



FCC RADIO TEST REPORT

FCC ID: OLEU511

Of

Product Name: 3G MOBILE PHONE

Brand Name: unnecto™

Model No.: U511

Series Model: N/A

Test Report Number: STS1411047F03

Issued for

PARKTEL FZE

WAREHOUSE NO:FF01,ROUND ABOUT NO:05,JEBEL ALI FREEZONE DUBAI U.A.E

Issued by

Shenzhen STS Test Services Co., Ltd.

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All Test Data Presented in this report is only applicable to presented Test sample.**

TEST RESULT CERTIFICATION

Applicant's name : PARKTEL FZE
Address : WAREHOUSE NO:FF01,ROUND ABOUT NO:05,JEBEL ALI
 FREEZONE DUBAI U.A.E
Manufacture's Name..... : SHENZHEN UNI-ONE ELECTRONIC CO.,LTD
Address : 5/F,BLDG A2,KEXING SCIENCE PARK,KEYUAN RD.,HI-TECH
 PARK SHENZHEN,P.R.CHINA

Product description

Product name : 3G MOBILE PHONE
Model and/or type reference : U511
Serial Model : N/A

Standards : FCC Part15.247

Test procedure ANSI C63.10-2009

This device described above has been tested by STS, 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 : 19 Nov.. 2014 ~24 Nov. 2014

Date of Issue..... : 24 Nov. 2014

Test Result..... : **Pass**

Testing Engineer : _____



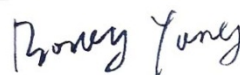
(Tony Liu)

Technical Manager : _____



(Vita Li)

Authorized Signatory : _____



(Bovey Yang)



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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) (reference KDB 558074 d05 v02. /9.1.2)	Peak Output Power	PASS	
15.247 (c)	Radiated Spurious Emission	PASS	
15.247 (d)	Conducted Spurious Emission	PASS	
15.247 (e)	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

Shenzhen STS Test Services Co., Ltd.

Add. : 1/F, Building 2, Zhuoke Science Park, Chongqing Road, Fuyong, Baoan District, Shenzhen, China.

FCC Registration No.: 842334

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded 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	$\pm 1.38\text{dB}$
2	RF power,conducted	$\pm 0.16\text{dB}$
3	Spurious emissions,conducted	$\pm 0.21\text{dB}$
4	All emissions,radiated(<1G)	$\pm 4.68\text{dB}$
5	All emissions,radiated(>1G)	$\pm 4.89\text{dB}$
6	Temperature	$\pm 0.5^{\circ}\text{C}$
7	Humidity	$\pm 2\%$

2.GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	3G MOBILE PHONE	
Trade Name	unnecto TM	
Model Name	U511	
Serial Model	N/A	
Model Difference	N/A	
Product Description	The EUT is a 3G MOBILE PHONE	
	Operation Frequency:	802.11b/g/n 20: 2412~2462 MHz 802.11n 40: 2422~2452MHz
	Modulation Type:	CCK/OFDM/DBPSK/DAPSK
	Bit Rate of Transmitter	802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6Mbps 802.11n(20/40MHz):300/150/144.44/130/117/115.56/104/86.67/78/52/6.5Mbps
	Number Of Channel	802.11b/g/n20: 11CH 802.11n 40: 7CH
	Antenna Designation:	Please see Note 3.
	Antenna Gain (dBi)	0 dBi
Channel List	Please refer to the Note 2.	
Ratings	DC 3.8V from battery	
Adapter	Power supply and ADP (rating) : Input:100-240V AC,50/60Hz 0.15A Output:5.0V,700mA	
Battery	Rated Voltage: 3.8V Charge Limit: 4.2V capacity :1250mAh	
Hardware version number	U01_MB_V0.1	
Software versioning number	UNI_C231_1.3_140820	
Connecting I/O Port(s)	Please refer to the User's Manual	

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	PIFA Antenna	NA	0	N/A

2.2 DESCRIPTION OF TEST MODES

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

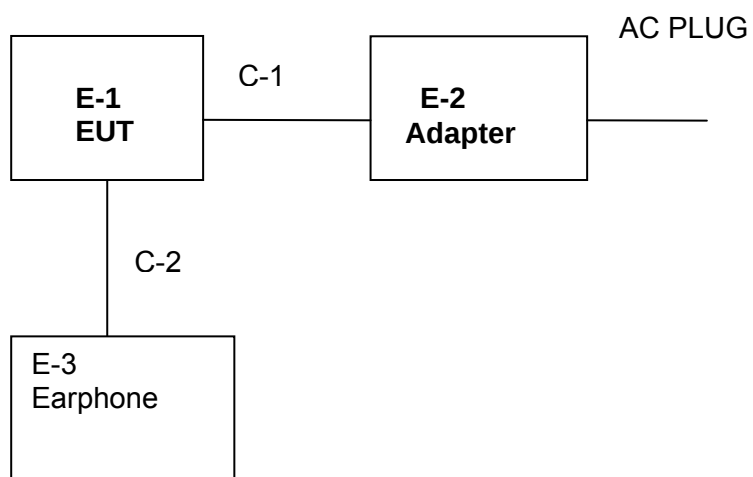
Pretest Mode	Description
Mode 1	802.11b CH1/ CH6/ CH11
Mode 2	802.11g CH1/ CH6/ CH11
Mode 3	802.11n(20)CH1/ CH6/ CH11
Mode 4	802.11n(40) CH3/ CH6/ CH9
Mode 5	Link Mode

For Conducted Emission	
Final Test Mode	Description
Mode 5	Link Mode

For Radiated Emission	
Final Test Mode	Description
Mode 1	802.11b CH1/ CH6/ CH11
Mode 2	802.11g CH1/ CH6/ CH11
Mode 3	802.11n CH1/ CH6/ CH11
Mode 4	802.11n(40) CH3/ CH6/ CH9
Mode 5	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

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	3G MOBILE PHONE	unnecto ™	U511	N/A	EUT
E-2	Adapter	unnecto ™	CU-511	N/A	
E-3	Earphone	N/A	N/A	N/A	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	YES	1.5m	
C-2	NO	NO	1.2m	

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	2014.07.06	2015.07.05	1 year
2	Test Receiver	R&S	ESPI	101318	2014.06.07	2015.06.06	1 year
3	Bilog Antenna	TESEQ	CBL6111D	31216	2014.07.06	2015.07.05	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	2014.06.07	2015.06.06	1 year
5	Spectrum Analyzer	ADVANTEST	R3132	150900201	2014.06.07	2015.06.06	1 year
6	Horn Antenna	EM	EM-AH-10180	2011071402	2014.07.06	2015.07.05	1 year
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2014.07.06	2015.07.05	1 year
8	Amplifier	EM	EM-30180	060538	2013.12.22	2014.12.21	1 year
9	Loop Antenna	ARA	PLA-1030/B	1029	2014.06.08	2015.06.07	1 year
10	Power Meter	Agilent	5738A	11290	2014.10.25	2015.10.24	1 year
11	Power Sensor	R&S	NRP-Z21	103971	2014.10.25	2015.10.24	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	2014.06.06	2015.06.05	1 year
2	LISN	R&S	ENV216	101313	2014.08.24	2015.08.23	1 year
3	LISN	EMCO	3816/2	00042990	2014.08.24	2015.08.23	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2014.06.07	2015.06.06	1 year
5	Passive Voltage Probe	R&S	ESH2-Z3	100196	2014.06.07	2015.06.06	1 year
6	Absorbing clamp	R&S	MOS-21	100423	2014.06.08	2015.06.07	1 year

3.EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)
operating frequency band. In case the emission fall within the restricted band specified on Part 15.247&207(a) limit in the table below has to be followed.

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

0.15 -0.5	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	56.00	46.00	FCC
5.0 -30.0	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

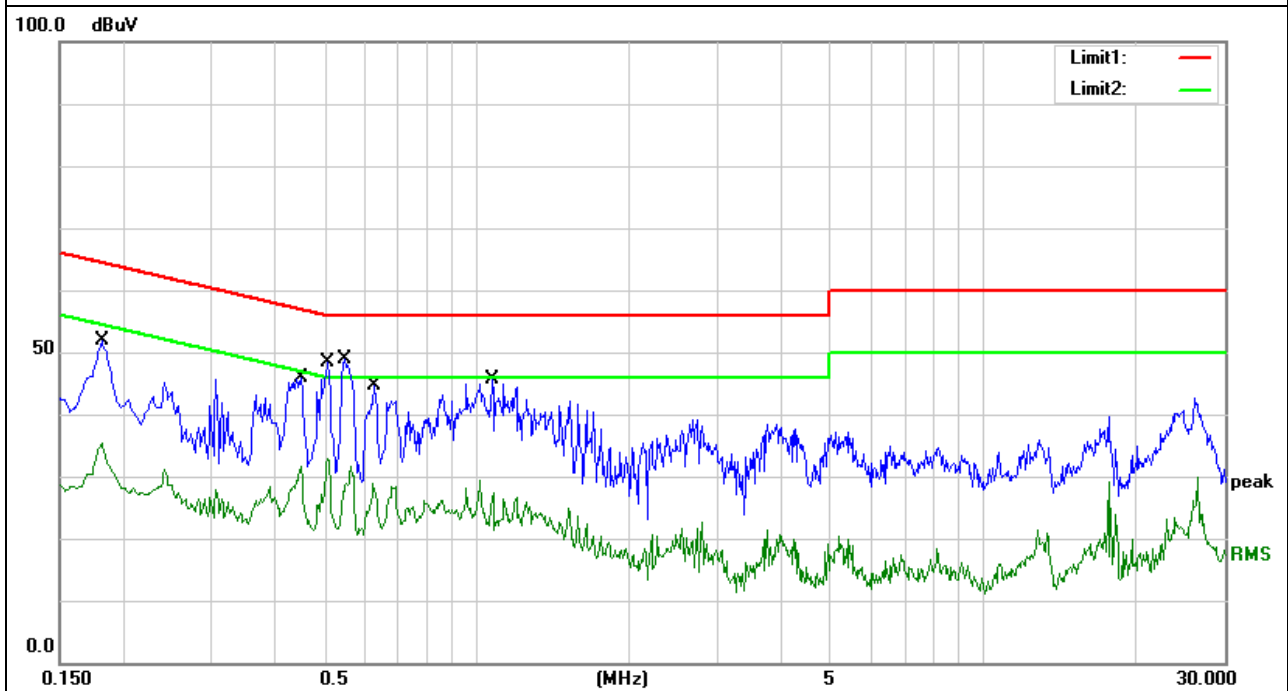
3.2 TEST RESULTS

EUT :	3G MOBILE PHONE	Model Name. :	U511
Temperature :	23 °C	Relative Humidity :	50%
Pressure :	1010hPa	Phase :	L
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode :	Mode 5

Frequency	Reading	Correct	Result	Limit	Margin	Remark
(MHz)	(dBuV)	Factor(dB)	(dBuV)	(dBuV)	(dB)	
0.1833	37.01	10.44	47.45	64.33	-16.88	QP
0.1833	23.62	10.44	34.06	54.33	-20.27	AVG
0.4503	32.82	10.41	43.23	56.87	-13.64	QP
0.4503	19.63	10.41	30.04	46.87	-16.83	AVG
0.5085	36.38	10.4	46.78	56	-9.22	QP
0.5085	22.69	10.4	33.09	46	-12.91	AVG
0.5485	35.63	10.4	46.03	56	-9.97	QP
0.5485	17.92	10.4	28.32	46	-17.68	AVG
0.6298	29.56	10.41	39.97	56	-16.03	QP
0.6298	17.4	10.41	27.81	46	-18.19	AVG
1.0756	30.94	10.41	41.35	56	-14.65	QP
1.0756	17.51	10.41	27.92	46	-18.08	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

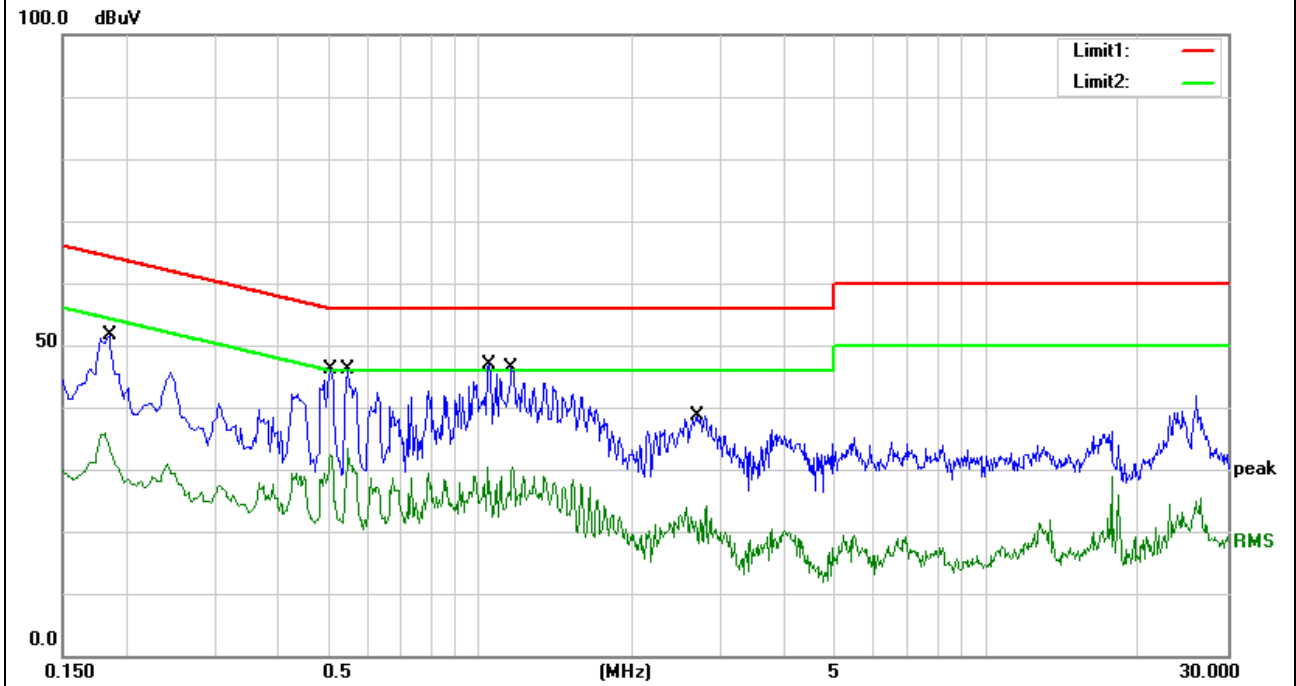


EUT :	3G MOBILE PHONE	Model Name. :	U511
Temperature :	23 °C	Relative Humidity :	50%
Pressure :	1010hPa	Phase :	N
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode :	Mode 5

Frequency	Reading	Correct	Result	Limit	Margin	Remark
(MHz)	(dBuV)	Factor(dB)	(dBuV)	(dBuV)	(dB)	
0.1835	37.15	10.39	47.54	64.33	-16.79	QP
0.1835	23.42	10.39	33.81	54.33	-20.52	AVG
0.5105	33.73	10.41	44.14	56	-11.86	QP
0.5105	20.31	10.41	30.72	46	-15.28	AVG
0.5491	33.49	10.41	43.9	56	-12.1	QP
0.5491	21.81	10.41	32.22	46	-13.78	AVG
1.0448	32.83	10.45	43.28	56	-12.72	QP
1.0448	15.47	10.45	25.92	46	-20.08	AVG
1.1601	33.05	10.45	43.5	56	-12.5	QP
1.1601	16.37	10.45	26.82	46	-19.18	AVG
2.6602	22.55	10.45	33	56	-23	QP
2.6602	8.28	10.45	18.73	46	-27.27	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.



4. RADIATED EMISSION MEASUREMENT

Radiated Emission Limits (Frequency Range 9kHz-1000MHz)

6 dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on Part 15.247&205(a), then the Part 15.247&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 B (dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	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
Detector	Peak
Start Frequency	1000 MHz (Peak/AV)
Stop Frequency	10th carrier harmonic (Peak/AV)
RB / VB (emission in restricted band)	1 MHz / 1 MHz, Average=1 MHz / 10Hz

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

4.1 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:

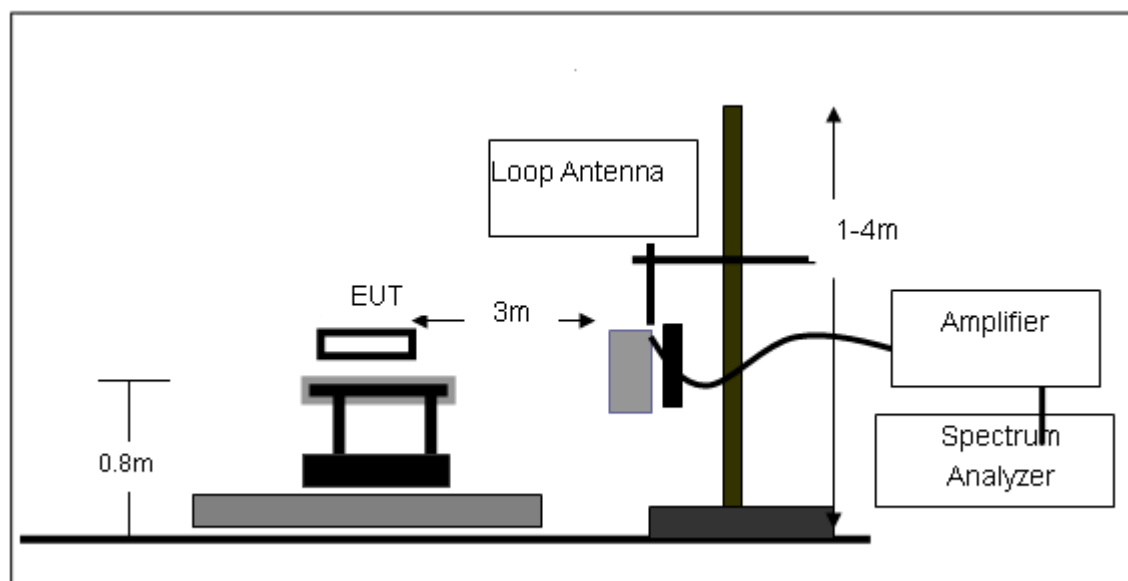
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

4.2 DEVIATION FROM TEST STANDARD

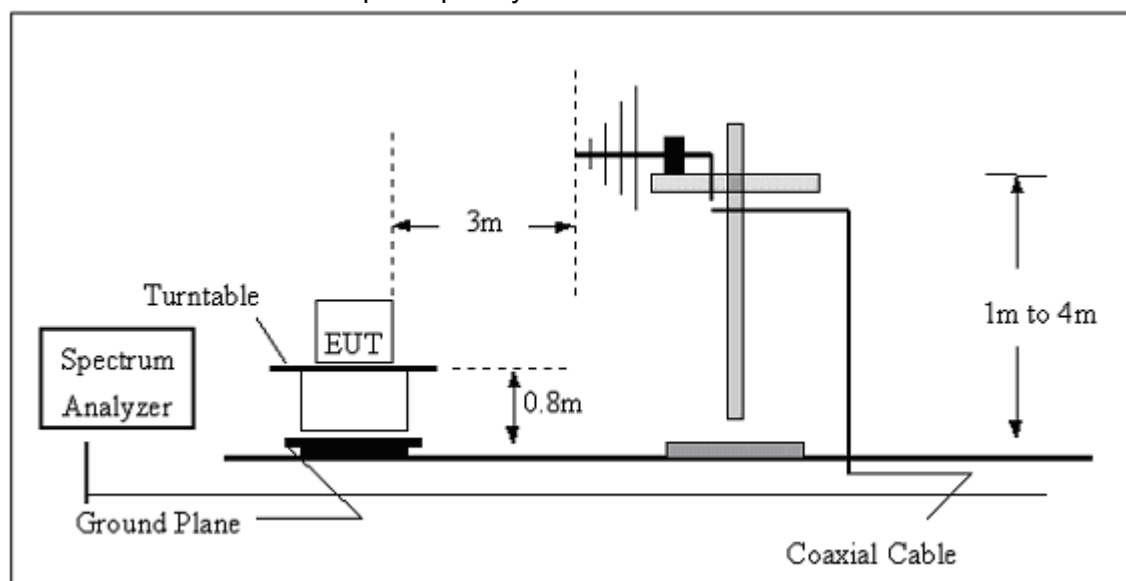
No deviation

4.3 TEST SETUP

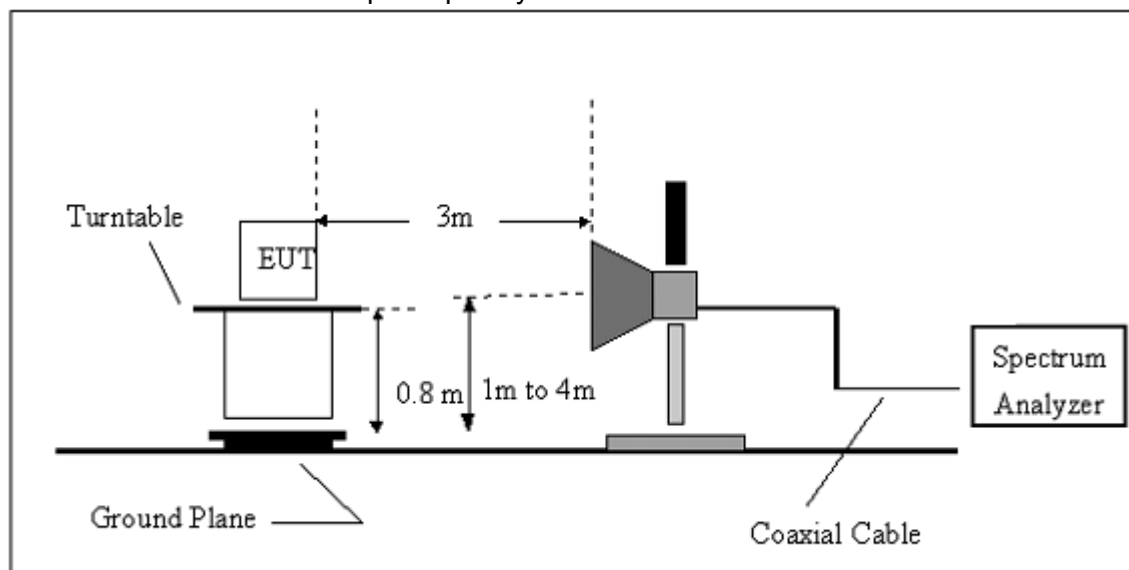
(A) Radiated Emission Test-Up Frequency Below 30MHz



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



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

**4.4 EUT OPERATING CONDITIONS**

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

4.5 TEST RESULTS (BETWEEN 9KHZ – 30 MHZ)

EUT:	3G MOBILE PHONE	Model Name. :	U511
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	Link mode	Polarization :	Mode 5

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor = $40 \log (\text{specific distance}/\text{test distance})(\text{dB})$;

Limit line = specific limits(dBuv) + distance extrapolation factor.

