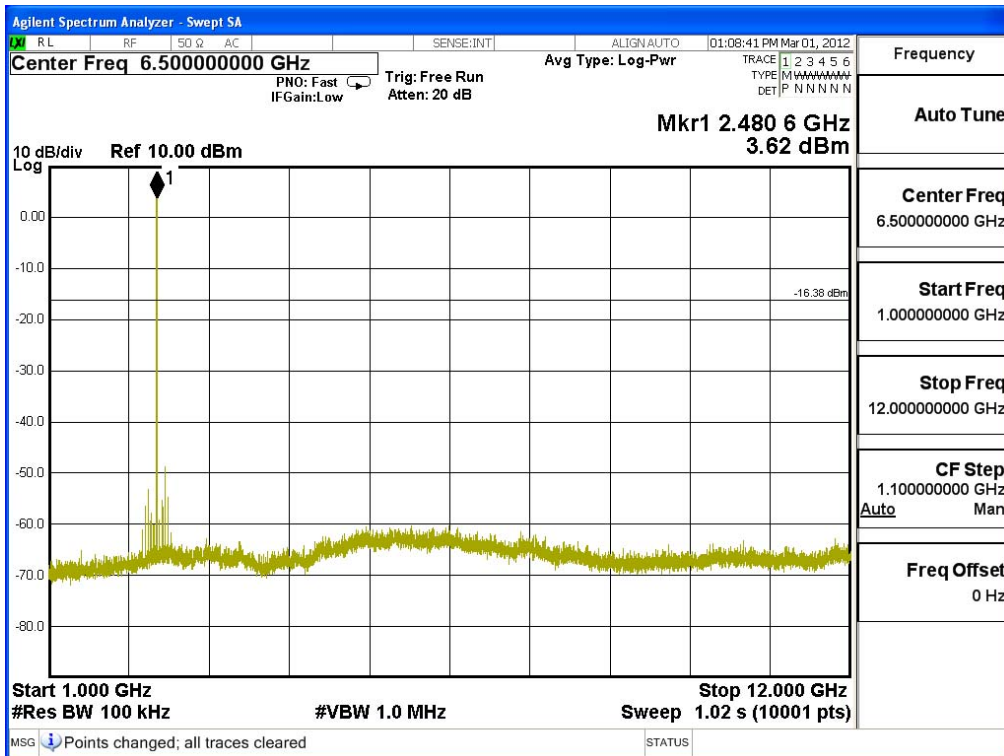




Product : Tablet PC
 Test Item : RF Antenna Conducted Test
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit - 3Mbps (8DPSK)

