

RADIO TEST REPORT

Report No: STS1605154F01

Issued for

Xwireless LLC

11426 Rockville pike, Rockville, MD 20852United States

Product Name:	Mobile Phone
Brand Name:	VORTEX
Model Name:	Beat 2.0
Series Model:	UW4003K
FCC ID:	2ADLJBEAT20
Test Standard:	FCC Part 22H and 24E



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TEST RESULT CERTIFICATION

Applicant's name:	Xwireless LLC
Address:	11426 Rockville pike, Rockville, MD 20852United States
Manufacture's Name	Xwireless LLC
Address:	11426 Rockville pike, Rockville, MD 20852United States
Product name:	Mobile Phone
Brand name:	VORTEX
Model and/or type reference:	Beat 2.0
Standards	FCC Part 22H and 24E
Test procedure	ANSI/TIA 603-D (2010)

This device described above has been tested by STS and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test

Date of performance of tests 23 May 2016 ~05 June 2016

Date of Issue 06 June 2016

Test Result Pass

Testing Engineer :	Finning
	(Jin Ming)
Technical Manager :	virtati = ==
	(Vita Li)
Authorized Signatory :	honey Yoney
	(Bovey Yang)

Shenzhen STS Test Services Co., Ltd.

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Revision History

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	06 June 2016	STS1605154F01	ALL	Initial Issue



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SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

The radiated emission testing was performed according to the procedures of ANSI/TIA-603-D:

2010,KDB 971168 D01 v02r02 and KDB 648474 D03 v01r04

FCC Rules	Test Description	Test Limit	Test Result	Reference
2.1049	Conducted OutputPower	Reporting Only	PASS	
2.0146 24.232	Peak-to-AverageRatio	< 13 dB	PASS	
2.1046 22.913 24.232	Effective Radiated Pow- er/Equivalent Isotropic Radiated Power	< 7 Watts max. ERP(Part 22) < 2 Watts max. EIRP(Part 24)	PASS	
2.1049 22.917 24.238	Occupied Bandwidth	Reporting Only	PASS	
2.1055 22.355 24.235	Frequency Stability	< 2.5 ppm (Part 22) Emission must remain in band (Part 24)	PASS	
2.1051 22.917 24.238	Spurious Emission at Antenna Terminals	< 43+10log10(P[Watts])	PASS	
2.1053 22.917 24.238	Field Strength of Spurious Radiation	< 43+10log10(P[Watts])	PASS	
2.1051 22.917 24.238	Band Edge	< 43+10log10(P[Watts])	PASS	



1 INTRODUCTION 1.1 TEST FACTORY Shenzhen STS Test Services Co., Ltd. Add. : 1/F., Building B, Zhuoke Science Park, No.190,Chongqing Road, Fuyong Street, Bao'an District, Shenzhen, Guangdong,China CNAS Registration No.: L7649; FCC Registration No.: 842334; IC Registration No.: 12108A-1

1.2 MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.4-2014. All measurement uncertainty values are shown with a coverage factor of k = 2 to indicate a 95% level of confidence. The measurement data shown herein meets or exceeds the UCISPR measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

No.	Item	Uncertainty
1	RF power,conducted	±0.70dB
2	Spurious emissions,conducted	±1.19dB
5	All emissions,radiated(<1G) 30MHz-200MHz	±2.83dB
6	All emissions,radiated(<1G) 200MHz-1000MHz	±2.94dB
7	All emissions,radiated(>1G)	±3.03dB
8	Temperature	±0.5°C
9	Humidity	±2%



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2 PRODUCT INFORMATION

Product Designation:	Mobile Phone
Hardware version number:	T5-V20
Software version number:	LMY47I TEST-KEYS
FCC ID:	2ADLJBEAT20
	GSM/GPRS/EDGE:
	850: 824.2 MHz ~ 848.8 MHz
T. F.	1900: 1850.2 MHz ~ 1909.8MHz
Tx Frequency:	WCDMA:
	Band V: 826.4 MHz ~ 846.6 MHz
	Band II: 1852.4 MHz ~ 1907.6 MHz
	GSM/GPRS/EDGE:
	850: 869.2 MHz ~ 893.8 MHz
Dy Fraguanay:	1900: 1930.2 MHz ~ 1989.8 MHz
Rx Frequency:	WCDMA:
	Band V: 871.4 MHz ~ 891.6 MHz
	Band II: 1932.4 MHz ~ 1987.6 MHz
Max RF Output Power:	GSM850:32.50dBm,PCS1900:26.54dBm GPRS850:32.21dBm,GPRS1900:26.30dBm EDGE850:32.05dBm,EDGE1900:26.18dBm WCDMABand V:21.60dBm,WCDMA Band II:19.36dBm
Type of Emission:	GSM(850):323KGXW: GSM(1900):321KGXW GPRS(850):317KG7W; GPRS(1900):319KG7W EDGE(850):320KG7W; EDGE(1900):319KG7W WCDMA850:4M68F9W WCDMA1900:4M71F9W
SIM Card:	SIM 1 and SIM 2 is a chipset unit and tested as single chip- set,SIM 1 is used to tested
A standard	BT/WIFI: PIFA Antenna
Antenna:	GSM/WCDMA:PIFA Antenna
Antonno goini	GSM 850:1.1dBi ,PCS 1900:1.7dBi
Antenna gain:	WCDMA 850:1.1dBi, WCDMA1900:1.7dBi
Power Supply:	DC 3.7V by battery
Battery parameter:	Capacitance: 1300mAh, Rated Voltage: 3.7V
GPRS/EDGE Class:	Multi-Class12
Extreme Vol. Limits:	DC3.5 V to 4.2 V (Nominal DC4.2V)
Extreme Temp. Tolerance	-20℃ to +45℃
** Note: The High Voltage 4.2	V and Low Voltage 3.5V was declared by manufacturer, The EUT

couldn't be operate normally with higher or lower voltage.

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3 TEST CONFIGURATION OF EQUIPMENT UNDER TEST

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	



4 MEASUREMENT INSTRUMENTS

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
Spectrum Analyzer	Agilent	E4407B	MY50140340	2015.10.25	2016.10.24
Signal Analyzer	Agilent	N9020A	MY49100060	2015.11.18	2016.11.17
Test Receiver	R&S	ESCI	101427	2015.10.25	2016.10.24
Communication Tester	Agilent	8960	MY48360751	2015.11.20	2016.11.19
Communication Tester	R&S	CMU200	112012	2015.10.25	2016.10.24
Test Receiver	R&S	ESCI	102086	2015.10.25	2016.10.24
Bilog Antenna	TESEQ	CBL6111D	34678	2015.11.25	2016.11.24
Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-1343	2016.03.06	2017.03.05
Horn Antenna	Schwarzbeck	BBHA 9170	9170-0741	2016.03.06	2017.03.05
MXA SIGNAL Analyzer	Agilent	N9020A	MY49100060	2015.10.25	2016.10.24
Bilog Antenna	Sunol Sciences	JB3	A110714	2015.09.03	2016.09.02
Horn-Antenna	Schwarzbeck	BBHA9120D	9120D-1266	2016.03.06	2017.03.05
Horn Antenna	Schwarzbeck	BBHA 9170	9170-0741	2016.03.06	2017.03.05
Double Ridge Horn An- tenna	COM-POWER CORPORATION	AH-840	AHA-840	2016.03.06	2017.03.05
Low frequency cable	N/A	R01	N/A	N/A	N/A
High frequency cable	SCHWARZBECK	AK9515H	SN-96286/96287	N/A	N/A
Vector signal generator	Agilent	E8257D-521	MY45141029	2015.10.16	2016.10.14
Power amplifier	DESAY	ZHL-42W	9638	2015.10.24	2016.10.23

Equipment with a calibration date of "N/A" shown in this list was not used to make direct calibrated measurements.



5 TEST ITEMS 5.1 CONDUCTED OUTPUT POWER

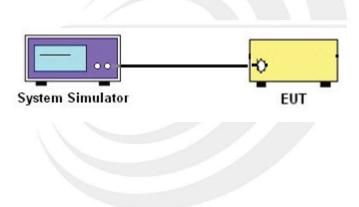
Test overview

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.

Test procedures

- 1. The transmitter output port was connected to the system simulator.
- 2. Set eut at maximum power through the system simulator.
- 3. Select lowest, middle, and highest channels for each band and different modulation.
- 4. Measure and record the power level from the system simulator.

Test setup





5.2 PEAK TO AVERAGE RATIO

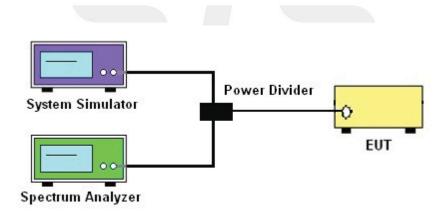
TEST OVERVIEW

According to §24.232(d), power measurements for transmissions by stations authorized under this section may be made either in accordance with a commission-approved average power technique or in compliance with paragraph (e) of this section. In both instances, equipment employed must be authorized in accordance with the provisions of §24.51. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 db.

TEST PROCEDURES

- 1. The testing follows fcckdb 971168 v02r02 section
- 2. The eut was connected to the and peak and av system simulator& spectrum analysis reads
- 3. Select lowest, middle, and highest channels for each band and different modulation.
- 4. Set the test probe and measure average power of the spectrum analysis

TEST SETUP



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5.3 TRANSMITTER RADIATED POWER (EIRP/ERP)

TEST OVERVIEW

Effective Radiated Power (ERP) and Equivalent Isotropic Radiated Power (EIRP) measurements are performed using the substitution method described in ANSI/TIA-603-D-2010 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using vertically polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically polarized broadband horn antennas. All measurements are performed as RMS average measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

TEST PROCEDURE

 The testing follows FCC KDB 971168 D01 Section 5.2.1. (for CDMA/WCDMA), Section 5.2.2 (for GSM/GPRS/EDGE) and ANSI / TIA-603-D-2010 Section 2.2.17.
The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load

which was also placed on the turntable. 3. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

4. The frequency range up to tenth harmonic of the fundamental frequency was investigated.

5. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a nonradiating cable. The absolute levels of the spurious emissions were measured by the substitution.

6. 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/ERP was calculated with the correction factor,

ERP/EIRP = P.SG + GT - LC

ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as PMe as, typically dBW or dBm);

PMeas(PK) = measured transmitter output power or PSD, in dBm or dBW;

GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

LC = signal attenuation in the connecting cable between the transmitter and antenna, in dB.



5.4 OCCUPIED BANDWIDTH

TEST OVERVIEW

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured.

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.

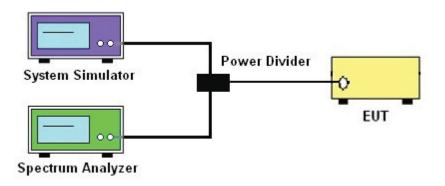
All modes of operation were investigated and the worst case configuration results are reported in this section.

TEST PROCEDURE

1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99% occupied bandwidth and the 26dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.

- 2. RBW = 1 5% of the expected OBW
- 3. VBW ≥ 3 x RBW
- 4. Detector = Peak
- 5. Trace mode = max hold
- 6. Sweep = auto couple
- 7. The trace was allowed to stabilize
- 8. If necessary, steps 2 7 were repeated after changing the RBW such that it would be within
- 1-5% of the 99% occupied bandwidth observed in Step 7

TEST SETUP





5.5 FREQUENCY STABILITY Test Overview

Frequency stability testing is performed in accordance with the guidelines of ANSI/TIA-603-D-2010. The frequency stability of the transmitter is measured by:

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a.) Temperature: The temperature is varied from -30°C to +50°C in 10°C increments using an environmental chamber.

b.) Primary Supply Voltage: The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

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

Test Procedure

Temperature Variation

1. The testing follows fcckdb 971168 D01 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.

Voltage Variation

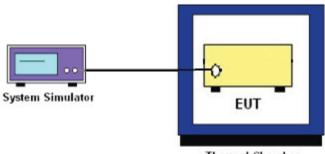
1. The testing follows FCC KDB 971168 D01 Section 9.0.

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.

TEST SETUP



Thermal Chamber





5.6 SPURIOUS EMISSIONS AT ANTENNA TERMINALS Test Overview

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 10th harmonic.

Test procedure

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.

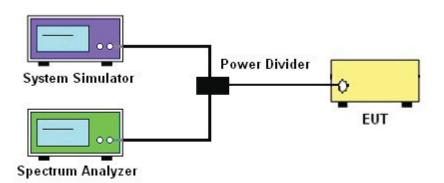
7. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

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

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

= -13dBm.

