



# FCC RADIO TEST REPORT

FCC ID : A4RG025J  
Equipment : Phone  
Model Name : G025J, G025N, G025M  
Applicant : Google LLC  
1600 Amphitheatre Parkway,  
Mountain View, California, 94043 USA  
Standard : 47 CFR Part 2, 22(H), 24(E), 27(L)

The product was received on Jan. 16, 2020 and testing was started from Jan. 21, 2020 and completed on Mar. 19, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E and has been in compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

*Louis Wu*

Approved by: Louis Wu

**SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory**

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



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## History of this test report

| Report No.   | Version | Description             | Issued Date   |
|--------------|---------|-------------------------|---------------|
| FG9D0616-05A | 01      | Initial issue of report | Mar. 24, 2020 |
|              |         |                         |               |
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## Summary of Test Result

| Report Clause | Ref Std. Clause | Test Items                                                                                                                            | Result (PASS/FAIL) | Remark                                                                                                                               |
|---------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 3.2           | §2.1046         | Conducted Output Power                                                                                                                | Pass               | -                                                                                                                                    |
|               | §22.913 (a)(2)  | Effective Radiated Power<br>(GSM850) (WCDMA Band V) (CDMA BC0)                                                                        |                    |                                                                                                                                      |
|               | §24.232 (c)     | Equivalent Isotropic Radiated Power<br>(GSM1900) (WCDMA Band II) (CDMA BC1)                                                           |                    |                                                                                                                                      |
|               | §27.50 (d)(4)   | Equivalent Isotropic Radiated Power<br>(WCDMA Band IV)                                                                                |                    |                                                                                                                                      |
| 3.3           | §24.232 (d)     | Peak-to-Average Ratio                                                                                                                 | Pass               |                                                                                                                                      |
| 3.4           | §2.1049         | Occupied Bandwidth<br>(GSM850) (WCDMA Band V) (CDMA BC0)<br>(GSM1900) (WCDMA Band II) (CDMA BC1)<br>(WCDMA Band IV)                   | Pass               | -                                                                                                                                    |
|               | §22.917 (b)     |                                                                                                                                       |                    |                                                                                                                                      |
|               | §24.238 (b)     |                                                                                                                                       |                    |                                                                                                                                      |
|               | §27.53 (g)      |                                                                                                                                       |                    |                                                                                                                                      |
| 3.5           | §2.1051         | Band Edge Measurement<br>(GSM850) (WCDMA Band V) (CDMA BC0)<br>(GSM1900) (WCDMA Band II) (CDMA BC1)<br>(WCDMA Band IV)                | Pass               | -                                                                                                                                    |
|               | §22.917 (a)     |                                                                                                                                       |                    |                                                                                                                                      |
|               | §24.238 (a)     |                                                                                                                                       |                    |                                                                                                                                      |
|               | §27.53 (g)      |                                                                                                                                       |                    |                                                                                                                                      |
| 3.6           | §2.1051         | Conducted Emission<br>(GSM850) (WCDMA Band V) (CDMA BC0)<br>(GSM1900) (WCDMA Band II) (CDMA BC1)<br>(WCDMA Band IV)                   | Pass               | -                                                                                                                                    |
|               | §22.917 (a)     |                                                                                                                                       |                    |                                                                                                                                      |
|               | §24.238 (a)     |                                                                                                                                       |                    |                                                                                                                                      |
|               | §27.53 (g)      |                                                                                                                                       |                    |                                                                                                                                      |
| 3.7           | §2.1055         | Frequency Stability<br>Temperature & Voltage                                                                                          | Pass               | -                                                                                                                                    |
|               | §22.355         |                                                                                                                                       |                    |                                                                                                                                      |
|               | §24.235         |                                                                                                                                       |                    |                                                                                                                                      |
|               | §27.54          |                                                                                                                                       |                    |                                                                                                                                      |
| 4.4           | §2.1053         | Field Strength of Spurious Radiation<br>(GSM850) (WCDMA Band V) (CDMA BC0)<br>(GSM1900) (WCDMA Band II) (CDMA BC1)<br>(WCDMA Band IV) | Pass               | Under limit<br>25.08 dB at<br>3763.000 MHz for<br>Primary Antenna<br>Under limit<br>17.91 dB at<br>5730.000 MHz for<br>ASDIV Antenna |
|               | §22.917 (a)     |                                                                                                                                       |                    |                                                                                                                                      |
|               | §24.238 (a)     |                                                                                                                                       |                    |                                                                                                                                      |
|               | §27.53 (h)      |                                                                                                                                       |                    |                                                                                                                                      |

**Declaration of Conformity:**

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

**Comments and Explanations:**

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

**Reviewed by: Wii Chang**

**Report Producer: Lucy Wu**



# 1 General Description

## 1.1 Product Feature of Equipment Under Test

| Product Feature                 |                                                                                                                                                 |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Equipment                       | Phone                                                                                                                                           |
| Model Name                      | G025J, G025N, G025M                                                                                                                             |
| FCC ID                          | A4RG025J                                                                                                                                        |
| EUT supports Radios application | CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE/NFC/GNSS<br>WLAN 11b/g/n HT20<br>WLAN 11a/n HT20/HT40<br>WLAN 11ac VHT20/VHT40/VHT80<br>Bluetooth BR/EDR/LE |
| EUT Stage                       | Identical Prototype                                                                                                                             |

**Remark:** The above EUT's information was declared by manufacturer.

| EUT Information List |                                   |
|----------------------|-----------------------------------|
| S/N                  | Performed Test Item               |
| 01021FQC200422       | Conducted Measurement<br>ERP/EIRP |
| 01021FQC200313       | Radiated Spurious Emission        |

## 1.2 Product Specification of Equipment Under Test

| Standards-related Product Specification |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tx Frequency</b>                     | <b>GSM/GPRS/EDGE:</b><br>850: 824.2 MHz ~ 848.8 MHz<br>1900: 1850.2 MHz ~ 1909.8 MHz<br><b>CDMA/EV-DO</b><br>BC0 824.70 MHz ~ 848.31 MHz<br>BC1: 1851.25 MHz ~ 1908.75 MHz<br><b>WCDMA:</b><br>Band V: 826.4 MHz ~ 846.6 MHz<br>Band II: 1852.4 MHz ~ 1907.6 MHz<br>Band IV: 1712.4 MHz ~ 1752.6 MHz                                                                                                                                                                           |
| <b>Rx Frequency</b>                     | <b>GSM/GPRS/EDGE:</b><br>850: 869.2 MHz ~ 893.8 MHz<br>1900: 1930.2 MHz ~ 1989.8 MHz<br><b>CDMA/EV-DO</b><br>BC0 869.70 MHz ~ 893.31 MHz<br>BC1: 1931.25 MHz ~ 1988.75 MHz<br><b>WCDMA:</b><br>Band V: 871.4 MHz ~ 891.6 MHz<br>Band II: 1932.4 MHz ~ 1987.6 MHz<br>Band IV: 2112.4 MHz ~ 2152.6 MHz                                                                                                                                                                           |
| <b>Maximum Output Power to Antenna</b>  | <b>&lt;Primary Antenna&gt;</b><br><b>GSM/GPRS/EDGE:</b><br>850: 32.98 dBm<br>1900: 29.84 dBm<br><b>CDMA/EV-DO</b><br>BC0 24.92 dBm<br>BC1: 24.93 dBm<br><b>WCDMA:</b><br>Band V: 25.25 dBm<br>Band II: 25.05 dBm<br>Band IV: 24.87 dBm<br><b>&lt;ASDIV Antenna&gt;</b><br><b>GSM/GPRS/EDGE:</b><br>850: 32.37 dBm<br>1900: 30.31 dBm<br><b>CDMA/EV-DO</b><br>BC0 24.52 dBm<br>BC1: 25.41 dBm<br><b>WCDMA:</b><br>Band V: 24.86 dBm<br>Band II: 25.19 dBm<br>Band IV: 25.17 dBm |

| Standards-related Product Specification |                                                                                                                                                                                |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Antenna Type                            | <b>&lt;Primary Antenna&gt;</b> : PIFA Antenna type<br><b>&lt;ASDIV Antenna&gt;</b> : PIFA Antenna type                                                                         |
| Type of Modulation                      | GSM: GMSK<br>GPRS: GMSK<br>EDGE: GMSK / 8PSK<br>WCDMA: BPSK (Uplink)<br>HSDPA: 64QAM (Downlink)<br>HSUPA: QPSK (Uplink)<br>CDMA2000 1xRTT: QPSK<br>CDMA2000 1xEV-DO: QPSK/8PSK |

**<Primary Antenna>**

| Radio Tech | Band Number | Antenna name | Gain |
|------------|-------------|--------------|------|
| CDMA       | BC0         | ANT0         | -2.2 |
| CDMA       | BC1         | ANT2         | 1.9  |
| WCDMA      | B2          | ANT2         | 1.9  |
| WCDMA      | B4          | ANT2         | 1.1  |
| WCDMA      | B5          | ANT0         | -2.2 |
| GSM1Tx     | 850         | ANT0         | -2.2 |
| GSM1Tx     | 1900        | ANT2         | 1.9  |

**<ASDIV Antenna>**

| Radio Tech | Band Number | Antenna name | Gain |
|------------|-------------|--------------|------|
| CDMA       | BC0         | ANT1         | -3.5 |
| CDMA       | BC1         | ANT0         | 1.7  |
| WCDMA      | B2          | ANT0         | 1.7  |
| WCDMA      | B4          | ANT0         | -0.4 |
| WCDMA      | B5          | ANT1         | -3.5 |
| GSM1Tx     | 850         | ANT1         | -3.5 |
| GSM1Tx     | 1900        | ANT0         | 1.7  |

### 1.3 Modification of EUT

No modifications are made to the EUT during all test items.



## 1.4 Testing Location

|                    |                                                                                                                    |
|--------------------|--------------------------------------------------------------------------------------------------------------------|
| Test Site          | SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory                                                |
| Test Site Location | No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)<br>TEL: +886-3-327-3456<br>FAX: +886-3-328-4978 |
| Test Site No.      | <b>Sporton Site No.</b><br>TH03-HY                                                                                 |
| Test Engineer      | Louis Chung                                                                                                        |
| Temperature        | 23.2~24.6℃                                                                                                         |
| Relative Humidity  | 52.6~58.2%                                                                                                         |

**Note:** The test site complies with ANSI C63.4 2014 requirement.

|                    |                                                                                                                                           |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Test Site          | SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory                                                                       |
| Test Site Location | No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist.,<br>Taoyuan City, Taiwan (R.O.C.)<br>TEL: +886-3-327-0868<br>FAX: +886-3-327-0855 |
| Test Site No.      | <b>Sporton Site No.</b><br>03CH13-HY                                                                                                      |
| Test Engineer      | Jimmy Chung , Karl Hou and Wilson Wu                                                                                                      |
| Temperature        | 21.5~23.5℃                                                                                                                                |
| Relative Humidity  | 49.5~55.5%                                                                                                                                |

**Note:** The test site complies with ANSI C63.4 2014 requirement.

FCC Designation No.: TW1190 and TW0007

## 1.5 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ ANSI C63.26-2015
- ♦ ANSI / TIA-603-E
- ♦ 47 CFR Part 2, 22(H), 24(E), 27(L)
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01

**Remark:**

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



## 2 Test Configuration of Equipment Under Test

### 2.1 Test Mode

Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Primary Antenna : Y Plane with Accessory for Ant. 0 and Ant. 2, Z Plane with Accessory for Ant. 2; ASDIV Antenna: Y Plane with Accessory for Ant. 0, Z Plane with Accessory for Ant. 0 and Ant. 1) were recorded in this report.

Radiated emissions were investigated as following frequency range:

1. 30 MHz to 9000 MHz for GSM850 and WCDMA Band V and CDMA BC0
2. 30 MHz to 18000 MHz for WCDMA Band IV
3. 30 MHz to 19100 MHz for GSM1900 and WCDMA Band II and CDMA BC1

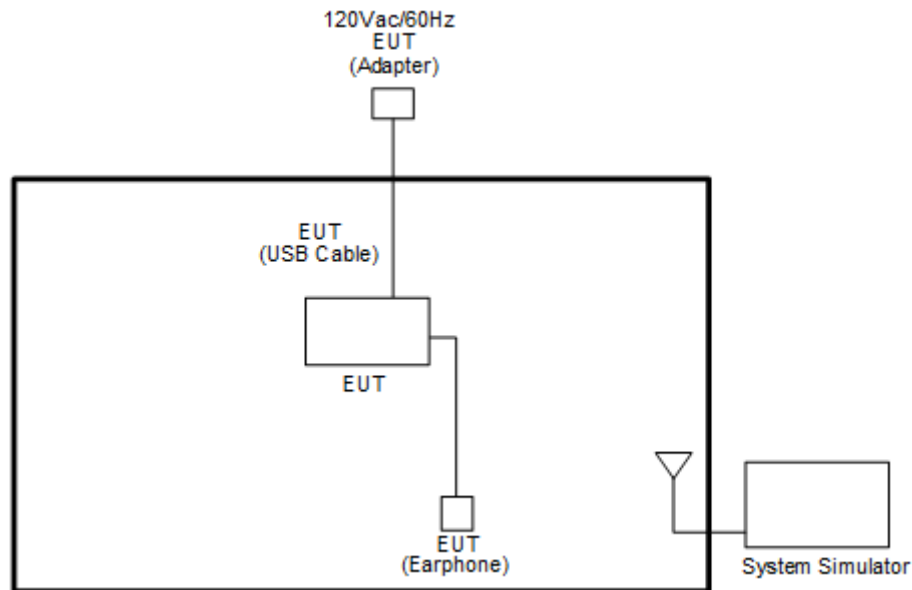
All modes and data rates and positions were investigated.

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

| Test Modes    |                                            |                                            |
|---------------|--------------------------------------------|--------------------------------------------|
| Band          | Radiated TCs                               | Conducted TCs                              |
| GSM850        | ■ GPRS Class 8 Link<br>■ EDGE Class 8 Link | ■ GPRS Class 8 Link<br>■ EDGE Class 8 Link |
| GSM1900       | ■ GPRS Class 8 Link<br>■ EDGE Class 8 Link | ■ GPRS Class 8 Link<br>■ EDGE Class 8 Link |
| WCDMA Band V  | ■ RMC 12.2Kbps Link                        | ■ RMC 12.2Kbps Link                        |
| WCDMA Band II | ■ RMC 12.2Kbps Link                        | ■ RMC 12.2Kbps Link                        |
| WCDMA Band IV | ■ RMC 12.2Kbps Link                        | ■ RMC 12.2Kbps Link                        |
| CDMA BC0      | ■ 1xRTT Link                               | ■ 1xRTT Link<br>■ 1xEV-DO Link             |
| CDMA BC1      | ■ 1xRTT Link                               | ■ 1xRTT Link<br>■ 1xEV-DO Link             |

**Remark:** All the radiated test cases were performed with Adapter 1, Battery 1 and USB Cable 1.

## 2.2 Connection Diagram of Test System



## 2.3 Support Unit used in test configuration

| Item | Equipment        | Trade Name | Model No. | FCC ID | Data Cable | Power Cord        |
|------|------------------|------------|-----------|--------|------------|-------------------|
| 1.   | System Simulator | R&S        | CMU 200   | N/A    | N/A        | Unshielded, 1.8 m |

## 2.4 Measurement Results Explanation Example

### For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between RF conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level will be exactly the RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

*Offset = RF cable loss + attenuator factor.*

The following shows an offset computation example with RF cable loss 4.2 dB and a 10dB attenuator.

Example:

$$\begin{aligned}
 \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)} \\
 &= 4.2 + 10 = 14.2 \text{ (dB)}
 \end{aligned}$$



## 2.5 Frequency List of Low/Middle/High Channels

| Frequency List   |                        |         |        |         |
|------------------|------------------------|---------|--------|---------|
| Band             | Channel/Frequency(MHz) | Lowest  | Middle | Highest |
| GSM850           | Channel                | 128     | 189    | 251     |
|                  | Frequency              | 824.2   | 836.4  | 848.8   |
| WCDMA<br>Band V  | Channel                | 4132    | 4182   | 4233    |
|                  | Frequency              | 826.4   | 836.4  | 846.6   |
| GSM1900          | Channel                | 512     | 661    | 810     |
|                  | Frequency              | 1850.2  | 1880.0 | 1909.8  |
| WCDMA<br>Band II | Channel                | 9262    | 9400   | 9538    |
|                  | Frequency              | 1852.4  | 1880.0 | 1907.6  |
| WCDMA<br>Band IV | Channel                | 1312    | 1413   | 1513    |
|                  | Frequency              | 1712.4  | 1732.6 | 1752.6  |
| CDMA2000<br>BC0  | Channel                | 1013    | 384    | 777     |
|                  | Frequency              | 824.7   | 836.52 | 848.31  |
| CDMA2000<br>BC1  | Channel                | 25      | 600    | 1175    |
|                  | Frequency              | 1851.25 | 1880.0 | 1908.75 |

### 3 Conducted Test Result

#### 3.1 Measuring Instruments

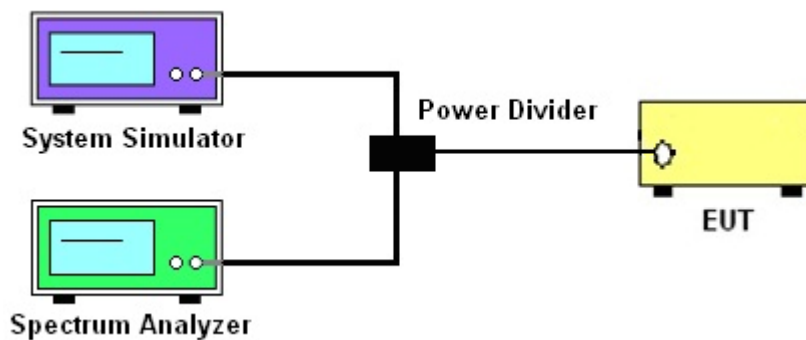
See list of measuring instruments of this test report.

##### 3.1.1 Test Setup

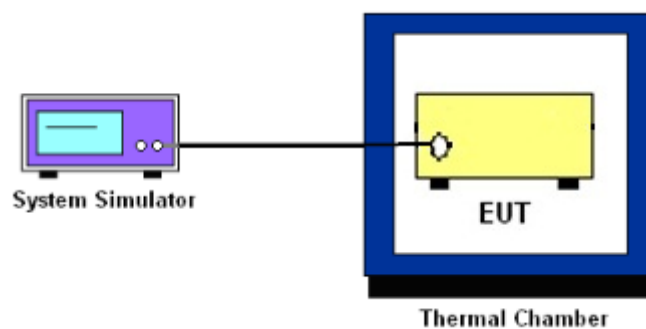
##### 3.1.2 Conducted Output Power



##### 3.1.3 Peak-to-Average Ratio, Occupied Bandwidth, Conducted Band-Edge and Conducted Spurious Emission



##### 3.1.4 Frequency Stability



##### 3.1.5 Test Result of Conducted Test

Please refer to Appendix A.



## **3.2 Conducted Output Power and ERP/EIRP**

### **3.2.1 Description of the Conducted Output Power and ERP/EIRP**

A system simulator was used to establish communication with the EUT. Its parameters were set to enforce EUT transmitting at the maximum power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The ERP of mobile transmitters must not exceed 7 Watts for GSM850 and WCDMA Band V and CDMA BC0

The EIRP of mobile transmitters must not exceed 2 Watts for GSM1900 and WCDMA Band II and CDMA BC1

The EIRP of mobile transmitters must not exceed 1 Watts for WCDMA Band IV

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$ ,  $ERP = EIRP - 2.15$ , where

$P_T$  = transmitter output power in dBm

$G_T$  = gain of the transmitting antenna in dBi

$L_C$  = signal attenuation in the connecting cable between the transmitter and antenna in dB

### **3.2.2 Test Procedures**

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure the maximum burst average power for GSM and maximum average power for other modulation signal.



### **3.3 Peak-to-Average Ratio**

#### **3.3.1 Description of the PAR Measurement**

The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

#### **3.3.2 Test Procedures**

The testing follows ANSI C63.26-2015 Section 5.2.6

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. Set EUT to transmit at maximum output power.
3. When the duty cycle is less than 98%, then signal gating will be implemented on the spectrum analyzer by triggering from the system simulator.
4. Set the CCDF (Complementary Cumulative Distribution Function) option of the spectrum analyzer.
5. Record the maximum PAPR level associated with a probability of 0.1%.

### 3.4 99% Occupied Bandwidth and 26dB Bandwidth Measurement

#### 3.4.1 Description of 99% Occupied Bandwidth and 26dB Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

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

#### 3.4.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.4.3 (26dB) and Section 5.4.4 (99OB)

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



## **3.5 Conducted Band Edge**

### **3.5.1 Description of Conducted Band Edge Measurement**

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least  $43 + 10 \log (P)$  dB.

### **3.5.2 Test Procedures**

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

1. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
2. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator.  
The path loss was compensated to the results for each measurement.
3. The band edges of low and high channels for the highest RF powers were measured.
4. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
5. The limit line is derived from  $43 + 10\log(P)$  dB below the transmitter power P(Watts)



## **3.6 Conducted Spurious Emission**

### **3.6.1 Description of Conducted Spurious Emission Measurement**

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least  $43 + 10 \log (P)$  dB.

