TEST REPORT

Report Number	:	TZ0059241106FRF21
Product Name	:	4G Mobile Phone
Model/Type reference	:	M10, KM0466, M10 FLIP, AGM_M10_FLIP
FCC ID	:	2A3DR-M10
Prepared for	:	AGM MOBILE LIMITED FLAT/RM 2253 22/F HOI TAI FACTORY ESTATE TSING YEUNG CIRCUIT TUEN MUN NT HONG KONG,CHINA

Prepared By	:	Shenzhen Tongzhou Testing Co.,Ltd. 1st Floor, Building 1, Haomai High-tech Park, Huating Road 387, Dalang Street, Longhua, Shenzhen, China
Standards	:	FCC CFR Title 47 Part 22, FCC CFR Title 47 Part 24, FCC CFR Title 47 Part 27,ANSI C63.26:2015
Date of Test	:	Nov. 28, 204 ~ Jan. 17, 2025
Date of Issue	:	Apr. 02, 2025

Prepared by	:	Lena Wen (File administrators)	Lena Wen
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Approved by	:	Matte He (General Manager)	Matte He

** Report Revise Record **

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Apr. 02, 2025	Valid	Initial release

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1. SUMMARY

1.1. Client Information

Applicant	:	AGM MOBILE LIMITED
Address	:	FLAT/RM 2253 22/F HOI TAI FACTORY ESTATE TSING YEUNG CIRCUIT TUEN MUN NT HONG KONG,CHINA
Manufacturer	:	GUANGDONG AIJIEMO ELECTRONIC INDUSTRY CO., LTD
Address	:	AGM TECHNOLOGY PARK, NO.187 LIANFA ROAD, TONGQIAO TOWN, ZHONGKAI HIGH-TECH DISTRICT, HUIZHOU CITY, P.R.CHINA

1.2. Description of Device (EUT)

Product Name	:	4G Mobile Phone
Trade Mark	:	AGM
Model Number	:	M10, KM0466, M10 FLIP, AGM_M10_FLIP
Model Declaration	:	All the same except for the model name
Test Model	:	M10
Power Supply	:	DC 3.7V by Built-in Li-ion Battery
Hardware version	:	FF628-MB-V0.3
Software version	:	FF628V03

1.3. Wireless Function Tested in this Report

GSM		
GSM FCC Operation Frequency	:	GSM850 (UL: 824 – 849 MHz/DL: 869 – 894 MHz) PCS1900 (UL: 1850 – 1910 MHz/DL: 1930 – 1990 MHz)
Channel Separation	:	0.2 MHz
Modulation Technology	:	GMSK
Power Class	:	GSM850: 4 ; PCS1900: 1
Antenna Type And Gain	:	PIFA Antenna:GSM850:-2.01dBi ;PCS1900: -0.96dBi

WCDMA		
WCDMA FCC Operation Frequency	:	Band 5 (UL: 824 – 849 MHz/DL: 869 – 894 MHz) Band 4 (UL: 1710 – 1755MHz/DL:2110 – 2155 MHz) Band 2 (UL: 1850 – 1910 MHz/DL: 1930 – 1990 MHz)
Channel Separation	:	0.2 MHz
Modulation Technology	:	BPSK, QPSK
Power Class	:	Power Class 3
Antenna Type And Gain	:	PIFA Antenna:Band 5: -2.01dBi;Band 4: -1.09dBi;Band 2: -0.96dBi

Note 1: Antenna position refer to EUT Photos.
Note 2: the above information was supplied by the applicant.
Note 3: The default power level of the equipment test configuration meets the technical claim requirements

1.4. Normal Accessory setting

Fully charged battery was used during the test.

1.5. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for **FCC ID: 2A3DR-M10** filing to comply with FCC Rules.

1.6. Modifications

No modifications were implemented to meet testing criteria.

2. TEST ENVIRONMENT

2.1. Test Facility

FCC

Designation Number: CN1275

Test Firm Registration Number: 167722

Shenzhen Tongzhou Testing Co.,Ltd has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

A2LA

Certificate Number: 5463.01

Shenzhen Tongzhou Testing Co.,Ltd has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

IC

ISED#: 22033

CAB identifier: CN0099

Shenzhen Tongzhou Testing Co.,Ltd has been listed by Innovation, Science and Economic Development Canada to perform electromagnetic emission measurement.

The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.4 and CISPR 16-1-4:2010

2.2. Measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to ETSI TR 100 028 " Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics" and is documented in the Shenzhen Tongzhou Testing Co.,Ltd. quality system acc. to ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen Tongzhou Testing Co.,Ltd. is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	3.10 dB	(1)
Radiated Emission	1~18GHz	3.70 dB	(1)
Radiated Emission	18-40GHz	3.90 dB	(1)
Conducted Disturbance	0.15~30MHz	1.63 dB	(1)
Conducted Power	9KHz~18GHz	0.61 dB	(1)
Spurious RF Conducted Emission	9KHz~40GHz	1.22 dB	(1)
Band Edge Compliance of RF Emission	9KHz~40GHz	1.22 dB	(1)
Occuiped Bandwidth	9KHz~40GHz	-	(1)
Frequency Error	9KHz~40GHz	1×10^{-7}	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

3. SUMMARY OF TEST RESULTS

Test Item	FCC Rule No.	Judgement	Sample ID
Effective Radiated Power	§2.1046,22.913(a)(5)	Pass	TZ0059241106-1#
Effective (Isotropic) Radiated Power	§2.1046,§24.232(c), §27.50(d)(4)	Pass	TZ0059241106-1#
Occupied Bandwidth	§2.1049	Pass	TZ0059241106-1#
Band Edges Compliance	§2.1051, §22.917(a),§24.238(a) §27.53(h)	Pass	TZ0059241106-1#
Spurious Emission at Antenna Terminals	§2.1051, §22.917(a),§24.238(a),§27.53(h)	Pass	TZ0059241106-1#
Field Strength of Spurious Radiation	§2.1053, §22.917(a),§24.238(a),§27.53(h)	Pass	TZ0059241106-2#
Frequency Stability	§2.1055, § 22.355, §24.235, §27.54	Pass	TZ0059241106-1#
Peak to average ratio	§2.1046,§24.232(d), §27.50(d)(5),	Pass	TZ0059241106-1#

Remark: The measurement uncertainty is not included in the test result.

