FCC RF Test Report

APPLICANT	:	ZTE CORPORATION
EQUIPMENT	:	LTE/WCDMA/GSM (GPRS) Multi-Mode Digital Mobile Phone
BRAND NAME	:	ZTE
MODEL NAME	:	Z988
FCC ID	:	SRQ-Z988
STANDARD	:	FCC 47 CFR Part 2, 22(H), 24(E)
CLASSIFICATION	:	PCS Licensed Transmitter Held to Ear (PCE)

The product testing was completed on Oct. 30, 2015. We, SPORTON INTERNATIONAL (KUNSHAN) INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA / EIA-603-D-2010 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 (KUNSHAN) INC., the test report shall not be reproduced except in full.

James Huang

Prepared by: James Huang / Manager

Jones Tsai

Approved by: Jones Tsai / Manager

Testing Laboratory
2627

SPORTON INTERNATIONAL (KUNSHAN) INC.
No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P. R. China

TABLE OF CONTENTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG5O2302A	Rev. 01	This is a variant product of Z962BL.The product equality declaration could be referred to Appendix D. The test result is not affected, all the test cases were performed on original report which can be referred to Sporton Report Number FG5O2205A (Model name: Z962BL; FCC ID: SRQ-Z962BL). Based on the original test report, only removed WCDMA Band IV and performed full tests.	Jan. 05, 2016

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
3.5	§24.232(d)	Peak-to-Average Ratio	< 13 dB	PASS	-
3.6	§2.1049 §22.917(b) §24.238(b)	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §22.917(a) §24.238(a)	Band Edge Measurement	< 43+10log10(P[Watts])	PASS	-
3.8	§2.1051 §22.917(a) §24.238(a)	Conducted Emission	< 43+10log10(P[Watts])	PASS	-
3.9	§2.1055 §22.355	Frequency Stability for Temperature & Voltage	< 2.5 ppm for Part 22H	PASS	-
	§2.1055 §24.235		Within Authorized Band		
4.4	§22.913(a)(2)	Effective Radiated Power	< 7 Watts	PASS	-
	§24.232(c)	Equivalent Isotropic Radiated Power	< 2 Watts	PASS	-
4.5	§2.1053 §22.917(a) §24.238(a)	Field Strength of Spurious Radiation	< 43+10log10(P[Watts])	PASS	Under limit 27.36 dB at 2510.000 MHz

1 General Description

1.1 Applicant

ZTE CORPORATION
ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

1.2 Manufacturer

ZTE CORPORATION
ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	LTE/WCDMA/GSM (GPRS) Multi-Mode Digital Mobile Phone
Brand Name	ZTE
Model Name	Z988
FCC ID	SRQ-Z988
EUT supports Radios application	GSM/GPRS/EGPRS/ WCDMA/HSPA/HSPA+(16QAM uplink is not supported)/LTE WLAN2.4GHz 802.11b/g/n HT20 WLAN5GHz 802.11a/n HT20 WLAN5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth v2.1+EDR/Bluetooth v4.1 LE
IMEI Code	Conducted: 868661020002150 Radiation: 868661020001368 ERP/EIRP: 868661020001368
HW Version	Z988HWV1.0
SW Version	Z988V1.0.0B01
EUT Stage	Production Unit

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
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
Maximum Output Power to Antenna	**GSM/GPRS/EDGE:** 850: 33.58 dBm 1900: 30.69 dBm **WCDMA:** Band V: 23.46 dBm Band II: 22.91 dBm
Antenna Type	IFA Antenna
Type of Modulation	GSM: GMSK GPRS: GMSK EDGE: GMSK / 8PSK WCDMA : QPSK (Uplink) HSDPA : QPSK (Uplink) HSUPA : QPSK (Uplink) HSPA+ : 16QAM(16QAM uplink is not supported)

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	1.1350	0.0562 ppm	243KGXW
Part 22	GSM850 EDGE class 8	8PSK	0.2844	0.0526 ppm	237KG7W
Part 22	WCDMA Band V RMC 12.2Kbps	QPSK	0.1007	0.0502 ppm	4M12F9W
Part 24	GSM1900 GSM	GMSK	1.2190	0.0234 ppm	244KGXW
Part 24	GSM1900 EDGE class 8	8PSK	0.4710	0.0191 ppm	243KG7W
Part 24	WCDMA Band II RMC 12.2Kbps	QPSK	0.2399	0.0239 ppm	4M12F9W

1.7 Testing Location

Test Site	SPORTON INTERNATIONAL (KUNSHAN) INC.		
Test Site Location	No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P. R. China TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958		
Test Site No.	Sporton Site No.		FCC Registration No.
	TH01-KS	03CH03-KS	306251

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)
- ANSI / TIA / EIA-603-D-2010
- FCC KDB 971168 D01 Power Meas. License Digital Systems v02r02

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 measurements were performed with rotating EUT in different three orthogonal test planes to find the maximum emission.

Radiated emissions were investigated as following frequency range:

1. 30 MHz to 10th harmonic for GSM850 and WCDMA Band V.
2. 30 MHz to 10th harmonic for GSM1900 and WCDMA Band II.

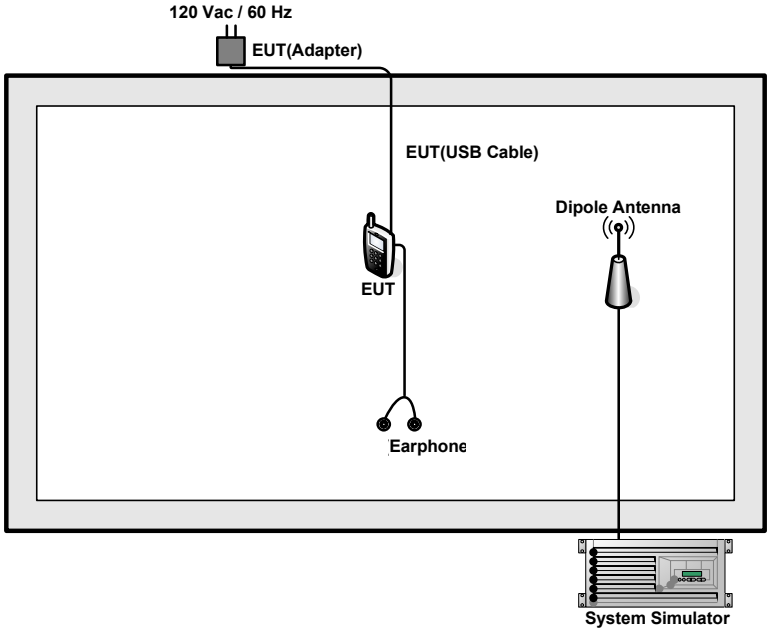
All modes and data rates and positions were investigated.

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

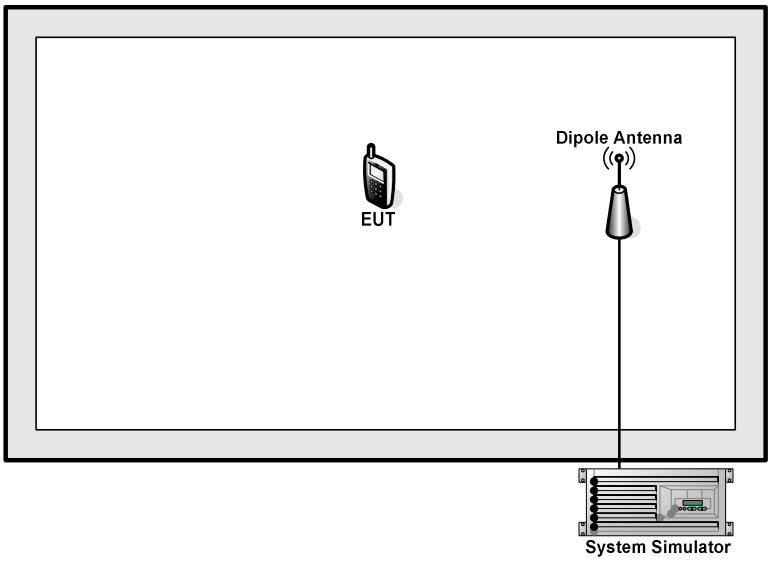
Test Modes		
Band	**Radiated TCs**	**Conducted TCs**
GSM 850	■ GSM Link ■ EDGE class 8 Link	■ GSM Link ■ EDGE class 8 Link
GSM 1900	■ GSM Link ■ EDGE class 8 Link	■ GSM Link ■ EDGE class 8 Link
WCDMA Band V	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link
WCDMA Band II	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link

2.2 Connection Diagram of Test System

Part 22 H



Part 24E



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	GW INSTEK	GPS-3030D	N/A	N/A	Unshielded, 1.8 m
3.	Earphone	Lenovo	LH102	N/A	Unshielded,1.2m	N/A

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

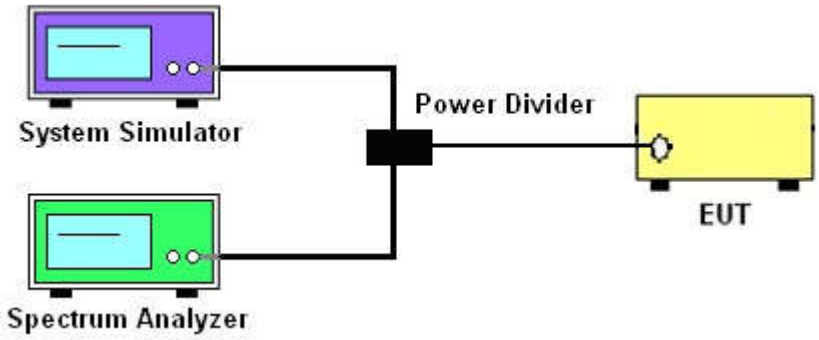
3.1 Measuring Instruments

See list of measuring instruments of this test report.

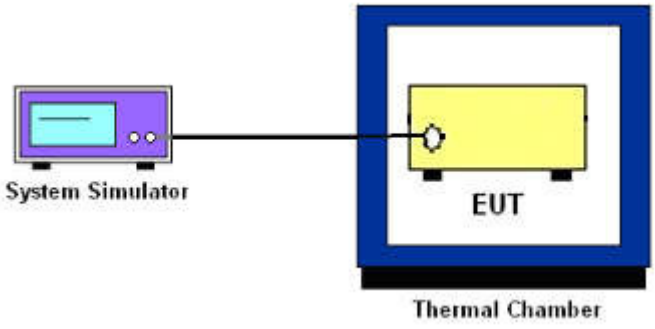
3.2 Test Setup

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 v02r02 Section 5.7.1.
2. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
3. For GSM/EGPRS operating modes:
   a. Set EUT in maximum power output.
   b. Set the RBW = 1MHz, VBW = 3MHz, Peak detector on spectrum analyzer for first trace.
   c. Set the RBW = 1MHz, VBW = 3MHz, RMS detector on spectrum analyzer for second trace.
   d. The wanted burst signal is triggered by spectrum analyzer, and measured respectively the peak level and Mean level without burst-off time, after system simulator has synchronized with the spectrum analyzer.
4. For UMTS operating modes:
   a. Set the CCDF (Complementary Cumulative Distribution Function) option on the spectrum analyzer.
   b. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
5. Record the deviation as Peak to Average Ratio.

3.6 99% Occupied Bandwidth and 26dB Bandwidth Measurement

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

The 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 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

3.6.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 4.2.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
4. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
5. Set the detection mode to peak, and the trace mode to max hold.
6. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace. (this is the reference value)
7. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
8. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “–X dB down amplitude” determined in step 6. If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
9. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

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.

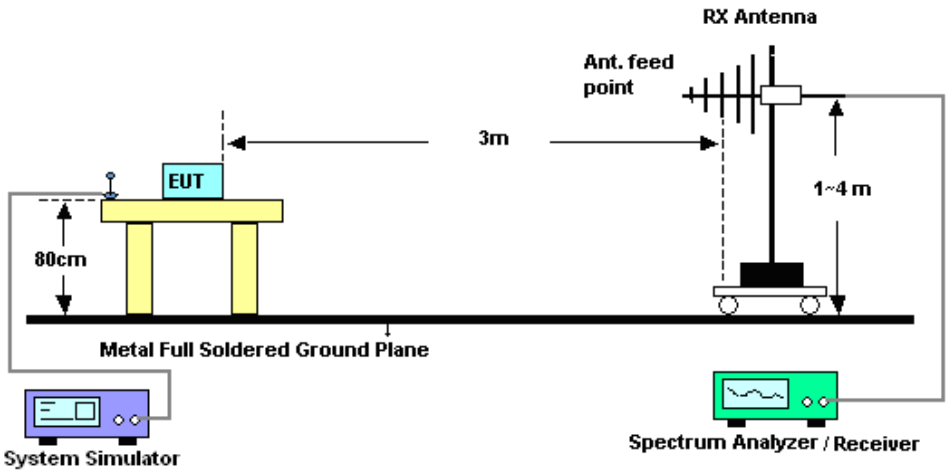
4 Radiated Test Items

4.1 Measuring Instruments

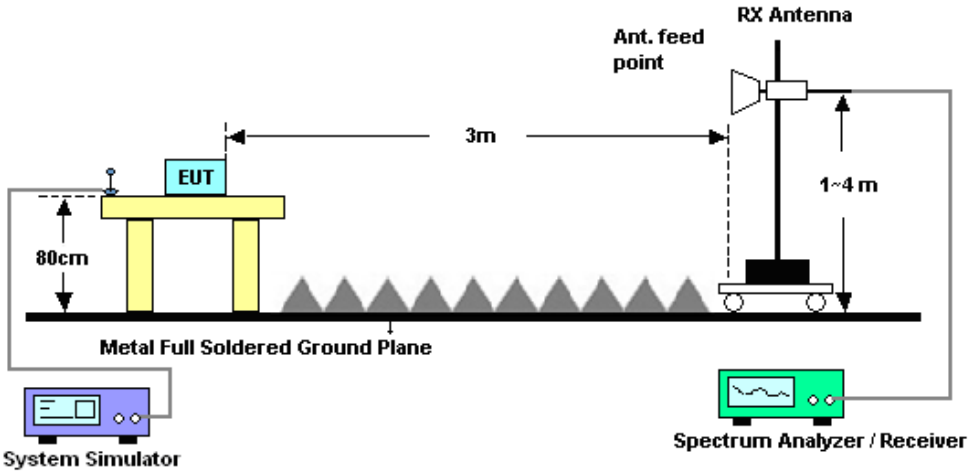
See list of measuring instruments of this test report.

