



# RADIO TEST REPORT

## Report No: STS1608029F01

Issued for

Interglobe Connection Corp

7500 NW 25th Street 112 Miami, Florida 33122 USA

| Product Name:  | MOBILE PHONE         |
|----------------|----------------------|
| Brand Name:    | SOLE                 |
| Model Name:    | SOLE F250            |
| Series Model:  | N/A                  |
| FCC ID:        | 2AC7ISOLE-F250       |
| Test Standard: | FCC Part 22H and 24E |

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## **TEST RESULT CERTIFICATION**

| Applicant's name:             | Interglobe Connection Corp                                       |
|-------------------------------|--|
| Address                       | 7500 NW 25 <sup>th</sup> Street 112 Miami, Florida 33122 USA     |
| Manufacture's Name            | EZA Electronic limited   |
| Address                       | RM1902(A) 19/F 38 PLAZA 38 SHAN TUNG ST MONGKOK KLN<br>HONG KONG |
| Product name:                 | MOBILE PHONE   |
| Brand name:                   | SOLE   |
| Model and/or type reference : | SOLE F250  |
| 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 ...... 02 Aug. 2016 ~15 Aug. 2016

Date of Issue ..... 16 Aug. 2016

Test Result ..... Pass

| Testing Engineer :     | Junter       |                 |
|------------------------|--------------|-----------------|
|                        | (Tony Liu)   | ESTING · CONSUL |
| Technical Manager :    | Meati        |                 |
|                        | (Vita Li)    | APPROVAL 0      |
| Authorized Signatory : | Troney Yoney |                 |
|                        | (Bovey Yang) |                 |

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## **Revision History**

| Rev. | Issue Date   | Report NO.    | Effect Page | Contents      |
|------|--------------|---------------|-------------|---------------|
| 00   | 16 Aug. 2016 | STS1608029F01 | ALL         | Initial Issue |
|      |              |               |             |               |



Shenzhen STS Test Services Co., Ltd.



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





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## **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     | N/A  |  |  |  |
| Software version number     | N/A  |  |  |  |
| FCC ID:                     | 2AC7ISOLE-F250   |  |  |  |
|                             | GSM/GPRS:  |  |  |  |
| Tx Frequency:               | 850: 824.2 MHz ~ 848.8 MHz   |  |  |  |
|                             | 1900: 1850.2 MHz ~ 1909.8MHz   |  |  |  |
|                             | GSM/GPRS:  |  |  |  |
| Rx Frequency                | 850: 869.2 MHz ~ 893.8 MHz   |  |  |  |
|                             | 1900: 1930.2 MHz ~ 1989.8 MHz  |  |  |  |
| SIM Card                    | SIM 1 and SIM 2 is a chipset unit and tested as single chipset,SIM 1 is used to tested |  |  |  |
| Antenna:                    | PIFA Antenna   |  |  |  |
| Antenna gain:               | GSM 850:1.6dBi ,PCS 1900:1.4dBi  |  |  |  |
| Power Supply:               | DC 3.7V by battery   |  |  |  |
| Battery parameter:          | Capacity:800mAh, Rated Voltage: 3.7V   |  |  |  |
| GPRS/EDGE Class             | Multi-Class12  |  |  |  |
| Extreme Vol. Limits:        | DC3.6 V to 4.2 V (Nominal DC3.7V)  |  |  |  |
| Extreme Temp. Tolerance     | -20℃ to +45℃   |  |  |  |
| ** Note: The High Voltage   | 4.2 V and Low Voltage 3.6 V was declared by manufacturer, The EUT                      |  |  |  |
| couldn't be operate normall | y with higher or lower voltage.  |  |  |  |







#### **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
- 2. 30 MHz to 10th harmonic for GSM1900
- 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 TO      |                                |  |  |  |
| GSM 850  | GSM LINK<br>GPRS CLASS 12 LINK | GSM LINK<br>GPRS CLASS 12 LINK |  |  |  |
| GSM 1900 | GSM LINK<br>GPRS CLASS 12 LINK | GSM LINK<br>GPRS CLASS 12 LINK |  |  |  |



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#### **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       |
| Bilog Antenna<br>(Calibration 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<br>(Calibration antenna)  | Schwarzbeck              | BBHA 9170D | 9120D-1344     | 2016.03.06       | 2017.03.05       |
| MXA SIGNAL Analyzer                    | Agilent                  | N9020A     | MY49100060     | 2015.10.25       | 2016.10.24       |
| Double Ridge Horn An-<br>tenna         | COM-POWER<br>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.