3.1. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15-35 ° C
Humidity:	30-60 %
Atmospheric pressure:	950-1050mbar

3.2. EUT Exercise Software

The device system configuration parameters are linked to the communication integrated tester. The manufacturer claims that the device uses the engineering command program name FF628V03. Version: V03. The device is configured with a power level according to the requirements of 3GPP. Refer to the report section 1.3 Device parameter information

4. EQUIPMENTS USED DURING THE TEST

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Due Date
1	MXA Signal Analyzer	Keysight	N9020B	MY56101792	2024-01-04	2025-01-03
1	MXA Signal Analyzer	Keysight	N9020B	MY56101792	2024-12-31	2025-12-30
2	Power Sensor	Agilent	U2021XA	MY5365004	2024-01-04	2025-01-03
2	Power Sensor	Agilent	U2021XA	MY5365004	2024-12-31	2025-12-30
3	Loop Antenna	schwarzbeck	FMZB1519 B	00023	2022-11-13	2025-11-12
4	Wideband Antenna	schwarzbeck	VULB 9163	958	2022-11-13	2025-11-12
5	Horn Antenna	schwarzbeck	BBHA 9120D	01989	2022-11-13	2025-11-12
6	EMI Test Receiver	R&S	ESCI	100849/003	2024-01-04	2025-01-03
6	EMI Test Receiver	R&S	ESCI	100849/003	2024-12-31	2025-12-30
7	Controller	MF	MF7802	N/A	N/A	N/A
8	Amplifier	schwarzbeck	BBV 9743	209	2024-01-04	2025-01-03
8	Amplifier	schwarzbeck	BBV 9743	209	2024-12-31	2025-12-30
9	Amplifier	Tonscend	TSAMP-0518SE	--	2024-01-04	2025-01-03
9	Amplifier	Tonscend	TSAMP-0518SE	--	2024-12-31	2025-12-30
10	RF Cable(below 1GHz)	HUBER+SUHNER	RG214	N/A	2024-01-04	2025-01-03
10	RF Cable(below 1GHz)	HUBER+SUHNER	RG214	N/A	2024-12-31	2025-12-30
11	RF Cable(above 1GHz)	HUBER+SUHNER	RG214	N/A	2024-01-04	2025-01-03
11	RF Cable(above 1GHz)	HUBER+SUHNER	RG214	N/A	2024-12-31	2025-12-30
12	RE test software	Tonscend	JS32-RE	V5.0.0.0	N/A	N/A
12	Test Software	Tonscend	JS1120-3	V3.2.22	N/A	N/A
14	Horn Antenna	A-INFO	LB-180400-KF	J211020657	2024-01-04	2025-01-03
14	Horn Antenna	A-INFO	LB-180400-KF	J211020657	2024-12-31	2025-12-30
15	Amplifier	Chengyi	EMC184045SE	980508	2024-09-20	2025-09-19
16	Spectrum Analyzer	R&S	FSV40	101321	2024-06-07	2025-06-06
17	UNIVERSAL RADIO COMMUNICATION	R&S	CMW500	101855	2024-01-04	2025-01-03
17	UNIVERSAL RADIO COMMUNICATION	R&S	CMW500	101855	2024-12-31	2025-12-30
18	Signal Generator	Keysight	N5182A	MY4620709	2024-01-04	2025-01-03

18	Signal Generator	Keysight	N5182A	MY4620709	2024-12-31	2025-12-30
19	Climate Chamber	KRUOMR	KRM-1000	KRM16072901	2024-01-04	2025-01-03
19	Climate Chamber	KRUOMR	KRM-1000	KRM16072901	2024-12-31	2025-12-30
20	Horn Antenna	ETS	3117	00218874	2022-11-13	2025-11-12
21	Wideband Antenna	Sunol	JB3	A020115	2022-07-03	2025-07-02
22	Power Splitter	Agilent	11667B	N/A	2022-07-03	2025-07-02
23	DC Source	Agilent	E3646A	MY40006693	2024-01-04	2025-01-03
23	DC Source	Agilent	E3646A	MY40006693	2024-12-31	2025-12-30

5. TEST CONDITIONS AND RESULTS

5.1. Conducted Output Power / E.I.R.P / E.R.P / Peak-to-Average Ratio (PAR)

5.1.1. TEST APPLICABLE

During the process of testing, the EUT was controlled via R&S Digital Radio Communication tester (CMW500) to ensure max power transmission and proper modulation. This result contains output power and EIRP measurements for the EUT. In all cases, output power is within the specified limits.

