

### Shenzhen Huatongwei International Inspection Co., Ltd.

1/F,Bldg 3,Hongfa Hi-tech Industrial Park,Genyu Road,Tianliao,Gongming,Shenzhen,China Phone:86-755-26748019 Fax:86-755-26748089 http://www.szhtw.com.cn



# **FCC REPORT**

Report Reference No.....: TRE1708017601 R/C......: 29420

FCC ID.....: 2AM6Q-W1450

Applicant's name .....: GRUPO SOLONE SA DE CV

Address...... AV. LOMAS DE SOTELO NO. 1112 PB,COL. LOMA HERMOSA,

DEL. MIGUEL HIDALGO, CIUDAD DE MEXICO.

Manufacturer...... GUANGDONG ENOK COMMUNICATION CO, LTD

Dongguan, Guangdong China

Test item description .....: Smart Phone

Trade Mark ...... SOLONE

Model/Type reference...... W1450

Listed Model(s) ..... -

Standard .....: FCC Part 22: PUBLIC MOBILE SERVICES

FCC Part 24: PERSONAL COMMUNICATIONS SERVICES

Candy Liu, Cron Con

FCC Part 27: MISCELLANEOUS WIRELESS

**COMMUNICATIONS SERVICES** 

Date of receipt of test sample........... Aug.25, 2017

Date of testing...... Aug.26, 2017 - Sep.07, 2017

Date of issue...... Sep.08, 2017

Result...... Pass

Compiled by

( position+printedname+signature)...: File administrators Candy Liu

Supervised by

(position+printedname+signature)....: Project Engineer Lion Cai

Approved by

(position+printedname+signature)....: Manager Hans Hu

Testing Laboratory Name .....: Shenzhen Huatongwei International Inspection Co., Ltd.

Gongming, Shenzhen, China

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## 1. Test standards and Report version

## 1.1. Applicable Standards

The tests were performed according to following standards:

FCC Part 22: PRIVATE LAND MOBILE RADIO SERVICES.

FCC Part 24: PUBLIC MOBILE SERVICES

FCC Part 27:MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

TIA/EIA 603 D June 2010:Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.

FCC Part 2: FREQUENCY ALLOCA-TIONS AND RADIO TREATY MAT-TERS; GENERAL RULES AND REGULATIONS

<u>971168 D01 Power Meas License Digital Systems v02r02:</u>provides a methodology for fully characterizing the fundamental power of wideband (> 1 MHz) digitally modulated RF signals acceptable to the FCC for demonstrating compliance for licensed transmitters.

## 1.2. Report version

| Version No. | Date of issue | Description |
|-------------|---------------|-------------|
| 00          | Sep.08, 2017  | Original    |
|             |               |             |
|             |               |             |
|             |               |             |
|             |               |             |

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# 2. Test Description

| Test Item                           | Section in CFR 47   | Result | Test Engineer |
|-------------------------------------|---|--------|---------------|
| RF Output Power                     | Part 2.1046<br>Part 22.913(a)<br>Part 24.232(c)<br>Part 27.50 | Pass   | William Wang  |
| 99% & -26 dB Occupied<br>Bandwidth  | Part 2.1049<br>Part 22.917(b)<br>Part 24.238(b)               | Pass   | William Wang  |
| Conducted Spurious Emissions        | Part 2.1051<br>Part 22.917<br>Part 24.238<br>Part 27.53       | Pass   | William Wang  |
| Band Edge                           | Part 2.1051<br>Part 22.917<br>Part 24.238<br>Part 27.53       | Pass   | William Wang  |
| ERP and EIRP                        | Part 22.913(a)<br>Part 24.232(b)                              | Pass   | William Wang  |
| Radiated Spurious Emissions         | Part 2.1053 Part 22.917 Part 24.238 Part 27.53                | Pass   | William Wang  |
| Frequency stability vs. temperature | Part 2.1055(a)(1)(b) Part 22.355 Part 24.235 Part 27.54       | Pass   | William Wang  |
| Frequency stability vs. voltage     | Part 2.1055(d)(1)(2) Part 22.355 Part 24.235 Part 27.54       | Pass   | William Wang  |
| Peak-Average Ratio                  | Part 24.232<br>Part 27.50                                     | Pass   | William Wang  |

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

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# 3. **SUMMARY**

# 3.1. Client Information

| Applicant:    | GRUPO SOLONE SA DE CV   |
|---------------|---|
| Address:      | AV. LOMAS DE SOTELO NO. 1112 PB,COL. LOMA HERMOSA,<br>DEL. MIGUEL HIDALGO,CIUDAD DE MEXICO. |
| Manufacturer: | GUANGDONG ENOK COMMUNICATION CO,.LTD  |
| Address:      | 139&137Lixiang road ,Songmushan Dalang town,Dongguan,<br>Guangdong China                    |

# 3.2. Product Description

| Name of EUT:              | Smart Phone   |
|---------------------------|---|
|                           |   |
| Trade Mark:               | SOLONE  |
| Model No.:                | W1450   |
| Listed Model(s):          | -   |
| IMEI:                     | 911524550220641   |
| Power supply:             | DC 3.8V From exchange battery                                 |
| Adapter information:      | Input: 100-240Va.c., 50/60Hz, 0.2A<br>Output: 5Vd.c., 1A      |
| Hardware version:         | Ver.A   |
| Software version:         | M1701W1450V001  |
| 2G:                       |   |
| Support Network:          | GSM, GPRS, EGPRS  |
| Support Band:             | GSM850, PCS1900   |
| Modulation:               | GSM/GPRS/EGPRS: GMSK<br>EGPRS: 8PSK                           |
| Transmit Frequency:       | GSM850: 824.20MHz-848.80MHz<br>PCS1900: 1850.20MHz-1909.80MHz |
| Receive Frequency:        | GSM850: 869.20MHz-893.80MHz<br>PCS1900: 1930.20MHz-1989.80MHz |
| GPRS Class:               | 12  |
| EGPRS Class:              | 12  |
| Antenna type:             | LOOP Antenna  |
| Antenna gain:             | GSM850: 1.6dBi<br>PCS1900: 3.9dBi                             |
| 3G:                       |   |
| Operation Band:           | FDD Band II and FDD Band IV, FDD Band V                       |
| Power Class:              | Power Class 3   |
| Modilation Type:          | QPSK/16QAM/64QAM/HSUPA/HSDPA                                  |
| DC-HSUPA Release Version: | Not Supported   |
| Antenna type:             | LOOP Antenna  |
| Antenna gain:             | Band II: 3.8 dBi, Band IV: 3.7dBi ,Band V: 1.7dBi             |

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## 3.3. Operation state

## > Test frequency list

| GSI     | 1850            | PCS1900 |                 |  |
|---------|-----------------|---------|-----------------|--|
| Channel | Frequency (MHz) | Channel | Frequency (MHz) |  |
| 128     | 824.20          | 512     | 1850.20         |  |
| 190     | 836.60          | 661     | 1880.00         |  |
| 251     | 848.80          | 810     | 1909.80         |  |

| FDD Band II |                 | FDD Band IV |                 | FDD Band V |                 |
|-------------|-----------------|-------------|-----------------|------------|-----------------|
| Channel     | Frequency (MHz) | Channel     | Frequency (MHz) | Channel    | Frequency (MHz) |
| 9262        | 1852.4          | 1313        | 1712.6          | 4132       | 826.40          |
| 9400        | 1880.0          | 1450        | 1740.0          | 4183       | 836.60          |
| 9538        | 1907.6          | 1512        | 1752.4          | 4233       | 846.60          |

## Test mode

#### For RF test items

The EUT has been tested under typical operating condition. Testing was performed by configuring EUT to maimum output power status.