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

### **3.6.2 Test Procedures**

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

1. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
2. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator.  
The path loss was compensated to the results for each measurement.
3. The middle channel for the highest RF power within the transmitting frequency was measured.
4. The conducted spurious emission for the whole frequency range was taken.
5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
6. The limit line is derived from  $43 + 10\log(P)$  dB below the transmitter power P(Watts)

### 3.7 Frequency Stability

#### 3.7.1 Description of Frequency Stability Measurement

22.355

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within  $\pm 0.00025\%$  ( $\pm 2.5\text{ppm}$ ) of the center frequency.

24.235 & 27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

#### 3.7.2 Test Procedures for Temperature Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

1. The EUT was set up in the thermal chamber and connected with the system simulator.
2. With power OFF, the temperature was decreased to  $-30^{\circ}\text{C}$  and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in  $10^{\circ}\text{C}$  steps up to  $50^{\circ}\text{C}$ . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

#### 3.7.3 Test Procedures for Voltage Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

1. The EUT was placed in a temperature chamber at  $20\pm 5^{\circ}\text{C}$  and connected with the system simulator.
2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

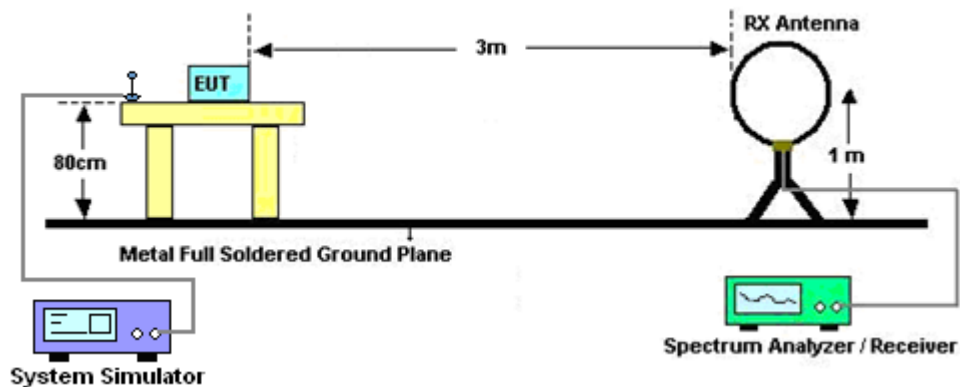
## 4 Radiated Test Items

### 4.1 Measuring Instruments

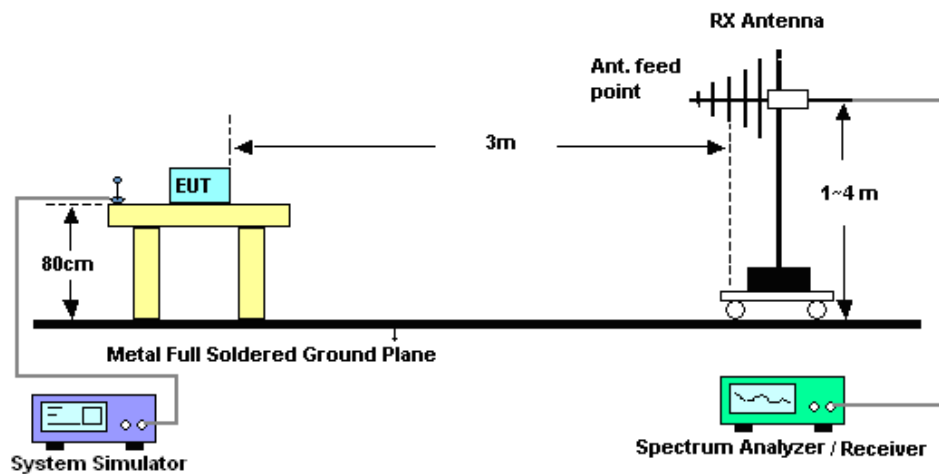
See list of measuring instruments of this test report.

### 4.2 Test Setup

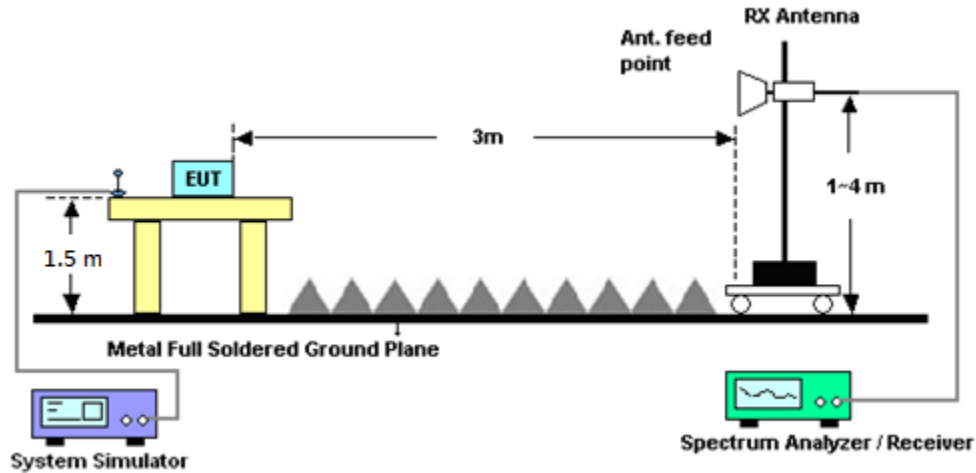
For radiated emissions below 30MHz



For radiated test from 30MHz to 1GHz



For radiated test above 1GHz



### 4.3 Test Result of Radiated Test

Please refer to Appendix B.

**Note:**

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.



## **4.4 Field Strength of Spurious Radiation Measurement**

### **4.4.1 Description of Field Strength of Spurious Radiated Measurement**

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least  $43 + 10 \log (P)$  dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

### **4.4.2 Test Procedures**

The testing follows FCC KDB 971168 D01 v03r01 Section 7 and ANSI / TIA-603-E Section 2.2.12.

1. The EUT was placed on a rotatable wooden table 0.8 meters for frequency below 1GHz and 1.5 meter for frequency above 1GHz above the ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search for the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10.  $EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$
11.  $ERP \text{ (dBm)} = EIRP - 2.15$
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
13. The limit line is derived from  $43 + 10\log(P)$  dB below the transmitter power P(Watts)



## 5 List of Measuring Equipment

| Instrument                | Manufacturer      | Model No.                       | Serial No.     | Characteristics                  | Calibration Date | Test Date                       | Due Date      | Remark                   |
|---------------------------|-------------------|---------------------------------|----------------|----------------------------------|------------------|---------------------------------|---------------|--------------------------|
| Hygrometer                | Testo             | 608-H1                          | 34893241       | N/A                              | Mar. 06, 2019    | Feb. 04, 2020~<br>Feb. 05, 2020 | Mar. 05, 2020 | Conducted<br>(TH03-HY)   |
| Hygrometer                | Testo             | HTC-2                           | 1              | N/A                              | Jun. 17, 2019    | Mar. 19, 2020                   | Jun. 16, 2020 | Conducted<br>(TH03-HY)   |
| Spectrum Analyzer         | Rohde & Schwarz   | FSP30                           | 101329         | 9kHz~30GHz                       | Sep. 04, 2019    | Feb. 04, 2020~<br>Mar. 19, 2020 | Sep. 03, 2020 | Conducted<br>(TH03-HY)   |
| Temperature Chamber       | ESPEC             | SU-641                          | 92013721       | -30℃ ~70℃                        | Nov. 26, 2019    | Feb. 04, 2020~<br>Feb. 05, 2020 | Nov. 25, 2020 | Conducted<br>(TH03-HY)   |
| Programmable Power Supply | GW Instek         | PSS-2005                        | EL890001       | 1V~20V<br>0.5A~4A                | Oct. 09, 2019    | Feb. 04, 2020~<br>Feb. 05, 2020 | Oct. 08, 2020 | Conducted<br>(TH03-HY)   |
| Base Station(Measure)     | Rohde & Schwarz   | CMU200                          | 117995         | GSM / GPRS /<br>WCDMA /<br>CDMA  | Aug. 23, 2019    | Feb. 04, 2020~<br>Feb. 05, 2020 | Aug. 22, 2020 | Conducted<br>(TH03-HY)   |
| Power Divider             | Warison           | WCOU-0.4-26<br>.5S-20           | #A             | N/A                              | Nov. 06, 2019    | Feb. 04, 2020~<br>Feb. 05, 2020 | Nov. 05, 2020 | Conducted<br>(TH03-HY)   |
| Amplifier                 | Sonoma-Instrument | 310 N                           | 187282         | 9KHz~1GHz                        | Dec. 17, 2019    | Jan. 21, 2020~<br>Mar. 19, 2020 | Dec. 16, 2020 | Radiation<br>(03CH13-HY) |
| Bilog Antenna             | TESEQ             | CBL<br>6111D&00800<br>N1D01N-06 | 40103&07       | 30MHz to 1GHz                    | Apr. 30, 2019    | Jan. 21, 2020~<br>Mar. 19, 2020 | Apr. 29, 2020 | Radiation<br>(03CH13-HY) |
| Bilog Antenna             | TESEQ             | CBL<br>6111D&00800<br>N1D01N-06 | 41912 &<br>07  | 30MHz to 1GHz                    | Apr. 30, 2019    | Jan. 21, 2020~<br>Mar. 19, 2020 | Apr. 29, 2020 | Radiation<br>(03CH13-HY) |
| Horn Antenna              | SCHWARZBECK       | BBHA 9120 D                     | 9120D-124<br>1 | 1GHz ~ 18GHz                     | Jul. 02, 2019    | Jan. 21, 2020~<br>Mar. 19, 2020 | Jul. 01, 2020 | Radiation<br>(03CH13-HY) |
| Horn Antenna              | SCHWARZBECK       | BBHA 9120 D                     | 9120D-121<br>2 | 1GHz ~ 18GHz                     | May 14, 2019     | Jan. 21, 2020~<br>Mar. 19, 2020 | May 13, 2020  | Radiation<br>(03CH13-HY) |
| Preamplifier              | MITEQ             | AMF-7D-0010<br>1800-30-10P      | 1590074        | 1GHz~18GHz                       | May 20, 2019     | Jan. 21, 2020~<br>Mar. 19, 2020 | May 19, 2020  | Radiation<br>(03CH13-HY) |
| Preamplifier              | Keysight          | 83017A                          | MY532701<br>47 | 1GHz~26.5GHz                     | Oct. 28, 2019    | Jan. 21, 2020~<br>Mar. 19, 2020 | Oct. 27, 2020 | Radiation<br>(03CH13-HY) |
| Signal Generator          | Rohde & Schwarz   | SMF100A                         | 101107         | 100kHz~40GHz                     | Aug. 27, 2019    | Jan. 21, 2020~<br>Mar. 19, 2020 | Aug. 26, 2020 | Radiation<br>(03CH13-HY) |
| Spectrum Analyzer         | Keysight          | N9010A                          | MY553705<br>26 | 10Hz~44GHz                       | Mar. 19, 2019    | Jan. 21, 2020~<br>Mar. 17, 2020 | Mar. 18, 2020 | Radiation<br>(03CH13-HY) |
| Spectrum Analyzer         | Keysight          | N9010A                          | MY542004<br>85 | 10Hz~44GHz                       | Feb. 10, 2020    | Mar. 18, 2020~<br>Mar. 19, 2020 | Feb. 09, 2021 | Radiation<br>(03CH13-HY) |
| Controller                | EMEC              | EM1000                          | N/A            | Control Turn<br>table & Ant Mast | N/A              | Jan. 21, 2020~<br>Mar. 19, 2020 | N/A           | Radiation<br>(03CH13-HY) |
| Antenna Mast              | EMEC              | AM-BS-4500-<br>B                | N/A            | 1m~4m                            | N/A              | Jan. 21, 2020~<br>Mar. 19, 2020 | N/A           | Radiation<br>(03CH13-HY) |
| Turn Table                | EMEC              | TT2000                          | N/A            | 0~360 Degree                     | N/A              | Jan. 21, 2020~<br>Mar. 19, 2020 | N/A           | Radiation<br>(03CH13-HY) |
| Software                  | Audix             | E3<br>6.2009-8-24               | RK-00099<br>2  | N/A                              | N/A              | Jan. 21, 2020~<br>Mar. 19, 2020 | N/A           | Radiation<br>(03CH13-HY) |
| Preamplifier              | EMEC              | EM18G40G                        | 060715         | 18GHz ~ 40GHz                    | Dec. 13, 2019    | Jan. 21, 2020~<br>Mar. 19, 2020 | Dec. 12, 2020 | Radiation<br>(03CH13-HY) |



| Instrument           | Manufacturer   | Model No.                     | Serial No.   | Characteristics         | Calibration Date | Test Date                   | Due Date      | Remark                |
|----------------------|----------------|-------------------------------|--------------|-------------------------|------------------|-----------------------------|---------------|-----------------------|
| RF Cable             | HUBER + SUHNER | SF102/2*11S K252              | MY4278/2     | 9kHz~40GHz              | May 16, 2019     | Jan. 21, 2020~Mar. 19, 2020 | May 15, 2020  | Radiation (03CH13-HY) |
| RF Cable             | HUBER + SUHNER | SUCOFLEX 104                  | MY36980/4    | 30M-18G                 | Apr. 15, 2019    | Jan. 21, 2020~Mar. 19, 2020 | Apr. 14, 2020 | Radiation (03CH13-HY) |
| RF Cable             | HUBER + SUHNER | SUCOFLEX 102                  | MY2859/2     | 30M~40GHz               | Mar. 13, 2019    | Jan. 21, 2020~Mar. 11, 2020 | Mar. 12, 2020 | Radiation (03CH13-HY) |
| RF Cable             | HUBER + SUHNER | SUCOFLEX 102                  | MY2859/2     | 30M~40GHz               | Mar. 12, 2020    | Mar. 13, 2020~Mar. 19, 2020 | Mar. 11, 2021 | Radiation (03CH13-HY) |
| SHF-EHF Horn Antenna | SCHWARZBECK    | BBHA 9170                     | BBHA9170 584 | 18GHz- 40GHz            | Dec. 10, 2019    | Jan. 21, 2020~Mar. 19, 2020 | Dec. 09, 2020 | Radiation (03CH13-HY) |
| SHF-EHF Horn Antenna | SCHWARZBECK    | BBHA 9170                     | BBHA9170 576 | 18GHz~40GHz             | May 14, 2019     | Jan. 21, 2020~Mar. 19, 2020 | May 13, 2020  | Radiation (03CH13-HY) |
| Filter               | Wainwright     | WHKX12-270 0-3000-18000 -60SS | SN2          | 3GHz High Pass Filter   | Jul. 14, 2019    | Jan. 21, 2020~Mar. 19, 2020 | Jul. 13, 2020 | Radiation (03CH13-HY) |
| Filter               | Wainwright     | WHKX12-108 0-1200-15000 -60SS | SN3          | 1.2GHz High Pass Filter | Jul. 03, 2019    | Jan. 21, 2020~Mar. 19, 2020 | Jul. 02, 2020 | Radiation (03CH13-HY) |
| Hygrometer           | TECEPIL        | DTM-303B                      | TP157151     | N/A                     | Jun. 17, 2019    | Jan. 21, 2020~Mar. 19, 2020 | Jun. 16, 2020 | Radiation (03CH13-HY) |



## 6 Uncertainty of Evaluation

### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

|                                                                            |      |
|----------------------------------------------------------------------------|------|
| Measuring Uncertainty for a Level of<br>Confidence of 95% ( $U = 2Uc(y)$ ) | 3.21 |
|----------------------------------------------------------------------------|------|

### Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

|                                                                            |      |
|----------------------------------------------------------------------------|------|
| Measuring Uncertainty for a Level of<br>Confidence of 95% ( $U = 2Uc(y)$ ) | 3.24 |
|----------------------------------------------------------------------------|------|

### Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

|                                                                            |      |
|----------------------------------------------------------------------------|------|
| Measuring Uncertainty for a Level of<br>Confidence of 95% ( $U = 2Uc(y)$ ) | 3.99 |
|----------------------------------------------------------------------------|------|



## Appendix A. Test Results of Conducted Test

### Conducted Output Power(Average power)

<Primary Antenna>

| Conducted Power (*Unit: dBm) |        |       |       |         |       |        |
|------------------------------|--------|-------|-------|---------|-------|--------|
| Band                         | GSM850 |       |       | GSM1900 |       |        |
| Channel                      | 128    | 189   | 251   | 512     | 661   | 810    |
| Frequency                    | 824.2  | 836.4 | 848.8 | 1850.2  | 1880  | 1909.8 |
| GSM                          | 32.96  | 32.70 | 32.48 | 29.61   | 29.72 | 29.83  |
| GPRS class 8                 | 32.98  | 32.70 | 32.50 | 29.63   | 29.72 | 29.84  |
| GPRS class 10                | 31.37  | 31.13 | 30.94 | 28.28   | 28.27 | 28.19  |
| GPRS class 11                | 30.20  | 29.96 | 29.90 | 27.58   | 27.54 | 27.46  |
| GPRS class 12                | 29.05  | 28.83 | 28.78 | 26.57   | 26.58 | 26.73  |
| EGPRS class 8                | 27.15  | 27.11 | 26.84 | 25.84   | 25.67 | 25.66  |
| EGPRS class 10               | 26.32  | 26.03 | 25.87 | 24.21   | 24.71 | 24.64  |
| EGPRS class 11               | 26.19  | 25.81 | 25.70 | 23.05   | 23.50 | 23.37  |
| EGPRS class 12               | 24.25  | 24.06 | 23.78 | 22.10   | 22.70 | 22.70  |

| Conducted Power (*Unit: dBm) |              |       |       |               |       |        |
|------------------------------|--------------|-------|-------|---------------|-------|--------|
| Band                         | WCDMA Band V |       |       | WCDMA Band II |       |        |
| Channel                      | 4132         | 4182  | 4233  | 9262          | 9400  | 9538   |
| Frequency                    | 826.4        | 836.4 | 846.6 | 1852.4        | 1880  | 1907.6 |
| RMC 12.2K                    | 25.21        | 25.09 | 25.25 | 24.78         | 24.85 | 25.05  |
| HSDPA Subtest-1              | 24.22        | 24.08 | 24.24 | 23.66         | 23.84 | 23.99  |
| HSDPA Subtest-2              | 24.25        | 24.12 | 24.26 | 23.69         | 23.84 | 23.99  |
| HSDPA Subtest-3              | 23.69        | 23.60 | 23.82 | 23.26         | 23.37 | 23.54  |
| HSDPA Subtest-4              | 23.71        | 23.61 | 23.85 | 23.26         | 23.32 | 23.53  |
| HSUPA Subtest-1              | 24.18        | 24.01 | 24.24 | 23.71         | 23.82 | 23.99  |
| HSUPA Subtest-2              | 22.17        | 22.02 | 22.26 | 21.73         | 21.80 | 21.97  |
| HSUPA Subtest-3              | 23.23        | 23.08 | 23.23 | 22.74         | 22.81 | 23.01  |
| HSUPA Subtest-4              | 22.23        | 22.06 | 22.21 | 21.66         | 21.80 | 22.01  |
| HSUPA Subtest-5              | 24.10        | 24.10 | 24.30 | 23.70         | 23.80 | 24.00  |



| Conducted Power (*Unit: dBm) |               |        |        |
|------------------------------|---------------|--------|--------|
| Band                         | WCDMA Band IV |        |        |
| Channel                      | 1312          | 1413   | 1513   |
| Frequency                    | 1712.4        | 1732.6 | 1752.6 |
| RMC 12.2K                    | 24.85         | 24.83  | 24.87  |
| HSDPA Subtest-1              | 23.76         | 23.70  | 23.78  |
| HSDPA Subtest-2              | 23.76         | 23.77  | 23.79  |
| HSDPA Subtest-3              | 23.24         | 23.25  | 23.31  |
| HSDPA Subtest-4              | 23.22         | 23.26  | 23.25  |
| HSUPA Subtest-1              | 23.72         | 23.75  | 23.71  |
| HSUPA Subtest-2              | 21.64         | 21.70  | 21.72  |
| HSUPA Subtest-3              | 22.72         | 22.74  | 22.74  |
| HSUPA Subtest-4              | 21.71         | 21.73  | 21.78  |
| HSUPA Subtest-5              | 23.70         | 23.70  | 23.80  |

| Conducted Power (*Unit: dBm) |               |        |        |               |       |         |
|------------------------------|---------------|--------|--------|---------------|-------|---------|
| Band                         | CDMA 2000 BC0 |        |        | CDMA 2000 BC1 |       |         |
| Channel                      | 1013          | 384    | 777    | 25            | 600   | 1175    |
| Frequency                    | 824.7         | 836.52 | 848.31 | 1851.25       | 1880  | 1908.75 |
| 1xRTT RC1 SO55               | 24.84         | 24.86  | 24.89  | 24.91         | 24.81 | 24.73   |
| 1xRTT RC3 SO55               | 24.86         | 24.85  | 24.92  | 24.93         | 24.85 | 24.74   |
| 1xRTT RC3 SO32 (+ F-SCH)     | 24.88         | 24.82  | 24.88  | 24.92         | 24.82 | 24.71   |
| 1xRTT RC3 SO32 (+SCH)        | 24.90         | 24.84  | 24.92  | 24.90         | 24.82 | 24.71   |
| 1xEVDO RTAP 153.6Kbps        | 24.65         | 24.68  | 24.73  | 24.88         | 24.80 | 24.70   |
| 1xEVDO RETAP 4096Bits        | 24.64         | 24.67  | 24.72  | 24.87         | 24.78 | 24.65   |



