FCC Test Report (WIFI)

FCC ID	:	**YPVITALCOMSUN**
Applicant	:	**ITALCOM GROUP**
		1728 Coral Way, Coral Gables, Miami, Florida, United States 33145
Sample Description		
Product Name	:	**3G Mobile**
Model No.	:	SUN
Serial No.	:	N/A
Trademark	:	NYX Mobile
Receipt Date	:	2013-09-26
Test Date	:	2013-09-27 to 2013-10-28
Issue Date	:	2013-11-05
Test Standard(s)	:	**FCC CFR Title 47 Part 15 Subpart C Section 15.247**
Conclusions	:	**PASSED***
		*In the configuration tested, the EUT complied with the standards specified above.

Test/Witness Engineer : Jason Deng

Approved & Authorized : Winkey Wang

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

Contents

1. General Information

1.1 Client Information

Applicant	:	ITALCOM GROUP
Address	:	1728 Coral Way, Coral Gables, Miami, Florida, United States 33145
Manufacturer	:	Sunry Technology LTD
Address	:	18F, Dawning Building #12 Keji South Road, Hi-Tech Park, Nanshan District, Shenzhen, China

1.2 General Description of EUT (Equipment Under Test)

Product Name	:	3G Mobile	
Models No.	:	SUN	
Serial No.	:	N/A	
Trademark	:	NYX Mobile	
Product Description	:	Operation Frequency:	2412MHz~2462MHz (802.11b/802.11g/802.11n(H20)) 2422MHz~2452MHz (802.11n(H40))
		Transfer Rate:	802.11b: 1/ 2/ 5.5/ 11Mbps 802.11g: 6/ 9/ 12/ 18/ 24/ 36/, 48/54 Mbps 802.11n: Up to 150Mbps
		Number of Channel:	11 for 802.11b/802.11g/802.11(H20) 7 for 802.11n(H40)
		Channel separation	5MHz
		Modulation Technology:	802.11b:DSSS 802.11g/ 802.11n:OFDM
		Antenna Type:	Integral Antenna
		Antenna Gain:	1.2 dBi
Power Supply	:	AC adapter: Input 100-240V~, 50/60Hz 0.15A, Output 5.0V DC, 500mA Rechargeable Li-ion Battery DC 3.7V	

Note:

(1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

(2) Channel List:

CH 01~CH 11 for 802.11b/ g/ n(20M) and CH 03~CH 09 for 802.11n(40M)

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	05	2432	09	2452
02	2417	06	2437	10	2457
03	2422	07	2442	11	2462
04	2427	08	2447		

1.3 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

Test Mode	Description
Transmitting mode	Keep the EUT in continuous transmitting with modulation

Remark: The sample was placed 0.8m above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.	
Mode	Data rate
802.11b	1Mbps
802.11g	6Mbps
802.11n(H20)	6.5Mbps
802.11n(H40)	13.5Mbps
Final Test Mode:	
According to ANSI C63.4 standards, the test results are both the “worst case” and “worst setup” 1Mbps for 802.11b, 6Mbps for 802.11g, 6.5Mbps for 802.11n(H20) and 13.5 Mbps for 802.11n(H40). Duty cycle setting during the transmission is 100% with maximum power setting for all modulations.	

1.4 Test Instruments List

Item	Test Equipment	Manufacturer	Model No.	Cal. Date	Cal. Due date
1	Bilog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	May 25, 2013	May 24, 2014
2	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	May 30, 2013	May 29, 2014
3	Coaxial Cable	N/A	N/A	Apr. 01, 2013	Mar. 31, 2014
4	Coaxial Cable	N/A	N/A	Apr. 01, 2013	Mar. 31, 2014
5	Coaxial cable	N/A	N/A	Apr. 01, 2013	Mar. 31, 2014
6	Coaxial Cable	N/A	N/A	Apr. 01, 2013	Mar. 31, 2014
7	Coaxial Cable	N/A	N/A	Apr. 01, 2013	Mar. 31, 2014
8	Amplifier (10kHz-1.3GHz)	HP	8447D	Apr. 01, 2013	Mar. 31, 2014
9	Amplifier (1GHz-18GHz)	Compliance Direction Systems Inc.	PAP-1G18	Jun. 09, 2013	Jun. 08, 2014
10	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	Apr. 01, 2013	Mar. 31, 2014
11	Horn Antenna	ETS-LINDGREN	3160	Mar. 30, 2013	Mar. 29, 2014
12	Positioning Controller	UC	UC3000	N/A	N/A
13	Spectrum analyzer 9kHz-30GHz	Rohde & Schwarz	FSP	May 29, 2013	May 28, 2014
14	EMI Test Receiver	Rohde & Schwarz	ESPI	Apr. 01, 2013	Mar. 31, 2014
15	Loop antenna	Laplace instrument	RF300	May 25, 2013	May 24,, 2014
16	Universal radio communication tester	Rhode & Schwarz	CMU200	May 29, 2013	May 28, 2014
17	Signal Analyzer	Rohde & Schwarz	FSIQ3	May 29, 2013	May 28, 2014

1.5 Laboratory Location

Shenzhen Certification Technology Service Co., Ltd.
Address: 2F, Building B, East Area of Nanchang Second Industrial Zone, Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China

At the time of testing, the Laboratory is accredited. It is listed in the United States of American Federal Communications Commission (FCC), and the registration number is 197647.
Tel:86-755-86375552 Fax: 86-755-26736857

2. Test Summary

Standard Section	Test Item	Judgment
15.203/15.247(c)	Antenna Requirement	PASSED
15.207	Conducted Emission	PASSED
15.247(b)(3)	Conducted Peak Output Power	PASSED
15.247(a)(2)	99% OBW and 6dB Emission Bandwidth	PASSED
15.247(e)	Power Spectral Density	PASSED
15.247(d)	Band Edge	PASSED
15.205/15.209	Spurious Emission	PASSED

3. Antenna Requirement

3.1. Standard Requirement

3.1.1 Test standard

FCC Part15 Section 15.203 /247(c)

3.1.2 Requirement

1) 15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

2) 15.247(c) (1)(i) requirement:

Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

3.2. Antenna Connected Construction

The antenna is an integral antenna which permanently attached, and the best case gain of the antenna is 1.2 dBi. It complies with the standard requirement.

4. Conducted Emission Test

4.1 Test Standard and Limit

4.1.1 Test Standard

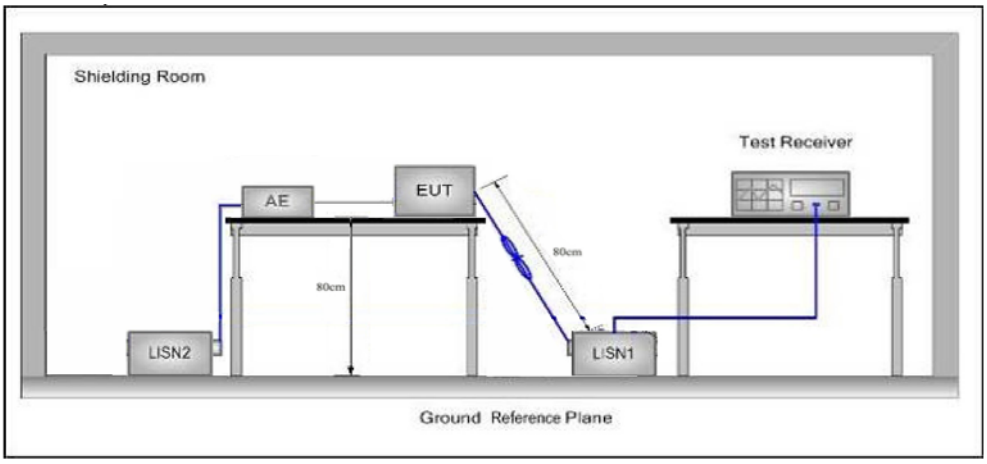
FCC Part15 Section 15.207

4.1.2 Test Limit

Conducted Emission Test Limit

Frequency	Maximum RF Line Voltage (dBμV)	
	Quasi-peak Level	Average Level
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
500kHz~5MHz	56	46
5MHz~30MHz	60	50
Remark: (1) *Decreasing linearly with logarithm of the frequency. (2) The lower limit shall apply at the transition frequencies.		

4.2 Test Setup



4.3 Test Procedure

1) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.

2) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane.

The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal

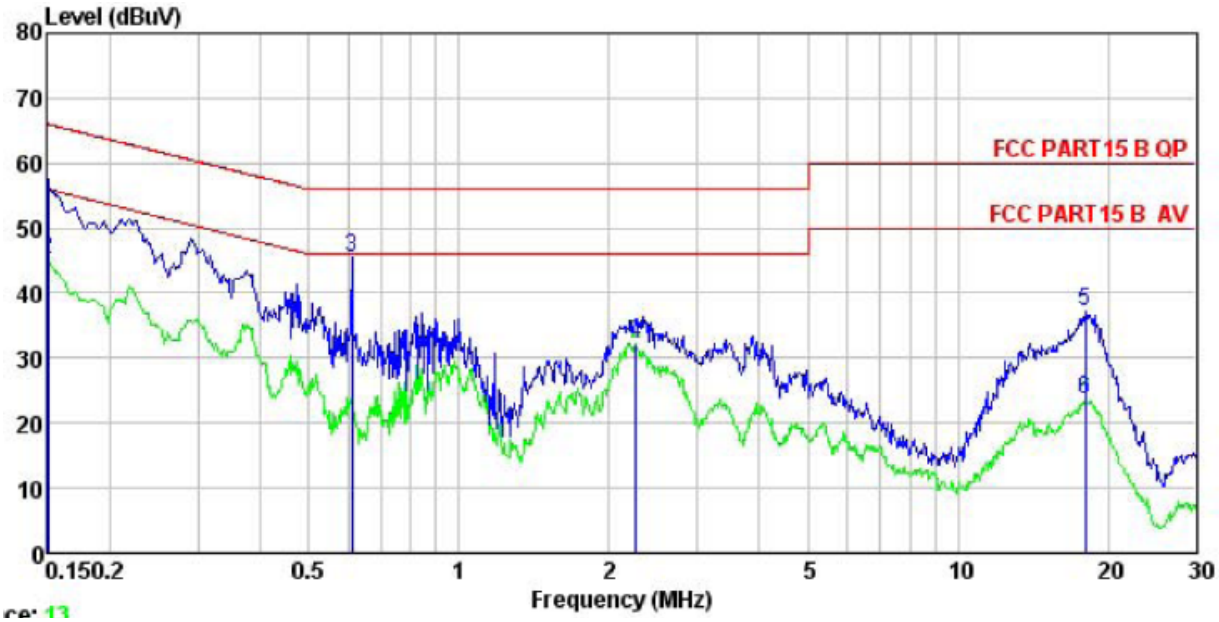
ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.

4.4 Test Data

Please refer to the following pages

Conducted Emission Test Data

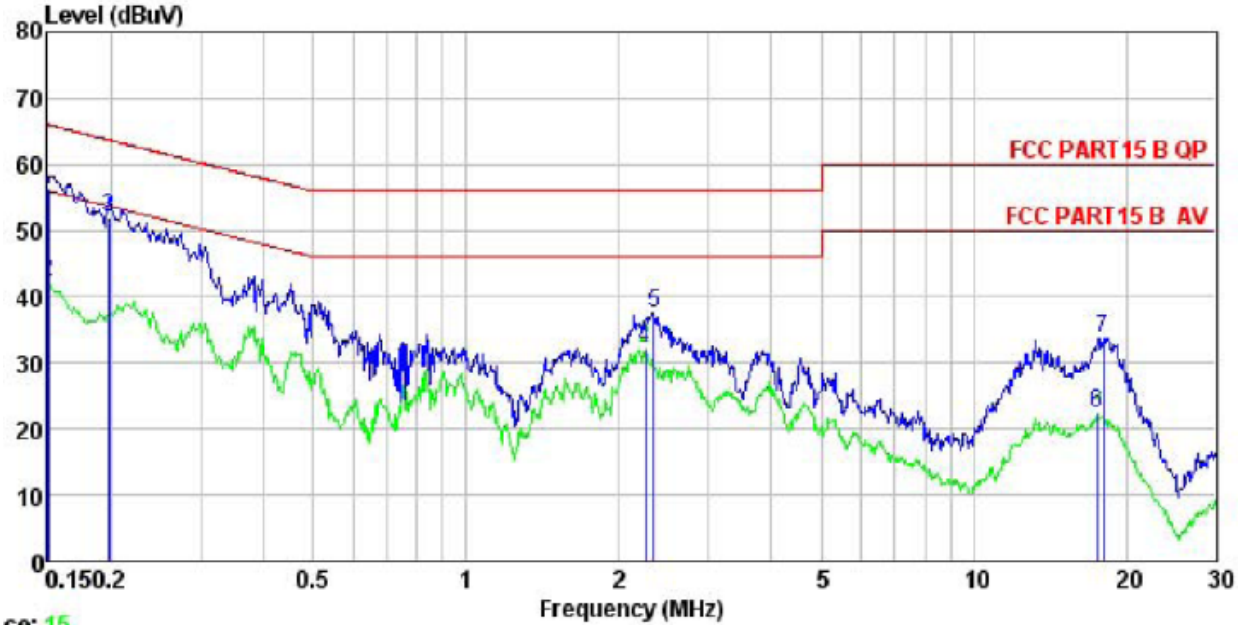
EUT:	3G Mobile	M/N: SUN
Operating Condition:	WIFI mode	
Test Site:	Shielded room	
Operator:	Tom	
Test Specification:	AC 120V/60Hz	
Polarization:	Line	
Note	Tem:25℃	Hum:50%



	Freq	Read Level	LISN Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	0.150	46.40	10.25	0.79	0.00	57.44	66.00	-8.56	QP
2	0.150	34.13	10.25	0.79	0.00	45.17	56.00	-10.83	Average
3	0.611	34.36	10.22	0.77	0.00	45.35	56.00	-10.65	QP
4	2.261	20.95	10.28	0.95	0.00	32.18	46.00	-13.82	Average
5	17.944	25.90	10.29	0.92	0.00	37.11	60.00	-22.89	QP
6	17.944	12.33	10.29	0.92	0.00	23.54	50.00	-26.46	Average

Conducted Emission Test Data

EUT:	3G Mobile	M/N: SUN
Operating Condition:	WIFI mode	
Test Site:	Shielded room	
Operator:	Tom	
Test Specification:	AC 120V/60Hz	
Polarization:	Neutral	
Note	Tem:25℃ Hum:50%	



	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.150	45.26	10.27	0.79	56.32	66.00	-9.68	QP
2	0.150	31.28	10.27	0.79	42.34	56.00	-13.66	Average
3	0.198	41.02	10.23	0.76	52.01	63.71	-11.70	QP
4	2.249	21.05	10.27	0.95	32.27	46.00	-13.73	Average
5	2.346	26.17	10.27	0.94	37.38	56.00	-18.62	QP
6	17.475	11.15	10.29	0.92	22.36	50.00	-27.64	Average
7	17.944	22.49	10.30	0.92	33.71	60.00	-26.29	QP

5. Peak Output Power Test

5.1. Test Standard and Limit

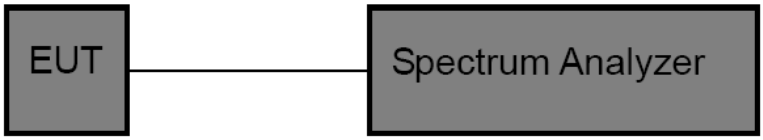
5.1.1 Test Standard

FCC Part15 C Section 15.247 (b)(3)

5.1.2 Test Limit

FCC Part 15 Subpart C(15.247)		
Test Item	Limit	Frequency Range (MHz)
Peak Output Power	1 Watt or 30 dBm	2400~2483.5

5.2. Test Setup



5.3. Test Procedure

(1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.