## 3.4. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

- supplied by the manufacturer
- supplied by the lab

| Length (m): /   | I |
|-----------------|---|
| Shield: /       | 1 |
| Detachable: /   | 1 |
| Manufacturer: / | I |
| Model No.: /    | l |

## 3.5. Modifications

No modifications were implemented to meet testing criteria.

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## 4. TEST ENVIRONMENT

## 4.1. Address of the test laboratory

Laboratory: Shenzhen Huatongwei International Inspection Co., Ltd. Address: 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China

## 4.2. Test Facility

CNAS-Lab Code: L1225

Shenzhen Huatongwei International Inspection Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA-Lab Cert. No.: 3902.01

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 762235

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files.

## IC-Registration No.:5377B-1

Two 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No.: 5377B-1.

## **ACA**

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our A2LA accreditation.

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# 4.3. Equipments Used during the Test

| RF Co | onducted                      |                      |           |              |            |
|-------|-------------------------------|----------------------|-----------|--------------|------------|
| No.   | Equipment                     | Manufacturer         | Model No. | SerialNo.    | Last Cal.  |
| 1     | UNIVERSAL RADIO COMMUNICATION | Rohde&Schwarz        | CMU200    | 112012       | 2016/11/13 |
| 2     | WIDEB.RADIO<br>COMM.TESRER    | Rohde&Schwarz        | CMW500    | 1201.0002K50 | 2016/11/13 |
| 3     | Spectrum Analyzer             | Rohde&Schwarz        | FSU26     | 201141       | 2016/11/13 |
| 4     | MXA Signal Analyzer           | Agilent Technologies | N9020A    | MY5050187    | 2016/11/13 |
| 5     | Splitter                      | Mini-Circuit         | ZAPD-4    | 400059       | 2016/11/13 |
| 6     | Climate Chamber               | ESPEC                | EL-10KA   | 05107008     | 2016/11/13 |

| RF Ra | adiated                       |                              |           |              |            |
|-------|-------------------------------|------------------------------|-----------|--------------|------------|
| No.   | Equipment                     | Manufacturer                 | Model No. | SerialNo.    | Last Cal.  |
| 1     | UNIVERSAL RADIO COMMUNICATION | Rohde&Schwarz                | CMU200    | 112012       | 2016/11/13 |
| 2     | WIDEB.RADIO<br>COMM.TESRER    | Rohde&Schwarz                | CMW500    | 1201.0002K50 | 2016/11/13 |
| 3     | Spectrum Analyzer             | Rohde&Schwarz                | FSU26     | 201141       | 2016/11/13 |
| 4     | HORNANTENNA                   | ShwarzBeck                   | 9120D     | 1012         | 2016/11/13 |
| 5     | HORNANTENNA                   | ShwarzBeck                   | 9120D     | 1011         | 2016/11/13 |
| 6     | Ultra-Broadband Antenna       | ShwarzBeck                   | VULB9163  | 538          | 2016/11/13 |
| 7     | Ultra-Broadband Antenna       | ShwarzBeck                   | VULB9163  | 539          | 2016/11/13 |
| 8     | TURNTABLE                     | MATURO                       | TT2.0     |              | N/A        |
| 9     | ANTENNA MAST                  | MATURO                       | TAM-4.0-P |              | N/A        |
| 10    | EMI Test Software             | Audix                        | E3        | N/A          | N/A        |
| 11    | EMI Test Receiver             | Rohde&Schwarz                | ESIB 26   | 100009       | 2016/11/13 |
| 12    | RF Test Panel                 | Rohde&Schwarz                | TS / RSP  | 335015/ 0017 | 2016/11/13 |
| 13    | High pass filter              | Compliance Direction systems | BSU-6     | 34202        | 2016/11/13 |
| 14    | Splitter                      | Mini-Circuit                 | ZAPD-4    | 400059       | 2016/11/13 |
| 15    | Horn Antenna                  | SCHWARZBECK                  | BBHA9170  | 25841        | 2016/11/13 |
| 16    | Horn Antenna                  | SCHWARZBECK                  | BBHA9170  | 25842        | 2016/11/13 |
| 17    | Preamplifier                  | ShwarzBeck                   | BBV 9718  | BBV 9718     | 2016/11/13 |
| 18    | Broadband Preamplifier        | ShwarzBeck                   | BBV743    | 9743-0079    | 2016/11/13 |
| 19    | Signal Generator              | Rohde&Schwarz                | SMF100A   | 101932       | 2016/11/13 |
| 20    | Amplifer                      | Compliance Direction systems | PAP1-4060 | 120          | 2016/11/13 |
| 21    | TURNTABLE                     | ETS                          | 2088      | 2149         | 2016/11/13 |
| 22    | ANTENNA MAST                  | ETS                          | 2075      | 2346         | 2016/11/13 |
| 23    | HORNANTENNA                   | Rohde&Schwarz                | HF906     | 100068       | 2016/11/13 |
| 24    | HORNANTENNA                   | Rohde&Schwarz                | HF906     | 100039       | 2016/11/13 |

The calibration interval was one year.

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#### 4.4. Environmental conditions

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

| Normal Temperature/Tnor: | 15~35°C      |
|--------------------------|--------------|
| lative Humidity          | 30~60 %      |
| Air Pressure             | 950-1050 hPa |

## 4.5. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01"Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 1"and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 2 " and is documented in the Shenzhen Huatongwei International Inspection Co., Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen Huatongwei laboratory is reported:

| Test Items MeasurementUncertainty          |         | Notes |
|--|---------|-------|
| Frequency stability                        | 25 Hz   | (1)   |
| Transmitter power conducted                | 0.57 dB | (1)   |
| Transmitter power Radiated                 | 2.20 dB | (1)   |
| Conducted spurious emission 9KHz-12.75 GHz | 1.60 dB | (1)   |
| Conducted Emission 9KHz-30MHz              | 3.39 dB | (1)   |
| Radiated Emission 30~1000MHz               | 4.24 dB | (1)   |
| Radiated Emissio 1~18GHz                   | 5.16 dB | (1)   |
| Radiated Emissio 18-40GHz                  | 5.54 dB | (1)   |
| Occupied Bandwidth                         |         | (1)   |

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

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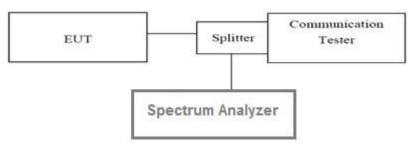
# 5. TEST CONDITIONS AND RESULTS

## 5.1. Conducted Output Power

**LIMIT** 

N/A

### **TEST CONFIGURATION**



### **TEST PROCEDURE**

- 1. The transmitter output port was connected to base station.
- 2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator, the path loss was compensated to the results for each measurement.
- 3. Set EUT at maximum power through base station.
- 4. Select lowest, middle, and highest channels for each band and different modulation.
- 5. Measure the maximum burst average power.