Test Setup







5.7 BAND EDGE

OVERVIEW

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

The minimum permissible attenuation level of any spurious emission is 43 + log10(P[Watts]), where P is the transmitter power in Watts.

TEST PROCEDURE

1. Start and stop frequency were set such that the band edge would be placed in the center of the Plot.

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.

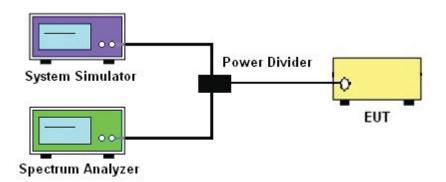
6.The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

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

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

= -13dBm.

TEST SETUP







5.8 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT Test overview

Radiated spurious emissions measurements are performed using the substitution method described inANSI/TIA-603-D-2010 with the EUT transmitting into an integral antenna. Measurements on signalsoperating below 1GHz are performed using horizontally and vertically polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized horn antennas. All measurements are performed as peak measurements while the EUT isoperating at maximum power and at the appropriate frequencies.

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

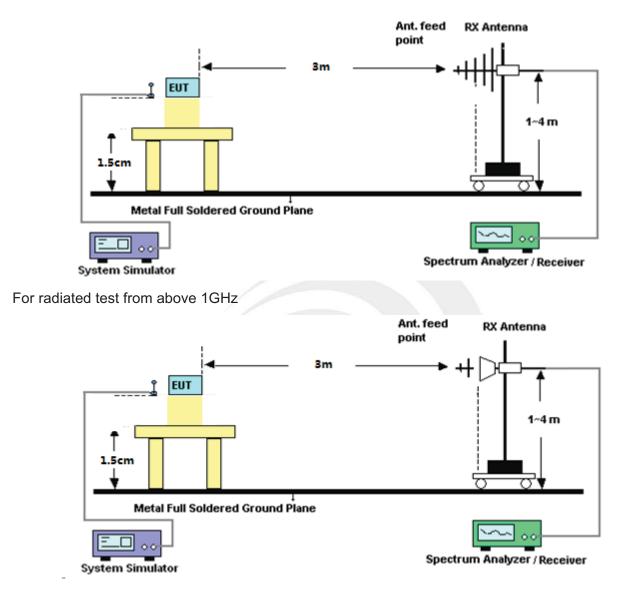
Test procedure

1. The testing follows FCC KDB 971168 D01 Section 5.8 and ANSI/TIA-603-D-2010 – Section 2.2.12

- 2. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
- 3. VBW \geq 3 x RBW
- 4. Span = 1.5 times the OBW
- 5.No. of sweep points > 2 x span/RBW
- 6. Detector = Peak
- 7. Trace mode = max hold
- 8. The trace was allowed to stabilize



For radiated test from 30MHz to 1GHz



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APPENDIX ATestResult A1 CONDUCTED OUTPUT POWER

GSM 850:

Mode	Frequency (MHz)	AVG Power	
	824.2	32.17	
GSM850	836.6	32.50	
	848.8	32.40	
GPRS850 (1-slot)	824.2	32.00	
	836.6	32.21	
	848.8	32.15	
EDGE850 (1 Slot)	824.2	31.96	
	836.6	32.01	
	848.8	32.05	

PCS 1900:

Mode	Frequency (MHz)	AVG Power
/	1850.2	26.49
GSM1900	1880	26.42
	1909.8	26.54
00004000	1850.2	26.30
GPRS1900 (1-slot)	1880	26.25
	1909.8	26.30
	1850.2	26.14
EDGE1900 (1 Slot)	1880	26.14
(1 3101)	1909.8	26.18



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UMTS BAND V

Mode	Frequency(MHz)	AVG Power
	826.4	21.60
WCDMA 850 RMC	836.6	21.59
T(MO	846.6	21.41
	826.4	21.14
HSDPA Subtest 1	836.6	21.11
Gabicat 1	846.6	20.95
	826.4	20.19
HSDPA Subtest 2	836.6	20.29
Sublest 2	846.6	20.14
	826.4	19.77
HSDPA Subtest 3	836.6	19.85
Sublest 5	846.6	19.69
	826.4	19.25
HSDPA Subtest 4	836.6	19.21
Sublest 4	846.6	19.14
	826.4	20.70
HSUPA Subtest 1	836.6	20.66
Sublest	846.6	20.49
	826.4	19.74
HSUPA Subtest 2	836.6	19.81
Sublest 2	846.6	19.52
	826.4	19.27
HSUPA Subtest 3	836.6	19.36
Sublest 5	846.6	19.06
	826.4	18.72
HSUPA Subtest 4	836.6	18.70
อนมเธอเ 4	846.6	18.42
	826.4	18.11
HSUPA	836.6	18.16
Subtest 5	846.6	17.81

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UMTS BAND II

Mode	Frequency(MHz)	AVG Power
	1852.4	18.82
WCDMA 1900 RMC	1880	17.98
Rivic	1907.6	19.36
	1852.4	18.35
HSDPA Subtest 1	1880	17.52
Sublest 1	1907.6	18.89
	1852.4	17.42
HSDPA Subtest 2	1880	16.53
Sublest 2	1907.6	18.02
	1852.4	17.00
HSDPA Subtest 3	1880	16.10
Sublest 5	1907.6	17.54
	1852.4	16.48
HSDPA Subtest 4	1880	15.46
Sublest 4	1907.6	16.95
	1852.4	17.91
HSUPA Subtest 1	1880	17.11
Sublest 1	1907.6	18.46
	1852.4	16.97
HSUPA Subtest 2	1880	16.24
Sublest 2	1907.6	17.62
	1852.4	16.48
HSUPA Subtest 3	1880	15.79
Sublest 5	1907.6	17.18
	1852.4	15.90
HSUPA Subtest 4	1880	15.17
	1907.6	16.50
	1852.4	15.34
HSUPA Subtest 5	1880	14.57
Sublest 3	1907.6	15.92

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A2 PEAK-TO-AVERAGE RADIO

PCS 1900:

Mode	Frequency (MHz)	PEAK Power	AVG Power	PAR
	1850.2	27.24	26.49	0.75
PCS1900	1880	27.21	26.42	0.79
	1909.8	27.36	26.54	0.82
GPRS1900 (1 Slot)	1850.2	27.15	26.30	0.85
	1880	27.10	26.25	0.85
	1909.8	27.21	26.30	0.91
EDGE1900	1850.2	27.02	26.14	0.88
	1880	27.00	26.14	0.86
(1 Slot)	1909.8	27.11	26.18	0.93

UMTS BAND II:

Mode	Frequency (MHz)	PEAK Power	AVG Power	PAR
	1852.4	22.30	18.82	3.48
WCDMA 1900	1880	21.08	17.98	3.10
RMC -	1907.6	22.35	19.36	2.99
HSDPA 1900 (1 Slot)	1852.4	21.86	18.35	3.51
	1880	20.65	17.52	3.13
	1907.6	21.42	18.89	2.53
HSUPA1900 (1 Slot)	1852.4	21.15	17.91	3.42
	1880	20.01	17.11	2.90
(1 300)	1907.6	20.84	18.46	2.38



Report No.: STS1605154F01

A3 TRANSMITTER RADIATED POWER (EIRP/ERP)

Radiated Power (ERP) for GSM 850 MHZ							
				Res	sult		
Mode	Frequency	Substituted level (dBm)	Cable loss	Gain (dBd)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	Conclusion
	824.2	28.43	0.44	0	30.14	Horizontal	Pass
	824.2	30.46	0.44	0	32.17	Vertical	Pass
0014050	836.6	28.55	0.45	0	30.25	Horizontal	Pass
GSM850	836.6	30.8	0.45	0	32.50	Vertical	Pass
	848.8	28.7	0.46	0	30.39	Horizontal	Pass
	848.8	30.71	0.46	0	32.40	Vertical	Pass
	824.2	28.52	0.44	0	30.23	Horizontal	Pass
	824.2	30.29	0.44	0	32.00	Vertical	Pass
GPRS	836.6	28.66	0.45	0	30.36	Horizontal	Pass
850	836.6	30.51	0.45	0	32.21	Vertical	Pass
	848.8	28.48	0.46	0	30.17	Horizontal	Pass
	848.8	30.46	0.46	0	32.15	Vertical	Pass
	824.2	28.83	0.44	0	30.54	Horizontal	Pass
	824.2	30.25	0.44	0	31.96	Vertical	Pass
	836.6	28.5	0.45	0	30.20	Horizontal	Pass
EDGE850	836.6	30.31	0.45	0	32.01	Vertical	Pass
	848.8	28.72	0.46	0	30.41	Horizontal	Pass
	848.8	30.36	0.46	0	32.05	Vertical	Pass
)dBd=2.15dBi,(.Level+ Amplifi		ntenna (Gain 1.1dBi		



Report No.: STS1605154F01

Radiated Power (EIRP) for PCS 1900 MHZ								
			Result					
Mode	Frequency	Substituted level (dBm)	Cable loss	Gain (dBi)	PMeas E.I.R.P.(dBm)	Polarization Of Max.EIRP.	Conclusion	
	1850.2	18.49	2.41	10.06	26.14	Horizontal	Pass	
	1850.2	18.84	2.41	10.06	26.49	Vertical	Pass	
PCS1900	1880.0	18.72	2.42	10.06	26.36	Horizontal	Pass	
PC31900	1880.0	18.78	2.42	10.06	26.42	Vertical	Pass	
	1909.8	16.73	2.43	10.06	24.36	Horizontal	Pass	
	1909.8	18.91	2.43	10.06	26.54	Vertical	Pass	
	1850.2	16.52	2.41	10.06	24.17	Horizontal	Pass	
	1850.2	18.65	2.41	10.06	26.30	Vertical	Pass	
GPRS1900	1880.0	16.62	2.42	10.06	24.26	Horizontal	Pass	
GFK31900	1880.0	18.61	2.42	10.06	26.25	Vertical	Pass	
	1909.8	16.62	2.43	10.06	24.25	Horizontal	Pass	
	1909.8	18.67	2.43	10.06	26.30	Vertical	Pass	
	1850.2	16.58	2.41	10.06	24.23	Horizontal	Pass	
	1850.2	18.49	2.41	10.06	26.14	Vertical	Pass	
EDGE1900	1880.0	16.51	2.42	10.06	24.15	Horizontal	Pass	
EDGE 1900	1880.0	18.5	2.42	10.06	26.14	Vertical	Pass	
	1909.8	16.58	2.43	10.06	24.21	Horizontal	Pass	
	1909.8	18.55	2.43	10.06	26.18	Vertical	Pass	
· · /	enna Gain 1.70 d level =S G.I	dBi _evel+ Amplifie	r gain					

Shenzhen STS Test Services Co., Ltd.



