



EMC Test Report

Product Name: Wireless Gateway

Model Number: E583C

Report No: SYBHZ(R)E008092010EB-1
FCC ID: QISE583C-52
IC ID: 6369A-E583C

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Notice 2

Modification Information:

Table 1 Modification Information

Modification Information	1	
	2	
	3	<i>Not Applicable!</i>
	4	
	5	
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REPORT BODY CONTENT

1	Status	6
1.1	Product Information.....	6
1.2	Applied Standard	6
1.3	Test Site.....	6
1.4	Test environment condition.....	6
2	Summary of Results.....	7
3	Equipment Specification	8
3.1	General Description	8
3.2	Sub-Assembly Identity	8
4	System Configuration during EMC Test	10
4.1	Cables Used during Test	10
4.2	Associated Equipment Used during Test	10
4.3	Test Configurations and Test Mode.....	10
4.4	Test conditions and test Connections.....	11
5	Electromagnetic Interference (EMI).....	13
5.1	Radiated Disturbance 30MHz to 18GHz	13
5.2	Conducted Disturbance 0.15 MHz to 30MHz	14
5.3	Radiated Spurious Emissions.....	14
6	Receiver Spurious Emission (Radiated).....	18
7	Main Test Instruments	19
8	System Measurement Uncertainty.....	20
9	Graph and Data of Emission Test.....	21
9.1	Radiated Disturbance	21
10	Conducted Disturbance	23
10.2	Radiated Spurious Emission.....	24
10.3	Receiver Spurious Emission.....	37



1 Status

1.1 Product Information

CLIENT:	Huawei Technologies Co., Ltd.
ADDRESS:	Bantian Longgang District Shenzhen, P.R. China
MANUFACTURING DESCRIPTION	Wireless Modem
MANUFACTURERS MODEL NUMBER	E583C

1.2 Applied Standard

APPLIED STANDARD	FCC CFR47 Part 15: Subpart B;
	ICES-003
	ANSI C63.4
	CAN/CSA-CEI/IEC CISPR 22
	CISPR 22
	RSS-Gen;
	FCC CFR47 Part 22: Subpart H; FCC CFR47 Part 24: Subpart E; FCC CFR47 Part 27: Subpart C; RSS-132; RSS-133; RSS-139

1.3 Test Site

Site 1:
EMC LABORATORY OF RELIABILITY LABORATORY OF HUAWEI TECHNOLOGIES CO., LTD

1.4 Test environment condition

Ambient temperature	20~25°C
Relative humidity	40%~52%
Atmospheric pressure	101kPa



2 Summary of Results

Table 2 below shows a brief summary of the results obtained.

Table 2 Summary of results

EUT Classification: Wireless Terminal				
Test Items	Test Configuration & Test Mode	Required Performance Criteria	Result	Site
<u>Radiated Emissions</u> Enclosure Port	TC1/TC2 (TM8-TM14)	N/A	Pass	Site1
<u>Conducted Emissions</u>	TC1 (TM1-TM14)	N/A	Pass	Site1
<u>Radiated Spurious Emissions</u> Enclosure Port	TC1 (TM1-TM7)	N/A	Pass	Site1
<u>Receiver Spurious Emission</u> Enclosure Port	TC1 (TM8-TM14)	N/A	Pass	Site1

Note:
 1, Measurement taken is within the measurement uncertainty of measurement system.
 2, TC = Test configuration



3 Equipment Specification

3.1 General Description

E583C is a UMTS/GSM Wireless Modem It can be used as a WiFi Access Point, Max to 5 WiFi stations can be associating with E583C simultaneity. It also can be used as a USB modem by connecting with PC via USB cable. It supports wireless internet accessing function. The data service rate is HSUPA 5.75Mbps, and HSDPA 7.2Mbps. The WCDMA frequency is BAND I and BAND IV. The GPRS/EDGE frequency is 850/900/1800/1900 MHz, but only WCDMA BAND IV、GSM850 and PCS1900 test data included in this report. The WiFi frequency is 2.4G.

3.1.1 Main Equipment Technical Data

Description:	Wireless Modem
Models:	E583C
Input Rated Voltage:	~ 230V
Rated Consumption Power:	Max 3.5 W
Maximum Emission Power:	Max 30dBm(E.R.P.)
Dimensions:	96.0 (length) × 57.0 (width) × 11.5 (height) (mm3)
Weight:	< 90g

Table 3 Sub-Assembly Identity

Mode		Work Frequency	
		Transmitt Frequency(MHz)	Receive Frequency (MHz)
GSM	GSM850	824-849	869-894
	PCS1900	1850-1910	1930-1990
WCDMA	AWS	1712-1753	2112-2153
WiFi	11b/g	2400~2483.5	2400~2483.5

3.2 Sub-Assembly Identity

Table 4 Sub-Assembly Identity

Board				
Model Name	Qt y.	Hardware Version	Serial	Description
EMC	1	WL1E583CT	7U2AB11060200311	Main board
Accessory				
Name	Qt y.	Manufacture	Serials number	Description
Adapter	1	Shen Zhen Huntkey Power Technology Co.,Ltd	TPAA62900074	Adapter Model: HW-050100U1W voltage nominal: ~230V Input Voltage : 100-240V ~50/60Hz, 0.2A Output Voltage: === 5.0V 1.0A
Adapter	1	Shen Zhen Huntkey Power Technology Co.,Ltd	HKAA10486131	Adapter Model: HW-050100U1W voltage nominal: ~230V Input Voltage : 100-240V ~50/60Hz, 0.2A



				Output Voltage: === 5.0V 1.0A
--	--	--	--	----------------------------------

Battery

Name	Qty	Manufacture	Serials number	Description
Rechargeable Li-ion	1	Huawei Technologies Co., Ltd.	YGCA317H1210154	Battery Model: HB7A1H Rated capacity: 1400mAh Nominal Voltage: === +3.7V Charging Voltage: === +4.2V



4 System Configuration during EMC Test

The Equipment under Test (EUT) was functioning correctly during all tests. The EUT was installed within the test site and was configured to simulate a typical user installation.

4.1 Cables Used during Test

Table 5 Cable Used during Test

Port	Length	Quantity	Type of Cable
AC Power Port	1.2m	1	Unshielded

4.2 Associated Equipment Used during Test

Table 6 Associated Equipment Used during Test

Name	Model	Manufacturer	S/N	Cal Date
Radio Communication Tester	CMU200	R&S	1117057	2010-8-4

4.3 Test Configurations and Test Mode

4.3.1 Test Configuration.

The EUT will be connected to test system (Base Station Simulator) in order to simulate normal operating conditions (with reference to the guidance given in the standard for this type of equipment).

TC1:EUT powered with an adapter and connected to the test system (Base Station Simulator).
 TC2:EUT connected to the notebook by USB port.

Table 7 Configuration table

TC1	TM1~TM14
-----	----------

4.3.2 Test Mode

There were 20 test Modes. TM1 to TM20 were shown in the diagrams below:

- TM1: operate in traffic mode GPRS 850;
- TM2: operate in traffic mode EGPRS 850;
- TM3: operate in traffic mode GPRS 1900;
- TM4: operate in traffic mode EGPRS 1900;
- TM5: operate in traffic mode WCDMA AWS;
- TM6: operate in traffic mode HSUPA AWS;
- TM7: operate in traffic mode HSDPA AWS;
- TM8: operate in idle mode GPRS 850;
- TM9: operate in idle mode EGPRS 850;
- TM10: operate in idle mode GPRS 1900;
- TM11: operate in idle mode EGPRS 1900;
- TM12: operate in idle mode WCDMA AWS
- TM13: operate in idle mode HSDPA AWS
- TM14: operate in idle mode HSUPA AWS

The EUT will be connected to test system (Base Station Simulator) in order to simulate normal operating conditions (with reference to the guidance given in the standard for this type of equipment).

4.4 Test conditions and test Connections

4.4.1 Test Conditions

The EUT will be connected to test system (Base Station Simulator) in order to simulate normal operating conditions (with reference to the guidance given in the standard for this type of equipment).

4.4.2 Test Connections

For GSM, the following conditions shall also be met:
The EUT shall be commanded to operate at maximum transmit power;
The downlink RXQUAL shall be monitored.

. For WCDMA, the following conditions shall also be met:
Logical Test Interface for details regarding generic call set-up procedure and BER, BLER test loop scenarios:
set and send continuously up power control commands to the UE;
The DTX shall be disabled;
Inner Loop Power Control shall be enabled;
transmitting and/or receiving (UL/DL) bit rate for reference test channel shall be 12.2 kbit / s.
The EUT shall be commanded to operate at maximum transmit power;

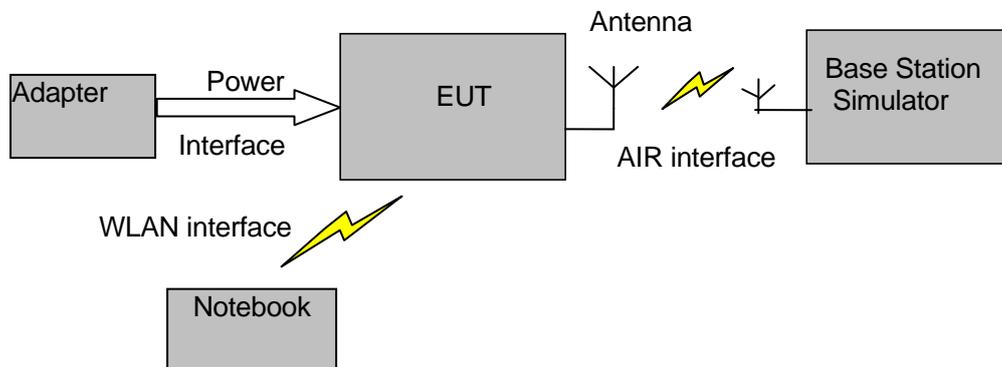


Figure 1.: Test Configuration

Idle Mode:

The EUT is required to be in the idle mode:

For WCDMA, the following conditions shall be met:
UE shall be camped on a cell;
UE shall perform Location Registration (LR) before the test, but not during the test;
UE's neighbour cell list shall be empty;
Paging repetition period and DRX cycle shall be set to minimum (shortest possible time interval).

For GSM and PCS, the following conditions shall be met:
When the EUT is required to be in the idle mode, the test system shall simulate a Base Station (BS) with Broadcast Control Channel/Common Control Channel (BCCH/CCCH) on one carrier. The EUT shall be

synchronized to the BCCH, listening to the CCCH and able to respond to paging messages. Periodic Location Updating shall be disabled.

Please refer to following figure:



Figure 2. Test Configuration

5 Electromagnetic Interference (EMI)

5.1 Radiated Disturbance 30MHz to 18GHz

5.1.1 Test Procedure

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4dB according to the standards: ANSI C63.4. The test distance was 3m. The set-up and test methods were according to ANSI 63.4 and CAN/CSA-CEI/IEC CISPR 22

A preliminary scan and a final scan of the emissions were made from 30 MHz to 18 GHz by using test script of software; the emissions were measured using Quasi-Peak Detector (30MHz~1GHz) and AV detector (above 1GHz). The maximal emission value was acquired by adjusting the antenna height, polarisation and turntable azimuth in accordance with the software setup. 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.

EUT was configured in idle mode and the test performed at worst emission state.

