



Report No.: RZA2010-1463RF01R1



Part 22

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.	RZA2010-1463RF01R1		
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 CFR 47 Part 22H (2009-12) Public Mobile Services(850MHz)</p> <p>ANSI/TIA-603-C(2004) Land mobile FM or PM Communications Equipment Measurements and Performance Standards.</p> <p>RSS-132 Issue 2 (2005-9) Cellular Telephones Employing New Technologies Operating in the Bands 824-849 MHz and 869-894 MHz</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

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杜如蔚

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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
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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

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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):	GSM 850: (tested)		
Test Modulation:	GMSK		
E.R.P	28.62dBm		
Power Supply:	Battery or Charger (AC adaptor)		
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)	128 - 190 - 251 (GSM 850) (tested)		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	GSM850	824.2 ~ 848.8	869.2 ~ 893.8

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Auxiliary Equipment Details

AE1: Battery

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

AE2: Travel Adapter

Model: P6050100 US
Manufacture: 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 GSM 850 band 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 Radiated Power	FCC part 22.913(a)(2)	PASS
3	Occupied Bandwidth	FCC part 2.1049	PASS
4	Band Edge Compliance	FCC part 22.917	PASS
5	Frequency Stability	FCC part 2.1055 / 22.355	PASS
6	Spurious Emissions at Antenna Terminals	FCC part 2.1051 / 22.917(a)	PASS
7	Radiates Spurious Emission	FCC part 2.1053 / 22.917 (a)	PASS
8	Receiver Spurious Emissions	RSS-132 Issue 2 (2005)	PASS

2.2. RF Power Output

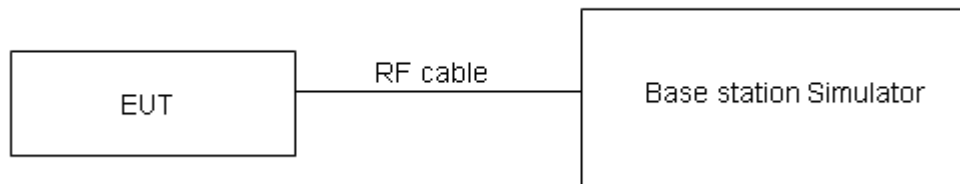
Ambient condition

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: 128, 190, and 251 for GSM 850 band.

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 850

Channel	Frequency (MHz)	RF Output Power (dBm)
128	824.2	32.15
190	836.6	32.08
251	848.8	31.84

2.3. Effective Radiated Power

Ambient condition

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

Methods of Measurement

The measurement procedures in TIA- 603C are used.

The radiated power was measured using ETS-LINDGREN OTA Chamber in “Peak” mode.

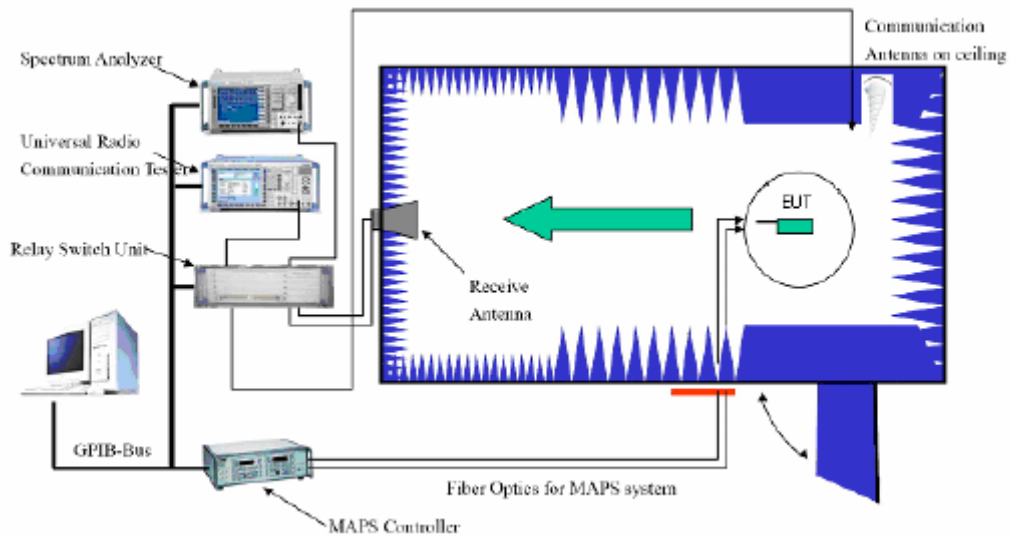
1. In an fully anechoic chamber, a sleeve dipole antenna for the frequency band of interest is placed on the reference centre of the turntable at a 5 meters test distance from the test receive antenna. An RF signal source is connected to the dipole with a Tx cable that has been constructed to not interfere 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.
2. The EUT substituted for the dipole at the reference centre of the chamber. A radio link shall be established between EUT and the Base Station Simulator. The EUT is controlled to ensure at its maximum power level and proper modulation.
3. A scan is performed to obtain the radiation pattern. A peak detector is used while RBW and VBW are both set to 3MHz. From these measurements, the maximum radiated power (P_{er}) was recorded from the spectrum analyzer from the 360 degrees rotation of the turntable and in both horizontally and vertically polarized orientations of the test antenna.

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

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

4. ERP can be calculated from EIRP by subtracting the gain of the dipole, $\text{ERP} = \text{EIRP} - 2.15 \text{ dBi}$.
5. The measurement will be conducted at three channels No.128, No.190 and No.251 (Bottom, middle and top channels of GSM 850).

Test Setup



Limits

Rule Part 22.913(a) specifies that "Mobile/portable stations are limited to 7 watts ERP".

GSM 850(ERP)	$\leq 7 \text{ W}$ (38.45 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 $k = 2$. $U = 1.19 \text{ dB}$

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Test Results: Pass

GSM 850

	Channel	Frequency (MHz)	P _{er} (EUT)	Pin	Gain (dBi)	Cable Loss	Pr (dBm)	Path loss (dBm)	E.R.P. (dBm)
GSM 850	128	824.2	-16.79	0	1.06475	-15.1681	-30.5608	46.79	27.85
	190	836.6	-16.39	0	1.2373	-15.1951	-30.4537	46.89	28.35
	251	848.8	-16.28	0	1.384	-15.2426	-30.4192	47.05	28.62

Note: The Reference Path loss = Pin - Pr - Tx cable loss + Substitution antenna gain

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

$$\text{ERP} = \text{EIRP} - 2.15 \text{ dBi}$$

2.4. Occupied Bandwidth

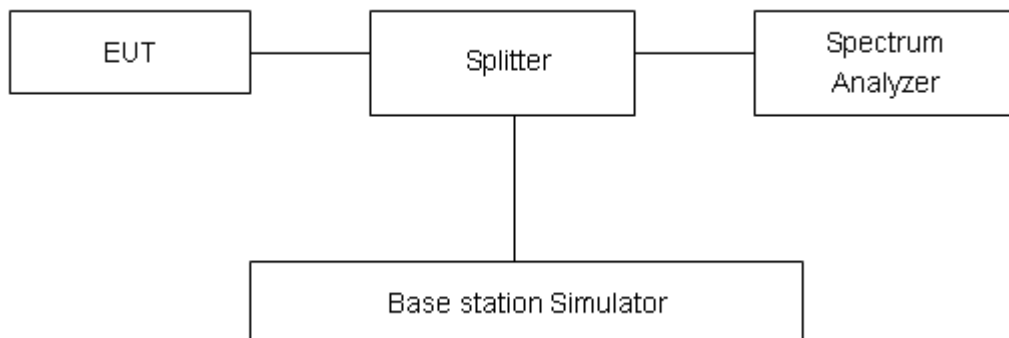
Ambient condition

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 $k = 2$. $U = 624\text{Hz}$.

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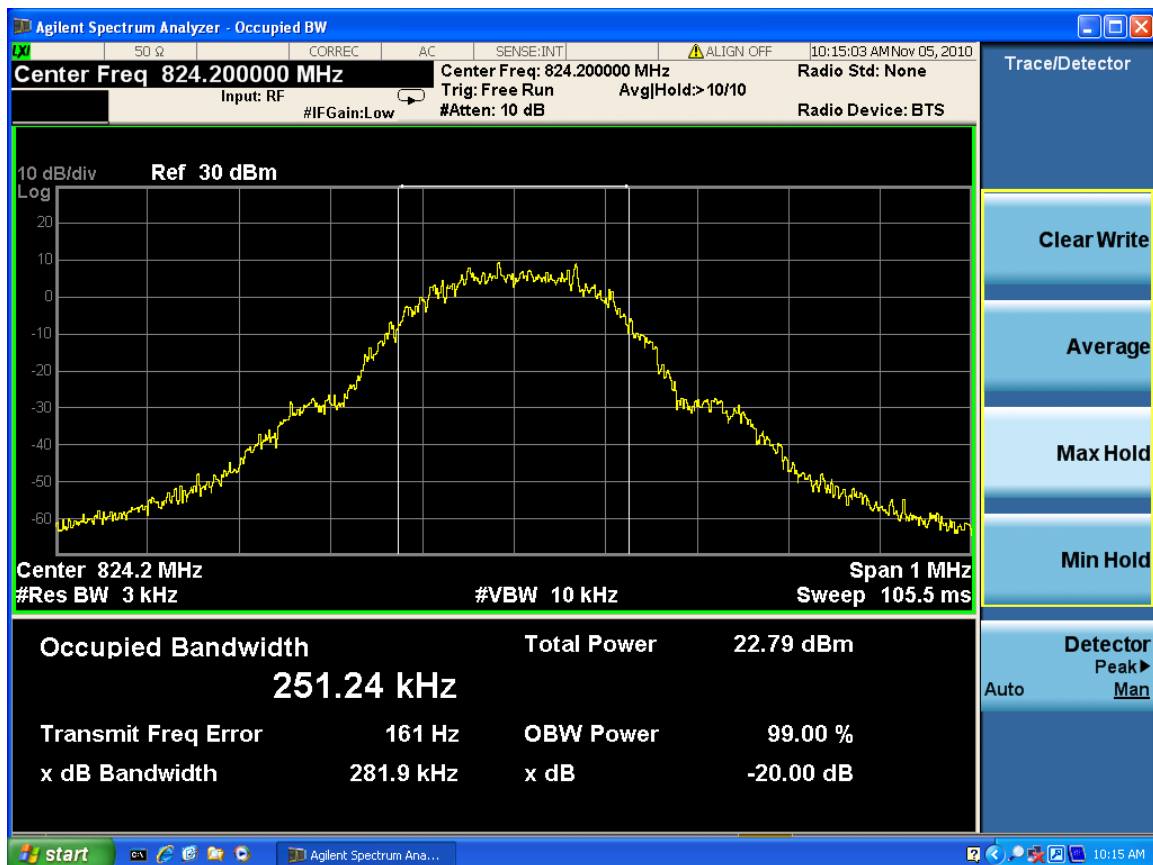
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Test Result

GSM 850

Channel	Frequency (MHz)	-20dBc Bandwidth(kHz)
128	824.2	281.9
190	836.6	296.7
251	848.8	297.7