Report No.: STS1605154F01

				Res	ult		
Mode	Frequency	Substituted level (dBm)	Cable loss	Gain (dBd)	PMeas E.R.P (dBm)	Polarization Of Max.ERP	Conclusion
	826.4	17.64	0.44	0	19.35	Horizontal	Pass
	826.4	19.89	0.44	0	21.60	Vertical	Pass
Band V	836.6	17.77	0.45	0	19.47	Horizontal	Pass
Danu v	836.6	19.89	0.45	0	21.59	Vertical	Pass
	846.6	17.66	0.46	0	19.35	Horizontal	Pass
	846.6	19.72	0.46	0	21.41	Vertical	Pass

Radiated Power (EIRP) for WCDMA Band II								
				Res	sult			
Mode	Frequency	Substituted level (dBm)	Cable loss	Gain (dBi)	PMeas E.I.R.P.(dBm)	Polarization Of Max.EIRP	Conclusion	
	1852.4	8.82	2.41	10.06	16.47	Horizontal	Pass	
	1852.4	11.17	2.41	10.06	18.82	Vertical	Pass	
Band II	1880.0	7.75	2.42	10.06	15.39	Horizontal	Pass	
Danu II	1880.0	10.34	2.42	10.06	17.98	Vertical	Pass	
	1907.6	9.89	2.43	10.06	17.52	Horizontal	Pass	
	1907.6	11.73	2.43	10.06	19.36	Vertical	Pass	
. ,	(1) EUT Antenna Gain 1.7dBi							
(2)Substr	(2)Substituted level =S G.Level+ Amplifier gain							

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Report No.: STS1605154F01

A4 OCCUPIED BANDWIDTH(99% OCCUPIED BANDWIDTH/26DB BANDWIDTH)

Bandwidth for GSM 850 band						
Mode		Occupied Bandwidth	Emission Bandwidth			
Widde	Frequency(MHz)	(99%)(kHz)	(-26dBc)(kHz)			
Low Channel	824.2	246.82	317.5			
Middle Channel	836.6	242.68	314.0			
High Channel	848.8	246.51	322.7			
Occupied Bandwidth for GPRS 850 band						
Mode	Frequency(MHz)	Occupied Bandwidth	Emission Bandwidth			
Widde		(99%)(kHz)	(-26dBc)(kHz)			
Low Channel	824.2	244.94	316.4			
Middle Channel	836.6	248.06	317.0			
High Channel	848.8	246.00	315.8			
	Bandwidth	for EGPRS 850 band				
Mode		Occupied Bandwidth	Emission Bandwidth			
Widde	Frequency(MHz)	(99%)(kHz)	(-26dBc)(kHz)			
Low Channel	824.2	247.13	318.5			
Middle Channel	836.6	245.70	320.1			
High Channel	848.8	242.02	317.3			



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Occupied Bandwidth for GSM1900 band						
Mode		Occupied Bandwidth	Emission Bandwidth			
Mode	Frequency(MHz)	(99%)(kHz)	(-26dBc)(kHz)			
Low Channel	1850.2	245.62	320.3			
Middle Channel	1880.0	246.55	320.2			
High Channel	1909.8	246.44	321.1			
Occupied Bandwidth for GPRS 1900 band						
Mode	Frequency(MHz)	Occupied Bandwidth	Emission Bandwidth			
Mode		(99%)(kHz)	(-26dBc)(kHz)			
Low Channel	1850.2	244.82	318.1			
Middle Channel	1880.0	244.78	316.7			
High Channel	1909.8	244.52	319.4			
	Occupied Bandy	width for EDGE1900 band				
Mode		Occupied Bandwidth	Emission Bandwidth			
wode	Frequency(MHz)	(99%)(kHz)	(-26dBc)(kHz)			
Low Channel	1850.2	244.72	317.4			
Middle Channel	1880.0	250.08	318.9			
High Channel	1909.8	243.49	310.8			

Occupied Bandwidth for UMTS band V						
Mode	Occupied Bar		Emission Bandwidth			
wode	Frequency(MHz)	(99%)(MHz)	(-26dBc)(MHz)			
Low Channel	826.4	4.1491	4.674			
Middle Channel	836.6	4.1536	4.675			
High Channel	846.6	4.1537	4.672			

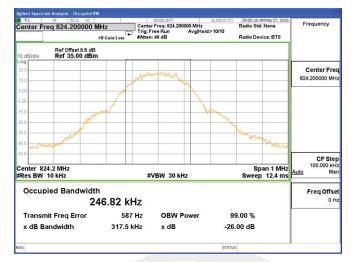
Occupied Bandwidth for UMTS band II						
Mode	Fraguanay (MHz)	Occupied Bandwidth	Emission Bandwidth			
	Frequency(MHz)	(99%)(MHz)	(-26dBc)(MHz)			
Low Channel	1852.4	4.1504	4.670			
Middle Channel	1880	4.1654	4.707			
High Channel	1907.6	4.1858	4.741			

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Report No.: STS1605154F01

GSM 850 CH 128



GSM 850 CH 190





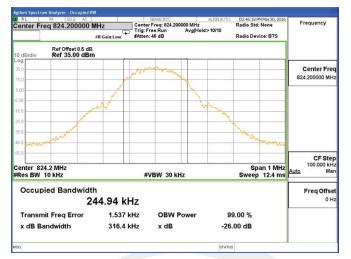
GSM 850 CH 251

Shenzhen STS Test Services Co., Ltd.



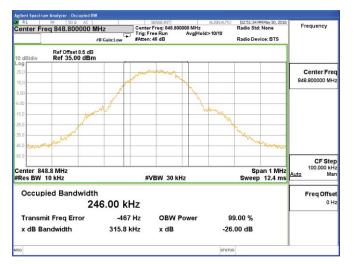
Report No.: STS1605154F01

GPRS 850 CH 128



GPRS 850 CH 190





GPRS 850 CH 251

Shenzhen STS Test Services Co., Ltd.

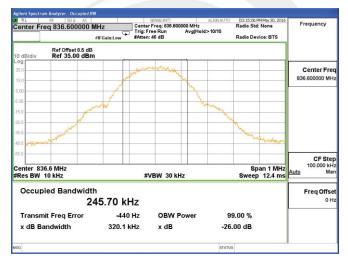


Report No.: STS1605154F01

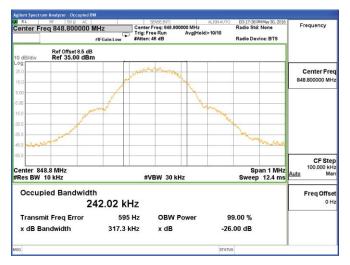
EDGE 850 CH 128



EDGE 850 CH 190



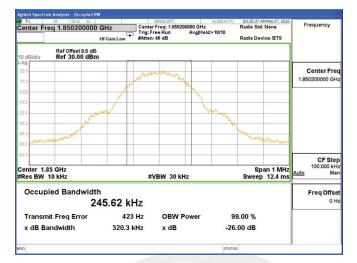
EDGE 850 CH 251



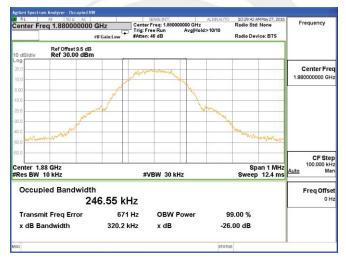


Report No.: STS1605154F01

PCS 1900 CH 512



PCS 1900 CH 661



SEISE.INT ALIGNA GHz Center Freq: 1309800000 GHz Trig. Freq Run Avg|Hold>10/10 #/IFGain:Low #Atten: 46 dB 10:32:41 AM May 27 Radio Std: None enter Freq 1.909800000 GHz Frequency Radio Device: BTS Ref Offset 9.5 dB Ref 30.00 dBm Center Fred 1 9098000 CF Step 100.000 kHz Center 1.91 GHz #Res BW 10 kHz Span 1 MHz Sweep 12.4 ms #VBW 30 kHz Occupied Bandwidth Freq Offse 246.44 kHz 0 H 818 Hz OBW Power Transmit Freg Error 99.00 % x dB Bandwidth 321.1 kHz x dB -26.00 dB

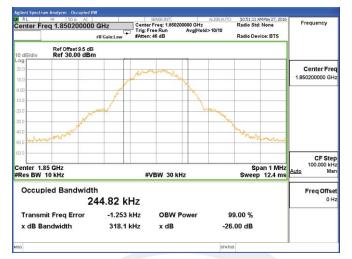
PCS 1900 CH 810

Shenzhen STS Test Services Co., Ltd.

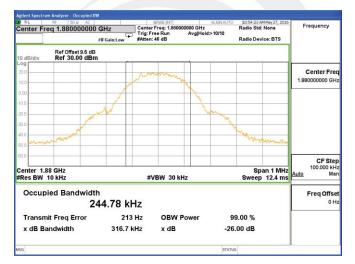


Report No.: STS1605154F01

GPRS 1900 CH 512



GPRS 1900 CH 661





GPRS 1900 CH 810

Shenzhen STS Test Services Co., Ltd.



Report No.: STS1605154F01

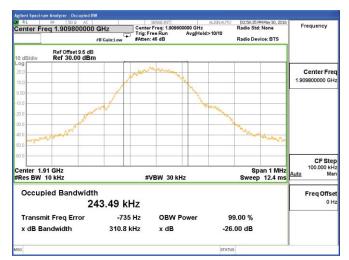
EDGE 1900 CH 512



EDGE 1900 CH 661



EDGE 1900 CH 810

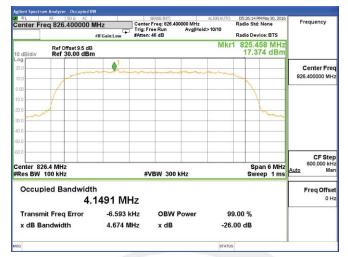


Shenzhen STS Test Services Co., Ltd.



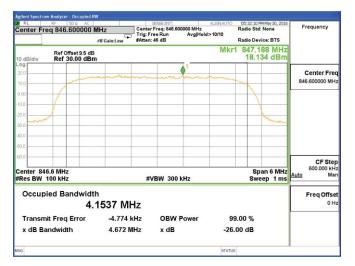
Report No.: STS1605154F01

UMTS BAND V CH 4132



UMTS BAND V CH 4183

Center Fr	RF 50 Ω AC eq 836.600000 N	Tris	SENSE:INT Itter Freq: 836.600000 MHz g: Free Run Avg H ten: 46 dB	ALIGNAUTO	05:30:14 PM May 30, 2016 Radio Std: None Radio Device: BTS	Frequency
10 dB/div	Ref Offset 9.5 dB Ref 30.00 dBm			Mkr	1 837.512 MHz 16.813 dBm	
.og 20.0 10.0	- Jum	and the second second	m		-	Center Fred 836.600000 MH:
10.00	1			_		
30.0					hanne	
40.0						
enter 83 Res BW			#VBW 300 kHz		Span 6 MHz Sweep 1 ms	
	ied Bandwidth	1 1536 MHz	#VBW 300 KHZ		Sweep 1 ms	Freq Offse
	nit Freq Error andwidth	-2.673 kHz 4.675 MHz	OBW Power x dB		9.00 % 00 dB	
sa				STATU	4	

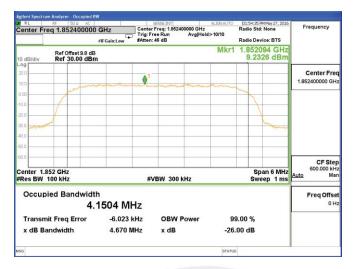


UMTS BAND V CH 4233

Shenzhen STS Test Services Co., Ltd.

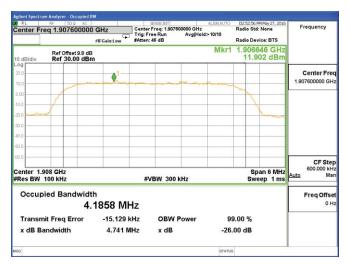


UMTS BAND II CH 9262



UMTS BAND II CH 9400

Center Fre	RF 50 Ω AC eq 1.880000000		SENSE:INT Center Freq: 1.880000000 rig: Free Run Av Atten: 46 dB	ALIGNAUTO GHz gjHold>10/10	D2:47:31 PM May 27, 2016 Radio Std: None Radio Device: BTS		Frequency
10 dB/div	Ref Offset 9.8 dB Ref 30.00 dBn			Mkr1		546 GHz 189 dBm	
20.0	- Aller	- marine and a start of the sta	1	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			Center Fred 1.88000000 GH2
10.00					1		
30.0				<u></u>		hun	
40.0 50.0							
60.0							CF Step 600.000 kH
	nter 1.88 GHz Span 6 MHz es BW 100 kHz Sweep 1 ms					eep 1 ms	Auto Mar
Occup	ied Bandwidt 4.	^h 1654 MH:	2				Freq Offset 0 Hz
	it Freq Error Indwidth	-12.598 kH 4.707 MH			9.00 % .00 dB		
ISG				STATU	s		



UMTS BAND II CH 9538



Report No.: STS1605154F01

A5 FREQUENCY STABILITY

Normal Voltage = 3.7V. ; Battery End Point (BEP) = 3.5 V.; Maximum Voltage =4.2 V

GSM 850 Middle Channel						
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result	
50	-	13.508	0.016			
40		26.537	0.032			
30		23.621	0.028			
20		27.883	0.033			
10	Normal Voltage	18.237	0.022			
0		13.522	0.016	2.5ppm	PASS	
-10		17.365	0.021			
-20		15.927	0.019			
-30		16.231	0.019			
25	Maximum Voltage	19.888	0.024]		
25	BEP	11.585	0.014			

GPRS 850 Middle Channel						
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result	
50		13.512	0.016			
40		26.493	0.032			
30		23.629	0.028			
20		27.855	0.033			
10	Normal Voltage	18.212	0.022			
0		13.568	0.016	2.5ppm	PASS	
-10		17.420	0.021			
-20		15.895	0.019			
-30		16.228	0.019			
25	Maximum Voltage	19.858	0.024			
25	BEP	11.606	0.014			



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	E	DGE 850 Middle	Channel		
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50		13.542	0.016		
40		26.470	0.032		
30		23.652	0.028		
20		27.909	0.033		
10	Normal Voltage	18.194	0.022		
0		13.539	0.016	2.5ppm	PASS
-10		17.340	0.021		
-20		15.863	0.019		
-30		16.257	0.019		
25	Maximum Voltage	19.844	0.024		
25	BEP	11.592	0.014		

	G	SM 1900 Middle	e Channel		
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50		19.081	0.010		
40		11.152	0.006		
30		10.296	0.005		
20		22.300	0.012		
10	Normal Voltage	14.112	0.008	Within Au-	
0		10.057	0.005	thorized	PASS
-10		15.421	0.008	Band	
-20		20.681	0.011		
-30		24.177	0.013		
25	Maximum Voltage	12.443	0.007		
25	BEP	12.520	0.007		

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Report No.: STS1605154F01

	G	PRS 1900 Middl	e Channel		
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50		19.048	0.010		
40		11.170	0.006		
30		10.260	0.005		
20		22.232	0.012		
10	Normal Voltage	14.084	0.007	Within Au-	
0		10.036	0.005	thorized	PASS
-10		15.391	0.008	Band	
-20		20.706	0.011		
-30		24.155	0.013		
25	Maximum Voltage	12.502	0.007		
25	BEP	12.462	0.007		



Shenzhen STS Test Services Co., Ltd.