Measurement bandwidth: 30 MHz – 1000 MHz: 120 k Hz

Measurement bandwidth: 1GHz – 18GHz: 1MHz

Test set up figure:

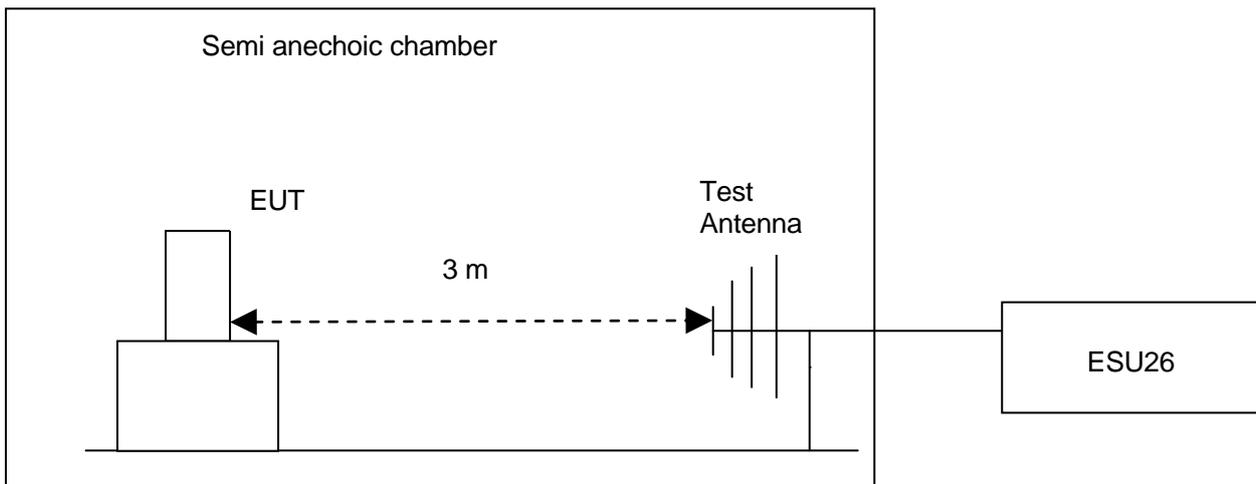


Figure 3. Test set-up

5.1.2 Test Results

The EUT has met the requirements for Radiated Emission of enclosure port.

Table 8 Test Limits

Frequency of Emission (MHz)	Radiated Limit	
	Unit($\mu\text{V}/\text{m}$)	Unit($\text{dB}\mu\text{V}/\text{m}$)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

5.2 Conducted Disturbance 0.15 MHz to 30MHz

5.2.1 Test Procedure

The Table-top EUT was placed upon a non-metallic table 0.8 m above the horizontal metal reference ground plane. EUT was connected to LISN and LISN was connected to reference Ground Plane. EUT was 80cm from LISN. The set-up and test methods were according to ANSI C63.4: 2003.

Conducted Disturbance at AC Port measurements were undertaken on the L and N Lines. The emissions were measured using a Quasi-Peak Detector and Average Detector.

Huawei Mobile Station was communicated with the BTS simulator through Air interface, the BTS simulator controls the Mobile Station to transmitter the maximum power which defined in specification of product. The Mobile Station operated on the typical channel.

Measurement bandwidth (RBW) for 150kHz to 30 MHz: 9 kHz;

Test Set-up figure:

The Mobile Station was setup in the screened chamber and operated under nominal conditions.

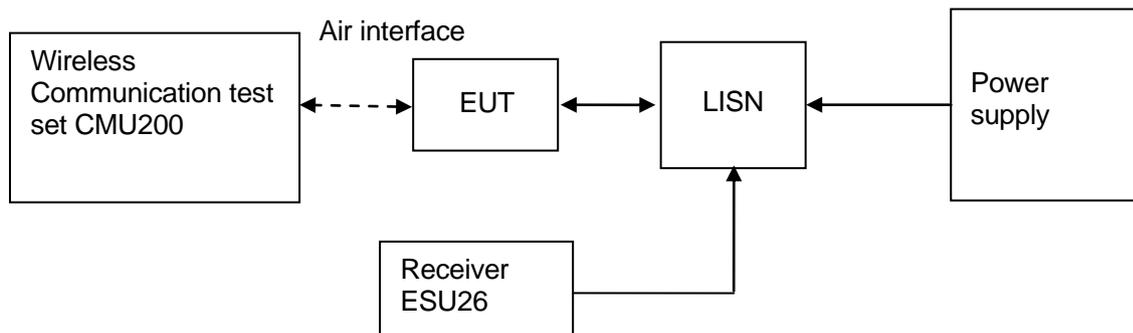


Figure 4. Test Set-up

5.2.2 Test Results

The EUT has met requirements for Conducted disturbance of power lines.

Table 9 Test Limit of DC&AC Power Port

Frequency range	150kHz~ 30MHz	
Classification	Class B	
Limit(Class B)	Voltage limits	
	QP	AV
0.15MHz~0.5MHz	66~56 dB μ V	56~46 dB μ V
0.5MHz~5MHz	56 dB μ V	46 dB μ V
5MHz~30MHz	60 dB μ V	50 dB μ V

5.3 Radiated Spurious Emissions

5.3.1 Test Procedure

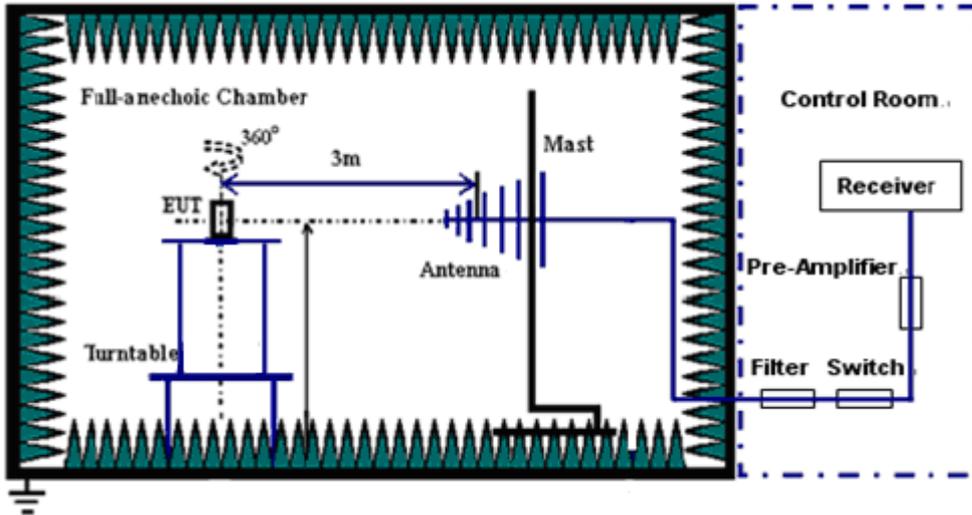
A test site fulfilling the requirements of ITU-R Recommendation SM329-10 was used. The EUT was placed on a non-conducting support in the anechoic chamber and was operated from a power source via

an RF filter to avoid radiation from the power leads.

Step 1:

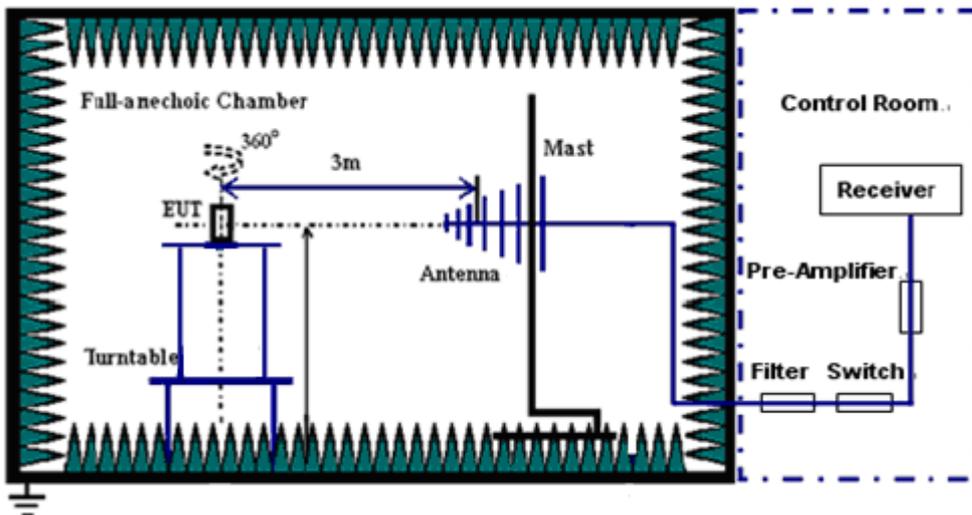
For transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, EIRP shall be measured when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in 2.1033(c)(8). Connect the EUT to the BTS simulator via the air interface.

Test the Radiated maximum output power by the Rohde and Schwarz FSU43 Test Receiver from test antenna.



Step 2:

Use substitution method to verify the maximum output power. The EUT is substituted by a dipole antenna. The dipole is connected to a signal generator. And then adjust the output level of the signal generator to get the same received power recorded in step1 on FSU43 Test Receiver, and record the power level of Signal Generator. Of course, the cable loss at the test frequency should be compensated.



According to part 22.917, the defined measurement bandwidth as following:

22.917(b) Measurement procedure: Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater.



Measurement bandwidth (RBW) for 9 kHz up to 150 kHz: 1 kHz;
 Measurement bandwidth (RBW) for 150 kHz up to 30 MHz: 10 kHz;
 Measurement bandwidth (RBW) for 30 MHz up to 1 GHz: 100 kHz;
 Measurement bandwidth (RBW) for 1GHz up to 18 GHz: 1MHz;

According to RSS-132, the defined measurement bandwidth as following:
 Measurement procedure: Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater.
 Measurement bandwidth (RBW) for 30 MHz up to 1 GHz: 100 kHz;
 Measurement bandwidth (RBW) for 1GHz up to 18 GHz: 1MHz;

Table 10 Radiated Spurious Emissions Limits

Frequency band	Minimum requirement (E.R.P) traffic mode
30MHz~18GHz	-13dBm

According to part 24.238, the defined measurement bandwidth as following:

24.238 (b) Measurement procedure: Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater.
 Measurement bandwidth (RBW) for 9 kHz up to 150 kHz: 1 kHz;
 Measurement bandwidth (RBW) for 150 kHz up to 30 MHz: 10 kHz;
 Measurement bandwidth (RBW) for 30 MHz up to 26.5 GHz: 1 MHz;

According to RSS-133, the defined measurement bandwidth as following:
 RSS-133 Measurement procedure: Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater.
 Measurement bandwidth (RBW) for 30 MHz up to 26.5 GHz: 1 MHz;

Table 11 Radiated Spurious Emissions Limits

Frequency band	Minimum requirement (E.R.P) traffic mode
30MHz~26.5GHz	-13dBm

According to part 27.53, the defined measurement bandwidth as following:

27.53(g) Measurement procedure: Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater.

Measurement bandwidth (RBW) for 9 kHz up to 150 kHz: 1 kHz;
 Measurement bandwidth (RBW) for 150 kHz up to 30 MHz: 10 kHz;
 Measurement bandwidth (RBW) for 30MHz up to 18GHz: 1MHz;

According to RSS-139, the defined measurement bandwidth as following:
 RSS-139 Measurement procedure: Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater.
 Measurement bandwidth (RBW) for 30 MHz up to 18 GHz: 1 MHz;

Table 12 Radiated Spurious Emissions Limits



Frequency band	Minimum requirement (E.R.P) traffic mode
9KHz~18GHz	-13dBm

No peak found in pre- test. All frequency points' margin is bigger than 20dB, so the substitution method isn't used.

Calculation Sample:

Table 13 Substitution Results

Freq. [MHz]	Measurement Value [dBm]	Substitution Antenna Type	Gain [dBd]	Cable Loss [dB]	Signal Generator Level [dBm]	Substitution Level [dBm]	FCC limit [dBm]	Result

Note: For get the E.R.P. (Efficient Radiated Power) in substitution method, the following formula should take to calculate it,

$$E.R.P. [dBm] = SGP [dBm] - Cable Loss [dB] + Gain [dBd]$$

NOTE: SGP- Signal Generator Level

5.3.2 Test Results

The EUT has met the requirements of Part22/24/27/RSS-132/133/139 requirement.

6 Receiver Spurious Emission (Radiated)

6.1.1 Test Procedure

The EUT was connected to the Spectrum Analyzer or equivalent via one RF RX diversity connector, and other RF connectors were connected to match loads. The EUT was controlled to transmit maximum power and to be operated in the normal receive mode by Console Computer. Measure and record the Receiver Out-band Spurious Emissions of the EUT by the Spectrum Analyzer or equivalent.

According to IC RSS-Gen clause 4.10, the search for spurious emissions shall be from the lowest frequency internally generated or used in the receiver (e.g. local oscillator, intermediate or carrier frequency), or 30 MHz, whichever is the higher, to at least 3 times the highest tuneable or local oscillator frequency, whichever is the higher, without exceeding 40 GHz.