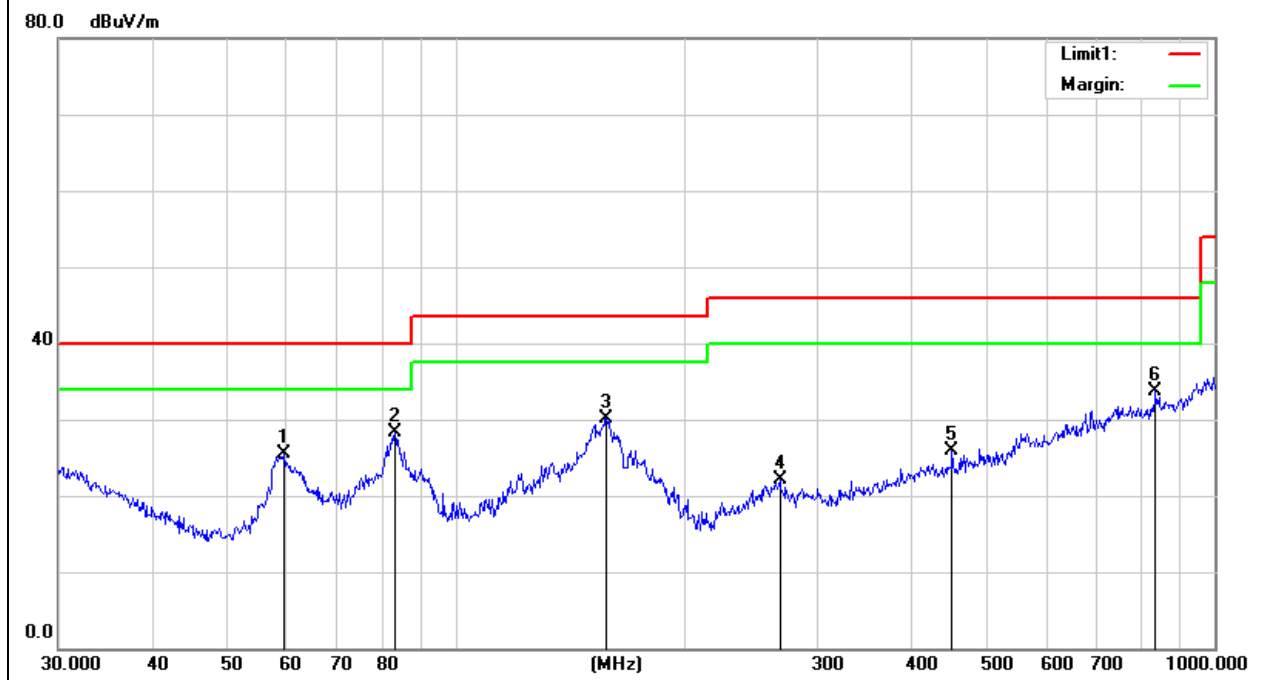
4.6 TEST RESULTS (BETWEEN 30MHZ – 1GHZ)

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	Mode 5	Polarization :	Horizontal

Frequency	Reading	Correct	Result	Limit	Margin	Remark
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
59.4405	19.69	5.76	25.45	40	-14.55	QP
83.2298	19.63	8.62	28.25	40	-11.75	QP
158.1123	18.24	12.02	30.26	43.5	-13.24	QP
267.5455	7.13	15.1	22.23	46	-23.77	QP
451.1350	6.04	19.79	25.83	46	-20.17	QP
836.2443	6.26	27.43	33.69	46	-12.31	QP

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

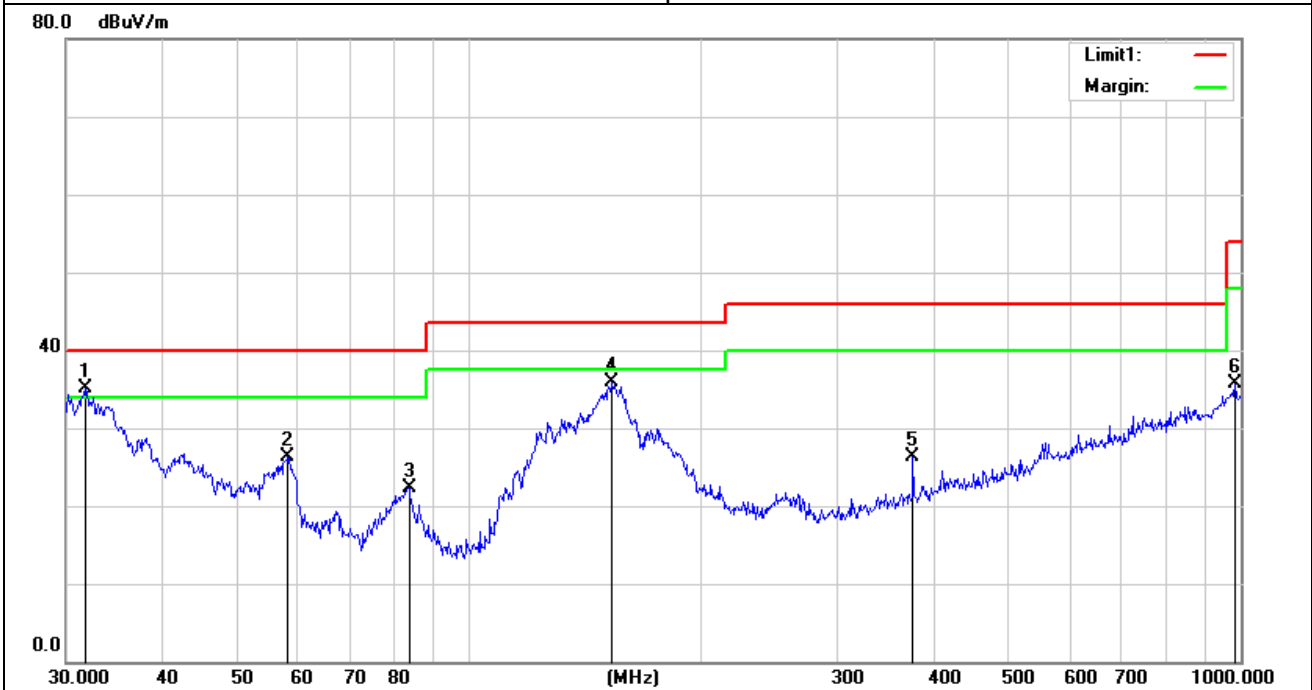


EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	Mode 5	Polarization :	Vertical

Frequency	Reading	Correct	Result	Limit	Margin	Remark
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
31.7313	17.15	18.05	35.2	40	-4.8	QP
58.203	20.26	5.95	26.21	40	-13.79	QP
83.5222	13.45	8.67	22.12	40	-17.88	QP
153.2004	23.73	12.23	35.96	43.5	-7.54	QP
375.9385	8.69	17.63	26.32	46	-19.68	QP
982.62	5.81	29.86	35.67	54	-18.33	QP

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.



4.7 TEST RESULTS (ABOVE 1000 MHZ)

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH1 (802.11b Mode)/2412	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4824.075	46.21	10.44	56.65	74	-17.35	peak
4824.100	31.43	10.44	41.87	54	-12.13	AVG
7236.092	43.21	12.39	55.6	74	-18.4	peak
7236.056	33.73	12.39	46.12	54	-7.88	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH1 (802.11b Mode)/2412	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4874.123	56.93	10.4	67.33	74	-6.67	peak
4874.070	32.45	10.4	42.85	54	-11.15	AVG
7311.131	48.61	12.75	61.36	74	-12.64	peak
7311.160	29.25	12.75	42	54	-12	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH6 (802.11b Mode)/2437	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4874.111	48.36	10.4	58.76	74	-15.24	peak
4874.088	32.43	10.4	42.83	54	-11.17	AVG
7311.084	45.28	12.75	58.03	74	-15.97	peak
7311.127	31.39	12.75	44.14	54	-9.86	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH6 (802.11b Mode)/2437	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4924.112	50.45	10.39	60.84	74	-13.16	peak
4934.131	33.39	10.44	43.83	54	-10.17	AVG
7386.133	47.21	12.68	59.89	74	-14.11	peak
7386.102	33.47	12.68	46.15	54	-7.85	AVG

Remark:

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

No emission detected above 18GHz

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH11 (802.11b Mode)/2462	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4924.122	48.19	10.39	58.58	74	-15.42	peak
4924.141	33.14	10.39	43.53	54	-10.47	AVG
7386.109	45.25	12.68	57.93	74	-16.07	peak
7386.057	28.36	12.68	41.04	54	-12.96	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

2. No emission detected above 18GHz

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH11 (802.11b Mode)/2462	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4924.075	49.08	10.39	59.47	74	-14.53	peak
4924.075	35.24	10.39	45.63	54	-8.37	AVG
7386.119	47.47	12.68	60.15	74	-13.85	peak
7386.068	32.16	12.68	44.84	54	-9.16	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH1 (802.11g Mode)/2412	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4824.075	45.31	10.44	55.75	74	-18.25	peak
4824.132	36.65	10.44	47.09	54	-6.91	AVG
7236.179	46.73	12.39	59.12	74	-14.88	peak
7236.208	30.58	12.39	42.97	54	-11.03	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH1 (802.11g Mode)/2412	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4824.124	55.32	10.44	65.76	74	-8.24	peak
4824.081	32.76	10.44	43.2	54	-10.8	AVG
7236.134	44.69	12.39	57.08	74	-16.92	peak
7236.082	32.59	12.39	44.98	54	-9.02	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH6 (802.11g Mode)/2437	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4874.084	45.44	10.4	55.84	74	-18.16	peak
4874.041	26.56	10.4	36.96	54	-17.04	AVG
7311.170	44.69	12.75	57.44	74	-16.56	peak
7311.093	25.78	12.75	38.53	54	-15.47	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH6 (802.11g Mode)/2437	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4874.072	48.35	10.4	58.75	74	-15.25	peak
4874.130	35.29	10.4	45.69	54	-8.31	AVG
7311.055	48.26	12.75	61.01	74	-12.99	peak
7311.101	33.44	12.75	46.19	54	-7.81	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH11 (802.11g Mode)/2462	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4924.068	49.65	10.39	60.04	74	-13.96	peak
4924.070	33.43	10.39	43.82	54	-10.18	AVG
7386.081	48.29	12.68	60.97	74	-13.03	peak
7386.069	30.88	12.68	43.56	54	-10.44	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH11(802.11g Mode)/2462	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4924.083	46.76	10.39	57.15	74	-16.85	peak
4924.128	34.52	10.39	44.91	54	-9.09	AVG
7386.046	46.44	12.68	59.12	74	-14.88	peak
7386.032	33.81	12.68	46.49	54	-7.51	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH1(802.11n Mode)/20MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4824.062	46.38	10.44	56.82	74	-17.18	peak
4824.045	36.15	10.44	46.59	54	-7.41	AVG
7236.041	42.31	12.39	54.7	74	-19.30	peak
7236.092	28.26	12.39	40.65	54	-13.35	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH1(802.11n Mode)/20MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4824.058436	46.56	10.44	57	74	-17.00	peak
4824.074476	37.21	10.44	47.65	54	-6.35	AVG
7236.11349	51.47	12.39	63.86	74	-10.14	peak
7236.077992	31.18	12.39	43.57	54	-10.43	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH6(802.11n Mode)/20MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4874.118	51.69	10.4	62.09	74	-11.91	peak
4874.063	32.38	10.4	42.78	54	-11.22	AVG
7311.122	48.54	12.75	61.29	74	-12.71	peak
7311.107	27.48	12.75	40.23	54	-13.77	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH6(802.11n Mode)/20MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4874.067	48.17	10.4	58.57	74	-15.43	peak
4874.102	32.52	10.4	42.92	54	-11.08	AVG
7311.164	47.46	12.75	60.21	74	-13.79	peak
7311.101	26.61	12.75	39.36	54	-14.64	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH11(802.11n Mode)/20MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4924.145	46.02	10.39	56.41	74	-17.59	peak
4924.127	35.15	10.39	45.54	54	-8.46	AVG
7386.185	43.82	12.68	56.5	74	-17.50	peak
7386.127	31.32	12.68	44	54	-10.00	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH11(802.11n Mode)/20MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4924.157	51.45	10.39	61.84	74	-12.16	peak
4924.132	35.64	10.39	46.03	54	-7.97	AVG
7386.167	42.32	12.68	55	74	-19.00	peak
7386.158	28.49	12.68	41.17	54	-12.83	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH3(802.11n Mode)/40MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4844.075	47.93	10.5	58.43	74	-15.57	peak
4844.114	31.65	10.5	42.15	54	-11.85	AVG
7266.257	48.43	12.5	60.93	74	-13.07	peak
7266.271	31.18	12.5	43.68	54	-10.32	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH3(802.11n Mode)/40MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4844.325	47.24	10.5	57.74	74	-16.26	peak
4844.349	30.61	10.5	41.11	54	-12.89	AVG
7266.258	48.88	12.5	61.38	74	-12.62	peak
7266.193	29.41	12.5	41.91	54	-12.09	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH6(802.11n Mode)/40MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4874.238	48.67	10.4	59.07	74	-14.93	peak
4874.238	33.53	10.4	43.93	54	-10.07	AVG
7311.159	47.71	12.75	60.46	74	-13.54	peak
7311.159	32.54	12.75	45.29	54	-8.71	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH6(802.11n Mode)/40MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4874.535	47.07	10.4	57.47	74	-16.53	peak
4874.485	34.56	10.4	44.96	54	-9.04	AVG
7311.590	46.83	12.75	59.58	74	-14.42	peak
7311.606	35.54	12.75	48.29	54	-5.71	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH9(802.11n Mode)/40MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4904.313	49.46	10.29	59.75	74	-14.25	peak
4904.310	35.83	10.29	46.12	54	-7.88	AVG
7356.226	48.15	12.79	60.94	74	-13.06	peak
7356.209	31.56	12.79	44.35	54	-9.65	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH9(802.11n Mode)/40MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4904.147	50.96	10.29	61.25	74	-12.75	peak
4904.065	34.72	10.29	45.01	54	-8.99	AVG
7356.393	48.54	12.79	61.33	74	-12.67	peak
7356.407	32.44	12.79	45.23	54	-8.77	AVG

Remark:

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

4.8 TEST RESULTS (BAND EDGE)

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH1(802.11b Mode)	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
2399.9	80.56	-13	67.56	74	-6.44	peak
2399.9	61.47	-13	48.47	54	-5.54	AVG
2400	82.38	-12.99	69.39	74	-4.41	peak
2400	61.29	-12.99	48.3	54	-5.74	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH1(802.11b Mode)	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
2399.9	81.48	-13	68.48	74	-5.52	peak
2399.9	61.23	-13	48.23	54	-5.77	AVG
2400	78.41	-12.99	65.42	74	-8.58	peak
2400	59.43	-12.99	46.44	54	-7.56	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH11(802.11b Mode)	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
2483.5	78.59	-12.78	65.81	74	-8.19	peak
2483.5	60.32	-12.78	47.54	54	-6.46	AVG
2483.6	79.14	-12.77	66.37	74	-7.63	peak
2483.6	60.28	-12.78	47.5	54	-6.5	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH11(802.11b Mode)	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
2483.5	77.39	-12.78	64.61	74	-9.39	peak
2483.5	60.42	-12.78	47.64	54	-6.36	AVG
2483.6	78.54	-12.77	65.77	74	-8.23	peak
2483.6	59.72	-12.77	46.95	54	-7.05	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH1(802.11g Mode)	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
2399.9	76.41	-13	63.41	74	-10.59	peak
2399.9	59.43	-13	46.43	54	-7.57	AVG
2400	78.19	-12.99	65.2	74	-8.8	peak
2400	58.57	-12.99	45.58	54	-8.42	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH1(802.11gMode)	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
2399.9	77.37	-13	64.37	74	-9.63	peak
2399.9	60.21	-13	47.21	54	-6.79	AVG
2400	78.83	-12.99	65.84	74	-8.16	peak
2400	62.61	-12.99	49.62	54	-4.38	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH11(802.11g Mode)	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
2483.5	77.39	-12.78	64.61	74	-9.39	peak
2483.5	63.27	-12.78	50.49	54	-3.51	AVG
2483.6	76.66	-12.77	63.89	74	-10.11	peak
2483.6	61.46	-12.77	48.69	54	-5.31	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH11(802.11g Mode)	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
2483.5	76.73	-12.78	63.95	74	-10.05	peak
2483.5	60.91	-12.78	48.13	54	-5.87	AVG
2483.6	75.93	-12.77	63.16	74	-10.84	peak
2483.6	61.55	-12.77	48.78	54	-5.22	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH1(802.11n Mode)/20MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
2399.9	76.83	-13	63.83	74	-10.17	peak
2399.9	58.41	-13	45.41	54	-8.59	AVG
2400	78.29	-12.99	65.3	74	-8.7	peak
2400	58.48	-12.99	45.49	54	-8.51	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH1(802.11n Mode)/20M	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
2399.9	77.15	-13	64.15	74	-9.85	peak
2399.9	58.28	-13	45.28	54	-8.72	AVG
2400	76.35	-12.99	63.36	74	-10.64	peak
2400	59.43	-12.99	46.44	54	-7.56	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH11(802.11n Mode)/20MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
2483.5	77.82	-12.78	65.04	74	-8.96	peak
2483.5	56.75	-12.78	43.97	54	-10.03	AVG
2483.6	75.65	-12.77	62.88	74	-11.12	peak
2483.6	57.72	-12.77	44.95	54	-9.05	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH11(802.11n Mode)/20MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
2483.5	73.27	-12.78	60.45	74	-13.55	peak
2483.5	59.54	-12.78	46.84	54	-7.16	AVG
2483.6	73.68	-12.78	60.45	74	-13.55	peak
2483.6	59.56	-12.78	46.84	54	-7.16	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH3(802.11n Mode)/40M	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
2399.9	77.08	-13	64.08	74	-9.92	peak
2399.9	58.12	-13	45.12	54	-8.88	AVG
2400	77.36	-12.99	64.37	74	-9.63	peak
2400	59.45	-12.99	46.46	54	-7.54	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH3(802.11n Mode)/40MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
2399.9	80.59	-13	67.59	74	-6.41	peak
2399.9	55.56	-13	42.56	54	-11.44	AVG
2400	78.37	-12.99	65.38	74	-8.62	peak
2400	55.19	-12.99	42.2	54	-11.8	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH9(802.11n Mode)/40MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
2483.5	76.09	-12.78	63.31	74	-10.69	peak
2483.5	59.06	-12.78	46.28	54	-7.72	AVG
2483.6	77.23	-12.77	64.46	74	-9.54	peak
2483.6	61.18	-12.77	48.41	54	-5.59	AVG

Remark:

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

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH9(802.11n Mode)/40MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
2483.5	77.63	-12.78	64.85	74	-9.15	peak
2483.5	60.47	-12.78	47.69	54	-6.31	AVG
2483.6	78.46	-12.78	65.68	74	-8.32	peak
2483.6	59.25	-12.78	46.47	54	-7.53	AVG

Remark:

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

5. CONDUCTED SPURIOUS EMISSIONS

5.1 APPLIED PROCEDURES / LIMIT

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. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

5.1.1 TEST PROCEDURE

Spectrum Parameter	Setting
Detector	Peak
Start Frequency	30 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	100 KHz/300 KHz
Trace-Mode:	Max hold

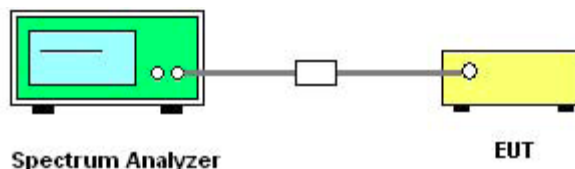
For Band edge

Spectrum Parameter	Setting
Attenuation	Auto
Start/Stop Frequency	Lower Band Edge: 2300 – 2430 MHz Upper Band Edge: 2450 – 2500 MHz
RB / VB (emission in restricted band)	100 KHz/300 KHz
Trace-Mode:	Max hold

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP



The EUT which is powered by the Battery, is coupled to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 50Ω; the path loss as the factor is calibrated to correct the reading. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. In order to make an accurate measurement, set the span greater than RBW.

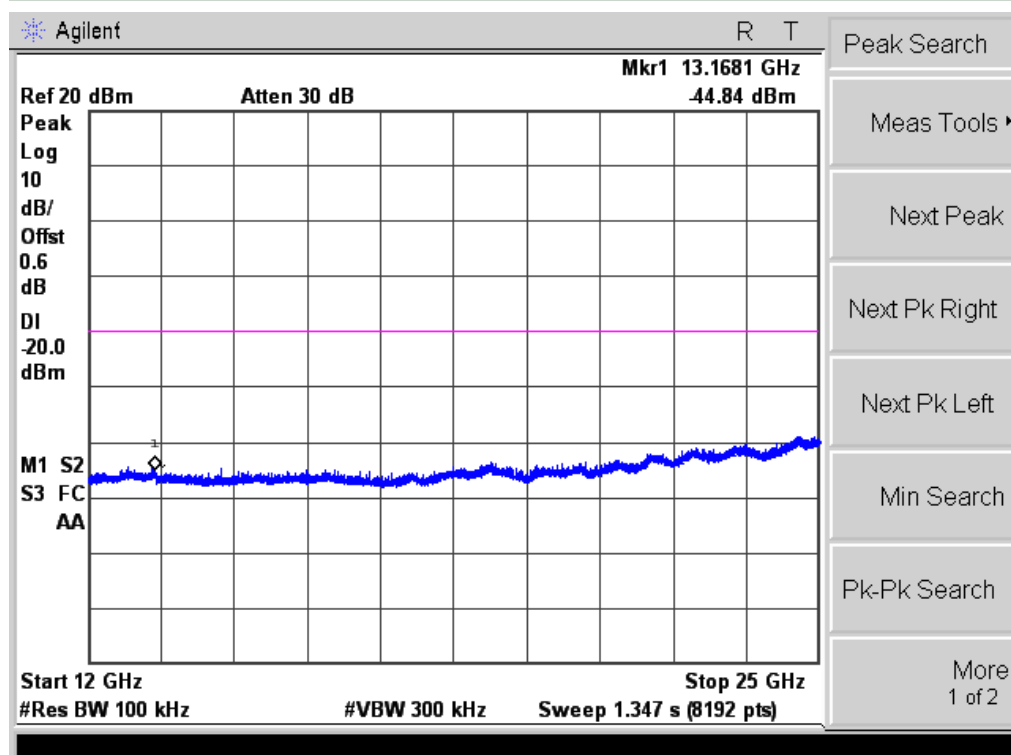
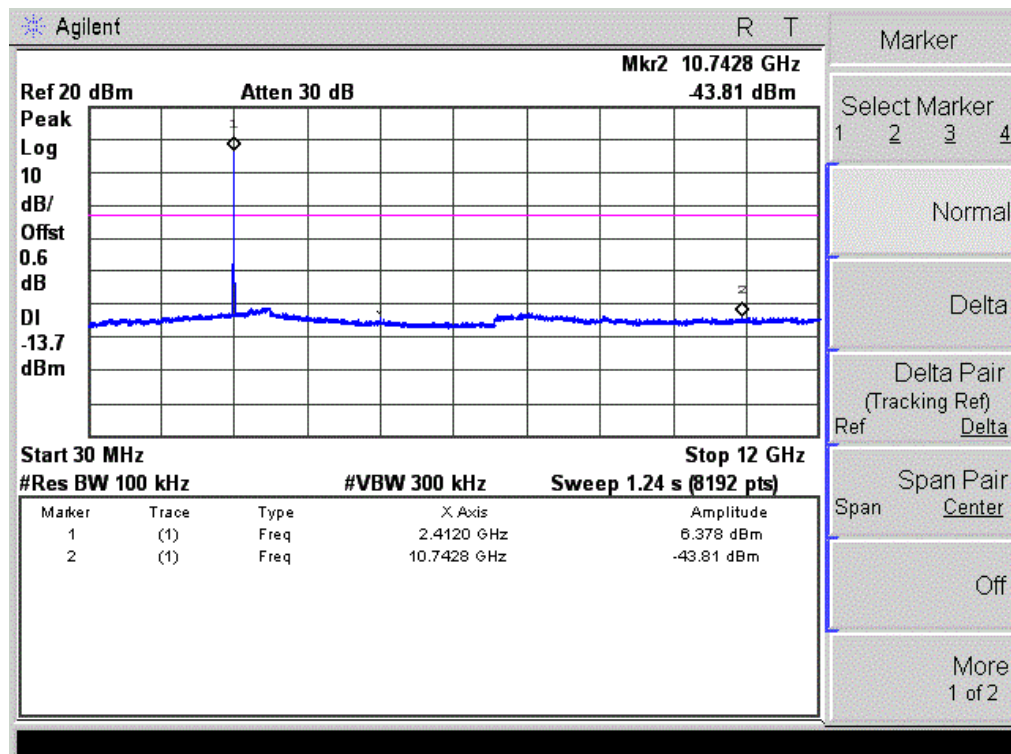
5.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

