



# FCC RF Test Report

**Product Name: T-Mobile myTouch;  
HSPA/UMTS/GPRS/GSM/EDGE Mobile Phone with Bluetooth;  
Ascend G 312**

**Model Number: HUAWEI U8680, U8680**

**Report No: SYBH(Z-RF)004022012-2003  
FCC ID: QISU8680**

**Reliability Laboratory of Huawei Technologies Co., Ltd.**

Huawei Base, Bantian, Longgang District, Shenzhen 518129, P.R. China

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## Notice

1. The laboratory has obtained the accreditation of China National Accreditation Service for Conformity Assessment (CNAS), and accreditation number: L0310.
2. The laboratory has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements. The site recognition number is 97456.
3. The laboratory has been listed by industry Canada to perform electromagnetic emission measurement. The site recognition number is 6369A-2.
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**Applicant:** Huawei Technologies Co., Ltd.  
**Address:** Huawei Base, Bantian, Longgang District, Shenzhen  
 518129, P.R. China  
**Date of Receipt Test Item:** Mar.03, 2012  
**Start Date of Test:** Mar.05, 2012  
**End Date of Test:** Mar.12, 2012

**Test Result:** Pass

Approved By Senior Engineer Mar.15, 2012 Dai Linjun *Dai Linjun*  
 Date Name Signature

Reviewed By Mar.15, 2012 Cousy Xu *Cousy XU*  
 Date Name Signature

Operator Mar.15, 2012 Huang Qiuliang *Huang Qiuliang*  
 Date Name Signature

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# 1 General Information

## 1.1 Applied Standard

Applied Rules: 47 CFR FCC Part 2:2010, Subpart J  
47 CFR FCC Part 27:2010, Subpart C&L  
ANSI/TIA 603C 2004

## 1.2 Test Location

Test Location 1: Reliability Laboratory of Huawei Technologies Co., Ltd.  
Address: Huawei Base, Bantian, Longgang District, Shenzhen 518129, P.R.  
China

## 1.3 Test Environment Condition

Ambient Temperature: 20 – 25 °C  
Ambient Relative Humidity: 45 – 55 %  
Atmospheric Pressure: 101 kPa

## 2 Summary

Table 1 Summary of results

Test Case	FCC Part No.	Requirements	Result
AWS Band			
Transmitter Output Power	2.1046 & 27.50(d)	Peak EIRP not exceed 1 W	Pass
PAPR	27.50(d)(5) & 27.50(d)(6)	Peak-to-average ratio not exceed 13 dB	Pass
Modulation Characteristics	2.1047	Digital modulation	Pass
Occupied Bandwidth	2.1049	(Not specified)	Pass
Band Edges Compliance	2.1051 & 27.53(h)	Below -13 dBm/1%*EBW, in 1 MHz range	Pass
Spurious Emission at Antenna Terminals	2.1051 & 27.53(h)	Below -13 dBm/1 kHz, 9 kHz to 150 kHz Below -13 dBm/10 kHz, 150 kHz to 30 MHz Below -13 dBm/1 MHz, 30 MHz to 10 <sup>th</sup> harmonics	Pass
Field Strength of Spurious Radiation	2.1053 & 27.53(h)	Below -13 dBm/1 MHz	Pass
Frequency Stability	2.1055 & 27.54	Stay within the authorized bands of operation	Pass

### 3 Product Description

#### 3.1 Production Information

##### 3.1.1 General Description

HUAWEI U8680, U8680 is subscriber equipment in the WCDMA/GSM system. The HSPA/UMTS frequency band is Band I, Band II, Band IV, and Band V, but only Band IV band test data included in this report. The GSM/GPRS/EDGE frequency band includes GSM850 and GSM900 and DCS1800 and PCS1900. The Mobile Phone implements such functions as RF signal receiving/transmitting, HSPA/UMTS and GSM/GPRS/EDGE protocol processing, voice, video MMS service, GPS, AGPS and WIFI etc. Externally it provides micro SD card interface, earphone port(to provide voice service) and USIM card interface. It also provides Bluetooth module to synchronize data between a PC and the phone, or to use the built-in modem of the phone to access the Internet with a PC, or to exchange data with other Bluetooth devices.

##### 3.1.2 Board Information

Table 2 Board Information

T-Mobile myTouch; HSPA/UMTS/GPRS/GSM/EDGE Mobile Phone with Bluetooth; Ascend G 312		
HUAWEI U8680, U8680		
Hardware Version	Software Version	Serial Number
HD1U868M	U8680V100R001C85B815	C5Z01A11B1800946

##### 3.1.3 Sub-Assembly

AC/DCAdapter Model	HW-050100U2W
Manufacturer	Huawei Technologies Co., Ltd.
Input Voltage	~100-240V 50/60Hz 0.2A
Output Voltage	5V  1A
Rated Power	5W

##### 3.1.4 Battery Technical Data

Name	Manufacture	Description
Rechargeable Li-ion	Huawei Technologies Co., Ltd.	Battery Model: HB5N1H Rated capacity: 1500mAh Nominal Voltage:  +3.7V Charging Voltage:  +4.2V

## 4 Test Description

### 4.1 Supported Frequency Range

Characteristics	Description
Downlink	1713 to 1753 MHz
Uplink	2113 to 2153 MHz

### 4.2 Transmitter / Receiver Characteristics

Characteristics	Description
System Type	UMTS
TX Output Power (per Antenna Port)	UMTS system: 24dBm;
Channel Spacing(s) / Bandwidth(s)	UMTS system: 5 MHz
Designation of Emissions	UMTS system: 4M16F9W

### 4.3 Antenna Gain

Antenna Gain(dBi)	-0.2
-------------------	------

### 4.4 Power Supply

Specification	Description
Power Supply Type	Directly Connected to DC /AC Power Supply
Input to EUT (DC power)	DC Voltage Nominal: == 3.7 V DC Voltage Range: == 3.6 V to 4.2 V

## 5 General Test Conditions / Configurations

### 5.1 RF Channels under Test

Test Mode	TX / RX	RF Channel		
		Bottom (B)	Middle (M)	Top (T)
TM1/TM2/TM3	TX	Channel1312(B)	Channel1412(M)	Channel1513(T)
		1712.4MHz	1732.4MHz	1752.6MHz
	RX	Channel 1537	Channel 1637	Channel 1738
		2112.4 MHz	2132.4 MHz	2152.6 MHz

### 5.2 Test Modes

Test Mode	Test Modes Description
TM1	WCDMA ,QPSK modulation
TM2	HSDPA , QPSK modulation
TM3	HSUPA , QPSK modulation

### 5.3 Test Environments

Environment Parameter	Selected Values During Tests	
Relative Humidity	Ambient	
Temperature	TN	Ambient
Voltage	VL	3.6V
	VN	3.7V
	VH	4.2V

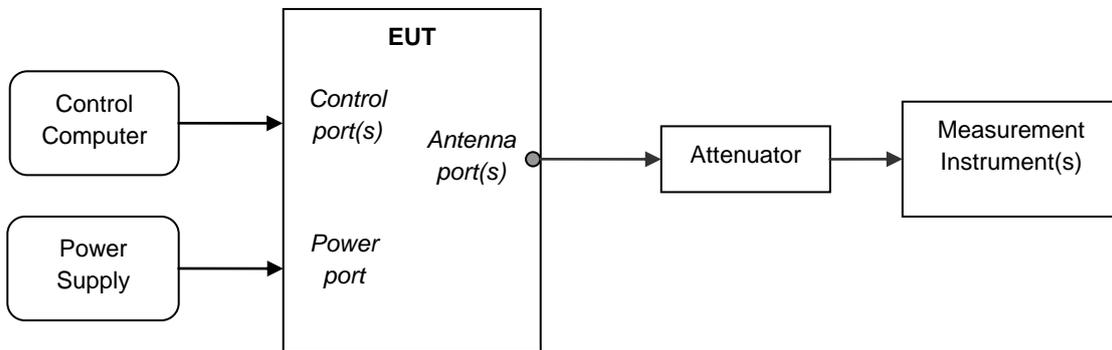
NOTE: VL= lower extreme test voltages  
VN= nominal voltage  
VH= upper extreme test voltage  
TN= normal temperature

## 5.4 Test Setups

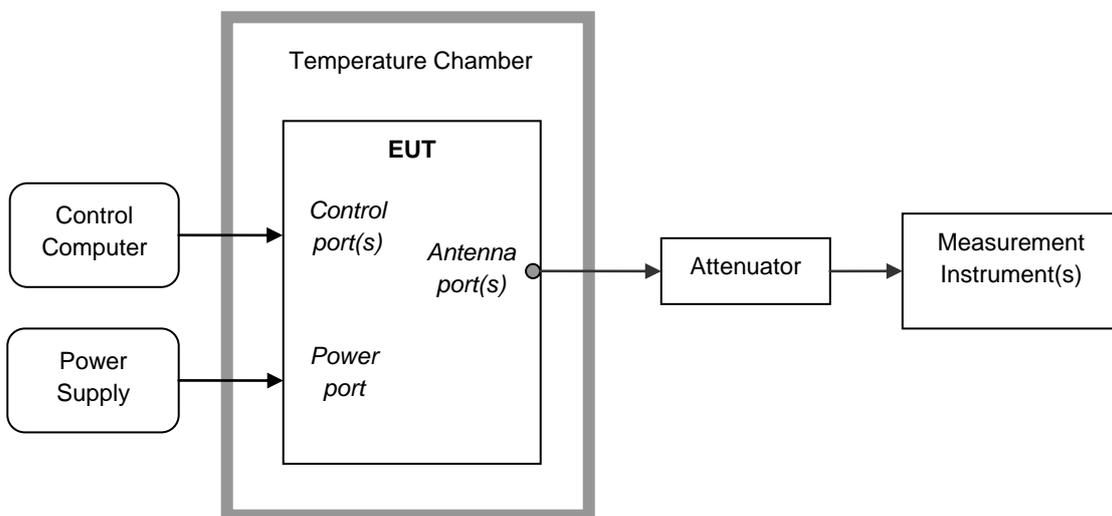
### 5.4.1 General Test Setup Configurations

Configuration	Description
Test Antenna Ports	Until otherwise declared, all TX tests are ONLY performed at the main Transmitter antenna port (e.g. TRXA, TXA and so on) of the EUT, and all RX tests are ONLY performed at the main Receiver antenna port (e.g. TRXA, RXA and so on) of the EUT.
Multiple RF Sources	Other than the tested RF source of the EUT, other RF source(s) are disabled or shutdown during measurements.

### 5.4.2 Test Setup 1



### 5.4.3 Test Setup 2



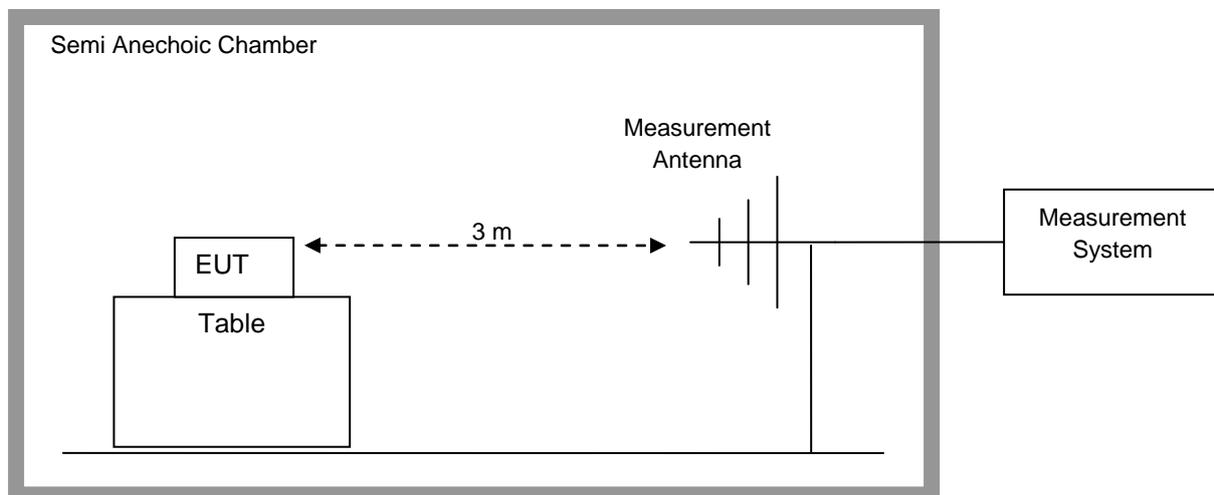
### 5.4.4 Test Setup 3

NOTE1: Effective Isotropic radiated power (EIRP) refers to the radiation power output of the EUT, assuming all emissions are radiated from half-wave dipole antennas.