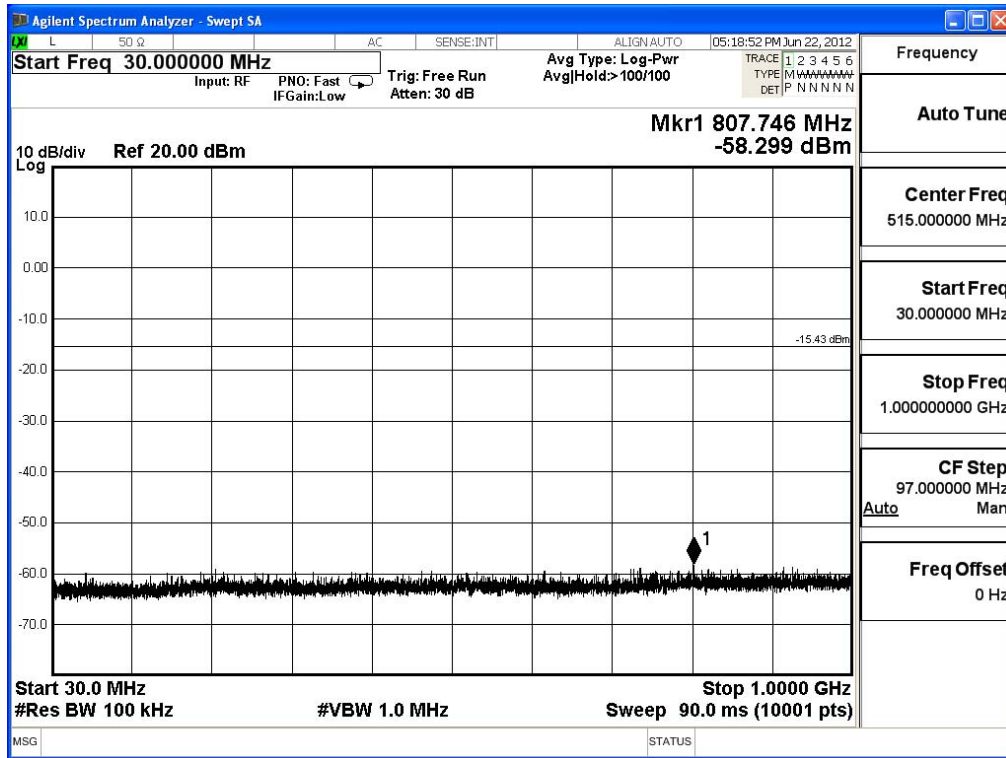
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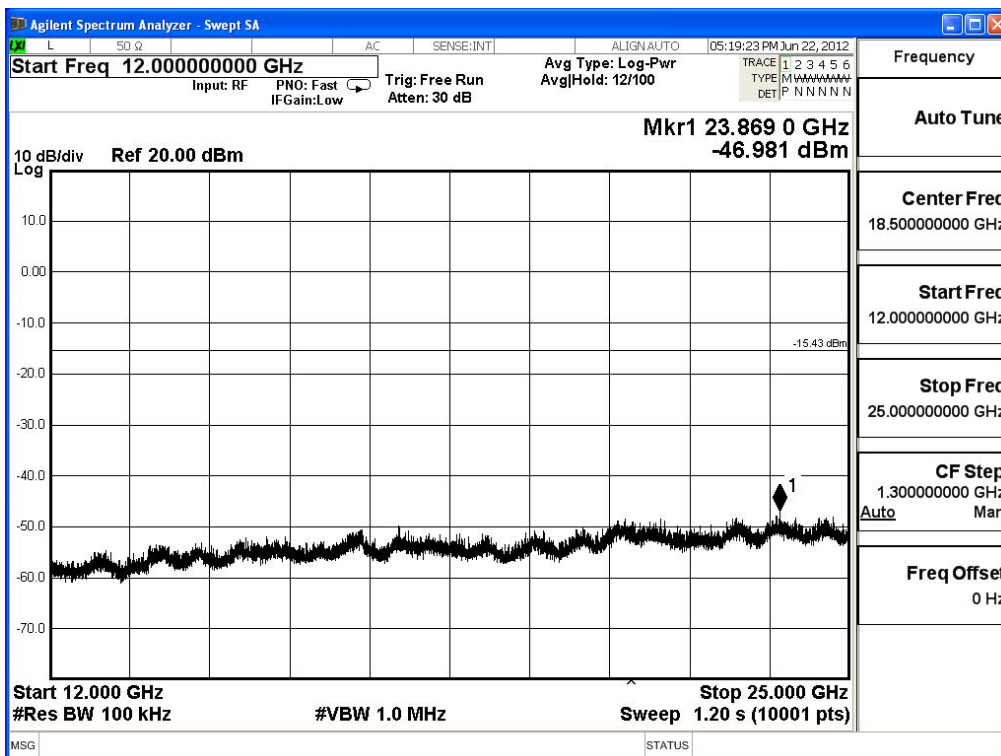
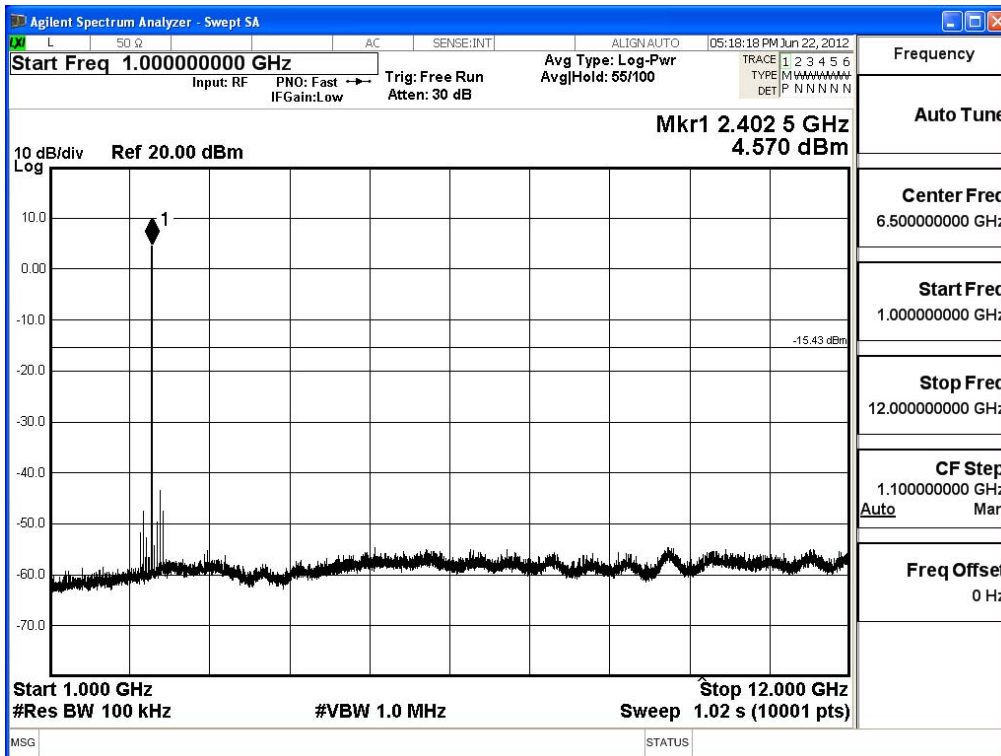




Product : Tablet PC
 Test Item : RF Antenna Conducted Test
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - BLE (GFSK)