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	E	DGE 1900 Middl	e Channel		
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50		19.085	0.010		
40		11.159	0.006		
30		10.289	0.005		
20		22.249	0.012		
10	Normal Voltage	14.043	0.007	Within Au-	
0		10.057	0.005	thorized	PASS
-10		15.480	0.008	Band	
-20		20.632	0.011		
-30		24.178	0.013		
25	Maximum Voltage	12.465	0.007		
25	BEP	12.489	0.007		



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	WCDMA V Middle Channel											
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result							
50		23.915	0.029									
40		12.761	0.015									
30		16.946	0.020									
20		16.677	0.020									
10	Normal Voltage	19.934	0.024									
0		18.968	0.023	2.5ppm	PASS							
-10		17.227	0.021									
-20		10.963	0.013									
-30		25.381	0.030									
25	Maximum Voltage	23.579	0.028									
25	BEP	15.555	0.019									

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

	۷	VCDMA II Middle	e Channel		
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50		14.177	0.008		
40		17.895	0.010		
30		23.655	0.013		
20		21.097	0.011		
10	Normal Voltage	10.472	0.006	Within Au-	
0		18.577	0.010	thorized	PASS
-10		16.290	0.009	Band	
-20		16.999	0.009		
-30		16.496	0.009		
25	Maximum Voltage	11.801	0.006		
25	BEP	13.357	0.007		

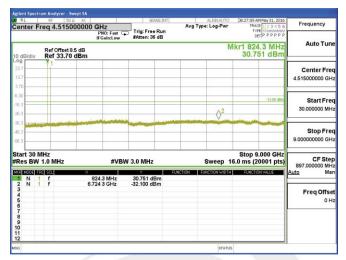
1. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



A6 SPURIOUS EMISSIONS AT ANTENNA TERMINALS

GSM 850 BAND

Lowest Channel



Middle Channel

Frequency	M May 31, 2016		ALIGNAUTO		SENSE: INT		DΩ AC	RF 50		L	RI
Frequency	E 1 2 3 4 5 6	TM	pe: Log-Pwr	P	Trig: Free Run	GHz	000000	4.515	Fre	ter	Cen
	PPPPPP	C			#Atten: 36 dB	PNO: Fast G					
Auto Tu	6.9 MHz 50 dBm		М					ef Offset ef 34.00		B/div	
Center Fre								1			_0g
4.515000000 GH				_							14.0
							_				4.00
	-13.00 dBm		-	-		-	-		-		6.00
Start Fre 30.000000 Mi	-13.00 dam			-			-	-	-	F	16.0
30.000000 Mi			\Diamond^2				-				26.0
	No. of Concession, Name	No. of Concession, Name	a destroy and the second	a line and the	and the second s	and the special division of	and shines	A Constant	-	dented	36.0
Stop Fre						-		-		-	46.0
9.00000000 GH			-	-							56.0
CF Ste 897.000000 Mi	.000 GHz 0001 pts)		Sweep 16		.0 MHz	#VB		z D MHz		t 30 s B\	
Auto Ma	IN VALUE	FUNCTI	FUNCTION WIDTH	FUNCTIO	31,150 dBm	36.9 MHz	×	60L	TRC	MODE N	1
	- Ir				31.907 dBm	78 1 GHz	6.7	f	1	N	23
Freq Offs 0 F											34567
											7
											8 9 10
											11 12
			STATUS						-	_	12

Highest Channel

Frequency	M May 31, 2016	TRAC	Lignauto	Avg T	SENSE: INT	GHz	50 Q AC		Fre	nter
	TPPPPPP	DE			Trig: Free Run #Atten: 36 dB	PNO: Fast C IFGain:Low				
Auto Tur	0.0 MHz 65 dBm		M					Ref Offset Ref 34.0		B/div
Center Fre								×1		
4.515000000 G										
				_		_	_	-		- I
Start Fre	-13.00 dBm			-		-				-
30.000000 M		.2	n							
		\Diamond^2		1					_	
Stop Fre		Construction of the local division of the lo	A COLORED TO A COL		State of the local division of the local div	Party of the local de	Contraction of the local district	and the section	180ga	-
9.00000000 G						1				
CF Ste 897.000000 MH	.000 GHz 0001 pts)		Sweep 16		3.0 MHz	#VB		Hz .0 MHz		rt 30 es B
Auto Ma	IN VALUE	FUNCTIO	OCTION WIDTH	INCTION			×	SCL	TRC	MODE
					30.965 dBm -30.947 dBm	49.0 MHz 422 6 GHz		+	1	NN
Freq Offs 0 F										
			STATUS						_	_

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GPRS 850 BAND

Lowest Channel

E	08:40:24 AM May 31, 2016	ALIGNAUTO		SENSE: INT		50 Q AC	1.1	RL
Frequency	TYPE NUMBER	: Log-Pwr	Avg Ty	Trig: Free Run #Atten: 36 dB	GHz PNO: Fast C	4.515000000	er Fre	en
Auto Tu	1 824.3 MHz 30.798 dBm	M			realizedw	Offset 8.5 dB f 33.70 dBm	/div	D dE
Center Fr 4,515000000 G								3.7 3.7 3.7 70
Start Fr 30.000000 M	-13.00 dēm		⊘²					30 13
Stop Fr 9.000000000 G				and the second secon				3 3 3
	Stop 9.000 GHz ms (20001 pts)	Sweep 16		.0 MHz	#VBW	MHz	30 MH BW 1	
<u>Auto</u> N	FUNCTION VALUE	NCTION WIDTH	NCTION	30.798 dBm 32.065 dBm	324.3 MHz 553 3 GHz	8	N 1 N 1	
Freq Off 0								
		STATUS						3

Middle Channel

Frequency	M May 31, 2016	08:41:12 A	ALIGNAUTO	IT	SEN		AC		RF		-
Trequency	E 1 2 3 4 5 6	TY	pe: Log-Pwr	č.	Tria: Free	Hz PNO: Fast C	0000 G	51500	eq 4.	Fre	ter
	TPPPPPP	D		~	#Atten: 36	FGain:Low	, ii				
Auto Tu		Ref 0ffset 85 dB Mkr1 836.9 MHz dB/div Ref 34.00 dBm 31.200 dBm									
Center Fr						-	_		1		
4.515000000 G			_						-		_
									+	_	_
Start Fre	-13.00 dBm		2							-	-
30.000000 Mi		.2									
		\Diamond									
Stop Fr		-			State of Sta				-	public d	-
9.000000000 G									_		
CF Ste	.000 GHz	Stop 9	Sweep 10		W 3.0 MHz	#VB		47	iz .0 M	MH W 1	
897.000000 Mi Auto M		EUNOT	LINGHONWIGH	FUNC	T DIO MILL		×				
					31.200 dB -31.926 dB	6.9 MHz 0 0 GHz	836		1	1	NN
Freq Offs					-31.926 dB	U U GHZ	7.450		T	1	N
01											
			STATUS						-	-	_

Highest Channel

L RF 50.Ω AC		SENSE: INT	ALIGNAUTO	D8:41:57 AM May 31, 2016	
nter Freq 4.515000000 G	Hz NO: Fast 😱 Gain:Low	Trig: Free Run #Atten: 36 dB	Avg Type: Log-Pwr	TRACE 1 2 3 4 5 6 TYPE Minimum DET P P P P P P	Frequency
Ref Offset 8.5 dB B/div Ref 34.00 dBm	Gain:Low	Printen. ov 4D	M	lkr1 849.0 MHz 31.035 dBm	Auto Tun
×1					Center Fre 4.515000000 GH
				-13.00 dBm	Start Fre 30.000000 MH
		A CONTRACTOR OF THE OWNER OF THE			Stop Fre 9.000000000 GH
rt 30 MHz es BW 1.0 MHz	#VBW	3.0 MHz	Sweep 1	Stop 9.000 GHz 6.0 ms (20001 pts)	CF Ste 897.000000 MH
	.0 MHz 6 GHz	31.035 dBm -31.978 dBm	UNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Ma
1 1 7,304	0 942	51.370 dBill			Freq Offs 0 F

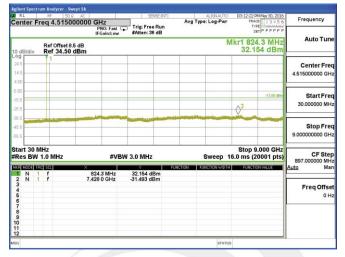
Shenzhen STS Test Services Co., Ltd.



Report No.: STS1605154F01

EDGE 850 BAND

Lowest Channel



Middle Channel

RL RF 50 Ω AC		SENSE: INT	ALIGNAUTO	03:16:19 PM May 30, 2016	211.00 A 100.00			
enter Freq 4.515000000	GHz PNO: Fast	Trig: Free Run #Atten: 36 dB	Avg Type: Log-Pwr	TRACE 23456 TYPE MUMMMMM DET P P P P P P	Frequency			
Ref Offset 8.5 dB Mkr1 836.9 MHz 10 dB/div Ref 34.50 dBm 32.415 dBm								
24.5 14.5					Center Fre 4.515000000 GH			
5.50 15.5 25.5				-13.00 dām	Start Fre 30.000000 Mi			
45.5 55.5					Stop Fr 9.000000000 G			
itart 30 MHz Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep 10	Stop 9.000 GHz 5.0 ms (20001 pts)	CF Ste 897.000000 M			
	836.9 MHz 462 8 GHz	32.415 dBm 31.847 dBm	UNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> M			
3 4 5 6 7	402 0 GH2	31.847 dBm			Freq Offs 01			
8 9 10								

Highest Channel

03:20:00 PM May 30, 2016	ALIGNAUTO	ENSE: INT	38		50 Q AC	RF		RL
TYPE MUMMMMM DET P P P P P P	Type: Log-Pwr	e Run 6 dB	Trig: Free	PNO: Fast		q 4.51	Fre	nte
kr1 849.0 MHz 32.263 dBm	М	o ub	Protein. or	FGamtow	t 8.5 dB			dB/d
	6 2					×1		5
-13.00 dan							_	5
	Mindagen at Ministry of Ministry							5
		-	3.0 MHz	#VBW :		0 MHz	W 1	es E
FUNCTION VALUE	FUNCTION WIDTH	Bm	32.263 dl -31.605 dl		8	f f	1	NNN
	the set of the s	Avg Type: Log-Pwr ter [] 2 3 5 5 ter [] 2 4	Avg Type: Log-Pwr TMCG []:2:3:4:5 Homoson TMCG []:2:3:4:5 Mkrit R4:0 Mkrit R4:0 Stop 9:000 GHz 2 Stop 9:000 GHz Stop 9:000 GHz Stop 9:000 GHz MKRI R4:00001015	Avg Type: Log-Per Trid: [] 2 4 5 G Arten: 36 dB Mkr1 8480 Mkr1 849,0 MHz Stop 9.000 GHz 3.0 MHz Stop 9.000 GHz Stop 9.000 GHz Stop 9.000 GHz	GHz Avg Type: Log-Pur Trid: Free Run IFGaint.tow Avg Type: Log-Pur Trid: [] 2 4 5 0 Trid: Trid: Free Run IFGaint.tow Trid: Free Run IFGaint.tow Trid: [] 2 4 5 0 Trid: [] 2 4 5 0 Trid: Trid: Free Run IFGaint.tow Trid: [] 2 4 5 0 Trid: [] 2	S000000 GHz IFGain.Low Trig: Free Run #Atten: 36 dB Avg Type: Log.Pur Type: Log.Pur Trig: 2/3 d S (2/3 d B) et 8.5 dB Mkr1 849.0 MHz 32.263 dBm 32.263 dBm #VBW 3.0 MHz Stop 9.000 GHz Were 16.0 ms (20001 pts) #VBW 3.0 MHz Stop 9.000 GHz Sweep 16.0 ms (20001 pts)	Image: State of the s	Freq 4.515000000 GHZ PHC Fat: Trig: Free Run IFGain:Low Avg Type: Log-Pwr Attan::36 dB Mcc Tip: Free Run IfGain:Low Ref Offset 85 dB Ref 34.50 dBm Mkr1 84.90 MHz 32.263 dBm 0 MHz

Shenzhen STS Test Services Co., Ltd.



