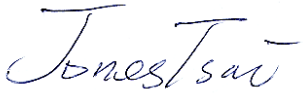
FCC RF Test Report

APPLICANT	:	**CT Asia (HK) Ltd.**
EQUIPMENT	:	**SMART PHONE**
BRAND NAME	:	**BLU**
MODEL NAME	:	**STUDIO G PLUS**
FCC ID	:	**YHLBLUSTGPLUS**
STANDARD	:	**FCC 47 CFR Part 2, 22(H), 24(E), 27(L)**
CLASSIFICATION	:	**PCS Licensed Transmitter Held to Ear (PCE)**

The product was received on Sep. 25, 2015 and testing was completed on Oct. 07, 2015. We, SPORTON INTERNATIONAL (SHENZHEN) INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA / EIA-603-C-2004 and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL (SHENZHEN) INC., the test report shall not be reproduced except in full.

Reviewed by: Joseph Lin / Supervisor



Approved by: Jones Tsai / Manager

Testing Laboratory
2353

SPORTON INTERNATIONAL (SHENZHEN) INC.
1F & 2F, Building A, Morning Business Center, No. 4003 ShiGu Rd., Xili Town, Nanshan District, Shenzhen, Guangdong, P. R. China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG592508	Rev. 01	Initial issue of report	Oct. 16, 2015

SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.4	§2.1046	RSS-132 (5.4) RSS-133 (6.4) RSS-139 (6.5)	Conducted Output Power	Reporting Only	PASS	-
3.5	§24.232(d)	RSS-132 (5.4) RSS-133 (6.4) RSS-139 (6.5)	Peak-to-Average Ratio	< 13 dB	PASS	-
3.6	§2.1049 §22.917(b) §24.238(b) §27.53(g)	RSS-GEN(6.6) RSS-132(3.1) RSS-133(3.1) RSS-139 (3.1)	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §22.917(a) §24.238(a) §27.53(h)	RSS-132 (5.5) RSS-133 (6.5) RSS-139 (6.6)	Band Edge Measurement	< 43+10log10(P[Watts])	PASS	-
3.8	§2.1051 §22.917(a) §24.238(a) §27.53(h)	RSS-132 (5.5) RSS-133 (6.5) RSS-139 (6.6)	Conducted Emission	< 43+10log10(P[Watts])	PASS	-
3.9	§2.1055 §22.355	RSS-GEN(6.11) RSS-132 (5.3)	Frequency Stability for Temperature & Voltage	< 2.5 ppm for Part 22	PASS	-
	§2.1055 §24.235 §27.54	RSS-GEN(6.11) RSS-133 (6.3) RSS-139 (6.4)		Within Authorized Band		
4.4	§22.913(a)(2)	RSS-132(5.4) SRSP-503(5.1.3)	Effective Radiated Power	< 7 Watts	PASS	-
	§24.232(c)	RSS-133 (6.4) SRSP-510(5.1.2)	Equivalent Isotropic Radiated Power	< 2 Watts	PASS	-
	§27.50(d)(4)	RSS-139 (6.5) SRSP-513(5.1.2)	Equivalent Isotropic Radiated Power	< 1 Watts	PASS	-
4.5	§2.1053 §22.917(a) §24.238(a) §27.53(h)	RSS-132 (5.5) RSS-133 (6.5) RSS-139 (6.6)	Field Strength of Spurious Radiation	< 43+10log10(P[Watts])	PASS	Under limit 27.22 dB at 2472.600 MHz

1 General Description

1.1 Applicant

CT Asia (HK) Ltd.
Unit1309-11, 13th Floor 9 Wing Hong Street Cheung Sha Wan Kowloon, Hong Kong

1.2 Manufacturer

CT Asia (HK) Ltd.
Unit1309-11, 13th Floor 9 Wing Hong Street Cheung Sha Wan Kowloon, Hong Kong

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	SMART PHONE
Brand Name	BLU
Model Name	STUDIO G PLUS
FCC ID	YHLBLUSTGPLUS
EUT supports Radios application	GSM/GPRS/EGPRS(Downlink Only)/ WCDMA/HSPA/HSPA+(Downlink Only) WLAN 2.4GHz 802.11b/g/n HT20/HT40 Bluetooth v3.0 + EDR/Bluetooth v4.0 LE
IMEI Code	Conducted: 868455018520582/868455018522588 Radiation: 868455018521267/868455018523263 ERP&EIRP: 868455018521267/868455018523263
HW Version	V1.1
SW Version	BLU_S510_V03_GENERIC
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification subjective to this standard

Product Specification subjective to this standard	
Tx Frequency	**GSM/GPRS/EDGE:** 850: 824.2 MHz ~ 848.8 MHz 1900: 1850.2 MHz ~ 1909.8MHz **WCDMA:** Band V: 826.4 MHz ~ 846.6 MHz Band II: 1852.4 MHz ~ 1907.6 MHz Band IV: 1712.4 MHz ~ 1752.6 MHz
Rx Frequency	**GSM/GPRS/EDGE:** 850: 869.2 MHz ~ 893.8 MHz 1900: 1930.2 MHz ~ 1989.8 MHz **WCDMA:** Band V: 871.4 MHz ~ 891.6 MHz Band II: 1932.4 MHz ~ 1987.6 MHz Band IV: 2112.4 MHz ~ 2152.6 MHz
Maximum Output Power to Antenna	**GSM/GPRS/EDGE:** 850: 32.64 dBm 1900: 29.83 dBm **WCDMA:** Band V: 22.69 dBm Band II: 22.60 dBm Band IV: 22.83 dBm
Antenna Type	PIFA Antenna
Type of Modulation	GSM: GMSK GPRS: GMSK EDGE: GMSK / 8PSK WCDMA : QPSK (Uplink) HSDPA : QPSK (Uplink) HSUPA : QPSK (Uplink) HSPA+ : 16QAM (Downlink Only)

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Maximum ERP/EIRP Power, Frequency Tolerance, and Emission Designator

FCC Rule	System	Type of Modulation	Maximum ERP/EIRP (W)	Frequency Tolerance (ppm)	Emission Designator
Part 22	GSM850 GSM	GMSK	0.1660	0.0155 ppm	248KGXW
Part 22	WCDMA Band V RMC 12.2Kbps	QPSK	0.0228	0.0203 ppm	4M16F9W
Part 24	GSM1900 GSM	GMSK	0.4178	0.0069 ppm	249KGXW
Part 24	WCDMA Band II RMC 12.2Kbps	QPSK	0.0607	0.0144 ppm	4M17F9W
Part 27	WCDMA Band IV RMC 12.2Kbps	QPSK	0.0895	0.0040 ppm	4M17F9W

1.7 Testing Location

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.
Test Site Location	1F & 2F, Building A, Morning Business Center, No. 4003 ShiGu Rd., Xili Town, Nanshan District, Shenzhen, Guangdong, P. R. China TEL: +86-755-8637-9589 FAX: +86-755-8637-9595
Test Site No.	**Sporton Site No.**
	TH01-SZ

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.	
Test Site Location	No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan warehouse, Nanshan District, Shenzhen, Guangdong, P. R. China TEL: +86-755- 3320-2398	
Test Site No.	**Sporton Site No.**	**FCC/IC Registration No.**
	03CH01-SZ	831040/4086F

Note: The test site complies with ANSI C63.4 2009 requirement.

1.8 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 2, 22(H), 24(E), 27(L)
- ANSI / TIA / EIA-603-C-2004
- FCC KDB 971168 D01 Power Meas. License Digital Systems v02r02
- IC RSS-132 Issue 3
- IC RSS-133 Issue 6
- IC RSS-139 Issue 3
- IC RSS-Gen Issue 4

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

2.1 Test Mode

Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas. License Digital Systems v02r02 with maximum output power.

Radiated emissions were investigated as following frequency range:

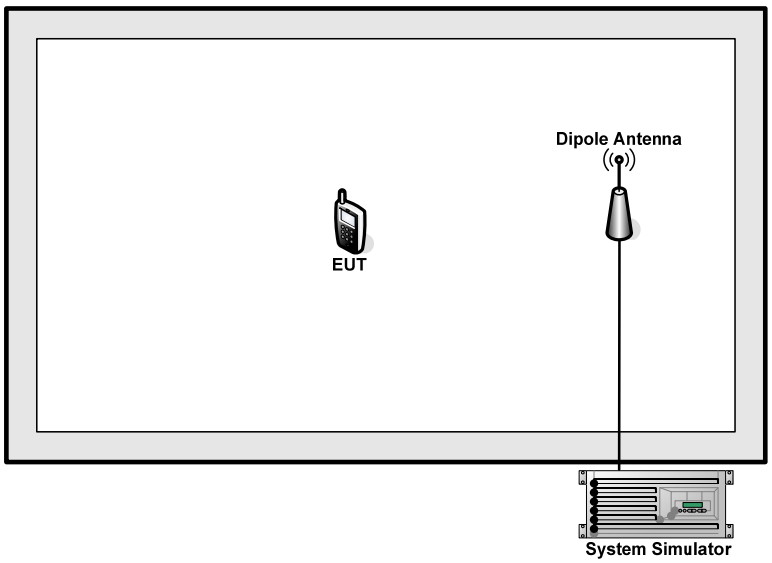
1. 30 MHz to 9000 MHz for GSM850 and WCDMA Band V.
2. 30 MHz to 18000 MHz for WCDMA Band IV.
3. 30 MHz to 19000 MHz for GSM1900 and WCDMA Band II.

All modes and data rates and positions were investigated.

Test modes are chosen to be reported as the worst case configuration below:

Test Modes		
Band	**Radiated TCs**	**Conducted TCs**
GSM 850	■ GSM Link	■ GSM Link
GSM 1900	■ GSM Link	■ GSM Link
WCDMA Band V	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link
WCDMA Band II	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link
WCDMA Band IV	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	DC Power Supply	TOPWORD	3303DR	N/A	N/A	Unshielded, 1.8 m

2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between RF conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level will be exactly the RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

The following shows an offset computation example with RF cable loss 4.5 dB and a 10dB attenuator.

Example :

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 4.5 + 10 = 14.5 (dB)

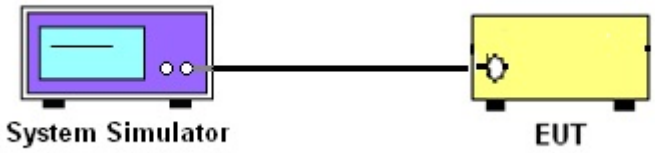
3 Conducted Test Result

3.1 Measuring Instruments

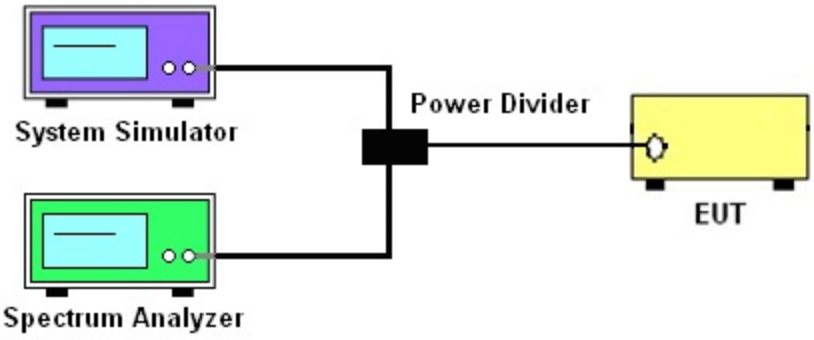
See list of measuring instruments of this test report.

