



Report No.: RZA2010-1463RF02R1



Part 24

TEST REPORT

Product Name	CLEAR DIGITAL AMPLIFIED CELLULAR HANDSET
Model Name	CL-3605/AC100
FCC ID	WG8AC100
IC	7800A-AC100
Client	ClearSounds Communications, Inc.

TA Technology (Shanghai) Co., Ltd.



GENERAL SUMMARY

Product Name	CLEAR DIGITAL AMPLIFIED CELLULAR HANDSET	Model Name	CL-3605/AC100
FCC ID	WG8AC100	IC	7800A-AC100
Report No.	RZA2010-1463RF02R1		
Client	ClearSounds Communications, Inc.		
Manufacturer	Xingtel Xiamen Electronics Co., Ltd.		
Reference Standard(s)	<p>FCC CFR47 Part 2 (2009-12) Frequency Allocations And Radio Treaty Matters; General Rules And Regulations</p> <p>FCC CFR47 Part 24E (2009-12) Personal Communications Services</p> <p>ANSI/TIA-603-C(2004) Land mobile FM or PM Communications Equipment Measurements and Performance Standards.</p> <p>RSS-133 Issue 5, (2009-2) 2 GHz Personal Communications Services</p> <p>RSS-Gen Issue 2 (2007-6) General Requirements and Information for the Certification of Radio communication Equipment</p>		
Conclusion	<p>This portable wireless equipment has been measured in all cases requested by the relevant standards. Test results in Chapter 2 of this test report are below limits specified in the relevant standards.</p> <p>General Judgment: Pass</p> <div style="text-align: right;">  <p>(Stamp) Date of issue: November 5th, 2010</p> </div>		
Comment	The test result only responds to the measured sample.		

Approved by 杨伟中
Yang Weizhong

Revised by 徐凯
Xu Kai

Performed by 杜如蔚
Du Ruwei

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1. General Information

1.1. Notes of the test report

TA Technology (Shanghai) Co., Ltd. guarantees the reliability of the data presented in this test report, which is the results of measurements and tests performed for the items under test on the date and under the conditions stated in this test report and is based on the knowledge and technical facilities available at TA Technology (Shanghai) Co., Ltd. at the time of execution of the test.

TA Technology (Shanghai) Co., Ltd. is liable to the client for the maintenance by its personnel of the confidentiality of all information related to the items under test and the results of the test. This report only refers to the item that has undergone the test.

This report standalone dose not constitute or imply by its own an approval of the product by the certification Bodies or competent Authorities. This report cannot be used partially or in full for publicity and/or promotional purposes without previous written approval of **TA Technology (Shanghai) Co., Ltd.** and the Accreditation Bodies, if it applies.

1.2. Testing laboratory

Company: TA Technology (Shanghai) Co., Ltd.
Address: No.145, Jintang Rd, Tangzhen Industry Park, Pudong
City: Shanghai
Post code: 201201
Country: P. R. China
Contact: Yang Weizhong
Telephone: +86-021-50791141/2/3
Fax: +86-021-50791141/2/3-8000
Website: <http://www.ta-shanghai.com>
E-mail: yangweizhong@ta-shanghai.com

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1.3. Applicant Information

Company: ClearSounds Communications, Inc.
Address: 1743 Quincy Avenue #155 Naperville, IL 60540 U.S.A
Country: U.S.A
Contact: Michele Ahlman
Telephone: +630-654-9200
Fax: +630-654-9219

1.4. Manufacturer Information

Company: Xingtel Xiamen Electronics Co., Ltd.
Address: Xingtel Building,Chuangxin Road, Torch Hi-Tech Industrial District,Xiamen 361006,
P.R. China
City: Xiamen
Postal Code: 361006
Country: P.R. China
Telephone: +86-592-5625929
Fax: +86-592-6037860

1.5. Information of EUT

General information

Name of EUT:	CLEAR DIGITAL AMPLIFIED CELLULAR HANDSET		
IMEI:	352417030014823		
Hardware Version:	CL3605GSM_FCC_V10		
Software Version:	L6DLH02.4.0.1.0T06S0521_M600_KF719D_XXL		
Antenna Type:	Internal Antenna		
Device Operating Configurations:			
Operating Mode(s):	GSM1900: (tested)		
Test Modulation:	GMSK		
E.I.R.P	26.86dBm		
Power Supply:	Battery or Charger		
Rated Power Supply Voltage:	3.7V		
Extreme Voltage:	Minimum: 3.3V Maximum: 4.2V		
Extreme Temperature:	Lowest: -20°C Highest: +55°C		
Test Channel: (Low - Middle - High)	512 - 661 - 810 (GSM 1900) (tested)		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	GSM1900	1850.2 ~ 1909.8	1930.2 ~ 1989.8

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Auxiliary equipment details

AE1: Battery

Model: BL-5C
Manufacturer: SHENZHEN REXPOWER ELECTRONICS CO., LTD.
S/N: MH45125 116024-001

AE2: Travel Charger

Model: P6050100 US
Manufacturer: Something High Electric (Xiamen) Co., Ltd.
S/N: E229085

Equipment Under Test (EUT) is CLEAR DIGITAL AMPLIFIED CELLULAR HANDSET with internal antenna. The EUT supports GSM1900 in this report.

The sample under test was selected by the Client.

Components list please refer to documents of the manufacturer.

1.6. Test Date

The test is performed from September 23, 2010 to September 27, 2010.

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2. Test Information

2.1. Summary of test results

Number	Test Case	Clause in rules	Verdict
1	RF power output	FCC part 2.1046	PASS
2	Effective Isotropic Radiated power	FCC part 24.232	PASS
3	Occupied Bandwidth	FCC part 2.1049	PASS
4	Band Edge Compliance	FCC part 24.238	PASS
5	Frequency Stability	FCC part 2.1055 / 24.235	PASS
6	Spurious Emissions at Antenna Terminals	FCC part 2.1051 / 24.238	PASS
7	Radiates Spurious Emission	FCC part 2.1053 / 24.238	PASS
8	Receiver Spurious Emissions	RSS-133 Issue 5 (2009)	PASS

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2.2. RF Power Output

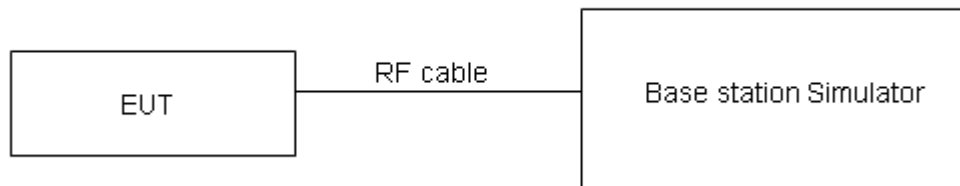
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

During the process of the testing, The EUT is controlled by the Base Station Simulator to ensure max power transmission and proper modulation. These measurements have been tested at following channels: 512,661,810 for GSM 1900.

Test Setup



The loss between RF output port of the EUT and the input port of the tester has been taken into consideration.

Limits

No specific RF power output requirements in part 2.1046.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$. $U = 0.4$ dB.

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Test Results

GSM 1900

Channel	Frequency(MHz)	RF Output Power (dBm)
512	1850.2	28.41
661	1880.0	28.05
810	1909.8	28.22

2.3. Effective Isotropic Radiated Power

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

Test procedure:

The measurement was done according to TIA/EIA 603C.

Step 1:

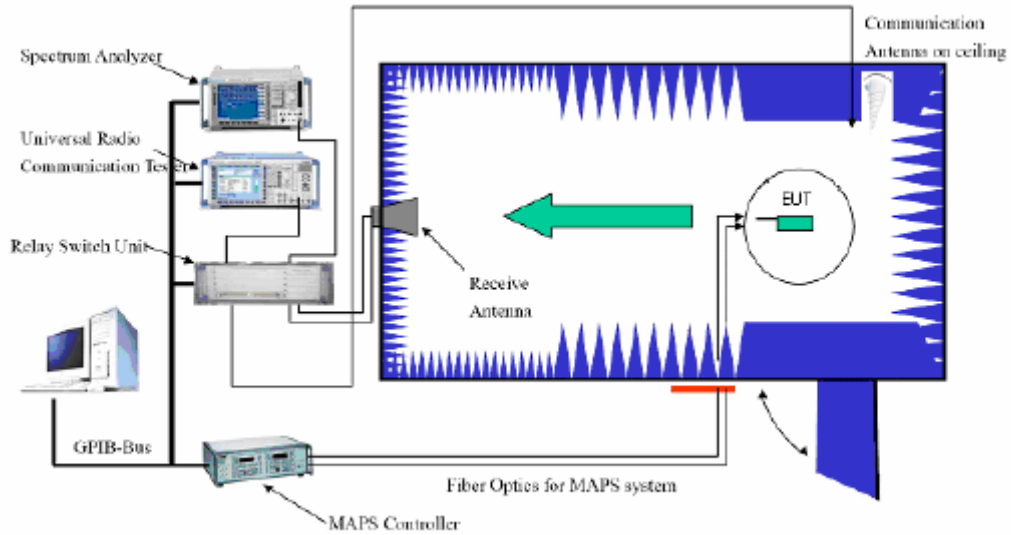
The measurement is carried out in a fully anechoic chamber. EUT was placed on a 0.8 meters high non-conductive table at a 3 meters test distance from the test receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT. A radio link shall be established between EUT and Tester. The output power of the cell signal of the tester will be decreased until the output power of the EUT reach a maximum value. A peak detector is used while RBW and VBW are both set to 3MHz. During the measurement, the highest emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna moved up and down over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.

Step 2:

A dipole antenna shall be substituted in place of the EUT. The antenna will be driven by a signal generator with a known power S.G. applied through a Tx cable. Then the maximum Analyzer reading is recorded while the antenna was moving up and down. The E.R.P. /E.I.R.P. of the EUT can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.

The correction factor (in dB)=S.G. - Tx Cable loss + Substitution antenna gain - Analyzer reading – 2.15. Then the EUT's E.R.P. was calculated with the correction factor, E.R.P. = LVL + Correction factor. The measurement will be conducted at three channels No.512, No.661 and No.810 of GSM 1900.

Test Setup



Limits

Rule Part 24.232(b) specifies that "Mobile/portable stations are limited to 2 watts EIRP. Peak power" and Rule Part 24.232(c) specifies that "Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage".

Limit (EIRP)	$\leq 2\text{ W}$ (33 dBm)
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Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$. $U = 1.19\text{ dB}$

Test Results:Pass

GSM 1900

	Channel	Frequency (MHz)	P_{er} (EUT)	P_{in}	Gain (dBi)	Cable Loss	P_r (dBm)	Path loss (dBm)	E.I.R.P. (dBm)
GSM 1900	512	1850.2	-29.1356	0	1.9173	-18.1801	-34.8482	54.9456	25.81
	661	1880.0	-28.7107	0	1.94	-18.2744	-35.1363	55.3507	26.64
	810	1909.8	-28.7683	0	1.9	-18.3003	-35.428	55.6283	26.86

Note: The Reference Path loss = $P_{in} - P_r - \text{Tx cable loss} + \text{Substitution antenna gain}$

$EIRP = P_{er} + \text{Path loss}$

2.4. Occupied Bandwidth

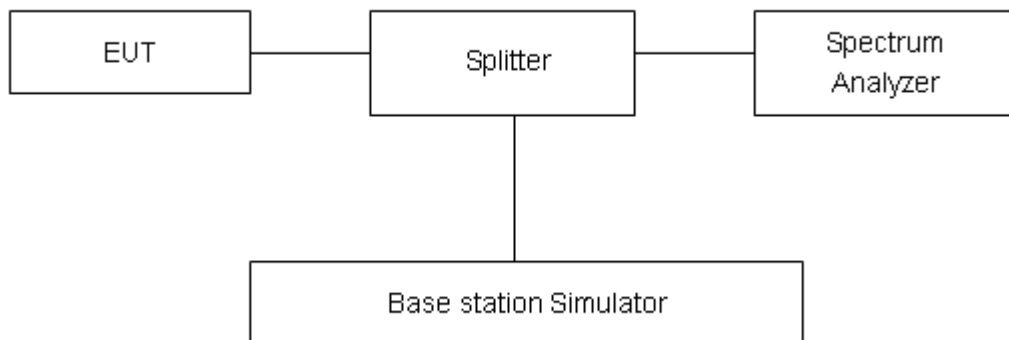
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The occupied bandwidth is measured using spectrum analyzer. RBW is set to 3kHz,VBW is set to 10kHz on spectrum analyzer.-20dBC,99% power and -26dBC occupied bandwidths are recorded. Spectrum analyzer plots are included on the following pages.

Test Setup



Limits

No specific occupied bandwidth requirements in part 2.1049.

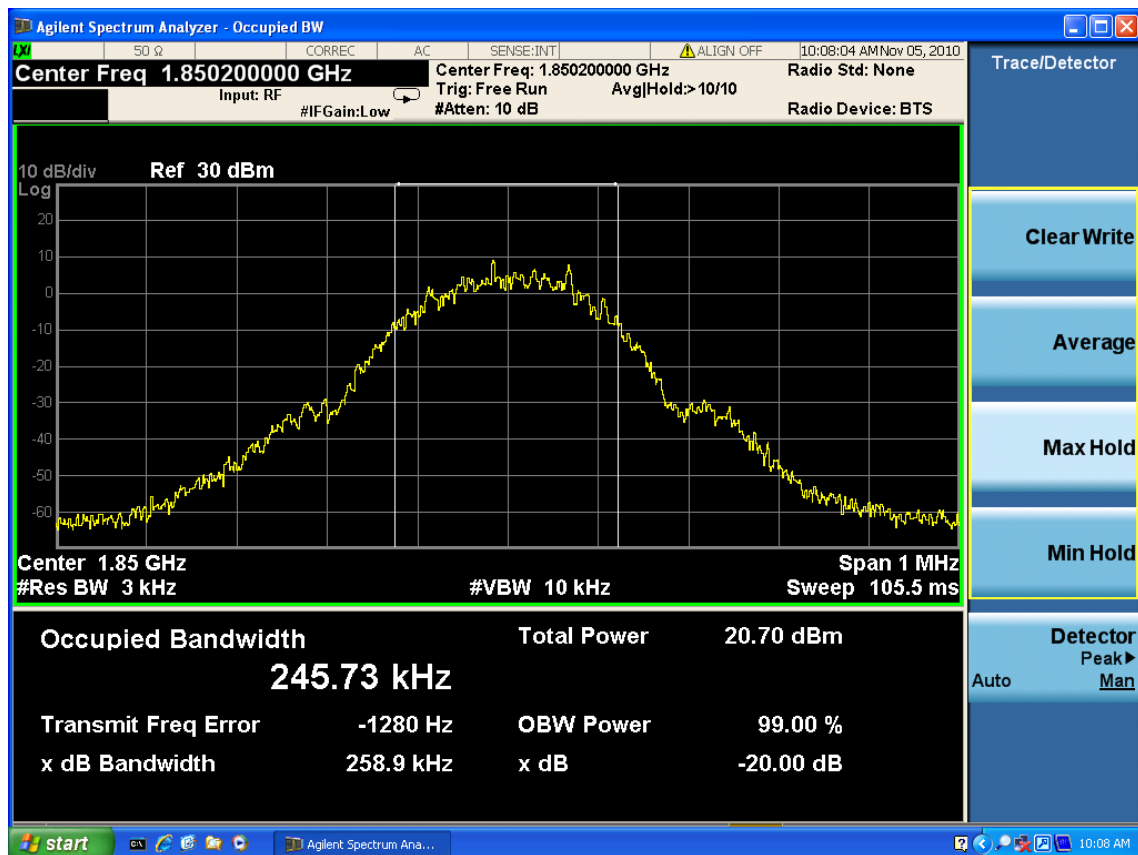
Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$. $U = 624\text{Hz}$.