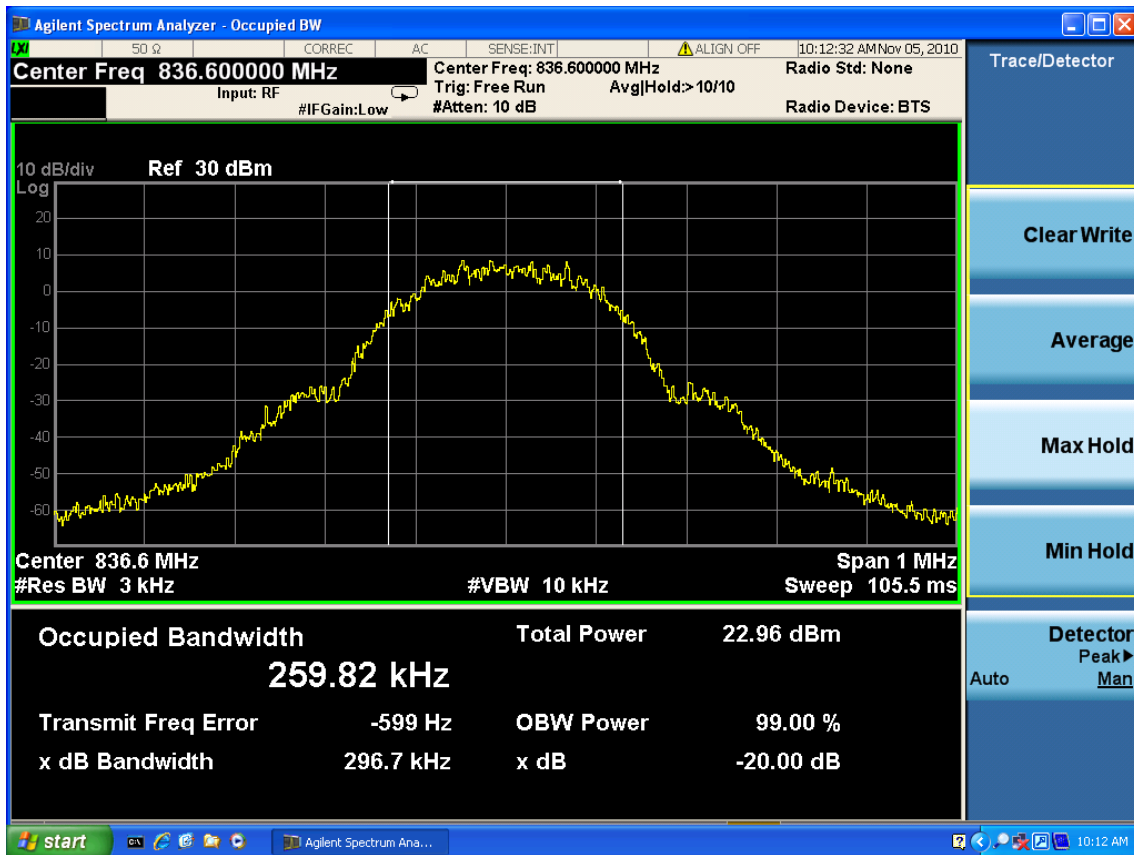


GSM 850 CH128 Occupied Bandwidth

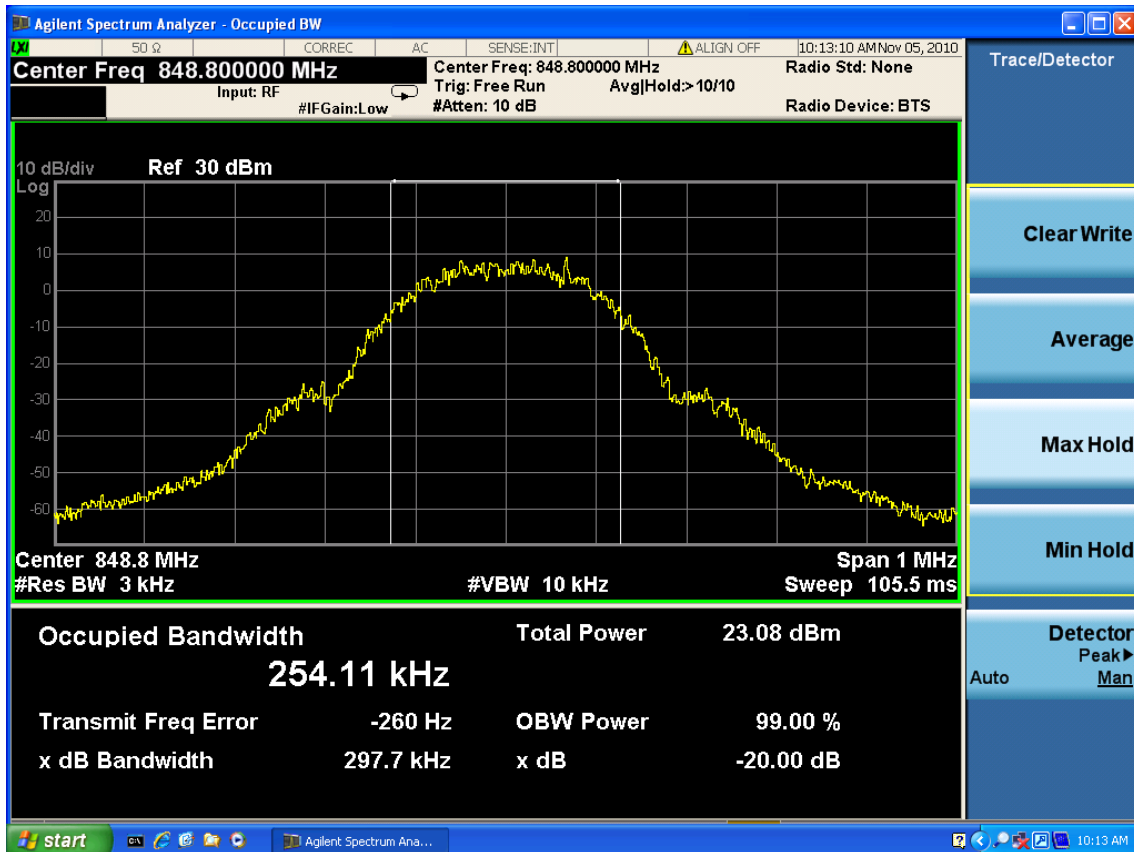
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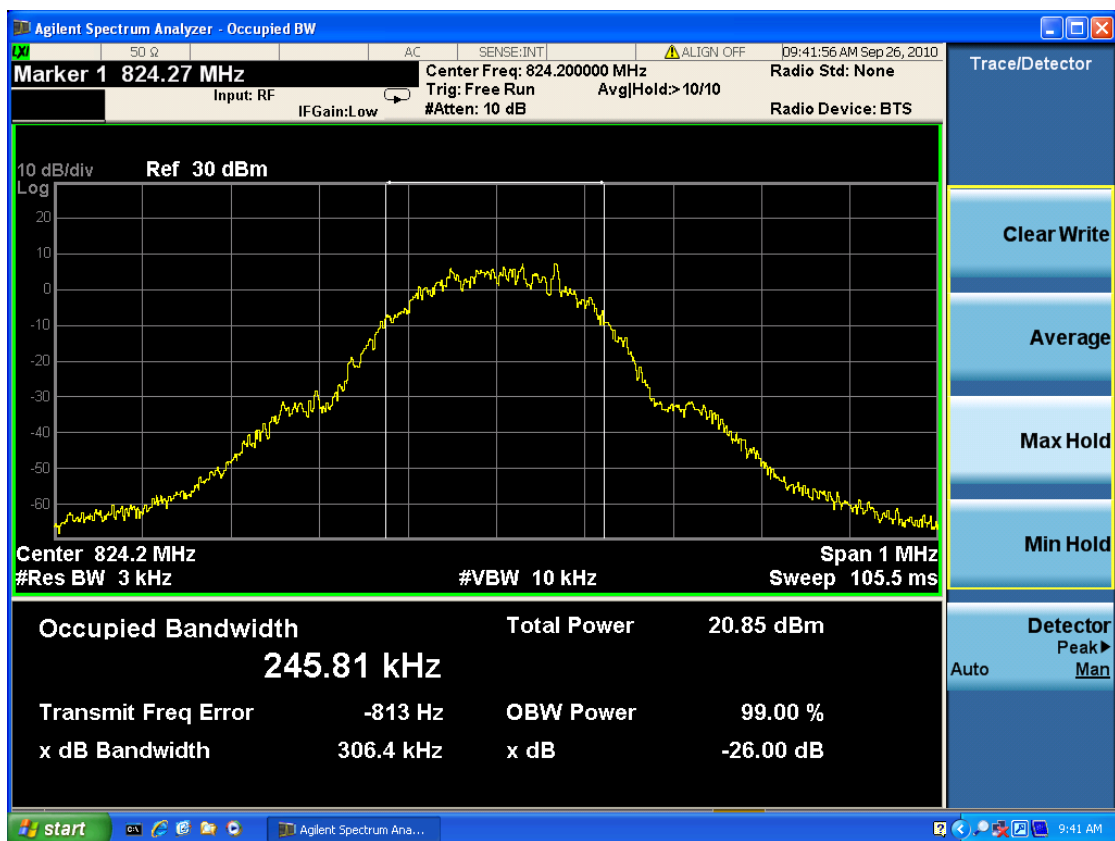
GSM 850 CH190 Occupied Bandwidth



GSM 850 CH251 Occupied Bandwidth

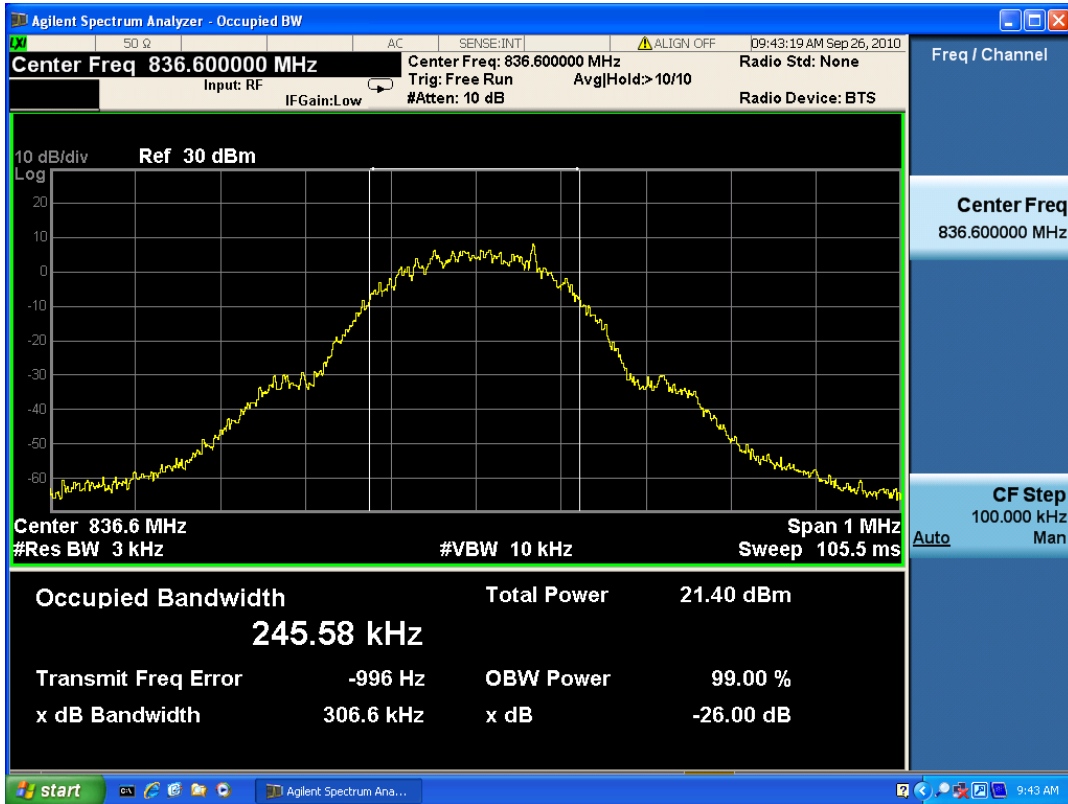
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Channel	Frequency (MHz)	99% Power Bandwidth (kHz)	-26dBc Bandwidth(kHz)
128	824.2	245.81	306.4
190	836.6	245.58	306.6
251	848.8	247.17	307.9

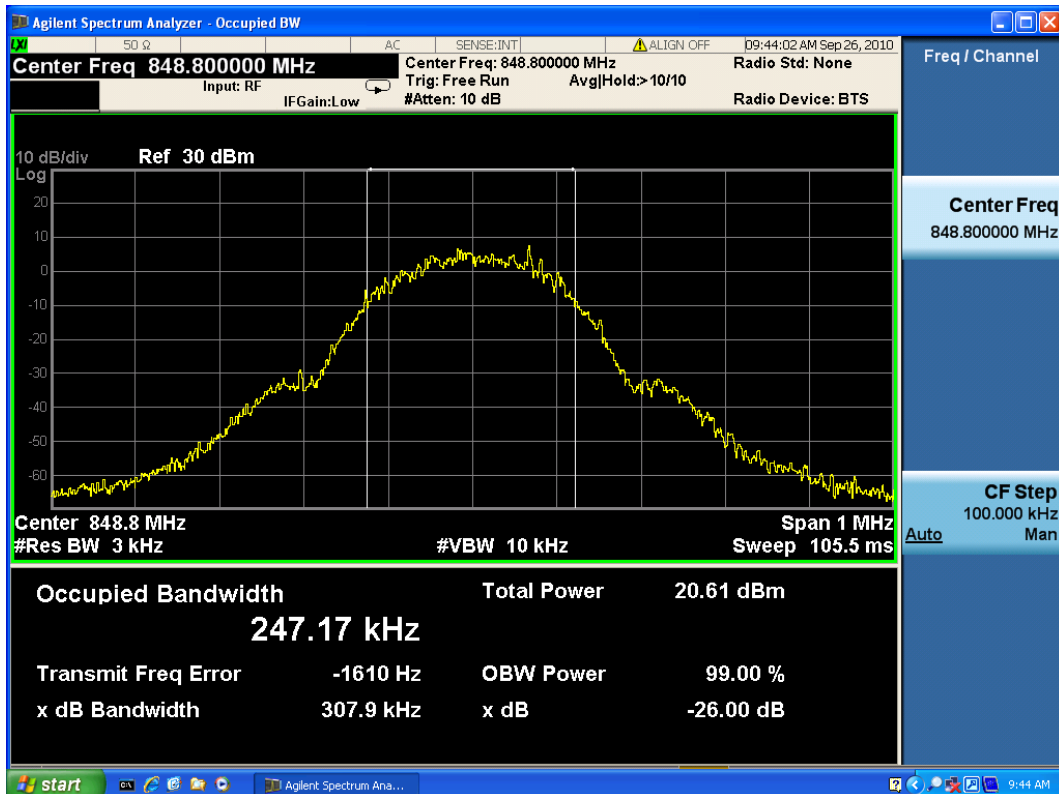


GSM 850 CH128 Occupied Bandwidth

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GSM 850 CH190 Occupied Bandwidth



GSM 850 CH251 Occupied Bandwidth

2.5. Band Edge Compliance

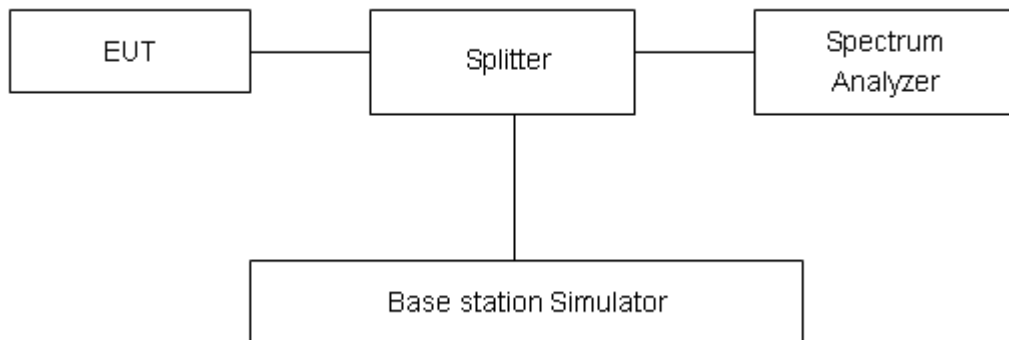
Ambient condition

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. RBW is set to 3kHz on spectrum analyzer. Spectrum analyzer plots are included on the following pages.