3.2 Test Setup

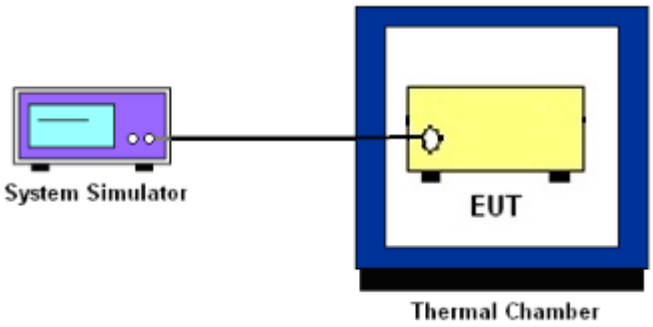
3.2.1 Conducted Output Power



3.2.2 Peak-to-Average Ratio, Occupied Bandwidth, Conducted Band-Edge and Conducted Spurious Emission



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power

3.4.1 Description of the Conducted Output Power

A system simulator was used to establish communication with the EUT. Its parameters were set to enforce EUT transmitting at the maximum power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

3.4.2 Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure the maximum burst average power for GSM and maximum average power for other modulation signal.

3.5 Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

3.5.2 Test Procedures

1. The testing follows FCC KDB 971168 D01 v02r02 Section 5.7.1.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. Set EUT to transmit at maximum output power.
4. When the duty cycle is less than 98%, then signal gating will be implemented on the spectrum analyzer by triggering from the system simulator.
5. Set the CCDF (Complementary Cumulative Distribution Function) option of the spectrum analyzer.

Record the maximum PAPR level associated with a probability of 0.1%.

3.6 99% Occupied Bandwidth and 26dB Bandwidth Measurement

3.6.1 Description of 99% Occupied Bandwidth and 26dB Bandwidth Measurement

The 99% occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The emission bandwidth is defined as the width of the signal between two points, located at the two sides of the carrier frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

3.6.2 Test Procedures

1. The testing follows FCC KDB 971168 D01 v02r02 Section 4.2.
2. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
3. The RF output of the EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The 99% occupied bandwidth were measured, set RBW= 1% of span, VBW= 3*RBW, sample detector, trace maximum hold.
5. The 26dB bandwidth were measured, set RBW= 1% of EBW, VBW= 3*RBW, peak detector, trace maximum hold.

3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

3.7.2 Test Procedures

1. The testing follows FCC KDB 971168 D01 v02r02 Section 6.0.
2. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The band edges of low and high channels for the highest RF powers were measured.
5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
6. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)
   = P(W) - [43 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
   = -13dBm.

3.8 Conducted Spurious Emission

3.8.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10^{th} harmonic.

3.8.2 Test Procedures

1. The testing follows FCC KDB 971168 D01 v02r02 Section 6.0.
2. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
7. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

= P(W) - [43 + 10log(P)] (dB)

= [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)

= -13dBm.

3.9 Frequency Stability

3.9.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

3.9.2 Test Procedures for Temperature Variation

1. The testing follows FCC KDB 971168 D01 v02r02 Section 9.0.
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
4. With power OFF, the temperature was raised in 10°C steps up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.9.3 Test Procedures for Voltage Variation

1. The testing follows FCC KDB 971168 D01 v02r02 Section 9.0.
2. The EUT was placed in a temperature chamber at 25±5° C and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
4. The variation in frequency was measured for the worst case.

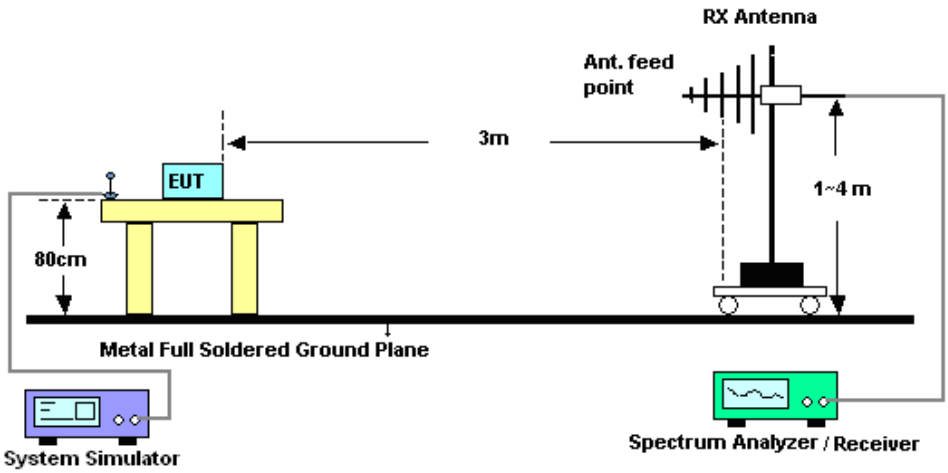
4 Radiated Test Items

4.1 Measuring Instruments

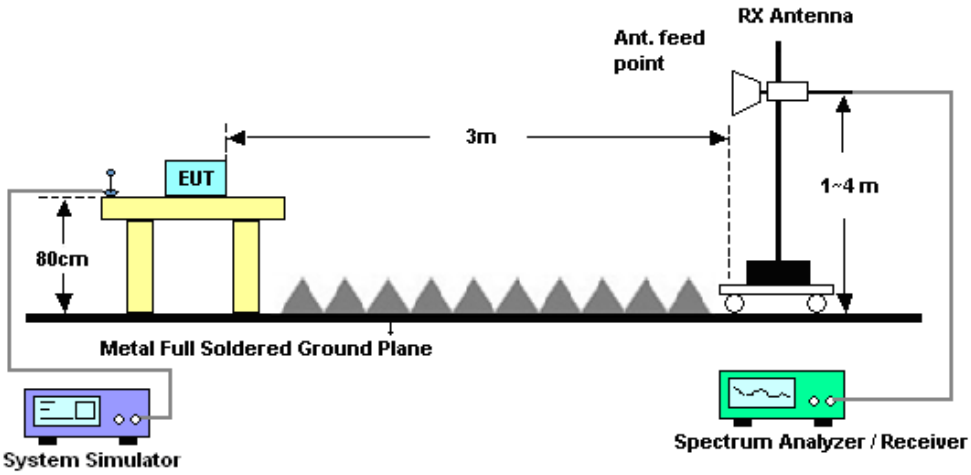
See list of measuring instruments of this test report.

4.2 Test Setup

4.2.1 For radiated test from 30MHz to 1GHz



4.2.2 For radiated test above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

4.4 Effective Radiated Power and Effective Isotropic Radiated Power Measurement

4.4.1 Description of the ERP/EIRP Measurement

The substitution method, in ANSI / TIA / EIA-603-C-2004, was used for ERP/EIRP measurement, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r02. The ERP of mobile transmitters must not exceed 7 Watts (Cellular Band) and the EIRP of mobile transmitters are limited to 2 Watts (PCS Band) and 1 Watts (AWS Band).

4.4.2 Test Procedures

1. The testing follows FCC KDB 971168 D01 v02r02 Section 5.2.1. (for CDMA/WCDMA), Section 5.2.2.2 (for GSM/GPRS/EDGE) and ANSI / TIA-603-C-2004 Section 2.2.17.
2. The EUT was placed on a non-conductive rotating platform 0.8 meters high in a semi-anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer with RMS detector per section 5. of KDB 971168 D01.
3. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power. The maximum emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.
4. Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to TIA/EIA-603-C. The EUT was replaced by the substitution antenna at same location, and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. The correction factor (in dB) = S.G. - Tx Cable loss + Substitution antenna gain - Analyzer reading. Then the EUT's EIRP was calculated with the correction factor, EIRP = LVL + Correction factor and ERP = EIRP - 2.15. Take the record of the output power at substitution antenna.

	GSM/GPRS/EDGE	WCDMA/HSPA
SPAN	500kHz	10MHz
RBW	10kHz	100kHz
VBW	30kHz	300kHz
Detector	RMS	RMS
Trace	Average	Average
Average Type	Power	Power
Sweep Count	100	100

4.5 Field Strength of Spurious Radiation Measurement

4.5.1 Description of Field Strength of Spurious Radiated Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.5.2 Test Procedures

1. The testing follows FCC KDB 971168 D01 v02r02 Section 5.8 and ANSI / TIA-603-C-2004 Section 2.2.12.
2. The EUT was placed on a rotatable wooden table 0.8 meters above the ground.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between one meter and four meters to search for the maximum spurious emission for both horizontal and vertical polarizations.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. Taking the record of output power at antenna port.
10. Repeat step 7 to step 8 for another polarization.
11. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
12. ERP (dBm) = EIRP - 2.15
13. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
14. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

    = P(W) - [43 + 10log(P)] (dB)

    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)

    = -13dBm.

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSP30	101400	9kHz~30GHz	Jan. 28, 2015	Sep. 30, 2015	Jan. 27, 2016	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Aug. 07, 2015	Sep. 30, 2015	Aug. 06, 2016	Conducted (TH01-SZ)
EMI Test Receiver&SA	Agilent Technologies	N9038A	MY52260185	20Hz~26.5GHz	May 26, 2015	Sep. 30, 2015~ Oct. 07, 2015	May 25, 2016	Radiation (03CH01-SZ)
Spectrum Analyzer	R&S	FSV40	101041	10kHz~40GHz;Max 30dBm	Oct. 15, 2014	Sep. 30, 2015~ Oct. 07, 2015	Oct. 14, 2015	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	23188	30MHz~2GHz	Nov. 07, 2014	Sep. 30, 2015~ Oct. 07, 2015	Nov. 06, 2015	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Oct. 15, 2014	Sep. 30, 2015~ Oct. 07, 2015	Oct. 14, 2015	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18GHz~40GHz	Aug.19, 2015	Sep. 30, 2015~ Oct. 07, 2015	Aug. 18, 2016	Radiation (03CH01-SZ)
Amplifier	ADVANTEST	BB525C	E9007003	9kHz~3000MHz / 30 dB	Jan. 28, 2015	Sep. 30, 2015~ Oct. 07, 2015	Jan. 27, 2016	Radiation (03CH01-SZ)
Amplifier	Yiai	AV3860B	04030	2GHz~26.5GHz	May 05, 2015	Sep. 30, 2015~ Oct. 07, 2015	May 04, 2016	Radiation (03CH01-SZ)
Amplifier	Agilent Technologies	83017A	MY39501302	500MHz~26.5GHz	Jan. 28, 2015	Sep. 30, 2015~ Oct. 07, 2015	Jan. 27, 2016	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	Sep. 30, 2015~ Oct. 07, 2015	NCR	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Sep. 30, 2015~ Oct. 07, 2015	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Sep. 30, 2015~ Oct. 07, 2015	NCR	Radiation (03CH01-SZ)

6 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.9dB**

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

For SIM1:

Conducted Power (*Unit: dBm)						
Band	**GSM850**			**GSM1900**		
Channel	**128**	**189**	**251**	**512**	**661**	**810**
Frequency	**824.2**	**836.4**	**848.8**	**1850.2**	**1880.0**	**1909.8**
GSM	32.62	**32.64**	32.61	29.79	**29.83**	29.81
GPRS class 8	32.61	32.63	32.60	29.76	29.81	29.80
GPRS class 10	31.72	31.76	31.70	28.86	28.91	28.87
GPRS class 11	29.88	29.90	29.86	26.93	27.01	26.99
GPRS class 12	29.12	29.13	29.11	26.12	26.21	26.17

Conducted Power (*Unit: dBm)									
Band	**WCDMA Band V**			**WCDMA Band II**			**WCDMA Band IV**		
Channel	**4132**	**4182**	**4233**	**9262**	**9400**	**9538**	**1312**	**1413**	**1513**
Frequency	**826.4**	**836.4**	**846.6**	**1852.4**	**1880**	**1907.6**	**1712.4**	**1732.6**	**1752.6**
AMR 12.2K	22.65	22.60	22.56	22.55	22.58	22.47	22.50	22.82	22.59
RMC 12.2K	22.67	22.61	**22.69**	22.58	**22.60**	22.50	22.51	**22.83**	22.60
HSDPA Subtest-1	21.55	21.54	21.56	21.54	21.51	21.41	21.17	21.47	21.45
HSDPA Subtest-2	21.52	21.55	21.56	21.55	21.72	21.39	21.17	21.48	21.42
HSDPA Subtest-3	21.05	21.09	21.11	21.04	21.15	20.92	20.68	21.00	20.95
HSDPA Subtest-4	21.06	21.07	21.07	21.04	21.11	20.89	20.67	20.99	20.93
HSUPA Subtest-1	19.47	19.49	19.54	19.58	19.55	19.52	19.16	19.41	19.42
HSUPA Subtest-2	19.50	19.53	19.55	19.61	19.61	19.52	19.17	19.45	19.44
HSUPA Subtest-3	20.56	20.56	20.60	20.54	20.61	20.44	20.22	20.51	20.44
HSUPA Subtest-4	18.94	19.00	19.03	19.04	19.04	18.87	18.64	18.97	18.84
HSUPA Subtest-5	21.60	21.60	21.60	21.60	21.60	21.40	21.20	21.60	21.50

For SIM2:

Conducted Power (*Unit: dBm)						
Band	**GSM850**			**GSM1900**		
Channel	**128**	**189**	**251**	**512**	**661**	**810**
Frequency	**824.2**	**836.4**	**848.8**	**1850.2**	**1880.0**	**1909.8**
GSM	32.60	**32.62**	32.59	29.78	**29.81**	29.80
GPRS class 8	32.59	32.61	32.57	29.75	29.80	29.78
GPRS class 10	31.71	31.75	31.70	28.84	28.90	28.85
GPRS class 11	29.85	29.88	29.84	26.90	27.00	26.98
GPRS class 12	29.10	29.12	29.08	26.10	26.20	26.15

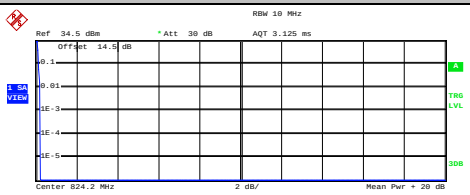
Peak-to-Average Ratio

Mode	GSM850	GSM1900	Limit: 13dB
Mod.	GSM	GSM	Result
Lowest CH	0.24	0.20	PASS
Middle CH	0.20	0.16	
Highest CH	0.24	0.20	

Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV	Limit: 13dB
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps	Result
Lowest CH	3.24	3.00	3.12	PASS
Middle CH	3.24	3.16	3.00	
Highest CH	3.24	2.76	3.20	

GSM850 (GSM)

Lowest Channel



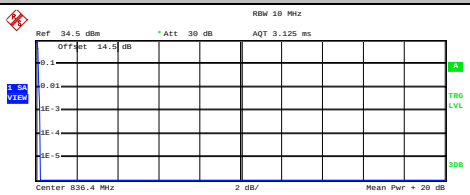
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	32.91 dBm
Peak	33.13 dBm
Crest	0.22 dB
10 %	0.16 dB
1 %	0.20 dB
.1 %	0.24 dB
.01 %	0.24 dB

Date: 30.SEP.2015 15:51:37

Middle Channel



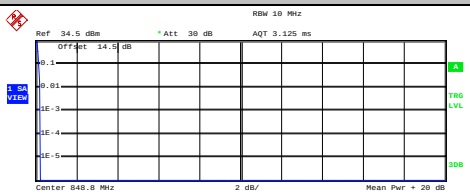
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	32.90 dBm
Peak	33.13 dBm
Crest	0.23 dB
10 %	0.16 dB
1 %	0.16 dB
.1 %	0.20 dB
.01 %	0.24 dB

Date: 30.SEP.2015 15:53:42

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

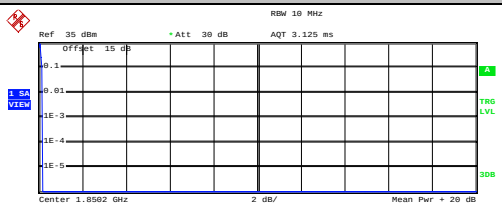
Trace 1

Mean	32.85 dBm
Peak	33.06 dBm
Crest	0.21 dB
10 %	0.16 dB
1 %	0.20 dB
.1 %	0.24 dB
.01 %	0.24 dB

Date: 30.SEP.2015 15:54:39

GSM1900 (GSM)

Lowest Channel



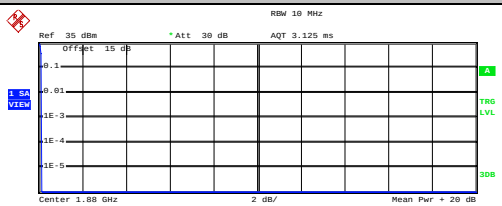
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	30.06 dBm
Peak	30.24 dBm
Crest	0.19 dB
10 %	0.16 dB
1 %	0.20 dB
.1 %	0.20 dB
.01 %	0.20 dB

Date: 30.SEP.2015 16:21:08

Middle Channel



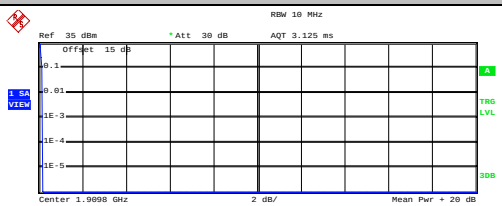
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	30.02 dBm
Peak	30.17 dBm
Crest	0.16 dB
10 %	0.16 dB
1 %	0.16 dB
.1 %	0.16 dB
.01 %	0.16 dB

Date: 30.SEP.2015 16:21:21

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

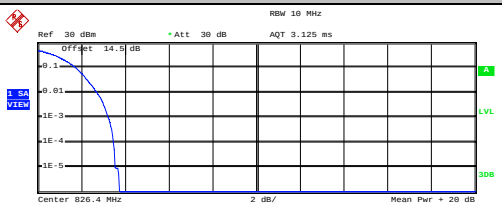
Trace 1

Mean	30.06 dBm
Peak	30.24 dBm
Crest	0.19 dB
10 %	0.16 dB
1 %	0.20 dB
.1 %	0.20 dB
.01 %	0.20 dB

Date: 30.SEP.2015 16:23:00

WCDMA Band V (RMC 12.2Kbps)

Lowest Channel



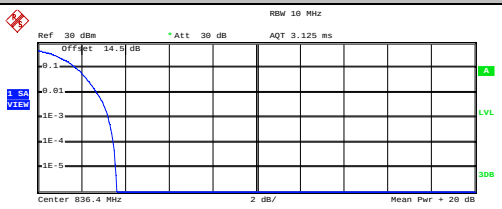
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	22.76 dBm
Peak	26.51 dBm
Crest	3.75 dB
10 %	1.76 dB
1 %	2.72 dB
.1 %	3.24 dB
.01 %	3.48 dB

Date: 30.SEP.2015 17:43:48

Middle Channel



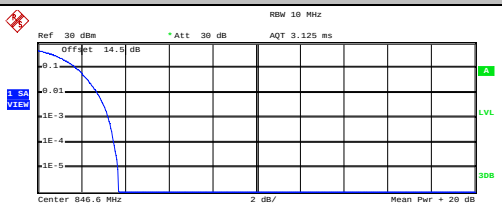
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	22.68 dBm
Peak	26.30 dBm
Crest	3.63 dB
10 %	1.76 dB
1 %	2.72 dB
.1 %	3.24 dB
.01 %	3.48 dB

Date: 30.SEP.2015 17:48:30

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

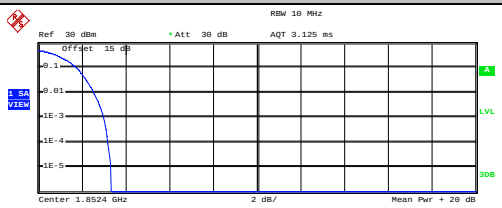
Trace 1

Mean	22.67 dBm
Peak	26.37 dBm
Crest	3.70 dB
10 %	1.76 dB
1 %	2.72 dB
.1 %	3.24 dB
.01 %	3.48 dB

Date: 30.SEP.2015 17:48:44

WCDMA Band II (RMC 12.2Kbps)

Lowest Channel



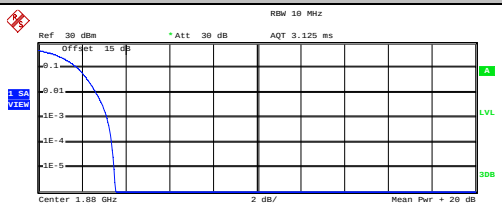
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	22.46 dBm
Peak	25.81 dBm
Crest	3.35 dB
10 %	1.76 dB
1 %	2.56 dB
.1 %	3.00 dB
.01 %	3.20 dB

Date: 30.SEP.2015 17:30:02

Middle Channel



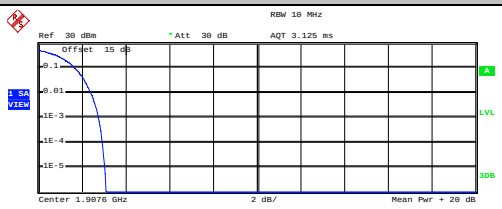
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	22.49 dBm
Peak	26.02 dBm
Crest	3.53 dB
10 %	1.80 dB
1 %	2.64 dB
.1 %	3.16 dB
.01 %	3.36 dB

Date: 30.SEP.2015 17:30:45

Highest Channel

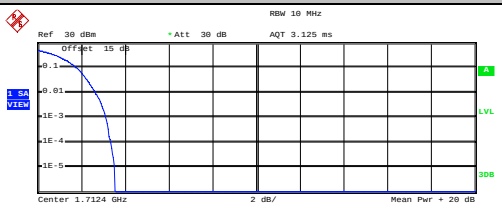
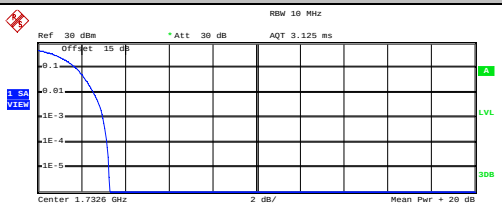
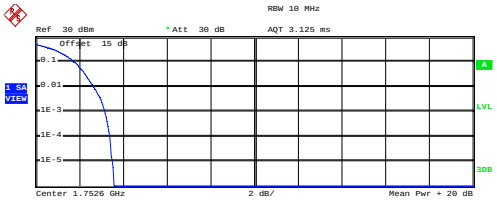


Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	22.34 dBm
Peak	25.46 dBm
Crest	3.11 dB
10 %	1.68 dB
1 %	2.40 dB
.1 %	2.76 dB
.01 %	2.96 dB

Date: 30.SEP.2015 17:31:01

WCDMA Band IV (RMC 12.2Kbps)	
Lowest Channel	
 Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 22.54 dBm Peak 26.09 dBm Crest 3.56 dB 10 % 1.80 dB 1 % 2.64 dB .1 % 3.12 dB .01 % 3.36 dB Date: 30.SEP.2015 17:19:58	
Middle Channel	
 Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 22.46 dBm Peak 25.74 dBm Crest 3.28 dB 10 % 1.76 dB 1 % 2.56 dB .1 % 3.00 dB .01 % 3.16 dB Date: 30.SEP.2015 17:20:27	
Highest Channel	
 Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 22.57 dBm Peak 26.16 dBm Crest 3.59 dB 10 % 1.80 dB 1 % 2.68 dB .1 % 3.20 dB .01 % 3.40 dB Date: 30.SEP.2015 17:20:47	

ERP/EIRP

Channel	Mode	Horizontal		Vertical	
		ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	GSM850 GSM	21.97	0.1574	21.16	0.1306
Middle		22.20	0.1660	20.84	0.1213
Highest		20.79	0.1199	20.43	0.1104
Lowest	WCDMA Band V RMC 12.2Kbps	12.48	0.0177	11.29	0.0135
Middle		13.57	0.0228	11.69	0.0148
Highest		12.53	0.0179	11.26	0.0134
Limit	ERP < 7W	Result		PASS	

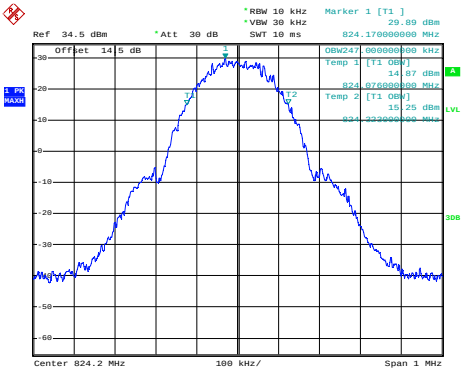
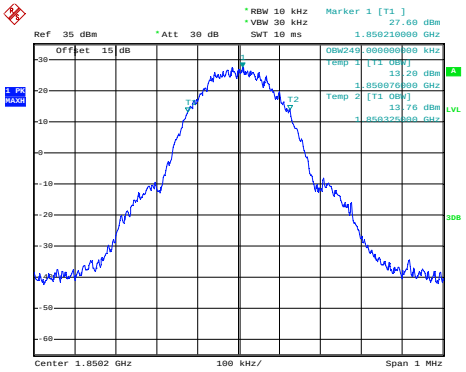
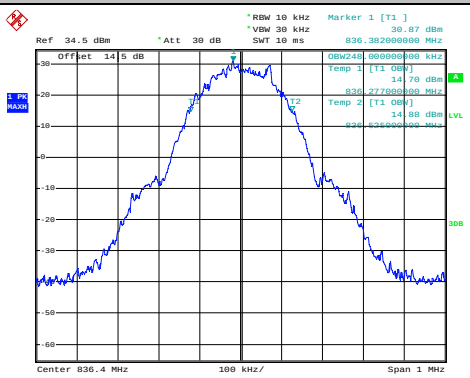
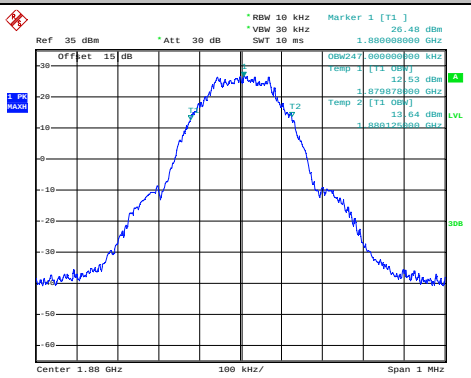
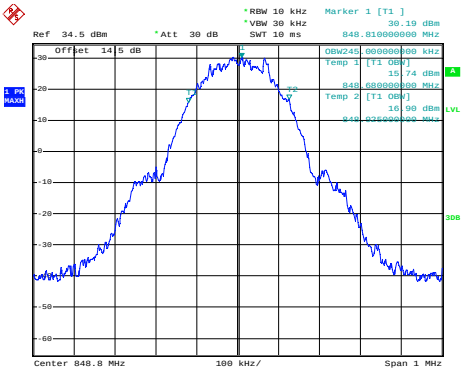
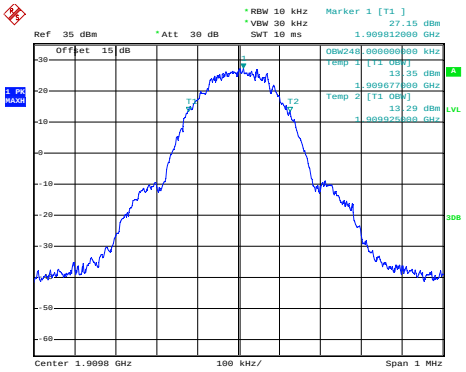
Channel	Mode	Horizontal		Vertical	
		EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	GSM1900 GSM	23.30	0.2138	26.21	0.4178
Middle		22.16	0.1644	26.01	0.3990
Highest		22.96	0.1977	25.70	0.3715
Lowest	WCDMA Band II RMC 12.2Kbps	15.78	0.0378	17.80	0.0603
Middle		16.26	0.0423	17.83	0.0607
Highest		16.84	0.0483	17.13	0.0516
Limit	EIRP < 2W	Result		PASS	

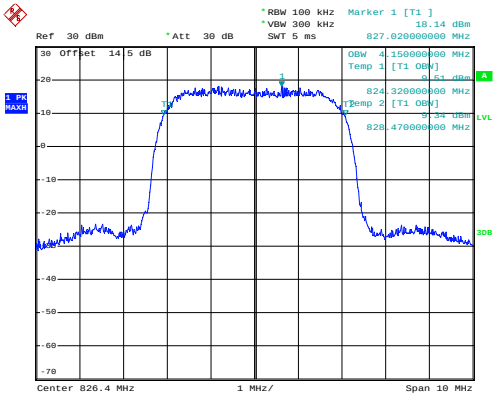
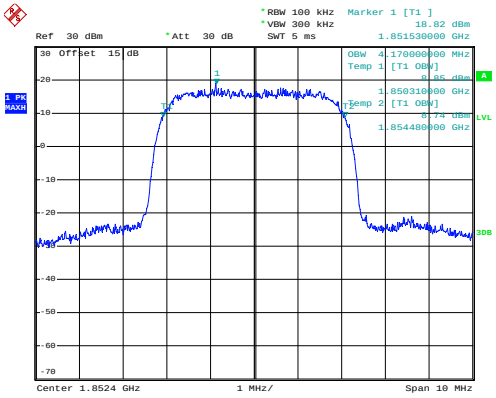
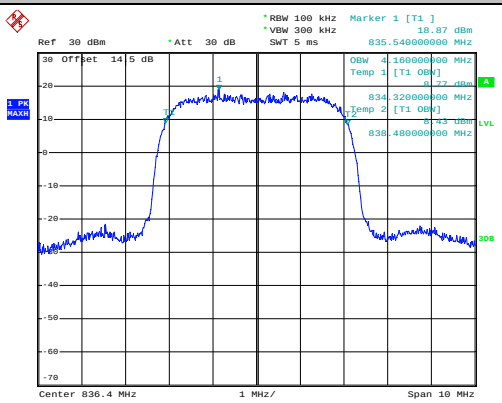
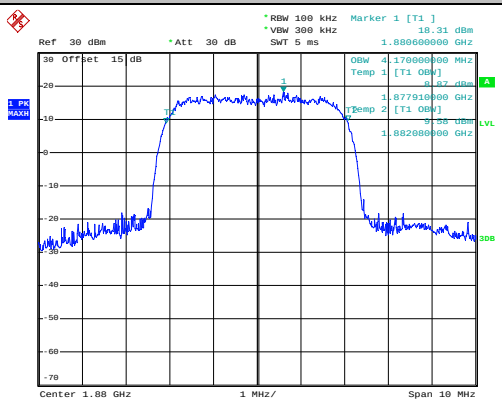
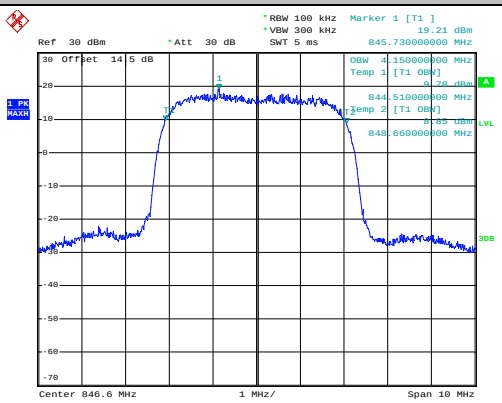
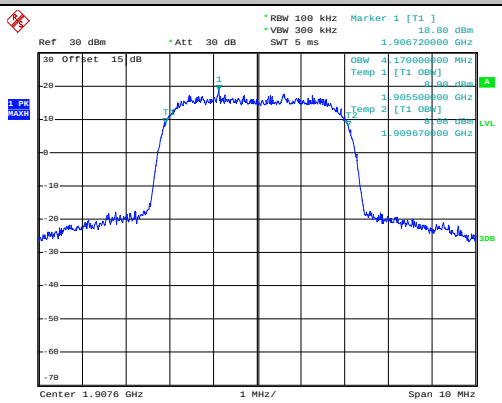
Channel	Mode	Horizontal		Vertical	
		EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	WCDMA Band IV RMC 12.2Kbps	19.14	0.0820	12.74	0.0188
Middle		19.52	0.0895	10.40	0.0110
Highest		18.55	0.0716	9.67	0.0093
Limit	EIRP < 1W	Result		PASS	

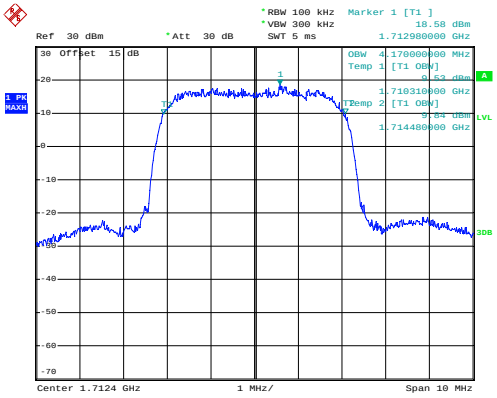
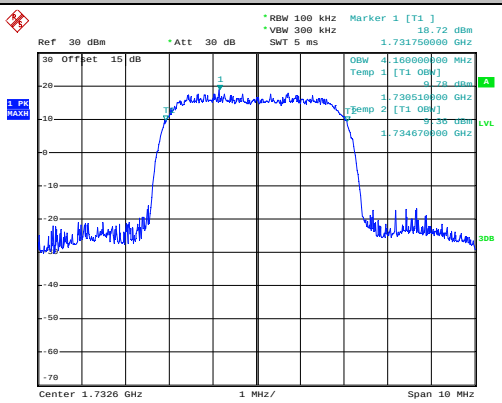
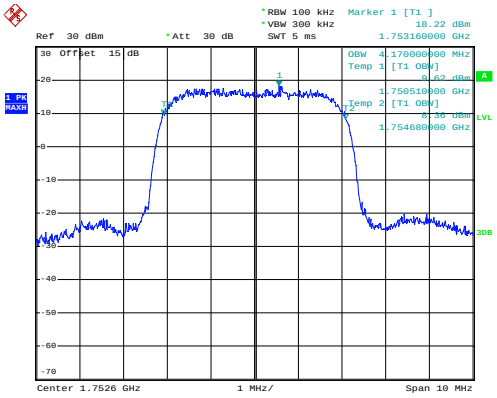
Occupied Bandwidth

