FCC RADIO TEST REPORT
FCC ID: 2ACDBJEASUNGA9

Product：	WCDMA 3G SMART PHONE
Trade Name：	JEASUNG
Model Name：	A9
Serial Model：	N/A
Report No.：	BZT140404F03

Prepared for

Shen Zhen Xin Jiao Du Technology Development.,LTD

28-2, 2F, Wu Gang Henggang Town Village Road, Longgang, Shenzhen, China

Prepared by

BZT Testing Technology Co., Ltd

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TEST RESULT CERTIFICATION

Applicant's name	:	Shen Zhen Xin Jiao Du Technology Development.,LTD
Address	:	28-2, 2F, Wu Gang Henggang Town Village Road, Longgang, Shenzhen, China
Manufacture's Name	:	Shen Zhen Xin Jiao Du Technology Development.,LTD
Address	:	28-2, 2F, Wu Gang Henggang Town Village Road, Longgang, Shenzhen, China

Product description

Product name	:	WCDMA 3G SMART PHONE
Band name	:	JEASUNG
Model and/or type reference	:	A9
Standards	:	FCC Part15.247
Test procedure		ANSI C63.4-2003

This device described above has been tested by BZT, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test	:	
Date (s) of performance of tests	:	April 15, 2014 ~ April 25, 2014
Date of Issue	:	April 28, 2014
Test Result	:	**Pass**

Testing Engineer **:** Lynn Chen

(Lynn Chen)

Technical Manager **:** Carlen

(Carlen Liu)

Authorized Signatory **:** Tommy zhang

(Tommy zhang)

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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.247) , Subpart C			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	
15.247 (a)(2)	6dB Bandwidth	PASS	
15.247 (b)	Peak Output Power	PASS	
15.247 (c)	Radiated Spurious Emission	PASS	
15.247 (d)	Power Spectral Density	PASS	
15.205	Band Edge Emission	PASS	
15.203	Antenna Requirement	PASS	

NOTE:

(1)” N/A” denotes test is not applicable in this Test Report

1.1 TEST FACILITY

BZT Testing Technology Co., Ltd
Add.:1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China.
FCC Registration No.: 701733

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y** ± **U**，where expended uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k=2**，providing a level of confidence of approximately **95** %。

No.	Item	Uncertainty
1	Conducted Emission Test	±1.38dB
2	RF power,conducted	±0.16dB
3	Spurious emissions,conducted	±0.21dB
4	All emissions,radiated(<1G)	±4.68dB
5	All emissions,radiated(>1G)	±4.89dB
6	Temperature	±0.5°C
7	Humidity	±2%

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

<table>
<tr><td>Equipment</td><td>WCDMA 3G SMART PHONE</td></tr>
<tr><td>Trade Name</td><td>JEASUNG</td></tr>
<tr><td>Model Name</td><td>A9</td></tr>
<tr><td>Serial Model</td><td>N/A</td></tr>
<tr><td>Model Difference</td><td>N/A.</td></tr>
<tr><td>Product Description</td><td>The EUT is a WCDMA 3G SMART PHONE
<table>
<tr><td>Operation Frequency:</td><td>802.11b/g/n 20:2412~2462 MHz
802.11n 40: 2422~2452MHz</td></tr>
<tr><td>Modulation Type:</td><td>CCK/OFDM/DBPSK/DAPSK</td></tr>
<tr><td>Bit Rate of Transmitter</td><td>802.11b:11/5.5/2/1 Mbps
802.11g:54/48/36/24/18/12/9/6Mbps
802.11n(20/40MHz):300/150/144.44/
130/117/115.56/104/86.67/78/52/6.5
Mbps</td></tr>
<tr><td>Number Of Channel</td><td>802.11b/g/n20: 11CH
802.11n 40: 7CH</td></tr>
<tr><td>Antenna Designation:</td><td>Please see Note 3.</td></tr>
<tr><td>Peak Output Power(Conducted):</td><td>802.11b: 9.32 dBm (Max.)
802.11g: 8.47 dBm (Max.)
802.11n(20MHz): 8.35 dBm (Max.)
802.11n(40MHz): 7.82 dBm (Max.)</td></tr>
<tr><td>Antenna Gain (dBi)</td><td>1.2 dbi</td></tr>
</table>
Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.</td></tr>
<tr><td>Frequency Bands:</td><td>☒GSM 850 ☒PCS 1900 (U.S. Bands)
☒GSM 900 ☒DCS 1800 (Non-U.S. Bands)
U.S. Bands:
☐UMTS FDD Band II ☒UMTS FDD Band V
Non-U.S. Bands:
☒UMTS FDD Band I ☐UMTS FDD Band VIII</td></tr>
<tr><td>Bluetooth</td><td>Frequency:2402 – 2480 MHz
Modulation: GFSK
Output Power: 2.544dBm</td></tr>
<tr><td>NFC</td><td>Frequency Band: 13.553MHz~13.567MHz
Modulation Type: ASK</td></tr>
<tr><td>Channel List</td><td>Please refer to the Note 2.</td></tr>
<tr><td>Ratings</td><td>DC 5V from adapter and 3.7V from battery</td></tr>
<tr><td>Adapter</td><td>DC 5V 1000mA</td></tr>
<tr><td>Battery</td><td>3000mA</td></tr>
<tr><td>Connecting I/O Port(s)</td><td>Please refer to the User's Manual</td></tr>
</table>

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2.

Channel List for 802.11b/g/n(20MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		

Channel List for 802.11n(40MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
03	2422	06	2437	09	2452		
04	2427	07	2442				
05	2432	08	2447				

3.

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
A	N/A	N/A	FPCB Antenna	N/A	1.2	N/A

2.2 DESCRIPTION OF TEST MODES

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 above was evaluated respectively.

Pretest Mode	Description
Mode 1	Link Mode

For Conducted Emission	
Final Test Mode	Description
Mode 1	Link Mode

For Radiated Emission	
Final Test Mode	Description
Mode 1	Link Mode

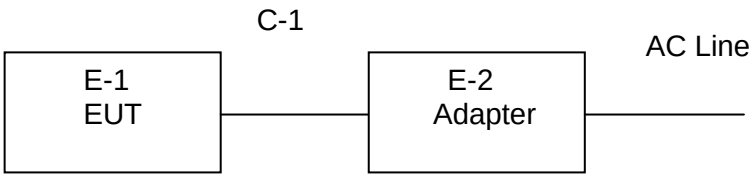
Note:

(1) The measurements are performed at the highest, middle, lowest available channels.

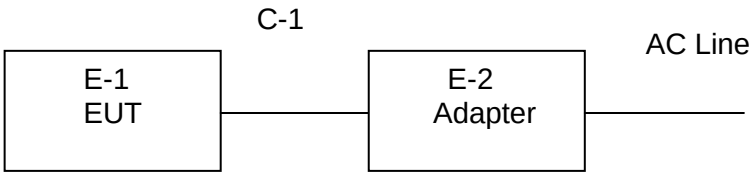
(2) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Conducted Emission Test



Radiated Spurious Emission Test



2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	WCDMA 3G SMART PHONE	JEASUNG	A9	N/A	EUT

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	1M	

Note:

(1) The support equipment was authorized by Declaration of Confirmation.
(2) For detachable type I/O cable should be specified the length in cm in『Length』column.

2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Spectrum Analyzer	Agilent	E4407B	MY45108040	2013.07.06	2014.07.05	1 year
2	Test Receiver	R&S	ESPI	101318	2013.06.07	2014.06.06	1 year
3	Bilog Antenna	TESEQ	CBL6111D	31216	2013.07.06	2014.07.05	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	2013.06.07	2014.06.06	1 year
5	Spectrum Analyzer	ADVANTEST	R3132	150900201	2013.06.07	2014.06.06	1 year
6	Horn Antenna	EM	EM-AH-10180	2011071402	2013.07.06	2014.07.05	1 year
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2013.07.06	2014.07.05	1 year
8	Amplifier	EM	EM-30180	060538	2013.12.22	2014.12.21	1 year
9	Loop Antenna	ARA	PLA-1030/B	1029	2013.06.08	2014.06.07	1 year
10	Power Meter	R&S	NRVS	100696	2013.07.06	2014.07.05	1 year
11	Power Sensor	R&S	URV5-Z4	0395.1619.05	2013.07.06	2014.07.05	1 year

Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Test Receiver	R&S	ESCI	101160	2013.06.06	2014.06.05	1 year
2	LISN	R&S	ENV216	101313	2013.08.24	2014.08.23	1 year
3	LISN	EMCO	3816/2	00042990	2013.08.24	2014.08.23	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2013.06.07	2014.06.06	1 year
5	Passive Voltage Probe	R&S	ESH2-Z3	100196	2013.06.07	2014.06.06	1 year
6	Absorbing clamp	R&S	MOS-21	100423	2013.06.08	2014.06.07	1 year

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)		Standard
	Quasi-peak	Average	Quasi-peak	Average	
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	73.00	60.00	56.00	46.00	CISPR
5.0 -30.0	73.00	60.00	60.00	50.00	CISPR

0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	73.00	60.00	56.00	46.00	FCC
5.0 -30.0	73.00	60.00	60.00	50.00	FCC

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

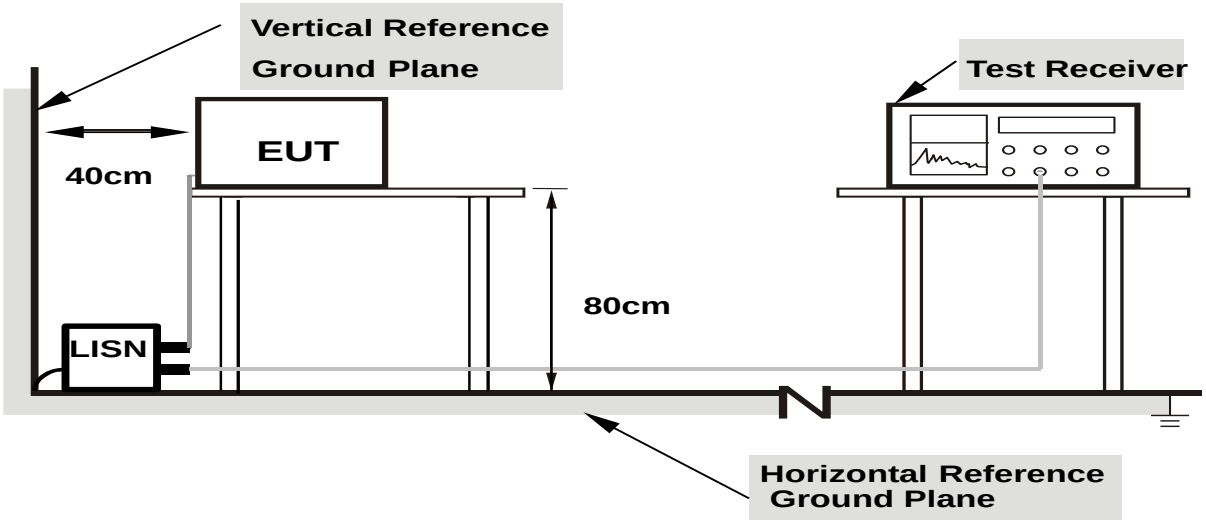
3.1.2 TEST PROCEDURE

a. The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
d. LISN at least 80 cm from nearest part of EUT chassis.
e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.1.5 EUT OPERATING CONDITIONS

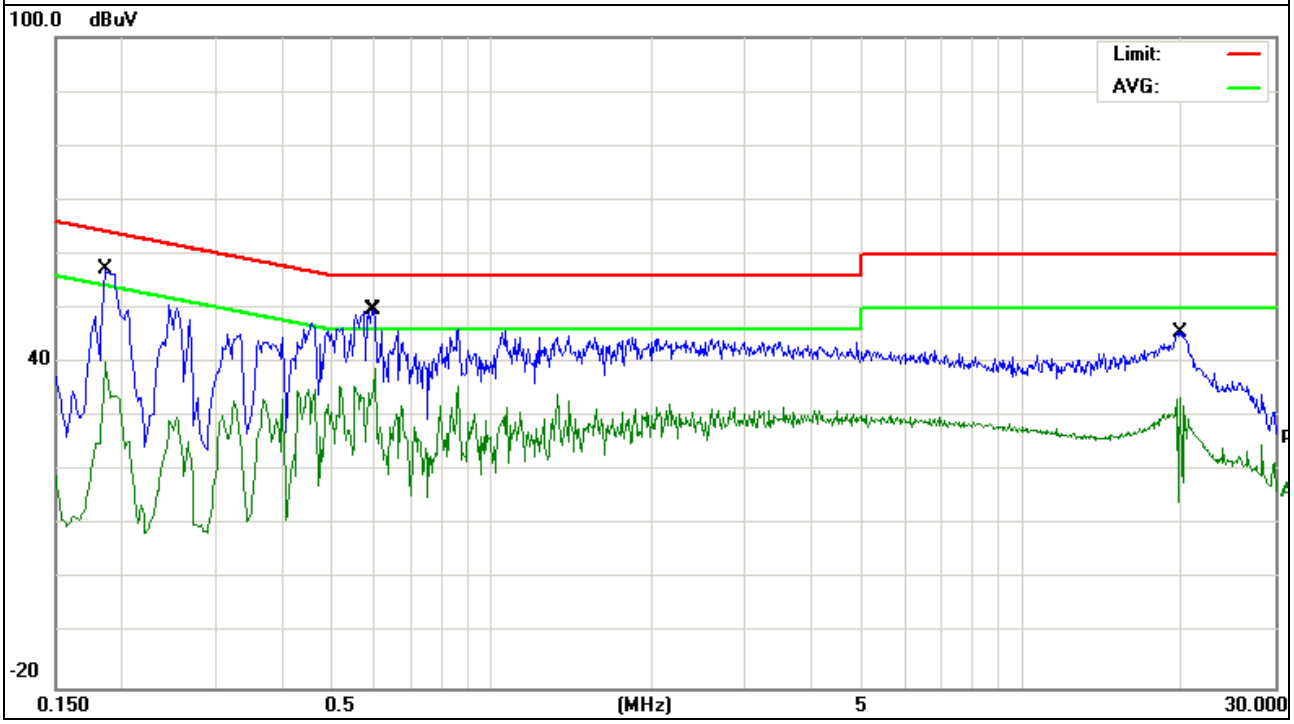
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

3.1.6 TEST RESULTS

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase：	L
Test Voltage ：	DC 5V from adapter AC120V/60Hz	Test Mode：	Mode 1

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1860	47.22	10.10	57.32	64.21	-6.89	QP
0.1860	29.97	10.10	40.07	54.21	-14.14	AVG
0.5940	39.48	10.22	49.70	56.00	-6.30	QP
0.6020	28.83	10.22	39.05	46.00	-6.95	AVG
19.9420	34.95	10.65	45.60	60.00	-14.40	QP
19.9420	23.04	10.65	33.69	50.00	-16.31	AVG

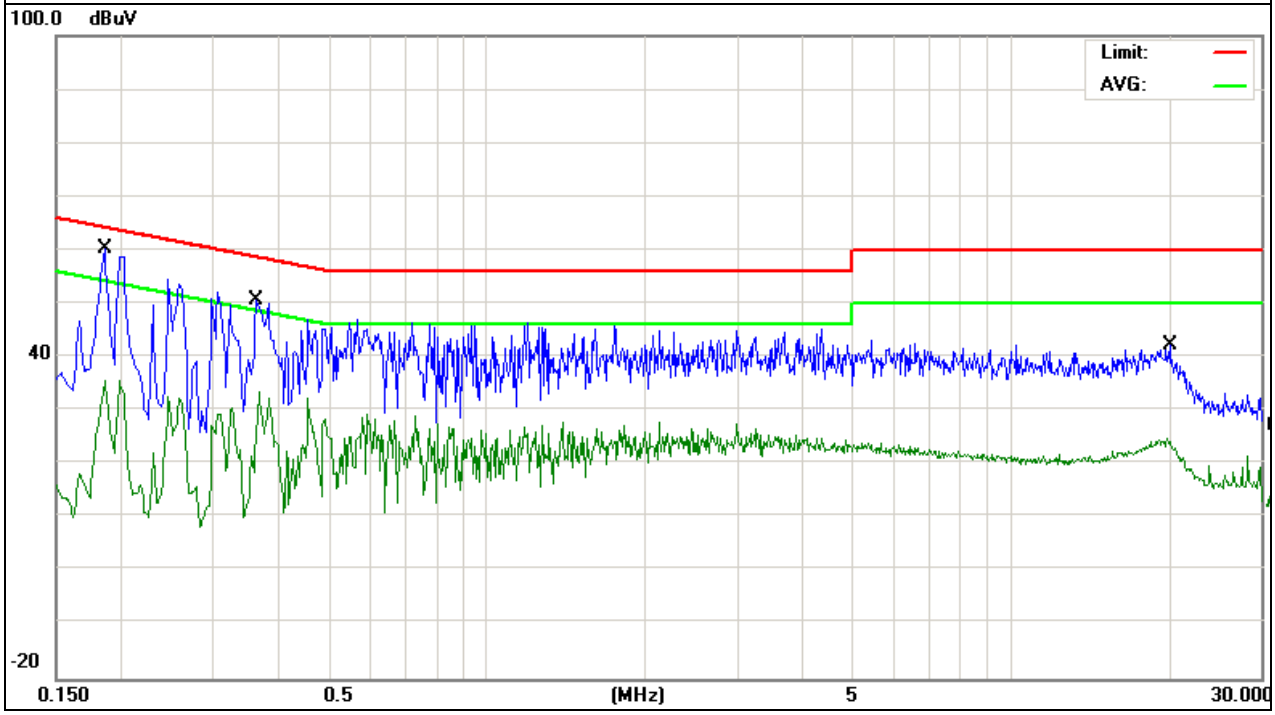
Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase：	N
Test Voltage ：	DC 5V from adapter AC120V/60Hz	Test Mode：	Mode 1

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1860	50.24	10.10	60.34	64.21	-3.87	QP
0.1860	25.69	10.10	35.79	54.21	-18.42	AVG
0.3620	40.49	10.20	50.69	58.68	-7.99	QP
0.3660	23.39	10.20	33.59	48.59	-15.00	AVG
19.9259	14.10	10.65	24.75	50.00	-25.25	AVG
20.0940	31.54	10.65	42.19	60.00	-17.81	QP

Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	Class A (dBuV/m) (at 3M)		Class B (dBuV/m) (at 3M)	
	PEAK	AVERAGE	PEAK	AVERAGE
Above 1000	80	60	74	54

Notes:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / *10Hz* for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.2.2 TEST PROCEDURE

a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

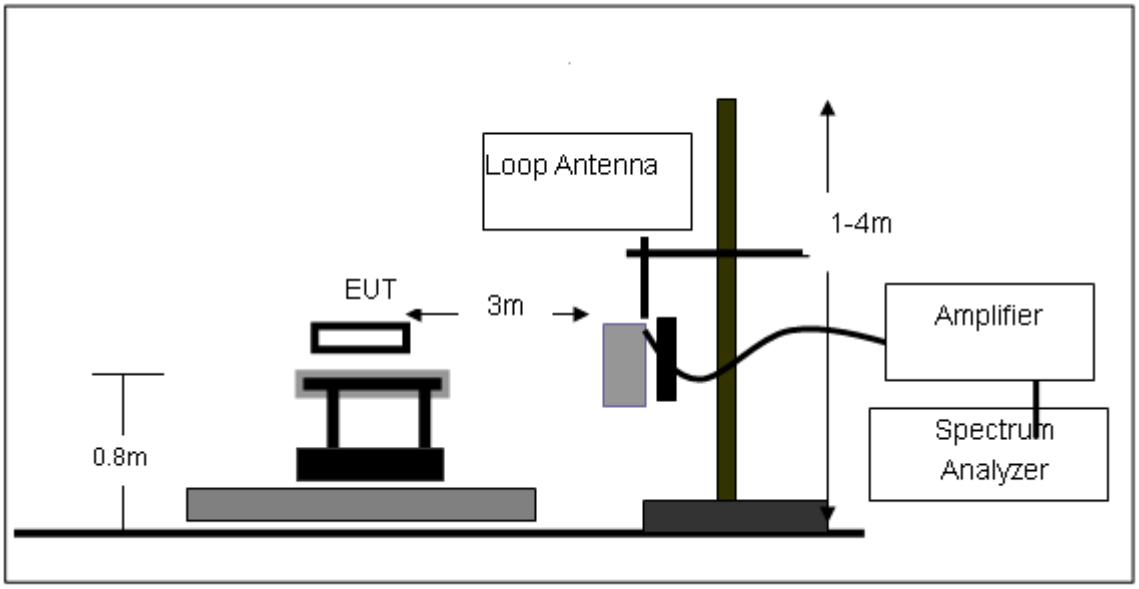
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

3.2.3 DEVIATION FROM TEST STANDARD

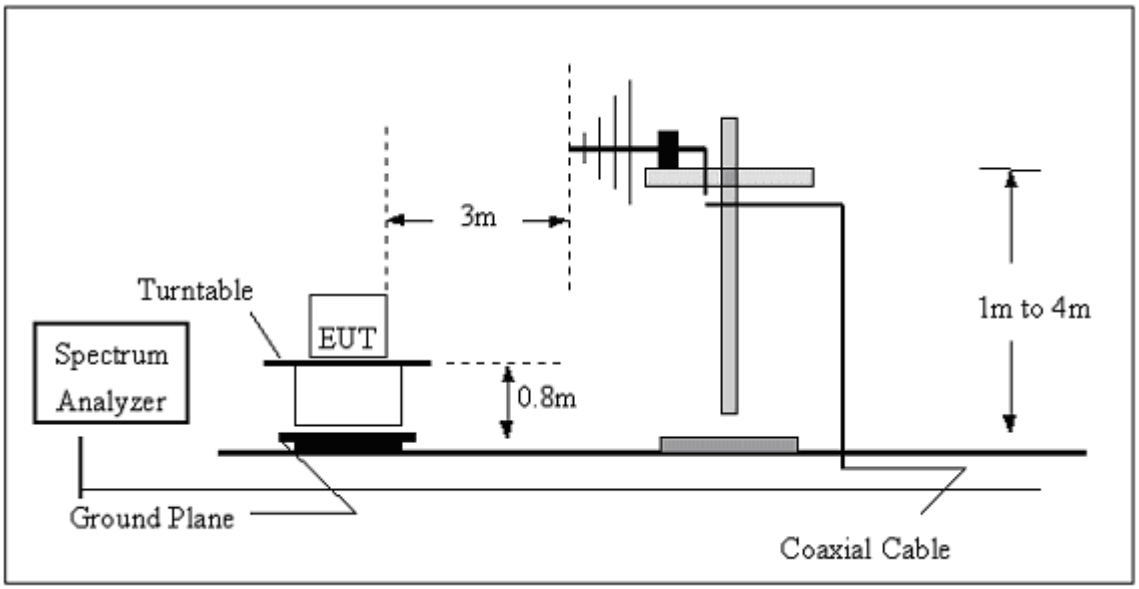
No deviation

3.2.4 TEST SETUP

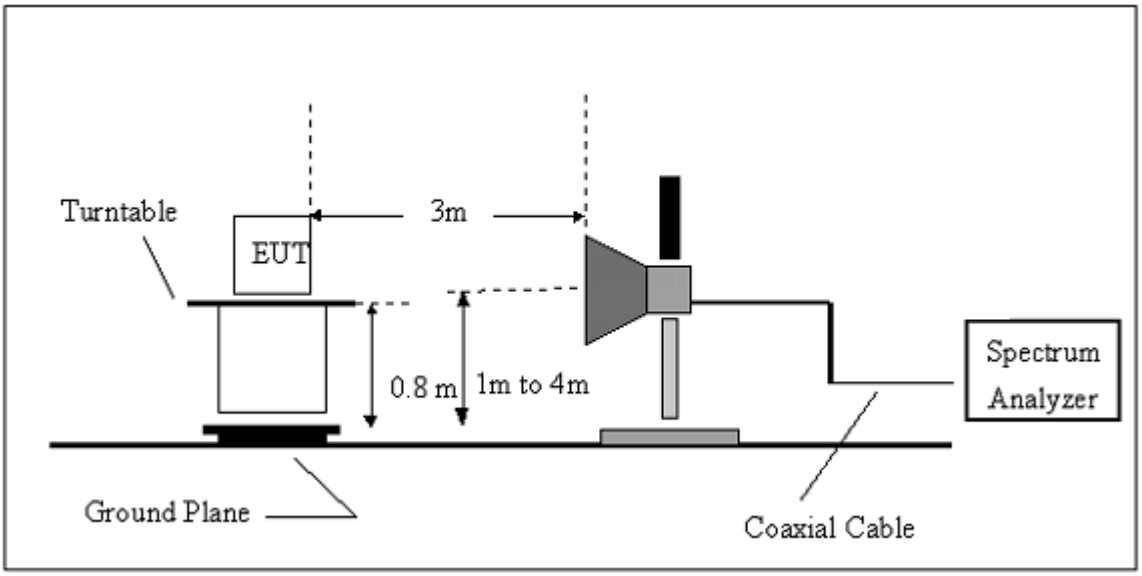
（A）Radiated Emission Test-Up Frequency Below 30MHz