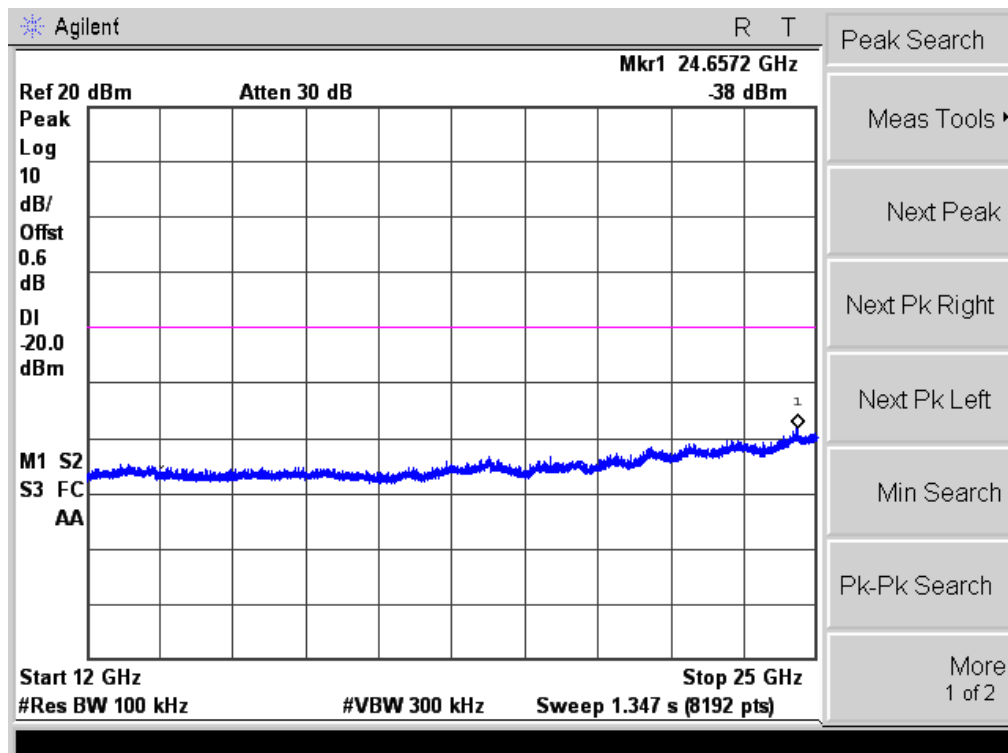
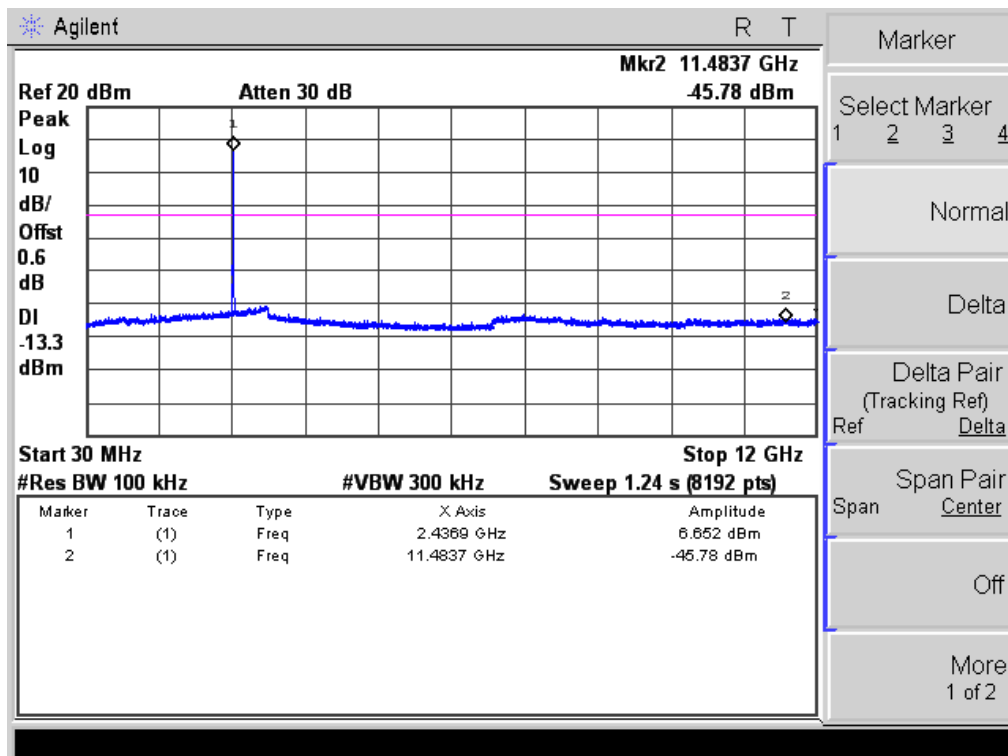
5.1.5 TEST RESULTS

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX b Mode /CH01, CH06, CH11		

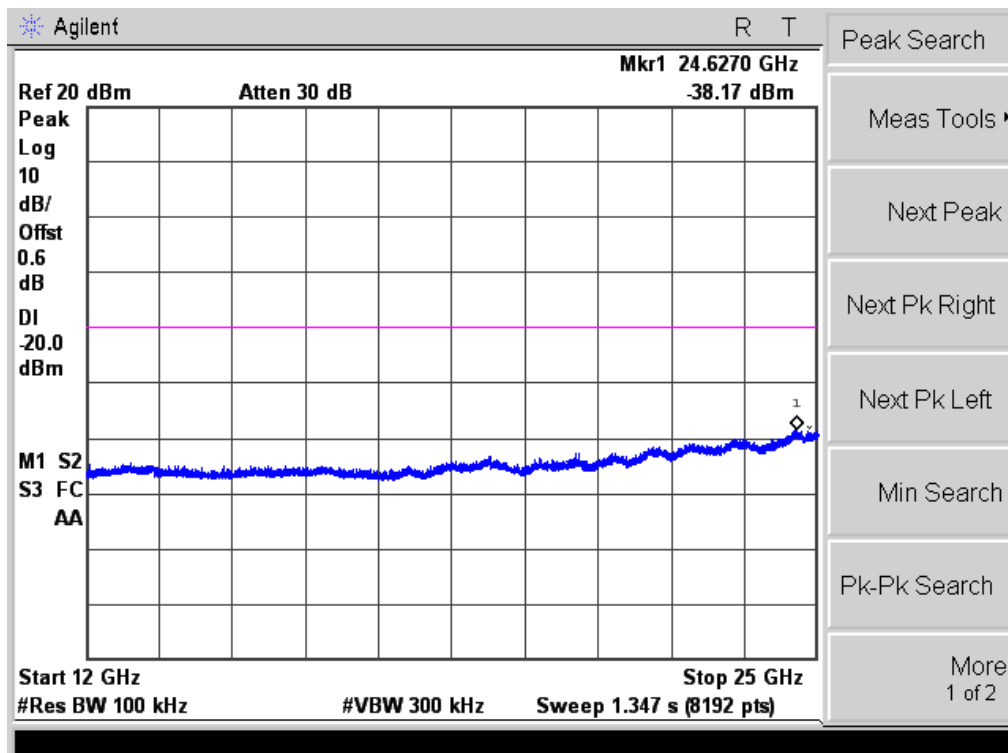
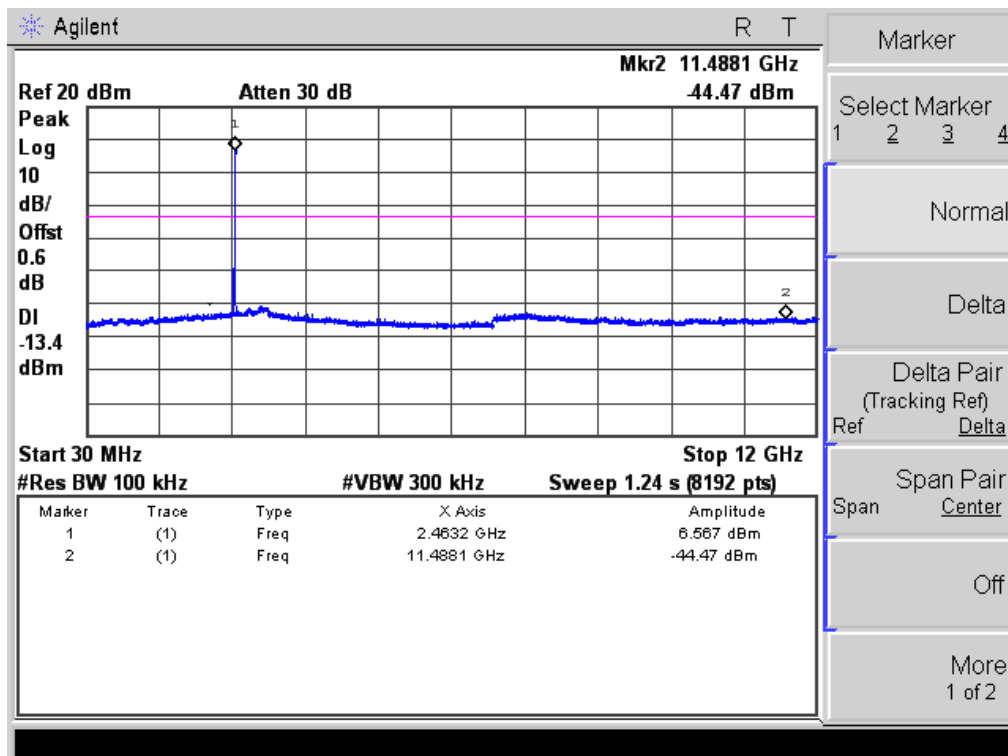
CH 01



CH 06

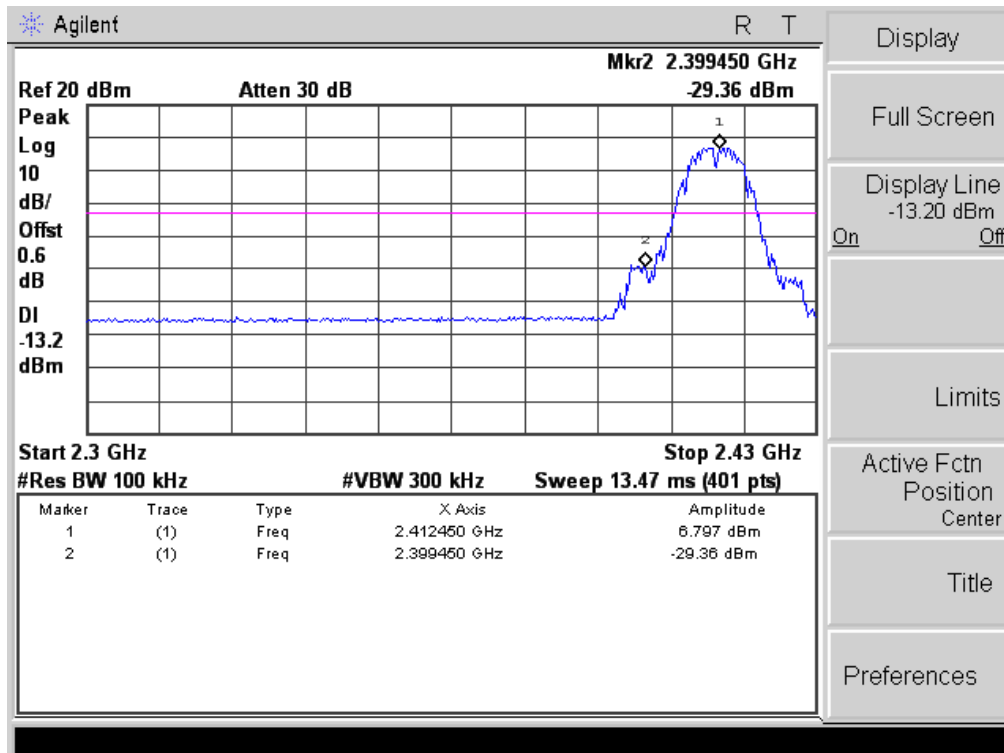


CH 11

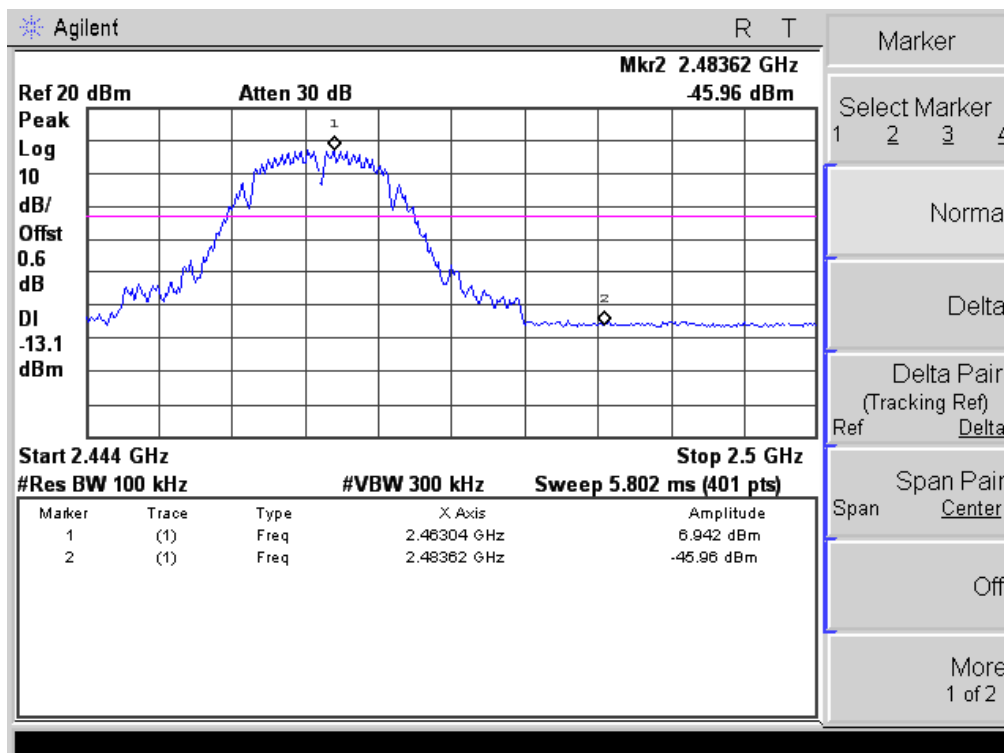


Band edge

CH 01

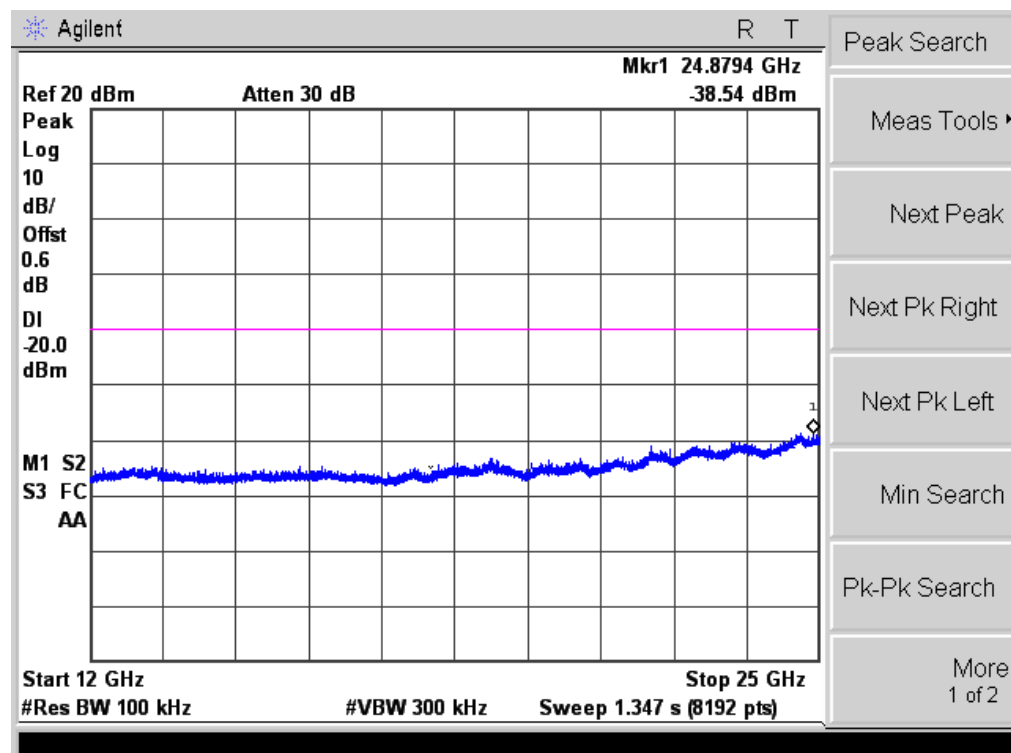
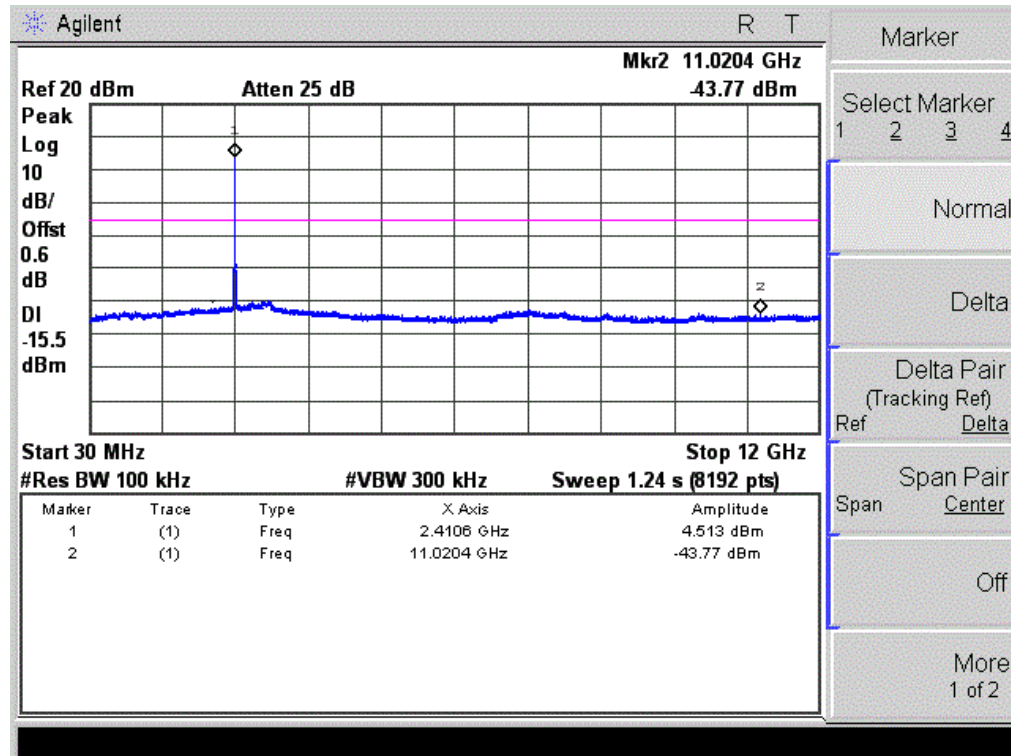


CH 11

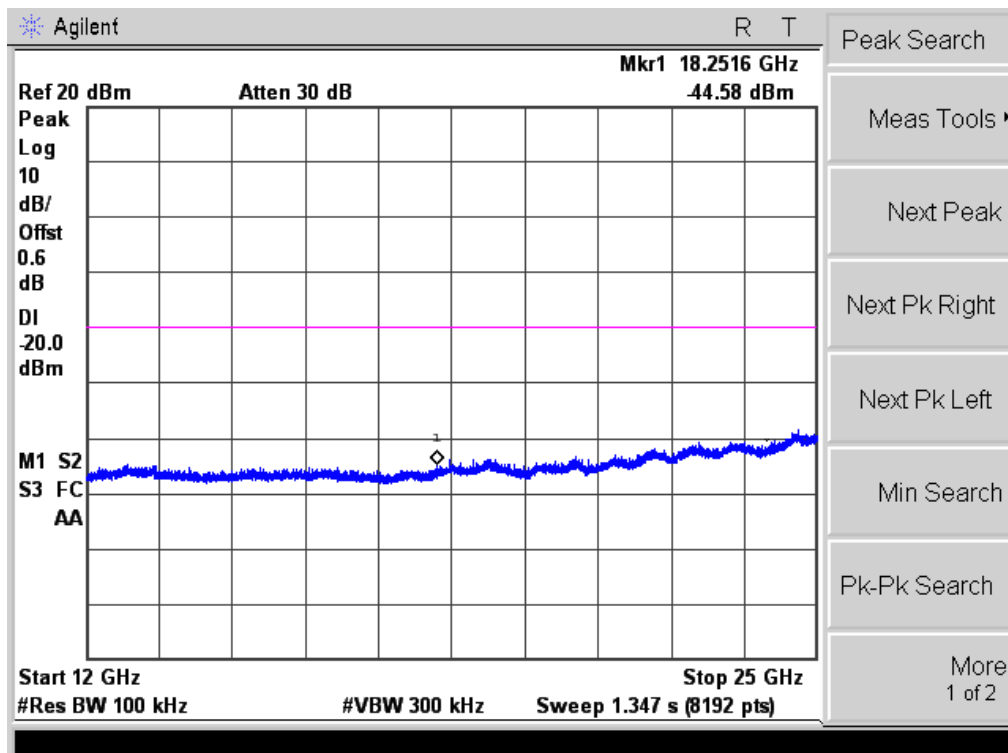
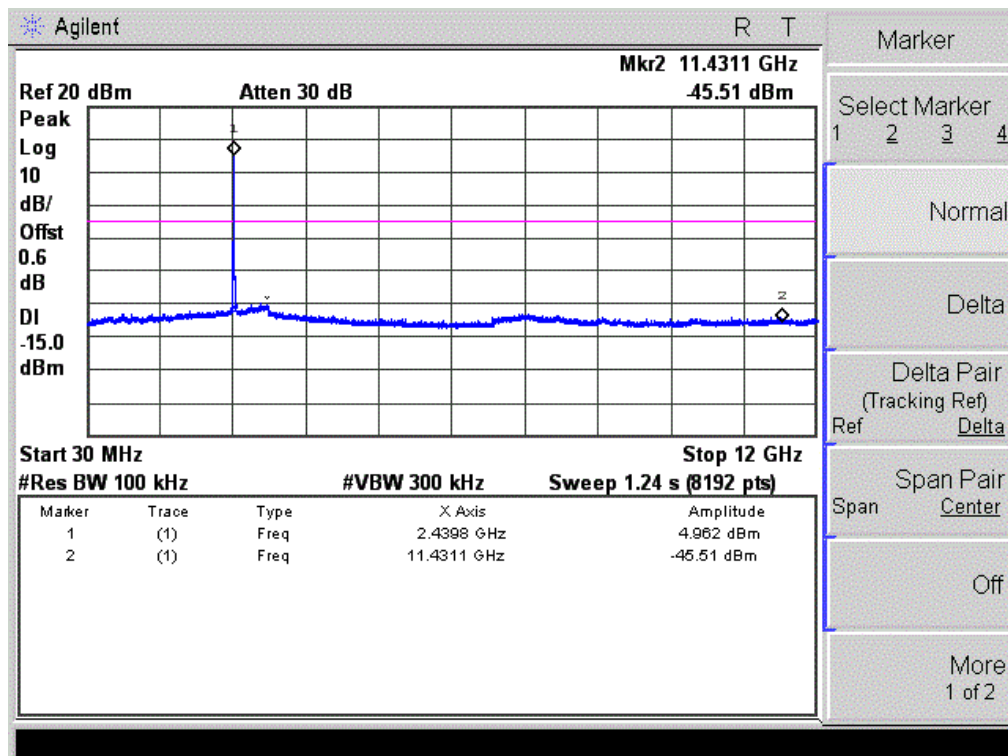


EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX g Mode /CH01, CH06, CH11		

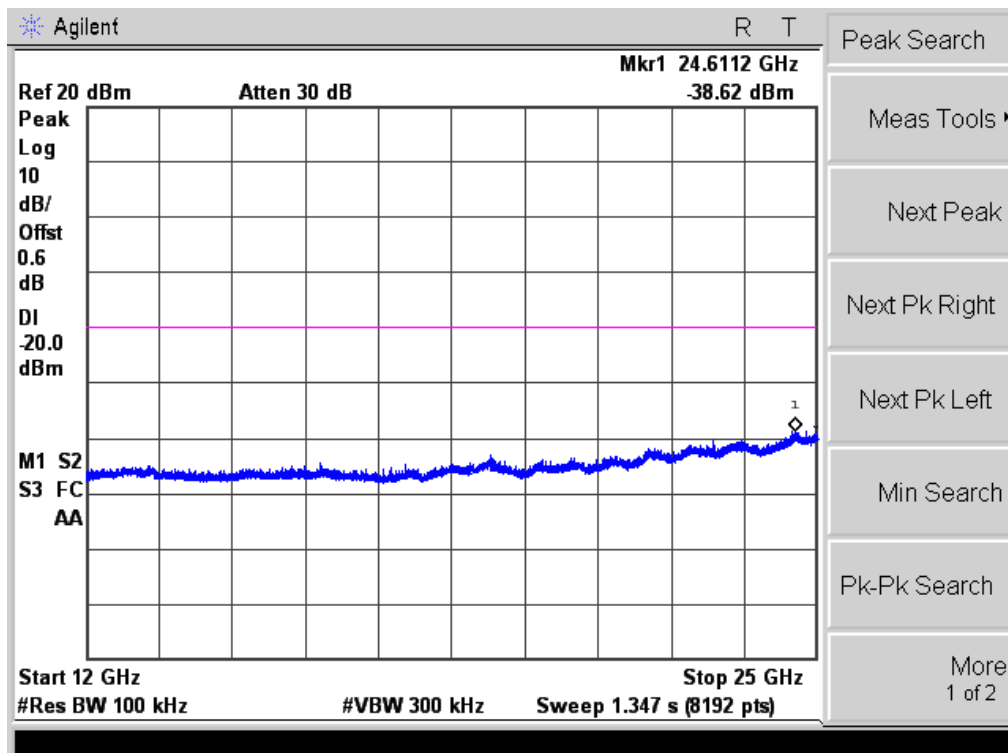
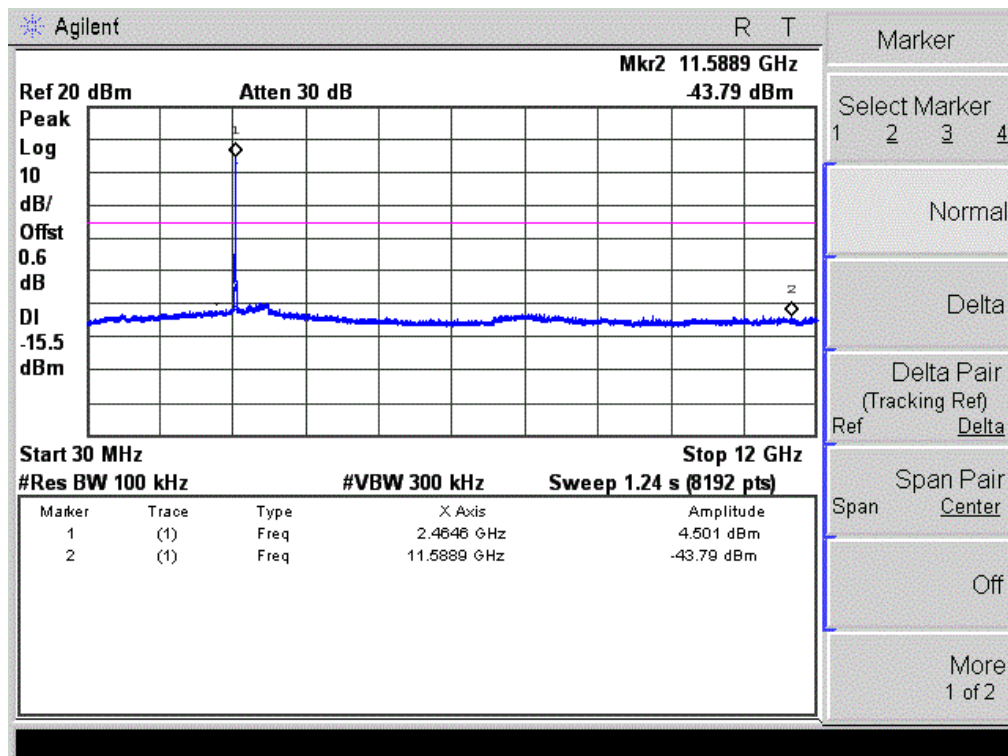
CH 01



CH 06

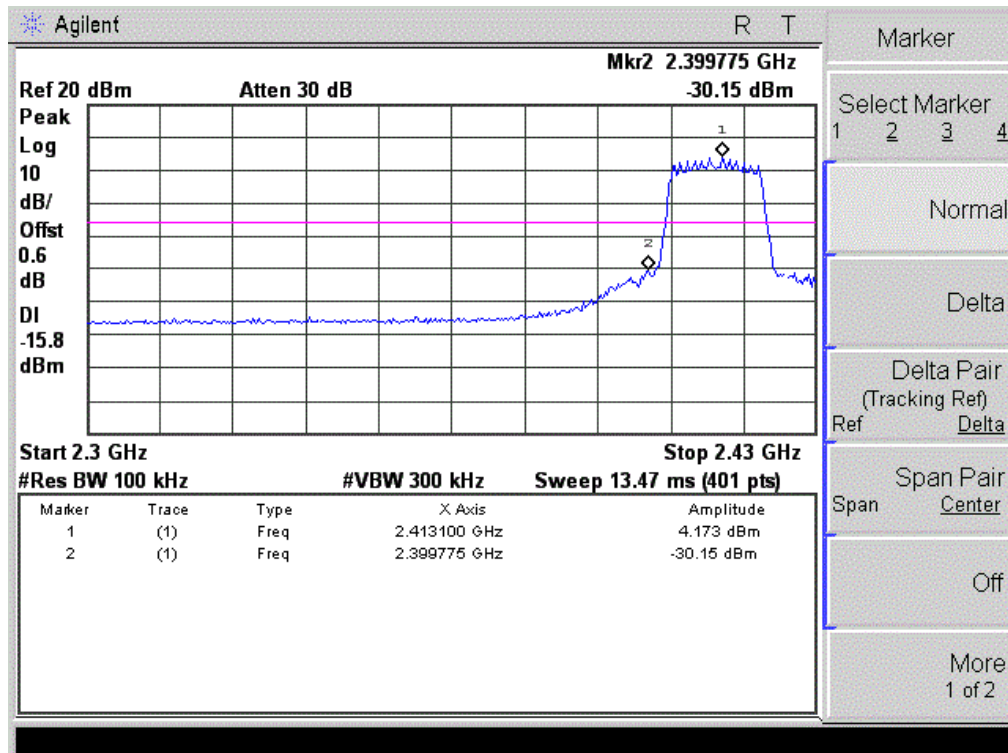


CH 11

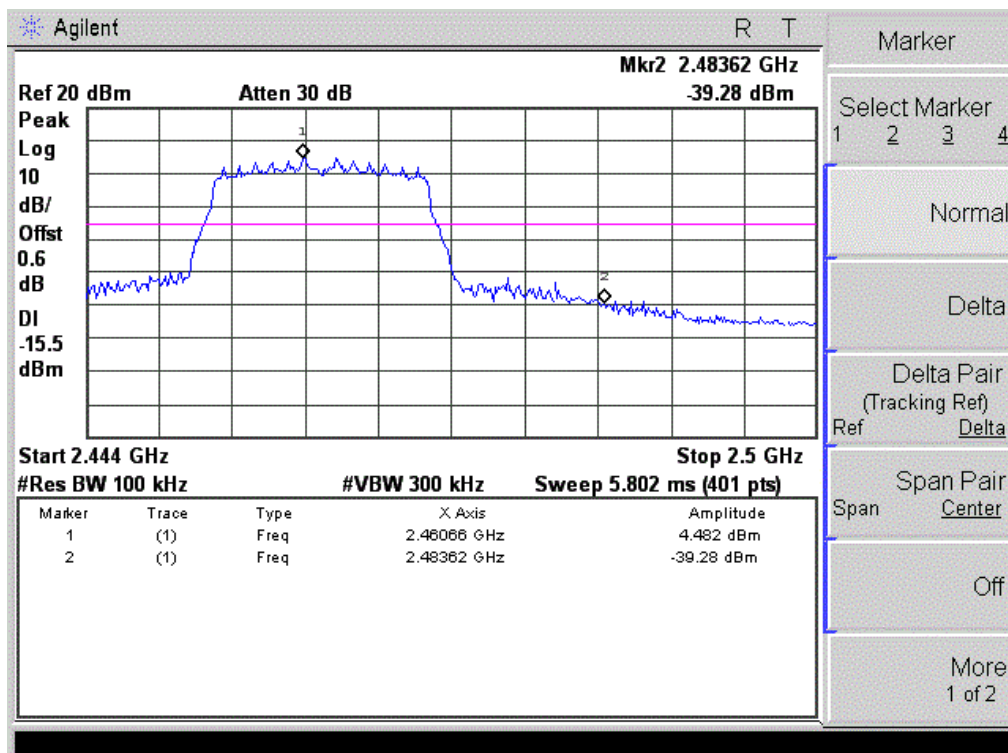


Band edge

CH 01

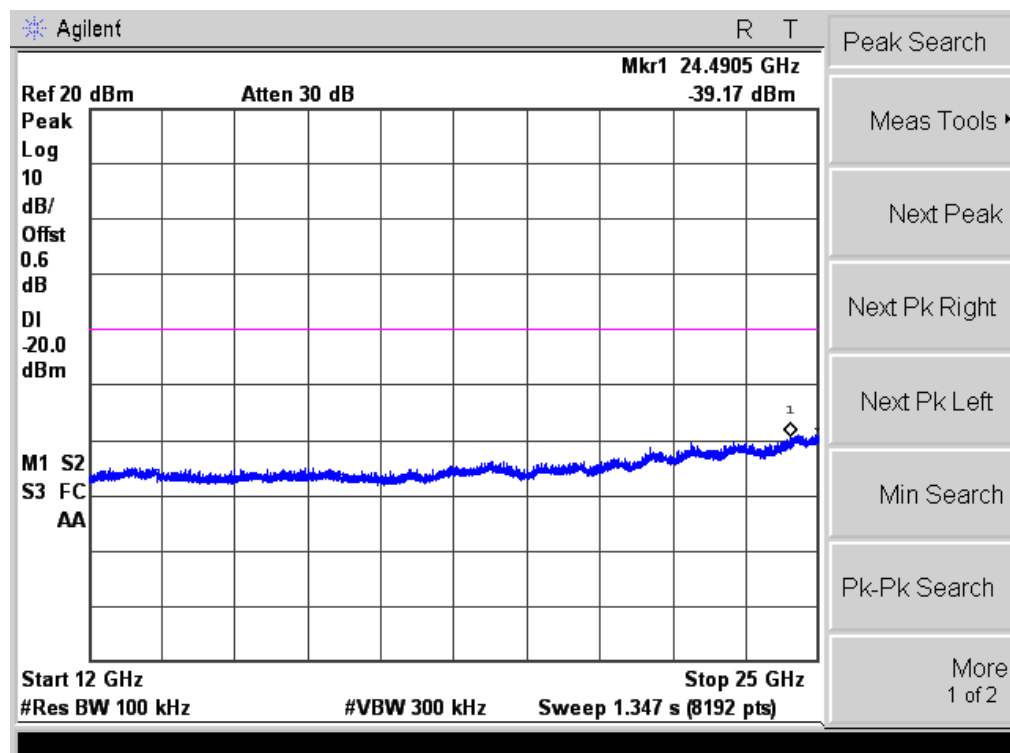
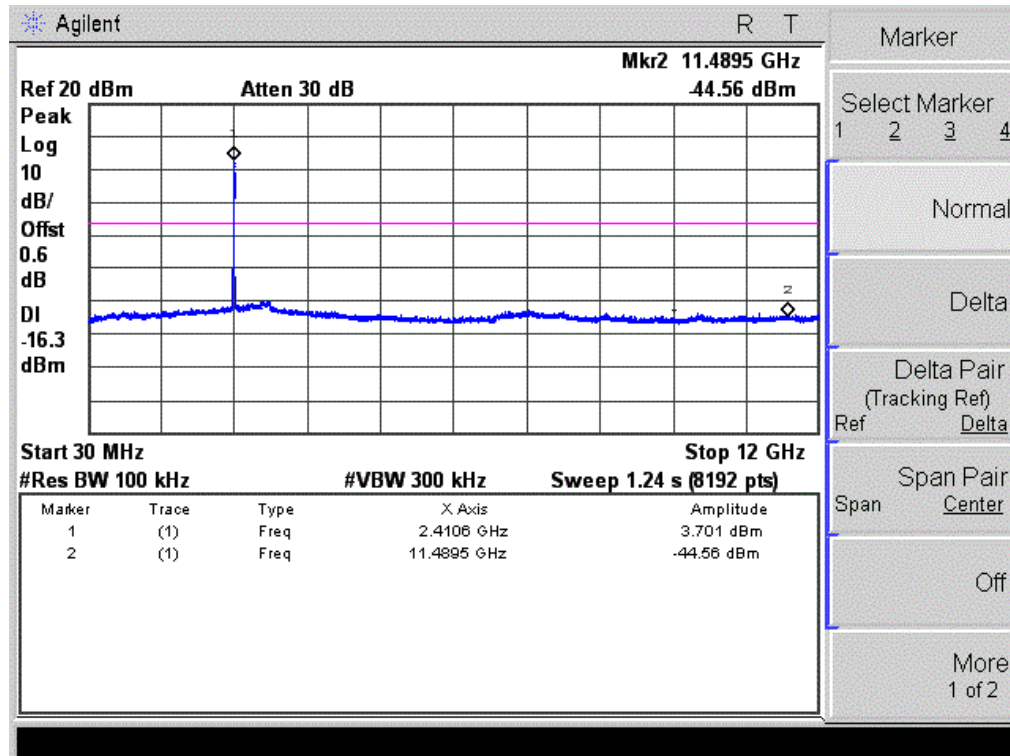


CH11

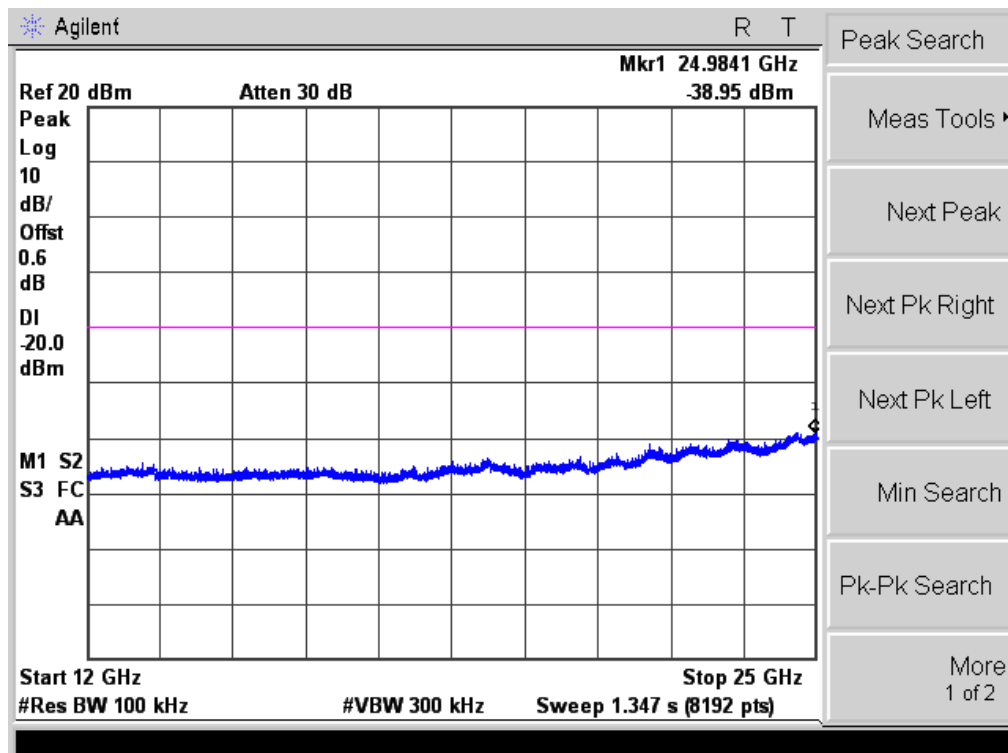
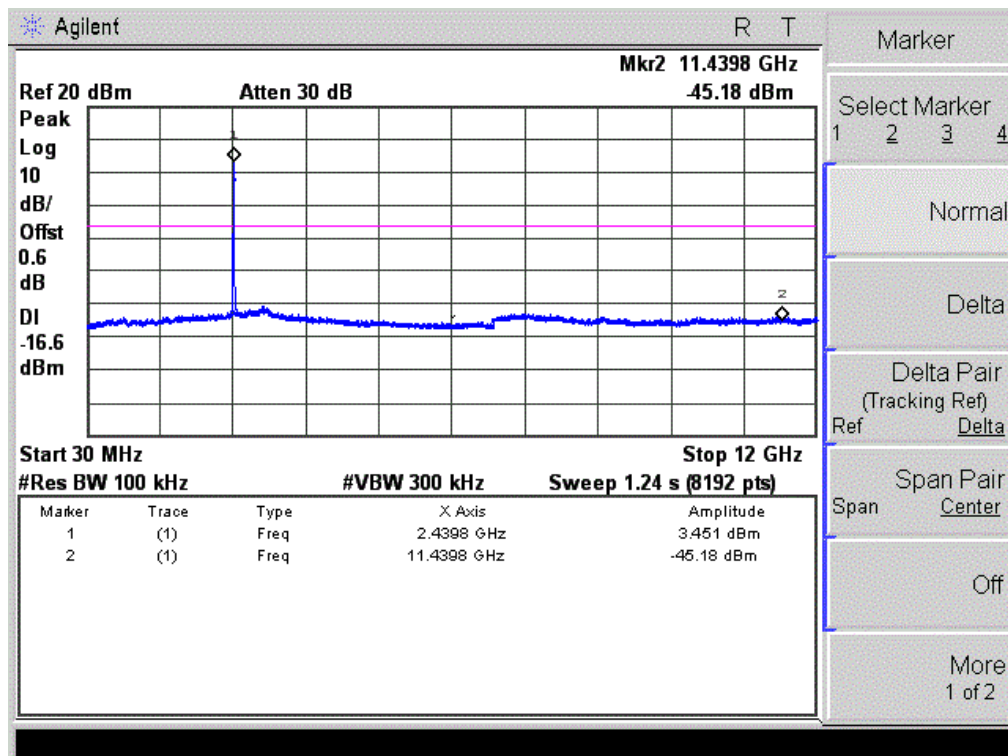


EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX n Mode(20M) /CH01, CH06, CH11		

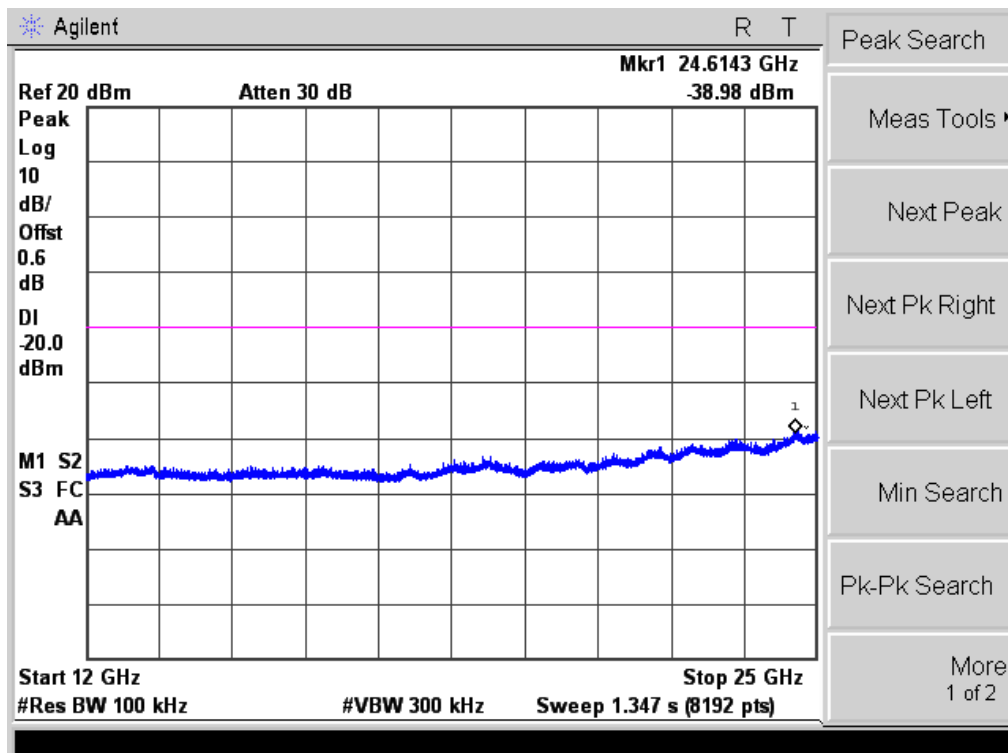
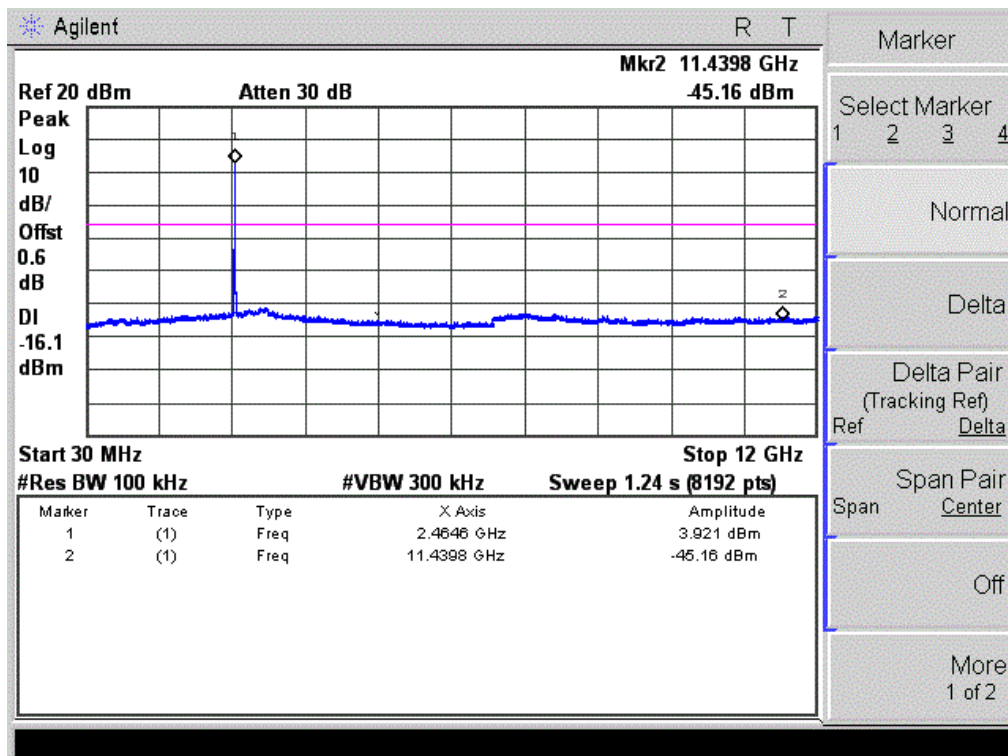
CH 01