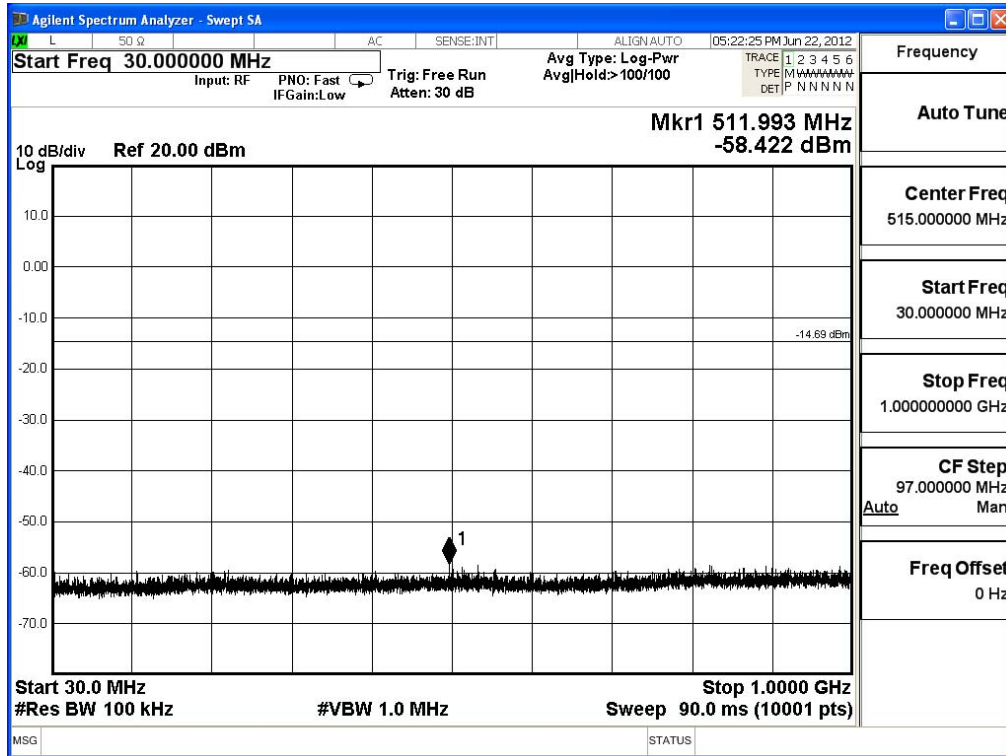
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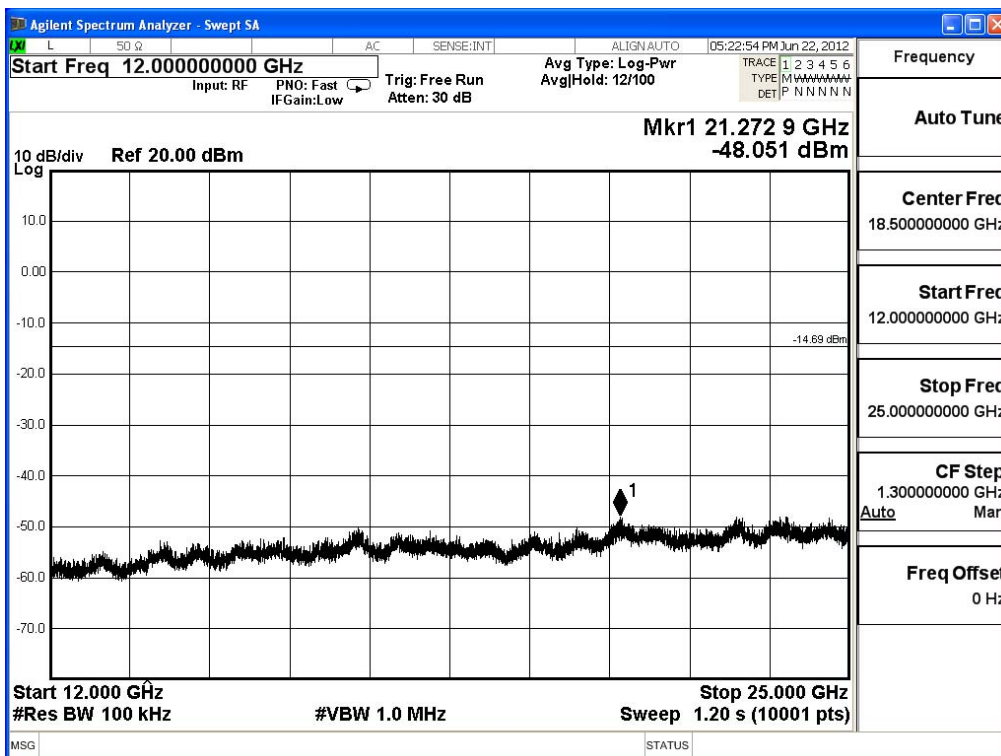
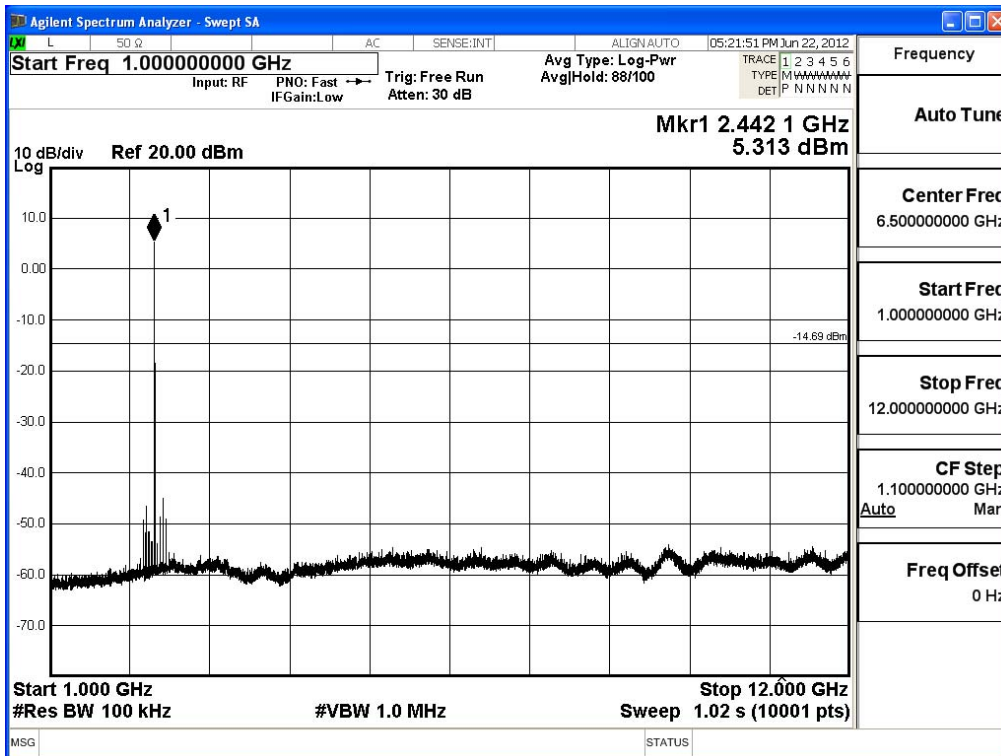




Product : Tablet PC
 Test Item : RF Antenna Conducted Test
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - BLE (GFSK)