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-D-2010, 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).

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-D-2010 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-D. 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-D-2010 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	FSV30	101338	9kHz~30GHz	May 04, 2015	Oct. 24, 2015~ Oct. 30, 2015	May 03, 2016	Conducted (TH01-KS)
Thermal Chamber	Ten Billion	TTC-B3S	TBN-960502	-40~+150°C	Oct. 24, 2015	Oct. 24, 2015~ Oct. 30, 2015	Oct. 23, 2016	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz-44GHz	Jun. 05, 2015	Oct. 25, 2015	Jun. 04, 2016	Radiation (03CH03-KS)
Bilog Antenna	TeseQ	CBL6112D	35406	25MHz-2GHz	Jun. 25, 2015	Oct. 25, 2015	Jun. 24, 2016	Radiation (03CH03-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1356	1GHz~18GHz	Jun. 25, 2015	Oct. 25, 2015	Jun. 24, 2016	Radiation (03CH03-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15GHz ~40GHz	Mar. 03, 2015	Oct. 25, 2015	Mar. 02, 2016	Radiation (03CH03-KS)
Amplifier	Burgeon	BPA-530	102212	0.01MHz-3000MHz	Aug.10, 2015	Oct. 25, 2015	Aug. 09, 2016	Radiation (03CH03-KS)
Amplifier	MITEQ	TTA1840-35 -HG	1887435	18~40GHz	Aug. 27, 2015	Oct. 25, 2015	Aug. 26, 2016	Radiation (03CH03-KS)
high gain Amplifier	MITEQ	AMF-7D-00 101800-30-1	1889560	1GHz-18GHz	Aug. 10, 2015	Oct. 25, 2015	Aug. 09, 2016	Radiation (03CH03-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Oct. 24, 2015	Oct. 25, 2015	Oct. 23, 2016	Radiation (03CH03-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Oct. 25, 2015	NCR	Radiation (03CH03-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Oct. 25, 2015	NCR	Radiation (03CH03-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Oct. 25, 2015	NCR	Radiation (03CH03-KS)

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))	**4.5dB**

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

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	33.58	33.34	33.26	30.44	30.48	30.69
GPRS class 8	33.55	33.32	33.25	30.42	30.46	30.65
GPRS class 10	32.22	32.30	32.35	28.50	28.54	28.86
GPRS class 11	30.78	30.75	30.79	26.81	27.04	27.30
GPRS class 12	29.56	29.45	29.54	25.79	25.66	26.04
EGPRS class 8	26.95	26.89	26.88	25.97	26.02	26.35
EGPRS class 10	26.81	26.74	26.74	25.86	25.90	26.24
EGPRS class 11	26.16	26.08	26.06	25.23	25.24	25.58
EGPRS class 12	25.93	25.87	25.89	25.02	25.08	25.43

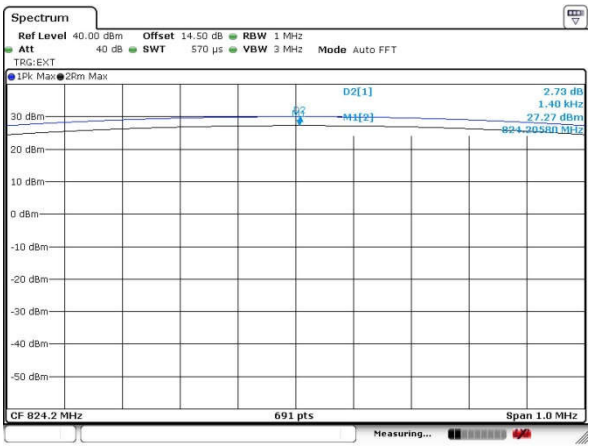
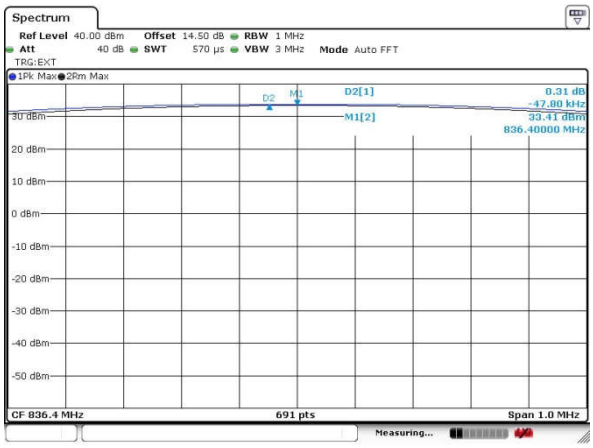
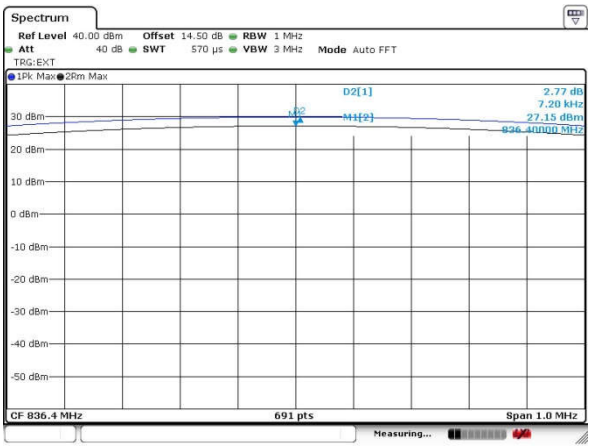
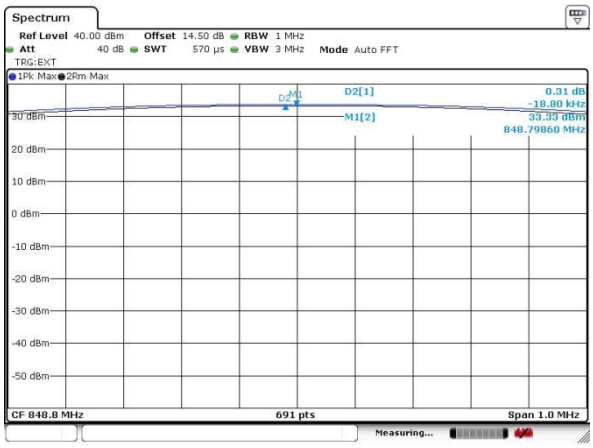
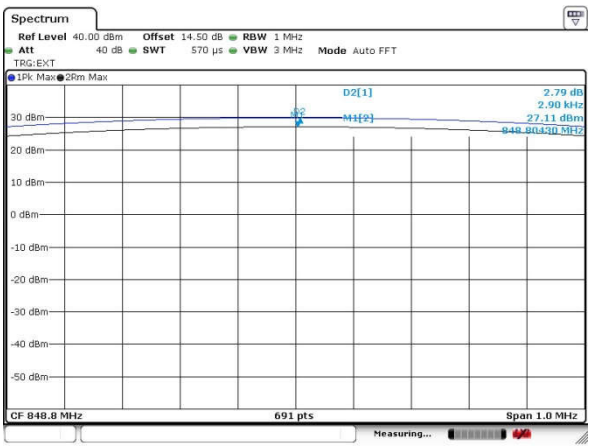
Conducted Power (*Unit: dBm)						
Band	WCDMA Band V			WCDMA Band II		
Channel	4132	4182	4233	9262	9400	9538
Frequency	826.4	836.4	846.6	1852.4	1880	1907.6
AMR 12.2Kbps	23.40	23.37	23.38	22.75	22.85	22.90
RMC 12.2Kbps	23.40	23.40	23.46	22.78	22.86	22.91
HSDPA Subtest-1	22.58	22.58	22.48	21.94	21.79	21.96
HSDPA Subtest-2	22.55	22.53	22.47	21.95	21.11	21.94
HSDPA Subtest-3	22.00	21.98	22.08	21.50	21.31	21.47
HSDPA Subtest-4	21.94	22.01	22.01	21.44	21.29	21.44
HSUPA Subtest-1	22.36	22.30	22.33	21.89	21.87	21.94
HSUPA Subtest-2	20.28	20.12	20.21	19.85	19.82	19.96
HSUPA Subtest-3	21.27	21.18	21.25	20.88	20.80	20.92
HSUPA Subtest-4	20.43	20.38	20.28	19.83	19.90	20.02
HSUPA Subtest-5	21.83	21.87	21.81	21.32	21.31	21.47

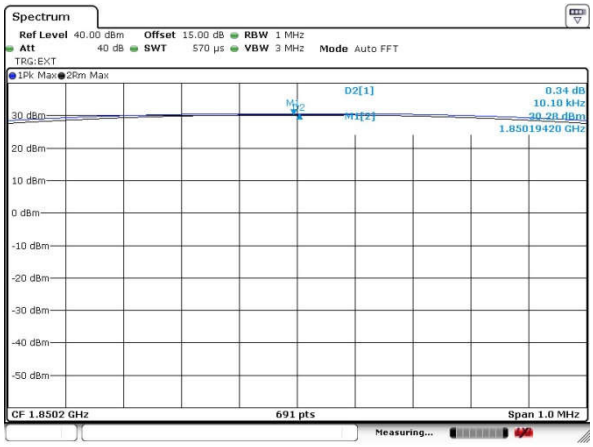
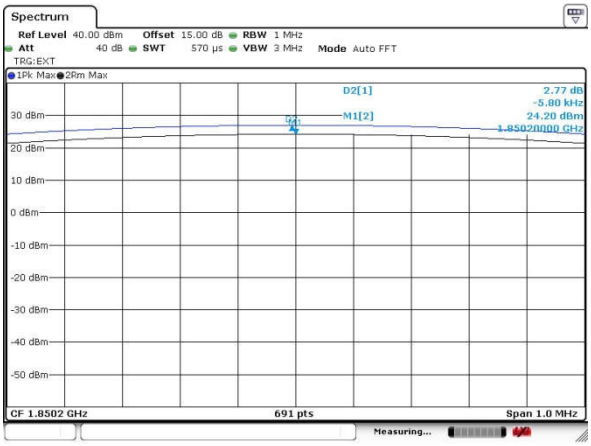
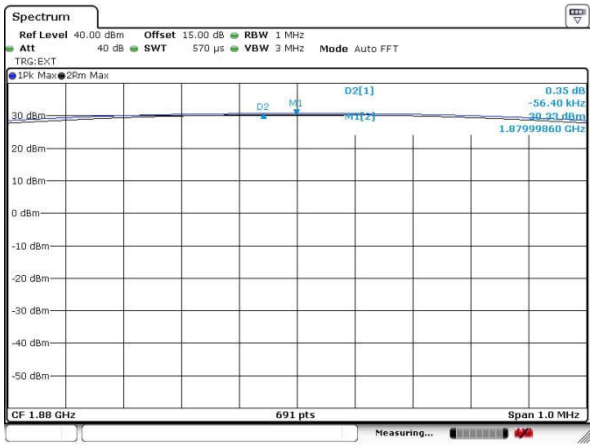
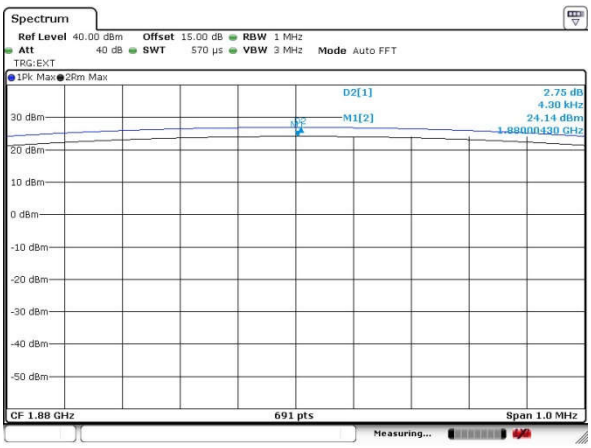
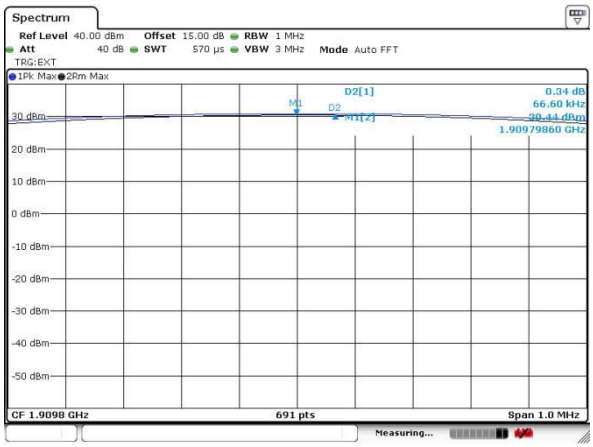
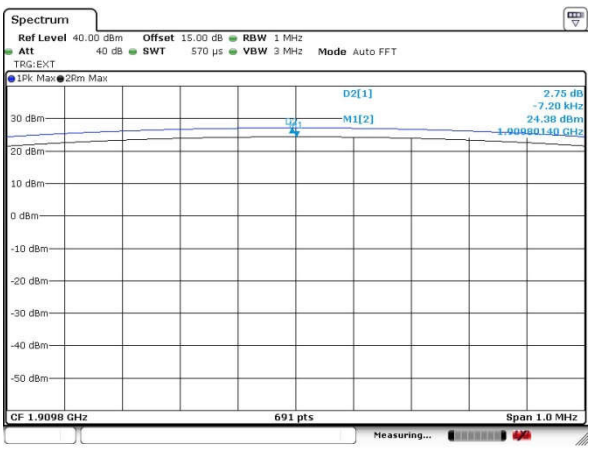
A1. GSM

Peak-to-Average Ratio

Mode	GSM850		Limit: 13dB
Mod.	GSM	EDGE class 8	Result
Lowest CH	0.32	2.73	PASS
Middle CH	0.31	2.77	
Highest CH	0.31	2.79	

Mode	GSM1900		Limit: 13dB
Mod.	GSM	EDGE class 8	Result
Lowest CH	0.34	2.77	PASS
Middle CH	0.35	2.75	
Highest CH	0.34	2.75	