NOTE2: The EUT was set-up on insulator 80cm above the Ground Plane. The set-up and test methods were according to ANSI-TIA-603C 2004. The measurements were made using a Rohde and Schwarz Test Receiver and control software.

#### Step 1: Pre-test , find the Maximum EIRP

1. Connect the test system according to Figure. EUT is running for 30 minutes before test, and measurement instruments are warming-up for 30 minutes.
2. Set up communication link between Universal radio communication tester and EUT, set EUT working frequency, and control EUT to transmit at maximum power.
3. Set the center frequency of the signal analyzer or receiver to the EUT's operating frequency, the RBW is equal to the emission bandwidth of signal. RMS detector for the test.. Normally, the height range of antenna was 1m to 4m, the azimuth range of turntable was 0° to 360°, The receive antenna has two polarizations V and H. A portable or small unlicensed wireless device shall be placed on a non-metallic test fixture or other nonmetallic support during testing. The supporting fixture shall permit orientation of the EUT in each of three orthogonal (x, y, z axes) axis positions such that emissions from the EUT are maximized. Measure the EUT maximum RF power and record the result.
4. Changing EUT working frequency and measuring the RF power at channel T, M, B respectively. Complete the test data.

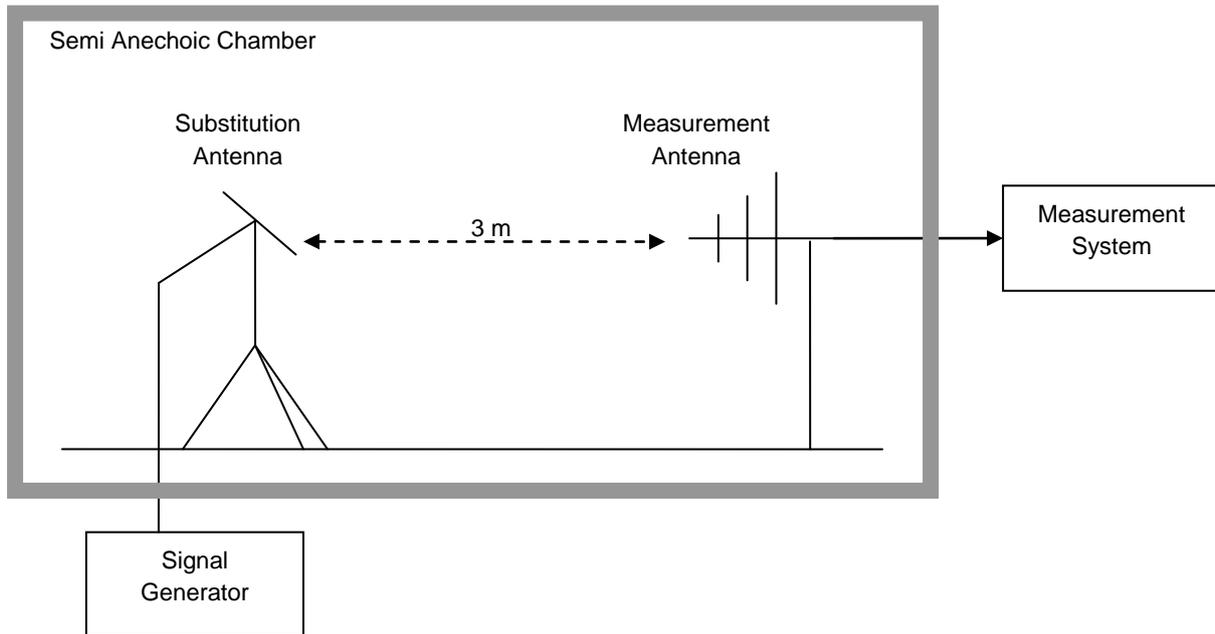


## Step 2: Substitution method to verify the maximum EIRP

1.Measurement setup according to figure , EUT was substituted by antenna, and the polarization is identical as the test antenna; the signal generator was connected to the substitution antenna.

2.The radiated output power, measured by signal analyzer set, is as same as recorded in above item 1).

Then this power level is matched by a signal from a calibrated signal generator which is substituted for EUT. The power supplied by the generator is then equal to the EIRP after corrected by the antenna gain and cable loss.



## 5.5 Test Conditions

Test Case		Test Conditions	
Transmitter Output Power	Conducted power	Test Configuration	Ambient Temperature & Rated Voltage
		Test Setup	Test Setup 1 & Setup 3
		Detector	RMS
		RF Channels (TX)	B, M, T
		Test Mode	TM1/TM2/TM3
	ERIP	Test Configuration	Ambient Temperature & Rated Voltage
		Test Setup	Test Setup 1 & Setup 3
		Detector	RMS
		RF Channels (TX)	B, M, T
		Test Mode	TM1/TM2/TM3
	Peak-to-Average Ratio	Test Configuration	Ambient Temperature & Rated Voltage
		Test Setup	Test Setup 1 & Setup 3
		RF Channels (TX)	B, M, T
		Test Mode	TM1/TM2/TM3/TM4/TM5
Modulation Characteristics		Test Configuration	Ambient Temperature & Rated Voltage
		Test Setup	Test Setup 1
		RF Channels (TX)	M
		Test Mode	TM1
Bandwidth	99% Occupied Bandwidth	Test Configuration	Ambient Temperature & Rated Voltage
		Test Setup	Test Setup 1
		Detector	PK
		RF Channels (TX)	B, M, T
		Test Mode	TM1/TM2/TM3
	Emission Bandwidth (if required)	Test Configuration	Ambient Temperature & Rated Voltage
		Test Setup	Test Setup 1
		Detector	PK
		RF Channels (TX)	B, M, T
		Test Mode	TM1
Band Edges Compliance			Ambient Temperature & Rated Voltage
			Test Setup 1
		Emission Bandwidth (if required)	RMS
			B, T

Test Case	Test Conditions	
		TM1/TM2/TM3
Spurious Emission at Antenna Terminals	Test Configuration	Ambient Temperature & Rated Voltage
	Test Setup	Test Setup 1
	Detector	PK
	RF Channels (TX)	B, M,T
	Test Mode	TM1
Field Strength of Spurious Radiation	Test Configuration	Ambient Temperature & Rated Voltage
	Test Setup	Test Setup 3
	Detector	PK
	RF Channels (TX)	M
	Test Mode	TM1/TM2/TM3
Frequency Stability	Test Configuration	(1) -30 °C to +50 °C with step 10 °C at Rated Voltage; (2) 85%, 100% and 115% of Rated Voltage at Ambient Temperature.
	Test Setup	Test Setup 2
	RF Channels (TX)	M
	Test Mode	TM1

## 6 Main Test Instruments

Table 3 Main Test Equipments

Equipment Description	Manufacturer	Model	Serial Number	Calibrated until
Power supply	KEITHLEY	2303	1288003	Sep.27,2012
Universal Radio Communication Tester	R&S	CMU200	117341	Jan.12.2013
Universal Radio Communication Tester	Agilent	E5515C	MY50260239	Aug.31,2012
Spectrum Analyzer	Agilent	E4440A	MY49420179	Apr.20,2012
Signal Analyzer	R&S	FSQ31	200021	Sep.27,2012
Temperature Chamber	WEISS	WKL64	24600294	Feb.13,2013
Signal generator	Agilent	E8257D	MY49281095	Jul.9.2012
Test receiver	R&S	ESU26	100150	May.29.2012
Tunable Dipole	Schwarzbeck	D69250-UHAP/D69250-VHAP	919/1009	Jan.29.2013
Tunable Dipole	Schwarzbeck	D69250-UHAP/D69250-VHAP	979/917	Jan.29.2013
Horn Antenna	R & S	HF906	100683	May.15, 2012
Horn Antenna	R & S	HF906	100684	Jul.01, 2012
Broadband Antenna	Schwarzbeck	VULB 9163	9163-357	May.15, 2012
Broadband Antenna	Schwarzbeck	VULB 9163	9163-356	May.15, 2012



## 7 Test Results

No.	Test Item	Test Result
1	Transmitter Output Power	Appendix A
2	Modulation Characteristics	Appendix B
3	Occupied Bandwidth	Appendix C
4	Band Edges Compliance	Appendix D
5	Spurious Emission at Antenna Terminals	Appendix E
6	Field Strength of Spurious Radiation	Appendix F
7	Frequency Stability	Appendix G
8	Photos of Field Strength of Spurious Radiation	Appendix H

NOTE: The Appendix H only photos of Field Strength of Spurious Radiation, no test data.



## 8 Measurement Uncertainty

For a 95% confidence level (k=2), the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 as following:

Test Item		Extended Uncertainty
Transmitter Output Power	Power (dBm)	U =0.39 dB
Occupied Bandwidth	Magnitude (%)	U=0.2%
Band Edge Compliance	Disturbance Power (dBm)	U=2.0 dB
Conducted Spurious Emissions	Disturbance Power (dBm)	U=2.0 dB
Field Strength of Spurious Radiation	ERP (dBm)	U=4.6 dB (30 MHz – 1GHz) U=3.0 dB (above 1 GHz)
Frequency Stability	Frequency Accuracy (ppm)	U=0.21 ppm

-----The END-----



# Appendix A

## Transmitter Output Power According to FCC Part 2.1046 & Part 27 Subpart C&L



## Conducted Power of Transmitter

Table 1 Measurement Results

TEST CONDITIONS		RF Output Power (Conducted)					
		Channel 1312(B)		Channel 1412(M)		Channel 1513(T)	
		1712.4MHz		1732.4MHz		1752.6MHz	
		dBm		dBm		dBm	
$T_{nom} / V_{nom}$		Measured	Limit	Measured	Limit	Measured	Limit
TM1		24.48	30	24.45	30	24.09	30
TM2	Case1	23.28	30	23.32	30	22.91	30
	Case2	23.38	30	23.31	30	23.04	30
	Case3	23.12	30	23.20	30	23.64	30
	Case4	23.47	30	23.01	30	23.56	30
TM3	Case1	22.55	30	23.28	30	22.15	30
	Case2	22.03	30	21.94	30	21.81	30
	Case3	22.08	30	22.03	30	21.59	30
	Case4	22.53	30	22.43	30	22.05	30
	Case5	22.50	30	22.19	30	22.11	30



## Peak-to-Average Ratio

Table 2 Measurement Results

TEST CONDITIONS		Channel 1312(B)		Channel 1412(M)		Channel 1513(T)	
		1712.4MHz		1732.4MHz		1752.6MHz	
		dBm		dBm		dBm	
$T_{nom} / V_{nom}$		Measured	Limit	Measured	Limit	Measured	Limit
TM1		3.15	13.0	3.33	13.0	3.21	13.0
TM2	Case1	2.98	13.0	2.97	13.0	2.94	13.0
	Case2	2.89	13.0	2.68	13.0	2.96	13.0
	Case3	2.94	13.0	2.68	13.0	2.91	13.0
	Case4	2.88	13.0	2.64	13.0	2.93	13.0
TM3	Case1	2.37	13.0	2.45	13.0	2.96	13.0
	Case2	2.85	13.0	2.90	13.0	2.55	13.0
	Case3	2.42	13.0	2.50	13.0	2.52	13.0
	Case4	2.81	13.0	2.83	13.0	2.61	13.0
	Case5	2.71	13.0	2.85	13.0	2.91	13.0



NOTE:

For TM2:

Sub-test	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{HS}$ (Note 1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
Case1	2/15	15/15	64	2/15	4/15	0.0	0.0
Case2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0
Case3	15/15	8/15	64	15/8	30/15	1.5	0.5
Case4	15/15	4/15	64	15/4	30/15	1.5	0.5

For TM3:

Sub-test	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{HS}$	$\beta_{ec}$	$\beta_{ed}$	$\beta_{ed}$ (SF)	$\beta_{ed}$ (Codes)	CM (dB)	MPR (dB)	AG Index)	E-TFCI
Case1	11/15	15/15	64	11/15	22/15	209/225	1309/225	4	1	1.0	0.0	20	75
Case2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
Case3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed1}$ : 47/15 $\beta_{ed2}$ : 47/15	4 4	2	2.0	1.0	15	92
Case4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
Case5	15/15	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67





## Test Plot of Peak-to-Average Ratio

Note: All relevant operation modes have been tested, and the worst case Plot is included in this report.