**<ASDIV Antenna>**

| Conducted Power (*Unit: dBm) |              |              |       |         |       |              |
|------------------------------|--------------|--------------|-------|---------|-------|--------------|
| Band                         | GSM850       |              |       | GSM1900 |       |              |
| Channel                      | 128          | 189          | 251   | 512     | 661   | 810          |
| Frequency                    | 824.2        | 836.4        | 848.8 | 1850.2  | 1880  | 1909.8       |
| GSM                          | 32.28        | 32.35        | 32.19 | 30.09   | 30.07 | 30.30        |
| GPRS class 8                 | 32.29        | <b>32.37</b> | 32.19 | 30.09   | 30.08 | <b>30.31</b> |
| GPRS class 10                | 31.12        | 30.62        | 30.55 | 28.60   | 28.74 | 28.72        |
| GPRS class 11                | 30.10        | 29.63        | 29.43 | 28.09   | 27.84 | 27.88        |
| GPRS class 12                | 28.89        | 28.40        | 28.15 | 27.24   | 27.12 | 27.09        |
| EGPRS class 8                | <b>26.82</b> | 26.76        | 26.56 | 26.04   | 26.10 | <b>26.23</b> |
| EGPRS class 10               | 25.95        | 25.77        | 25.52 | 25.24   | 25.19 | 25.18        |
| EGPRS class 11               | 25.79        | 25.54        | 25.20 | 24.07   | 23.96 | 23.84        |
| EGPRS class 12               | 23.93        | 23.67        | 23.40 | 23.06   | 23.11 | 23.23        |

| Conducted Power (*Unit: dBm) |              |       |              |               |       |              |
|------------------------------|--------------|-------|--------------|---------------|-------|--------------|
| Band                         | WCDMA Band V |       |              | WCDMA Band II |       |              |
| Channel                      | 4132         | 4182  | 4233         | 9262          | 9400  | 9538         |
| Frequency                    | 826.4        | 836.4 | 846.6        | 1852.4        | 1880  | 1907.6       |
| RMC 12.2K                    | 24.85        | 24.74 | <b>24.86</b> | 25.15         | 25.04 | <b>25.19</b> |
| HSDPA Subtest-1              | 23.90        | 23.74 | 23.85        | 24.13         | 24.06 | 24.23        |
| HSDPA Subtest-2              | 23.88        | 23.72 | 23.84        | 24.18         | 24.05 | 24.27        |
| HSDPA Subtest-3              | 23.40        | 23.23 | 23.43        | 23.68         | 23.60 | 23.75        |
| HSDPA Subtest-4              | 23.42        | 23.27 | 23.42        | 23.67         | 23.61 | 23.82        |
| HSUPA Subtest-1              | 23.91        | 23.73 | 23.86        | 24.17         | 24.08 | 24.25        |
| HSUPA Subtest-2              | 21.89        | 21.76 | 21.90        | 22.20         | 22.08 | 22.17        |
| HSUPA Subtest-3              | 22.85        | 22.71 | 22.87        | 23.12         | 23.08 | 23.24        |
| HSUPA Subtest-4              | 21.88        | 21.76 | 21.84        | 22.15         | 22.07 | 22.21        |
| HSUPA Subtest-5              | 23.90        | 23.70 | 23.80        | 24.20         | 24.10 | 24.30        |



| Conducted Power (*Unit: dBm) |               |        |        |
|------------------------------|---------------|--------|--------|
| Band                         | WCDMA Band IV |        |        |
| Channel                      | 1312          | 1413   | 1513   |
| Frequency                    | 1712.4        | 1732.6 | 1752.6 |
| RMC 12.2K                    | 25.17         | 25.16  | 25.14  |
| HSDPA Subtest-1              | 24.20         | 24.16  | 24.14  |
| HSDPA Subtest-2              | 24.19         | 24.18  | 24.16  |
| HSDPA Subtest-3              | 23.71         | 23.67  | 23.66  |
| HSDPA Subtest-4              | 23.34         | 23.63  | 23.68  |
| HSUPA Subtest-1              | 24.17         | 24.14  | 24.16  |
| HSUPA Subtest-2              | 22.12         | 22.16  | 22.16  |
| HSUPA Subtest-3              | 23.15         | 23.13  | 23.15  |
| HSUPA Subtest-4              | 22.13         | 22.16  | 22.14  |
| HSUPA Subtest-5              | 24.20         | 24.20  | 24.20  |

| Conducted Power (*Unit: dBm) |               |        |        |               |       |         |
|------------------------------|---------------|--------|--------|---------------|-------|---------|
| Band                         | CDMA 2000 BC0 |        |        | CDMA 2000 BC1 |       |         |
| Channel                      | 1013          | 384    | 777    | 25            | 600   | 1175    |
| Frequency                    | 824.7         | 836.52 | 848.31 | 1851.25       | 1880  | 1908.75 |
| 1xRTT RC1 SO55               | 24.44         | 24.46  | 24.49  | 25.41         | 25.34 | 25.22   |
| 1xRTT RC3 SO55               | 24.46         | 24.45  | 24.52  | 25.40         | 25.32 | 25.20   |
| 1xRTT RC3 SO32 (+ F-SCH)     | 24.48         | 24.42  | 24.48  | 25.38         | 25.30 | 25.22   |
| 1xRTT RC3 SO32 (+SCH)        | 24.50         | 24.44  | 24.52  | 25.38         | 25.31 | 25.21   |
| 1xEVDO RTAP 153.6Kbps        | 24.25         | 24.28  | 24.33  | 25.22         | 25.14 | 25.11   |
| 1xEVDO RETAP 4096Bits        | 24.24         | 24.27  | 24.32  | 25.20         | 25.13 | 25.06   |

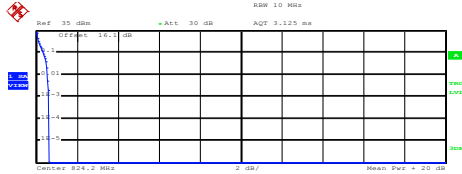
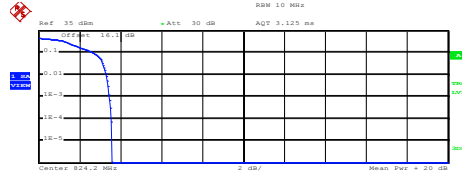
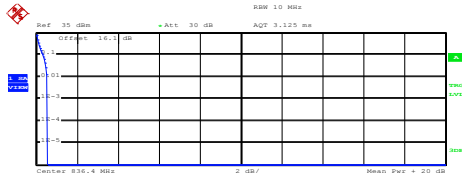
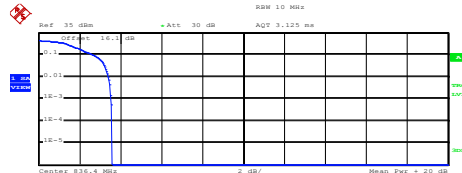


## A2. GSM

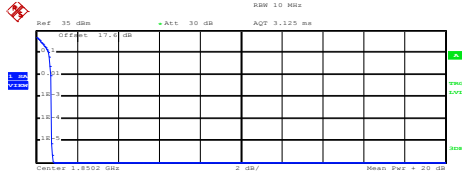
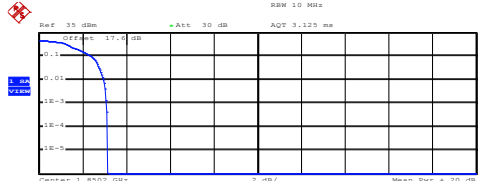
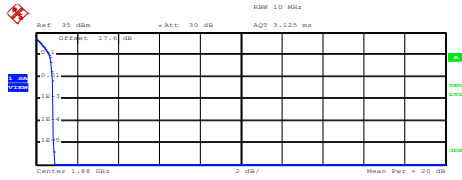
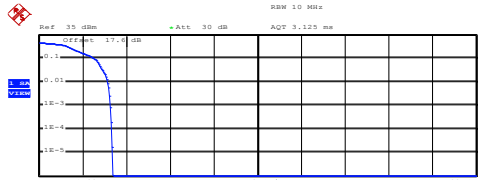
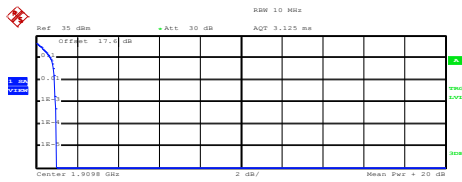
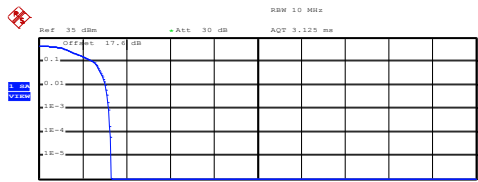
### Peak-to-Average Ratio

| Mode       | GSM850       |              | Limit: 13dB |
|------------|--------------|--------------|-------------|
| Mod.       | GPRS class 8 | EDGE class 8 | Result      |
| Lowest CH  | 0.60         | 3.44         | PASS        |
| Middle CH  | 0.56         | 3.56         |             |
| Highest CH | 0.52         | 3.28         |             |
| Mode       | GSM1900      |              | Limit: 13dB |
| Mod.       | GPRS class 8 | EDGE class 8 | Result      |
| Lowest CH  | 0.76         | 3.08         | PASS        |
| Middle CH  | 0.84         | 3.28         |             |
| Highest CH | 0.96         | 3.20         |             |



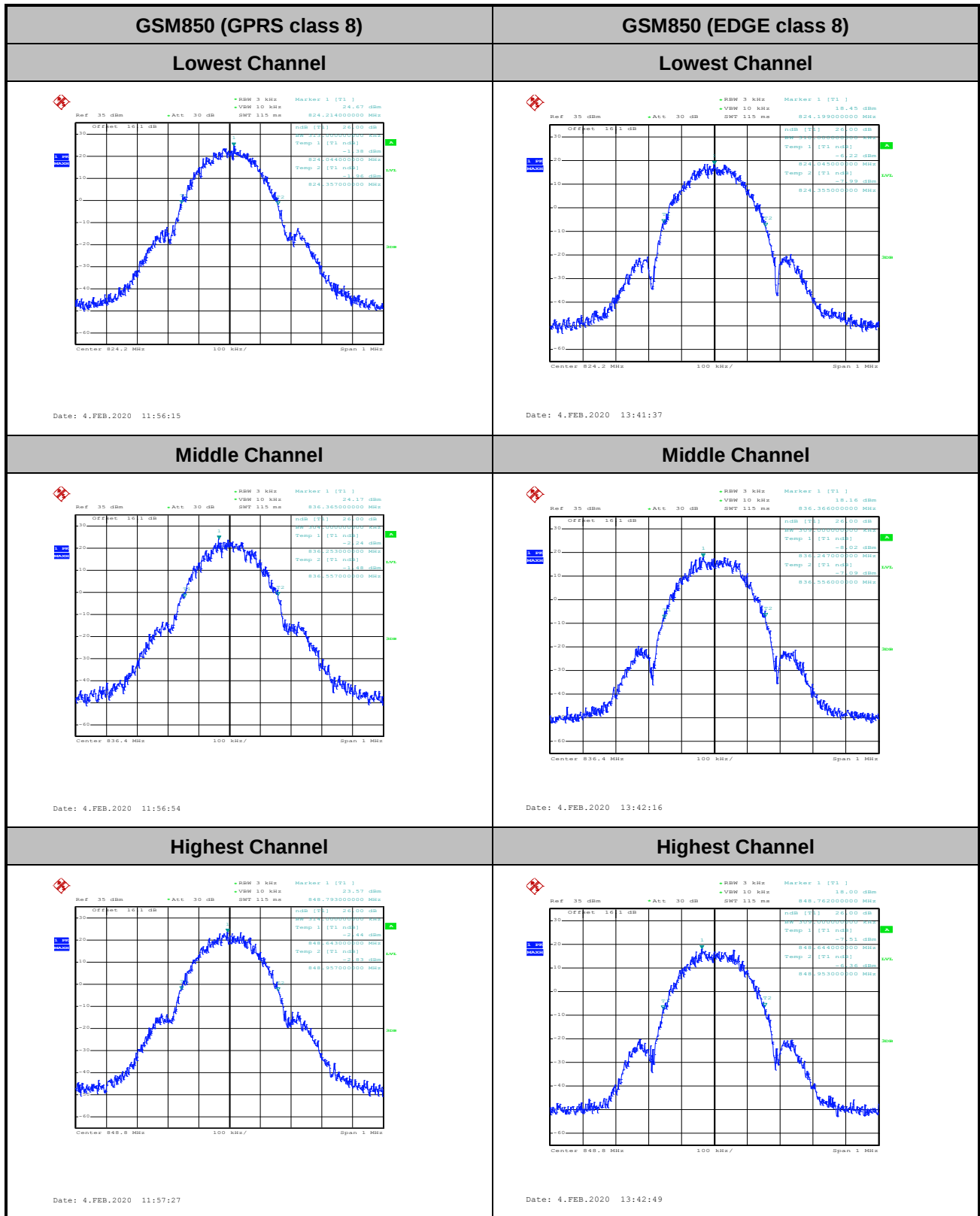
| GSM850 (GPRS class 8)                                                                                                                                                                                                                                                                                                                                       |  | GSM850 (EDGE class 8)                                                                                                                                                                                                                                                                                                                                        |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Lowest Channel                                                                                                                                                                                                                                                                                                                                              |  | Lowest Channel                                                                                                                                                                                                                                                                                                                                               |  |
|  <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 31.80 dBm</p> <p>Peak 32.43 dBm</p> <p>Crest 0.62 dB</p> <p>10 % 0.36 dB</p> <p>1 % 0.56 dB</p> <p>.1 % 0.60 dB</p> <p>.01 % 0.64 dB</p> <p>Date: 4.FEB.2020 11:57:50</p>   |  |  <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 26.18 dBm</p> <p>Peak 29.75 dBm</p> <p>Crest 3.57 dB</p> <p>10 % 2.68 dB</p> <p>1 % 3.32 dB</p> <p>.1 % 3.44 dB</p> <p>.01 % 3.56 dB</p> <p>Date: 4.FEB.2020 13:51:31</p>   |  |
| Middle Channel                                                                                                                                                                                                                                                                                                                                              |  | Middle Channel                                                                                                                                                                                                                                                                                                                                               |  |
|  <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 31.52 dBm</p> <p>Peak 32.07 dBm</p> <p>Crest 0.56 dB</p> <p>10 % 0.32 dB</p> <p>1 % 0.52 dB</p> <p>.1 % 0.56 dB</p> <p>.01 % 0.56 dB</p> <p>Date: 4.FEB.2020 11:58:03</p>  |  |  <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 25.67 dBm</p> <p>Peak 29.25 dBm</p> <p>Crest 3.59 dB</p> <p>10 % 2.68 dB</p> <p>1 % 3.40 dB</p> <p>.1 % 3.56 dB</p> <p>.01 % 3.60 dB</p> <p>Date: 4.FEB.2020 13:51:46</p>  |  |
| Highest Channel                                                                                                                                                                                                                                                                                                                                             |  | Highest Channel                                                                                                                                                                                                                                                                                                                                              |  |
|  <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 31.45 dBm</p> <p>Peak 32.00 dBm</p> <p>Crest 0.56 dB</p> <p>10 % 0.32 dB</p> <p>1 % 0.48 dB</p> <p>.1 % 0.52 dB</p> <p>.01 % 0.52 dB</p> <p>Date: 4.FEB.2020 11:58:14</p> |  |  <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 25.71 dBm</p> <p>Peak 29.04 dBm</p> <p>Crest 3.33 dB</p> <p>10 % 2.64 dB</p> <p>1 % 3.16 dB</p> <p>.1 % 3.28 dB</p> <p>.01 % 3.32 dB</p> <p>Date: 4.FEB.2020 13:52:01</p> |  |

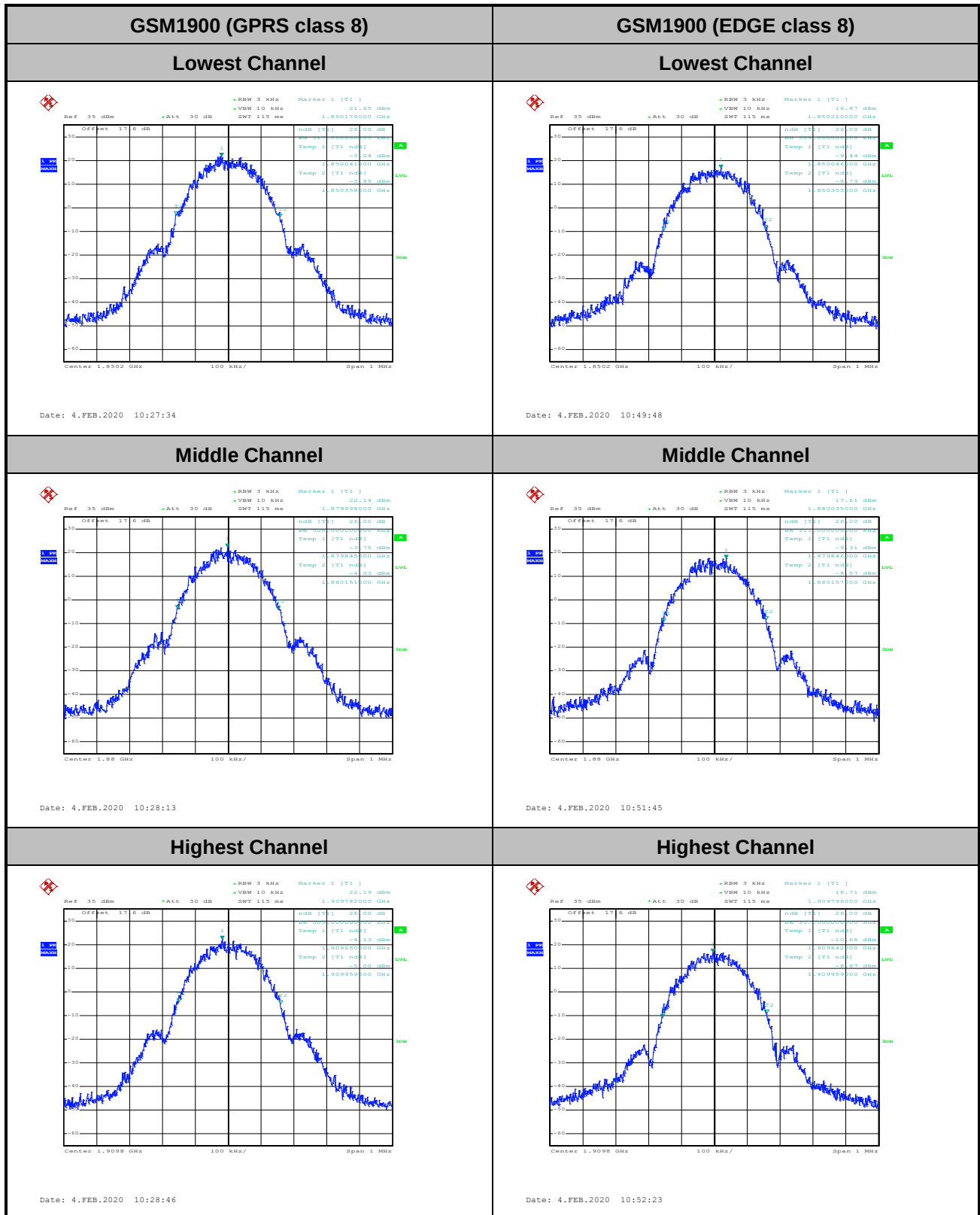


| GSM1900 (GPRS class 8)                                                                                                                                                                                                                                                                                                                                                                                      |  | GSM1900 (EDGE class 8)                                                                                                                                                                                                                                                                                                                                                                                       |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Lowest Channel                                                                                                                                                                                                                                                                                                                                                                                              |  | Lowest Channel                                                                                                                                                                                                                                                                                                                                                                                               |  |
|  <p>Center 1.8502 GHz 2 dB/ Mean Pwr + 20 dB</p> <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 29.21 dBm</p> <p>Peak 30.03 dBm</p> <p>Crest 0.82 dB</p> <p>10 % 0.60 dB</p> <p>1 % 0.72 dB</p> <p>.1 % 0.76 dB</p> <p>.01 % 0.76 dB</p> <p>Date: 4.FEB.2020 10:32:20</p>   |  |  <p>Center 1.8502 GHz 2 dB/ Mean Pwr + 20 dB</p> <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 25.48 dBm</p> <p>Peak 28.62 dBm</p> <p>Crest 3.13 dB</p> <p>10 % 2.40 dB</p> <p>1 % 2.96 dB</p> <p>.1 % 3.08 dB</p> <p>.01 % 3.16 dB</p> <p>Date: 4.FEB.2020 10:55:20</p>   |  |
| Middle Channel                                                                                                                                                                                                                                                                                                                                                                                              |  | Middle Channel                                                                                                                                                                                                                                                                                                                                                                                               |  |
|  <p>Center 1.88 GHz 2 dB/ Mean Pwr + 20 dB</p> <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 29.21 dBm</p> <p>Peak 30.10 dBm</p> <p>Crest 0.89 dB</p> <p>10 % 0.64 dB</p> <p>1 % 0.80 dB</p> <p>.1 % 0.84 dB</p> <p>.01 % 0.84 dB</p> <p>Date: 4.FEB.2020 10:32:37</p>    |  |  <p>Center 1.88 GHz 2 dB/ Mean Pwr + 20 dB</p> <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 25.36 dBm</p> <p>Peak 28.76 dBm</p> <p>Crest 3.39 dB</p> <p>10 % 2.56 dB</p> <p>1 % 3.16 dB</p> <p>.1 % 3.28 dB</p> <p>.01 % 3.36 dB</p> <p>Date: 4.FEB.2020 10:55:40</p>    |  |
| Highest Channel                                                                                                                                                                                                                                                                                                                                                                                             |  | Highest Channel                                                                                                                                                                                                                                                                                                                                                                                              |  |
|  <p>Center 1.9099 GHz 2 dB/ Mean Pwr + 20 dB</p> <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 29.11 dBm</p> <p>Peak 30.10 dBm</p> <p>Crest 0.99 dB</p> <p>10 % 0.68 dB</p> <p>1 % 0.88 dB</p> <p>.1 % 0.96 dB</p> <p>.01 % 1.00 dB</p> <p>Date: 4.FEB.2020 10:32:48</p> |  |  <p>Center 1.9099 GHz 2 dB/ Mean Pwr + 20 dB</p> <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 25.18 dBm</p> <p>Peak 28.48 dBm</p> <p>Crest 3.29 dB</p> <p>10 % 2.48 dB</p> <p>1 % 3.04 dB</p> <p>.1 % 3.20 dB</p> <p>.01 % 3.28 dB</p> <p>Date: 4.FEB.2020 10:56:01</p> |  |