Test Setup



Limits

Rule RSS-132 Issue 2 (2005) September 2005 specifies that “In the first 1.0 MHz band immediately outside and adjacent to the licensee’s frequency block, the power of emissions per any 1% of the emission bandwidth shall be attenuated below the transmitter output power P (in watts) by at least $43 + 10 \log(P)$, dB. After the first 1.0 MHz, the power of emissions shall be attenuated below the transmitter output power by at least $43 + 10 \log(P)$, dB, in any 100 kHz bandwidth.”

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 $k = 1.96$. $U=0.684\text{dB}$.

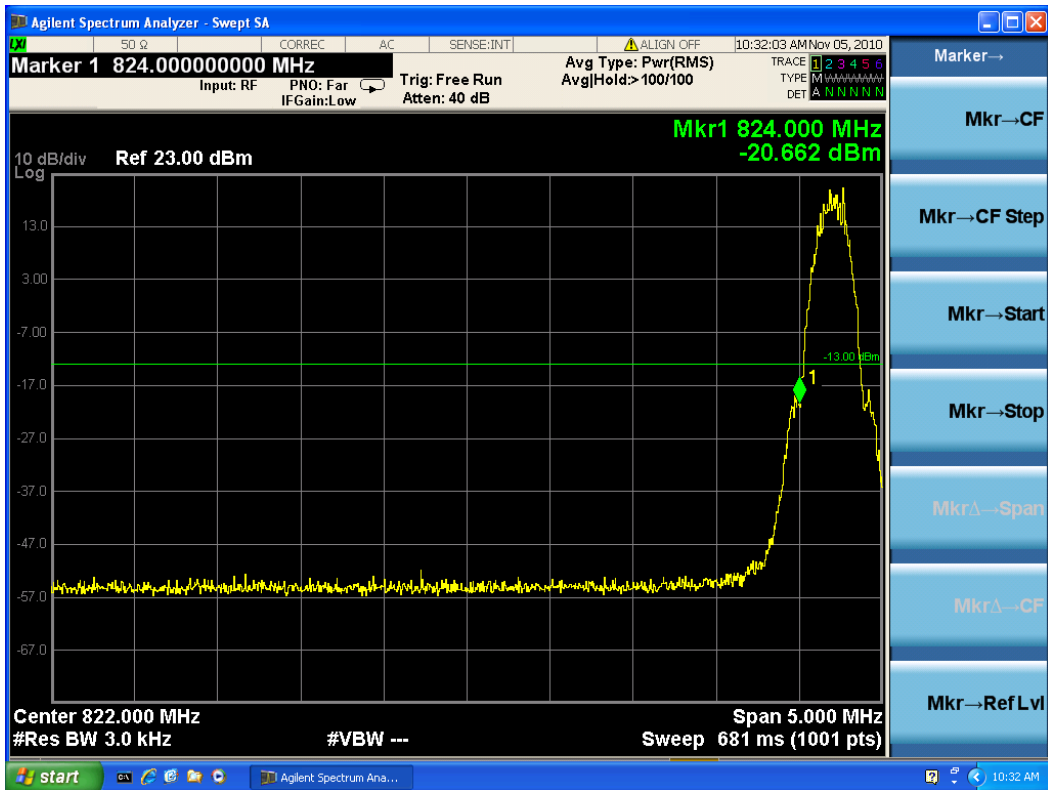
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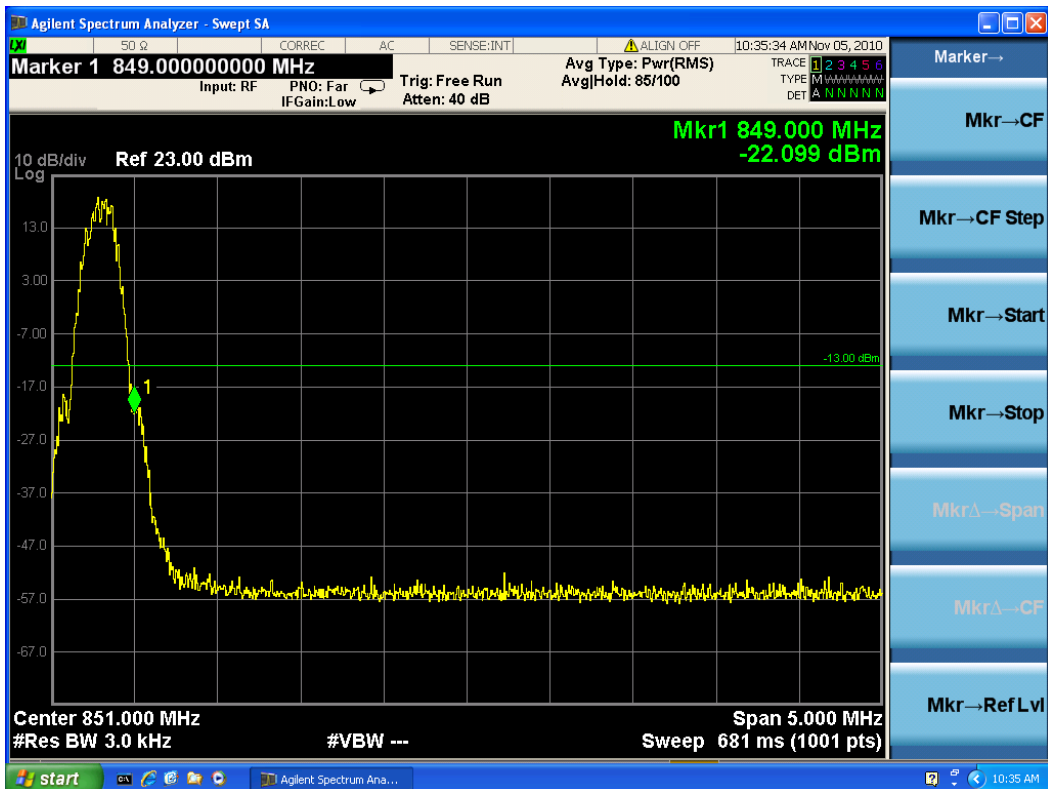
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Test Result: Pass

GSM 850



GSM 850 128 Channel



GSM 850 251 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)

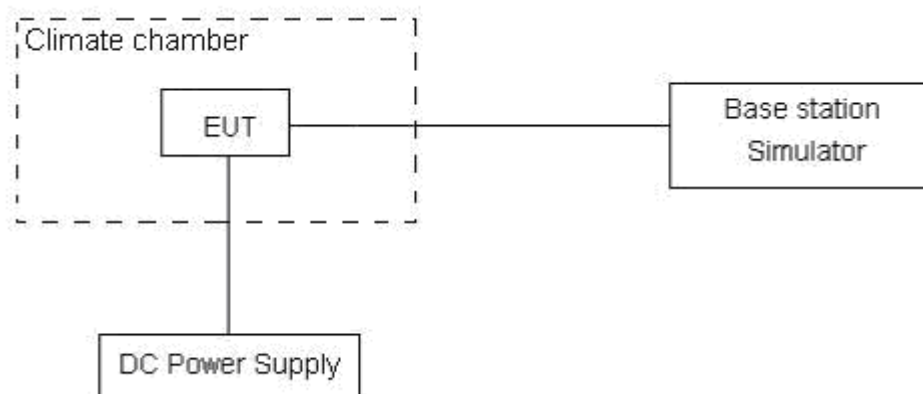
The frequency stability shall be measured with variation of primary supply voltage as follows:

(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



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Limits

According to the JTC standard, the frequency stability of the carrier shall be accurate to within 2.5 ppm of the received frequency from the base station. This accuracy is sufficient to meet Sec. 22.355 Frequency Stability. The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Limits	≤ 2.5 ppm
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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 $k = 3$. $U = 0.01$ ppm.

Test Result

Temperature (° C)	Test Results (ppm) / 3.7 V Power supply
	Channel 190
-30	0.011
-20	0.007
-10	0.012
0	0.014
10	0.009
20	0.016
30	0.011
40	0.019
50	0.012

Voltage (V)	Test Results(ppm) / 20° C
	Channel 190
4.2	0.006
3.4	0.007

2.7. Spurious Emissions at Antenna Terminals

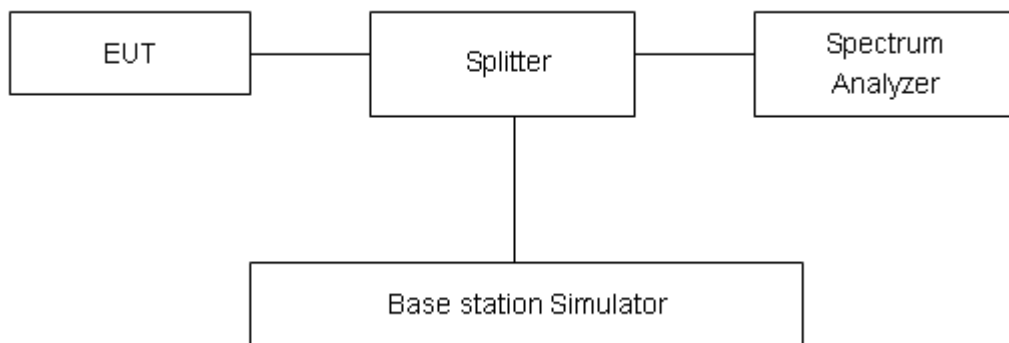
Ambient condition

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 22.917(a) specifies that “The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ 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

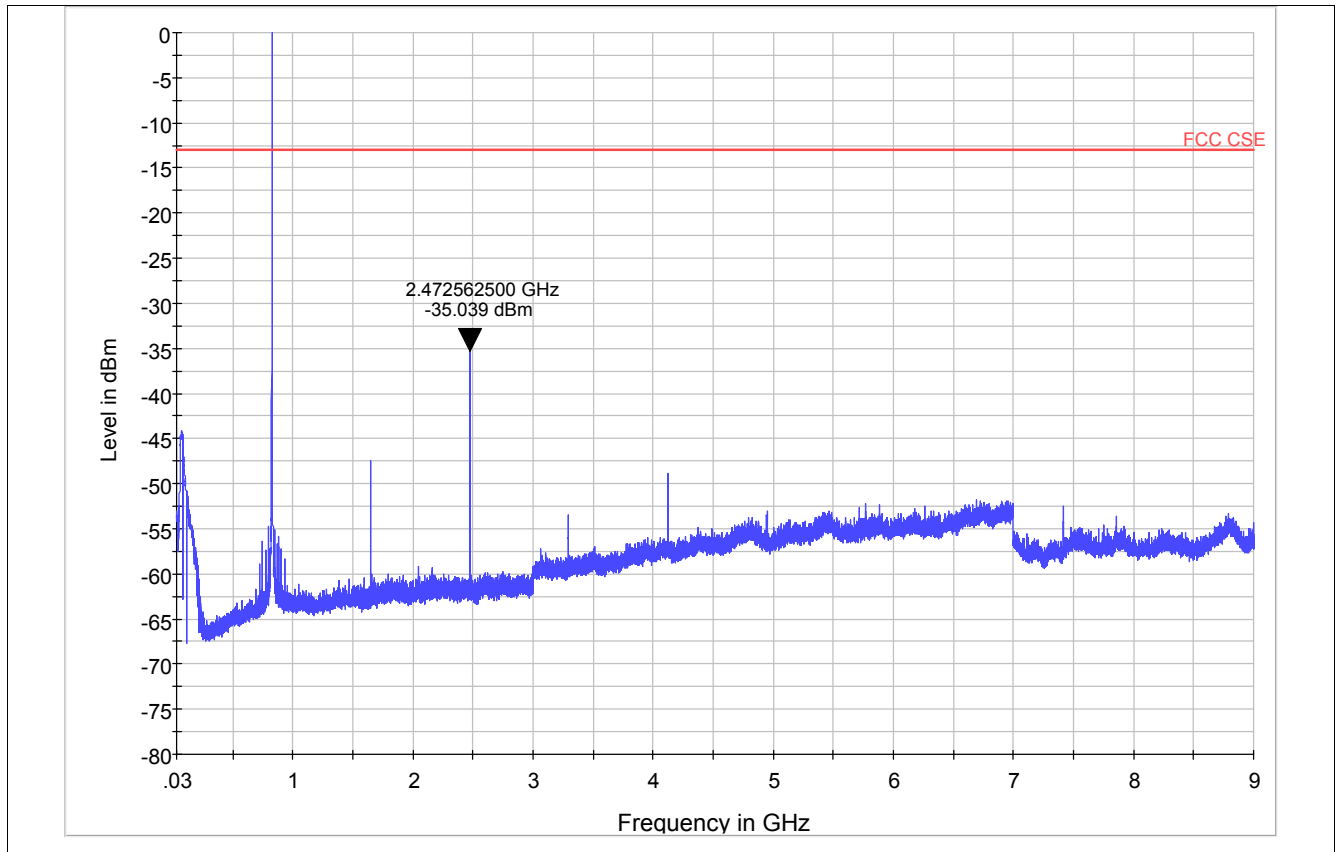
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Test Result