### TM1/TM2/TM3

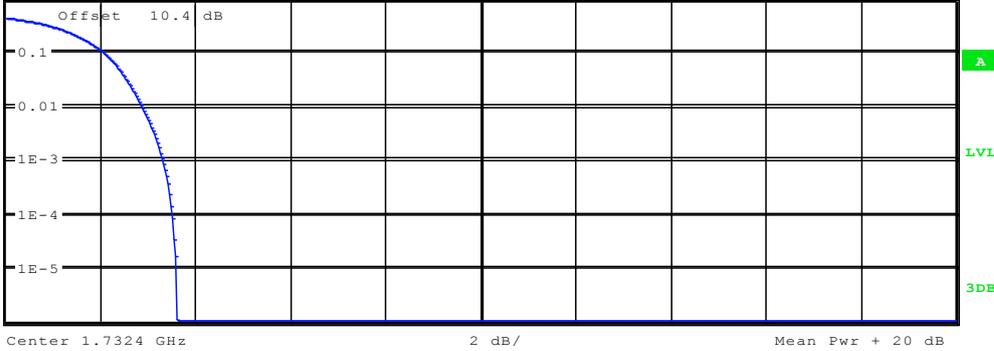


RBW 5 MHz

Ref 30 dBm

Att 45 dB

AQT 12.5 ms



Complementary Cumulative Distribution Function  
NOF samples: 100000, Usable BW: 7.1MHz

Trace 1	
Mean	25.34 dBm
Peak	28.96 dBm
Crest	3.61 dB
10 %	2.08 dB
1 %	2.88 dB
.1 %	3.33 dB
.01 %	3.53 dB



Efficient Isotropic Radiated Power (EIRP)

Table 2 Substitution Results

Test Mode	Freq. [MHz]	Meas. Level [dBm]	Substitution Antenna Type	SGP [dBm]	Substitution Gain [dBi]	Cable Loss [dB]	Substitution Level (EIRP) [dBm]	Limit [dBm]	Result
TM1	1712.4	24.28	Horn Ant.	20.75	4.5	1.0	24.25	30	Pass
TM1	1732.4	24.25	Horn Ant.	20.71	4.5	1.0	24.21	30	Pass
TM1	1752.6	23.89	Horn Ant.	20.07	4.8	1.0	23.87	30	Pass

Note: a, For getting the EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should take to calculate it,

$$\text{EIRP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBi]}$$

b, SGP=Signal Generator Level

The END



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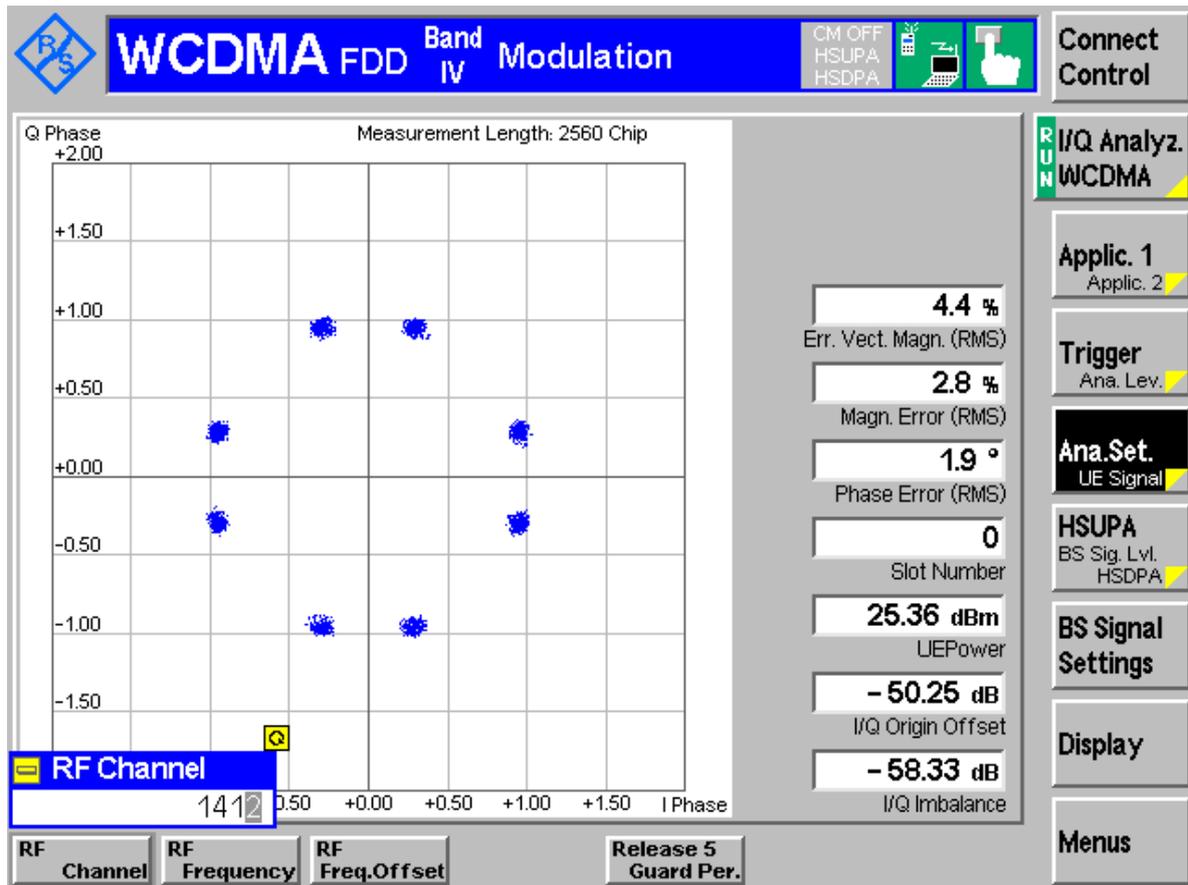
## **Appendix B**

# Modulation Characteristics

According to FCC Part 2.1047 & Part 27 Subpart C&L



# TM1: WCDMA Channel 1412



-----The END-----



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## Appendix C

# Occupied Bandwidth

According to FCC Part 2.1049 & Part 27 Subpart C&L



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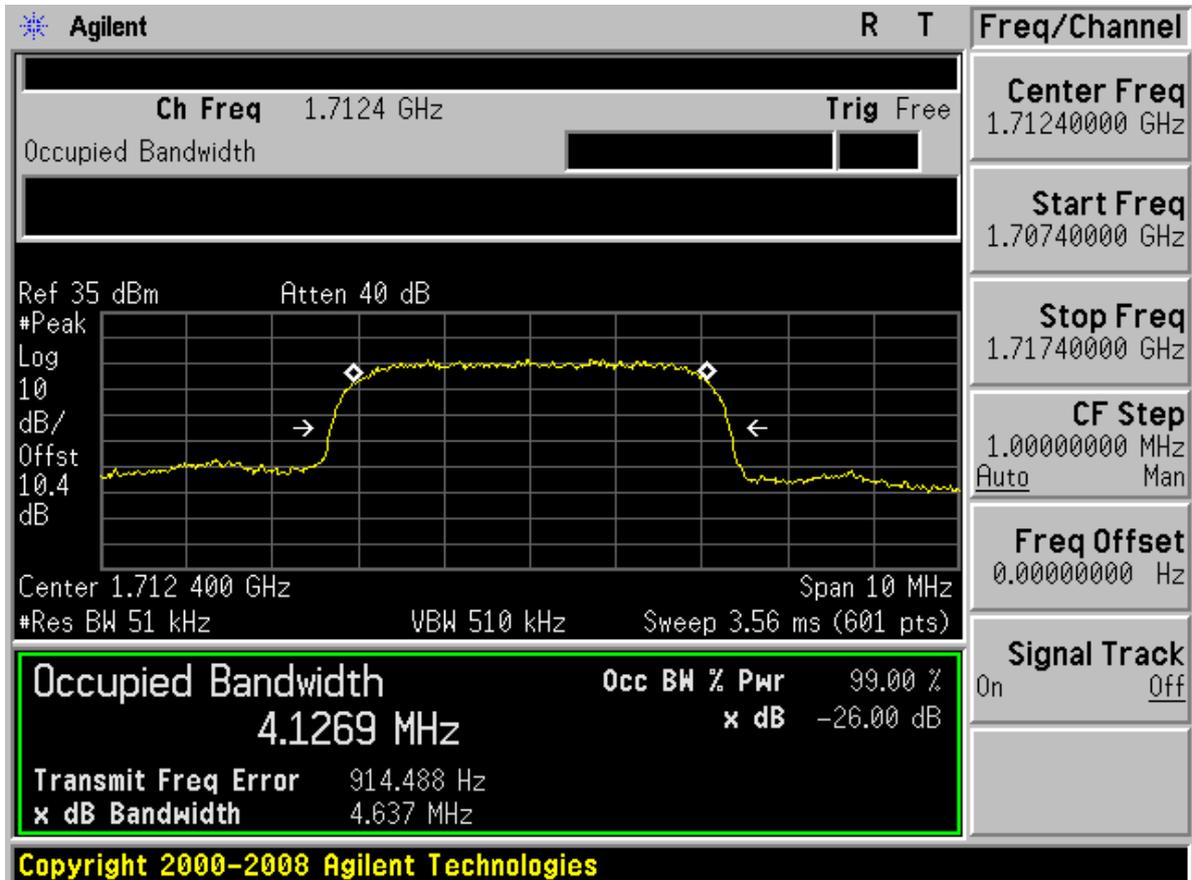
Result Table

Table 1 Measurement Results

Test Mode	RF Channel	Occupied Bandwidth [MHz]	-26dB BW [MHz]	Verdict
TM1	1312	4.13	4.64	Pass
	1412	4.16	4.66	Pass
	1513	4.15	4.64	Pass