#### 5.1 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

1. The testing follows FCC KDB 971168 D01

Section 5.2.2 (for GSM/GPRS/EDGE) and ANSI / TIA-603-D-2010 Section 2.2.17.

2. 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.





## 5.2 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.

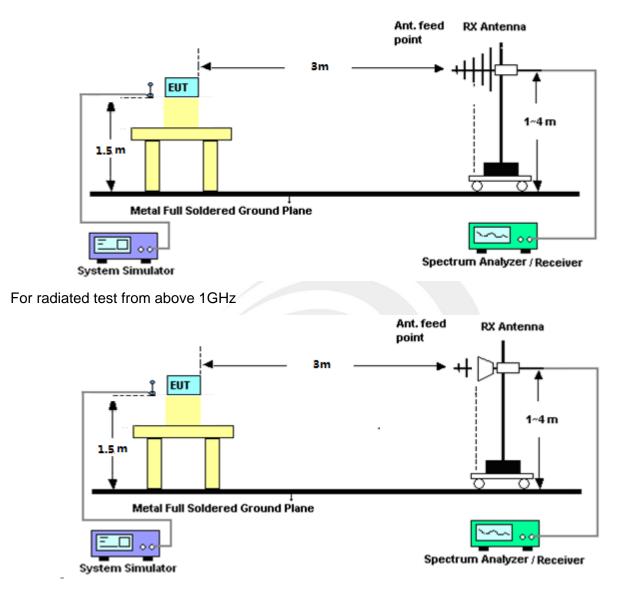
#### Test procedure

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 TRANSMITTER RADIATED POWER (EIRP/ERP)

| Radiated Power (ERP) for GSM 850 MHZ |           |              |       |           |            |              |               |
|--------------------------------------|-----------|--------------|-------|-----------|------------|--------------|---------------|
|                                      |           |              |       | Result    |            |              | Conclusion    |
| Mode                                 | Frequency | S G.Level Ca | Cable | abla      | PMeas      | Polarization |               |
| mode                                 | requerey  | (dBm)        | loss  | Gain(dBi) | E.R.P(dBm) | Of Max.      | Consideration |
|                                      |           | (abiii)      | 1000  |           |            | ERP          |               |
|                                      | 824.2     | 17.64        | 0.44  | 6.5       | 23.70      | Horizontal   | Pass          |
|                                      | 824.2     | 17.31        | 0.44  | 6.5       | 23.37      | Vertical     | Pass          |
| GSM850                               | 836.6     | 17.28        | 0.45  | 6.5       | 23.33      | Horizontal   | Pass          |
| 0310000                              | 836.6     | 17.11        | 0.45  | 6.5       | 23.16      | Vertical     | Pass          |
|                                      | 848.8     | 17.26        | 0.46  | 6.5       | 23.30      | Horizontal   | Pass          |
|                                      | 848.8     | 17.42        | 0.46  | 6.5       | 23.46      | Vertical     | Pass          |
|                                      | 824.2     | 17.31        | 0.44  | 6.5       | 23.37      | Horizontal   | Pass          |
|                                      | 824.2     | 17.25        | 0.44  | 6.5       | 23.31      | Vertical     | Pass          |
| GPRS850                              | 836.6     | 17.19        | 0.45  | 6.5       | 23.24      | Horizontal   | Pass          |
| GPR5850                              | 836.6     | 17.08        | 0.45  | 6.5       | 23.13      | Vertical     | Pass          |
|                                      | 848.8     | 17.45        | 0.46  | 6.5       | 23.49      | Horizontal   | Pass          |
|                                      | 848.8     | 17.41        | 0.46  | 6.5       | 23.45      | Vertical     | Pass          |



