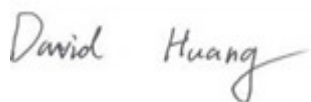


# RF TEST REPORT



Report No.: 17070190-FCC-R1

Supersede Report No.: N/A

|                                                                                                                                      |                                                                                     |                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Applicant                                                                                                                            | AOC                                                                                 |                                                                                       |
| Product Name                                                                                                                         | Tablet PC                                                                           |                                                                                       |
| Model No.                                                                                                                            | A831L                                                                               |                                                                                       |
| Serial No.                                                                                                                           | N/A                                                                                 |                                                                                       |
| Test Standard                                                                                                                        | FCC Part 22(H):2016 ;FCC Part 24(E):2016; ANSI/TIA-603-D: 2010                      |                                                                                       |
| Test Date                                                                                                                            | March 10 to April 04, 2017                                                          |                                                                                       |
| Issue Date                                                                                                                           | April 05, 2017                                                                      |                                                                                       |
| Test Result                                                                                                                          | <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail              |                                                                                       |
| Equipment complied with the specification <input checked="" type="checkbox"/>                                                        |                                                                                     |                                                                                       |
| Equipment did not comply with the specification <input type="checkbox"/>                                                             |                                                                                     |                                                                                       |
|                                                   |  |  |
| Loren Luo<br>Test Engineer                                                                                                           | David Huang<br>Checked By                                                           |                                                                                       |
| This test report may be reproduced in full only<br>Test result presented in this test report is applicable to the tested sample only |                                                                                     |                                                                                       |

Issued by:

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## Laboratories Introduction

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### Accreditations for Conformity Assessment

| Country/Region | Scope                              |
|----------------|------------------------------------|
| USA            | EMC, RF/Wireless, SAR, Telecom     |
| Canada         | EMC, RF/Wireless, SAR, Telecom     |
| Taiwan         | EMC, RF, Telecom, SAR, Safety      |
| Hong Kong      | RF/Wireless, SAR, Telecom          |
| Australia      | EMC, RF, Telecom, SAR, Safety      |
| Korea          | EMI, EMS, RF, SAR, Telecom, Safety |
| Japan          | EMI, RF/Wireless, SAR, Telecom     |
| Singapore      | EMC, RF, SAR, Telecom              |
| Europe         | EMC, RF, SAR, Telecom, Safety      |

|             |                 |
|-------------|-----------------|
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## 1. Report Revision History

| Report No.      | Report Version | Description | Issue Date     |
|-----------------|----------------|-------------|----------------|
| 17070190-FCC-R1 | NONE           | Original    | April 05, 2017 |
|                 |                |             |                |
|                 |                |             |                |
|                 |                |             |                |
|                 |                |             |                |
|                 |                |             |                |

## 2. Customer information

|                  |                                                                                              |
|------------------|----------------------------------------------------------------------------------------------|
| Applicant Name   | AOC                                                                                          |
| Applicant Add    | 14F-5, NO.258, Liancheng Rd., Zhonghe Dist., New Taipei City, Taiwan                         |
| Manufacturer     | China Great Wall Computer Shenzhen Co., Ltd                                                  |
| Manufacturer Add | No.Great wall Computer Industrial Park,Bao Shi East Road,Bao' an Bistrict,Shenzhen,P.R.China |

## 3. Test site information

|                      |                                                                                                                                              |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Lab performing tests | SIEMIC (Shenzhen-China) LABORATORIES                                                                                                         |
| Lab Address          | Zone A, Floor 1, Building 2 Wan Ye Long Technology Park<br>South Side of Zhoushi Road, Bao' an District, Shenzhen, Guangdong China<br>518108 |
| FCC Test Site No.    | 718246                                                                                                                                       |
| IC Test Site No.     | 4842E-1                                                                                                                                      |
| Test Software        | Radiated Emission Program-To Shenzhen(ICP-03A1)                                                                                              |

## 4. Equipment under Test (EUT) Information

Description of EUT: Tablet PC

Main Model: A831L

Serial Model: N/A

Date EUT received: March 10, 2017

Test Date(s): March 10 to April 04, 2017

Equipment Category : PCE

Antenna Gain:

- GSM850: -0.7dBi
- PCS1900: -0.8dBi
- UMTS-FDD Band V: -0.7dBi
- UMTS-FDD Band II: -0.8dBi
- LTE Band II: -0.8dBi
- LTE Band IV: -0.7dBi
- LTE Band VII: -1dBi
- LTE Band XVII: -0.7dBi
- WIFI: 1.18dBi
- Bluetooth/BLE: 1.18dBi
- GPS: 0.22dBi

Antenna Type: PIFA antenna

Type of Modulation:

- GSM / GPRS: GMSK
- EGPRS: GMSK, 8PSK
- UMTS-FDD: QPSK
- LTE Band: QPSK, 16QAM
- 802.11b/g/n: DSSS, OFDM
- Bluetooth: GFSK,  $\pi$  /4DQPSK, 8DPSK
- BLE: GFSK
- GPS: BPSK

RF Operating Frequency (ies):

GSM850 TX: 824.2 ~ 848.8 MHz; RX: 869.2 ~ 893.8 MHz  
 PCS1900 TX: 1850.2 ~ 1909.8 MHz; RX: 1930.2 ~ 1989.8 MHz  
 UMTS-FDD Band V TX: 826.4 ~ 846.6 MHz; RX: 871.4 ~ 891.6 MHz  
 UMTS-FDD Band II TX: 1852.4 ~ 1907.6 MHz;  
 RX: 1932.4 ~ 1987.6 MHz  
 LTE Band II TX: 1850.7 ~ 1909.3 MHz; RX : 1930.7 ~ 1989.3 MHz  
 LTE Band IV TX: 1710.7 ~ 1754.3 MHz; RX : 2110.7 ~ 2154.3 MHz  
 LTE Band VII TX: 2502.5 ~ 2567.5 MHz; RX : 2622.5 ~ 2687.5 MHz  
 LTE Band XVII TX: 706.5 ~ 713.5 MHz; RX : 736.5 ~ 743.5 MHz  
 WIFI: 802.11b/g/n(20M): 2412-2462 MHz  
 WIFI: 802.11n(40M): 2422-2452 MHz  
 Bluetooth& BLE: 2402-2480 MHz  
 GPS: 1575.42 MHz

Maximum Conducted

AV Power to Antenna:

GSM Voice: GSM850: 32.91 dBm  
 PCS1900: 30.48 dBm  
 GPRS: GSM850: 32.89 dBm  
 PCS1900: 30.46 dBm  
 EGPRS(MCS5): GSM850: 29.63 dBm  
 PCS1900: 29.12 dBm  
 RMC: UMTS-FDD Band V: 23.07 dBm  
 UMTS-FDD Band II: 23.42 dBm  
 HSUPA: UMTS-FDD Band V: 22.14 dBm  
 UMTS-FDD Band II: 22.35 dBm  
 HSDPA: UMTS-FDD Band V: 22.17 dBm  
 UMTS-FDD Band II: 22.38 dBm

|                              |                                        |
|------------------------------|----------------------------------------|
|                              | GSM Voce:GSM850: 30.06dBm / ERP        |
|                              | PCS1900: 29.68dBm / EIRP               |
|                              | GPRS:GSM850: 30.03dBm / ERP            |
|                              | PCS1900: 29.66 dBm / EIRP              |
|                              | EGPRS(MCS5):GSM850: 26.78 dBm / ERP    |
|                              | PCS1900: 28.32dBm / EIRP               |
| ERP/EIRP:                    | RMC:UMTS-FDD Band V: 20.22 dBm / ERP   |
|                              | UMTS-FDD Band II: 22.62 dBm / EIRP     |
|                              | HSDPA:UMTS-FDD Band V: 19.29 dBm / ERP |
|                              | UMTS-FDD Band II: 21.55 dBm / EIRP     |
|                              | HSUPA:UMTS-FDD Band V: 19.32 dBm / ERP |
|                              | UMTS-FDD Band II: 21.58 dBm / EIRP     |
|                              | GSM 850: 124CH                         |
|                              | PCS1900: 299CH                         |
|                              | UMTS-FDD Band V : 102CH                |
|                              | UMTS-FDD Band II : 277CH               |
| Number of Channels:          | WIFI :802.11b/g/n(20M): 11CH           |
|                              | WIFI :802.11n(40M): 7CH                |
|                              | Bluetooth: 79CH                        |
|                              | BLE: 40CH                              |
|                              | GPS:1CH                                |
| Port:                        | USB Port, Earphone Port                |
|                              | Adapter:                               |
|                              | Model: SC/10WA050200US                 |
| Input Power:                 | Input: AC100-240V~50/60Hz,0.5A         |
|                              | Output: DC 5.0V,2A                     |
|                              | Battery :                              |
|                              | Spec: 3.8V,19Wh,5000mAh                |
| Trade Name :                 | AOC                                    |
| GPRS/ EGPRS Multi-slot class | 8/10/12                                |
| FCC ID:                      | 2AEB5-A831L                            |

## 5. Test Summary

The product was tested in accordance with the following specifications.

All testing has been performed according to below product classification:

| FCC Rules                                             | Description of Test                                                    | Result     |
|-------------------------------------------------------|------------------------------------------------------------------------|------------|
| § 1.1307; § 2.1093                                    | RF Exposure (SAR)                                                      | Compliance |
| §2.1046; § 22.913(a); § 24.232(c);<br>§ 27.50(c.10) ; | RF Output Power                                                        | Compliance |
| § 24.232 (d) ;                                        | Peak-Average Ratio                                                     | Compliance |
| § 2.1049; § 22.905; § 22.917;<br>§ 24.238;            | 99% & -26 dB Occupied Bandwidth                                        | Compliance |
| § 2.1051; § 22.917(a);<br>§ 24.238(a);                | Spurious Emissions at Antenna Terminal                                 | Compliance |
| § 2.1053; § 22.917(a);<br>§ 24.238(a);                | Field Strength of Spurious Radiation                                   | Compliance |
| § 22.917(a); § 24.238(a);                             | Out of band emission, Band Edge                                        | Compliance |
| § 2.1055; § 22.355; § 24.235;                         | Frequency stability vs. temperature<br>Frequency stability vs. voltage | Compliance |

Note: Testing was performed by configuring EUT to maximum output power status, the declared output power class for different

### Measurement Uncertainty

| Emissions                                    |                                                                                                                                                 |               |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Test Item                                    | Description                                                                                                                                     | Uncertainty   |
| Band Edge and Radiated<br>Spurious Emissions | Confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2 (for EUTs < 0.5m X 0.5m X 0.5m) | +5.6dB/-4.5dB |
| -                                            | -                                                                                                                                               | -             |

## **6. MEASUREMENTS, EXAMINATION AND DERIVED RESULTS**

### **6.1 RF Exposure (SAR)**

Test Result: Pass

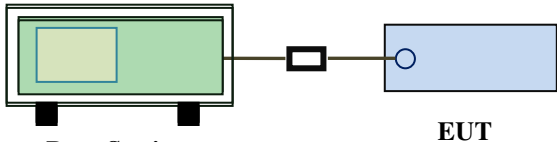
The EUT is a portable device, thus requires SAR evaluation;  
Please refer to RF Exposure Evaluation Report: 17070190-FCC-H.

## 6.2 RF Output Power

|                      |                |
|----------------------|----------------|
| Temperature          | 22°C           |
| Relative Humidity    | 53%            |
| Atmospheric Pressure | 1010mbar       |
| Test date :          | March 13, 2017 |
| Tested By :          | Loren Luo      |

### Requirement(s):

| Spec        | Item | Requirement  | Applicable                          |
|-------------|------|--------------|-------------------------------------|
| §22.913 (a) | a)   | ERP:38.45dBm | <input checked="" type="checkbox"/> |
| §24.232 (c) | b)   | EIRP:33dBm   | <input checked="" type="checkbox"/> |

|            |                                                                                                                                                              |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Setup |  <p style="text-align: center;">Base Station                      EUT</p> |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Procedure | <p>For Conducted Power:</p> <ul style="list-style-type: none"> <li>- The transmitter output port was connected to base station.</li> <li>- Set EUT at maximum power through base station.</li> <li>- Select lowest, middle, and highest channels for each band and different test mode.</li> </ul> <p>For ERP/EIRP:</p> <p>According with KDB 971168 v02r02</p> <ul style="list-style-type: none"> <li>- The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable.</li> <li>- 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.</li> <li>- The frequency range up to tenth harmonic of the fundamental frequency was investigated.</li> </ul> |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        | <ul style="list-style-type: none"> <li>- Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.</li> <li>- Spurious emissions in dB = <math>10 \log (\text{TX power in Watts}/0.001)</math> – the absolute level</li> <li>- Spurious attenuation limit in dB = <math>43 + 10 \text{ Log}_{10} (\text{power out in Watts})</math>.</li> </ul> |
| Remark |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Result | <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

Test Data ☒ Yes ☐ N/A

Test Plot ☐ Yes (See below) ☒ N/A

## Conducted Power

### GSM Mode:

| Burst Average Power (dBm);                           |              |       |       |                              |         |              |        |                              |
|------------------------------------------------------|--------------|-------|-------|------------------------------|---------|--------------|--------|------------------------------|
| Band                                                 | GSM850       |       |       |                              | PCS1900 |              |        |                              |
| Channel                                              | 128          | 190   | 251   | Tune up<br>Power<br>tolerant | 512     | 661          | 810    | Tune up<br>Power<br>tolerant |
| Frequency (MHz)                                      | 824.2        | 836.6 | 848.8 | /                            | 1850.2  | 1880         | 1909.8 | /                            |
| GSM Voice<br>(1 uplink),GMSK                         | <b>32.91</b> | 32.84 | 32.80 | 32.5±1                       | 30.46   | <b>30.48</b> | 30.47  | 30±1                         |
| GPRS Multi-Slot Class<br>8 (1 uplink),GMSK           | <b>32.89</b> | 32.84 | 32.79 | 32.5±1                       | 30.45   | <b>30.46</b> | 30.43  | 30±1                         |
| GPRS Multi-Slot Class<br>10 (2 uplink) GMSK          | 32.08        | 32.04 | 32.07 | 32±1                         | 29.71   | 29.77        | 29.73  | 29.5±1                       |
| GPRS Multi-Slot Class<br>12 (4 uplink) GMSK          | 29.11        | 29.07 | 29.09 | 29+1                         | 27.02   | 27.07        | 27.03  | 27±1                         |
| EGPRS Multi-Slot<br>Class 8 (1 uplink)<br>GMSK MCS1  | <b>32.85</b> | 32.78 | 32.73 | 32.5±1                       | 30.43   | <b>30.46</b> | 30.42  | 30±1                         |
| EGPRS Multi-Slot<br>Class 10 (2 uplink)<br>GMSK MCS1 | 32.05        | 32.01 | 31.95 | 32±1                         | 29.65   | 29.64        | 29.65  | 29.5±1                       |
| EGPRS Multi-Slot<br>Class 12 (4 uplink)<br>GMSK MCS1 | 29.04        | 29.03 | 28.98 | 29+1                         | 27.06   | 27.04        | 27.01  | 27±1                         |
| EGPRS Multi-Slot<br>Class 8 (1 uplink)<br>8PSK MCS5  | <b>29.63</b> | 29.52 | 29.47 | 29.5±1                       | 29.05   | <b>29.12</b> | 29.01  | 29±1                         |
| EGPRS Multi-Slot<br>Class 10 (2 uplink)<br>8PSK MCS5 | 28.71        | 28.74 | 28.72 | 28.5±1                       | 28.41   | 28.29        | 28.23  | 28±1                         |
| EGPRS Multi-Slot<br>Class 12 (4 uplink)<br>8PSK MCS5 | 25.59        | 25.73 | 25.71 | 25.5±1                       | 25.81   | 25.61        | 25.49  | 25.5±1                       |

|             |                 |
|-------------|-----------------|
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Remark :

GPRS, CS1 coding scheme.

EGPRS, MCS1 coding scheme.

EGPRS, MCS5 coding scheme.