A preliminary scan and a final scan of the emissions were made from 30 MHz to 18 GHz by using test script of software; the emissions were measured using Quasi-Peak Detector (30MHz~1GHz) and AV detector (above 1GHz). The maximal emission value was acquired by adjusting the antenna height, polarisation and turntable azimuth in accordance with the software setup. 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.

EUT was configured in idle mode and the test performed at worst emission state.

Measurement bandwidth: 30 MHz – 1000 MHz: 120 kHz
 Measurement bandwidth: 1GHz – 18GHz: 1MHz

Test set up figure:

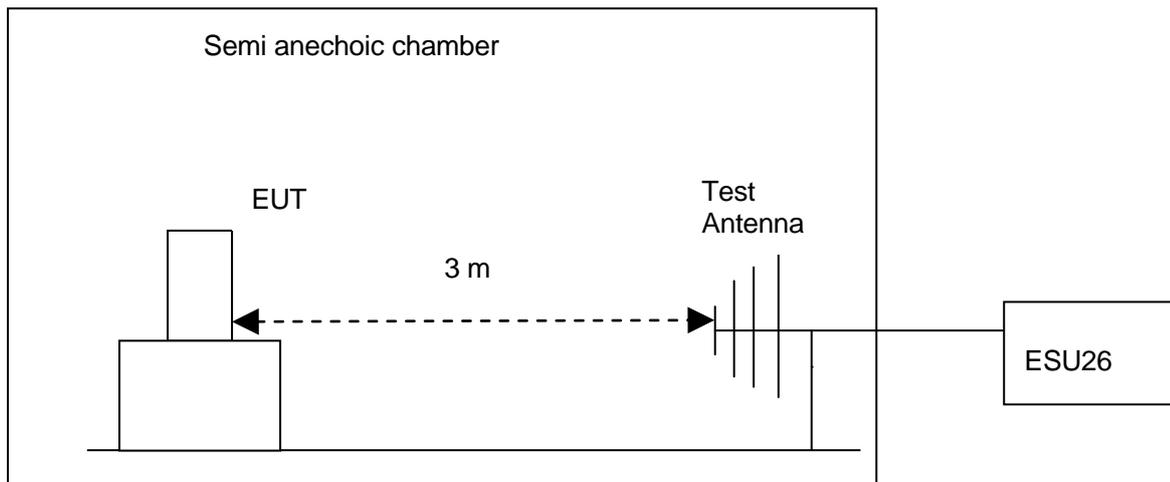


Figure 5. Test set-up

6.1.2 Test Results

The EUT has met the requirements for Radiated Emission of enclosure port.

Table 14 Test Limits

Frequency of Emission (MHz)	Radiated Limit	
	Unit(μV/m)	Unit(dBμV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54



7 Main Test Instruments

Table 15 Main Test Equipments

Test item	Test Instrument	Model	Manufacturer	Cal-Date	Cal Interval (month)
RE	EMI Test receiver	ESU26	R&S	Jun.15, 2010	12
	Broadband Antenna	VULB 9163	SCHAFFNER	May.15, 2010	12
	Horn Antenna	HF906	R&S	May.15, 2010	12
	Horn Antenna	3160-09	ETS-Lindgren	Sep.22, 2009	12
CE	EMI Test receiver	ESU26	R&S	Jun.15, 2010	12
	Artificial Mains Network	ENV216	R&S	Jun.15, 2010	12
RSE	EMI Test receiver	FSU43	R&S	Jun.24, 2010	12
	Broadband Antenna	VULB 9163	SCHAFFNER	Sep.21, 2010	12
	Horn Antenna	HF906	R&S	Jun.29, 2010	12
	Broadband Antenna	VUBA 9117	SCHWARZBECK	May.15, 2010	12
	Horn Antenna	3160	ETS-Lindgren	Sep.22, 2009	12
Software Information					
Test Item	Software Name	Manufacturer	Version		
RE/CE	ES-K1	R&S	1.7.1		
RSE	EMC32	R&S	V8.10.10		



8 System Measurement Uncertainty

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 were:

Table 16 System Measurement Uncertainty

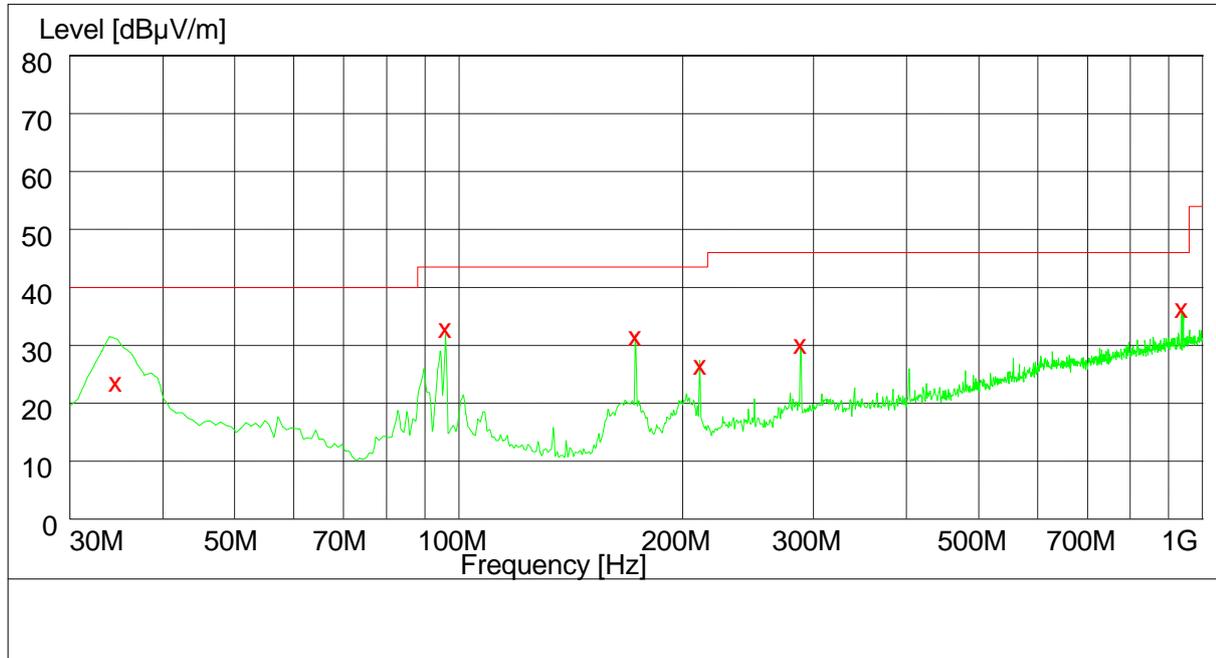
Items		Extended Uncertainty
RE	Field strength (dB μ V/m)	U=4.1dB; k=2(30MHz-1GHz)
RE	Field strength (dB μ V/m)	U=4.1dB; k=2(1GHz-18GHz)
RSE	ERP (dBm)	U=2.8dB; k=2
CE	Disturbance Voltage (dB μ V)	U=3.4dB; k=2

9 Graph and Data of Emission Test

9.1 Radiated Disturbance

This test was carried out in all the test modes, Here only the worst test result was shown.

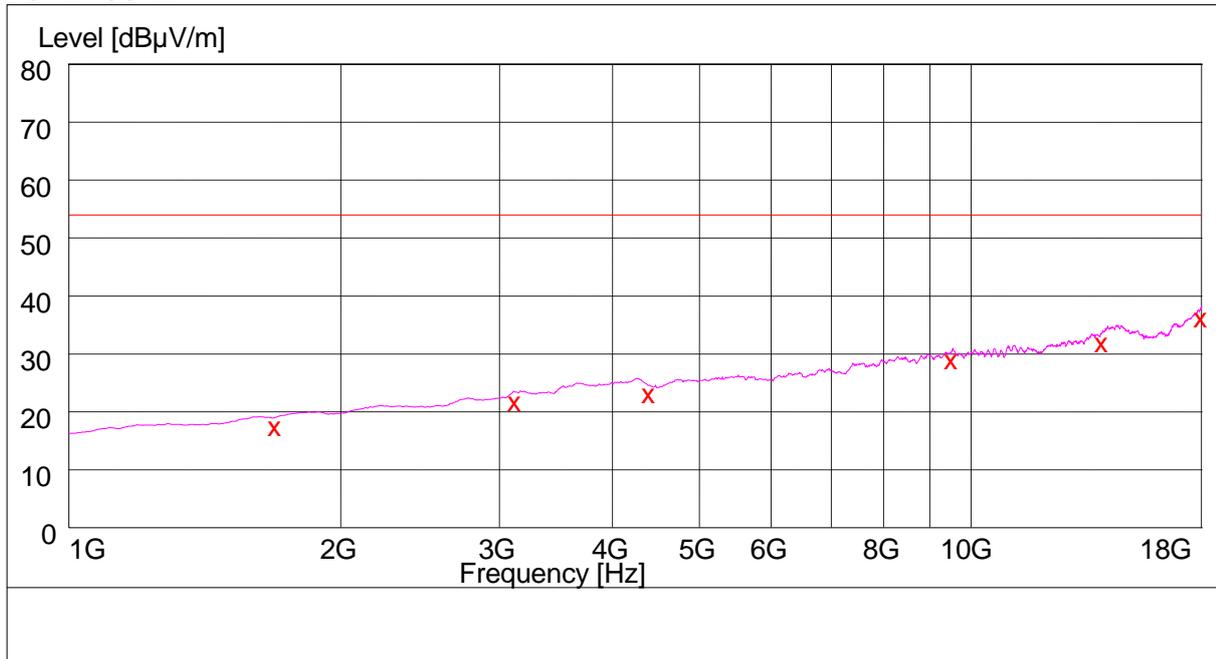
30MHz-1GHz



MEASUREMENT RESULT: QP Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarisation
34.620000	24.80	11.7	40.0	15.2	100.0	98.00	VERTICAL
96.000000	34.10	12.8	43.5	9.4	100.0	95.00	VERTICAL
172.800000	32.70	10.3	43.5	10.8	143.0	216.00	HORIZONTAL
211.200000	27.70	12.6	43.5	15.8	145.0	316.00	HORIZONTAL
288.000000	31.30	15.2	46.0	14.7	100.0	123.00	HORIZONTAL
938.220000	37.50	26.5	46.0	8.5	289.0	36.00	VERTICAL

1GHz-18GHz



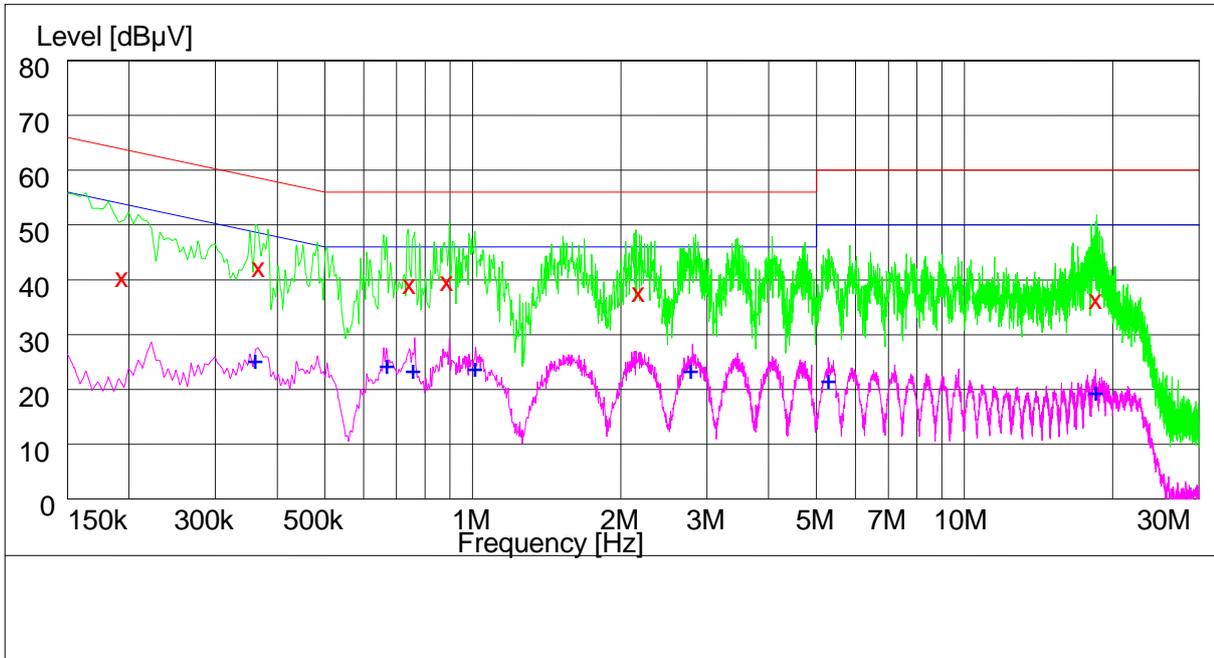
MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarisation
1692.500000	18.70	-14.0	54.0	35.3	100.0	273.00	HORIZONTAL
3122.000000	22.90	-8.6	54.0	31.1	100.0	200.00	VERTICAL
4396.500000	24.30	-5.7	54.0	29.7	100.0	17.00	HORIZONTAL
9519.500000	30.10	5.0	54.0	23.9	100.0	359.00	HORIZONTAL
13962.000000	33.20	10.8	54.0	20.8	100.0	12.00	HORIZONTAL
17975.500000	37.40	17.2	54.0	16.6	100.0	249.00	VERTICAL

10 Conducted Disturbance

This test was carried out in all the test modes, Here only the worst test result was shown.