5.1.2. LIMIT

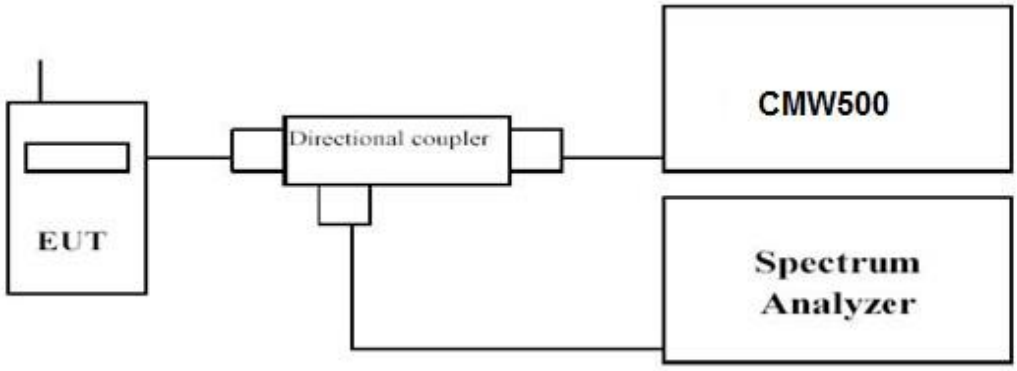
For Conducted Power
Within Tune-up Value

For Radiated Power
The following rules are for the maximum radiated power limit requirements of the product:

Mode	Nominal Peak Power
GSM 850	< 7 Watts max. ERP (38.45dBm)
PCS 1900	< 2 Watts max. EIRP (33dBm)
WCDMA Band II	< 2 Watts max. EIRP (33dBm)
WCDMA Band IV	< 1 Watts max. EIRP (30dBm)
WCDMA Band V	< 7 Watts max. ERP (38.45dBm)

For Peak-to-Average Ratio (PAR)
The Peak-to-Average Ratio (PAR) of the transmission may not exceed 13 dB.

5.1.3. TEST CONFIGURATION



5.1.4. TEST PROCEDURE

Place the EUT on a bench and set it in transmitting mode.
Connect a low loss RF cable from the antenna port to a CMW500 by an Att.
EUT Communicate with CMW500 then selects a channel for testing.
Add a correction factor to the display CMW500, and then test.
Record the Peak power(P1) and Average power(P2).
Peak-to-Average Ratio (PAR) = Peak power(P1) - Average power(P2)
EIRP = Average power(P2) + Antenna Gain(dBi), ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP-2.15dBi.

5.1.5. TEST RESULTS

Pass

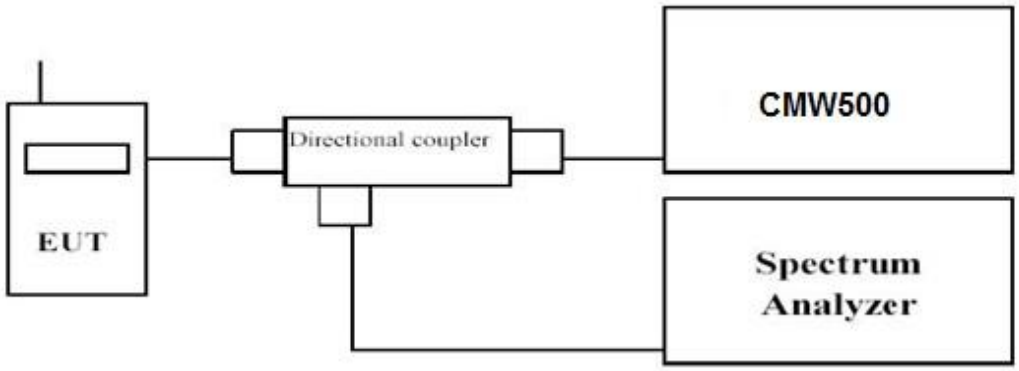
Remark:please refer to RF output power in Appendix Test data for GSM&WCDMA

5.2. Occupied Bandwidth and Emission Bandwidth

5.2.1. LIMIT

N/A

5.2.2. TEST CONFIGURATION



5.2.3. TEST PROCEDURE

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at low, middle and high channel in each band. The -26dBc Emission bandwidth was also measured and recorded.
Set RBW was set to about 1% of emission BW, VBW≥3 times RBW.
-26dBc display line was placed on the screen (or 99% bandwidth), the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace.

5.2.4. TEST RESULTS

Pass

Remark:please refer to Occupied Bandwidth in Appendix Test data for GSM&WCDMA

5.3. Band Edge compliance

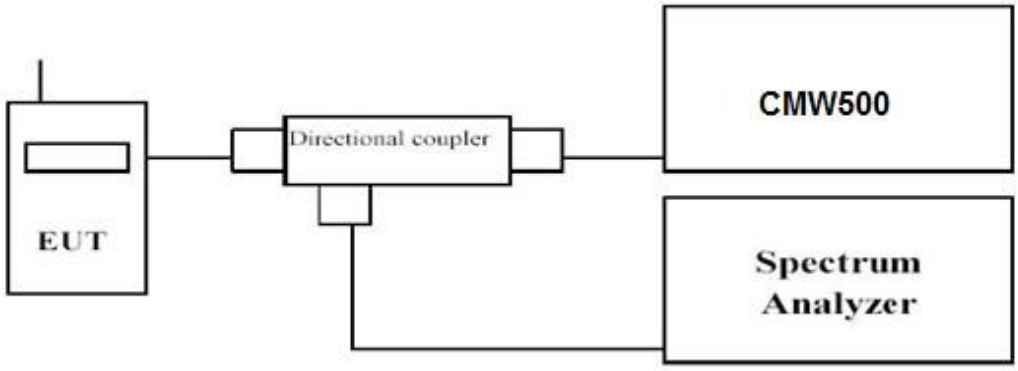
5.3.1. LIMIT

For GSM1900 and WCDMA band 2: Per §24.238(a): Out of band emissions. 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.