（B）Radiated Emission Test-Up Frequency 30MHz~1GHz



（C）Radiated Emission Test-Up Frequency Above 1GHz



3.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

3.2.6 TEST RESULTS

Radiated Spurious Emission (Transmitting)

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH1 (802.11b Mode)/2412	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4824.50	47.28	10.44	57.72	74	-16.28	peak
4824.50	32.75	10.44	43.19	54	-10.81	AVG
7236.76	44.62	12.75	57.37	74	-16.63	peak
7236.76	28.38	12.75	41.13	54	-12.87	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH1 (802.11b Mode)/2412	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4824.50	45.80	10.44	56.2	74	-17.8	peak
4824.50	28.09	10.44	38.59	54	-15.41	AVG
7236.76	41.37	12.75	54.12	74	-19.88	peak
7236.76	28.40	12.75	41.15	54	-12.85	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH6 (802.11b Mode)/2437	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874.24	46.73	10.38	57.11	74	-16.89	peak
4874.24	29.53	10.38	39.88	54	-14.12	AVG
7311.36	43.68	12.68	56.36	74	-17.64	peak
7311.36	28.05	12.68	40.73	54	-13.27	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH6 (802.11b Mode)/2437	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874.24	46.57	10.38	56.95	74	-17.05	peak
4874.24	31.47	10.38	41.85	54	-12.15	AVG
7311.36	41.72	12.68	54.4	74	-19.6	peak
7311.36	30.38	12.68	42.5	54	-11.5	AVG

Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. No emission detected above 18GHz

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH11 (802.11b Mode)/2462	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924.15	48.47	10.33	58.8	74	-15.2	peak
4924.15	32.79	10.33	43.12	54	-10.88	AVG
7386.31	45.27	12.71	57.98	74	-16.02	peak
7386.31	30.65	12.71	43.36	54	-10.64	AVG

Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. No emission detected above 18GHz

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH11 (802.11b Mode)/2462	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924.15	47.83	10.33	58.16	74	-15.84	peak
4924.15	32.57	10.33	42.9	54	-11.1	AVG
7386.31	45.90	12.71	58.61	74	-15.39	peak
7386.31	31.46	12.71	44.17	54	-9.83	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH1 (802.11g Mode)/2412	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4824.50	47.82	10.44	58.26	74	-15.74	peak
4824.50	33.47	10.44	43.91	54	-10.09	AVG
7236.76	42.10	12.75	54.85	74	-19.15	peak
7236.76	32.47	12.75	45.22	54	-8.78	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH1 (802.11g Mode)/2412	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4824.50	47.85	10.44	58.59	74	-15.41	peak
4824.50	32.48	10.44	42.92	54	-11.08	AVG
7236.76	42.46	12.75	55.21	74	-18.79	peak
7236.76	31.79	12.75	44.54	54	-9.46	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 12V
Test Mode ：	CH6 (802.11g Mode)/2437	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874.24	47.57	10.38	51.25	74	-22.75	peak
4874.24	32.47	10.38	39.62	54	-14.38	AVG
7311.36	43.58	12.68	53.56	74	-20.48	peak
7311.36	30.79	12.68	43.47	54	-10.53	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 12V
Test Mode ：	CH6 (802.11g Mode)/2437	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874.24	44.28	10.38	54.66	74	-19.34	peak
4874.24	32.36	10.38	42.74	54	-11.26	AVG
7311.36	42.55	12.68	58.56	74	-19.43	peak
7311.36	29.89	12.68	46.62	54	-12.44	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH11 (802.11g Mode)/2462	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924.15	46.37	10.33	56.7	74	-17.3	peak
4924.15	32.31	10.33	42.64	54	-11.36	AVG
7386.31	42.51	12.71	55.22	74	-18.78	peak
7386.31	29.81	12.71	42.52	54	-11.48	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH11(802.11g Mode)/2462	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924.15	44.28	10.33	54.61	74	-19.39	peak
4924.15	33.04	10.33	43.37	54	-10.63	AVG
7386.31	45.01	12.71	57.72	74	-16.28	peak
7386.31	32.83	12.71	45.54	54	-8.46	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH1(802.11n Mode)/20MHz	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4824.50	46.03	10.44	56.47	74	-17.53	peak
4824.50	31.96	10.44	42.4	54	-11.6	AVG
7236.76	45.96	12.75	58.71	74	-15.29	peak
7236.76	29.57	12.75	42.32	54	-11.68	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH1(802.11n Mode)/20MHz	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4824.50	47.28	10.44	57.72	74	-16.28	peak
4824.50	35.12	10.44	45.56	54	-8.44	AVG
7236.76	47.23	12.75	59.62	74	-14.38	peak
7236.76	32.11	12.75	44.5	54	-9.5	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH6(802.11n Mode)/20MHz	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874.24	50.38	10.38	60.76	74	-13.24	peak
4874.24	35.64	10.38	46.02	54	-7.98	AVG
7311.64	46.57	12.68	59.25	74	-14.75	peak
7311.64	33.74	12.68	46.42	54	-7.58	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH6(802.11n Mode)/20MHz	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874.24	40.14	10.38	50.51	74	-23.49	peak
4874.24	28.65	10.38	38.62	54	-15.38	AVG
7311.64	45.47	12.68	58.15	74	-15.85	peak
7311.64	30.75	12.68	43.43	54	-19.57	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH11(802.11n Mode)/20MHz	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924.14	42.78	10.33	53.11	74	-20.89	peak
4924.14	30.15	10.33	40.54	54	-13.46	AVG
7386.28	39.61	12.71	52.32	74	-21.68	peak
7386.28	29.43	12.71	42.14	54	-11.86	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH11(802.11n Mode)/20MHz	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924.14	43.97	10.33	54.30	74	-19.70	peak
4924.14	31.03	10.33	41.36	54	-12.64	AVG
7386.28	39.93	12.71	52.64	74	-21.36	peak
7386.28	29.60	12.71	42.31	54	-11.69	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH3(802.11n Mode)/40MHz	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4844.156	43.28	10.5	53.78	74	-20.22	peak
4844.156	30.47	10.5	40.97	54	-13.03	AVG
7266.319	44.57	12.5	57.07	74	-16.93	peak
7266.319	32.53	12.5	45.03	54	-8.79	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH3(802.11n Mode)/40MHz	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4844.325	47.38	10.5	57.88	74	-16.12	peak
4844.325	33.38	10.5	43.88	54	-10.12	AVG
7266.258	42.04	12.5	54.54	74	-19.46	peak
7266.258	31.47	12.5	43.97	54	-10.03	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH6(802.11n Mode)/40MHz	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874.238	44.37	10.38	54.75	74	-19.25	peak
4874.238	35.22	10.38	45.6	54	-8.4	AVG
7311.159	46.37	12.68	59.05	74	-14.95	peak
7311.159	34.04	12.68	46.72	54	-7.28	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH6(802.11n Mode)/40MHz	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874.535	47.48	10.38	57.86	74	-16.14	peak
4874.535	36.76	10.38	47.14	54	-6.86	AVG
7311.633	48.02	12.68	60.7	74	-13.3	peak
7311.633	31.72	12.68	44.4	54	-9.6	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH9(802.11n Mode)/40MHz	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4904.345	43.56	10.29	53.85	74	-20.15	peak
4904.345	31.58	10.29	41.87	54	-12.13	AVG
7356.247	46.03	12.79	58.82	74	-15.18	peak
7356.247	32.48	12.79	45.27	54	-8.73	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	CH9(802.11n Mode)/40MHz	Polarization :	Vertical

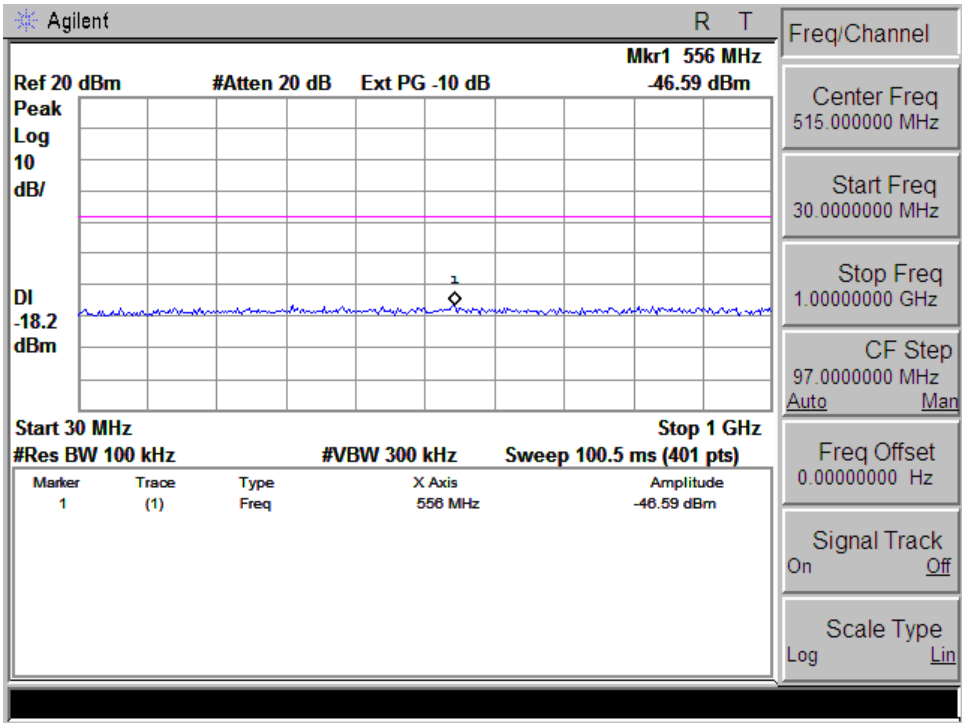
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4904.16	44.75	10.29	55.04	74	-18.96	peak
4904.16	33.04	10.29	43.33	54	-10.67	AVG
7356.423	43.28	12.79	56.07	74	-17.93	peak
7356.423	31.89	12.79	44.68	54	-9.32	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

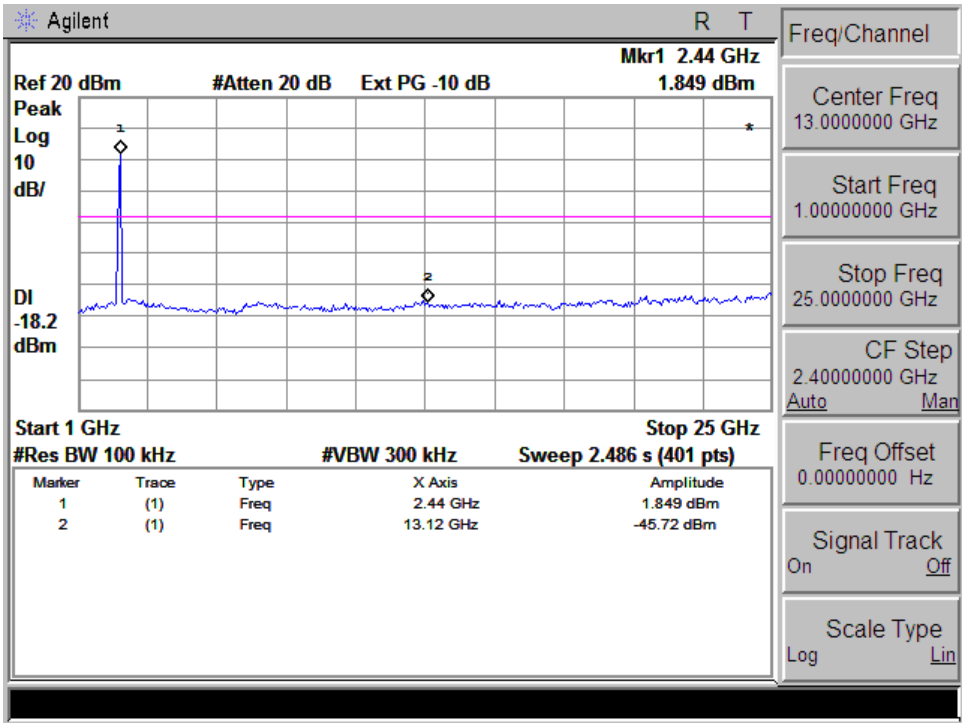
Conducted Spurious Emissions at Antenna Port:

802.11b Low Channel

30MHz-1GHz

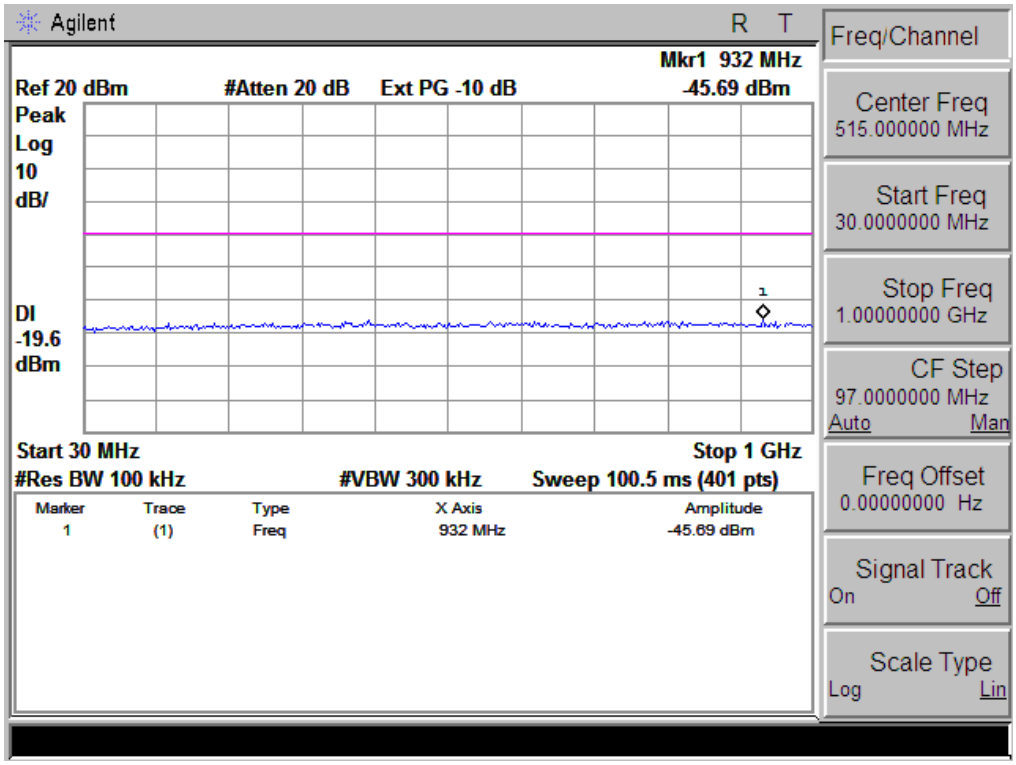


1GHz-25GHz

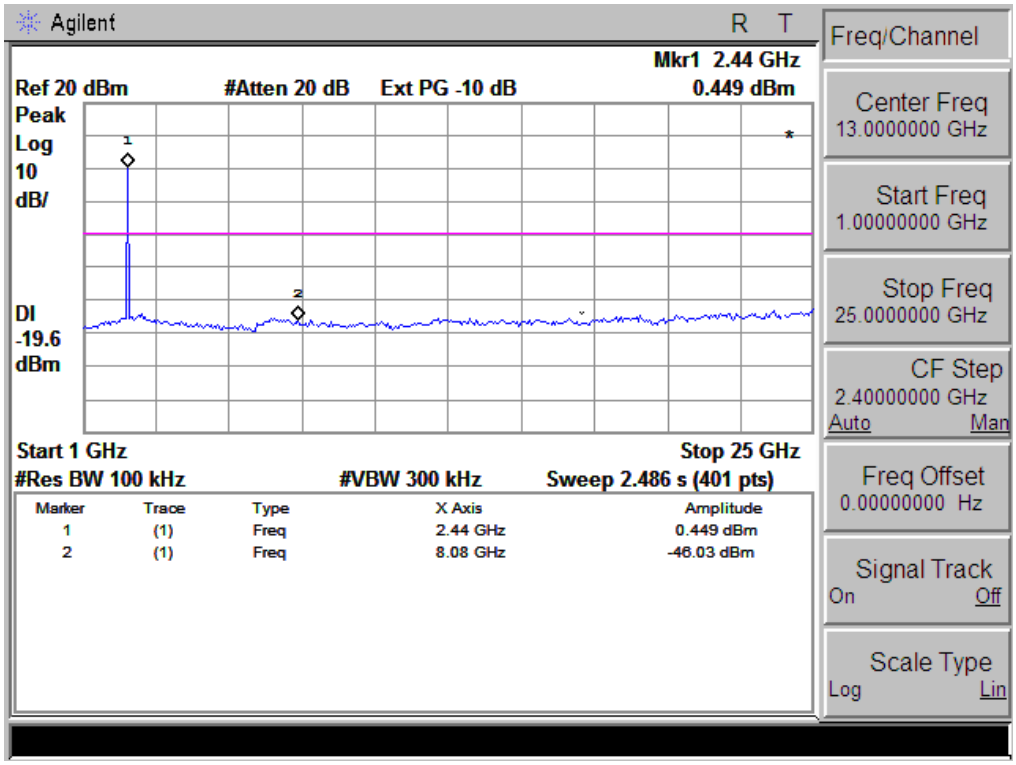


802.11b Middle Channel

30MHz-1GHz

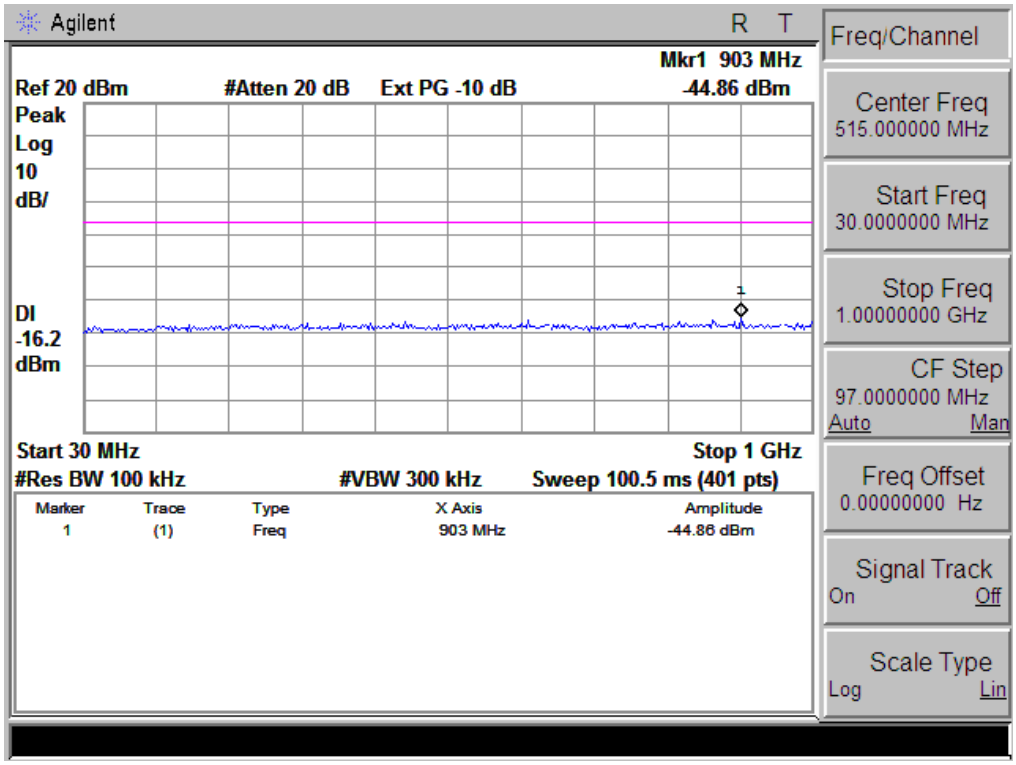


1GHz-25GHz

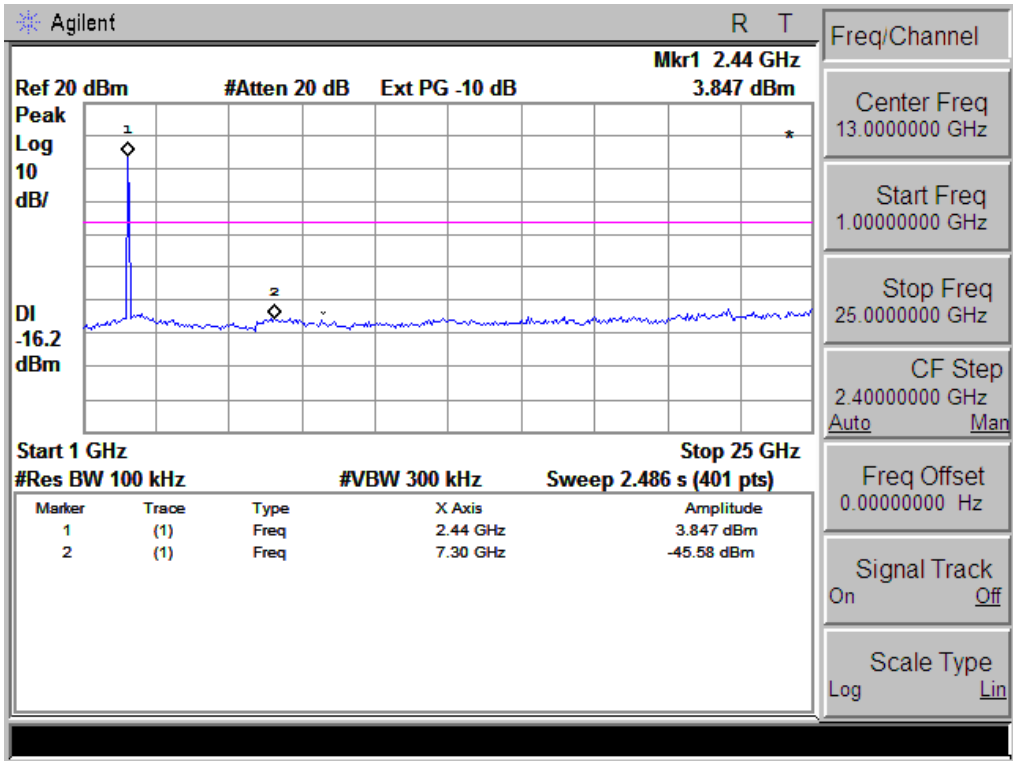


802.11b High Channel

30MHz-1GHz

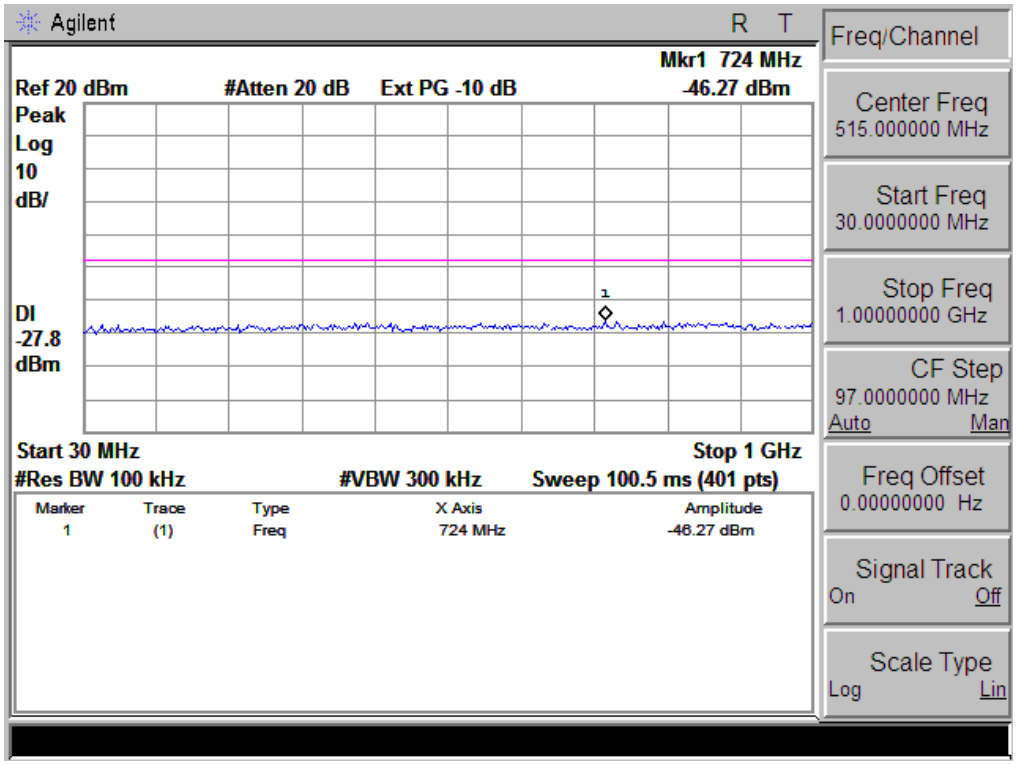


1GHz-25GHz

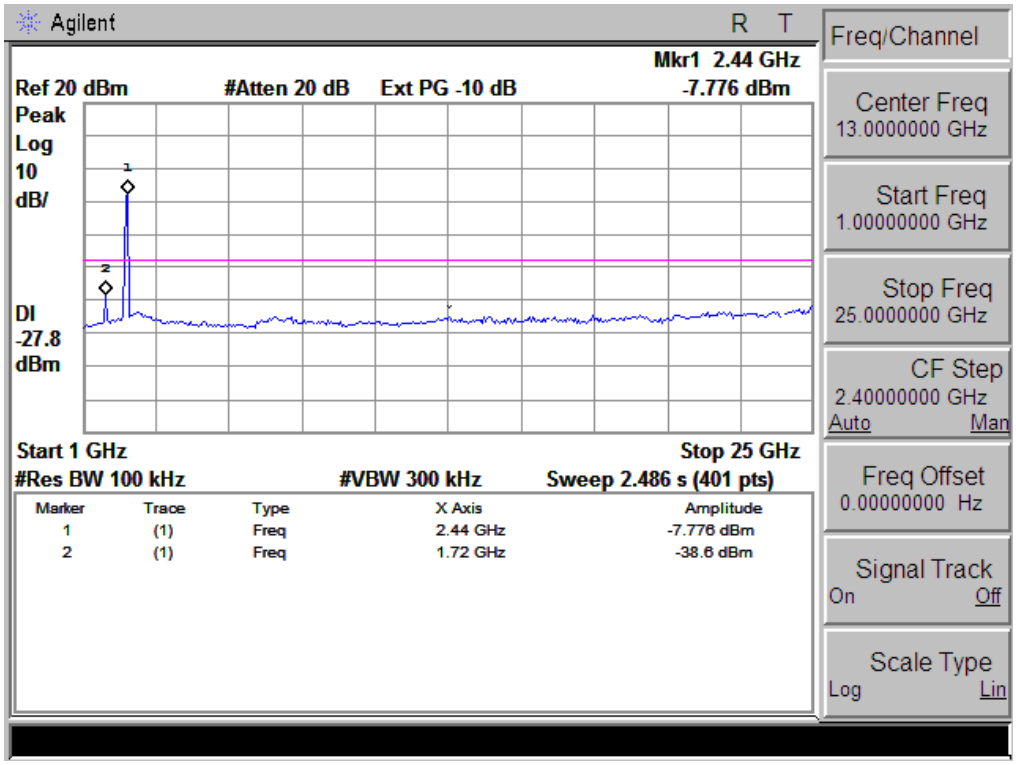


802.11g Low Channel

30MHz-1GHz

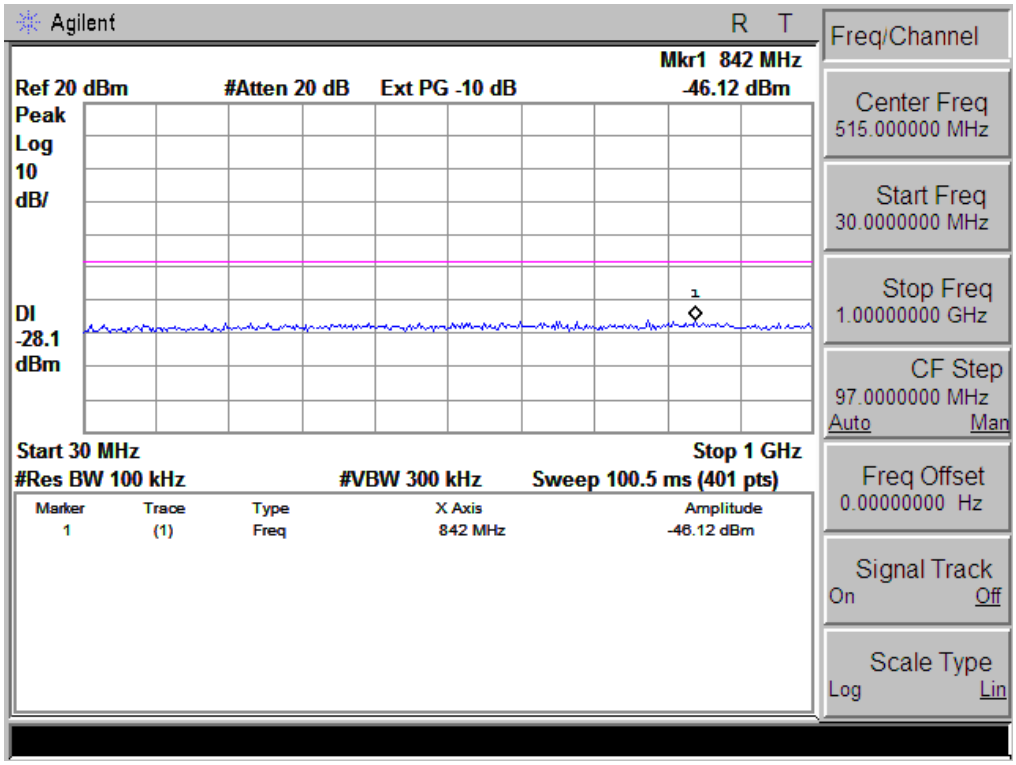


1GHz-25GHz

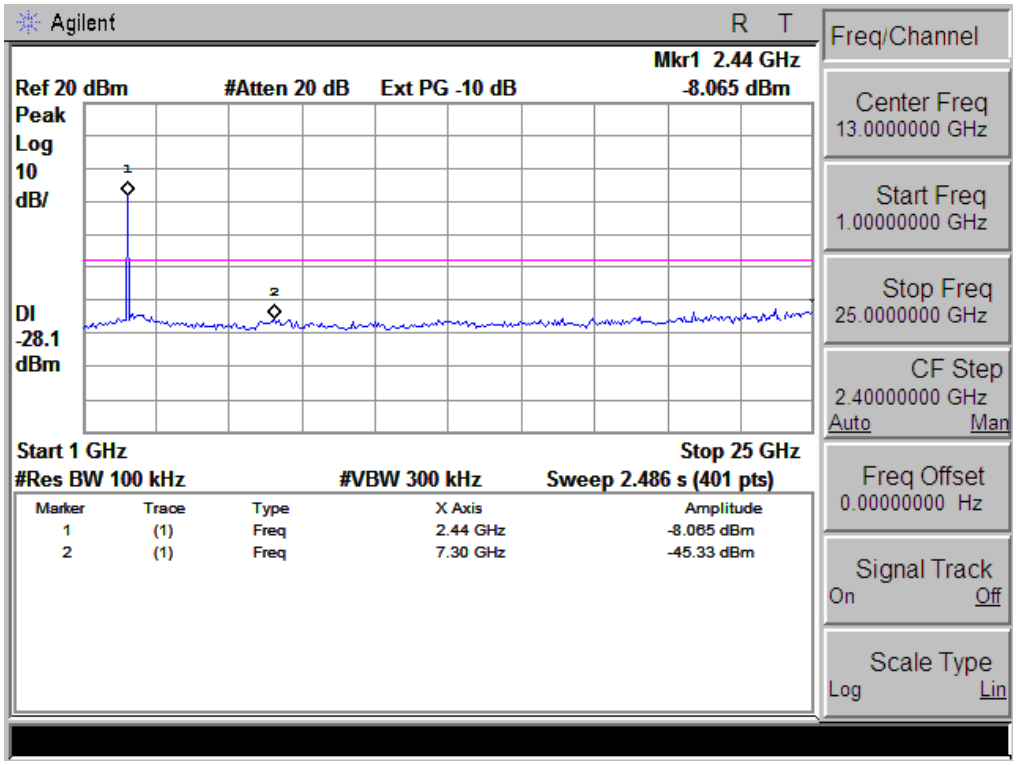


802.11g Middle Channel

30MHz-1GHz

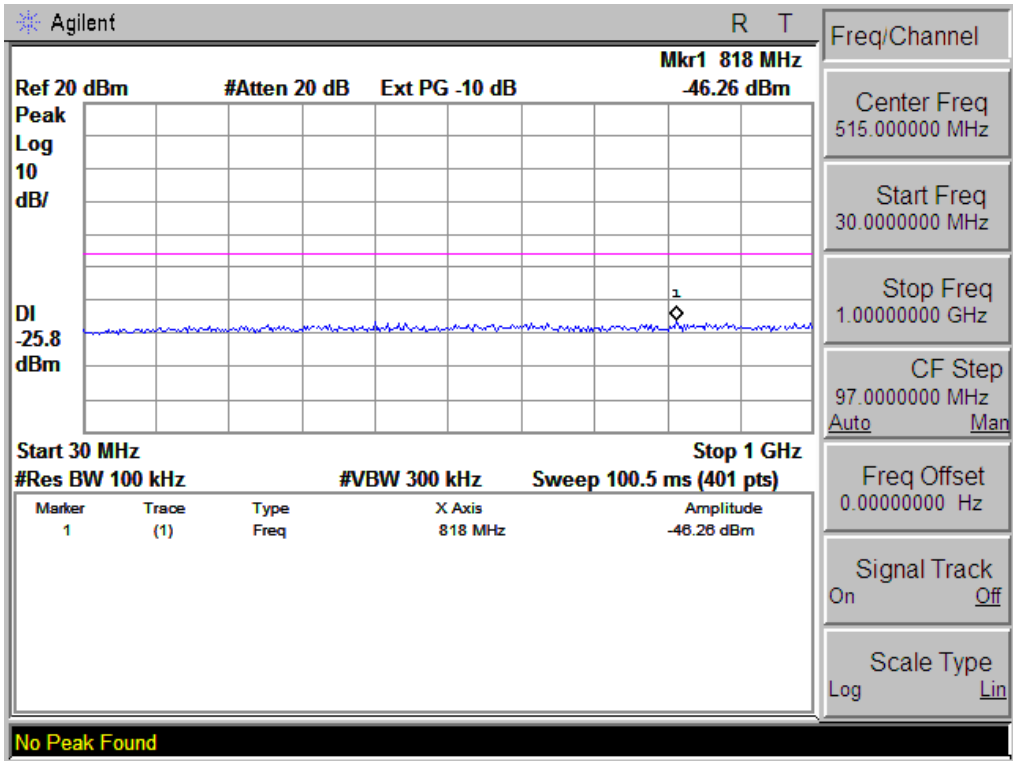


1GHz-25GHz

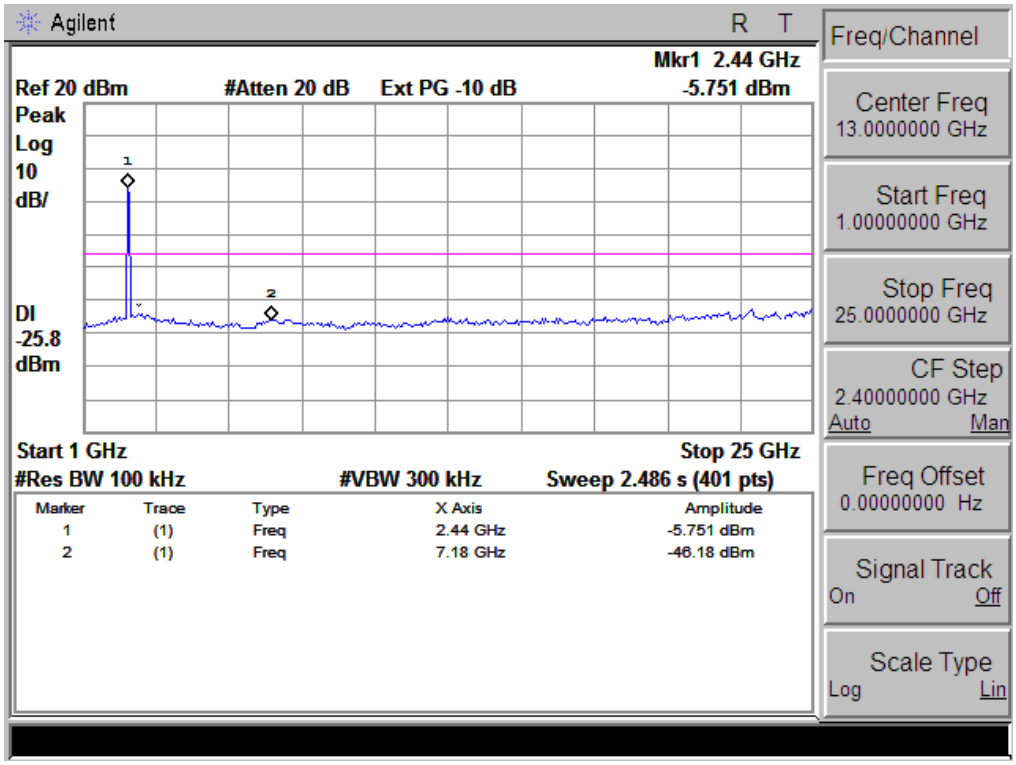


802.11g High Channel

30MHz-1GHz

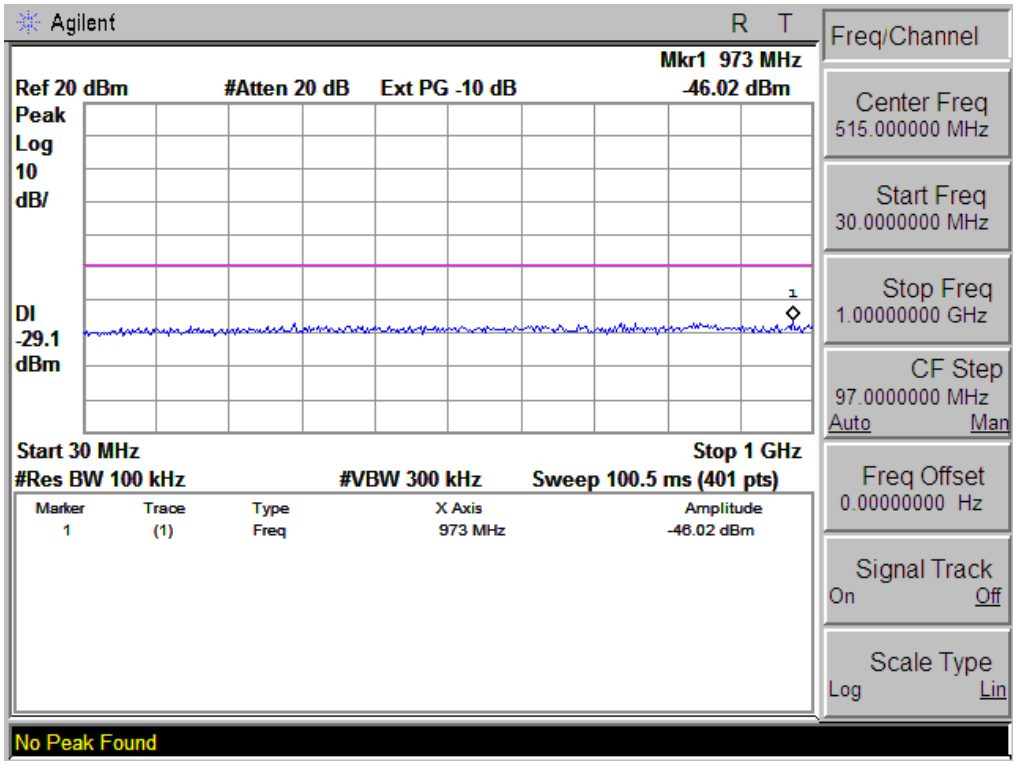


1GHz-25GHz



802.11n-HT20 Low Channel

30MHz-1GHz


Agilent
R T
Mkr1 973 MHz
Ref 20 dBm
#Atten 20 dB
Ext PG -10 dB
-46.02 dBm
Peak
Log
10
dB/
DI
-29.1
dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1 GHz
Sweep 100.5 ms (401 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 973 MHz -46.02 dBm
No Peak Found
Freq/Channel
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
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CF Step
97.0000000 MHz
Auto Man
Freq Offset
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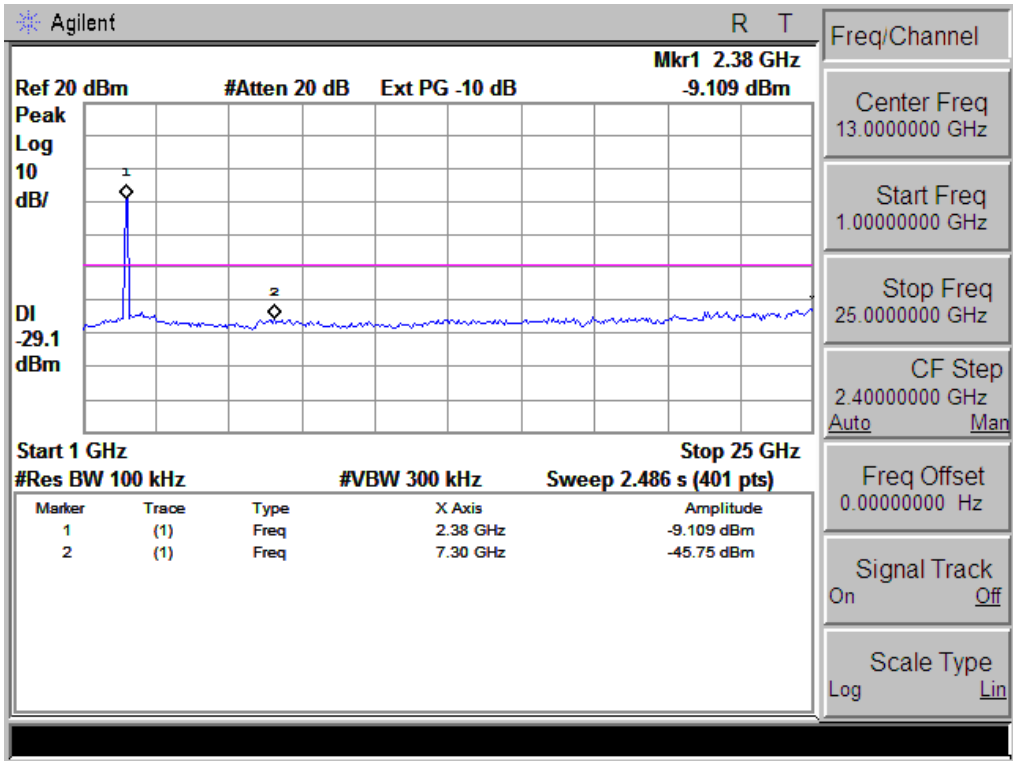
Signal Track
On Off
Scale Type
Log Lin