GSM1900 BAND(30M-12G)

Lowest Channel

Frequency	1 AM May 31, 2016		ALIGNAUTO		SENSE: INT			50 Ω AC	RF		R L
Frequency	TYPE MUMMMMMM DET P P P P P P		e: Log-Pwr	Avg T	Free Run n: 36 dB	Þ	PNO: Fast	15000000	eq 6.0	er Fi	n
Auto Tu	50 4 GHz 694 dBm		Mk					et 9.5 dB .00 dBm		ldiv	
Center Fr 6.015000000 G								21			
Start Fre 30.000000 M	-13.00 dēm			\Diamond^2							0
Stop Fr 12.00000000 Gi											0
CF Ste	12.000 GHz (25001 pts)	Stop 1 0.0 ms	Sweep 20		1Hz	W 3	#VBW		Hz 1.0 MH	30 N BW	
<u>Auto</u> M	CTION VALUE	FUNC	UNCTION WIDTH	JNCTION	94 dBm 58 dBm		850 4 GHz 539 5 GHz		f	N 1	
Freq Offs 01							555 6 GH2				
		5	STATUS								

Middle Channel

Frequency	18:49:13 AM May 31, 2016	ALIGNAUTO		ENSE: INT	SE		50 Q AC	RF		-
Frequency	TRACE 1 2 3 4 5 6	: Log-Pwr	Avg Ty	e Pup	Tria: Fre	GHz	15000000	q 6.0	Fre	ter
Auto Tu	DETPPPPP				#Atten: 3	PNO: Fast C IFGain:Low				
Auto Tu	1.880 1 GHz 27.063 dBm	Mki					et 9.5 dB .00 dBm			3/div
Center Fr						_	1			
6.015000000 G		o	-			-		-		-
					-	-		-		-
Start Fre	-13.00 dBm					-				
30.000000 M			()2	-	1	-				
		Section 200	-	A CONTRACTOR	ale printer and state	and the second	and a designation	-	-	-
Stop Fre					-			-		-
12.00000000 G										
CF Ste 1.19700000 G	top 12.000 GHz ms (25001 pts)	Sweep 20			W 3.0 MHz	#VB		iz .0 MH	W 1	
<u>Auto</u> M	FUNCTION VALUE	ICTION WIDTH	INCTION		27.063 d	880 1 GHz	× 18	SCL	TRC	MODE N
				Bm	-30.710 d	455 2 GHz	7.	f	1	N
Freq Offs										
				_				_	_	_

Highest Channel

- 0.00 A 100 A	M May 31, 2016		ALIGNAUTO		NSE:INT	SE		AC	50 g	RF		100	RL
Frequency		TRAC TYP	: Log-Pwr	Avg T		Trig: Free	PNO: Fast C	00000 G	01500	eq 6.	Fre	ter	ent
Auto Tur		-			5 dB	#Atten: 3	IFGain:Low	IF				_	_
Auto Tu	8 GHz 80 dBm	26.8	Mk						ffset 9.6 34.00			3/div	
Center Fre									- Y1 -				g
6.015000000 Gi				_					_	-			0
				_			_	-	-	-			10
Start Fre	-13.00 dBm						-						0
30.000000 Mi	-		-	\wedge^2									0
	-		a contraction	IV.	a life of		-	-					0
Stop Fre													0
12.00000000 GH				_			-	-		-			10
CF Ste	.000 GHz			_							M		
1.197000000 GH			Sweep 20			V 3.0 MHz	#VB		Hz	.0 M	-	_	
Auto Ma	IN VALUE	FUNCTIO	NCTION WIDTH	UNCTION	Bm	26.880 d	09 8 GHz	× 1.909		SCL	TRC 1	Ν	
Freq Offs					Bm	-30.737 d	39 0 GHz	7.439		f	1	N	2
Prequis 01													1
1													5
													3
													2

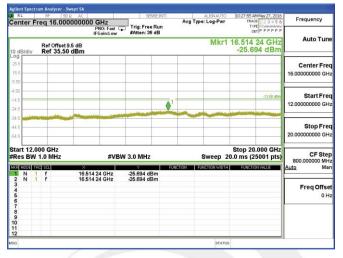
Shenzhen STS Test Services Co., Ltd.



Report No.: STS1605154F01

GSM1900 BAND(12G-20G)

Lowest Channel



Middle Channel

	R	50 Ω AC		SENSE: IN	IT	A	LIGNAUTO		M May 27, 2016	-
ente	r Freq	16.0000000	PNO: Fast C	Trig: Free Run #Atten: 36 dB	A	vg Type: I	Log-Pwr	TY		Frequency
10 dB/d		f Offset 9.5 dB f 35.50 dBm	IFGain:Low	setten. 30 db			Mkr1		60 GHz 93 dBm	Auto Tun
25.6 15.6 5.50										Center Fre 16.00000000 GH
4.50					↓ ¹	∂ ²	and the local data		-13.00 dBm	Start Fre 12.00000000 GF
34.5 🚧 44.5 — 54.5 —			ignikitaipagi platenti							Stop Fre 20.00000000 GF
Res E	2.000 (3W 1.0	MHz	#VB	W 3.0 MHz				0.0 ms (2	.000 GHz 5001 pts)	CF Ste 800.000000 M
1 N 2 N		16.	505 60 GHz 096 32 GHz	-24.793 dBm -25.332 dBm	FUNCTION	FUNC	TION WIDTH	FUNCTS	ON VALUE	<u>Auto</u> Ma
3 4 5 6 7										Freq Offs 0 F
8										

Highest Channel

RL RF 50.0 AC	SENSE:INT	ALIGNAUTO	10:34:31 AM May 27, 2016	-
enter Freq 16.000000000 GHz PNO: Fast (IFGain:Low	Trig: Free Run #Atten: 36 dB	Avg Type: Log-Pwr	TYPE Monoration DET P P P P P P	Frequency
Ref Offset 9.5 dB 0 dB/div Ref 35.50 dBm		Mkr1	16.557 12 GHz -25.136 dBm	Auto Tune
55 5 5 50				Center Free 16.000000000 GH
4.5	1		-13.00 dBm	Start Fre 12.000000000 GH
14 5				Stop Fre 20.000000000 GH
itart 12.000 GHz Res BW 1.0 MHz #VB	W 3.0 MHz	Sweep 2	Stop 20.000 GHz 0.0 ms (25001 pts)	CF Ste 800.000000 MH
MODE TEC SCL X 1 N 1 f 16.557 12 GHz 2 N 1 f 16.523 20 GHz	-25.136 dBm -25.342 dBm	CTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Ma
3 4 5 6 7				Freq Offse 0 H
8 9 00 11				

Shenzhen STS Test Services Co., Ltd.



Report No.: STS1605154F01

GPRS 1900 BAND(30M-12G)

Lowest Channel

Frequency	AM May 31, 2016		ALIGNAUTO		NSE: INT	SE			RF 50			R
	ACE 1 2 3 4 5 6 TYPE MUMMMMM DET P P P P P P	TY	ype: Log-Pwr	Av	e Run 5 dB	Trig: Free #Atten: 3	PNO: Fast IFGain:Low	000000	q 6.0150	Fre	nter	en
Auto Tu	50 4 GHz 735 dBm		Mk						ef Offset 9 ef 33.70		B/di	
Center Fr 6.015000000 G									V1			9 3.7 3.7 3.7
Start Fre 30.000000 M	-13.00 dBn										F	.30 5.3 6.3
Stop Fr 12.00000000 Gi											F	63 63 63
CF Sto 1.197000000 G	2.000 GHz 25001 pts)	Stop 12 0.0 ms (2	Sweep 20			3.0 MHz	#VBW	-	z) MHz	0 MH W 1.		
<u>Auto</u> M	TION VALUE	FUNCTI	FUNCTION WIDTH	INCTION	Bm	26.735 d	850 4 GHz 608 6 GHz		f	TRC	N N N	1
Freq Offs 01					DIII	50.5 is u	00000	0.2			N	234567890
												8 9 0 1 2
			STATUS									a

Middle Channel

Frequency	D8:55:49 AM May 31, 2016	ALIGNAUTO		INSE: INT	SE		AC		RF		RL
requeries	TYPE MUMMMMM DET P P P P P P	e: Log-Pwr	Avg Typ	e Run	Trig: Free	IZ NO: Fast C	00000 GH	01500	eq 6.	er Fr	ent
	DETPPPPP			6 dB	#Atten: 3	Sain:Low	IFG				
Auto Tur	1 1.880 1 GHz 27.111 dBm	Mk						ffset 9.5 14.00 c		/div	
Center Fre								V 1			9g
6.015000000 Gi								_	_		1.0
								-	_		00
Start Fre	-13.00 dBm		-					-	-		10
30.000000 Mi	2			-				-			0
	3				Laboration and						10
Stop Fr			and the second second							and the second	0
12.000000000 G											10
CF Ste	Stop 12.000 GHz 0 ms (25001 pts)	Sweep 20			W 3.0 MHz	#VB		47		30 M BW	
1.197000000 G Auto M	FUNCTION VALUE	NCTION WIDTH	NCTION F		Y		×			IDE TE	
			71		27.111 d -30.496 d	1 GHz	1.880 1 11.985 2		f		1
Freq Offs 01				DIII	-50.430 U	2 912	11,365 2				3
											5 6 7
											8
											D 1
											2

Highest Channel

RL RF 50.Ω AC		SENSE:INT	ALIGNAUTO	D8:56:44 AM May 31, 2016	2 () () () () () () ()
nter Freq 6.015000000 GH	Z 0: Fast 😱 ain:Low	Trig: Free Run #Atten: 36 dB	Avg Type: Log-Pwr	TYPE WWWWWWWW DET P P P P P	Frequency
Ref Offset 9.5 dB	ann.cow		Mk	r1 1.909 8 GHz 26.926 dBm	Auto Tune
99 4.0 4.0					Center Fre 6.015000000 GH
00				-13.00 dBm	Start Fre 30.000000 MH
50 50 50	Contraction of	and the second			Stop Fre 12.00000000 GH
art 30 MHz Res BW 1.0 MHz	#VBW	3.0 MHz		Stop 12.000 GHz 0.0 ms (25001 pts)	CF Ste 1.197000000 GF
E 2005 TEG SCI X N 1 f 1.909 E 2 N 1 f 6.477 C	GHz	26.926 dBm -30.182 dBm	UNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Ma
4 5 7	, Grit				Freq Offso 0 H
/ B D D 1 2					

Shenzhen STS Test Services Co., Ltd.