For GSM850 and WCDMA Band 5: Per 22.917(a): 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.

For WCDMA Band 4: Per 27.53: 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.

5.3.2. TEST CONFIGURATION



5.3.3. TEST PROCEDURE

1. The transmitter output port was connected to base station.
The RF output of EUT was connected to the power meter by RF cable and attenuator, the path loss was compensated to the results for each measurement.
Set EUT at maximum power through base station.
Select lowest and highest channels for each band and different modulation.
Measure Band edge using RMS (Average) detector by spectrum

5.3.4. TEST RESULTS

Pass

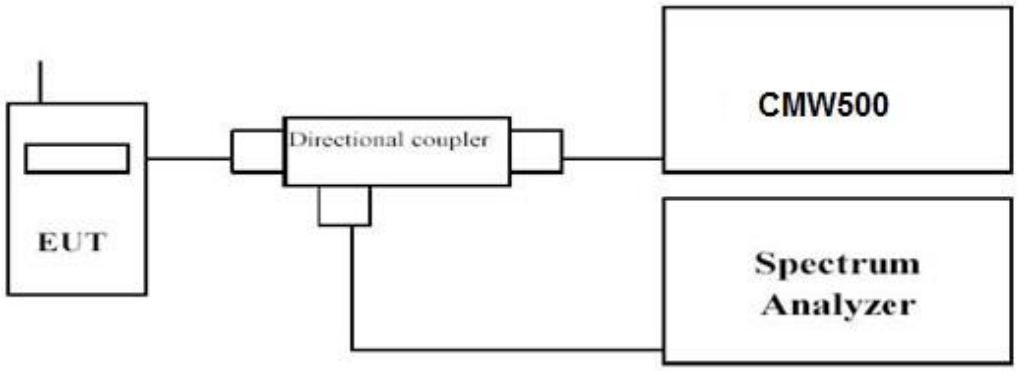
Remark:please refer to Band Edge in Appendix Test data for GSM&WCDMA

5.4. Spurious Emission on Antenna Port

5.4.1. LIMIT

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

5.4.2. TEST CONFIGURATION



5.4.3. TEST PROCEDURE

The EUT was setup according to ANSI C63.26

a. Place the EUT on a bench and set it in transmitting mode.

b. Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMW500 by a Directional Couple.

c. EUT Communicate with CMW500, then select a channel for testing.

d. Add a correction factor to the display of spectrum, and then test.

e. The resolution bandwidth of the spectrum analyzer was set sufficient scans were taken to show the out of band Emission if any up to10th harmonic.

f. Please refer to following tables for test antenna conducted emissions.

Sub range (GHz)	RBW	VBW	Sweep time (s)
0.000009~0.000015	1KHz	3KHz	Auto
0.000015~0.03	10KHz	30KHz	Auto
0.03~26	1 MHz	3 MHz	Auto

5.4.4. TEST RESULTS

Pass

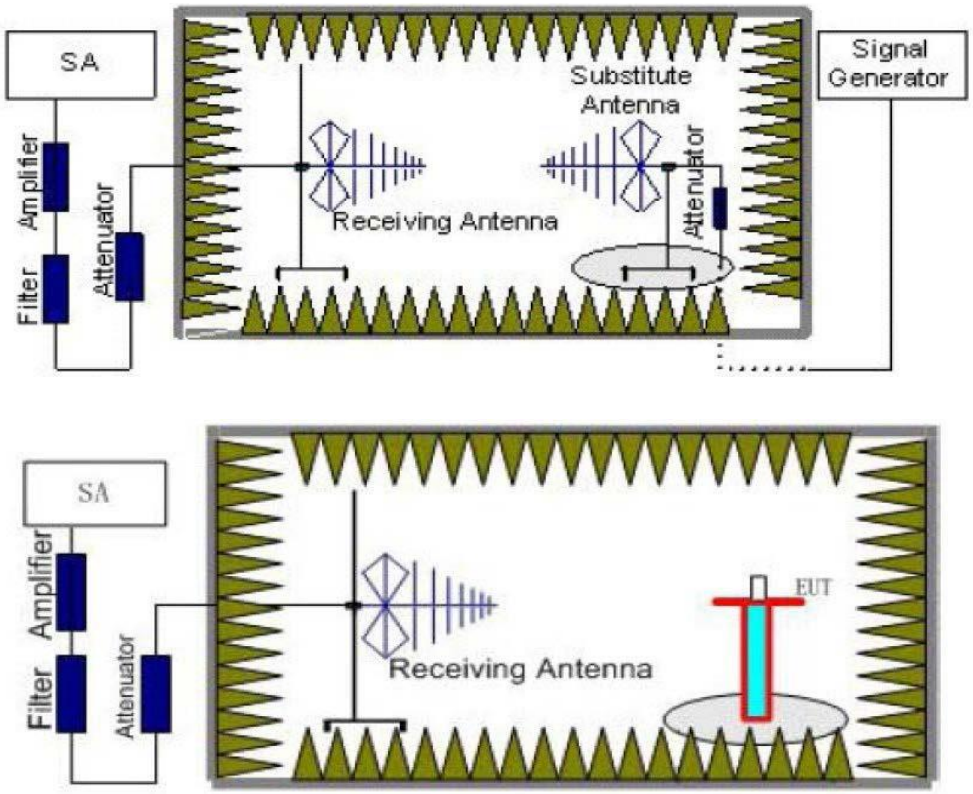
Remark:please refer to Spurious Emission on Antenna Port in Appendix Test data for GSM&WCDMA

5.5. Radiated Spurious Emission

5.5.1. LIMIT

- On any frequency outside a licensee's frequency block (e.g. A, D, B, etc.) within the USPCS spectrum, the power of any emission shall be attenuated below the transmitter power (P, in Watts) by at least 43+10Log(P) dB. The specification that emissions shall be attenuated below the transmitter power (P) by at least 43 + 10 log (P) dB, translates in the relevant power range (1 to 0.001 W) to -13 dBm.
- At 1 W the specified minimum attenuation becomes 43 dB and relative to a 30 dBm (1 W) carrier becomes a limit of -13 dBm. At 0.001 W (0 dBm) the minimum attenuation is 13 dB, which again yields a limit of -13 dBm. In this way a translation of the specification from relative to absolute terms is carried out.
- For specific criteria, please refer to the description in section 9.2 of the report for corresponding evaluation.