1GHz-25GHz


Agilent
R T
Mkr1 2.38 GHz
Ref 20 dBm
#Atten 20 dB
Ext PG -10 dB
-9.109 dBm
Peak
Log
10
dB/
DI
-29.1
dBm
Start 1 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25 GHz
Sweep 2.486 s (401 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.38 GHz -9.109 dBm
2 (1) Freq 7.30 GHz -45.75 dBm
Freq/Channel
Center Freq
13.0000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
25.0000000 GHz
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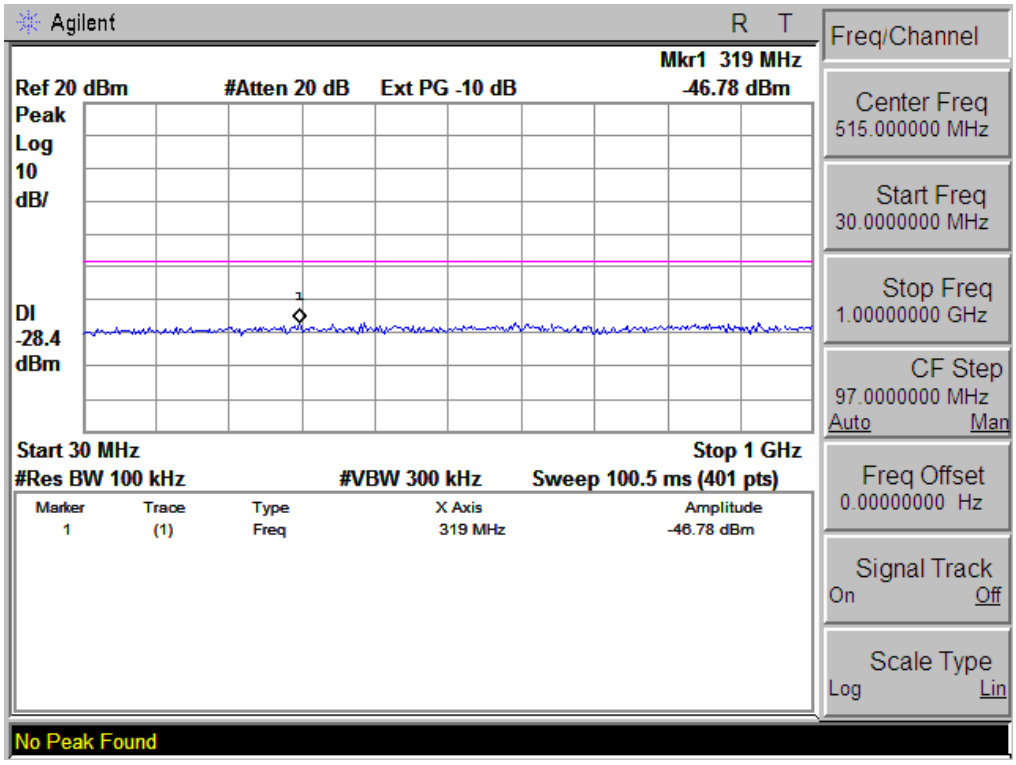
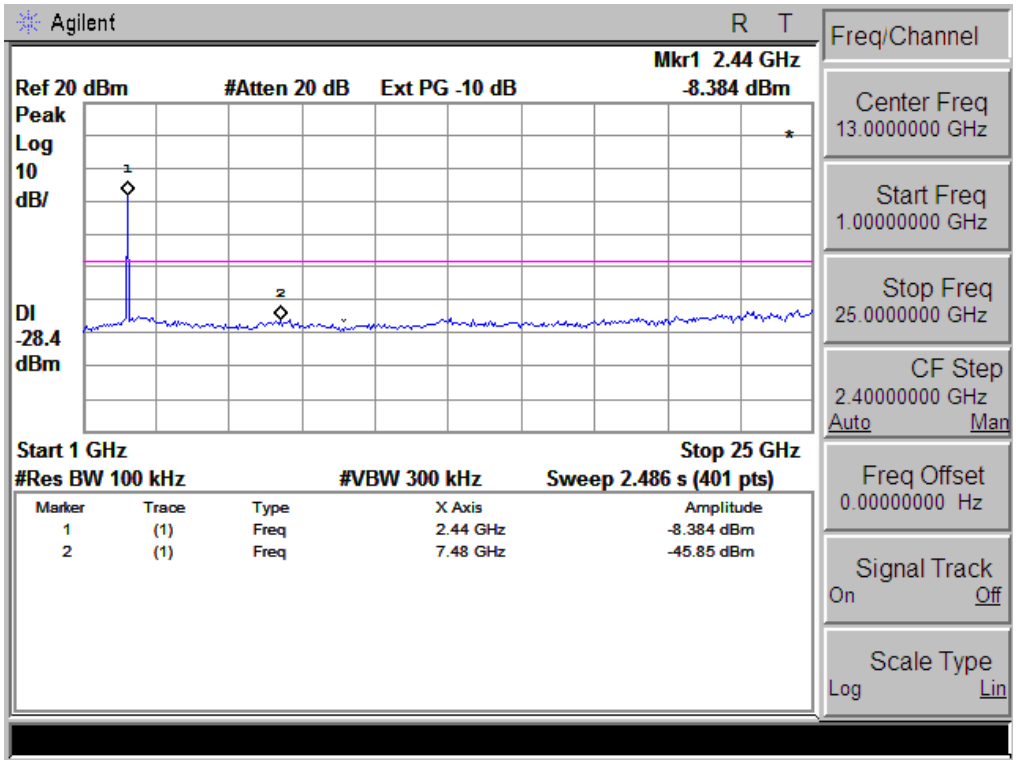
Scale Type
Log Lin

802.11n-HT20 Middle Channel

30MHz-1GHz

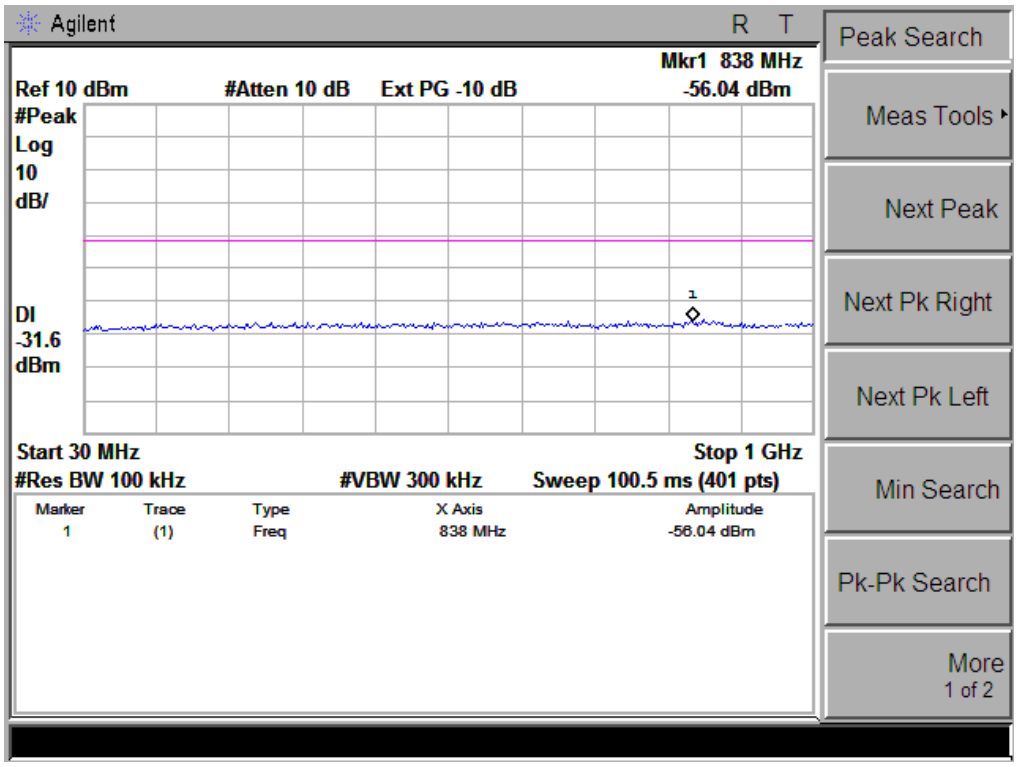


1GHz-25GHz

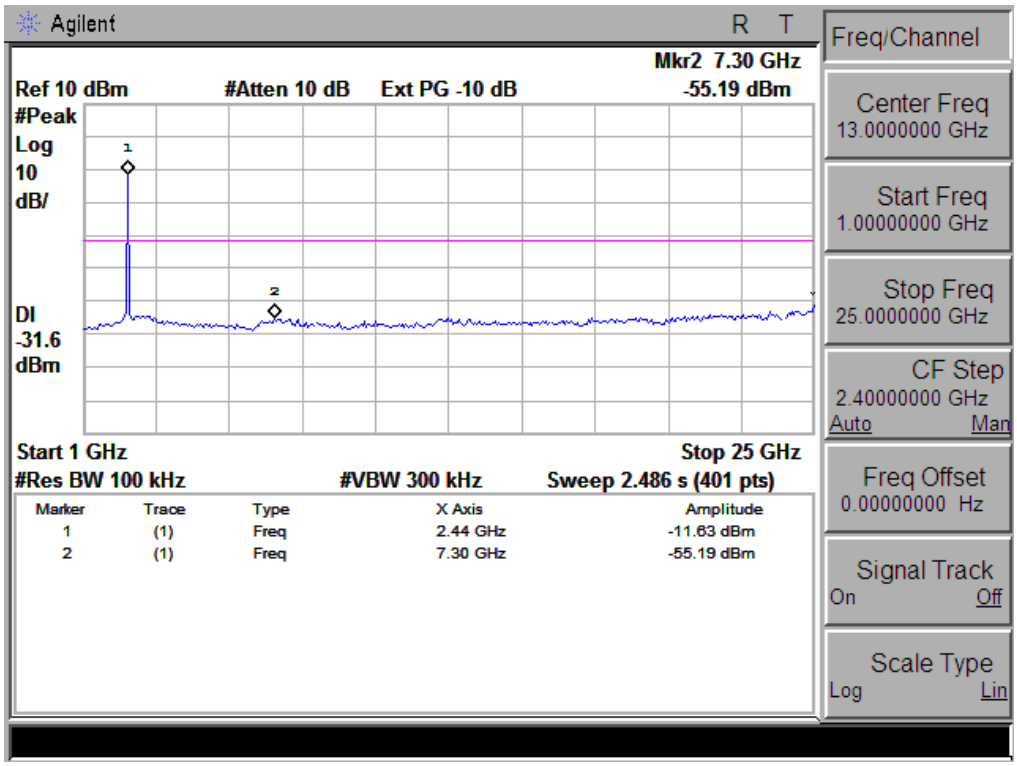


802.11n-HT20 High Channel

30MHz-1GHz

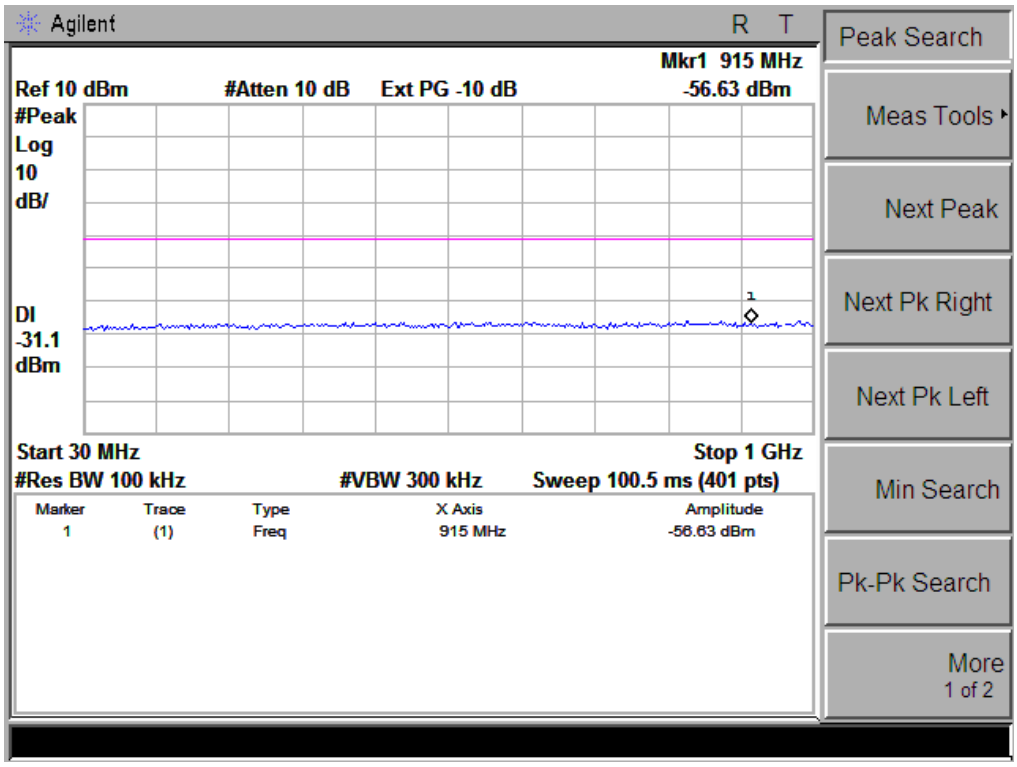


1GHz-25GHz

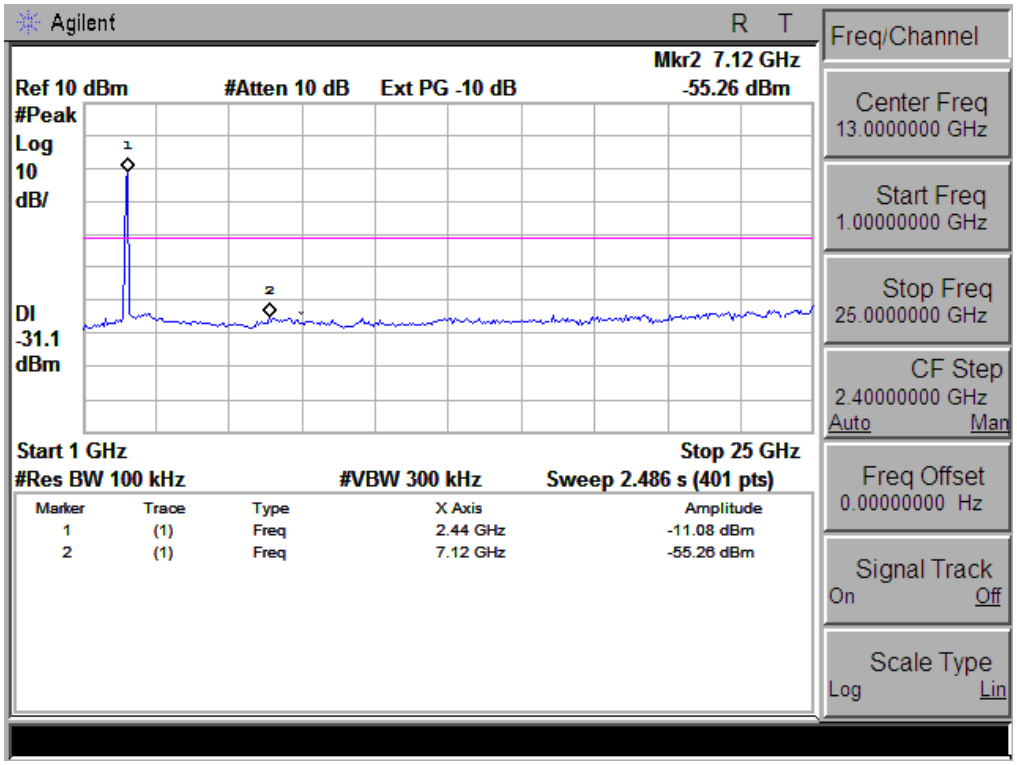


802.11n-HT40 Low Channel

30MHz-1GHz

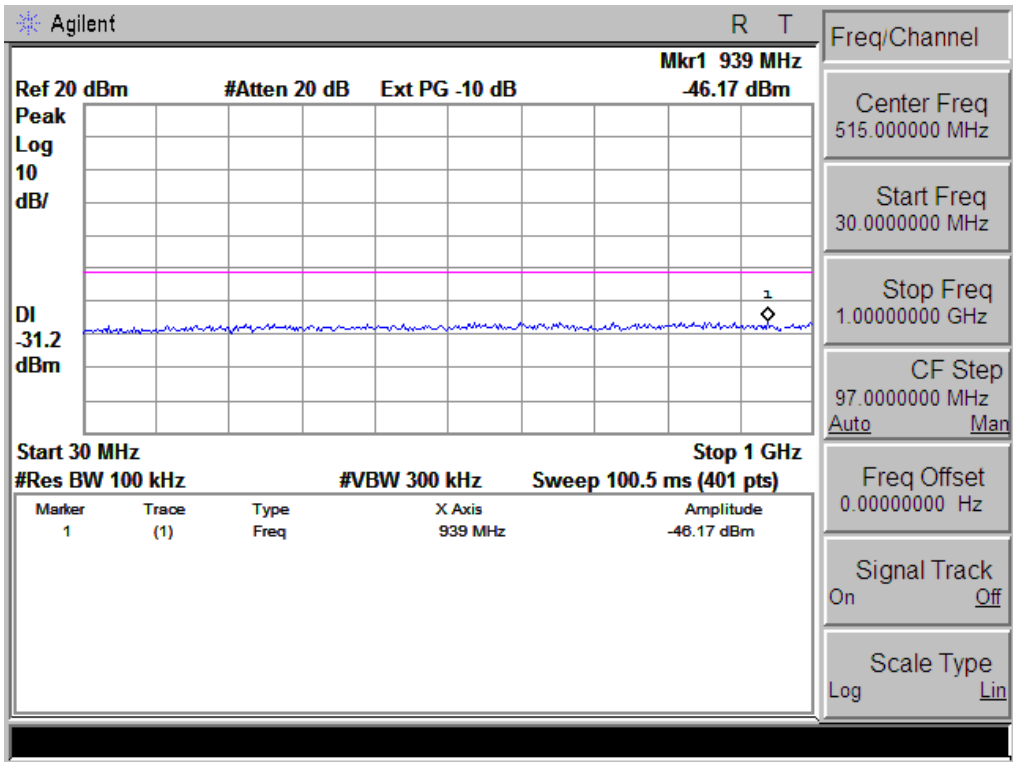


1GHz-25GHz

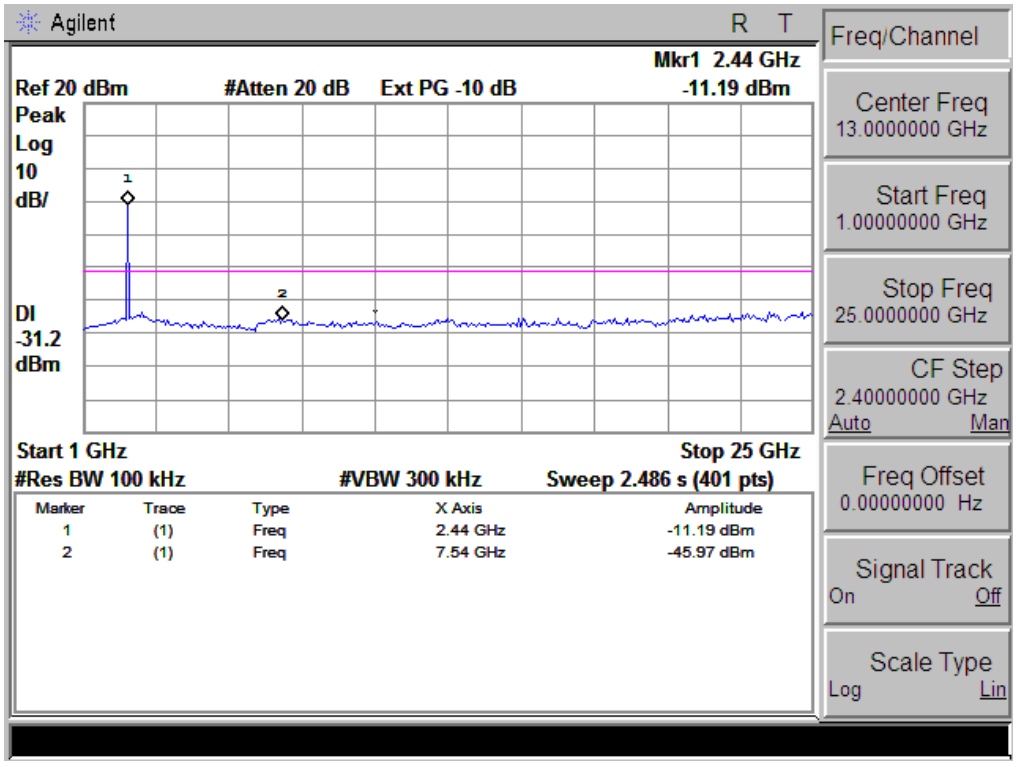


802.11n-HT40 Mid Channel

30MHz-1GHz

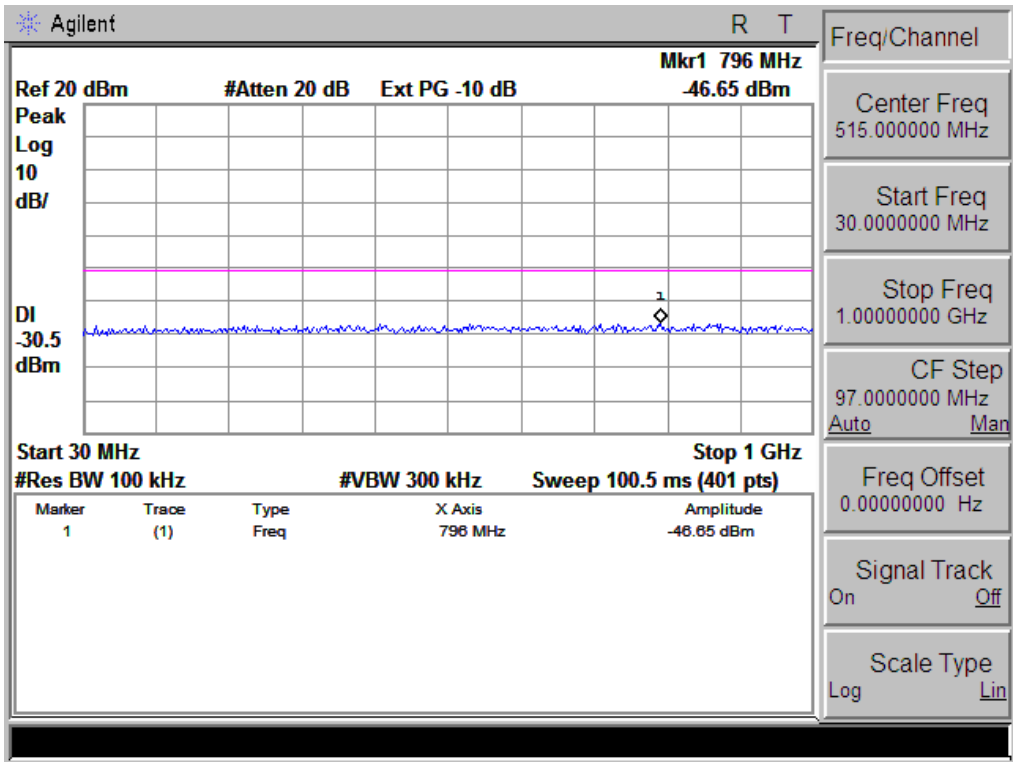


1GHz-25GHz

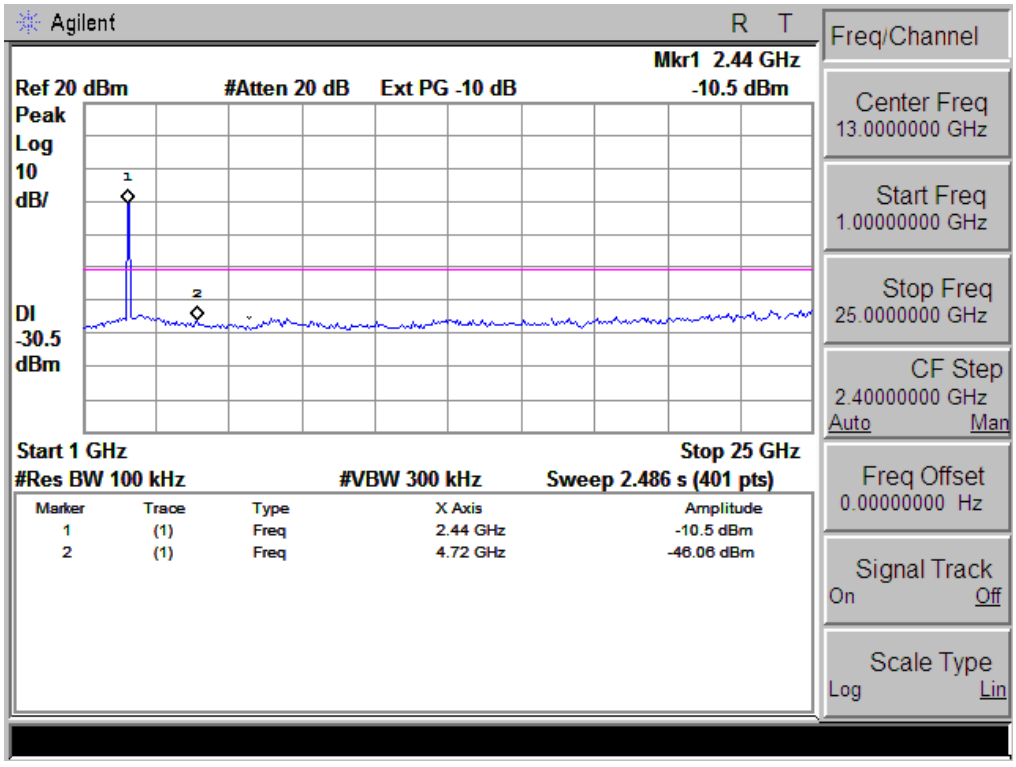


802.11n-HT40 High Channel

30MHz-1GHz



1GHz-25GHz



4. POWER SPECTRAL DENSITY TEST

4.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS

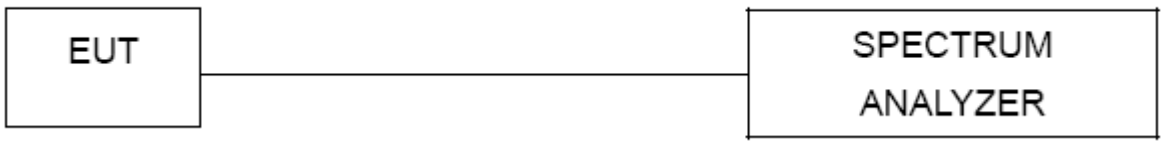
4.1.1 TEST PROCEDURE

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.
3. Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz
4. Set the VBW ≥ 3 x RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

4.1.2 DEVIATION FROM STANDARD

No deviation.