Test Result

GSM 1900

Channel	Frequency (MHz)	-20dBc Bandwidth(kHz)
512	1850.2	258.9
661	1880.0	273.0
810	1909.8	275.6



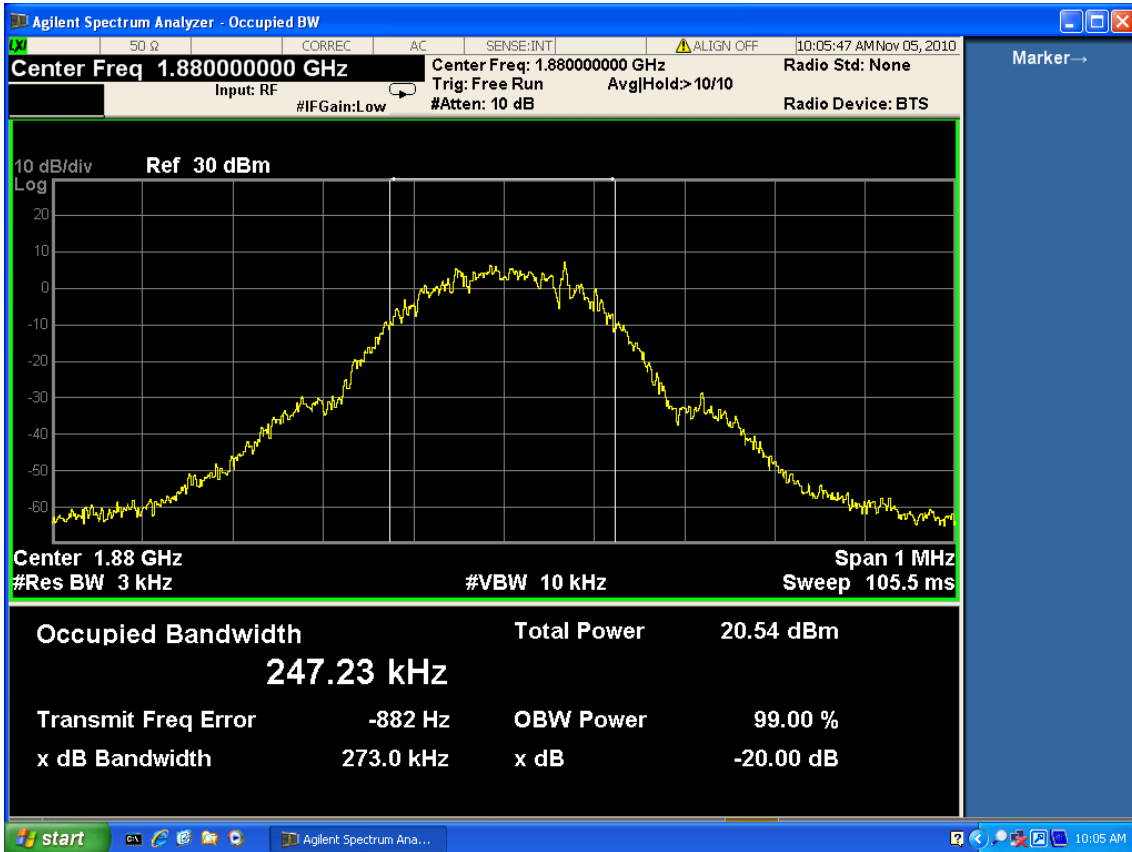
GSM1900 CH512 Occupied Bandwidth

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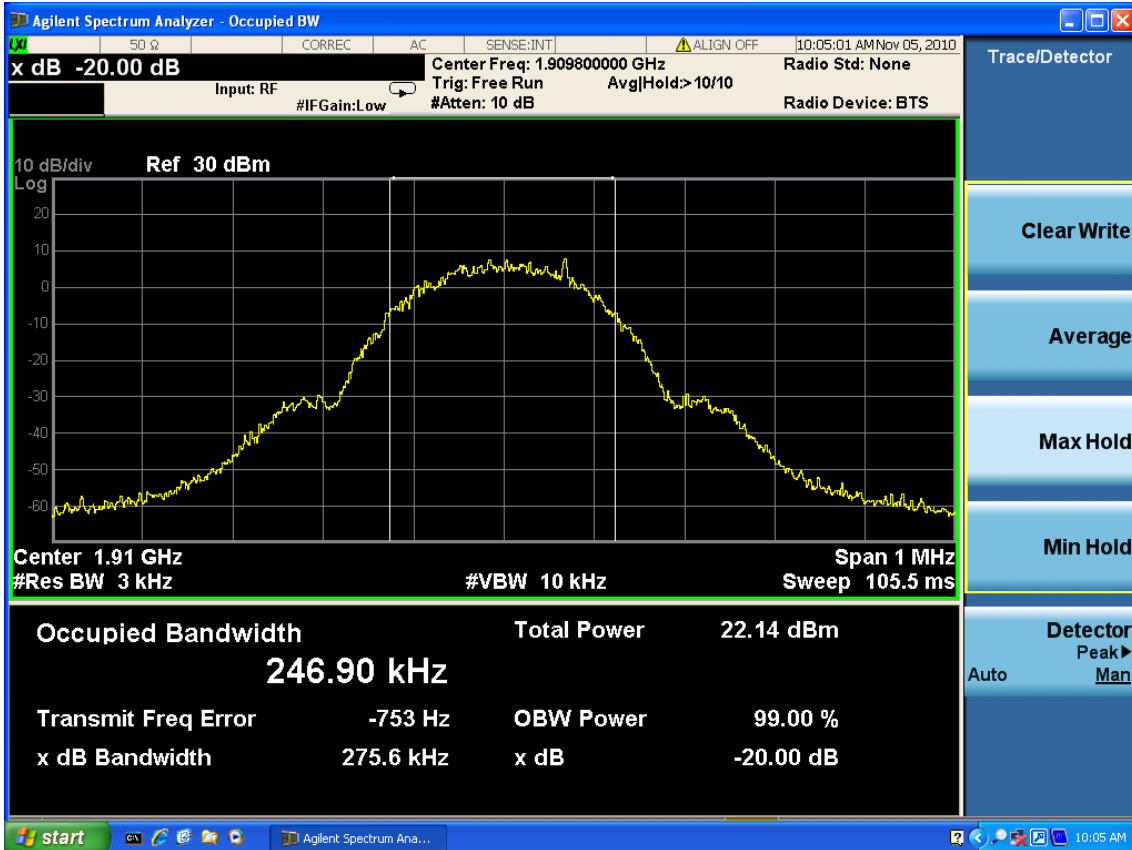
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GSM 1900 CH661 Occupied Bandwidth



GSM 1900 CH810 Occupied Bandwidth

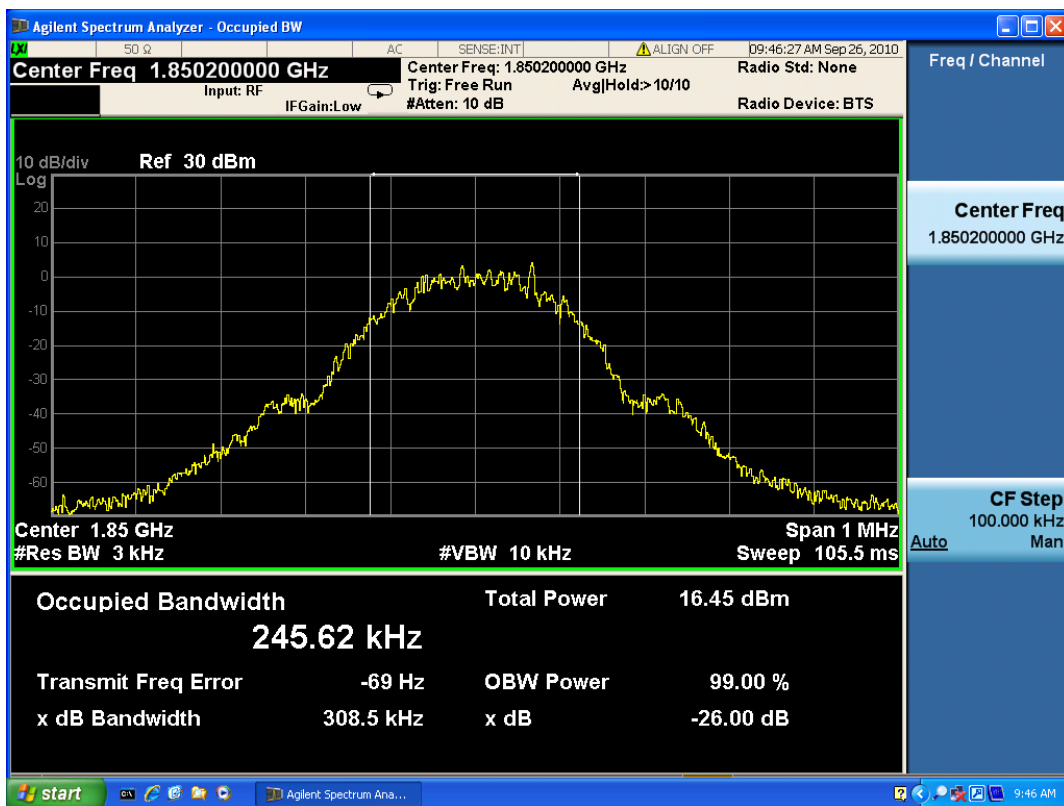
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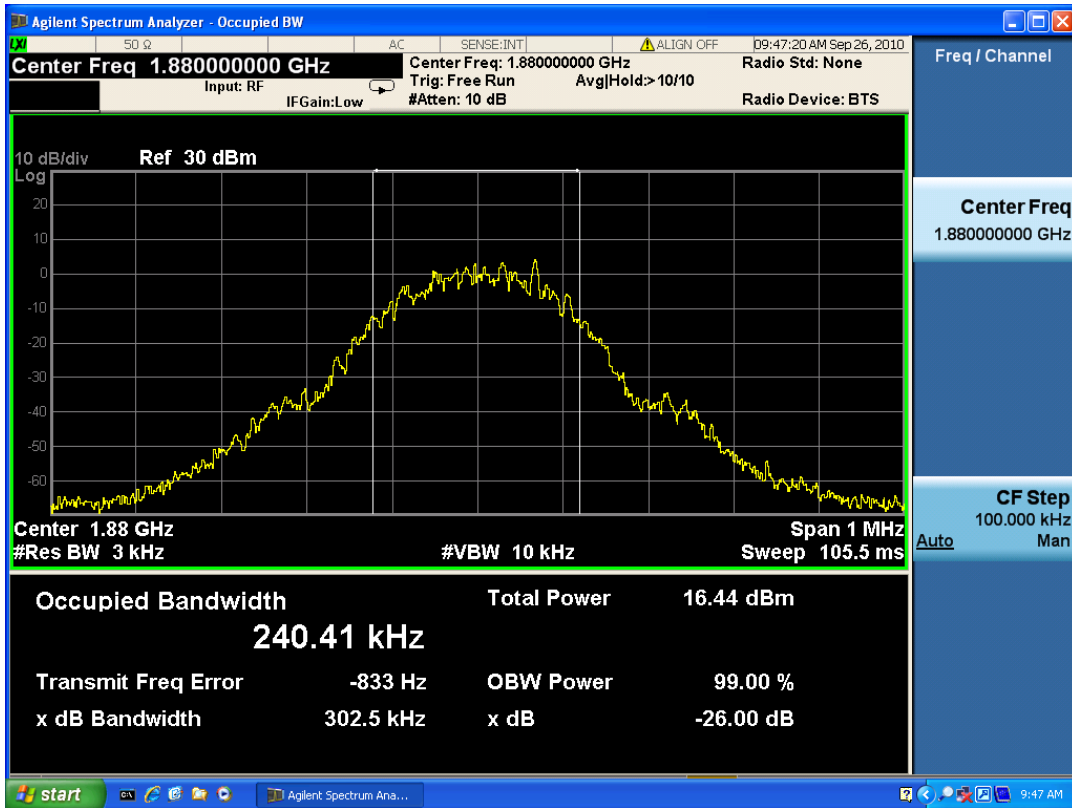
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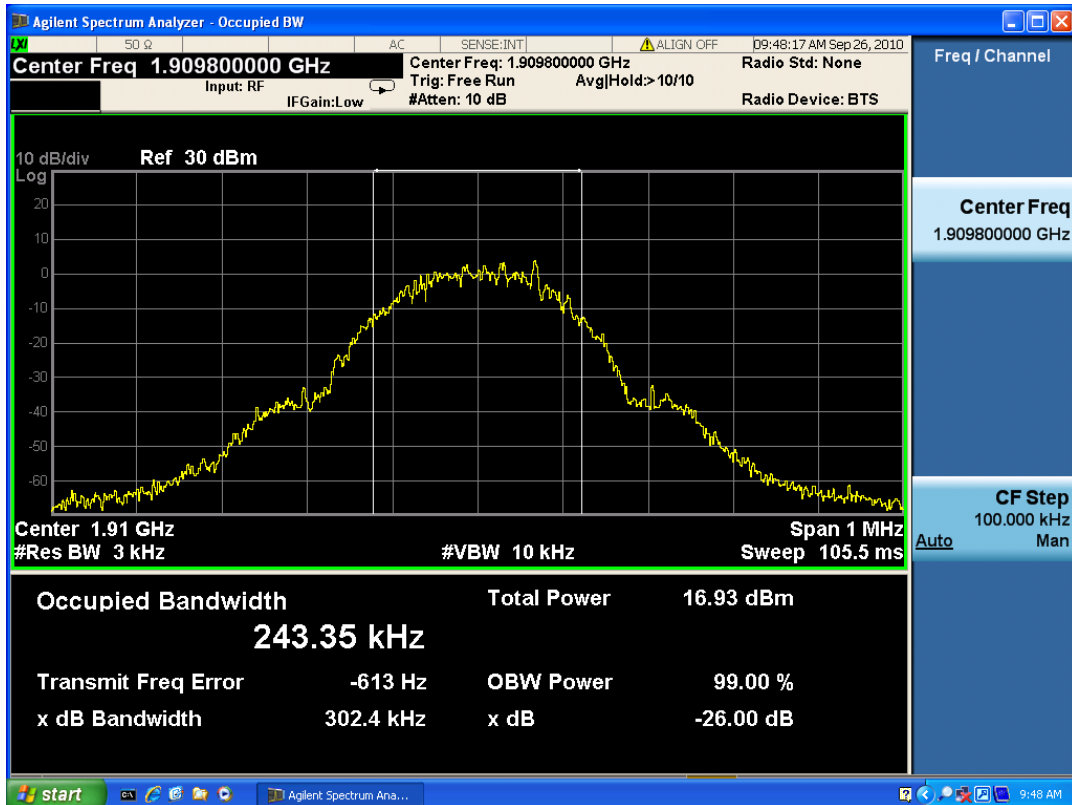
Channel	Frequency (MHz)	99% Power Bandwidth (kHz)	-26dBc Bandwidth(kHz)
512	1850.2	245.62	308.5
661	1880.0	240.41	302.5
810	1909.8	243.35	302.4



GSM1900 CH512 Occupied Bandwidth



GSM 1900 CH661 Occupied Bandwidth



GSM 1900 CH810 Occupied Bandwidth

2.5. Band Edge Compliance

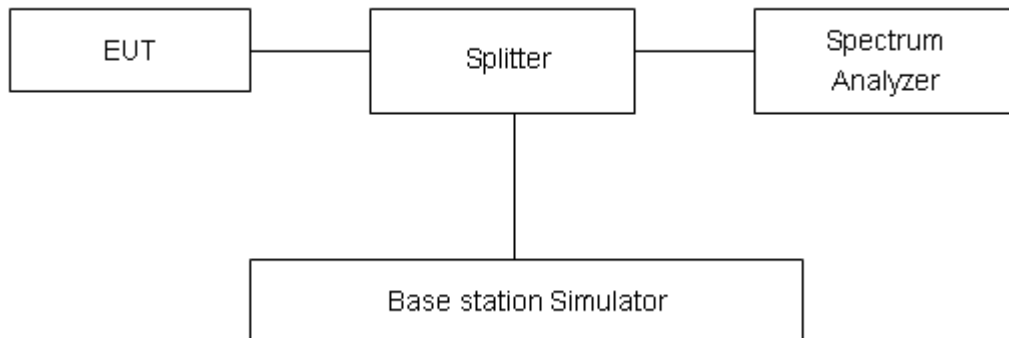
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The band edge of the lowest and highest channels were measured. The Average detector is used and RBW is set to 3kHz on spectrum analyzer. Spectrum analyzer plots are included on the following pages.