10.1.1 AC Power Port Test Data



MEASUREMENT RESULT: QP Detector

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.194000	41.80	10.1	64	22.2	N	FLO
0.368000	43.50	10.0	59	15.5	N	FLO
0.746000	40.50	10.1	56	15.5	N	FLO
0.888000	41.10	10.1	56	14.9	N	FLO
2.182000	39.00	10.1	56	17.0	N	FLO
18.560000	37.80	10.3	60	22.2	N	FLO

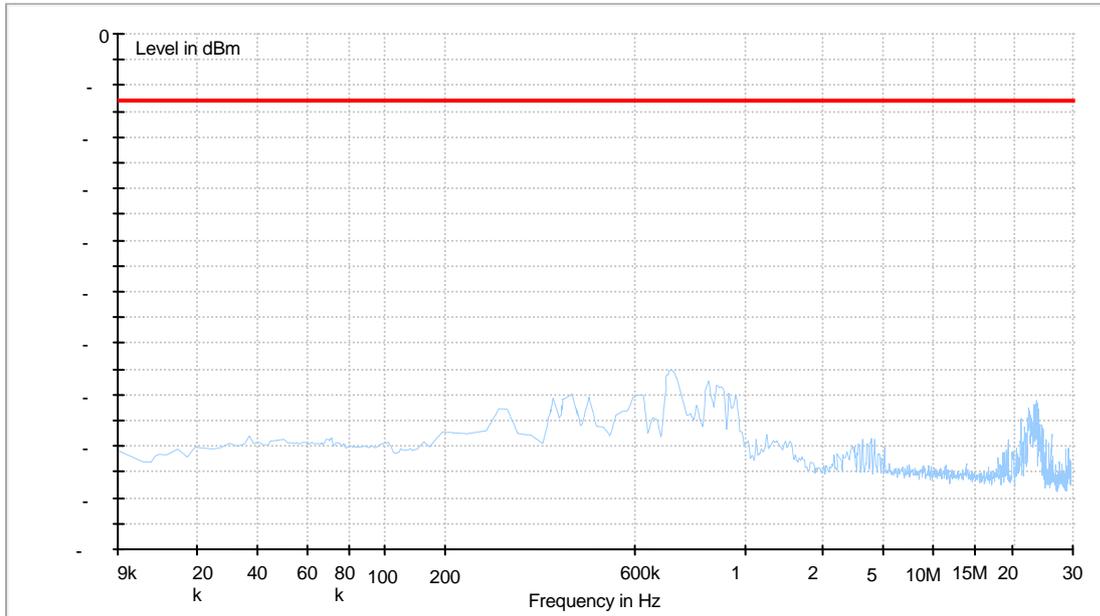
MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.360000	26.70	10.0	49	22.3	N	FLO
0.668000	25.80	10.1	46	20.2	N	FLO
0.756000	24.90	10.1	46	21.1	N	FLO
1.010000	25.30	10.1	46	20.7	N	FLO
2.780000	24.90	10.2	46	21.1	N	FLO
5.276000	23.00	10.2	50	27.0	N	FLO
18.496000	20.80	10.3	50	29.2	N	FLO

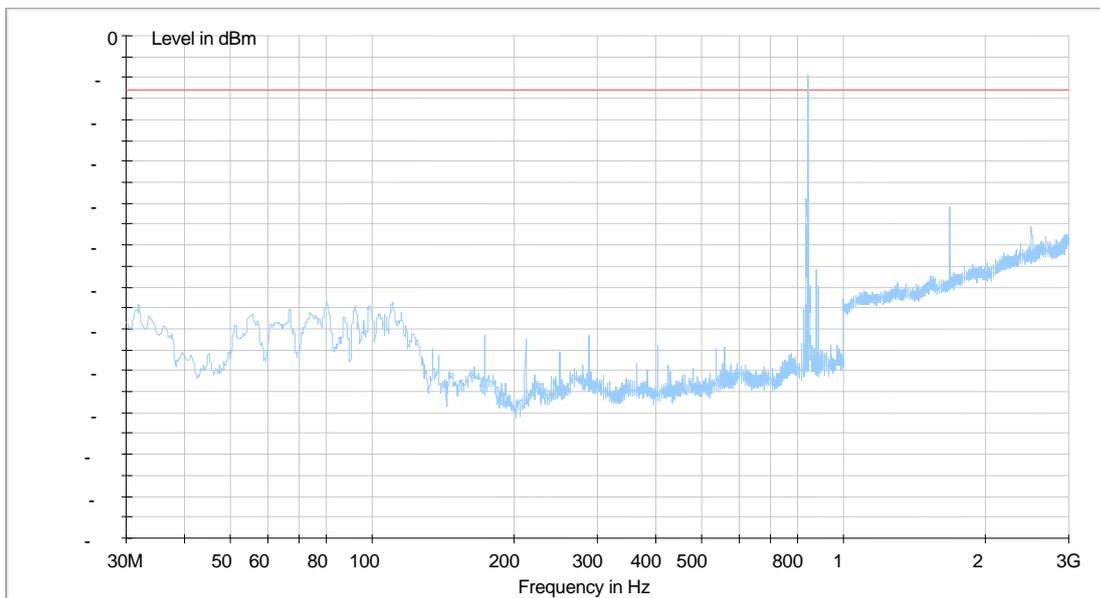
10.2 Radiated Spurious Emission

10.2.1 For GPRS 850

Traffic Mode (9kHz-30MHz)

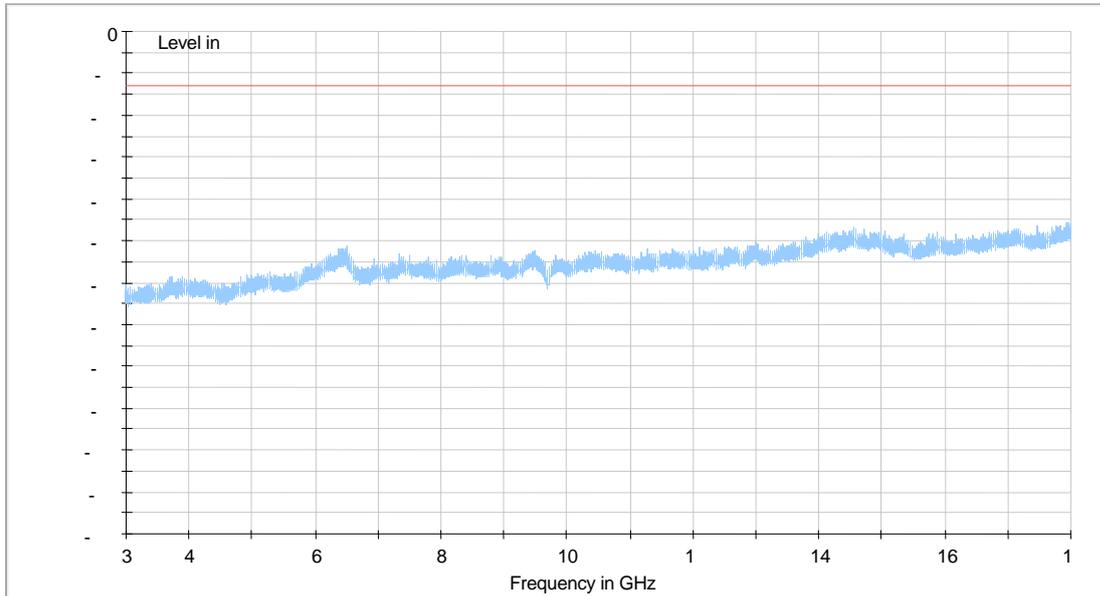


Traffic Mode (30MHz-3GHz)

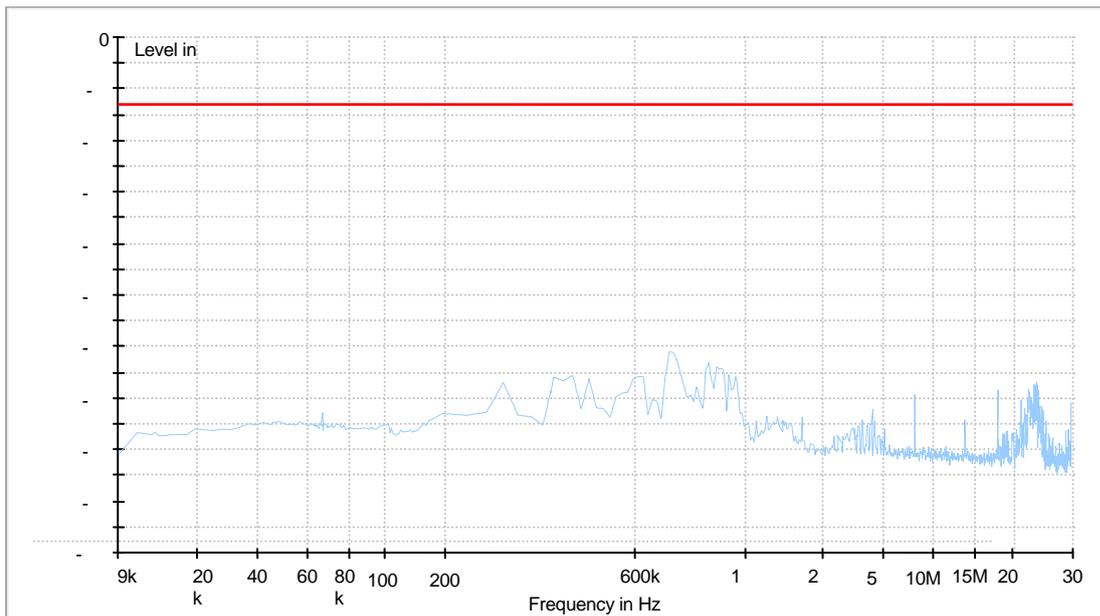


Note: The peak exceeds the limit line is carrier frequency.