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| Radiated Power (EIRP) for PCS 1900 MHZ |            |         |        |       |               |              |               |  |
|--|------------|---------|--------|-------|---------------|--------------|---------------|--|
|  |            |         | Result |       |               |              |               |  |
| Mode                                   | Frequency  | S       | Cable  | Gain  | PMeas         | Polarization | Conclusion    |  |
| mode                                   | i ioquonoy | G.Level | loss   | (dBi) | E.I.R.P.(dBm) | Of Max.      | Consideration |  |
|  |            | (dBm)   |        |       |               | ERP          |               |  |
|  | 1850.2     | 7.63    | 2.41   | 10.06 | 15.28         | Horizontal   | Pass          |  |
|  | 1850.2     | 12.51   | 2.41   | 10.06 | 20.16         | Vertical     | Pass          |  |
| PCS1900                                | 1880       | 7.79    | 2.42   | 10.06 | 15.43         | Horizontal   | Pass          |  |
| FC31900                                | 1880       | 12.62   | 2.42   | 10.06 | 20.26         | Vertical     | Pass          |  |
|  | 1909.8     | 7.87    | 2.43   | 10.06 | 15.50         | Horizontal   | Pass          |  |
|  | 1909.8     | 12.42   | 2.43   | 10.06 | 20.05         | Vertical     | Pass          |  |
|  | 1850.2     | 7.64    | 2.41   | 10.06 | 15.29         | Horizontal   | Pass          |  |
|  | 1850.2     | 12.46   | 2.41   | 10.06 | 20.11         | Vertical     | Pass          |  |
| GPRS1900                               | 1880       | 7.62    | 2.42   | 10.06 | 15.26         | Horizontal   | Pass          |  |
| GPR51900                               | 1880       | 12.54   | 2.42   | 10.06 | 20.18         | Vertical     | Pass          |  |
|  | 1909.8     | 7.34    | 2.43   | 10.06 | 14.97         | Horizontal   | Pass          |  |
|  | 1909.8     | 12.58   | 2.43   | 10.06 | 20.21         | Vertical     | Pass          |  |

A2 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT GSM 850: (30-9000)MHz

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| Frequency(MHz)                               | S G.Lev | A pt(dDi) |       | PMea   | Limit  | Margin | Polarity |  |
|--|---------|-----------|-------|--------|--------|--------|----------|--|
|  | (dBm)   | Ant(dBi)  | Loss  | (dBm)  | (dBm)  | (dBm)  |          |  |
| -1648.10                                     | -40.74  | 9.40      | 4.75  | -36.09 | -13.00 | -23.09 | Н        |  |
| 2472.23                                      | -39.78  | 10.60     | 8.39  | -37.57 | -13.00 | -24.57 | Н        |  |
| 3296.44                                      | -31.38  | 12.00     | 11.79 | -31.17 | -13.00 | -18.17 | Н        |  |
| 1648.34                                      | -44.59  | 9.40      | 4.75  | -39.94 | -13.00 | -26.94 | V        |  |
| 2472.66                                      | -44.09  | 10.60     | 8.39  | -41.88 | -13.00 | -28.88 | V        |  |
| 3296.90                                      | -43.34  | 12.00     | 11.79 | -43.13 | -13.00 | -30.13 | V        |  |
| The Worst Test Results Channel 190/836.6 MHz |         |           |       |        |        |        |          |  |
|  | S G.Lev |           | Loss  | PMea   | Limit  | Margin | Polarity |  |
| Frequency(MHz)                               | (dBm)   | Ant(dBi)  |       | (dBm)  | (dBm)  | (dBm)  |          |  |
| 1673.12                                      | -40.15  | 9.50      | 4.76  | -35.41 | -13.00 | -22.41 | Н        |  |
| 2509.66                                      | -39.35  | 10.70     | 8.40  | -37.05 | -13.00 | -24.05 | Н        |  |
| 3346.18                                      | -30.86  | 12.20     | 11.80 | -30.46 | -13.00 | -17.46 | Н        |  |
| 1672.83                                      | -43.29  | 9.40      | 4.75  | -38.64 | -13.00 | -25.64 | V        |  |
| 2509.81                                      | -44.38  | 10.60     | 8.39  | -42.17 | -13.00 | -29.17 | V        |  |
| 3346.45                                      | -43.75  | 12.20     | 11.82 | -43.37 | -13.00 | -30.37 | V        |  |
| The Worst Test Results Channel 251/848.8 MHz |         |           |       |        |        |        |          |  |
|  | S G.Lev |           | Loss  | PMea   | Limit  | Margin | Polarity |  |
| Frequency(MHz)                               | (dBm)   | Ant(dBi)  | LUSS  | (dBm)  | (dBm)  | (dBm)  | Polarity |  |
| 1697.66                                      | -40.04  | 9.60      | 4.77  | -35.21 | -13.00 | -22.21 | Н        |  |
| 2546.44                                      | -39.94  | 10.80     | 8.50  | -37.64 | -13.00 | -24.64 | Н        |  |
| 3395.30                                      | -32.19  | 12.50     | 11.90 | -31.59 | -13.00 | -18.59 | Н        |  |
| 1697.46                                      | -43.84  | 9.60      | 4.77  | -39.01 | -13.00 | -26.01 | V        |  |
| 2546.26                                      | -44.12  | 10.80     | 8.50  | -41.82 | -13.00 | -28.82 | V        |  |
| 3394.96                                      | -42.97  | 12.50     | 11.90 | -42.37 | -13.00 | -29.37 | V        |  |
| 000-1.00                                     | 72.01   | 12.00     | 11.00 | 72.01  | 10.00  | 20.01  | v        |  |