#### TEST MODE:

Please refer to the clause 3.3

## **TEST RESULTS**

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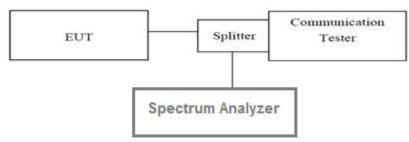
| EUT Mode                  | Channel | Frequency (MHz) | Power (dBm) |
|---------------------------|---------|-----------------|-------------|
|                           | 128     | 824.20          | 32.58       |
| GSM 850<br>(GMSK)         | 190     | 836.60          | 32.55       |
| (GMON)                    | 251     | 848.80          | 32.51       |
|                           | 128     | 824.20          | 32.60       |
| GPRS850<br>(GMSK,1Slot)   | 190     | 836.60          | 32.56       |
| (GWGIX, TOIOL)            | 251     | 848.80          | 32.50       |
| EODB 2252                 | 128     | 824.20          | 27.25       |
| EGPRS850<br>(8PSK,1Slot)  | 190     | 836.60          | 27.10       |
| (653K, 13101)             | 251     | 848.80          | 26.88       |
|                           | 512     | 1850.20         | 28.35       |
| PCS1900<br>(GMSK)         | 661     | 1880.00         | 28.30       |
| (OMOR)                    | 810     | 1909.80         | 28.50       |
|                           | 512     | 1850.20         | 28.33       |
| GPRS1900<br>(GMSK,1Slot)  | 661     | 1880.00         | 28.30       |
| (GWOR, FOICE)             | 810     | 1909.80         | 28.51       |
|                           | 512     | 1850.20         | 25.83       |
| EGPRS1900<br>(8PSK,1Slot) | 661     | 1880.00         | 25.92       |
| (0F3K, 1310t)             | 810     | 1909.80         | 26.50       |
|                           | 9262    | 1852.40         | 22.69       |
| WCDMA Band II             | 9400    | 1880.00         | 22.76       |
|                           | 9538    | 1907.60         | 22.71       |
|                           | 1313    | 1712.6          | 22.70       |
| WCDMA Band IV             | 1450    | 1740.0          | 22.55       |
|                           | 1512    | 1752.4          | 22.63       |
|                           | 4132    | 826.40          | 23.20       |
| WCDMA Band V              | 4183    | 836.60          | 23.24       |
|                           | 4233    | 846.60          | 23.19       |

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## 5.2. 99% & -26 dB Occupied Bandwidth

LIMIT N/A

### **TEST CONFIGURATION**



### **TEST PROCEDURE**

- 1. The EUT's output RF connector was connected with a short cable to the spectrum analyzer
- 2. RBWwas set to about 1% of emission BW, VBW= 3 times RBW.
- 3. -26dBc display line was placed on the screen (or 99% bandwidth), the occupied bandwidth isthe delta frequency between the two points where the display line intersects the signal trace.