(2) Spectrum Setting:

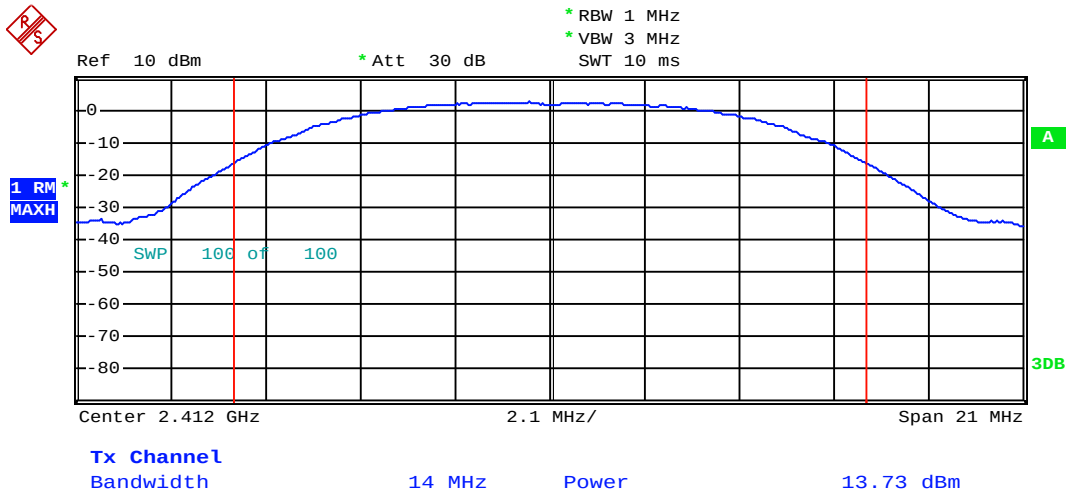
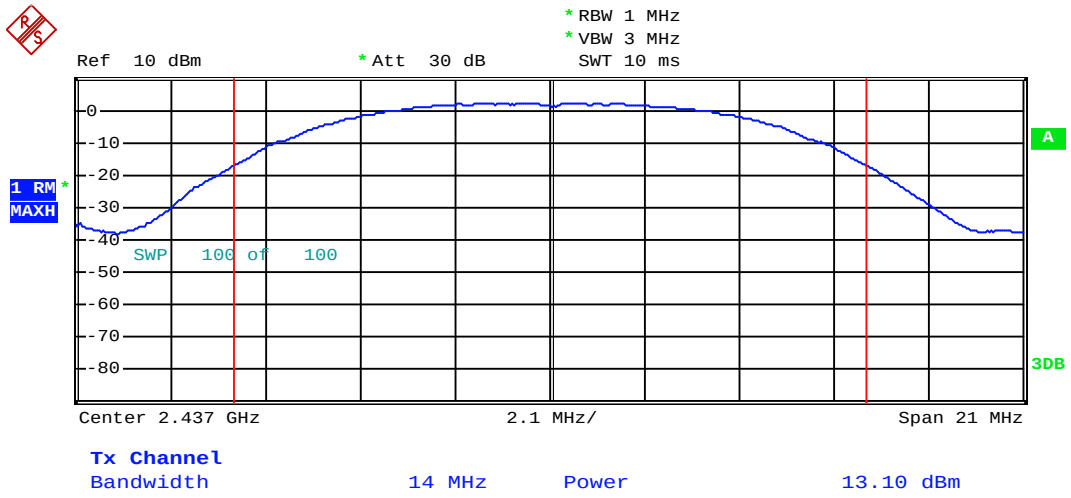
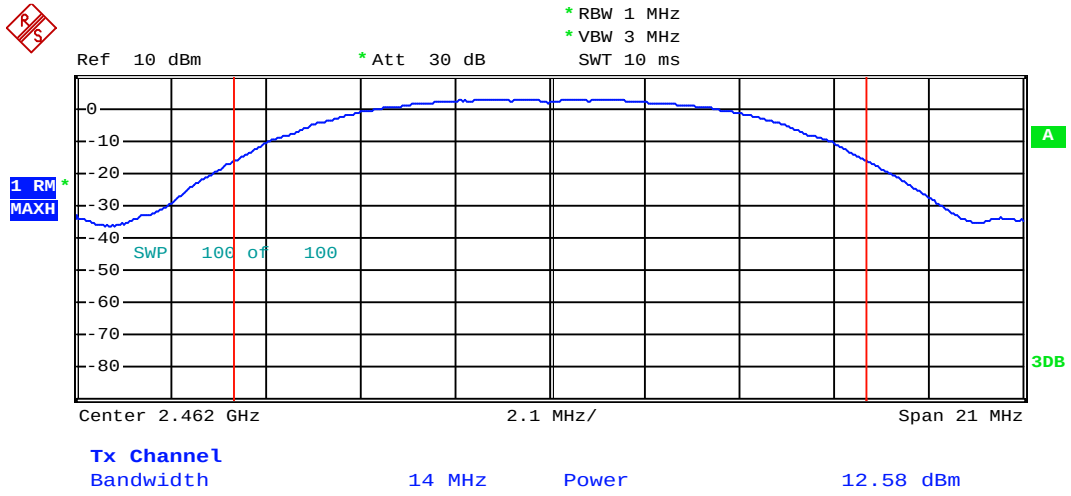
RBW=1MHz, VBW=3MHz, Detector=Peak (If 20dB BW ≤1 MHz)

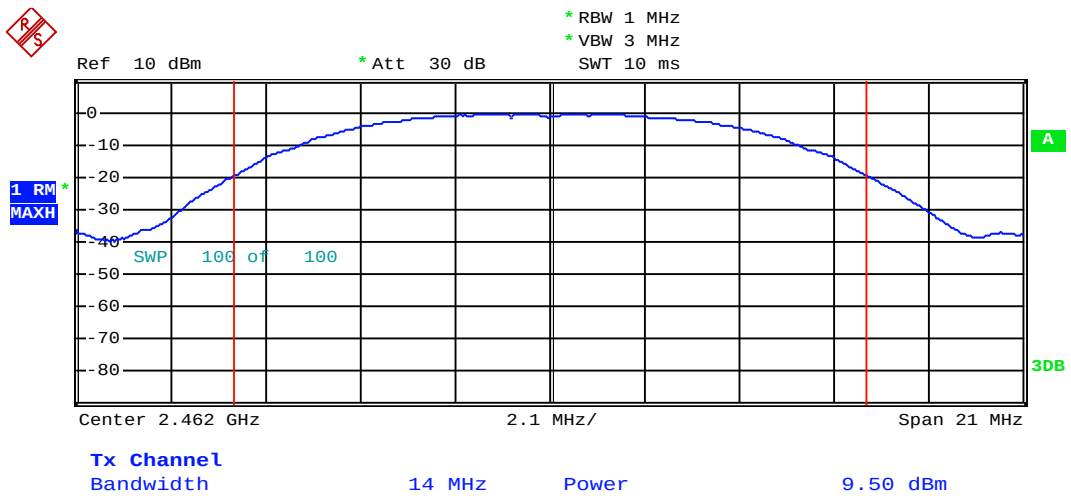
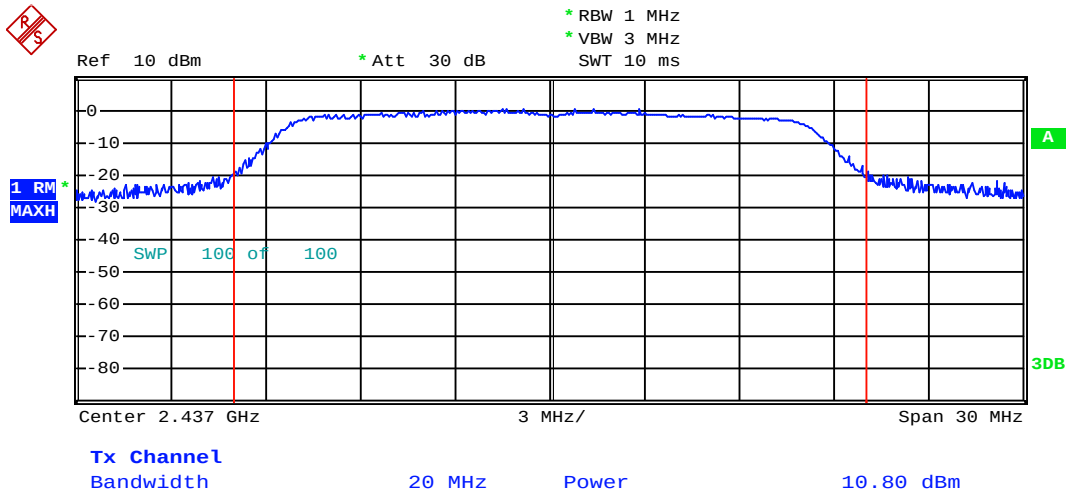
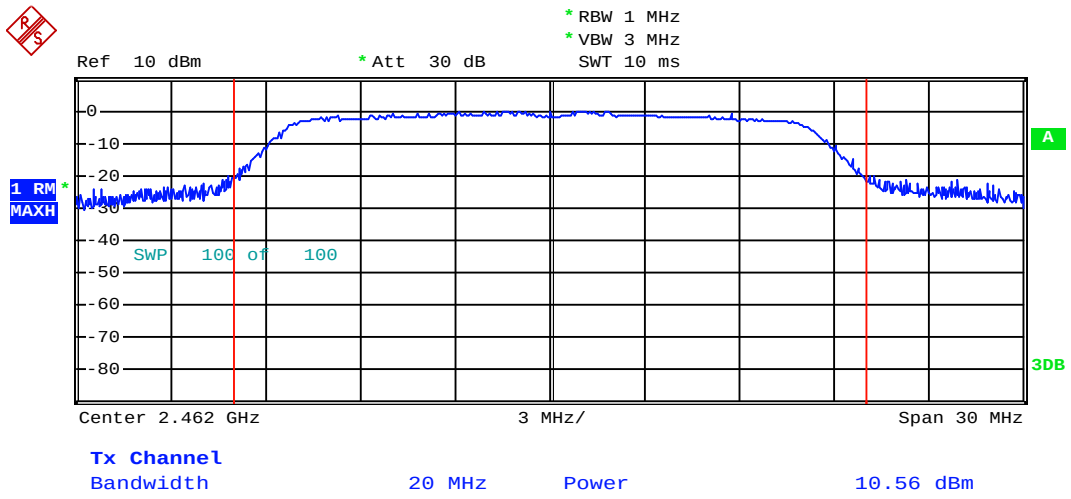
RBW=3MHz, VBW=10MHz, Detector=Peak (If 20dB BW > 1 MHz)

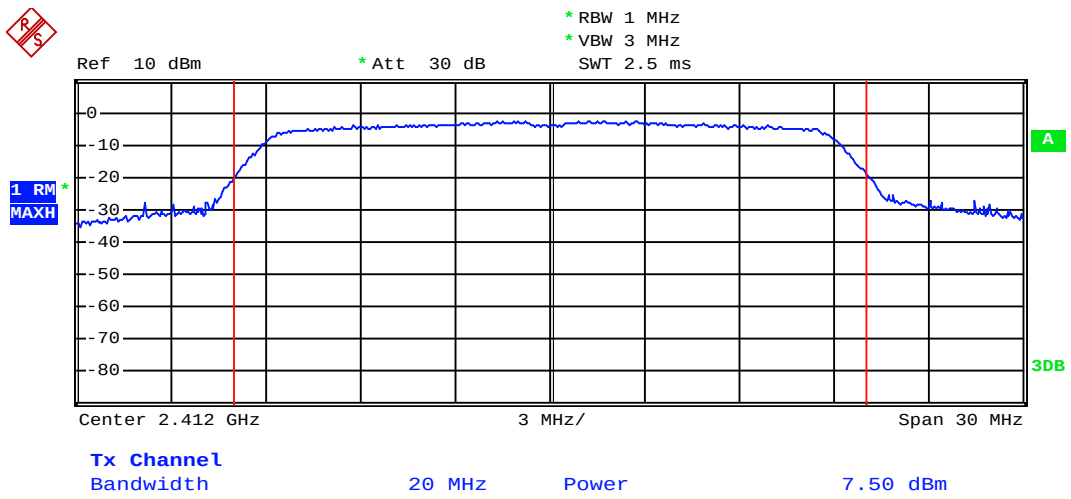
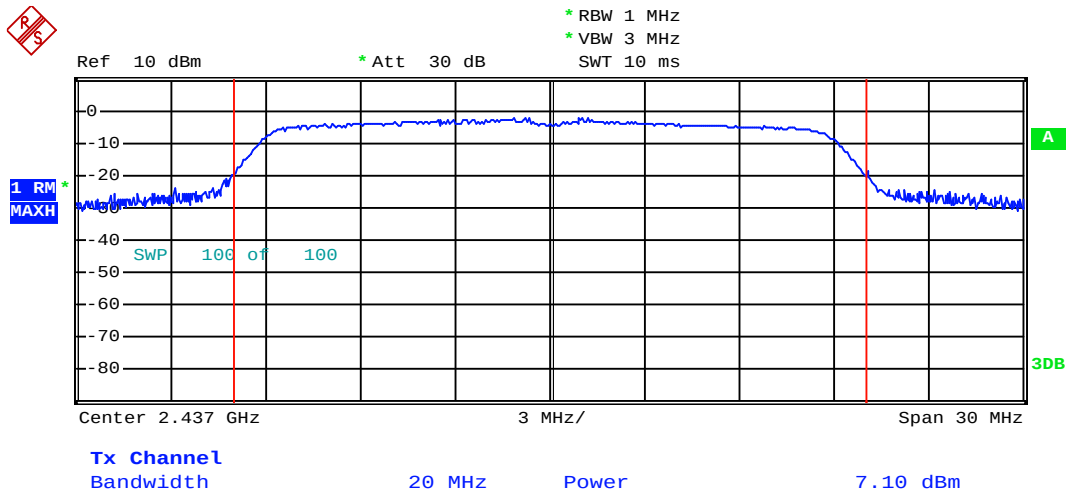
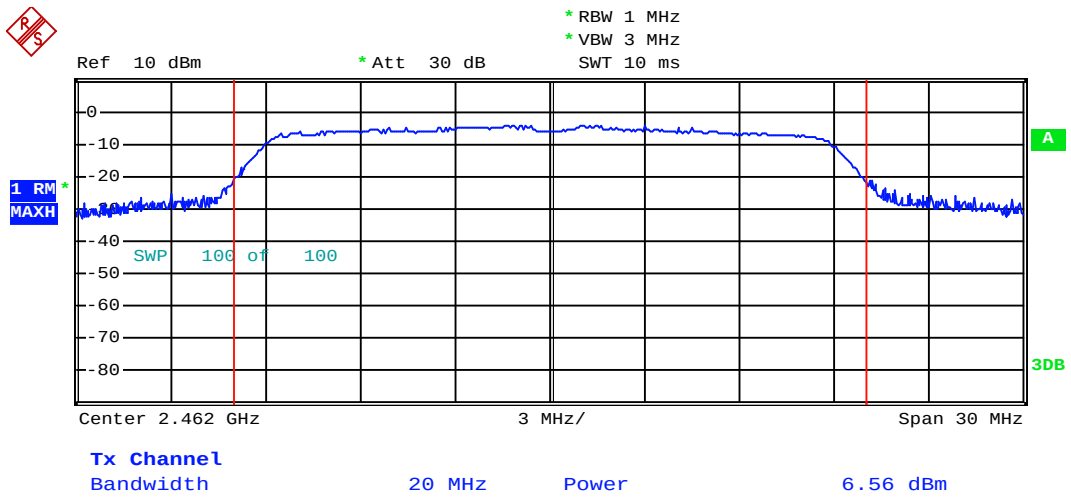
(3) The EUT was set to continuously transmitting in the max power during the test.