5.5.2. TEST CONFIGURATION



5.5.3. TEST PROCEDURE

1. Setup as illustrated above the DUT placed on the 0.8m height (for frequencies < 1GHz) or 1.5m (for frequencies > 1GHz) of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power.
2. A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. 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.
3. The EUT is then put into continuously transmitting mode at its maximum power level during the test.Set Test Receiver or Spectrum RBW=1MHz,VBW=3MHz, And the maximum value of the receiver should be recorded as (P_r).
4. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (P_{Mea}) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (P_r). The power of signal source (P_{Mea}) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
5. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (P_{cl}) ,the Substitution Antenna Gain (G_a) and the Amplifier Gain (P_{Ag}) should be recorded after test.
The measurement results are obtained as described below: Power(EIRP)=P_{Mea}+ P_{Ag} - P_{cl} + G_a
It can omit power amplifier if signal generator level meets requirement;
6. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.
7. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP -2.15dBi.
8. In order to make sure test results more clearly,we set frequency range and sweep time for difference frequency range as follows table:

Subrange (GHz)	RBW	VBW	Sweep time (s)
0.00009~0.15	1KHz	3KHz	30
0.00015~0.03	10KHz	30KHz	10
0.03~1	100KHz	300KHz	10
1~2	1 MHz	3 MHz	2
2~5	1 MHz	3 MHz	3
5~8	1 MHz	3 MHz	3
8~10th	1 MHz	3 MHz	3

5.5.4. TEST LIMITS

According to rules specify 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.
The specification that emissions shall be attenuated below the transmitter power (P) by at least 43 + 10 log (P) dB, translates in the relevant power range (1 to 0.001 W) to -13 dBm. At 1 W the specified minimum attenuation becomes 43 dB and relative to a 30 dBm (1 W) carrier becomes a limit of -13 dBm. At 0.001 W (0 dBm) the minimum attenuation is 13 dB, which again yields a limit of -13 dBm. In this way a translation of the specification from relative to absolute terms is carried out.

Channel	Frequency Range	Verdict
Low	9 KHz – 10th GHz	PASS
Middle	9 KHz – 10th GHz	PASS
High	9 KHz – 10th GHz	PASS

5.5.5. TEST RESULTS

Pass

Temperature	24.8℃	Humidity	58%
Test Engineer	Anna Hu		

Remark:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result – Limit
4. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test. Subsequently, only the worst case emissions are reported.

The measurement Below 1GHz data as follows:

GSM 850							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
GSM_ Lowest Channel							
1	154.759	-66.31	15.52	-50.79	-13.00	-37.79	Horizontal
2	231.144	-62.43	16.75	-45.68	-13.00	-32.68	Horizontal
3	710.963	-59.42	19.35	-40.07	-13.00	-27.07	Horizontal
4	51.708	-64.65	10.44	-54.21	-13.00	-41.21	Vertical
5	426.340	-61.75	17.75	-44.00	-13.00	-31.00	Vertical
6	511.247	-59.08	18.66	-40.42	-13.00	-27.42	Vertical
GSM_ Middle Channel							
1	26.735	-63.12	9.78	-53.34	-13.00	-40.34	Horizontal
2	174.759	-62.77	13.75	-49.02	-13.00	-36.02	Horizontal
3	253.144	-60.75	16.75	-44.00	-13.00	-31.00	Horizontal
4	49.233	-63.64	10.23	-53.41	-13.00	-40.41	Vertical
5	412.340	-61.41	17.75	-43.66	-13.00	-30.66	Vertical
6	503.730	-58.76	18.02	-40.74	-13.00	-27.74	Vertical
GSM_ Highest Channel							
1	166.759	-63.24	13.75	-49.49	-13.00	-36.49	Horizontal
2	217.144	-62.15	16.75	-45.40	-13.00	-32.40	Horizontal
3	653.435	-57.97	19.01	-38.96	-13.00	-25.96	Horizontal
4	42.233	-61.32	10.23	-51.09	-13.00	-38.09	Vertical
5	401.340	-60.73	17.75	-42.98	-13.00	-29.98	Vertical
6	455.730	-57.07	18.02	-39.05	-13.00	-26.05	Vertical