Multi-Slot Class 8 , Support Max 4 downlink, 1 uplink , 5 working link

Multi-Slot Class 10 , Support Max 4 downlink, 2 uplink , 5 working link

Multi-Slot Class 12 , Support Max 4 downlink, 4 uplink , 5 working link

## UMTS Mode:

### UMTS-FDD Band V

| Band/ Time Slot configuration | Channel | Frequency | Average power (dBm) | Tune up Power tolerant |
|-------------------------------|---------|-----------|---------------------|------------------------|
| RMC<br>12.2kbps               | 4132    | 826.4     | <b>23.07</b>        | 23±1                   |
|                               | 4175    | 835       | 23.06               | 23±1                   |
|                               | 4233    | 846.6     | 23.02               | 23±1                   |
| HSDPA<br>Subtest1             | 4132    | 826.4     | 21.95               | 22±1                   |
|                               | 4175    | 835       | 21.91               | 22±1                   |
|                               | 4233    | 846.6     | 21.93               | 22±1                   |
| HSDPA<br>Subtest2             | 4132    | 826.4     | 22.13               | 22±1                   |
|                               | 4175    | 835       | 22.10               | 22±1                   |
|                               | 4233    | 846.6     | <b>22.14</b>        | 22±1                   |
| HSDPA<br>Subtest3             | 4132    | 826.4     | 21.92               | 22±1                   |
|                               | 4175    | 835       | 21.97               | 22±1                   |
|                               | 4233    | 846.6     | 21.99               | 22±1                   |
| HSDPA<br>Subtest4             | 4132    | 826.4     | 22.11               | 22±1                   |
|                               | 4175    | 835       | 22.14               | 22±1                   |
|                               | 4233    | 846.6     | 22.14               | 22±1                   |
| HSUPA<br>Subtest1             | 4132    | 826.4     | 22.02               | 22±1                   |
|                               | 4175    | 835       | 22.10               | 22±1                   |
|                               | 4233    | 846.6     | 22.06               | 22±1                   |
| HSUPA<br>Subtest2             | 4132    | 826.4     | 21.94               | 22±1                   |
|                               | 4175    | 835       | 21.92               | 22±1                   |
|                               | 4233    | 846.6     | 21.99               | 22±1                   |
| HSUPA<br>Subtest3             | 4132    | 826.4     | 22.13               | 22±1                   |
|                               | 4175    | 835       | 22.09               | 22±1                   |
|                               | 4233    | 846.6     | 22.10               | 22±1                   |
| HSUPA<br>Subtest4             | 4132    | 826.4     | 22.13               | 22±1                   |
|                               | 4175    | 835       | <b>22.17</b>        | 22±1                   |
|                               | 4233    | 846.6     | 22.06               | 22±1                   |
| HSUPA<br>Subtest5             | 4132    | 826.4     | 21.96               | 22±1                   |
|                               | 4175    | 835       | 21.91               | 22±1                   |
|                               | 4233    | 846.6     | 22.01               | 22±1                   |

## UMTS-FDD Band II

| Band/ Time Slot configuration | Channel | Frequency | Average power (dBm) | Tune up Power tolerant |
|-------------------------------|---------|-----------|---------------------|------------------------|
| RMC<br>12.2kbps               | 9262    | 1852.4    | 23.26               | 23±1                   |
|                               | 9400    | 1880      | <b>23.42</b>        | 23±1                   |
|                               | 9538    | 1907.6    | 23.32               | 23±1                   |
| HSDPA<br>Subtest1             | 9262    | 1852.4    | <b>22.35</b>        | 22.3±1                 |
|                               | 9400    | 1880      | 22.29               | 22.3±1                 |
|                               | 9538    | 1907.6    | 22.30               | 22.3±1                 |
| HSDPA<br>Subtest2             | 9262    | 1852.4    | 22.16               | 22.3±1                 |
|                               | 9400    | 1880      | 22.12               | 22.3±1                 |
|                               | 9538    | 1907.6    | 22.17               | 22.3±1                 |
| HSDPA<br>Subtest3             | 9262    | 1852.4    | 22.04               | 22.3±1                 |
|                               | 9400    | 1880      | 22.03               | 22.3±1                 |
|                               | 9538    | 1907.6    | 22.07               | 22.3±1                 |
| HSDPA<br>Subtest4             | 9262    | 1852.4    | 22.09               | 22.3±1                 |
|                               | 9400    | 1880      | 22.14               | 22.3±1                 |
|                               | 9538    | 1907.6    | 22.11               | 22.3±1                 |
| HSUPA<br>Subtest1             | 9262    | 1852.4    | 22.34               | 22.3±1                 |
|                               | 9400    | 1880      | 22.33               | 22.3±1                 |
|                               | 9538    | 1907.6    | <b>22.38</b>        | 22.3±1                 |
| HSUPA<br>Subtest2             | 9262    | 1852.4    | 22.12               | 22.3±1                 |
|                               | 9400    | 1880      | 22.16               | 22.3±1                 |
|                               | 9538    | 1907.6    | 22.09               | 22.3±1                 |
| HSUPA<br>Subtest3             | 9262    | 1852.4    | 22.15               | 22.3±1                 |
|                               | 9400    | 1880      | 22.16               | 22.3±1                 |
|                               | 9538    | 1907.6    | 22.03               | 22.3±1                 |
| HSUPA<br>Subtest4             | 9262    | 1852.4    | 22.15               | 22.3±1                 |
|                               | 9400    | 1880      | 22.12               | 22.3±1                 |
|                               | 9538    | 1907.6    | 22.09               | 22.3±1                 |
| HSUPA<br>Subtest5             | 9262    | 1852.4    | 22.14               | 22.3±1                 |
|                               | 9400    | 1880      | 22.15               | 22.3±1                 |
|                               | 9538    | 1907.6    | 22.17               | 22.3±1                 |

## ERP & EIRP

### GSM Voice

#### ERP for Cellular Band (Part 22H)

| Frequency (MHz) | Substituted level (dBm) | Antenna Polarization | Antenna Gain correction (dBi) | Cable Loss (dB) | Absolute Level (dBm) | Limit (dBm) |
|-----------------|-------------------------|----------------------|-------------------------------|-----------------|----------------------|-------------|
| 824.2           | 23.79                   | V                    | 6.8                           | 0.53            | <b>30.06</b>         | 38.45       |
| 824.2           | 22.19                   | H                    | 6.8                           | 0.53            | 28.46                | 38.45       |
| 836.6           | 23.71                   | V                    | 6.8                           | 0.53            | 29.98                | 38.45       |
| 836.6           | 22.1                    | H                    | 6.8                           | 0.53            | 28.37                | 38.45       |
| 848.8           | 23.57                   | V                    | 6.9                           | 0.53            | 29.94                | 38.45       |
| 848.8           | 21.96                   | H                    | 6.9                           | 0.53            | 28.33                | 38.45       |

#### EIRP for PCS Band (Part 24E)

| Frequency (MHz) | Substituted level (dBm) | Antenna Polarization | Antenna Gain correction (dBi) | Cable Loss (dB) | Absolute Level (dBm) | Limit (dBm) |
|-----------------|-------------------------|----------------------|-------------------------------|-----------------|----------------------|-------------|
| 1850.2          | 22.63                   | V                    | 7.88                          | 0.85            | 29.66                | 33          |
| 1850.2          | 20.81                   | H                    | 7.88                          | 0.85            | 27.84                | 33          |
| 1880            | 22.65                   | V                    | 7.88                          | 0.85            | <b>29.68</b>         | 33          |
| 1880            | 20.83                   | H                    | 7.88                          | 0.85            | 27.86                | 33          |
| 1909.8          | 22.66                   | V                    | 7.86                          | 0.85            | 29.67                | 33          |
| 1909.8          | 20.84                   | H                    | 7.86                          | 0.85            | 27.85                | 33          |

**GPRS:**

**ERP for Cellular Band (Part 22H)**

| Frequency (MHz) | Substituted level (dBm) | Antenna Polarization | Antenna Gain correction (dBi) | Cable Loss (dB) | Absolute Level (dBm) | Limit (dBm) |
|-----------------|-------------------------|----------------------|-------------------------------|-----------------|----------------------|-------------|
| 824.2           | 23.76                   | V                    | 6.8                           | 0.53            | <b>30.03</b>         | 38.45       |
| 824.2           | 22.16                   | H                    | 6.8                           | 0.53            | 28.43                | 38.45       |
| 836.6           | 23.71                   | V                    | 6.8                           | 0.53            | 29.98                | 38.45       |
| 836.6           | 22.1                    | H                    | 6.8                           | 0.53            | 28.37                | 38.45       |
| 848.8           | 23.56                   | V                    | 6.9                           | 0.53            | 29.93                | 38.45       |
| 848.8           | 21.95                   | H                    | 6.9                           | 0.53            | 28.32                | 38.45       |

**EIRP for PCS Band (Part 24E)**

| Frequency (MHz) | Substituted level (dBm) | Antenna Polarization | Antenna Gain correction (dBi) | Cable Loss (dB) | Absolute Level (dBm) | Limit (dBm) |
|-----------------|-------------------------|----------------------|-------------------------------|-----------------|----------------------|-------------|
| 1850.2          | 22.62                   | V                    | 7.88                          | 0.85            | 29.65                | 33          |
| 1850.2          | 20.8                    | H                    | 7.88                          | 0.85            | 27.83                | 33          |
| 1880            | 22.63                   | V                    | 7.88                          | 0.85            | <b>29.66</b>         | 33          |
| 1880            | 20.81                   | H                    | 7.88                          | 0.85            | 27.84                | 33          |
| 1909.8          | 22.62                   | V                    | 7.86                          | 0.85            | 29.63                | 33          |
| 1909.8          | 20.81                   | H                    | 7.86                          | 0.85            | 27.82                | 33          |

## EGPRS (MCS5):

### ERP for Cellular Band (Part 22H)

| Frequency (MHz) | Substituted level (dBm) | Antenna Polarization | Antenna Gain correction (dBi) | Cable Loss (dB) | Absolute Level (dBm) | Limit (dBm) |
|-----------------|-------------------------|----------------------|-------------------------------|-----------------|----------------------|-------------|
| 824.2           | 20.35                   | V                    | 6.8                           | 0.53            | 26.62                | 38.45       |
| 824.2           | 18.61                   | H                    | 6.8                           | 0.53            | 24.88                | 38.45       |
| 836.6           | 20.4                    | V                    | 6.8                           | 0.53            | 26.67                | 38.45       |
| 836.6           | 18.66                   | H                    | 6.8                           | 0.53            | 24.93                | 38.45       |
| 848.8           | 20.41                   | V                    | 6.9                           | 0.53            | <b>26.78</b>         | 38.45       |
| 848.8           | 18.71                   | H                    | 6.9                           | 0.53            | 25.08                | 38.45       |

### EIRP for PCS Band (Part 24E)

| Frequency (MHz) | Substituted level (dBm) | Antenna Polarization | Antenna Gain correction (dBi) | Cable Loss (dB) | Absolute Level (dBm) | Limit (dBm) |
|-----------------|-------------------------|----------------------|-------------------------------|-----------------|----------------------|-------------|
| 1850.2          | 21.29                   | V                    | 7.88                          | 0.85            | <b>28.32</b>         | 33          |
| 1850.2          | 19.56                   | H                    | 7.88                          | 0.85            | 26.59                | 33          |
| 1880            | 21.22                   | V                    | 7.88                          | 0.85            | 28.25                | 33          |
| 1880            | 19.49                   | H                    | 7.88                          | 0.85            | 26.52                | 33          |
| 1909.8          | 21.2                    | V                    | 7.86                          | 0.85            | 28.21                | 33          |
| 1909.8          | 19.47                   | H                    | 7.86                          | 0.85            | 26.48                | 33          |

## RMC

### ERP for UMTS-FDD Band V (Part 22H)

| Frequency (MHz) | Substituted level (dBm) | Antenna Polarization | Antenna Gain correction (dBi) | Cable Loss (dB) | Absolute Level (dBm) | Limit (dBm) |
|-----------------|-------------------------|----------------------|-------------------------------|-----------------|----------------------|-------------|
| 826.4           | 13.95                   | V                    | 6.8                           | 0.53            | <b>20.22</b>         | 38.45       |
| 826.4           | 12.99                   | H                    | 6.8                           | 0.53            | 19.26                | 38.45       |
| 835             | 13.94                   | V                    | 6.8                           | 0.53            | 20.21                | 38.45       |
| 835             | 12.98                   | H                    | 6.8                           | 0.53            | 19.25                | 38.45       |
| 846.6           | 13.8                    | V                    | 6.9                           | 0.53            | 20.17                | 38.45       |
| 846.6           | 12.84                   | H                    | 6.9                           | 0.53            | 19.21                | 38.45       |

### EIRP for UMTS-FDD Band II (Part 24E)

| Frequency (MHz) | Substituted level (dBm) | Antenna Polarization | Antenna Gain correction (dBi) | Cable Loss (dB) | Absolute Level (dBm) | Limit (dBm) |
|-----------------|-------------------------|----------------------|-------------------------------|-----------------|----------------------|-------------|
| 1852.4          | 15.43                   | V                    | 7.88                          | 0.85            | 22.46                | 33          |
| 1852.4          | 14.5                    | H                    | 7.88                          | 0.85            | 21.53                | 33          |
| 1880            | 15.59                   | V                    | 7.88                          | 0.85            | <b>22.62</b>         | 33          |
| 1880            | 14.71                   | H                    | 7.88                          | 0.85            | 21.74                | 33          |
| 1907.6          | 15.51                   | V                    | 7.86                          | 0.85            | 22.52                | 33          |
| 1907.6          | 14.6                    | H                    | 7.86                          | 0.85            | 21.61                | 33          |

## HSDPA

### ERP for UMTS-FDD Band V (Part 22H)

| Frequency (MHz) | Substituted level (dBm) | Antenna Polarization | Antenna Gain correction (dBi) | Cable Loss (dB) | Absolute Level (dBm) | Limit (dBm) |
|-----------------|-------------------------|----------------------|-------------------------------|-----------------|----------------------|-------------|
| 826.4           | 13.01                   | V                    | 6.8                           | 0.53            | 19.28                | 38.45       |
| 826.4           | 12.07                   | H                    | 6.8                           | 0.53            | 18.34                | 38.45       |
| 835             | 13.02                   | V                    | 6.8                           | 0.53            | <b>19.29</b>         | 38.45       |
| 835             | 12.08                   | H                    | 6.8                           | 0.53            | 18.35                | 38.45       |
| 846.6           | 12.92                   | V                    | 6.9                           | 0.53            | 19.29                | 38.45       |
| 846.6           | 11.98                   | H                    | 6.9                           | 0.53            | 18.35                | 38.45       |

### EIRP for UMTS-FDD Band II (Part 24E)

| Frequency (MHz) | Substituted level (dBm) | Antenna Polarization | Antenna Gain correction (dBi) | Cable Loss (dB) | Absolute Level (dBm) | Limit (dBm) |
|-----------------|-------------------------|----------------------|-------------------------------|-----------------|----------------------|-------------|
| 1852.4          | 14.52                   | V                    | 7.88                          | 0.85            | <b>21.55</b>         | 33          |
| 1852.4          | 13.64                   | H                    | 7.88                          | 0.85            | 20.67                | 33          |
| 1880            | 14.46                   | V                    | 7.88                          | 0.85            | 21.49                | 33          |
| 1880            | 13.51                   | H                    | 7.88                          | 0.85            | 20.54                | 33          |
| 1907.6          | 14.49                   | V                    | 7.86                          | 0.85            | 21.50                | 33          |
| 1907.6          | 13.62                   | H                    | 7.86                          | 0.85            | 20.63                | 33          |

## HSUPA

### ERP for UMTS-FDD Band V (Part 22H)

| Frequency (MHz) | Substituted level (dBm) | Antenna Polarization | Antenna Gain correction (dBi) | Cable Loss (dB) | Absolute Level (dBm) | Limit (dBm) |
|-----------------|-------------------------|----------------------|-------------------------------|-----------------|----------------------|-------------|
| 826.4           | 13.01                   | V                    | 6.8                           | 0.53            | 19.28                | 38.45       |
| 826.4           | 12.06                   | H                    | 6.8                           | 0.53            | 18.33                | 38.45       |
| 835             | 13.05                   | V                    | 6.8                           | 0.53            | <b>19.32</b>         | 38.45       |
| 835             | 12.09                   | H                    | 6.8                           | 0.53            | 18.36                | 38.45       |
| 846.6           | 12.88                   | V                    | 6.9                           | 0.53            | 19.25                | 38.45       |
| 846.6           | 11.92                   | H                    | 6.9                           | 0.53            | 18.29                | 38.45       |

### EIRP for UMTS-FDD Band II (Part 24E)

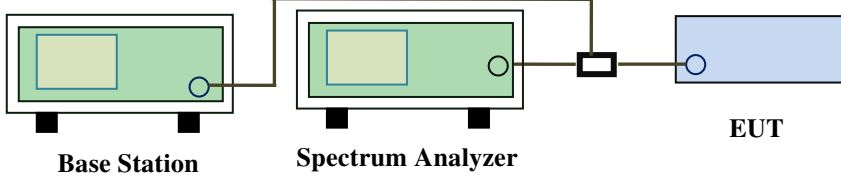
| Frequency (MHz) | Substituted level (dBm) | Antenna Polarization | Antenna Gain correction (dBi) | Cable Loss (dB) | Absolute Level (dBm) | Limit (dBm) |
|-----------------|-------------------------|----------------------|-------------------------------|-----------------|----------------------|-------------|
| 1852.4          | 14.51                   | V                    | 7.88                          | 0.85            | 21.54                | 33          |
| 1852.4          | 13.58                   | H                    | 7.88                          | 0.85            | 20.61                | 33          |
| 1880            | 14.5                    | V                    | 7.88                          | 0.85            | 21.53                | 33          |
| 1880            | 13.57                   | H                    | 7.88                          | 0.85            | 20.60                | 33          |
| 1907.6          | 14.57                   | V                    | 7.86                          | 0.85            | <b>21.58</b>         | 33          |
| 1907.6          | 13.56                   | H                    | 7.86                          | 0.85            | 20.57                | 33          |