**26dB Bandwidth**

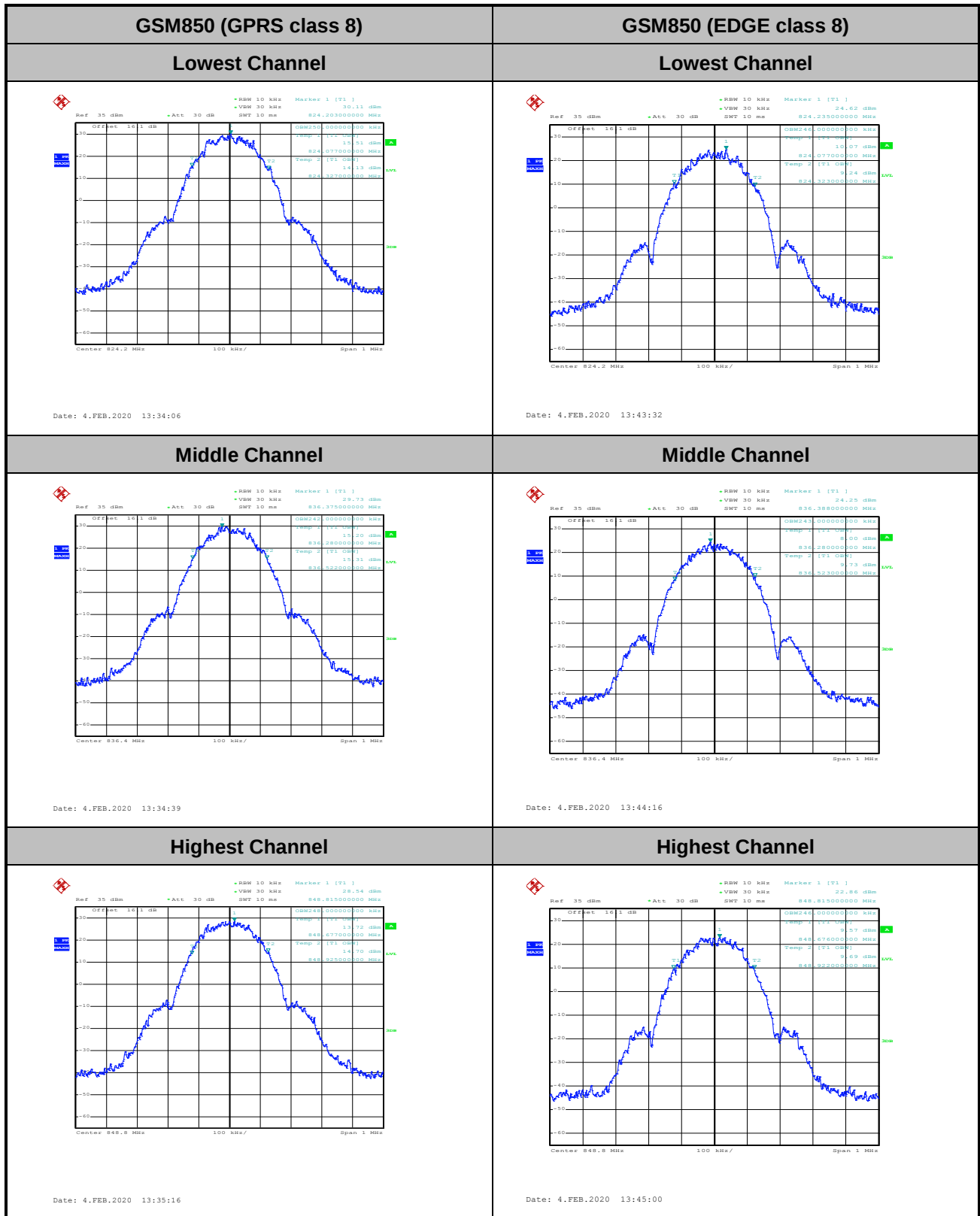
| Mode       | GSM850 : 26dB BW (MHz)  |              |
|------------|-------------------------|--------------|
| Mod.       | GPRS class 8            | EDGE class 8 |
| Lowest CH  | 0.313                   | 0.310        |
| Middle CH  | 0.304                   | 0.309        |
| Highest CH | 0.314                   | 0.309        |
| Mode       | GSM1900 : 26dB BW (MHz) |              |
| Mod.       | GPRS class 8            | EDGE class 8 |
| Lowest CH  | 0.317                   | 0.309        |
| Middle CH  | 0.306                   | 0.311        |
| Highest CH | 0.309                   | 0.317        |

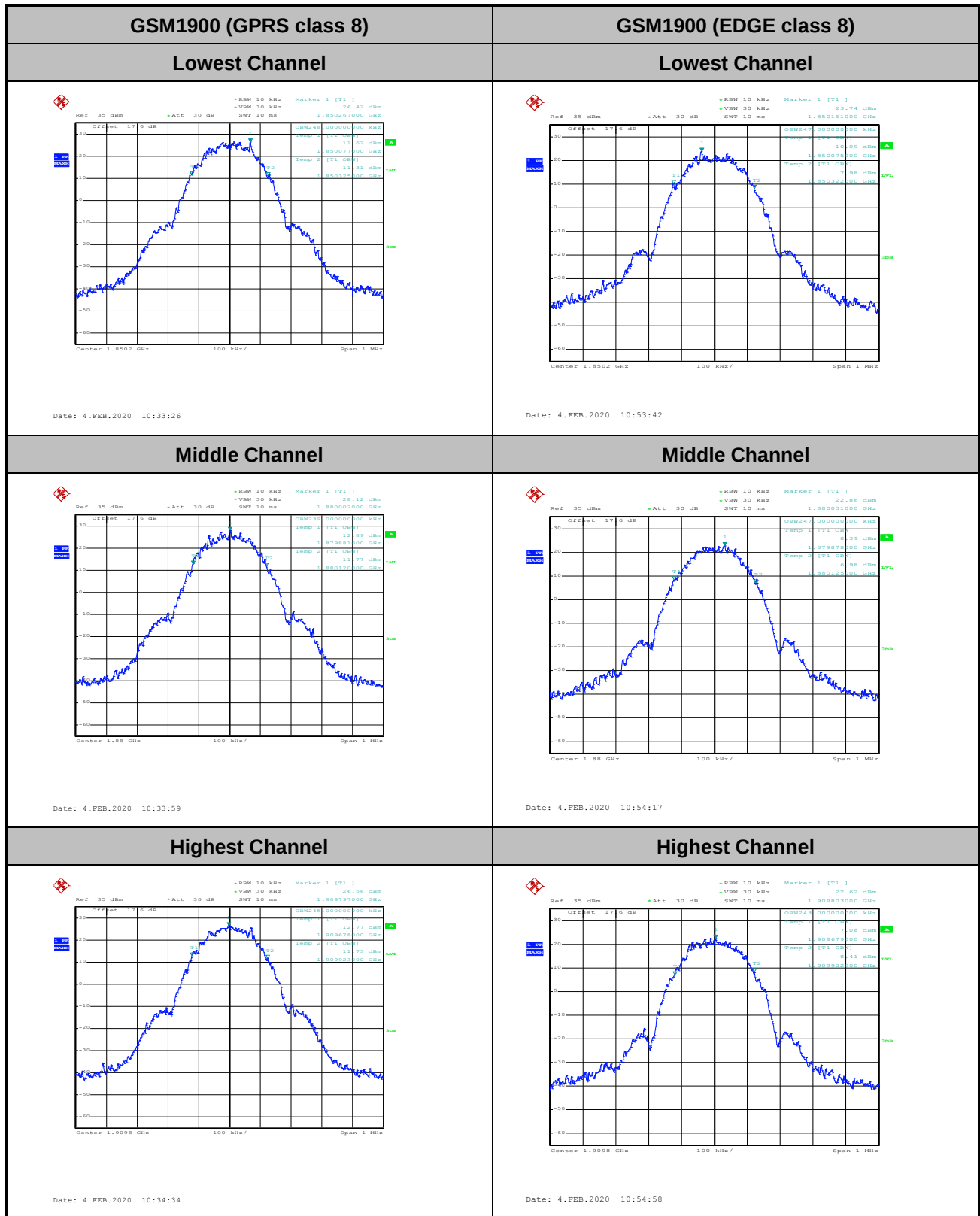


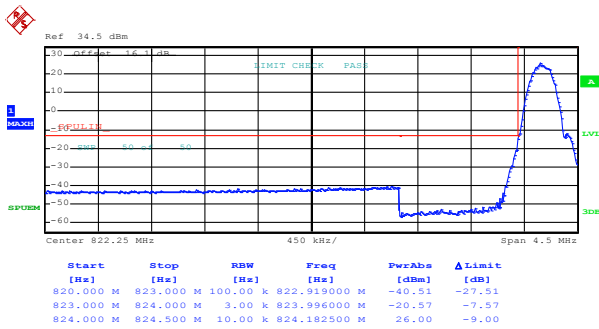


**Occupied Bandwidth**

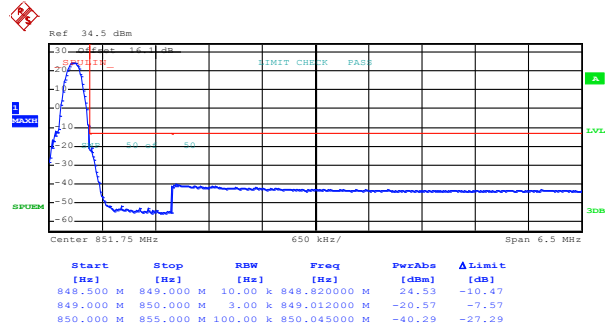
| Mode       | GSM850: 99% OBW (MHz)  |              |
|------------|------------------------|--------------|
| Mod.       | GPRS class 8           | EDGE class 8 |
| Lowest CH  | 0.250                  | 0.246        |
| Middle CH  | 0.242                  | 0.243        |
| Highest CH | 0.248                  | 0.246        |
| Mode       | GSM1900: 99% OBW (MHz) |              |
| Mod.       | GPRS class 8           | EDGE class 8 |
| Lowest CH  | 0.248                  | 0.247        |
| Middle CH  | 0.239                  | 0.247        |
| Highest CH | 0.245                  | 0.243        |



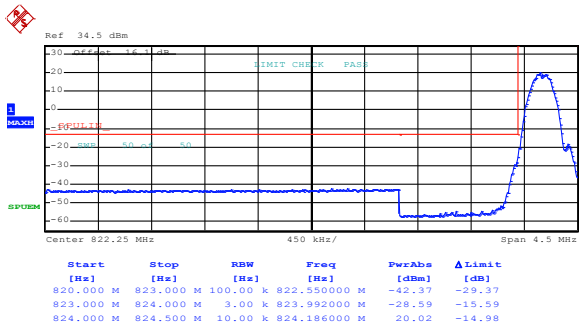


**Conducted Band Edge****GSM850 (GPRS class 8)****Lowest Band Edge**

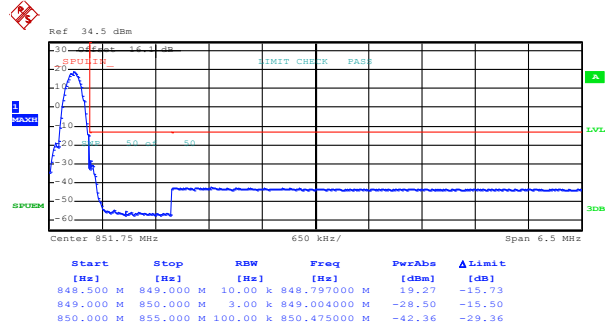
Date: 4.FEB.2020 13:36:55

**Highest Band Edge**

Date: 4.FEB.2020 13:38:29

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

Date: 4.FEB.2020 13:46:35

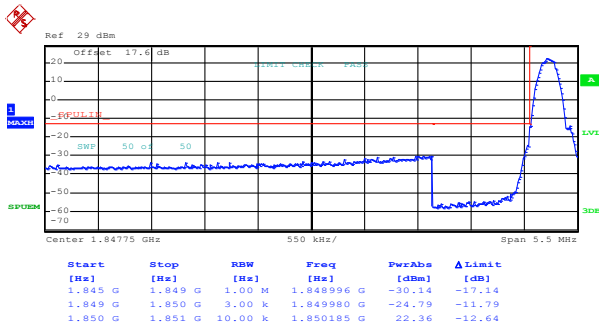
**Highest Band Edge**

Date: 4.FEB.2020 13:48:09



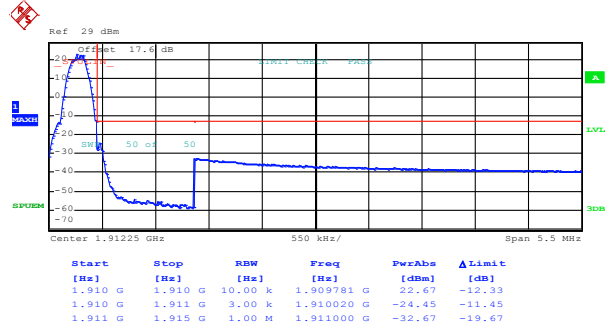
## GSM1900 (GPRS class 8)

## Lowest Band Edge



Date: 4.FEB.2020 10:36:11

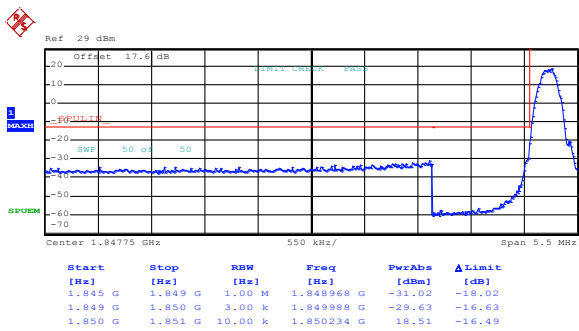
## Highest Band Edge



Date: 4.FEB.2020 10:37:44

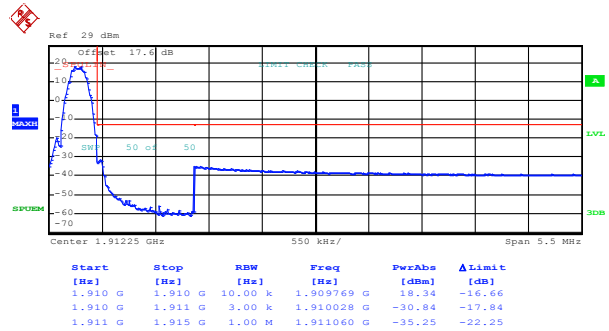
## GSM1900 (EDGE class 8)

## Lowest Band Edge



Date: 4.FEB.2020 11:00:21

## Highest Band Edge

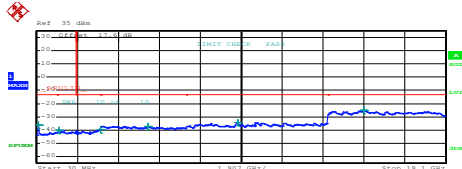
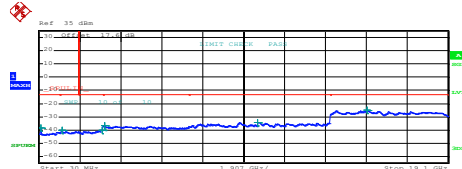
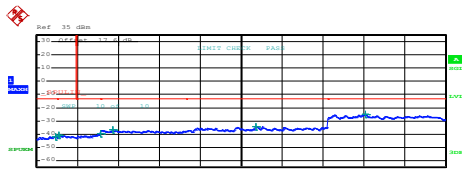
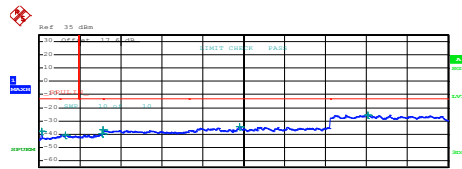
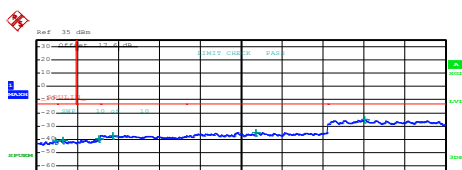
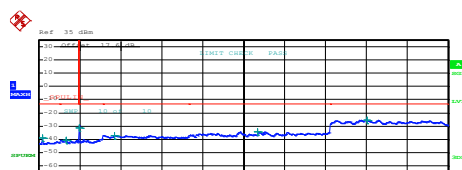