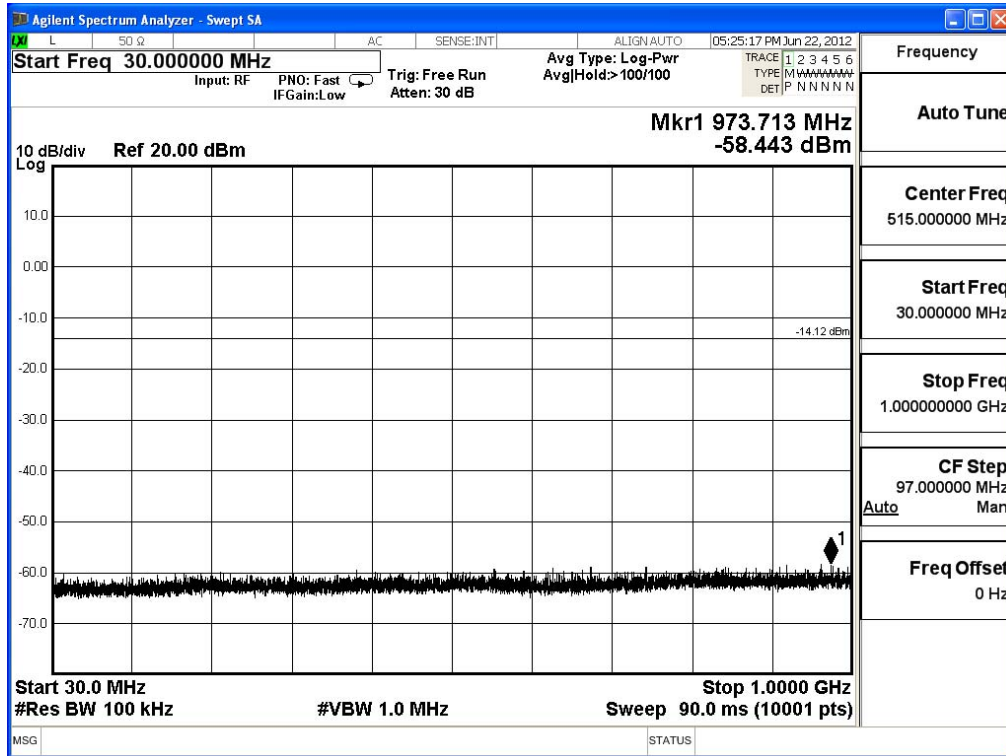
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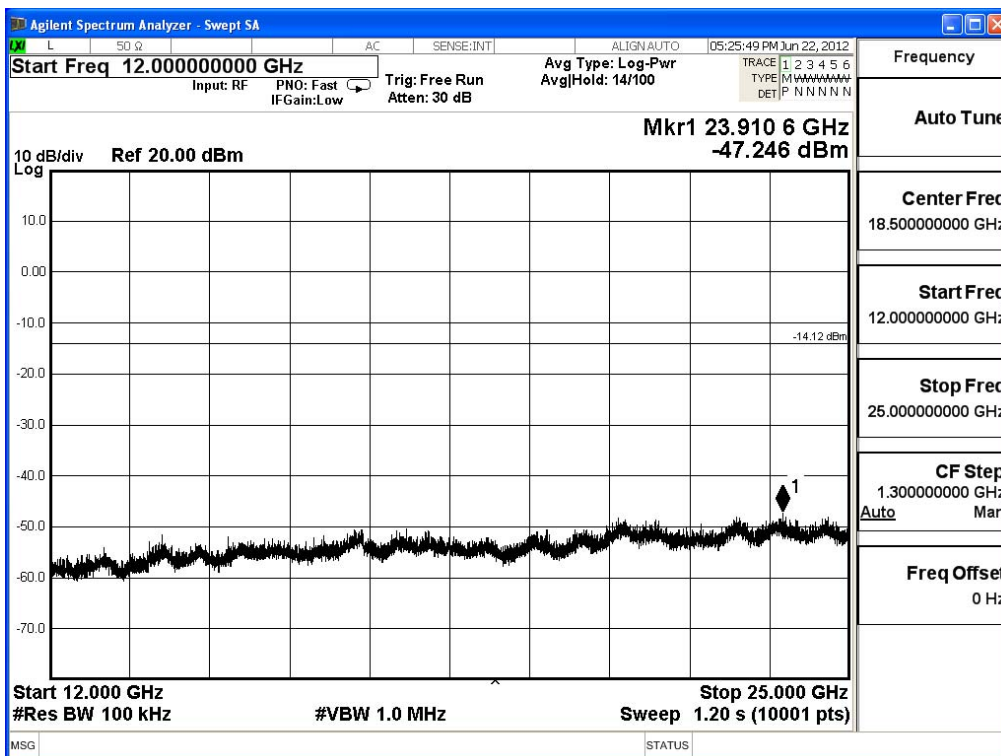
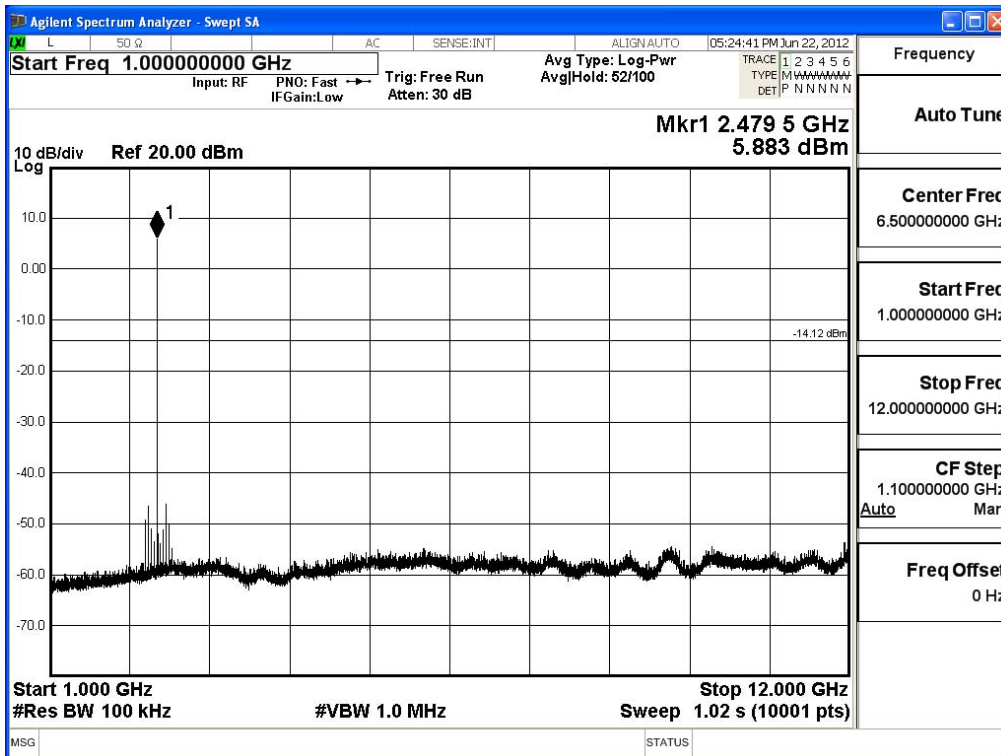