Mode	GSM850	GSM1900
Mod.	GSM	GSM
Lowest CH	0.247	0.249
Middle CH	0.248	0.247
Highest CH	0.245	0.248

Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.15	4.17	4.17
Middle CH	4.16	4.17	4.16
Highest CH	4.15	4.17	4.17

GSM850 (GSM)	GSM1900 (GSM)
Lowest Channel	**Lowest Channel**
	
Date: 30.SEP.2015 15:14:05	Date: 30.SEP.2015 16:04:54
Middle Channel	**Middle Channel**
	
Date: 30.SEP.2015 15:14:44	Date: 30.SEP.2015 16:05:21
Highest Channel	**Highest Channel**
	
Date: 30.SEP.2015 15:15:32	Date: 30.SEP.2015 16:05:49

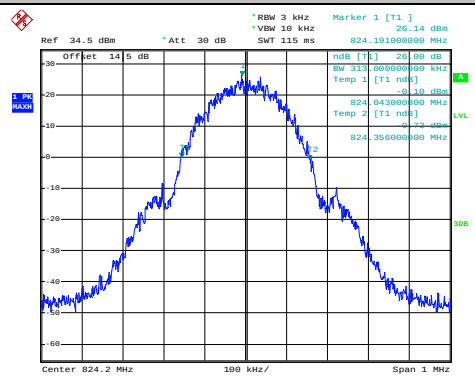
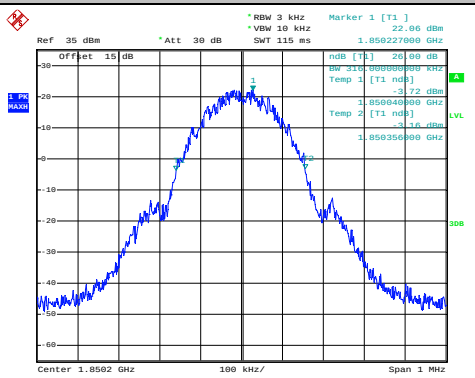
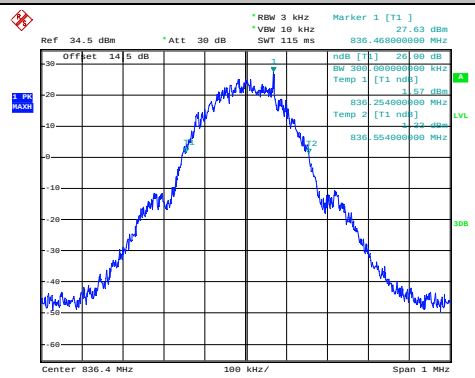
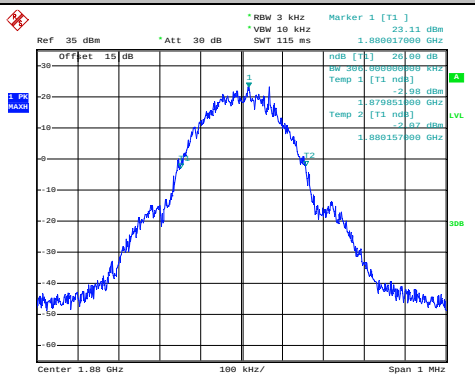
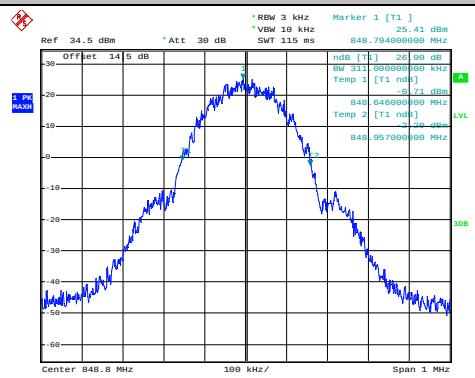
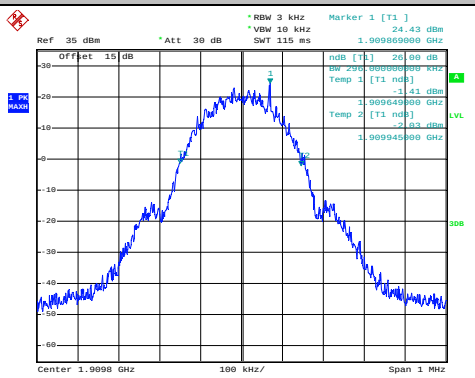
WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
	
Date: 30.SEP.2015 17:34:43	Date: 30.SEP.2015 17:24:04
Middle Channel	**Middle Channel**
	
Date: 30.SEP.2015 17:35:11	Date: 30.SEP.2015 17:24:32
Highest Channel	**Highest Channel**
	
Date: 30.SEP.2015 17:35:39	Date: 30.SEP.2015 17:25:00

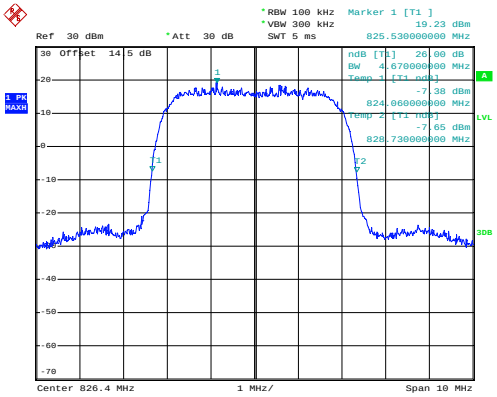
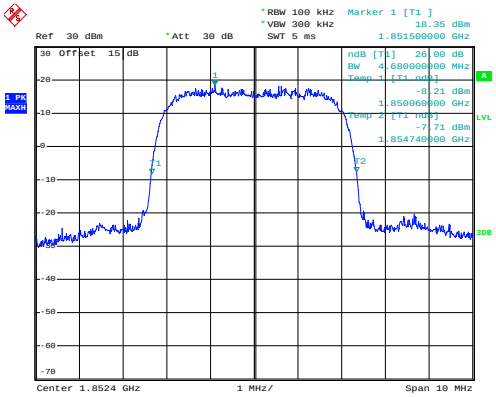
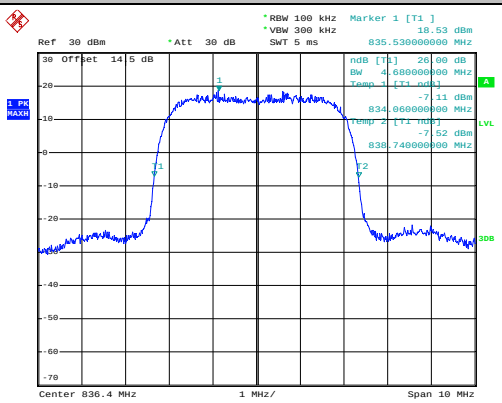
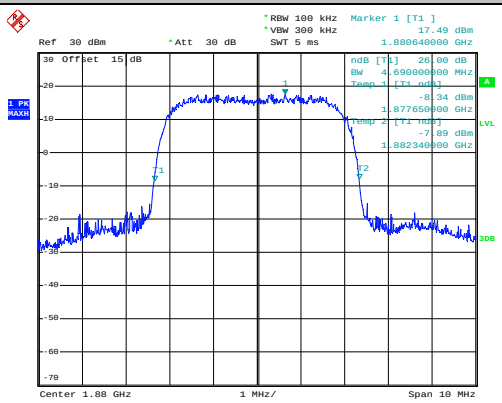
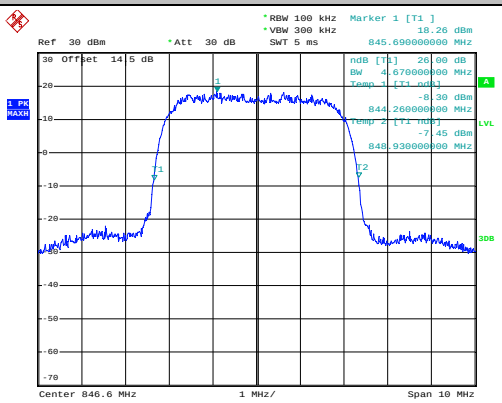
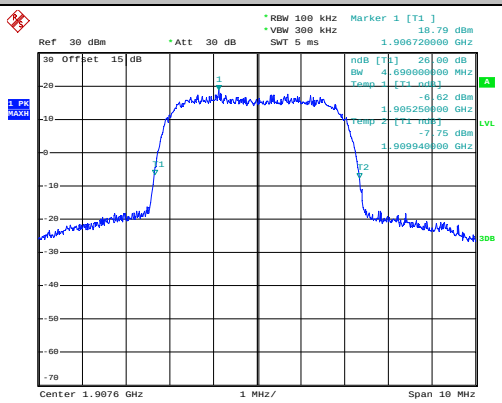
WCDMA Band IV (RMC 12.2Kbps)	
Lowest Channel	
 Date: 30.SEP.2015 18:29:23	
Middle Channel	
 Date: 30.SEP.2015 18:29:51	
Highest Channel	
 Date: 30.SEP.2015 18:30:19	

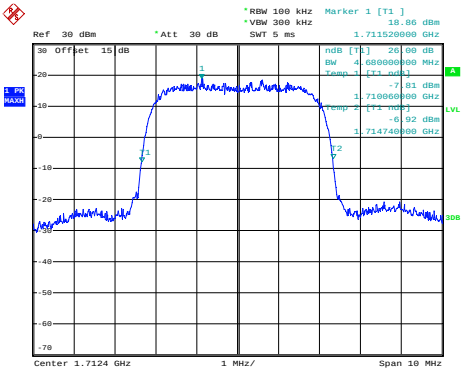
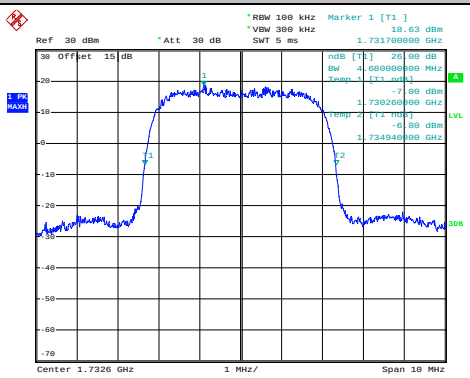
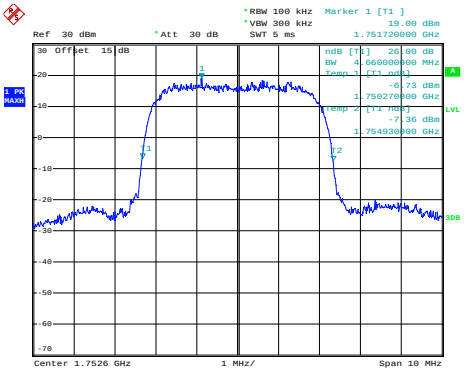
26dB Bandwidth