## **TEST MODE:**

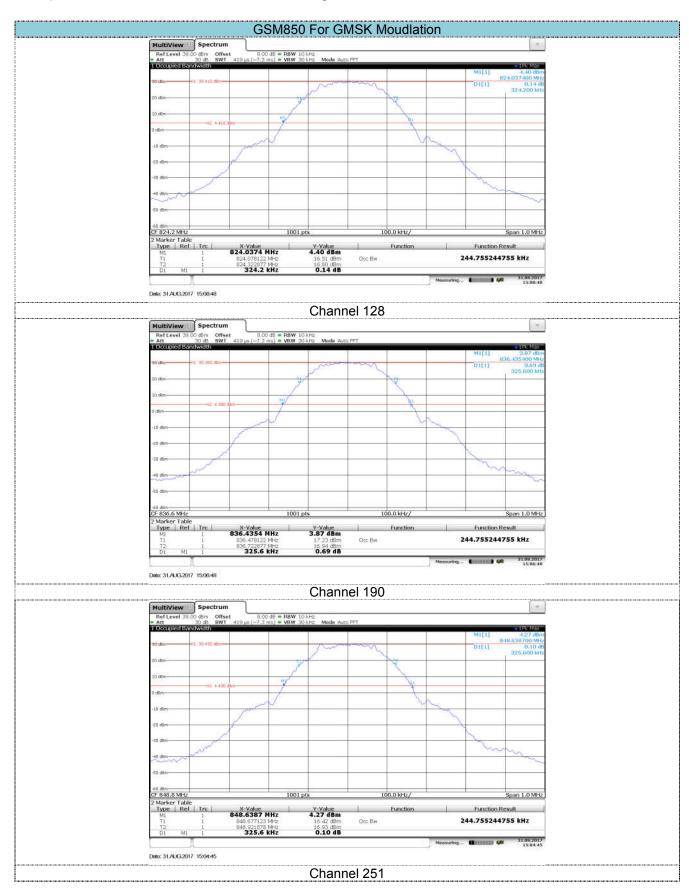
Please refer to the clause 3.3

### **TEST RESULTS**

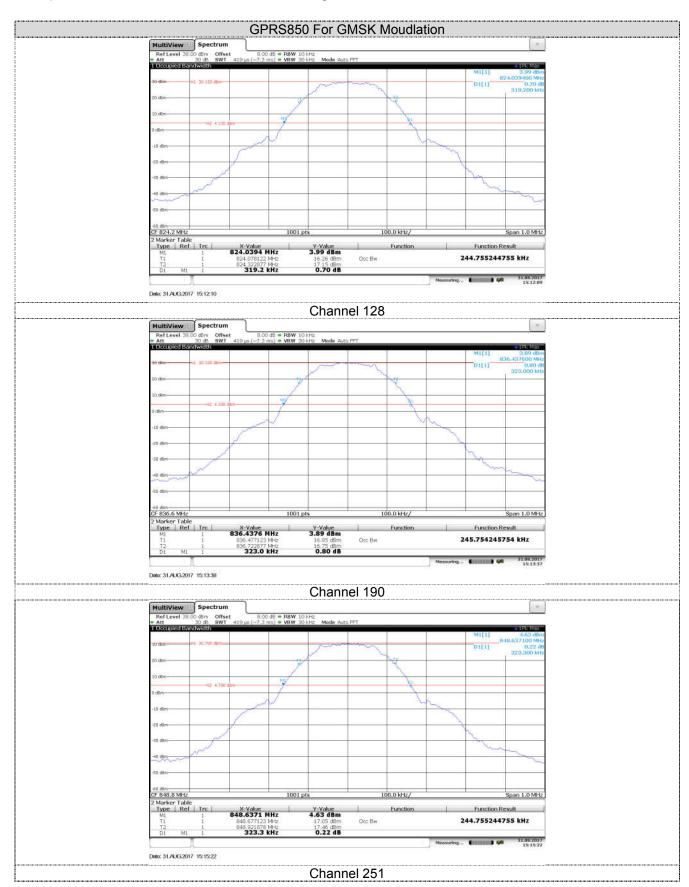
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| EUT Mode                  | Channel | Frequency (MHz) | 99% Occupy bandwidth (KHz) | -26dB bandwidth<br>(KHz) |
|---------------------------|---------|-----------------|----------------------------|--------------------------|
|                           | 128     | 824.20          | 244.75                     | 324.20                   |
| GSM 850<br>(GMSK)         | 190     | 836.60          | 244.75                     | 325.60                   |
| (Gillort)                 | 251     | 128   824.20    | 244.75                     | 325.60                   |
|                           | 128     | 824.20          | 244.75                     | 319.20                   |
| GPRS850<br>(GMSK,1Slot)   | 190     | 836.60          | 245.75                     | 323.00                   |
| (Ginera, relet)           | 251     | 848.80          | 244.75                     | 323.30                   |
| FORDOOF                   | 128     | 824.20          | 237.76                     | 312.90                   |
| EGPRS850<br>(8PSK,1Slot)  | 190     | 836.60          | 239.76                     | 312.10                   |
| (01 314, 13101)           | 251     | 848.80          | 236.76                     | 314.70                   |
|                           | 512     | 1850.20         | 243.75                     | 320.20                   |
| PCS1900<br>(GMSK)         | 661     | 1880.00         | 244.75                     | 318.60                   |
| (Givert)                  | 810     | 1909.80         | 245.75                     | 323.30                   |
|                           | 512     | 1850.20         | 242.75                     | 322.90                   |
| GPRS1900<br>(GMSK,1Slot)  | 661     | 1880.00         | 243.75                     | 328.50                   |
| (GIVISK, 15101)           | 810     | 1909.80         | 244.75                     | 322.40                   |
|                           | 512     | 1850.20         | 237.76                     | 322.00                   |
| EGPRS1900<br>(8PSK,1Slot) | 661     | 1880.00         | 239.76                     | 323.50                   |
| (01 011, 10101)           | 810     | 1909.80         | 241.75                     | 315.80                   |
|                           | 9262    | 1852.40         | 4205.79                    | 4874.00                  |
| WCDMA Band II             | 9400    | 1880.00         | 4205.79                    | 4875.00                  |
|                           | 9538    | 1907.60         | 4215.78                    | 4887.00                  |
|                           | 1313    | 1712.60         | 4215.78                    | 4871.00                  |
| WCDMA Band IV             | 1450    | 1740.00         | 4205.79                    | 4871.00                  |
|                           | 1512    | 1752.40         | 4195.80                    | 4877.00                  |
|                           | 4132    | 826.40          | 4195.80                    | 4871.00                  |
| WCDMA Band V              | 4183    | 836.60          | 4205.79                    | 4885.00                  |
|                           | 4233    | 846.60          | 4215.78                    | 4891.00                  |