GSM 850 CH128



Note: The signal beyond the limit is carrier:824.2 MHz

GSM 850 128 Channel 30MHz~9GHz

Harmonic	TX ch.128 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)
2	1648.4	Nf	-13	/
3	2472.5625	-35.039	-13	22.039
4	3296.8	Nf	-13	/
5	4121	Nf	-13	/
6	4945.2	Nf	-13	/
7	5769.4	Nf	-13	/
8	6593.6	Nf	-13	/
9	7417.8	Nf	-13	/
10	8242	Nf	-13	/

Nf: noise floor

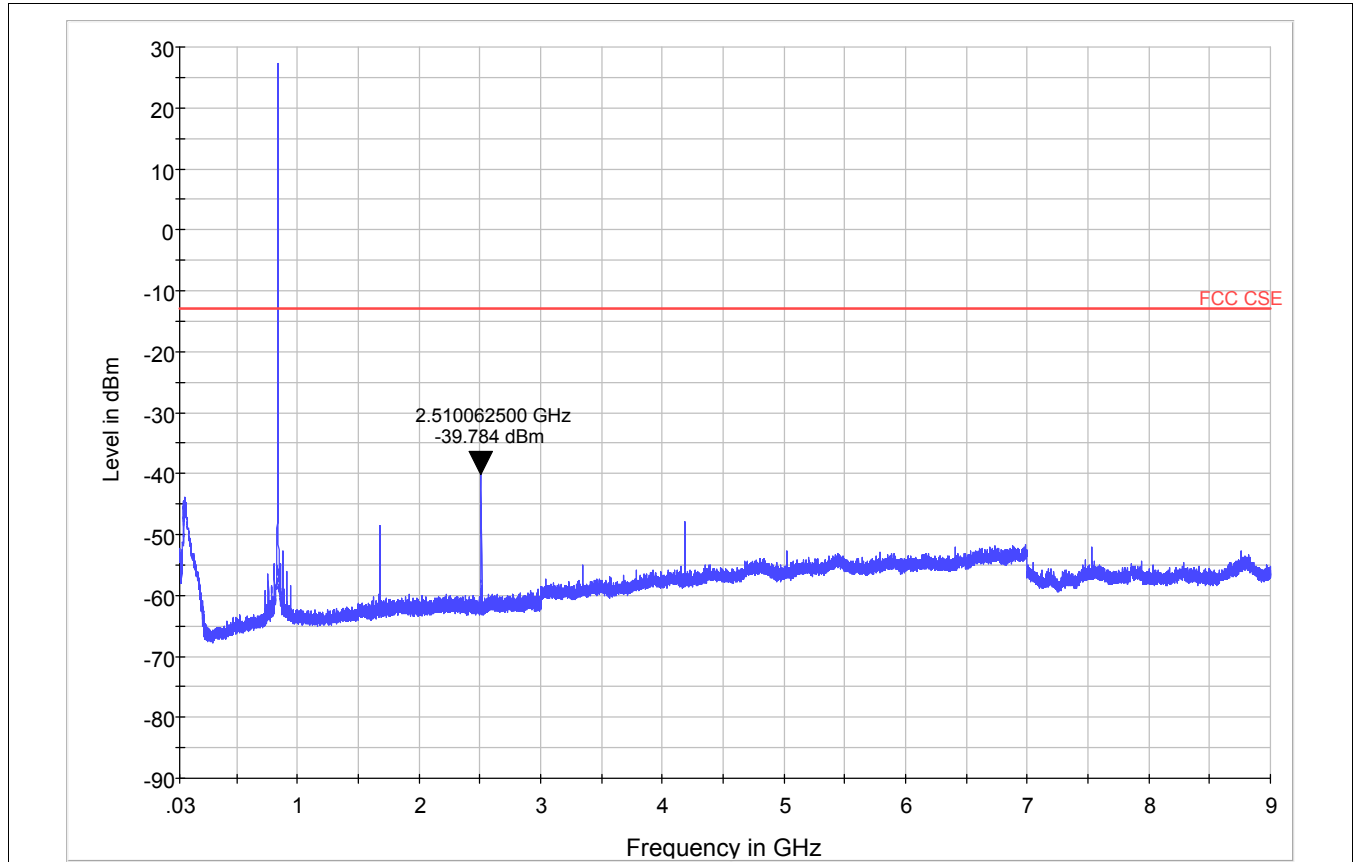
Note: The other Spurious RF conducted emissions level is no more than noise floor.

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GSM 850 CH190



Note: The signal beyond the limit is carrier:836.6 MHz
GSM 850 190 Channel 30MHz~9GHz

Harmonic	TX ch.190 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)
2	1673.2	Nf	-13	/
3	2510.0625	-39.784	-13	26.784
4	3346.4	Nf	-13	/
5	4183	Nf	-13	/
6	5019.6	Nf	-13	/
7	5856.2	Nf	-13	/
8	6692.8	Nf	-13	/
9	7529.4	Nf	-13	/
10	8366	Nf	-13	/

Nf: noise floor

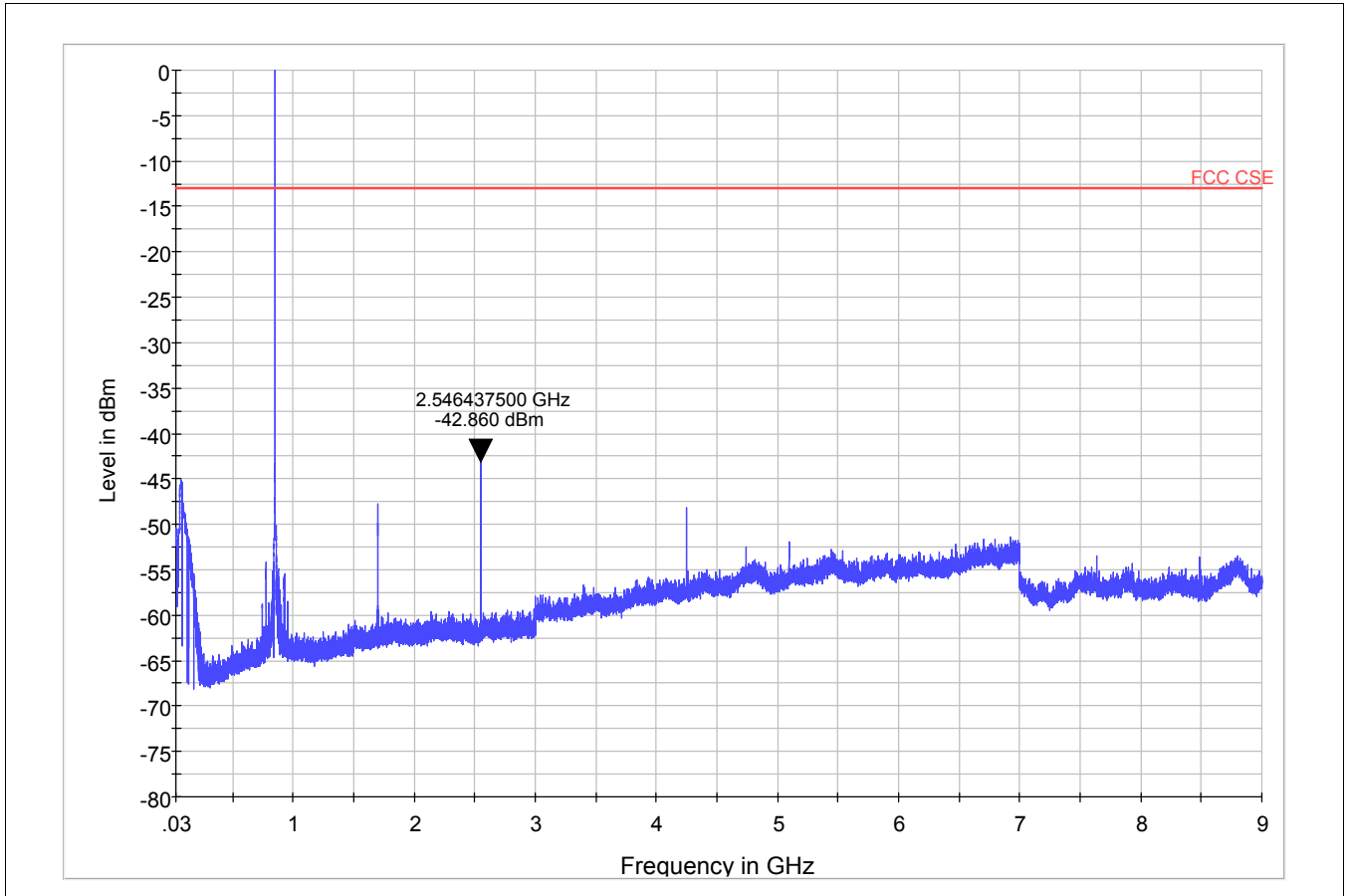
Note: The other Spurious RF conducted emissions level is no more than noise floor.

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GSM 850 CH251



Note: The signal beyond the limit is carrier:848.8 MHz
GSM 850 251 Channel 30MHz~9GHz

Harmonic	TX ch.251 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)
2	1697.6	Nf	-13	/
3	2546.4375	-42.860	-13	29.860
4	3395.2	Nf	-13	/
5	4244	Nf	-13	/
6	5092.8	Nf	-13	/
7	5941.6	Nf	-13	/
8	6790.4	Nf	-13	/
9	7639.2	Nf	-13	/
10	8488	Nf	-13	/

Nf: noise floor

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

2.8. 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.

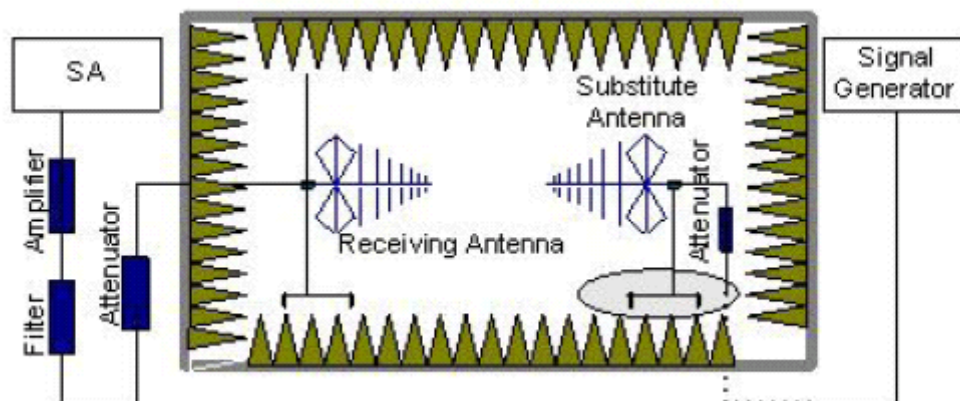
The spectrum was scanned from 30 MHz to the 10th harmonic of the highest frequency generated within the equipment. The measurement will be conducted at three channels 128, 190, 251 of GSM850.

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

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harmonic could not be detected above the noise floor, the ambient level was recorded.

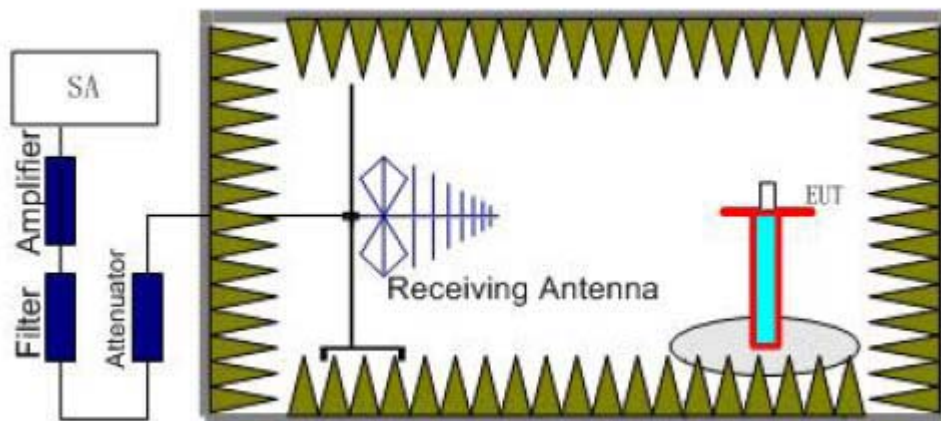
The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.