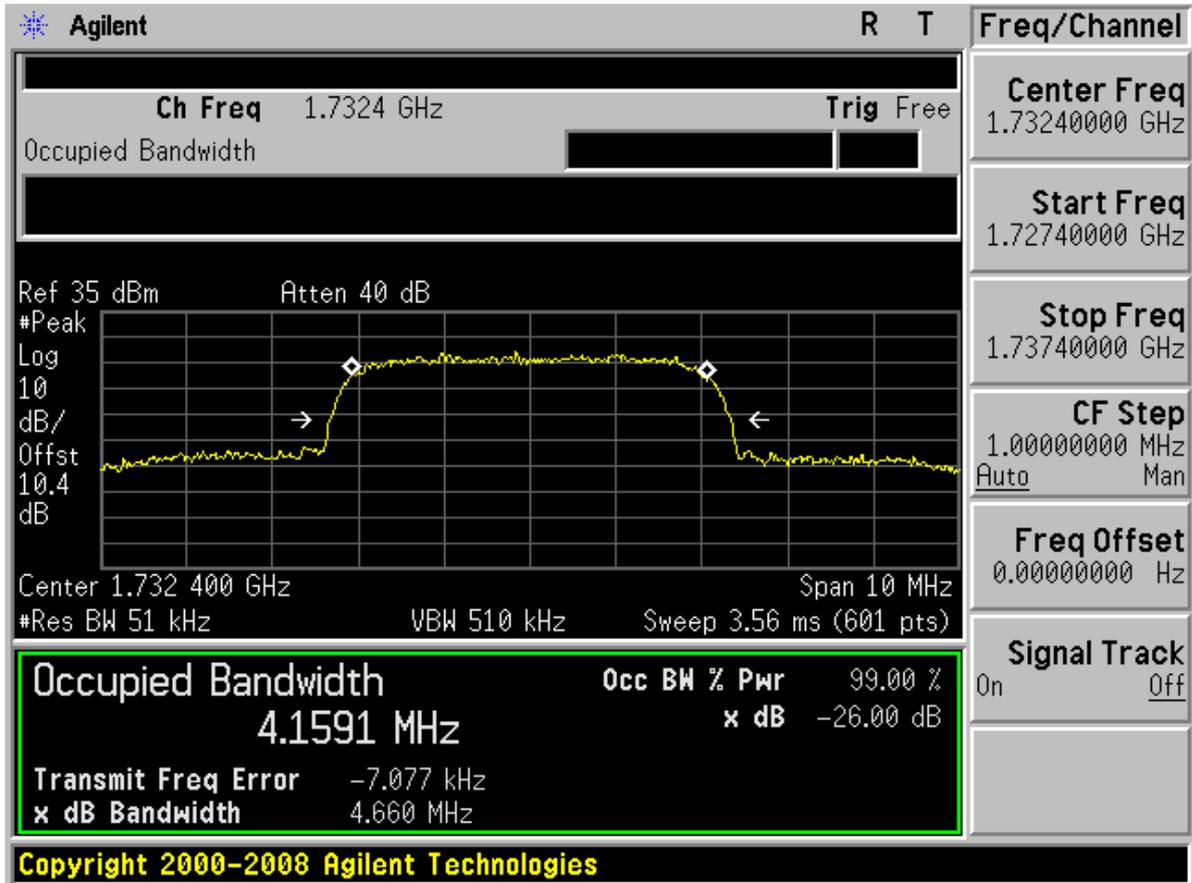


## TM1: WCDMA Channel 1312



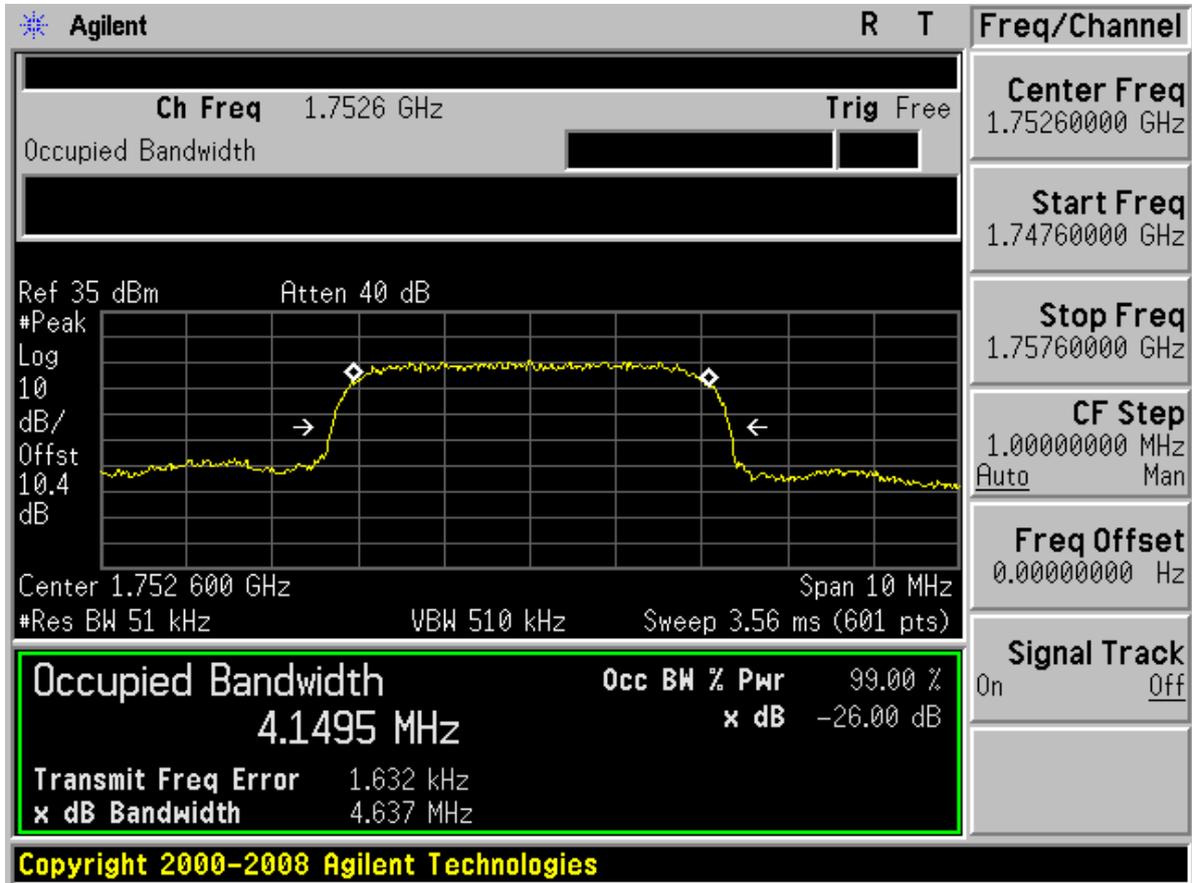


## Channel 1412





## Channel 1513



The END



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## Appendix D

### Band Edges Compliance

According to FCC Part 2.1051 & Part 27 Subpart C&L



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## 26dB Occupied Bandwidth

Note: All relevant operation modes have been tested, and the widest case data is included in this table.

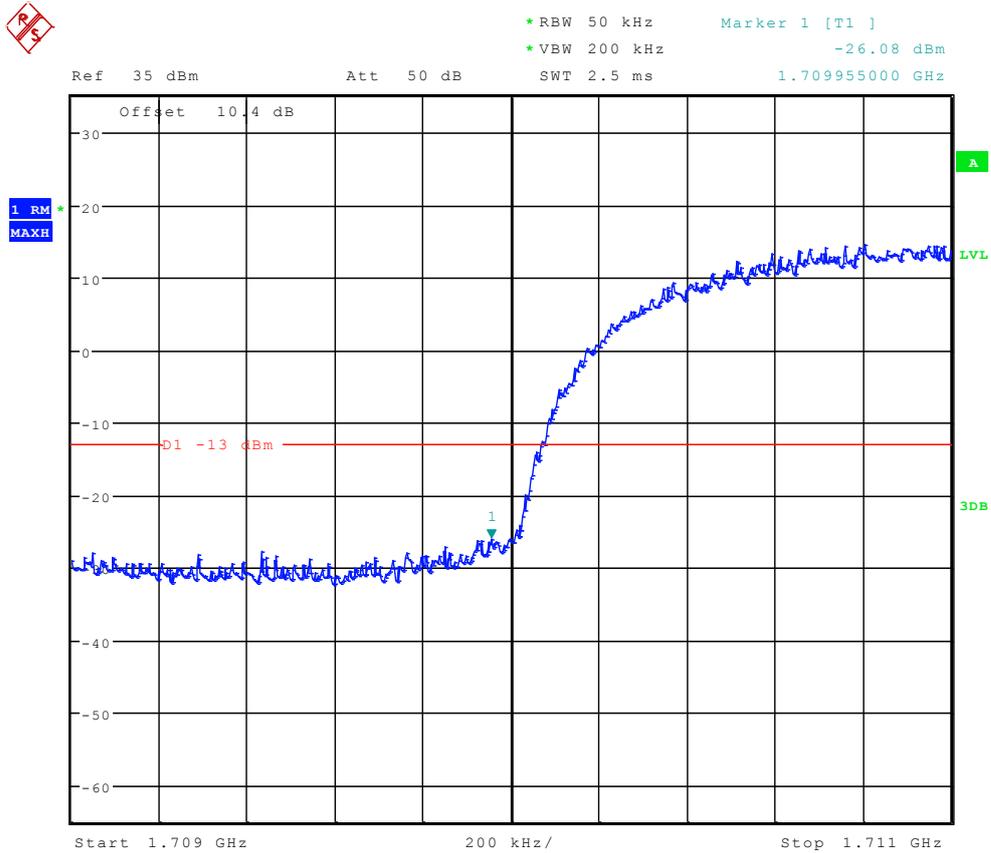
Mode	-26dB BW [MHz]	RBW to Measure Band Edge [kHz]
TM1/TM2	4.66	$\geq 4.66$ , used 5