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 Worst Test Results Channel 128/824.2 MHz

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| Frequency(MHz)                               | S G.Lev | G.Lev Ant(dBi) | Loss  | PMea                | Limit  | Margin   | Polarity |  |
|--|---------|----------------|-------|---------------------|--------|----------|----------|--|
|  | (dBm)   | Ani(ubi)       |       | (dBm)               | (dBm)  | (dBm)    |          |  |
| 1648.47                                      | -40.45  | 9.40           | 4.75  | -35.80              | -13.00 | -22.80   | Н        |  |
| 2472.31                                      | -39.30  | 10.60          | 8.39  | -37.09              | -13.00 | -24.09   | Н        |  |
| 3296.63                                      | -32.07  | 12.00          | 11.79 | -31.86              | -13.00 | -18.86   | н        |  |
| 1648.06                                      | -43.94  | 9.40           | 4.75  | -39.29              | -13.00 | -26.29   | V        |  |
| 2472.56                                      | -44.32  | 10.60          | 8.39  | -42.11              | -13.00 | -29.11   | V        |  |
| 3296.63                                      | -43.94  | 12.00          | 11.79 | -43.73              | -13.00 | -30.73   | V        |  |
| The Worst Test Results Channel 190/836.6 MHz |         |                |       |                     |        |          |          |  |
|  | S G.Lev |                | Loss  | PMea                | Limit  | Margin   | Polarity |  |
| Frequency(MHz)                               | (dBm)   | Ant(dBi)       |       | (dBm)               | (dBm)  | (dBm)    |          |  |
| 1673.28                                      | -40.41  | 9.50           | 4.76  | -35.67              | -13.00 | -22.67   | Н        |  |
| 2509.46                                      | -40.50  | 10.70          | 8.40  | -38.20              | -13.00 | -25.20   | Н        |  |
| 3346.11                                      | -31.45  | 12.20          | 11.80 | -31.05              | -13.00 | -18.05   | Н        |  |
| 1673.13                                      | -44.25  | 9.40           | 4.75  | -39.60              | -13.00 | -26.60   | V        |  |
| 2509.75                                      | -44.83  | 10.60          | 8.39  | -42.62              | -13.00 | -29.62   | V        |  |
| 3346.22                                      | -42.58  | 12.20          | 11.82 | -42.20              | -13.00 | -29.20   | V        |  |
| The Worst Test Results Channel 251/848.8 MHz |         |                |       |                     |        |          |          |  |
|  | S G.Lev |                | 1     | PMea                | Limit  | Margin   | Delerit  |  |
| Frequency(MHz)                               | (dBm)   | Ant(dBi)       | LOSS  | Loss (dBm) (dBm) (d | (dBm)  | Polarity |          |  |
| 1697.25                                      | -41.27  | 9.60           | 4.77  | -36.44              | -13.00 | -23.44   | Н        |  |
| 2546.36                                      | -40.48  | 10.80          | 8.50  | -38.18              | -13.00 | -25.18   | Н        |  |
| 3395.28                                      | -31.63  | 12.50          | 11.90 | -31.03              | -13.00 | -18.03   | Н        |  |
| 1697.42                                      | -44.64  | 9.60           | 4.77  | -39.81              | -13.00 | -26.81   | V        |  |
| 2546.40                                      | -45.05  | 10.80          | 8.50  | -42.75              | -13.00 | -29.75   | V        |  |
| 3395.00                                      | -43.07  | 12.50          | 11.90 | -42.47              | -13.00 | -29.47   | V        |  |