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 22.917(a) specifies that "The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB."

Limit	-13 dBm
-------	---------

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.

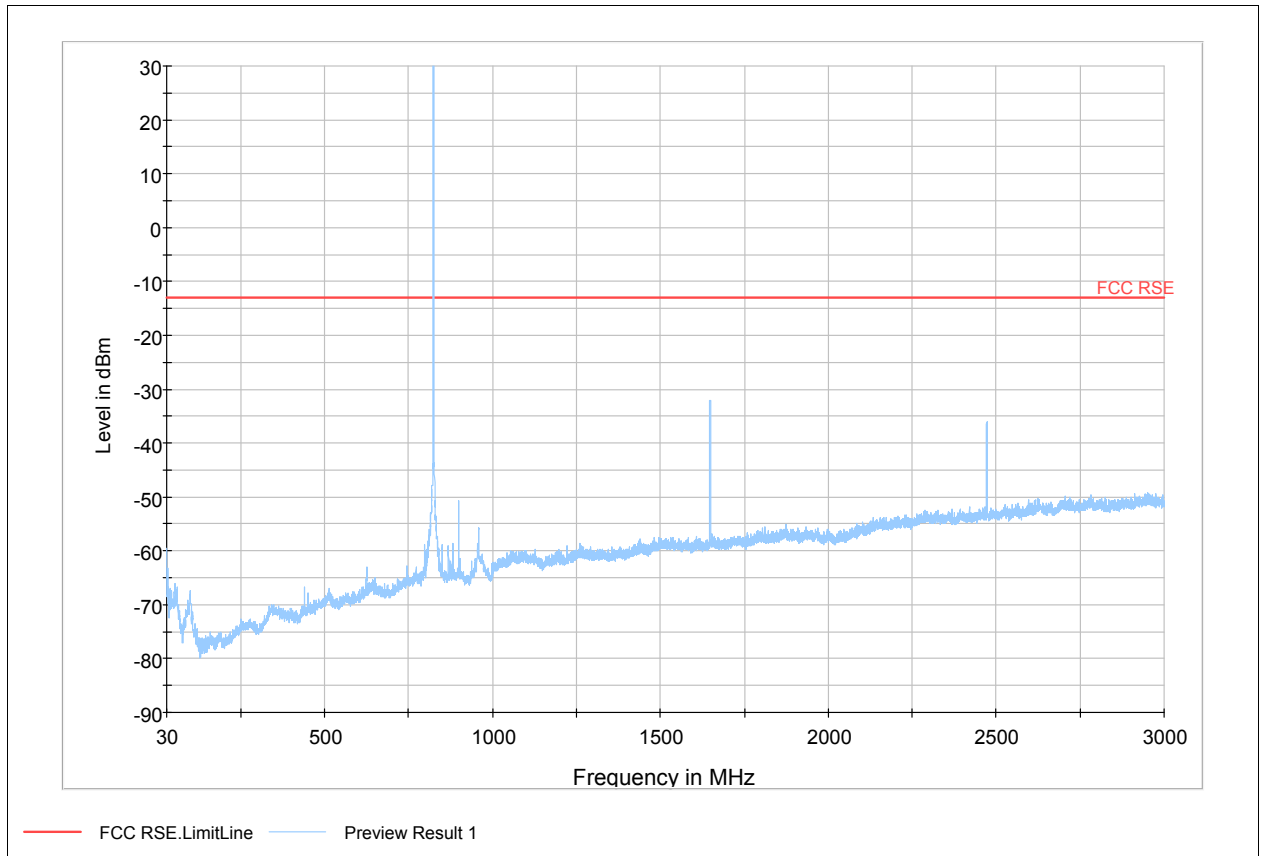
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Test Result

GSM 850 CH128

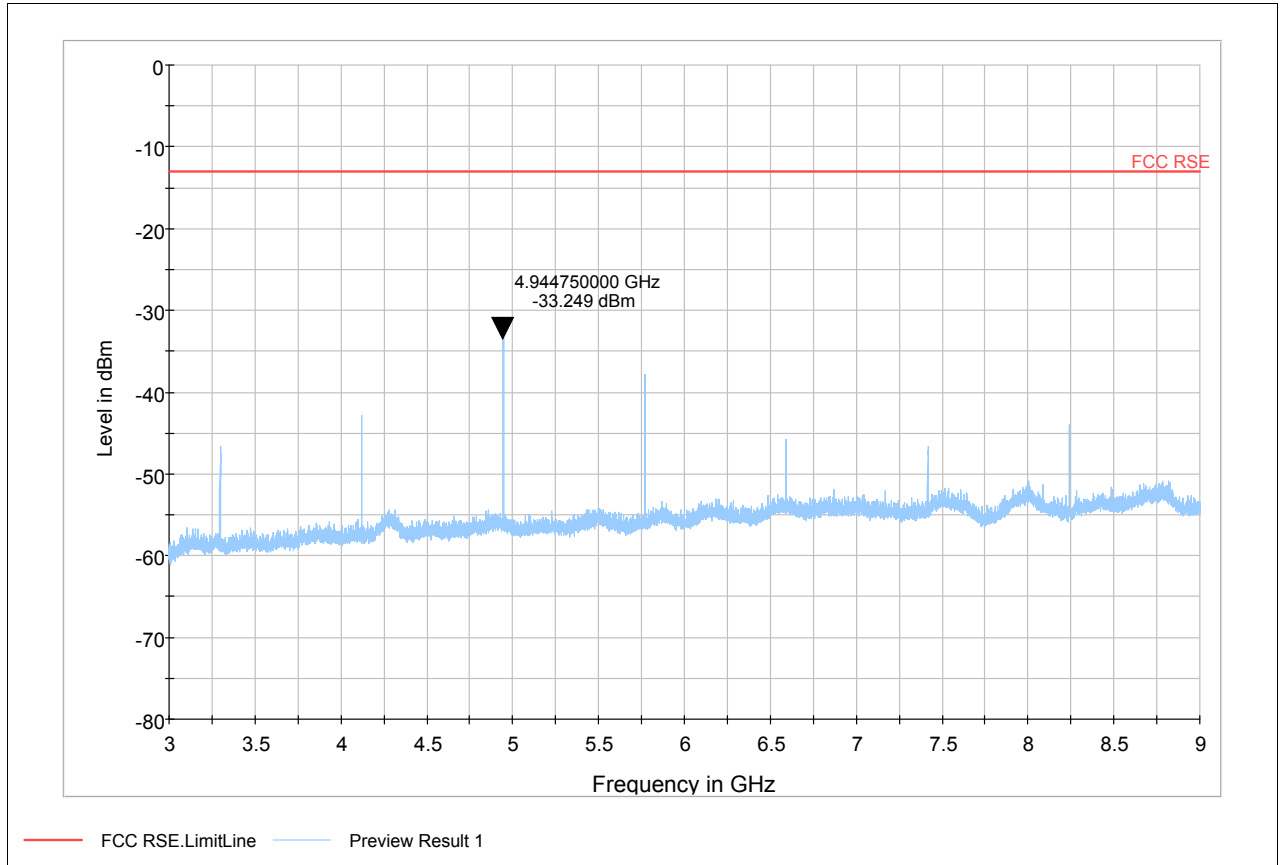


Note: The signal beyond the limit is carrier:824.2 MHz
GSM 850 128 Channel 30MHz~3GHz

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GSM 850 128 Channel 3GHz~9GHz

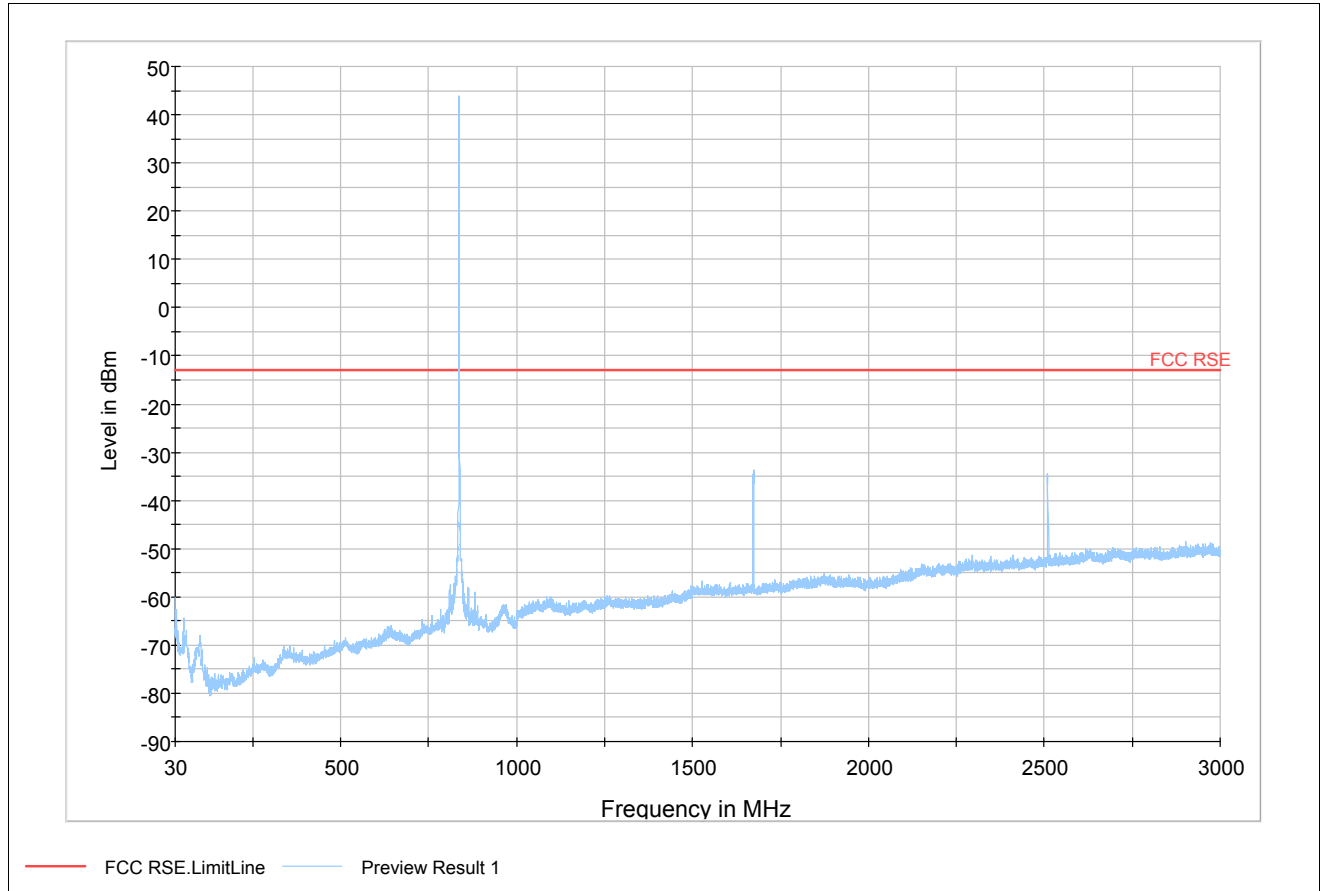
Harmonic	TX ch.128 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1648.3	-32.02	-13	19.02	270
6	4944.75	-33.249	-13	20.249	270