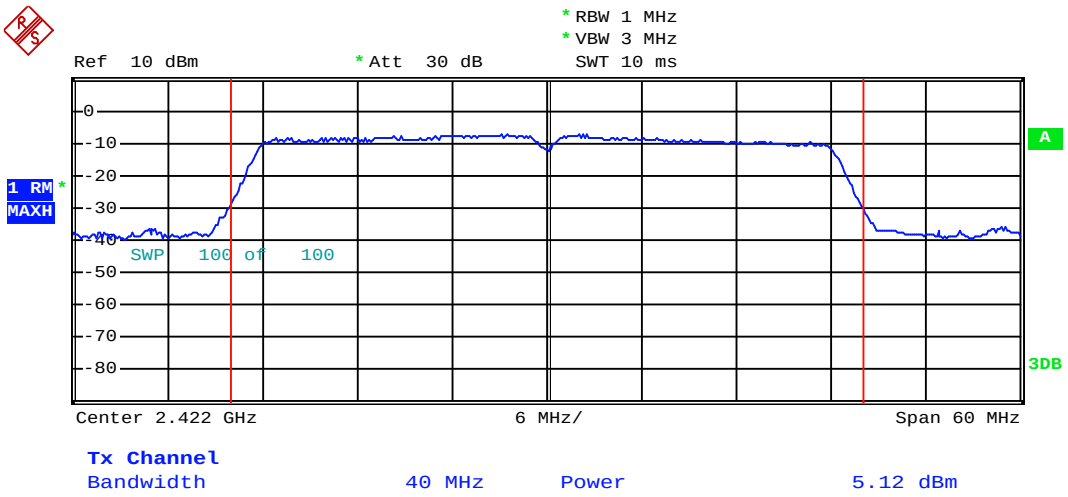
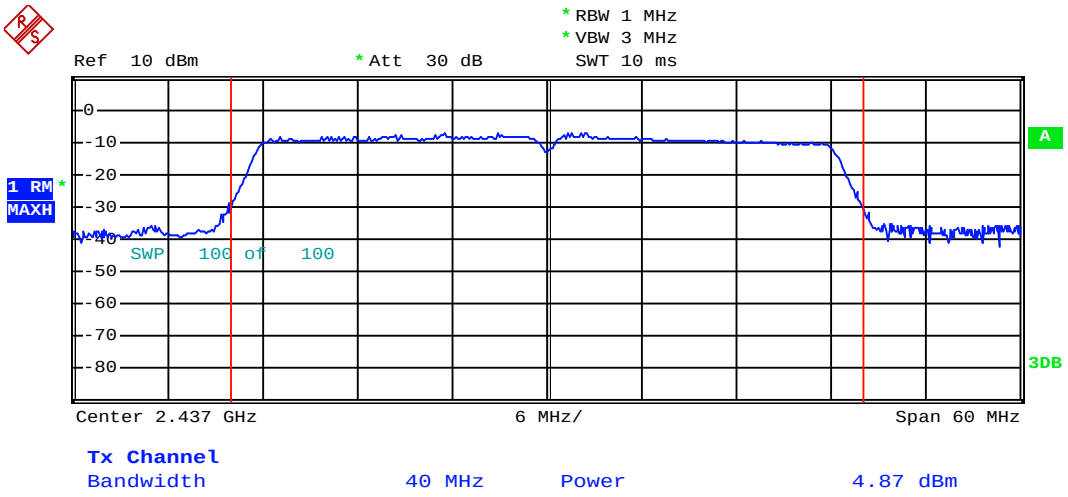
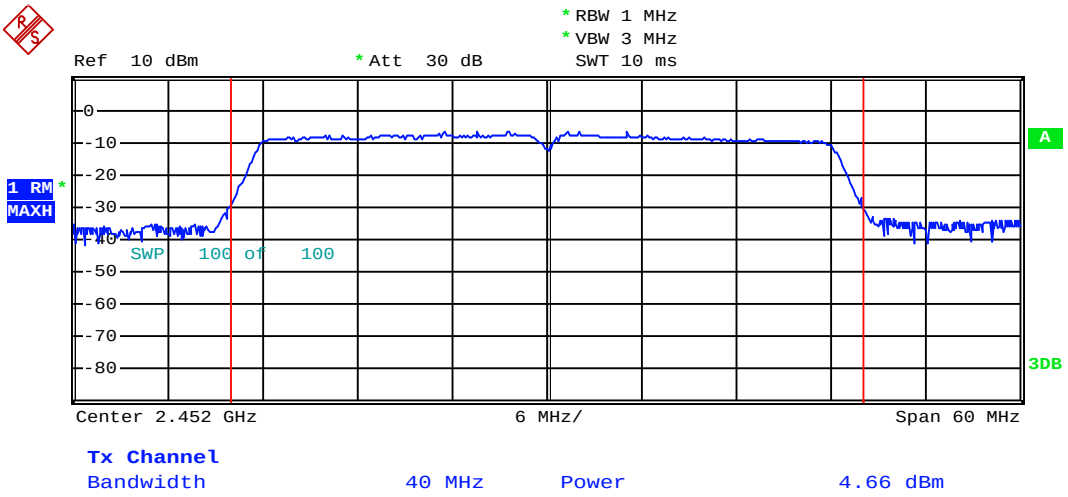
5.4. Test Data

Test CH	Maximum Conducted Output Power (dBm)				Limit(dBm)	Result
	802.11b	802.11g	802.11n(H20)	802.11n(H40)		
Lowest	13.73	9.50	7.50	5.12	30.00dBm	PASSED
Middle	13.10	10.80	7.10	4.87		PASSED
Highest	12.58	10.56	6.50	4.66		PASSED
Remark: Test plot as follows						

Test mode	802.11b
Lowest Channel	
Middle Channel	
Highest Channel	

Test mode	802.11g
Lowest Channel	
Middle Channel	
Highest Channel	

Test mode	802.11n(H20)
Lowest Channel	
Middle Channel	
Highest Channel	

Test mode	802.11n(H40)
Lowest Channel	 Tx Channel Bandwidth 40 MHz Power 5.12 dBm
Middle Channel	 Tx Channel Bandwidth 40 MHz Power 4.87 dBm
Highest Channel	 Tx Channel Bandwidth 40 MHz Power 4.66 dBm

6. Occupy Bandwidth Test

6.1. Test Standard and Limit

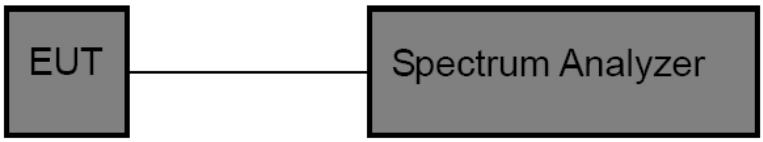
6.1.1 Test Standard

FCC Part15 C Section 15.247 (a)(2)

6.1.2 Test Limit

FCC Part 15 Subpart C(15.247)		
Test Item	Limit	Frequency Range
Bandwidth	>500 kHz (6dB bandwidth)	2400~2483.5(MHz)

6.2. Test Setup



6.3. Test Procedure

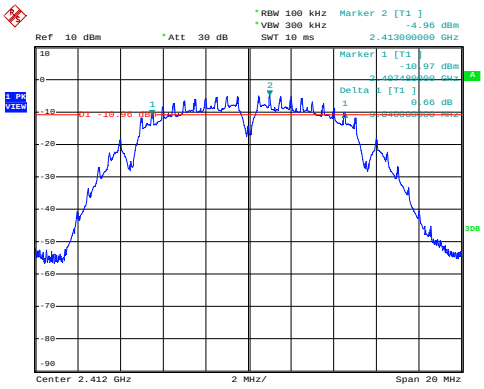
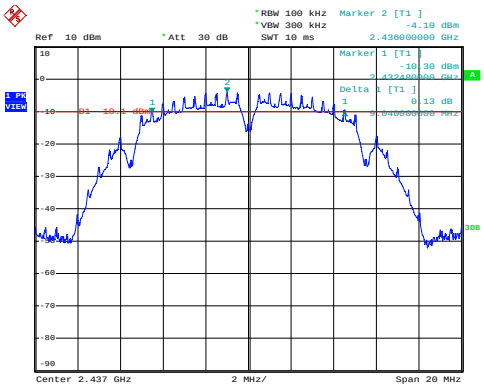
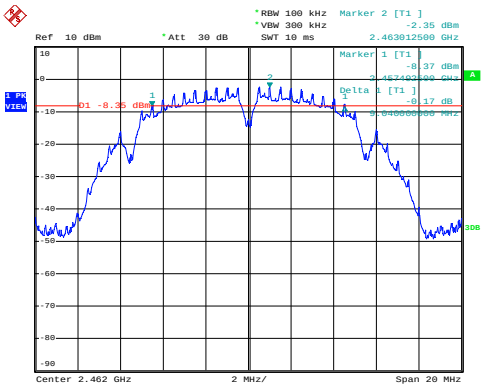
(1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.

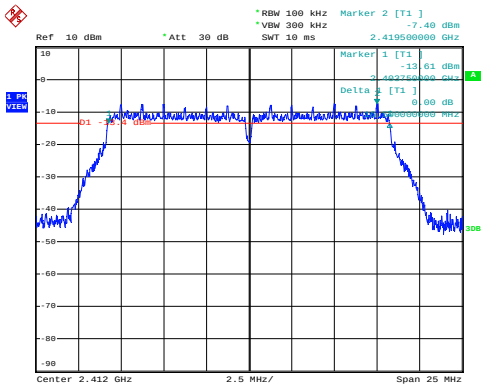
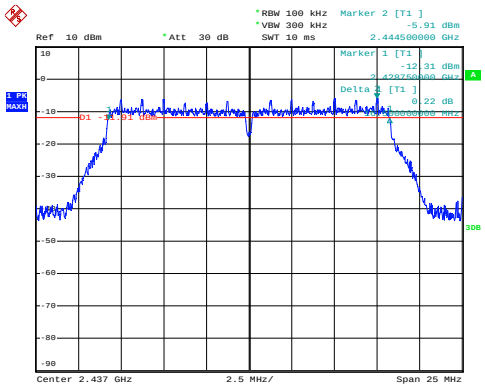
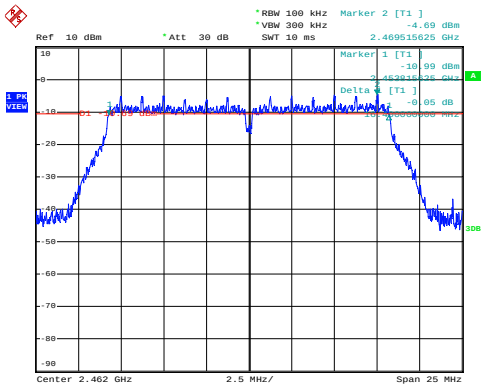
(2) The bandwidth is measured at an amplitude level reduced 6dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst –case (i.e the widest) bandwidth.

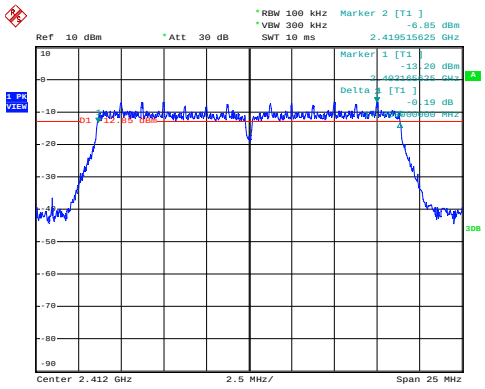
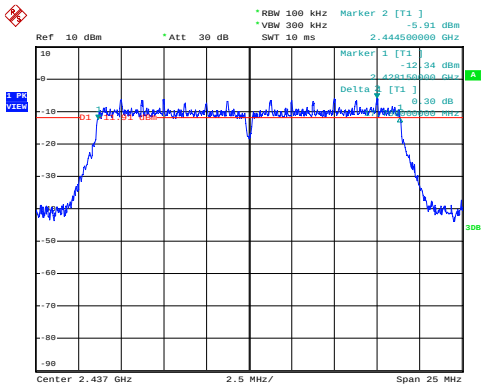
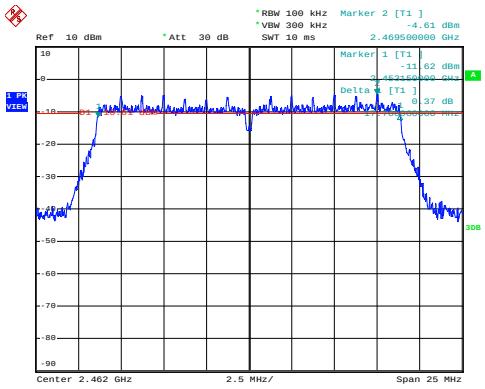
(3) Spectrum Setting:
Bandwidth: RBW=100 kHz, VBW=300 kHz, detector= Peak

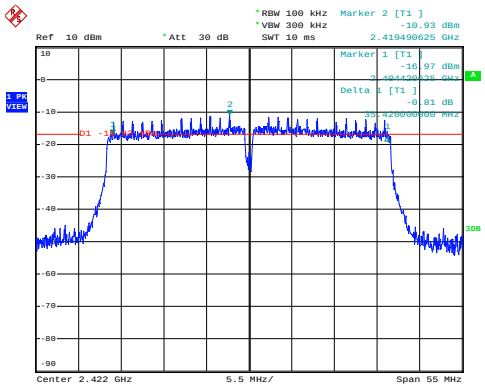
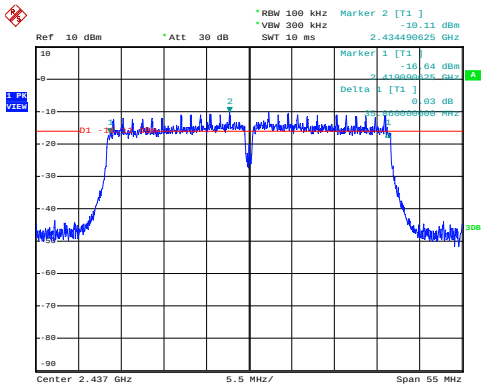
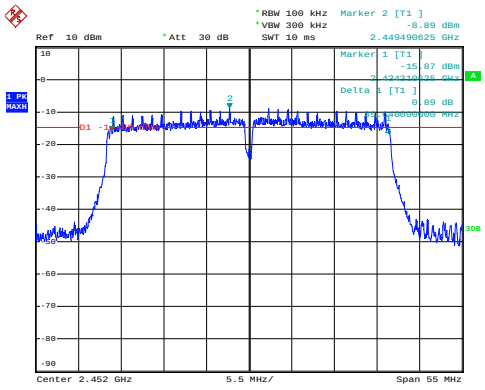
6.4. Test Data

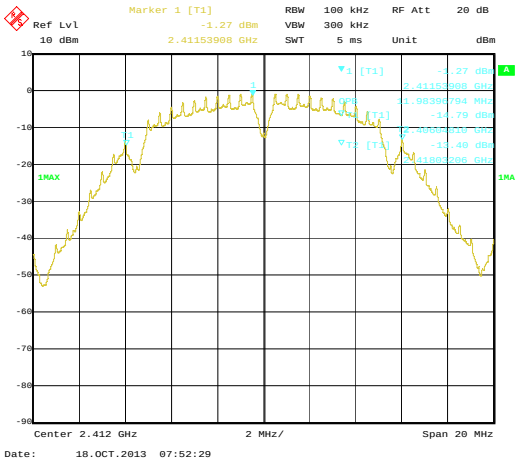
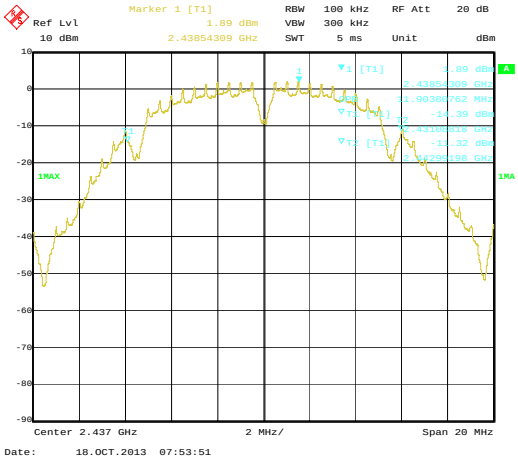
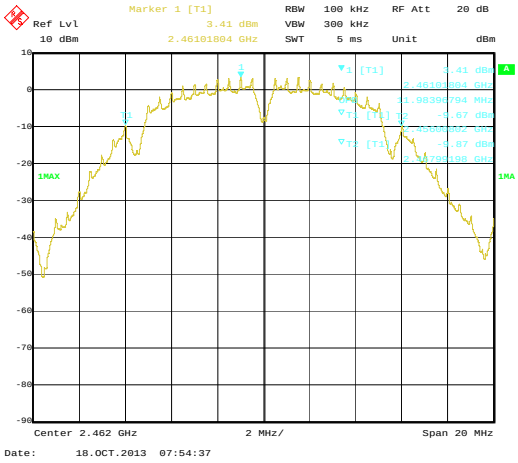
Test CH	6dB Occupy Bandwidth (MHz)				Limit (kHz)	Result
	802.11b	802.11g	802.11n(H20)	802.11n(H40)		
Lowest	9.04	16.50	17.70	35.42	>=500 kHz	PASSED
Middle	9.04	16.50	17.70	35.86		PASSED
Highest	9.04	16.40	17.70	35.64		PASSED
Test CH	**99%dB Occupy Bandwidth (MHz)**				**Limit (kHz)**	**Result**
	802.11b			**802.11n(H40)**		
Lowest	11.98	16.63	17.74	36.04	N/A	N/A
Middle	11.90	16.58	17.74	36.04		N/A
Highest	11.98	16.58	17.79	36.04		N/A
Remark: Test plot as follows						