CH 06

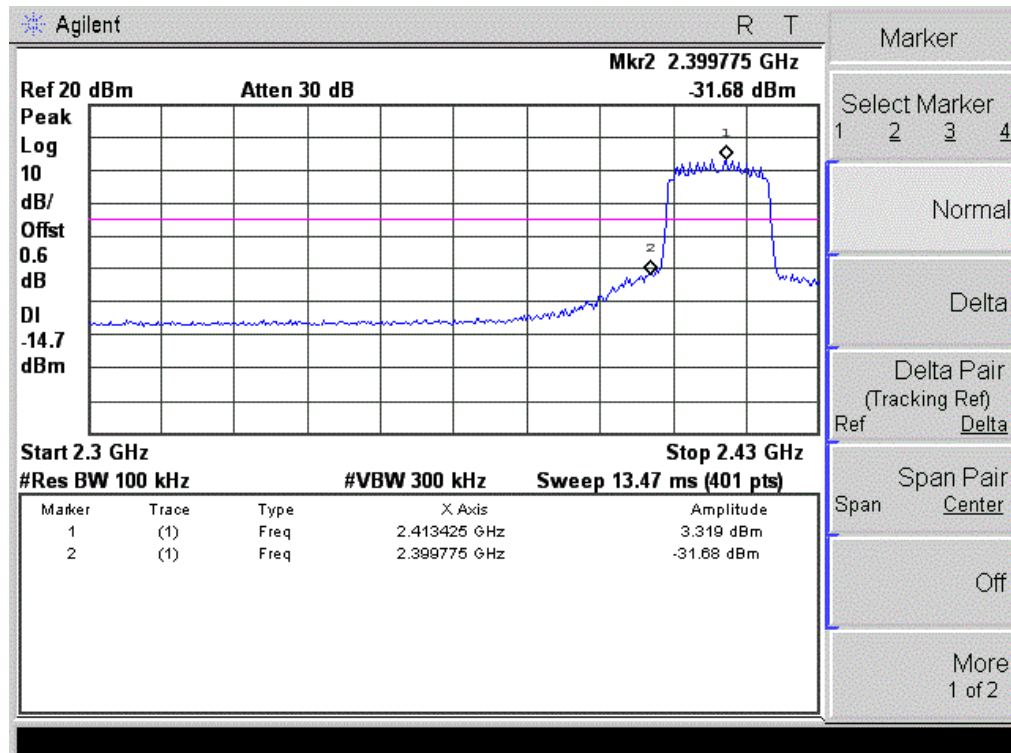


CH 11

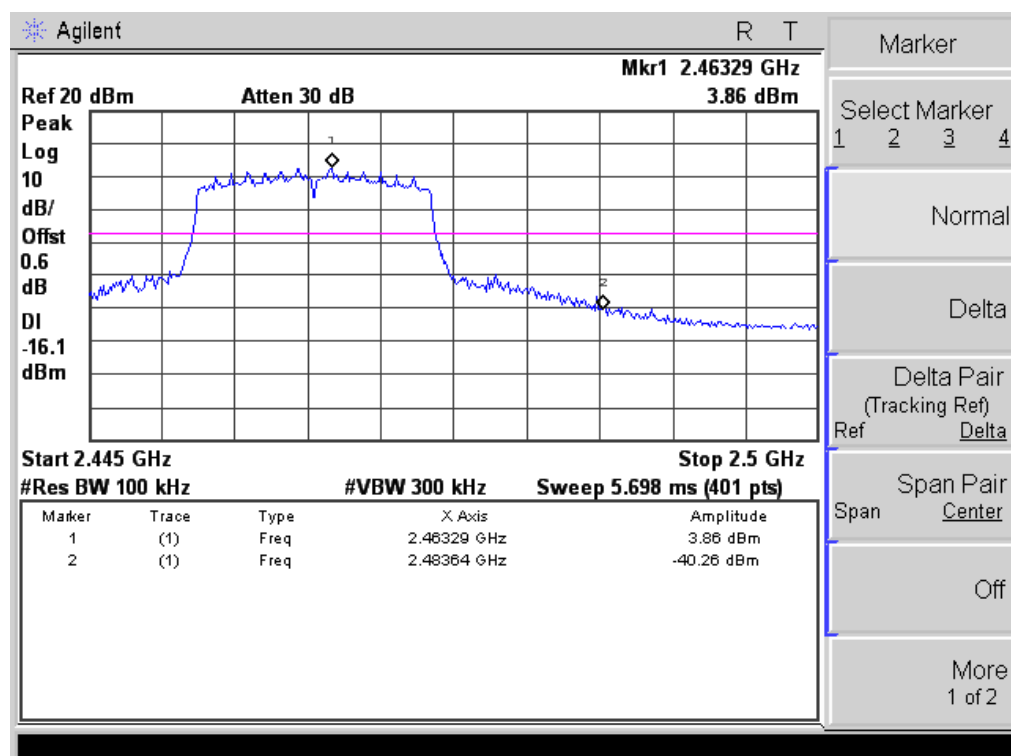


Band edge

CH 01

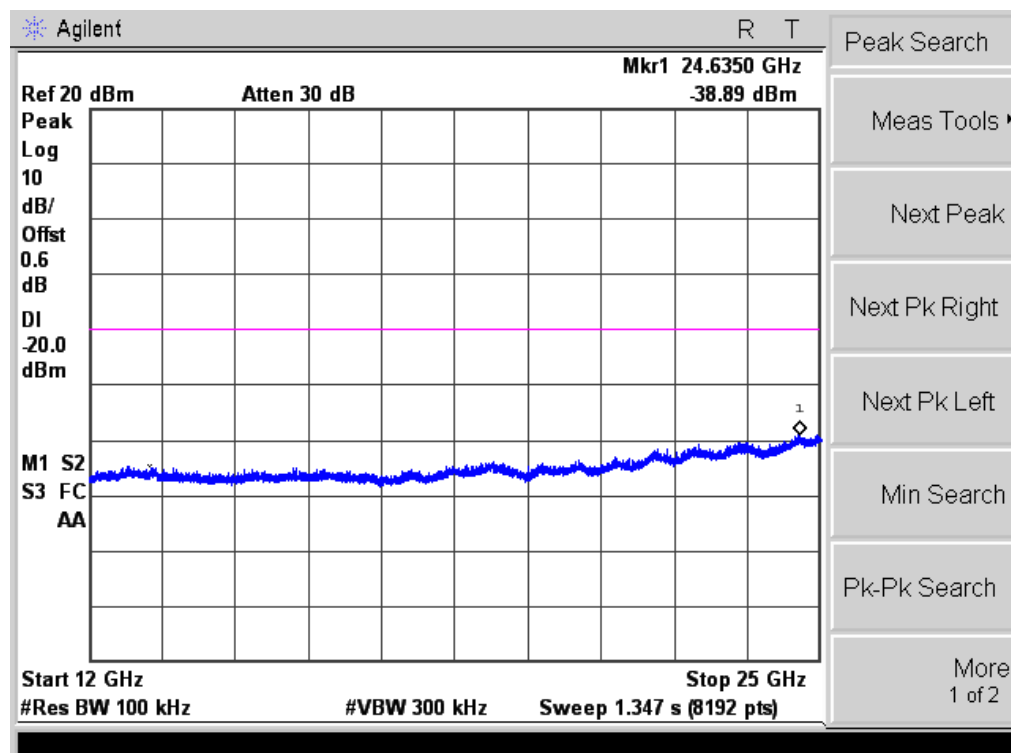
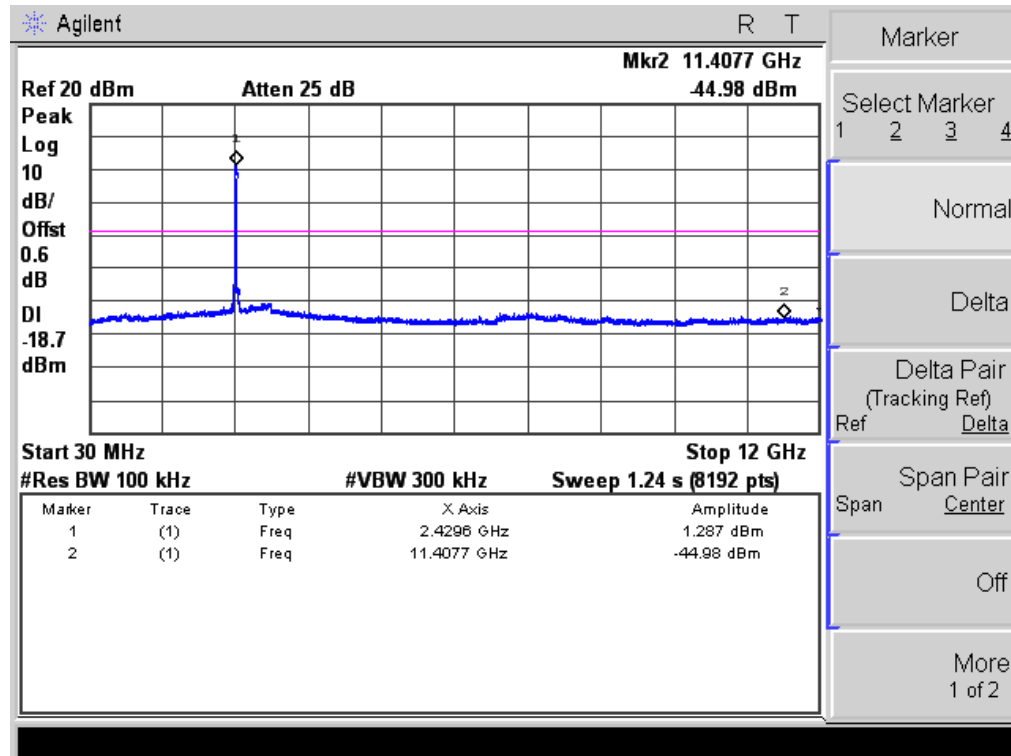


CH 11

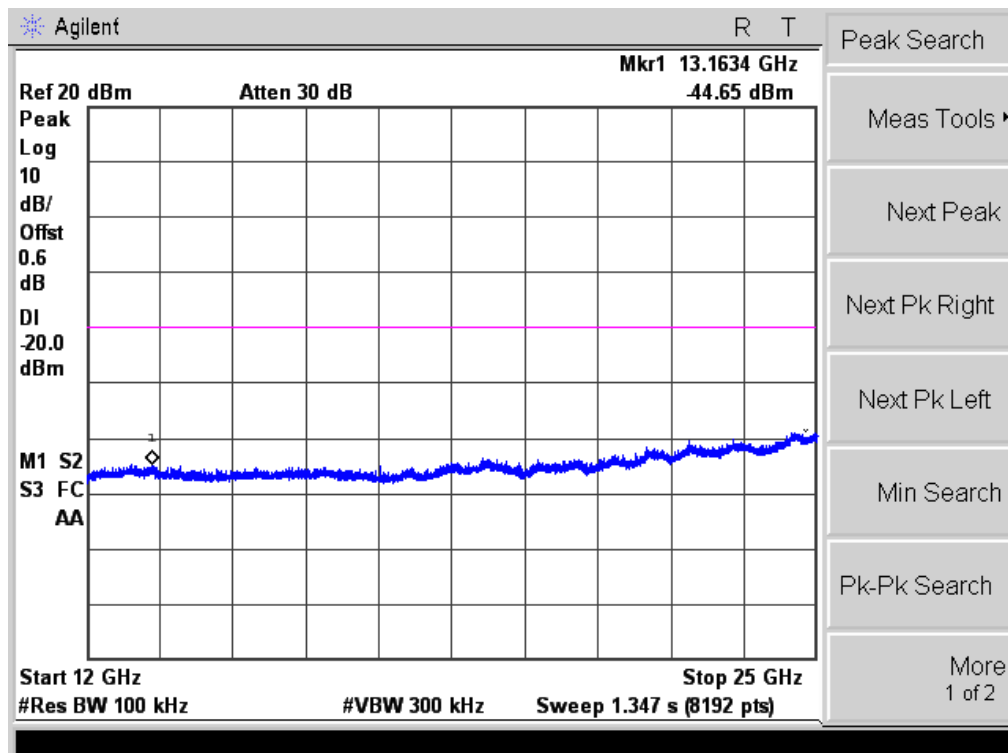
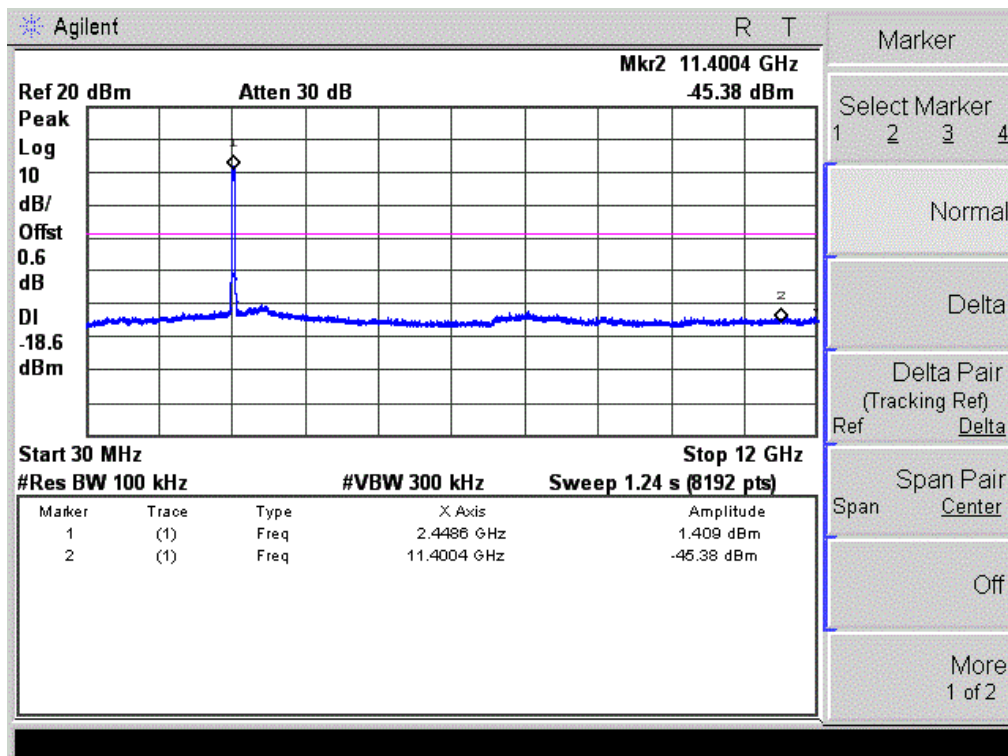


EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX n Mode(40M) /CH03, CH06, CH09		

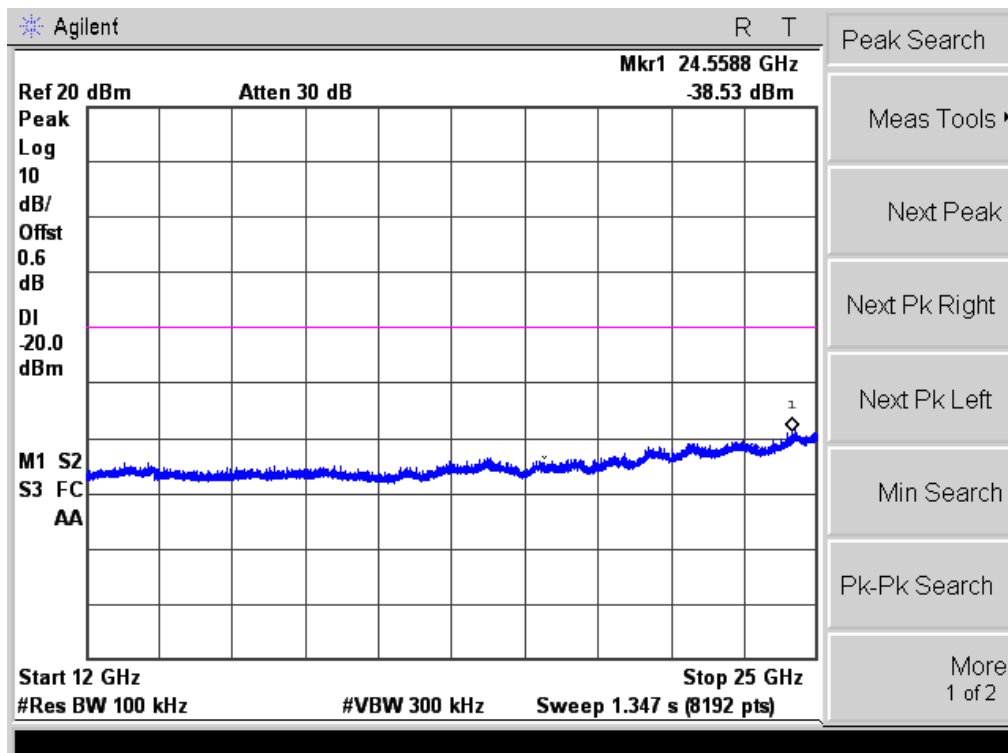
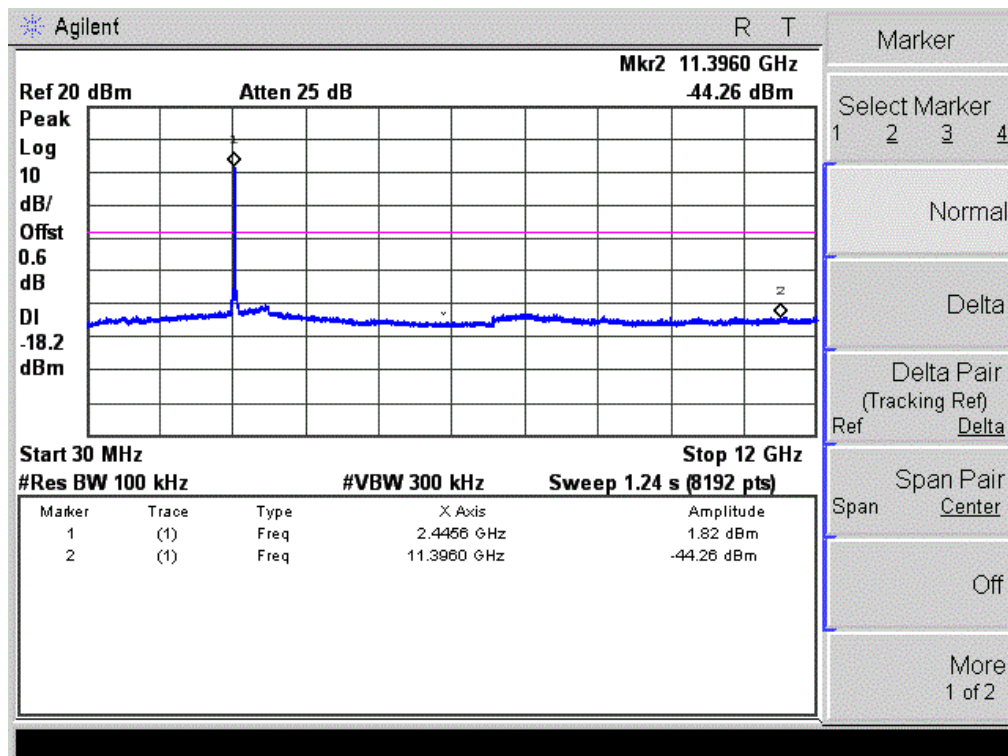
CH 03



CH06

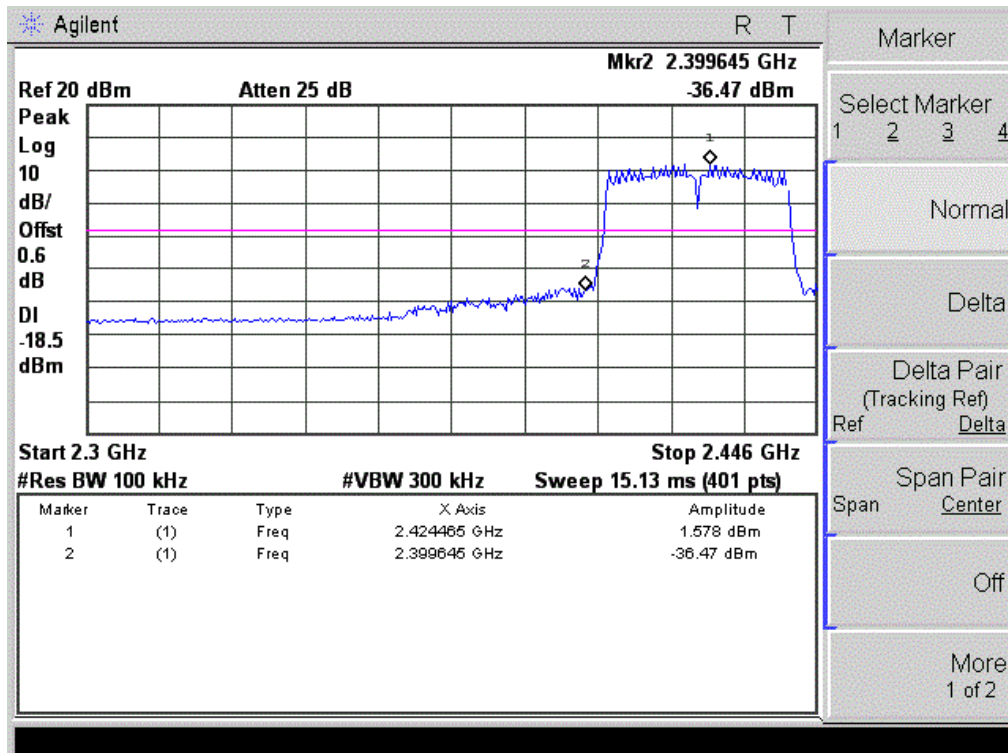


CH09

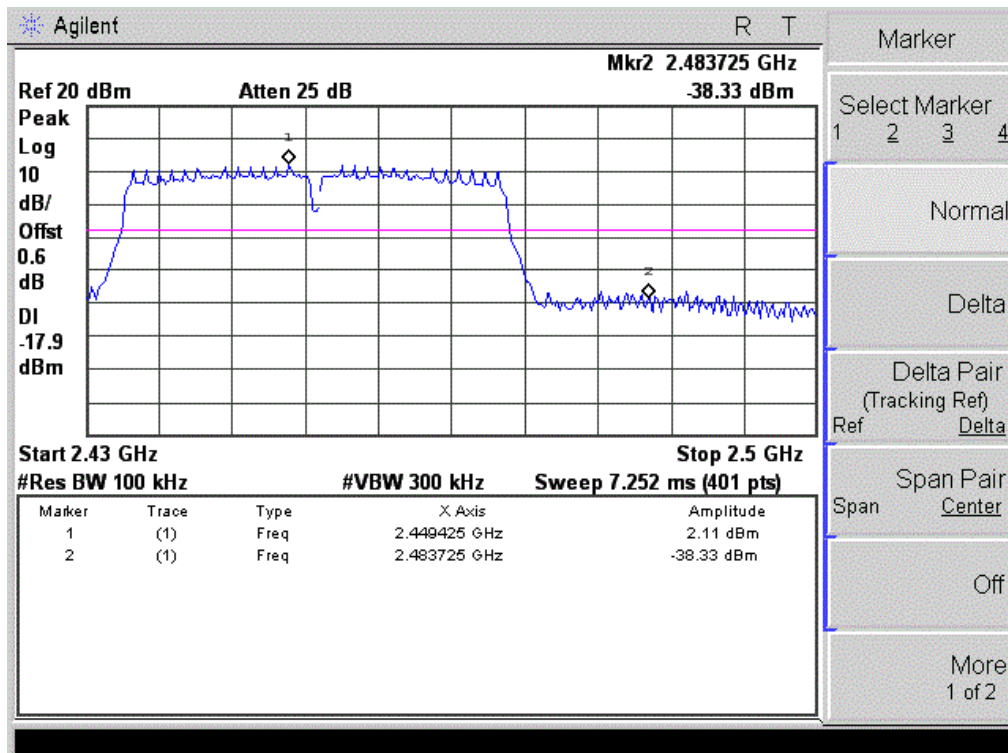


Band edge

CH03



CH 09



6. POWER SPECTRAL DENSITY TEST

6.1 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

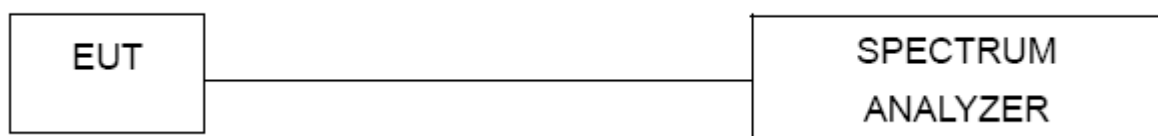
6.1.1 TEST PROCEDURE

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 ≥ 3 kHz.
4. Set the VBW $\geq 3 \times$ 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.