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GSM 850 CH190

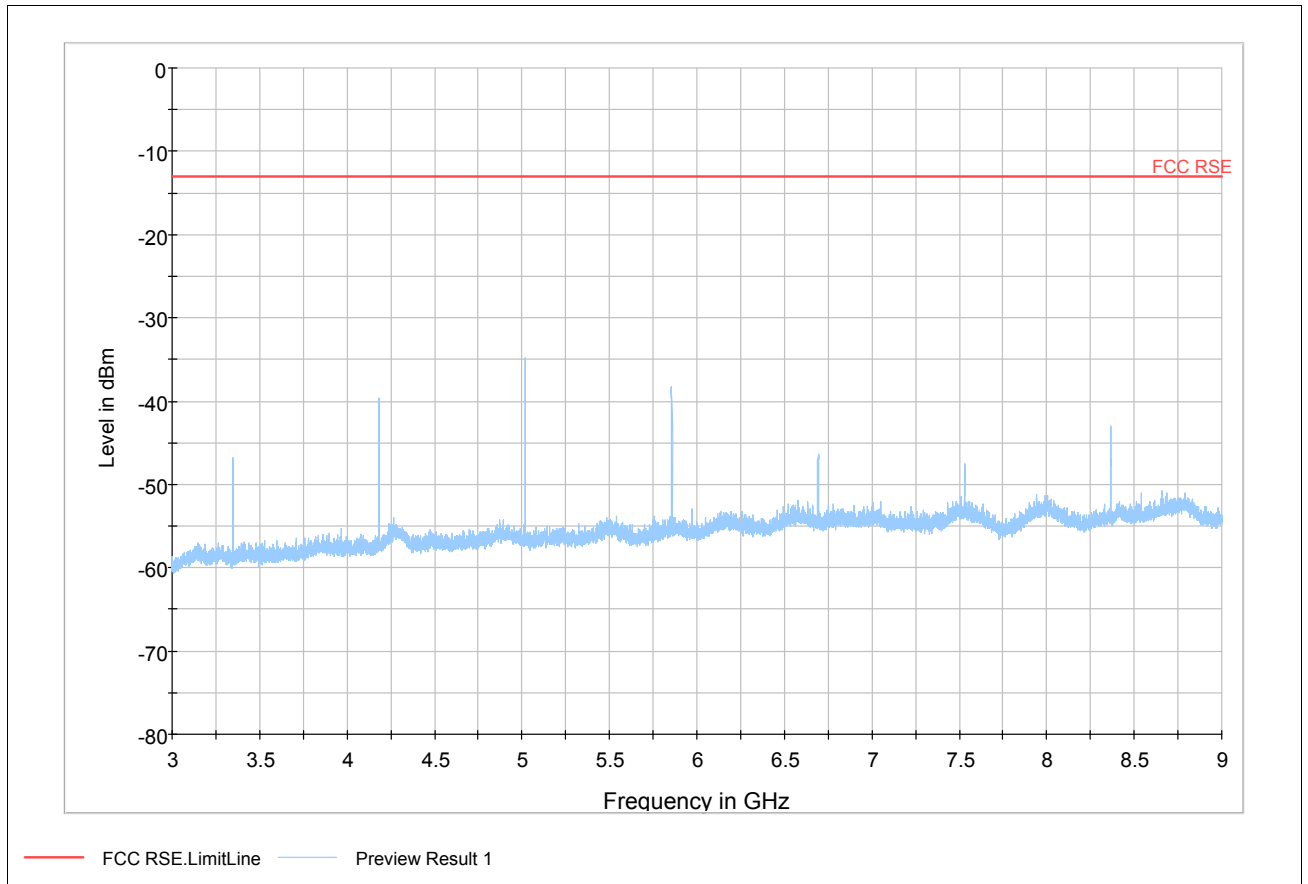


Note: The signal beyond the limit is carrier.
GSM 850 190 Channel 30MHz~3GHz

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GSM 850 190 Channel 3GHz ~9GHz

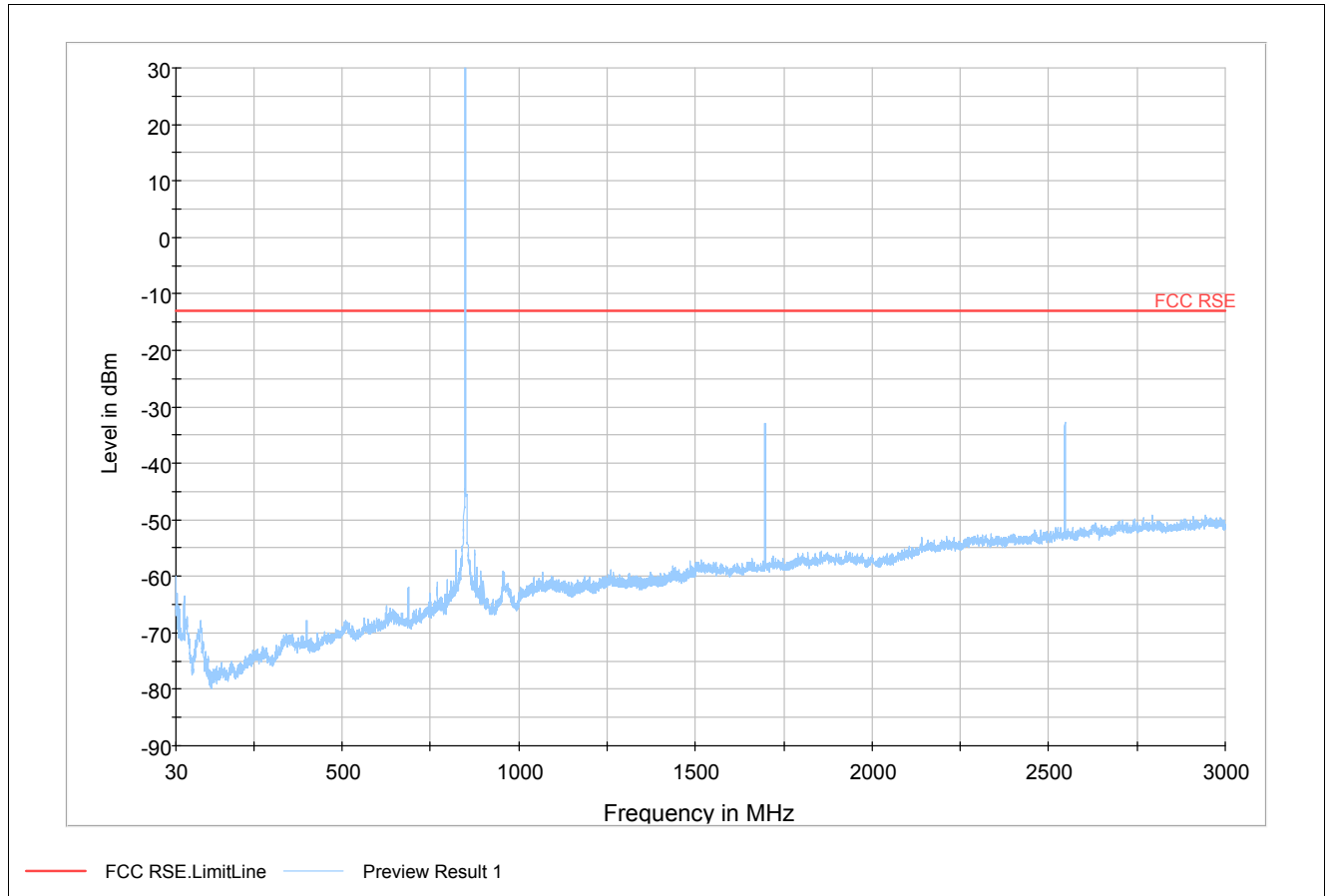
Harmonic	TX ch.190 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1673.3	-33.60	-13	20.60	180
6	5019.4	-34.78	-13	21.78	270

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GSM 850 CH251

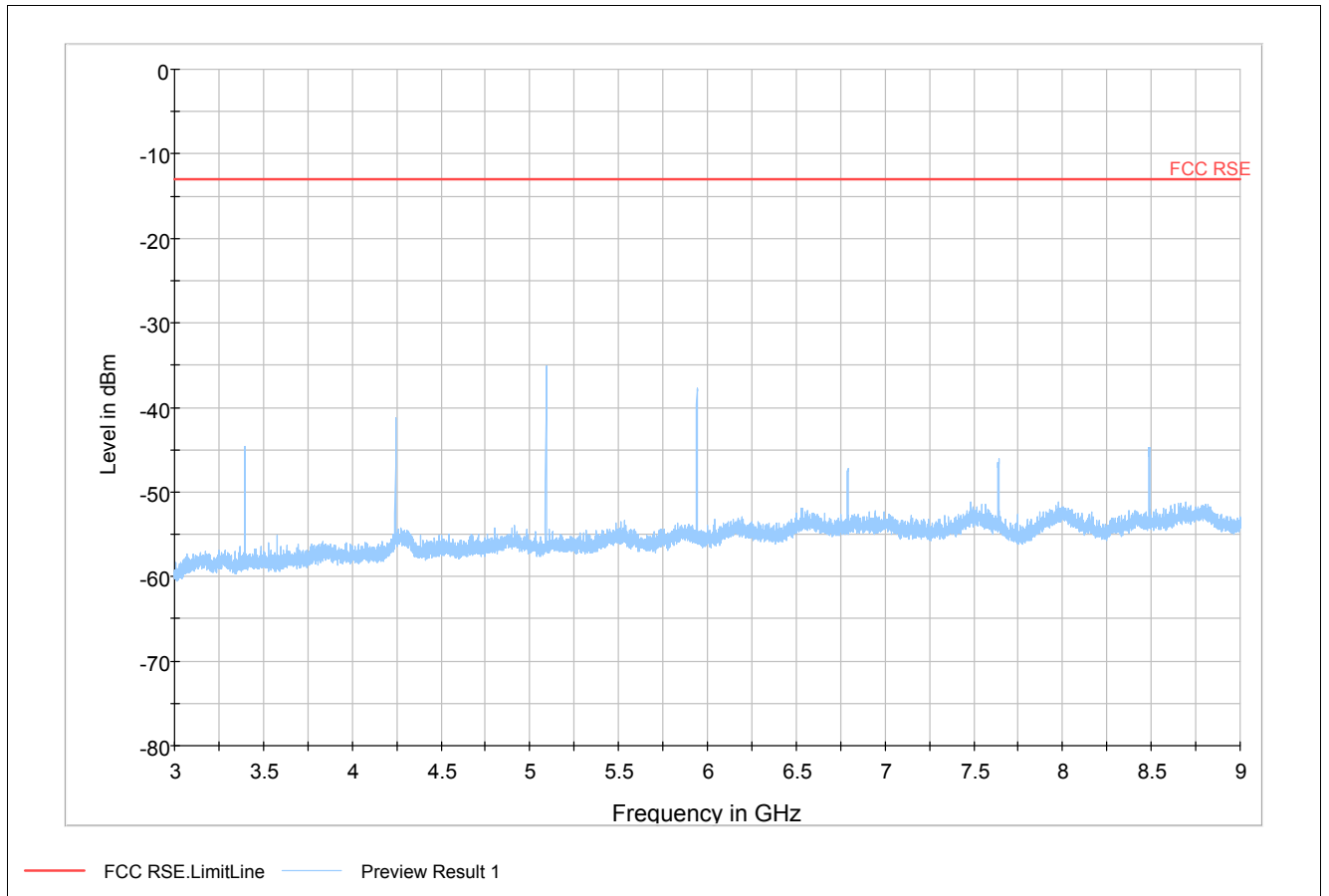


Note: The signal beyond the limit is carrier.
GSM 850 251 Channel 30MHz~3GHz

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Harmonic	TX ch.251 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
3	2546.3	-32.6	-13	19.6	225
6	5093.3	-35.1	-13	22.1	270

2.9. 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

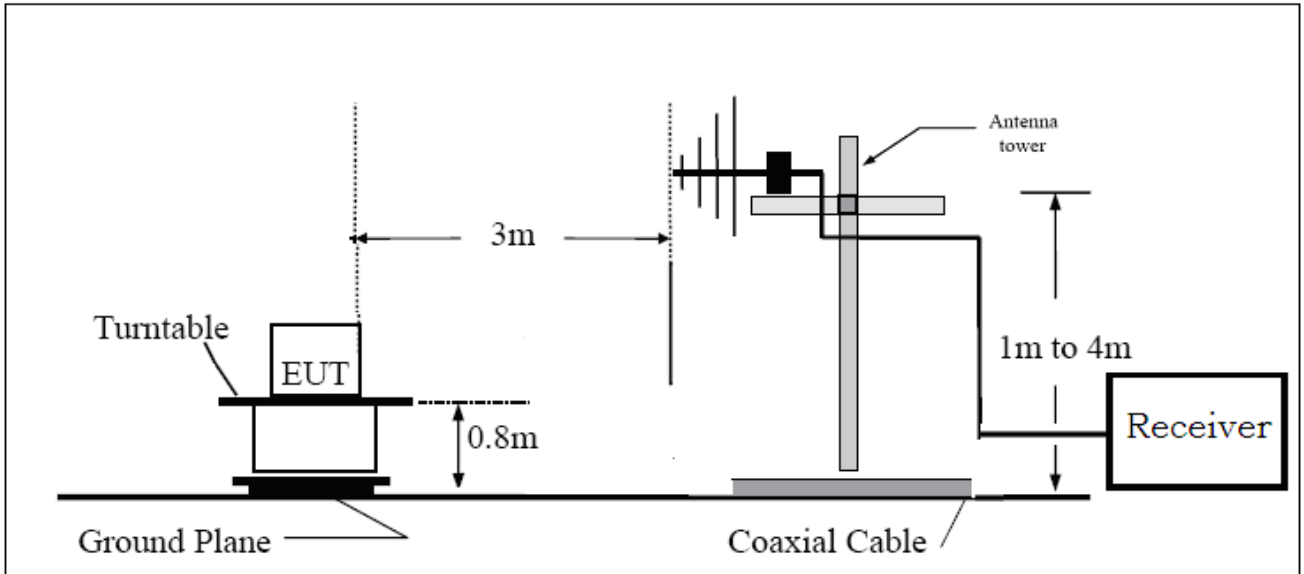
Above 1GHz:

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

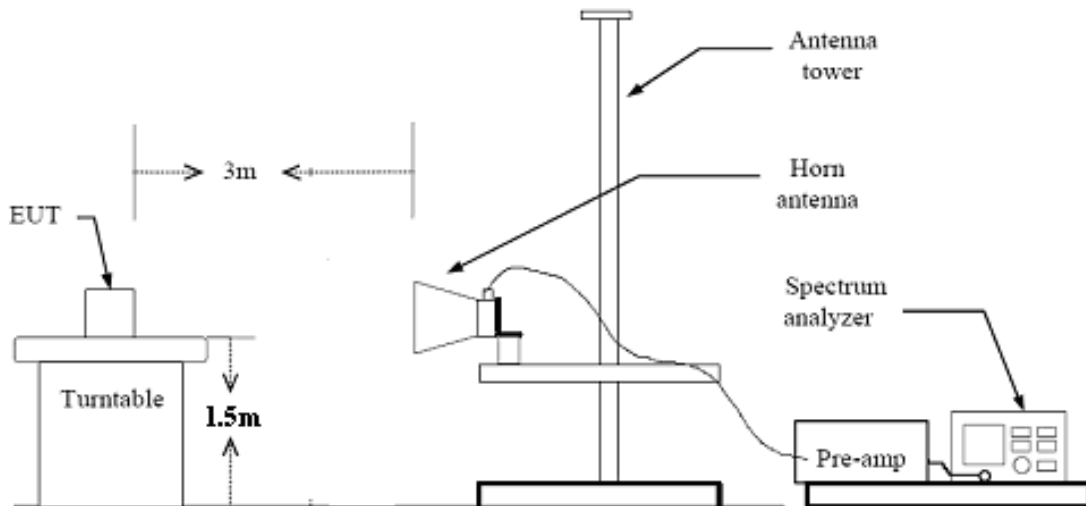
(b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO

Test Setup

Below 1GHz



Above 1GHz



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Limits

Frequency (MHz)	Field Strength (dBμV/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.