Product : Tablet PC
 Test Item : RF Antenna Conducted Test
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - BLE (GFSK)

Figure Channel 39:





6. Band Edge

6.1. Test Equipment

RF Conducted Measurement

The following test equipments are used during the band edge tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2012
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2012
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2012

RF Radiated Measurement:

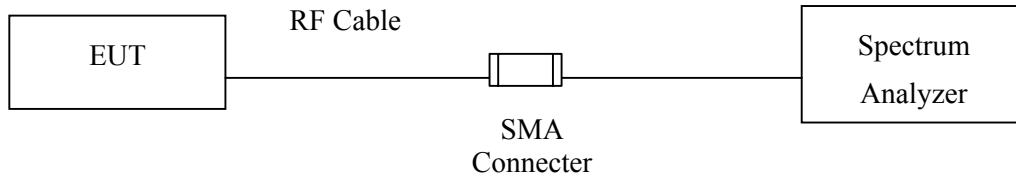
The following test equipments are used during the band edge tests:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒ Site # 3		Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2011
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2011
		Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2011
	X	Pre-Amplifier	Agilent	8447D/2944A09549	Sep., 2011
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2012
		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 every one year.
 2. The test instruments marked by "X" are used to measure the final test results.

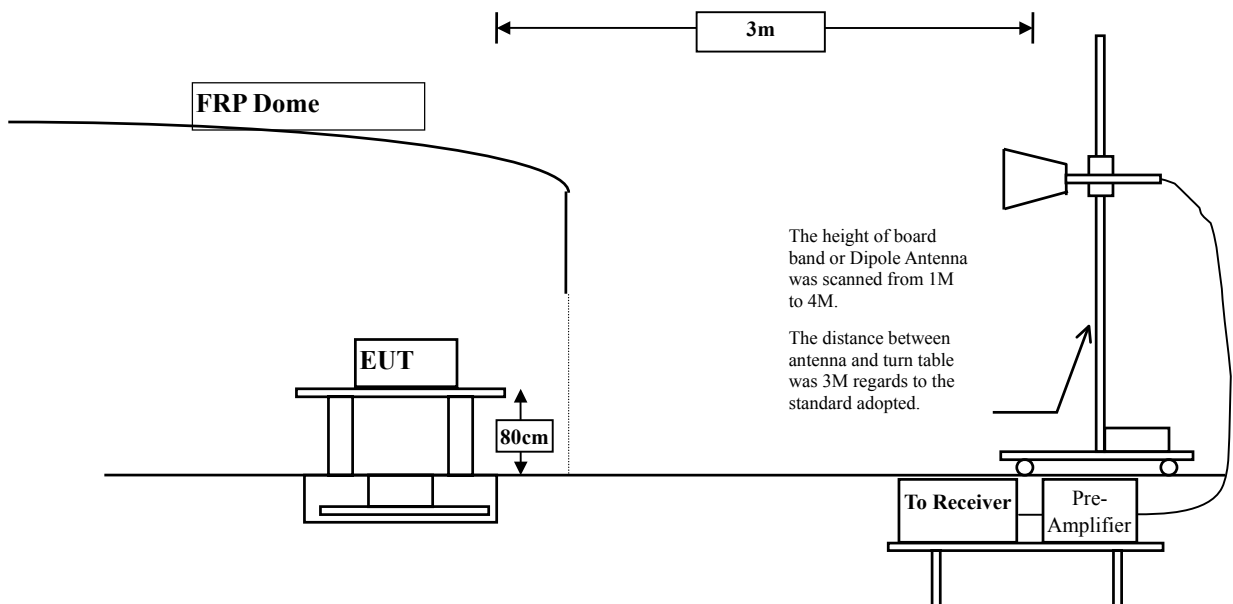
6.2. Test Setup

RF Conducted Measurement



RF Radiated Measurement:

Above 1GHz



6.3. Limit

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)).

6.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 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 can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4:2003 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz. The EUT was setup to ANSI C63.4, 2003; tested to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.

6.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

6.6. Test Result of Band Edge

Product : Tablet PC
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit - 1Mbps (GFSK)

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dBuV/m]	Detector
Horizontal	2402	31.573	59.67	91.244	Peak
Horizontal	2402	31.573	55.83	87.404	Average
Vertical	2402	30.917	54.51	85.427	Peak
Vertical	2402	30.917	50.69	81.607	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Limit (dBuV/m)	Detector
Horizontal	2362	91.244	57.49	33.754	74.000	Peak
Horizontal	2362	87.404	59.25	28.154	54.000	Average
Vertical	2362	85.427	57.49	27.937	74.000	Peak
Vertical	2362	81.607	59.25	22.357	54.000	Average

Note:

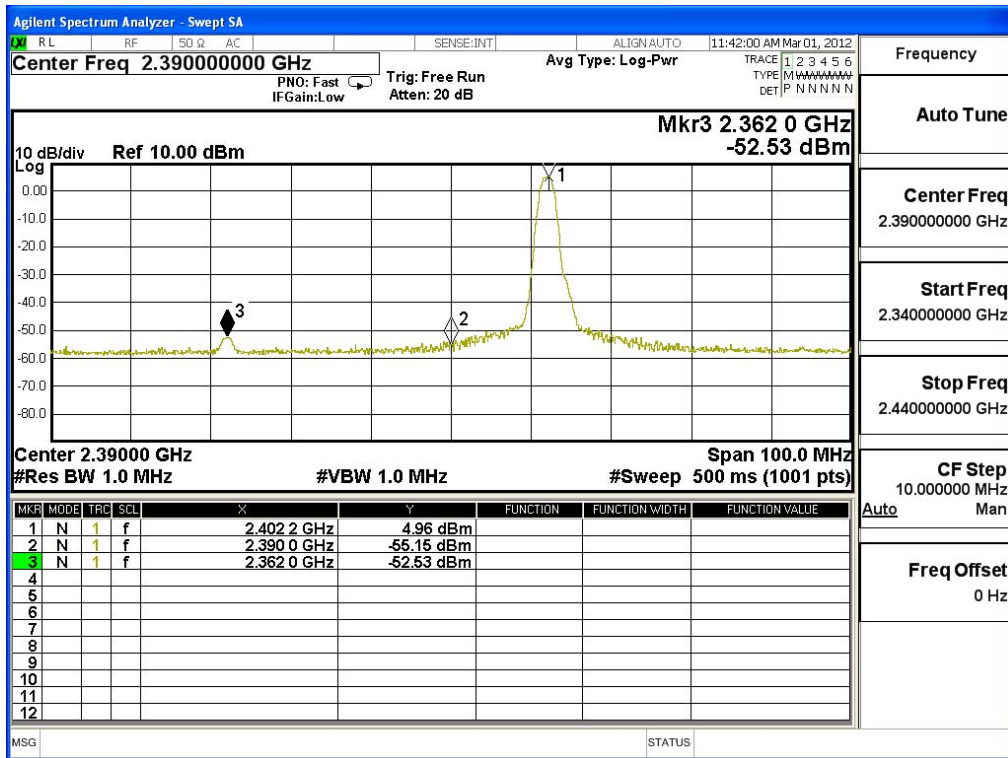
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

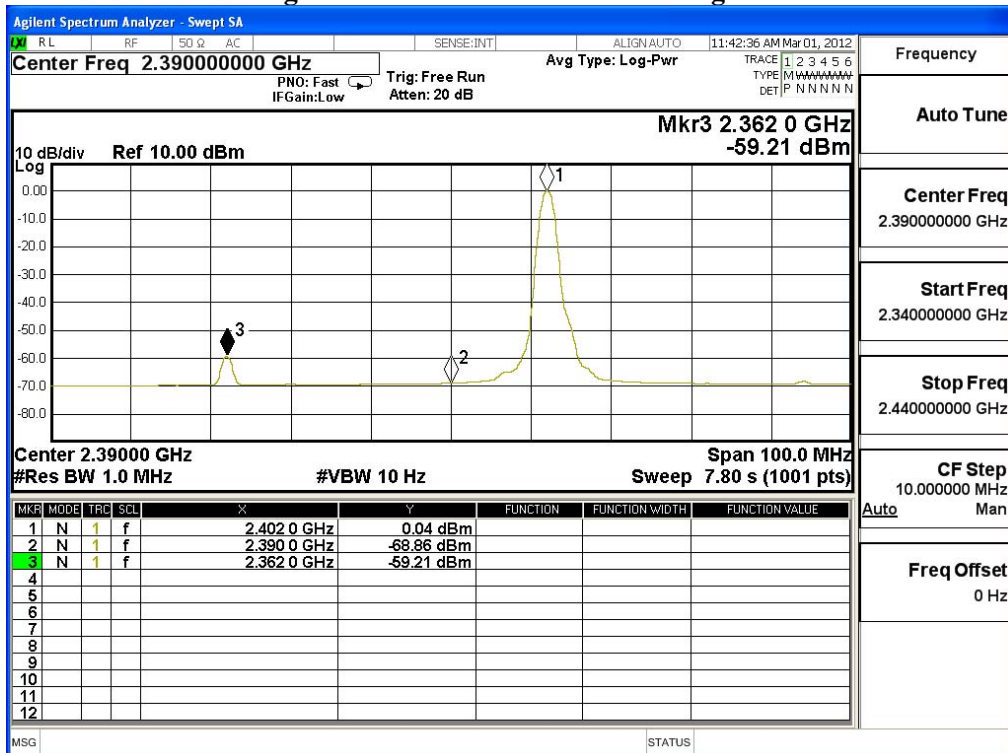
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : Tablet PC
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit - 1Mbps (GFSK)

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dB(uV/m)]	Detector
Horizontal	2480	32.155	65.09	97.246	Peak
Horizontal	2480	32.155	61.13	93.286	Average
Vertical	2480	31.412	60.74	92.152	Peak
Vertical	2480	31.412	57	88.412	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Limit (dBuV/m)	Detector
Horizontal	2483.5	97.246	48.71	48.536	74.000	Peak
Horizontal	2483.5	93.286	52.42	40.866	54.000	Average
Vertical	2483.5	92.152	48.71	43.442	74.000	Peak
Vertical	2483.5	88.412	52.42	35.992	54.000	Average

Note:

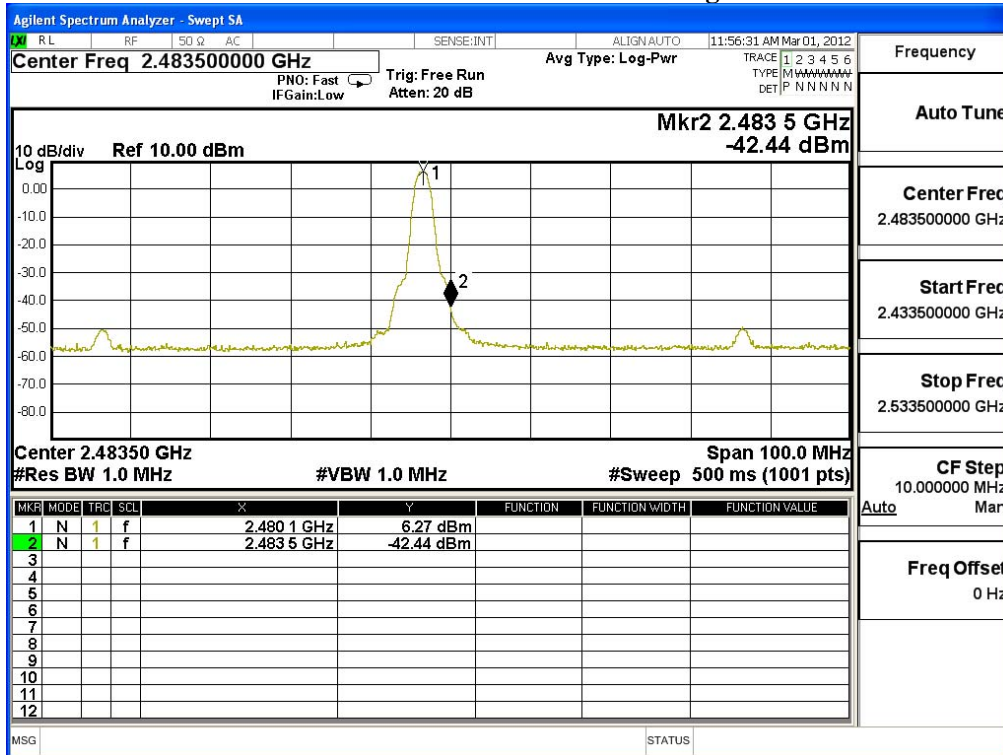
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