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.



#### Report No.: STS1608029F01

#### PCS 1900: (30-20000)MHz

| The Worst Test Results for Channel 512/1850.2MHz |         |             |             |                  |            |          |          |
|--|---------|-------------|-------------|------------------|------------|----------|----------|
| Frequency(MHz)                                   | S G.Lev | Ant(dBi)    | Loss        | PMea             | Limit      | Margin   | Polarity |
|  | (dBm)   |             |             | (dBm)            | (dBm)      | (dBm)    |          |
| 3700.26  | -34.37  | 12.60       | 12.93       | -34.70           | -13.00     | -21.70   | Н        |
| 5550.53  | -35.42  | 13.10       | 17.11       | -39.43           | -13.00     | -26.43   | Н        |
| 7400.75  | -32.24  | 11.50       | 22.20       | -42.94           | -13.00     | -29.94   | Н        |
| 3700.51  | -35.44  | 12.60       | 12.93       | -35.77           | -13.00     | -22.77   | V        |
| 5550.25  | -34.27  | 13.10       | 17.11       | -38.28           | -13.00     | -25.28   | V        |
| 7400.86  | -32.09  | 11.50       | 22.20       | -42.79           | -13.00     | -29.79   | V        |
|  | The Wor | st Test Res | sults for C | hannel 661       | /1880.0MH  | Z        |          |
|  | S G.Lev | Ant(dDi)    |             | PMea             | Limit      | Margin   | Polarity |
| Frequency(MHz)                                   | (dBm)   | Ant(dBi)    | Loss        | (dBm)            | (dBm)      | (dBm)    |          |
| 3760.17  | -34.71  | 12.60       | 12.93       | -35.04           | -13.00     | -22.04   | Н        |
| 5640.05  | -35.11  | 13.10       | 17.11       | -39.12           | -13.00     | -26.12   | Н        |
| 7519.88  | -32.81  | 11.50       | 22.20       | -43.51           | -13.00     | -30.51   | Н        |
| 3760.10  | -35.14  | 12.60       | 12.93       | -35.47           | -13.00     | -22.47   | V        |
| 5640.06  | -34.73  | 13.10       | 17.11       | -38.74           | -13.00     | -25.74   | V        |
| 7519.84  | -32.58  | 11.50       | 22.20       | -43.28           | -13.00     | -30.28   | V        |
|  | The Wor | st Test Res | sults for C | hannel 810       | )/1909.8MH | z        |          |
| Frequency(MHz)                                   | S G.Lev | Apt(dDi)    | 1           | PMea             | Limit      | Margin   | Polority |
| Frequency(MHZ)                                   | (dBm)   | Ant(dBi)    | LUSS        | Loss (dBm) (dBm) | (dBm)      | Polarity |          |
| 3819.44  | -33.76  | 12.60       | 12.93       | -34.09           | -13.00     | -21.09   | Н        |
| 5729.11  | -34.30  | 13.10       | 17.11       | -38.31           | -13.00     | -25.31   | Н        |
| 7638.96  | -33.03  | 11.50       | 22.20       | -43.73           | -13.00     | -30.73   | Н        |
| 3819.66  | -35.42  | 12.60       | 12.93       | -35.75           | -13.00     | -22.75   | V        |
| 5729.08  | -34.47  | 13.10       | 17.11       | -38.48           | -13.00     | -25.48   | V        |
| 7639.38  | -32.30  | 11.50       | 22.20       | -43.00           | -13.00     | -30.00   | V        |

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.