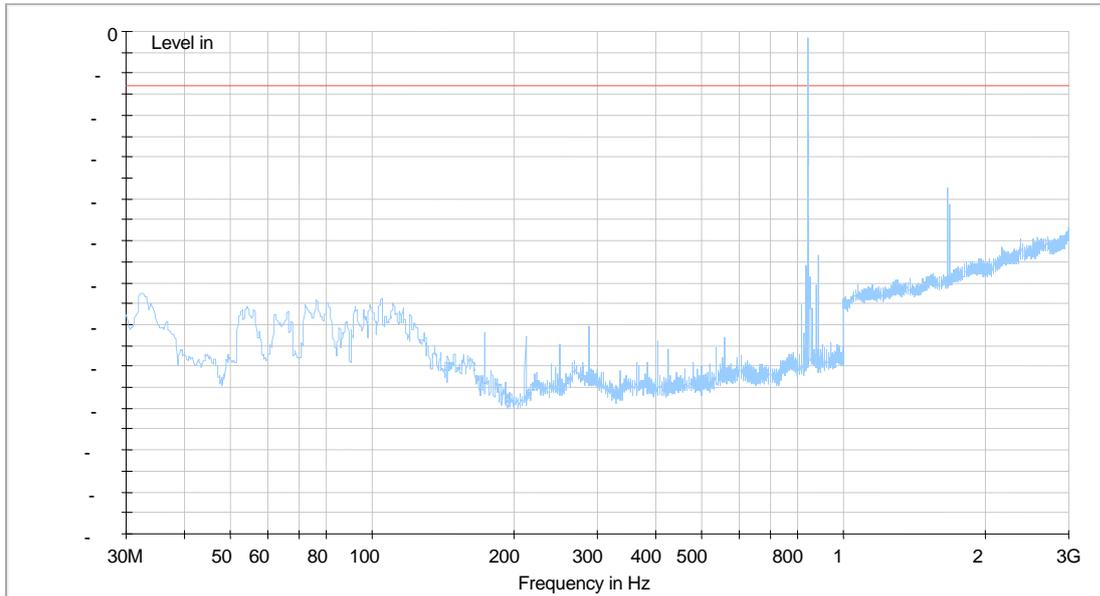
Traffic Mode (3GHz-18GHz)



10.2.2 For EGPRS 850
Traffic Mode (9kHz-30MHz)

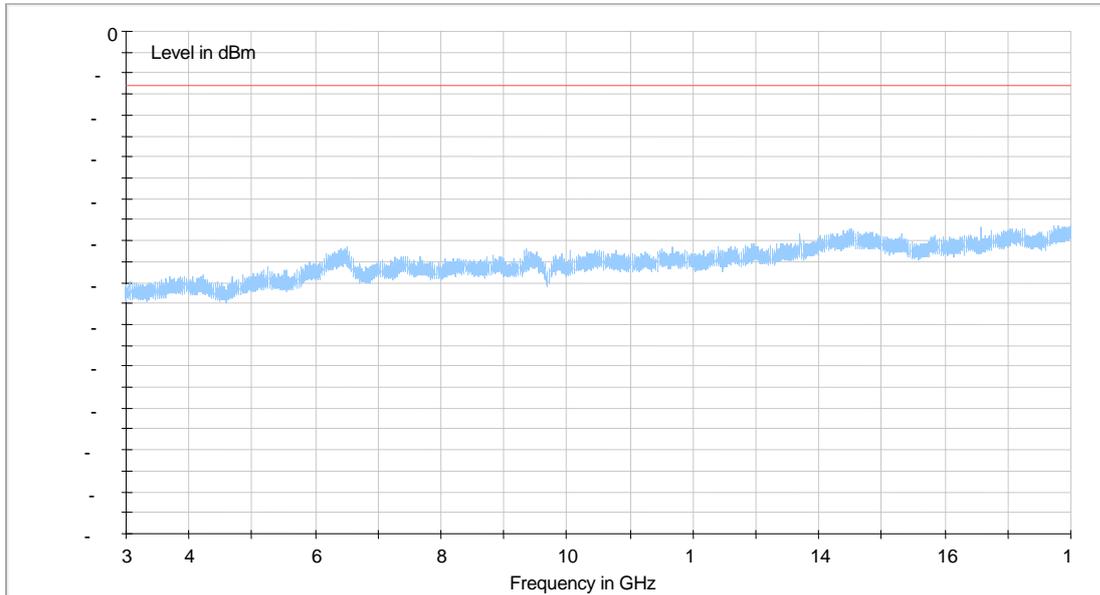


Traffic Mode (30MHz-3GHz)

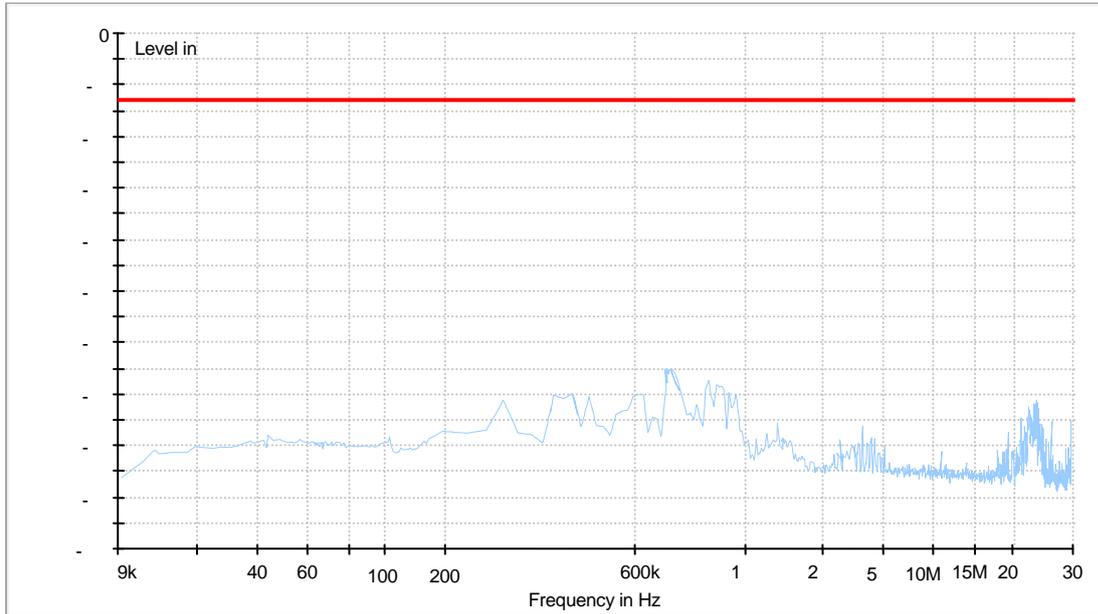


Note: The peak exceeds the limit line is carrier frequency.

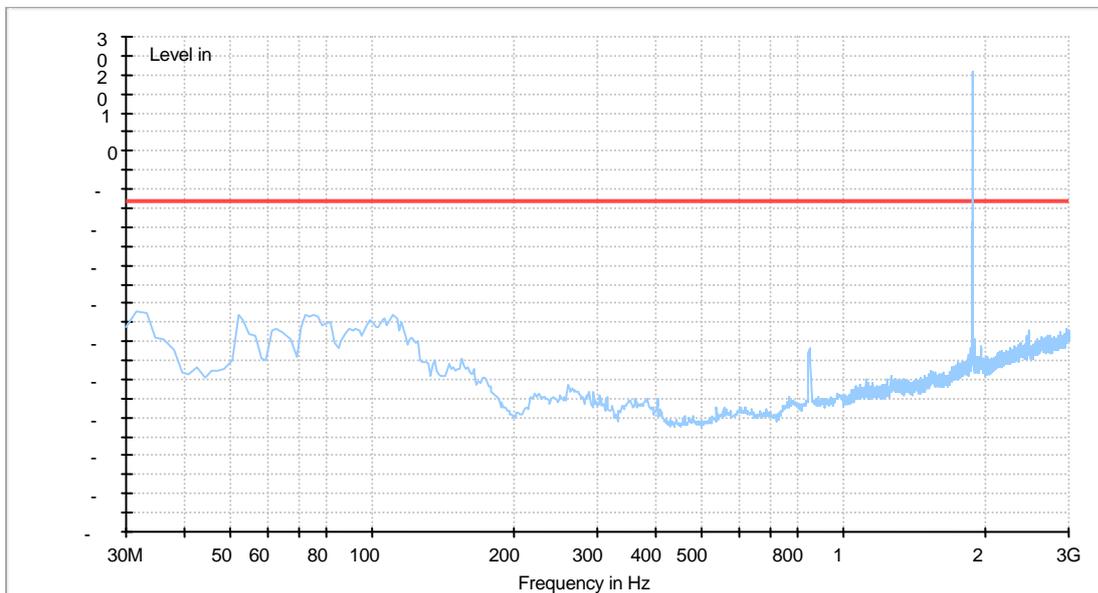
Traffic Mode (3GHz-18GHz)



10.2.3 For GPRS 1900 Traffic Mode (9kHz-30MHz)



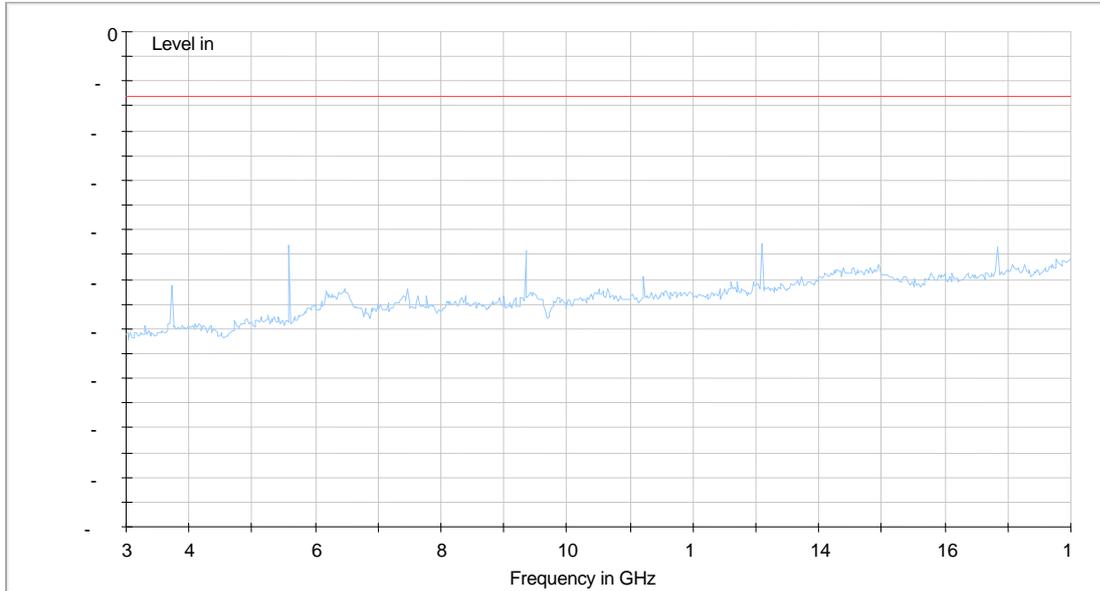
Traffic Mode (30MHz-3GHz)



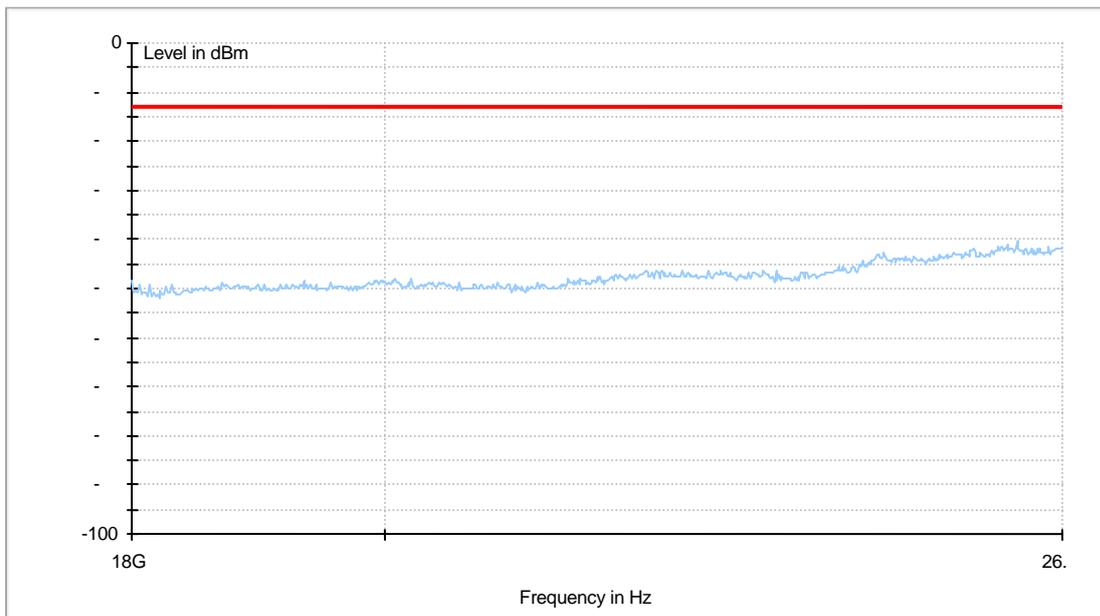
Note: The peak exceeds the limit line is carrier frequency.