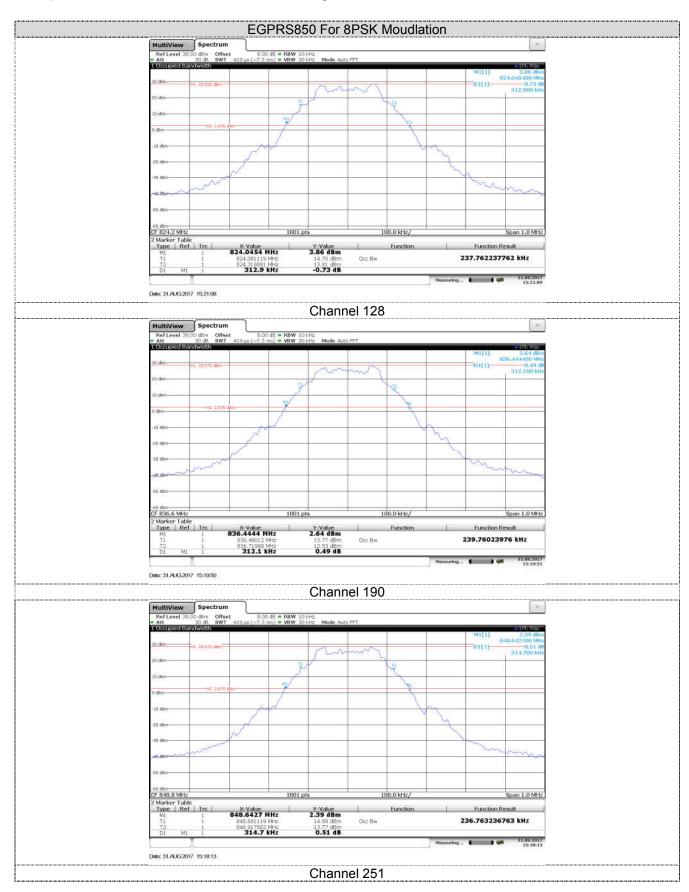
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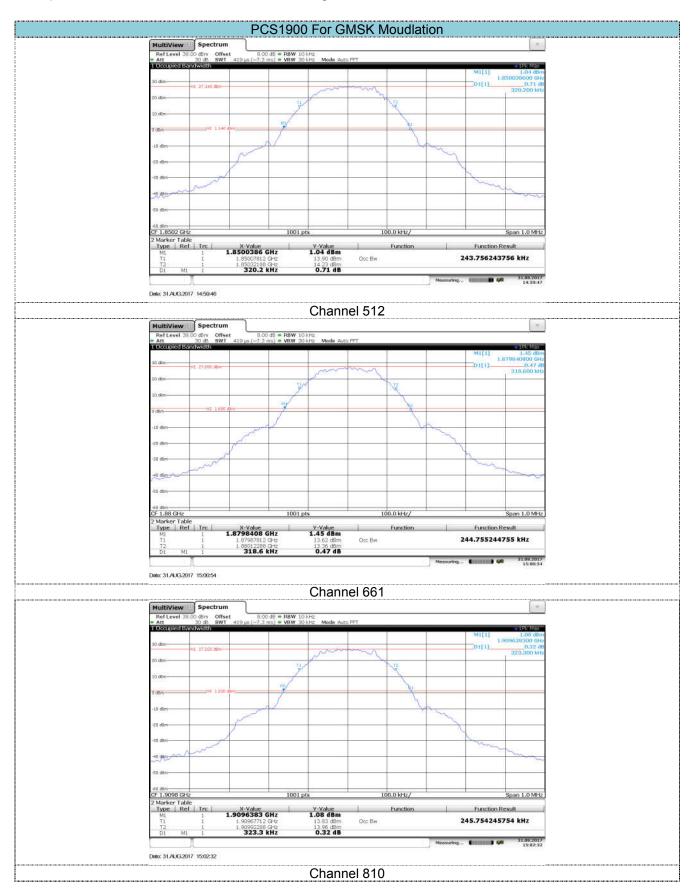
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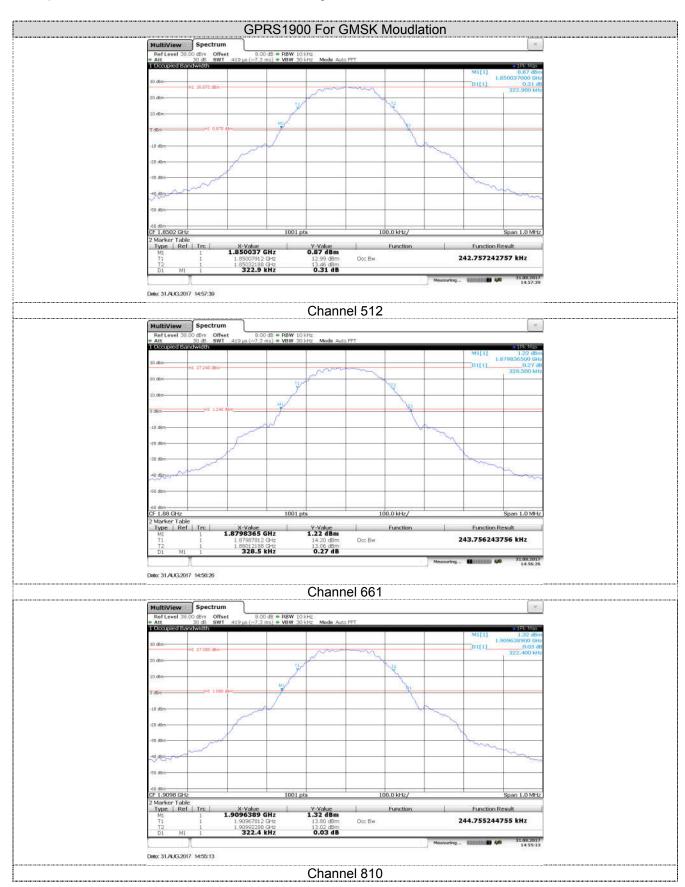
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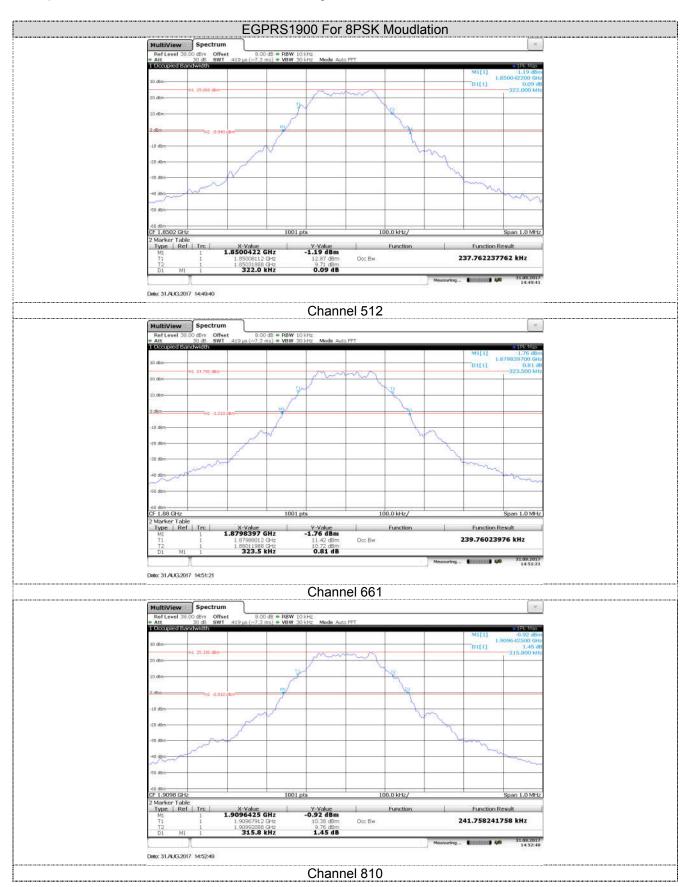