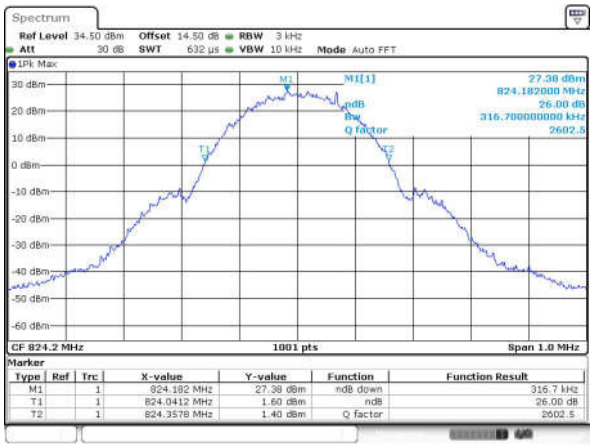
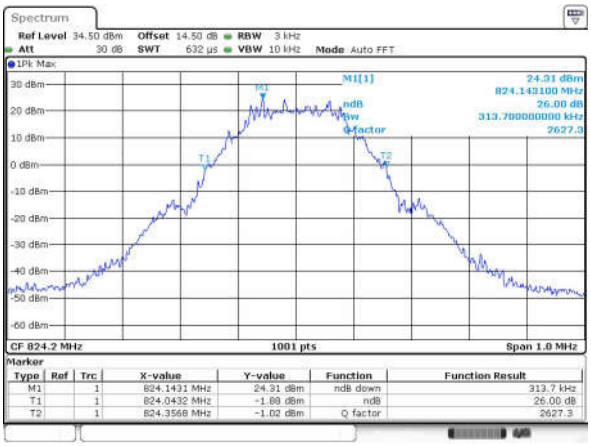
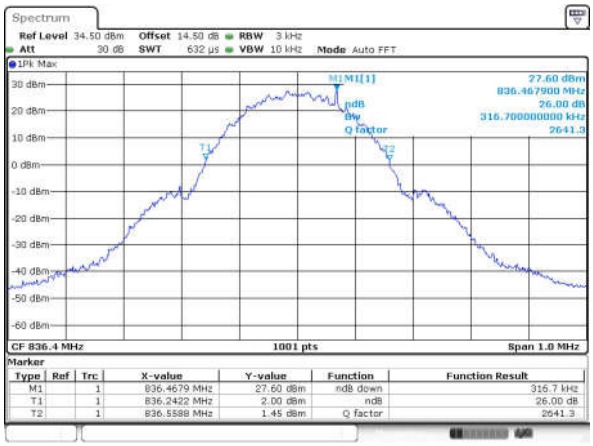
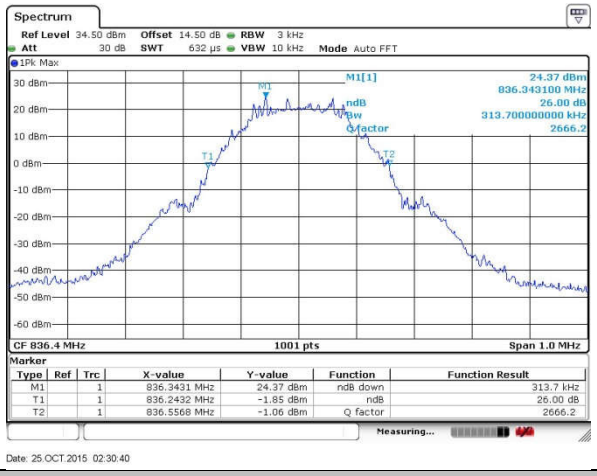
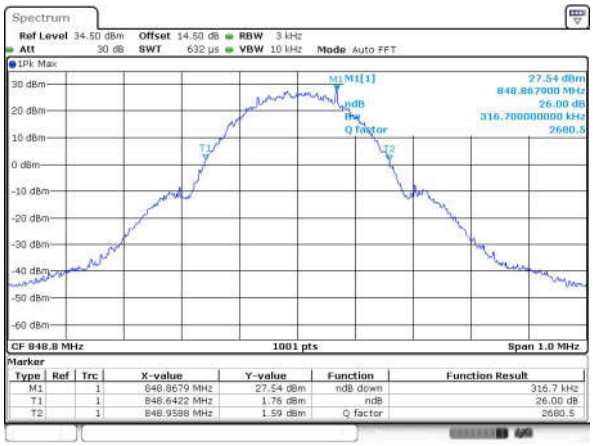
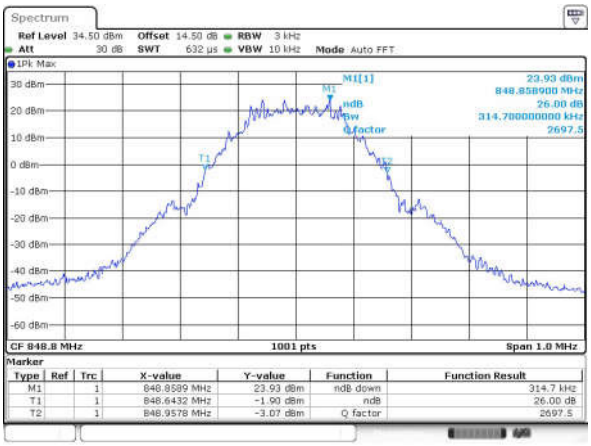
GSM850 (GSM)	GSM850 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Middle Channel	**Middle Channel**
	
Highest Channel	**Highest Channel**
	

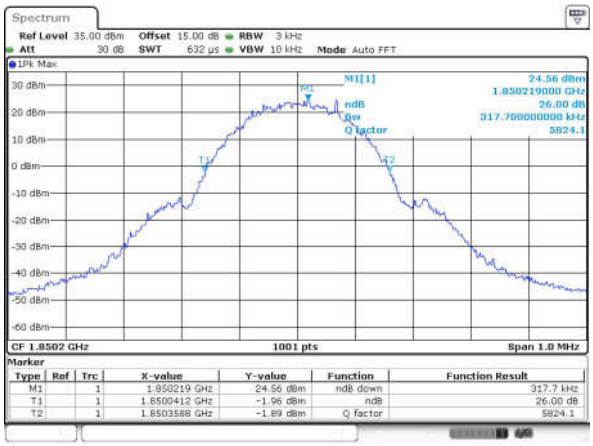
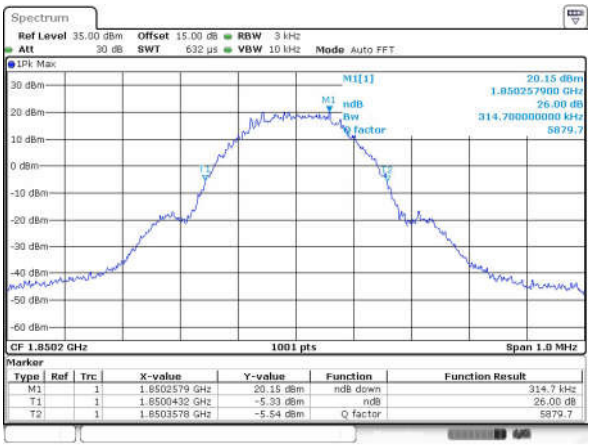
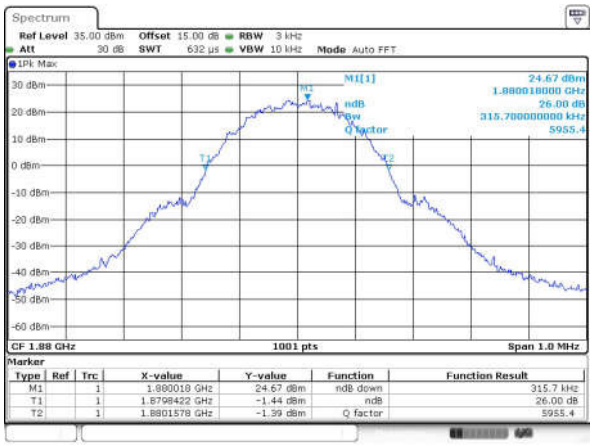
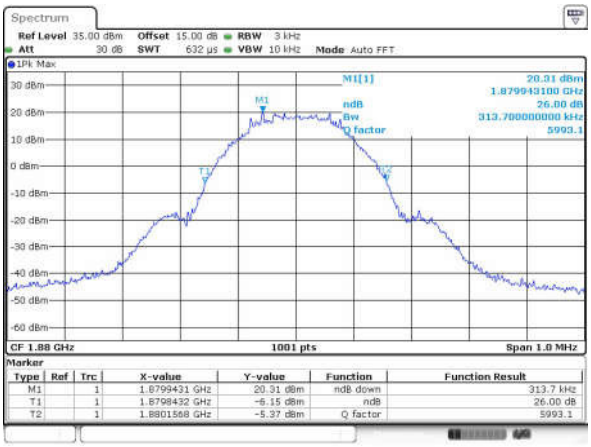
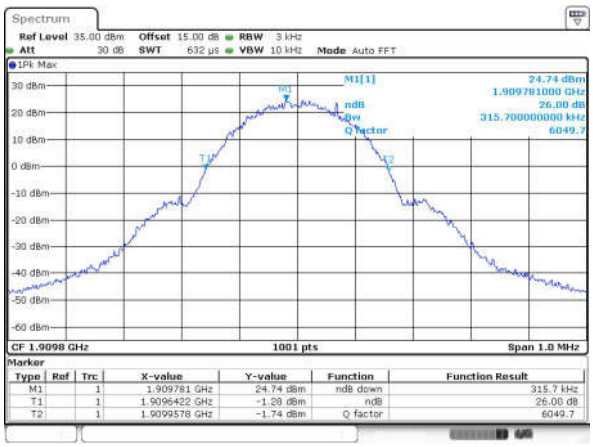
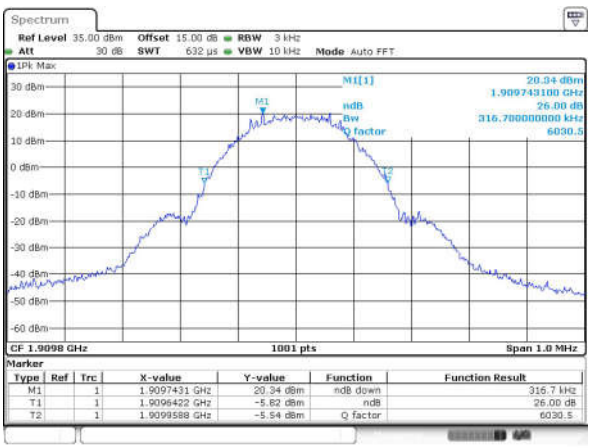
GSM1900 (GSM)	GSM1900 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Middle Channel	**Middle Channel**
	
Highest Channel	**Highest Channel**
	

26dB Bandwidth

Mode	GSM850	
Mod.	GSM	EDGE class 8
Lowest CH	0.317	0.314
Middle CH	0.317	0.314
Highest CH	0.317	0.315

Mode	GSM1900	
Mod.	GSM	EDGE class 8
Lowest CH	0.318	0.315
Middle CH	0.316	0.314
Highest CH	0.316	0.317

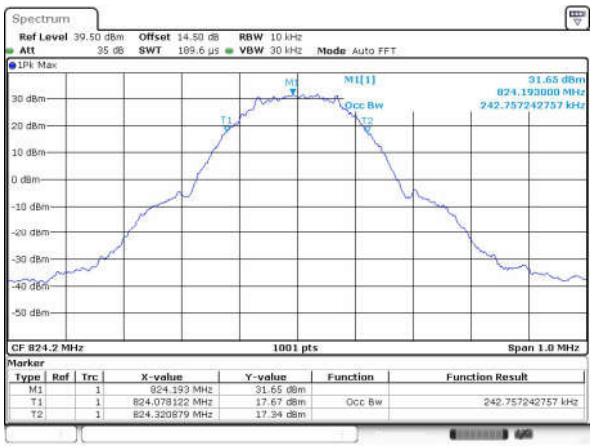
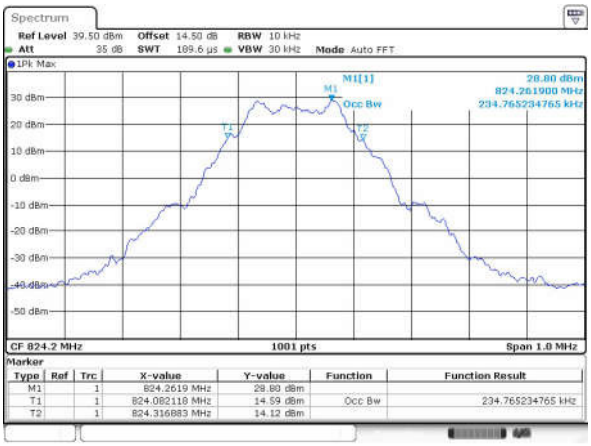
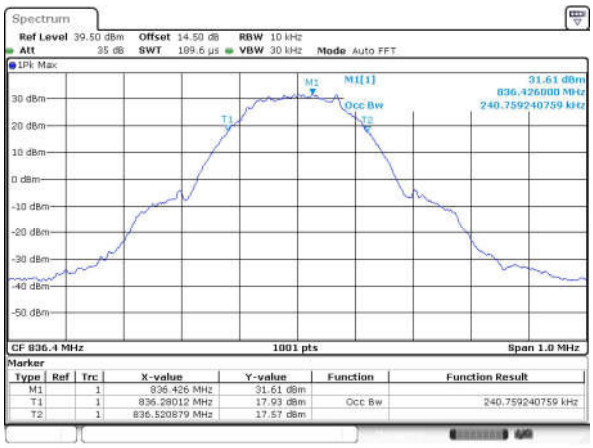
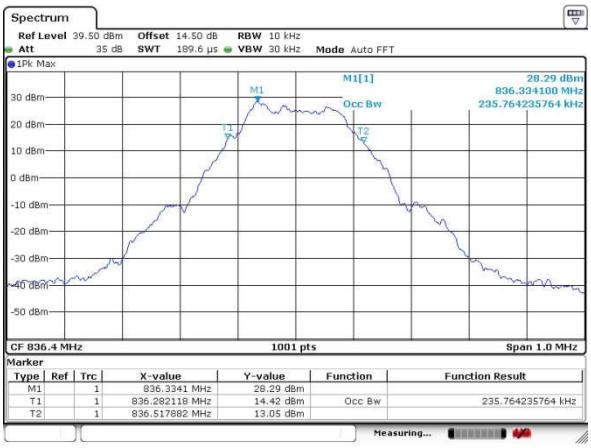
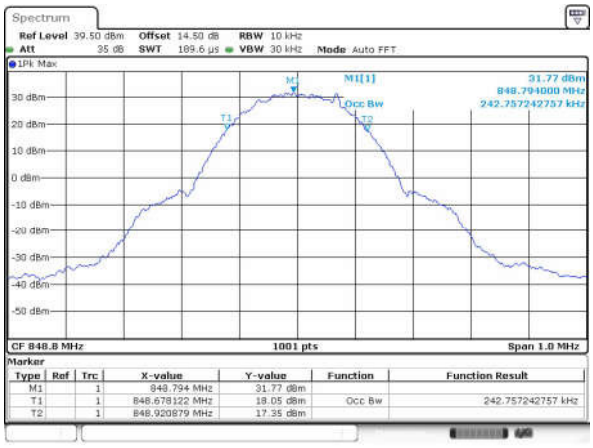
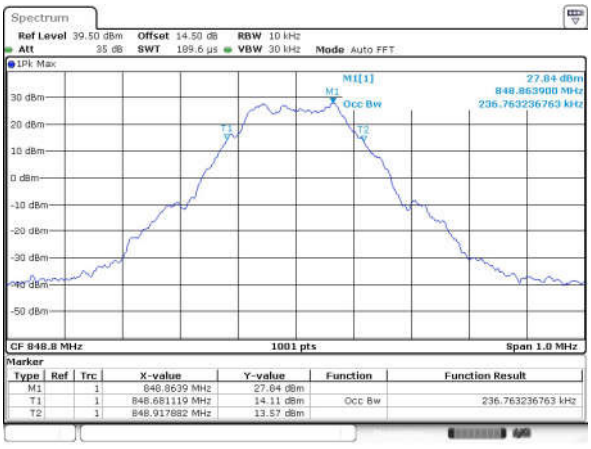
GSM850 (GSM)	GSM850 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Middle Channel	**Middle Channel**
	