Test Setup



Limits

Rule RSS-133 Issue 5 (2009) specifies that “In the first 1.0 MHz bands immediately outside and adjacent to the equipment’s operating frequency block, the emission power per any 1% of the emission bandwidth shall be attenuated below the transmitter output power P (in watts) by at least 43 + 10 log₁₀(P), dB.”

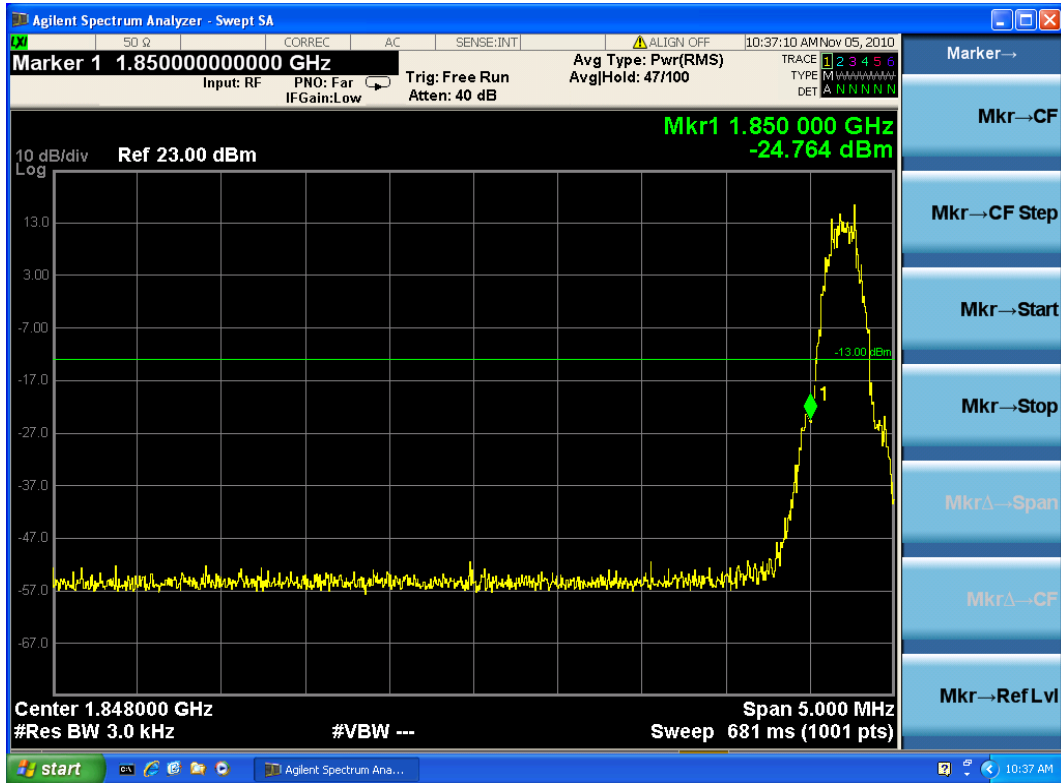
Limit	-13 dBm
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Measurement Uncertainty

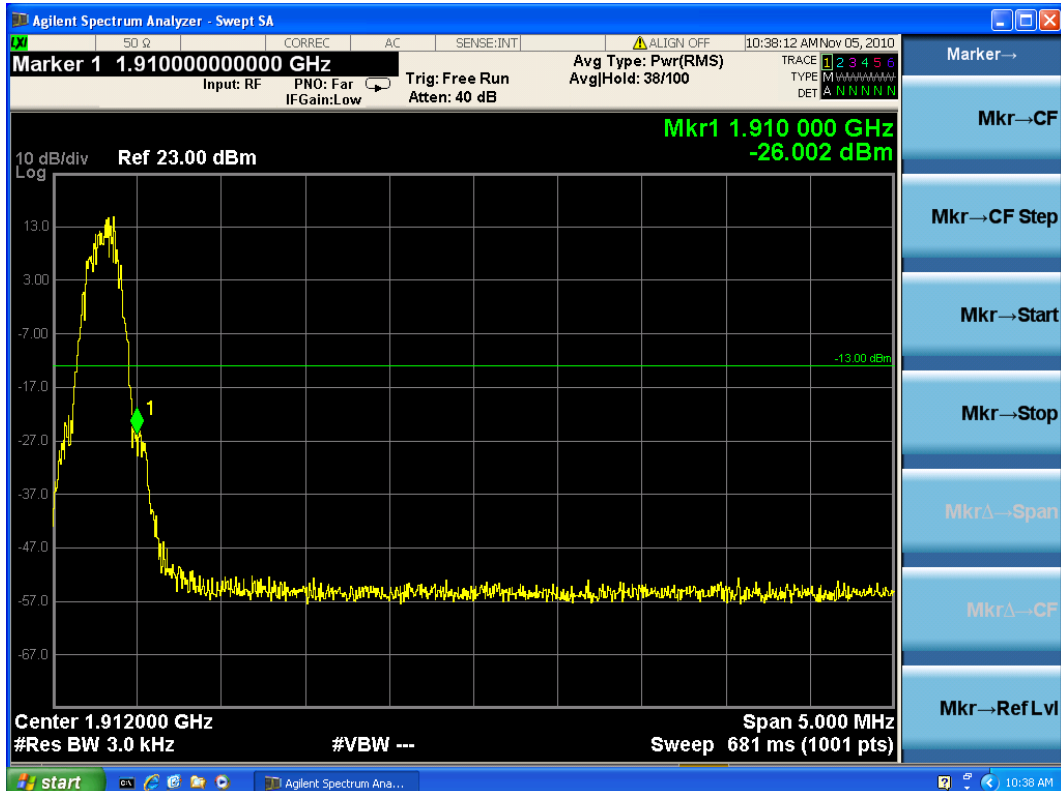
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$. $U=0.684\text{dB}$.

Test Result:Pass

GSM 1900



GSM 1900 512 Channel



GSM1900 810 Channel

2.6. Frequency Stability

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

1. Frequency Stability (Temperature Variation)

The temperature inside the climate chamber is varied from -30°C to +50°C in 10°C step size,
 (1) With all power removed, the temperature was decreased to -30°C and permitted to stabilize for three hours.

(2) Measure the carrier frequency with the test equipment in a “call mode”. These measurements should be made within 1 minute of powering up the mobile station, to prevent significant self warming.

(3) Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, un-powered, before making measurements.

2. Frequency Stability (Voltage Variation)

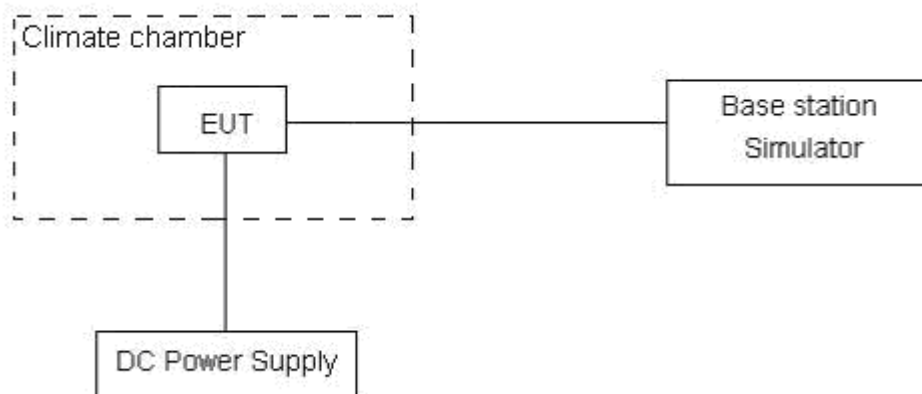
The frequency stability shall be measured with variation of primary supply voltage as follows:

(1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.

(2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery-operating end point which shall be specified by the manufacturer.

This transceiver is specified to operate with an input voltage of between 3.4 V and 4.2 V, with a nominal voltage of 3.7V.

Test setup



Limits

No specific frequency stability requirements in part 24.235

Measurement Uncertainty

The assessed measurement uncertainty to ensure 99.75% confidence level for the normal distribution is with the coverage factor $k = 3$. $U = 0.01\text{ppm}$.

Test Result

GSM 1900

Temperature (° C)	Test Results (ppm) / 3.7 V Power supply
	GSM 1900 Channel 661
-30	0.035
-20	0.018
-10	0.020
0	0.032
10	0.024
20	0.020
30	0.032
40	0.026
50	0.090

Voltage (V)	Test Results(ppm) / 20° C
	Channel 661
4.2	0.025
3.4	-0.029

2.7. Spurious Emissions at Antenna Terminals

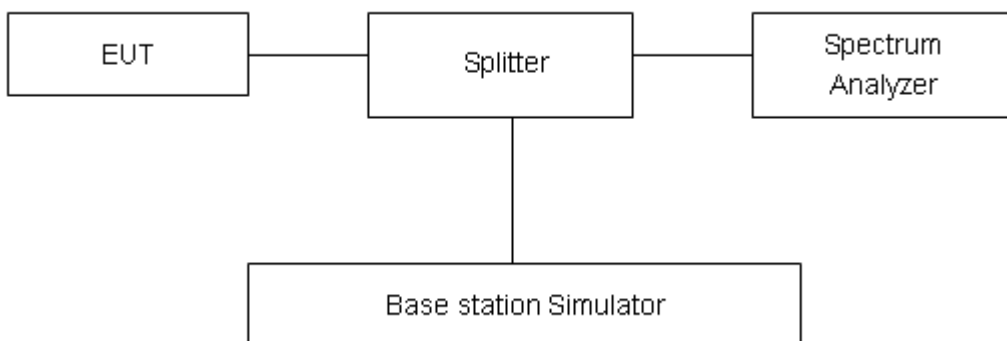
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The measurement is carried out using a spectrum analyzer. The spectrum analyzer scans from 30MHz to the 10th harmonic of the carrier. The peak detector is used. RBW and VBW are set to 100 kHz, Sweep is set to ATUO.

Test setup



Limits

Rule Part 24.238(a) specifies that “on any frequency outside a licensee’s frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least 43 + 10 log₁₀ (P) dB.”

Limit	-13 dBm
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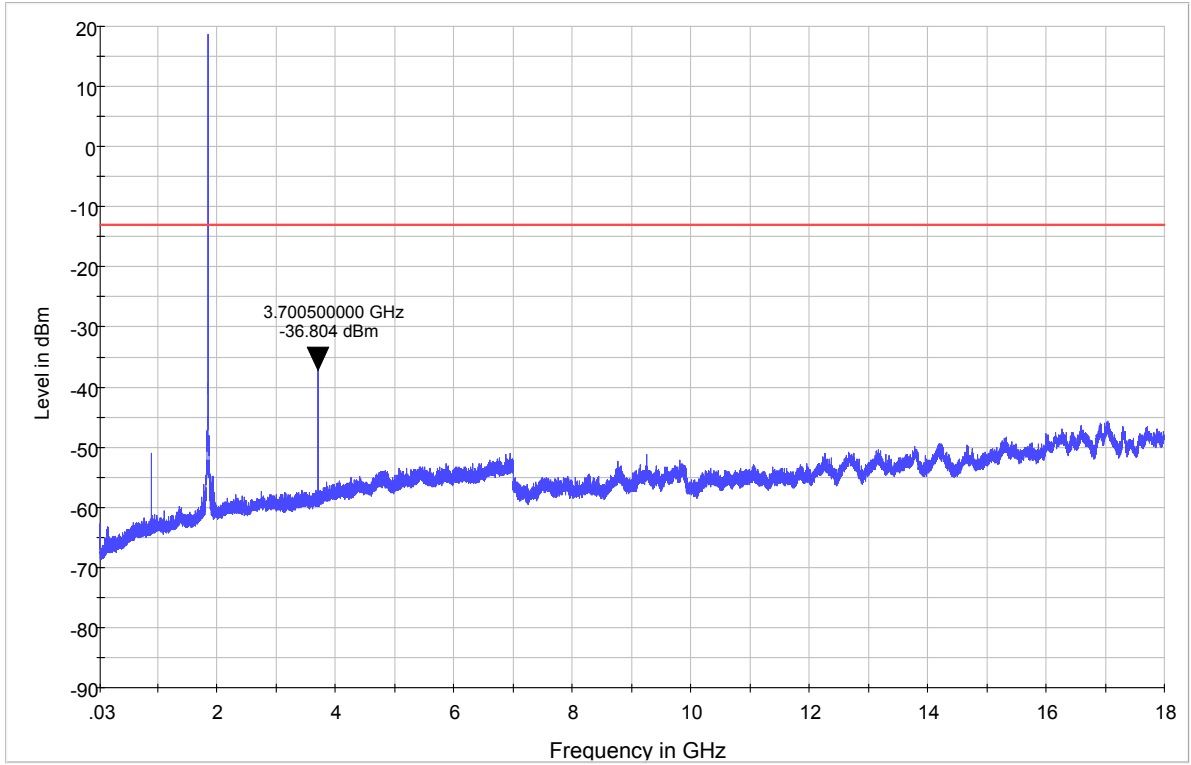
Measurement Uncertainty

The assessed measurement uncertainty to ensure 99.75% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

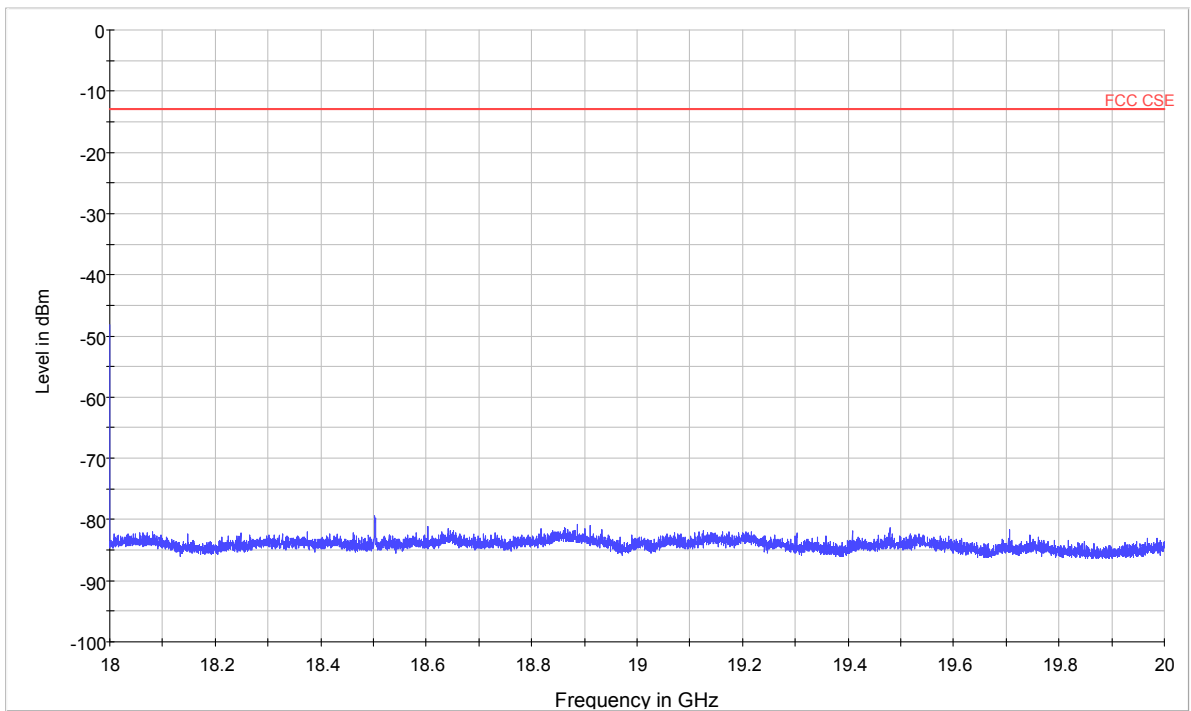
Frequency	Uncertainty
100kHz-2GHz	0.684 dB
2GHz-12.75GHz	1.407 dB