4.1.3 TEST SETUP



4.1.4 EUT OPERATION CONDITIONS

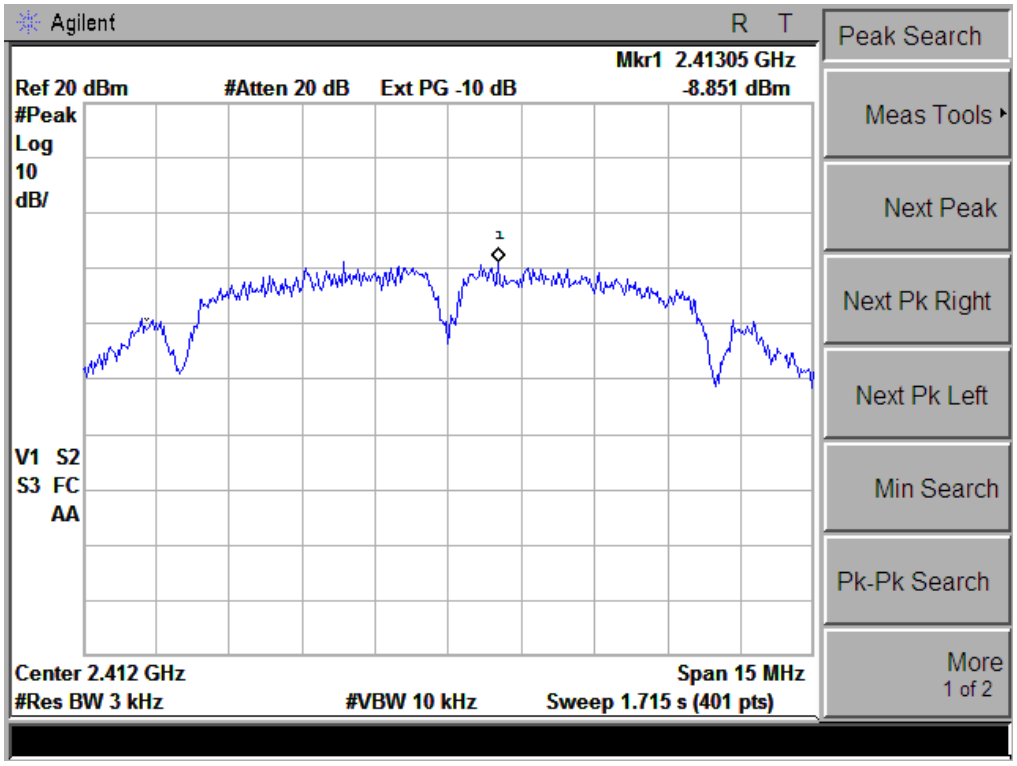
The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.

4.1.5 TEST RESULTS

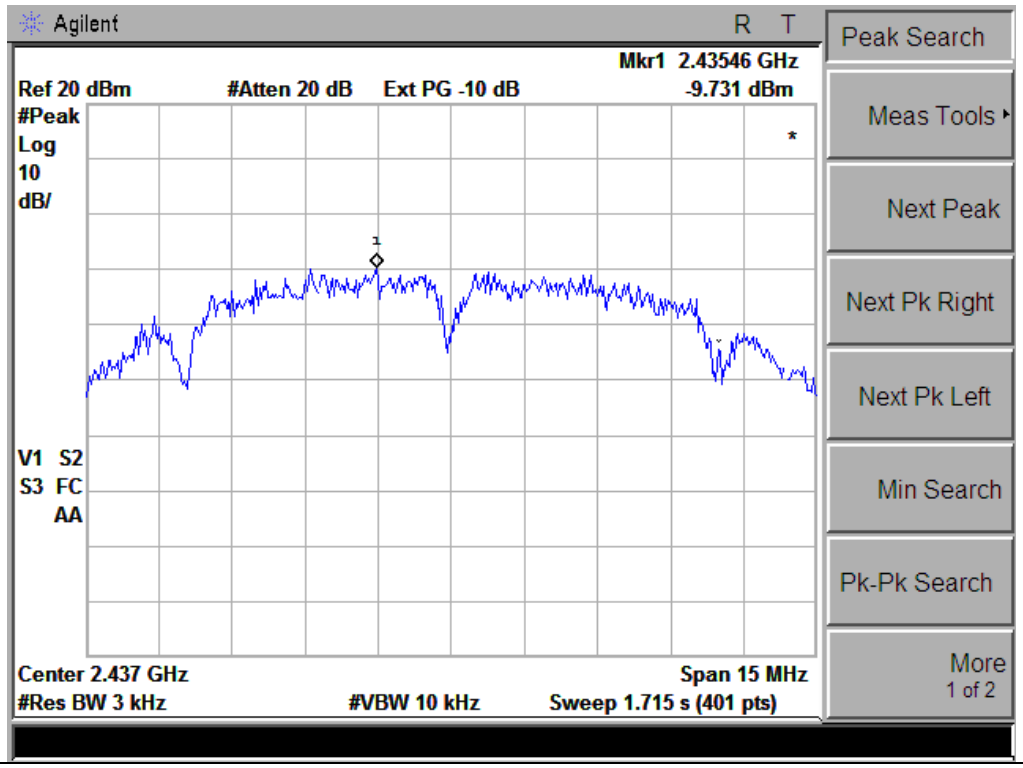
EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	60%
Pressure：	1015 hPa	Test Voltage ：	DC 5V from adapter AC120V/60Hz
Test Mode ：	TX b Mode /CH01, CH06, CH11		

Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-8.851	8	PASS
2437 MHz	-9.371	8	PASS
2462 MHz	-9.679	8	PASS

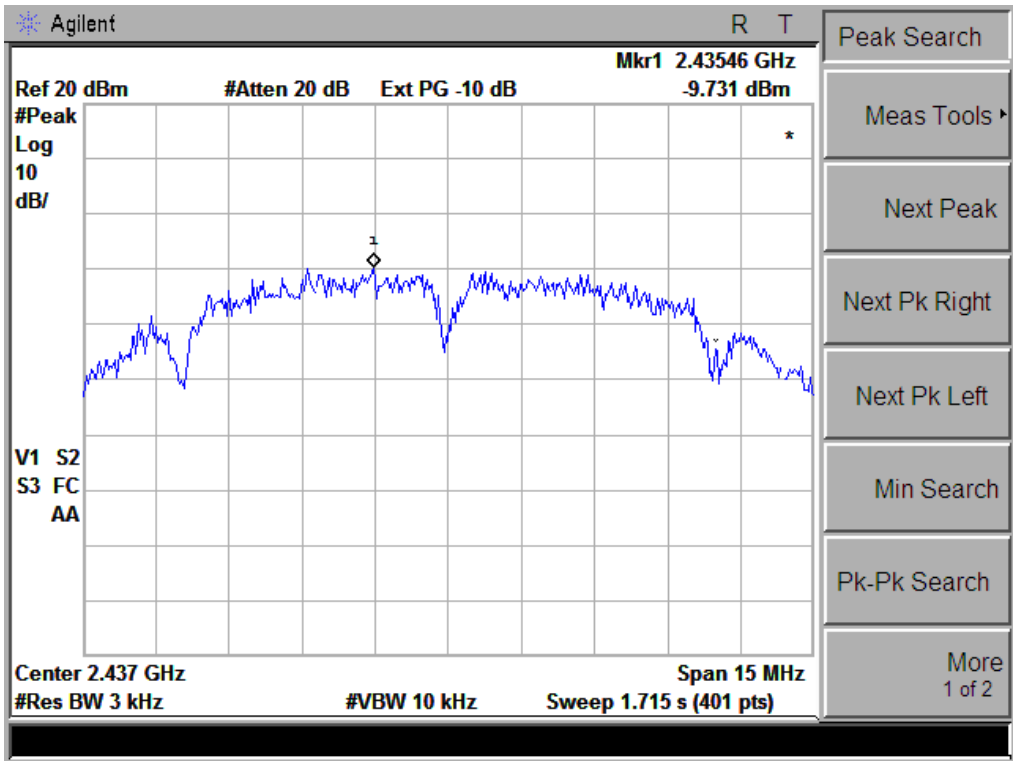
TX CH01



TX CH06



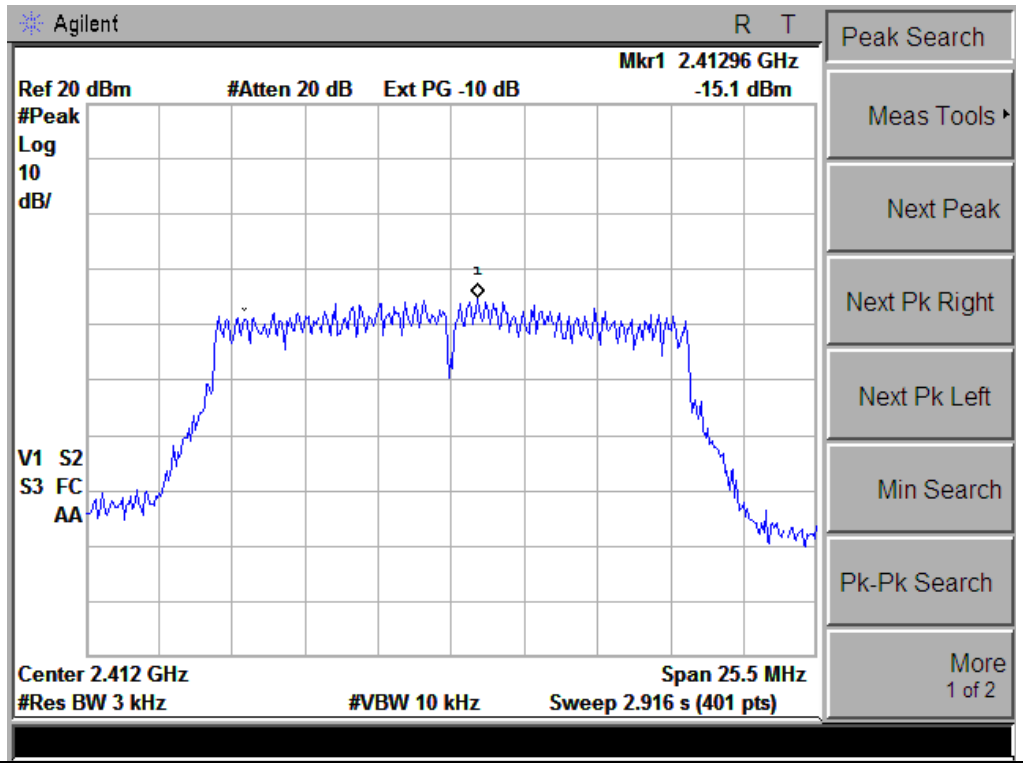
TX CH11



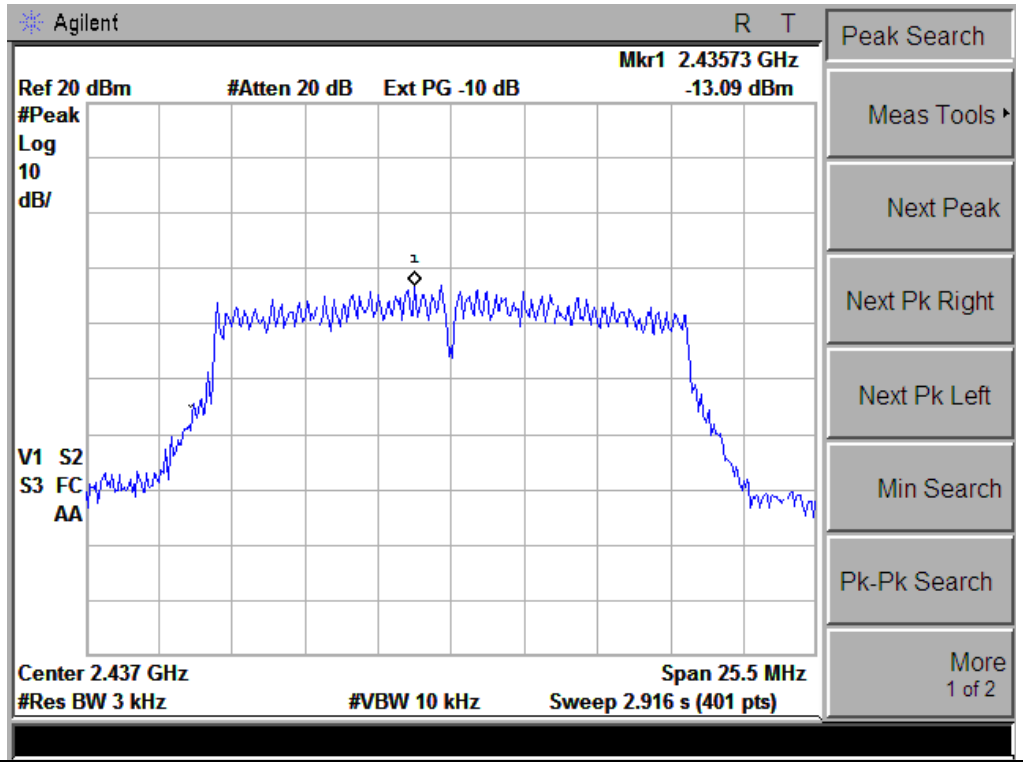
EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	60%
Pressure：	1015 hPa	Test Voltage ：	DC 5V from adapter AC120V/60Hz
Test Mode ：	TX g Mode /CH01, CH06, CH11		

Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-15.1	8	PASS
2437 MHz	-13.09	8	PASS
2462 MHz	-14.34	8	PASS

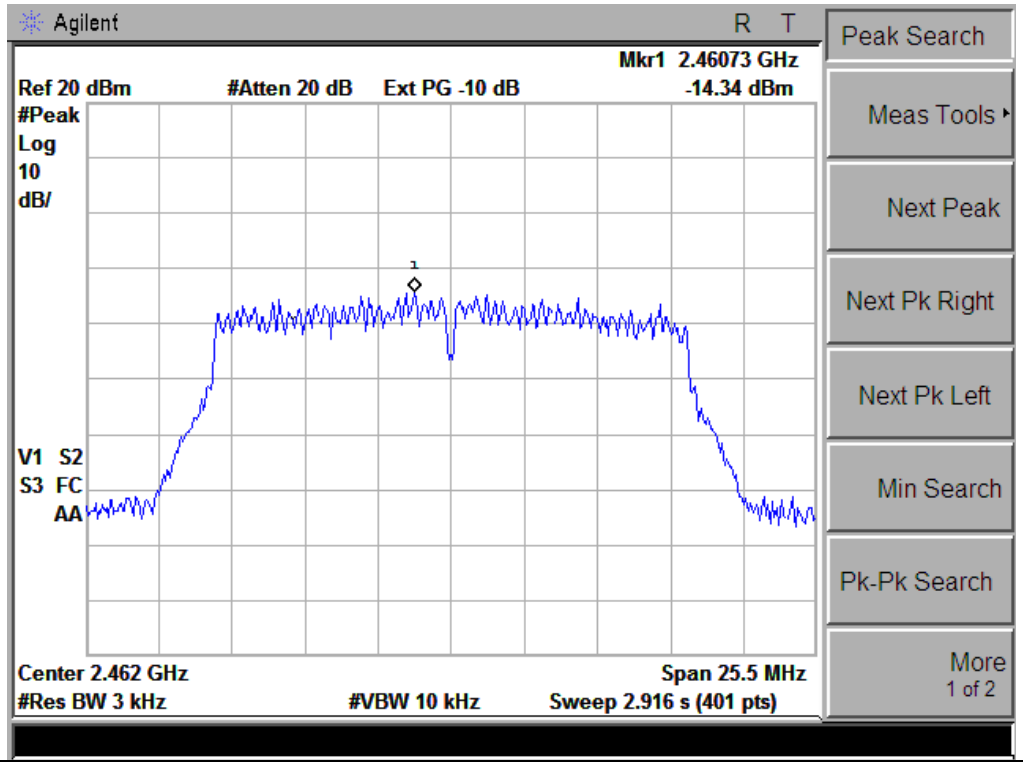
TX CH01



TX CH06



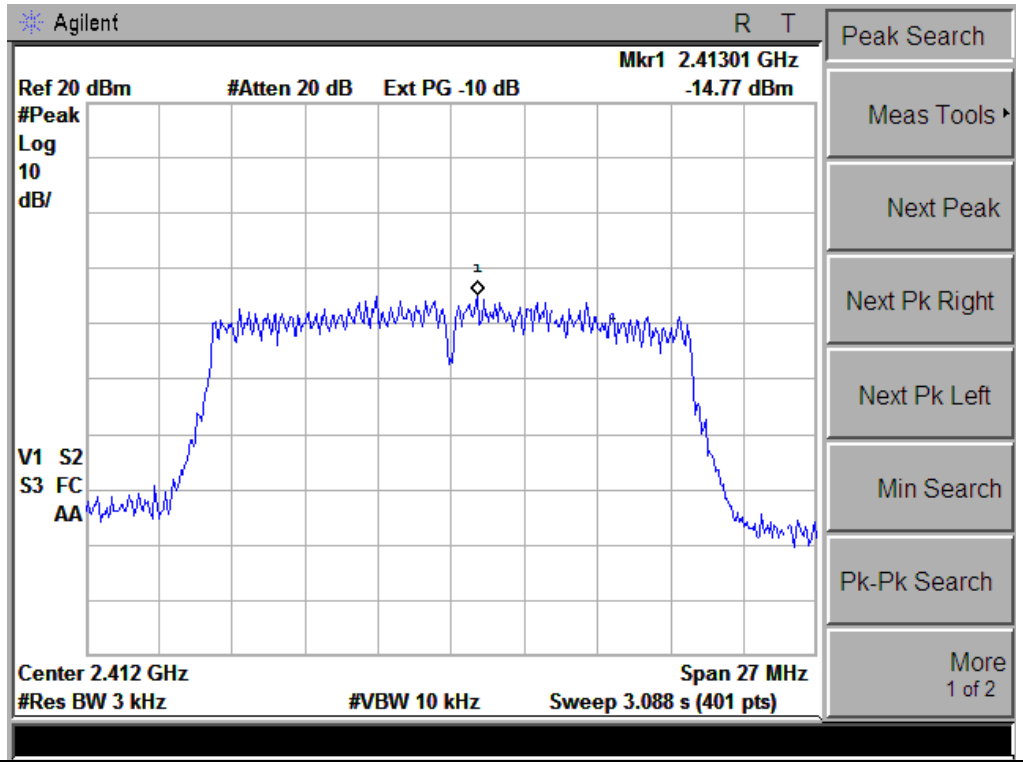
TX CH11



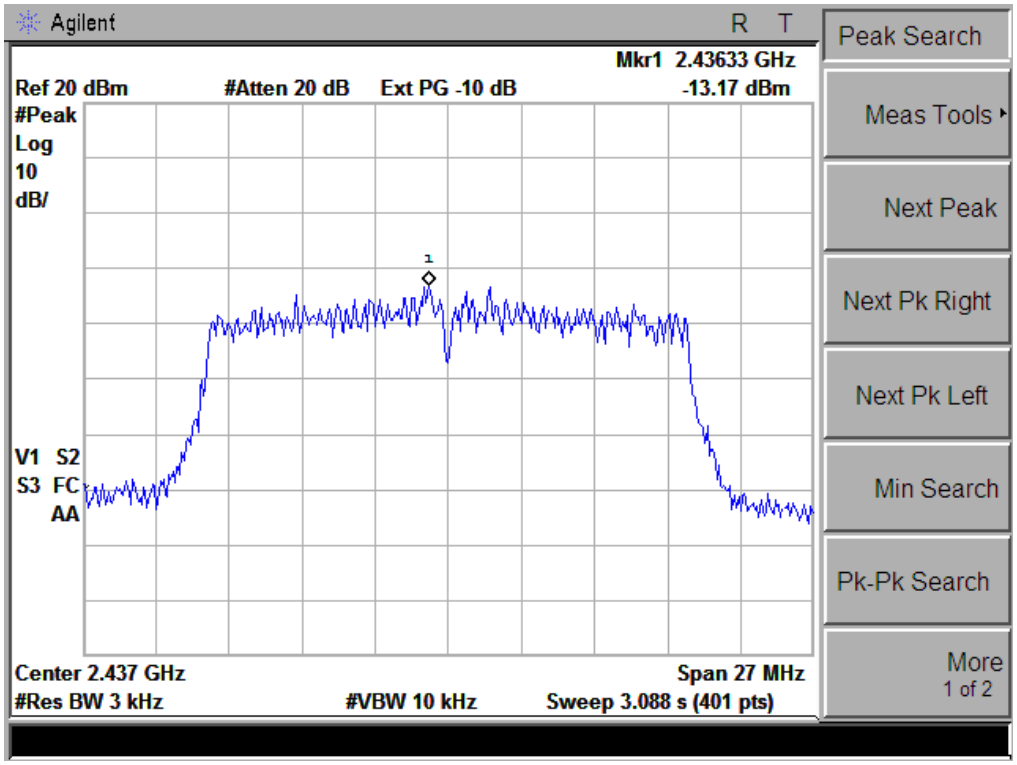
EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	60%
Pressure：	1015 hPa	Test Voltage ：	DC 5V from adapter AC120V/60Hz
Test Mode ：	TX n Mode（HT-20） /CH01, CH06, CH11		

Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-14.77	8	PASS
2437 MHz	-13.17	8	PASS
2462 MHz	-14.11	8	PASS