Highest Channel	**Highest Channel**
	

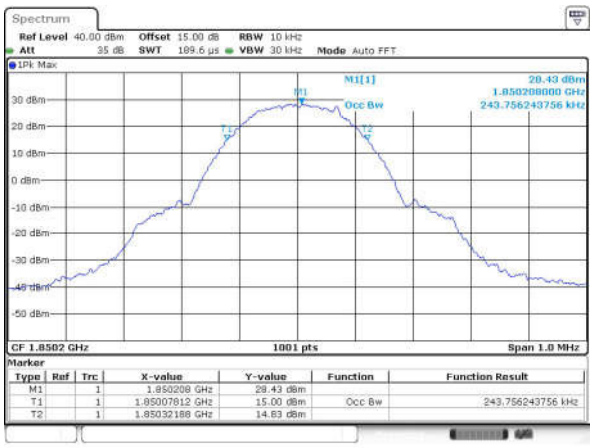
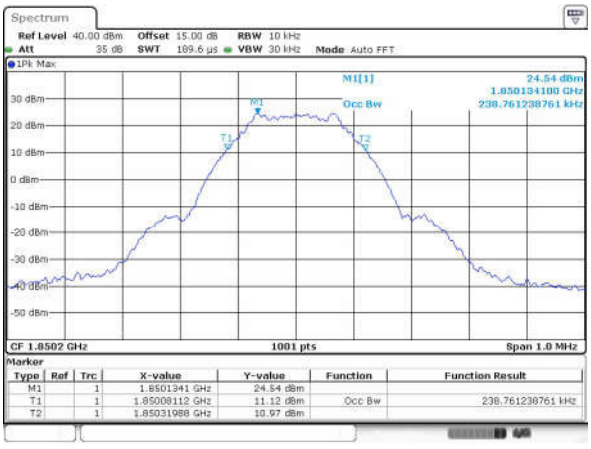
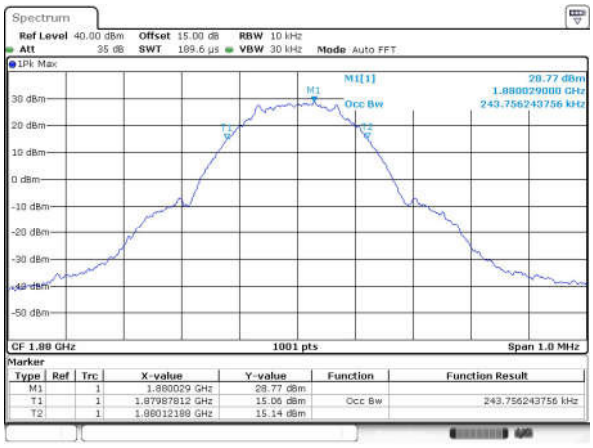
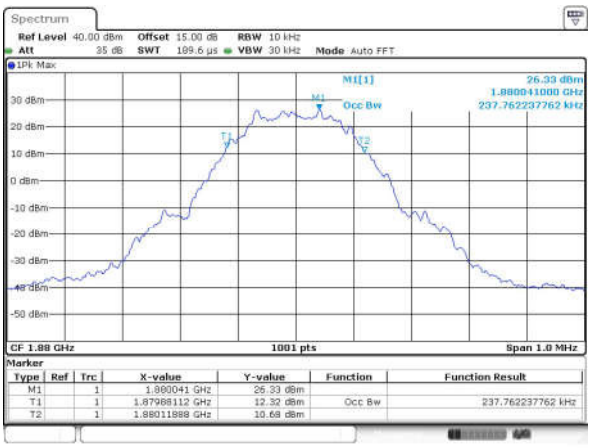
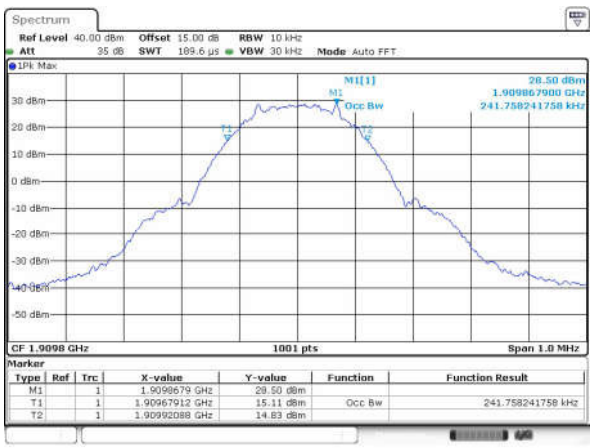
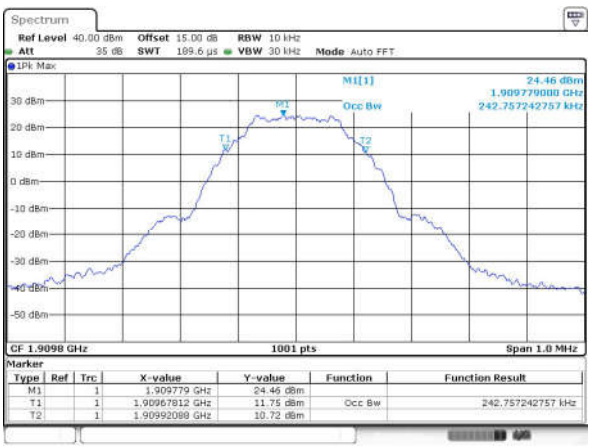
GSM1900 (GSM)	GSM1900 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Middle Channel	**Middle Channel**
	
Highest Channel	**Highest Channel**
	

Occupied Bandwidth

Mode	GSM850	
Mod.	GSM	EDGE class 8
Lowest CH	0.243	0.235
Middle CH	0.241	0.236
Highest CH	0.243	0.237

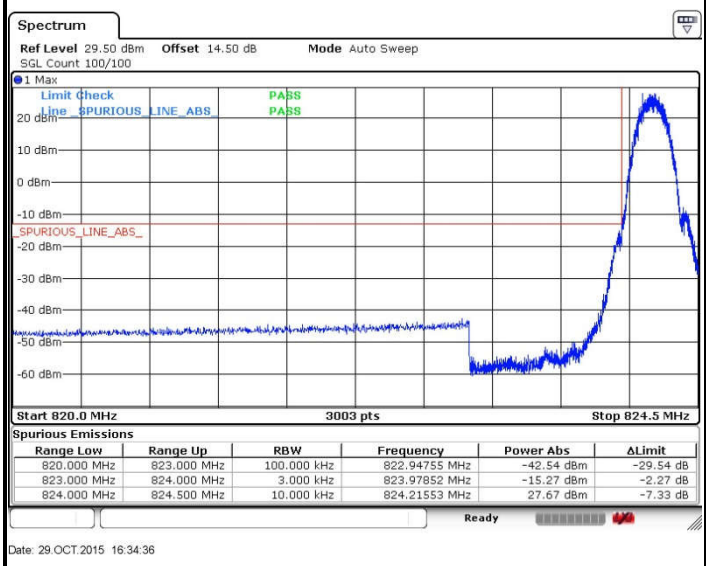
Mode	GSM1900	
Mod.	GSM	EDGE class 8
Lowest CH	0.244	0.239
Middle CH	0.244	0.238
Highest CH	0.242	0.243

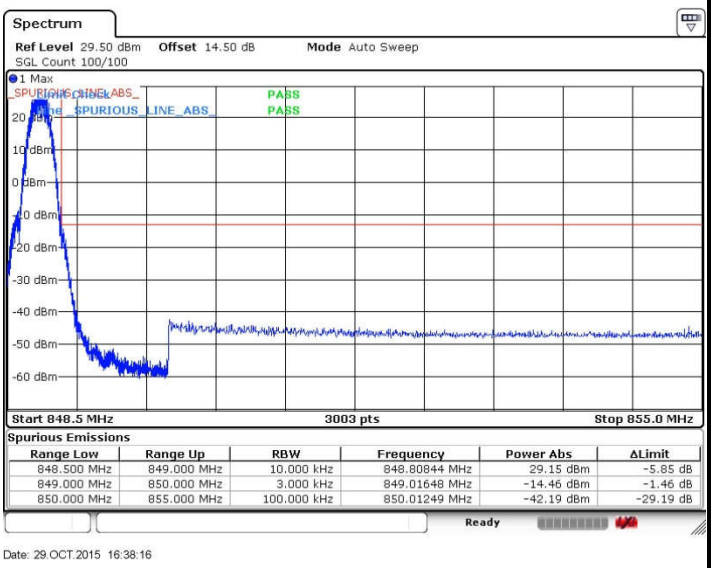
GSM850 (GSM)	GSM850 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Middle Channel	**Middle Channel**
	
Highest Channel	**Highest Channel**
	

GSM1900 (GSM)	GSM1900 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Middle Channel	**Middle Channel**
	
Highest Channel	**Highest Channel**
	

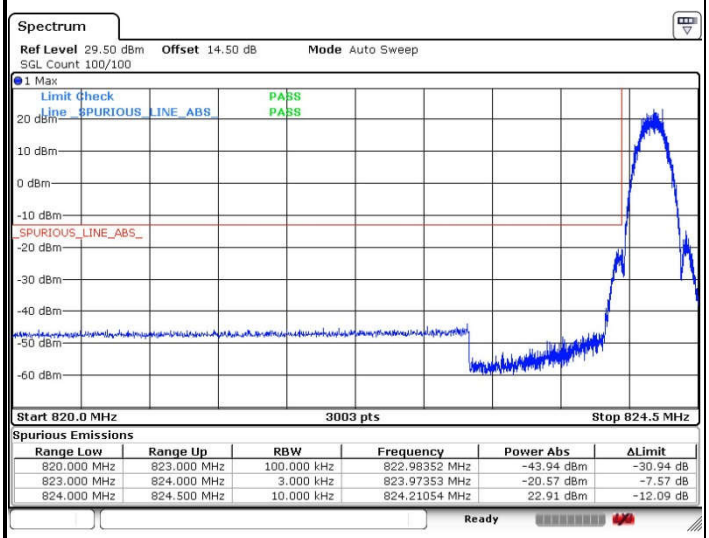
Conducted Band Edge

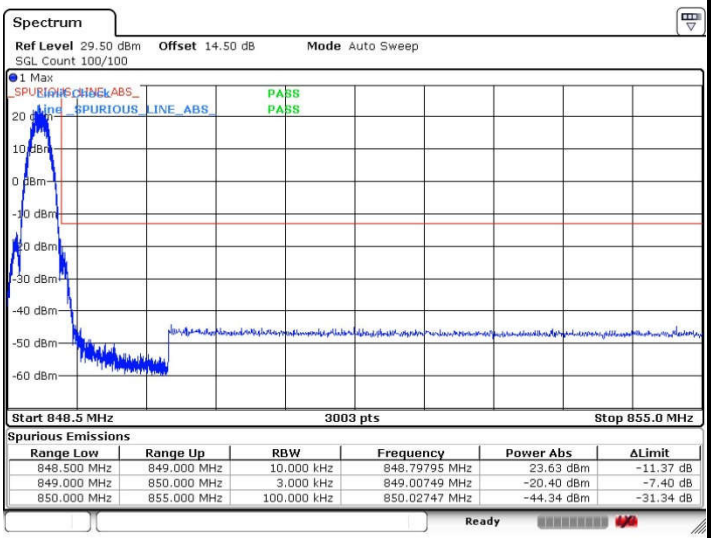
GSM850 (GSM)	
Lowest Band Edge	**Highest Band Edge**