Test Result

CH 512



Note: The signal beyond the limit is carrier:1850.2 MHz
GSM 1900 Channel 512 30MHz ~18GHz



GSM 1900 Channel 512 18GHz ~20GHz

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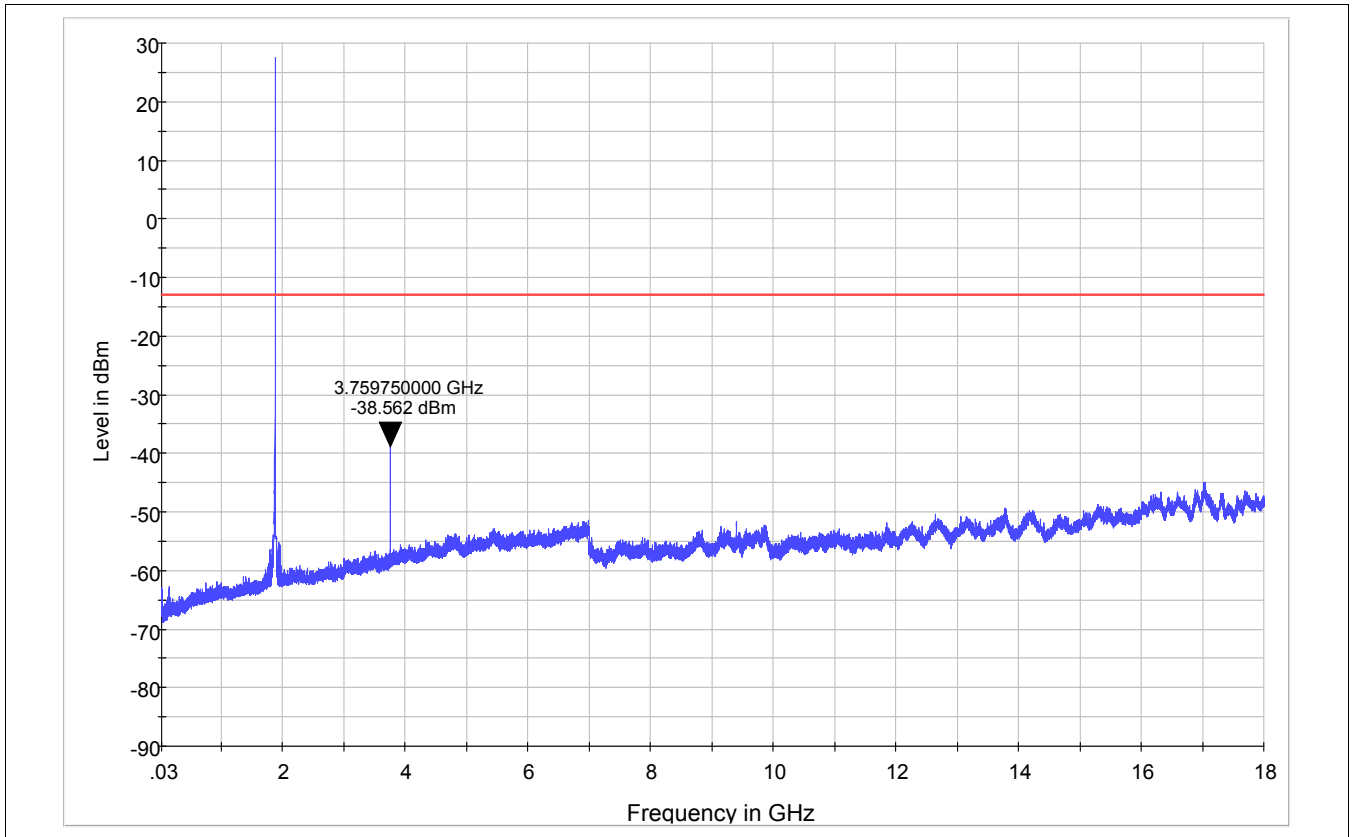
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Harmonic	TX ch.512 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)
2	3700.5	-36.80	-13	23.80
3	5550.6	Nf	-13	/
4	7400.8	Nf	-13	/
5	9251	Nf	-13	/
6	11101.2	Nf	-13	/
7	12951.4	Nf	-13	/
8	14801.6	Nf	-13	/
9	16651.8	Nf	-13	/
10	18502	Nf	-13	/

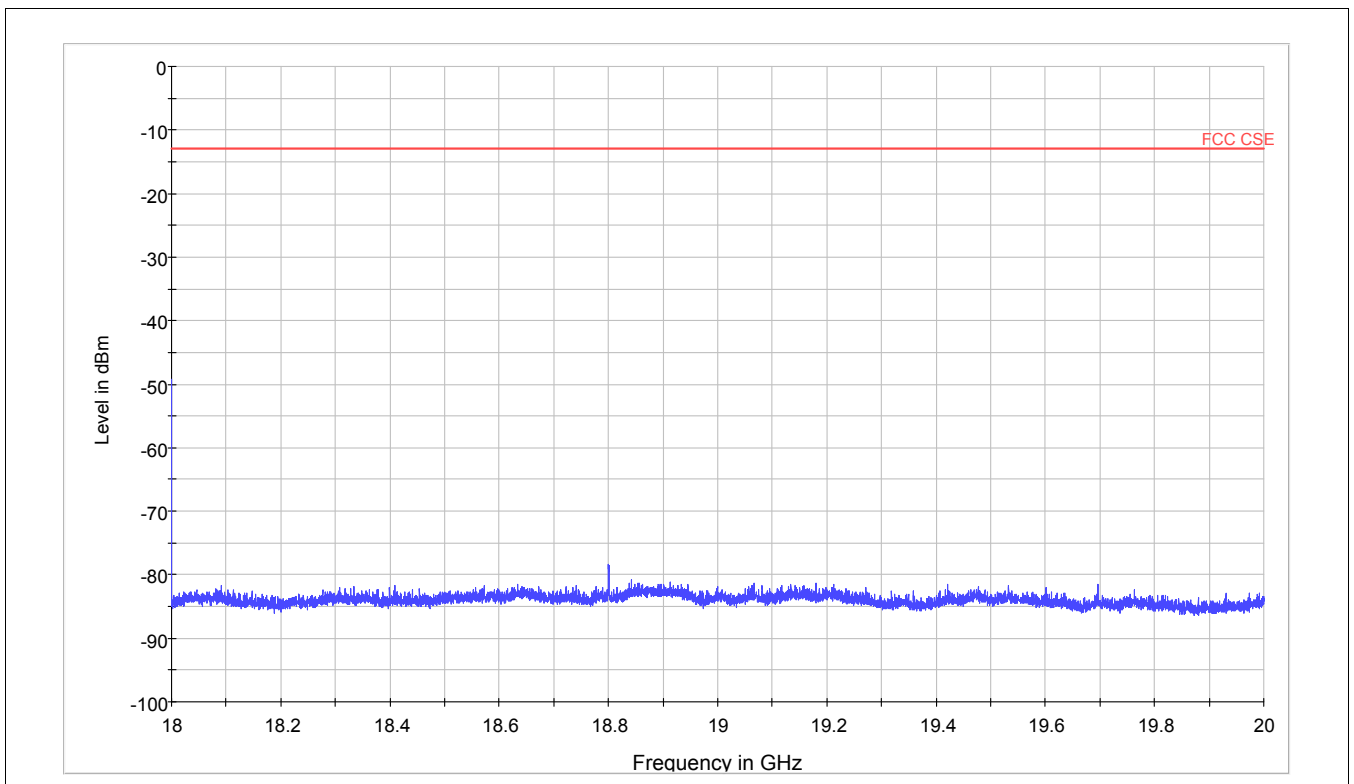
Nf: noise floor

Note: The other Spurious RF conducted emissions level is no more than noise floor.

CH 661



Note: The signal beyond the limit is carrier:1880 MHz
GSM 1900 Channel 661 30MHz ~18GHz



GSM 1900 Channel 661 18GHz ~20GHz

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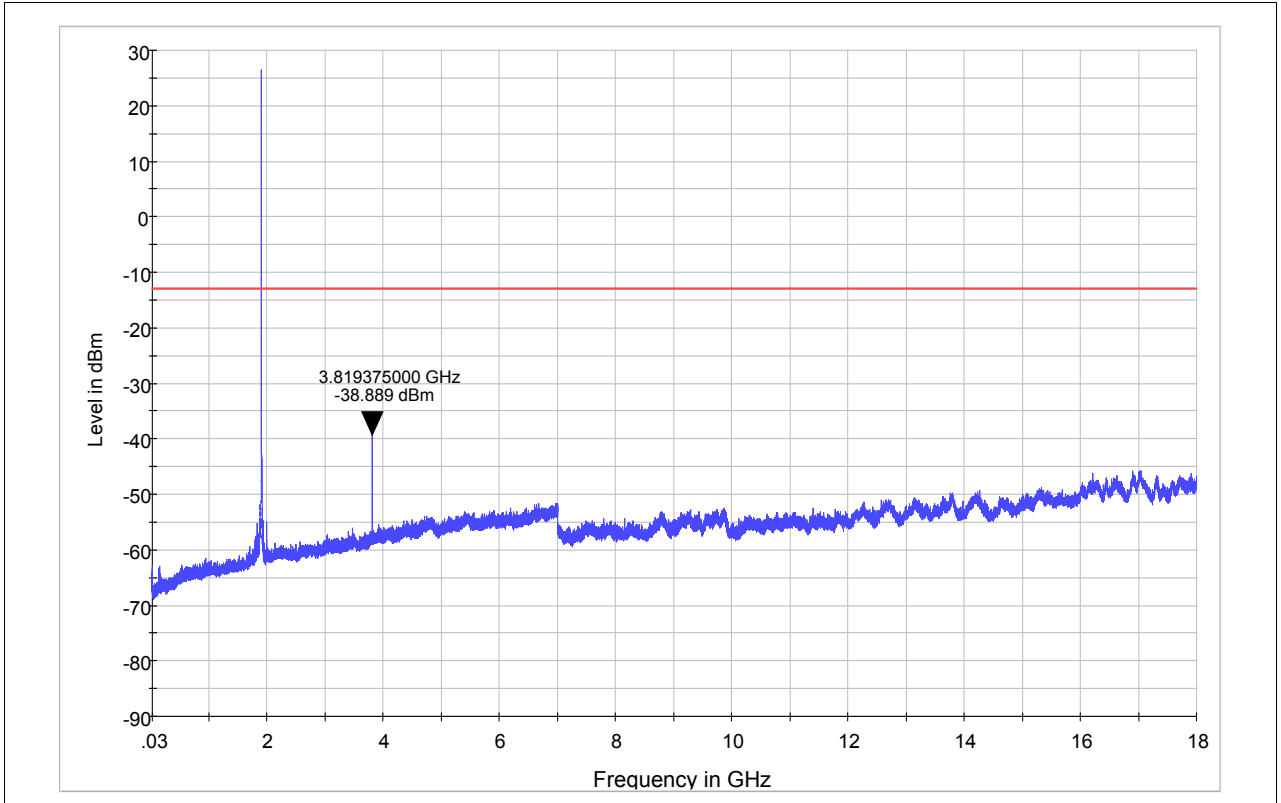
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Harmonic	TX ch.661 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)
2	3759.75	-38.562	-13	25.562
3	5640	Nf	-13	/
4	7520	Nf	-13	/
5	9400	Nf	-13	/
6	11280	Nf	-13	/
7	13160	Nf	-13	/
8	15040	Nf	-13	/
9	16920	Nf	-13	/
10	18800	Nf	-13	/

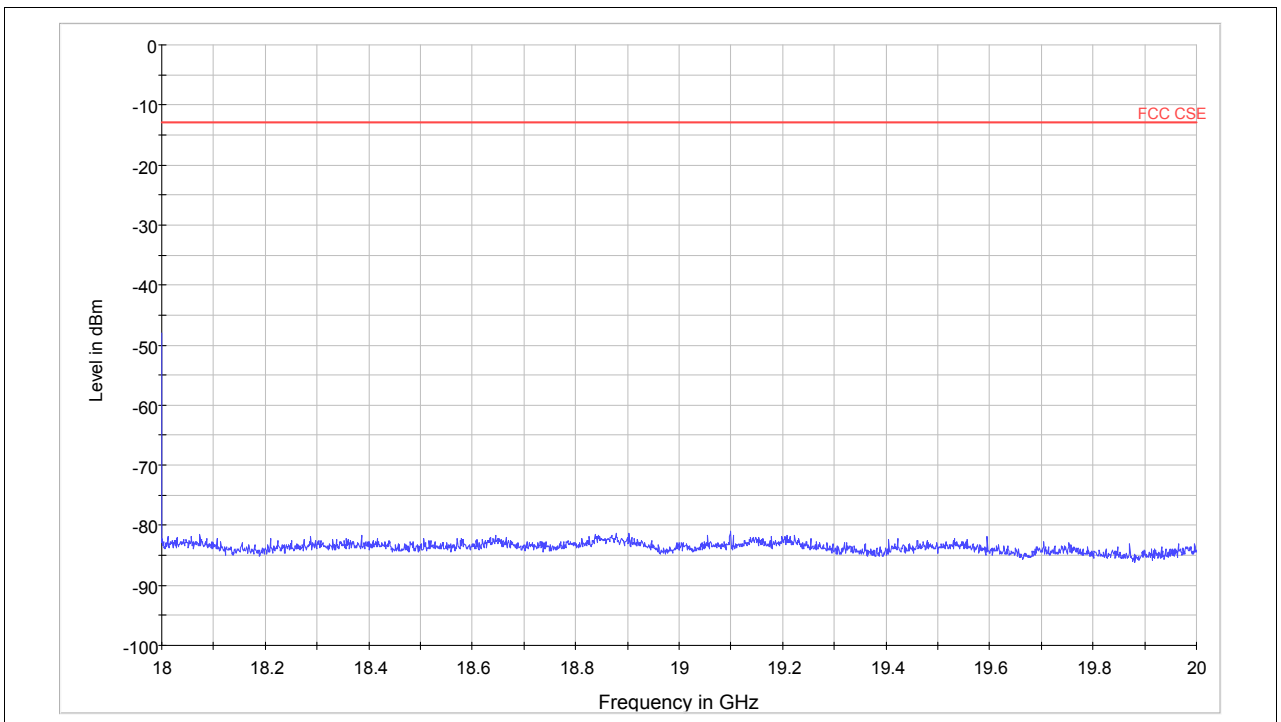
Nf: noise floor

Note: The other Spurious RF conducted emissions level is no more than noise floor.