# TM1: WCDMA

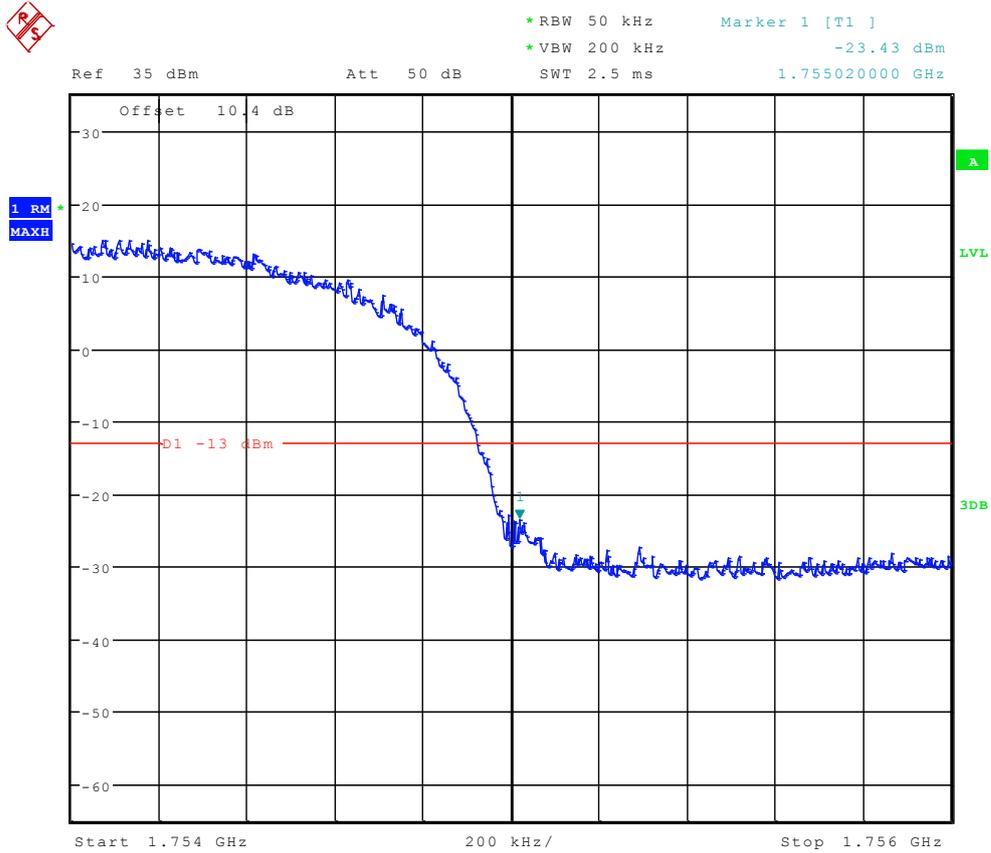
## Left Edge

### Channel 1312





## Right Edge Channel 1513



The END



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# Appendix E

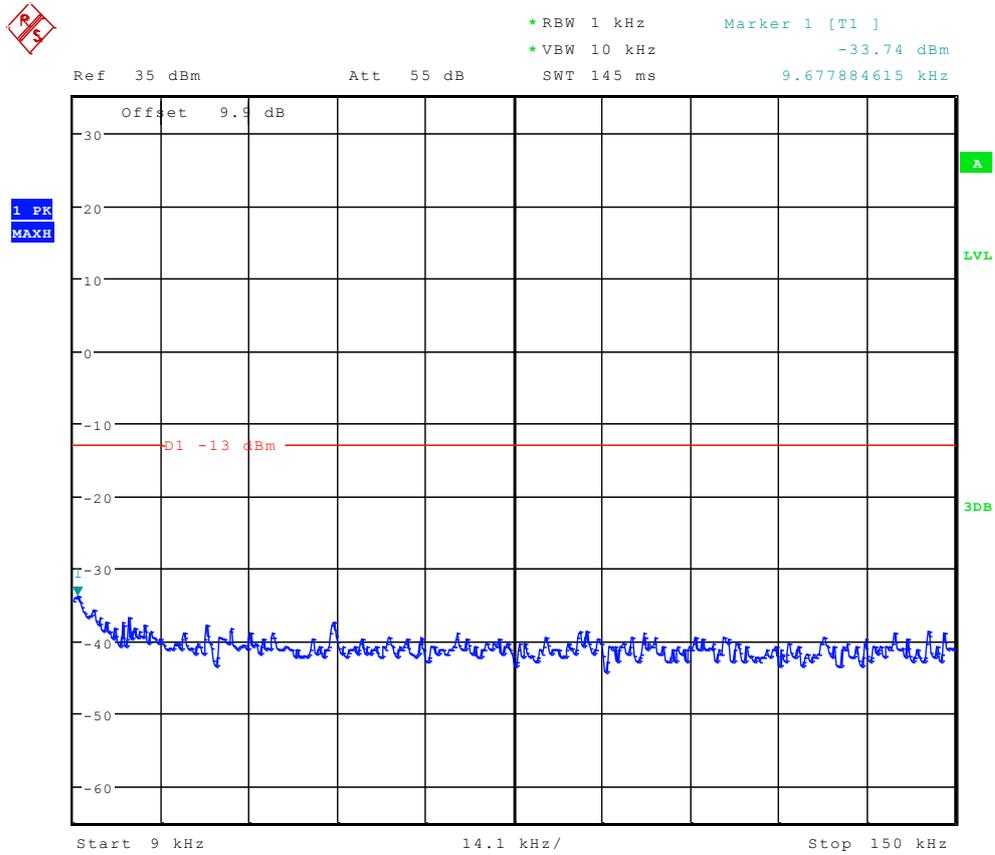
## Spurious Emission at Antenna Terminal

According to FCC Part 2.1051 & Part 27 Subpart C&L



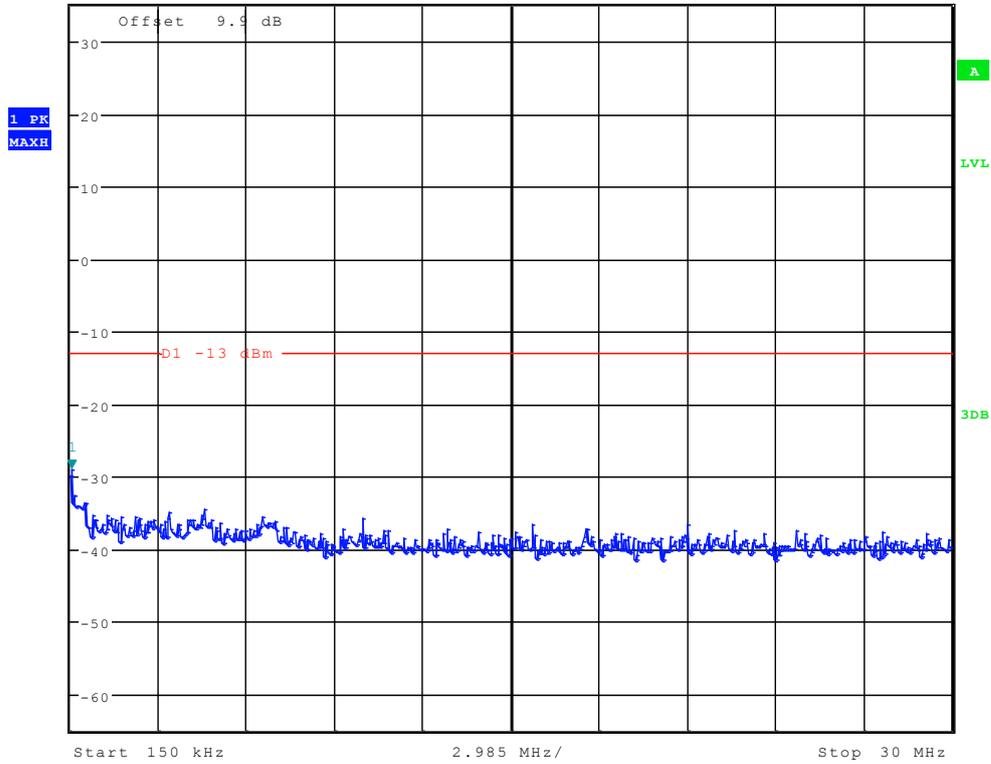
# TM1: WCDMA

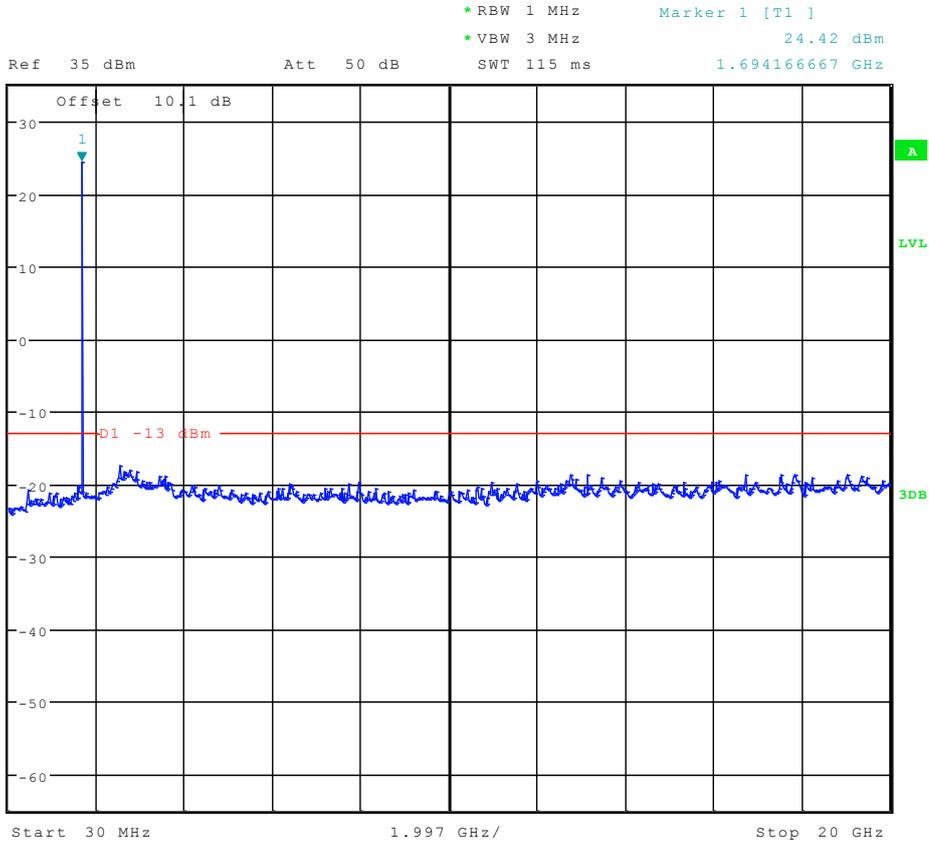
## Channel 1312





Ref 35 dBm Att 55 dB SWT 300 ms  
\*RBW 10 kHz Marker 1 [T1 ]  
\*VBW 30 kHz -28.95 dBm  
197.836538462 kHz