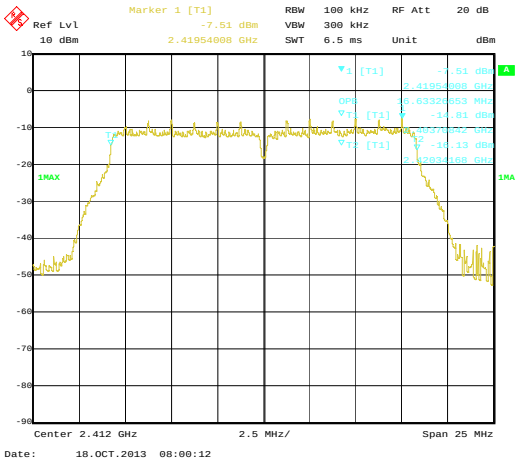
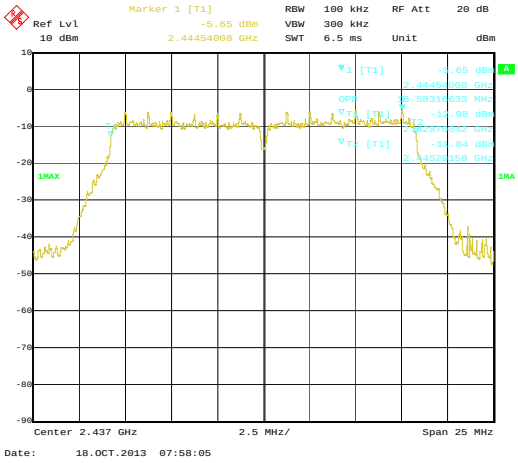
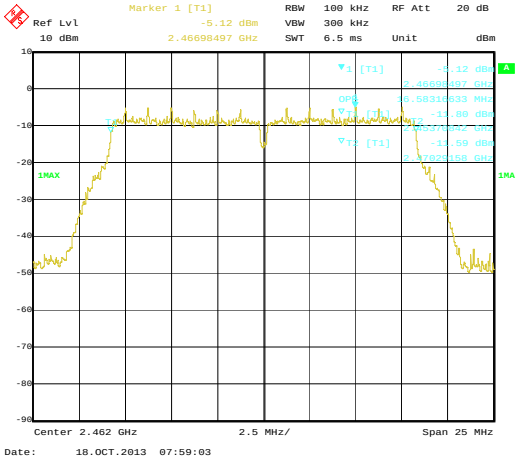
Test mode	6dB BW 802.11b
Lowest Channel	 REMOTE HIGH Date: 1.OCT.2013 15:53:40
Middle Channel	 REMOTE HIGH Date: 1.OCT.2013 15:52:24
Highest Channel	 REMOTE HIGH Date: 1.OCT.2013 15:50:47

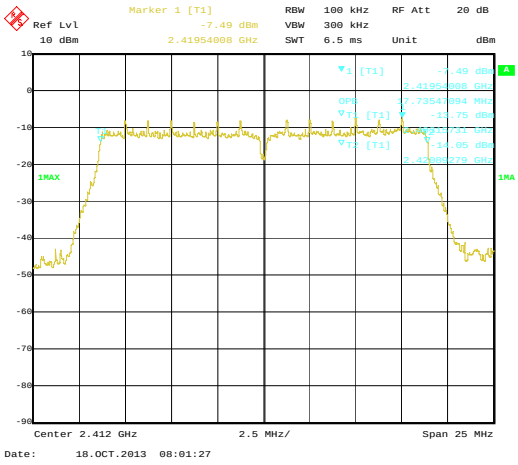
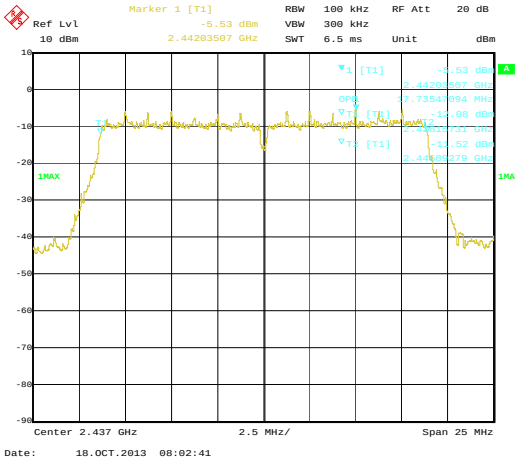
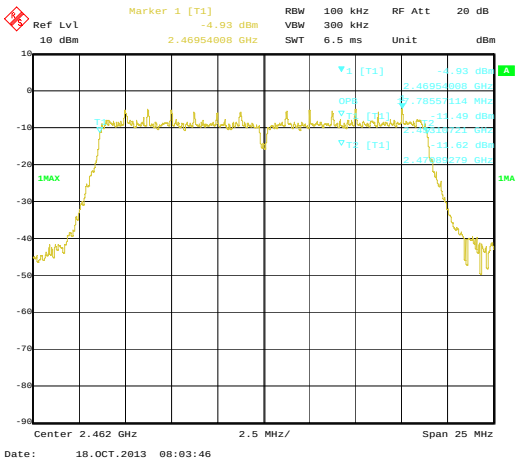
Test mode	6dB BW 802.11g
Lowest Channel	 REMOTE HIGH Date: 1.OCT.2013 15:45:03
Middle Channel	 REMOTE HIGH Date: 1.OCT.2013 15:43:31
Highest Channel	 REMOTE HIGH Date: 1.OCT.2013 15:48:11

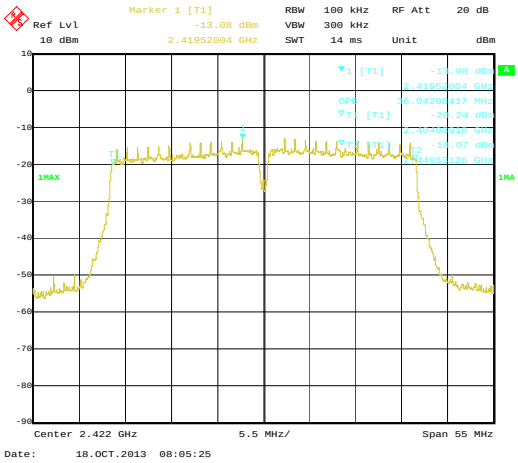
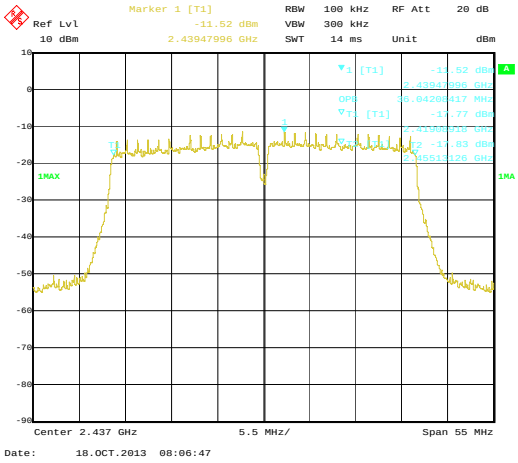
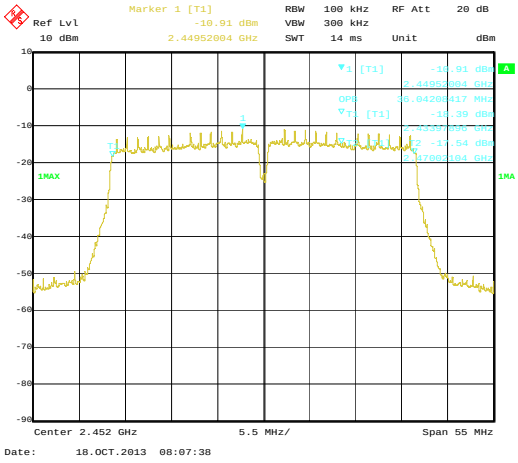
Test mode	6dB BW 802.11n(H20)
Lowest Channel	 REMOTE HIGH Date: 1.OCT.2013 15:56:10
Middle Channel	 REMOTE HIGH Date: 1.OCT.2013 15:57:36
Highest Channel	 REMOTE HIGH Date: 1.OCT.2013 15:59:06

Test mode	6dB BW 802.11n(H40)
Lowest Channel	 REMOTE HIGH Date: 1.OCT.2013 16:01:26
Middle Channel	 REMOTE HIGH Date: 1.OCT.2013 16:02:51
Highest Channel	 REMOTE HIGH Date: 1.OCT.2013 16:04:05

Test mode	99%dB BW 802.11b
Lowest Channel	
Middle Channel	
Highest Channel	

Test mode	99%dB BW 802.11g
Lowest Channel	
Middle Channel	
Highest Channel	

Test mode	99%dB BW 802.11n(H20)
Lowest Channel	
Middle Channel	
Highest Channel	

Test mode	99%dB BW 802.11n(H40)
Lowest Channel	
Middle Channel	
Highest Channel	

7. Power Spectral Density Test

7.1. Test Standard and Limit

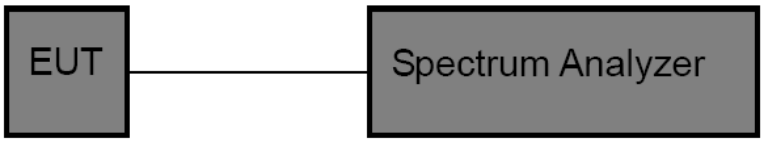
7.1.1 Test Standard

FCC Part15 C Section 15.247 (e)

7.1.2 Test Limit

FCC Part 15 Subpart C(15.247)		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	8dBm(in any 3 kHz)	2400~2483.5

7.2. Test Setup



7.3. Test Procedure

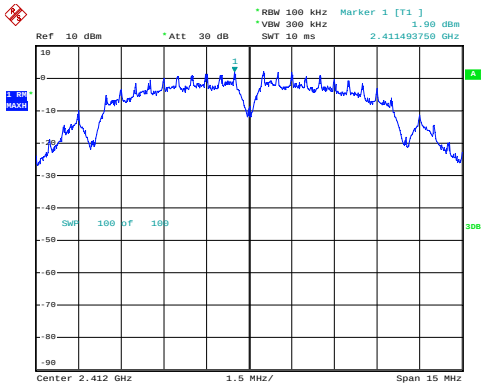
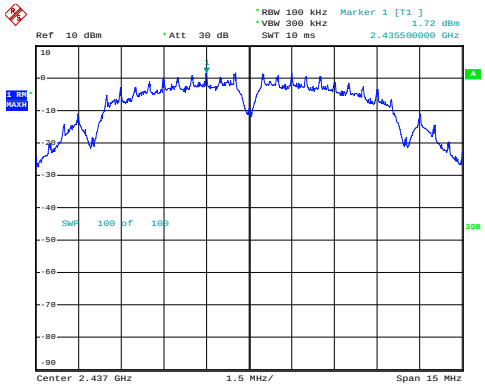
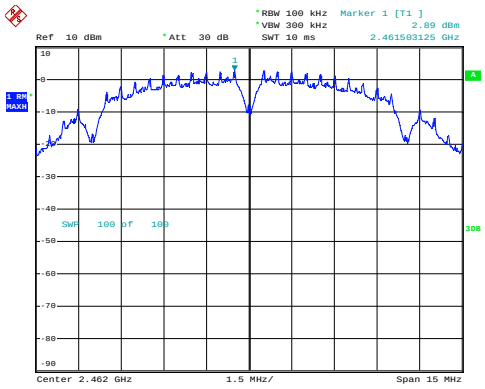
(1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.

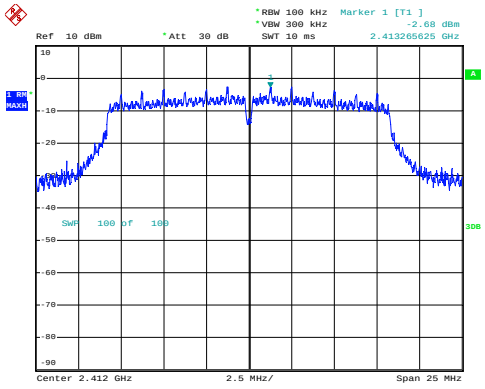
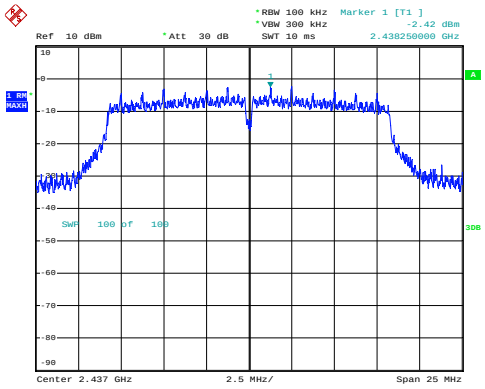
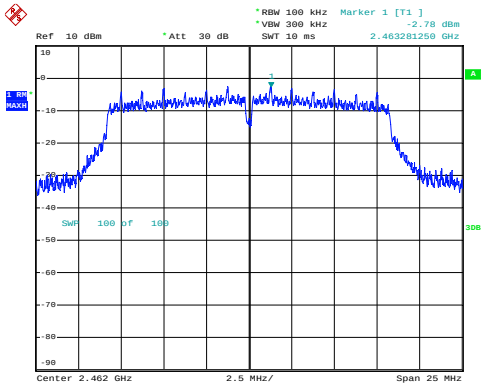
(2) Measure the spectral power density the spectrum analyzer was set to Resolution Bandwidth=100 kHz, and Video Bandwidth≥300 kHz, Detector: Peak, Span to 5%~30% greater than EBW, Sweep time auto.

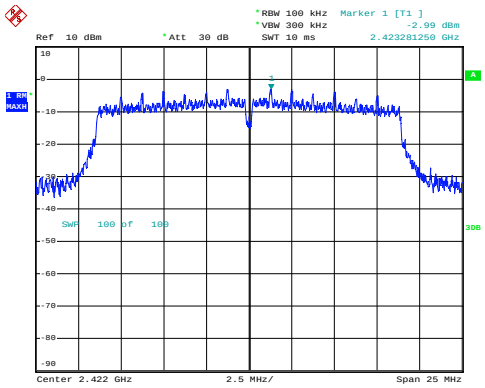
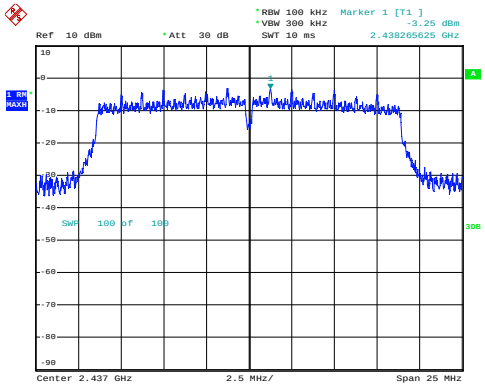
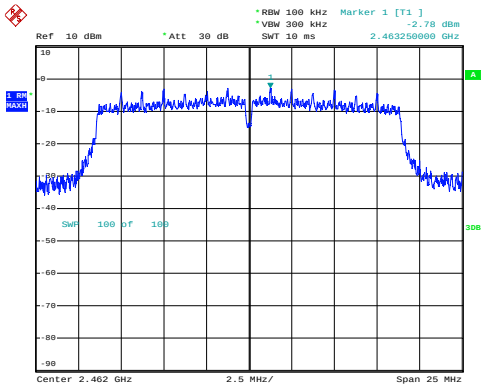
(3) Scale the observed power level to an equivalent value in 3 kHz by adjusting (reducing) the measured power by a BWCF=-15.2 dB.

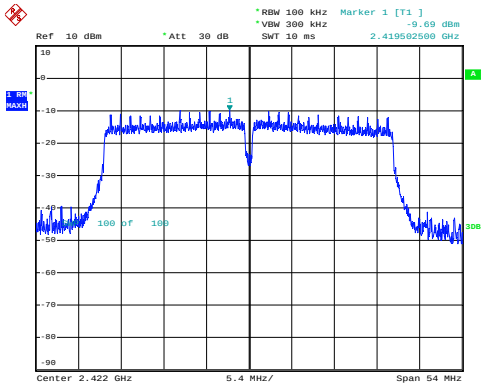
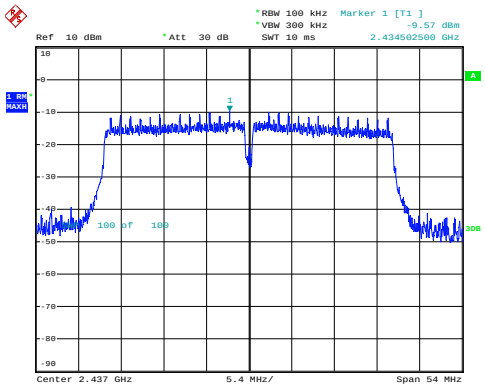
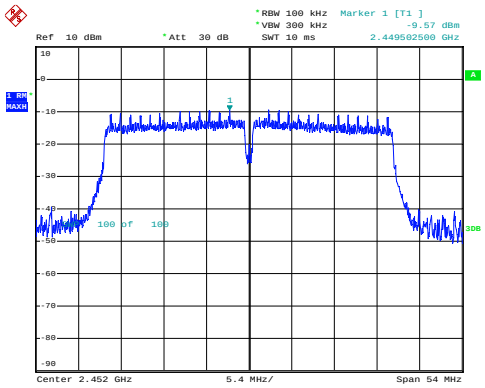
7.4. Test Data

Test CH	Power Spectral Density (dBm)				Limit (dBm)	Result
	802.11b	802.11g	802.11n(H20)	802.11n(H40)		
Lowest	1.90	-2.68	-2.99	-9.69	8.00	PASSED
Middle	1.72	-2.42	-3.25	-9.57		PASSED
Highest	2.89	-2.78	-2.78	-9.57		PASSED
Remark: Test plot as follows						

Test mode	802.11b
Lowest Channel	 REMOTE HIGH Date: 1.OCT.2013 16:56:24
Middle Channel	 REMOTE HIGH Date: 1.OCT.2013 16:55:54
Highest Channel	 REMOTE HIGH Date: 1.OCT.2013 16:57:04

Test mode	802.11g
Lowest Channel	 REMOTE HIGH Date: 1.OCT.2013 16:54:14
Middle Channel	 REMOTE HIGH Date: 1.OCT.2013 16:51:41
Highest Channel	 REMOTE HIGH Date: 1.OCT.2013 16:51:05

Test mode	802.11n(H20)
Lowest Channel	
Middle Channel	
Highest Channel	

Test mode	802.11n(H40)
Lowest Channel	 REMOTE HIGH Date: 1.OCT.2013 16:47:56
Middle Channel	 REMOTE HIGH Date: 1.OCT.2013 16:47:13
Highest Channel	 REMOTE HIGH Date: 1.OCT.2013 16:46:30

8. Band Edge Requirement (Conducted Emission Method)

8.1. Test Standard and Limit

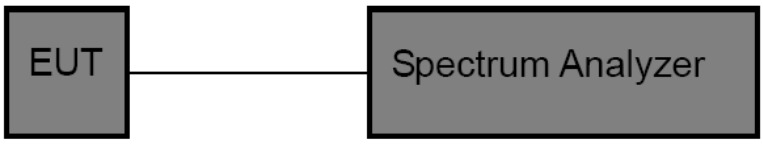
8.1.1 Test Standard

FCC Part15 C Section 15.247 (d)

8.1.2 Test 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 30 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.