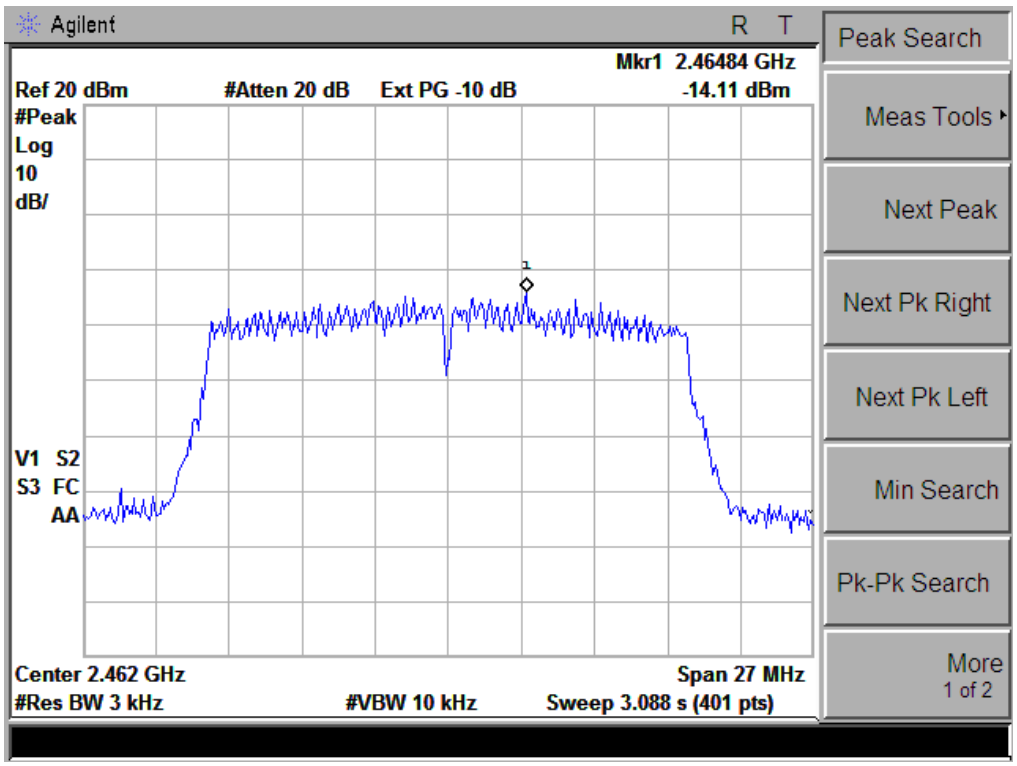
TX CH01



TX CH06



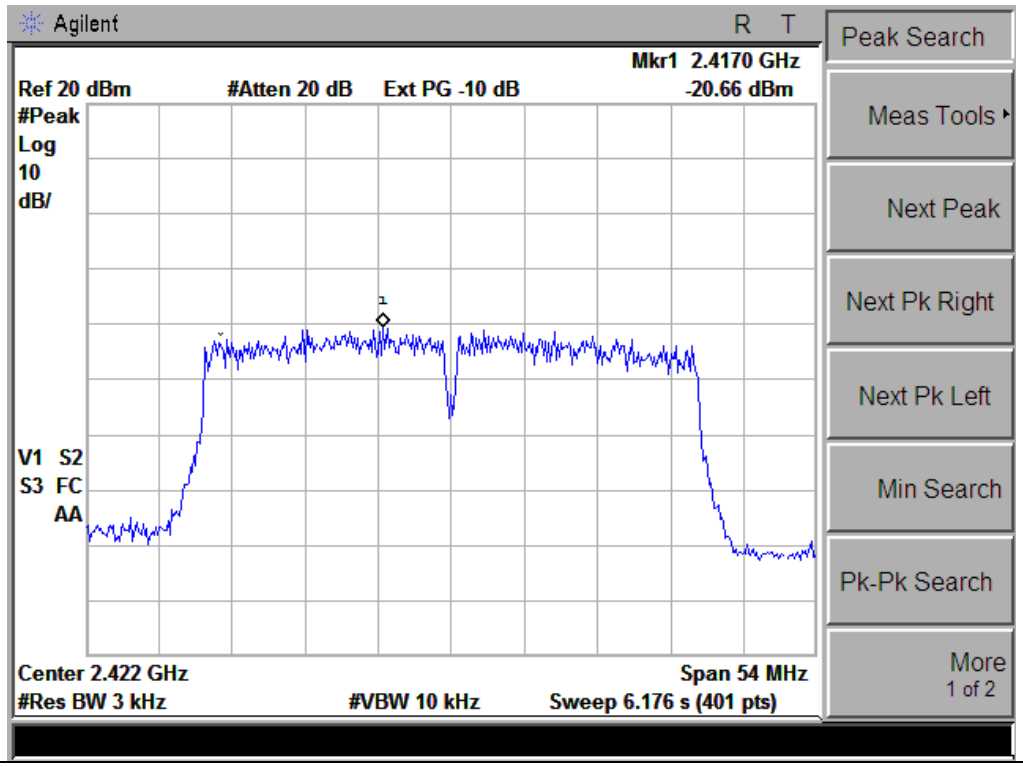
TX CH11



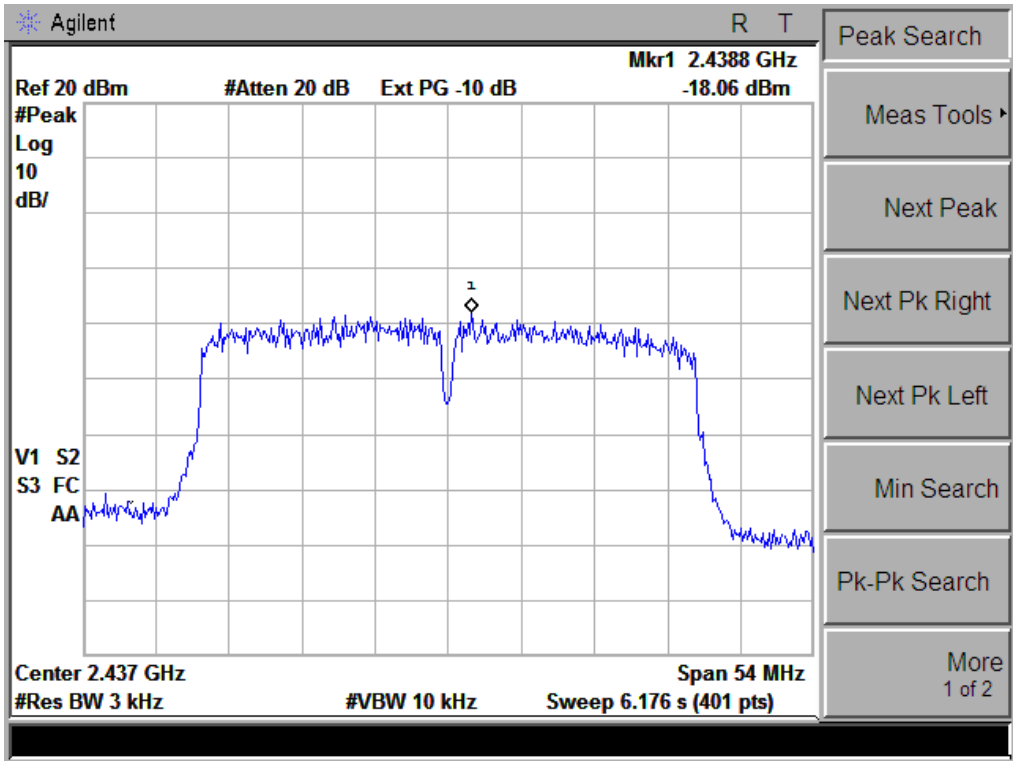
EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	60%
Pressure：	1015 hPa	Test Voltage ：	DC 5V from adapter AC120V/60Hz
Test Mode ：	TX n Mode（HT-40） /CH03, CH06, CH09		

Frequency	Power Density (dBm)	Limit (dBm)	Result
2422 MHz	-20.66	8	PASS
2437 MHz	-18.06	8	PASS
2452 MHz	-20.71	8	PASS

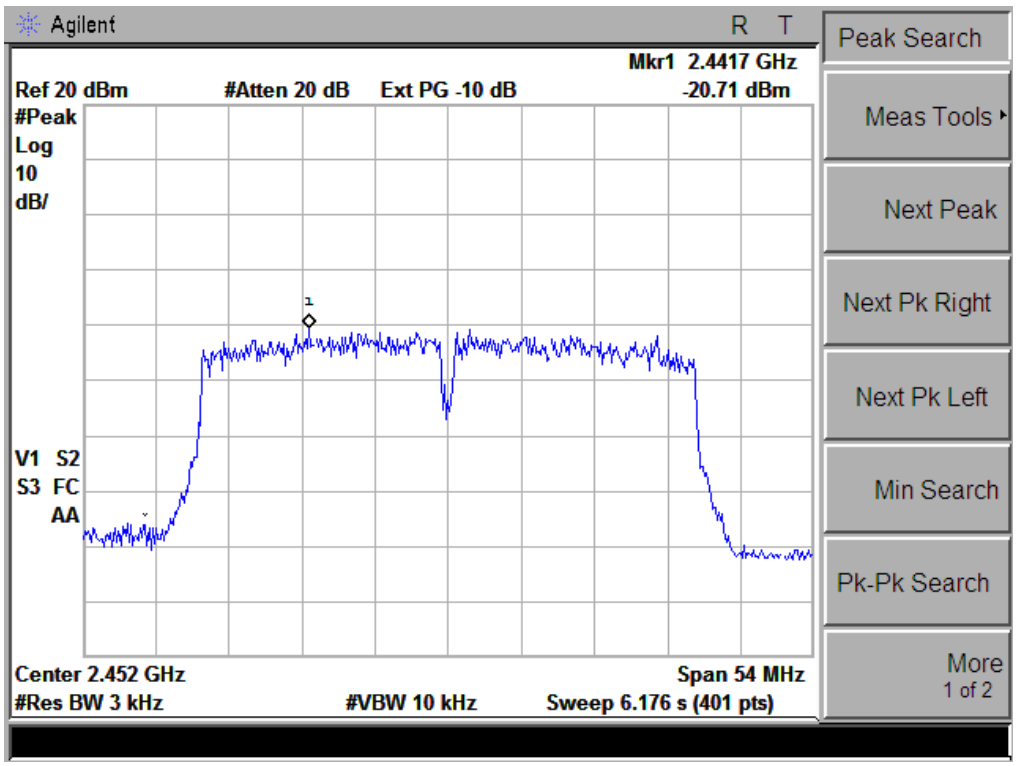
TX CH01



TX CH06



TX CH11



5. BANDWIDTH TEST

5.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	>= 500KHz (6dB bandwidth)	2400-2483.5	PASS

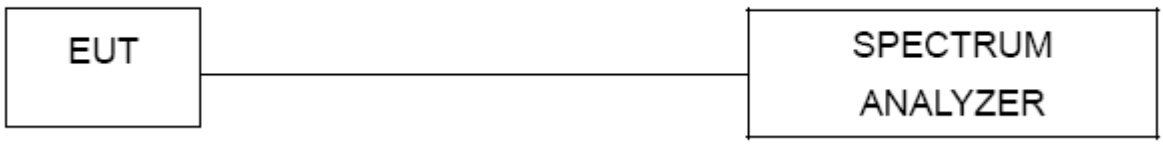
5.1.1 TEST PROCEDURE

1. Set RBW = 100 kHz
2. Set the video bandwidth (VBW) ≥ 3 x RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP



5.1.4 EUT OPERATION CONDITIONS

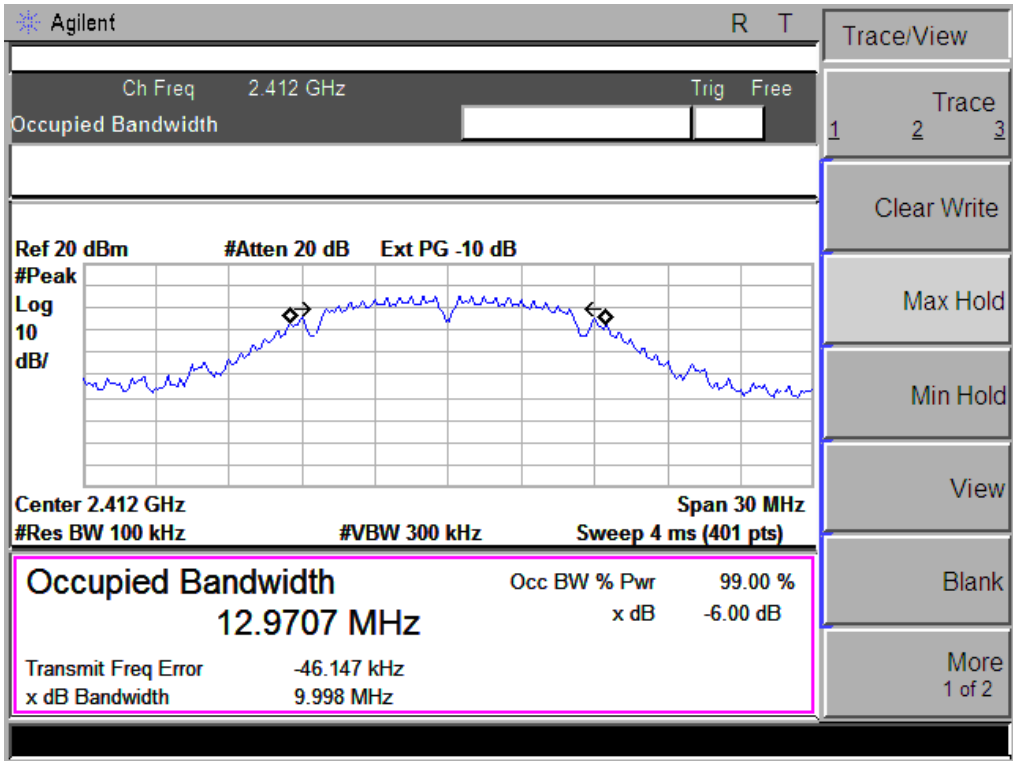
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

5.1.5 TEST RESULTS

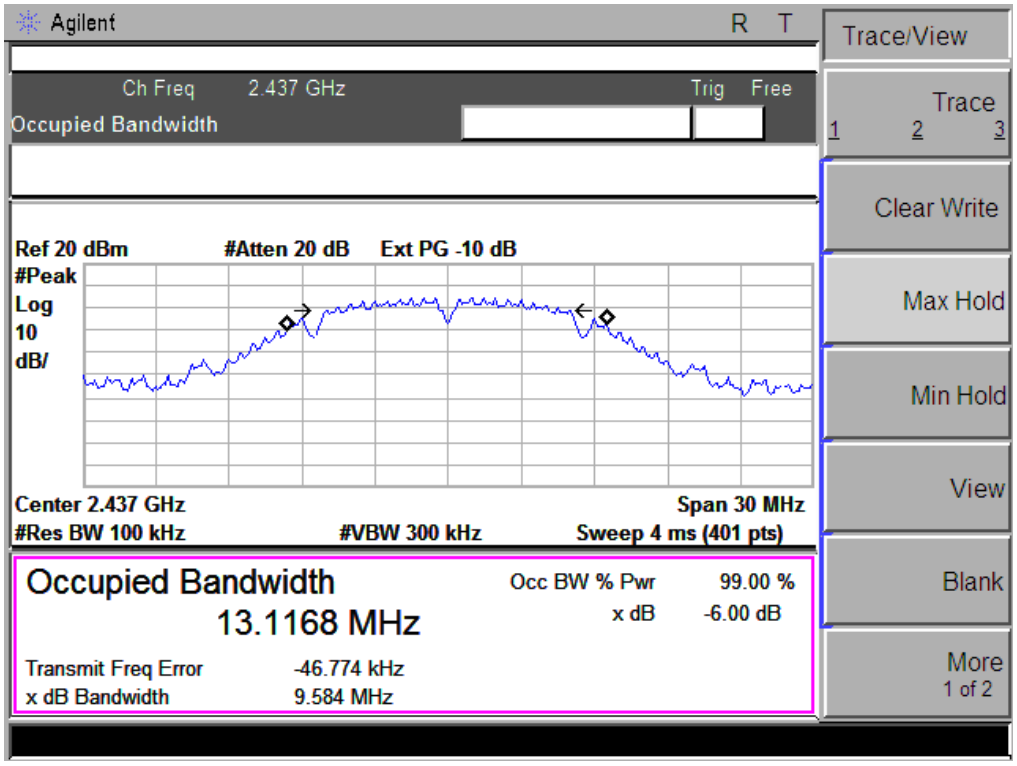
EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 5V from adapter AC120V/60Hz
Test Mode ：	TX b Mode /CH01, CH06, CH11		

Frequency	6dB Bandwidth (MHz)	Channel Separation (MHz)	Result
2412 MHz	10.00	>=500KHz	**PASS**
2437 MHz	9.58	>=500KHz	**PASS**
2462 MHz	9.61	>=500KHz	**PASS**

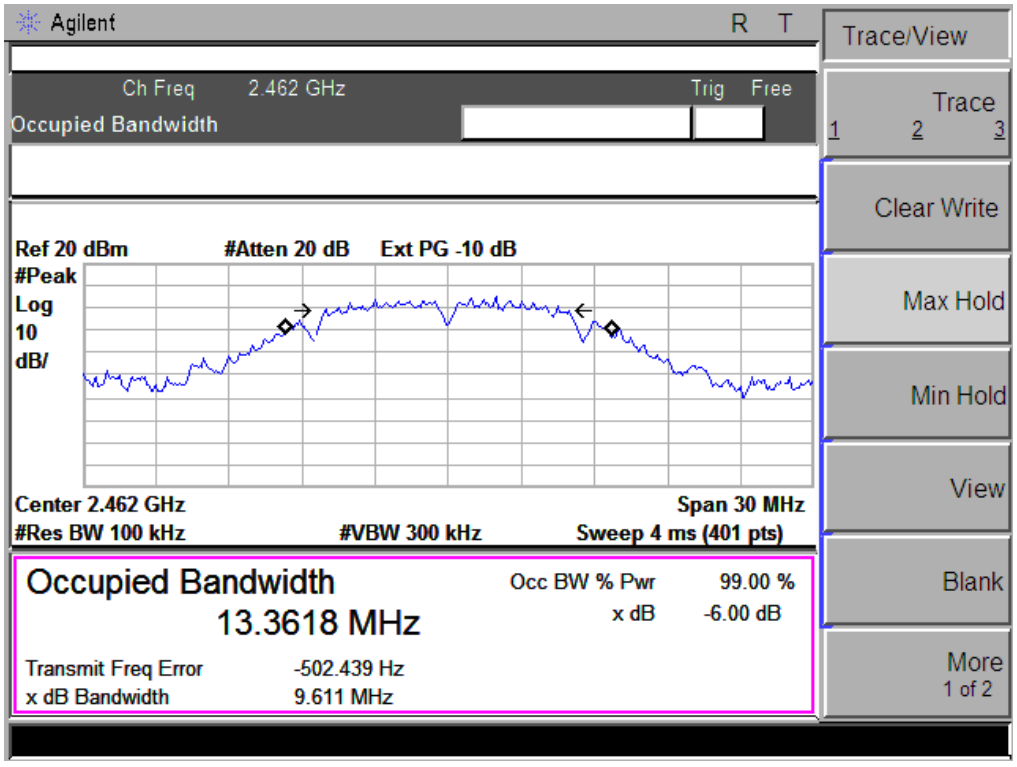
TX CH 01



TX CH 06



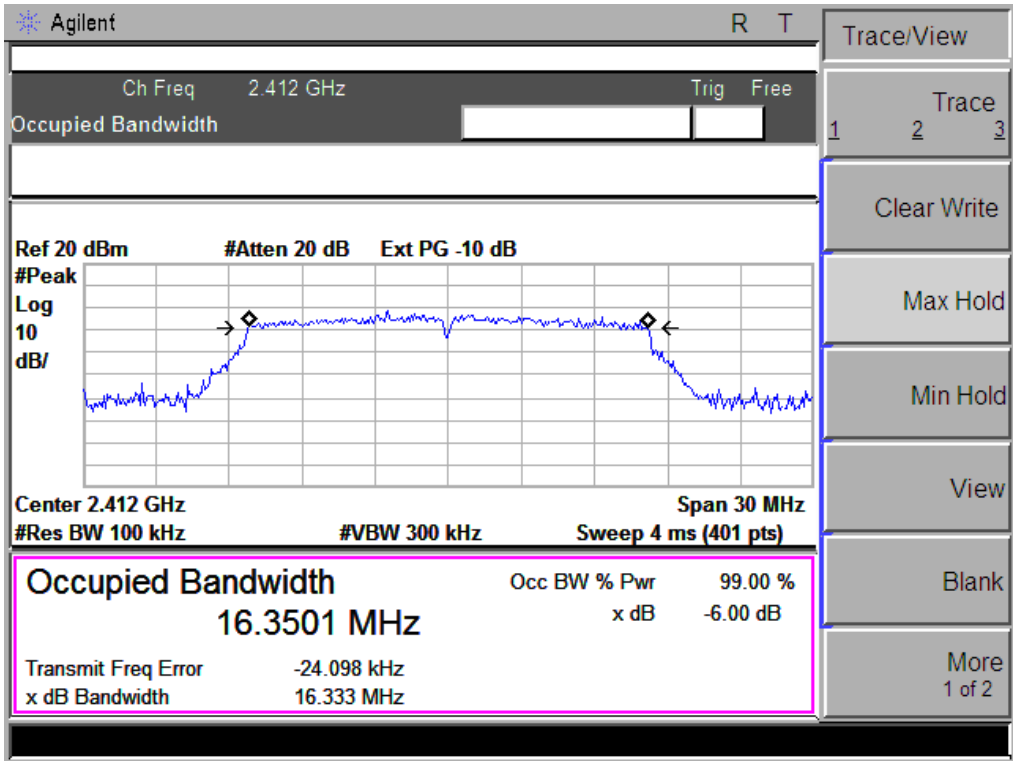
TX CH 11



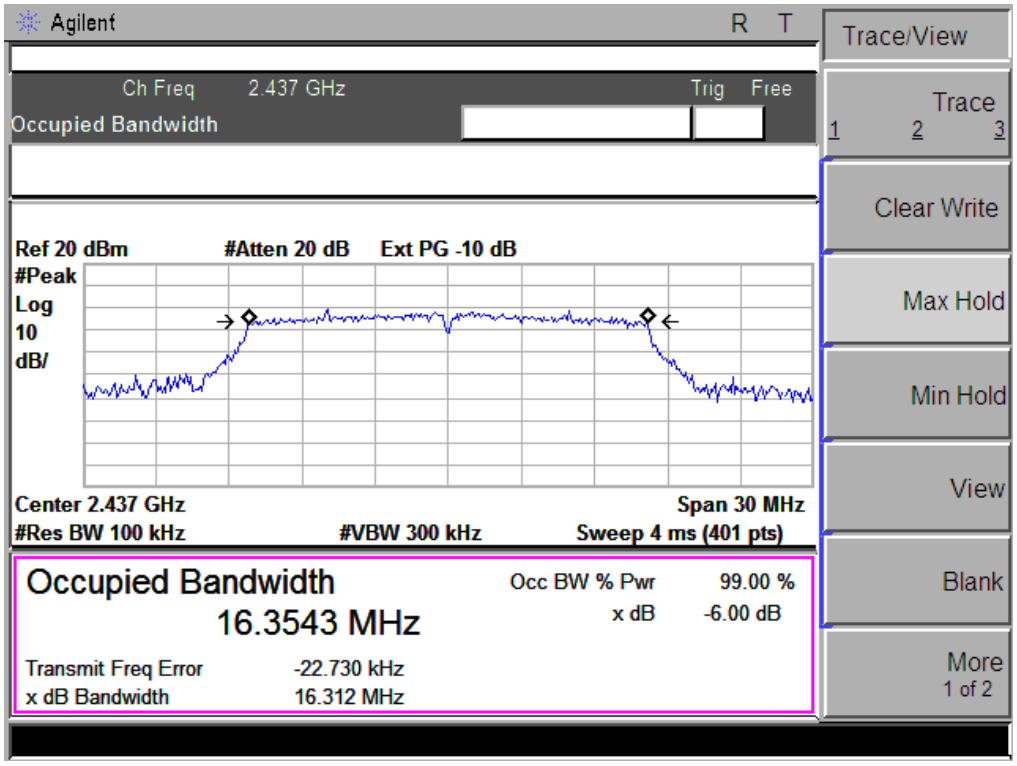
EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 5V from adapter AC120V/60Hz
Test Mode ：	TX g Mode /CH01, CH06, CH11		

Frequency	6dB Bandwidth (MHz)	Channel Separation (MHz)	Result
2412 MHz	16.35	>=500KHz	**PASS**
2437 MHz	16.31	>=500KHz	**PASS**
2462 MHz	16.10	>=500KHz	**PASS**