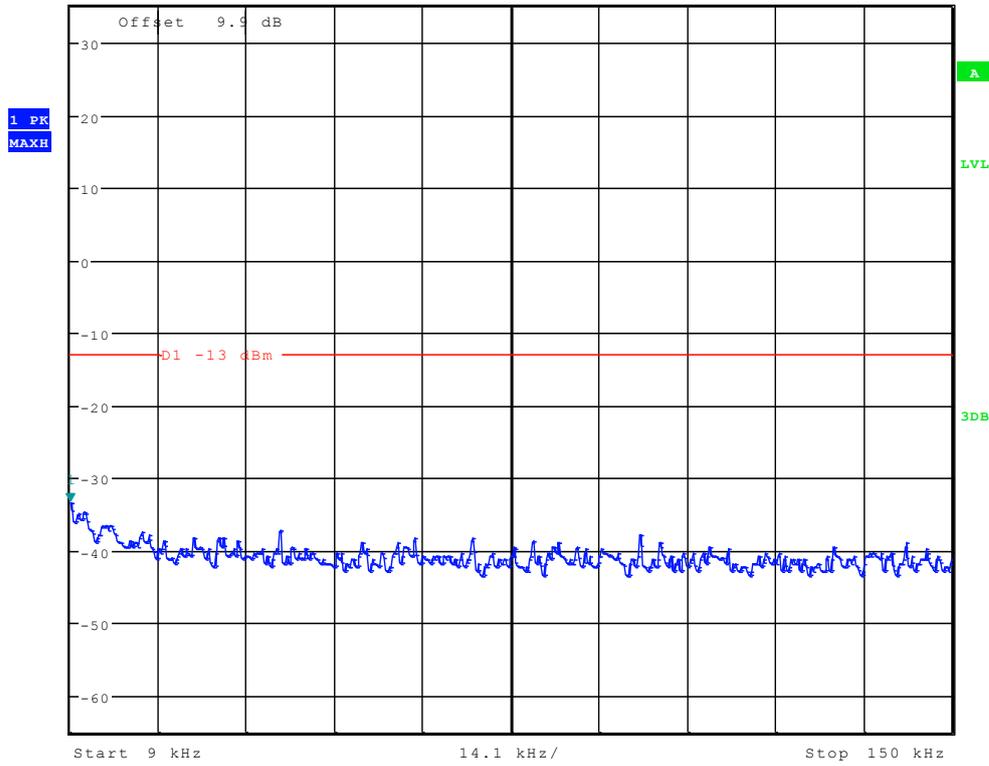




# Channel 1412

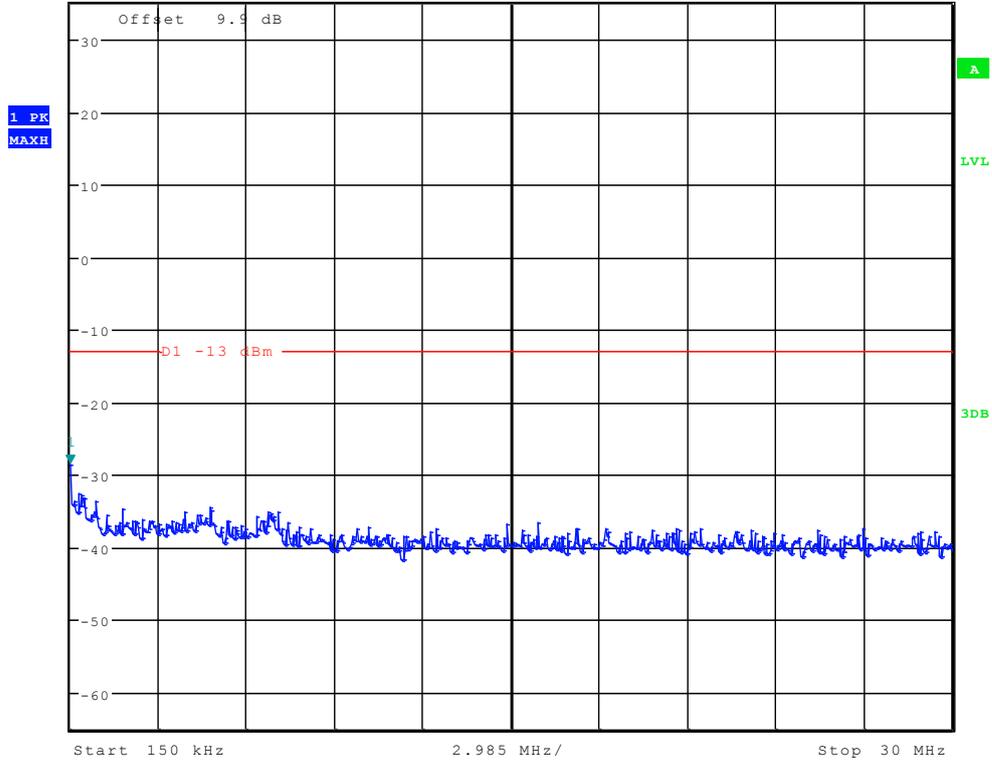


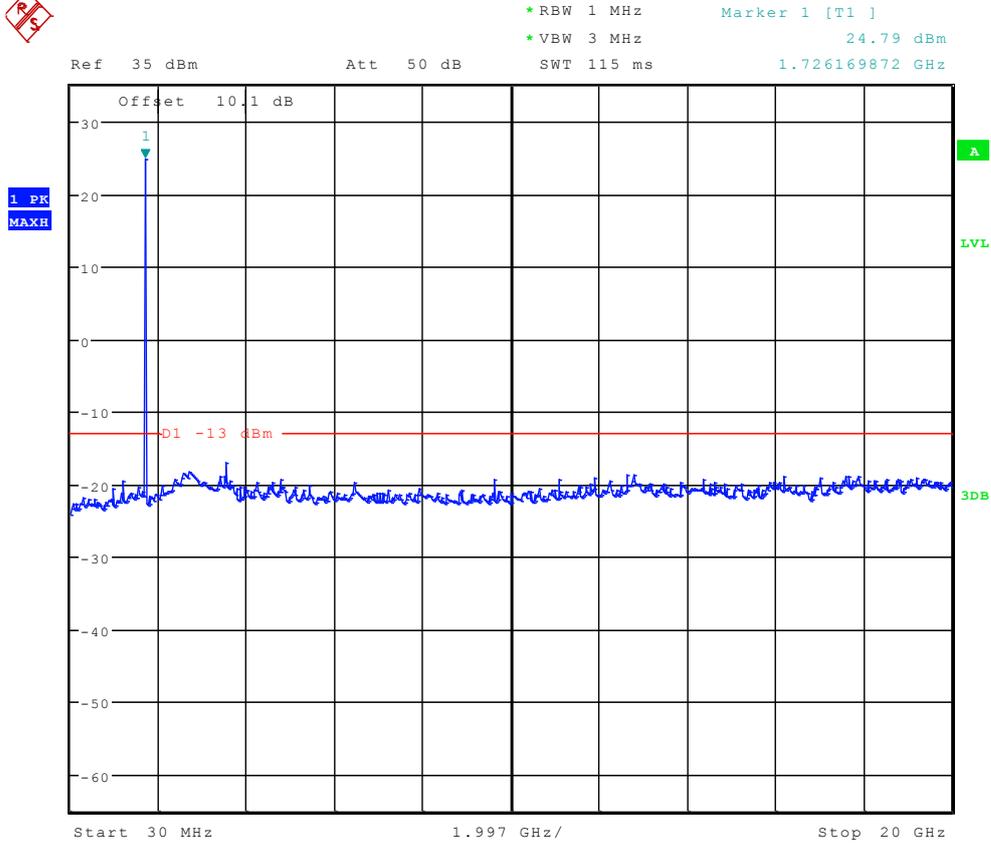
Ref 35 dBm      Att 55 dB      \*RBW 1 kHz      Marker 1 [T1]      \*VBW 10 kHz      -33.48 dBm  
SWT 145 ms      9.000000000 kHz





Ref 35 dBm Att 55 dB SWT 300 ms  
\*RBW 10 kHz Marker 1 [T1 ]  
\*VBW 30 kHz -28.60 dBm  
150.000000000 kHz



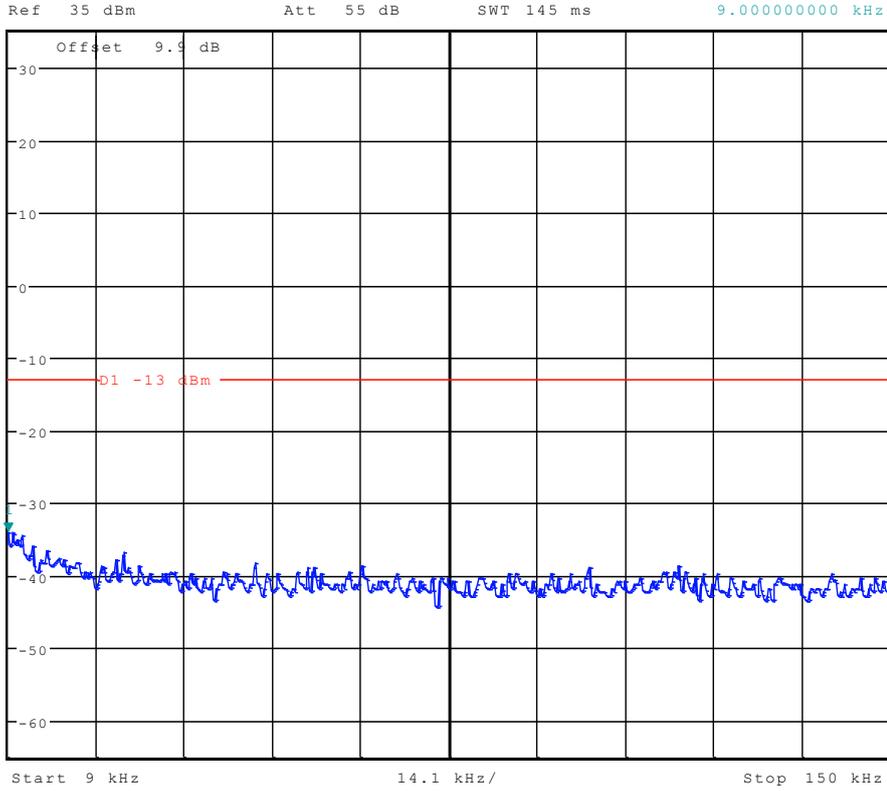




# Channel 1513

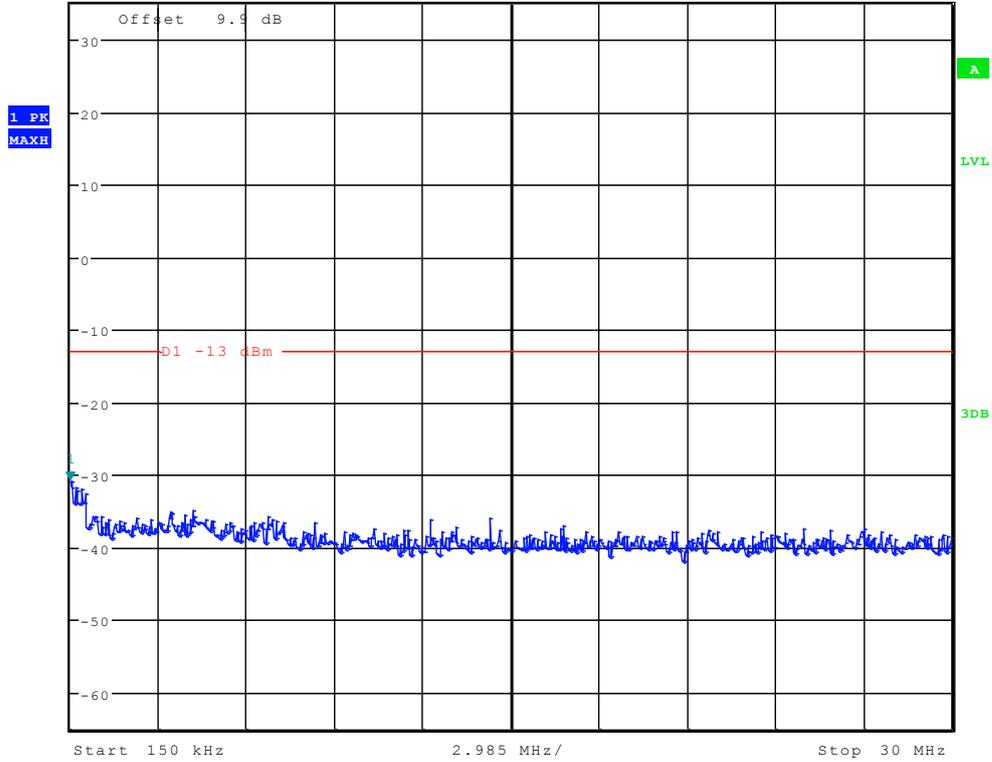


\*RBW 1 kHz      Marker 1 [T1 ]  
 \*VBW 10 kHz      -33.92 dBm  
 SWT 145 ms      9.000000000 kHz



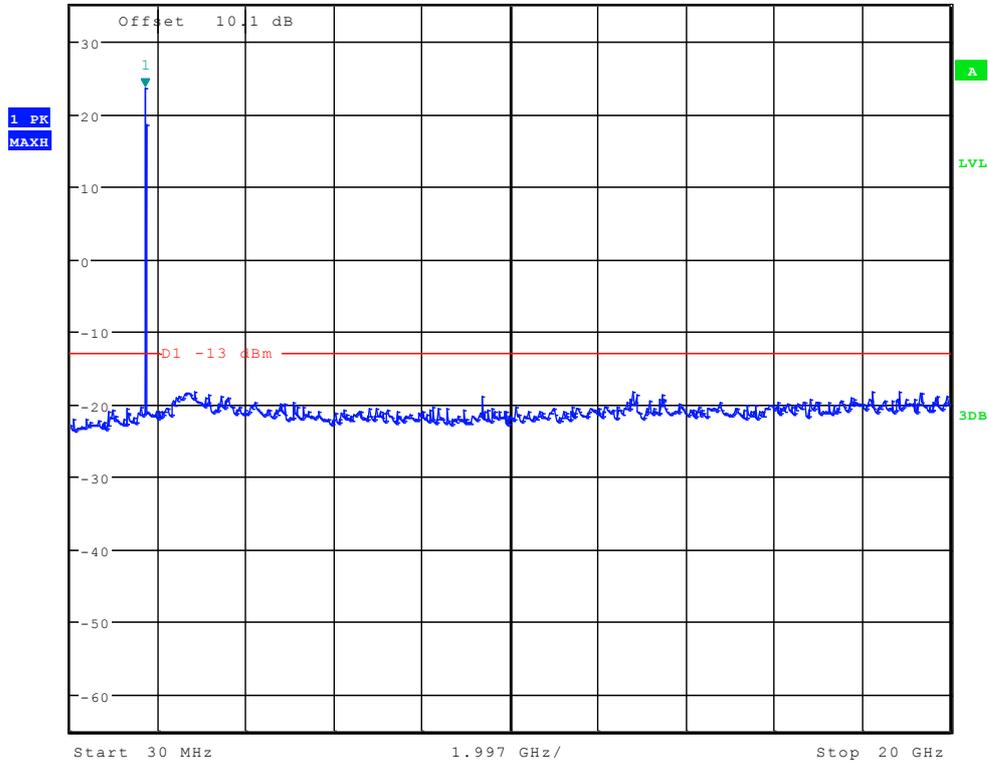


Ref 35 dBm Att 55 dB SWT 300 ms  
\*RBW 10 kHz Marker 1 [T1 ]  
\*VBW 30 kHz -30.83 dBm  
150.000000000 kHz





Ref 35 dBm Att 50 dB SWT 115 ms  
\*RBW 1 MHz Marker 1 [T1 ]  
\*VBW 3 MHz 23.55 dBm  
1.726169872 GHz