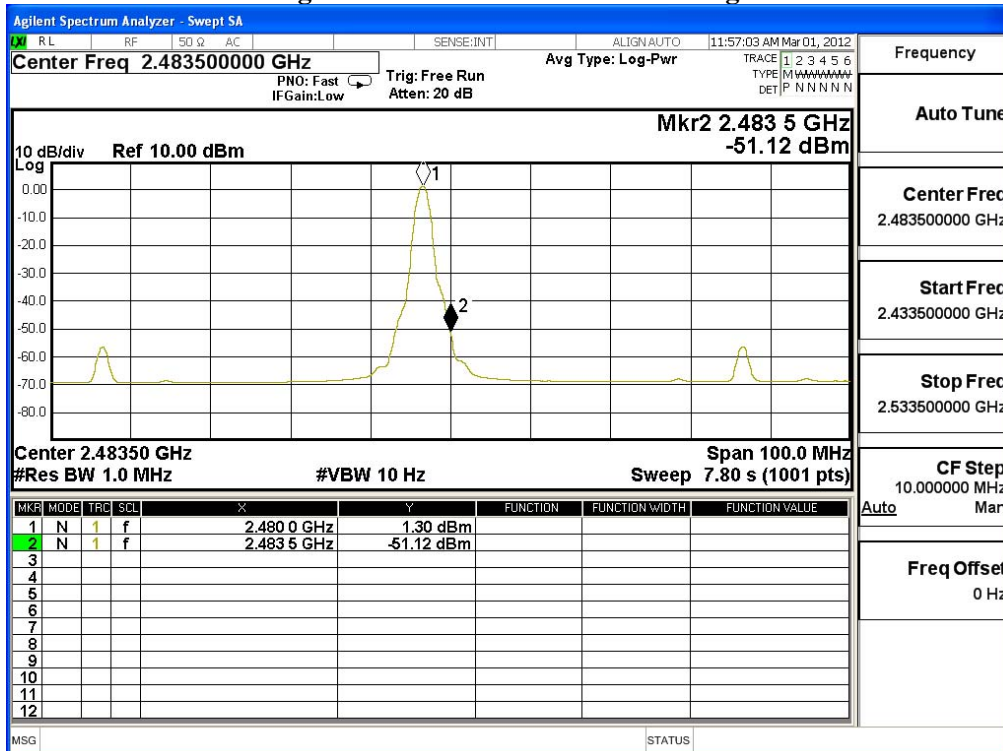
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : Tablet PC
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit - 3Mbps (8DPSK)

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dBuV/m]	Detector
Horizontal	2402	31.573	57.02	88.594	Peak
Horizontal	2402	31.573	50.35	81.924	Average
Vertical	2402	30.917	51.85	82.767	Peak
Vertical	2402	30.917	45.46	76.377	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Limit (dBuV/m)	Detector
Horizontal	2362.5	88.594	56.34	32.254	74.000	Peak
Horizontal	2362	81.924	59.07	22.854	54.000	Average
Vertical	2362.5	82.767	56.34	26.427	74.000	Peak
Vertical	2362	76.377	59.07	17.307	54.000	Average

Note:

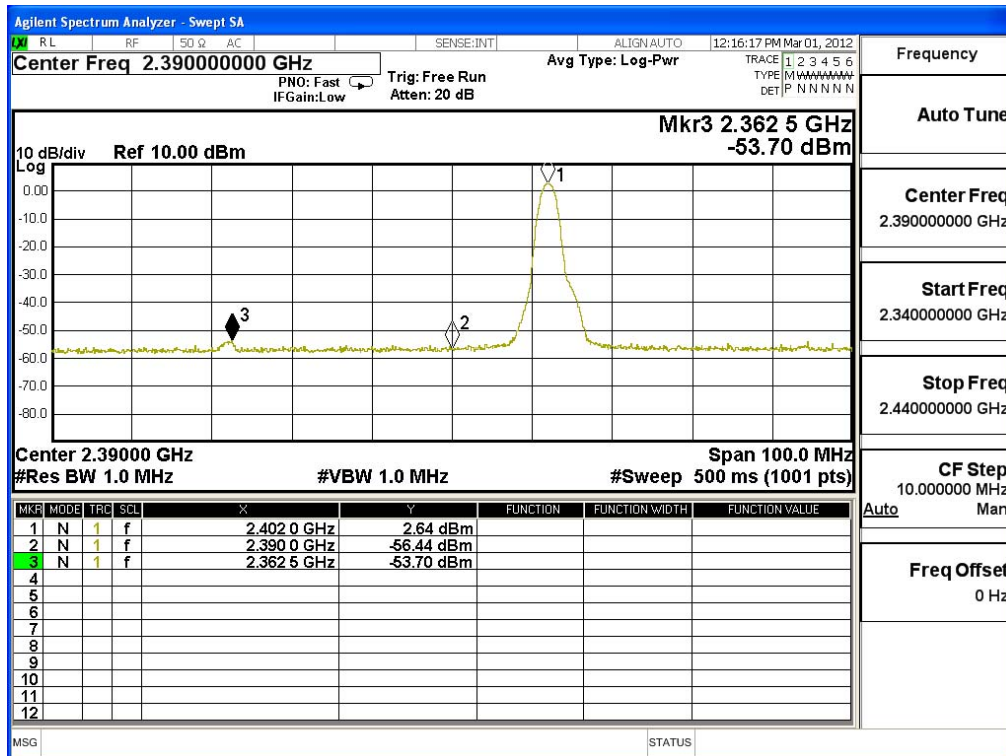
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