Date: 4.FEB.2020 11:02:41

**Conducted Spurious Emission**

| GSM850 (GPRS class 8)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  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| Lowest Channel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | Lowest Channel        |  |
| 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| GSM1900 (GPRS class 8)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | GSM1900 (EDGE class 8) |           |              |              |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------|--------------|--------------|--------------|--------------|-----------|----------|---------|--------------|--------|--------|----------|---------|---------|-------------|--------|--------|---------|----------|---------|------------|--------|--------|----------|----------|---------|------------|--------|--------|----------|-----------|---------|-------------|--------|--------|-----------|-----------|---------|-------------|--------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|----------|-----------|--------------|--------------|-----------|----------|---------|--------------|--------|--------|----------|---------|---------|-------------|--------|--------|---------|----------|---------|------------|--------|--------|----------|----------|---------|------------|--------|--------|----------|-----------|---------|-------------|--------|--------|-----------|-----------|---------|-------------|--------|--------|
| Lowest Channel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Lowest Channel         |           |              |              |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| <div><table><tr><th>Start [Hz]</th><th>Stop [Hz]</th><th>RBW [Hz]</th><th>Freq [Hz]</th><th>PerAbs [dBm]</th><th>Δ Limit [dB]</th></tr><tr><td>30.0000 M</td><td>1.0000 G</td><td>1.000 M</td><td>111.865000 M</td><td>-35.87</td><td>-22.87</td></tr><tr><td>1.0000 G</td><td>1.845 G</td><td>1.000 M</td><td>1.065065 G</td><td>-40.19</td><td>-27.19</td></tr><tr><td>1.845 G</td><td>3.0000 G</td><td>1.000 M</td><td>2.993490 G</td><td>-39.57</td><td>-26.57</td></tr><tr><td>3.0000 G</td><td>7.0000 G</td><td>1.000 M</td><td>5.209000 G</td><td>-37.01</td><td>-24.01</td></tr><tr><td>7.0000 G</td><td>13.6000 G</td><td>1.000 M</td><td>9.397450 G</td><td>-34.46</td><td>-21.46</td></tr><tr><td>13.6000 G</td><td>19.1000 G</td><td>1.000 M</td><td>15.303625 G</td><td>-24.96</td><td>-11.96</td></tr></table><p>Date: 4.FEB.2020 10:29:49</p></div>    | Start [Hz]             | Stop [Hz] | RBW [Hz]     | Freq [Hz]    | PerAbs [dBm] | Δ Limit [dB] | 30.0000 M | 1.0000 G | 1.000 M | 111.865000 M | -35.87 | -22.87 | 1.0000 G | 1.845 G | 1.000 M | 1.065065 G  | -40.19 | -27.19 | 1.845 G | 3.0000 G | 1.000 M | 2.993490 G | -39.57 | -26.57 | 3.0000 G | 7.0000 G | 1.000 M | 5.209000 G | -37.01 | -24.01 | 7.0000 G | 13.6000 G | 1.000 M | 9.397450 G  | -34.46 | -21.46 | 13.6000 G | 19.1000 G | 1.000 M | 15.303625 G | -24.96 | -11.96 | <div><table><tr><th>Start [Hz]</th><th>Stop [Hz]</th><th>RBW [Hz]</th><th>Freq [Hz]</th><th>PerAbs [dBm]</th><th>Δ Limit [dB]</th></tr><tr><td>30.0000 M</td><td>1.0000 G</td><td>1.000 M</td><td>111.865000 M</td><td>-36.45</td><td>-23.45</td></tr><tr><td>1.0000 G</td><td>1.845 G</td><td>1.000 M</td><td>1.090415 G</td><td>-40.01</td><td>-27.01</td></tr><tr><td>1.845 G</td><td>3.0000 G</td><td>1.000 M</td><td>2.949819 G</td><td>-40.08</td><td>-27.08</td></tr><tr><td>3.0000 G</td><td>7.0000 G</td><td>1.000 M</td><td>3.073000 G</td><td>-36.71</td><td>-23.71</td></tr><tr><td>7.0000 G</td><td>13.6000 G</td><td>1.000 M</td><td>10.212550 G</td><td>-34.39</td><td>-21.39</td></tr><tr><td>13.6000 G</td><td>19.1000 G</td><td>1.000 M</td><td>15.321500 G</td><td>-25.03</td><td>-12.03</td></tr></table><p>Date: 4.FEB.2020 10:57:02</p></div>   | Start [Hz] | Stop [Hz] | RBW [Hz] | Freq [Hz] | PerAbs [dBm] | Δ Limit [dB] | 30.0000 M | 1.0000 G | 1.000 M | 111.865000 M | -36.45 | -23.45 | 1.0000 G | 1.845 G | 1.000 M | 1.090415 G  | -40.01 | -27.01 | 1.845 G | 3.0000 G | 1.000 M | 2.949819 G | -40.08 | -27.08 | 3.0000 G | 7.0000 G | 1.000 M | 3.073000 G | -36.71 | -23.71 | 7.0000 G | 13.6000 G | 1.000 M | 10.212550 G | -34.39 | -21.39 | 13.6000 G | 19.1000 G | 1.000 M | 15.321500 G | -25.03 | -12.03 |
| Start [Hz]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Stop [Hz]              | RBW [Hz]  | Freq [Hz]    | PerAbs [dBm] | Δ Limit [dB] |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 30.0000 M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.0000 G               | 1.000 M   | 111.865000 M | -35.87       | -22.87       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 1.0000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1.845 G                | 1.000 M   | 1.065065 G   | -40.19       | -27.19       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 1.845 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3.0000 G               | 1.000 M   | 2.993490 G   | -39.57       | -26.57       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 3.0000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7.0000 G               | 1.000 M   | 5.209000 G   | -37.01       | -24.01       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 7.0000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 13.6000 G              | 1.000 M   | 9.397450 G   | -34.46       | -21.46       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 13.6000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 19.1000 G              | 1.000 M   | 15.303625 G  | -24.96       | -11.96       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| Start [Hz]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Stop [Hz]              | RBW [Hz]  | Freq [Hz]    | PerAbs [dBm] | Δ Limit [dB] |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 30.0000 M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.0000 G               | 1.000 M   | 111.865000 M | -36.45       | -23.45       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 1.0000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1.845 G                | 1.000 M   | 1.090415 G   | -40.01       | -27.01       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 1.845 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3.0000 G               | 1.000 M   | 2.949819 G   | -40.08       | -27.08       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 3.0000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7.0000 G               | 1.000 M   | 3.073000 G   | -36.71       | -23.71       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 7.0000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 13.6000 G              | 1.000 M   | 10.212550 G  | -34.39       | -21.39       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 13.6000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 19.1000 G              | 1.000 M   | 15.321500 G  | -25.03       | -12.03       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| Middle Channel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Middle Channel         |           |              |              |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| <div><table><tr><th>Start [Hz]</th><th>Stop [Hz]</th><th>RBW [Hz]</th><th>Freq [Hz]</th><th>PerAbs [dBm]</th><th>Δ Limit [dB]</th></tr><tr><td>30.0000 M</td><td>1.0000 G</td><td>1.000 M</td><td>891.117500 M</td><td>-41.78</td><td>-28.78</td></tr><tr><td>1.0000 G</td><td>1.845 G</td><td>1.000 M</td><td>1.0733004 G</td><td>-40.88</td><td>-27.88</td></tr><tr><td>1.845 G</td><td>3.0000 G</td><td>1.000 M</td><td>3.000000 G</td><td>-39.68</td><td>-26.68</td></tr><tr><td>3.0000 G</td><td>7.0000 G</td><td>1.000 M</td><td>3.566000 G</td><td>-36.84</td><td>-23.84</td></tr><tr><td>7.0000 G</td><td>13.6000 G</td><td>1.000 M</td><td>10.237300 G</td><td>-34.29</td><td>-21.29</td></tr><tr><td>13.6000 G</td><td>19.1000 G</td><td>1.000 M</td><td>15.345563 G</td><td>-25.00</td><td>-12.00</td></tr></table><p>Date: 4.FEB.2020 10:30:42</p></div> | Start [Hz]             | Stop [Hz] | RBW [Hz]     | Freq [Hz]    | PerAbs [dBm] | Δ Limit [dB] | 30.0000 M | 1.0000 G | 1.000 M | 891.117500 M | -41.78 | -28.78 | 1.0000 G | 1.845 G | 1.000 M | 1.0733004 G | -40.88 | -27.88 | 1.845 G | 3.0000 G | 1.000 M | 3.000000 G | -39.68 | -26.68 | 3.0000 G | 7.0000 G | 1.000 M | 3.566000 G | -36.84 | -23.84 | 7.0000 G | 13.6000 G | 1.000 M | 10.237300 G | -34.29 | -21.29 | 13.6000 G | 19.1000 G | 1.000 M | 15.345563 G | -25.00 | -12.00 | <div><table><tr><th>Start [Hz]</th><th>Stop [Hz]</th><th>RBW [Hz]</th><th>Freq [Hz]</th><th>PerAbs [dBm]</th><th>Δ Limit [dB]</th></tr><tr><td>30.0000 M</td><td>1.0000 G</td><td>1.000 M</td><td>141.792500 M</td><td>-38.00</td><td>-25.00</td></tr><tr><td>1.0000 G</td><td>1.845 G</td><td>1.000 M</td><td>1.2385001 G</td><td>-40.59</td><td>-27.59</td></tr><tr><td>1.845 G</td><td>3.0000 G</td><td>1.000 M</td><td>2.965822 G</td><td>-39.55</td><td>-26.55</td></tr><tr><td>3.0000 G</td><td>7.0000 G</td><td>1.000 M</td><td>3.000000 G</td><td>-36.65</td><td>-23.65</td></tr><tr><td>7.0000 G</td><td>13.6000 G</td><td>1.000 M</td><td>9.387500 G</td><td>-34.44</td><td>-21.44</td></tr><tr><td>13.6000 G</td><td>19.1000 G</td><td>1.000 M</td><td>15.344875 G</td><td>-25.36</td><td>-12.36</td></tr></table><p>Date: 4.FEB.2020 10:57:53</p></div>  | Start [Hz] | Stop [Hz] | RBW [Hz] | Freq [Hz] | PerAbs [dBm] | Δ Limit [dB] | 30.0000 M | 1.0000 G | 1.000 M | 141.792500 M | -38.00 | -25.00 | 1.0000 G | 1.845 G | 1.000 M | 1.2385001 G | -40.59 | -27.59 | 1.845 G | 3.0000 G | 1.000 M | 2.965822 G | -39.55 | -26.55 | 3.0000 G | 7.0000 G | 1.000 M | 3.000000 G | -36.65 | -23.65 | 7.0000 G | 13.6000 G | 1.000 M | 9.387500 G  | -34.44 | -21.44 | 13.6000 G | 19.1000 G | 1.000 M | 15.344875 G | -25.36 | -12.36 |
| Start [Hz]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Stop [Hz]              | RBW [Hz]  | Freq [Hz]    | PerAbs [dBm] | Δ Limit [dB] |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 30.0000 M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.0000 G               | 1.000 M   | 891.117500 M | -41.78       | -28.78       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 1.0000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1.845 G                | 1.000 M   | 1.0733004 G  | -40.88       | -27.88       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 1.845 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3.0000 G               | 1.000 M   | 3.000000 G   | -39.68       | -26.68       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 3.0000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7.0000 G               | 1.000 M   | 3.566000 G   | -36.84       | -23.84       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 7.0000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 13.6000 G              | 1.000 M   | 10.237300 G  | -34.29       | -21.29       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 13.6000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 19.1000 G              | 1.000 M   | 15.345563 G  | -25.00       | -12.00       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| Start [Hz]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Stop [Hz]              | RBW [Hz]  | Freq [Hz]    | PerAbs [dBm] | Δ Limit [dB] |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 30.0000 M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.0000 G               | 1.000 M   | 141.792500 M | -38.00       | -25.00       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 1.0000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1.845 G                | 1.000 M   | 1.2385001 G  | -40.59       | -27.59       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 1.845 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3.0000 G               | 1.000 M   | 2.965822 G   | -39.55       | -26.55       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 3.0000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7.0000 G               | 1.000 M   | 3.000000 G   | -36.65       | -23.65       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 7.0000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 13.6000 G              | 1.000 M   | 9.387500 G   | -34.44       | -21.44       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 13.6000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 19.1000 G              | 1.000 M   | 15.344875 G  | -25.36       | -12.36       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| Highest Channel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Highest Channel        |           |              |              |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| <div><table><tr><th>Start [Hz]</th><th>Stop [Hz]</th><th>RBW [Hz]</th><th>Freq [Hz]</th><th>PerAbs [dBm]</th><th>Δ Limit [dB]</th></tr><tr><td>30.0000 M</td><td>1.0000 G</td><td>1.000 M</td><td>926.280000 M</td><td>-43.33</td><td>-30.33</td></tr><tr><td>1.0000 G</td><td>1.845 G</td><td>1.000 M</td><td>1.268921 G</td><td>-40.80</td><td>-27.80</td></tr><tr><td>1.845 G</td><td>3.0000 G</td><td>1.000 M</td><td>2.946410 G</td><td>-39.77</td><td>-26.77</td></tr><tr><td>3.0000 G</td><td>7.0000 G</td><td>1.000 M</td><td>3.563000 G</td><td>-37.09</td><td>-24.09</td></tr><tr><td>7.0000 G</td><td>13.6000 G</td><td>1.000 M</td><td>10.248950 G</td><td>-34.74</td><td>-21.74</td></tr><tr><td>13.6000 G</td><td>19.1000 G</td><td>1.000 M</td><td>15.323463 G</td><td>-25.07</td><td>-12.07</td></tr></table><p>Date: 4.FEB.2020 10:31:35</p></div> | Start [Hz]             | Stop [Hz] | RBW [Hz]     | Freq [Hz]    | PerAbs [dBm] | Δ Limit [dB] | 30.0000 M | 1.0000 G | 1.000 M | 926.280000 M | -43.33 | -30.33 | 1.0000 G | 1.845 G | 1.000 M | 1.268921 G  | -40.80 | -27.80 | 1.845 G | 3.0000 G | 1.000 M | 2.946410 G | -39.77 | -26.77 | 3.0000 G | 7.0000 G | 1.000 M | 3.563000 G | -37.09 | -24.09 | 7.0000 G | 13.6000 G | 1.000 M | 10.248950 G | -34.74 | -21.74 | 13.6000 G | 19.1000 G | 1.000 M | 15.323463 G | -25.07 | -12.07 | <div><table><tr><th>Start [Hz]</th><th>Stop [Hz]</th><th>RBW [Hz]</th><th>Freq [Hz]</th><th>PerAbs [dBm]</th><th>Δ Limit [dB]</th></tr><tr><td>30.0000 M</td><td>1.0000 G</td><td>1.000 M</td><td>171.862500 M</td><td>-39.97</td><td>-26.97</td></tr><tr><td>1.0000 G</td><td>1.845 G</td><td>1.000 M</td><td>1.279695 G</td><td>-40.47</td><td>-27.47</td></tr><tr><td>1.845 G</td><td>3.0000 G</td><td>1.000 M</td><td>2.955271 G</td><td>-39.21</td><td>-26.21</td></tr><tr><td>3.0000 G</td><td>7.0000 G</td><td>1.000 M</td><td>3.554000 G</td><td>-36.99</td><td>-23.99</td></tr><tr><td>7.0000 G</td><td>13.6000 G</td><td>1.000 M</td><td>10.229050 G</td><td>-34.36</td><td>-21.36</td></tr><tr><td>13.6000 G</td><td>19.1000 G</td><td>1.000 M</td><td>15.314605 G</td><td>-25.27</td><td>-12.27</td></tr></table><p>Date: 4.FEB.2020 10:58:45</p></div> | Start [Hz] | Stop [Hz] | RBW [Hz] | Freq [Hz] | PerAbs [dBm] | Δ Limit [dB] | 30.0000 M | 1.0000 G | 1.000 M | 171.862500 M | -39.97 | -26.97 | 1.0000 G | 1.845 G | 1.000 M | 1.279695 G  | -40.47 | -27.47 | 1.845 G | 3.0000 G | 1.000 M | 2.955271 G | -39.21 | -26.21 | 3.0000 G | 7.0000 G | 1.000 M | 3.554000 G | -36.99 | -23.99 | 7.0000 G | 13.6000 G | 1.000 M | 10.229050 G | -34.36 | -21.36 | 13.6000 G | 19.1000 G | 1.000 M | 15.314605 G | -25.27 | -12.27 |
| Start [Hz]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Stop [Hz]              | RBW [Hz]  | Freq [Hz]    | PerAbs [dBm] | Δ Limit [dB] |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 30.0000 M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.0000 G               | 1.000 M   | 926.280000 M | -43.33       | -30.33       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 1.0000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1.845 G                | 1.000 M   | 1.268921 G   | -40.80       | -27.80       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 1.845 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3.0000 G               | 1.000 M   | 2.946410 G   | -39.77       | -26.77       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 3.0000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7.0000 G               | 1.000 M   | 3.563000 G   | -37.09       | -24.09       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 7.0000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 13.6000 G              | 1.000 M   | 10.248950 G  | -34.74       | -21.74       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 13.6000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 19.1000 G              | 1.000 M   | 15.323463 G  | -25.07       | -12.07       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| Start [Hz]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Stop [Hz]              | RBW [Hz]  | Freq [Hz]    | PerAbs [dBm] | Δ Limit [dB] |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 30.0000 M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.0000 G               | 1.000 M   | 171.862500 M | -39.97       | -26.97       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 1.0000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1.845 G                | 1.000 M   | 1.279695 G   | -40.47       | -27.47       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 1.845 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3.0000 G               | 1.000 M   | 2.955271 G   | -39.21       | -26.21       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 3.0000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7.0000 G               | 1.000 M   | 3.554000 G   | -36.99       | -23.99       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 7.0000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 13.6000 G              | 1.000 M   | 10.229050 G  | -34.36       | -21.36       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |
| 13.6000 G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 19.1000 G              | 1.000 M   | 15.314605 G  | -25.27       | -12.27       |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |          |           |              |              |           |          |         |              |        |        |          |         |         |             |        |        |         |          |         |            |        |        |          |          |         |            |        |        |          |           |         |             |        |        |           |           |         |             |        |        |

**Frequency Stability**

| Test Conditions  | Middle Channel    | GSM850<br>(GPRS class 8) | GSM850<br>(EDGE class 8) | Limit<br>2.5ppm |
|------------------|-------------------|--------------------------|--------------------------|-----------------|
| Temperature (°C) | Voltage (Volt)    | Deviation (ppm)          |                          | Result          |
| 50               | Normal Voltage    | 0.0108                   | 0.0012                   | PASS            |
| 40               | Normal Voltage    | 0.0060                   | 0.0012                   |                 |
| 30               | Normal Voltage    | 0.0036                   | 0.0000                   |                 |
| 20(Ref.)         | Normal Voltage    | 0.0000                   | 0.0000                   |                 |
| 10               | Normal Voltage    | 0.0060                   | 0.0036                   |                 |
| 0                | Normal Voltage    | 0.0036                   | 0.0000                   |                 |
| -10              | Normal Voltage    | 0.0000                   | 0.0012                   |                 |
| -20              | Normal Voltage    | 0.0012                   | 0.0024                   |                 |
| -30              | Normal Voltage    | 0.0012                   | 0.0024                   |                 |
| 20               | Maximum Voltage   | 0.0000                   | 0.0000                   |                 |
| 20               | Normal Voltage    | 0.0000                   | 0.0000                   |                 |
| 20               | Battery End Point | 0.0000                   | 0.0012                   |                 |

| Test Conditions  | Middle Channel    | GSM1900<br>(GPRS class 8) | GSM1900<br>(EDGE class 8) | Limit<br>Note 2. |
|------------------|-------------------|---------------------------|---------------------------|------------------|
| Temperature (°C) | Voltage (Volt)    | Deviation (ppm)           |                           | Result           |
| 50               | Normal Voltage    | 0.0021                    | 0.0027                    | PASS             |
| 40               | Normal Voltage    | 0.0005                    | 0.0037                    |                  |
| 30               | Normal Voltage    | 0.0011                    | 0.0016                    |                  |
| 20(Ref.)         | Normal Voltage    | 0.0000                    | 0.0000                    |                  |
| 10               | Normal Voltage    | 0.0011                    | 0.0016                    |                  |
| 0                | Normal Voltage    | 0.0011                    | 0.0011                    |                  |
| -10              | Normal Voltage    | 0.0021                    | 0.0245                    |                  |
| -20              | Normal Voltage    | 0.0016                    | 0.0282                    |                  |
| -30              | Normal Voltage    | 0.0069                    | 0.0378                    |                  |
| 20               | Maximum Voltage   | 0.0005                    | 0.0011                    |                  |
| 20               | Normal Voltage    | 0.0000                    | 0.0000                    |                  |
| 20               | Battery End Point | 0.0016                    | 0.0005                    |                  |

**Note:**

1. Normal Voltage = 3.87V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage =4.45 V
2. The frequency fundamental emissions stay within the authorized frequency block.

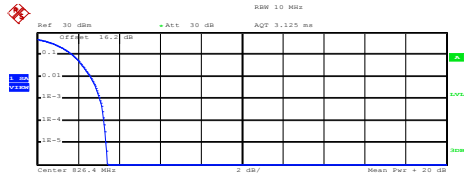
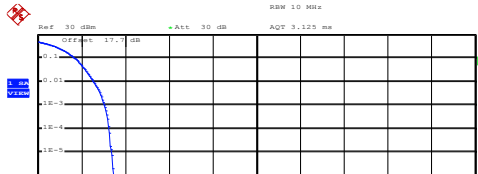
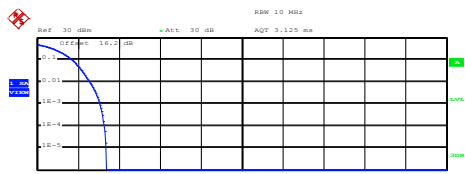
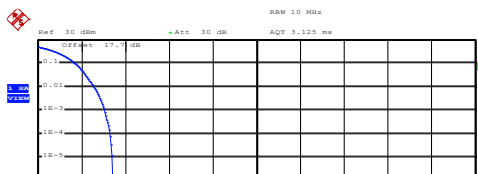
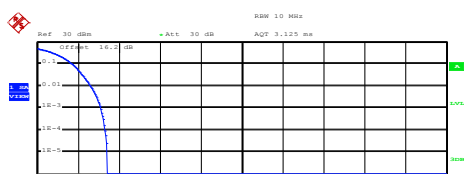
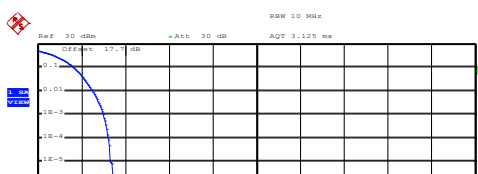


### A3. WCDMA

#### Peak-to-Average Ratio

| Mode       | WCDMA Band V | WCDMA Band II | WCDMA Band IV | Limit: 13dB |
|------------|--------------|---------------|---------------|-------------|
| Mod.       | RMC 12.2Kbps | RMC 12.2Kbps  | RMC 12.2Kbps  | Result      |
| Lowest CH  | 3.08         | 3.04          | 3.08          | PASS        |
| Middle CH  | 3.08         | 3.08          | 3.08          |             |
| Highest CH | 3.12         | 3.00          | 3.04          |             |