PCS 1900							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
GSM_ Lowest Channel							
1	159.211	-65.11	15.52	-49.59	-13.00	-36.59	Horizontal
2	240.103	-61.03	16.75	-44.28	-13.00	-31.28	Horizontal
3	754.536	-57.89	19.35	-38.54	-13.00	-25.54	Horizontal
4	46.152	-63.51	10.44	-53.07	-13.00	-40.07	Vertical
5	433.263	-59.29	17.75	-41.54	-13.00	-28.54	Vertical
6	502.741	-57.93	18.66	-39.27	-13.00	-26.27	Vertical
GSM_ Middle Channel							
1	31.263	-62.66	9.78	-52.88	-13.00	-39.88	Horizontal
2	159.117	-63.47	13.75	-49.72	-13.00	-36.72	Horizontal
3	240.012	-62.08	16.75	-45.33	-13.00	-32.33	Horizontal
4	43.136	-63.97	10.23	-53.74	-13.00	-40.74	Vertical
5	433.256	-62.28	17.75	-44.53	-13.00	-31.53	Vertical
6	498.227	-59.78	18.02	-41.76	-13.00	-28.76	Vertical
GSM_ Highest Channel							
1	159.413	-63.28	13.75	-49.53	-13.00	-36.53	Horizontal
2	240.236	-61.68	16.75	-44.93	-13.00	-31.93	Horizontal
3	679.415	-57.86	19.01	-38.85	-13.00	-25.85	Horizontal
4	43.236	-63.51	10.23	-53.28	-13.00	-40.28	Vertical
5	433.778	-60.31	17.75	-42.56	-13.00	-29.56	Vertical
6	498.635	-57.69	18.02	-39.67	-13.00	-26.67	Vertical

WCDMA Band 2							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
RMC 12.2kbps_ Lowest Channel							
1	159.263	-65.89	15.52	-50.37	-13.00	-37.37	Horizontal
2	240.012	-63.12	16.75	-46.37	-13.00	-33.37	Horizontal
3	789.963	-58.55	19.35	-39.20	-13.00	-26.20	Horizontal
4	52.708	-65.24	10.44	-54.80	-13.00	-41.80	Vertical
5	413.340	-61.46	17.75	-43.71	-13.00	-30.71	Vertical
6	512.247	-59.17	18.66	-40.51	-13.00	-27.51	Vertical
RMC 12.2kbps_ Middle Channel							
1	45.735	-62.85	9.78	-53.07	-13.00	-40.07	Horizontal
2	163.759	-64.41	13.75	-50.66	-13.00	-37.66	Horizontal
3	277.144	-61.30	16.75	-44.55	-13.00	-31.55	Horizontal
4	26.233	-63.97	10.23	-53.74	-13.00	-40.74	Vertical
5	369.340	-63.19	17.75	-45.44	-13.00	-32.44	Vertical
6	551.730	-58.57	18.02	-40.55	-13.00	-27.55	Vertical
RMC 12.2kbps_ Highest Channel							
1	152.636	-63.81	13.75	-50.06	-13.00	-37.06	Horizontal
2	325.144	-62.71	16.75	-45.96	-13.00	-32.96	Horizontal
3	587.435	-60.23	19.01	-41.22	-13.00	-28.22	Horizontal
4	36.233	-64.10	10.23	-53.87	-13.00	-40.87	Vertical
5	493.340	-62.00	17.75	-44.25	-13.00	-31.25	Vertical
6	511.730	-68.39	18.02	-50.37	-13.00	-37.37	Vertical

WCDMA Band 4							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
RMC 12.2kbps_ Lowest Channel							
1	159.525	-66.95	15.52	-51.43	-13.00	-38.43	Horizontal
2	240.632	-62.96	16.75	-46.21	-13.00	-33.21	Horizontal
3	754.125	-61.11	19.35	-41.76	-13.00	-28.76	Horizontal
4	46.745	-65.86	10.44	-55.42	-13.00	-42.42	Vertical
5	433.136	-61.78	17.75	-44.03	-13.00	-31.03	Vertical
6	502.263	-60.61	18.66	-41.95	-13.00	-28.95	Vertical
RMC 12.2kbps_ Middle Channel							
1	31.236	-63.83	9.78	-54.05	-13.00	-41.05	Horizontal
2	159.255	-64.04	13.75	-50.29	-13.00	-37.29	Horizontal
3	240.152	-62.68	16.75	-45.93	-13.00	-32.93	Horizontal
4	43.213	-64.73	10.23	-54.50	-13.00	-41.50	Vertical
5	433.257	-64.13	17.75	-46.38	-13.00	-33.38	Vertical
6	498.325	-60.08	18.02	-42.06	-13.00	-29.06	Vertical
RMC 12.2kbps_ Highest Channel							
1	159.116	-64.01	13.75	-50.26	-13.00	-37.26	Horizontal
2	240.105	-62.87	16.75	-46.12	-13.00	-33.12	Horizontal
3	679.264	-60.08	19.01	-41.07	-13.00	-28.07	Horizontal
4	43.136	-64.23	10.23	-54.00	-13.00	-41.00	Vertical
5	433.525	-63.22	17.75	-45.47	-13.00	-32.47	Vertical
6	498.163	-59.54	18.02	-41.52	-13.00	-28.52	Vertical

WCDMA Band 5							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
RMC 12.2kbps_ Lowest Channel							
1	159.759	-65.73	15.52	-50.21	-13.00	-37.21	Horizontal
2	240.144	-62.54	16.75	-45.79	-13.00	-32.79	Horizontal
3	754.963	-59.90	19.35	-40.55	-13.00	-27.55	Horizontal
4	46.708	-65.16	10.44	-54.72	-13.00	-41.72	Vertical
5	433.340	-61.22	17.75	-43.47	-13.00	-30.47	Vertical
6	502.247	-59.53	18.66	-40.87	-13.00	-27.87	Vertical
RMC 12.2kbps_ Middle Channel							
1	31.735	-62.70	9.78	-52.92	-13.00	-39.92	Horizontal
2	159.759	-62.94	13.75	-49.19	-13.00	-36.19	Horizontal
3	240.144	-62.31	16.75	-45.56	-13.00	-32.56	Horizontal
4	43.233	-63.78	10.23	-53.55	-13.00	-40.55	Vertical
5	433.340	-62.38	17.75	-44.63	-13.00	-31.63	Vertical
6	498.730	-59.13	18.02	-41.11	-13.00	-28.11	Vertical
RMC 12.2kbps_ Highest Channel							
1	159.759	-63.58	13.75	-49.83	-13.00	-36.83	Horizontal
2	240.144	-61.98	16.75	-45.23	-13.00	-32.23	Horizontal
3	679.435	-59.96	19.01	-40.95	-13.00	-27.95	Horizontal
4	43.233	-64.07	10.23	-53.84	-13.00	-40.84	Vertical
5	433.340	-61.85	17.75	-44.10	-13.00	-31.10	Vertical
6	498.730	-59.89	18.02	-41.87	-13.00	-28.87	Vertical