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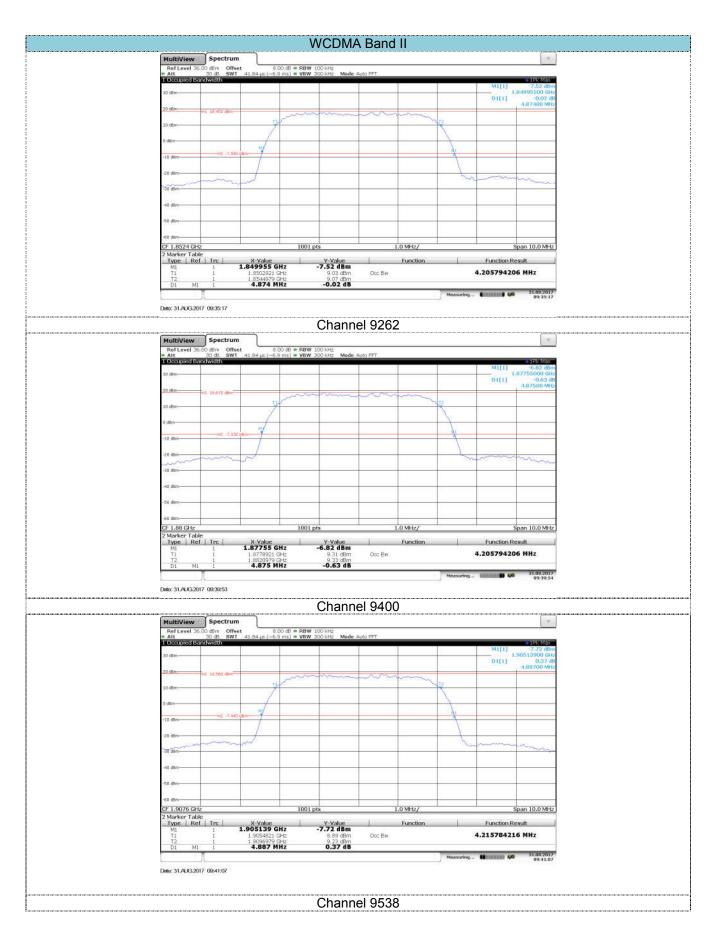
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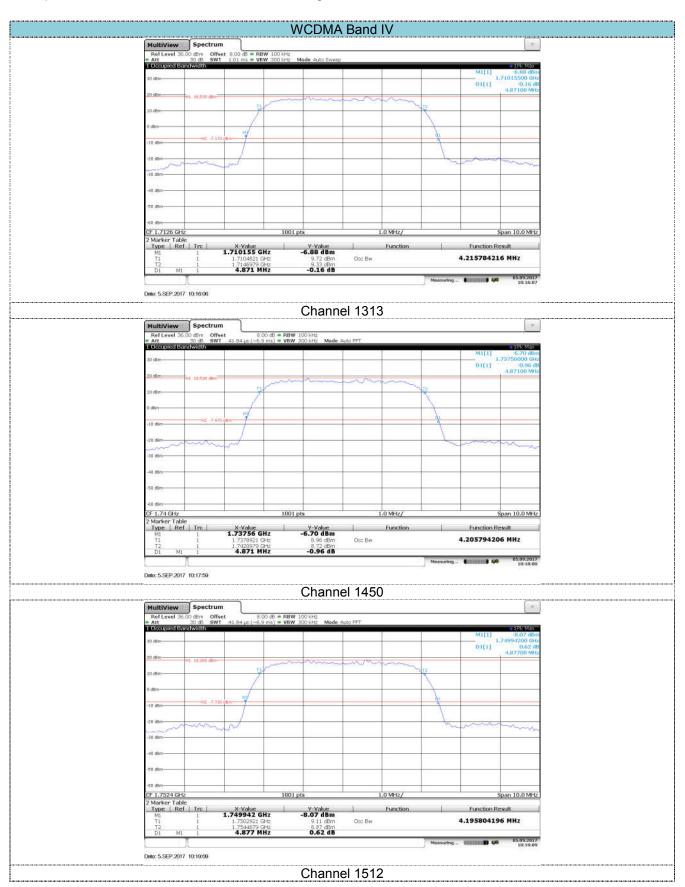
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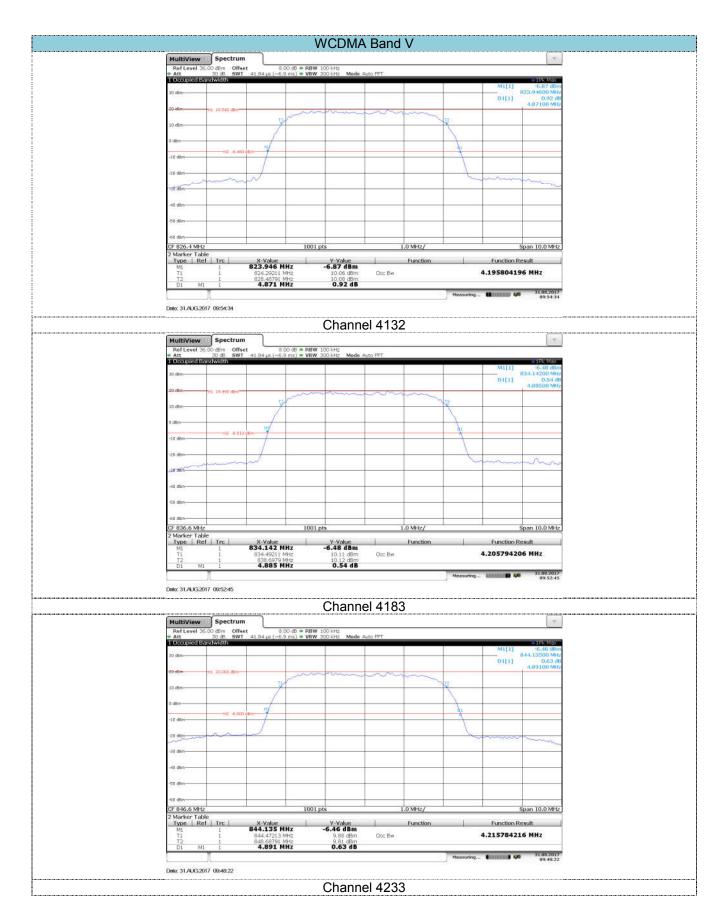
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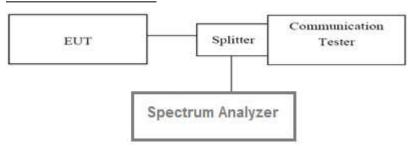
## 5.3. Conducted Spurious Emissions