CH 810



Note: The signal beyond the limit is carrier:1909.8 MHz
GSM 1900 Channel 810 30MHz ~18GHz



GSM 1900 Channel 810 18GHz ~20GHz

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Harmonic	TX ch.810 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)
2	3819.375	38.889	-13	25.889
3	5729.4	Nf	-13	/
4	7639.2	Nf	-13	/
5	9549	Nf	-13	/
6	11458.8	Nf	-13	/
7	13368.6	Nf	-13	/
8	15278.4	Nf	-13	/
9	17188.2	Nf	-13	/
10	19098	Nf	-13	/

Nf: noise floor

Note: The other Spurious RF conducted emissions level is no more than noise floor.

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2.1. Radiates Spurious Emission

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The measurements procedures in TIA -603C are used.

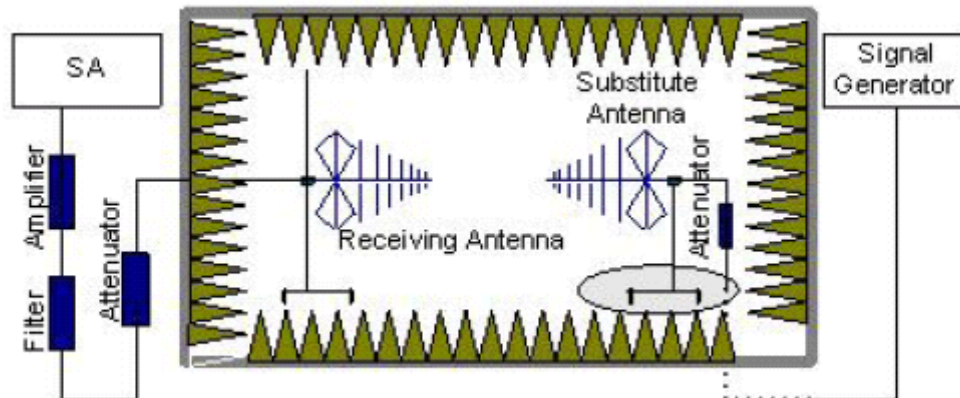
The spectrum was scanned from 30 MHz to the 10th harmonic of the highest frequency generated within the equipment. The measurement will be conducted at channels 512,661,810 of GSM1900.

The procedure of Radiates Spurious Emission is as follows:

1. Pre-calibration

In an fully anechoic chamber, A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted at a 3 meter test distance from the receive antenna. An RF signal source is connected to the dipole with a Tx cable that has been constructed to not interfere with radiation pattern of the antenna. A known (measured) power (P_{in}) is applied to input of dipole, and the power received (P_r) is recorded from the spectrum analyzer.

“Reference Path loss” is established as $P_{in} - P_r - \text{Tx cable loss} + \text{Substitution antenna gain}$.



2. EUT Test

EUT was placed on a 1.5 meter high non – conductive table at a 3 meter test distance from the receive antenna. The height of receiving antenna is 1.5 m. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the table and adjusting the receiving antenna polarization. The measurement is carried out using a spectrum analyzer .The radiated emission measurements of all non-harmonic and harmonic of the transmit frequency from 30MHz to the 10th harmonic were measured with peak detector. RBW is set to 100kHz and VBW is set to 300kHz for 30MHz to 1GHz. RBW is set to 100kHz,VBW is set to 30kHz for the carrier frequency, RBW is set to 1MHz and VBW is set to 3MHz for other frequency above 1GHz. A notch filter is necessary in the band near to the carrier frequency. A high pass filter is needed to avoid the distortion of the testing equipment in the band above the carrier frequency. If the harmonic could not be detected above the noise floor, the ambient level was recorded.

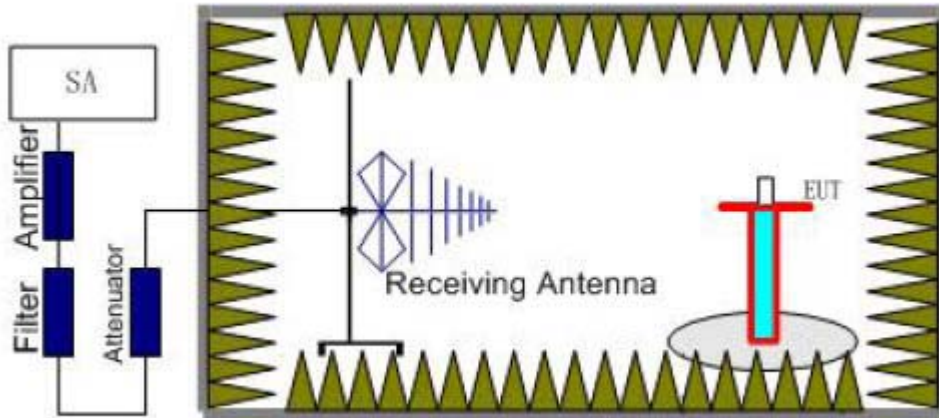
The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.

Calculation procedure:

$$RSE = Rx \text{ (dBm)} + \text{Reference Path loss}$$

Rx: reading of the receiver

EUT in X-axis orientation is the worst case, the test is only for this case.



Limits

Rule Part 24.238(a) specifies that “on any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10} (P)$ dB.”

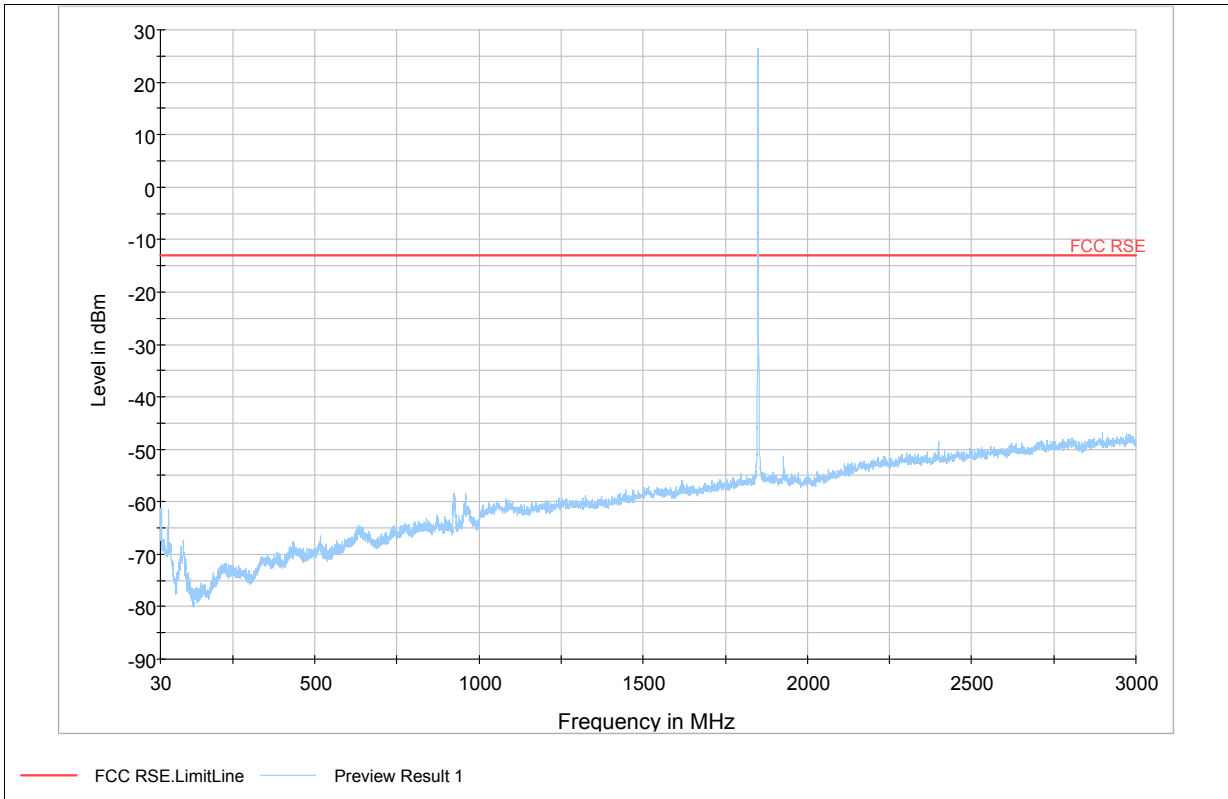
Limit	-13 dBm
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Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$. $U = 3.16$ dB.

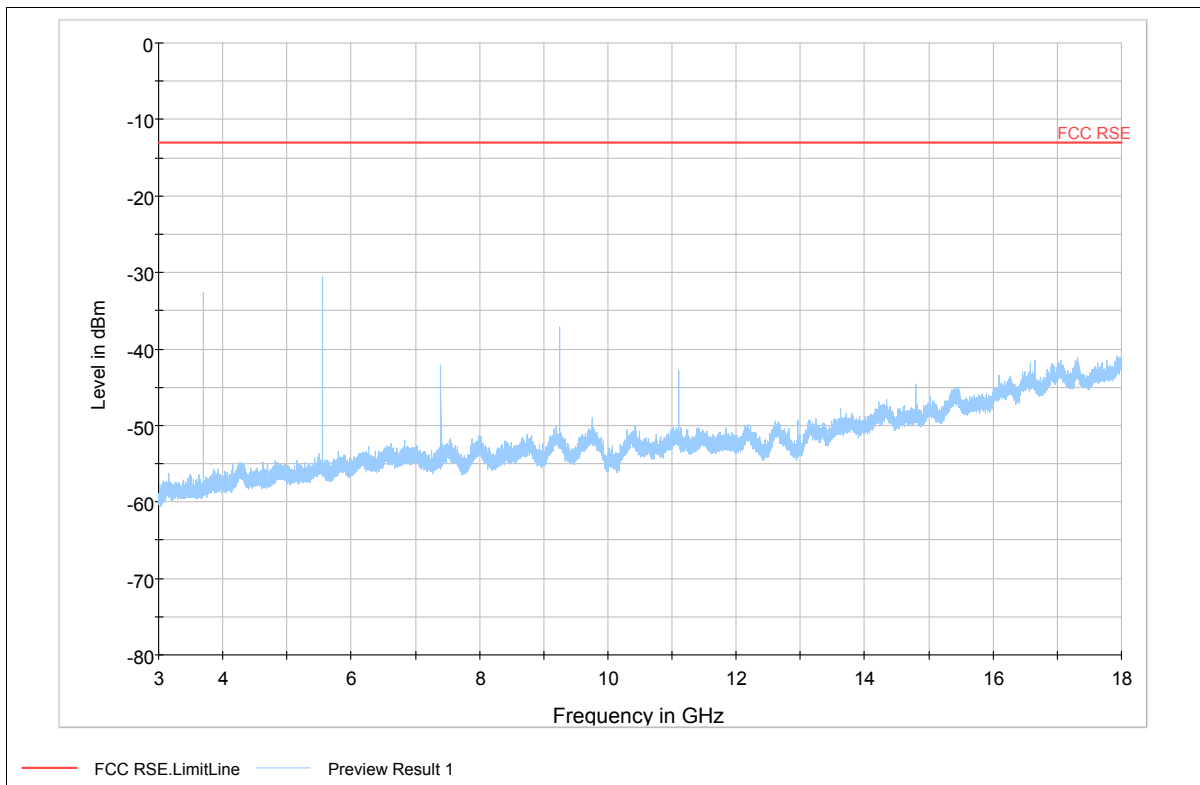
Test Result

CH 512

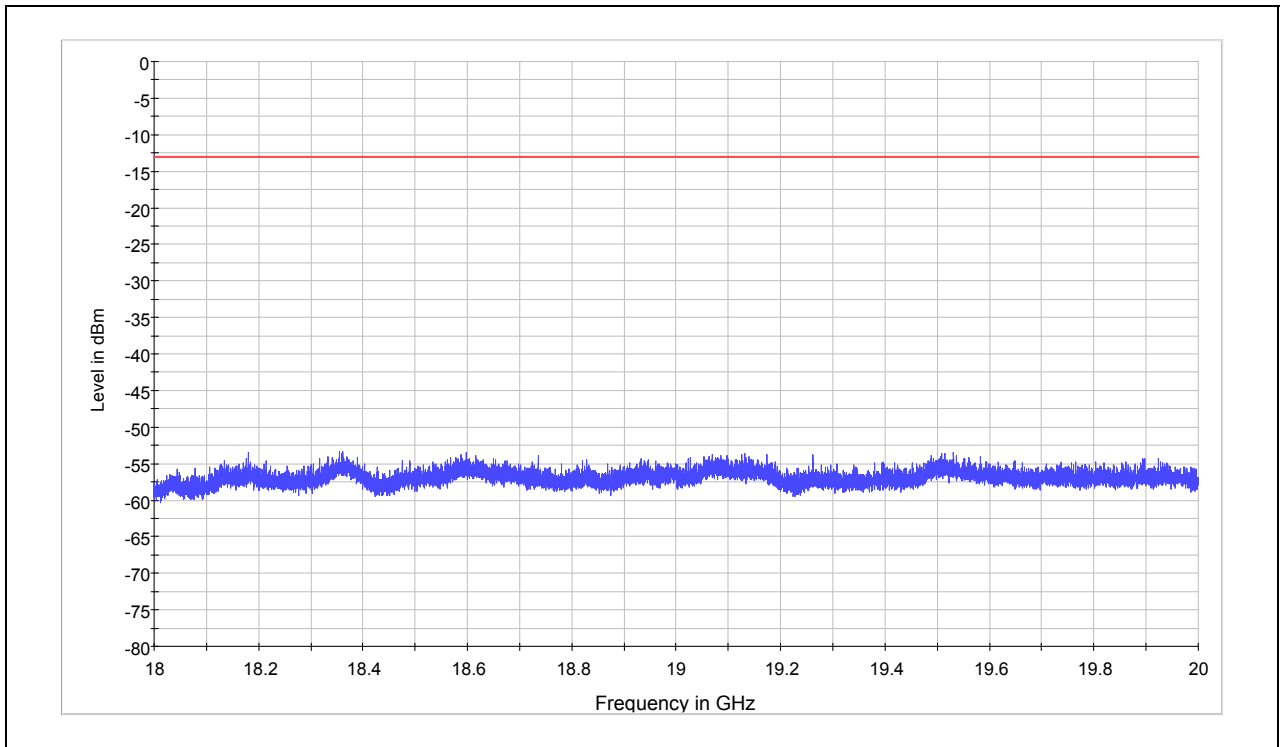


Note: The signal beyond the limit is carrier.