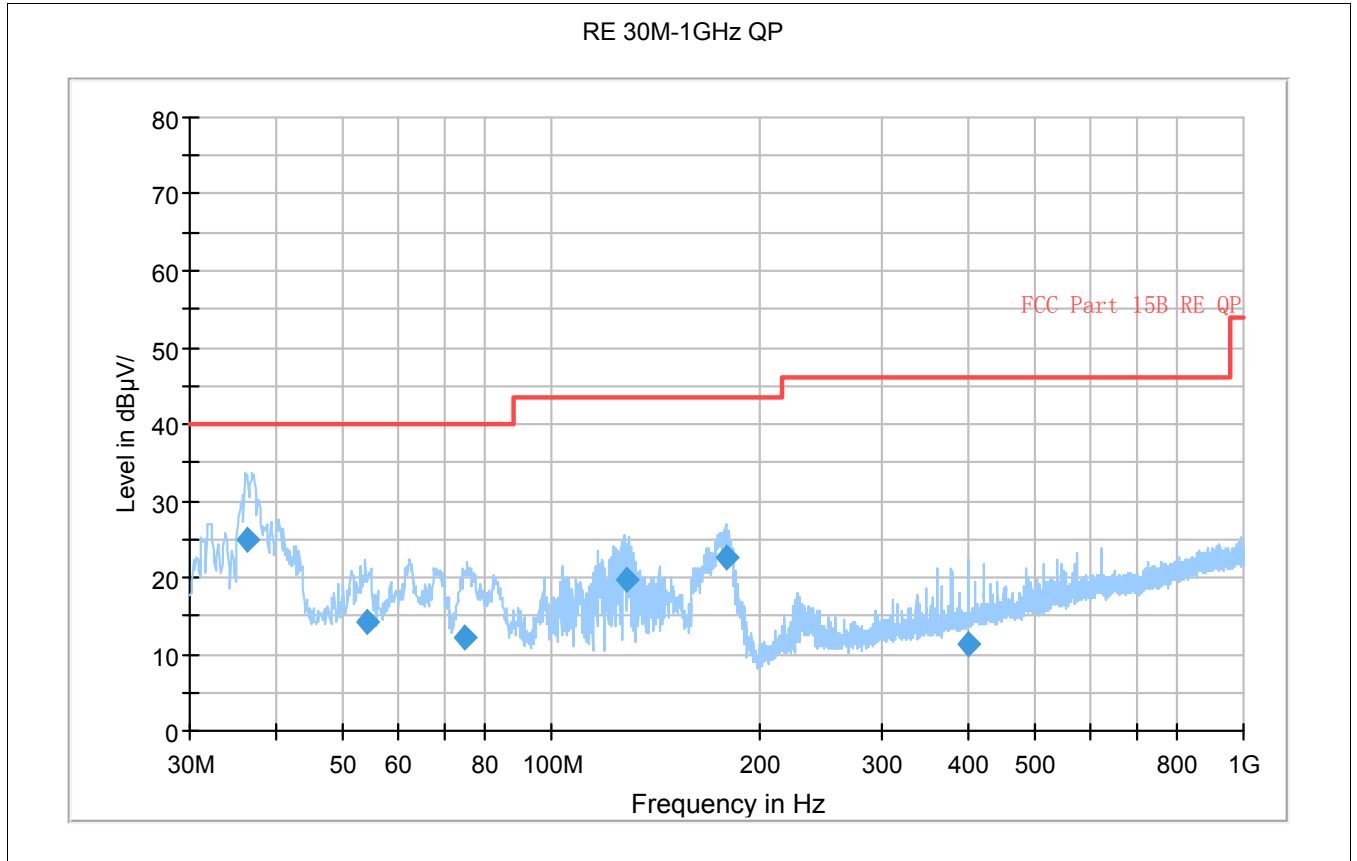
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Test Results

EUT with charger base



Radiated Emission from 30MHz to 1GHz

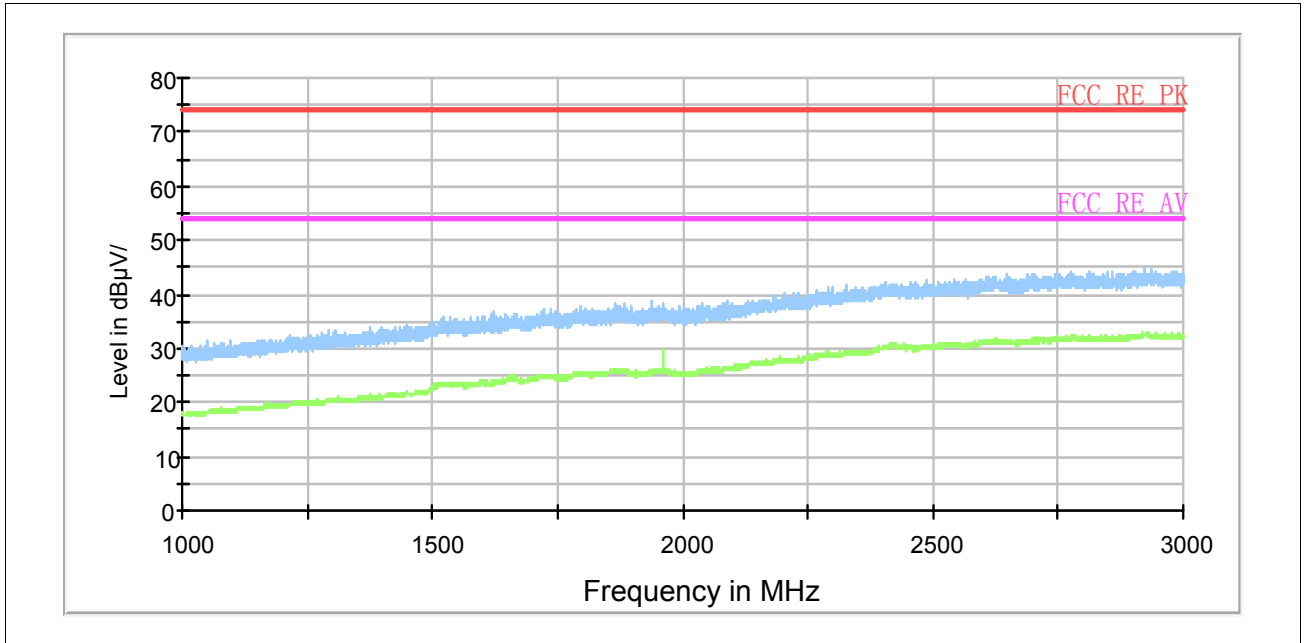
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
36.343750	24.9	100.0	V	117.0	-24.7	15.1	40.0
54.046250	14.3	100.0	V	124.0	-26.4	25.7	40.0
75.030000	12.2	175.0	V	138.0	-31.8	27.8	40.0
128.368750	19.6	125.0	V	255.0	-32.1	23.9	43.5
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

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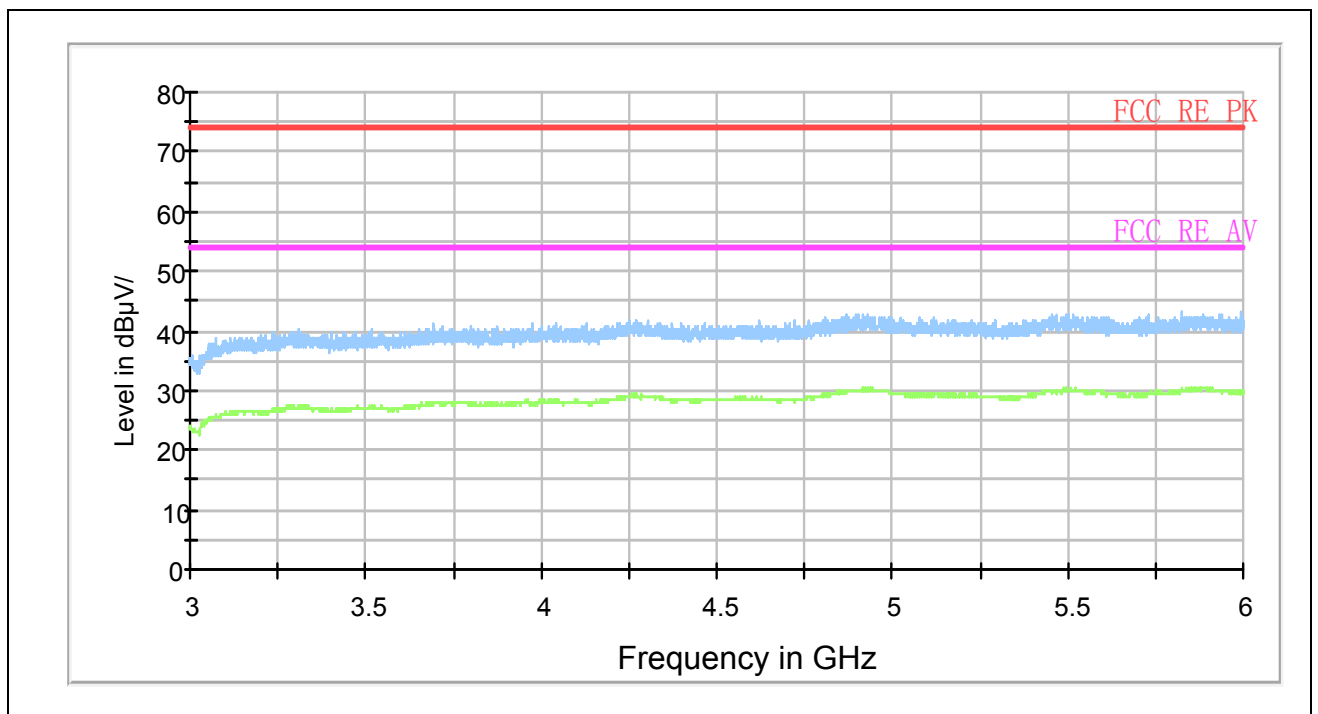
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Note: Blue trace uses the peak detection Green trace uses the average detection