The measurement Above 1GHz data as follows:

GSM 850							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
GSM_ Lowest Channel							
1	1648.400	-88.61	23.50	-65.11	-13.00	-52.11	Horizontal
2	2472.600	-88.08	29.47	-58.61	-13.00	-45.61	Horizontal
3	1648.400	-89.57	23.72	-65.85	-13.00	-52.85	Vertical
4	2472.600	-88.68	29.47	-59.21	-13.00	-46.21	Vertical
GSM_ Middle Channel							
1	1673.200	-89.15	23.50	-65.65	-13.00	-52.65	Horizontal
2	2509.800	-90.91	29.47	-61.44	-13.00	-48.44	Horizontal
3	1673.200	-88.71	23.72	-64.99	-13.00	-51.99	Vertical
4	2509.800	-92.94	29.47	-63.47	-13.00	-50.47	Vertical
GSM_ Highest Channel							
1	1697.600	-91.83	23.50	-68.33	-13.00	-55.33	Horizontal
2	2546.400	-93.28	29.47	-63.81	-13.00	-50.81	Horizontal
3	1697.600	-93.44	23.72	-69.72	-13.00	-56.72	Vertical
4	2546.400	-92.79	29.47	-63.32	-13.00	-50.32	Vertical

PCS 1900							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
GSM_ Lowest Channel							
1	3700.400	-87.14	32.11	-55.03	-13.00	-42.03	Horizontal
2	5550.600	-86.07	33.21	-52.86	-13.00	-39.86	Horizontal
3	3700.400	-87.90	32.09	-55.81	-13.00	-42.81	Vertical
4	5550.600	-86.20	34.03	-52.17	-13.00	-39.17	Vertical
GSM_ Middle Channel							
1	3760.000	-82.38	32.11	-50.27	-13.00	-37.27	Horizontal
2	5640.000	-84.75	33.21	-51.54	-13.00	-38.54	Horizontal
3	3760.000	-89.18	32.09	-57.09	-13.00	-44.09	Vertical
4	5640.000	-86.40	34.03	-52.37	-13.00	-39.37	Vertical
GSM_ Highest Channel							
1	3819.600	-88.01	32.11	-55.90	-13.00	-42.90	Horizontal
2	5729.400	-87.07	33.21	-53.86	-13.00	-40.86	Horizontal
3	3819.600	-90.72	32.09	-58.63	-13.00	-45.63	Vertical
4	5729.400	-88.93	34.03	-54.90	-13.00	-41.90	Vertical

WCDMA Band 2							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
RMC 12.2kbps_ Lowest Channel							
1	3704.800	-82.41	31.09	-51.32	-13.00	-38.32	Horizontal
2	5557.200	-90.45	34.14	-56.31	-13.00	-43.31	Horizontal
3	3704.800	-80.70	33.13	-47.57	-13.00	-34.57	Vertical
4	5557.200	-86.13	32.66	-53.47	-13.00	-40.47	Vertical
RMC 12.2kbps_ Middle Channel							
1	3760.000	-79.61	31.09	-48.52	-13.00	-35.52	Horizontal
2	5640.000	-88.01	34.14	-53.87	-13.00	-40.87	Horizontal
3	3760.000	-79.88	33.13	-46.75	-13.00	-33.75	Vertical
4	5640.000	-85.23	32.66	-52.57	-13.00	-39.57	Vertical
RMC 12.2kbps_ Highest Channel							
1	3815.200	-82.95	31.09	-51.86	-13.00	-38.86	Horizontal
2	5722.800	-85.87	34.14	-51.73	-13.00	-38.73	Horizontal
3	3815.200	-82.68	33.13	-49.55	-13.00	-36.55	Vertical
4	5722.800	-83.58	32.66	-50.92	-13.00	-37.92	Vertical

WCDMA Band 4							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
RMC 12.2kbps_ Lowest Channel							
1	3424.800	-90.14	32.11	-58.03	-13.00	-45.03	Horizontal
2	5137.200	-88.03	33.21	-54.82	-13.00	-41.82	Horizontal
3	3424.800	-90.28	32.09	-58.19	-13.00	-45.19	Vertical
4	5137.200	-88.00	34.03	-53.97	-13.00	-40.97	Vertical
RMC 12.2kbps_ Middle Channel							
1	3464.800	-89.16	32.11	-57.05	-13.00	-44.05	Horizontal
2	5197.200	-87.22	33.21	-54.01	-13.00	-41.01	Horizontal
3	3464.800	-90.32	32.09	-58.23	-13.00	-45.23	Vertical
4	5197.200	-87.14	34.03	-53.11	-13.00	-40.11	Vertical
RMC 12.2kbps_ Highest Channel							
1	3505.200	-88.58	32.11	-56.47	-13.00	-43.47	Horizontal
2	5257.800	-86.24	33.21	-53.03	-13.00	-40.03	Horizontal
3	3505.200	-88.94	32.09	-56.85	-13.00	-43.85	Vertical
4	5257.800	-86.35	34.03	-52.32	-13.00	-39.32	Vertical