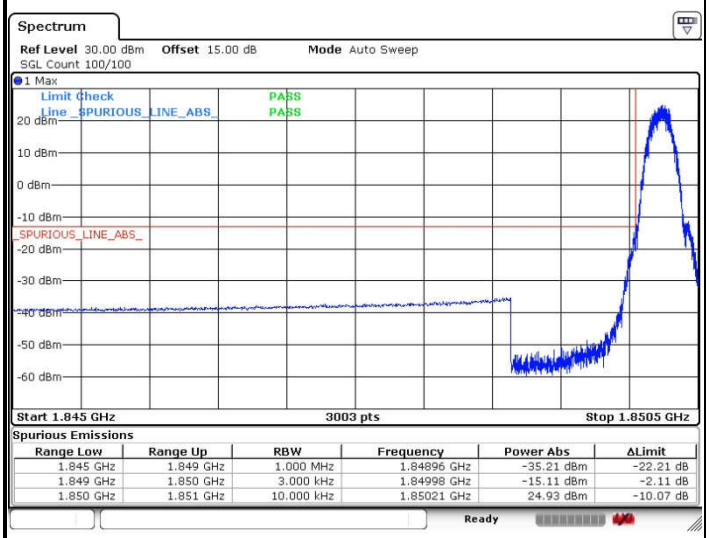


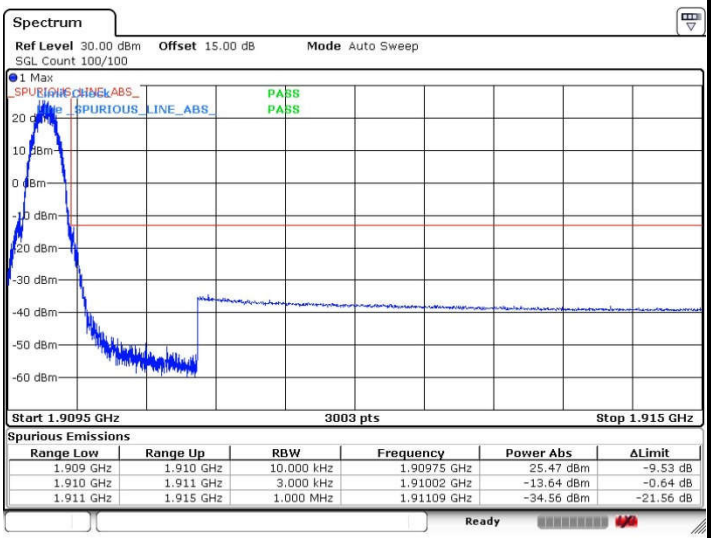
GSM850 (EDGE class 8)	
Lowest Band Edge	**Highest Band Edge**



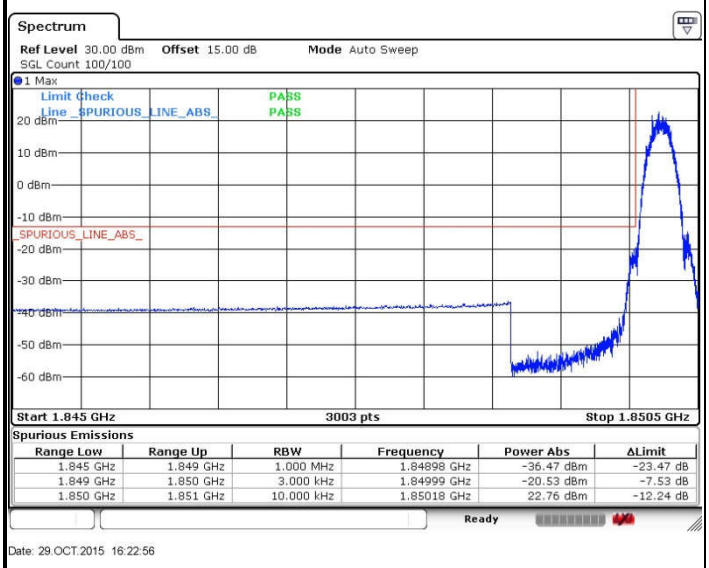


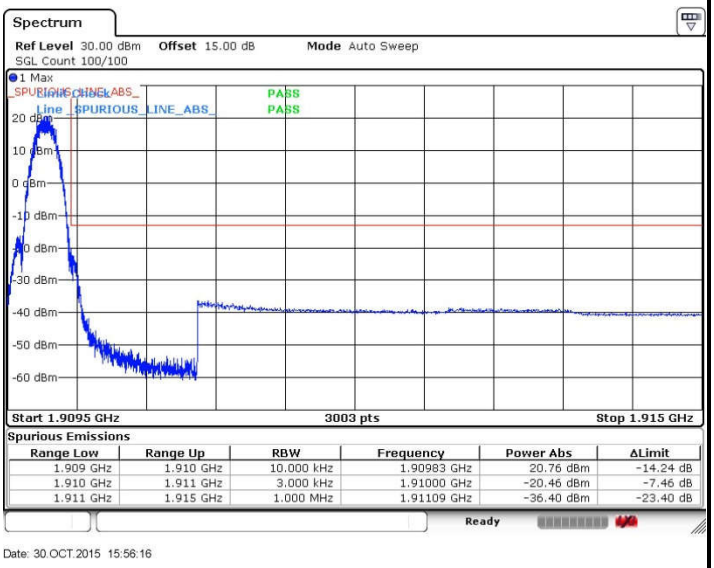
GSM1900 (GSM)	
Lowest Band Edge	**Highest Band Edge**





GSM1900 (EDGE class 8)	
Lowest Band Edge	**Highest Band Edge**

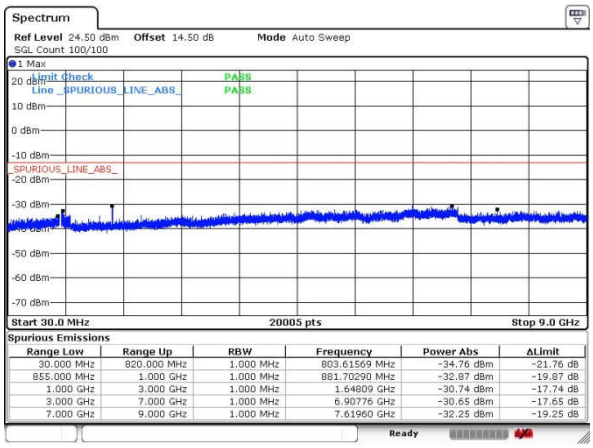




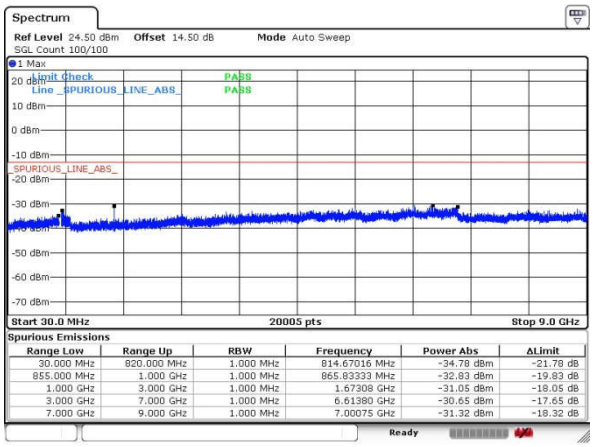
Conducted Spurious Emission

GSM850 (GSM)

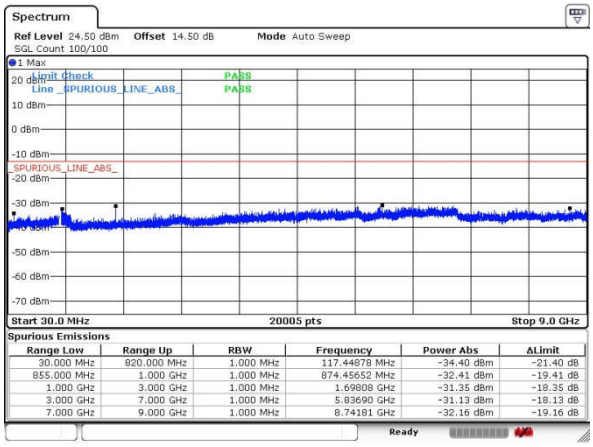
Lowest Channel



Middle Channel

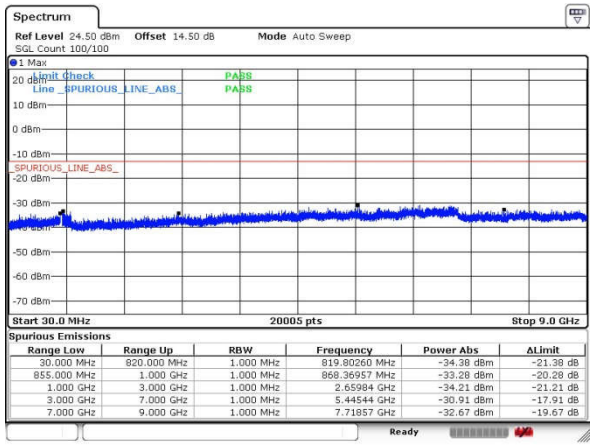


Highest Channel

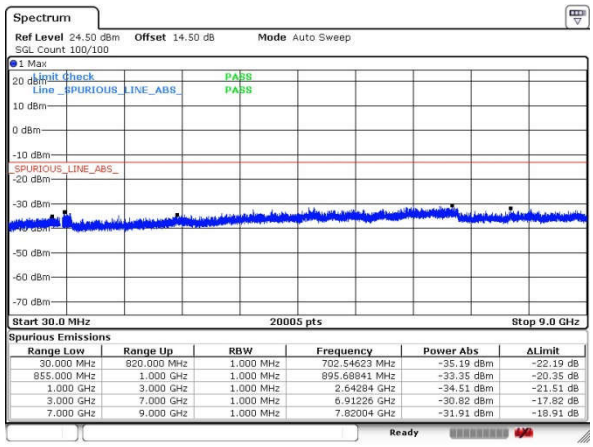


GSM850 (EDGE class 8)

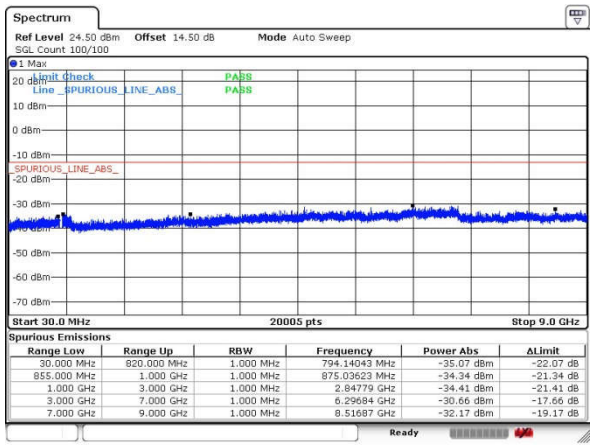
Lowest Channel

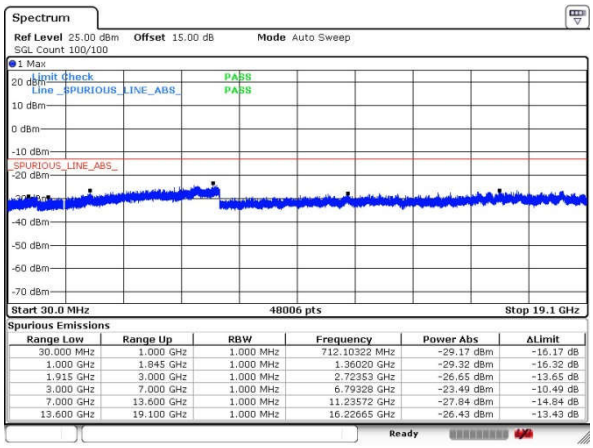
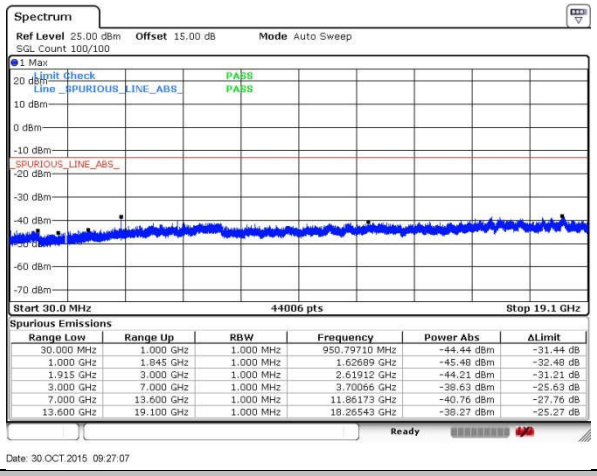
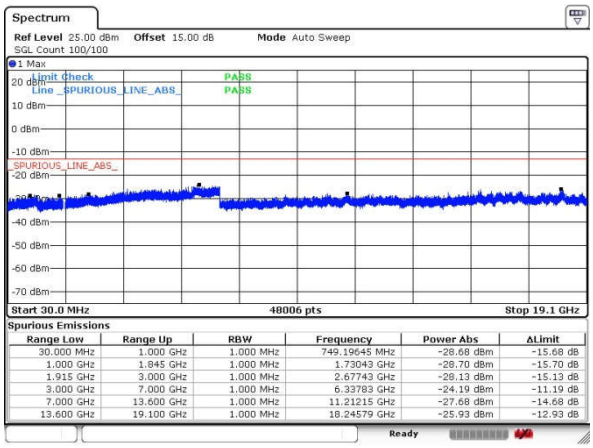
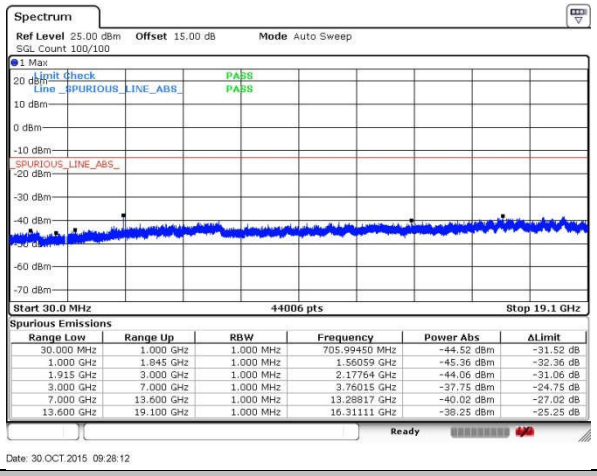
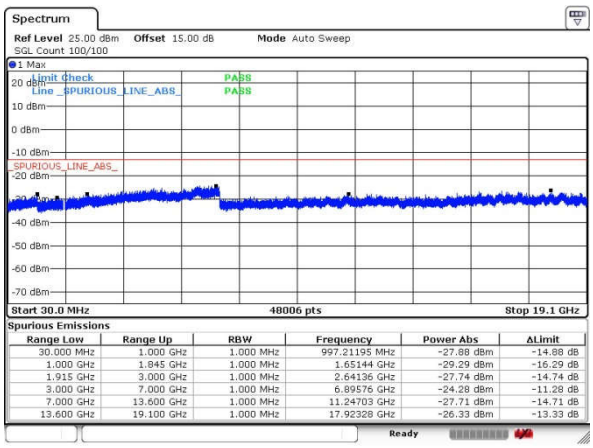
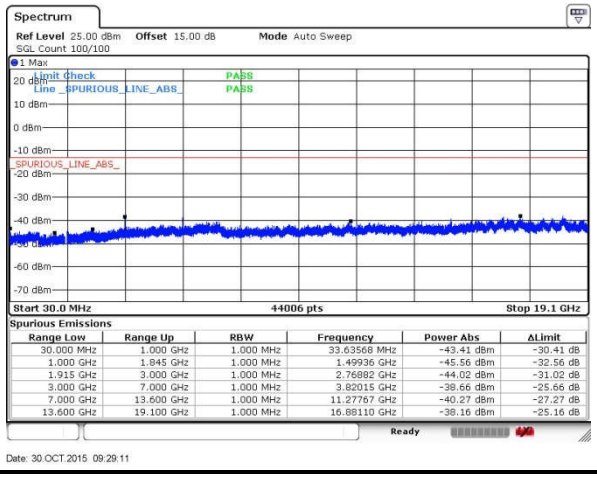