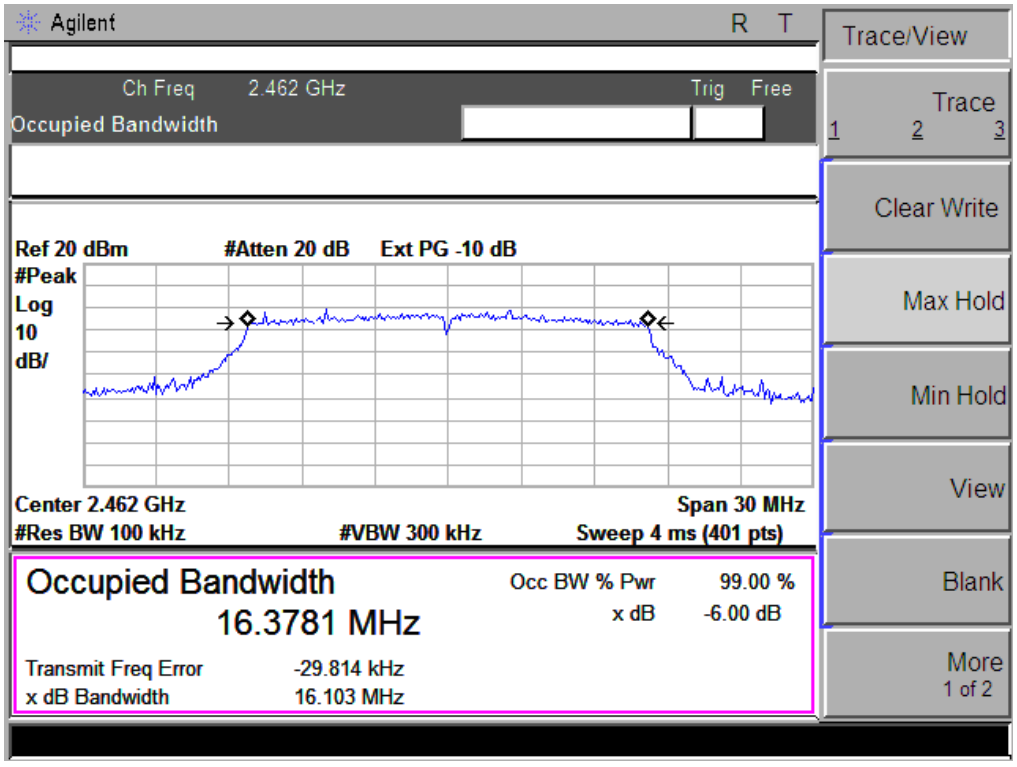
TX CH 01



TX CH 06



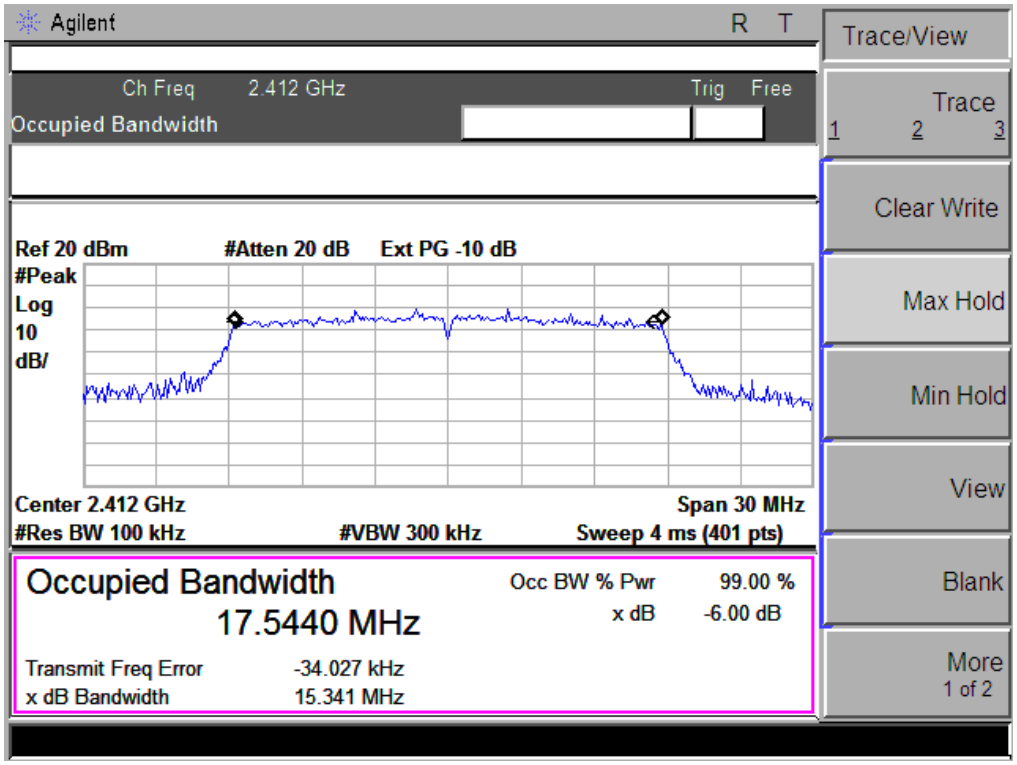
TX CH 11



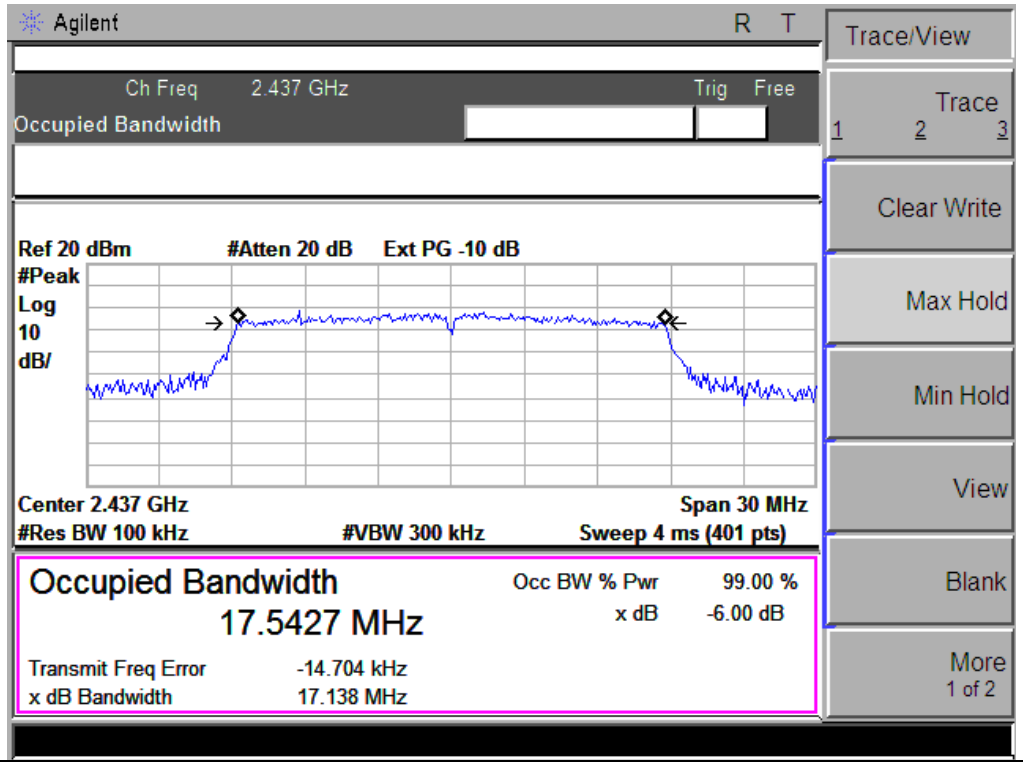
EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 5V from adapter AC120V/60Hz
Test Mode ：	TX n Mode（HT-20） /CH01, CH06, CH11		

Frequency	6dB Bandwidth (MHz)	Channel Separation (MHz)	Result
2412 MHz	15.34	>=500KHz	**PASS**
2437 MHz	17.14	>=500KHz	**PASS**
2462 MHz	17.60	>=500KHz	**PASS**

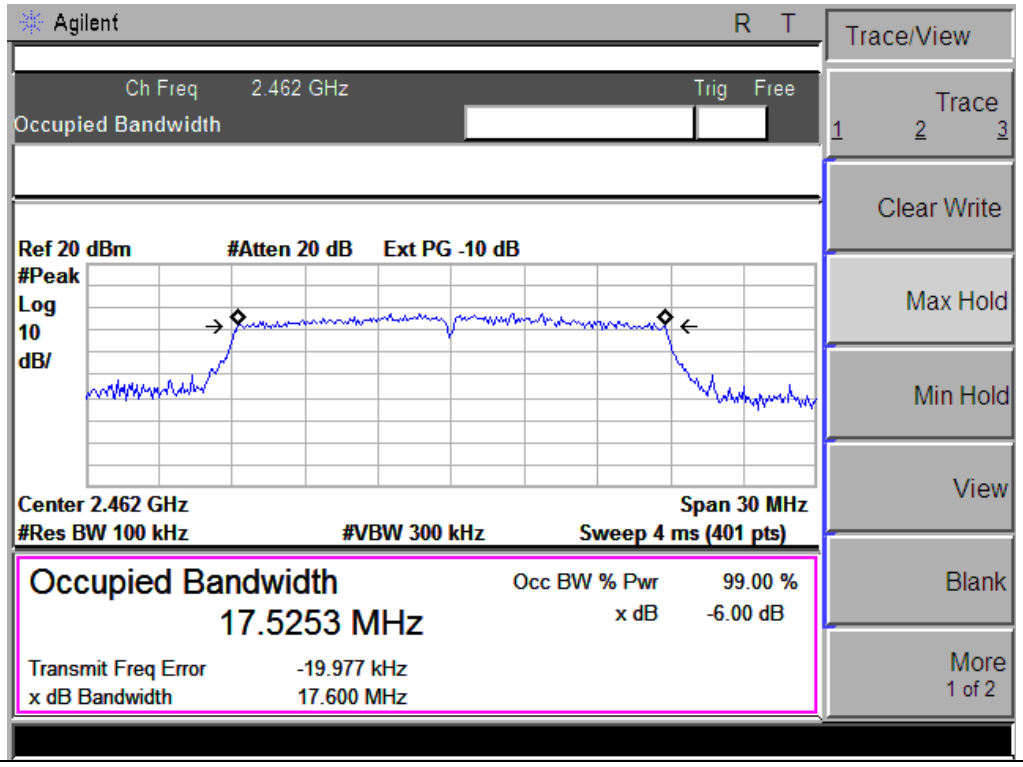
TX CH 01



TX CH 06



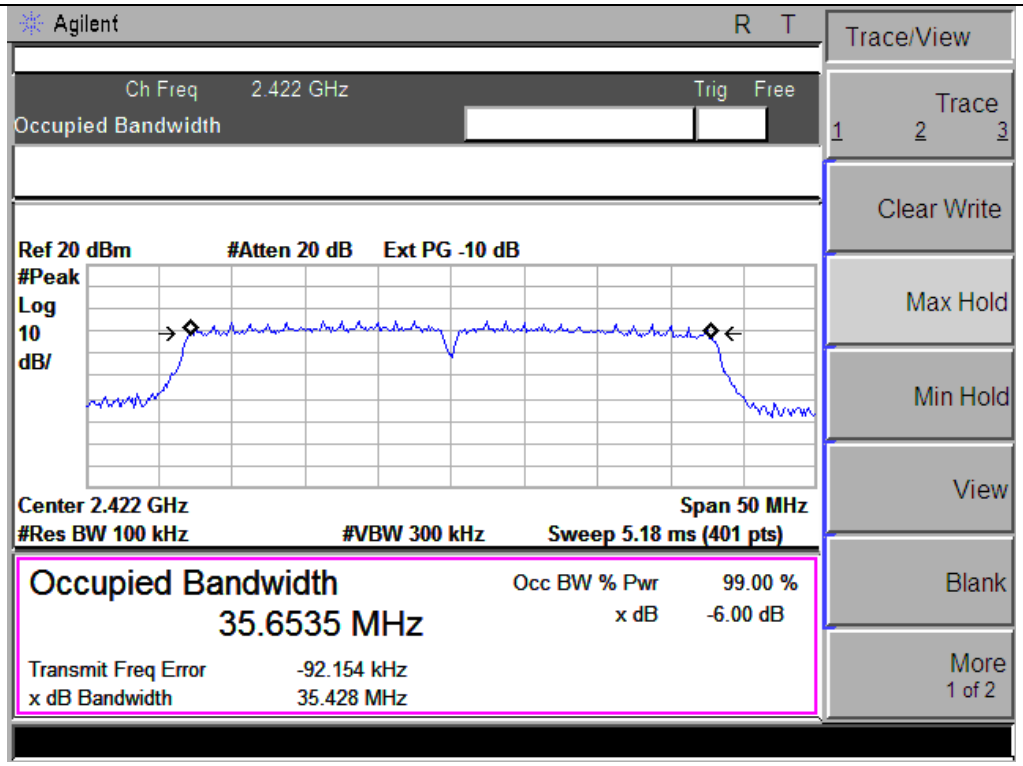
TX CH 11



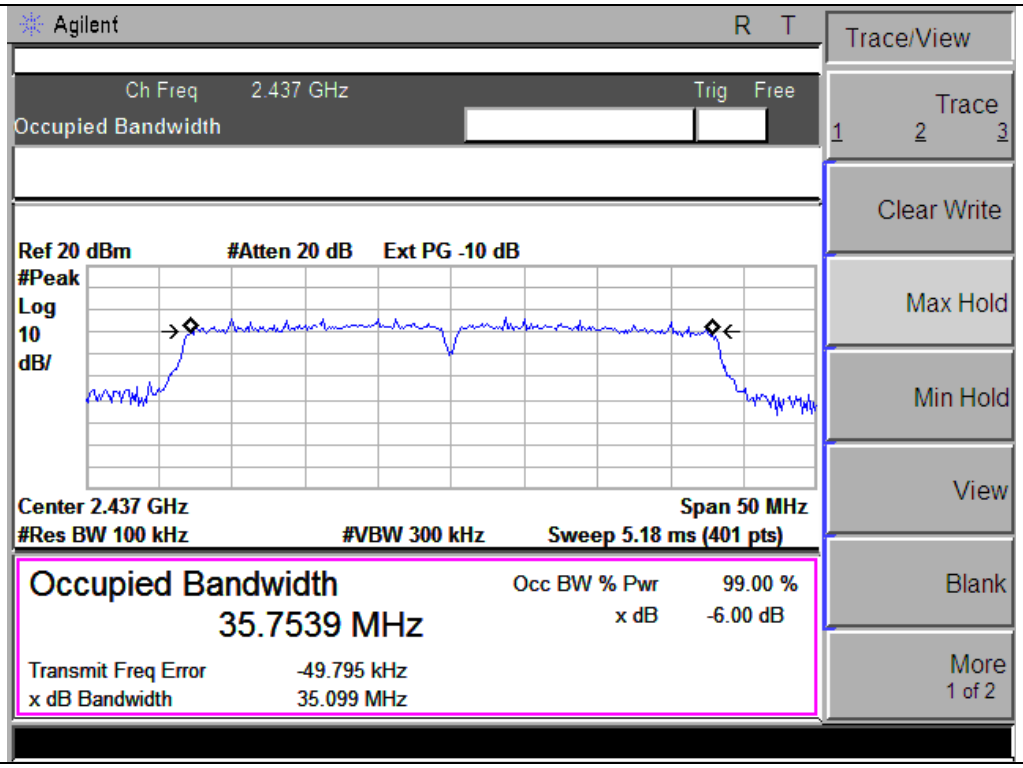
EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	20 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 5V from adapter AC120V/60Hz
Test Mode ：	TX n Mode（HT-40） /CH03, CH06, CH09		

Frequency	6dB Bandwidth (MHz)	Channel Separation (MHz)	Result
2422 MHz	35.43	>=500KHz	**PASS**
2437 MHz	35.10	>=500KHz	**PASS**
2452 MHz	35.35	>=500KHz	**PASS**

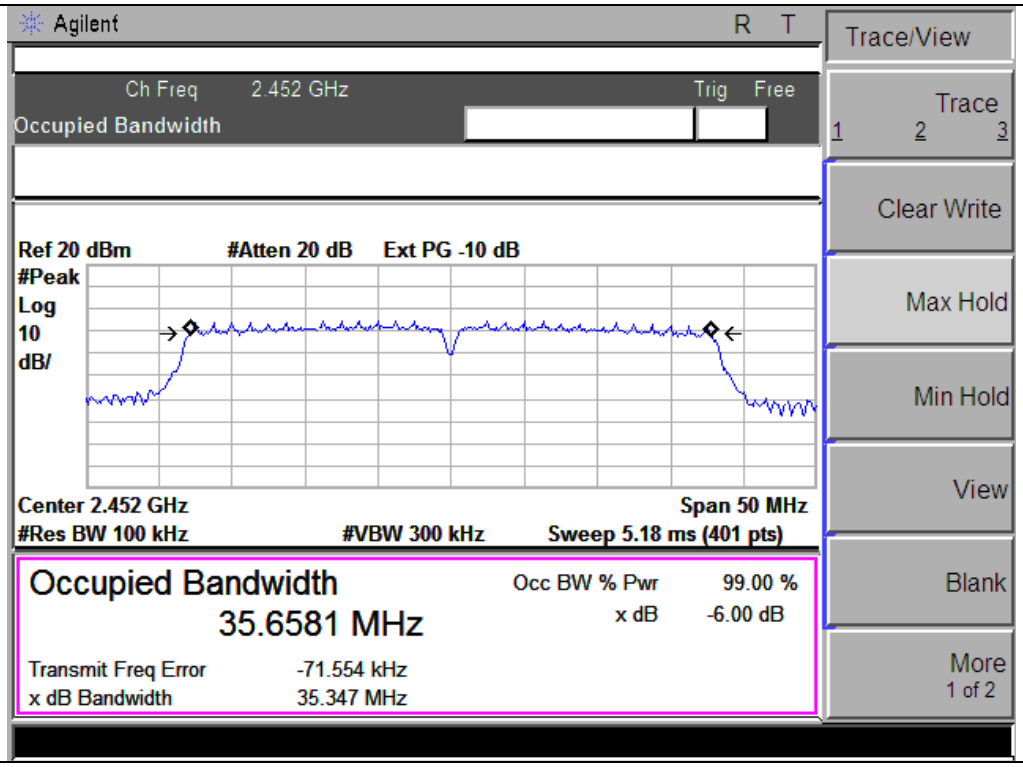
TX CH 01



TX CH 06



TX CH 11



6. PEAK OUTPUT POWER TEST

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Peak Output Power	1 watt or 30dBm	2400-2483.5	PASS

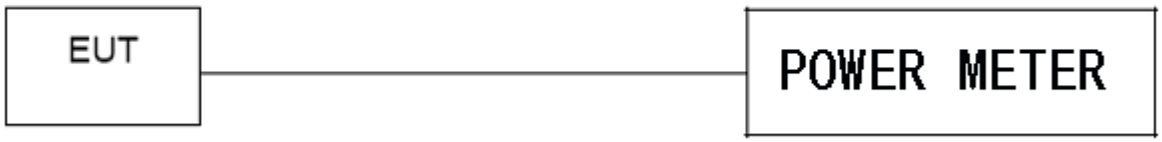
6.1.1 TEST PROCEDURE

a. The EUT was directly connected to the Power meter

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



6.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

6.1.5 TEST RESULTS

EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 5V from adapter AC120V/60Hz
Test Mode ：	TX b/g/n		

TX 802.11b Mode			
Test Channe	Frequency	Maximum Peak Conducted Output Power	LIMIT
	(MHz)	(dBm)	dBm
CH01	2412	9.31	30
CH06	2437	9.32	30
CH11	2462	9.28	30
TX 802.11g Mode			
CH01	2412	8.41	30
CH06	2437	8.47	30
CH11	2462	8.39	30
TX 802.11n20 Mode			
CH01	2412	8.28	30
CH06	2437	8.35	30
CH11	2462	8.24	30

TX 802.11n40 Mode			
CH03	2422	7.76	30
CH06	2437	7.82	30
CH09	2452	7.71	30

7. 100 KHZ BANDWIDTH OF FREQUENCY BAND EDGE

APPLICABLE STANDARD

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 a radiated 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, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

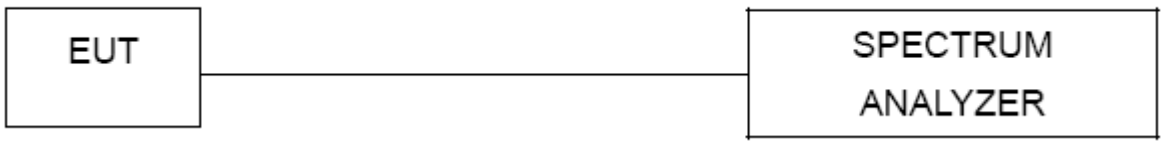
TEST PROCEDURE

a) Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
b) Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
c) Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
d) Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
e) Repeat above procedures until all measured frequencies were complete.

7.1 DEVIATION FROM STANDARD

No deviation.