### 6.3 Peak-Average Ratio

|                      |                |
|----------------------|----------------|
| Temperature          | 22°C           |
| Relative Humidity    | 53%            |
| Atmospheric Pressure | 1010mbar       |
| Test date :          | March 13, 2017 |
| Tested By :          | Loren Luo      |

Requirement(s):

| Spec       | Item | Requirement                                                              | Applicable                          |
|------------|------|--------------------------------------------------------------------------|-------------------------------------|
| §24.232(d) | a)   | The peak-to-average ratio (PAR) of the transmission may not exceed 13dB. | <input checked="" type="checkbox"/> |

|            |                                                                                                                                                                     |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Setup |  <p style="text-align: center;">Base Station      Spectrum Analyzer      EUT</p> |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Procedure | <p><b>According with KDB 971168 v02r02</b></p> <p><b>5.7.2 Alternate procedure for PAPR</b></p> <p><b>5.1.2 Peak power measurements with a peak power meter</b></p> <p>The total peak output power may be measured using a broadband peak RF power meter. The power meter must have a video bandwidth that is greater than or equal to the emission bandwidth and utilize a fast-responding diode detector.</p> <p><b>5.2.3 Average power measurement with average power meter</b></p> <p>As an alternative to the use of a spectrum/signal analyzer or EMI receiver to perform a measurement of the total in-band average output power, a wideband RF average power meter with a thermocouple detector or equivalent can be used under certain conditions</p> <p>If the EUT can be configured to transmit continuously (i.e., the burst duty cycle <math>\geq 98\%</math>) and at all times the EUT is transmitting at its maximum output</p> |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        | <p>power level, then a conventional wide-band RF power meter can be used.</p> <p>If the EUT cannot be configured to transmit continuously (i.e., the burst duty cycle &lt; 98%), then there are two options for the use of an average power meter. First, a gated average power meter can be used to perform the measurement if the gating parameters can be adjusted such that the power is measured only over active transmission bursts at maximum output power levels. A conventional average power meter can also be used if the measured burst duty cycle is constant (i.e., duty cycle variations are less than <math>\pm 2</math> percent) by performing the measurement over the on/off burst cycles and then correcting (increasing) the measured level by a factor equal to <math>10\log(1/\text{duty cycle})</math></p> |
| Remark |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Result | <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

Test Data ☒ Yes ☐ N/A  
 Test Plot ☐ Yes (See below) ☒ N/A

#### GSM : GSM 1900 PK-AV POWER (PART 24E)

| Frequency<br>(MHz) | Conducted power(dBm) |         | Peak-Average<br>Ratio(PAR) |
|--------------------|----------------------|---------|----------------------------|
|                    | Peak                 | Average |                            |
| 1850.2             | 31.5                 | 30.46   | 1.04                       |
| 1880               | 31.59                | 30.48   | 1.11                       |
| 1909.8             | 31.51                | 30.47   | 1.04                       |

#### GPRS 1900 PK-AV POWER (PART 24E)

| Frequency<br>(MHz) | Conducted power(dBm) |         | Peak-Average<br>Ratio(PAR) |
|--------------------|----------------------|---------|----------------------------|
|                    | Peak                 | Average |                            |
| 1850.2             | 31.5                 | 30.45   | 1.05                       |
| 1880               | 31.46                | 30.46   | 1.00                       |
| 1909.8             | 31.42                | 30.43   | 0.99                       |

#### EGPRS (MSC5) 1900 PK-AV POWER (PART 24E)

| Frequency<br>(MHz) | Conducted power(dBm) |         | Peak-Average<br>Ratio(PAR) |
|--------------------|----------------------|---------|----------------------------|
|                    | Peak                 | Average |                            |
| 1850.2             | 30.33                | 29.12   | 1.21                       |
| 1880               | 30.38                | 29.05   | 1.33                       |
| 1909.8             | 30.34                | 29.01   | 1.33                       |

#### RMC : UMTS-FDD Band 2 PK-AV POWER (PART 24E)

| Frequency<br>(MHz) | Conducted power(dBm) |         | Peak-Average<br>Ratio(PAR) |
|--------------------|----------------------|---------|----------------------------|
|                    | Peak                 | Average |                            |
| 1852.4             | 24.31                | 23.26   | 1.05                       |
| 1880               | 24.53                | 23.42   | 1.11                       |
| 1907.6             | 24.42                | 23.32   | 1.1                        |

#### HSDPA : UMTS-FDD Band 2 PK-AV POWER (PART 24E)

| Frequency<br>(MHz) | Conducted power(dBm) |         | Peak-Average<br>Ratio(PAR) |
|--------------------|----------------------|---------|----------------------------|
|                    | Peak                 | Average |                            |
| 1852.4             | 23.45                | 22.34   | 1.11                       |
| 1880               | 23.42                | 22.33   | 1.09                       |
| 1907.6             | 23.44                | 22.38   | 1.06                       |

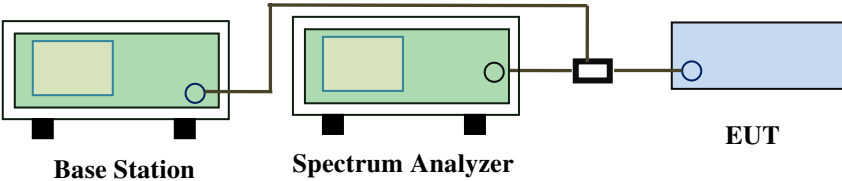
**HSUPA : UMTS-FDD Band 2 PK-AV POWER (PART 24E)**

| Frequency<br>(MHz) | Conducted power(dBm) |         | Peak-Average<br>Ratio(PAR) |
|--------------------|----------------------|---------|----------------------------|
|                    | Peak                 | Average |                            |
| 1852.4             | 23.50                | 22.35   | 1.15                       |
| 1880               | 23.53                | 22.29   | 1.24                       |
| 1907.6             | 23.57                | 22.30   | 1.27                       |

## 6.4 Occupied Bandwidth

|                      |                   |
|----------------------|-------------------|
| Temperature          | 22°C              |
| Relative Humidity    | 53%               |
| Atmospheric Pressure | 1010mbar          |
| Test date :          | March 13&14, 2017 |
| Tested By :          | Loren Luo         |

### Requirement(s):

| Spec                                       | Item                                                                                                                                                                                                                                     | Requirement                 | Applicable                          |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-------------------------------------|
| §2.1049,<br>§22.917,<br>§22.905<br>§24.238 | a)                                                                                                                                                                                                                                       | 99% Occupied Bandwidth(kHz) | <input checked="" type="checkbox"/> |
|                                            | b)                                                                                                                                                                                                                                       | 26 dB Bandwidth(kHz)        | <input checked="" type="checkbox"/> |
| Test Setup                                 |                                                                                                                                                      |                             |                                     |
| Test Procedure                             | <ul style="list-style-type: none"> <li>- The EUT was connected to Spectrum Analyzer and Base Station via power divider.</li> <li>- The 99% and 26 dB occupied bandwidth (BW) of the middle channel for the highest RF powers.</li> </ul> |                             |                                     |
| Remark                                     |                                                                                                                                                                                                                                          |                             |                                     |
| Result                                     | <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail                                                                                                                                                                   |                             |                                     |

Test Data    ☒ Yes      ☐ N/A

Test Plot    ☒ Yes (See below)      ☐ N/A

## GSM Voice:

### Cellular Band (Part 22H) result

| Channel | Frequency (MHz) | 99% Occupied Bandwidth (kHz) | 26 dB Bandwidth (kHz) |
|---------|-----------------|------------------------------|-----------------------|
| 128     | 824.2           | 245.44                       | 320.5                 |
| 190     | 836.6           | 245.11                       | 318.1                 |
| 251     | 848.8           | 246.97                       | 319.1                 |

### PCS Band (Part 24E) result

| Channel | Frequency (MHz) | 99% Occupied Bandwidth (kHz) | 26 dB Bandwidth (kHz) |
|---------|-----------------|------------------------------|-----------------------|
| 512     | 1850            | 246.89                       | 316.5                 |
| 661     | 1880            | 246.73                       | 316.5                 |
| 810     | 1910            | 243.75                       | 317.5                 |

## GPRS:

### Cellular Band (Part 22H) result

| Channel | Frequency (MHz) | 99% Occupied Bandwidth (kHz) | 26 dB Bandwidth (kHz) |
|---------|-----------------|------------------------------|-----------------------|
| 128     | 824.2           | 247.81                       | 321.9                 |
| 190     | 836.6           | 244.63                       | 315.6                 |
| 251     | 848.8           | 244.54                       | 318.5                 |

### PCS Band (Part 24E) result

| Channel | Frequency (MHz) | 99% Occupied Bandwidth (kHz) | 26 dB Bandwidth (kHz) |
|---------|-----------------|------------------------------|-----------------------|
| 512     | 1850            | 245.24                       | 315.9                 |
| 661     | 1880            | 245.06                       | 314.7                 |
| 810     | 1910            | 245.60                       | 315.7                 |

## EGPRS (MCS 5):

### Cellular Band (Part 22H) result

| Channel | Frequency<br>(MHz) | 99% Occupied<br>Bandwidth (kHz) | 26 dB Bandwidth<br>(kHz) |
|---------|--------------------|---------------------------------|--------------------------|
| 128     | 824.2              | 247.26                          | 318.6                    |
| 190     | 836.6              | 244.48                          | 318.7                    |
| 251     | 848.8              | 243.72                          | 317.9                    |

### PCS Band (Part 24E) result

| Channel | Frequency<br>(MHz) | 99% Occupied<br>Bandwidth (kHz) | 26 dB Bandwidth<br>(kHz) |
|---------|--------------------|---------------------------------|--------------------------|
| 512     | 1850               | 245.85                          | 317.1                    |
| 661     | 1880               | 244.99                          | 315.5                    |
| 810     | 1910               | 247.12                          | 314.9                    |

**RMC:**

**UMTS-FDD Band V (Part 22H)**

| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|---------|-----------------|------------------------------|-----------------------|
| 4132    | 826.6           | 4.1811                       | 4.819                 |
| 4175    | 835.0           | 4.2243                       | 4.846                 |
| 4233    | 846.4           | 4.1893                       | 4.823                 |

**UMTS-FDD Band II (Part 24E)**

| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|---------|-----------------|------------------------------|-----------------------|
| 9262    | 1853            | 4.2008                       | 4.865                 |
| 9400    | 1880            | 4.2117                       | 4.862                 |
| 9538    | 1907            | 4.2238                       | 4.882                 |

**HSDPA:**

**UMTS-FDD Band V (Part 22H)**

| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|---------|-----------------|------------------------------|-----------------------|
| 4132    | 826.6           | 4.1744                       | 4.823                 |
| 4175    | 835.0           | 4.2278                       | 4.836                 |
| 4233    | 846.4           | 4.1916                       | 4.842                 |

**UMTS-FDD Band II (Part 24E)**

| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|---------|-----------------|------------------------------|-----------------------|
| 9262    | 1853            | 4.2070                       | 4.820                 |
| 9400    | 1880            | 4.2079                       | 4.879                 |
| 9538    | 1907            | 4.2143                       | 4.884                 |

**HSUPA:**

**UMTS-FDD Band V (Part 22H)**

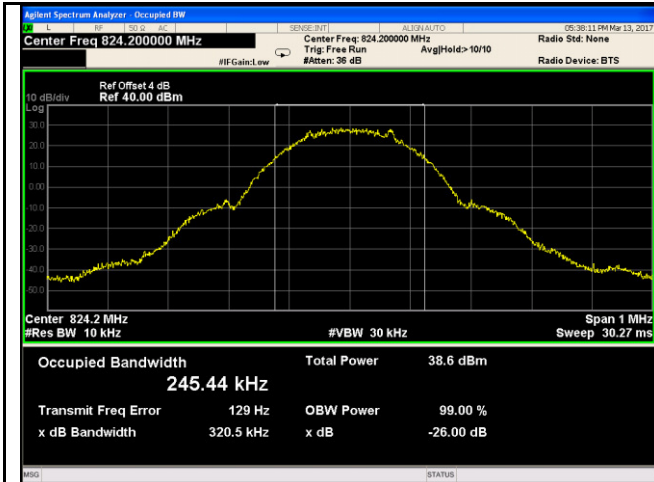
| Channel | Frequency<br>(MHz) | 99% Occupied<br>Bandwidth (MHz) | 26 dB Bandwidth<br>(MHz) |
|---------|--------------------|---------------------------------|--------------------------|
| 4132    | 826.6              | 4.1754                          | 4.846                    |
| 4175    | 835.0              | 4.2189                          | 4.896                    |
| 4233    | 846.4              | 4.2014                          | 4.827                    |

**UMTS-FDD Band II (Part 24E)**

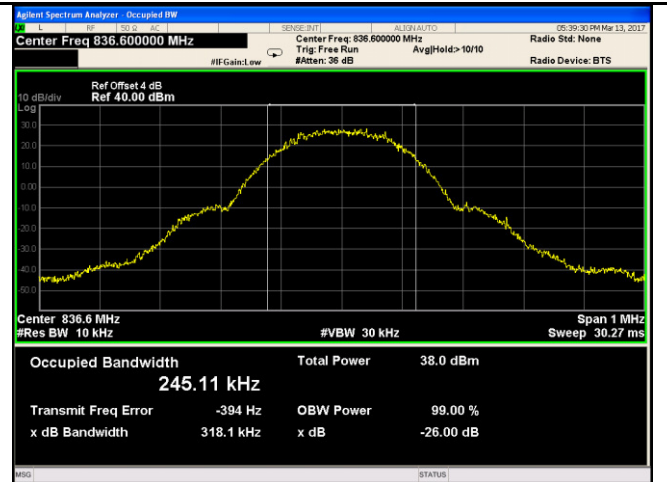
| Channel | Frequency<br>(MHz) | 99% Occupied<br>Bandwidth (MHz) | 26 dB Bandwidth<br>(MHz) |
|---------|--------------------|---------------------------------|--------------------------|
| 9262    | 1853               | 4.2018                          | 4.838                    |
| 9400    | 1880               | 4.2014                          | 4.861                    |
| 9538    | 1907               | 4.2358                          | 4.887                    |

## Test Plots

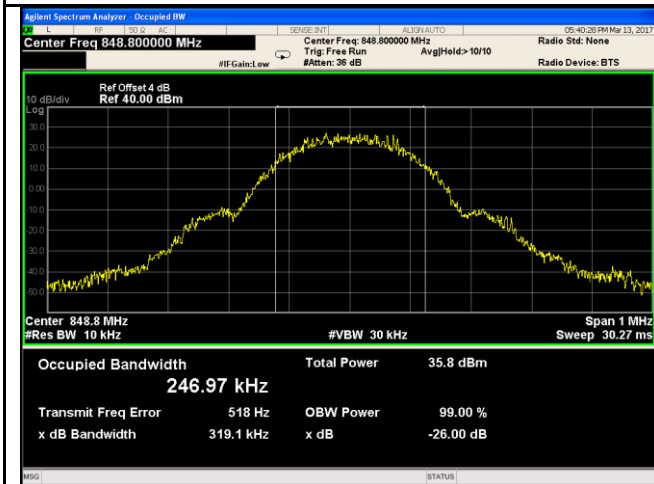
### GSM Voice:



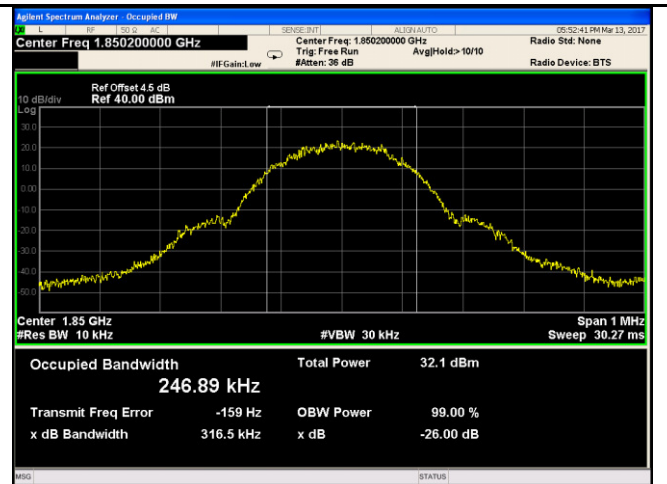
GSM 850 BW - Low CH 824.2MHz



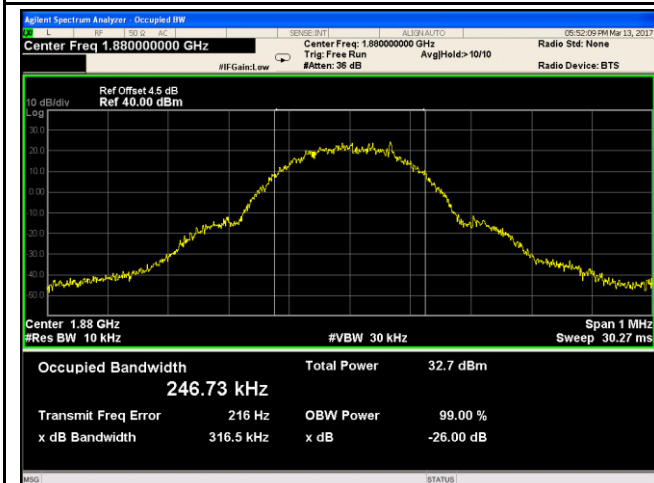
GSM 850 BW - Mid CH 836.6MHz



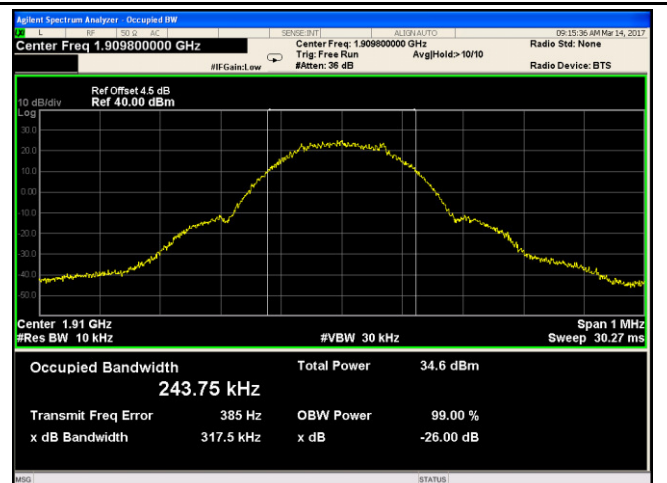
GSM 850 BW - High CH 848.8MHz



PCS 1900 BW - Low CH 1850.2MHz

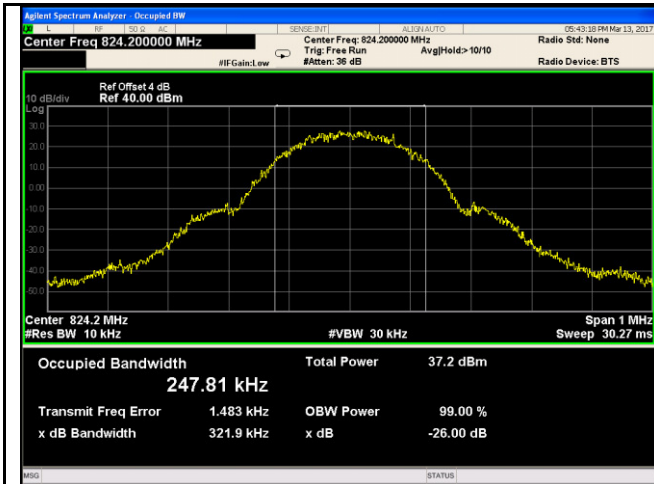


PCS 1900 BW - Mid CH 1880MHz

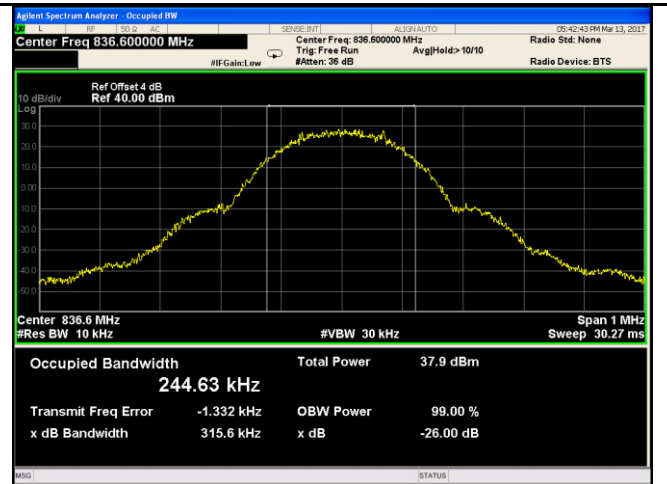


PCS 1900 BW - High CH 1909.8MHz

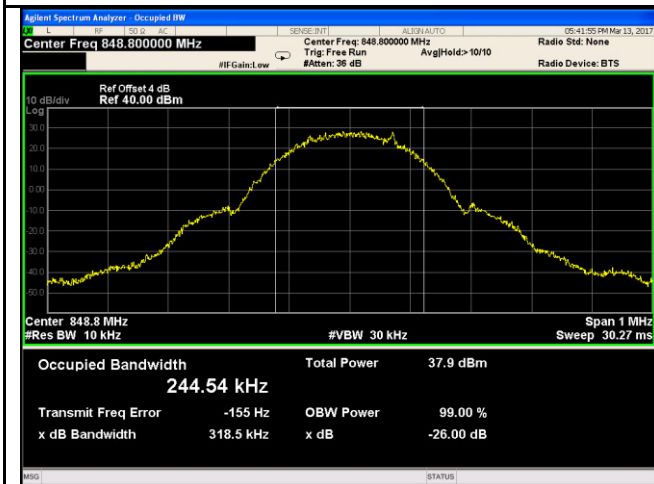
## GPRS:



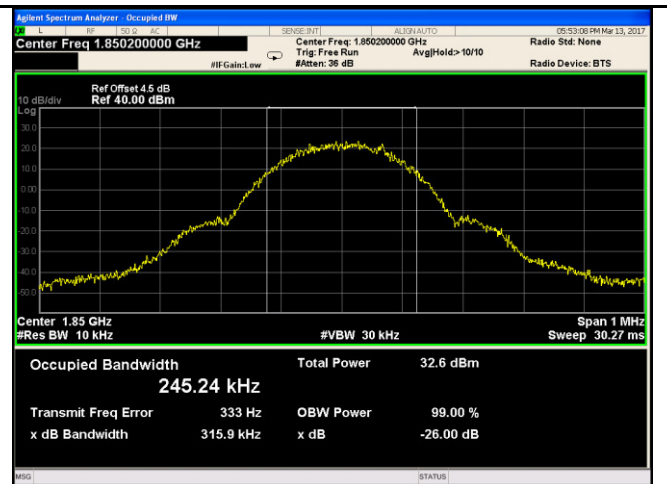
GSM 850 BW - Low CH 824.2MHz



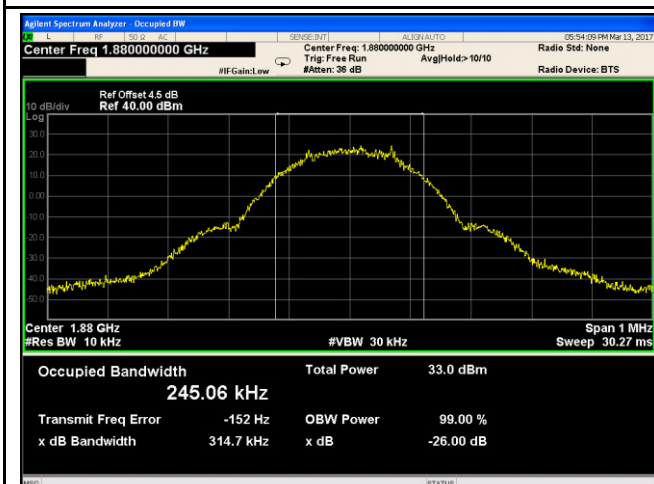
GSM 850 BW - Mid CH 836.6MHz



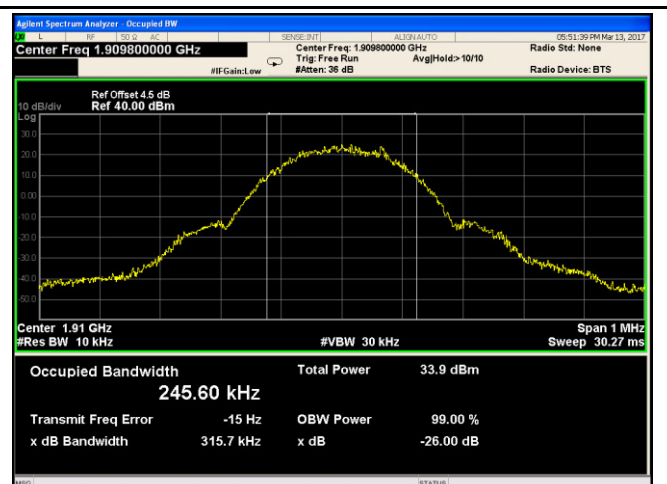
GSM 850 BW - High CH 848.8MHz



PCS 1900 BW - Low CH 1850.2MHz

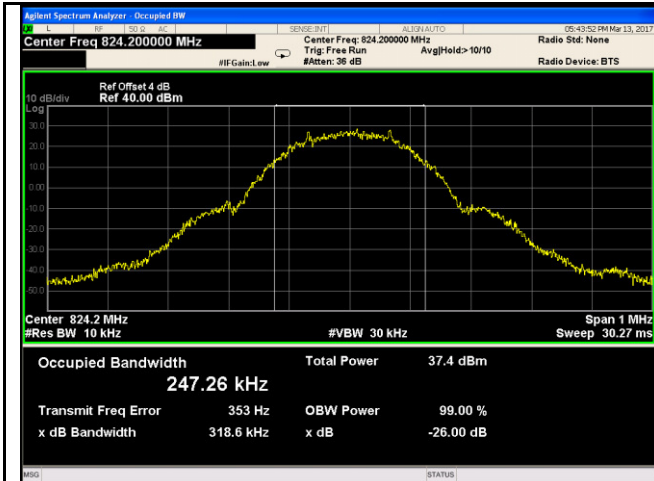


PCS 1900 BW - Mid CH 1880MHz

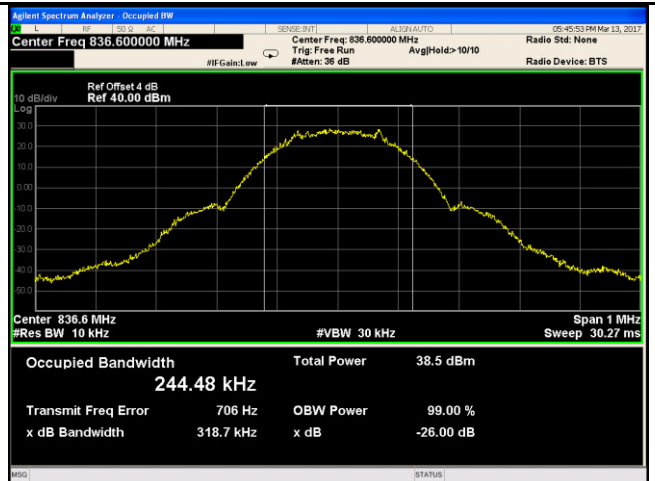


PCS 1900 BW - High CH 1909.8MHz

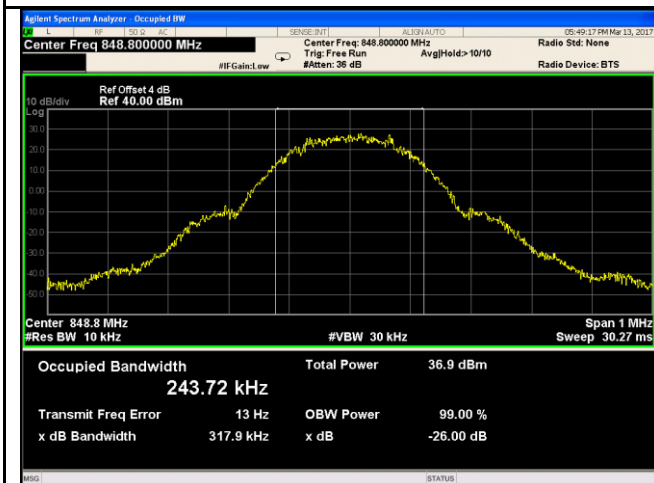
## EGPRS (MCS5):



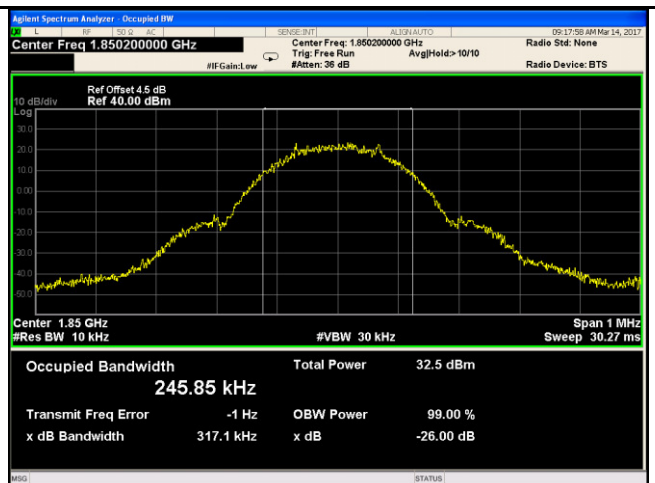
GSM 850 BW - Low CH 824.2MHz



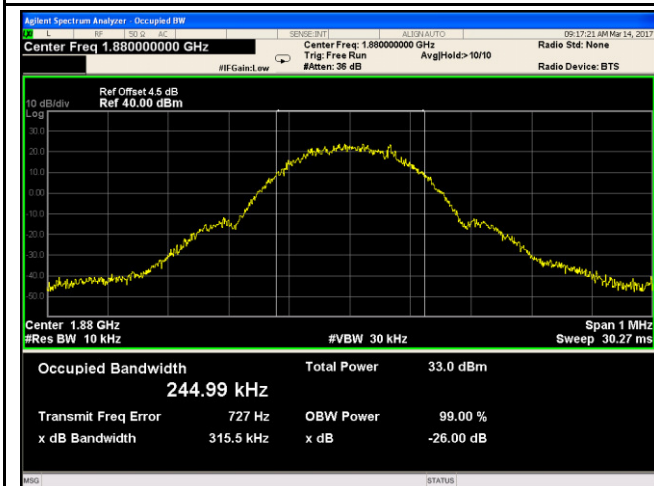
GSM 850 BW - Mid CH 836.6MHz



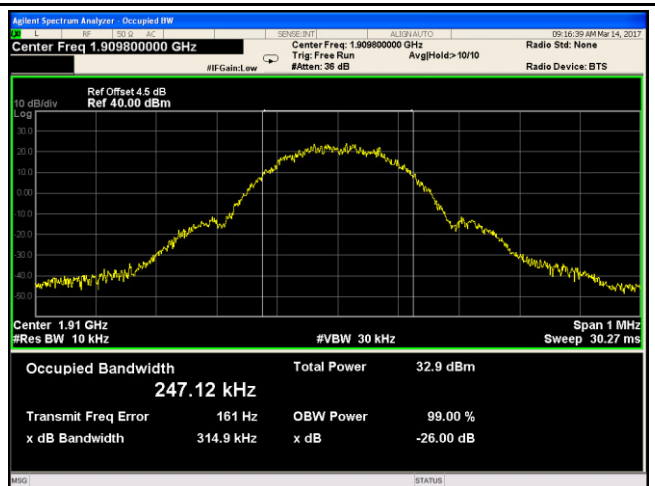
GSM 850 BW - High CH 848.8MHz



PCS 1900 BW - Low CH 1850.2MHz

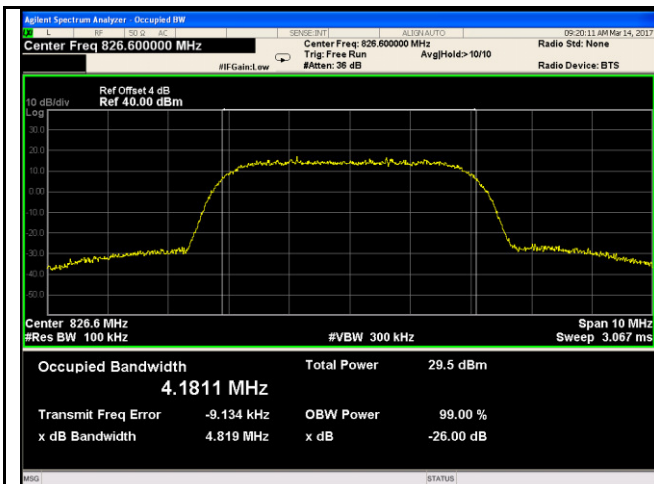


PCS 1900 BW - Mid CH 1880MHz

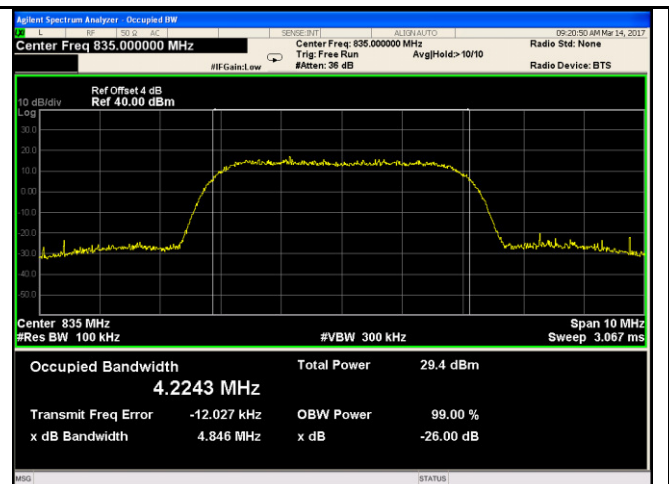


PCS 1900 BW - High CH 1909.8MHz

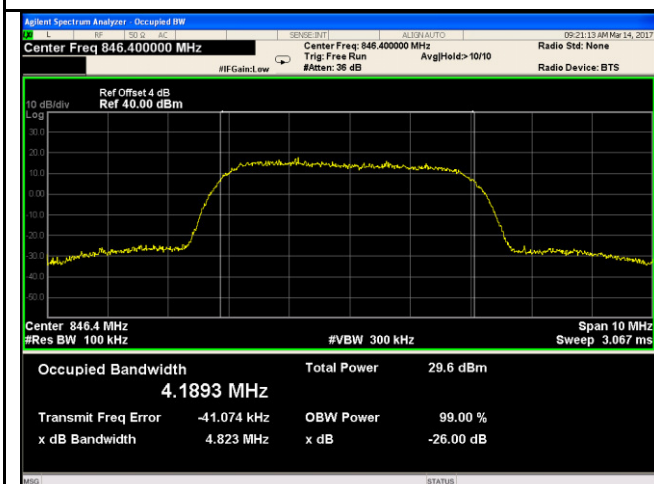
RMC:



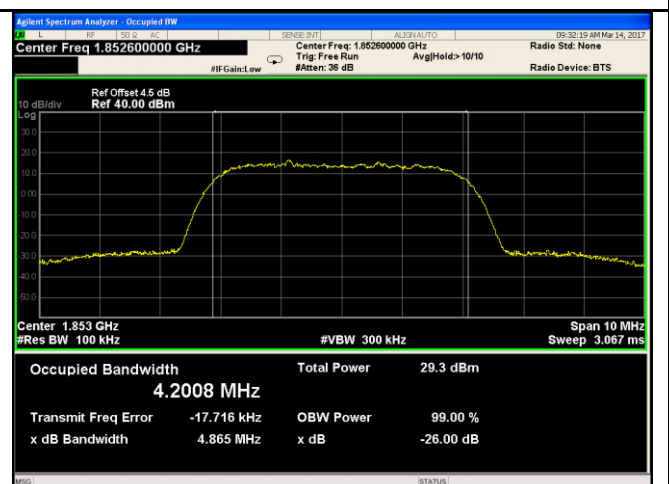
Band V BW - Low CH 826.6 MHz



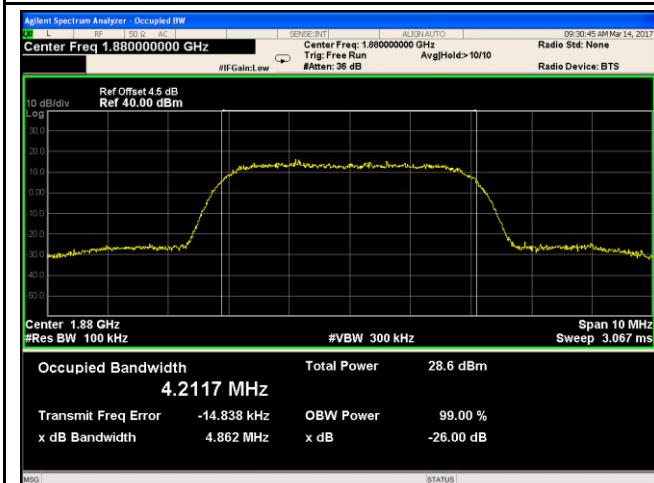
Band V BW - Mid CH 835.0 MHz



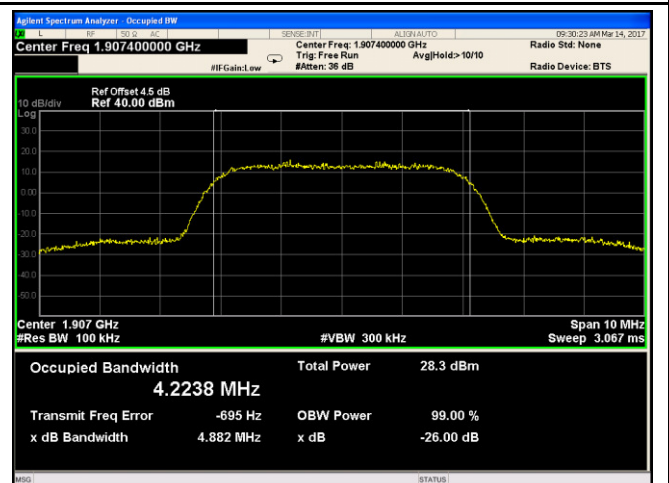
Band V BW - High CH 846.4 MHz



Band II BW - Low CH 1852.4 MHz

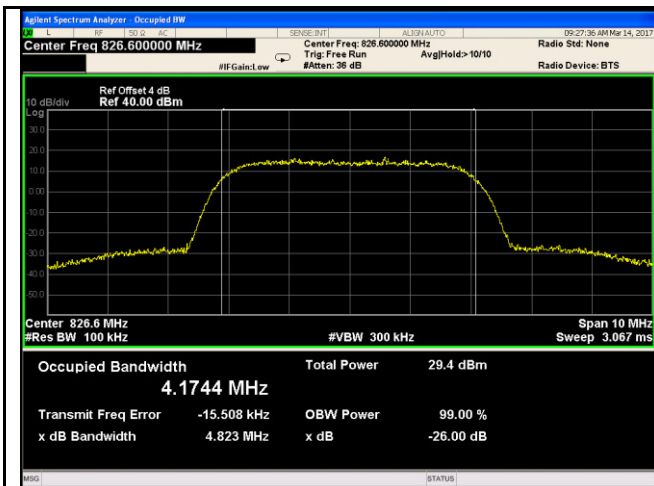


Band II BW - Mid CH 1880 MHz

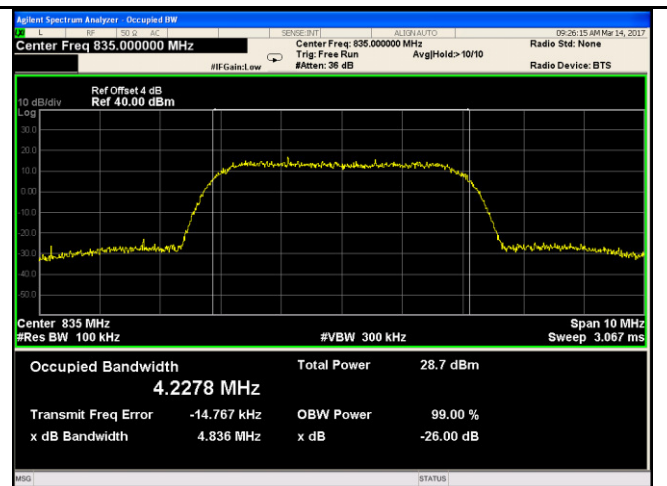


Band II BW - High CH 1907.6 MHz

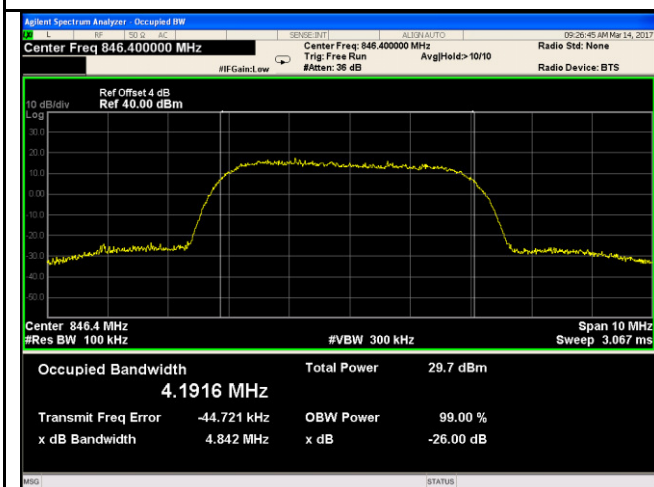
HSDPA:



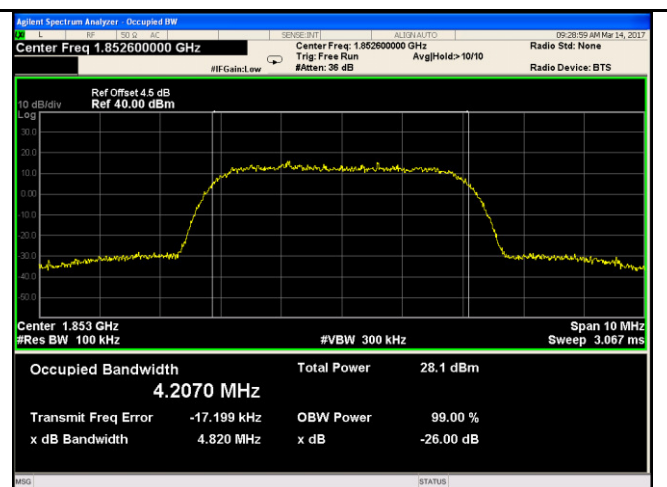
Band V BW - Low CH 826.6 MHz



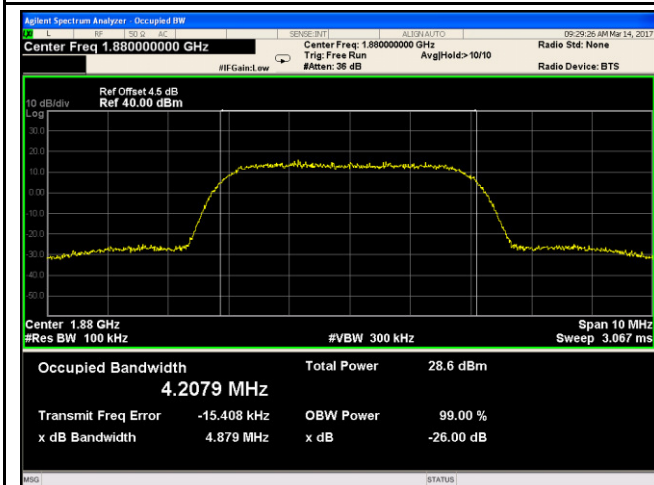
Band V BW - Mid CH 835.0 MHz



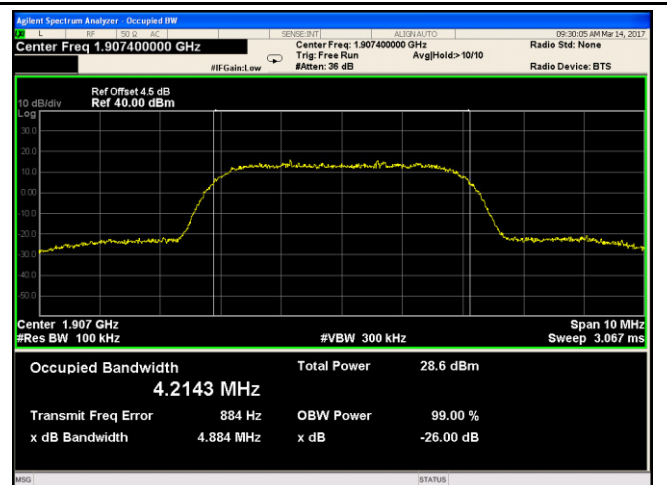
Band V BW - High CH 846.4 MHz



Band II BW - Low CH 1852.4MHz

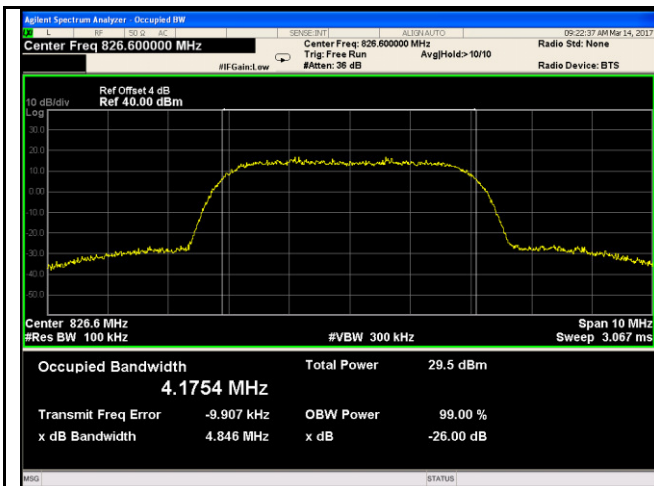


Band II BW - Mid CH 1880MHz

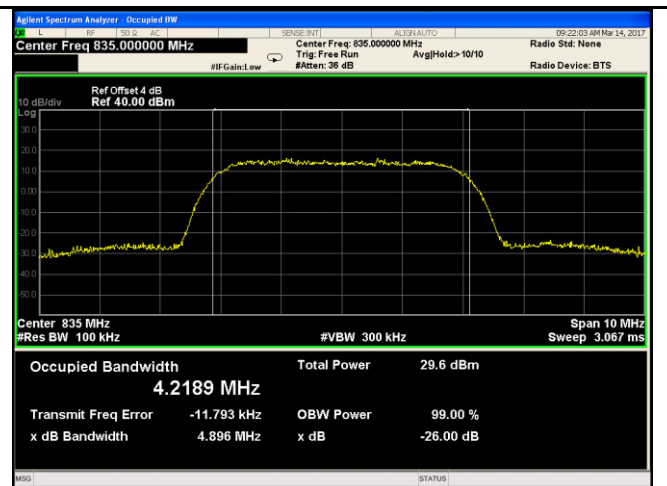


Band II BW - High CH 1907.6MHz

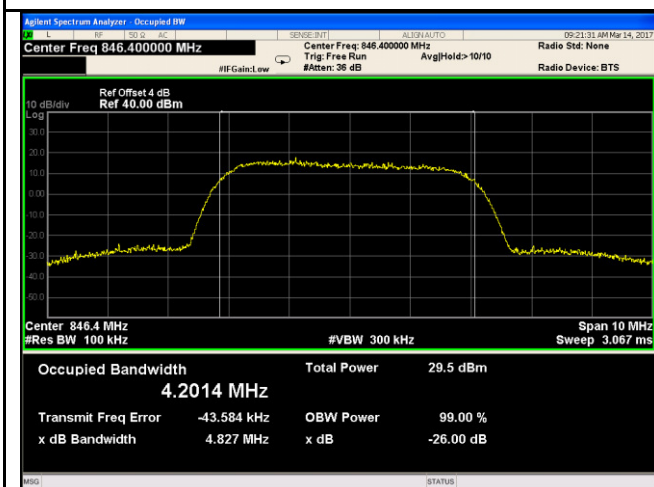
## HSUPA:



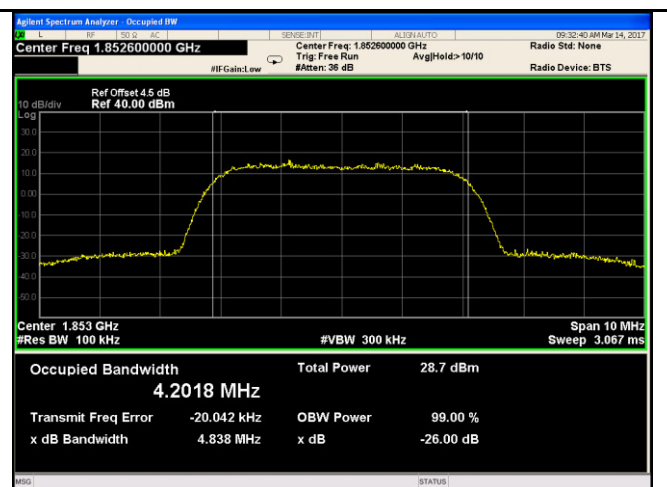
Band V BW - Low CH 826.6 MHz



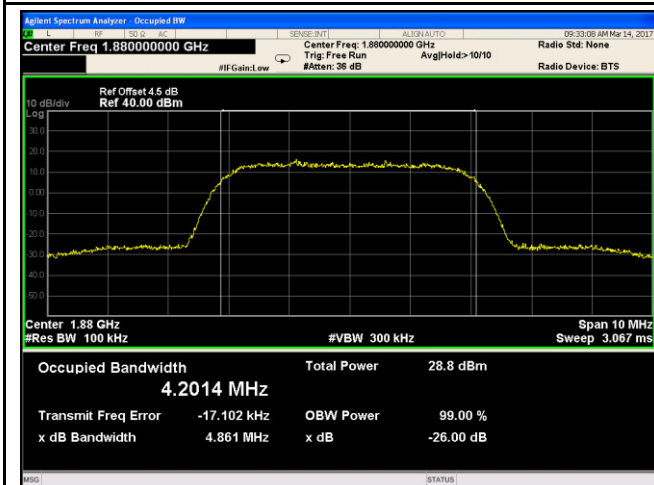
Band V BW - Mid CH 835.0 MHz



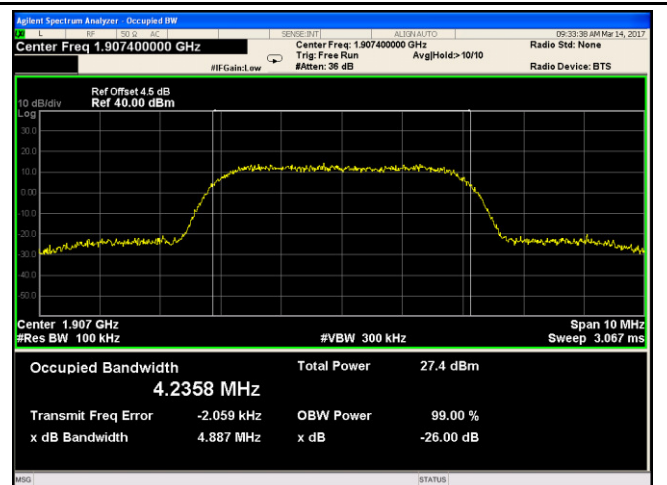
Band V BW - High CH 846.4 MHz



Band II BW - Low CH 1852.4MHz



Band II BW - Mid CH 1880MHz

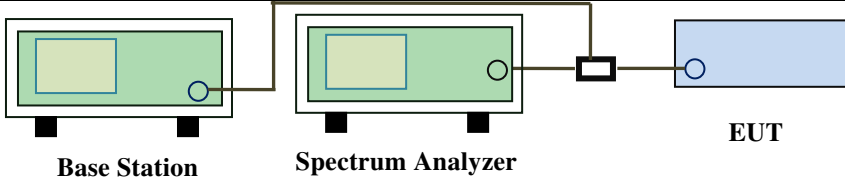


Band II BW - High CH 1907.6MHz

## 6.5 Spurious Emissions at Antenna Terminals

|                      |                |
|----------------------|----------------|
| Temperature          | 22°C           |
| Relative Humidity    | 55%            |
| Atmospheric Pressure | 1012mbar       |
| Test date :          | March 14, 2017 |
| Tested By :          | Loren Luo      |

### Requirement(s):

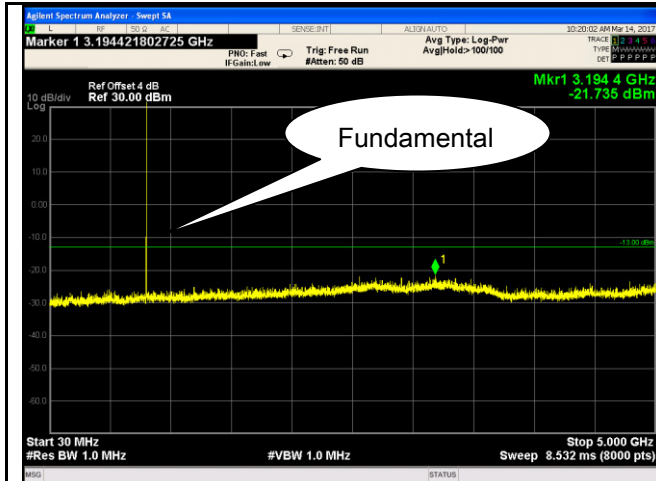
| Spec                                  | Item                                                                                                                                                                                                                                                                     | Requirement                                                                                                                                                               | Applicable                          |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| §2.1051,<br>§22.917(a)&<br>§24.238(a) | a)                                                                                                                                                                                                                                                                       | 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 | <input checked="" type="checkbox"/> |
| Test Setup                            |                                                                                                                                                                                      |                                                                                                                                                                           |                                     |
| Test Procedure                        | <ul style="list-style-type: none"> <li>- The EUT was connected to Spectrum Analyzer and Base Station via power divider.</li> <li>- The Band Edges of low and high channels for the highest RF powers were measured.</li> <li>- Setting RBW as roughly BW/100.</li> </ul> |                                                                                                                                                                           |                                     |
| Remark                                |                                                                                                                                                                                                                                                                          |                                                                                                                                                                           |                                     |
| Result                                | <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail                                                                                                                                                                                                   |                                                                                                                                                                           |                                     |