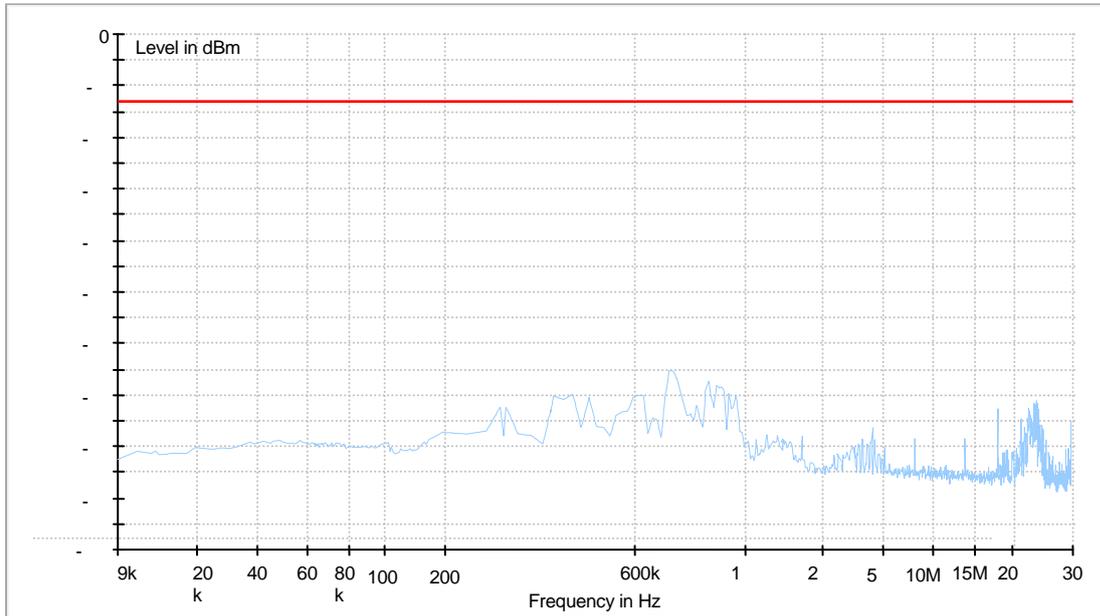
Traffic Mode (3GHz-18GHz)



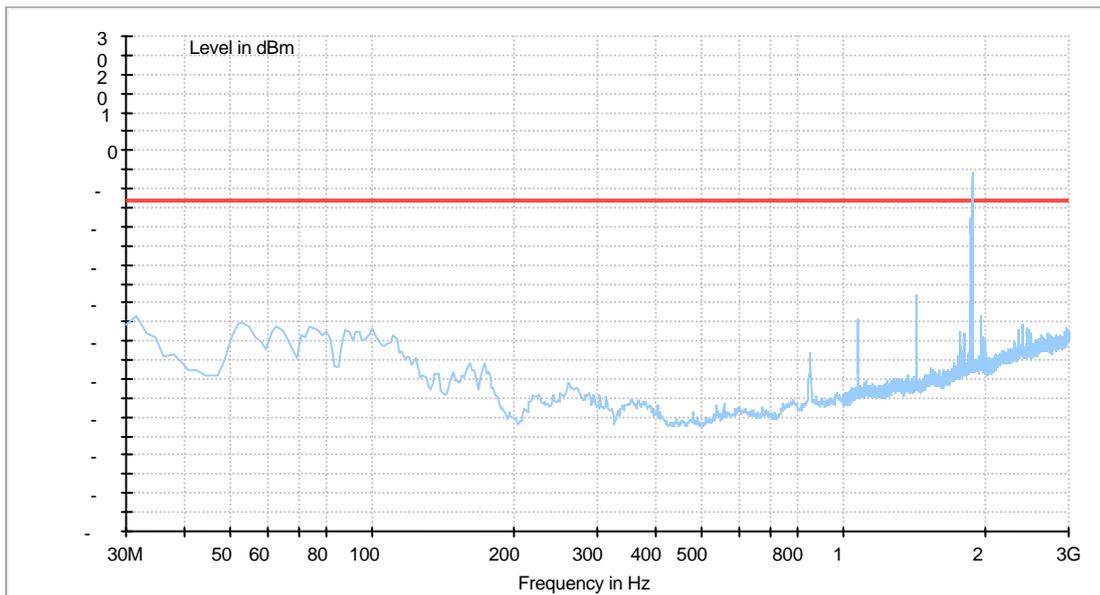
Traffic Mode (18GHz-26.5GHz)



10.2.4 For EGPRS 1900 Traffic Mode (9kHz-30MHz)

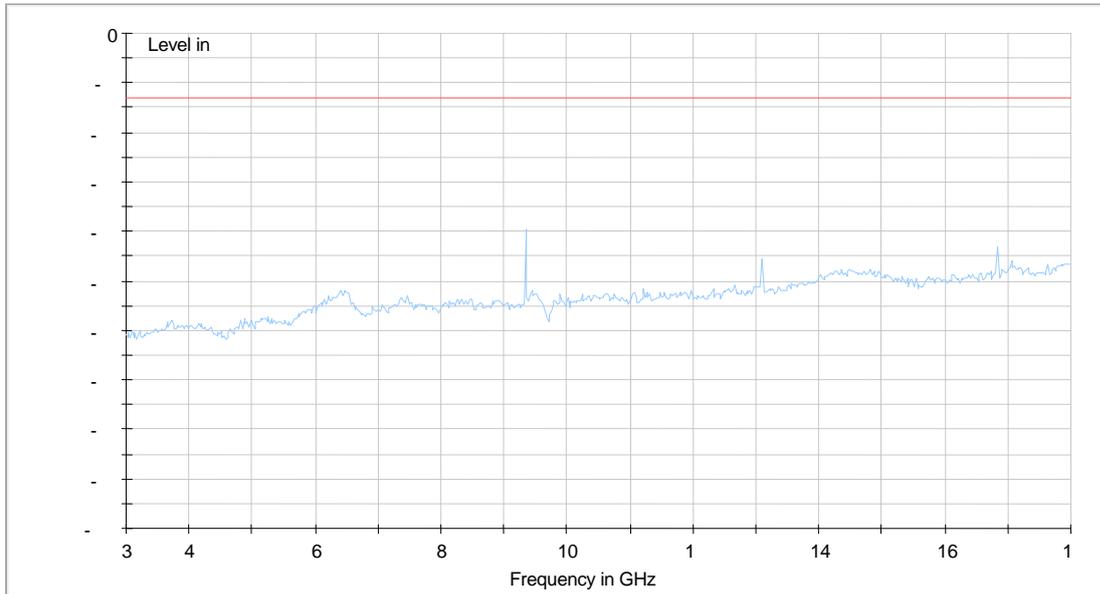


Traffic Mode (30MHz-3GHz)

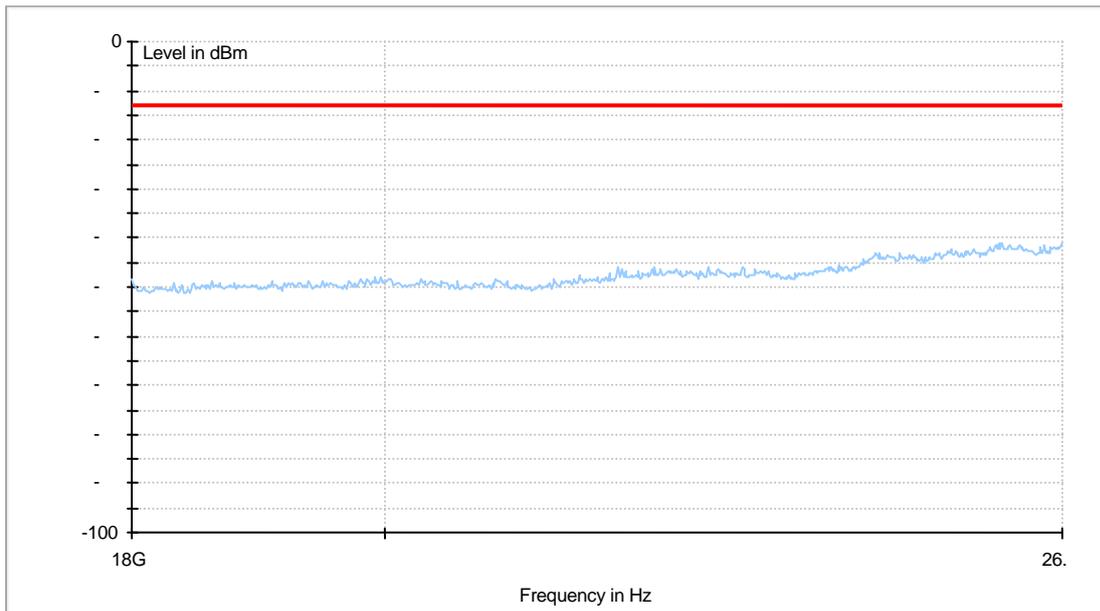


Note: The peak exceeds the limit line is carrier frequency.

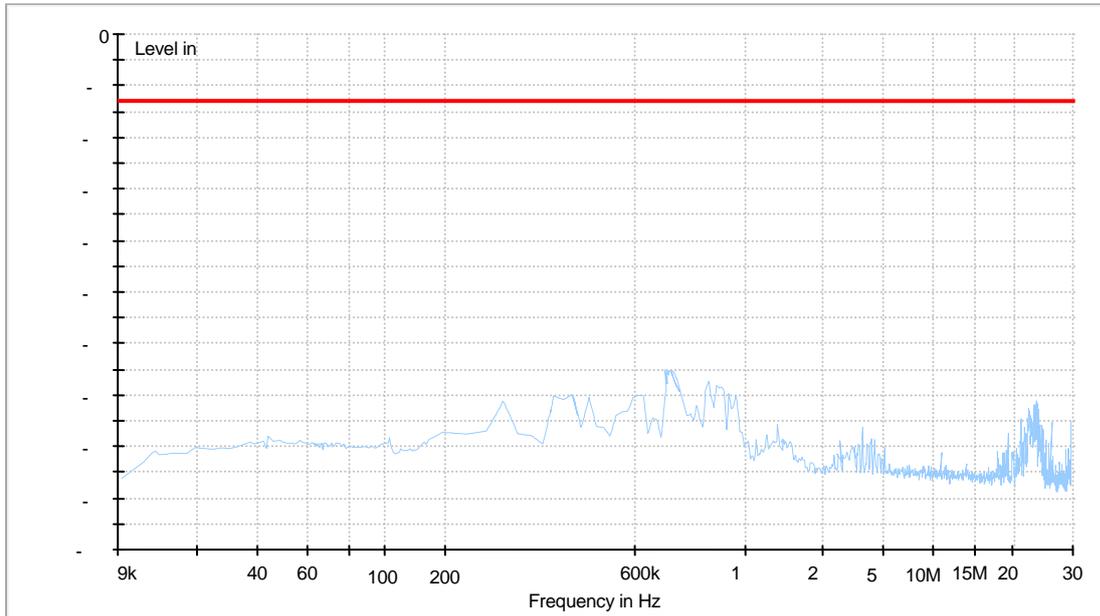
Traffic Mode (3GHz-18GHz)