GPRS 1900 BAND(12G-20G)

Lowest Channel

	M May 27, 2016		ALIGNAUTO		ISE: INT	SEN		DR AC		8 C - 1	a RL
		TVE	: Log-Pwr	Avg Type	Run dB	Trig: Free #Atten: 36	PNO: Fast IFGain:Low	000000	eq 16.00	er Fr	en
	00 GHz 96 dBm		Mkr1						Ref Offset Ref 35.5	/div	0 dE
Center Fr 16.000000000 G											5.6 5.6
Start Fr 12.000000000 G	-13.00 dBm				● ¹						50 1.5 1.5
Stop Fr 20.000000000 G											5 5
CF St 800.000000 N	.000 GHz 5001 pts)	0.0 ms (2	Sweep 2			3.0 MHz	#VBW		0 GHz .0 MHz		
Auto N	IN VALUE	FUNCTIC	NCTION WIDTH	TION FU		-25.196 dE -25.196 dE	4 00 GHz 4 00 GHz		f f	N 1 N 1	1
Freq Off											3 4 5 6 7 8 9
											9 0 1 2
			STATUS								a

Middle Channel

RL RF	50 Q AC		SENSE	INT		ALIGNAUTO		M May 27, 2016	Frequency
enter Freq 1	6.000000000	GHz PNO: Fast C	Trig: Free Ru	un.	Avg Type	: Log-Pwr	TRAC		riequency
		FGain:Low	#Atten: 36 df				D	ET P P P P P P	
dB/div Ref	Offset 9.5 dB 35.50 dBm					Mkr1		64 GHz 30 dBm	Auto Tur
5.5									Center Fre
5.5									16.00000000 G
50		_							
50		-	-					-13.00 dBm	Start Fre
15				1				-15.00 den	12.00000000 G
1.5			-1		-		- in the Male	and the second	
5 manual and the state of the	and a subscription of the local division of					b			01 E
1.5									Stop Fr 20.00000000 G
1.5									20.00000000 01
art 12.000 GI Res BW 1.0 M		#VB	W 3.0 MHz		:	Sweep 2		.000 GHz 5001 pts)	CF Ste 800.000000 Mi
R MODE TRC SCL	×	64 GHz	-25.130 dBm	FUNC	TION FUI	OCTION WIDTH	FUNCTI	ON VALUE	<u>Auto</u> M
N 1 f N 1 f	16.528	64 GHz 64 GHz	-25.130 dBm -25.130 dBm						
3									Freq Offs
5									01
i i i									
3									
)									
2									

Highest Channel

RL RF 50.0 AC		SENSE: INT	ALIGNAUTO	10:59:18 AM May 27, 2016	-
enter Freq 16.0000000	PNO: Fast	Trig: Free Run #Atten: 36 dB	Avg Type: Log-Pwr	TRACE 1 2 3 4 5 6 TYPE MWWWWWW DET P P P P P P	Frequency
Ref Offset 9.5 dB dB/div Ref 35.50 dBm	II CHINE OW		Mkr1	16.572 48 GHz -25.370 dBm	Auto Tun
og 55.5 5.5					Center Fre 16.000000000 GH
4.5			,1	-13.00 dBm	Start Fre 12.000000000 GH
45					Stop Fre 20.000000000 GH
tart 12.000 GHz Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep 2	Stop 20.000 GHz 0.0 ms (25001 pts)	CF Ste 800.000000 MH
	72 48 GHz 72 48 GHz	-25.370 dBm -25.370 dBm	UNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Ma
2 N 1 f 16.5 3 4 5 6 7 8 9	72 46 GHZ	-25.370 dBm			Freq Offse 0 H
7 8 9 00					

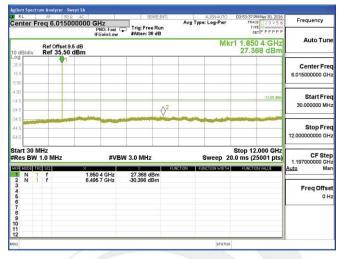
Shenzhen STS Test Services Co., Ltd.



Report No.: STS1605154F01

EDGE 1900 BAND(30M-12G)

Lowest Channel



Middle Channel

	03:57:06 PM May 30, 2016	ALIGNAUTO		SENSE: INT		50 Q AC	RF		RL			
Frequency	TRACE 1 2 3 4 5 6 TYPE MUMMMMM DET P P P P P P	/pe: Log-Pwr	Avg T	Trig: Free Run #Atten: 36 dB	PNO: Fast C	1500000	eq 6.	er Fr	ent			
Auto Tur		Mkr1 1.880 1 GHz					Ref Offset 9.5 dB					
Center Fre 6.015000000 GH						•1			og 25.5 15.5			
Start Fre 30.000000 MF	-13.00 dēm				-				1.50			
Stop Fre 12.000000000 GH					Nine Street				14.5 14.5			
CF Ste 1.197000000 G	Stop 12.000 GHz 0.0 ms (25001 pts)			/ 3.0 MHz	#VB		1.0 M		Res			
Auto Ma	FUNCTION VALUE	FUNCTION WIDTH	FUNCTION	27.427 dBm -30.013 dBm	880 1 GHz 441 8 GHz	1.	f f	N 1	1			
				50.013 UBIN	4410 012				345			
Freq Offs 0 F									6 7 8 9			

Highest Channel

RL RF 50.Ω AC		SENSE: INT		ALIGNAUTO	D4:00:02 PM May 30, 2016	-
Center Freq 6.01500000	PNO: Fast] Trig: Free Run	Avg Typ	e: Log-Pwr	TRACE 1 2 3 4 5 6 TYPE MWWWWWWWW DET P P P P P P	Frequency
	IFGain:Low	#Atten: 36 dB				
Ref Offset 9.5 dB 0 dB/div Ref 35.50 dBm				Mk	r1 1.910 2 GHz 27.300 dBm	Auto Tune
.og						
15.5						Center Free
5.50	1					6.015000000 GH
4.50	1.1.1			1		
14.5					-13.00 dBm	Start Free
24.5			O^2			30.000000 MH
34.5		A second state at the local state of the	∇			
44.5					and an	Stop Free
54.5						12.000000000 GH
Start 30 MHz #Res BW 1.0 MHz	#0./DM	3.0 MHz	-	Succes 20	Stop 12.000 GHz	
					0.0 ms (25001 pts)	1.197000000 GH
	1.910 2 GHz	27.300 dBm	UNCTION	INCTION WIDTH	FUNCTION VALUE	Auto Mar
2 N 1 f	7.485 4 GHz	-30.891 dBm				F 0//
4						Freq Offse
5 6 7						UN
7 8						
9						
11						
12						

Shenzhen STS Test Services Co., Ltd.



EDGE 1900 BAND(12G-20G)

Lowest Channel

Frequency	M May 30, 2016	TRAC	ALIGNAUTO e: Log-Pwr	Avg Ty	E:JNT		0 GHz	0000000	RF 5	er Fr	nte		
	ET P P P P P P	DE	-153		lB	Trig: Free #Atten: 36	PNO: Fast G						
Auto Tu	12 GHz 47 dBm	16.509 -25.64	Mkr1					Ref Offset 9.5 dB B/div Ref 35.50 dBm					
Center Fr 16.000000000 G											6		
Start Fr 12.000000000 G	-13.00 dBm	. Automation		\Diamond^2	1						5		
Stop Fr 20.000000000 G											5 -		
CF St 800.000000 M	.000 GHz 5001 pts)		Sweep 2			3.0 MHz	#VBW		0 GHz .0 MHz				
<u>Auto</u> N	ON VALUE	FUNCTIO	INCTION WIDTH	TION		-25.647 dB -25.685 dB	09 12 GHz 55 04 GHz		f f		1		
Freq Off 0													
		1	STATUS										

Middle Channel

	I Q AC	SENSE:INT	ALIGNAUTO	03:57:39 PM May 30, 2016	Frequency
enter Freq 16.00		Tria: Free Run	Avg Type: Log-Pwr	TRACE 1 2 3 4 5 6 TYPE Myddiadada	Frequency
	PNO: Fast 0 IFGain:Low	#Atten: 36 dB		DET P P P P P P	22005050000
Ref Offset dB/div Ref 35.50			Mkr1	16.455 68 GHz -24.828 dBm	Auto Tun
5.6					Center Fre
5.5					16.00000000 GH
50				-13.00 dEm	Start Fre
1.5				and the second s	12.00000000 GH
	and the second s				Stop Fre
4.5					20.00000000 GH
art 12.000 GHz Res BW 1.0 MHz	#VB	W 3.0 MHz	Sweep 2	Stop 20.000 GHz 0.0 ms (25001 pts)	CF Ste 800.000000 MH
R MODE THE SOL	× 16.455 68 GHz	-24.828 dBm	UNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Ma
2 N 1 f 3	16.493 44 GHz	-25.402 dBm			FreqOffs
4 5 6					01
7 B 9					
1					
2					

Highest Channel

RL RF 50 Q AC	-	SENSE:INT	ALIGNAUTO	D4:00:34 PM May 30, 2016	-
enter Freq 16.0000000	PNO: Fast	Trig: Free Run #Atten: 36 dB	Avg Type: Log-Pwr	TYPE WWWWWWWW DET P P P P P	Frequency
Ref Offset 9.5 dB 0 dB/div Ref 35.50 dBm	realized		Mkr1	19.039 68 GHz -25.177 dBm	Auto Tune
og 55.5 5.5					Center Fre 16.000000000 GH
50 4.5 4.5					Start Fre 12.000000000 GH
45					Stop Fre 20.000000000 GH
tart 12.000 GHz Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep 2	Stop 20.000 GHz 0.0 ms (25001 pts)	CF Ste 800.000000 MH
	39 68 GHz 39 68 GHz	-26.177 dBm -25.177 dBm	UNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Ma
2 N 1 f 19.0 3 4 5 6 7 8 9	39 66 GHZ	-25.177 dBm			Freq Offse 0 H
7 8 9 10					

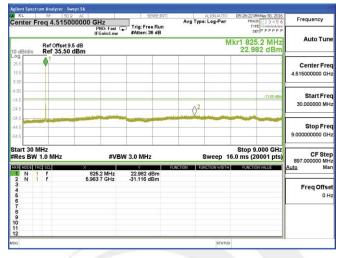
Shenzhen STS Test Services Co., Ltd.



Report No.: STS1605154F01

WCDMA Band V (RMC 12.2Kbps)

Lowest Channel



Middle Channel

2 0.624.03066	1:05 PM May 30, 2016	UTO I	AL		ENSE: INT	S		Ω AC	50	RF	1	RL
Frequency	TRACE 1 2 3 4 5 6	Pwr	Type: L		Run	Tria: Fre	GHz PNO: Fast G	000000	1.5150	req 4	er F	en
	DETPPPPP					#Atten: 3	IFGain:Low					
Auto Tu		Mkr1 835.5 MHz 22.724 dBm							Offset 9 35.50		div	0 dE
Center Fr								-				og 25.5
4.515000000 G		_	_	_	_		-	_				5.6
		-		-				+		-		5.50
Start Fr	-13.00 dBm		-									1.50
30.000000 M			2									4.5
	-		-									34.5
Stop Fr												4.5
9.00000000 G	_			-			-	-		-		54.5
CF St	op 9.000 GHz			_							30 1	
897.000000 M	is (20001 pts)					V 3.0 MH	#VB			1.0		
<u>uto</u> M	UNCTION VALUE	MIDTH	FUNCT	FUNCTI	iBm	22.724 0	35.5 MHz			C SCL	V	1
Freq Offs					Bm	-31.048 c	04 4 GHz	5.7		f	N	23
Freq Oils												4
												5 6 7
												89
												10
												2

Highest Channel

	05:33:00 PM May 30, 2016	ALIGNALITO	SENSE:INT	50 Q AC	RF.			RI
Frequency	TRACE 1 2 3 4 5 6 TYPE Monodation DET P P P P P P	4.515000000 GHz Avg Type: Log-Pwr TRACE 12 3 4 5 6					ter	en
Auto Tun	kr1 845.4 MHz 22.913 dBm	М		Ref Offse Ref 35.		3/div	D dł	
Center Fre 4.515000000 GH					♦ ¹			og 15.5 15.5
Start Fre 30.000000 MH	-13.00 dBm							4.5
Stop Fre 9.00000000 GH			Note the second design of the				ار دی. ا	4.5
CF Ste 897.000000 MH	Stop 9.000 GHz 5.0 ms (20001 pts)		3.0 MHz		.0 MHz	V 1		Re
<u>Auto</u> Ma	FUNCTION VALUE	CTION FUNCTION WIDTH	22.913 dBm -30.899 dBm	845.4 MHz 7.971 6 GHz	f f	TRC 1	N N	12
FreqOffse 0 ⊦			00,000 00.00	TST TO ONE				34567
								8 9 0 1 2

Shenzhen STS Test Services Co., Ltd.