Test Data    ☒ Yes      ☐ N/A  
 Test Plot    ☒ Yes (See below)      ☐ N/A

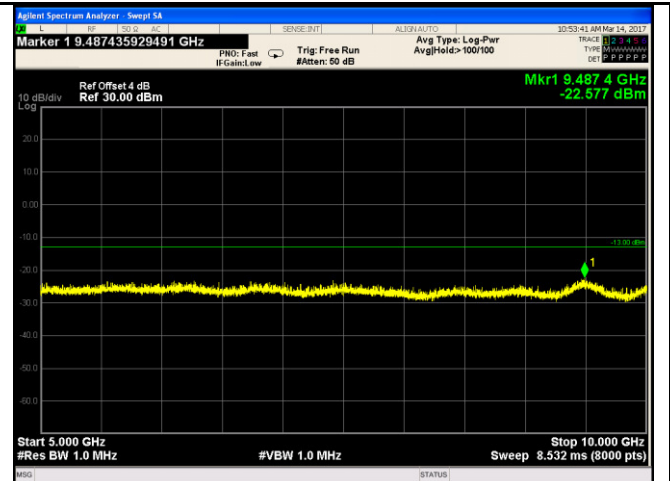
## Test Plots

### GSM Voice:

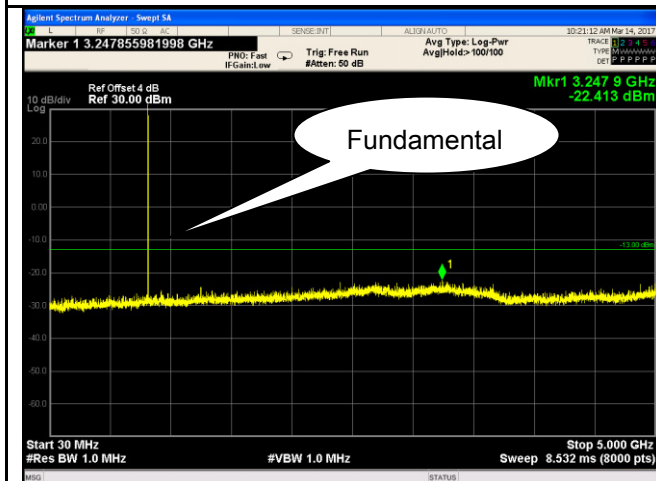
### Cellular Band (Part 22H) result



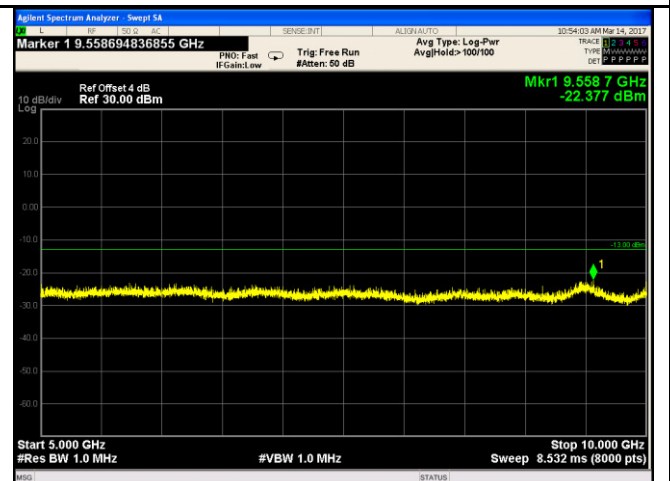
GSM 850 - Low Channel-1



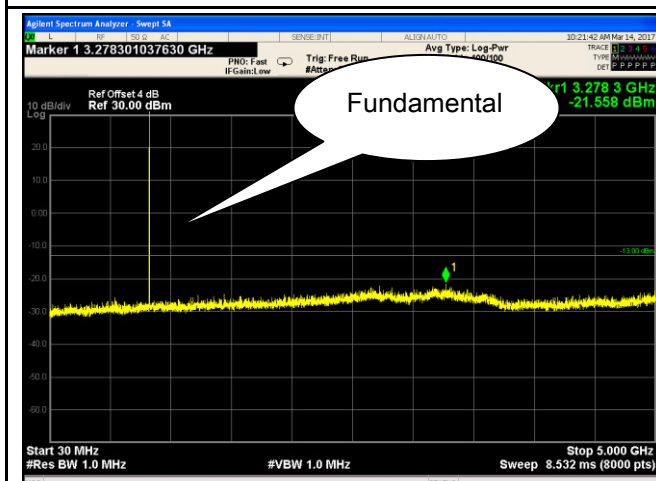
GSM 850 - Low Channel-2



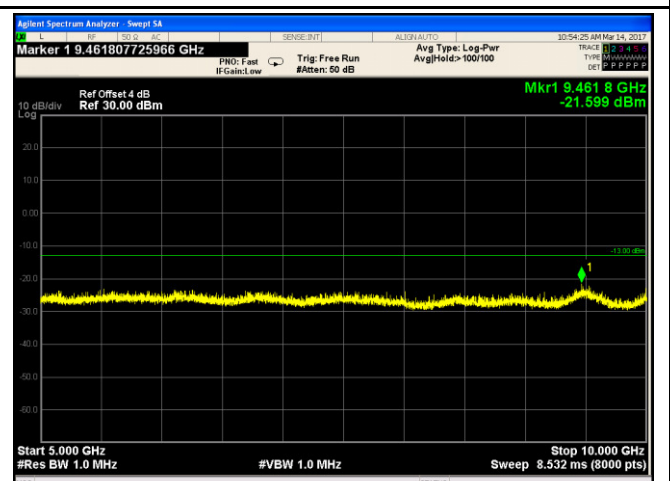
GSM 850 Middle Channel-1



GSM 850 Middle Channel-2

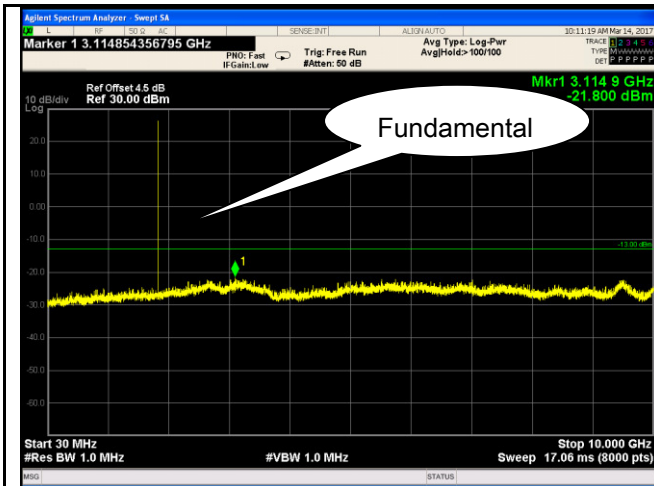


GSM 850 - High Channel-1

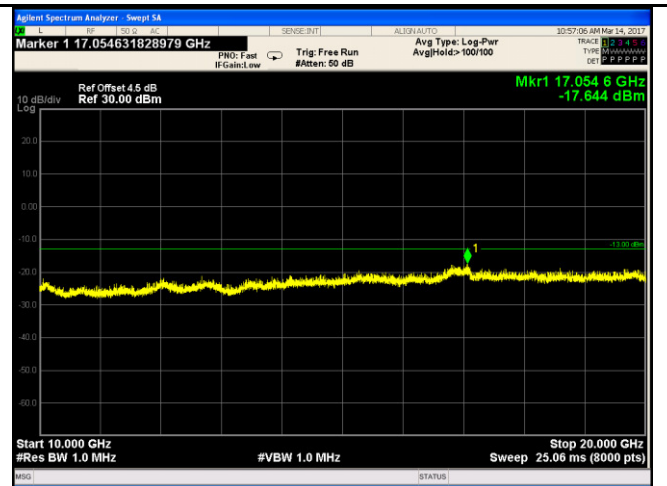


GSM 850 - High Channel-2

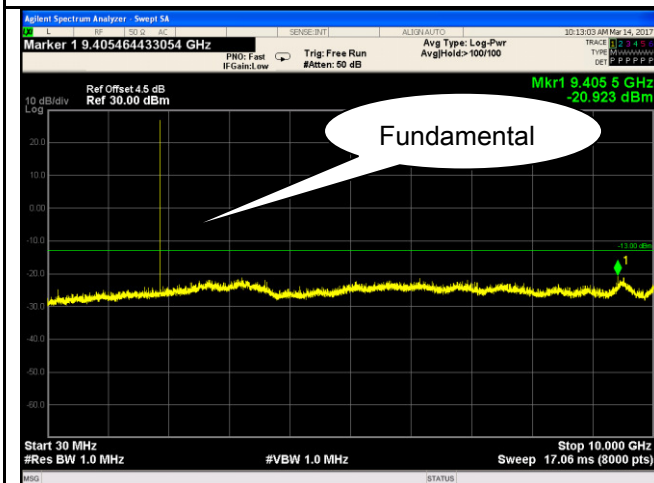
## PCS Band (Part24E) result



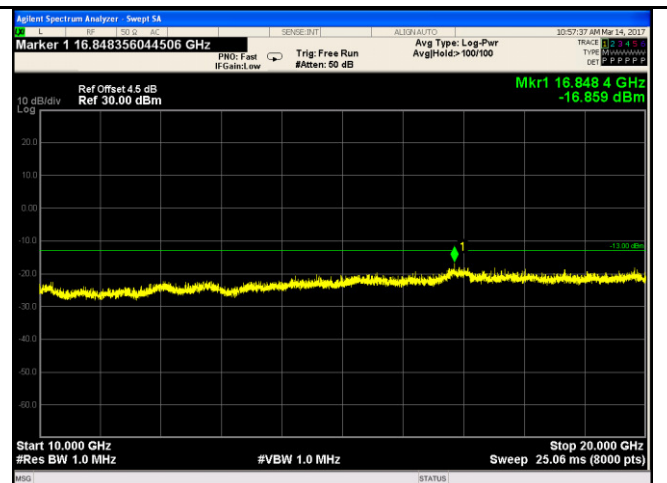
PCS1900 - Low Channel-1



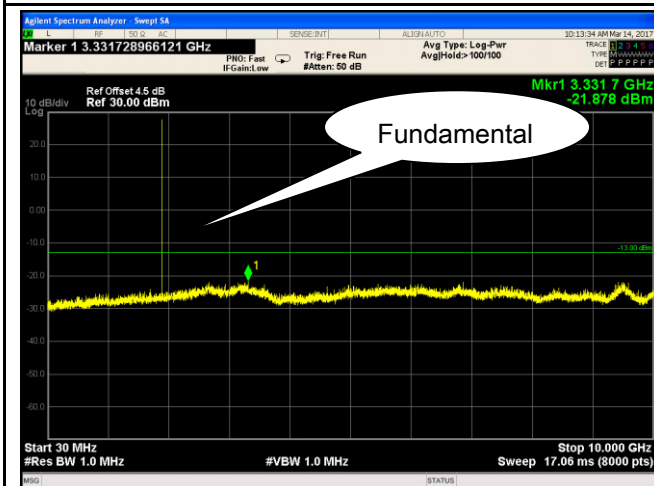
PCS 1900 - Low Channel-2



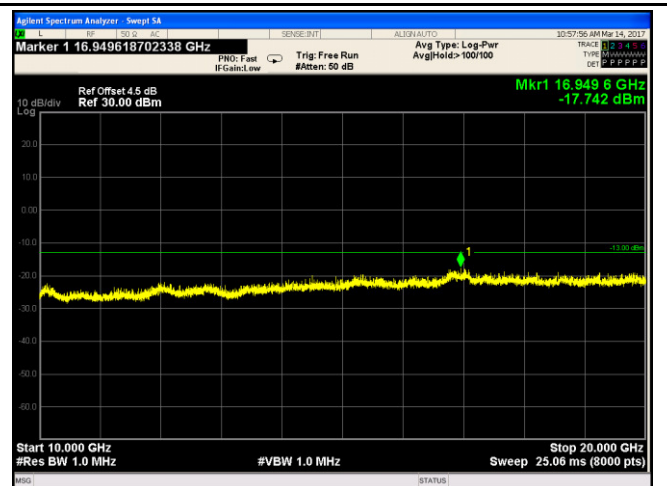
PCS1900 - Middle Channel-1



PCS 1900 - Middle Channel-2



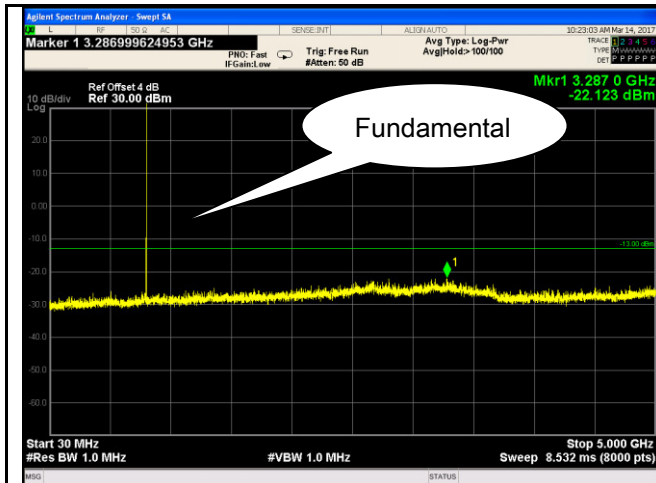
PCS1900 - High Channel-1



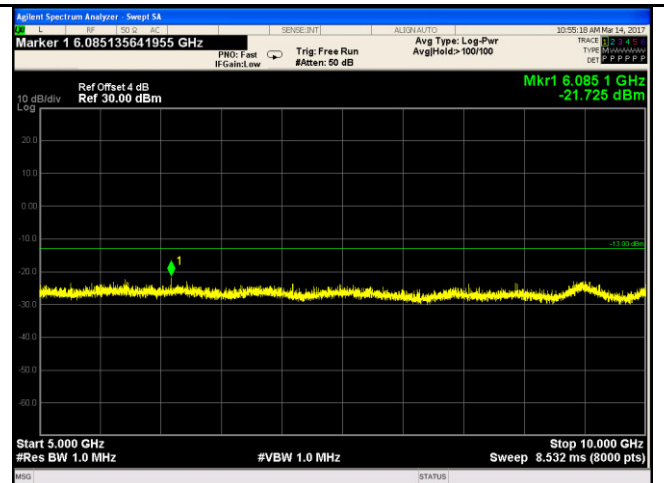
PCS 1900 - High Channel-2

## GPRS:

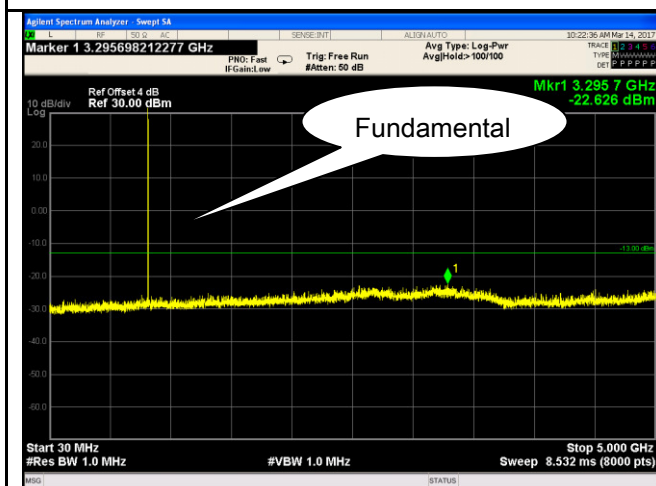
### Cellular Band (Part 22H) result



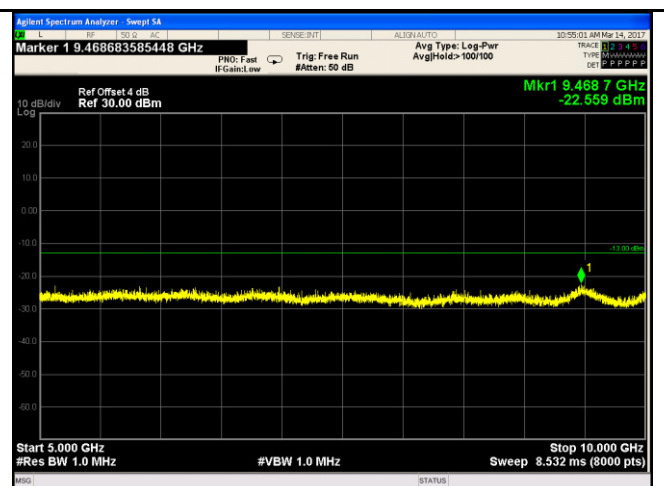
GSM 850 - Low Channel-1



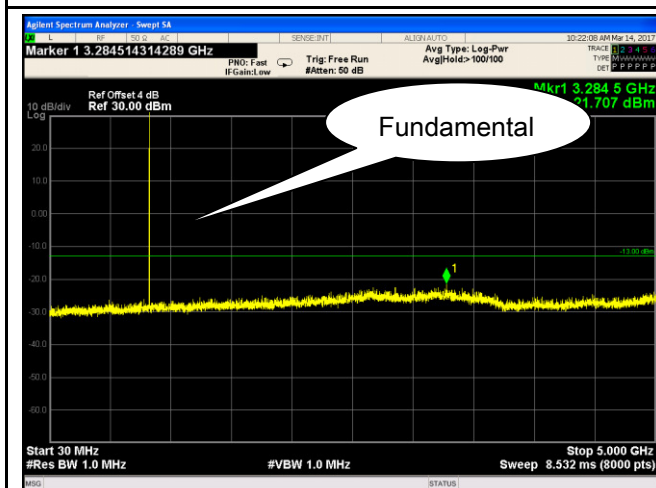
GSM 850 - Low Channel-2



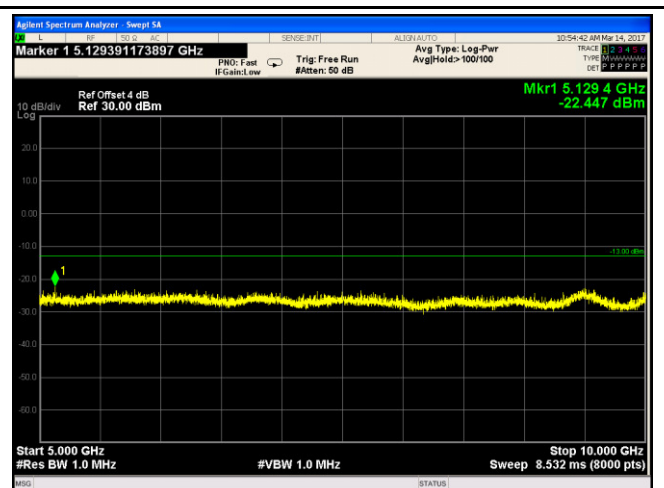
GSM 850 Middle Channel-1



GSM 850 Middle Channel-2

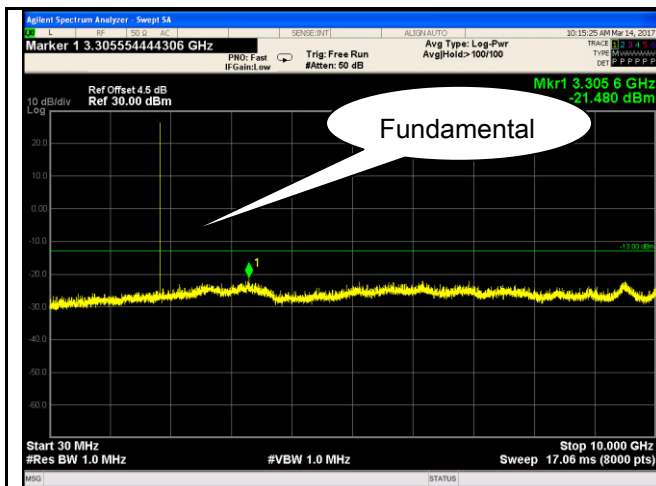


GSM 850 - High Channel-1

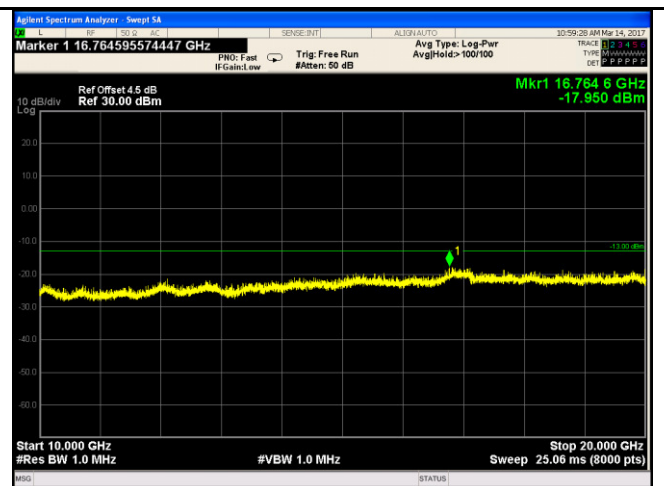


GSM 850 - High Channel-2

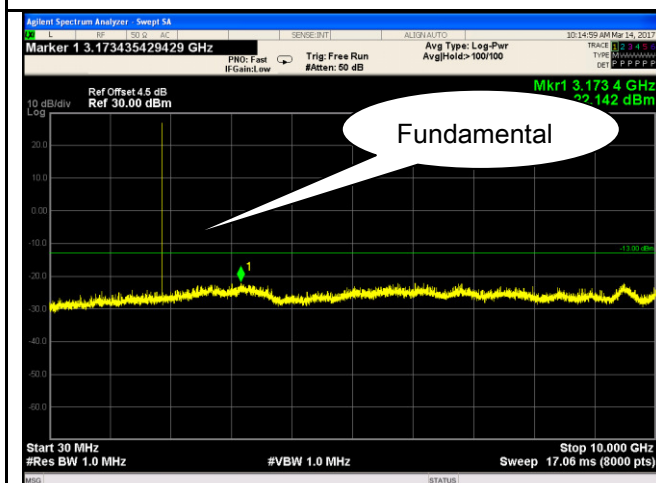
## PCS Band (Part24E) result



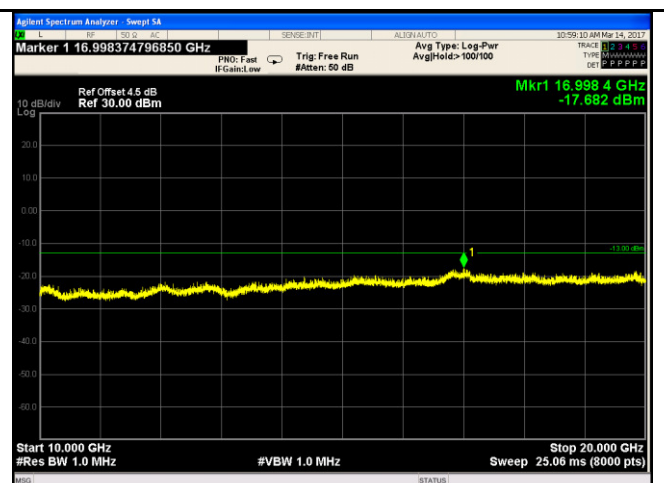
PCS1900 - Low Channel-1