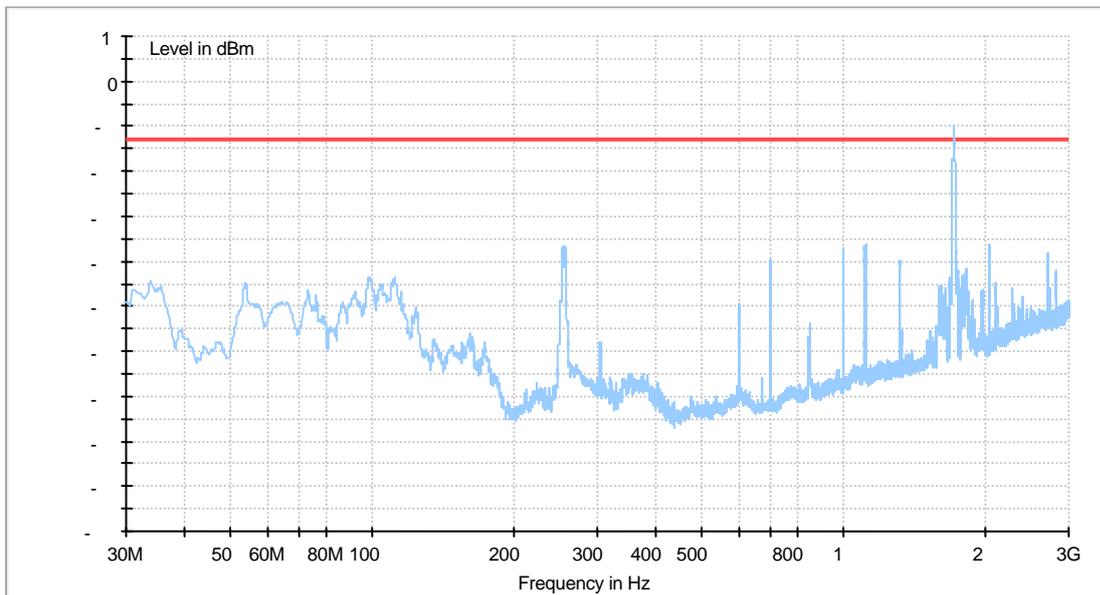
Traffic Mode (18GHz-26.5GHz)



10.2.5 For WCDMA AWS Traffic Mode (9kHz-30MHz)



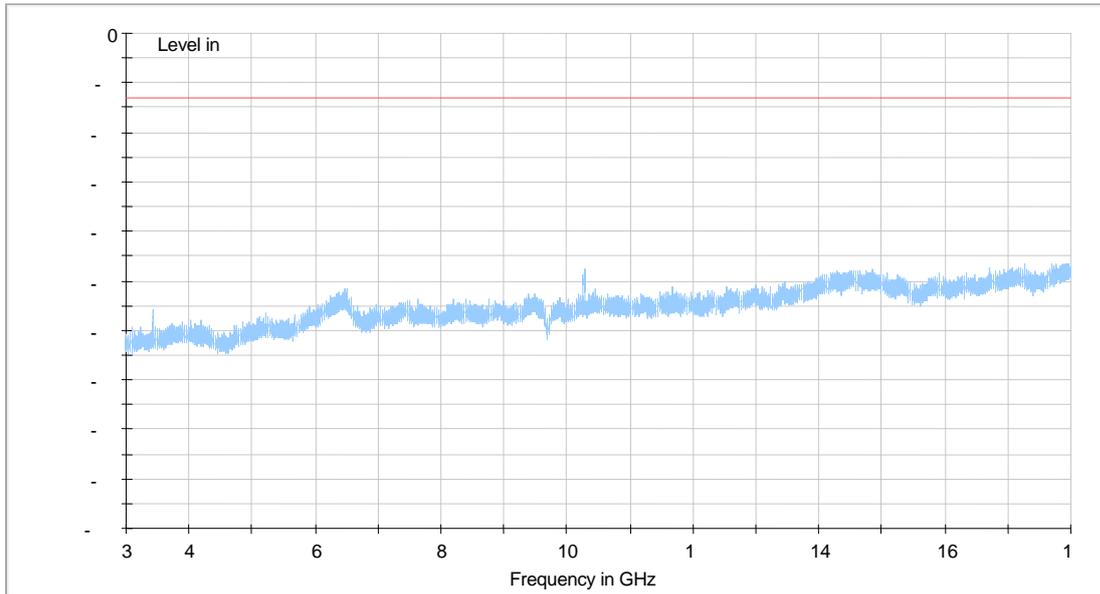
Traffic Mode (30MHz-3GHz)



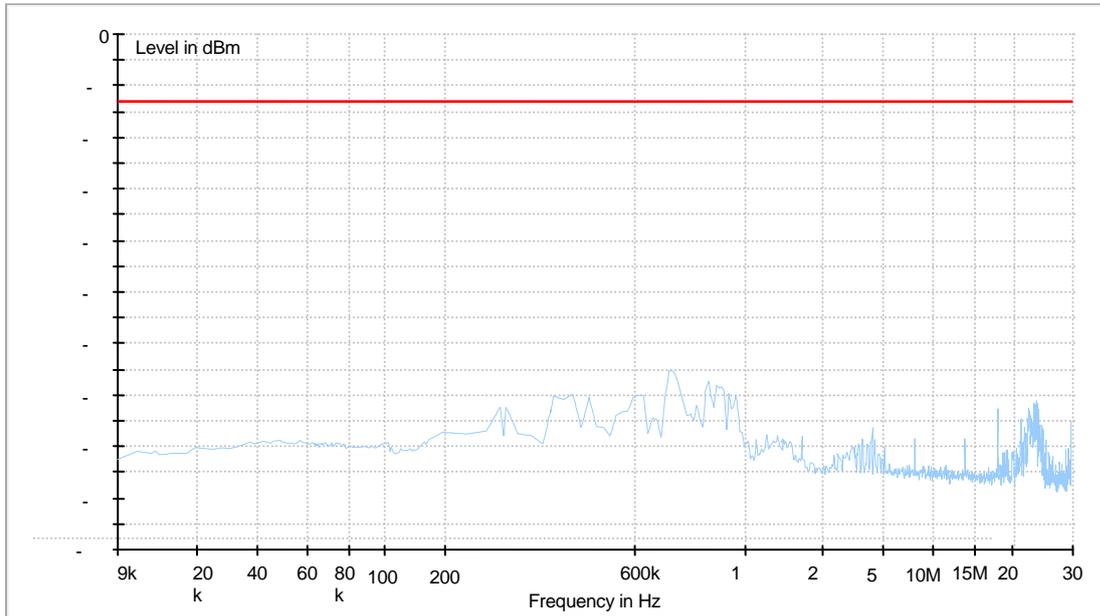
Note: The peak exceeds the limit line is carrier frequency.



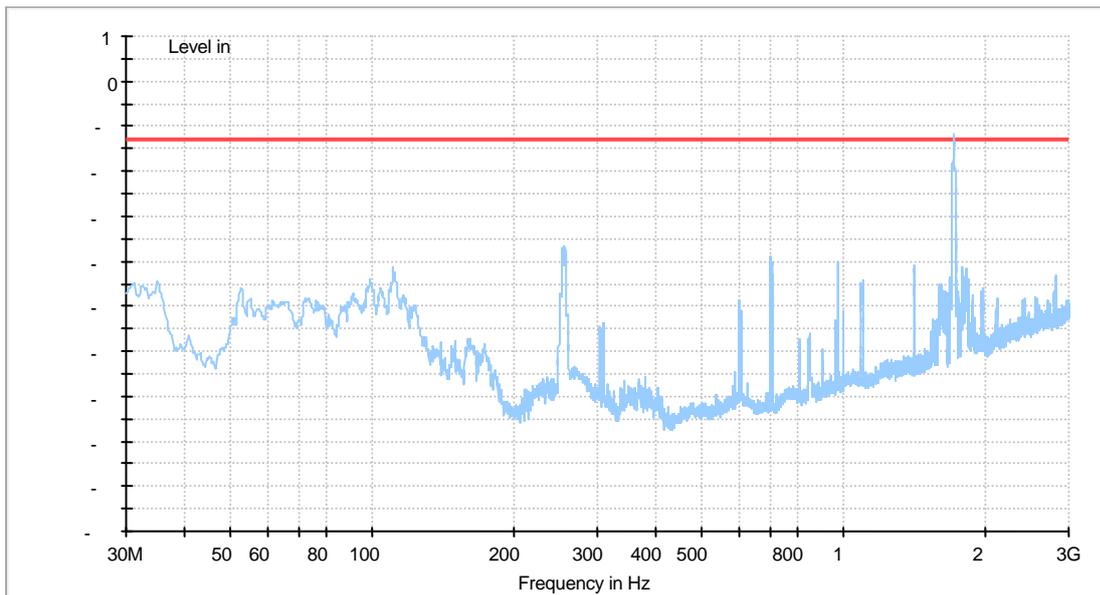
Traffic Mode (3GHz-18GHz)



10.2.6 For HSDPA AWS Traffic Mode (9kHz-30MHz)



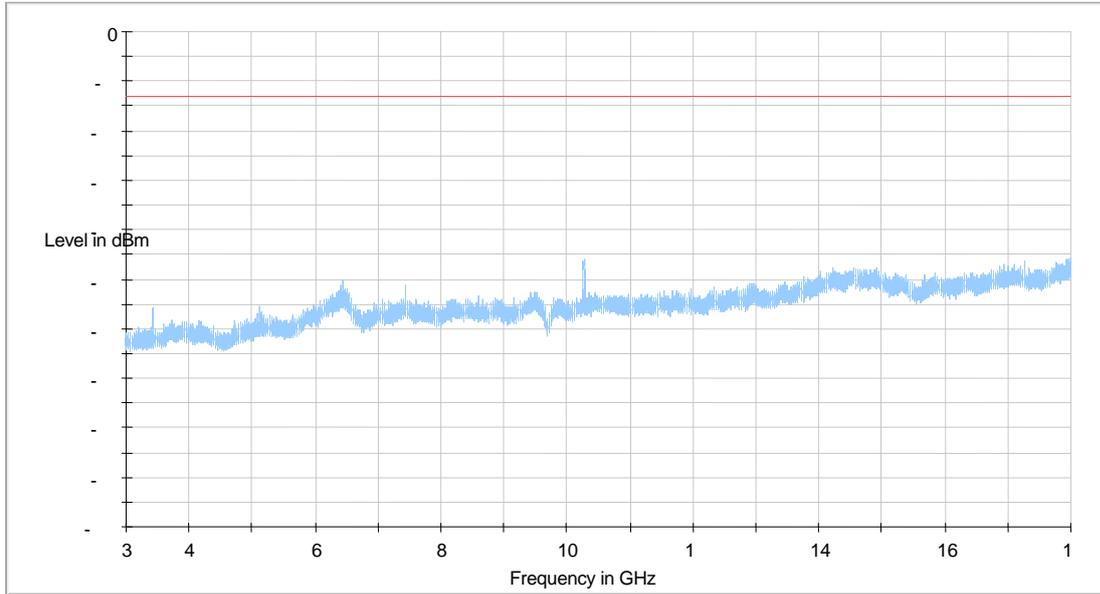
Traffic Mode (30MHz-3GHz)



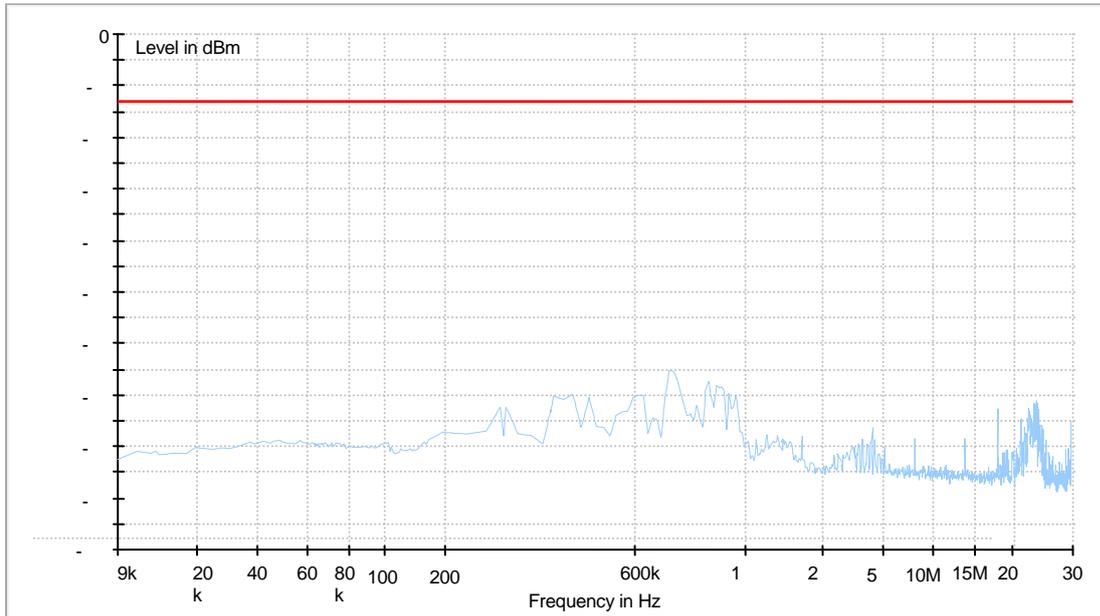
Note: The peak exceeds the limit line is carrier frequency.