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



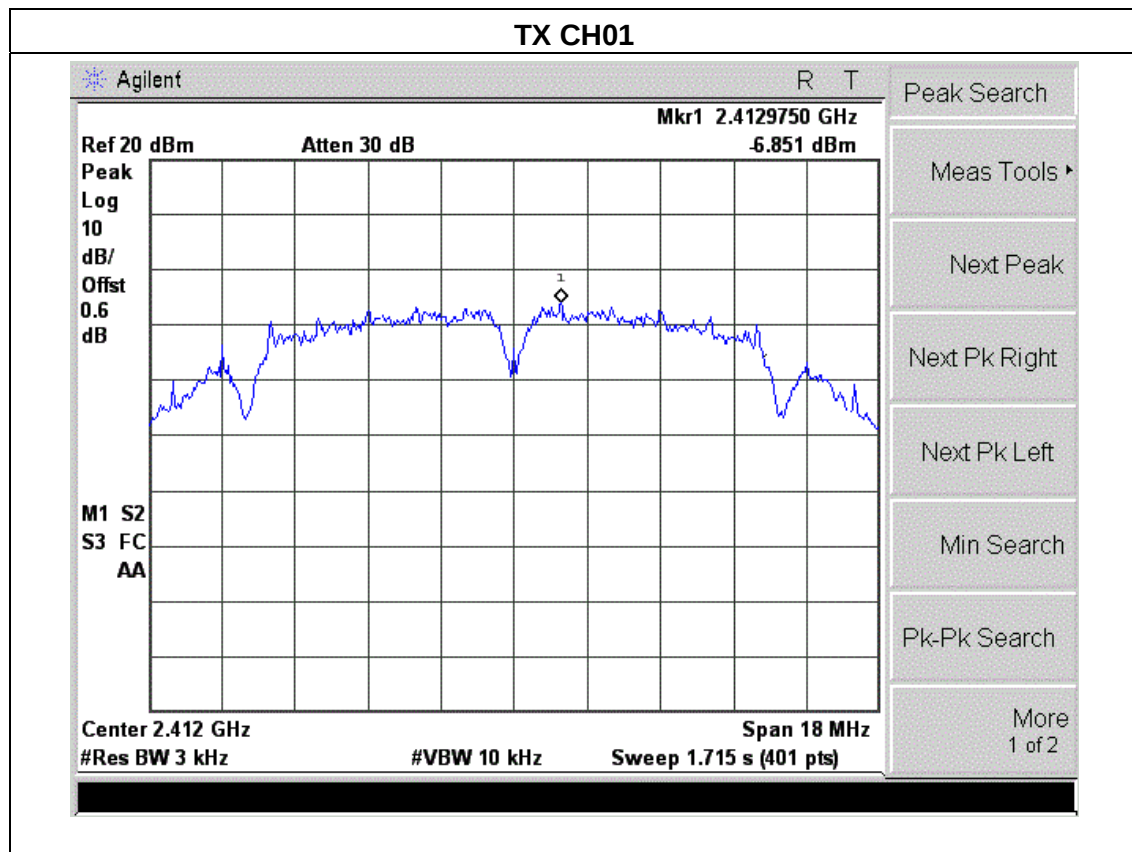
6.1.4 EUT OPERATION CONDITIONS

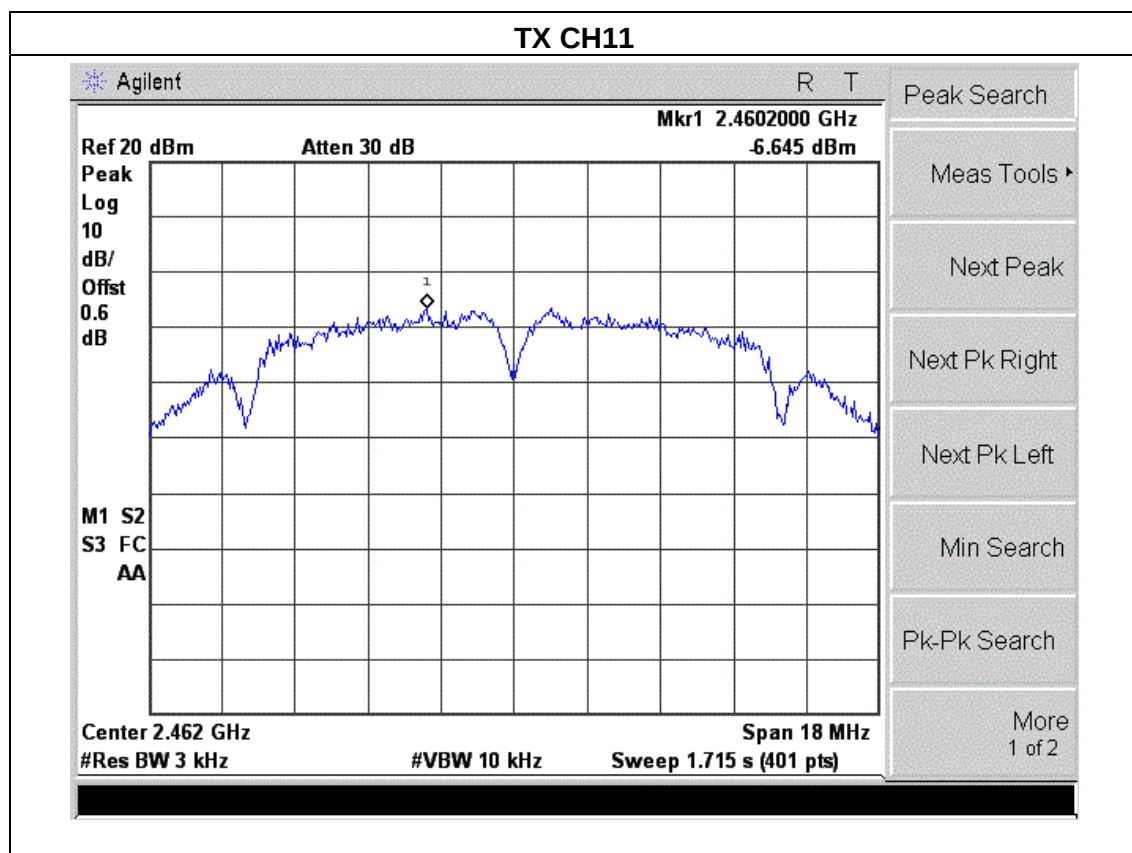
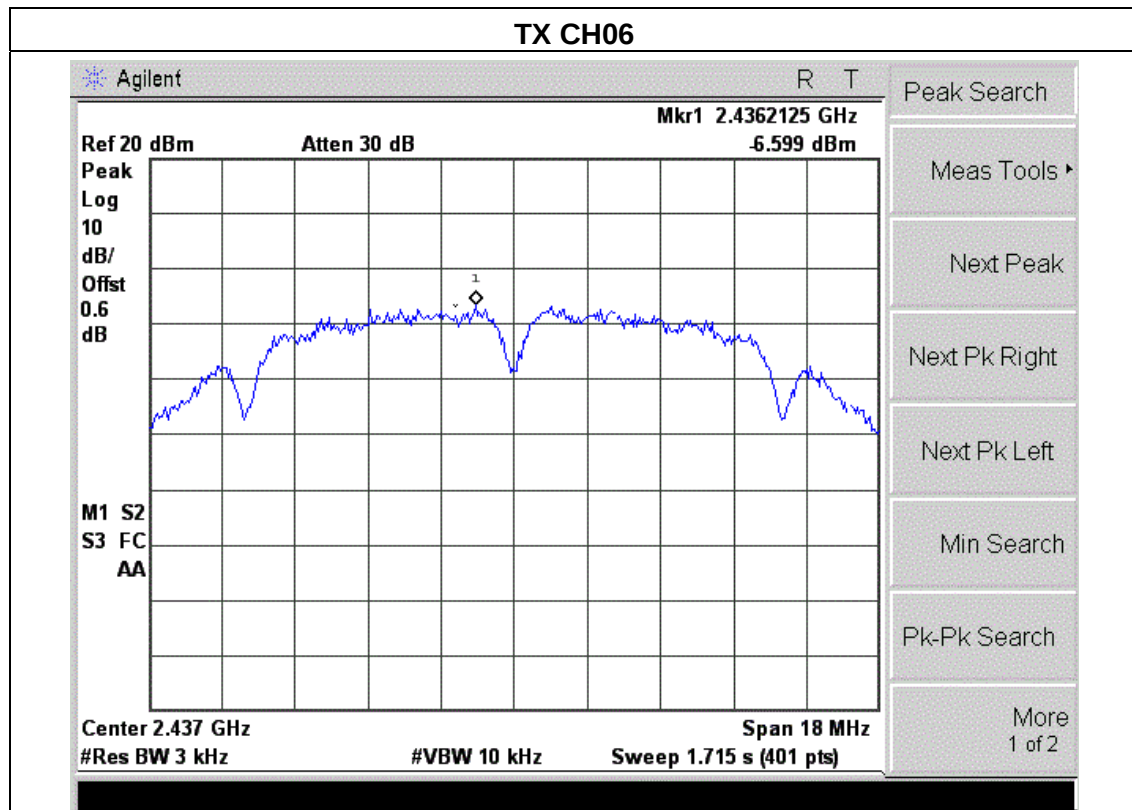
The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

6.1.5 TEST RESULTS

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX b Mode /CH01, CH06, CH11		

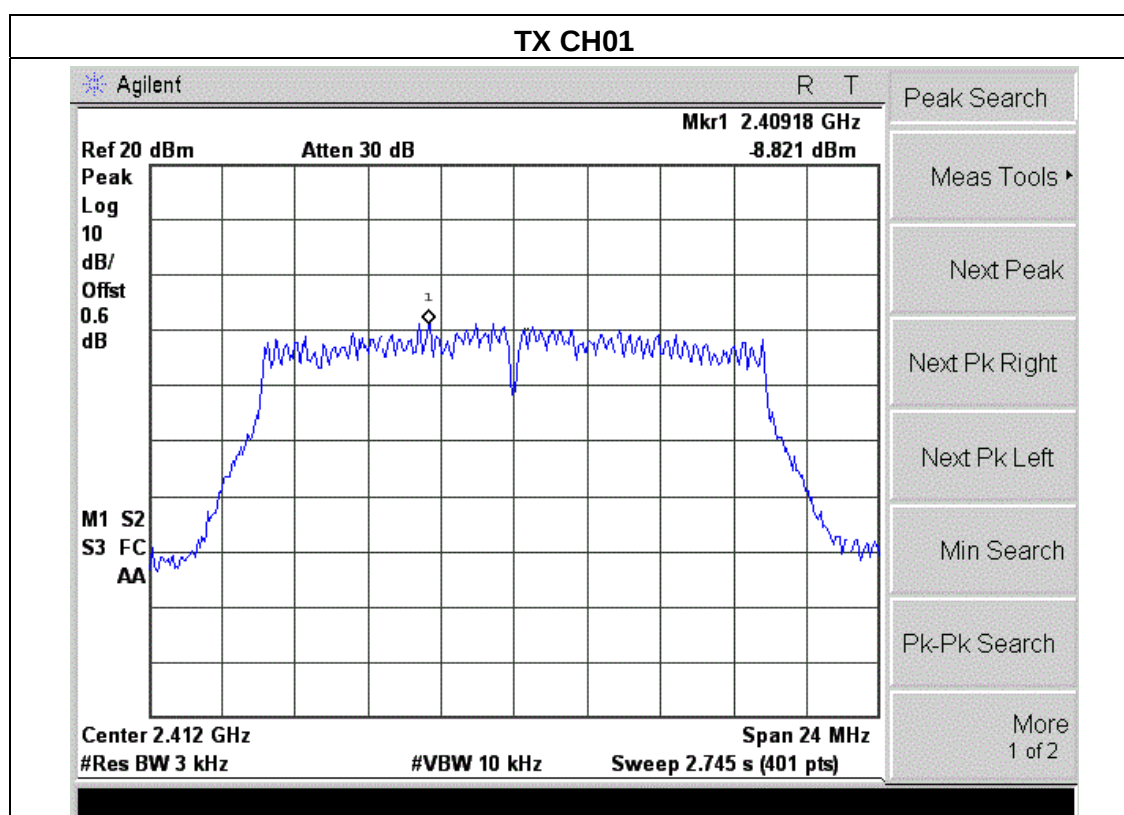
Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-6.851	8	PASS
2437 MHz	-6.599	8	PASS
2462 MHz	-6.645	8	PASS

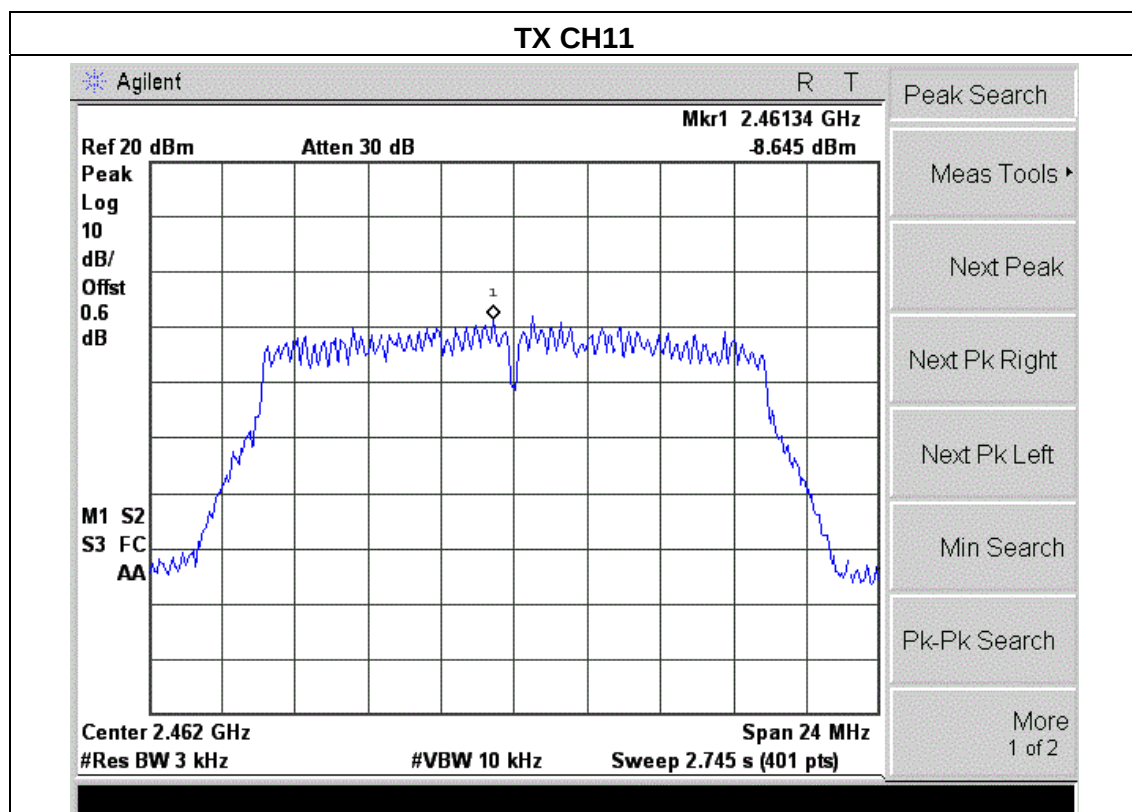
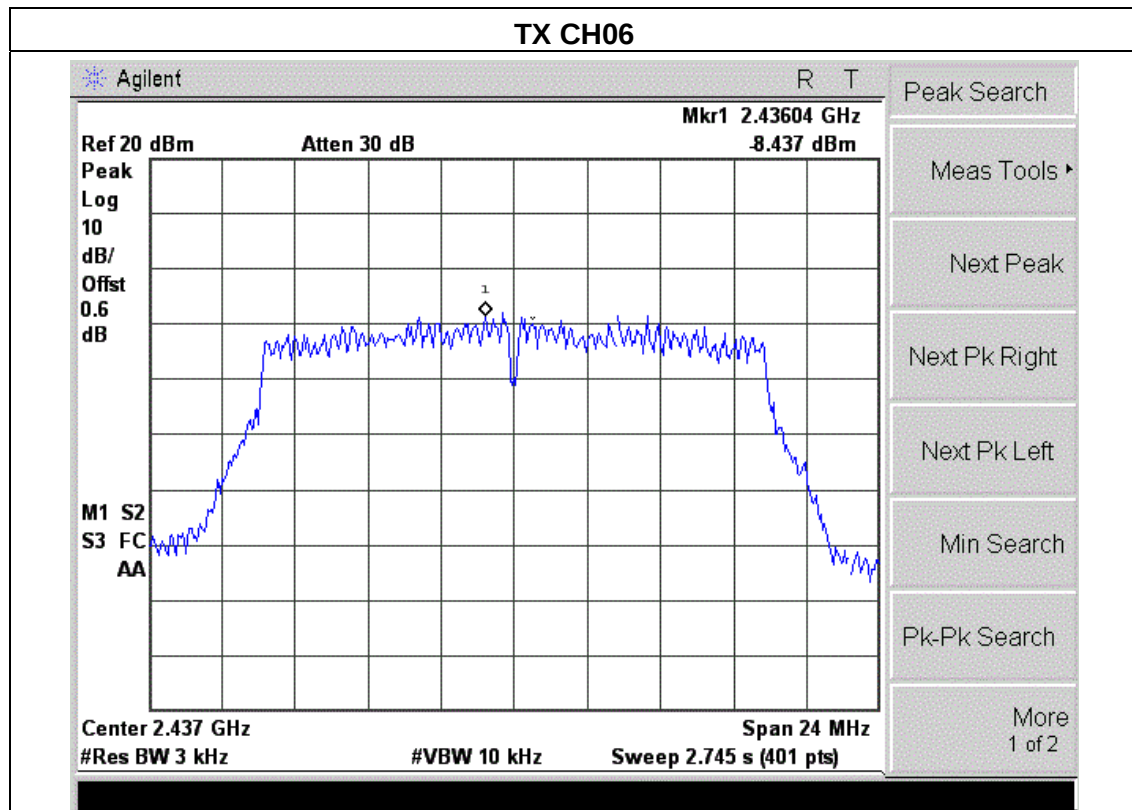




EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX g Mode /CH01, CH06, CH11		

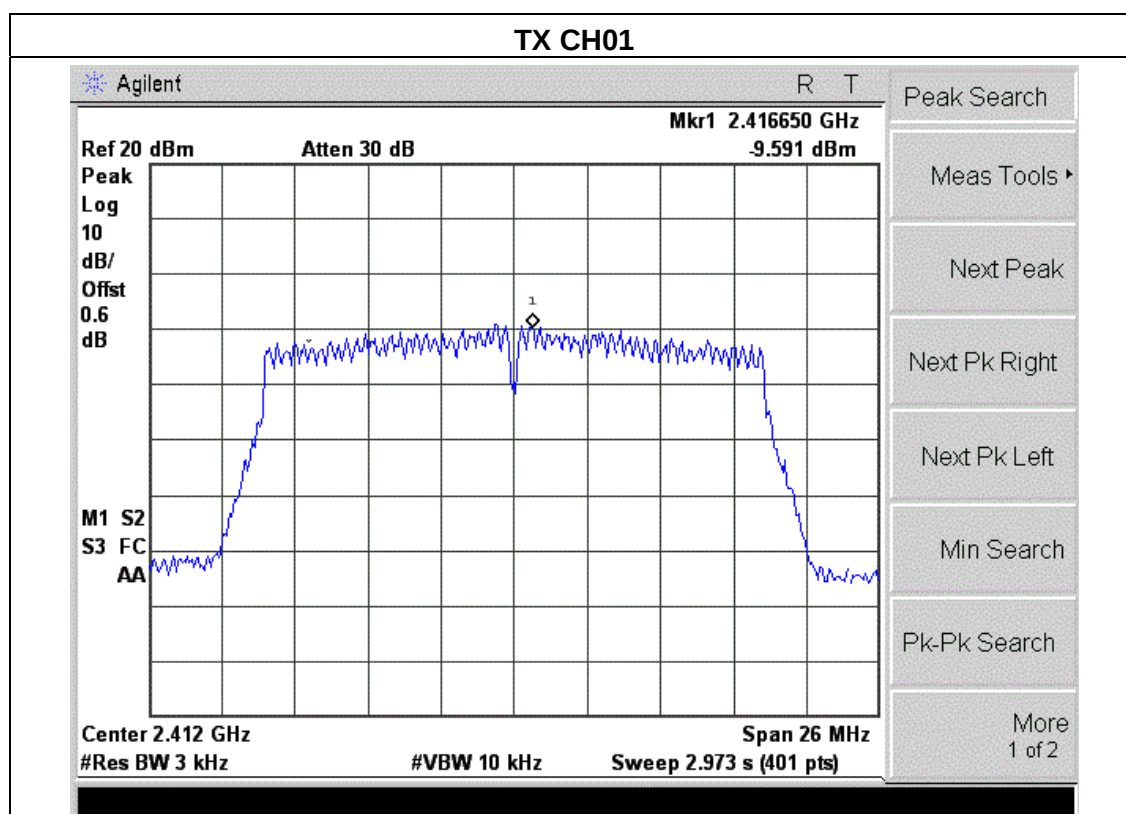
Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-8.821	8	PASS
2437 MHz	-8.437	8	PASS
2462 MHz	-8.645	8	PASS

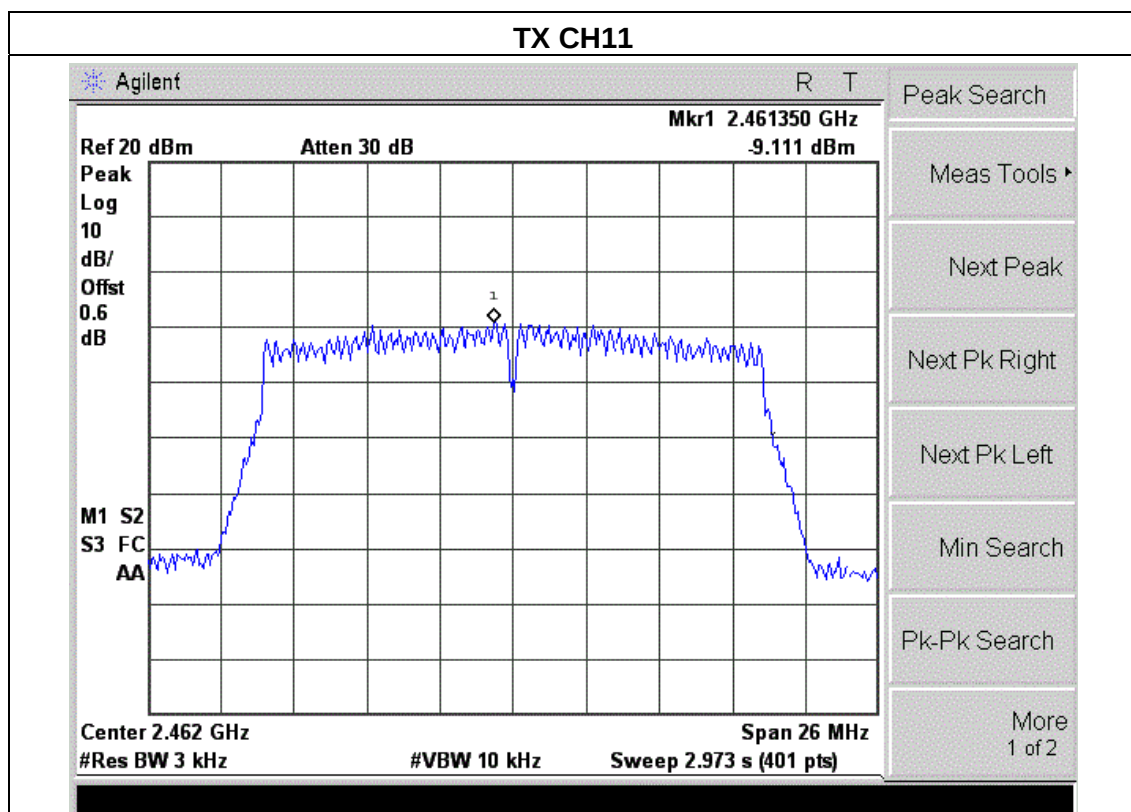
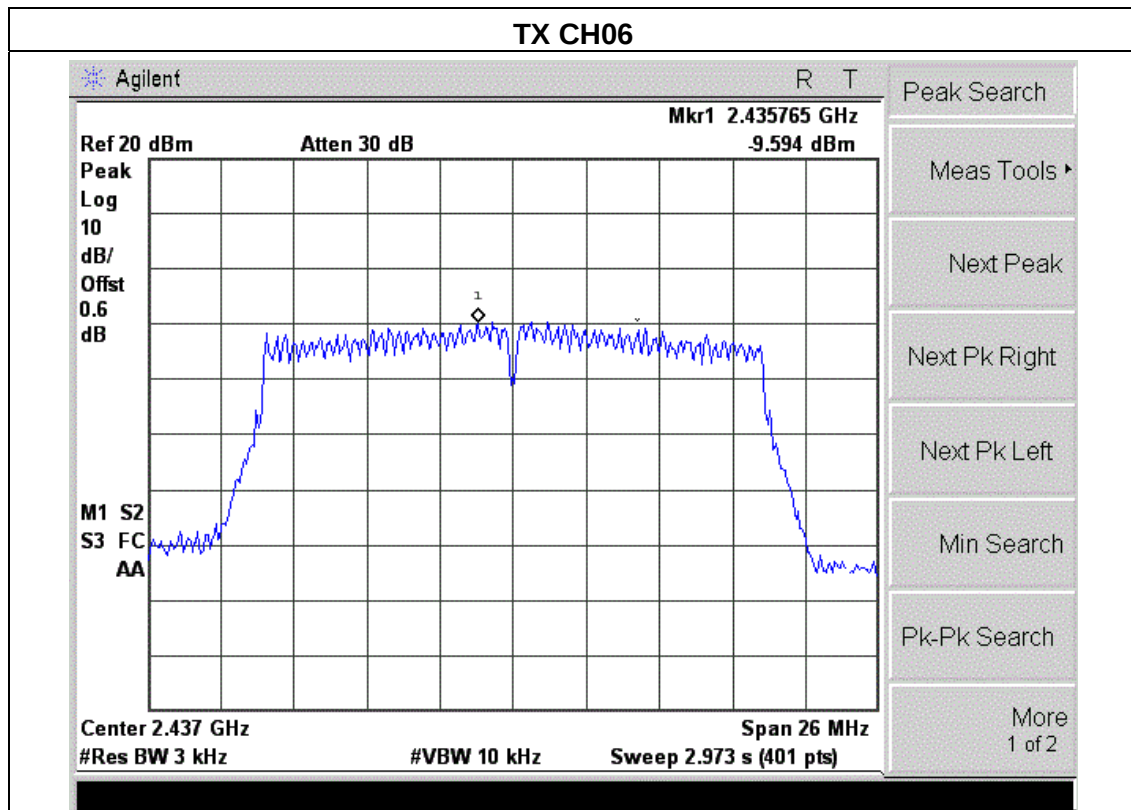




EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX n Mode(20M) /CH01, CH06, CH11		

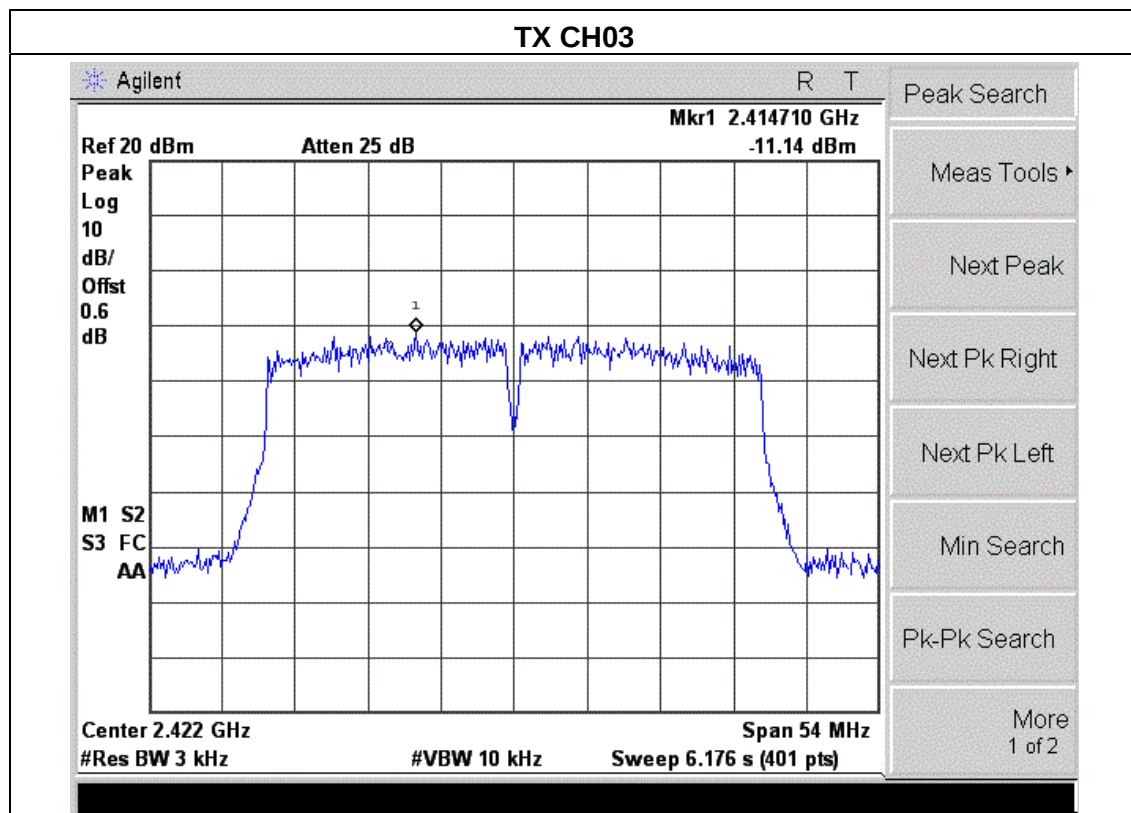
Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-9.591	8	PASS
2437 MHz	-9.594	8	PASS
2462 MHz	-9.111	8	PASS

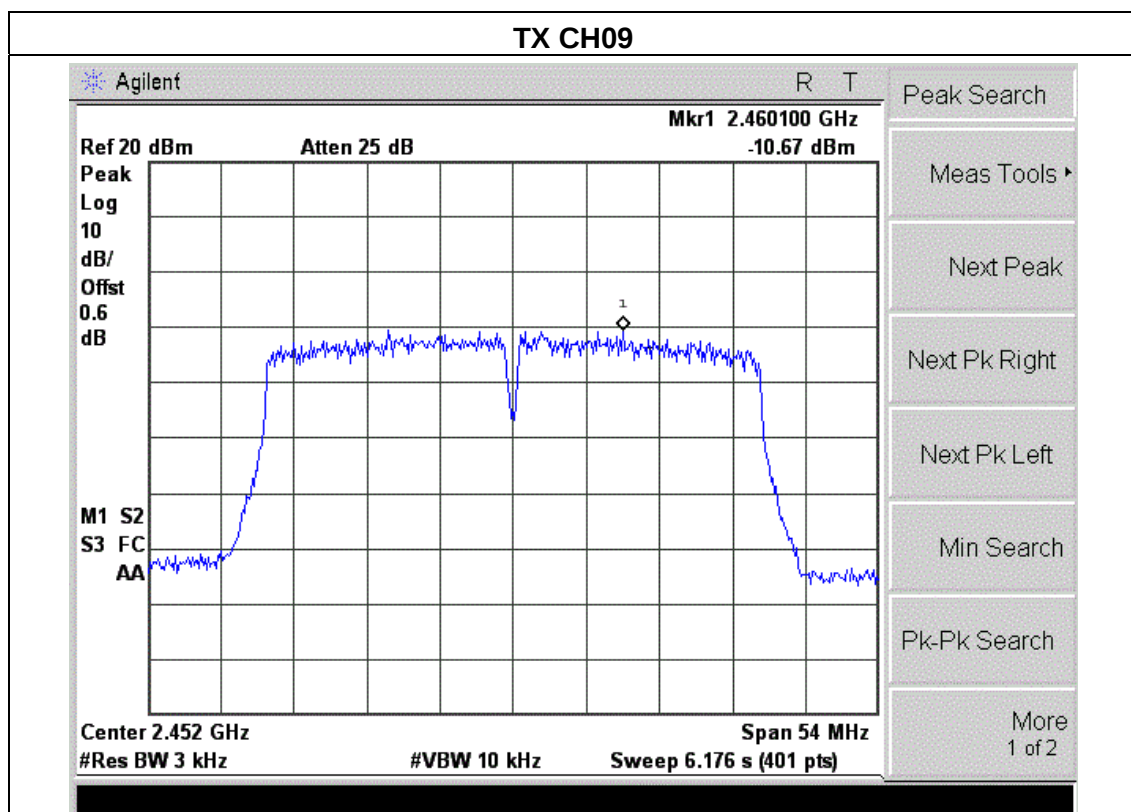
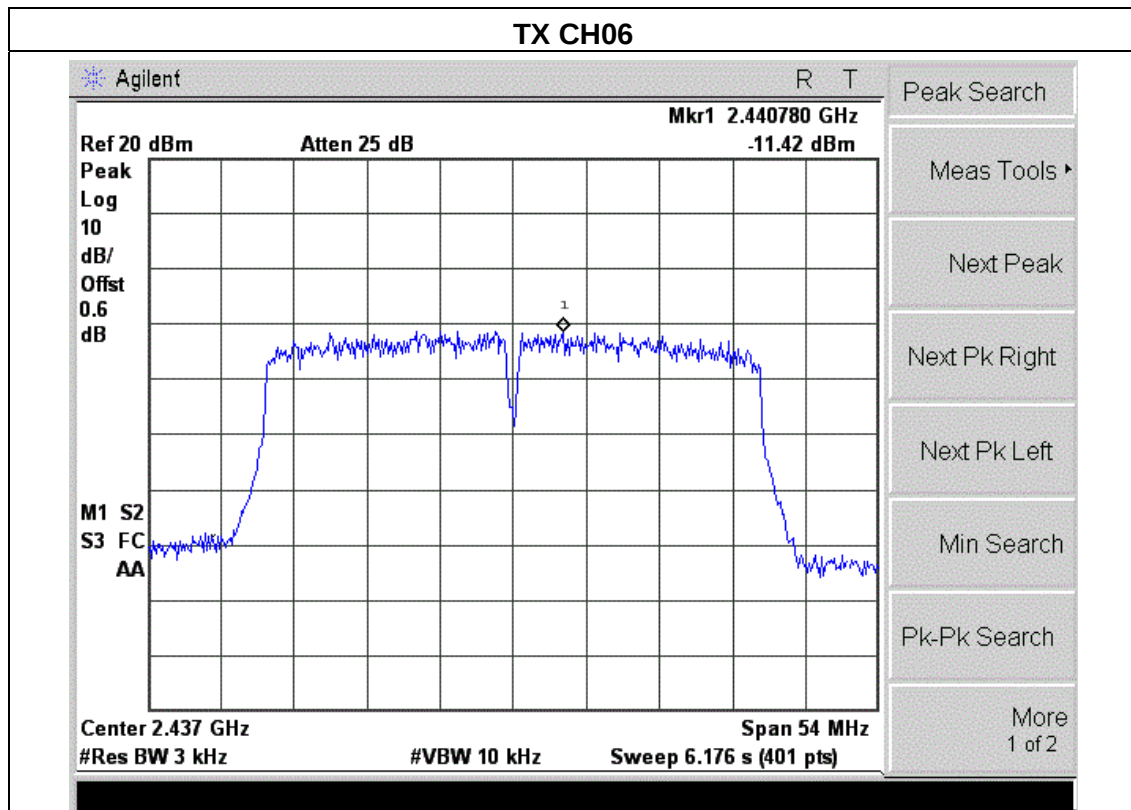




EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX n Mode(40M) /CH03, CH06, CH09		

Frequency	Power Density (dBm)	Limit (dBm)	Result
2422 MHz	-11.14	8	PASS
2437 MHz	-11.42	8	PASS
2452 MHz	-10.67	8	PASS





7. BANDWIDTH TEST

7.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	$\geq 500\text{KHz}$ (6dB bandwidth)	2400-2483.5	PASS

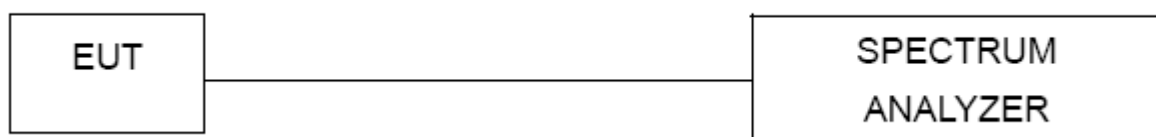
7.1.1 TEST PROCEDURE

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) $\geq 3 \times$ 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 frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

7.1.2 DEVIATION FROM STANDARD

No deviation.

7.1.3 TEST SETUP



7.1.4 EUT OPERATION CONDITIONS

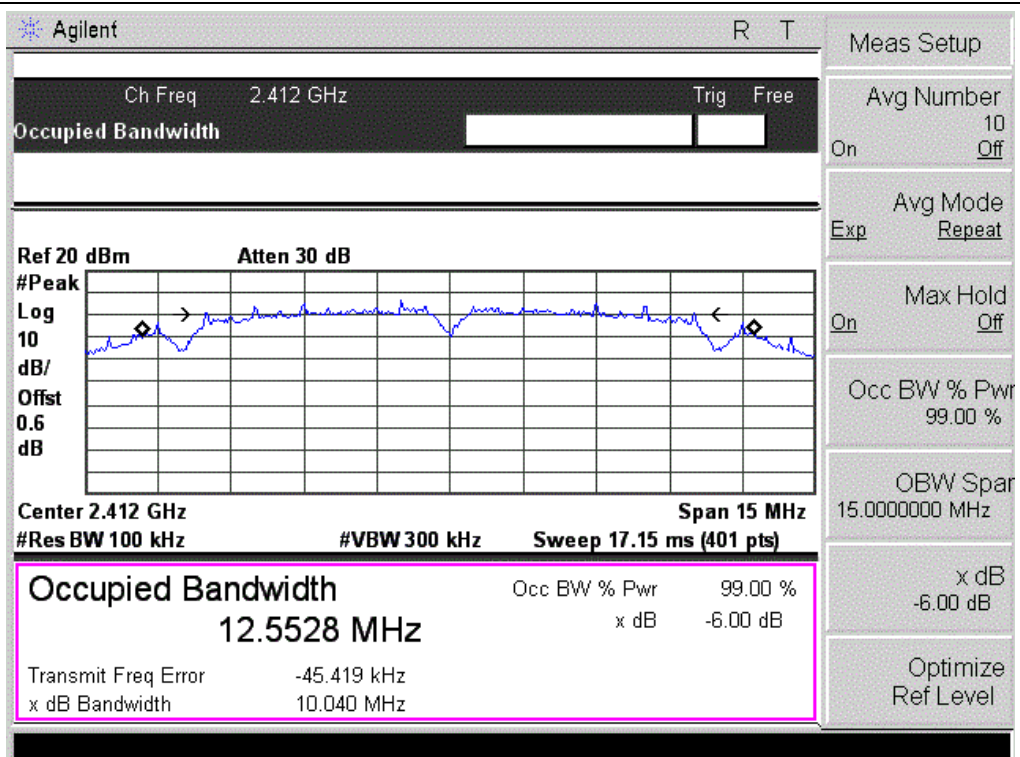
The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

7.1.5 TEST RESULTS

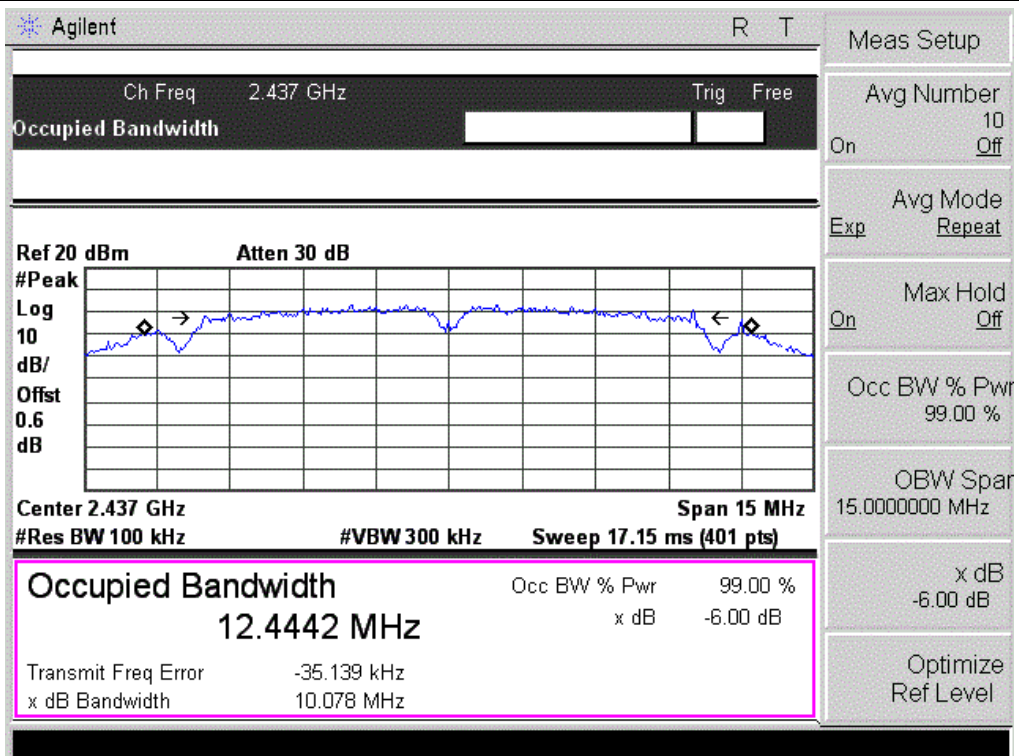
EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX b Mode /CH01, CH06, CH11		

Frequency	6dB Bandwidth (MHz)	Channel Separation (MHz)	Result
2412 MHz	10.040	>=500KHz	PASS
2437 MHz	10.078	>=500KHz	PASS
2462 MHz	10.026	>=500KHz	PASS

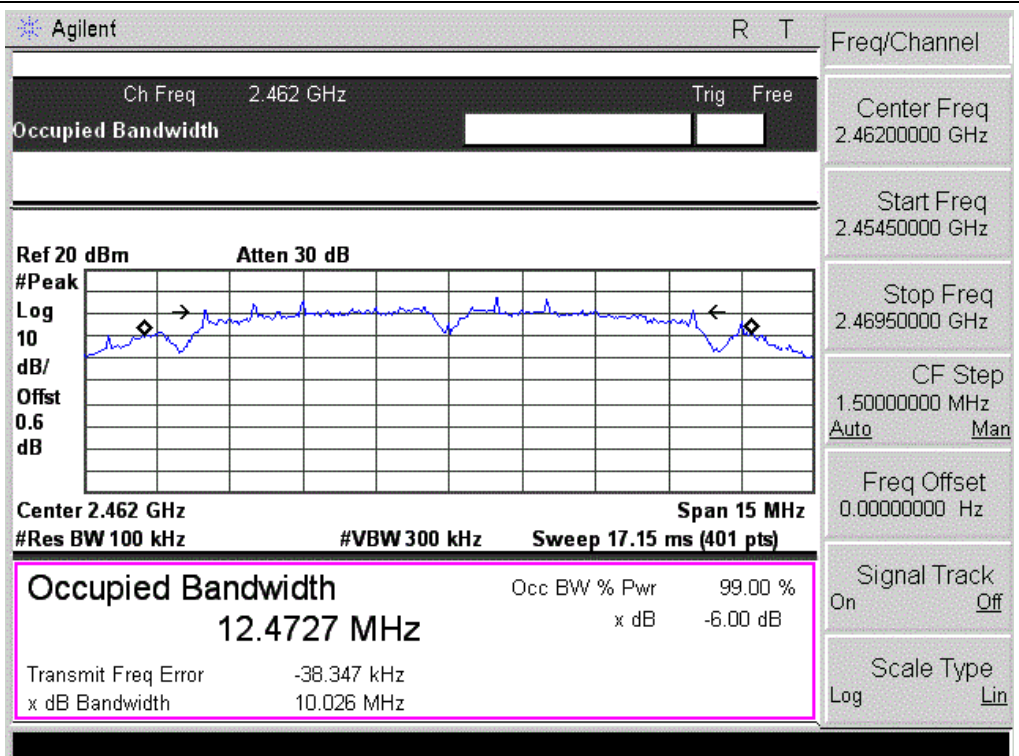
TX CH 01



TX CH 06

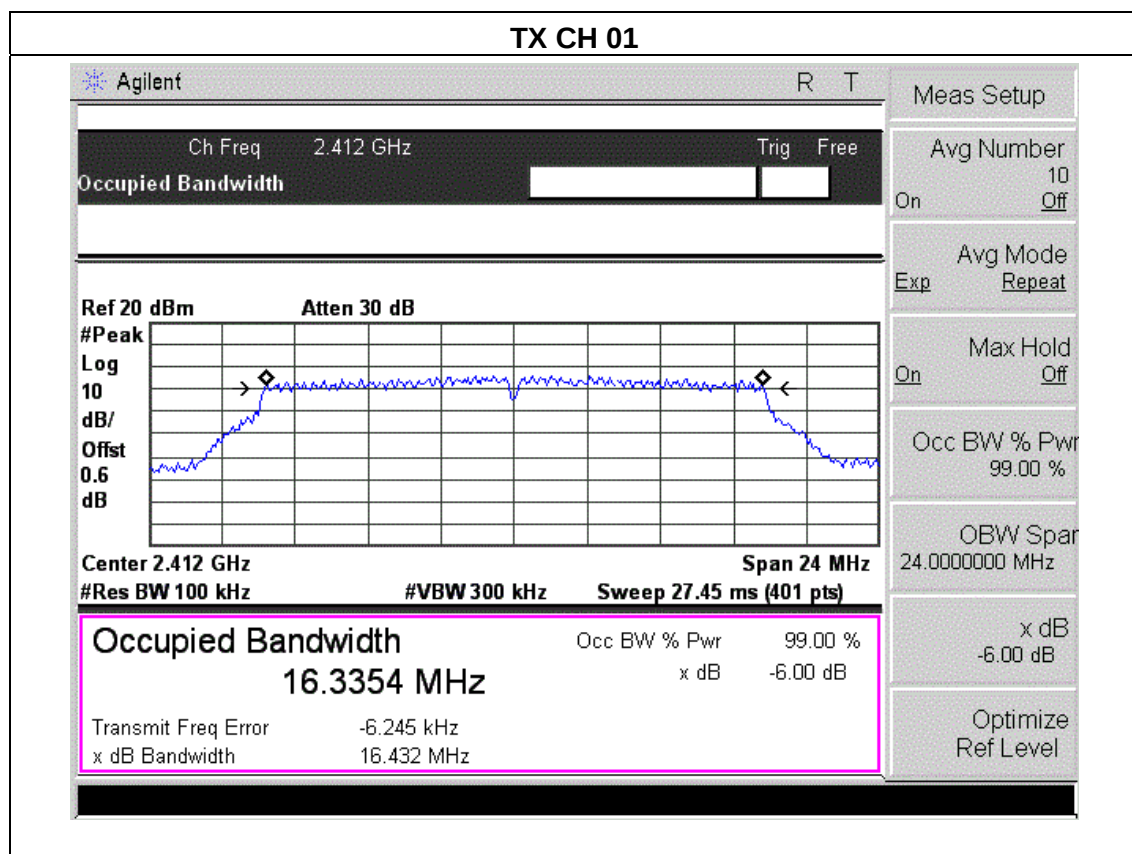


TX CH 11

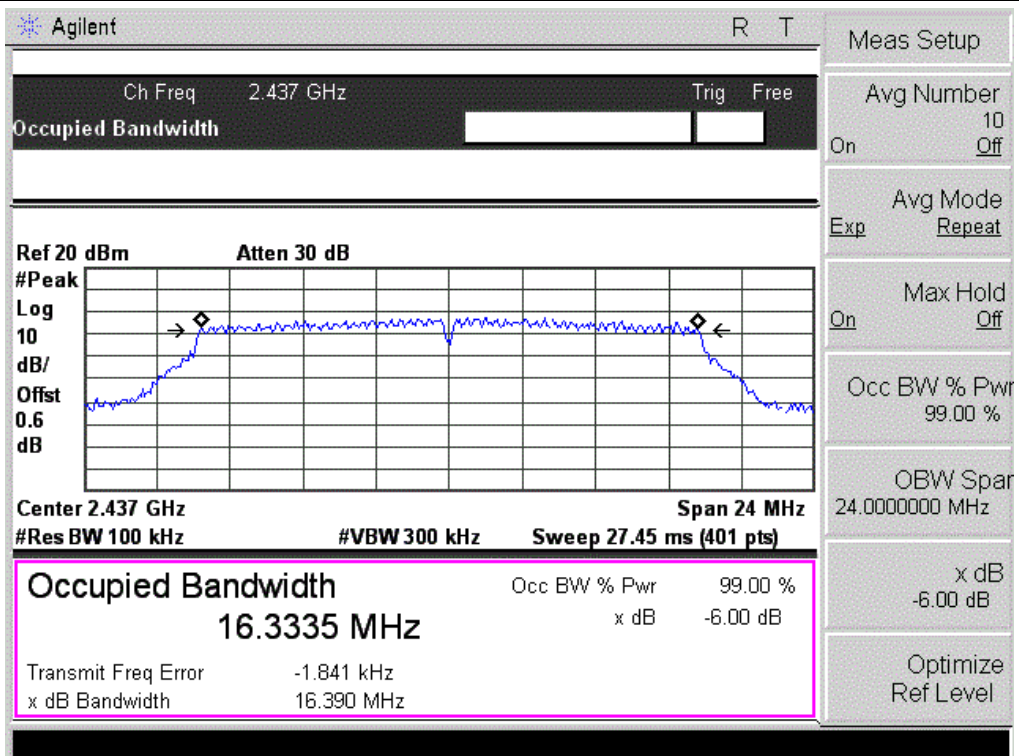


EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX g Mode /CH01, CH06, CH11		

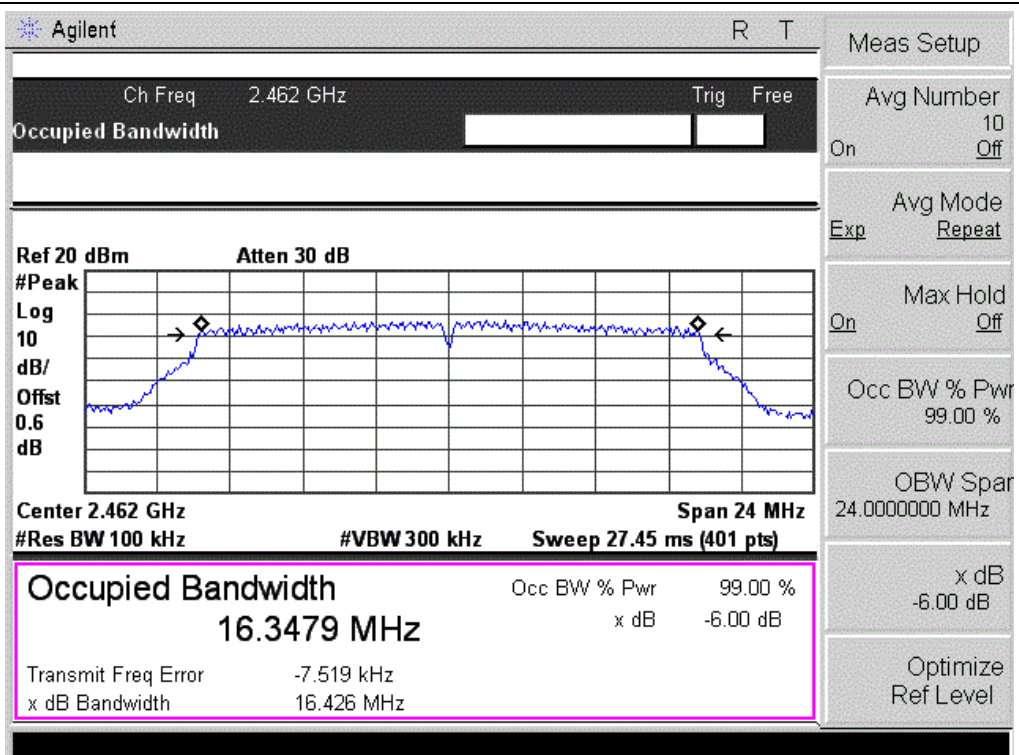
Frequency	6dB Bandwidth (MHz)	Channel Separation (MHz)	Result
2412 MHz	16.432	>=500KHz	PASS
2437 MHz	16.390	>=500KHz	PASS
2462 MHz	16.426	>=500KHz	PASS