Mode	GSM850	GSM1900
Mod.	GSM	GSM
Lowest CH	0.313	0.316
Middle CH	0.300	0.306
Highest CH	0.311	0.296

Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.67	4.68	4.68
Middle CH	4.68	4.69	4.68
Highest CH	4.67	4.69	4.66

GSM850 (GSM)	GSM1900 (GSM)
Lowest Channel	**Lowest Channel**
	
Date: 30.SEP.2015 15:10:26	Date: 30.SEP.2015 16:02:01
Middle Channel	**Middle Channel**
	
Date: 30.SEP.2015 15:11:27	Date: 30.SEP.2015 16:02:29
Highest Channel	**Highest Channel**
	
Date: 30.SEP.2015 15:12:16	Date: 30.SEP.2015 16:02:57

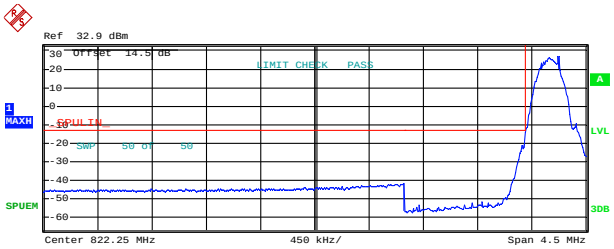
WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
	
Date: 30.SEP.2015 17:32:24	Date: 30.SEP.2015 17:22:07
Middle Channel	**Middle Channel**
	
Date: 30.SEP.2015 17:32:52	Date: 30.SEP.2015 17:22:35
Highest Channel	**Highest Channel**
	
Date: 30.SEP.2015 17:33:20	Date: 30.SEP.2015 17:23:03

WCDMA Band IV (RMC 12.2Kbps)	
Lowest Channel	
 Date: 30.SEP.2015 17:08:51	
Middle Channel	
 Date: 30.SEP.2015 17:09:19	
Highest Channel	
 Date: 30.SEP.2015 17:09:47	

Conducted Band Edge

GSM850 (GSM)

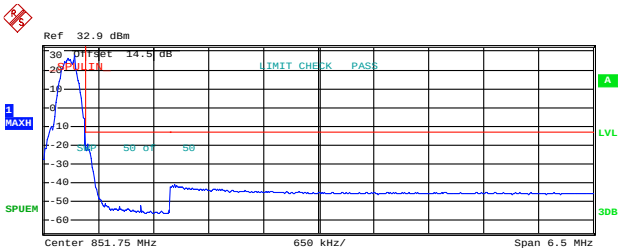
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.988000 M	-41.86	-28.86
823.000 M	824.000 M	3.00 k	823.996000 M	-20.70	-7.70
824.000 M	824.500 M	10.00 k	824.271500 M	27.03	-7.97

Date: 30.SEP.2015 15:17:19

Highest Band Edge

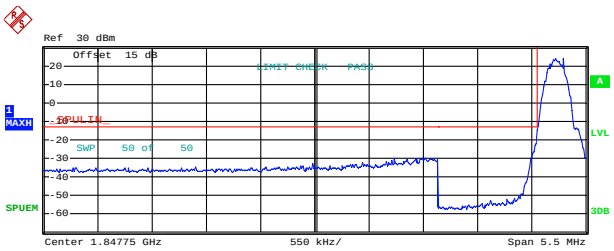


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
848.500 M	849.000 M	10.00 k	848.866500 M	27.90	-7.10
849.000 M	850.000 M	3.00 k	849.016000 M	-19.21	-6.21
850.000 M	855.000 M	100.00 k	850.040000 M	-40.86	-27.86

Date: 30.SEP.2015 15:19:05

GSM1900 (GSM)

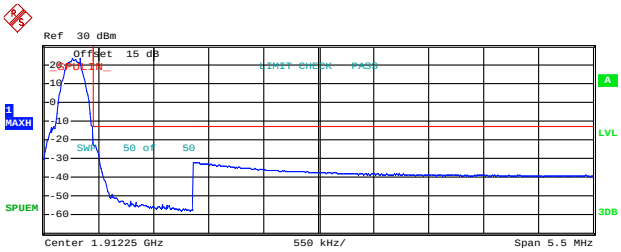
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848832 G	-29.74	-16.74
1.849 G	1.850 G	3.00 k	1.849980 G	-22.85	-9.85
1.850 G	1.851 G	10.00 k	1.850268 G	23.74	-11.26

Date: 30.SEP.2015 16:18:23

Highest Band Edge

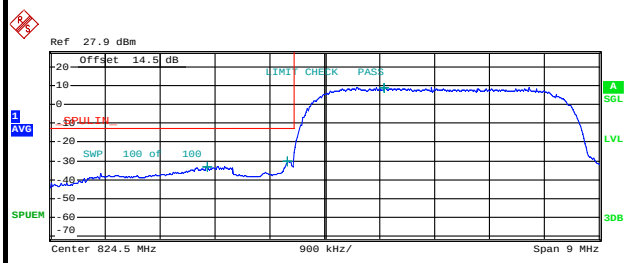


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.910 G	1.910 G	10.00 k	1.909868 G	23.29	-11.71
1.910 G	1.911 G	3.00 k	1.910012 G	-22.40	-9.40
1.911 G	1.915 G	1.00 M	1.911004 G	-32.18	-19.18

Date: 30.SEP.2015 16:19:49

WCDMA Band V (RMC 12.2Kbps)

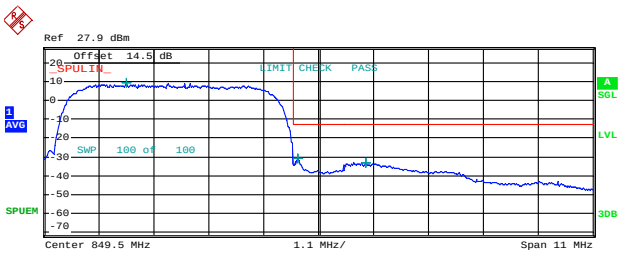
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.577000 M	-33.18	-20.18
823.000 M	824.000 M	50.00 k	823.896000 M	-30.45	-17.45
824.000 M	829.000 M	100.00 k	825.480000 M	8.99	-26.01

Date: 30.SEP.2015 18:12:30

Highest Band Edge

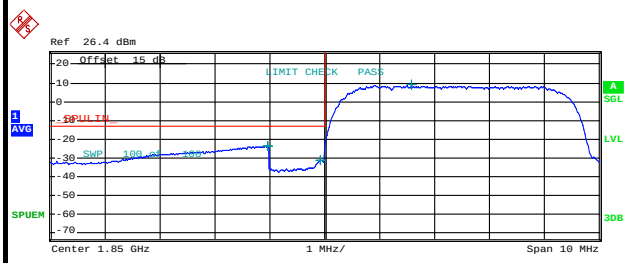


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
844.000 M	849.000 M	100.00 k	845.650000 M	9.49	-25.51
849.000 M	850.000 M	50.00 k	849.080000 M	-31.00	-18.00
850.000 M	855.000 M	100.00 k	850.435000 M	-33.37	-20.37

Date: 30.SEP.2015 18:09:11

WCDMA Band II (RMC 12.2Kbps)

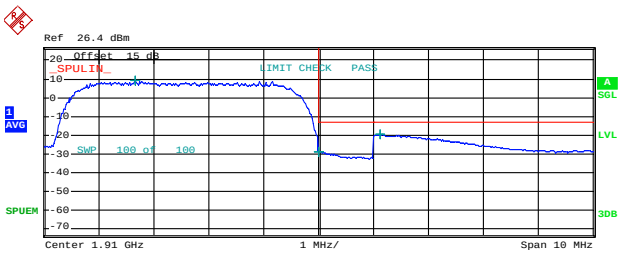
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848960 G	-23.69	-10.69
1.849 G	1.850 G	50.00 k	1.849912 G	-31.03	-18.03
1.850 G	1.855 G	100.00 k	1.851570 G	8.93	-26.07

Date: 30.SEP.2015 18:24:13

Highest Band Edge

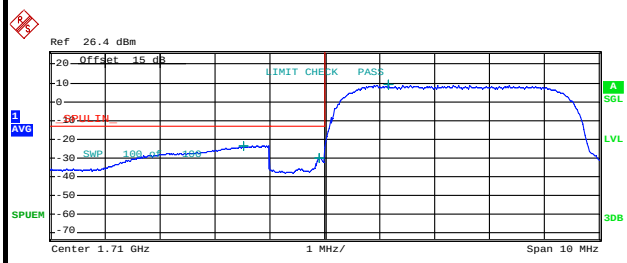


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.905 G	1.910 G	100.00 k	1.906665 G	9.34	-25.66
1.910 G	1.911 G	50.00 k	1.910004 G	-28.95	-15.95
1.911 G	1.915 G	1.00 M	1.911124 G	-19.74	-6.74

Date: 30.SEP.2015 18:21:30

WCDMA Band IV (RMC 12.2Kbps)

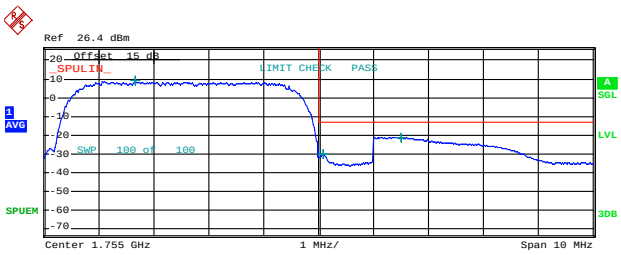
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.705 G	1.709 G	1.00 M	1.708524 G	-23.60	-10.60
1.709 G	1.710 G	50.00 k	1.709904 G	-29.98	-16.98
1.710 G	1.715 G	100.00 k	1.711165 G	9.05	-25.95

Date: 30.SEP.2015 18:18:45

Highest Band Edge



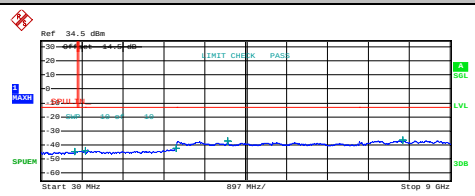
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.750 G	1.755 G	100.00 k	1.751655 G	8.97	-26.03
1.755 G	1.756 G	50.00 k	1.755072 G	-29.76	-16.76
1.756 G	1.760 G	1.00 M	1.756508 G	-21.24	-8.24

Date: 30.SEP.2015 18:15:38

Conducted Spurious Emission

GSM850 (GSM)

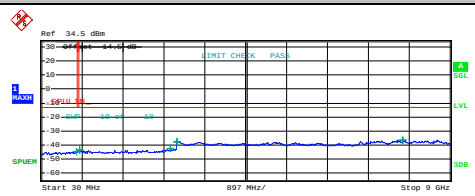
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	765.687500 M	-44.78	-31.78
855.000 M	1.000 G	1.00 M	998.260010 M	-44.38	-31.38
1.000 G	3.000 G	1.00 M	2.996500 G	-42.39	-29.39
3.000 G	7.000 G	1.00 M	4.121000 G	-37.41	-24.41
7.000 G	9.000 G	1.00 M	7.953000 G	-36.51	-23.51