Radiated Emission from 1GHz to 3GHz

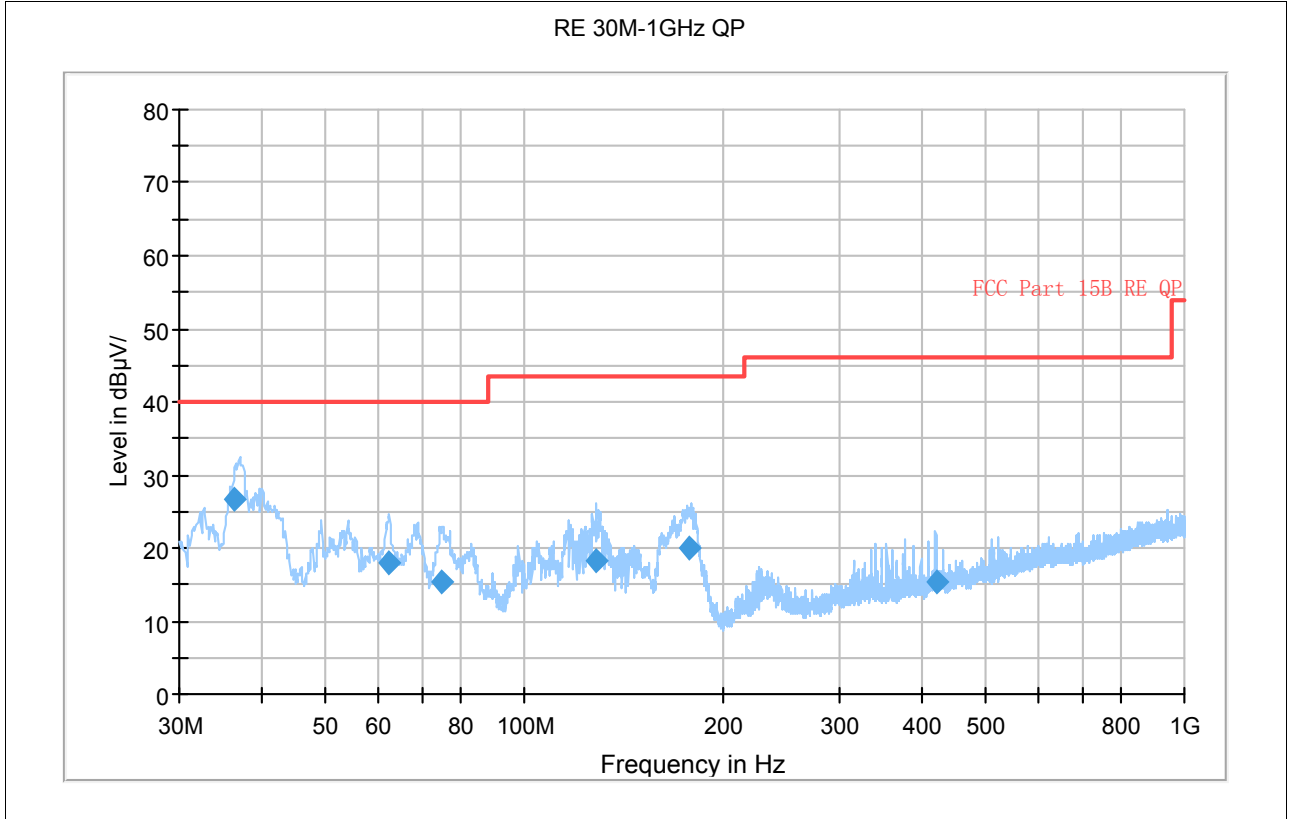


Note: Blue trace uses the peak detection Green trace uses the average detection

Radiated Emission from 3GHz to 6GHz

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EUT without charger base

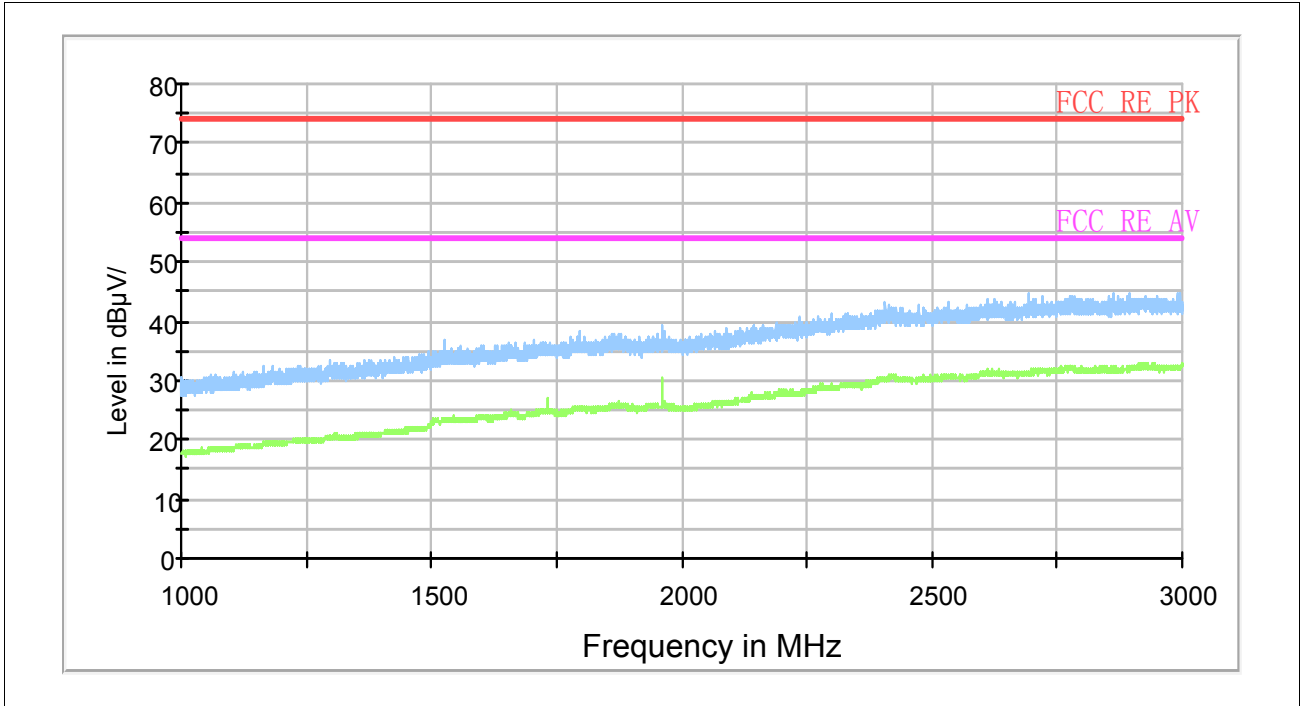


Radiated Emission from 30MHz to 1GHz

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

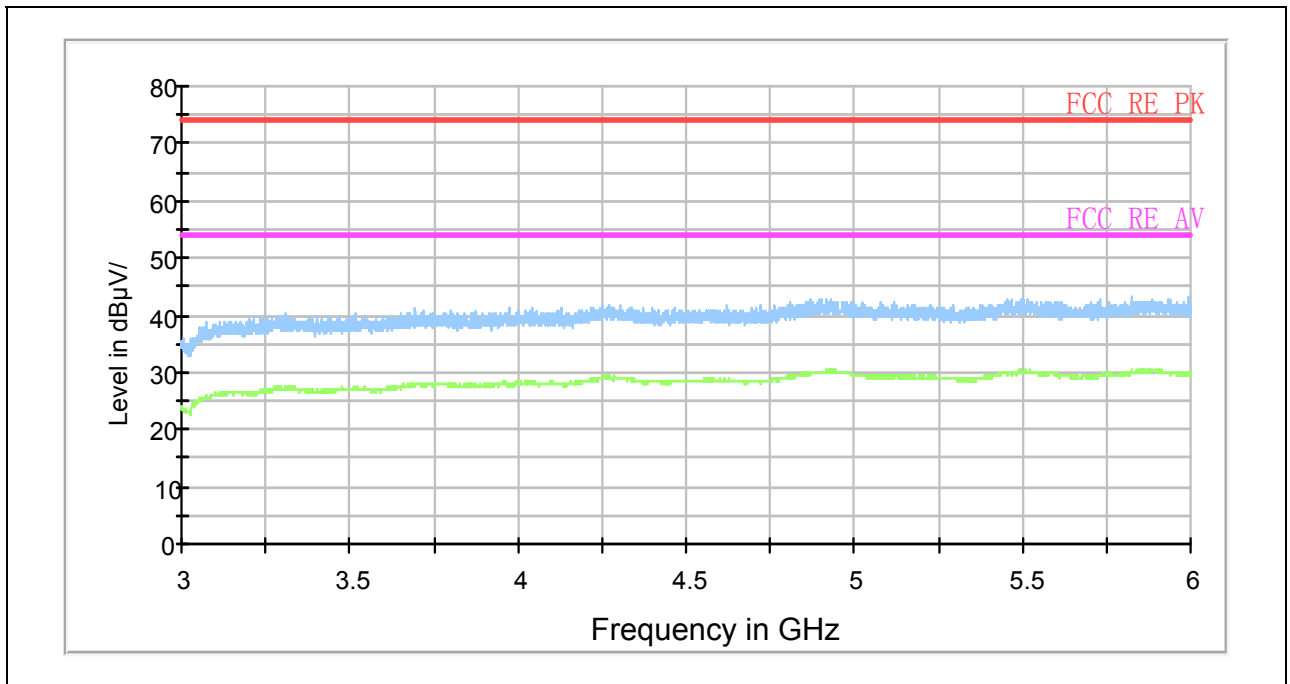
Note: all emissions level measured above 1GHz was more than 10dB below the limit

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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

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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



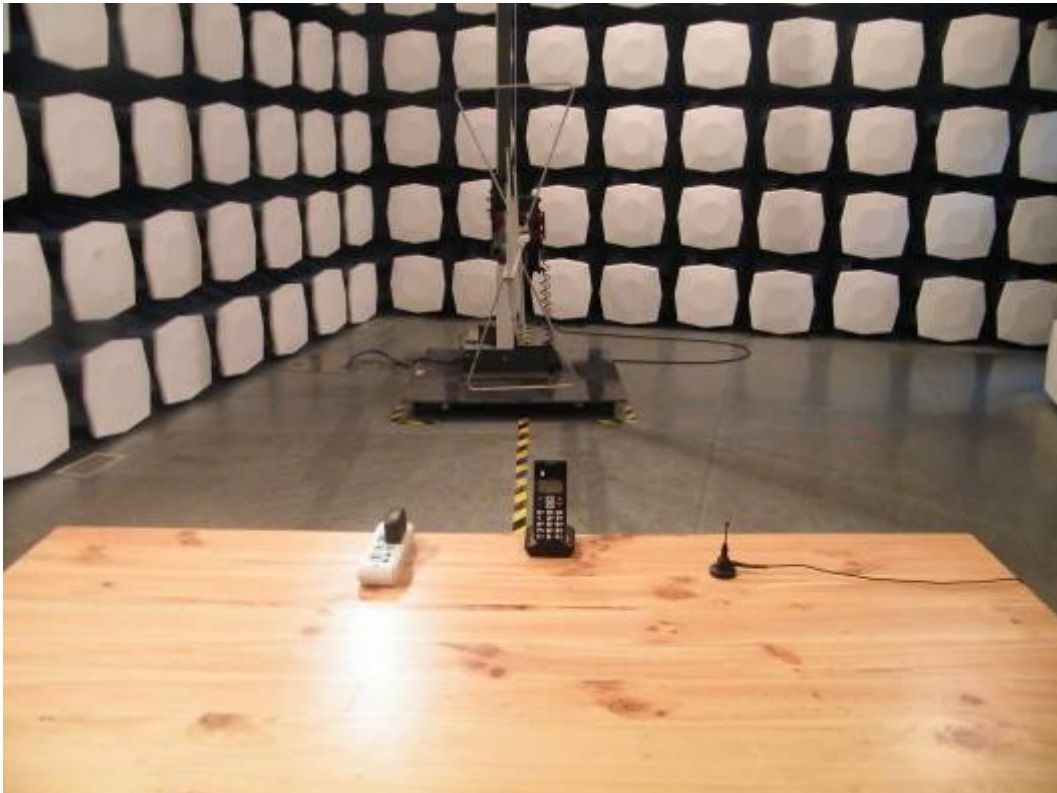
b: Battery

Picture 1 EUT and Auxiliary

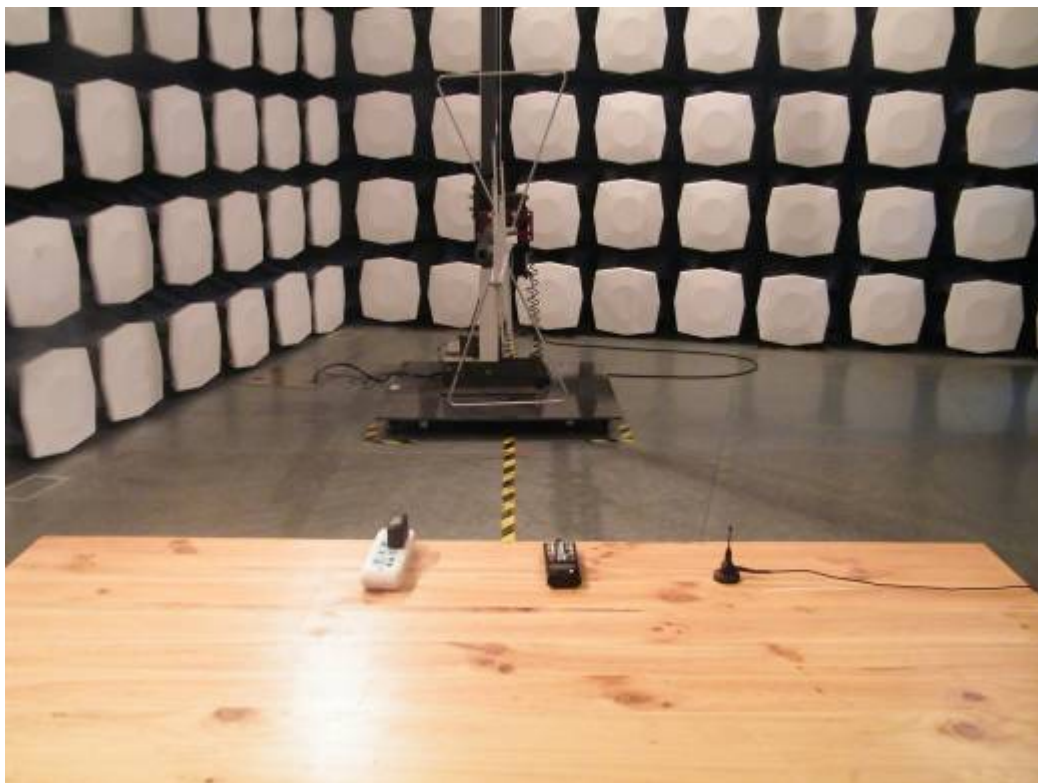
A.2 Test Setup



Picture 2: Radiated Spurious Emissions Test setup



Picture 3-1 EUT with charger base



Picture 3-2 EUT without charger base

Picture 3: Receiver Spurious Emissions Test Setup