Middle Channel



Highest Channel



GSM1900 (GSM)	GSM1900 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Middle Channel	**Middle Channel**
	
Highest Channel	**Highest Channel**
	

Frequency Stability

Test Conditions	Middle Channel	GSM850 (GSM)	GSM850 (EDGE class 8)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0096	0.0120	PASS
40	Normal Voltage	0.0048	0.0526	
30	Normal Voltage	0.0562	0.0418	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0466	0.0430	
0	Normal Voltage	0.0024	0.0024	
-10	Normal Voltage	0.0383	0.0407	
-20	Normal Voltage	0.0084	0.0036	
-30	Normal Voltage	0.0490	0.0466	
20	Maximum Voltage	0.0036	0.0048	
20	Normal Voltage	0.0407	0.0060	
20	Battery End Point	0.0155	0.0347	

Note: Normal Voltage = 3.8V. ；Battery End Point (BEP) = 3.6 V.；Maximum Voltage =4.35 V

Test Conditions	Middle Channel	GSM1900 (GSM)	GSM1900 (EDGE class 8)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0064	0.0059	PASS
40	Normal Voltage	0.0234	0.0037	
30	Normal Voltage	0.0032	0.0186	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0197	0.0176	
0	Normal Voltage	0.0011	0.0016	
-10	Normal Voltage	0.0186	0.0165	
-20	Normal Voltage	0.0027	0.0005	
-30	Normal Voltage	0.0207	0.0191	
20	Maximum Voltage	0.0021	0.0048	
20	Normal Voltage	0.0181	0.0032	
20	Battery End Point	0.0037	0.0149	

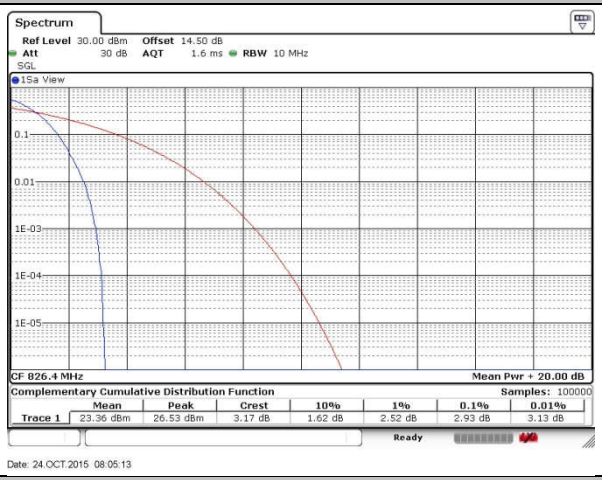
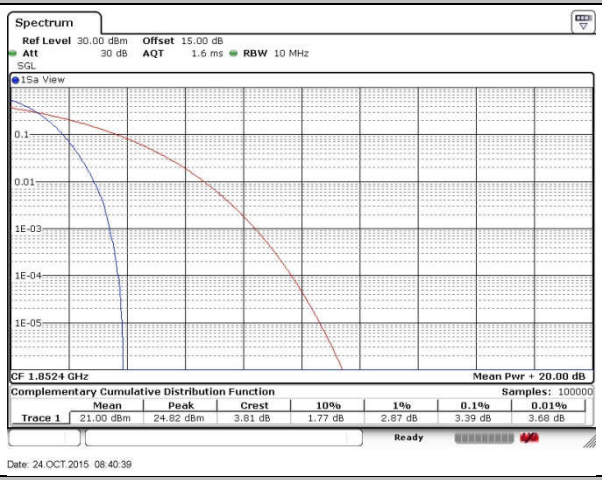
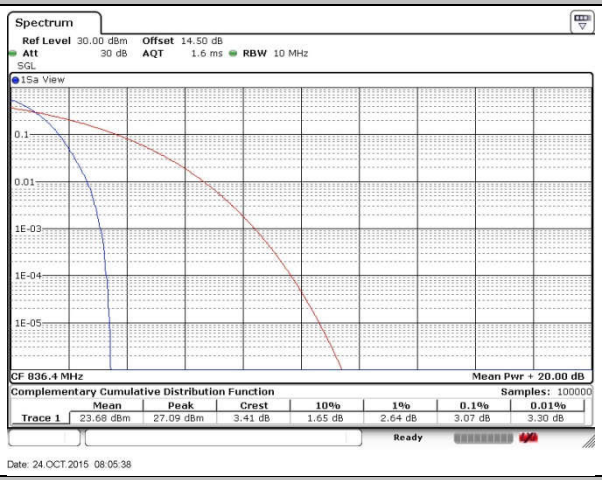
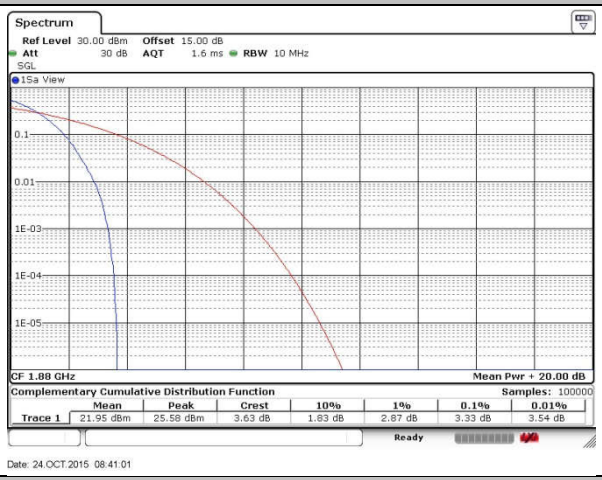
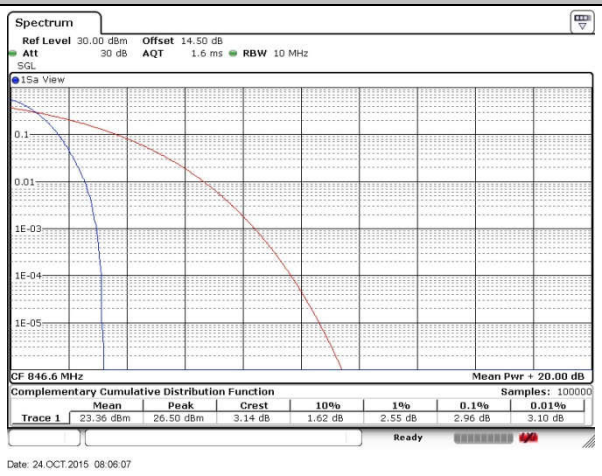
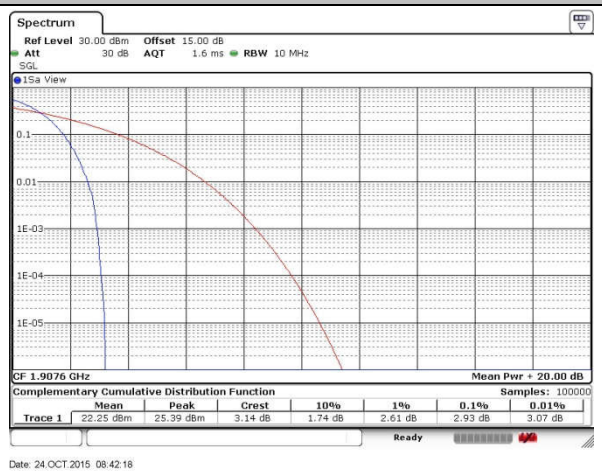
Note:

1. Normal Voltage = 3.8V. ；Battery End Point (BEP) = 3.6 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.

A2. WCDMA

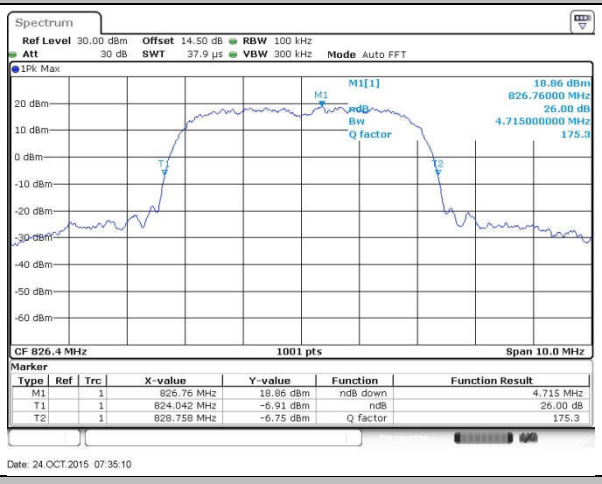
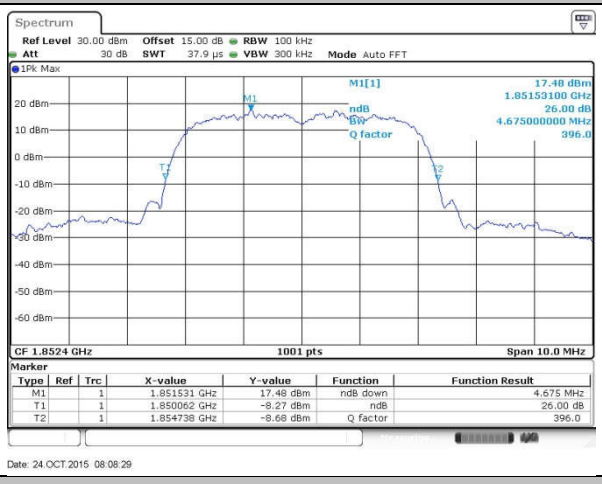
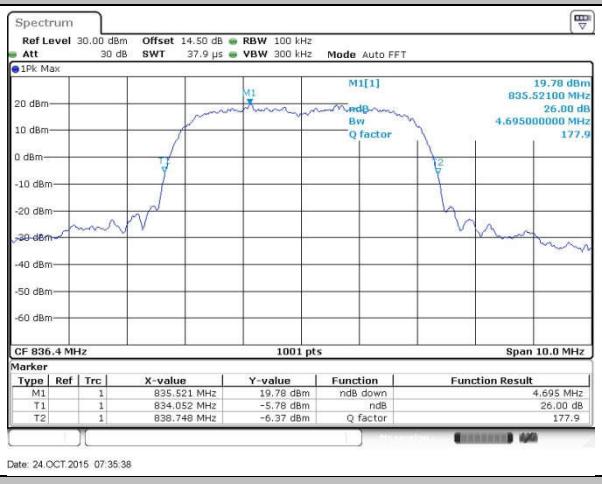
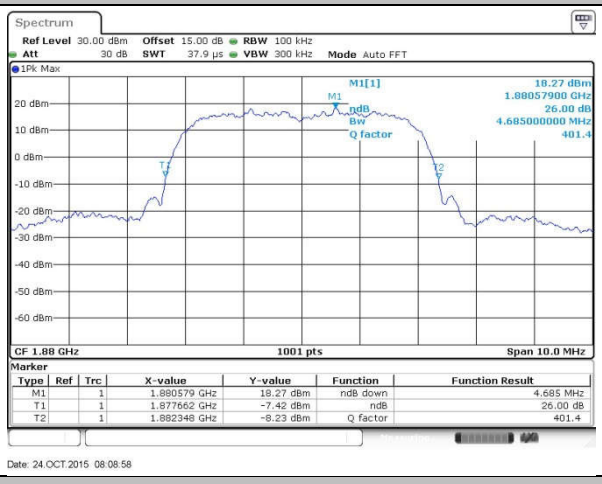
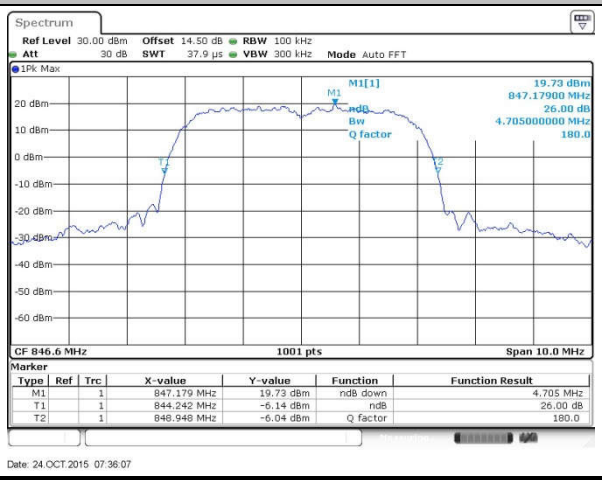
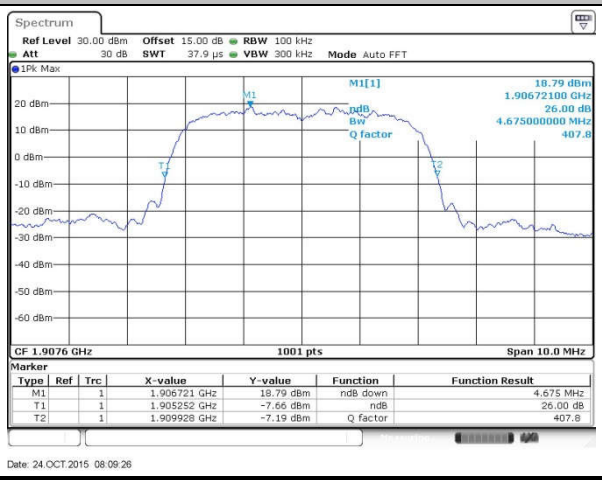
Peak-to-Average Ratio

Mode	WCDMA Band V	WCDMA Band II	Limit: 13dB
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	Result
Lowest CH	2.93	3.39	PASS
Middle CH	3.07	3.33	
Highest CH	2.96	2.93	

WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
	
Middle Channel	**Middle Channel**
	
Highest Channel	**Highest Channel**
	

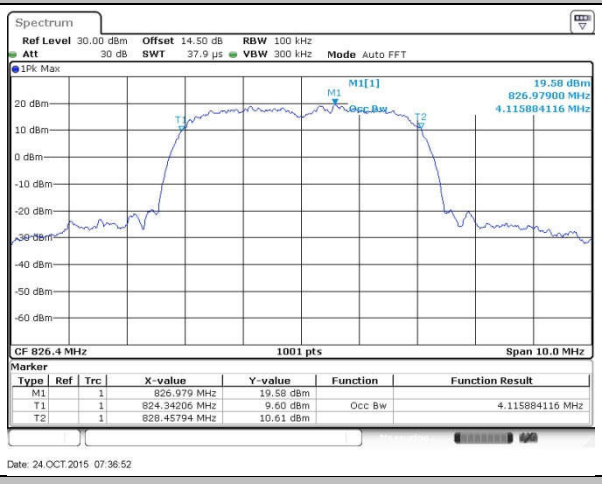
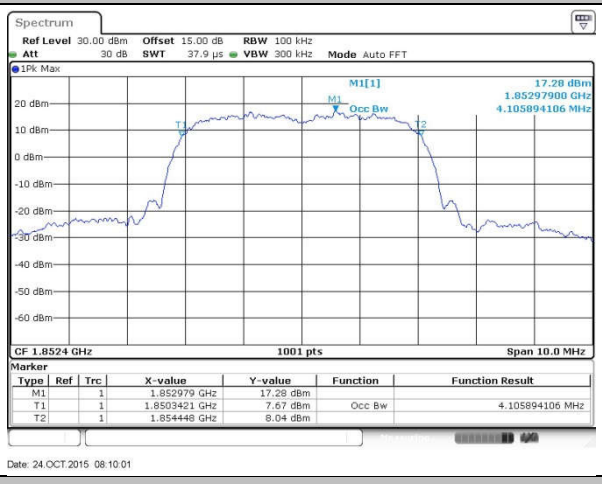
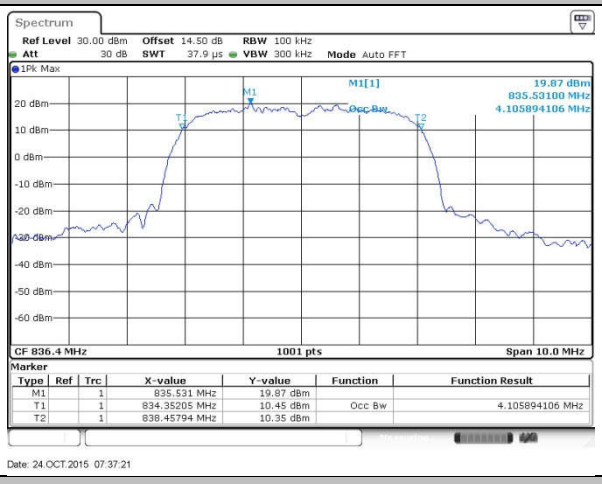
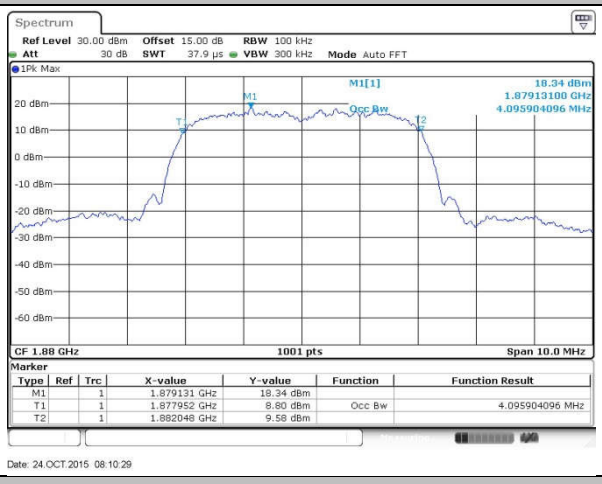
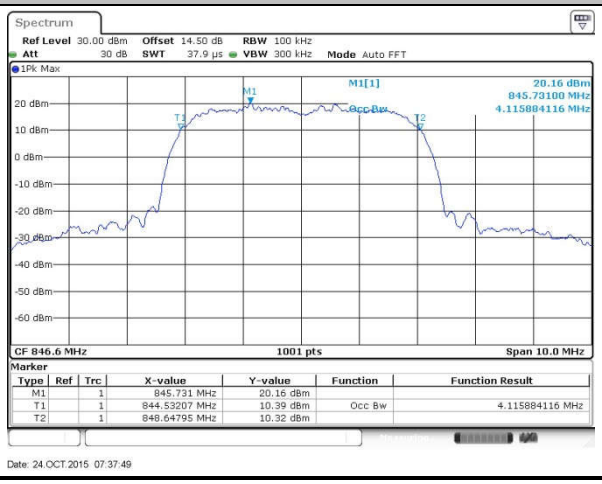
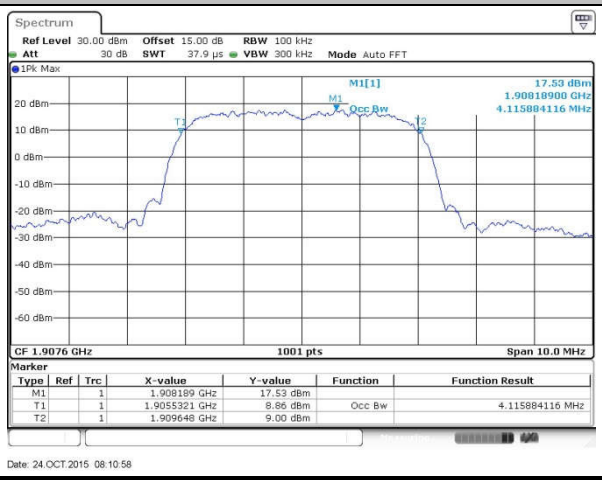
26dB Bandwidth

Mode	WCDMA Band V	WCDMA Band II
Mod.	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.72	4.68
Middle CH	4.70	4.69
Highest CH	4.71	4.68

WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
	
Middle Channel	**Middle Channel**
	
Highest Channel	**Highest Channel**
	

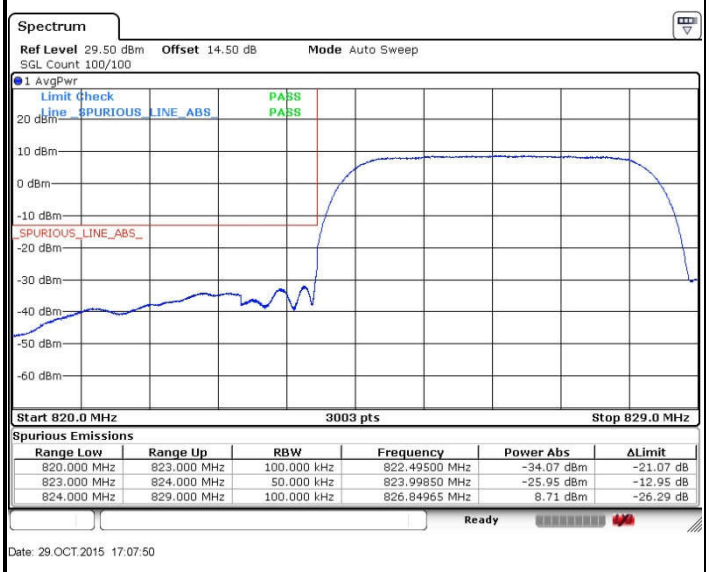
Occupied Bandwidth

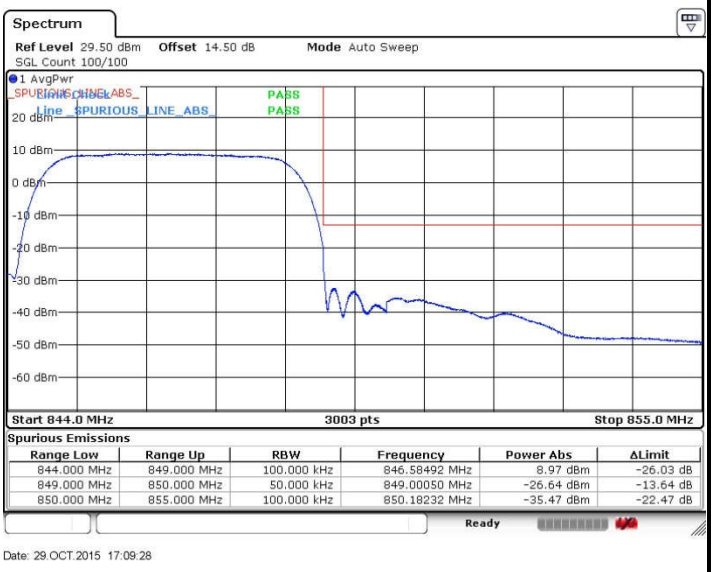
Mode	WCDMA Band V	WCDMA Band II
Mod.	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.12	4.11
Middle CH	4.11	4.10
Highest CH	4.12	4.12

WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
	
Middle Channel	**Middle Channel**
	
Highest Channel	**Highest Channel**
	

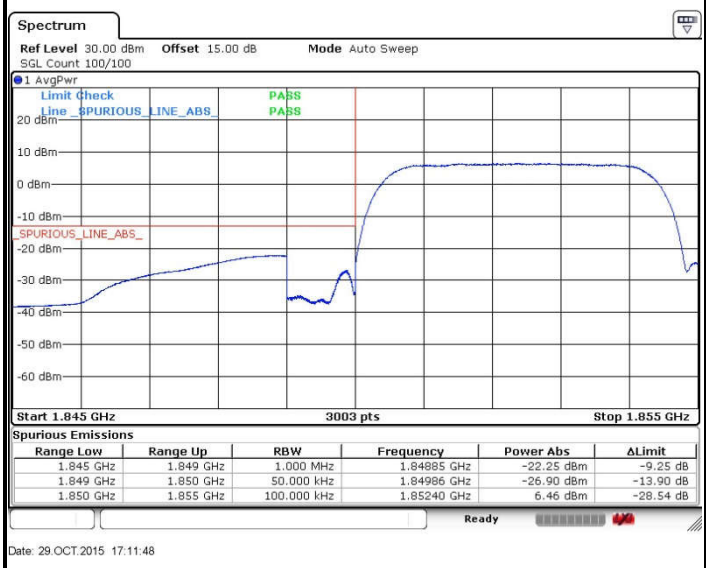
Conducted Band Edge

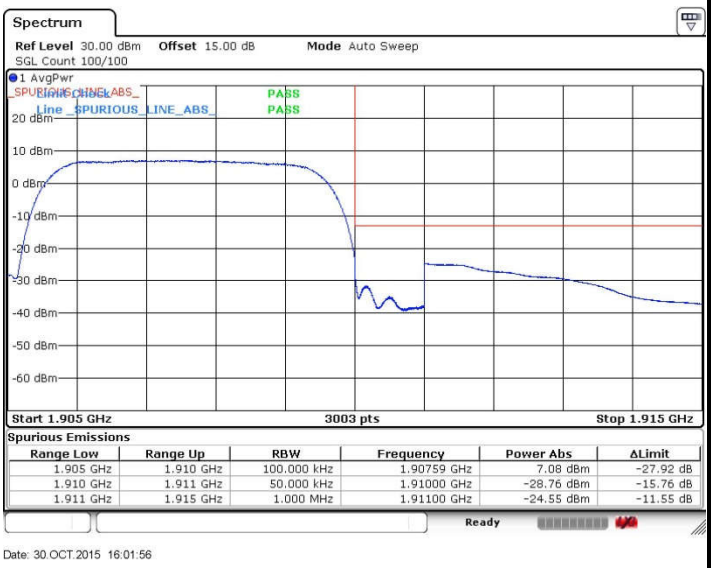
WCDMA Band V (RMC 12.2Kbps)	
Lowest Band Edge	**Highest Band Edge**





WCDMA Band II (RMC 12.2Kbps)	
Lowest Band Edge	**Highest Band Edge**

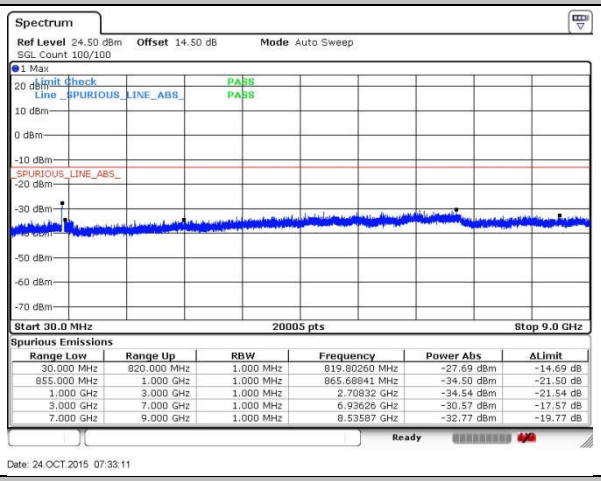




Conducted Spurious Emission

WCDMA Band V (RMC 12.2Kbps)

Lowest Channel

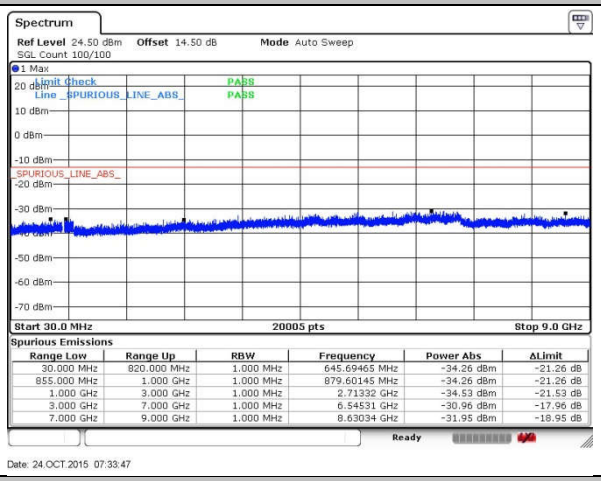


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	819.80260 MHz	-27.69 dBm	-14.69 dB
855.000 MHz	1.000 GHz	1.000 MHz	865.68841 MHz	-34.50 dBm	-21.50 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.70832 GHz	-34.54 dBm	-21.54 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.93626 GHz	-30.57 dBm	-17.57 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.53587 GHz	-32.77 dBm	-19.77 dB