8.2. Test Setup



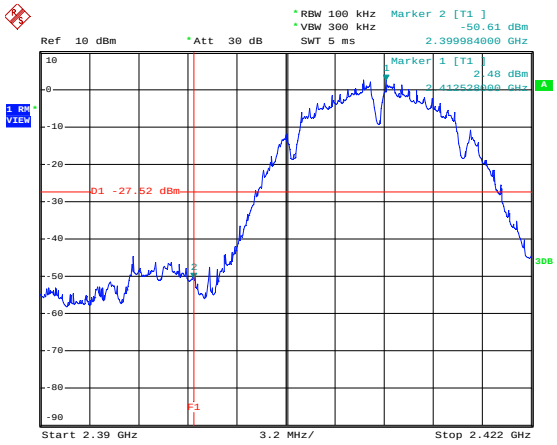
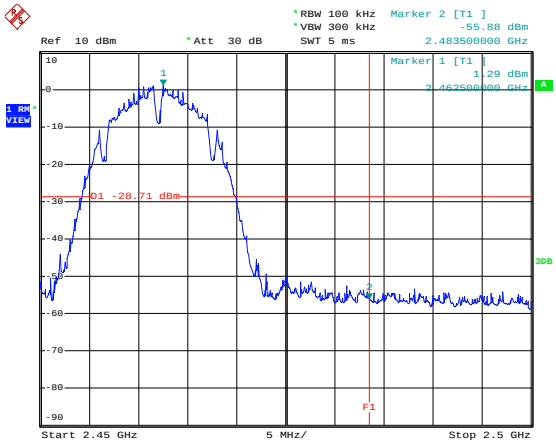
8.3. Test Procedure

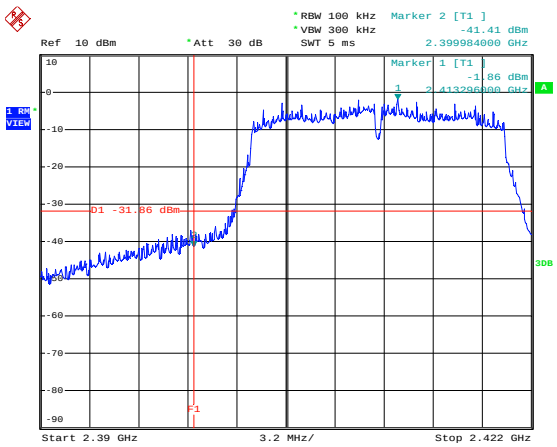
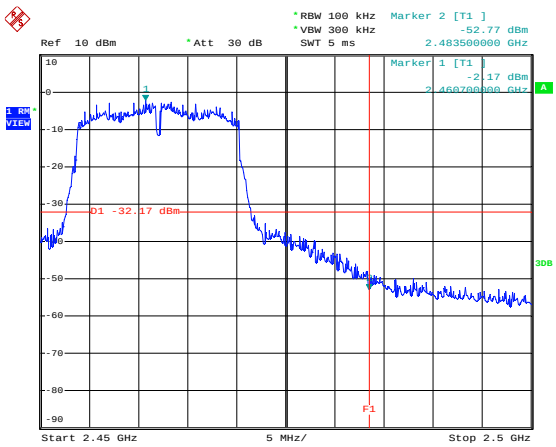
(1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.

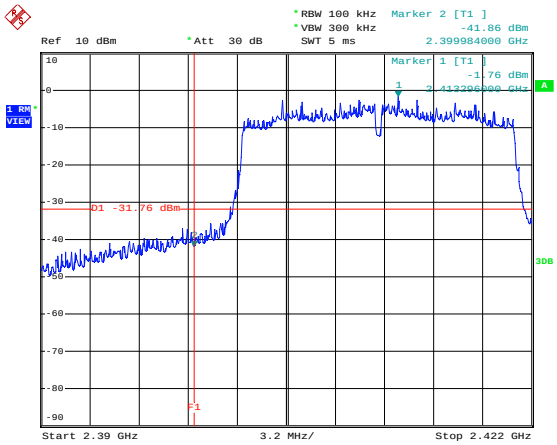
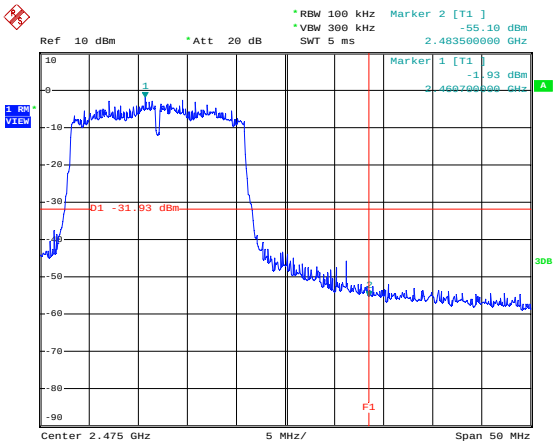
(2) Spectrum Setting: RBW=100 kHz, VBW=300 kHz, Detector=Peak

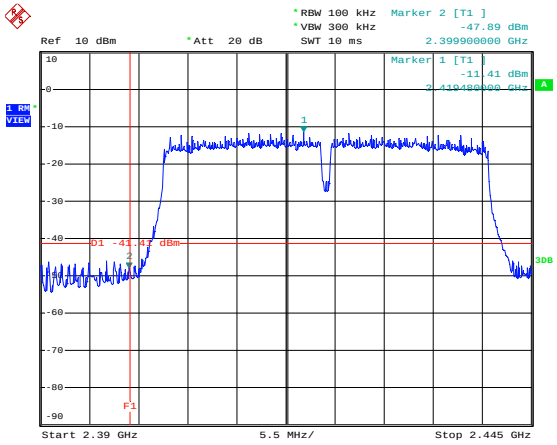
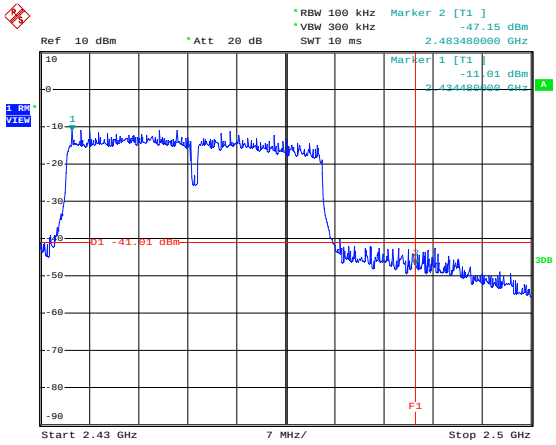
8.4. Test Data

Test plot as follows

Test mode	802.11b
 Date: 18.OCT.2013 11:46:23	 Date: 18.OCT.2013 11:44:50
Lowest Channel	Highest Channel

Test mode	802.11g
 Date: 18.OCT.2013 11:54:16	 Date: 18.OCT.2013 11:42:53
Lowest Channel	Highest Channel

Test mode	802.11n(H20)
 Date: 18.OCT.2013 11:54:58	 Date: 18.OCT.2013 15:00:07
Lowest Channel	Highest Channel

Test mode	802.11n(H40)
 Date: 18.OCT.2013 14:32:23	 Date: 18.OCT.2013 14:34:18
Lowest Channel	Highest Channel

9. Band Edge Requirement (Radiated Emission Method)

9.1. Test Standard and Limit

9.1.1 Test Standard

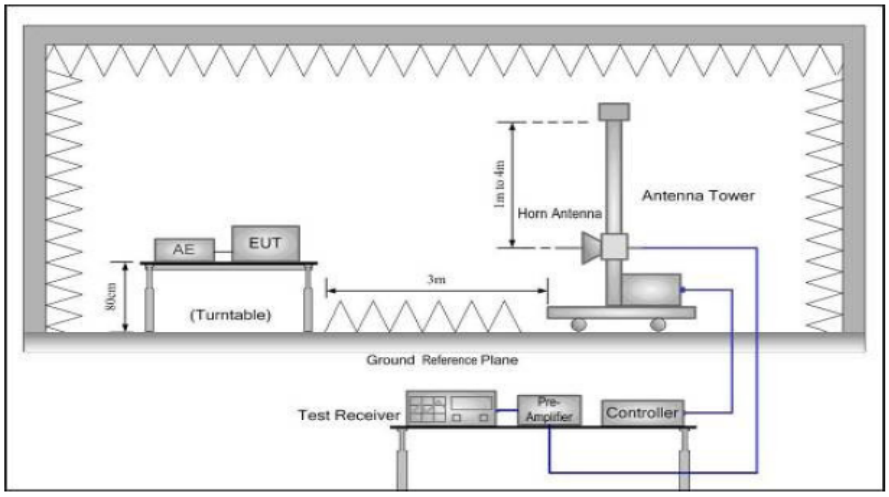
FCC Part15 C Section 15.209 and 15.205

9.1.2 Test Limit

Radiated Emission Test Limit

Frequency	Limit (dBμV/m @3m)	Remark
Above 1GHz	54.00	Average value
	74.00	Peak value

9.2. Test Setup



9.3. Test Procedure

1) The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
2) The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3) The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
5) The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. For Peak Value: RBW=1MHz, VBW=3MHz. For Average Value:RBW=1MHz, VBW=10Hz.
6) If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing

could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

9.4. Test Data

Test mode: 802.11b					Test channel: Lowest				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
2390.00	24.21	27.58	5.67	0.00	57.46	74.00	-16.54	H	PEAK
2390.00	23.68	27.58	5.67	0.00	56.93	74.00	-17.07	V	PEAK
2390.00	16.40	27.58	5.67	0.00	49.65	54.00	-4.35	H	AVG.
2390.00	16.96	27.58	5.67	0.00	50.21	54.00	-3.79	V	AVG.
Test mode: 802.11b					Test channel: Highest				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
2483.50	24.31	27.52	5.70	0.00	57.53	74.00	-16.47	H	PEAK
2483.50	23.99	27.52	5.70	0.00	57.21	74.00	-16.79	V	PEAK
2483.50	15.97	27.52	5.70	0.00	49.19	54.00	-4.81	H	AVG.
2483.50	16.35	27.52	5.70	0.00	49.57	54.00	-4.43	V	AVG.

Test mode: 802.11g					Test channel: Lowest				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
2390.00	23.51	27.58	5.67	0.00	56.76	74.00	-17.24	H	PEAK
2390.00	23.95	27.58	5.67	0.00	57.20	74.00	-16.80	V	PEAK
2390.00	16.76	27.58	5.67	0.00	50.01	54.00	-3.99	H	AVG.
2390.00	19.19	27.58	5.67	0.00	49.44	54.00	-4.56	V	AVG.
Test mode: 802.11g					Test channel: Highest				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
2483.50	23.63	27.52	5.70	0.00	56.85	74.00	-17.15	H	PEAK
2483.50	24.06	27.52	5.70	0.00	57.28	74.00	-16.72	V	PEAK
2483.50	15.53	27.52	5.70	0.00	48.75	54.00	-5.25	H	AVG.
2483.50	15.62	27.52	5.70	0.00	48.84	54.00	-5.16	V	AVG.

Test mode: 802.11n(H20)					Test channel: Lowest				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
2390.00	24.28	27.58	5.67	0.00	57.53	74.00	-16.47	H	PEAK
2390.00	24.68	27.58	5.67	0.00	57.93	74.00	-16.07	V	PEAK
2390.00	16.96	27.58	5.67	0.00	50.21	54.00	-3.79	H	AVG.
2390.00	16.59	27.58	5.67	0.00	49.84	54.00	-4.16	V	AVG.
Test mode: 802.11n(H20)					Test channel: Highest				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
2483.50	25.27	27.52	5.70	0.00	58.49	74.00	-15.51	H	PEAK
2483.50	25.28	27.52	5.70	0.00	58.50	74.00	-15.50	V	PEAK
2483.50	15.92	27.52	5.70	0.00	49.14	54.00	-4.86	H	AVG.
2483.50	16.30	27.52	5.70	0.00	49.52	54.00	-4.48	V	AVG.

Test mode: 802.11n(H40)					Test channel: Lowest				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
2390.00	24.44	27.58	5.67	0.00	57.69	74.00	-16.31	H	PEAK
2390.00	22.91	27.58	5.67	0.00	56.16	74.00	-17.84	V	PEAK
2390.00	16.33	27.58	5.67	0.00	49.58	54.00	-4.42	H	AVG.
2390.00	16.61	27.58	5.67	0.00	49.86	54.00	-4.14	V	AVG.
Test mode: 802.11n(H40)					Test channel: Highest				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
2483.50	24.58	27.52	5.70	0.00	57.80	74.00	-16.20	H	PEAK
2483.50	23.79	27.52	5.70	0.00	57.01	74.00	-16.99	V	PEAK
2483.50	15.98	27.52	5.70	0.00	49.20	54.00	-4.80	H	AVG.
2483.50	16.18	27.52	5.70	0.00	49.40	54.00	-4.60	V	AVG.

Remark:

1. Final Level = Read Level + Antenna Factor + Cable Loss
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

10. Spurious Emission (Conducted Emission Method)

10.1. Test Standard and Limit

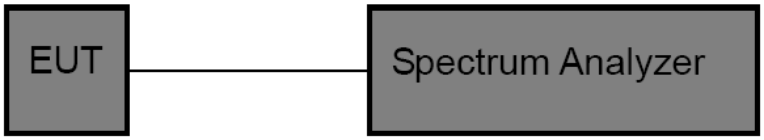
10.1.1 Test Standard

FCC Part15 C Section 15.247 (d)

10.1.2 Test 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.

10.2. Test Setup



10.3. Test Procedure

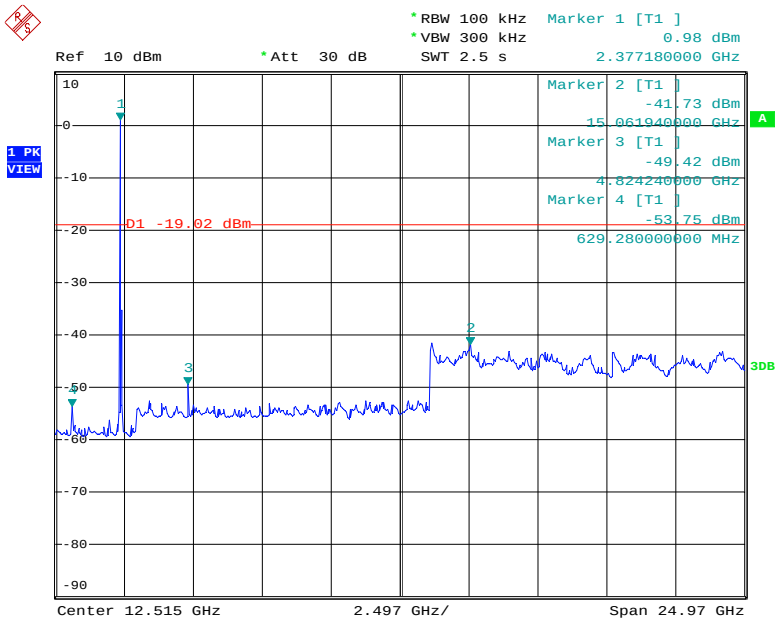
(1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.