GSM 1900 Channel 512 30MHz~3GHz



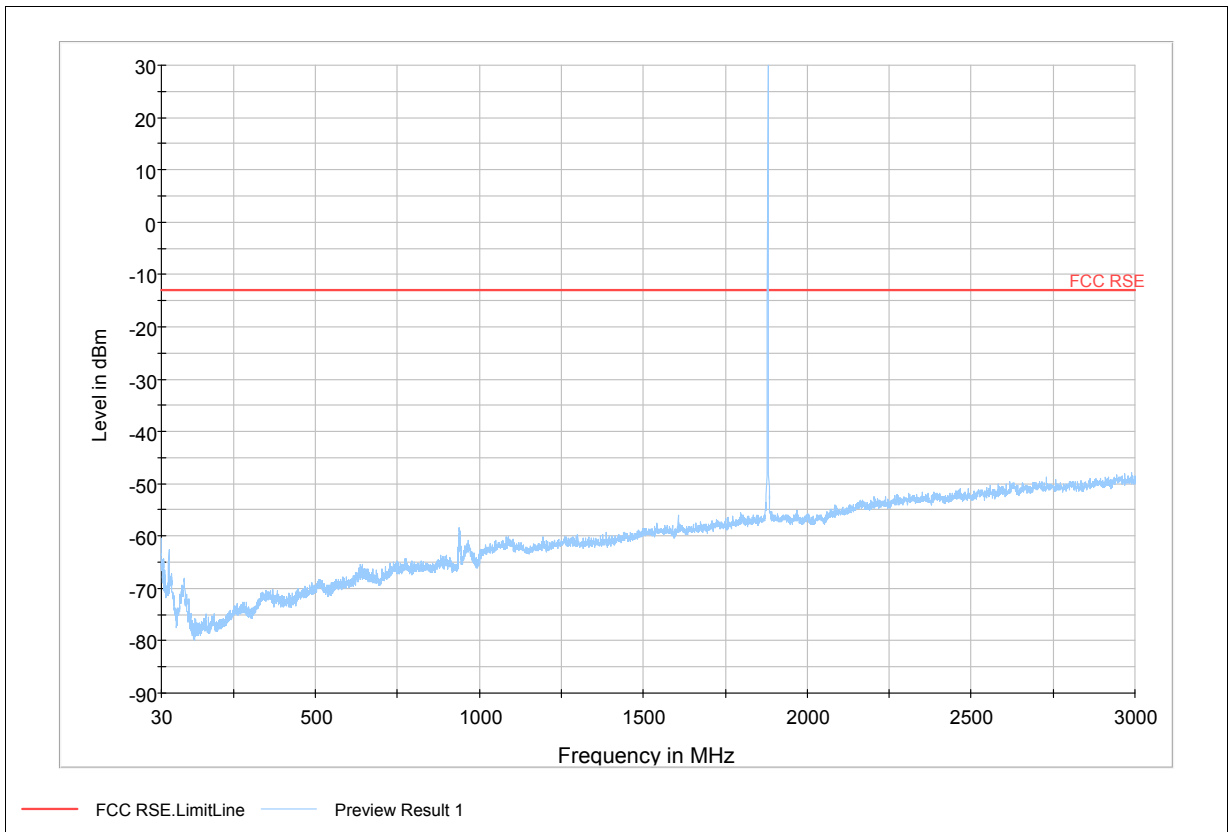
GSM 1900 Channel 512 3GHz ~18GHz



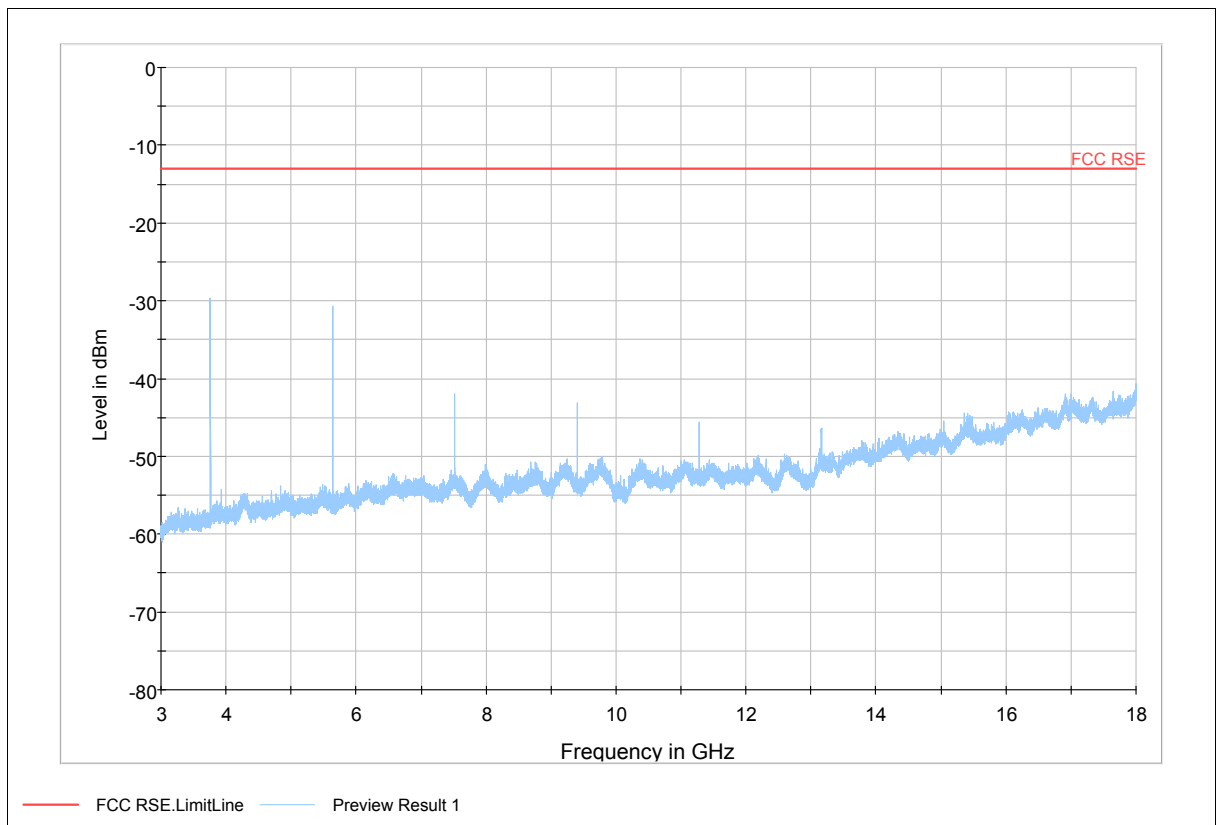
GSM 1900 Channel 512 18GHz ~20GHz

Harmonic	TX ch.512 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
3	5550.8	-30.56	-13	17.56	0

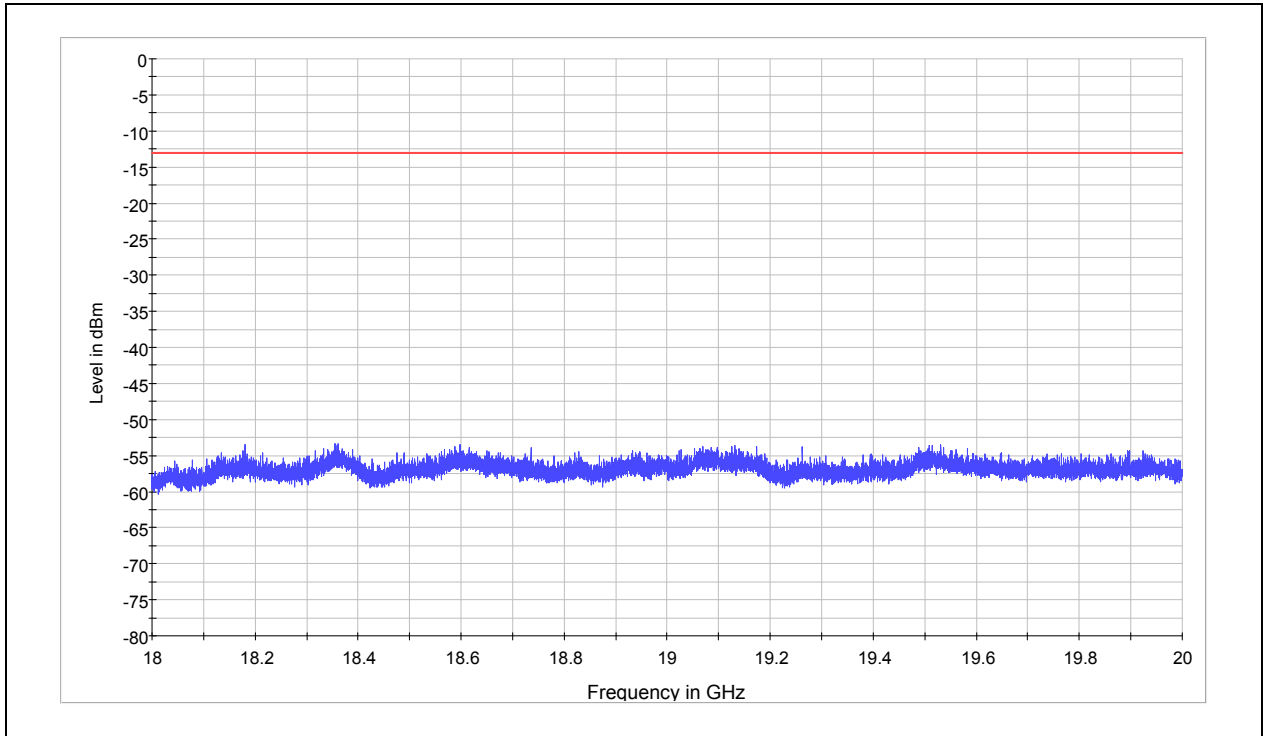
CH 661



Note: The signal beyond the limit is carrier.
GSM 1900 Channel 661 30MHz~3GHz



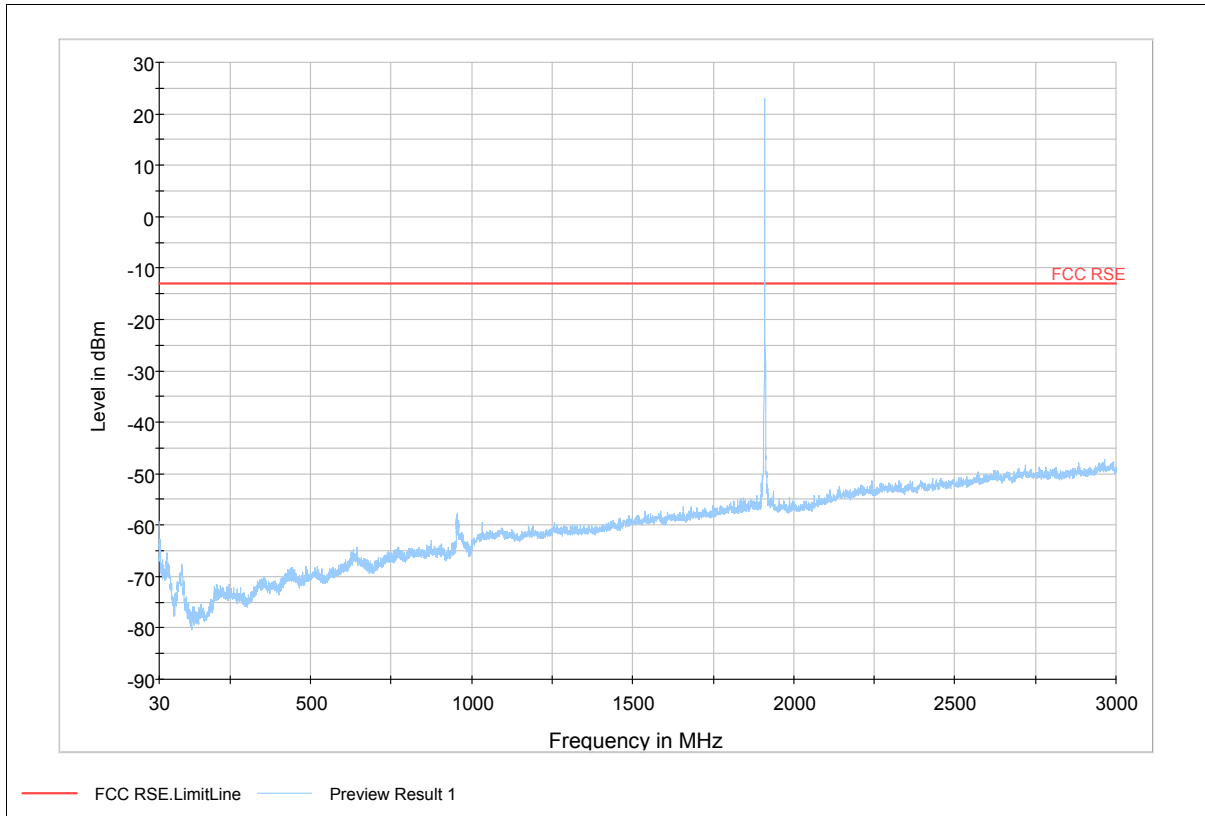
GSM 1900 Channel 661 3GHz ~18GHz



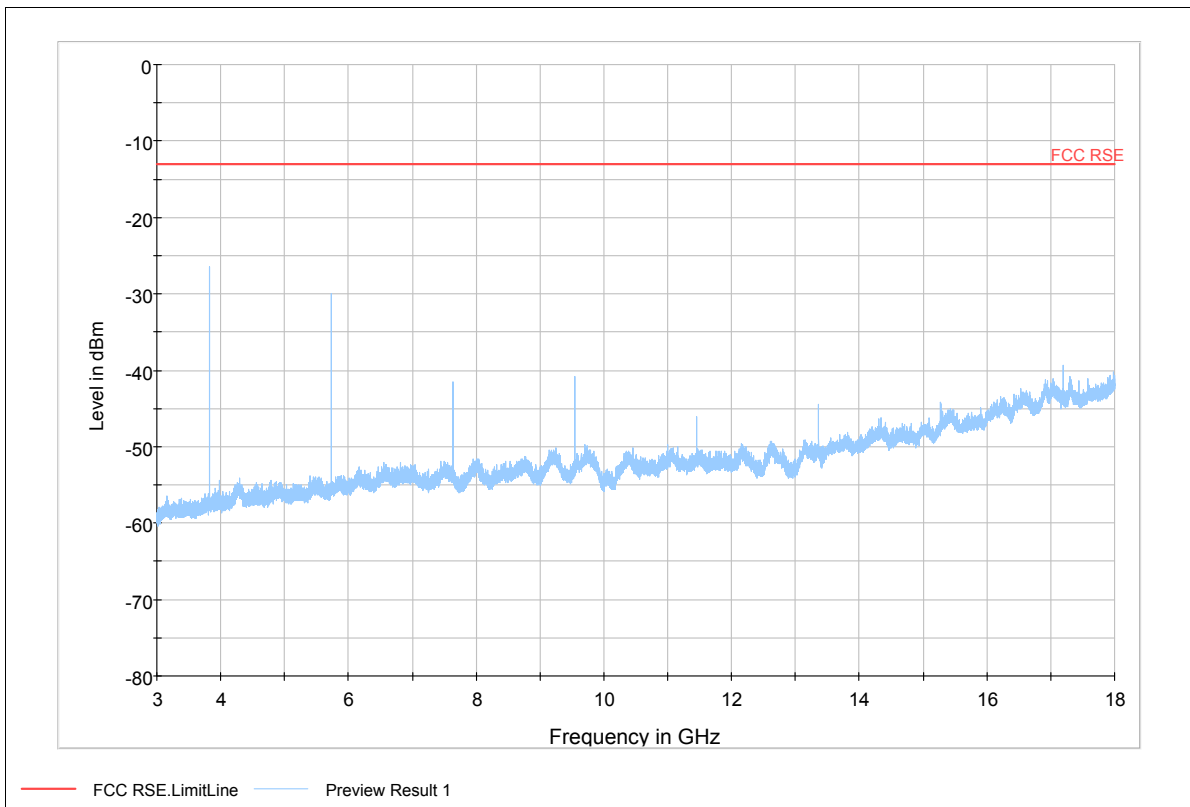
GSM 1900 Channel 661 18GHz ~20GHz

Harmonic	TX ch.661 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3760.1	-29.63	-13	16.63	315