Date: 24.OCT.2015 07:33:11

Middle Channel

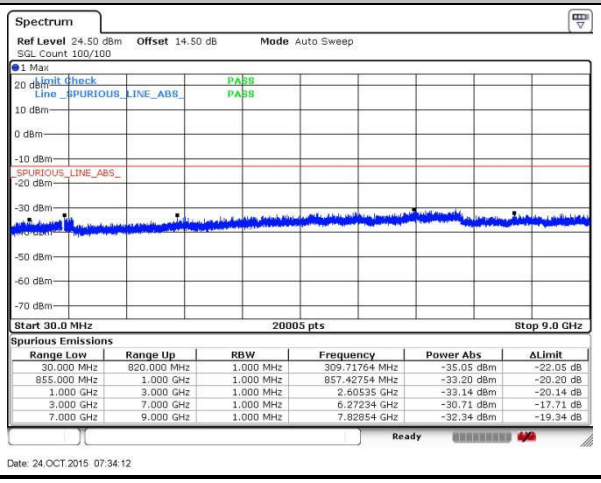


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	645.69465 MHz	-34.26 dBm	-21.26 dB
855.000 MHz	1.000 GHz	1.000 MHz	879.60145 MHz	-34.26 dBm	-21.26 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.71332 GHz	-34.53 dBm	-21.53 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.54531 GHz	-30.96 dBm	-17.96 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.63034 GHz	-31.95 dBm	-18.95 dB

Date: 24.OCT.2015 07:33:47

Highest Channel



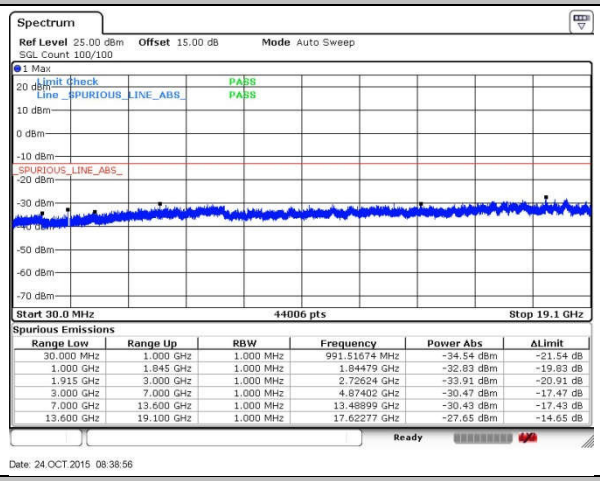
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	309.71764 MHz	-35.05 dBm	-22.05 dB
855.000 MHz	1.000 GHz	1.000 MHz	857.42754 MHz	-33.20 dBm	-20.20 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.60535 GHz	-33.14 dBm	-20.14 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.27234 GHz	-30.71 dBm	-17.71 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.82854 GHz	-32.34 dBm	-19.34 dB

Date: 24.OCT.2015 07:34:12

WCDMA Band II (RMC 12.2Kbps)

Lowest Channel

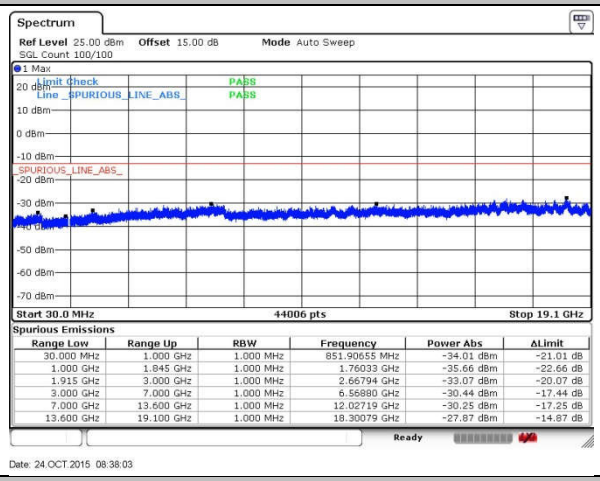


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	991.51674 MHz	-34.54 dBm	-21.54 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.84479 GHz	-32.83 dBm	-19.83 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.72624 GHz	-33.91 dBm	-20.91 dB
3.000 GHz	7.000 GHz	1.000 MHz	4.87402 GHz	-30.47 dBm	-17.47 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.48899 GHz	-30.43 dBm	-17.43 dB
13.600 GHz	19.100 GHz	1.000 MHz	17.62277 GHz	-27.65 dBm	-14.65 dB

Date: 24.OCT.2015 08:38:56

Middle Channel

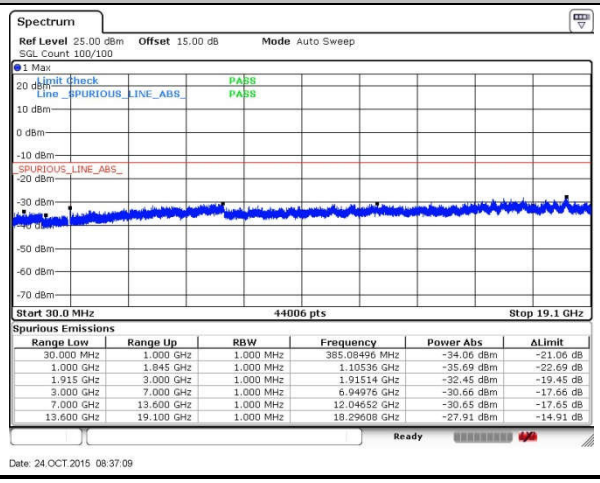


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	851.90655 MHz	-34.01 dBm	-21.01 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.76033 GHz	-35.66 dBm	-22.66 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.66794 GHz	-33.07 dBm	-20.07 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.55880 GHz	-30.44 dBm	-17.44 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.02719 GHz	-30.25 dBm	-17.25 dB
13.600 GHz	19.100 GHz	1.000 MHz	18.30079 GHz	-27.87 dBm	-14.87 dB

Date: 24.OCT.2015 08:38:03

Highest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	385.08496 MHz	-34.06 dBm	-21.06 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.10536 GHz	-35.69 dBm	-22.69 dB
1.915 GHz	3.000 GHz	1.000 MHz	1.91514 GHz	-32.45 dBm	-19.45 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.94976 GHz	-30.66 dBm	-17.66 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.04652 GHz	-30.65 dBm	-17.65 dB
13.600 GHz	19.100 GHz	1.000 MHz	18.29608 GHz	-27.91 dBm	-14.91 dB

Date: 24.OCT.2015 08:37:09

Frequency Stability

Test Conditions	Middle Channel	WCDMA Band V (RMC 12.2KbpsRMC 12.2Kbps)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0155	PASS
40	Normal Voltage	0.0108	
30	Normal Voltage	0.0502	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0442	
0	Normal Voltage	0.0335	
-10	Normal Voltage	0.0036	
-20	Normal Voltage	0.0323	
-30	Normal Voltage	0.0084	
20	Maximum Voltage	0.0072	
20	Normal Voltage	0.0383	
20	Battery End Point	0.407	

Note: Normal Voltage = 3.8V. ；Battery End Point (BEP) = 3.6 V.；Maximum Voltage =4.35 V

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0059	PASS
40	Normal Voltage	0.0032	
30	Normal Voltage	0.0239	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0186	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0213	
-20	Normal Voltage	0.0191	
-30	Normal Voltage	0.0043	
20	Maximum Voltage	0.0021	
20	Normal Voltage	0.0016	
20	Battery End Point	0.0165	

Note:

1. Normal Voltage = 3.8V. ；Battery End Point (BEP) = 3.6 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

ERP/EIRP

Channel	Mode	Horizontal		Vertical	
		ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	GSM850 GSM	30.44	1.1066	18.32	0.0679
Middle		30.55	1.1350	18.13	0.0650
Highest		30.45	1.1092	17.93	0.0621
Lowest	GSM850 EDGE class 8	23.56	0.2270	11.72	0.0149
Middle		24.04	0.2535	11.50	0.0141
Highest		24.54	0.2844	11.74	0.0149
Lowest	WCDMA Band V RMC 12.2Kbps	20.03	0.1007	9.36	0.0086
Middle		19.84	0.0964	9.81	0.0096
Highest		19.42	0.0875	10.82	0.0121
Limit	ERP < 7W	Result		PASS	

Channel	Mode	Horizontal		Vertical	
		EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	GSM1900 GSM	30.80	1.2023	28.53	0.7129
Middle		30.00	1.0000	28.51	0.7096
Highest		30.86	1.2190	28.97	0.7889
Lowest	GSM1900 EDGE class 8	26.07	0.4046	24.71	0.2958
Middle		25.81	0.3811	24.58	0.2871
Highest		26.73	0.4710	25.30	0.3388
Lowest	WCDMA Band II RMC 12.2Kbps	23.70	0.2344	21.49	0.1409
Middle		22.99	0.1991	21.47	0.1403
Highest		23.80	0.2399	21.90	0.1549
Limit	EIRP < 2W	Result		PASS	

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)
Middle	1674	-55.35	-13	-42.35	-55.86	-57.37	1.73	5.90	H
	2510	-44.44	-13	-31.44	-49.01	-46.98	2.11	6.80	H
	3345	-61.40	-13	-48.40	-66.48	-64.18	2.47	7.40	H
	1674	-54.40	-13	-41.40	-56.1	-56.42	1.73	5.90	V
	2510	-40.36	-13	-27.36	-46.29	-42.90	2.11	6.80	V
	3345	-61.45	-13	-48.45	-66.74	-64.23	2.47	7.40	V

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

GSM850 (EDGE class 8)									
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)
Middle	1672	-63.92	-13	-50.92	-63.07	-65.94	1.73	5.90	H
	2509	-59.33	-13	-46.33	-63.46	-61.87	2.11	6.80	H
	3345	-61.08	-13	-48.08	-66.16	-63.86	2.47	7.40	H
	1672	-62.50	-13	-49.50	-63.03	-64.52	1.73	5.90	V
	2509	-58.95	-13	-45.95	-64.44	-61.49	2.11	6.80	V
	3345	-60.65	-13	-47.65	-65.94	-63.43	2.47	7.40	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)
Middle	3759	-49.27	-13	-36.27	-59.61	-54.27	2.60	7.60	H
	5640	-50.39	-13	-37.39	-64.38	-57.39	3.10	10.10	H
	7521	-51.39	-13	-38.39	-70.12	-57.55	5.77	11.93	H
	3759	-51.42	-13	-38.42	-61.94	-56.42	2.60	7.60	V
	5640	-45.25	-13	-32.25	-60.29	-52.25	3.10	10.10	V
	7521	-51.37	-13	-38.37	-69.29	-57.53	5.77	11.93	V

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

GSM1900 (EDGE class 8)									
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)
Middle	3759	-56.30	-13	-43.30	-65.86	-61.30	2.60	7.60	H
	5640	-53.46	-13	-40.46	-67.45	-60.46	3.10	10.10	H
	7521	-51.51	-13	-38.51	-70.24	-57.67	5.77	11.93	H
	3759	-56.46	-13	-43.46	-66.98	-61.46	2.60	7.60	V
	5640	-53.95	-13	-40.95	-68.41	-60.95	3.10	10.10	V
	7521	-51.46	-13	-38.46	-69.38	-57.62	5.77	11.93	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)
Middle	1672	-61.60	-13	-48.60	-62.00	-63.62	1.73	5.90	H
	2506	-55.62	-13	-42.62	-59.75	-58.16	2.11	6.80	H
	3345	-60.76	-13	-47.76	-65.84	-63.54	2.47	7.40	H
	1672	-61.22	-13	-48.22	-62.33	-63.24	1.73	5.90	V
	2506	-56.22	-13	-43.22	-63.2	-61.71	2.11	6.80	V
	3345	-61.22	-13	-48.22	-66.51	-64.00	2.47	7.40	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)
Middle	3762	-54.79	-13	-41.79	-64.35	-59.79	2.60	7.60	H
	5640	-52.90	-13	-39.90	-66.89	-59.90	3.10	10.10	H
	7521	-50.06	-13	-37.06	-68.79	-56.22	5.77	11.93	H
	3759	-56.64	-13	-43.64	-67.16	-61.64	2.60	7.60	V
	5640	-53.77	-13	-40.77	-68.23	-60.77	3.10	10.10	V
	7521	-51.68	-13	-38.68	-69.6	-57.84	5.77	11.93	V

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

Appendix D. Product Equality Declaration

ZTE CORPORATION

Product Change Description

As the applicant of the below model, [ZTE Corporation] declares that the product,

[Z988]

[ZTE Corporation]

is the variant of the initial certified product,

[Z962BL]

[ZTE Corporation]

[Project Number:15ZTE134]

SOFTWARE MODIFICATIONS:

Protocol Stack changes: NO
MMS/STK changes: NO
JAVA changes: NO
Other changes detailed: Yes, different application for different carrier. And Z988 is Android M OS. And Z988 support different bands via software. Please refer to band changes below.
Z988 supports WiFi hotspots .

HARDWARE MODIFICATION:

Band changes: Yes, but please notice, all of the band changes are enable or diabled via software, no hardware different between them.
Z962BL supports
GSM 850/900/1800/1900MHz+UMTS 850/AWS/1900+LTE B2/B4/B5/B17
Z988 supports
GSM 850/900/1800/1900MHz+UMTS 850/1900/2100MHz+LTE B2/B4/B5/B12
But Z988 doesn't support diversity on UMTS BAND I.
Power Amplifier changes: NO

Antenna changes: NO
PCB Layout changes: NO
Components on PCB changes: NO
LCD changes: NO
Speaker changes: NO
Camera changes: NO
Vibrator changes: NO
Bluetooth changes: NO
FM changes: NO
Other changes: NO

MECHANICAL MODIFICATIONS:

Use new metal front/back cover or keypad: NO
Mechanical shell changes: NO
Other changes detailed: NO

ACCESSORY MODIFICATIONS:

Battery changes:NO
AC Adaptor changes: Yes
Z962BL with charger:STC-A515A-Z
Z988 with charger:STC-A5915A-Z
Earphone changes:NO

APPROVED BY:
Min zhang

Date:2015-11-23

Company: ZTE Corporation

Address: B109, #889, Bibo Rd, Zhangjiang Hi-Tech Park, Shanghai,China

Tel:+86-21-68896840

Fax: +86-21-68896835