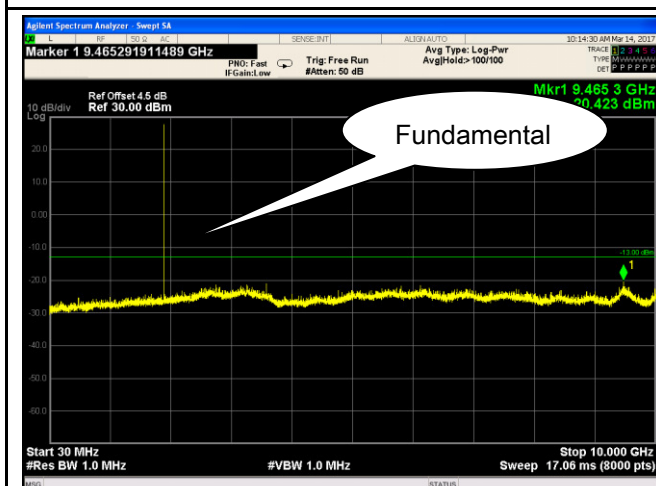
PCS1900 - Low Channel-2



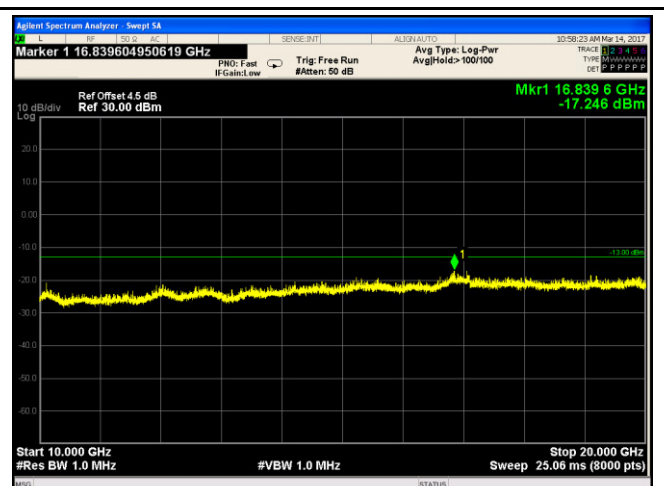
PCS1900 - Middle Channel-1



PCS1900 - Middle Channel-2



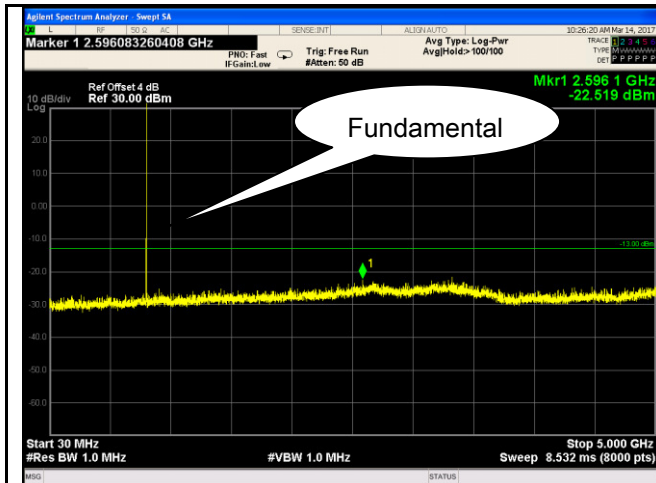
PCS1900 - High Channel-1



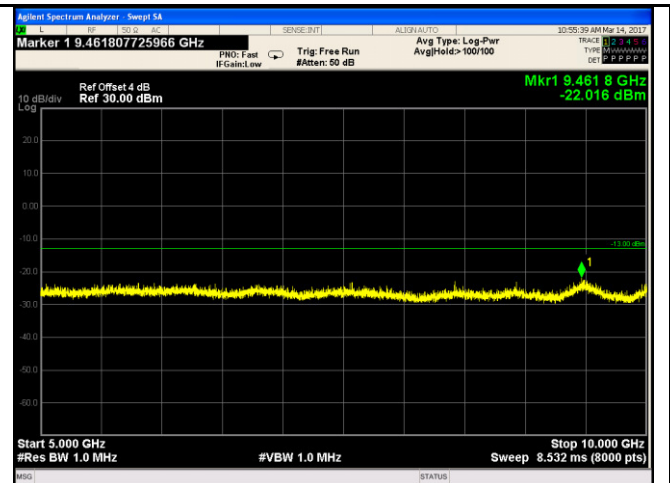
PCS1900 - High Channel-2

## EGPRS (MCS 5):

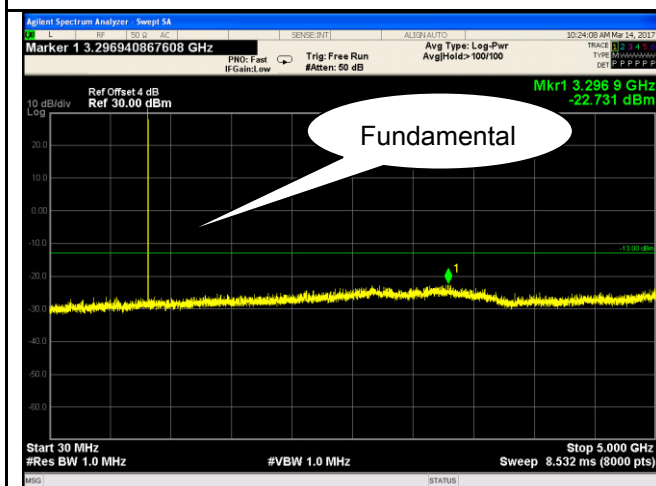
### Cellular Band (Part 22H) result



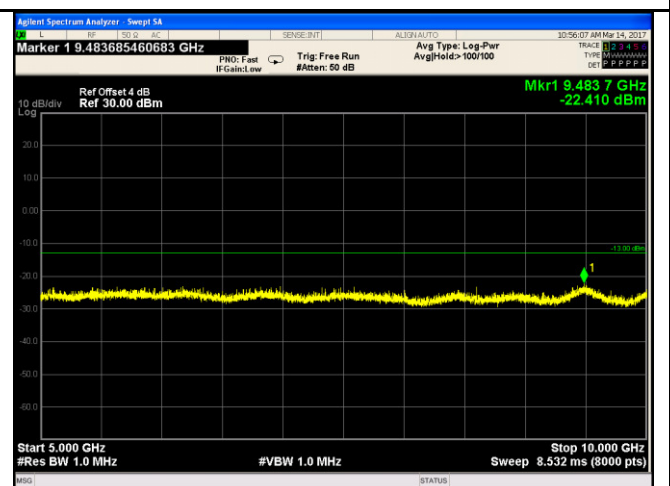
GSM 850 - Low Channel-1



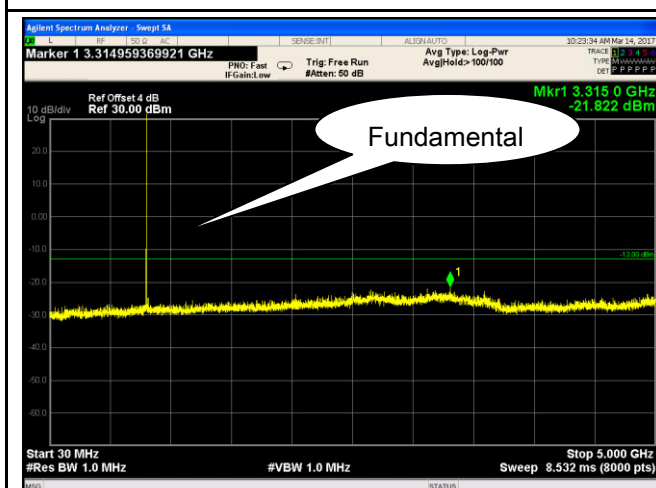
GSM 850 - Low Channel-2



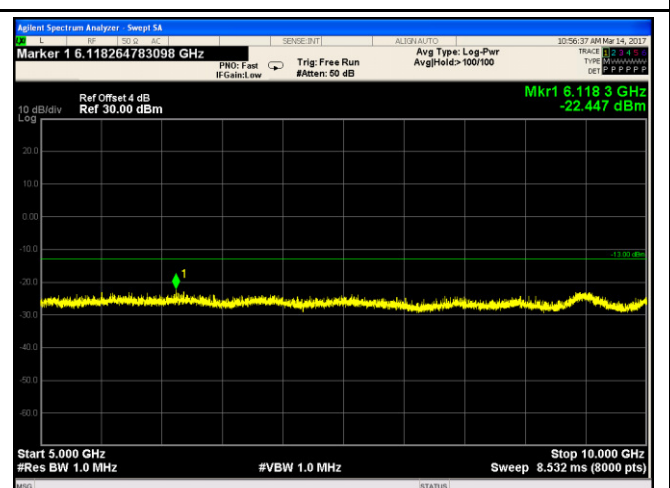
GSM 850 Middle Channel-1



GSM 850 Middle Channel-2

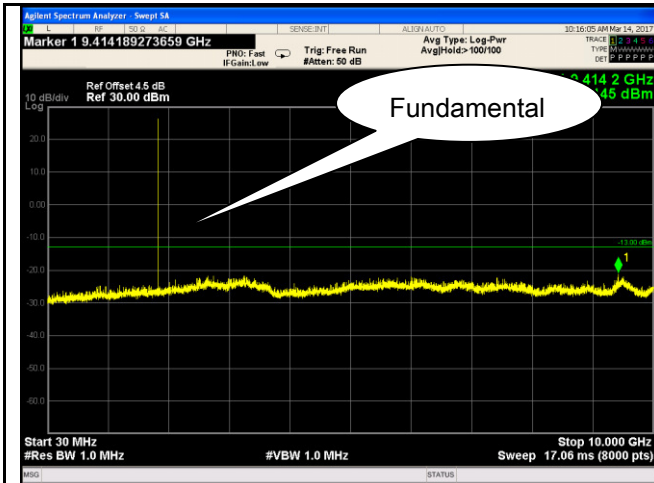


GSM 850 - High Channel-1

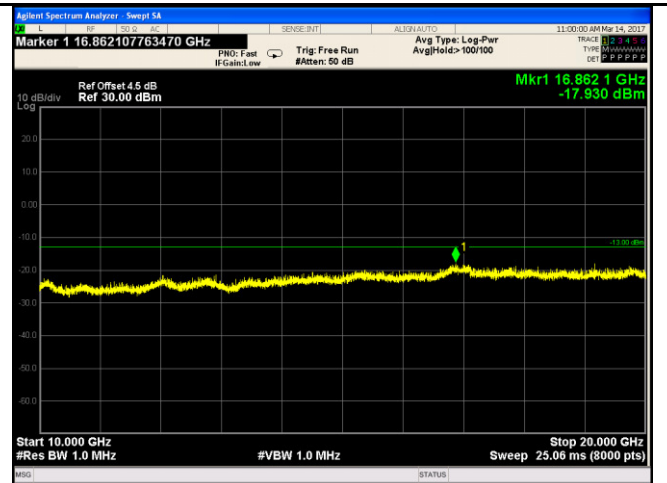


GSM 850 - High Channel-2

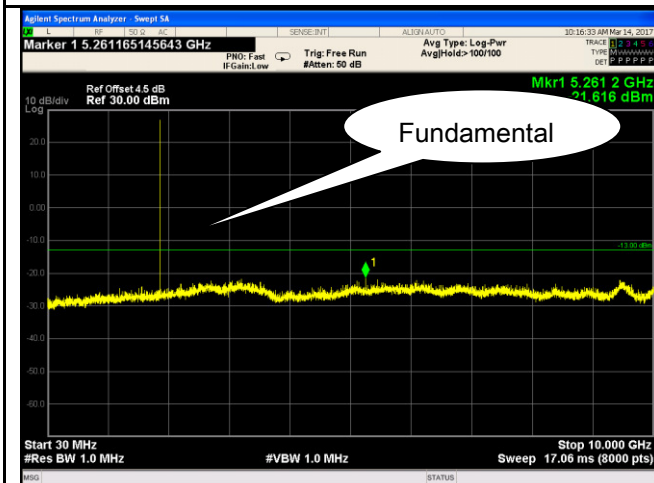
## PCS Band (Part24E) result



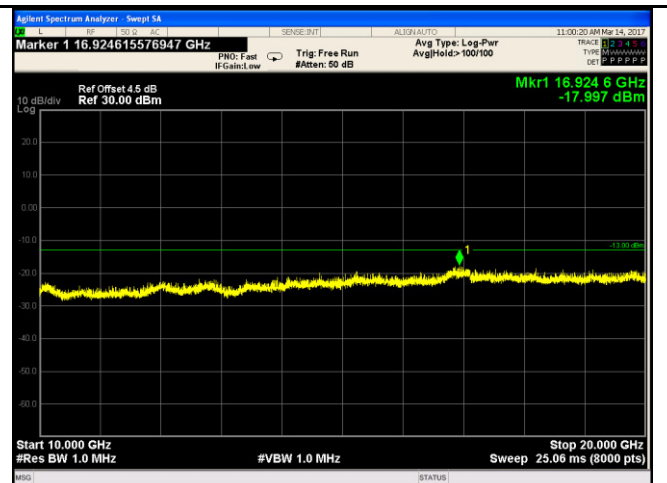
PCS1900 - Low Channel-1



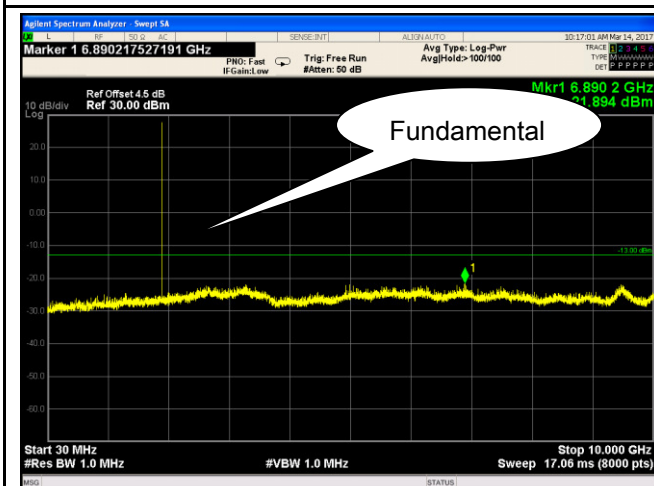
PCS 1900 - Low Channel-2



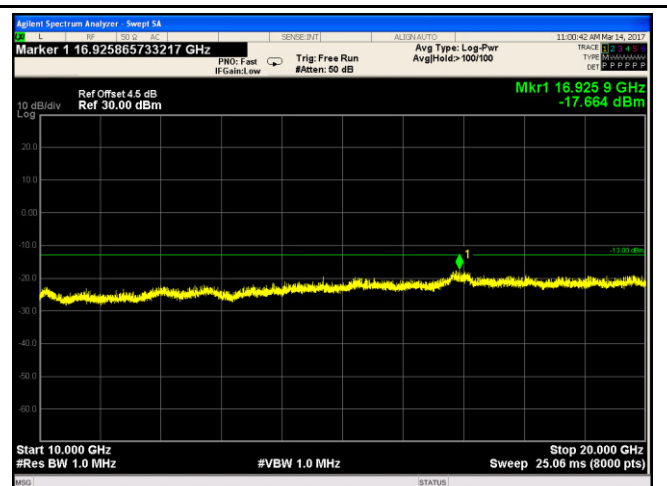
PCS1900 - Middle Channel-1



PCS 1900 - Middle Channel-2



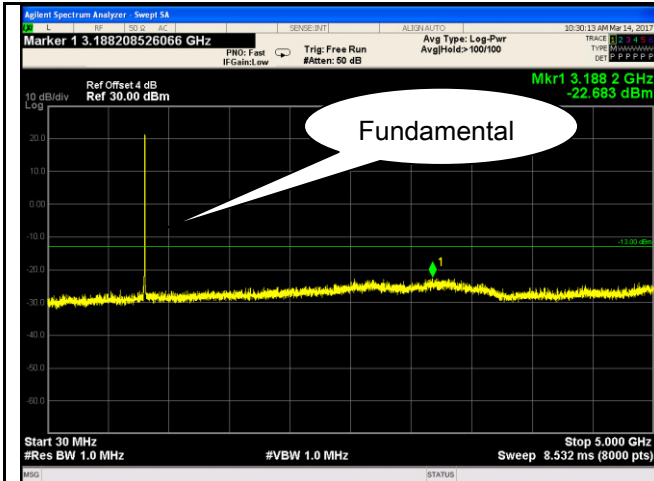
PCS1900 - High Channel-1



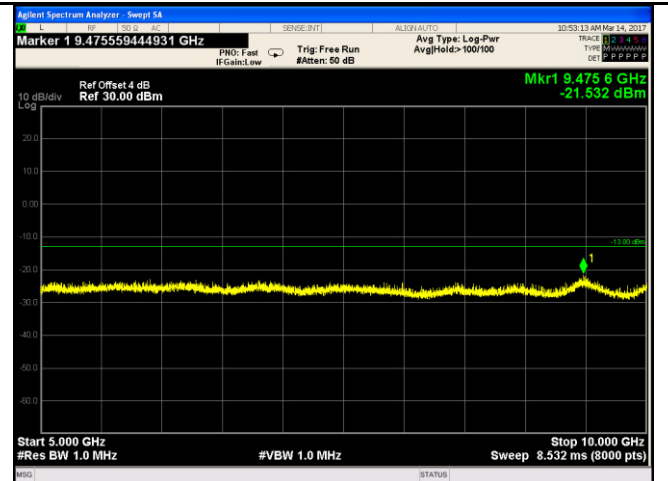
PCS 1900 - High Channel-2

## RMC

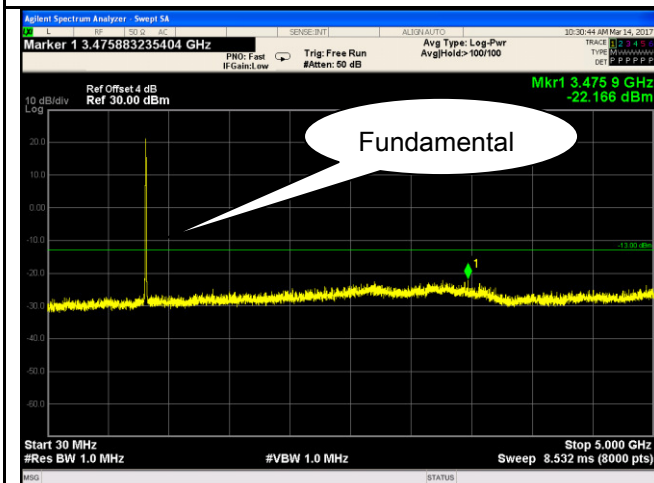
### UMTS-FDD Band V (Part 22H)



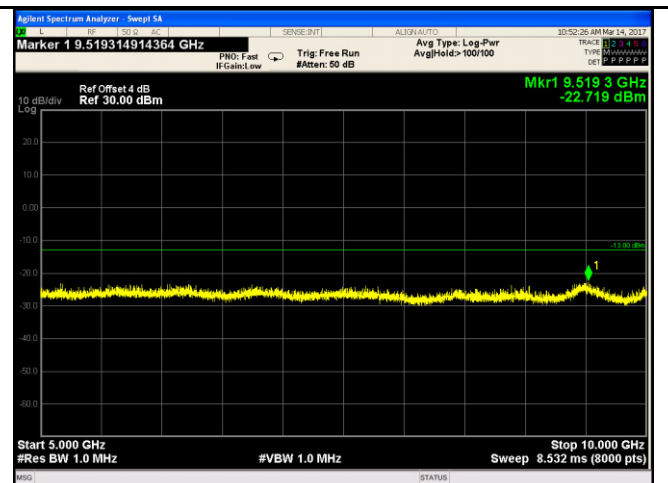
Band V - Low Channel-1



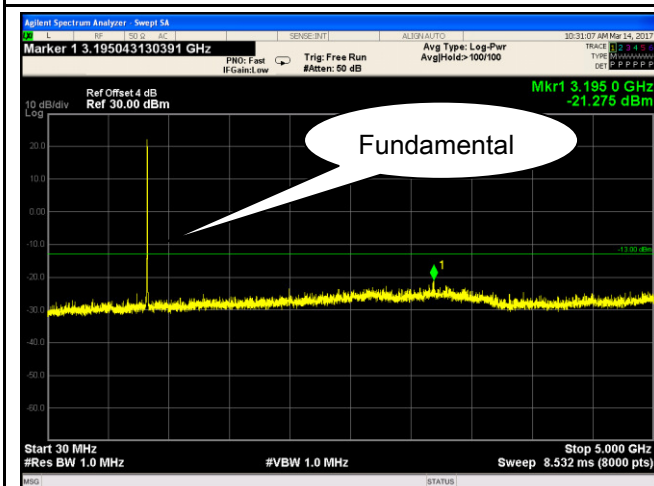
Band V - Low Channel-2



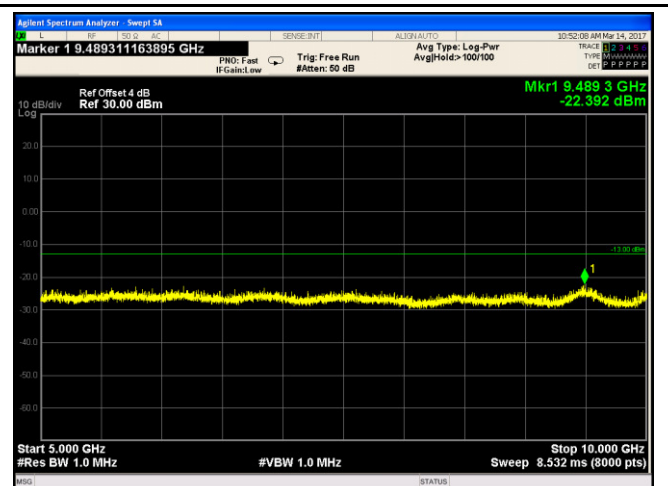
Band V - Middle Channel-1



Band V - Middle Channel-2



Band V - High Channel-1



Band V - High Channel-2

## UMTS-FDD Band II (Part 24E)