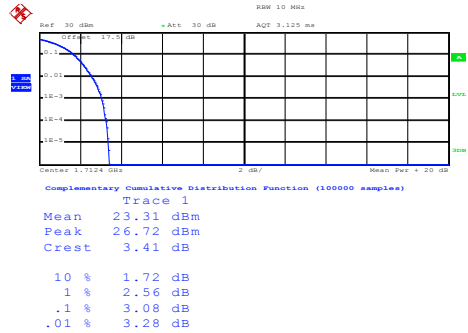


| WCDMA Band V (RMC 12.2Kbps)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | WCDMA Band II (RMC 12.2Kbps) |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------|-----|---------|------|---------|-------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------|-----|---------|------|---------|-------|---------|
| Lowest Channel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Lowest Channel               |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
|  <p>Ref: 30 dBm<br/>Offset: 16.2 dB<br/>Att: 30 dB<br/>AQ: 3.125 ms<br/>Center: 830.4 MHz<br/>2 dB/</p> <p>Complementary Cumulative Distribution Function (100000 samples)<br/>Trace 1<br/>Mean: 23.30 dBm<br/>Peak: 26.72 dBm<br/>Crest: 3.42 dB</p> <table><tr><td>10 %</td><td>1.72 dB</td></tr><tr><td>1 %</td><td>2.60 dB</td></tr><tr><td>.1 %</td><td>3.08 dB</td></tr><tr><td>.01 %</td><td>3.28 dB</td></tr></table> <p>Date: 4.FEB.2020 14:06:45</p>   | 10 %                         | 1.72 dB | 1 % | 2.60 dB | .1 % | 3.08 dB | .01 % | 3.28 dB |  <p>Ref: 30 dBm<br/>Offset: 17.7 dB<br/>Att: 30 dB<br/>AQ: 3.125 ms<br/>Center: 1.8324 GHz<br/>2 dB/</p> <p>Complementary Cumulative Distribution Function (100000 samples)<br/>Trace 1<br/>Mean: 22.35 dBm<br/>Peak: 25.80 dBm<br/>Crest: 3.45 dB</p> <table><tr><td>10 %</td><td>1.72 dB</td></tr><tr><td>1 %</td><td>2.56 dB</td></tr><tr><td>.1 %</td><td>3.04 dB</td></tr><tr><td>.01 %</td><td>3.28 dB</td></tr></table> <p>Date: 4.FEB.2020 11:07:17</p>   | 10 % | 1.72 dB | 1 % | 2.56 dB | .1 % | 3.04 dB | .01 % | 3.28 dB |
| 10 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.72 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| 1 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2.60 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| .1 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3.08 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| .01 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3.28 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| 10 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.72 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| 1 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2.56 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| .1 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3.04 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| .01 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3.28 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| Middle Channel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Middle Channel               |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
|  <p>Ref: 30 dBm<br/>Offset: 14.2 dB<br/>Att: 30 dB<br/>AQ: 3.125 ms<br/>Center: 830.4 MHz<br/>2 dB/</p> <p>Complementary Cumulative Distribution Function (100000 samples)<br/>Trace 1<br/>Mean: 23.14 dBm<br/>Peak: 26.51 dBm<br/>Crest: 3.37 dB</p> <table><tr><td>10 %</td><td>1.72 dB</td></tr><tr><td>1 %</td><td>2.56 dB</td></tr><tr><td>.1 %</td><td>3.08 dB</td></tr><tr><td>.01 %</td><td>3.28 dB</td></tr></table> <p>Date: 4.FEB.2020 14:07:03</p>  | 10 %                         | 1.72 dB | 1 % | 2.56 dB | .1 % | 3.08 dB | .01 % | 3.28 dB |  <p>Ref: 30 dBm<br/>Offset: 17.7 dB<br/>Att: 30 dB<br/>AQ: 3.125 ms<br/>Center: 1.83 GHz<br/>2 dB/</p> <p>Complementary Cumulative Distribution Function (100000 samples)<br/>Trace 1<br/>Mean: 23.14 dBm<br/>Peak: 26.58 dBm<br/>Crest: 3.44 dB</p> <table><tr><td>10 %</td><td>1.72 dB</td></tr><tr><td>1 %</td><td>2.56 dB</td></tr><tr><td>.1 %</td><td>3.08 dB</td></tr><tr><td>.01 %</td><td>3.32 dB</td></tr></table> <p>Date: 4.FEB.2020 11:07:27</p>    | 10 % | 1.72 dB | 1 % | 2.56 dB | .1 % | 3.08 dB | .01 % | 3.32 dB |
| 10 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.72 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| 1 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2.56 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| .1 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3.08 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| .01 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3.28 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| 10 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.72 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| 1 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2.56 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| .1 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3.08 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| .01 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3.32 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| Highest Channel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Highest Channel              |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
|  <p>Ref: 30 dBm<br/>Offset: 16.2 dB<br/>Att: 30 dB<br/>AQ: 3.125 ms<br/>Center: 830.6 MHz<br/>2 dB/</p> <p>Complementary Cumulative Distribution Function (100000 samples)<br/>Trace 1<br/>Mean: 23.30 dBm<br/>Peak: 26.72 dBm<br/>Crest: 3.42 dB</p> <table><tr><td>10 %</td><td>1.72 dB</td></tr><tr><td>1 %</td><td>2.60 dB</td></tr><tr><td>.1 %</td><td>3.12 dB</td></tr><tr><td>.01 %</td><td>3.32 dB</td></tr></table> <p>Date: 4.FEB.2020 14:07:12</p> | 10 %                         | 1.72 dB | 1 % | 2.60 dB | .1 % | 3.12 dB | .01 % | 3.32 dB |  <p>Ref: 30 dBm<br/>Offset: 17.7 dB<br/>Att: 30 dB<br/>AQ: 3.125 ms<br/>Center: 1.9076 GHz<br/>2 dB/</p> <p>Complementary Cumulative Distribution Function (100000 samples)<br/>Trace 1<br/>Mean: 22.21 dBm<br/>Peak: 25.66 dBm<br/>Crest: 3.45 dB</p> <table><tr><td>10 %</td><td>1.64 dB</td></tr><tr><td>1 %</td><td>2.52 dB</td></tr><tr><td>.1 %</td><td>3.00 dB</td></tr><tr><td>.01 %</td><td>3.24 dB</td></tr></table> <p>Date: 4.FEB.2020 11:07:37</p> | 10 % | 1.64 dB | 1 % | 2.52 dB | .1 % | 3.00 dB | .01 % | 3.24 dB |
| 10 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.72 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| 1 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2.60 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| .1 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3.12 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| .01 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3.32 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| 10 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.64 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| 1 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2.52 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| .1 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3.00 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |
| .01 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3.24 dB                      |         |     |         |      |         |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |         |     |         |      |         |       |         |



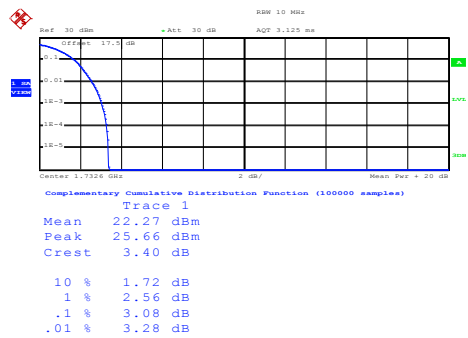
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



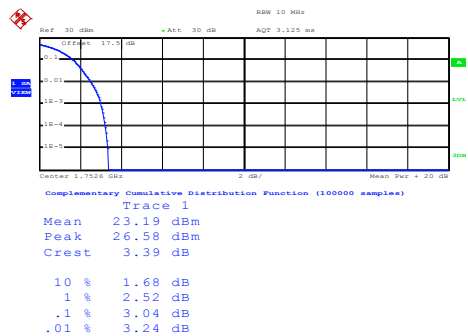
Date: 4.FEB.2020 11:34:37

Middle Channel



Date: 4.FEB.2020 11:34:52

Highest Channel



Date: 4.FEB.2020 11:35:07

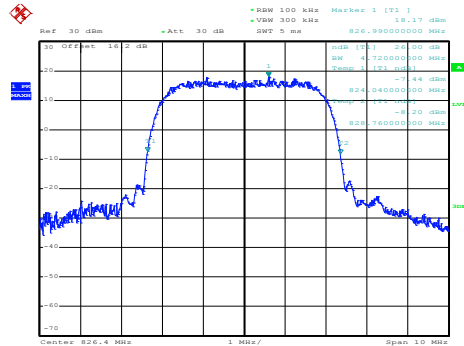
**26dB Bandwidth**

| Mode       | WCDMA Band V<br>26dB BW(MHz) | WCDMA Band II<br>26dB BW(MHz) | WCDMA Band IV<br>26dB BW(MHz) |
|------------|------------------------------|-------------------------------|-------------------------------|
| Mod.       | RMC 12.2Kbps                 | RMC 12.2Kbps                  | RMC 12.2Kbps                  |
| Lowest CH  | 4.72                         | 4.72                          | 4.70                          |
| Middle CH  | 4.72                         | 4.73                          | 4.70                          |
| Highest CH | 4.70                         | 4.69                          | 4.72                          |



## WCDMA Band V (RMC 12.2Kbps)

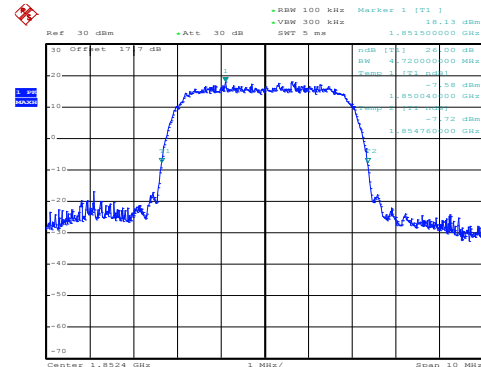
## Lowest Channel



Date: 4.FEB.2020 13:54:33

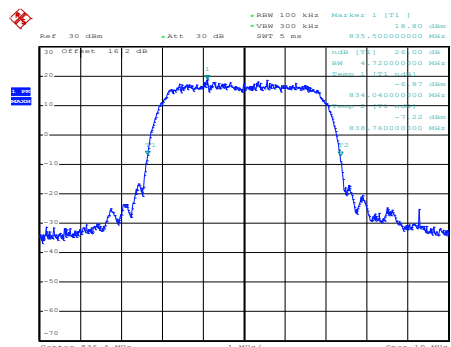
## WCDMA Band II (RMC 12.2Kbps)

## Lowest Channel



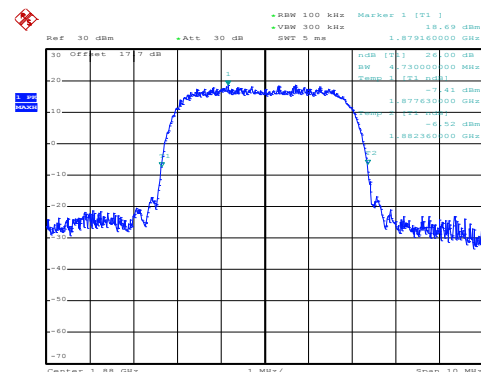
Date: 4.FEB.2020 11:05:41

## Middle Channel



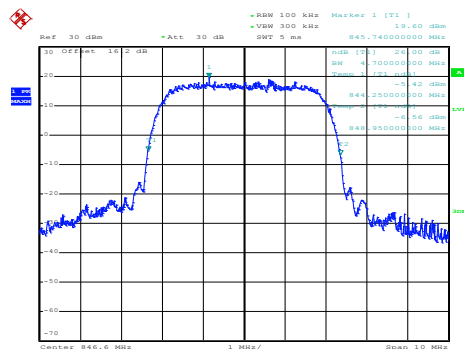
Date: 4.FEB.2020 13:55:10

## Middle Channel



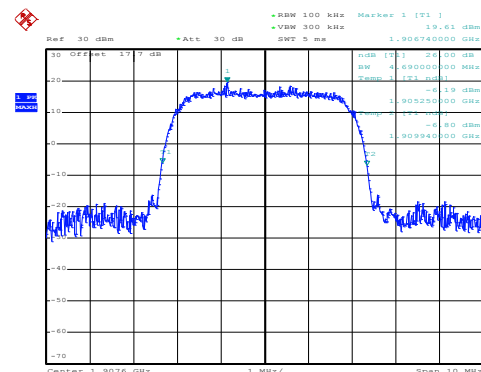
Date: 4.FEB.2020 11:06:20

## Highest Channel



Date: 4.FEB.2020 13:55:47

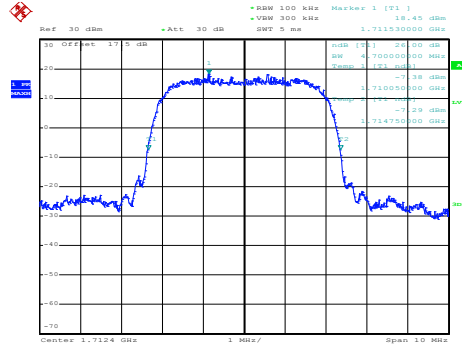
## Highest Channel



Date: 4.FEB.2020 11:06:53

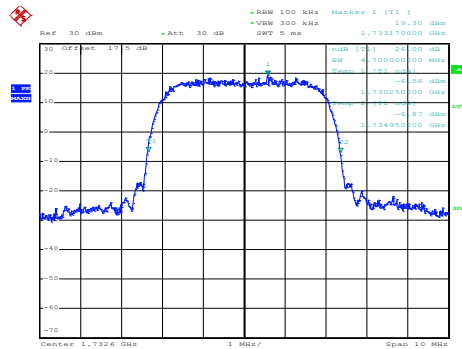
### WCDMA Band IV (RMC 12.2Kbps)

#### Lowest Channel



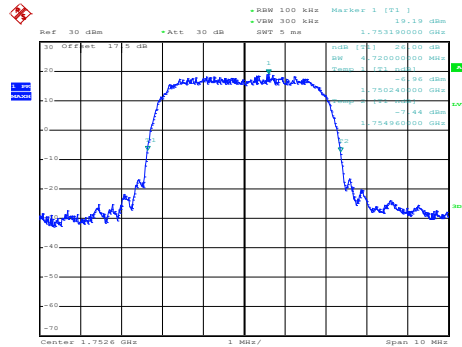
Date: 4.FEB.2020 11:19:49

#### Middle Channel



Date: 4.FEB.2020 11:21:00

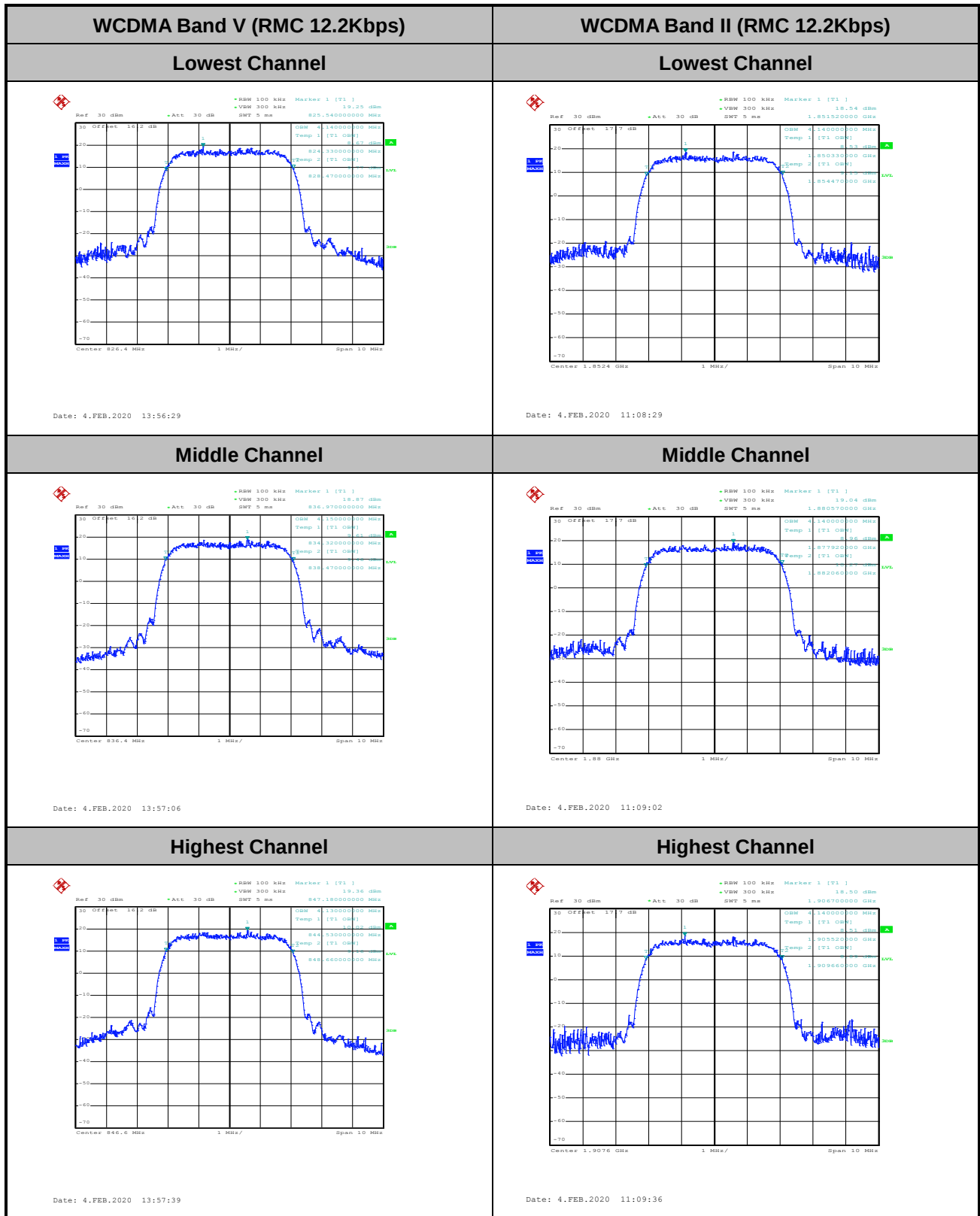
#### Highest Channel

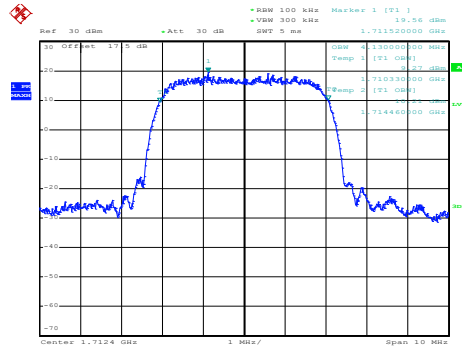


Date: 4.FEB.2020 11:21:39

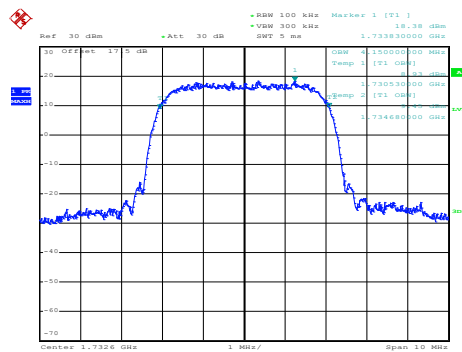
**Occupied Bandwidth**

| Mode       | WCDMA Band V<br>99% OBW(MHz) | WCDMA Band II<br>99% OBW(MHz) | WCDMA Band IV<br>99% OBW(MHz) |
|------------|------------------------------|-------------------------------|-------------------------------|
| Mod.       | RMC 12.2Kbps                 | RMC 12.2Kbps                  | RMC 12.2Kbps                  |
| Lowest CH  | 4.14                         | 4.14                          | 4.13                          |
| Middle CH  | 4.15                         | 4.14                          | 4.15                          |
| Highest CH | 4.13                         | 4.14                          | 4.14                          |

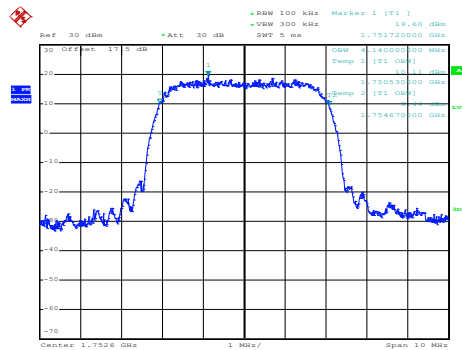


**WCDMA Band IV (RMC 12.2Kbps)**
**Lowest Channel**


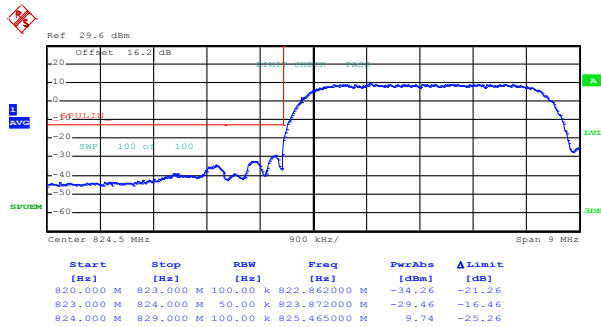
Date: 4.FEB.2020 11:22:30

**Middle Channel**


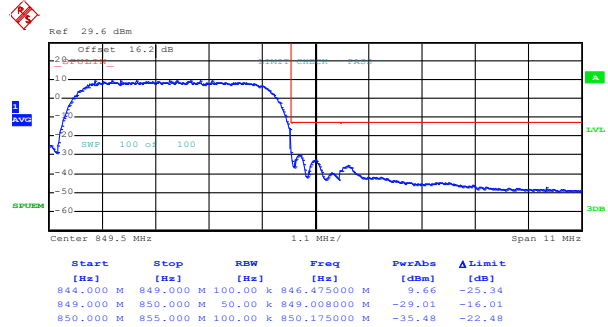
Date: 4.FEB.2020 11:23:03

**Highest Channel**


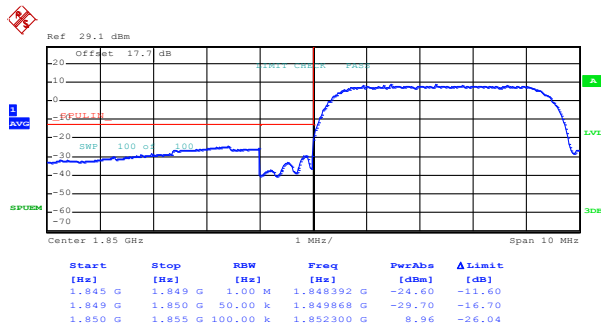
Date: 4.FEB.2020 11:23:36

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

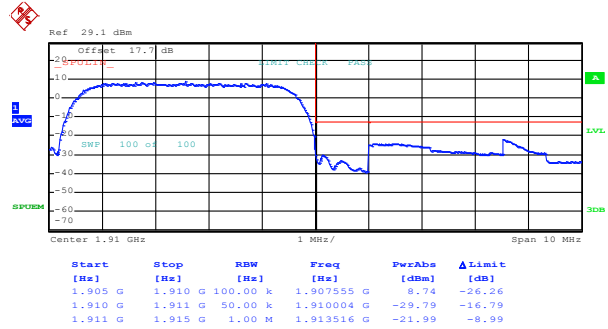
Date: 4.FEB.2020 14:00:48

**Highest Band Edge**

Date: 4.FEB.2020 14:03:41

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

Date: 4.FEB.2020 11:12:28

**Highest Band Edge**

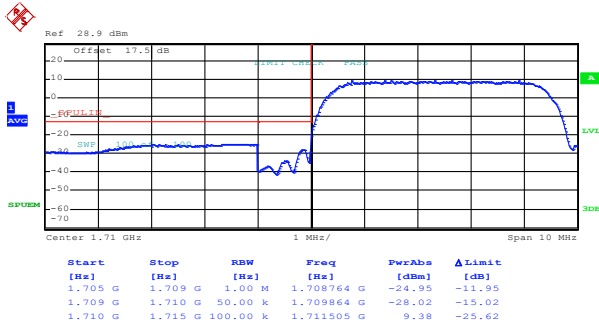
Date: 4.FEB.2020 11:15:21



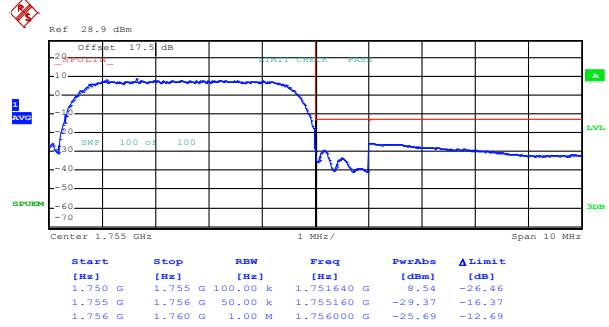
## WCDMA Band IV (RMC 12.2Kbps)