### **LIMIT**

Part 24.238 and Part 22.917 specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

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

## **TEST CONFIGURATION**



### **TEST PROCEDURE**

- 1. The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation.
- 2. The resolution bandwidth of the spectrum analyzer was set at 1MHz, sufficientscans were taken to show the out of band Emissions if any up to 10th harmonic.
- 3. For the out of band: Set the RBW= 1MHz, VBW = 3MHz, Start=30MHz, Stop= 10th harmonic.

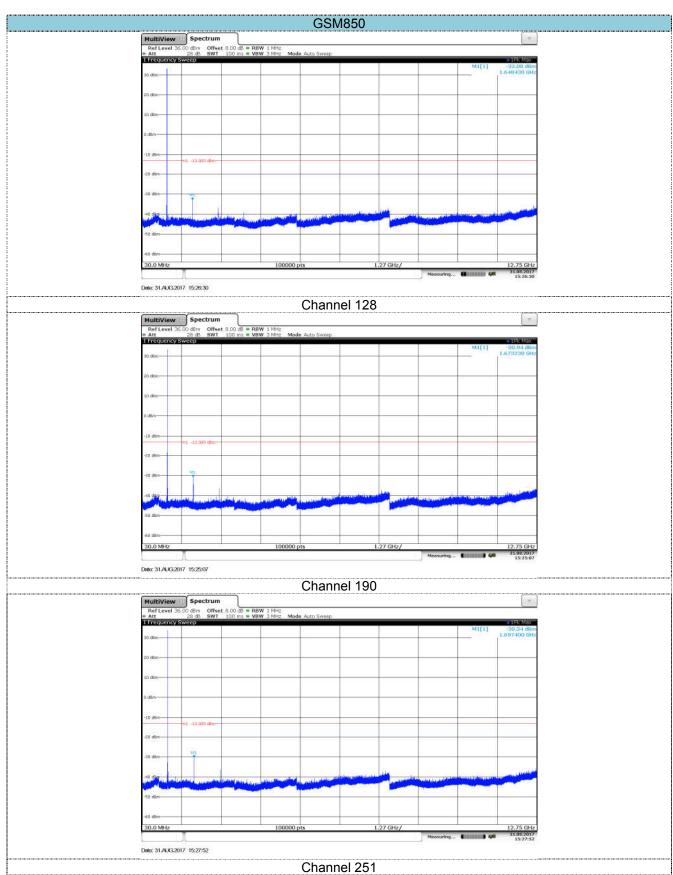
#### **TEST MODE:**

Please refer to the clause 3.3

## **TEST RESULTS**

Note:Worst case at GSM850/PCS1900

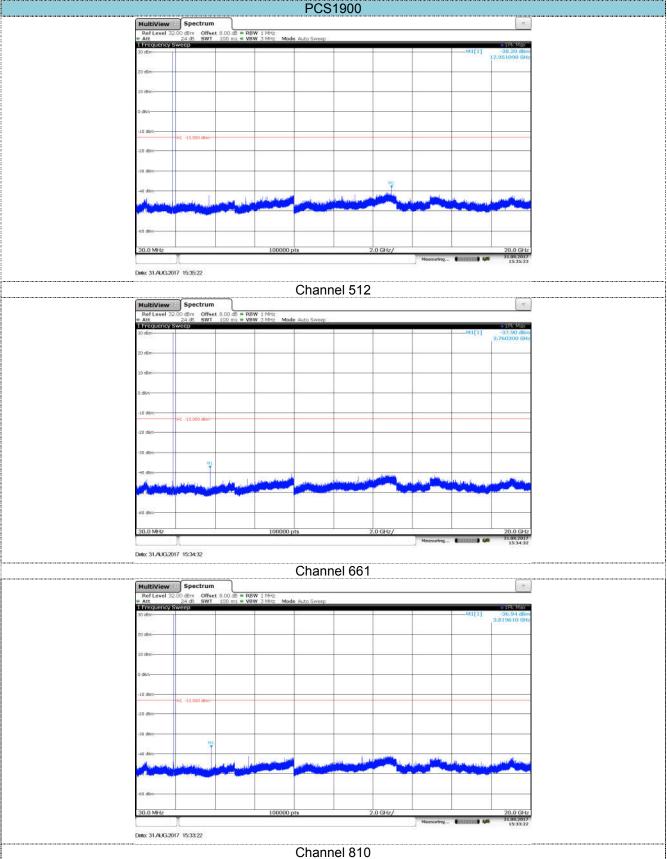
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PCS1900

| MultiView | Spectrum | Spec

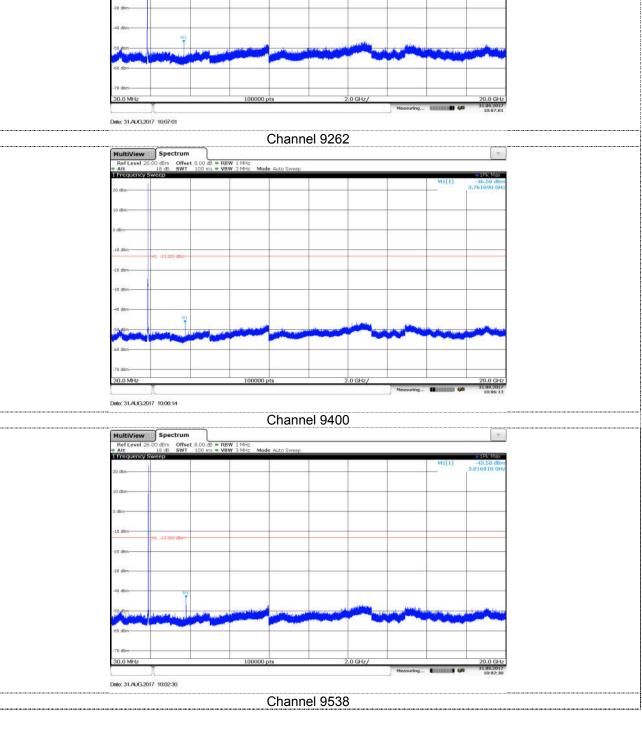


Report No.: TRE1708017601 Page: 26 of 62 Issued: 2017-09-08 WCDMA Band II MultiView Spectrum
Ref Level 25.00 dBm Offset
att 18 dB SWT
1 Frequency Sweep 30.0 MHz Dete: 31.AUG.2017 10:07:01 Channel 9262 MultiView Spectrum