(2) Spectrum Setting: RBW=100 KHz, VBW=300 KHz.
Frequency range from 30MHz to 25 GHz.

10.4. Test Data

Modulation mode	802.11b	Frequency range	30MHz~25GHz

Lowest Channel



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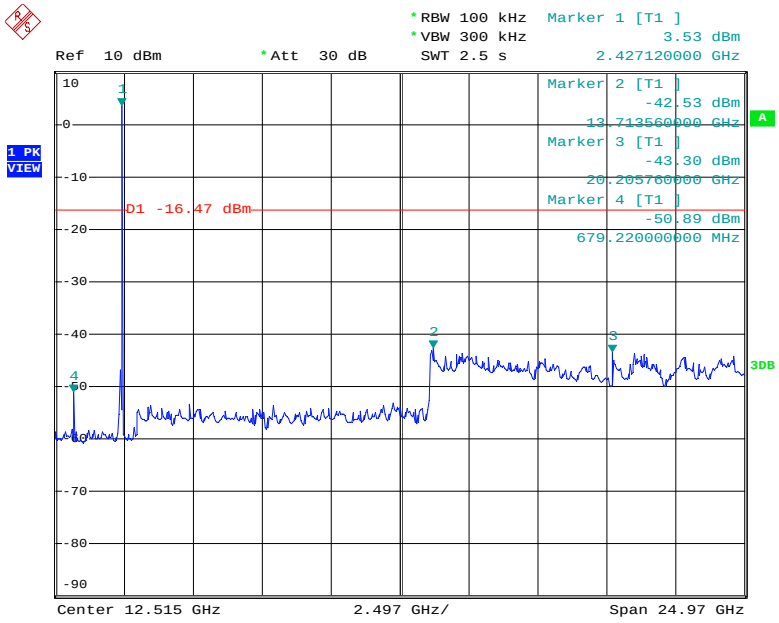
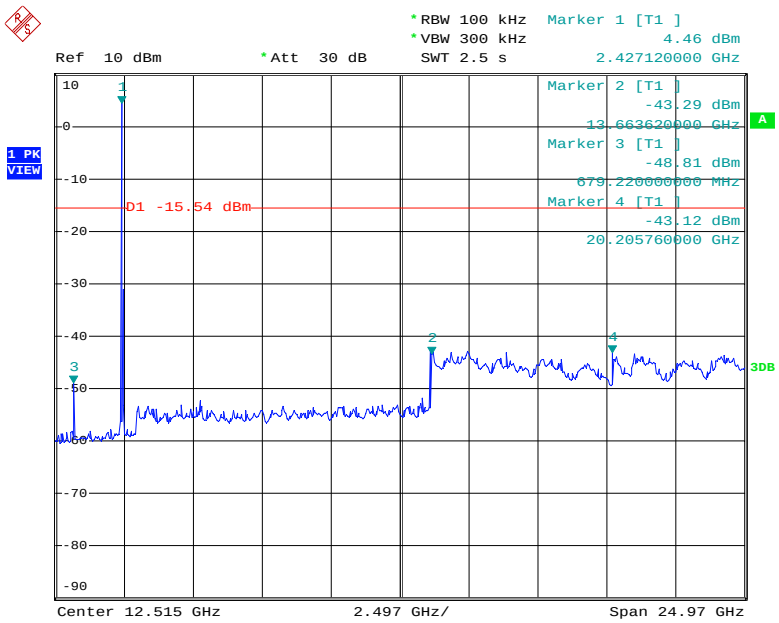
Date: 3.OCT.2013 14:46:56

Middle Channel



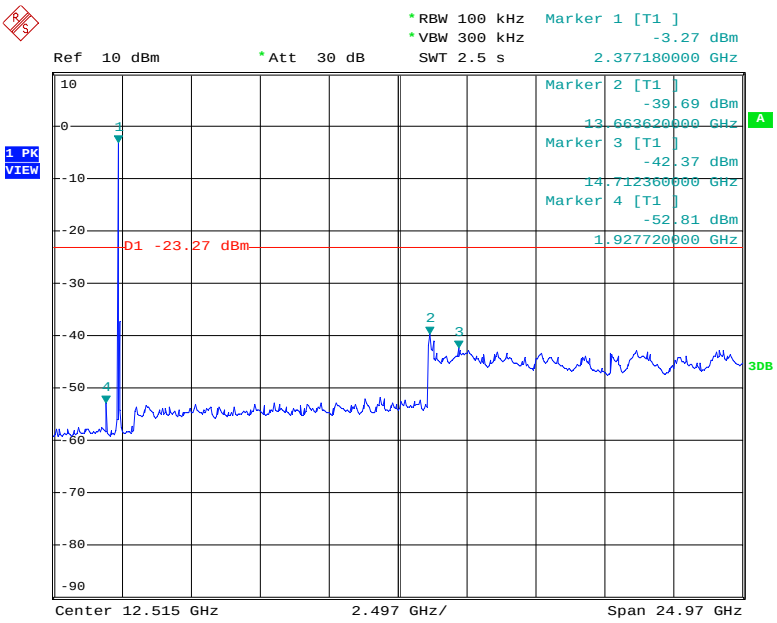
REMOTE HIGH

Date: 3.OCT.2013 14:47:42

Highest Channel	 REMOTE HIGH Date: 3.OCT.2013 14:48:42

Modulation mode	802.11g	Frequency range	30MHz~25GHz

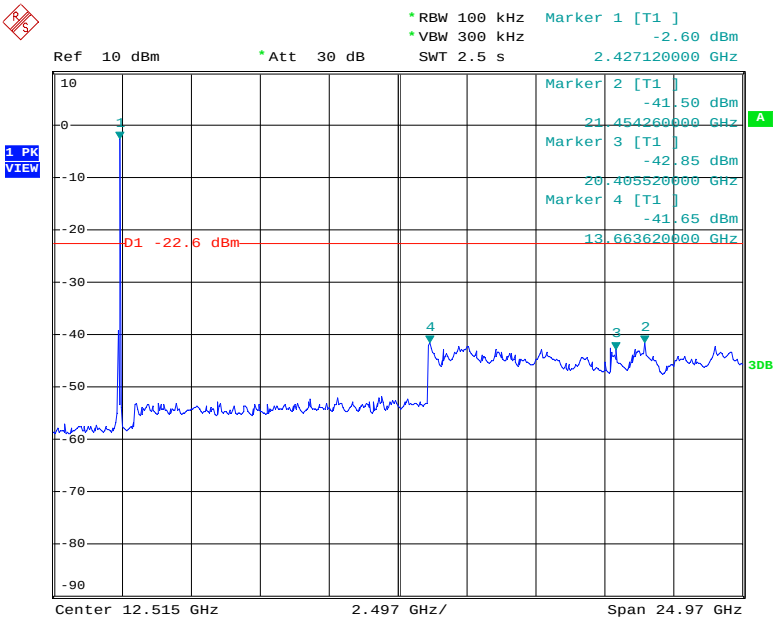
Lowest Channel



REMOTE HIGH

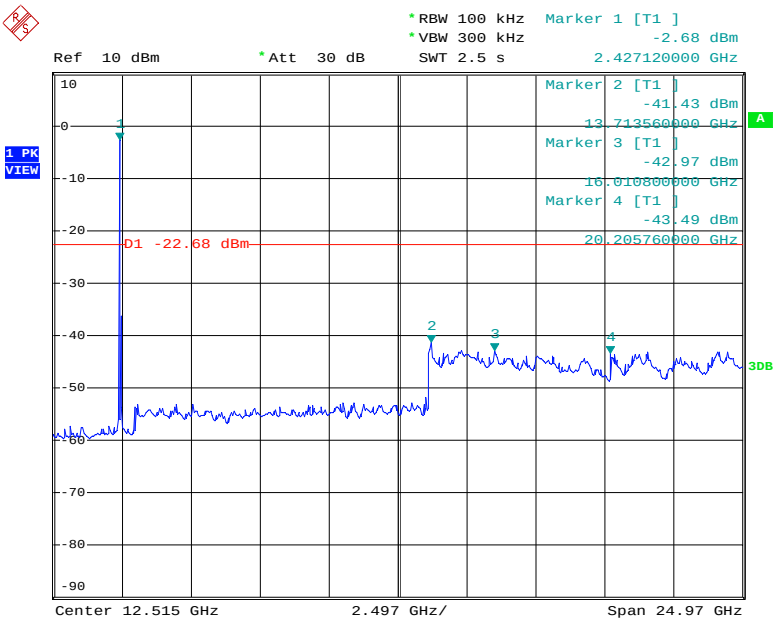
Date: 3.OCT.2013 14:45:25

Middle Channel



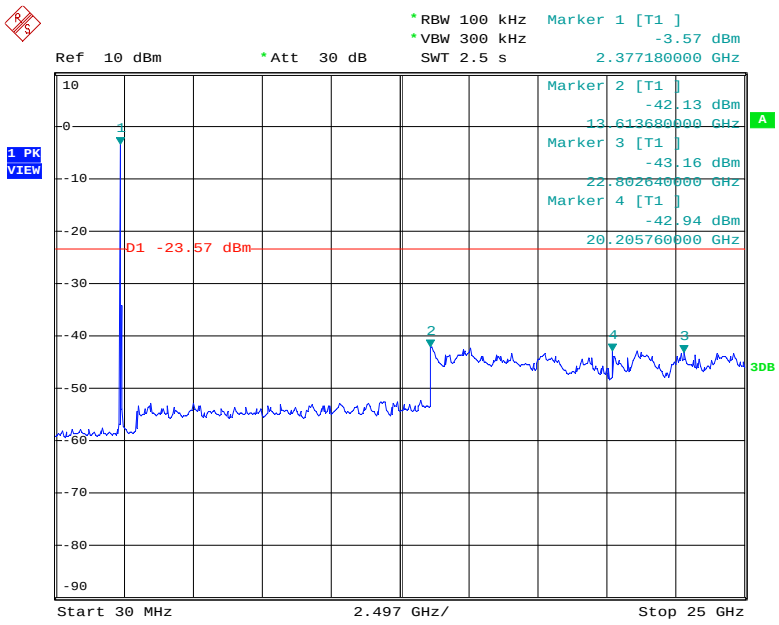
REMOTE HIGH

Date: 3.OCT.2013 14:43:17

Highest Channel	

Modulation mode	802.11n(H20)	Frequency range	30MHz~25GHz

Lowest Channel



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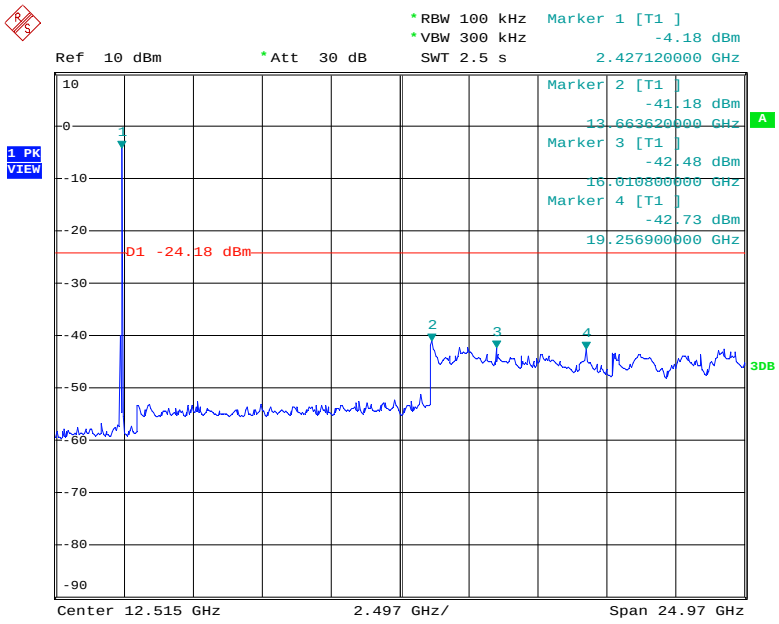
Date: 3.OCT.2013 14:34:10

Middle Channel



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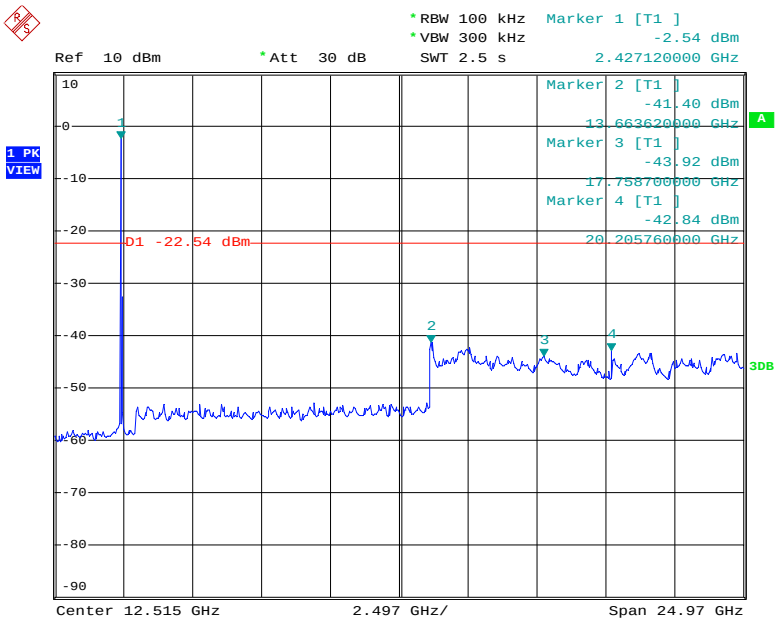
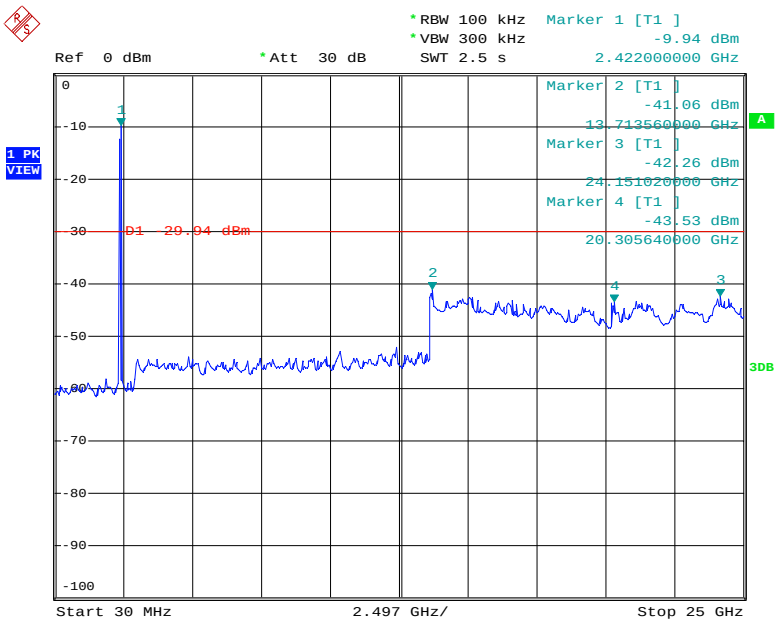
Date: 3.OCT.2013 14:36:28