## Lowest Band Edge

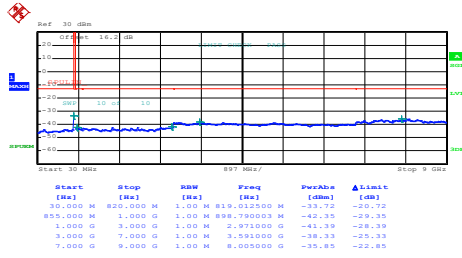
## Highest Band Edge



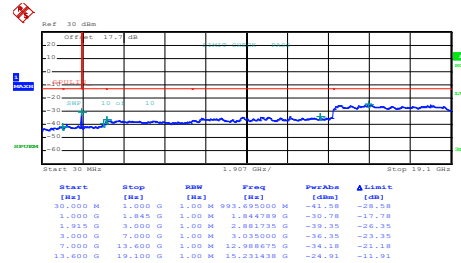
Date: 4.FEB.2020 11:27:45



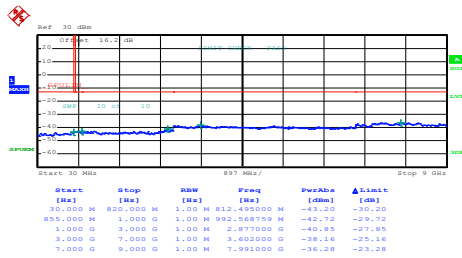
Date: 4.FEB.2020 11:30:34

**Conducted Spurious Emission****WCDMA Band V (RMC 12.2Kbps)****Lowest Channel**

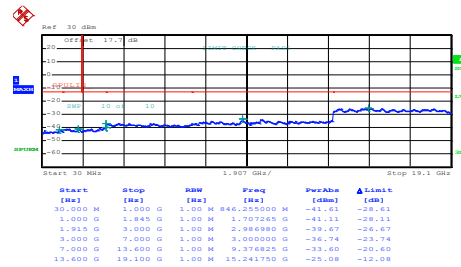
Date: 4.FEB.2020 14:04:37

**WCDMA Band II (RMC 12.2Kbps)****Lowest Channel**

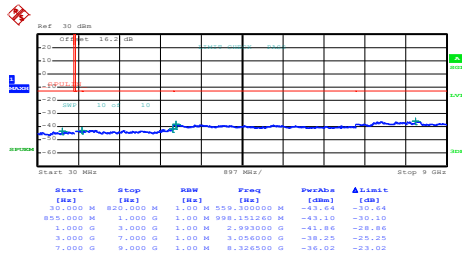
Date: 4.FEB.2020 11:16:17

**Middle Channel**

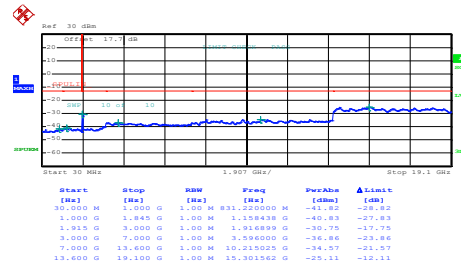
Date: 4.FEB.2020 14:05:28

**Middle Channel**

Date: 4.FEB.2020 11:17:14

**Highest Channel**

Date: 4.FEB.2020 14:06:19

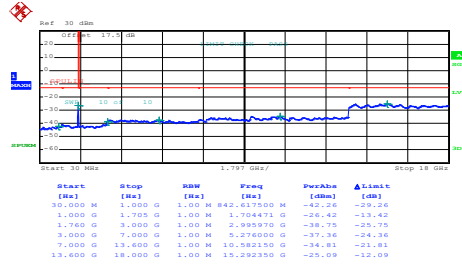
**Highest Channel**

Date: 4.FEB.2020 11:18:10



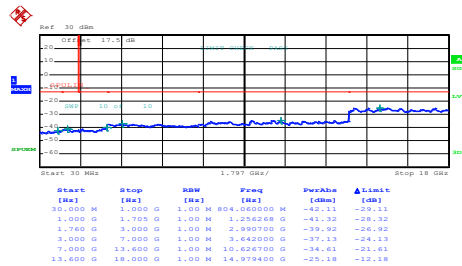
## WCDMA Band IV (RMC 12.2Kbps)

## Lowest Channel



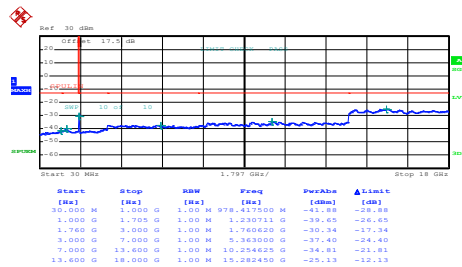
Date: 4.FEB.2020 11:31:27

## Middle Channel



Date: 4.FEB.2020 11:33:16

## Highest Channel



Date: 4.FEB.2020 11:34:07

**Frequency Stability**

| Test Conditions  | Middle Channel    | WCDMA Band V<br>(RMC 12.2Kbps) | Limit<br>2.5ppm |
|------------------|-------------------|--------------------------------|-----------------|
| Temperature (°C) | Voltage (Volt)    | Deviation (ppm)                | Result          |
| 50               | Normal Voltage    | 0.0048                         | PASS            |
| 40               | Normal Voltage    | 0.0012                         |                 |
| 30               | Normal Voltage    | 0.0024                         |                 |
| 20(Ref.)         | Normal Voltage    | 0.0000                         |                 |
| 10               | Normal Voltage    | 0.0000                         |                 |
| 0                | Normal Voltage    | 0.0000                         |                 |
| -10              | Normal Voltage    | 0.0000                         |                 |
| -20              | Normal Voltage    | 0.0132                         |                 |
| -30              | Normal Voltage    | 0.0143                         |                 |
| 20               | Maximum Voltage   | 0.0024                         |                 |
| 20               | Normal Voltage    | 0.0000                         |                 |
| 20               | Battery End Point | 0.0000                         |                 |

| Test Conditions  | Middle Channel    | WCDMA Band II<br>(RMC 12.2Kbps) | Limit<br>Note 2. |
|------------------|-------------------|---------------------------------|------------------|
| Temperature (°C) | Voltage (Volt)    | Deviation (ppm)                 | Result           |
| 50               | Normal Voltage    | 0.0027                          | PASS             |
| 40               | Normal Voltage    | 0.0011                          |                  |
| 30               | Normal Voltage    | 0.0021                          |                  |
| 20(Ref.)         | Normal Voltage    | 0.0000                          |                  |
| 10               | Normal Voltage    | 0.0005                          |                  |
| 0                | Normal Voltage    | 0.0000                          |                  |
| -10              | Normal Voltage    | 0.0027                          |                  |
| -20              | Normal Voltage    | 0.0011                          |                  |
| -30              | Normal Voltage    | 0.0005                          |                  |
| 20               | Maximum Voltage   | 0.0011                          |                  |
| 20               | Normal Voltage    | 0.0000                          |                  |
| 20               | Battery End Point | 0.0005                          |                  |



| Test Conditions  | Middle Channel    | WCDMA Band IV<br>(RMC 12.2Kbps) | Limit<br>Note 2. |
|------------------|-------------------|---------------------------------|------------------|
| Temperature (°C) | Voltage (Volt)    | Deviation (ppm)                 | Result           |
| 50               | Normal Voltage    | 0.0069                          | PASS             |
| 40               | Normal Voltage    | 0.0058                          |                  |
| 30               | Normal Voltage    | 0.0029                          |                  |
| 20(Ref.)         | Normal Voltage    | 0.0000                          |                  |
| 10               | Normal Voltage    | 0.0006                          |                  |
| 0                | Normal Voltage    | 0.0000                          |                  |
| -10              | Normal Voltage    | 0.0006                          |                  |
| -20              | Normal Voltage    | 0.0023                          |                  |
| -30              | Normal Voltage    | 0.0029                          |                  |
| 20               | Maximum Voltage   | 0.0017                          |                  |
| 20               | Normal Voltage    | 0.0000                          |                  |
| 20               | Battery End Point | 0.0023                          |                  |

**Note:**

1. Normal Voltage =3.87V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage =4.45 V
2. The frequency fundamental emissions stay within the authorized frequency block.



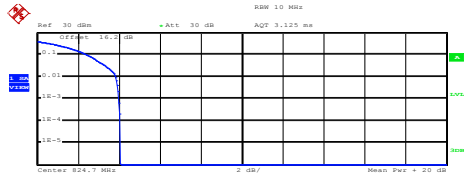
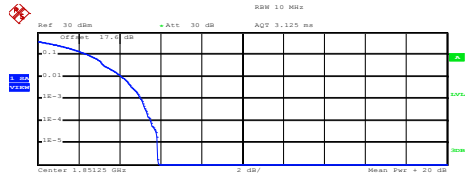
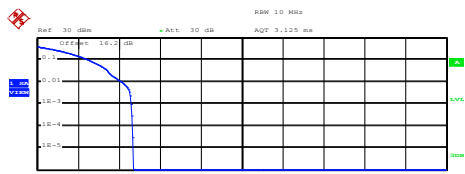
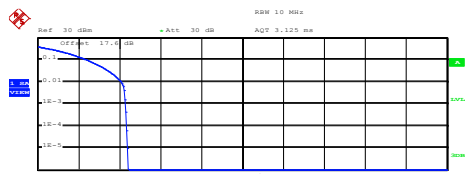
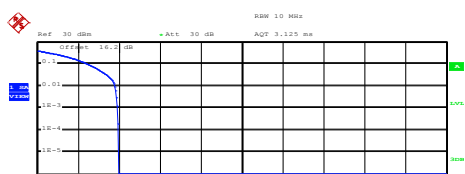
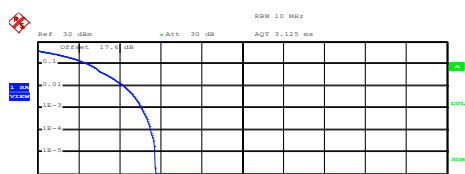
## A4. CDMA

### Peak-to-Average Ratio

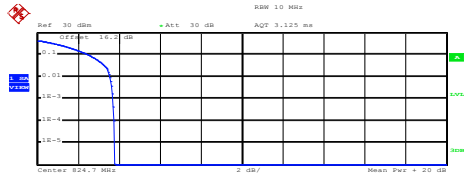
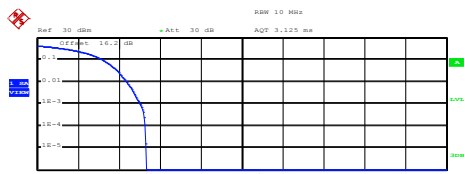
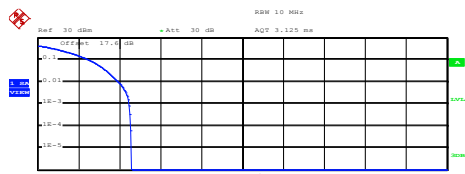
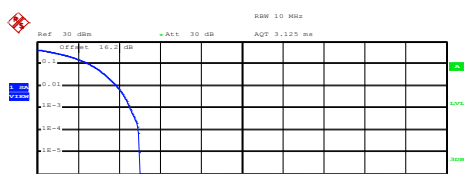
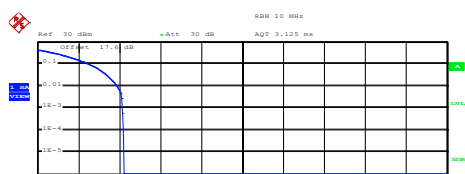
| Mode       | CDMA BC0 | CDMA BC1 | Limit: 13dB |
|------------|----------|----------|-------------|
| Mod.       | 1xRTT    | 1xRTT    | Result      |
| Lowest CH  | 4.00     | 5.04     | PASS        |
| Middle CH  | 4.60     | 4.32     |             |
| Highest CH | 3.92     | 5.08     |             |

| Mode       | CDMA BC0       | CDMA BC1       | Limit: 13dB |
|------------|----------------|----------------|-------------|
| Mod.       | 1xEV-DO Rev. 0 | 1xEV-DO Rev. 0 | Result      |
| Lowest CH  | 3.72           | 3.76           | PASS        |
| Middle CH  | 5.04           | 4.48           |             |
| Highest CH | 4.56           | 4.16           |             |



| CDMA BC0 (1xRTT)                                                                                                                                                                                                                                                                                                                                                      | CDMA BC1 (1xRTT)                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lowest Channel                                                                                                                                                                                                                                                                                                                                                        | Lowest Channel                                                                                                                                                                                                                                                                                                                                                          |
|  <p>Center 824.7 MHz</p> <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 23.66 dBm<br/>Peak 27.71 dBm<br/>Crest 4.05 dB</p> <p>10 % 2.48 dB<br/>1 % 3.84 dB<br/>.1 % 4.00 dB<br/>.01 % 4.08 dB</p> <p>Date: 4.FEB.2020 14:31:48</p>    |  <p>Center 1.65125 GHz</p> <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 21.91 dBm<br/>Peak 27.78 dBm<br/>Crest 5.87 dB</p> <p>10 % 2.48 dB<br/>1 % 4.12 dB<br/>.1 % 5.04 dB<br/>.01 % 5.52 dB</p> <p>Date: 4.FEB.2020 15:58:42</p>   |
| Middle Channel                                                                                                                                                                                                                                                                                                                                                        | Middle Channel                                                                                                                                                                                                                                                                                                                                                          |
|  <p>Center 834.52 MHz</p> <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 22.61 dBm<br/>Peak 27.28 dBm<br/>Crest 4.68 dB</p> <p>10 % 2.56 dB<br/>1 % 4.12 dB<br/>.1 % 4.60 dB<br/>.01 % 4.68 dB</p> <p>Date: 4.FEB.2020 14:32:55</p>  |  <p>Center 1.68 GHz</p> <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 21.59 dBm<br/>Peak 26.02 dBm<br/>Crest 4.43 dB</p> <p>10 % 2.48 dB<br/>1 % 4.08 dB<br/>.1 % 4.32 dB<br/>.01 % 4.36 dB</p> <p>Date: 4.FEB.2020 15:59:06</p>     |
| Highest Channel                                                                                                                                                                                                                                                                                                                                                       | Highest Channel                                                                                                                                                                                                                                                                                                                                                         |
|  <p>Center 849.51 MHz</p> <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 22.20 dBm<br/>Peak 26.16 dBm<br/>Crest 3.96 dB</p> <p>10 % 2.52 dB<br/>1 % 3.80 dB<br/>.1 % 3.92 dB<br/>.01 % 3.96 dB</p> <p>Date: 4.FEB.2020 14:33:31</p> |  <p>Center 1.92875 GHz</p> <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 22.38 dBm<br/>Peak 28.13 dBm<br/>Crest 5.75 dB</p> <p>10 % 2.48 dB<br/>1 % 4.24 dB<br/>.1 % 5.08 dB<br/>.01 % 5.52 dB</p> <p>Date: 4.FEB.2020 15:59:27</p> |