Report No.: STS1605154F01

WCDMA Band II (RMC 12.2Kbps)(30M-12G)

Lowest Channel

RL	RF 50 Q	AC	SENSE:	INT	ALIGNAUTO	D9:32:19 AM May 17, 20	16
enter F	req 6.015000	PNO: Fast G IFGain:Low	Trig: Free Ru #Atten: 36 dB	n	Avg Type: Log-Pwr	TYPE MUMMUM DET P P P P P	P
0 dB/div	Ref Offset 9.8 d Ref 35.80 dB				M	kr1 1.851 4 GH 20.768 dBr	
og 25.8 15.8 5.80	↓ ¹						Center Fre 6.015000000 GH
4.20						-13.00 df	Start Fre 30.000000 MH
34.2 44.2 54.2		And and a second designed to the second designed to the second designed to the second designed to the second de					Stop Fre 12.00000000 GH
start 30 I Res BW	MHz 1.0 MHz	#VB	N 3.0 MHz		Sweep	Stop 12.000 GH 20.0 ms (25001 pt	
ARE MODE T 1 N 2 N	20 500 f	1.851 4 GHz 6.660 4 GHz	20.768 dBm -30.172 dBm	FUNCTI	DN FUNCTION WIDT	H FUNCTION VALUE	Auto Ma
3 4 5 6 7		0.000 4 6112	50.172 dbii				Freq Offs 0 F
8 9 10							

Middle Channel

Center	Fre		000000 GH	IZ IO: Fast C	Trig: Free Run #Atten: 36 dB		ALIGNAUTO e: Log-Pwr	TRAC	May 27, 2016 E 1 2 3 4 5 6 E Monitorio T P P P P P P	Frequency
0 dB/di		Ref Offset Ref 35.80	9.8 dB	ain:Low	Price in or do		Mk	r1 1.879 18.48	0 1 GHz 37 dBm	Auto Tun
.og 25.8 15.8 5.80		1								Center Fre 6.015000000 GH
4.20						02			-13.00 dBm	Start Fre 30.000000 MH
34.2 44.2 54.2	and the second second		and a state of the second design							Stop Fre 12.00000000 GH
Start 3 Res B	W 1.	0 MHz	×		W 3.0 MHz	FUNCTION	Sweep 2	0.0 ms (2		CF Ste 1.197000000 GF Auto Ma
1 N 2 N 3 4 5 6	1	1	1.879 7.495	1 GHz 4 GHz	18.487 dBm -30.721 dBm					Freq Offs 0 H
6 7 8 9										

Highest Channel

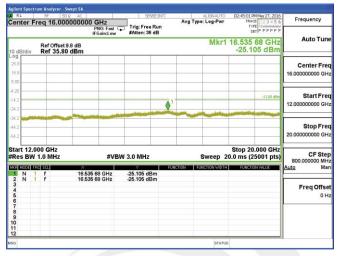
RL	RF	50 g A	C	SENSE:1	NT	ALIGNAUTO	02:53:48 PM May 27, 2016	
enter F	req 6.	0150000	00 GHz PNO: Fast C	Trig: Free Ru #Atten: 36 dB	n	Type: Log-Pwr	TYPE Monoration	
0 dB/div		ffset 9.8 dE 35.80 dBr	1	whiten: 30 db		Mk	r1 1.906 4 GHz 17.457 dBm	
og 25.8 15.8 5.80		¢ ¹						Center Fre 6.015000000 GH
4.20							-13.00 dBm	Start Fre 30.000000 MH
34.2 44.2 54.2								Stop Fre 12.00000000 GH
tart 30 Res BW		Hz	#VB	W 3.0 MHz		Sweep 2	Stop 12.000 GHz 0.0 ms (25001 pts)	
1 N 2 N	ric scl		1.906 4 GHz 7.412 6 GHz	17.457 dBm -30.259 dBm	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	Auto Ma
2 N 3 4 5 6 7 8 9 10 11 12			7,412 6 GHZ	-30.259 dBm				Freq Offs 0 H

Shenzhen STS Test Services Co., Ltd.



WCDMA Band II (RMC 12.2Kbps)(12G-20G)

Lowest Channel



Middle Channel

2010 A 100 A	M May 27, 2016		ALIGNAUTO		SE:INT	SEN		50 Q AC	RF		RL	
Frequency	ET P P P P P P	TY	e: Log-Pwr	Avg Ty	Run dB	Trig: Free #Atten: 36	PNO: Fast	0000000	eq 16.00	ter Fr	en	
Auto Tu	60 GHz 12 dBm		Mkr1					Ref Offset 9.8 dB dB/div Ref 35.80 dBm				
Center Fr 16.000000000 G											og 25.8 15.8 5.80	
Start Fr 12.000000000 G	-13.00 dEm	- Loisi Atta			1 ²						1.20	
Stop Fr 20.000000000 G											34.2 44.2 54.2	
CF St	.000 GHz 5001 pts)		Sweep 2			3.0 MHz	#VBW		0 GHz .0 MHz			
<u>Auto</u> M	DN VALUE	FUNCTI	UNCTION WIDTH	TION	EUNC	-26.112 dB -25.340 dB	9 60 GHz 8 32 GHz	16.36	SEL f	N 1	1	
Freq Offs 0						-20.340 00	0 JZ GHZ	10.32			34567	
											8 9 10	

Highest Channel

	AC	SENSE: INT	ALIGNAUTO	02:54:20 PM May 27, 2016	Frequency
Center Freq 16.0000	PNO: Fast G IFGain:Low	Trig: Free Run #Atten: 36 dB	Avg Type: Log-Pwr	TRACE 1 2 3 4 5 6 TYPE MUMMMMM DET P P P P P P	
Ref Offset 9.8 0 dB/div Ref 35.80			Mkr1	16.557 12 GHz -25.139 dBm	Auto Tun
25.8					Center Free 16.00000000 GH
5.80				-13.00 (Em	Start Fre
24.2			1		12.000000000 GH
42					Stop Fre
tart 12.000 GHz Res BW 1.0 MHz	#VB\	V 3.0 MHz	Sweep 2	Stop 20.000 GHz 0.0 ms (25001 pts)	
KE MODE THE SOL	× 16.557 12 GHz	-25,139 dBm	NCTION FUNCTION WIDTH	FUNCTION VALUE	Auto Ma
2 N 1 f 3 4 5 5 7 8	16.557 12 GHz	-25.139 dBm			Freq Offse 0 H
9 0					



A7 BAND EDGE

GSM 850





Note:Offset=Cable loss(8.5)+10log(3.2/3)=8.5+0.3=8.8 dB



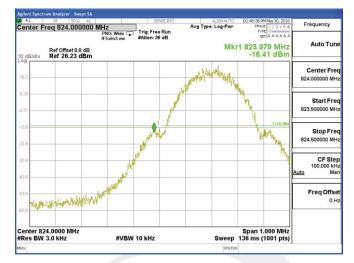
Highest Band Edge

Note:Offset=Cable loss(8.5)+10log(3.2/3)=8.5+0.3=8.8 dB



GPRS 850

Lowest Band Edge



Note:Offset=Cable loss(8.5)+10log(3.2/3)=8.5+0.3=8.8 dB

Highest Band Edge



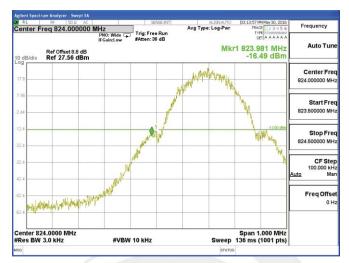
Note:Offset=Cable loss(8.5)+10log(3.2/3)=8.5+0.3=8.8 dB

Shenzhen STS Test Services Co., Ltd.



EDGE 850

Lowest Band Edge



Note:Offset=Cable loss(8.5)+10log(3.2/3)=8.5+0.3=8.8 dB

Highest Band Edge



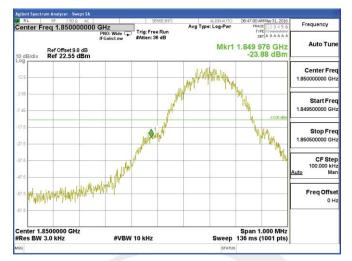
Note:Offset=Cable loss(8.5)+10log(3.2/3)=8.5+0.3=8.8 dB

Shenzhen STS Test Services Co., Ltd.



GSM 1900

Lowest Band Edge



Note:Offset=Cable loss(9.5)+10log(3.2/3)=9.5+0.3=9.8 dB

India by State of the state of Frequency Aug Type: Log-Pwr TYPE MWWWW DET A A A A Auto Tur Mkr1 1.910 022 GHz -22.08 dBm Ref Offset 9.8 dB Ref 22.11 dBm 10 d Center Fred 1.91000000 GHz MALANN Start Fred Stop Fre 0500000 GH CF Ste 100.000 kH divide of the part of the part of the Freq Offs 0 H Span 1.000 MHz Sweep 136 ms (1001 pts) Center 1.9100000 GHz #Res BW 3.0 kHz #VBW 10 kHz

Highest Band Edge

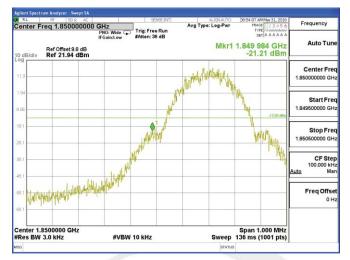
Note:Offset=Cable loss(9.5)+10log(3.2/3)=9.5+0.3=9.8 dB

Shenzhen STS Test Services Co., Ltd.



GPRS 1900

Lowest Band Edge



Note:Offset=Cable loss(9.5)+10log(3.2/3)=9.5+0.3=9.8 dB

Highest Band Edge



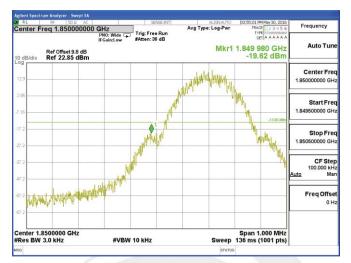
Note:Offset=Cable loss(9.5)+10log(3.2/3)=9.5+0.3=9.8 dB

Shenzhen STS Test Services Co., Ltd.



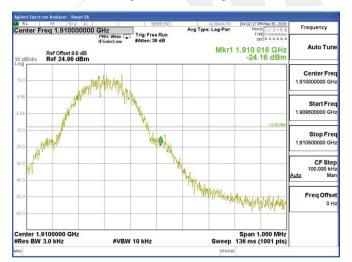
EDGE 1900

Lowest Band Edge



Note:Offset=Cable loss(9.5)+10log(3.2/3)=9.5+0.3=9.8 dB

Highest Band Edge



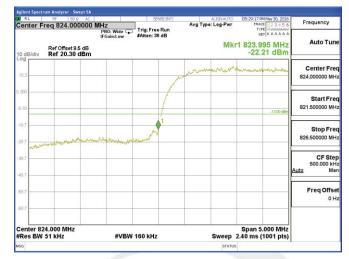
Note:Offset=Cable loss(9.5)+10log(3.2/3)=9.5+0.3=9.8 dB

Shenzhen STS Test Services Co., Ltd.



WCDMA Band V RMC 12.2Kbps





Note:Offset=Cable loss(10.45)+10log(41/51)=10.45+ (-0.95) =9.5 dB



Highest Band Edge

Note:Offset=Cable loss(10.45)+10log(41/51)=10.45+ (-0.95) =9.5 dB

Shenzhen STS Test Services Co., Ltd.



WCDMA Band II RMC 12.2Kbps





Note:Offset=Cable loss(10.75)+10log(41/51)=10.75+ (-0.95) =9.8 dB

Highest Band Edge



Note:Offset=Cable loss(10.75)+10log(41/51)=10.75+ (-0.95) =9.8 dB

Shenzhen STS Test Services Co., Ltd.



A8 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT GSM 850: (30-9000)MHz

	The	e Worst Test R	esults Channe	el 128/824.2 MHz		
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity
1648.467	-35.44	-4.65	-40.09	-13	-27.09	Horizontal
2472.713	-37.00	-2.21	-39.21	-13	-26.21	Horizontal
3296.875	-31.10	0.21	-30.89	-13	-17.89	Horizontal
1648.544	-38.53	-4.65	-43.18	-13	-30.18	Vertical
2472.783	-41.75	-2.21	-43.96	-13	-30.96	Vertical
3296.946	-42.75	0.21	-42.54	-13	-29.54	Vertical
	The	e Worst Test R	esults Channe	I 190/836.6 MHz		
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity
1673.282	-36.44	-4.65	-41.09	-13	-28.09	Horizontal
2509.934	-42.95	-2.21	-45.16	-13	-32.16	Horizontal
3346.475	-38.1	0.21	-37.89	-13	-24.89	Horizontal
1673.317	-37.47	-4.65	-42.12	-13	-29.12	Vertical
2509.957	-31.81	-2.21	-34.02	-13	-21.02	Vertical
3346.482	-36.71	0.21	-36.5	-13	-23.5	Vertical
	The	e Worst Test R	esults Channe	el 251/848.8 MHz		
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity
1697.658	-35.49	-4.65	-40.14	-13	-27.14	Horizontal
2546.516	-44.01	-2.21	-46.22	-13	-33.22	Horizontal
3395.335	-42.11	0.21	-41.9	-13	-28.9	Horizontal
1697.723	-35.46	-4.65	-40.11	-13	-27.11	Vertical
2546.601	-41.79	-2.21	-44	-13	-31	Vertical
3395.335	-37.73	0.21	-37.52	-13	-24.52	Vertical

Note: (1)Below 30MHz no Spurious found is the worst condition.