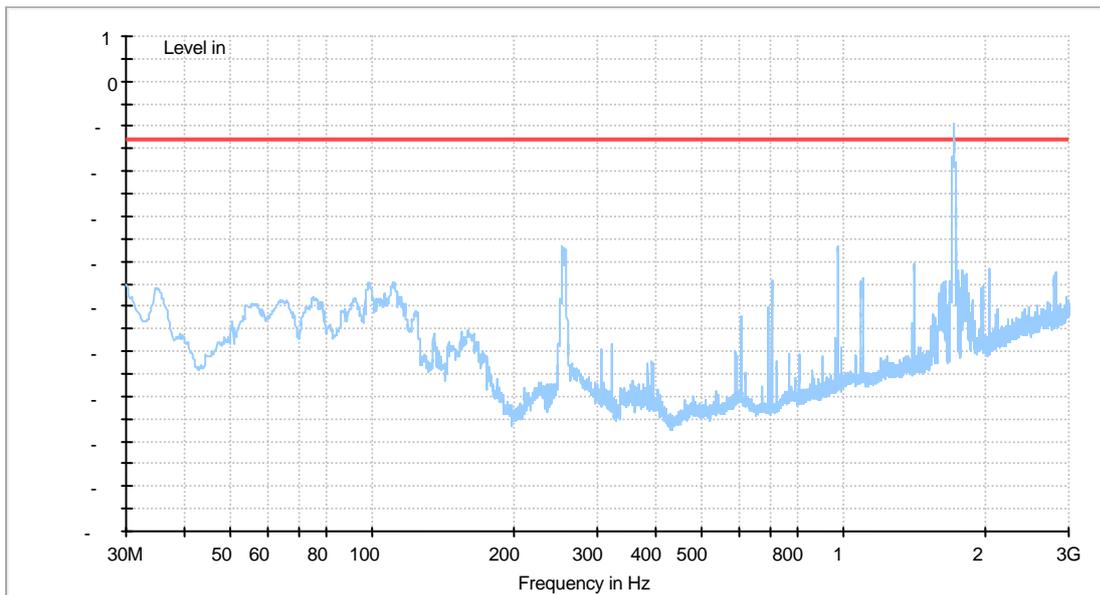
Traffic Mode (3GHz-18GHz)



10.2.7 For HSUPA AWS Traffic Mode (9kHz-30MHz)



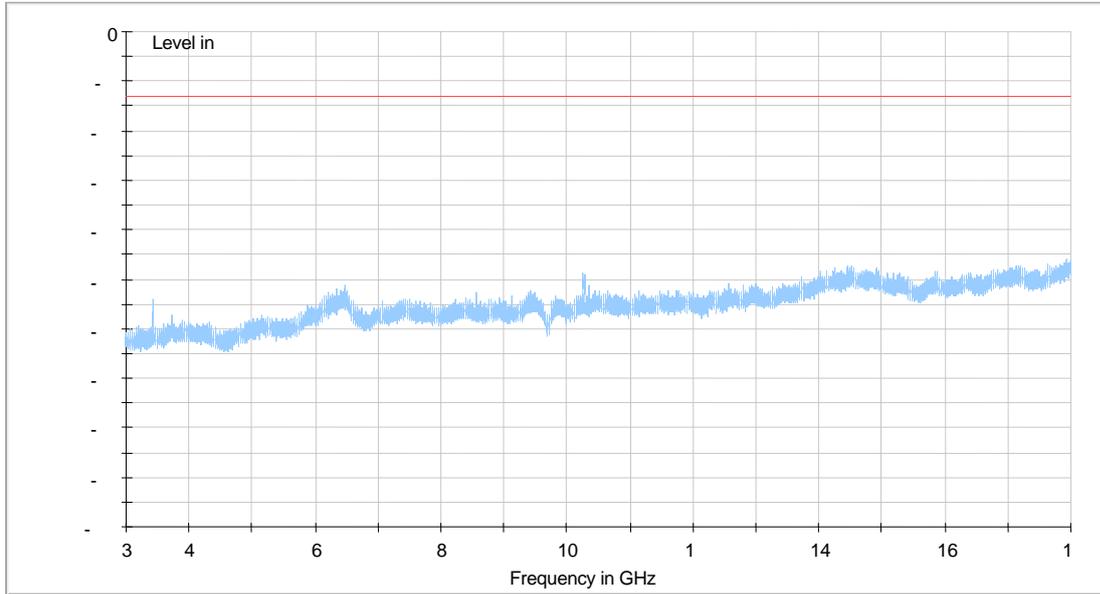
Traffic Mode (30MHz-3GHz)



Note: The peak exceeds the limit line is carrier frequency.



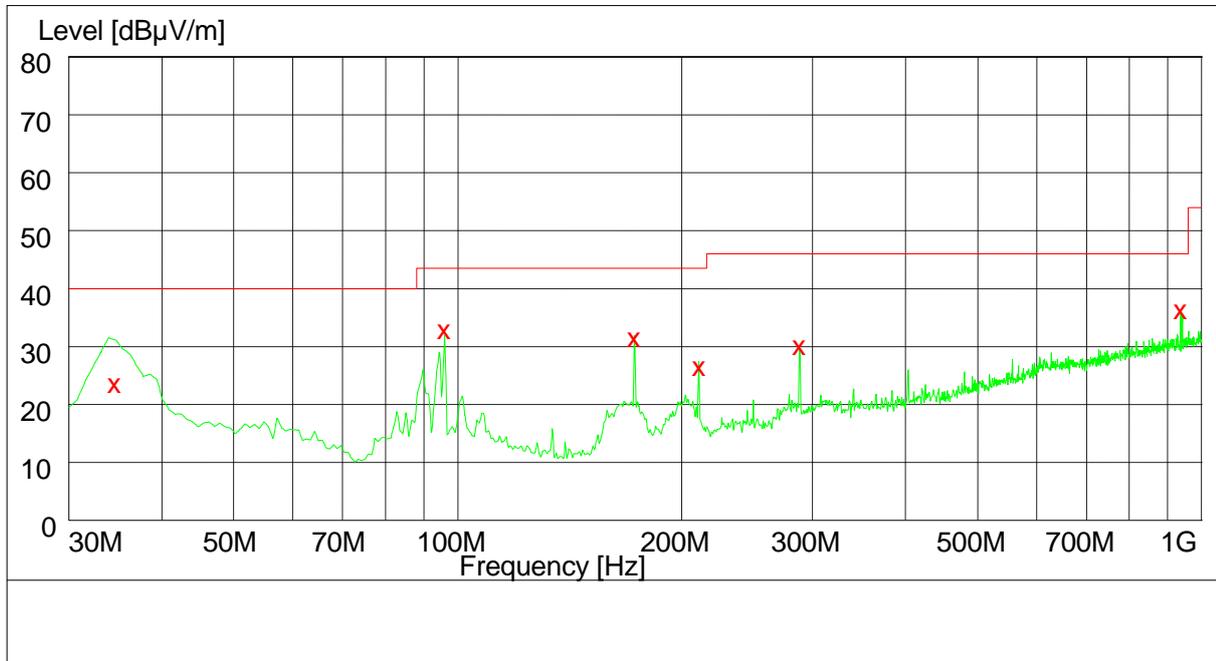
Traffic Mode (3GHz-18GHz)



10.3 Receiver Spurious Emission

This test was carried out in all the test modes, Here only the worst test result was shown.

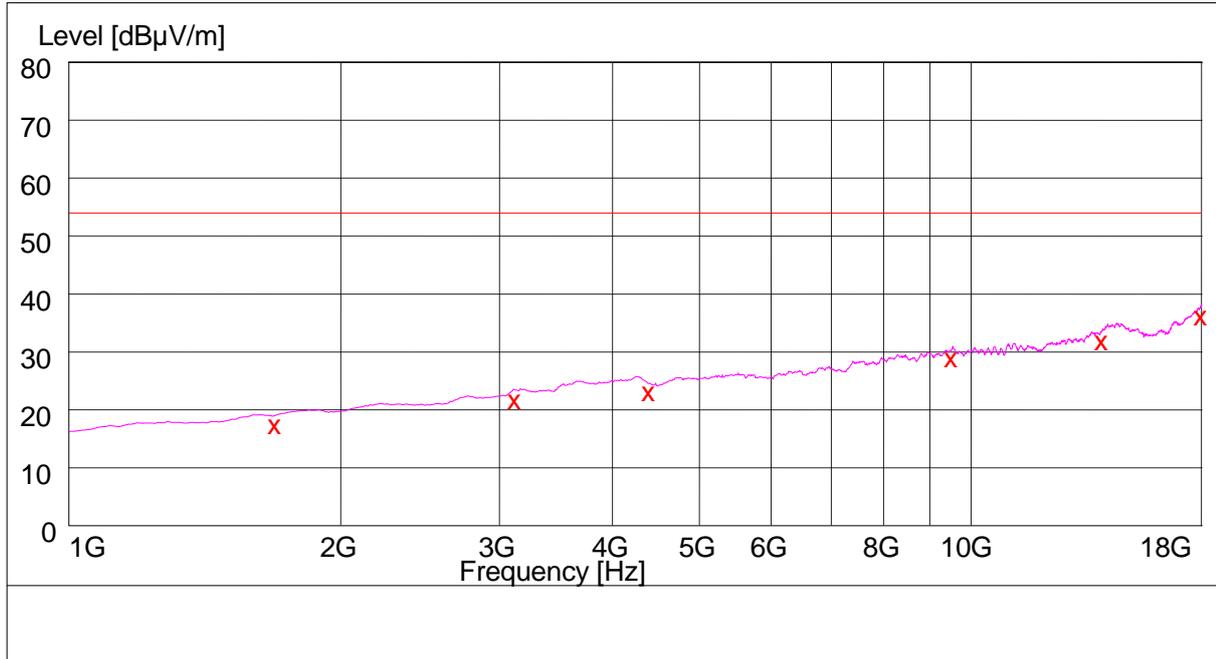
30MHz-1GHz



MEASUREMENT RESULT: QP Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarisation
34.620000	24.80	11.7	40.0	15.2	100.0	98.00	VERTICAL
96.000000	34.10	12.8	43.5	9.4	100.0	95.00	VERTICAL
172.800000	32.70	10.3	43.5	10.8	143.0	216.00	HORIZONTAL
211.200000	27.70	12.6	43.5	15.8	145.0	316.00	HORIZONTAL
288.000000	31.30	15.2	46.0	14.7	100.0	123.00	HORIZONTAL
938.220000	37.50	26.5	46.0	8.5	289.0	36.00	VERTICAL

1GHz-18GHz



MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarisation
1692.500000	18.70	-14.0	54.0	35.3	100.0	273.00	HORIZONTAL
3122.000000	22.90	-8.6	54.0	31.1	100.0	200.00	VERTICAL
4396.500000	24.30	-5.7	54.0	29.7	100.0	17.00	HORIZONTAL
9519.500000	30.10	5.0	54.0	23.9	100.0	359.00	HORIZONTAL
13962.000000	33.20	10.8	54.0	20.8	100.0	12.00	HORIZONTAL
17975.500000	37.40	17.2	54.0	16.6	100.0	249.00	VERTICAL