TX CH 06

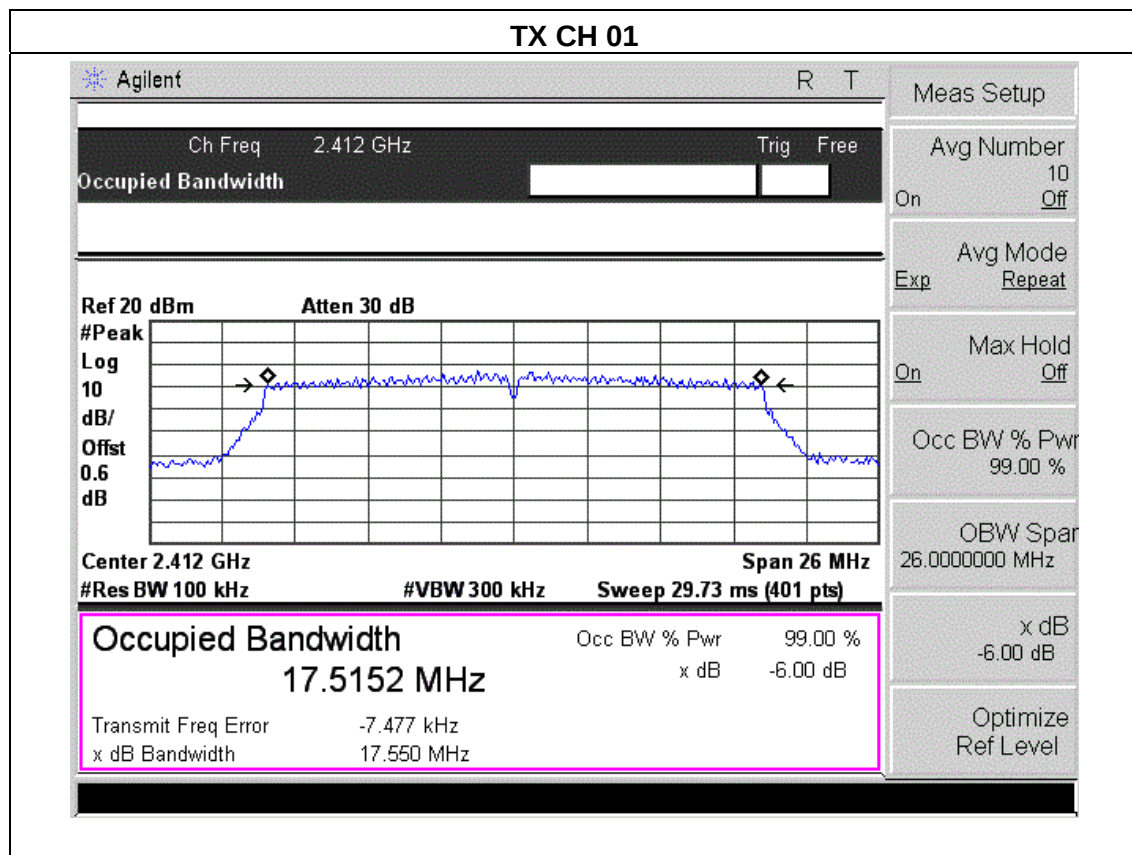


TX CH 11

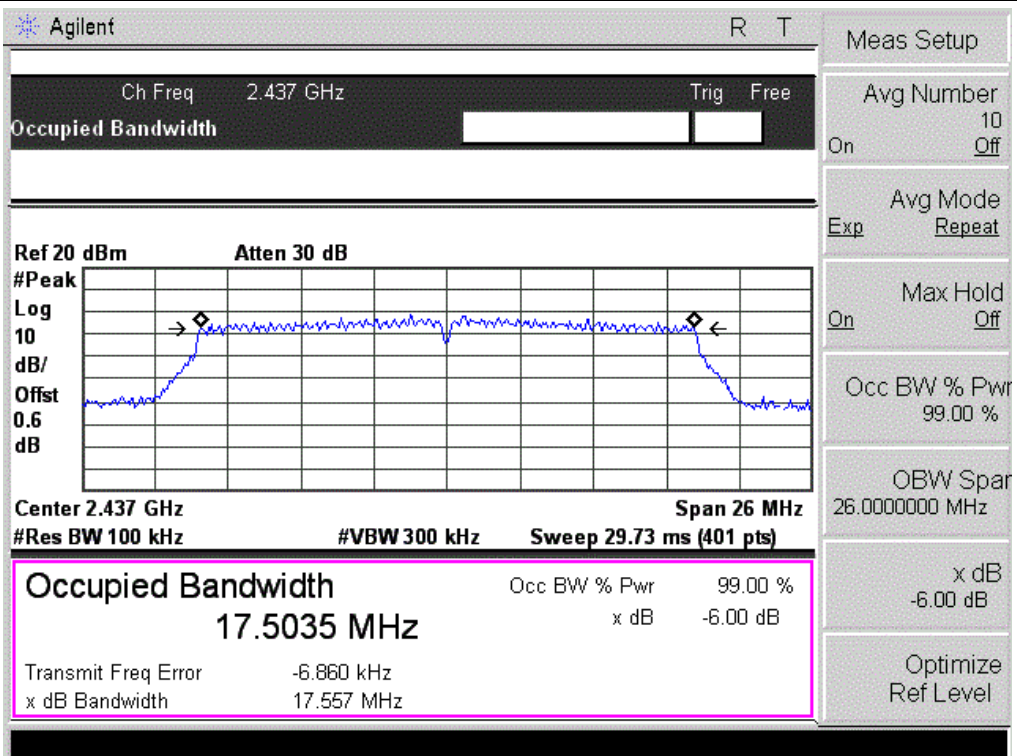


EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX n Mode(20M) /CH01, CH06, CH11		

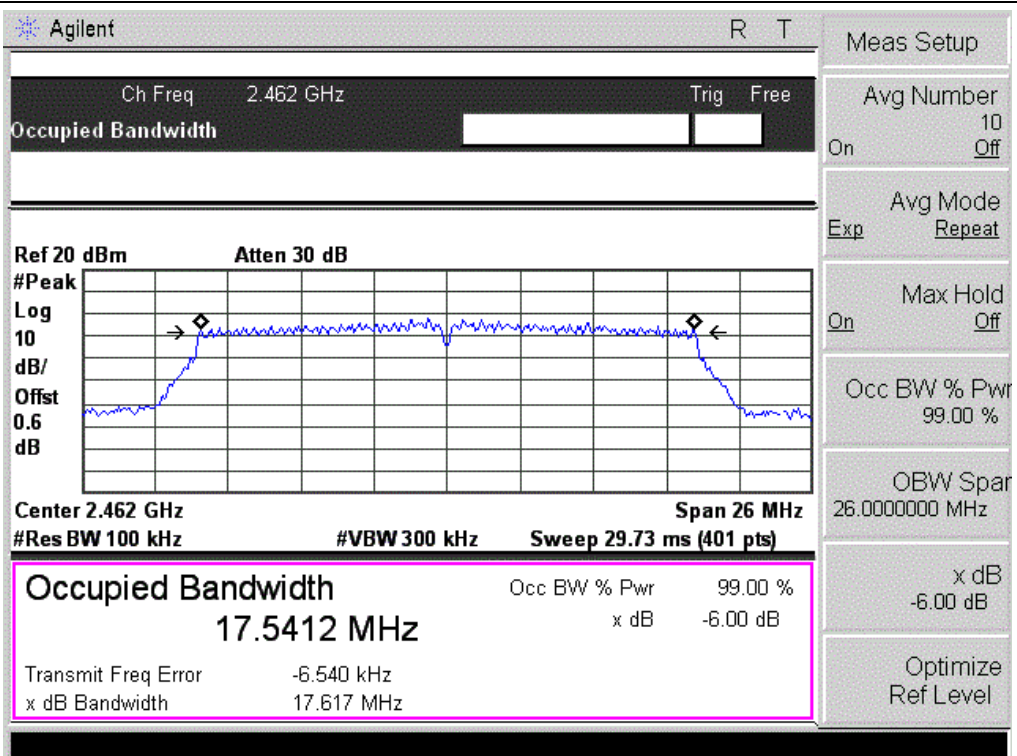
Frequency	6dB Bandwidth (MHz)	Channel Separation (MHz)	Result
2412 MHz	17.550	>=500KHz	PASS
2437 MHz	17.557	>=500KHz	PASS
2462 MHz	17.617	>=500KHz	PASS



TX CH 06

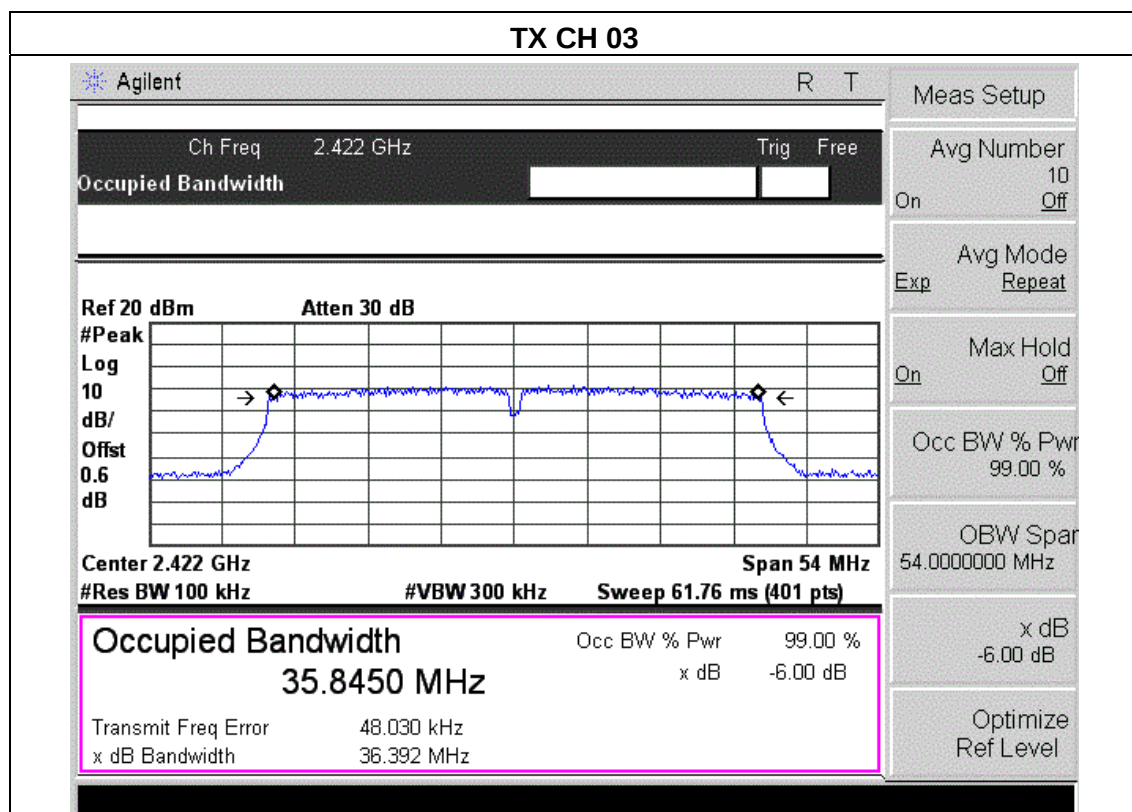


TX CH 11

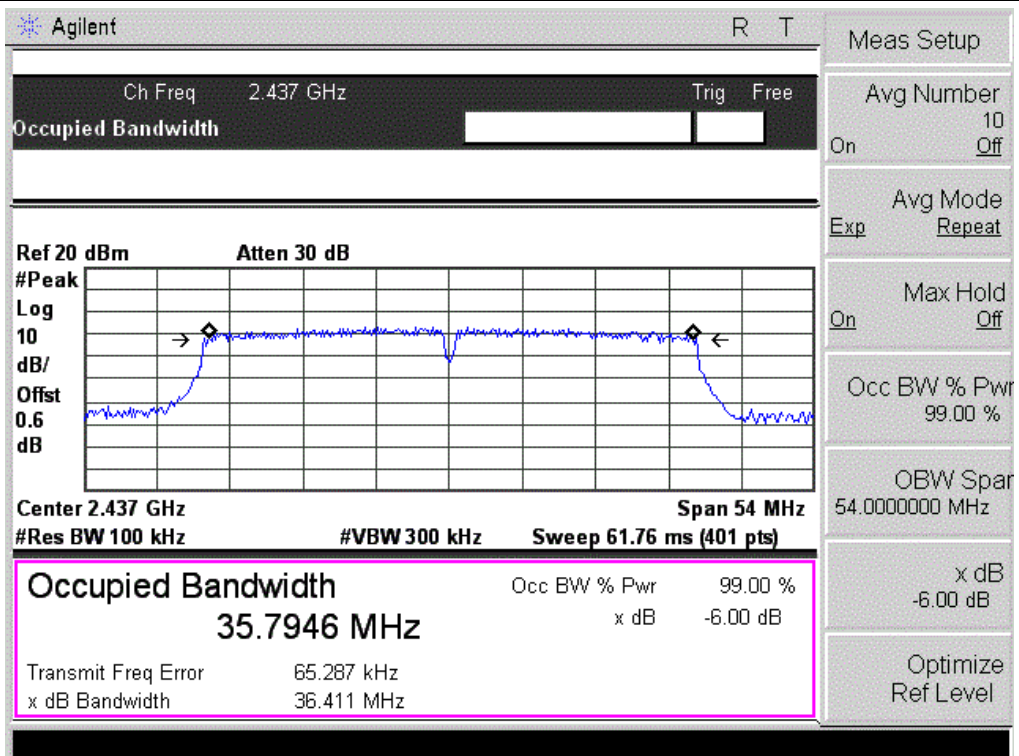


EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX n Mode(40M) /CH03, CH06, CH09		

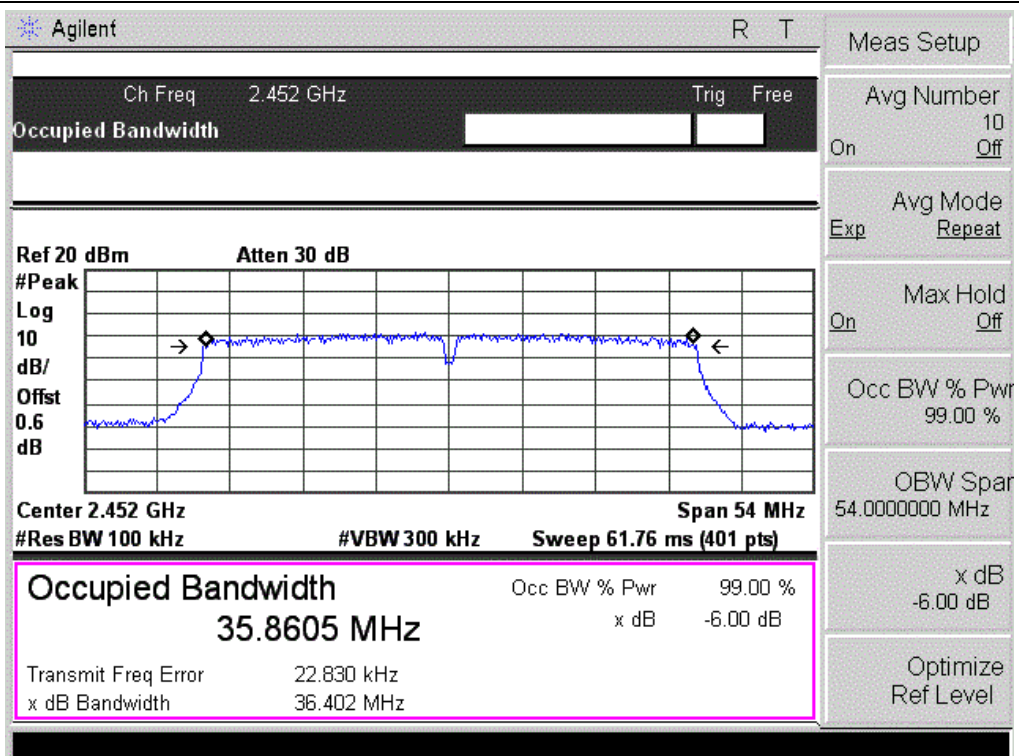
Frequency	6dB Bandwidth (MHz)	Channel Separation (MHz)	Result
2422 MHz	36.392	>=500KHz	PASS
2437 MHz	36.411	>=500KHz	PASS
2452 MHz	36.402	>=500KHz	PASS



TX CH 06



TX CH 09



8. PEAK OUTPUT POWER TEST**8.1 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

8.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the Power Sensor&Power meter

8.1.2 DEVIATION FROM STANDARD

No deviation.

8.1.3 TEST SETUP**8.1.4 EUT OPERATION CONDITIONS**

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

8.1.5 TEST RESULTS

EUT :	3G MOBILE PHONE	Model Name :	U511
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX b/g/n(20M,40M) Mode /CH01, CH06, CH11		

TX 802.11b Mode

Test Channe	Frequency	Peak Conducted Output Power	LIMIT
	(MHz)	(dBm)	dBm
CH01	2412	9.34	30
CH06	2437	9.565	30
CH11	2462	9.886	30

TX 802.11g Mode

Test Channe	Frequency	Peak Conducted Output Power	LIMIT
	(MHz)	(dBm)	dBm
CH01	2412	7.246	30
CH06	2437	7.904	30
CH11	2462	7.624	30

TX 802.11n20 Mode

Test Channe	Frequency	Peak Conducted Output Power	LIMIT
	(MHz)	(dBm)	dBm
CH01	2412	6.824	30
CH06	2437	6.817	30
CH11	2462	7.077	30

TX 802.11n40 Mode

Test Channe	Frequency	Peak Conducted Output Power	LIMIT
	(MHz)	(dBm)	dBm
CH03	2422	4.495	30
CH06	2437	4.866	30
CH09	2452	4.92	30

9. ANTENNA REQUIREMENT

9.1 STANDARD REQUIREMENT

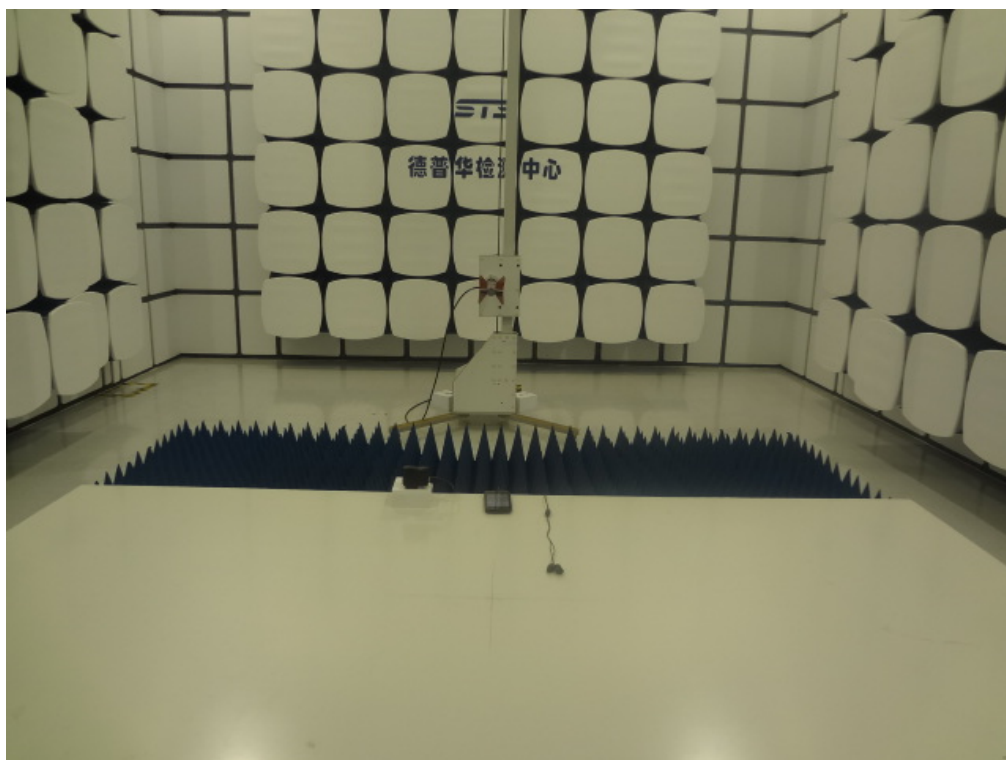
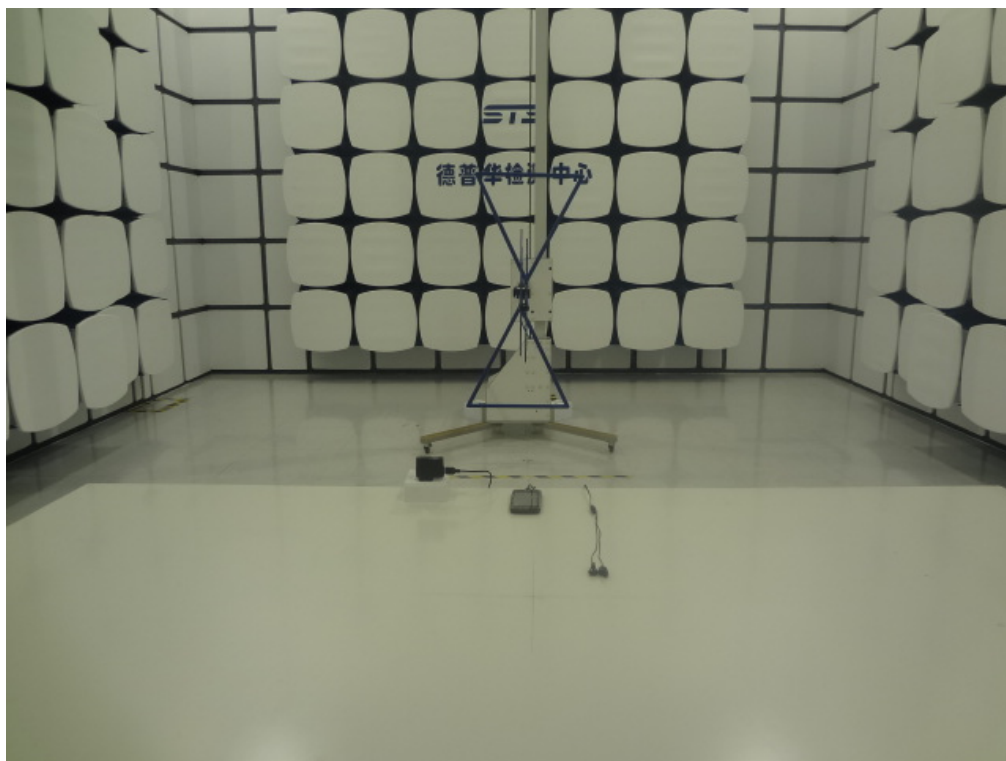
15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

9.2 EUT ANTENNA

The EUT antenna is PIFA Antenna. It comply with the standard requirement.

EUT TEST PHOTO

Radiated Measurement Photos



Conducted Measurement Photos