7.2 TEST SETUP



7.3 EUT OPERATION CONDITIONS

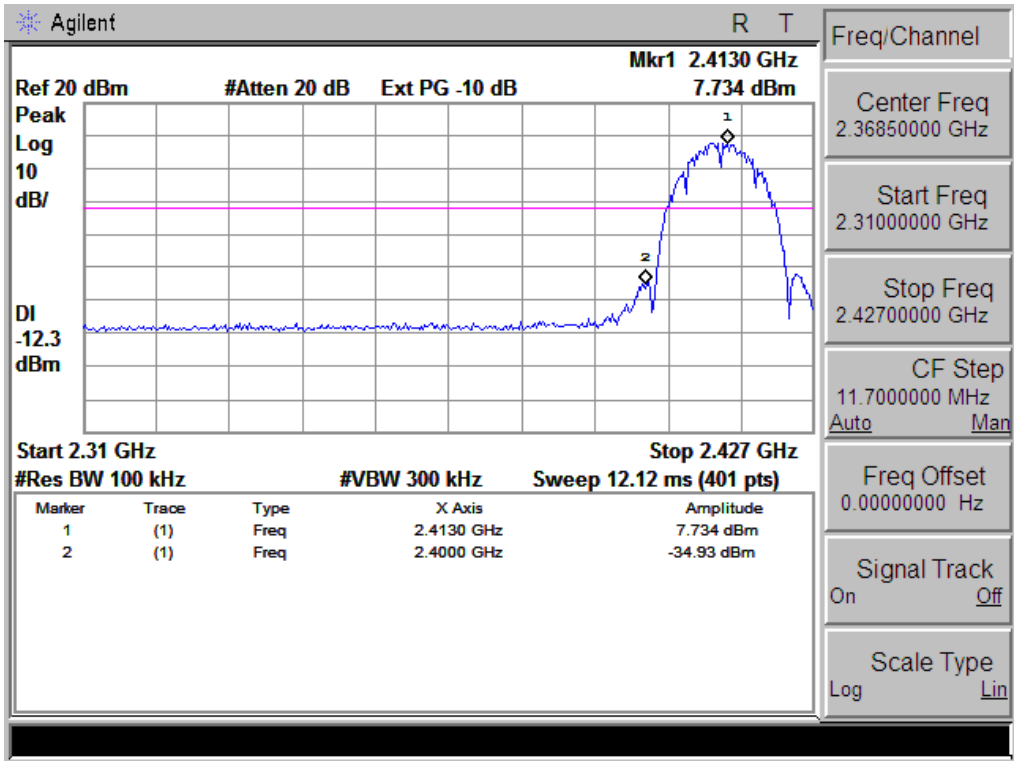
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

7.4 TEST RESULTS

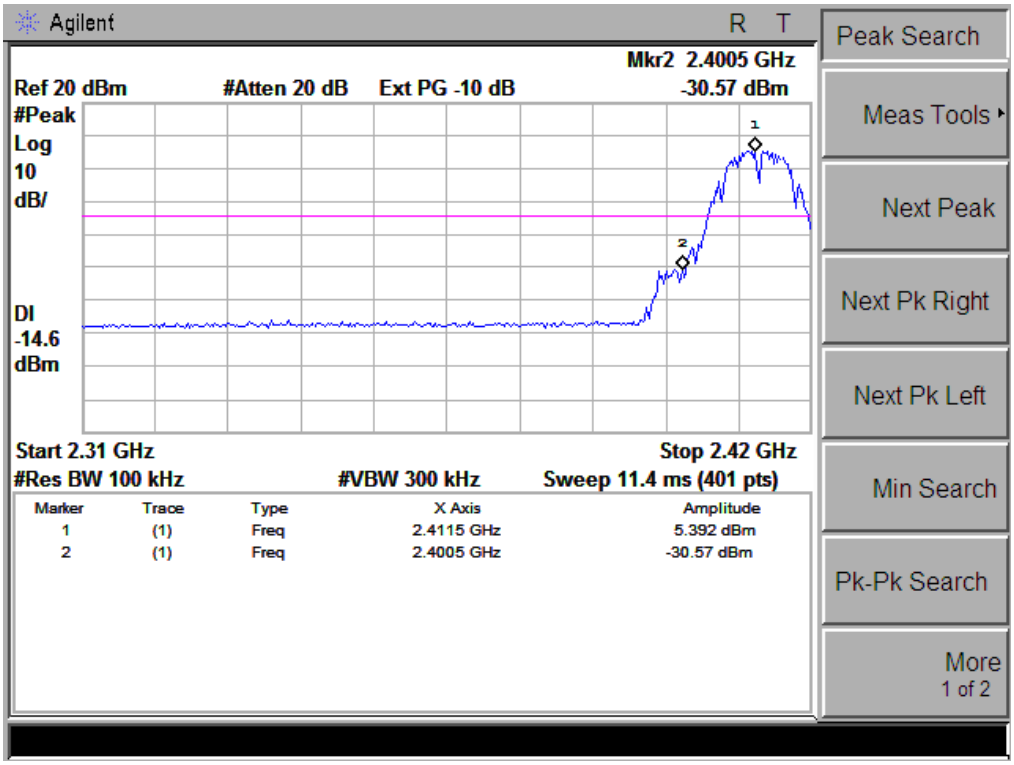
EUT：	WCDMA 3G SMART PHONE	Model Name ：	A9
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 3.7V

Frequency Band	Delta Peak to band emission (dBc)	＞Limit (dBc)	Result
802.11b mode			
Left-band		20	Pass
Right-band		20	Pass
802.11g mode			
Left-band		20	Pass
Right-band		20	Pass
802.11n-HT20 mode			
Left-band		20	Pass
Right-band		20	Pass
802.11n-HT40 mode			
Left-band		20	Pass
Right-band		20	Pass

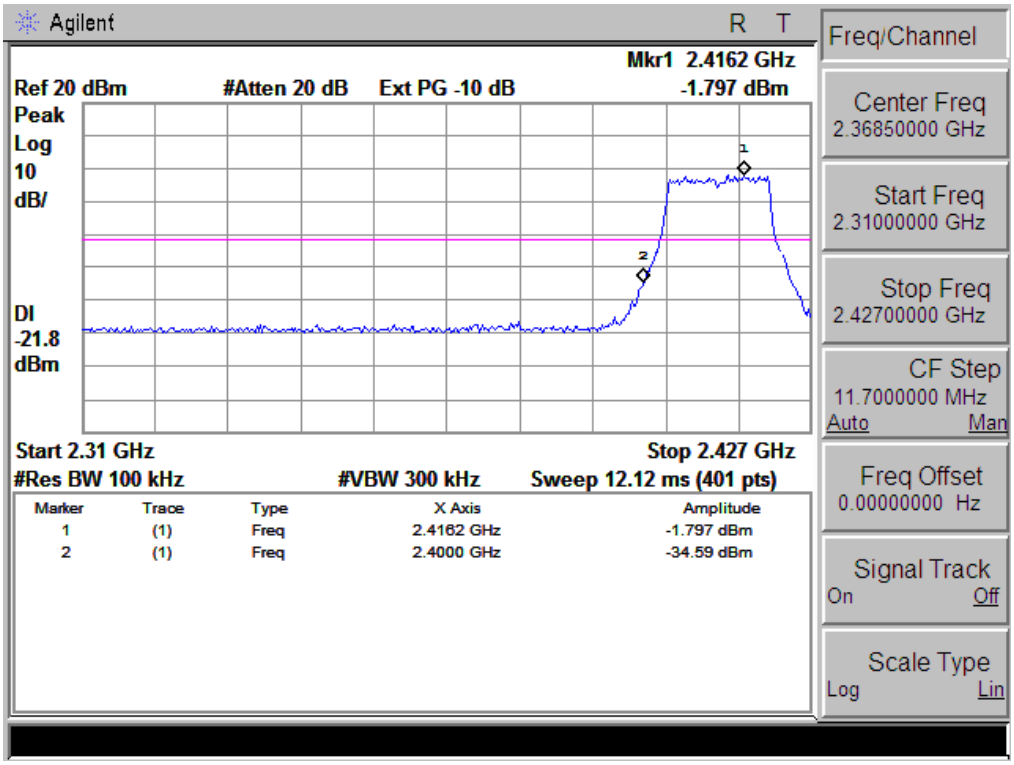
802.11b: Band Edge, Left Side



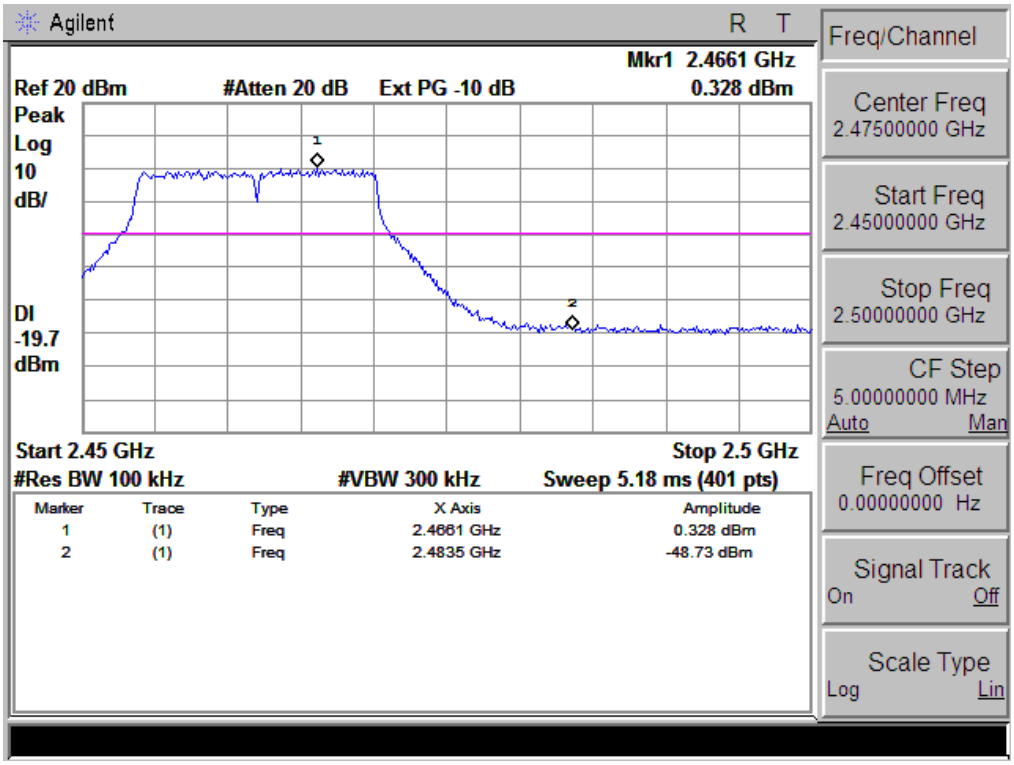
802.11b: Band Edge, Right Side



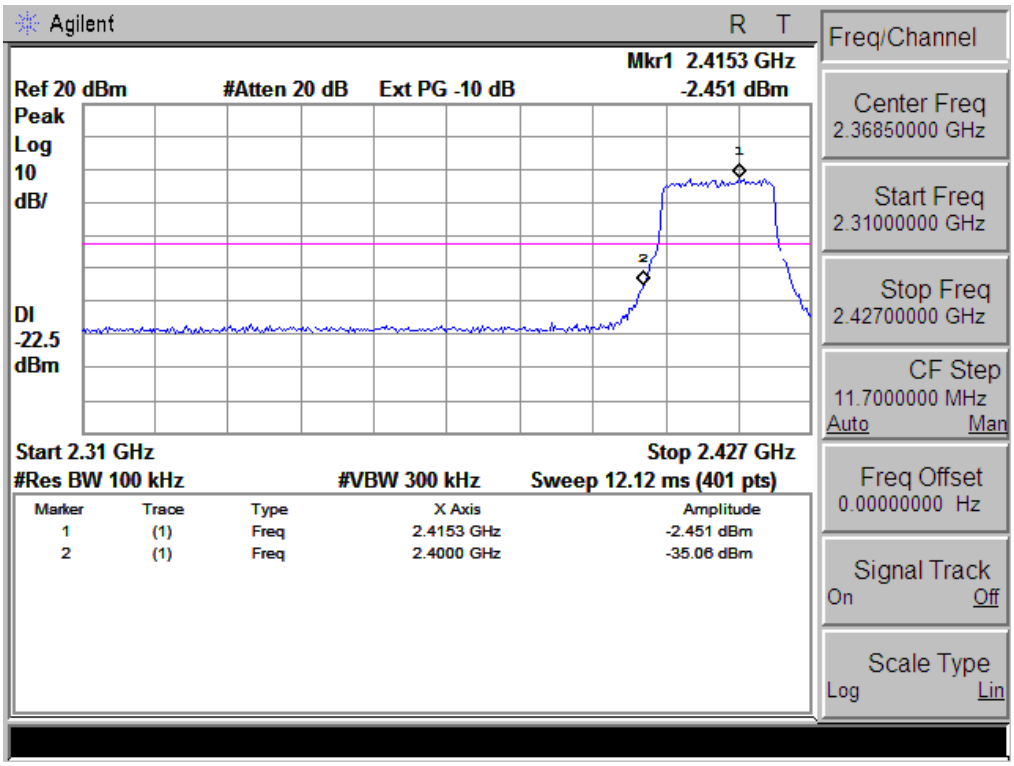
802.11g: Band Edge, Left Side



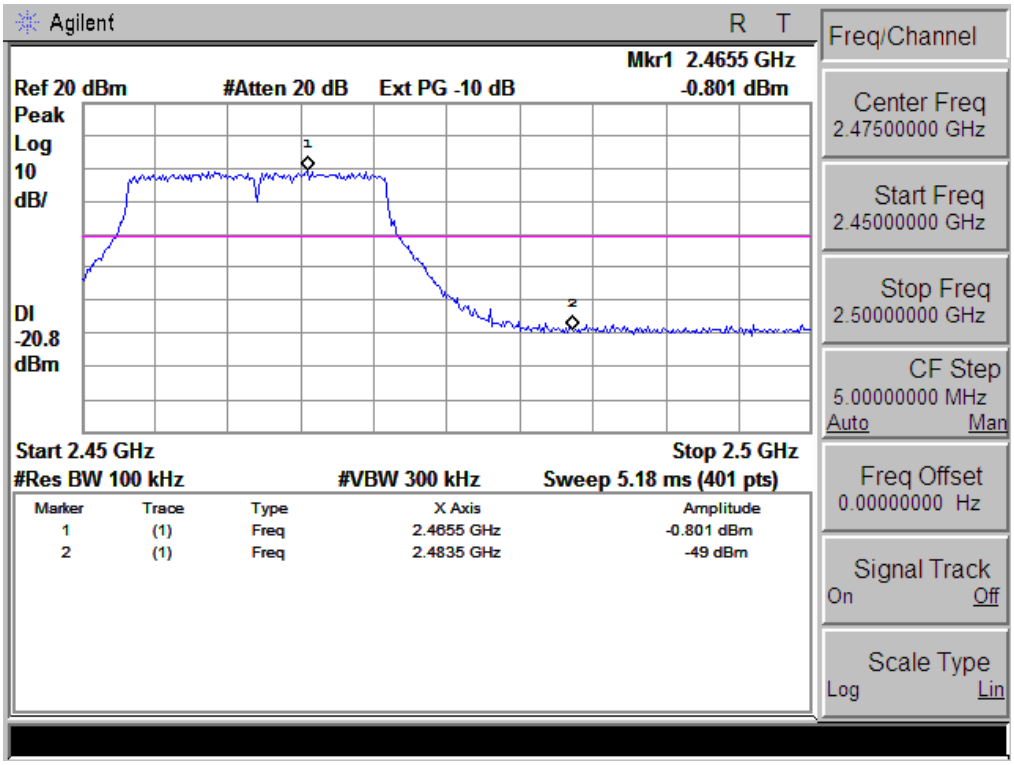
802.11g: Band Edge, Right Side



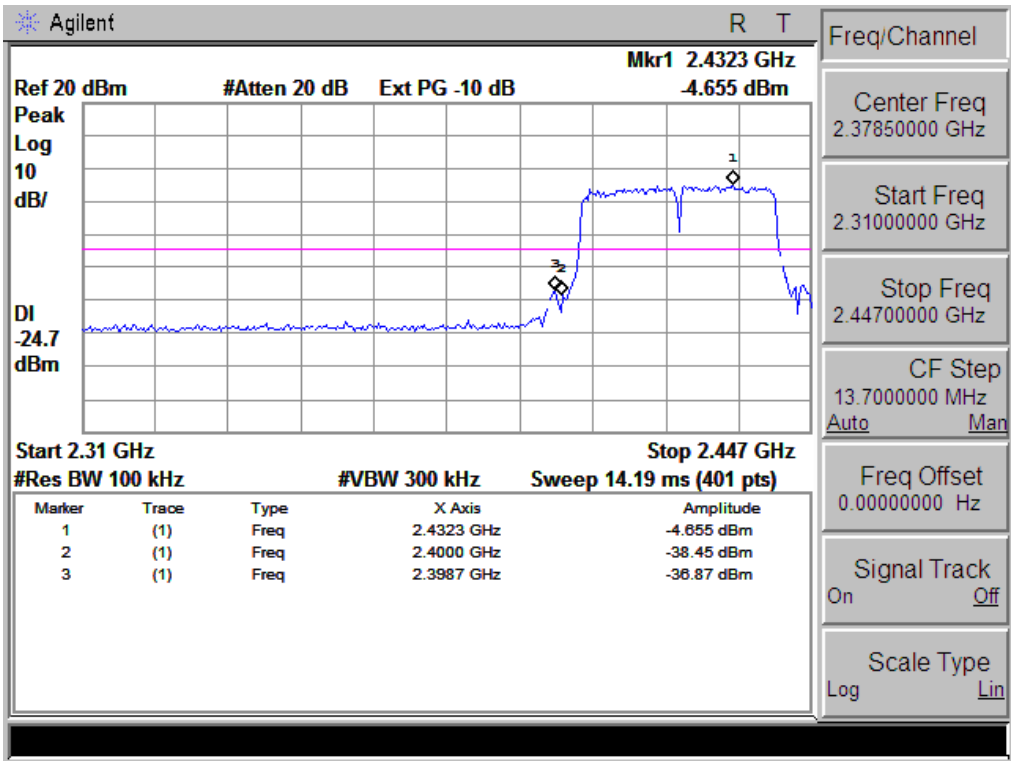
802.11n-HT20: Band Edge, Left Side



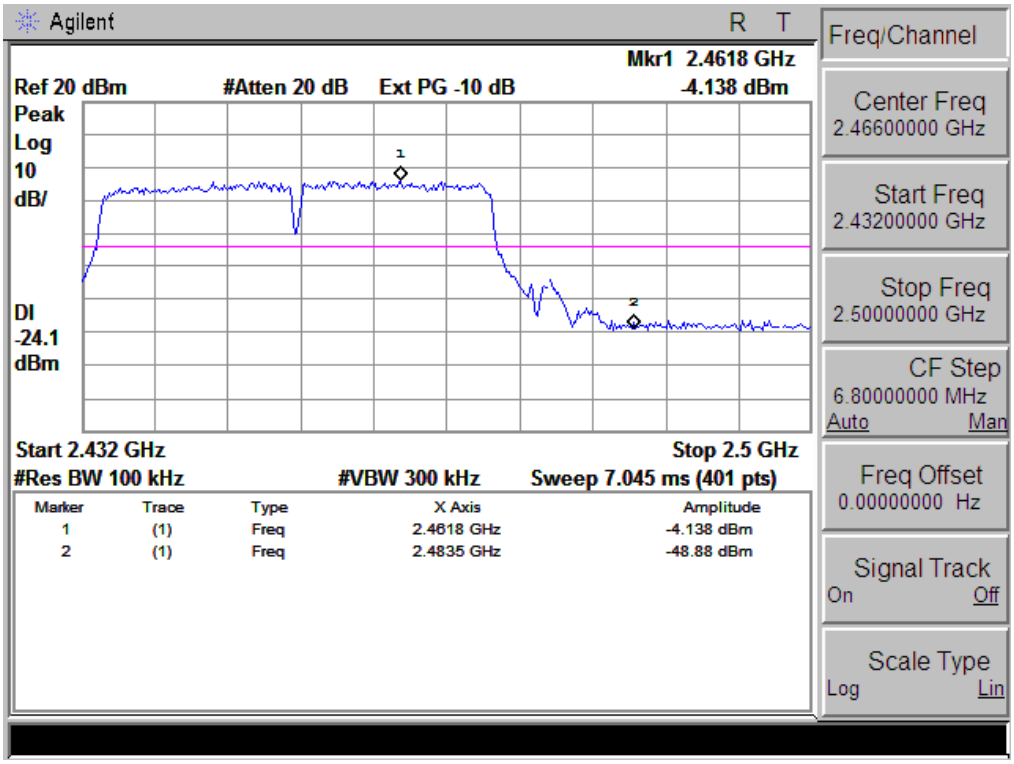
802.11n-HT20: Band Edge, Right Side



802.11n-HT40: Band Edge, Left Side



802.11n-HT40: Band Edge, Right Side



8. ANTENNA REQUIREMENT

8.1 STANDARD REQUIREMENT

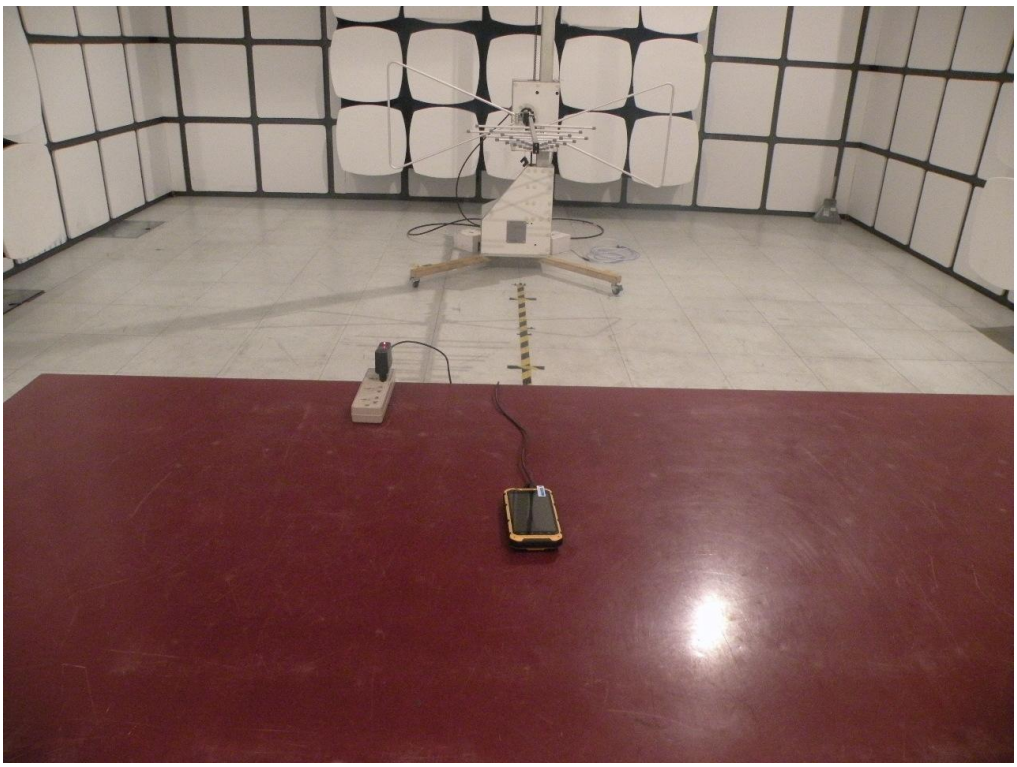
15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

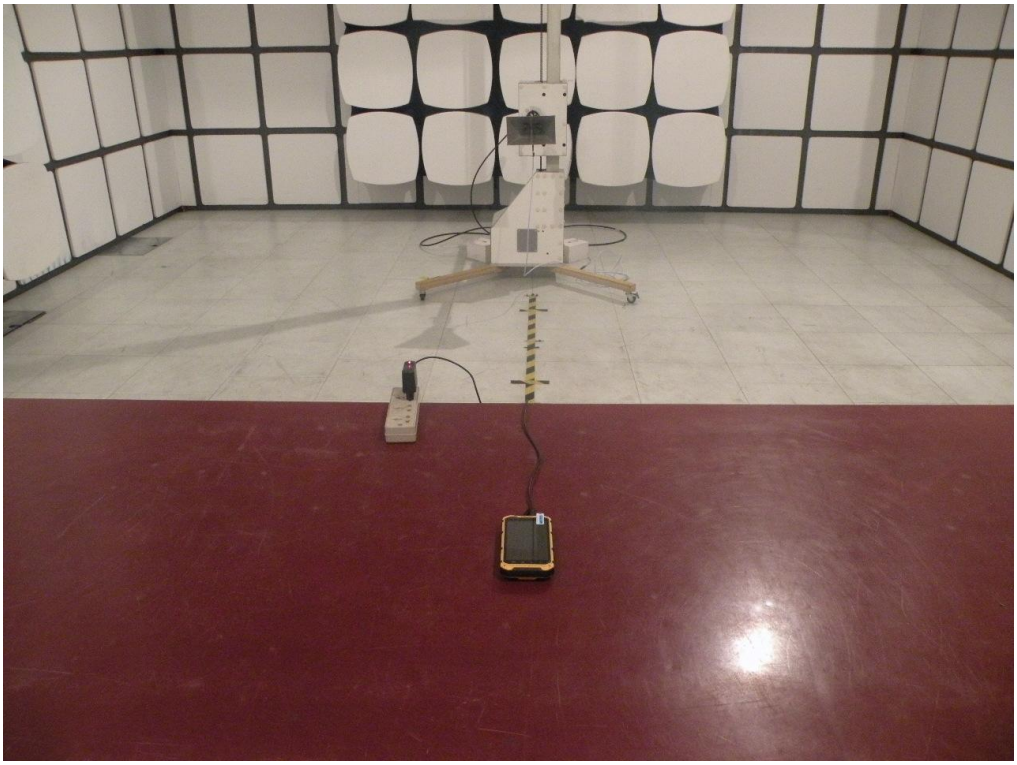
8.2 EUT ANTENNA

The EUT antenna is Integrated(FPCB) antenna. It comply with the standard requirement.

9. EUT TEST PHOTO

Radiated Measurement Photos





Conducted Measurement Photos