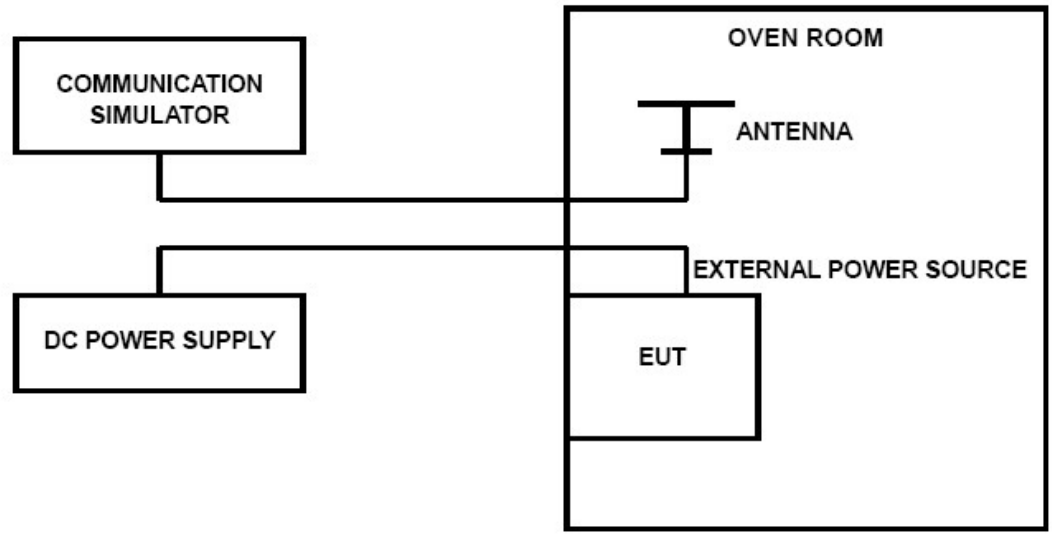
WCDMA Band 5							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
RMC 12.2kbps_ Lowest Channel							
1	1652.800	-84.04	23.12	-60.92	-13.00	-47.92	Horizontal
2	2479.200	-86.48	28.47	-58.01	-13.00	-45.01	Horizontal
3	1652.800	-83.20	23.12	-60.08	-13.00	-47.08	Vertical
4	2479.200	-83.36	28.47	-54.89	-13.00	-41.89	Vertical
RMC 12.2kbps_ Middle Channel							
1	1672.800	-81.41	23.12	-58.29	-13.00	-45.29	Horizontal
2	2509.200	-84.03	28.47	-55.56	-13.00	-42.56	Horizontal
3	1672.800	-82.90	23.12	-59.78	-13.00	-46.78	Vertical
4	2509.200	-82.42	28.47	-53.95	-13.00	-40.95	Vertical
RMC 12.2kbps_ Highest Channel							
1	1693.200	-80.57	23.12	-57.45	-13.00	-44.45	Horizontal
2	2539.800	-82.39	28.47	-53.92	-13.00	-40.92	Horizontal
3	1693.200	-80.87	23.12	-57.75	-13.00	-44.75	Vertical
4	2539.800	-80.99	28.47	-52.52	-13.00	-39.52	Vertical

5.6. Frequency Stability under Temperature & Voltage Variations

5.6.1. LIMIT

For Part 22, the frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5 ppm) of the center frequency. For Part 24 and Part 27, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

5.6.2. TEST CONFIGURATION



5.6.3. TEST PROCEDURE

The EUT was setup according to ANSI C63.26.

5.6.4. Frequency Stability Under Temperature Variations:

In order to measure the carrier frequency under the condition of AFC lock, it is necessary to make measurements with the EUT in a “call mode”. This is accomplished with the use of R&S CMW500 DIGITAL RADIO COMMUNICATION TESTER.

1. Measure the carrier frequency at room temperature.
2. Subject the EUT to overnight soak at -30℃.
3. With the EUT, powered via nominal voltage, connected to the CMW500 and in a simulated call on middle channel for Specific band, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
4. Repeat the above measurements at 10℃ increments from -30℃ to +50℃. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
5. Re-measure carrier frequency at room temperature with nominal voltage. Vary supply voltage from minimum voltage to maximum voltage, in 0.1Volt increments re-measuring carrier frequency at each voltage. Pause at nominal voltage for 1.5 hours unpowered, to allow any self-heating to stabilize, beforecontinuing.
6. Subject the EUT to overnight soak at +50℃.
7. With the EUT, powered via nominal voltage, connected to the CMW500 and in a simulated call on the centre channel, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
8. Repeat the above measurements at 10 ℃ increments from +50℃ to -30℃. Allow at least 1.5 hours at each temperature, unpowered, before making measurements
9. At all temperature levels hold the temperature to +/- 0.5℃ during the measurement procedure.

5.6.5. Frequency Stability Under Voltage Variations:

Set chamber temperature to 20℃. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.
Reduce the input voltage to specify extreme voltage variation (±15%) and endpoint, record the maximum frequency change.

5.6.6. TEST RESULTS

Pass

Remark:please refer to Frequency Stability in Appendix Test data for GSM&WCDMA

6. TEST SETUP PHOTOS OF THE EUT

Please refer to separated files for Test Setup Photos of the EUT.

7. EXTERNAL PHOTOS OF THE EUT

Please refer to separated files for External Photos of the EUT.

8. INTERNAL PHOTOS OF THE EUT

Please refer to separated files for Internal Photos of the EUT.

----------THE END OF REPORT----------