Date: 30.SEP.2015 15:22:45

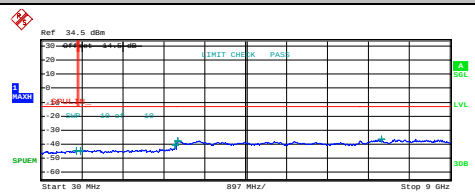
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	794.325000 M	-44.79	-31.79
855.000 M	1.000 G	1.00 M	868.593751 M	-43.82	-30.82
1.000 G	3.000 G	1.00 M	2.865500 G	-42.66	-29.66
3.000 G	7.000 G	1.00 M	3.003000 G	-37.60	-24.60
7.000 G	9.000 G	1.00 M	7.967500 G	-36.50	-23.50

Date: 30.SEP.2015 15:23:29

Highest Channel

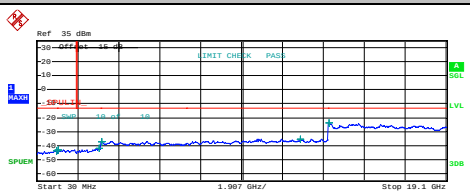


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	795.312500 M	-44.80	-31.80
855.000 M	1.000 G	1.00 M	887.806252 M	-44.50	-31.50
1.000 G	3.000 G	1.00 M	2.975000 G	-40.85	-27.85
3.000 G	7.000 G	1.00 M	3.033000 G	-37.67	-24.67
7.000 G	9.000 G	1.00 M	7.498500 G	-36.72	-23.72

Date: 30.SEP.2015 15:24:39

GSM1900 (GSM)

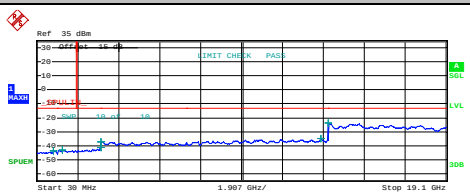
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	963.867500 M	-43.87	-30.87
1.000 G	1.845 G	1.00 M	1.015210 G	-43.25	-30.25
1.915 G	3.000 G	1.00 M	2.926763 G	-42.12	-29.12
3.000 G	7.000 G	1.00 M	3.027000 G	-37.12	-24.12
7.000 G	13.600 G	1.00 M	12.303925 G	-35.50	-22.50
13.600 G	19.100 G	1.00 M	13.655688 G	-23.99	-10.99

Date: 30.SEP.2015 16:25:52

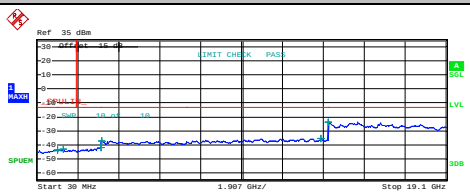
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	775.202500 M	-43.90	-30.90
1.000 G	1.845 G	1.00 M	1.205758 G	-43.21	-30.21
1.915 G	3.000 G	1.00 M	2.995660 G	-41.28	-28.28
3.000 G	7.000 G	1.00 M	3.019000 G	-37.04	-24.04
7.000 G	13.600 G	1.00 M	13.266700 G	-34.92	-21.92
13.600 G	19.100 G	1.00 M	13.624063 G	-23.48	-10.48

Date: 30.SEP.2015 16:26:22

Highest Channel

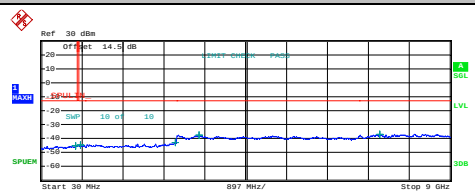


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	989.330000 M	-43.64	-30.64
1.000 G	1.845 G	1.00 M	1.255824 G	-43.15	-30.15
1.915 G	3.000 G	1.00 M	2.985895 G	-41.97	-28.97
3.000 G	7.000 G	1.00 M	3.041000 G	-37.30	-24.30
7.000 G	13.600 G	1.00 M	13.282375 G	-35.44	-22.44
13.600 G	19.100 G	1.00 M	13.619250 G	-23.56	-10.56

Date: 30.SEP.2015 16:26:51

WCDMA Band V (RMC 12.2Kbps)

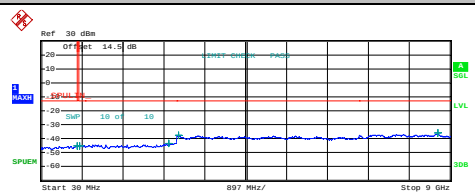
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	791.165000 M	-45.18	-32.18
855.000 M	1.000 G	1.00 M	892.156253 M	-44.54	-31.54
1.000 G	3.000 G	1.00 M	2.978500 G	-42.75	-29.75
3.000 G	7.000 G	1.00 M	3.494000 G	-37.40	-24.40
7.000 G	9.000 G	1.00 M	7.456000 G	-36.78	-23.78

Date: 30.SEP.2015 17:51:07

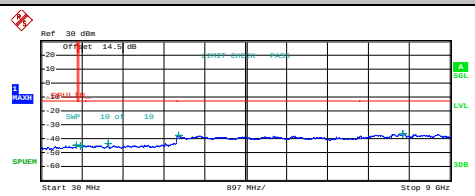
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	813.482500 M	-45.37	-32.37
855.000 M	1.000 G	1.00 M	867.216251 M	-44.86	-31.86
1.000 G	3.000 G	1.00 M	2.821000 G	-43.28	-30.28
3.000 G	7.000 G	1.00 M	3.042000 G	-37.74	-24.74
7.000 G	9.000 G	1.00 M	8.728500 G	-35.98	-22.98

Date: 30.SEP.2015 17:51:37

Highest Channel

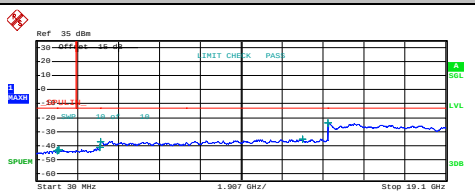


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	808.150000 M	-44.69	-31.69
855.000 M	1.000 G	1.00 M	882.151252 M	-44.99	-31.99
1.000 G	3.000 G	1.00 M	1.499500 G	-43.16	-30.16
3.000 G	7.000 G	1.00 M	3.035000 G	-37.66	-24.66
7.000 G	9.000 G	1.00 M	7.963500 G	-36.32	-23.32

Date: 30.SEP.2015 17:52:06

WCDMA Band II (RMC 12.2Kbps)

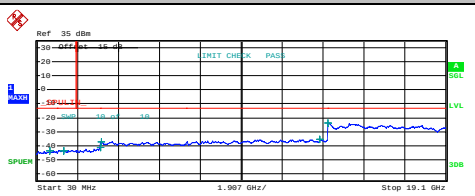
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	997.575000 M	-43.88	-30.88
1.000 G	1.845 G	1.00 M	1.077740 G	-43.00	-30.00
1.915 G	3.000 G	1.00 M	2.971519 G	-41.36	-28.36
3.000 G	7.000 G	1.00 M	3.011000 G	-36.96	-23.96
7.000 G	13.600 G	1.00 M	12.410350 G	-35.40	-22.40
13.600 G	19.100 G	1.00 M	13.608938 G	-24.04	-11.04

Date: 30.SEP.2015 17:04:33

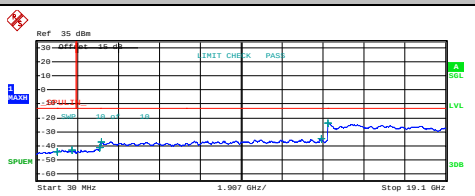
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	621.457500 M	-43.84	-30.84
1.000 G	1.845 G	1.00 M	1.275893 G	-43.50	-30.50
1.915 G	3.000 G	1.00 M	2.987522 G	-41.55	-28.55
3.000 G	7.000 G	1.00 M	3.061000 G	-37.11	-24.11
7.000 G	13.600 G	1.00 M	13.238650 G	-35.73	-22.73
13.600 G	19.100 G	1.00 M	13.611688 G	-23.82	-10.82

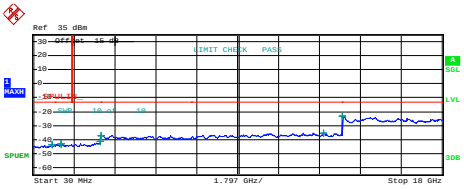
Date: 30.SEP.2015 17:05:03

Highest Channel



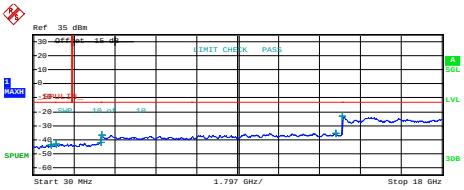
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	993.695000 M	-43.99	-30.99
1.000 G	1.845 G	1.00 M	1.663959 G	-42.97	-29.97
1.915 G	3.000 G	1.00 M	2.982911 G	-41.59	-28.59
3.000 G	7.000 G	1.00 M	3.032000 G	-37.01	-24.01
7.000 G	13.600 G	1.00 M	13.303000 G	-35.13	-22.13
13.600 G	19.100 G	1.00 M	13.602750 G	-23.54	-10.54

Date: 30.SEP.2015 17:05:33

WCDMA Band IV (RMC 12.2Kbps)	
Lowest Channel	
 Ref 35 dBm Offset 15 dB LIMIT CHECK PASS RBW 1 MHz SWP 10 ms Start 30 MHz / 1.797 GHz / Stop 18 GHz SPUEM A SGL LVL 3DB MARKER 1	

Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	861.775000 M	-43.72	-30.72
1.000 G	1.705 G	1.00 M	1.261379 G	-43.30	-30.30
1.760 G	3.000 G	1.00 M	2.987600 G	-41.37	-28.37
3.000 G	7.000 G	1.00 M	3.016000 G	-37.16	-24.16
7.000 G	13.600 G	1.00 M	12.780775 G	-35.32	-22.32
13.600 G	18.000 G	1.00 M	13.614300 G	-23.17	-10.17

Date: 30.SEP.2015 17:06:57

Middle Channel	
 Ref 35 dBm Offset 15 dB LIMIT CHECK PASS RBW 1 MHz SWP 10 ms Start 30 MHz / 1.797 GHz / Stop 18 GHz SPUEM A SGL LVL 3DB MARKER 1	

Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	806.000000 M	-43.79	-30.79
1.000 G	1.705 G	1.00 M	1.018506 G	-43.21	-30.21
1.760 G	3.000 G	1.00 M	2.997830 G	-41.68	-28.68
3.000 G	7.000 G	1.00 M	3.035000 G	-36.76	-23.76
7.000 G	13.600 G	1.00 M	13.331875 G	-35.66	-22.66
13.600 G	18.000 G	1.00 M	13.604950 G	-23.33	-10.33

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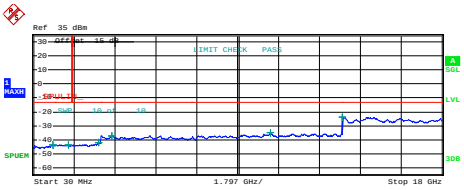
Highest Channel	
 Ref 35 dBm Offset 15 dB LIMIT CHECK PASS RBW 1 MHz SWP 10 ms Start 30 MHz / 1.797 GHz / Stop 18 GHz SPUEM A SGL LVL 3DB MARKER 1	

Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	877.052500 M	-43.41	-30.41
1.000 G	1.705 G	1.00 M	1.587089 G	-43.37	-30.37
1.760 G	3.000 G	1.00 M	2.896770 G	-42.17	-29.17
3.000 G	7.000 G	1.00 M	3.489000 G	-36.97	-23.97
7.000 G	13.600 G	1.00 M	10.465825 G	-35.17	-22.17
13.600 G	18.000 G	1.00 M	13.600000 G	-23.68	-10.68

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Frequency Stability

Test Conditions	Middle Channel	GSM850 (GSM)	WCDMA Band V (RMC 12.2Kbps RMC 12.2Kbps)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0155	0.0048	PASS
40	Normal Voltage	0.0132	0.0060	
30	Normal Voltage	0.0036	0.0024	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0012	0.0024	
0	Normal Voltage	0.0012	0.0155	
-10	Normal Voltage	0.0024	0.0167	
-20	Normal Voltage	0.0060	0.0191	
-30	Normal Voltage	0.0084	0.0203	
20	Maximum Voltage	0.0036	0.0012	
20	Normal Voltage	0.0000	0.0000	
20	Battery End Point	0.0024	0.0012	

Test Conditions	Middle Channel	GSM1900 (GSM)	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0069	0.0048	PASS
40	Normal Voltage	0.0059	0.0032	
30	Normal Voltage	0.0037	0.0011	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0011	0.0005	
0	Normal Voltage	0.0016	0.0011	
-10	Normal Voltage	0.0027	0.0122	
-20	Normal Voltage	0.0037	0.0133	
-30	Normal Voltage	0.0032	0.0144	
20	Maximum Voltage	0.0016	0.0011	
20	Normal Voltage	0.0000	0.0000	
20	Battery End Point	0.0005	0.0011	

Note:

1. Normal Voltage = 3.8V. ；Battery End Point (BEP) = 3.4 V.；Maximum Voltage =4.35 V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0035	PASS
40	Normal Voltage	0.0012	
30	Normal Voltage	0.0017	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0017	
-20	Normal Voltage	0.0023	
-30	Normal Voltage	0.0040	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

Note:

1. Normal Voltage = 3.8V. ；Battery End Point (BEP) = 3.4 V.；Maximum Voltage =4.35 V

2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

GSM850 (GSM)									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648.4	-53.24	-13	-40.24	-67.52	-59.92	0.57	9.40	H
	2472.6	-47.69	-13	-34.69	-69.14	-55.39	0.75	10.60	H
	3296.8	-46.03	-13	-33.03	-71.30	-55.61	0.87	12.60	H
	1648.4	-48.83	-13	-35.83	-65.01	-55.51	0.57	9.40	V
	2472.6	-40.22	-13	-27.22	-66.02	-47.92	0.75	10.60	V
	3296.8	-40.69	-13	-27.69	-70.69	-50.27	0.87	12.60	V
Middle	1672	-54.19	-13	-41.19	-68.40	-60.87	0.57	9.40	H
	2510	-47.53	-13	-34.53	-69.00	-55.23	0.75	10.60	H
	3346	-45.77	-13	-32.77	-71.20	-55.35	0.87	12.60	H
	1672	-49.45	-13	-36.45	-65.48	-56.13	0.57	9.40	V
	2510	-40.94	-13	-27.94	-66.58	-48.64	0.75	10.60	V
	3346	-40.25	-13	-27.25	-70.27	-49.83	0.87	12.60	V
Highest	1697.6	-53.31	-13	-40.31	-67.58	-59.99	0.57	9.40	H
	2546.4	-48.26	-13	-35.26	-69.54	-55.96	0.75	10.60	H
	3395.2	-46.19	-13	-33.19	-71.39	-55.77	0.87	12.60	H
	1697.6	-48.78	-13	-35.78	-64.96	-55.46	0.57	9.40	V
	2546.4	-41.91	-13	-28.91	-67.14	-49.61	0.75	10.60	V
	3395.2	-42.60	-13	-29.60	-71.60	-52.18	0.87	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

GSM1900 (GSM)									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3700.4	-43.48	-13	-30.48	-72.12	-55.21	0.87	12.60	H
	5550.6	-42.90	-13	-29.90	-73.22	-54.93	1.07	13.10	H
	7400.8	-43.42	-13	-30.42	-75.08	-52.85	1.87	11.30	H
	3700.4	-44.53	-13	-31.53	-72.98	-56.26	0.87	12.6	V
	5550.6	-42.28	-13	-29.28	-73.41	-54.31	1.07	13.1	V
	7400.8	-43.72	-13	-30.72	-75.61	-53.15	1.87	11.3	V
Middle	3760	-44.53	-13	-31.53	-73.17	-56.26	0.87	12.60	H
	5640	-42.70	-13	-29.70	-73.02	-54.73	1.07	13.10	H
	7520	-43.82	-13	-30.82	-75.48	-53.25	1.87	11.30	H
	3760	-44.66	-13	-31.66	-73.11	-56.39	0.87	12.6	V
	5640	-41.53	-13	-28.53	-72.66	-53.56	1.07	13.1	V
	7520	-43.14	-13	-30.14	-75.03	-52.57	1.87	11.3	V
Highest	3819.6	-43.66	-13	-30.66	-72.30	-55.39	0.87	12.60	H
	5729.4	-42.47	-13	-29.47	-72.79	-54.50	1.07	13.10	H
	7639.2	-44.11	-13	-31.11	-75.77	-53.54	1.87	11.30	H
	3819.6	-44.86	-13	-31.86	-73.31	-56.59	0.87	12.6	V
	5729.4	-42.09	-13	-29.09	-73.22	-54.12	1.07	13.1	V
	7639.2	-43.77	-13	-30.77	-75.66	-53.20	1.87	11.3	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

WCDMA Band V(RMC 12.2Kbps)									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1652.8	-54.28	-13	-41.28	-68.49	-60.96	0.57	9.40	H
	2479.2	-48.46	-13	-35.46	-69.64	-56.16	0.75	10.60	H
	3305.6	-45.51	-13	-32.51	-71.11	-55.09	0.87	12.60	H
	1652.8	-54.13	-13	-41.13	-68.71	-60.81	0.57	9.40	V
	2479.2	-46.86	-13	-33.86	-70.32	-54.56	0.75	10.60	V
	3305.6	-42.05	-13	-29.05	-71.16	-51.63	0.87	12.60	V
Middle	1672	-55.16	-13	-42.16	-69.37	-61.84	0.57	9.40	H
	2510	-48.36	-13	-35.36	-69.59	-56.06	0.75	10.60	H
	3346	-46.19	-13	-33.19	-71.39	-55.77	0.87	12.60	H
	1672	-53.44	-13	-40.44	-68.29	-60.12	0.57	9.40	V
	2510	-45.60	-13	-32.60	-69.41	-53.30	0.75	10.60	V
	3346	-41.85	-13	-28.85	-71.10	-51.43	0.87	12.60	V
Highest	1693.2	-53.99	-13	-40.99	-68.20	-60.67	0.57	9.40	H
	2539.8	-48.77	-13	-35.77	-69.80	-56.47	0.75	10.60	H
	3386.4	-46.39	-13	-33.39	-71.51	-55.97	0.87	12.60	H
	1693.2	-50.83	-13	-37.83	-66.56	-57.51	0.57	9.40	V
	2539.8	-46.26	-13	-33.26	-69.77	-53.96	0.75	10.60	V
	3386.4	-40.90	-13	-27.90	-70.89	-50.48	0.87	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

WCDMA Band II(RMC 12.2Kbps)									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3704.8	-43.89	-13	-30.89	-72.53	-55.62	0.87	12.60	H
	5557.2	-43.56	-13	-30.56	-73.88	-55.59	1.07	13.10	H
	7409.6	-43.35	-13	-30.35	-75.01	-52.78	1.87	11.30	H
	3704.8	-44.29	-13	-31.29	-72.74	-56.02	0.87	12.6	V
	5557.2	-42.52	-13	-29.52	-73.65	-54.55	1.07	13.1	V
	7409.6	-43.26	-13	-30.26	-75.15	-52.69	1.87	11.3	V
Middle	3760	-44.23	-13	-31.23	-72.87	-55.96	0.87	12.60	H
	5640	-42.98	-13	-29.98	-73.30	-55.01	1.07	13.10	H
	7520	-43.91	-13	-30.91	-75.57	-53.34	1.87	11.30	H
	3760	-44.68	-13	-31.68	-73.13	-56.41	0.87	12.6	V
	5640	-41.86	-13	-28.86	-72.99	-53.89	1.07	13.1	V
	7520	-43.69	-13	-30.69	-75.58	-53.12	1.87	11.3	V
Highest	3815.2	-44.11	-13	-31.11	-72.75	-55.84	0.87	12.60	H
	5722.8	-42.62	-13	-29.62	-72.94	-54.65	1.07	13.10	H
	7630.4	-43.90	-13	-30.90	-75.56	-53.33	1.87	11.30	H
	3815.2	-44.42	-13	-31.42	-72.87	-56.15	0.87	12.6	V
	5722.8	-41.19	-13	-28.19	-72.32	-53.22	1.07	13.1	V
	7630.4	-43.52	-13	-30.52	-75.41	-52.95	1.87	11.3	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

WCDMA Band IV(RMC 12.2Kbps)									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3424.8	-43.37	-13	-30.37	-70.00	-55.16	0.81	12.60	H
	5137.2	-42.91	-13	-29.91	-72.43	-54.66	0.95	12.70	H
	6849.6	-44.39	-13	-31.39	-74.79	-54.96	1.13	11.70	H
	3424.8	-47.26	-13	-34.26	-69.54	-59.05	0.81	12.6	V
	5137.2	-48.05	-13	-35.05	-72.58	-59.80	0.95	12.7	V
	6849.6	-41.65	-13	-28.65	-73.46	-52.22	1.13	11.7	V
Middle	3465.2	-43.95	-13	-30.95	-70.58	-55.74	0.81	12.60	H
	5197.8	-43.85	-13	-30.85	-73.37	-55.60	0.95	12.70	H
	6930.4	-44.24	-13	-31.24	-74.64	-54.81	1.13	11.70	H
	3465.2	-48.07	-13	-35.07	-70.35	-59.86	0.81	12.6	V
	5197.8	-48.53	-13	-35.53	-73.06	-60.28	0.95	12.7	V
	6930.4	-42.63	-13	-29.63	-74.44	-53.20	1.13	11.7	V
Highest	3505.2	-43.59	-13	-30.59	-70.22	-55.38	0.81	12.60	H
	5257.8	-42.75	-13	-29.75	-72.27	-54.50	0.95	12.70	H
	7010.4	-45.63	-13	-32.63	-76.03	-56.20	1.13	11.70	H
	3505.2	-48.53	-13	-35.53	-70.81	-60.32	0.81	12.6	V
	5257.8	-48.33	-13	-35.33	-72.86	-60.08	0.95	12.7	V
	7010.4	-42.75	-13	-29.75	-74.56	-53.32	1.13	11.7	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.