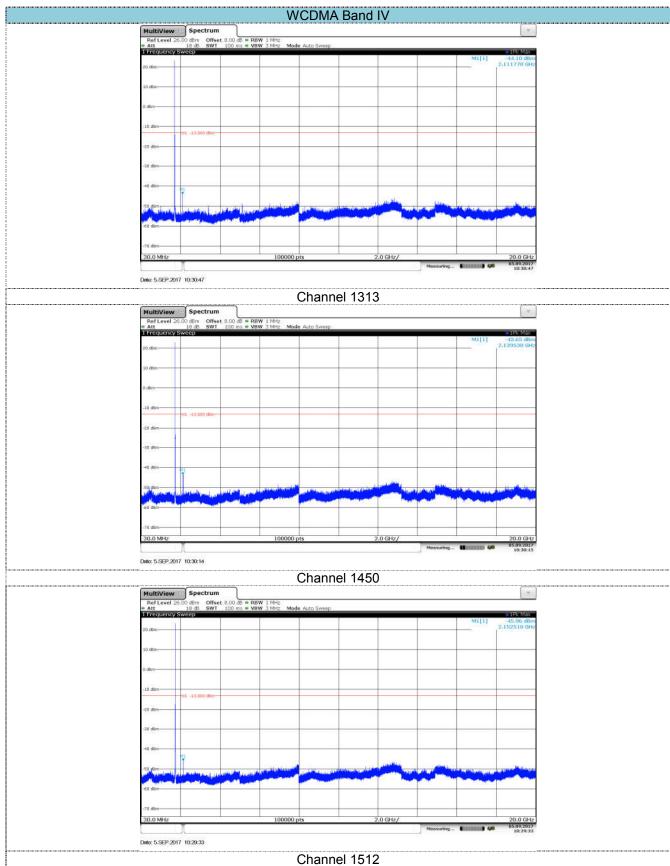
Ref Level 26.00 dBm Offset 8.00

att 18 d8 SWT 100

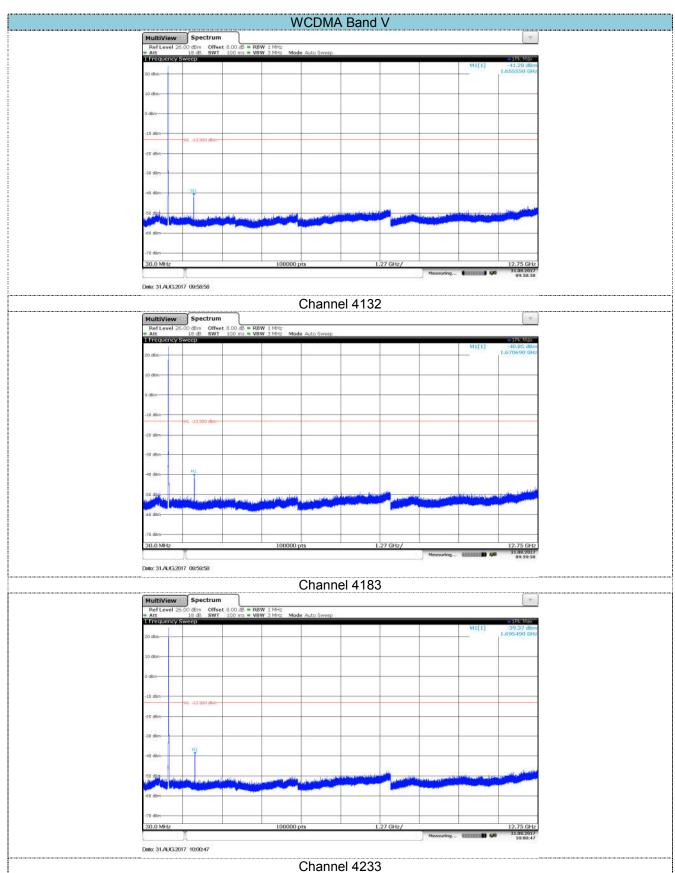
I Frequency Sweep Detec 31.AUG:2017 10:06:14 Channel 9400 Ref Level 26.00 dBm Offset



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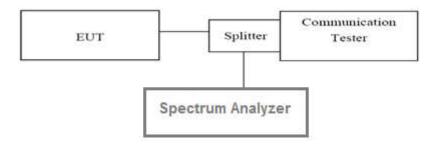
## 5.4. Band Edge

### LIMIT

Part 24.238 and Part 22.917 specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

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

### **TEST CONFIGURATION**



### **TEST PROCEDURE**

- 1. The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation.
- 2. For the bandedge: 2G:Set the RBW=3KHz, VBW = 10KHz, Sweep time= Auto

3G: Set the RBW=100KHz, VBW = 300KHz, Sweep time= Auto

#### **TEST MODE:**

Please refer to the clause 3.3

## **TEST RESULTS**

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| GSM850  |           |                |             |        |         |  |
|---------|-----------|----------------|-------------|--------|---------|--|
| Channel | Frequency | Measureme      | nt Results  | Limit  | Verdict |  |
| Number  | (MHz)     | Frequency(MHz) | Values(dBm) | (dBm)  | Verdict |  |
| 128     | 824.2     | 824            | -16.60      | -13.00 | Pass    |  |
| 251     | 848.8     | 849            | -16.28      | -13.00 | Pass    |  |

| GPRS850  |       |                |             |        |         |  |
|--|-------|----------------|-------------|--------|---------|--|
| Channel Frequency Measurement Results Limit Verdic |       |                |             |        | Verdict |  |
| Number   | (MHz) | Frequency(MHz) | Values(dBm) | (dBm)  | verdict |  |
| 128  | 824.2 | 824            | -13.28      | -13.00 | Pass    |  |
| 251  | 848.8 | 849            | -14.17      | -13.00 | Pass    |  |

| EGPRS850 |           |                                    |             |        |         |  |
|----------|-----------|------------------------------------|-------------|--------|---------|--|
| Channel  | Frequency | Frequency Measurement Results Limi |             |        |         |  |
| Number   | (MHz)     | Frequency(MHz)                     | Values(dBm) | (dBm)  | Verdict |  |
| 128      | 824.2     | 824                                | -14.31      | -13.00 | Pass    |  |
| 251      | 848.8     | 849                                | -15.86      | -13.00 | Pass    |  |

| PCS1900 |           |                     |             |               |         |  |
|---------|-----------|---------------------|-------------|---------------|---------|--|
| Channel | Frequency | Measurement Results |             | Limit Verdict |         |  |
| Number  | (MHz)     | Frequency(MHz)      | Values(dBm) | (dBm)         | verdict |  |
| 512     | 1850.2    | 1850                | -14.15      | -13.00        | Pass    |  |
| 810     | 1909.8    | 1910                | -13.75      | -13.00        | Pass    |  |

| GPRS1900 |           |                           |             |        |         |  |
|----------|-----------|---------------------------|-------------|--------|---------|--|
| Channel  | Frequency | Measurement Results Limit |             |        |         |  |
| Number   | (MHz)     | Frequency(MHz)            | Values(dBm) | (dBm)  | Verdict |  |
| 512      | 1850.2    | 1850                      | -16.23      | -13.00 | Pass    |  |
| 810      | 1909.8    | 1910                      | -15.55      | -13.00 | Pass    |  |

|         | EGPRS1900 |                           |             |        |         |  |  |
|---------|-----------|---------------------------|-------------|--------|---------|--|--|
| Channel | Frequency | Measurement Results Limit |             |        |         |  |  |
| Number  | (MHz)     | Frequency(MHz)            | Values(dBm) | (dBm)  | Verdict |  |  |
| 512     | 1850.2    | 1850                      | -19.57      | -13.00 | Pass    |  |  |
| 810     | 1909.8    | 1910                      | 19.93       | -13.00 | Pass    |  |  |

| WCDMA Band II                               |        |                |             |        |         |  |  |
|---|--------|----------------|-------------|--------|---------|--|--|
| Channel Frequency Measurement Results Limit |        |                |             |        | Verdict |  |  |
| Number                                      | (MHz)  | Frequency(MHz) | Values(dBm) | (dBm)  | Verdict |  |  |
| 9262  | 1852.4 | 1850           | -15.04      | -13.00 | Pass    |  |  |
| 9538  | 1907.6 | 1910           | -15.34      | -13.00 | Pass    |  |  |

| WCDMA Band IV |           |                |             |        |         |  |
|---------------|-----------|----------------|-------------|--------|---------|--|
| Channel       | Frequency | Measureme      | nt Results  | Limit  | Verdict |  |
| Number        | (MHz)     | Frequency(MHz) | Values(dBm) | (dBm)  | verdict |  |
| 1313          | 1712.6    | 1710           | -29.82      | -13.00 | Pass    |  |
| 1512          | 1752.4    | 1755           | -28.54      | -13.00 | Pass    |  |

| WCDMA Band V |           |                           |             |        |         |  |
|--------------|-----------|---------------------------|-------------|--------|---------|--|
| Channel      | Frequency | Measurement Results Limit |             |        | Verdict |  |
| Number       | (MHz)     | Frequency(MHz)            | Values(dBm) | (dBm)  | verdict |  |
| 4132         | 826.4     | 824                       | -13.61      | -13.00 | Pass    |  |
| 4233         | 846.6     | 849                       | -14.47      | -13.00 | Pass    |  |

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