(2)Above 3.5GHz amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has.





GPRS 850: (30-9000)MHz

	The	e Worst Test R	esults Channe	I 128/824.2 MHz		
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity
1648.551	-37.49	-4.65	-42.14	-13	-29.14	Horizontal
2472.76	-38.05	-2.21	-40.26	-13	-27.26	Horizontal
3296.869	-32.1	0.21	-31.89	-13	-18.89	Horizontal
1648.56	-39.48	-4.65	-44.13	-13	-31.13	Vertical
2472.806	-42.74	-2.21	-44.95	-13	-31.95	Vertical
3296.936	-43.78	0.21	-43.57	-13	-30.57	Vertical
	The	e Worst Test R	esults Channe	I 190/836.6 MHz		
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity
1673.332	-37.46	-4.65	-42.11	-13	-29.11	Horizontal
2509.845	-44.96	-2.21	-47.17	-13	-34.17	Horizontal
3346.506	-40.13	0.21	-39.92	-13	-26.92	Horizontal
1673.346	-39.49	-4.65	-44.14	-13	-31.14	Vertical
2509.929	-32.83	-2.21	-35.04	-13	-22.04	Vertical
3346.587	-38.7	0.21	-38.49	-13	-25.49	Vertical
	The	e Worst Test R	esults Channe	I 251/848.8 MHz		
Frequency(MHz)	Power(dBm)	ARpl	Р _{меа} (dBm)	Limit (dBm)	Margin(dBm)	Polarity
1697.699	-37.47	-4.65	-42.12	-13	-29.12	Horizontal
2546.49	-44.98	-2.21	-47.19	-13	-34.19	Horizontal
3395.274	-43.16	0.21	-42.95	-13	-29.95	Horizontal
1697.715	-36.49	-4.65	-41.14	-13	-28.14	Vertical
2546.511	-42.8	-2.21	-45.01	-13	-32.01	Vertical
3395.362	-38.68	0.21	-38.47	-13	-25.47	Vertical

Note: (1)Below 30MHz no Spurious found is the worst condition.

(2)Above 3.5GHz amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has.



EDGE 850: (30-9000)MHz

	The	e Worst Test R	esults Channe	I 128/824.2 MHz		
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity
1648.532	-38.48	-4.65	-43.13	-13	-30.13	Horizontal
2472.757	-39.03	-2.21	-41.24	-13	-28.24	Horizontal
3296.907	-33.1	0.21	-32.89	-13	-19.89	Horizontal
1648.575	-40.52	-4.65	-45.17	-13	-32.17	Vertical
2472.774	-44.81	-2.21	-47.02	-13	-34.02	Vertical
3296.962	-45.77	0.21	-45.56	-13	-32.56	Vertical
	The	e Worst Test R	esults Channe	I 190/836.6 MHz		
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity
1673.359	-38.53	-4.65	-43.18	-13	-30.18	Horizontal
2509.896	-44.98	-2.21	-47.19	-13	-34.19	Horizontal
3346.505	-42.07	0.21	-41.86	-13	-28.86	Horizontal
1673.43	-41.5	-4.65	-46.15	-13	-33.15	Vertical
2509.917	-34.82	-2.21	-37.03	-13	-24.03	Vertical
3346.506	-40.73	0.21	-40.52	-13	-27.52	Vertical
	The	e Worst Test R	esults Channe	I 251/848.8 MHz		
Frequency(MHz)	Power(dBm)	ARpl	Р _{меа} (dBm)	Limit (dBm)	Margin(dBm)	Polarity
1697.695	-39.47	-4.65	-44.12	-13	-31.12	Horizontal
2546.481	-46.95	-2.21	-49.16	-13	-36.16	Horizontal
3395.289	-45.1	0.21	-44.89	-13	-31.89	Horizontal
1697.774	-38.47	-4.65	-43.12	-13	-30.12	Vertical
2546.495	-44.8	-2.21	-47.01	-13	-34.01	Vertical
3395.291	40.82	0.21	41.03	-13	54.03	Vertical

Note: (1)Below 30MHz no Spurious found is the worst condition.

(2)Above 3.5GHz amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has.



PCS 1900: (30-20000)MHz

	The	Worst Test Res	sults for Channe	el 512/1850.2MH	z	
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity
3700.465	-33.43	0.33	-33.1	-13	-20.1	Horizontal
5550.739	-36.01	4.01	-32	-13	-19	Horizontal
7400.985	-42.15	10.7	-31.45	-13	-18.45	Horizontal
3700.507	-34.51	0.33	-34.18	-13	-21.18	Vertical
5550.745	-35.82	4.01	-31.81	-13	-18.81	Vertical
7401.019	-41.68	10.7	-30.98	-13	-17.98	Vertical
	The	Worst Test Res	sults for Channe	el 661/1880.0MH	z	
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity
3760.245	-36.49	0.33	-36.16	-13	-23.16	Horizontal
5640.254	-36.97	4.01	-32.96	-13	-19.96	Horizontal
7520.266	-32.09	10.7	-21.39	-13	-8.39	Horizontal
3760.328	-38.54	0.33	-38.21	-13	-25.21	Vertical
5640.285	-41.78	4.01	-37.77	-13	-24.77	Vertical
7520.346	-42.74	10.7	-32.04	-13	-19.04	Vertical
	The	Worst Test Res	sults for Channe	el 810/1909.8MH	lz	
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity
3819.665	-36.44	0.33	-36.11	-13	-23.11	Horizontal
5729.447	-36.97	4.01	-32.96	-13	-19.96	Horizontal
7639.277	-32.14	10.7	-21.44	-13	-8.44	Horizontal
3819.675	-38.51	0.33	-38.18	-13	-25.18	Vertical
5729.491	-41.79	4.01	-37.78	-13	-24.78	Vertical
7639.375	-42.75	10.7	-32.05	-13	-19.05	Vertical

Note: (1)Below 30MHz no Spurious found is the worst condition.

(2)Above 8GHz amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has.



GPRS 1900: (30-20000)MHz

	The	Worst Test Res	sults for Chann	el 512/1850.2MH	z	
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity
3700.482	-35.48	0.33	-35.15	-13	-22.15	Horizontal
5550.74	-38.01	4.01	-34	-13	-21	Horizontal
7400.912	-44.06	10.7	-33.36	-13	-20.36	Horizontal
3700.486	-36.49	0.33	-36.16	-13	-23.16	Vertical
5550.747	-37.75	4.01	-33.74	-13	-20.74	Vertical
7400.994	-42.73	10.7	-32.03	-13	-19.03	Vertical
	The	Worst Test Res	sults for Chann	el 661/1880.0MH	z	
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity
3760.182	-37.51	0.33	-37.18	-13	-24.18	Horizontal
5640.300	-37.98	4.01	-33.97	-13	-20.97	Horizontal
7520.241	-33.08	10.7	-22.38	-13	-9.38	Horizontal
3760.267	-39.55	0.33	-39.22	-13	-26.22	Vertical
5640.315	-42.81	4.01	-38.8	-13	-25.8	Vertical
7520.322	-43.67	10.7	-32.97	-13	-19.97	Vertical
	The	Worst Test Res	sults for Chann	el 810/1909.8MH	lz	
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity
3819.655	-37.52	0.33	-37.19	-13	-24.19	Horizontal
5729.5	-37.95	4.01	-33.94	-13	-20.94	Horizontal
7639.313	-33.2	10.7	-22.5	-13	-9.5	Horizontal
3819.664	-39.49	0.33	-39.16	-13	-26.16	Vertical
5729.511	-42.77	4.01	-38.76	-13	-25.76	Vertical
7639.328	-43.73	10.7	-33.03	-13	-20.03	Vertical

Note: (1)Below 30MHz no Spurious found is the worst condition.

(2)Above 8GHz amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has.





EDGE 1900: (30-20000)MHz

	The	Worst Test Res	sults for Chann	el 512/1850.2MH	z	
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity
3700.478	-37.52	0.33	-37.19	-13	-24.19	Horizontal
5550.769	-38.97	4.01	-34.96	-13	-21.96	Horizontal
7400.928	-46.16	10.7	-35.46	-13	-22.46	Horizontal
3700.527	-38.53	0.33	-38.2	-13	-25.2	Vertical
5550.818	-39.75	4.01	-35.74	-13	-22.74	Vertical
7400.982	-44.65	10.7	-33.95	-13	-20.95	Vertical
	The	Worst Test Res	sults for Chann	el 661/1880.0MH	z	
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity
3760.248	-39.49	0.33	-39.16	-13	-26.16	Horizontal
5640.248	-39	4.01	-34.99	-13	-21.99	Horizontal
7520.296	-35.06	10.7	-24.36	-13	-11.36	Horizontal
3760.307	-41.47	0.33	-41.14	-13	-28.14	Vertical
5640.265	-44.75	4.01	-40.74	-13	-27.74	Vertical
7520.320	-45.7	10.7	-35	-13	-22	Vertical
	The	Worst Test Res	sults for Chann	el 810/1909.8MH	lz	
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity
3819.724	-39.5	0.33	-39.17	-13	-26.17	Horizontal
5729.505	-39.04	4.01	-35.03	-13	-22.03	Horizontal
7639.371	-35.2	10.7	-24.5	-13	-11.5	Horizontal
3819.769	-41.44	0.33	-41.11	-13	-28.11	Vertical
5729.585	-44.79	4.01	-40.78	-13	-27.78	Vertical
7639.375	-45.69	10.7	-34.99	-13	-21.99	Vertical

Note: (1)Below 30MHz no Spurious found is the worst condition.

(2)Above 8GHz amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has.



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UMTS band V(30-9000)MHz

Channel 4132/826.4MHz							
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity	
1652.82	-34.48	-4.65	-39.13	-13	-26.13	Horizontal	
2479.242	-35.69	-2.21	-37.9	-13	-24.9	Horizontal	
1652.919	-32.65	-4.65	-37.3	-13	-24.3	Vertical	
2479.311	-31.42	-2.21	-33.63	-13	-20.63	Vertical	
		Chan	nel 4183/836.6N	1Hz			
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity	
1673.153	-31.54	-4.65	-36.19	-13	-23.19	Horizontal	
2509.766	-36.64	-2.21	-38.85	-13	-25.85	Horizontal	
1673.155	-28.67	0.21	-28.46	-13	-15.46	Vertical	
2509.823	-34.49	-4.65	-39.14	-13	-26.14	Vertical	
		Chan	nel 4233/846.6N	1Hz			
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity	
1693.864	-36.5	-4.65	-41.15	-13	-28.15	Horizontal	
2539.806	-38.63	-2.21	-40.84	-13	-27.84	Horizontal	
1693.871	-26.71	-4.65	-31.36	-13	-18.36	Vertical	
2539.841	-35.46	-2.21	-37.67	-13	-24.67	Vertical	

Note: (1)Below 30MHz no Spurious found is the worst condition.

(2)Above 3GHz amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has.



Report No.: STS1605154F01

UMTS band II(30-20000)MHz

Channel 9626/1852.4MHz							
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity	
3704.837	-34.49	0.33	-34.16	-13	-21.16	Horizontal	
5557.192	-35.65	4.01	-31.64	-13	-18.64	Horizontal	
3704.903	-34.74	0.33	-34.41	-13	-21.41	Vertical	
5557.231	-31.39	4.01	-27.38	-13	-14.38	Vertical	
		Cha	annel 9400/188	0MHz			
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity	
3760.156	-31.46	0.33	-31.13	-13	-18.13	Horizontal	
5640.208	-35.43	4.01	-31.42	-13	-18.42	Horizontal	
3760.249	-27.73	0.33	-27.4	-13	-14.4	Vertical	
5640.256	-35.4	4.01	-31.39	-13	-18.39	Vertical	
	•	Cha	nnel 9538/1907	.6MHz			
Frequency(MHz)	Power(dBm)	ARpl	P _{Mea} (dBm)	Limit (dBm)	Margin(dBm)	Polarity	
3815.258	-36.47	0.33	-36.14	-13	-23.14	Horizontal	
5722.862	-38.64	4.01	-34.63	-13	-21.63	Horizontal	
3815.289	-28.67	0.33	-28.34	-13	-15.34	Vertical	
5722.871	-35.42	4.01	-31.41	-13	-18.41	Vertical	

Note: (1)Below 30MHz no Spurious found is the worst condition.

(2)Above 6GHz amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has.



APPENDIX BPHOTOS OF TEST SETUP

RADIATED SPURIOUS EMISSION