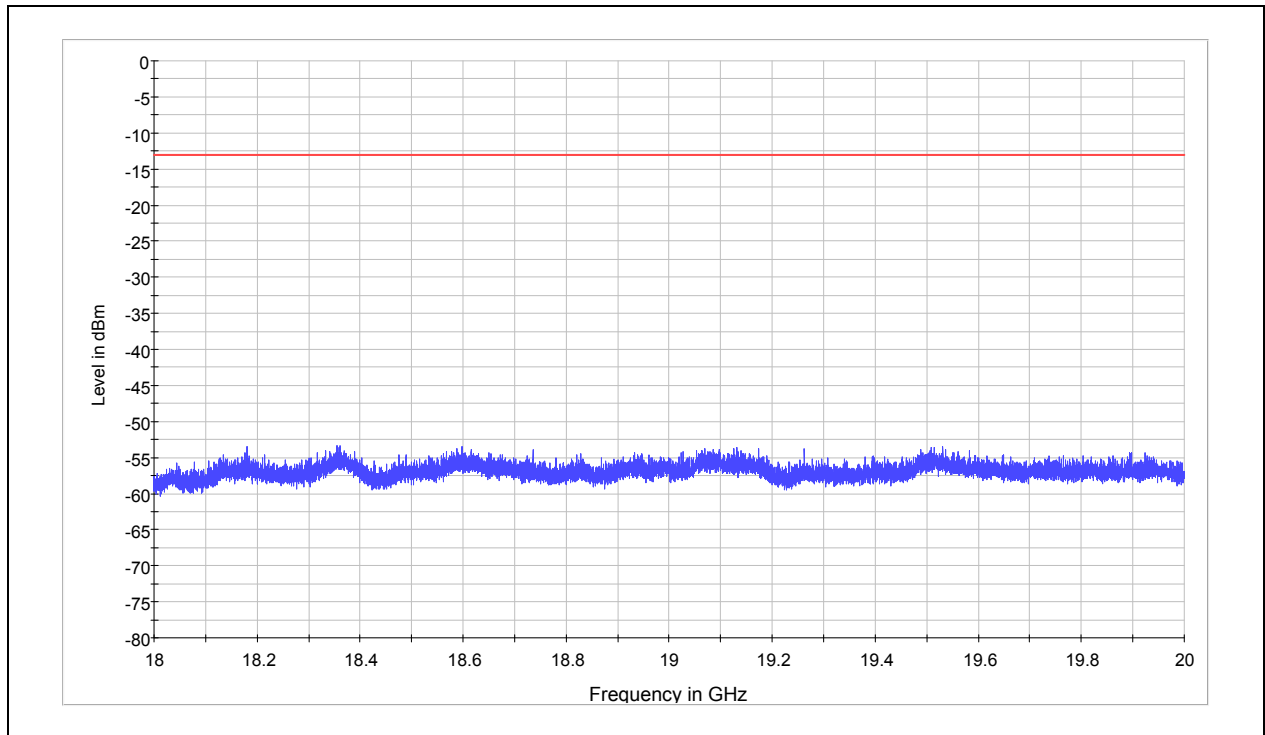
CH 810



Note: The signal beyond the limit is carrier.
GSM 1900 Channel 810 30MHz~3GHz



GSM 1900 Channel 810 3GHz ~18GHz



GSM 1900 Channel 810 18GHz ~20GHz

Harmonic	TX ch.810 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3819.4	-26.48	-13	13.48	180

2.2. Receiver Spurious Emissions

Ambient condition

Temperature	Relative humidity	Pressure
24°C~26°C	45%~50%	102.5kPa

Methods of Measurement

The EUT is placed on a non-metallic table 0.8m above the horizontal metal reference ground plane. The distance between EUT and receive antenna should be 3 meters. During the test, the EUT was operating in its typical mode. The test method is according to RSS-GEN (2007). Sweep the whole frequency band through the range from 30MHz to 6GHz. During the test, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turn table shall be rotated from 0 to 360 degrees for detecting the maximum of radiated emission signal level. The measurements shall be repeated with orthogonal polarization of the test antenna.

The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing. During the test, the EUT is worked at maximum output power.

Set the spectrum analyzer in the following:

Below 1GHz:

RBW=100kHz / VBW=300kHz / Sweep=AUTO

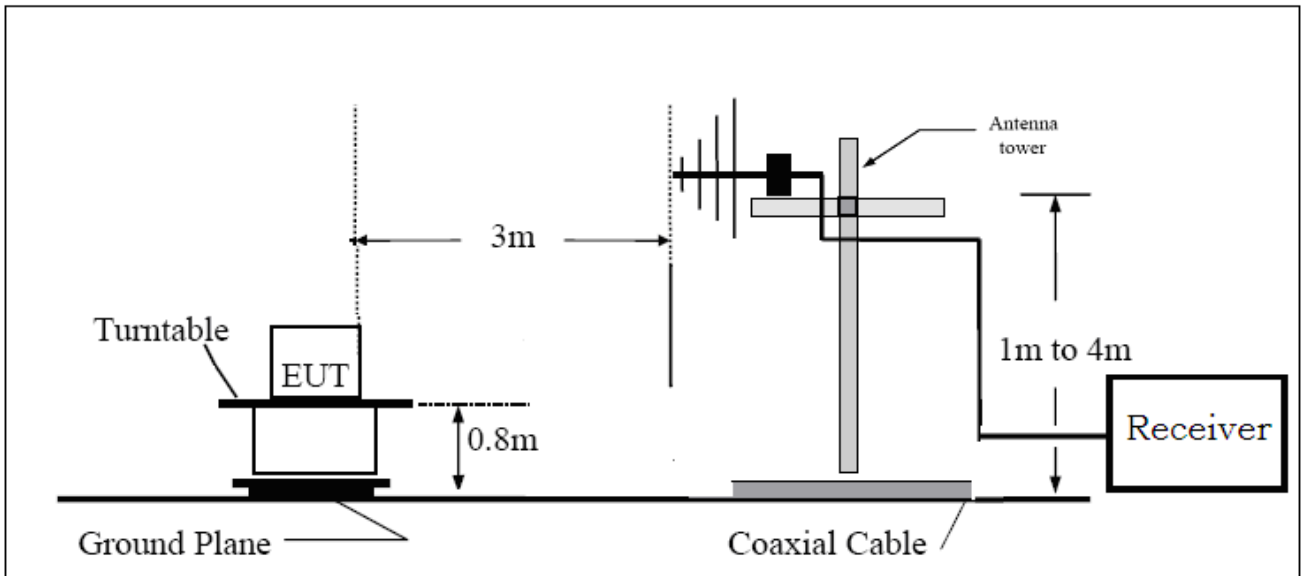
Above 1GHz:

(a) PEAK: RBW=1MHz VBW=3MHz/ Sweep=AUTO

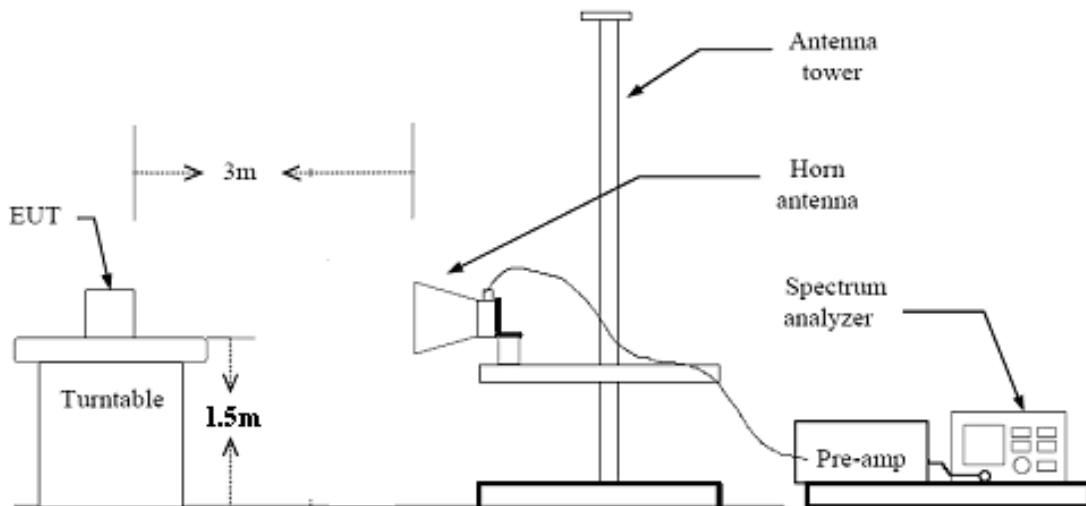
(b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO

Test Setup

Below 1GHz



Above 1GHz



Limits

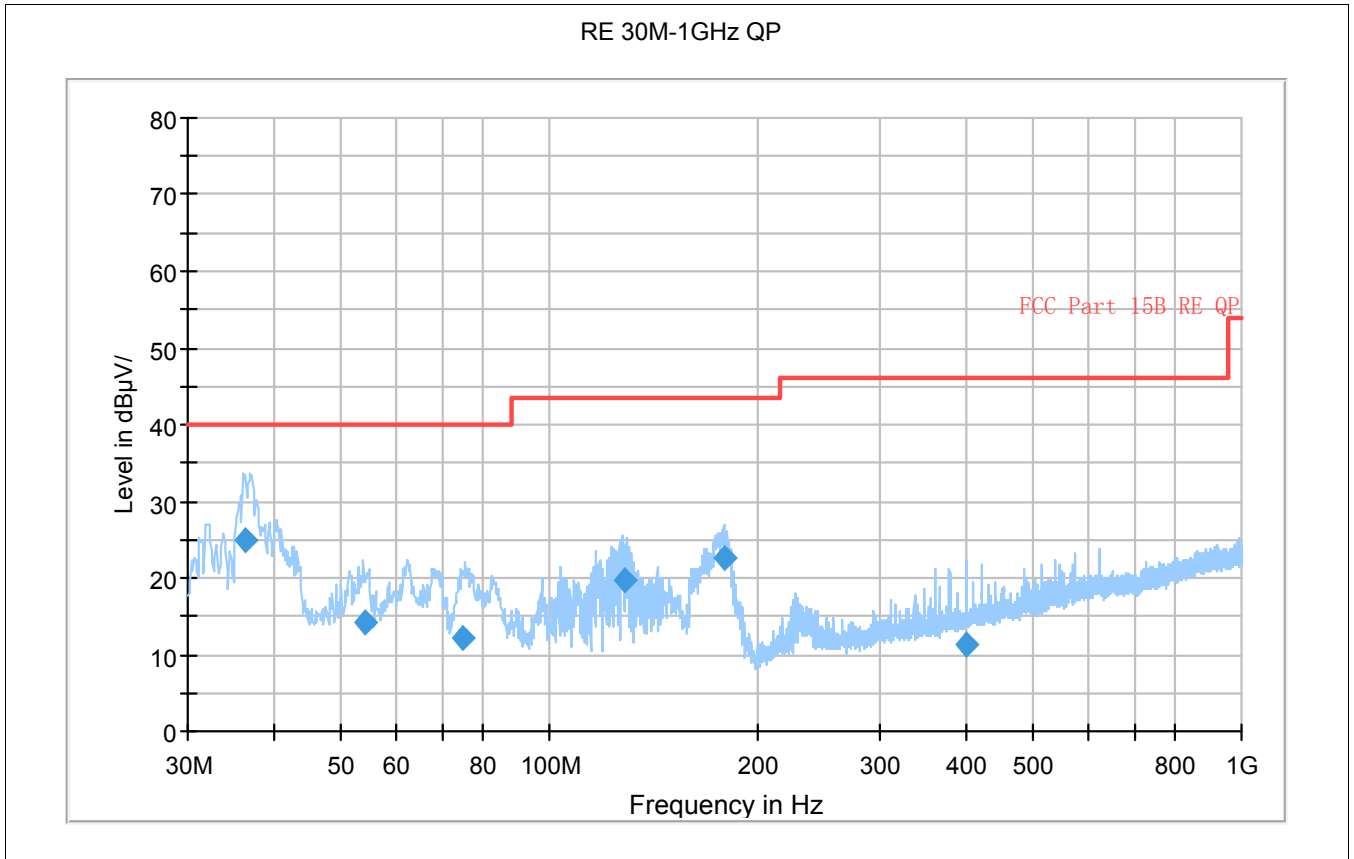
Frequency (MHz)	Field Strength (dB μ V/m)	Detector
30 -88	40.0	Quasi-peak
88-216	43.5	Quasi-peak
216 – 960	46.0	Quasi-peak
960-1000	54.0	Quasi-peak
1000-5 th harmonic of the highest frequency or 40GHz, which is lower	54 74	Average Peak

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$. $U = 3.92$ dB.

Test Results

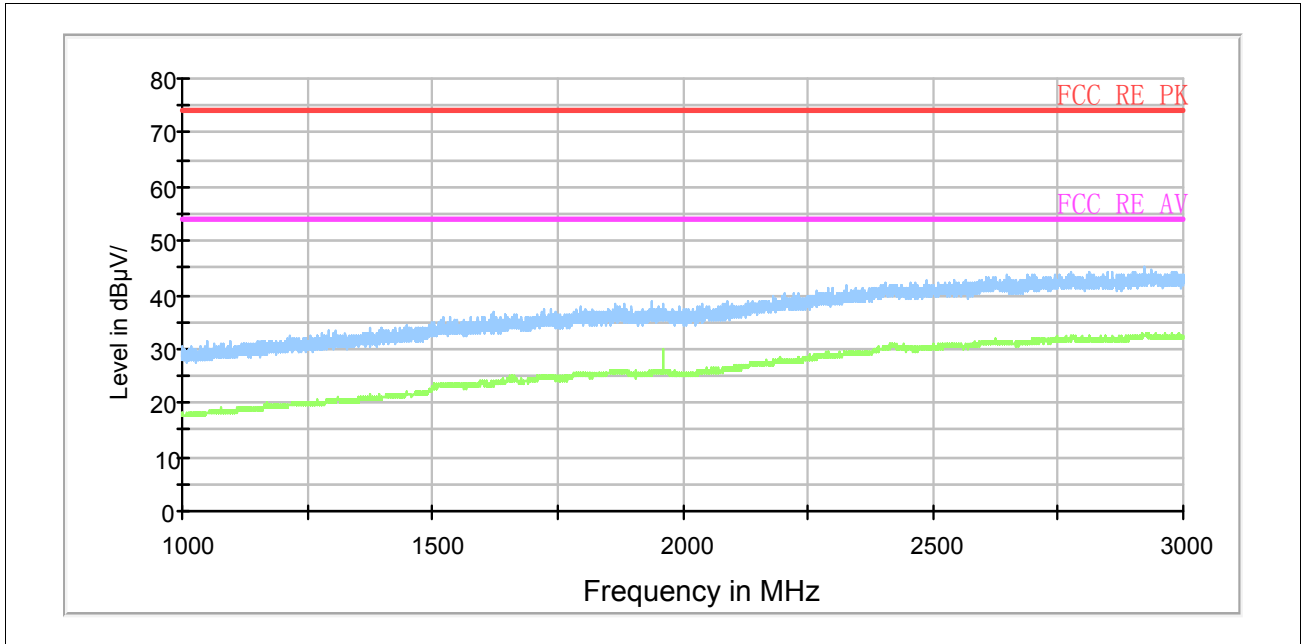
EUT with charger base



Radiated Emission from 30MHz to 1GHz

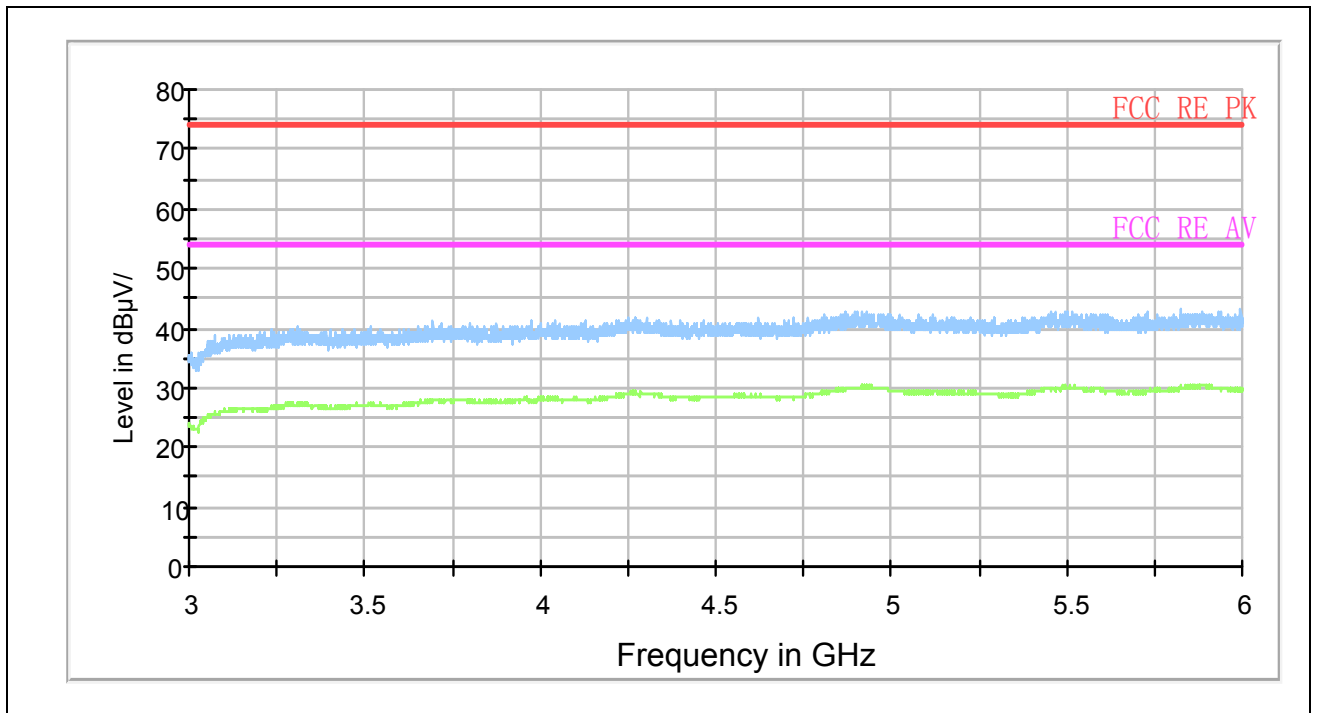
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
36.343750	24.9	100.0	V	117.0	-24.7	15.1	40.0
54.046250	14.3	100.0	V	124.0	-26.4	25.7	40.0
75.030000	12.2	175.0	V	138.0	-31.8	27.8	40.0
128.368750	19.6	125.0	V	255.0	-32.1	23.9	43.5
178.610000	22.6	100.0	V	221.0	-31.4	20.9	43.5
400.252500	11.3	199.0	V	261.0	-25.0	34.7	46.0