-----The END-----



# Appendix F

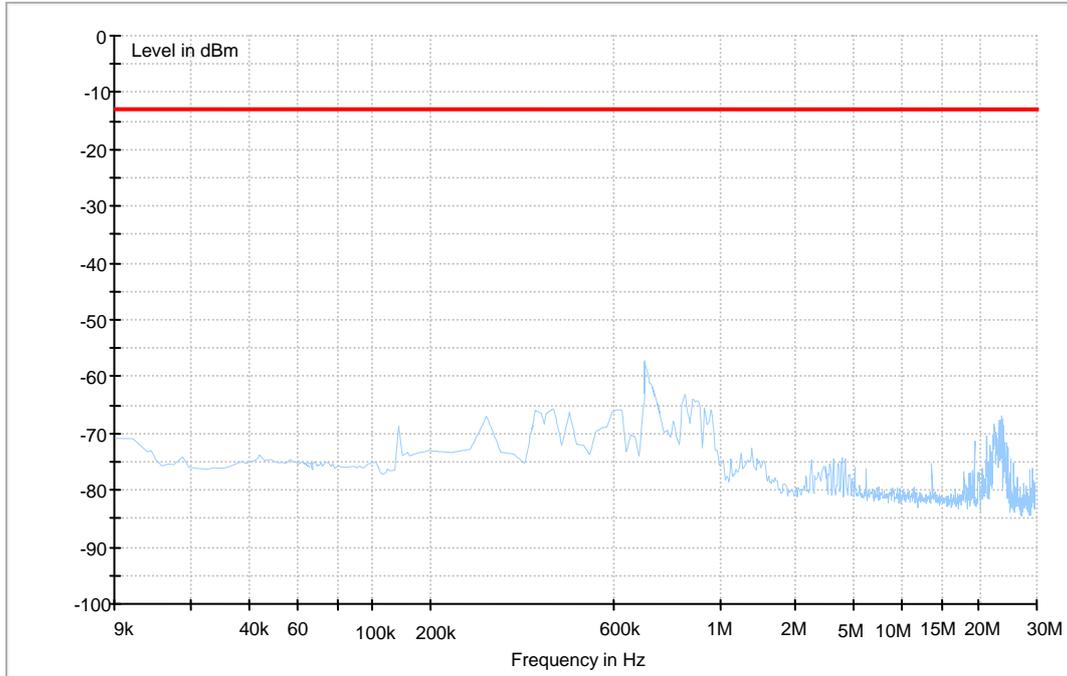
## Radiated spurious emission

According to FCC Part 2.1053& Part 27.53(g)



## WCDMA AWS

Traffic Mode (9kHz-30MHz)

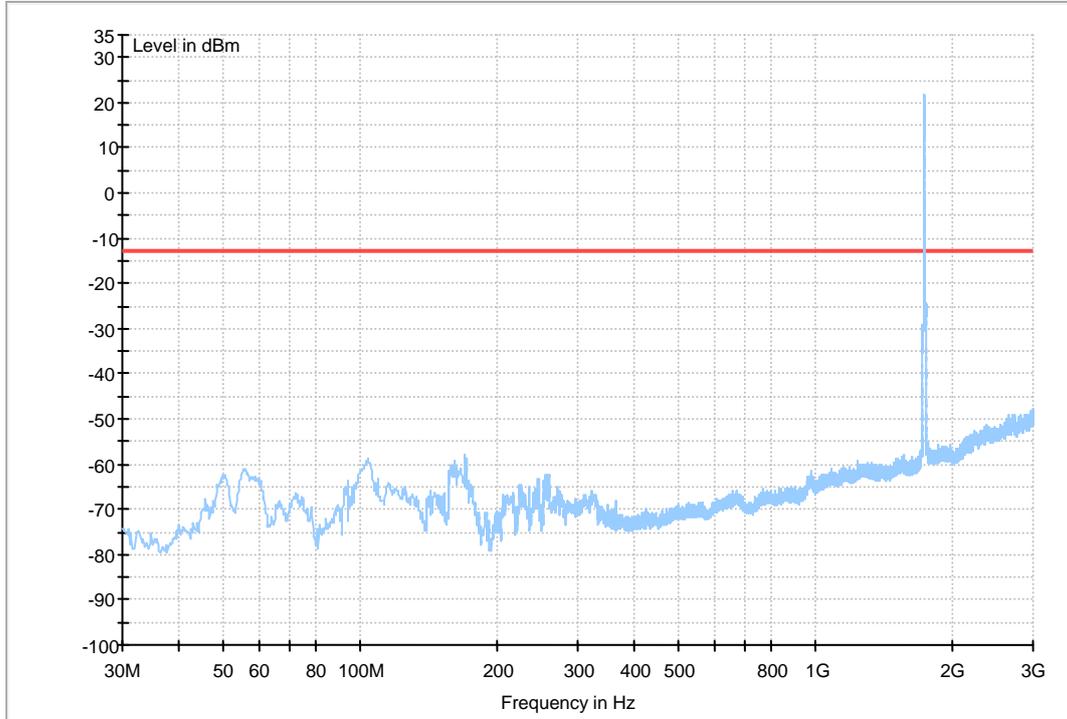




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### Traffic Mode (30MHz-3GHz)

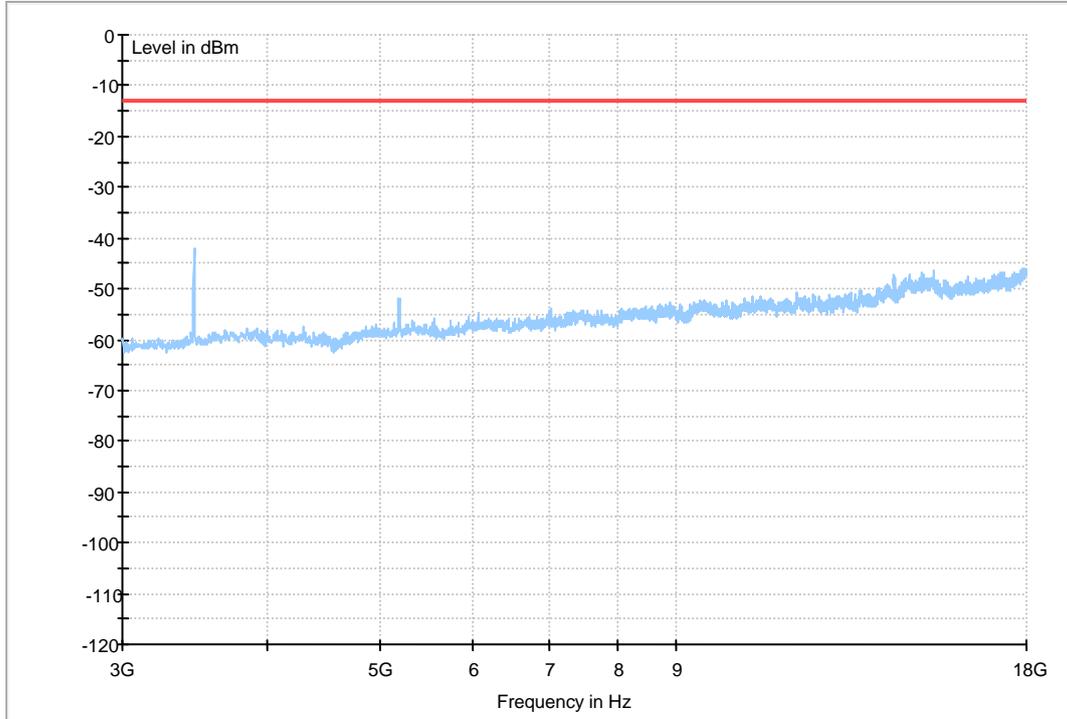




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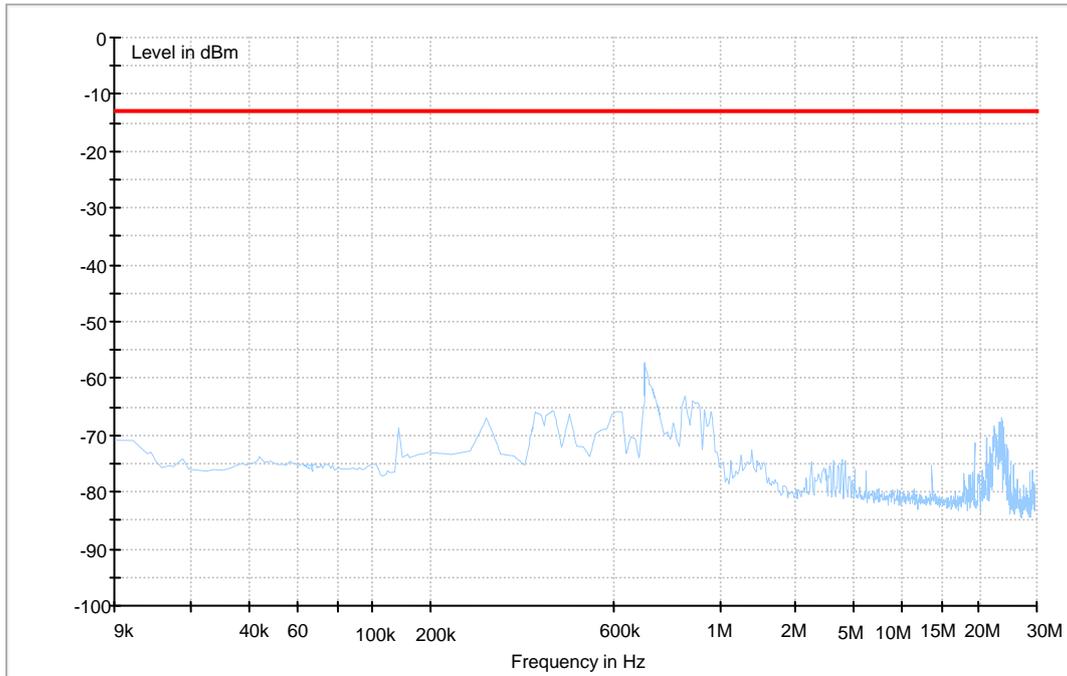
### Traffic Mode (3GHz-18GHz)





## HSDPA AWS

Traffic Mode (9kHz-30MHz)

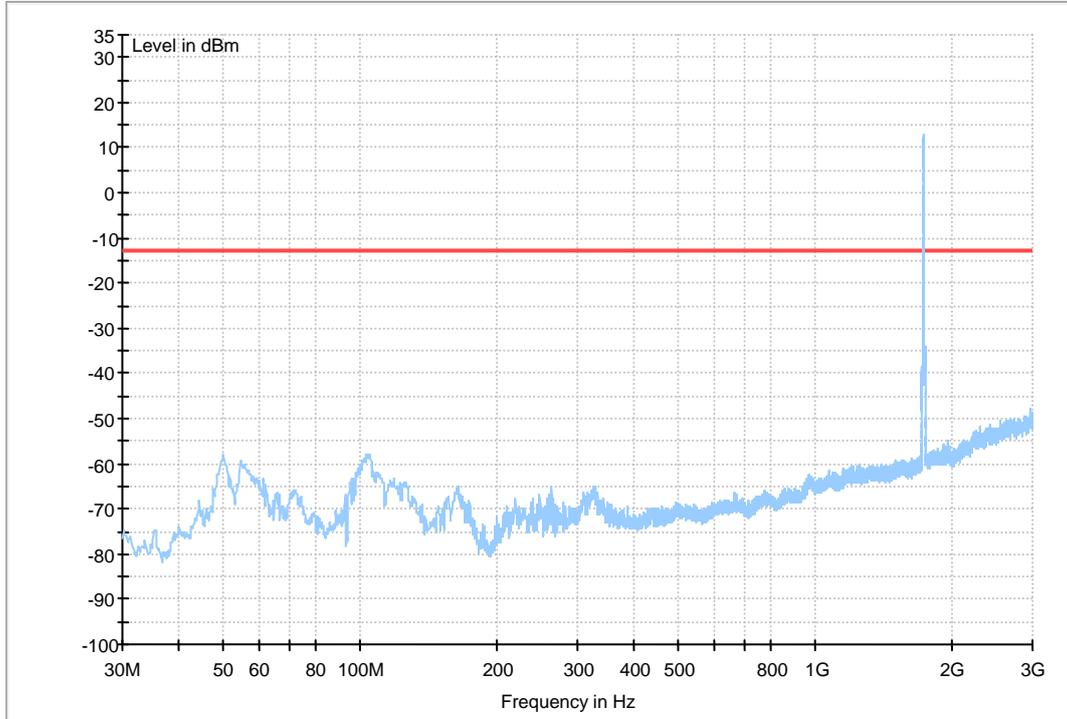




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### Traffic Mode (30MHz-3GHz)