Highest Channel	 REMOTE HIGH Date: 3.OCT.2013 14:38:08

Modulation mode	802.11n(H40)	Frequency range	30MHz~25GHz

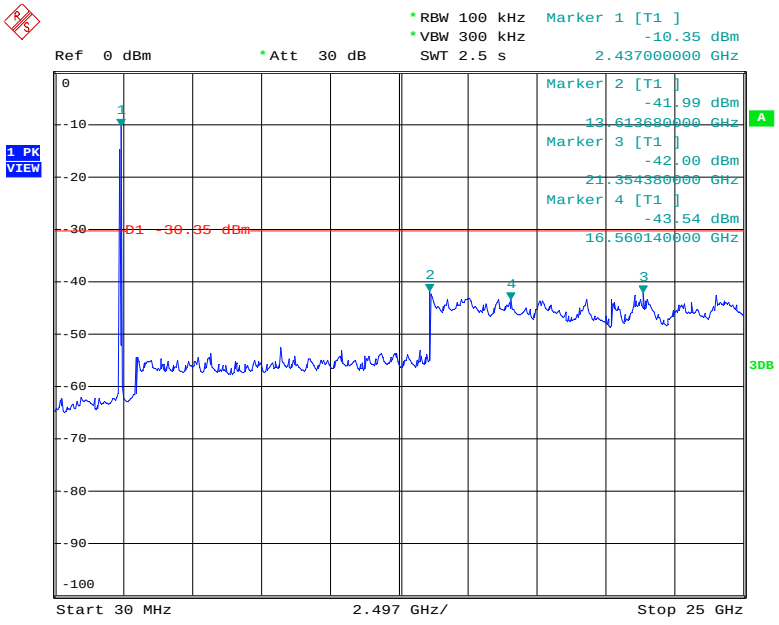
Lowest Channel



REMOTE HIGH

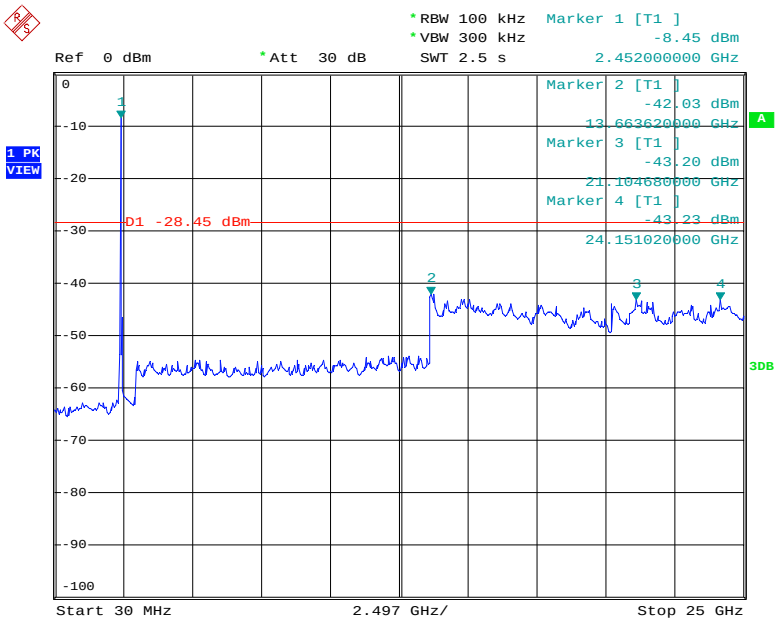
Date: 3.OCT.2013 14:28:28

Middle Channel



REMOTE HIGH

Date: 3.OCT.2013 14:30:20

Highest Channel	

11. Spurious Emission (Radiated Emission Method)

11.1. Test Standard and Limit

11.1.1 Test Standard

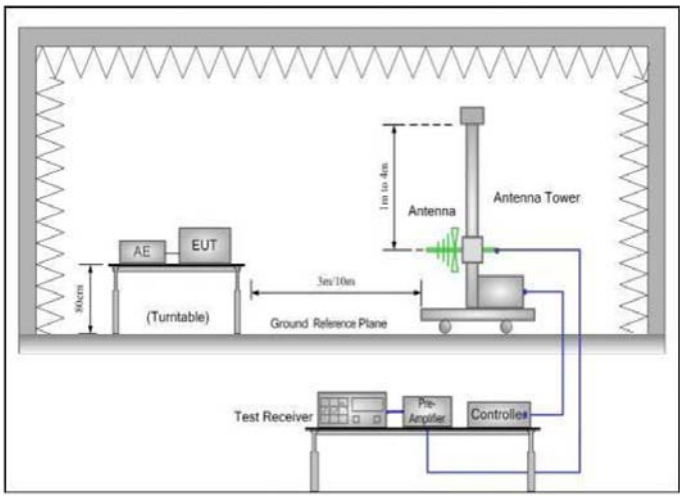
FCC Part15 C Section 15.209 and 15.205

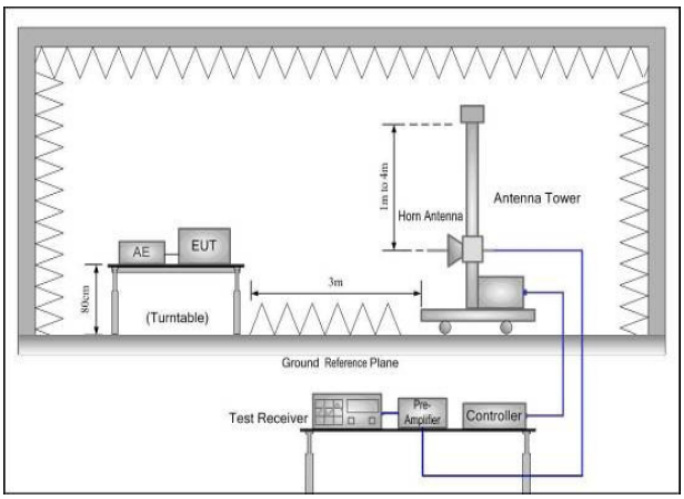
11.1.2 Test Limit

Frequency (MHz)	Limit (dBμV/m)	
	At 3m Distance	
30MHz~88MHz	40	Quasi-peak
88MHz~216MHz	43.5	Quasi-peak
216MHz~960MHz	46	Quasi-peak
960MHz~1000MHz	54	Quasi-peak
Above 1000MHz	54	Average
	74	Peak
Remark: 1. The lower limit shall apply at the transition frequency.		

11.2. Test Setup

Below 1GHz **Above 1GHz**





11.3. Test Procedure

1) The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
2) The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

3) The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

4) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

5) The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

6) If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

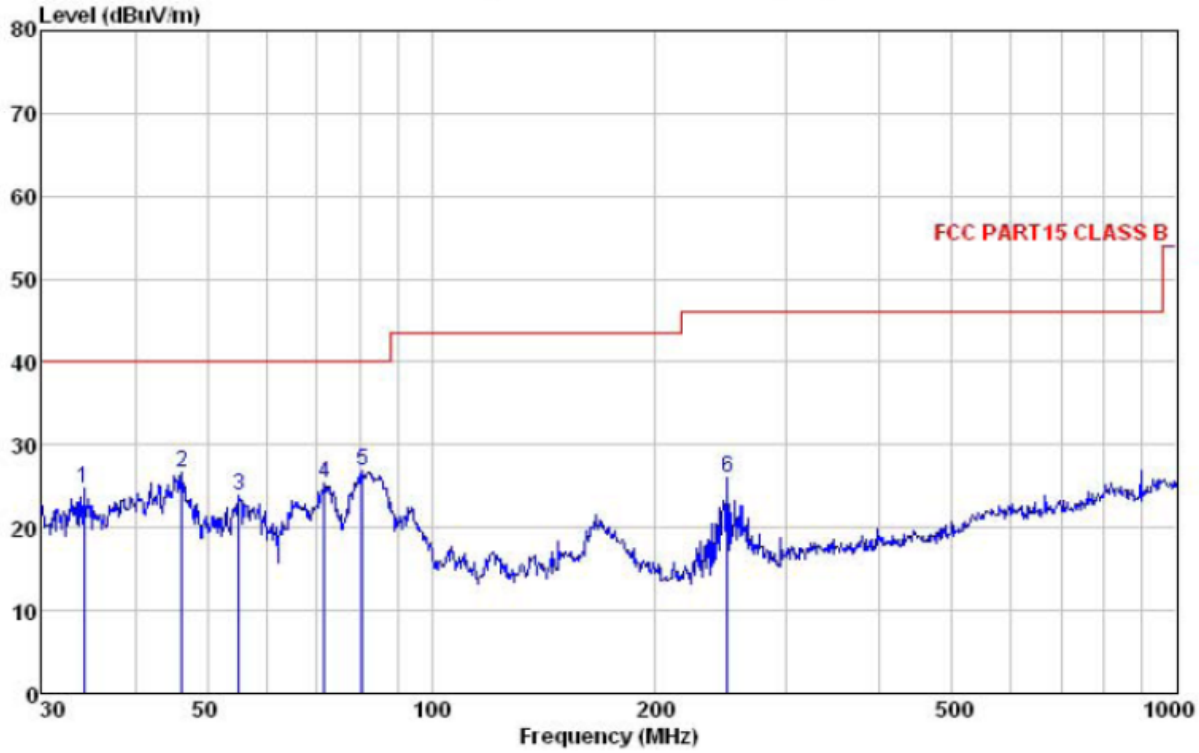
11.4. Test Data

Remark:

1. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis is the worst case.
2. 9 kHz to 30MHz is noise floor, so only shows the data of above 30MHz in this report.

Radiated Emission Test Data (Below 1GHz)

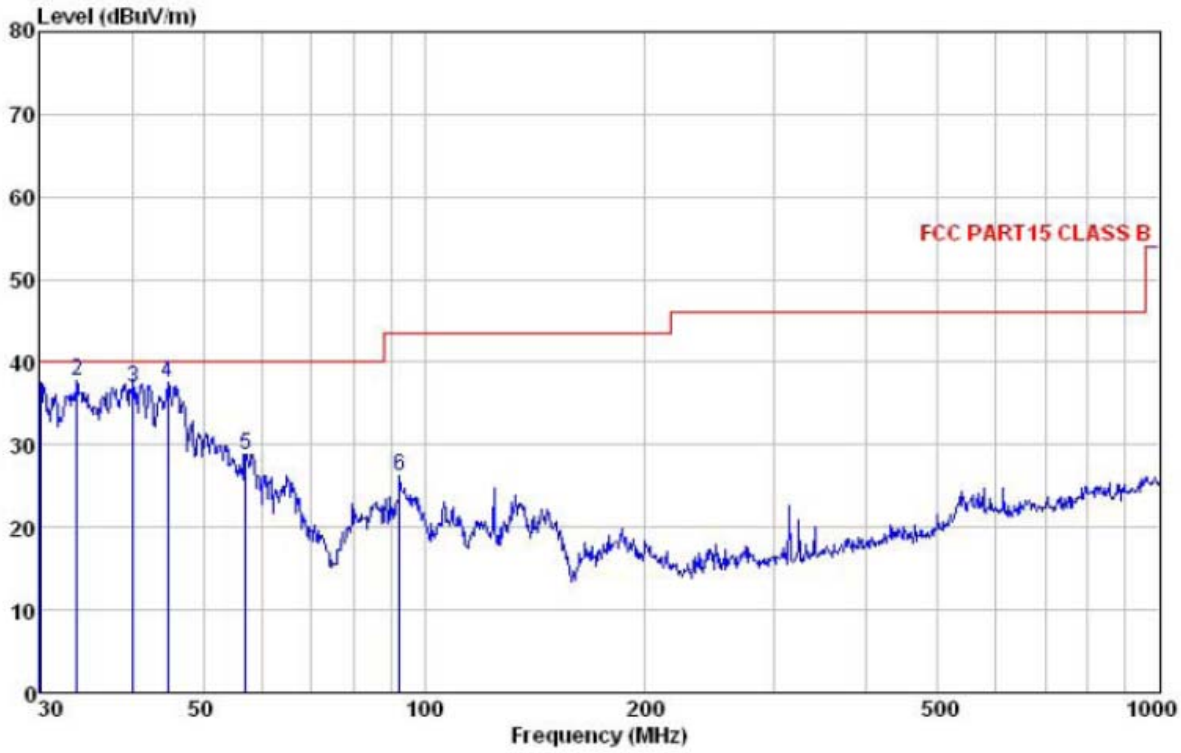
EUT:	3G Mobile	M/N: SUN
Operating Condition:	WIFI mode	
Test Site:	3m chamber	
Operator:	Tom	
Test Specification:	AC 120V/60Hz	
Polarization:	Horizontal	
Note	Tem:25℃	Hum:50%



	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	34.156	38.25	12.31	0.98	26.71	24.83	40.00	-15.17	QP
2	46.178	39.79	13.48	1.28	27.92	26.63	40.00	-13.37	QP
3	55.221	38.39	13.03	1.36	28.79	23.99	40.00	-16.01	QP
4	71.832	45.58	8.32	1.56	30.14	25.32	40.00	-14.68	QP
5	80.927	46.41	8.84	1.69	30.12	26.82	40.00	-13.18	QP
6	249.425	40.77	12.07	2.81	29.60	26.05	46.00	-19.95	QP

Radiated Emission Test Data (Below 1GHz)

EUT:	3G Mobile	M/N: SUN
Operating Condition:	WIFI mode	
Test Site:	3m chamber	
Operator:	Tom	
Test Specification:	AC 120V/60Hz	
Polarization:	Vertical	
Note	Tem:25℃	Hum:50%



	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	30.000	50.86	12.33	0.72	26.27	37.64	40.00	-2.36	QP
2	33.680	51.08	12.31	0.98	26.66	37.71	40.00	-2.29	QP
3	40.135	49.48	13.58	1.22	27.27	37.01	40.00	-2.99	QP
4	44.743	50.47	13.55	1.28	27.77	37.53	40.00	-2.47	QP
5	57.191	43.59	12.89	1.37	28.97	28.88	40.00	-11.12	QP
6	92.462	41.98	12.41	2.03	30.08	26.34	43.50	-17.16	QP

Radiated Emission Test Data (Above 1GHz)

Test mode: 802.11b					Test channel: Lowest				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4824.00	46.38	31.54	8.92	40.22	46.62	74.00	-27.38	V	PEAK
7236.00	47.07	36.50	10.62	41.22	52.97	74.00	-21.03	V	PEAK
9648.00	*					74.00		V	PEAK
12060.00	*					74.00		V	PEAK
14472.00	*					74.00		V	PEAK
16884.00	*					74.00		V	PEAK
4824.00	46.61	31.54	8.92	40.22	46.85	74.00	-27.15	H	PEAK
7236.00	49.00	36.50	10.62	41.22	54.90	74.00	-19.10	H	PEAK
9648.00	*					74.00		H	PEAK
12060.00	*					74.00		H	PEAK
14472.00	*					74.00		H	PEAK
16884.00	*					74.00		H	PEAK
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4824.00	35.57	31.54	8.92	40.22	35.81	54.00	-18.19	V	AVG.
7236.00	35.65	36.50	10.62	41.22	41.55	54.00	-12.45	V	AVG.
9648.00	*					54.00		V	AVG.
12060.00	*					54.00		V	AVG.
14472.00	*					54.00		V	AVG.
16884.00	*					54.00		V	AVG.
4824.00	37.27	31.54	8.92	40.22	37.51	54.00	-16.49	H	AVG.
7236.00	38.76	36.50	10.62	41.22	44.66	54.00	-9.34	H	AVG.
9648.00	*					54.00		H	AVG.
12060.00	*					54.00		H	AVG.
14472.00	*					54.00		H	AVG.
16884.00	*					54.00		H	AVG.

Remark:

1. Final Level = Read Level + Antenna Factor + Cable Loss – Preamplifier Factor
2. “*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

Radiated Emission Test Data (Above 1GHz)

Test mode: 802.11b					Test channel: Middle				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4874.00	47.32	31.57	8.98	40.15	47.72	74.00	-26.28	V	PEAK
7311.00	49.90	36.48	10.68	41.16	52.90	74.00	-21.10	V	PEAK
9748.00	*					74.00		V	PEAK
12185.00	*					74.00		V	PEAK
14622.00	*					74.00		V	PEAK
17059.00	*					74.00		V	PEAK
4874.00	46.30	31.57	8.98	40.15	46.70	74.00	-27.30	H	PEAK
7311.00	46.72	36.48	10.68	41.16	52.72	74.00	-21.28	H	PEAK
9748.00	*					74.00		H	PEAK
12185.00	*					74.00		H	PEAK
14622.00	*					74.00		H	PEAK
17059.00	*					74.00		H	PEAK
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4874.00	35.45	31.57	8.98	40.15	35.85	54.00	-18.15	V	AVG.
7311.00	37.98	36.48	10.68	41.16	43.98	54.00	-10.02	V	AVG.
9748.00	*					54.00		V	AVG.
12185.00	*					54.00		V	AVG.
14622.00	*					54.00		V	AVG.
17059.00	*					54.00		V	AVG.
4874.00	35.08	31.57	8.98	40.15	35.48	54.00	-18.52	H	AVG.
7311.00	35.87	36.48	10.68	41.16	41.87	54.00	-12.13	H	AVG.
9748.00	*					54.00		H	AVG.
12185.00	*					54.00		H	AVG.
14622.00	*					54.00		H	AVG.
17059.00	*					54.00		H	AVG.