#### Report No.: STS1608029F01

#### GPRS 1900: (30-20000)MHz

| The Worst Test Results for Channel 512/1850.2MHz |                |            |            |           |            |        |          |
|--|----------------|------------|------------|-----------|------------|--------|----------|
| Frequency(MHz)                                   | S              | Ant(dBi)   | Loss       | PMea      | Limit      | Margin | Polarity |
|  | G.Lev<br>(dBm) |            |            | (dBm)     | (dBm)      | (dBm)  |          |
| 3700.33  | -33.60         | 12.60      | 12.93      | -33.93    | -13.00     | -20.93 | Н        |
| 5550.28  | -35.32         | 13.10      | 17.11      | -39.33    | -13.00     | -26.33 | Н        |
| 7400.71  | -33.41         | 11.50      | 22.20      | -44.11    | -13.00     | -31.11 | Н        |
| 3700.51  | -34.86         | 12.60      | 12.93      | -35.19    | -13.00     | -22.19 | V        |
| 5550.63  | -34.84         | 13.10      | 17.11      | -38.85    | -13.00     | -25.85 | V        |
| 7400.98  | -32.88         | 11.50      | 22.20      | -43.58    | -13.00     | -30.58 | V        |
|  | The Wors       | t Test Res | ults for C | hannel 66 | 1/1880.0MI | Ηz     |          |
|  | S              |            |            | PMea      | Limit      | Margin | Polarity |
| Frequency(MHz)                                   | G.Lev<br>(dBm) | Ant(dBi)   | Loss       | (dBm)     | (dBm)      | (dBm)  |          |
| 3760.10  | -33.99         | 12.60      | 12.93      | -34.32    | -13.00     | -21.32 | Н        |
| 5640.00  | -34.52         | 13.10      | 17.11      | -38.53    | -13.00     | -25.53 | Н        |
| 7519.83  | -33.16         | 11.50      | 22.20      | -43.86    | -13.00     | -30.86 | Н        |
| 3760.22  | -34.59         | 12.60      | 12.93      | -34.92    | -13.00     | -21.92 | V        |
| 5640.11  | -34.13         | 13.10      | 17.11      | -38.14    | -13.00     | -25.14 | V        |
| 7519.98  | -32.56         | 11.50      | 22.20      | -43.26    | -13.00     | -30.26 | V        |
|  | The Wors       | t Test Res | ults for C | hannel 81 | 0/1909.8MH | Ηz     |          |
|  | S              |            |            | PMea      | Limit      | Margin | Polarity |
| Frequency(MHz)                                   | G.Lev<br>(dBm) | Ant(dBi)   | Loss       | (dBm)     | (dBm)      | (dBm)  |          |
| 3819.42  | -33.68         | 12.60      | 12.93      | -34.01    | -13.00     | -21.01 | Н        |
| 5729.32  | -34.97         | 13.10      | 17.11      | -38.98    | -13.00     | -25.98 | Н        |
| 7639.17  | -32.84         | 11.50      | 22.20      | -43.54    | -13.00     | -30.54 | Н        |
| 3819.77  | -34.77         | 12.60      | 12.93      | -35.10    | -13.00     | -22.10 | V        |
| 5729.53  | -33.75         | 13.10      | 17.11      | -37.76    | -13.00     | -24.76 | V        |
| 7639.38  | -31.96         | 11.50      | 22.20      | -42.66    | -13.00     | -29.66 | V        |

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.



#### APPENDIX BPHOTOS OF TEST SETUP