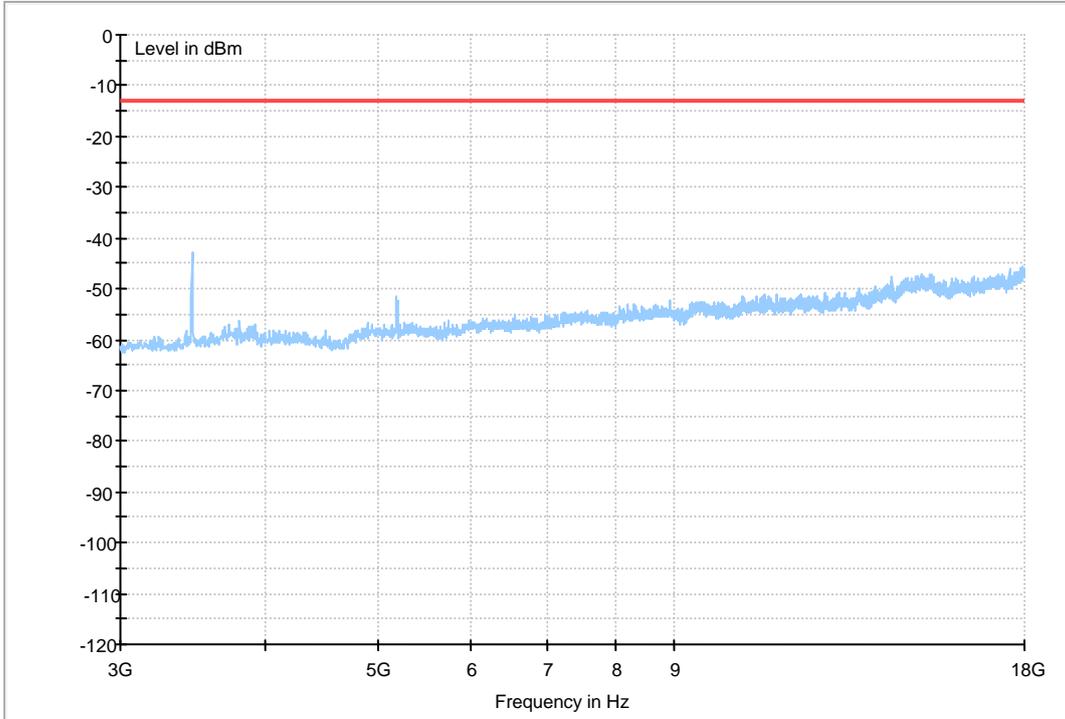




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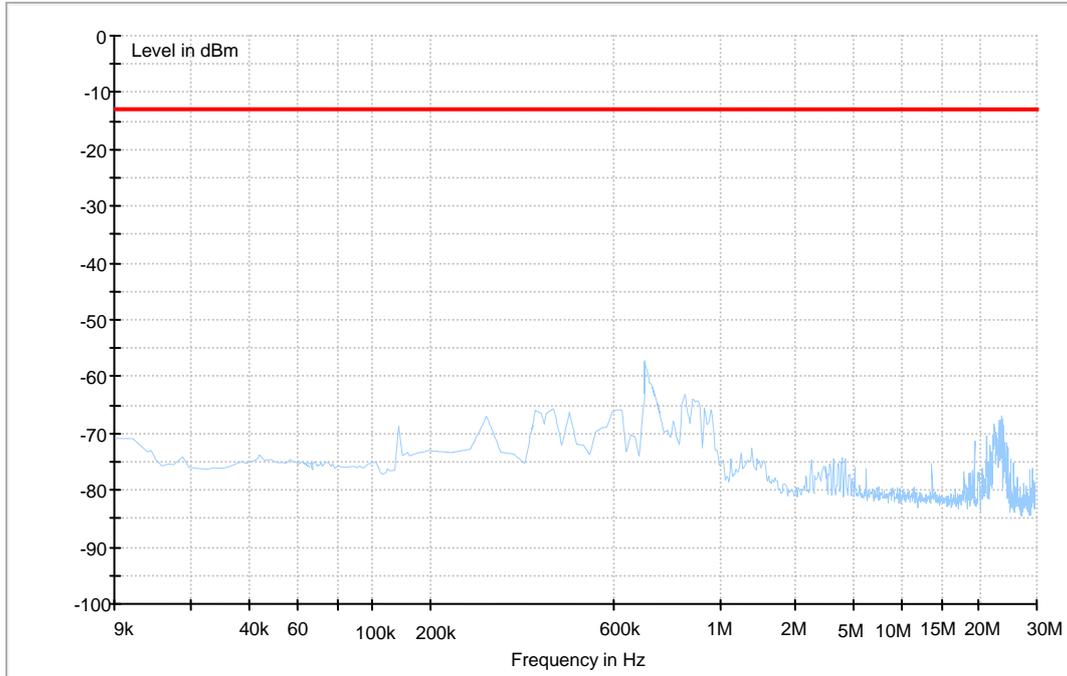
### Traffic Mode (3GHz-18GHz)





## HSUPA AWS

Traffic Mode (9kHz-30MHz)

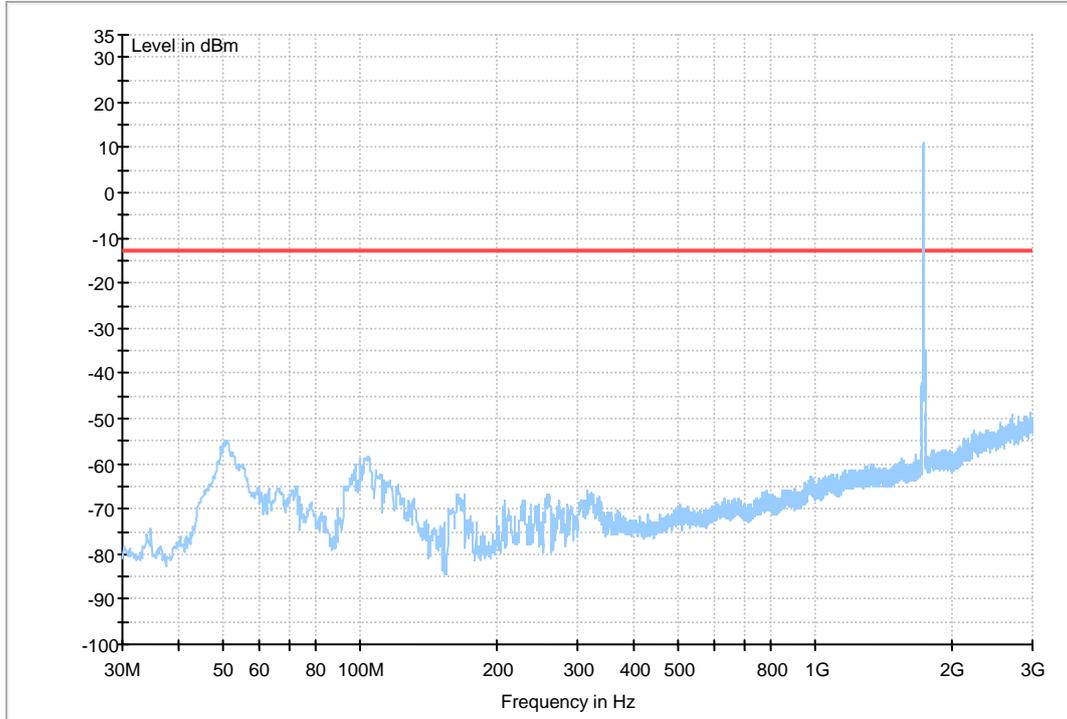




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### Traffic Mode (30MHz-3GHz)

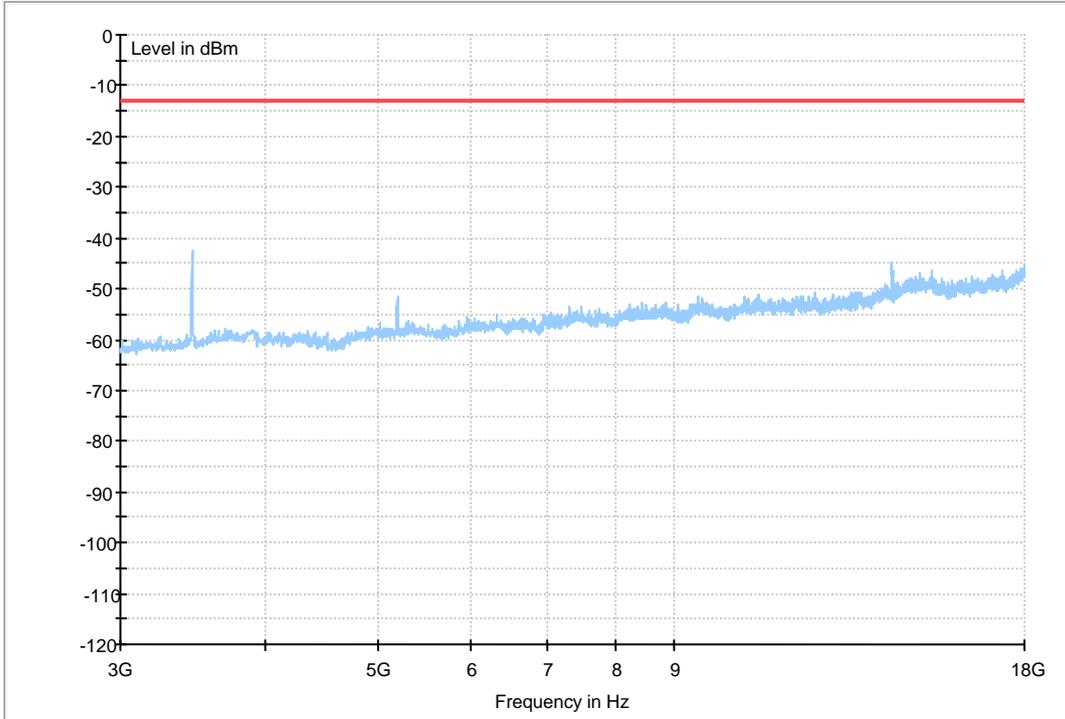




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### Traffic Mode (3GHz-18GHz)



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# Appendix G

## Frequency Stability

According to FCC Part 2.1055& Part 27 Subpart C&L



## **Frequency Error vs. Temperature:**

Test Mode	RF Ch.	Volt.	Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Freq. vs. 20 °C [ppm]	Limit [ppm]	Verdict
TM 1	M	100%	-30 °C	15	0.0087	---	±2.5	Pass
			-20 °C	10	0.0058	---	±2.5	Pass
			-10 °C	-21	-0.0121	---	±2.5	Pass
			0 °C	-11	-0.0063	---	±2.5	Pass
			10 °C	9	0.0052	---	±2.5	Pass
			20 °C	-23	-0.0133	---	±2.5	Pass
			30 °C	10	0.0058	---	±2.5	Pass
			40 °C	-9	-0.0052	---	±2.5	Pass
			50 °C	14	0.0081	---	±2.5	Pass



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## **Frequency Error vs. Voltage:**

Test Mode	RF Ch.	Temp.	Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Freq. vs. 20 °C [ppm]	Limit [ppm]	Verdict
TM 1	M	20 °C	85 %	13	0.0075	---	±2.5	Pass
			100 %	11	0.0063	---	±2.5	Pass
			115 %	-12	-0.0069	---	±2.5	Pass

-----The END-----

-----The END-----