Note: all emissions level measured above 1GHz was more than 10dB below the limit



Note: Blue trace uses the peak detection Green trace uses the average detection

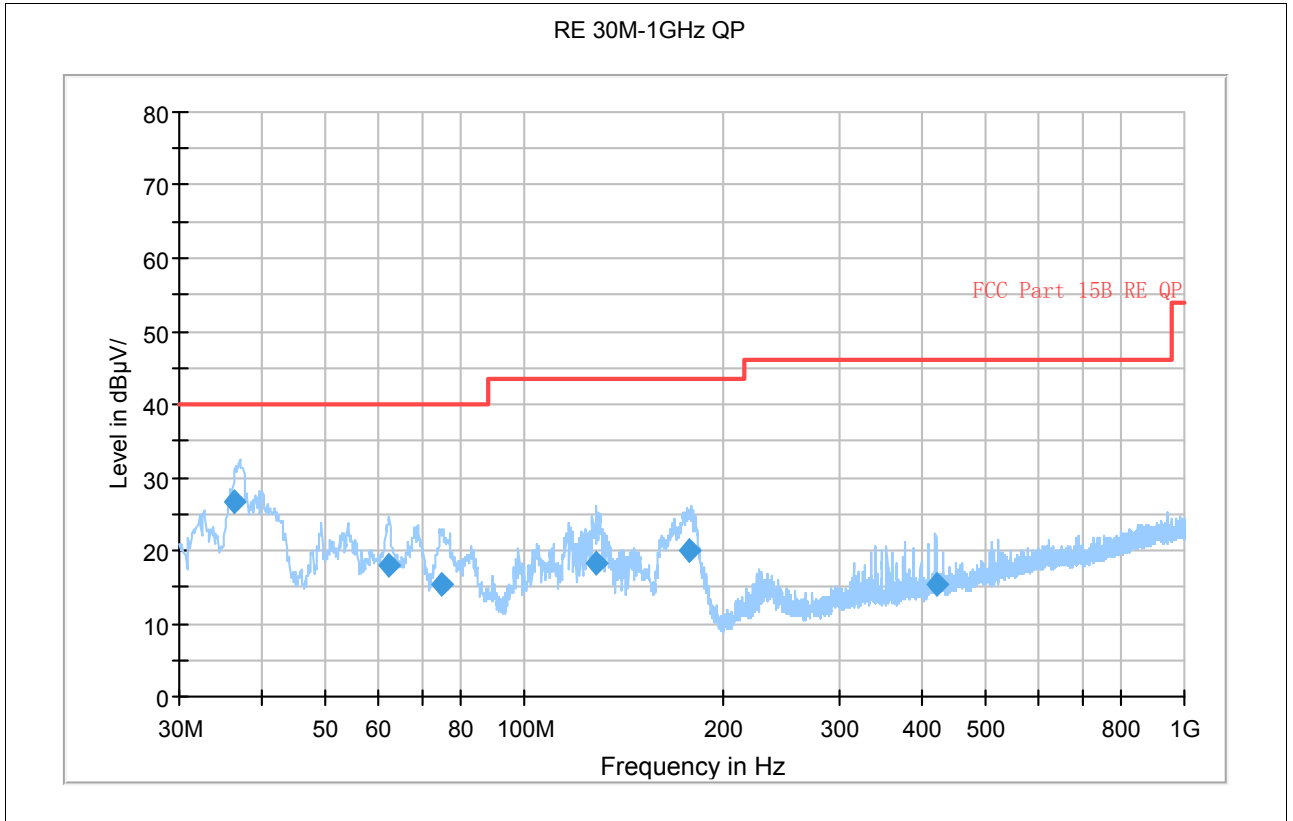
Radiated Emission from 1GHz to 3GHz



Note:Blue trace uses the peak detection Green trace uses the average detection

Radiated Emission from 3GHz to 6GHz

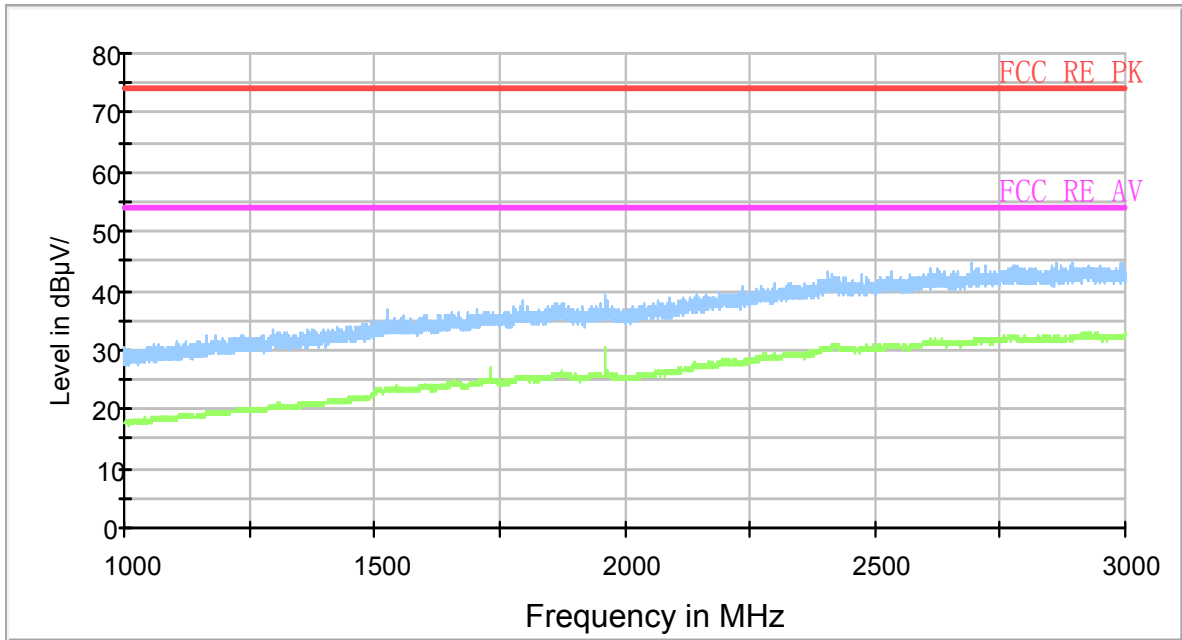
EUT without charger base



Radiated Emission from 30MHz to 1GHz

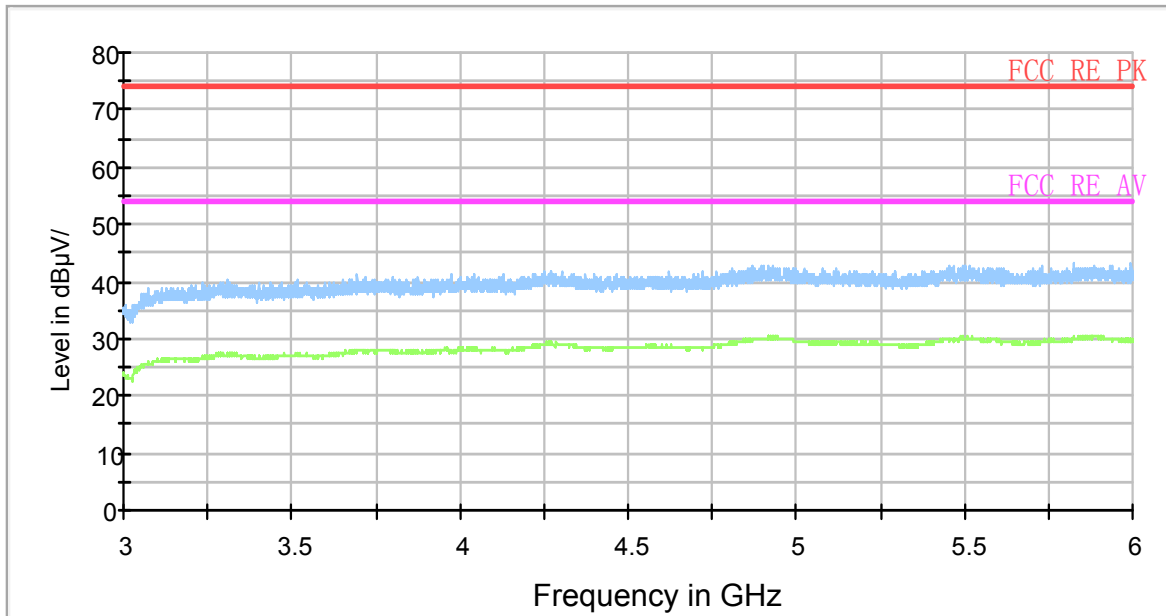
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
36.432500	26.5	100.0	V	112.0	-24.7	13.5	40.0
62.455000	17.9	100.0	V	135.0	-28.2	22.1	40.0
75.105000	15.2	175.0	V	112.0	-31.8	24.8	40.0
128.897500	18.2	100.0	V	248.0	-32.1	25.3	43.5
178.211250	20.1	100.0	V	221.0	-31.5	23.4	43.5
420.340000	15.5	100.0	V	288.0	-24.8	30.5	46.0

Note: all emissions level measured above 1GHz was more than 10dB below the limit



Note: Blue trace uses the peak detection Green trace uses the average detection

Radiated Emission from 1GHz to 3GHz



Note:Blue trace uses the peak detection Green trace uses the average detection

Radiated Emission from 3GHz to 6GHz

TA Technology (Shanghai) Co., Ltd.
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3. Main Test Instruments

No.	Name	Type	Manufacturer	Serial Number	Calibration Date	Valid Period
01	Base Station Simulator	CMU200	R&S	118133	2010-05-27	One year
02	Signal Analyzer	FSV	R&S	100815	2010-06-28	One year
03	Signal generator	SMR27	R&S	1606.6000.02	2010-06-28	One year
04	EMI Test Receiver	ESCI	R&S	100948	2010-07-01	One year
05	Trilog Antenna	VUBL 9163	SCHWARZB ECK	9163-201	2010-06-29	Two years
06	Horn Antenna	HF907	R&S	100126	2009-07-02	Two years
07	Power Splitter	11667A	Agilent	52960	NA	NA
08	DC Power Supply	GPS-3030D	GM	E877677	NA	NA
09	Climatic Chamber	ESS-SDH401	YIN HE	2006001	2010-02-22	One year
10	Semi-Anechoic Chamber	9.6*6.7*6.6m	ETS-Lindgren	NA	NA	NA
11	EMI test software	ES-K1	R&S	NA	NA	NA

*****END OF REPORT BODY*****

ANNEX A: EUT Appearance and Test Setup

A.1 EUT Appearance



a: EUT



b: Battery

Picture 1 EUT and Auxiliary

A.2 Test Setup



Picture 2: Radiated Spurious Emissions Test setup

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Test Report

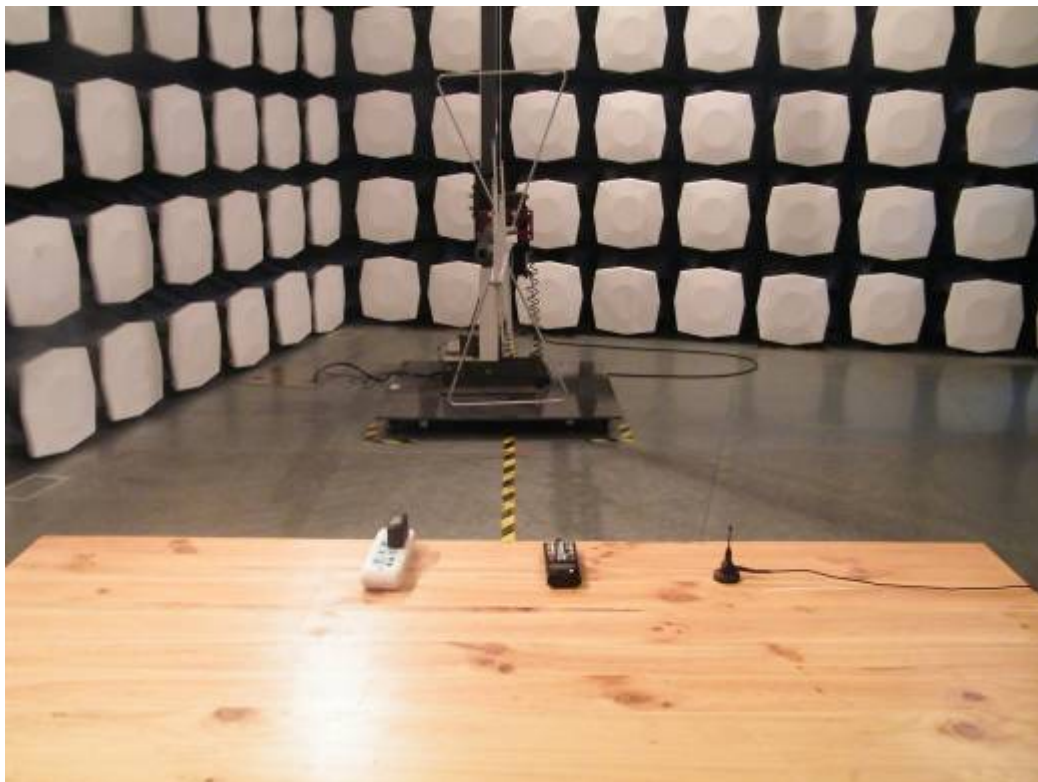
Registration Num:428261

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Picture 3-1 EUT with charger base



Picture 3-2 EUT without charger base

Picture 3: Receiver Spurious Emissions Test Setup