Remark:

1. Final Level = Read Level + Antenna Factor + Cable Loss – Preamplifier Factor
2. “*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

Radiated Emission Test Data (Above 1GHz)

Test mode: 802.11b					Test channel: Highest				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4924.00	45.72	31.61	9.04	40.08	46.29	74.00	-27.71	V	PEAK
7386.00	48.23	36.52	10.75	41.09	54.41	74.00	-19.59	V	PEAK
9848.00	*					74.00		V	PEAK
12310.00	*					74.00		V	PEAK
14772.00	*					74.00		V	PEAK
17234.00	*					74.00		V	PEAK
4924.00	45.83	31.61	9.04	40.08	46.40	74.00	-27.60	H	PEAK
7386.00	46.65	36.52	10.75	41.09	52.83	74.00	-21.17	H	PEAK
9848.00	*					74.00		H	PEAK
12310.00	*					74.00		H	PEAK
14772.00	*					74.00		H	PEAK
17234.00	*					74.00		H	PEAK
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4924.00	35.28	31.61	9.04	40.08	35.85	54.00	-18.15	V	AVG.
7386.00	38.51	36.52	10.75	41.09	44.69	54.00	-9.31	V	AVG.
9848.00	*					54.00		V	AVG.
12310.00	*					54.00		V	AVG.
14772.00	*					54.00		V	AVG.
17234.00	*					54.00		V	AVG.
4924.00	35.94	31.61	9.04	40.08	36.51	54.00	-17.49	H	AVG.
7386.00	37.49	36.52	10.75	41.09	43.67	54.00	-10.33	H	AVG.
9848.00	*					54.00		H	AVG.
12310.00	*					54.00		H	AVG.
14772.00	*					54.00		H	AVG.
17234.00	*					54.00		H	AVG.

Remark:

1. Final Level = Read Level + Antenna Factor + Cable Loss – Preamplifier Factor
2. “*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

Radiated Emission Test Data (Above 1GHz)

Test mode: 802.11g					Test channel: Lowest				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4824.00	47.04	31.54	8.92	40.22	47.28	74.00	-26.72	V	PEAK
7236.00	47.74	36.50	10.62	41.22	53.64	74.00	-20.36	V	PEAK
9648.00	*					74.00		V	PEAK
12060.00	*					74.00		V	PEAK
14472.00	*					74.00		V	PEAK
16884.00	*					74.00		V	PEAK
4824.00	46.51	31.54	8.92	40.22	46.75	74.00	-27.25	H	PEAK
7236.00	47.66	36.50	10.62	41.22	53.56	74.00	-20.44	H	PEAK
9648.00	*					74.00		H	PEAK
12060.00	*					74.00		H	PEAK
14472.00	*					74.00		H	PEAK
16884.00	*					74.00		H	PEAK
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4824.00	38.31	31.54	8.92	40.22	38.55	54.00	-15.45	V	AVG.
7236.00	38.30	36.50	10.62	41.22	44.20	54.00	-9.80	V	AVG.
9648.00	*					54.00		V	AVG.
12060.00	*					54.00		V	AVG.
14472.00	*					54.00		V	AVG.
16884.00	*					54.00		V	AVG.
4824.00	44.27	31.54	8.92	40.22	44.51	54.00	-9.49	H	AVG.
7236.00	36.85	36.50	10.62	41.22	42.75	54.00	-11.25	H	AVG.
9648.00	*					54.00		H	AVG.
12060.00	*					54.00		H	AVG.
14472.00	*					54.00		H	AVG.
16884.00	*					54.00		H	AVG.

Remark:

1. Final Level = Read Level + Antenna Factor + Cable Loss – Preamplifier Factor
2. “*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

Radiated Emission Test Data (Above 1GHz)

Test mode: 802.11g					Test channel: Middle				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4874.00	46.84	31.57	8.98	40.15	47.24	74.00	-26.76	V	PEAK
7311.00	46.95	36.48	10.68	41.16	52.95	74.00	-21.05	V	PEAK
9748.00	*					74.00		V	PEAK
12185.00	*					74.00		V	PEAK
14622.00	*					74.00		V	PEAK
17059.00	*					74.00		V	PEAK
4874.00	45.65	31.57	8.98	40.15	46.05	74.00	-27.95	H	PEAK
7311.00	46.85	36.48	10.68	41.16	52.85	74.00	-21.15	H	PEAK
9748.00	*					74.00		H	PEAK
12185.00	*					74.00		H	PEAK
14622.00	*					74.00		H	PEAK
17059.00	*					74.00		H	PEAK
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4874.00	36.44	31.57	8.98	40.15	36.84	54.00	-17.16	V	AVG.
7311.00	37.57	36.48	10.68	41.16	43.57	54.00	-10.43	V	AVG.
9748.00	*					54.00		V	AVG.
12185.00	*					54.00		V	AVG.
14622.00	*					54.00		V	AVG.
17059.00	*					54.00		V	AVG.
4874.00	34.18	31.57	8.98	40.15	34.58	54.00	-19.42	H	AVG.
7311.00	37.64	36.48	10.68	41.16	43.64	54.00	-10.36	H	AVG.
9748.00	*					54.00		H	AVG.
12185.00	*					54.00		H	AVG.
14622.00	*					54.00		H	AVG.
17059.00	*					54.00		H	AVG.

Remark:

1. Final Level = Read Level + Antenna Factor + Cable Loss – Preamplifier Factor
2. “*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

Radiated Emission Test Data (Above 1GHz)

Test mode: 802.11g					Test channel: Highest				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4924.00	46.43	31.61	9.04	40.08	47.00	74.00	-27.00	V	PEAK
7386.00	46.38	36.52	10.75	41.09	52.56	74.00	-21.44	V	PEAK
9848.00	*					74.00		V	PEAK
12310.00	*					74.00		V	PEAK
14772.00	*					74.00		V	PEAK
17234.00	*					74.00		V	PEAK
4924.00	46.13	31.61	9.04	40.08	46.70	74.00	-27.30	H	PEAK
7386.00	46.64	36.52	10.75	41.09	52.82	74.00	-21.18	H	PEAK
9848.00	*					74.00		H	PEAK
12310.00	*					74.00		H	PEAK
14772.00	*					74.00		H	PEAK
17234.00	*					74.00		H	PEAK
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4924.00	36.87	31.61	9.04	40.08	37.35	54.00	-16.65	V	AVG.
7386.00	36.40	36.52	10.75	41.09	42.58	54.00	-11.42	V	AVG.
9848.00	*					54.00		V	AVG.
12310.00	*					54.00		V	AVG.
14772.00	*					54.00		V	AVG.
17234.00	*					54.00		V	AVG.
4924.00	34.87	31.61	9.04	40.08	35.44	54.00	-18.56	H	AVG.
7386.00	37.51	36.52	10.75	41.09	43.69	54.00	-10.31	H	AVG.
9848.00	*					54.00		H	AVG.
12310.00	*					54.00		H	AVG.
14772.00	*					54.00		H	AVG.
17234.00	*					54.00		H	AVG.

Remark:

1. Final Level = Read Level + Antenna Factor + Cable Loss – Preamplifier Factor
2. “*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

Radiated Emission Test Data (Above 1GHz)

Test mode: 802.11n(H20)					Test channel: Lowest				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4824.00	45.28	31.54	8.92	40.22	45.52	74.00	-28.48	V	PEAK
7236.00	46.28	36.50	10.62	41.22	52.17	74.00	-21.83	V	PEAK
9648.00	*					74.00		V	PEAK
12060.00	*					74.00		V	PEAK
14472.00	*					74.00		V	PEAK
16884.00	*					74.00		V	PEAK
4824.00	45.08	31.54	8.92	40.22	45.33	74.00	-28.67	H	PEAK
7236.00	46.23	36.50	10.62	41.22	52.12	74.00	-21.88	H	PEAK
9648.00	*					74.00		H	PEAK
12060.00	*					74.00		H	PEAK
14472.00	*					74.00		H	PEAK
16884.00	*					74.00		H	PEAK
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4824.00	35.96	31.54	8.92	40.22	36.20	54.00	-17.80	V	AVG.
7236.00	34.70	36.50	10.62	41.22	40.60	54.00	-13.40	V	AVG.
9648.00	*					54.00		V	AVG.
12060.00	*					54.00		V	AVG.
14472.00	*					54.00		V	AVG.
16884.00	*					54.00		V	AVG.
4824.00	36.06	31.54	8.92	40.22	36.30	54.00	-17.70	H	AVG.
7236.00	37.75	36.50	10.62	41.22	43.65	54.00	-10.35	H	AVG.
9648.00	*					54.00		H	AVG.
12060.00	*					54.00		H	AVG.
14472.00	*					54.00		H	AVG.
16884.00	*					54.00		H	AVG.

Remark:

1. Final Level = Read Level + Antenna Factor + Cable Loss – Preamplifier Factor
2. “*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

Radiated Emission Test Data (Above 1GHz)

Test mode: 802.11n(H20)					Test channel: Middle				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4874.00	46.59	31.57	8.98	40.15	46.99	74.00	-27.01	V	PEAK
7311.00	47.80	36.48	10.68	41.16	53.80	74.00	-20.20	V	PEAK
9748.00	*					74.00		V	PEAK
12185.00	*					74.00		V	PEAK
14622.00	*					74.00		V	PEAK
17059.00	*					74.00		V	PEAK
4874.00	43.45	31.57	8.98	40.15	43.85	74.00	-30.15	H	PEAK
7311.00	45.41	36.48	10.68	41.16	51.41	74.00	-22.59	H	PEAK
9748.00	*					74.00		H	PEAK
12185.00	*					74.00		H	PEAK
14622.00	*					74.00		H	PEAK
17059.00	*					74.00		H	PEAK
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4874.00	35.44	31.57	8.98	40.15	35.84	54.00	-18.16	V	AVG.
7311.00	36.71	36.48	10.68	41.16	42.71	54.00	-11.29	V	AVG.
9748.00	*					54.00		V	AVG.
12185.00	*					54.00		V	AVG.
14622.00	*					54.00		V	AVG.
17059.00	*					54.00		V	AVG.
4874.00	33.14	31.57	8.98	40.15	33.54	54.00	-20.46	H	AVG.
7311.00	36.99	36.48	10.68	41.16	42.09	54.00	-11.01	H	AVG.
9748.00	*					54.00		H	AVG.
12185.00	*					54.00		H	AVG.
14622.00	*					54.00		H	AVG.
17059.00	*					54.00		H	AVG.

Remark:

1. Final Level = Read Level + Antenna Factor + Cable Loss – Preamplifier Factor
2. “*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

Radiated Emission Test Data (Above 1GHz)

Test mode: 802.11n(H20)					Test channel: Highest				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4924.00	46.09	31.61	9.04	40.08	46.66	74.00	-27.34	V	PEAK
7386.00	46.36	36.52	10.75	41.09	52.54	74.00	-21.46	V	PEAK
9848.00	*					74.00		V	PEAK
12310.00	*					74.00		V	PEAK
14772.00	*					74.00		V	PEAK
17234.00	*					74.00		V	PEAK
4924.00	46.13	31.61	9.04	40.08	46.70	74.00	-27.30	H	PEAK
7386.00	48.05	36.52	10.75	41.09	54.23	74.00	-19.77	H	PEAK
9848.00	*					74.00		H	PEAK
12310.00	*					74.00		H	PEAK
14772.00	*					74.00		H	PEAK
17234.00	*					74.00		H	PEAK
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4924.00	35.07	31.61	9.04	40.08	35.64	54.00	-18.36	V	AVG.
7386.00	35.37	36.52	10.75	41.09	41.65	54.00	-12.45	V	AVG.
9848.00	*					54.00		V	AVG.
12310.00	*					54.00		V	AVG.
14772.00	*					54.00		V	AVG.
17234.00	*					54.00		V	AVG.
4924.00	35.69	31.61	9.04	40.08	36.26	54.00	-17.74	H	AVG.
7386.00	39.77	36.52	10.75	41.09	45.95	54.00	-8.05	H	AVG.
9848.00	*					54.00		H	AVG.
12310.00	*					54.00		H	AVG.
14772.00	*					54.00		H	AVG.
17234.00	*					54.00		H	AVG.

Remark:

1. Final Level = Read Level + Antenna Factor + Cable Loss – Preamplifier Factor
2. “*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

Radiated Emission Test Data (Above 1GHz)

Test mode: 802.11n(H40)					Test channel: Lowest				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4844.00	45.21	31.55	8.94	40.19	45.51	74.00	-28.49	V	PEAK
7266.00	46.19	36.49	10.63	41.20	52.11	74.00	-21.89	V	PEAK
9688.00	*					74.00		V	PEAK
12110.00	*					74.00		V	PEAK
14532.00	*					74.00		V	PEAK
16954.00	*					74.00		V	PEAK
4844.00	44.54	31.55	8.94	40.19	44.84	74.00	-29.16	H	PEAK
7266.00	46.42	36.49	10.63	41.20	52.34	74.00	-21.66	H	PEAK
9688.00	*					74.00		H	PEAK
12110.00	*					74.00		H	PEAK
14532.00	*					74.00		H	PEAK
16954.00	*					74.00		H	PEAK
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4844.00	34.35	31.55	8.94	40.19	34.65	54.00	-19.35	V	AVG.
7266.00	35.45	36.49	10.63	41.20	41.40	54.00	-12.60	V	AVG.
9688.00	*					54.00		V	AVG.
12110.00	*					54.00		V	AVG.
14532.00	*					54.00		V	AVG.
16954.00	*					54.00		V	AVG.
4844.00	34.18	31.55	8.94	40.19	34.48	54.00	-19.52	H	AVG.
7266.00	35.84	36.49	10.63	41.20	41.79	54.00	-12.21	H	AVG.
9688.00	*					54.00		H	AVG.
12110.00	*					54.00		H	AVG.
14532.00	*					54.00		H	AVG.
16954.00	*					54.00		H	AVG.

Remark:

1. Final Level = Read Level + Antenna Factor + Cable Loss – Preamplifier Factor
2. “*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

Radiated Emission Test Data (Above 1GHz)

Test mode: 802.11n(H40)					Test channel: Middle				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4844.00	44.97	31.55	8.94	40.19	45.37	74.00	-28.63	V	PEAK
7266.00	46.04	36.49	10.63	41.20	52.04	74.00	-21.96	V	PEAK
9688.00	*					74.00		V	PEAK
12110.00	*					74.00		V	PEAK
14532.00	*					74.00		V	PEAK
16954.00	*					74.00		V	PEAK
4844.00	45.34	31.55	8.94	40.19	45.74	74.00	-28.26	H	PEAK
7266.00	45.87	36.49	10.63	41.20	51.87	74.00	-22.13	H	PEAK
9688.00	*					74.00		H	PEAK
12110.00	*					74.00		H	PEAK
14532.00	*					74.00		H	PEAK
16954.00	*					74.00		H	PEAK
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4844.00	33.97	31.55	8.94	40.19	34.37	54.00	-19.63	V	AVG.
7266.00	35.37	36.49	10.63	41.20	41.37	54.00	-12.63	V	AVG.
9688.00	*					54.00		V	AVG.
12110.00	*					54.00		V	AVG.
14532.00	*					54.00		V	AVG.
16954.00	*					54.00		V	AVG.
4844.00	34.72	31.55	8.94	40.19	35.12	54.00	-18.88	H	AVG.
7266.00	34.95	36.49	10.63	41.20	40.95	54.00	-13.05	H	AVG.
9688.00	*					54.00		H	AVG.
12110.00	*					54.00		H	AVG.
14532.00	*					54.00		H	AVG.
16954.00	*					54.00		H	AVG.

Remark:

1. Final Level = Read Level + Antenna Factor + Cable Loss – Preamplifier Factor
2. “*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

Radiated Emission Test Data (Above 1GHz)

Test mode: 802.11n(H40)					Test channel: Highest				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4844.00	45.02	31.55	8.94	40.19	45.49	74.00	-28.51	V	PEAK
7266.00	46.56	36.49	10.63	41.20	52.65	74.00	-21.35	V	PEAK
9688.00	*					74.00		V	PEAK
12110.00	*					74.00		V	PEAK
14532.00	*					74.00		V	PEAK
16954.00	*					74.00		V	PEAK
4844.00	45.43	31.55	8.94	40.19	45.90	74.00	-28.10	H	PEAK
7266.00	46.60	36.49	10.63	41.20	52.69	74.00	-21.31	H	PEAK
9688.00	*					74.00		H	PEAK
12110.00	*					74.00		H	PEAK
14532.00	*					74.00		H	PEAK
16954.00	*					74.00		H	PEAK
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Level
4844.00	36.08	31.55	8.94	40.19	36.59	54.00	-17.41	V	AVG.
7266.00	35.30	36.49	10.63	41.20	41.37	54.00	-12.63	V	AVG.
9688.00	*					54.00		V	AVG.
12110.00	*					54.00		V	AVG.
14532.00	*					54.00		V	AVG.
16954.00	*					54.00		V	AVG.
4844.00	34.69	31.55	8.94	40.19	35.20	54.00	-18.80	H	AVG.
7266.00	35.24	36.49	10.63	41.20	41.31	54.00	-12.69	H	AVG.
9688.00	*					54.00		H	AVG.
12110.00	*					54.00		H	AVG.
14532.00	*					54.00		H	AVG.
16954.00	*					54.00		H	AVG.

Remark:

1. Final Level = Read Level + Antenna Factor + Cable Loss – Preamplifier Factor
2. “*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.