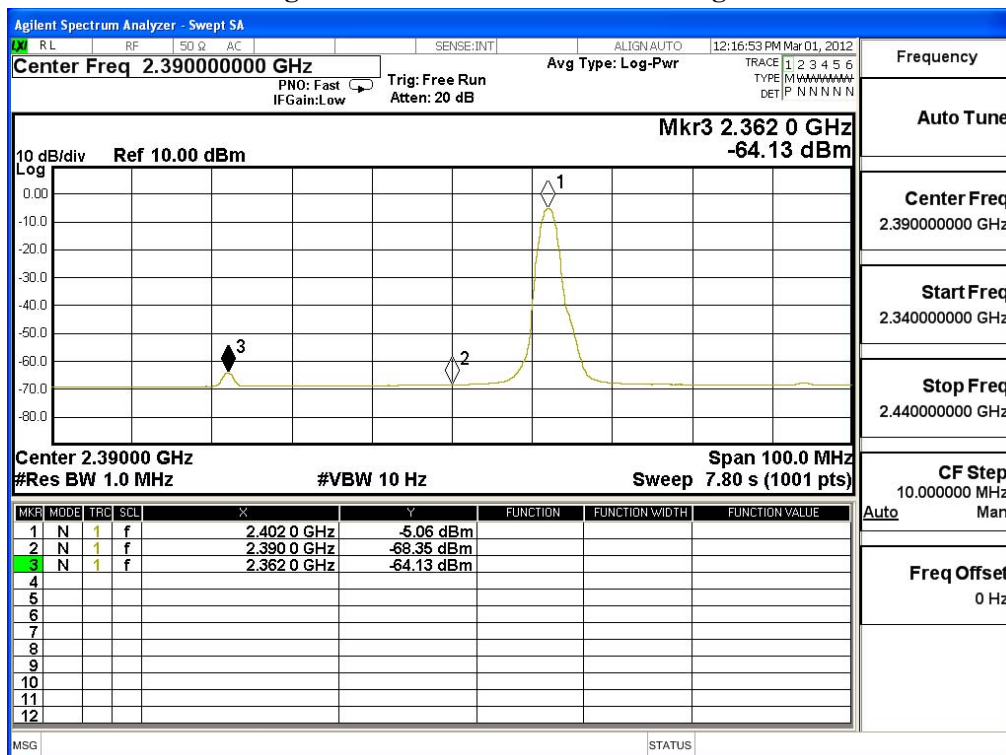
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : Tablet PC
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit - 3Mbps (8DPSK)

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dB(uV/m)]	Detector
Horizontal	2480	32.155	63.49	95.646	Peak
Horizontal	2480	32.155	56.93	89.086	Average
Vertical	2480	31.412	59.22	90.632	Peak
Vertical	2480	31.412	52.9	84.312	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Limit (dBuV/m)	Detector
Horizontal	2483.5	95.646	41.37	54.276	74.000	Peak
Horizontal	2483.5	89.086	47.61	41.476	54.000	Average
Vertical	2483.5	90.632	41.37	49.262	74.000	Peak
Vertical	2483.5	84.312	47.61	36.702	54.000	Average

Note:

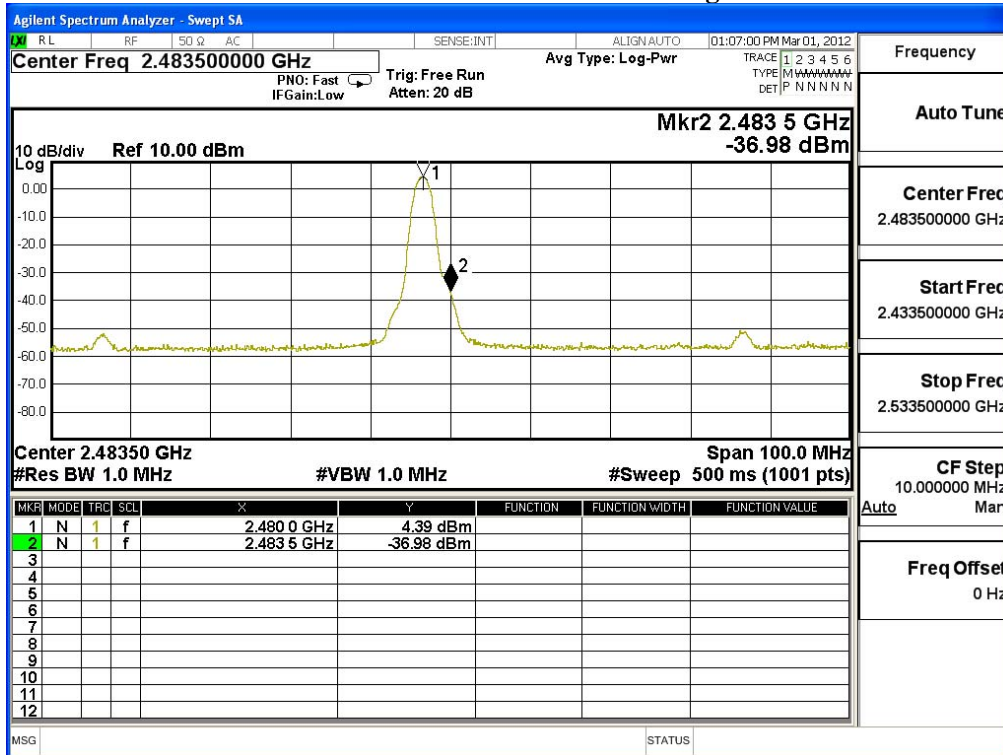
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta