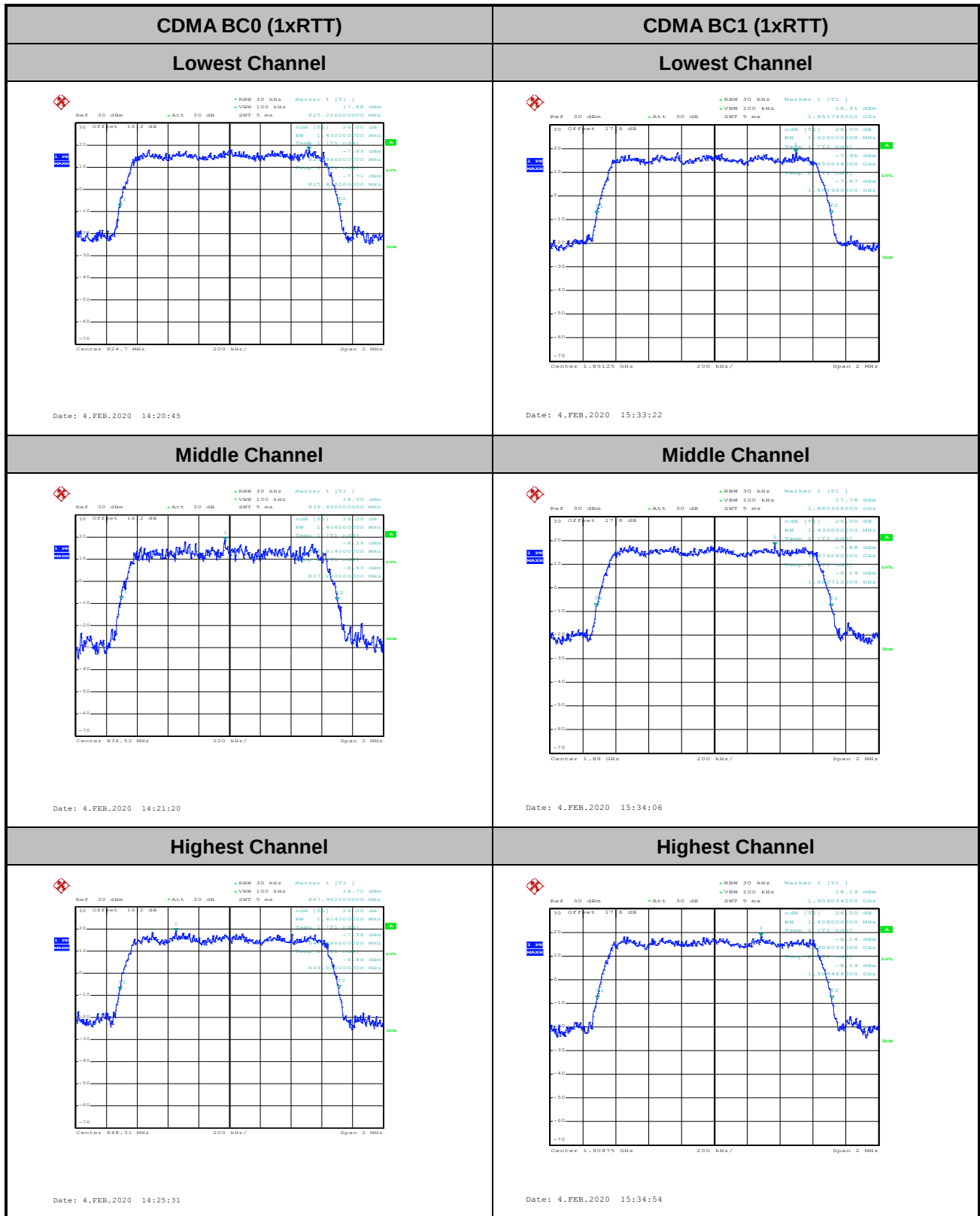


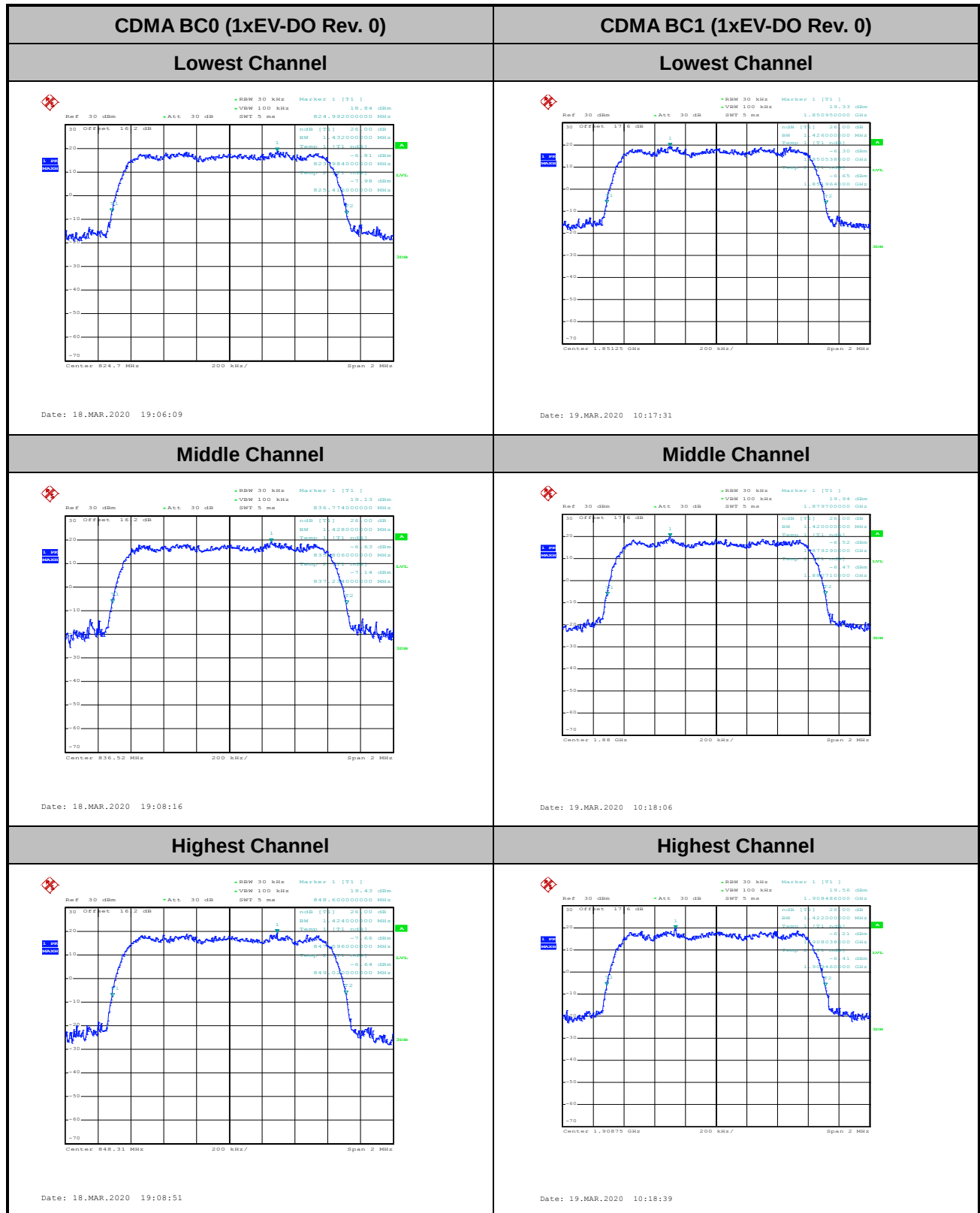
| CDMA BC0 (1xEV-DO Rev. 0)                                                                                                                                                                                                                                                                                                                                                              | CDMA BC1 (1xEV-DO Rev. 0)                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lowest Channel                                                                                                                                                                                                                                                                                                                                                                         | Lowest Channel                                                                                                                                                                                                                                                                                                                                                                           |
|  <p>Center: 824.7 MHz</p> <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 24.06 dBm</p> <p>Peak 27.83 dBm</p> <p>Crest 3.76 dB</p> <p>10 % 2.52 dB</p> <p>1 % 3.56 dB</p> <p>.1 % 3.72 dB</p> <p>.01 % 3.76 dB</p> <p>Date: 18.MAR.2020 19:21:21</p>    |  <p>Center: 1.65125 GHz</p> <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 24.13 dBm</p> <p>Peak 27.97 dBm</p> <p>Crest 3.84 dB</p> <p>10 % 3.28 dB</p> <p>1 % 3.68 dB</p> <p>.1 % 3.76 dB</p> <p>.01 % 3.80 dB</p> <p>Date: 19.MAR.2020 10:19:20</p>   |
| Middle Channel                                                                                                                                                                                                                                                                                                                                                                         | Middle Channel                                                                                                                                                                                                                                                                                                                                                                           |
|  <p>Center: 834.52 MHz</p> <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 23.99 dBm</p> <p>Peak 29.31 dBm</p> <p>Crest 5.32 dB</p> <p>10 % 3.24 dB</p> <p>1 % 4.36 dB</p> <p>.1 % 5.04 dB</p> <p>.01 % 5.28 dB</p> <p>Date: 18.MAR.2020 19:21:35</p>  |  <p>Center: 1.68 GHz</p> <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 24.04 dBm</p> <p>Peak 28.60 dBm</p> <p>Crest 4.56 dB</p> <p>10 % 2.56 dB</p> <p>1 % 3.92 dB</p> <p>.1 % 4.48 dB</p> <p>.01 % 4.56 dB</p> <p>Date: 19.MAR.2020 10:19:35</p>     |
| Highest Channel                                                                                                                                                                                                                                                                                                                                                                        | Highest Channel                                                                                                                                                                                                                                                                                                                                                                          |
|  <p>Center: 848.51 MHz</p> <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 23.96 dBm</p> <p>Peak 28.96 dBm</p> <p>Crest 5.00 dB</p> <p>10 % 2.56 dB</p> <p>1 % 3.88 dB</p> <p>.1 % 4.56 dB</p> <p>.01 % 4.96 dB</p> <p>Date: 18.MAR.2020 19:21:43</p> |  <p>Center: 1.60875 GHz</p> <p>Complementary Cumulative Distribution Function (100000 samples)</p> <p>Trace 1</p> <p>Mean 23.88 dBm</p> <p>Peak 28.11 dBm</p> <p>Crest 4.23 dB</p> <p>10 % 2.56 dB</p> <p>1 % 3.88 dB</p> <p>.1 % 4.16 dB</p> <p>.01 % 4.20 dB</p> <p>Date: 19.MAR.2020 10:19:51</p> |

**26dB Bandwidth**

| Mode       | CDMA BC0<br>26dB BW(MHz) | CDMA BC1<br>26dB BW(MHz) |
|------------|--------------------------|--------------------------|
| Mod.       | 1xRTT                    | 1xRTT                    |
| Lowest CH  | 1.43                     | 1.43                     |
| Middle CH  | 1.41                     | 1.43                     |
| Highest CH | 1.42                     | 1.43                     |

| Mode       | CDMA BC0<br>26dB BW(MHz) | CDMA BC1<br>26dB BW(MHz) |
|------------|--------------------------|--------------------------|
| Mod.       | 1xEV-DO Rev. 0           | 1xEV-DO Rev. 0           |
| Lowest CH  | 1.43                     | 1.43                     |
| Middle CH  | 1.43                     | 1.42                     |
| Highest CH | 1.42                     | 1.42                     |

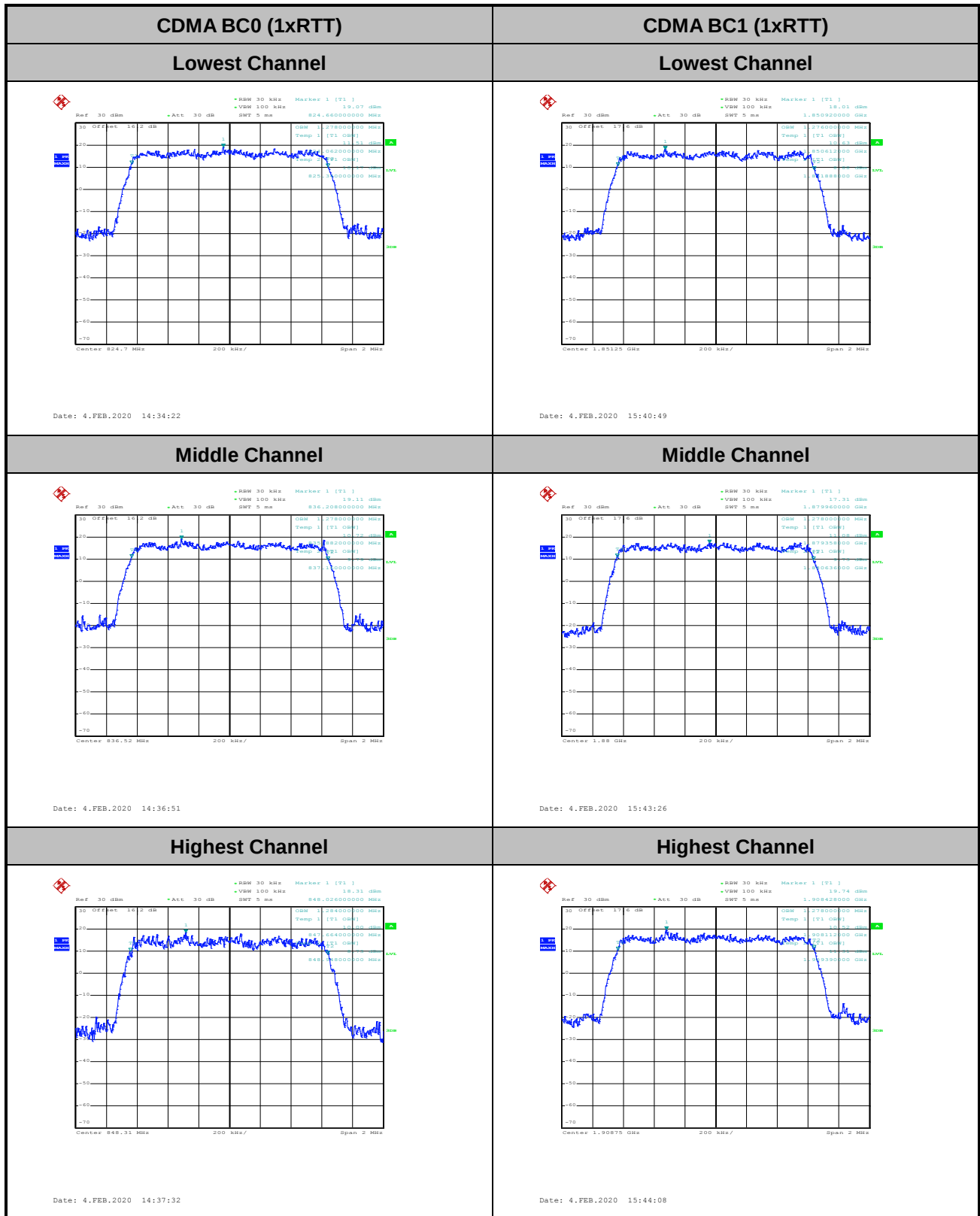




**Occupied Bandwidth**

| Mode       | CDMA BC0<br>99% OBW(MHz) | CDMA BC1<br>99% OBW(MHz) |
|------------|--------------------------|--------------------------|
| Mod.       | 1xRTT                    | 1xRTT                    |
| Lowest CH  | 1.28                     | 1.28                     |
| Middle CH  | 1.28                     | 1.28                     |
| Highest CH | 1.28                     | 1.28                     |

| Mode       | CDMA BC0<br>99% OBW(MHz) | CDMA BC1<br>99% OBW(MHz) |
|------------|--------------------------|--------------------------|
| Mod.       | 1xEV-DO Rev. 0           | 1xEV-DO Rev. 0           |
| Lowest CH  | 1.27                     | 1.28                     |
| Middle CH  | 1.27                     | 1.27                     |
| Highest CH | 1.27                     | 1.27                     |





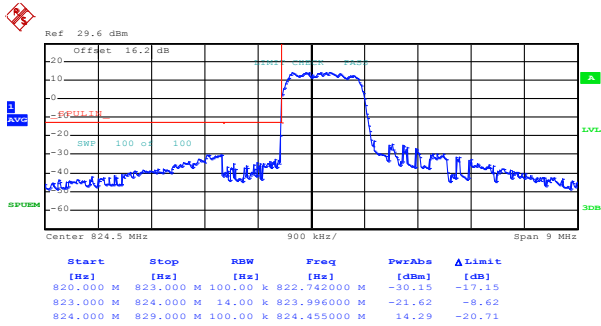
| CDMA BC0 (1xEV-DO Rev. 0)                                                                                                                               | CDMA BC1 (1xEV-DO Rev. 0)                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lowest Channel                                                                                                                                          | Lowest Channel                                                                                                                                        |
| <p>Ref: 30 dBm<br/>Att: 30 dB<br/>VSW: 100 kHz<br/>SWT: 5 ms<br/>Marker 1 [T1] 1<br/>824.735000000 MHz<br/>19.34 dBm<br/>Date: 18.MAR.2020 19:10:24</p> | <p>Ref: 30 dBm<br/>Att: 30 dB<br/>VSW: 100 kHz<br/>SWT: 5 ms<br/>Marker 1 [T1] 1<br/>1.850340000 GHz<br/>20.30 dBm<br/>Date: 19.MAR.2020 10:04:45</p> |
| Middle Channel                                                                                                                                          | Middle Channel                                                                                                                                        |
| <p>Ref: 30 dBm<br/>Att: 30 dB<br/>VSW: 100 kHz<br/>SWT: 5 ms<br/>Marker 1 [T1] 1<br/>836.608000000 MHz<br/>18.87 dBm<br/>Date: 18.MAR.2020 19:10:56</p> | <p>Ref: 30 dBm<br/>Att: 30 dB<br/>VSW: 100 kHz<br/>SWT: 5 ms<br/>Marker 1 [T1] 1<br/>1.880340000 GHz<br/>18.94 dBm<br/>Date: 19.MAR.2020 10:05:19</p> |
| Highest Channel                                                                                                                                         | Highest Channel                                                                                                                                       |
| <p>Ref: 30 dBm<br/>Att: 30 dB<br/>VSW: 100 kHz<br/>SWT: 5 ms<br/>Marker 1 [T1] 1<br/>848.608000000 MHz<br/>19.90 dBm<br/>Date: 18.MAR.2020 19:11:28</p> | <p>Ref: 30 dBm<br/>Att: 30 dB<br/>VSW: 100 kHz<br/>SWT: 5 ms<br/>Marker 1 [T1] 1<br/>1.908340000 GHz<br/>19.33 dBm<br/>Date: 19.MAR.2020 10:05:51</p> |



## Conducted Band Edge

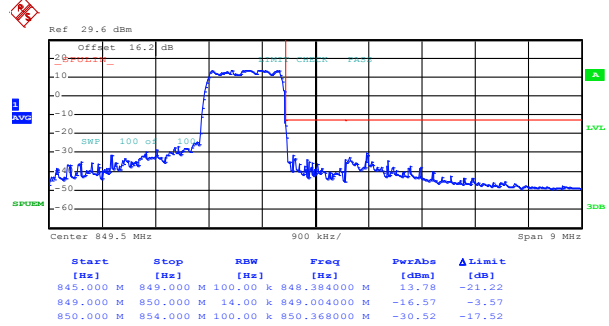
### CDMA BC0 (1xRTT)

#### Lowest Band Edge



Date: 4.FEB.2020 14:40:53

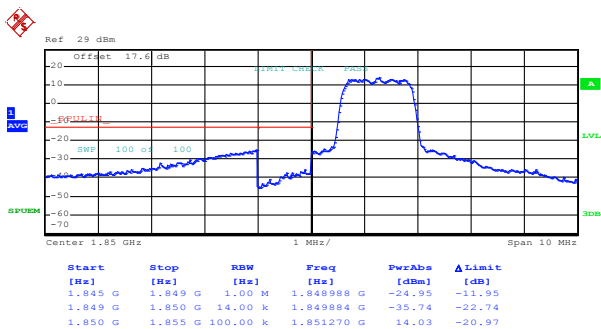
#### Highest Band Edge



Date: 4.FEB.2020 14:45:03

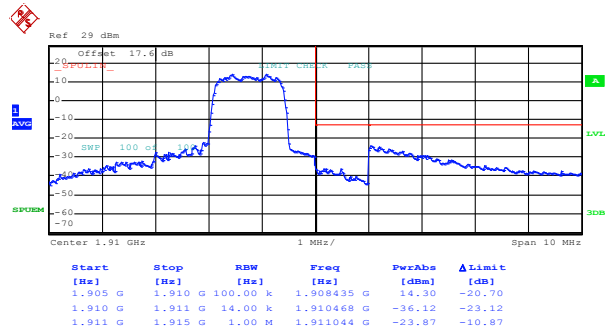
### CDMA BC1 (1xRTT)

#### Lowest Band Edge



Date: 4.FEB.2020 15:47:16

#### Highest Band Edge



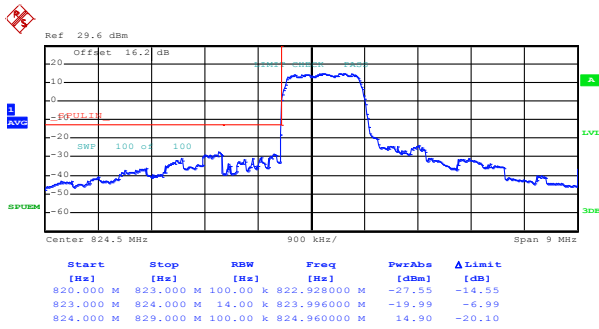
Date: 4.FEB.2020 15:54:11



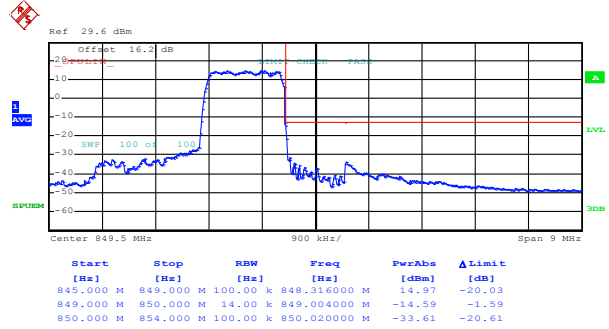
## CDMA BC0 (1xEV-DO Rev. 0)

## Lowest Band Edge

## Highest Band Edge



Date: 18.MAR.2020 19:14:36

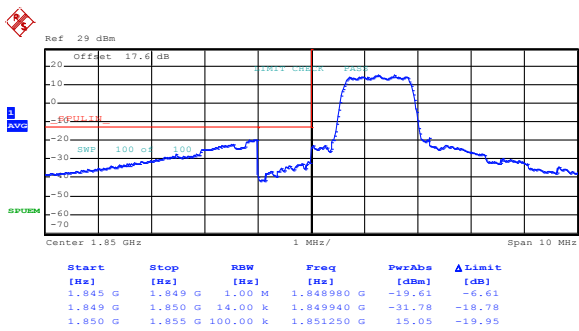


Date: 18.MAR.2020 19:17:25

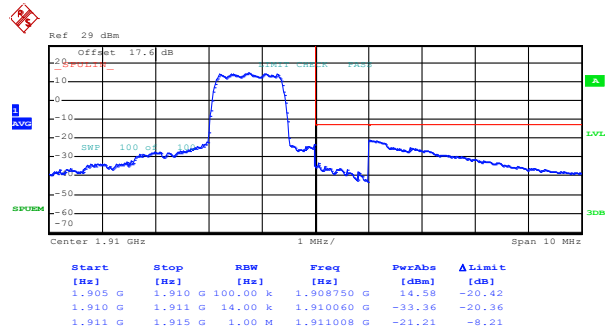
## CDMA BC1 (1xEV-DO Rev. 0)

## Lowest Band Edge

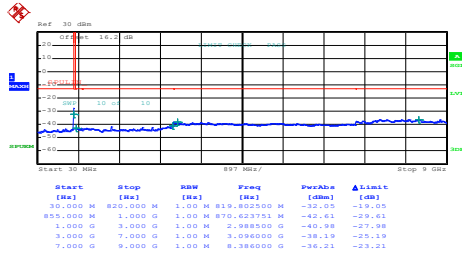
## Highest Band Edge



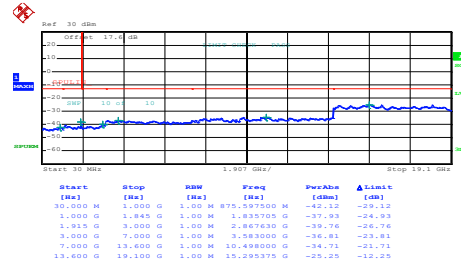
Date: 19.MAR.2020 10:08:46



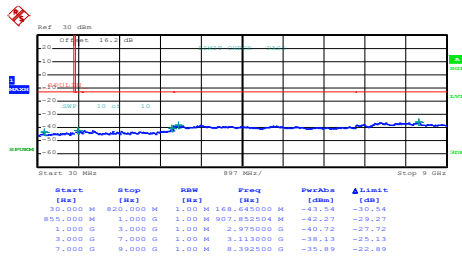
Date: 19.MAR.2020 10:14:20

**Conducted Spurious Emission****CDMA BC0 (1xRTT)****Lowest Channel**

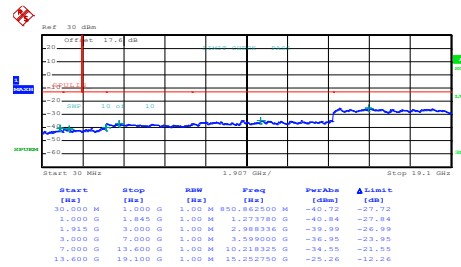
Date: 4.FEB.2020 14:27:00

**CDMA BC1 (1xRTT)****Lowest Channel**

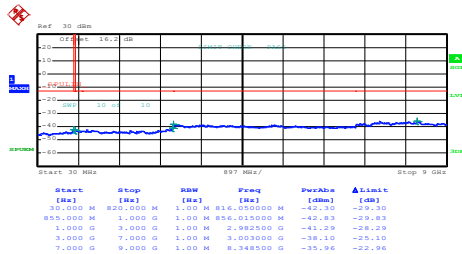
Date: 4.FEB.2020 15:56:13

**Middle Channel**

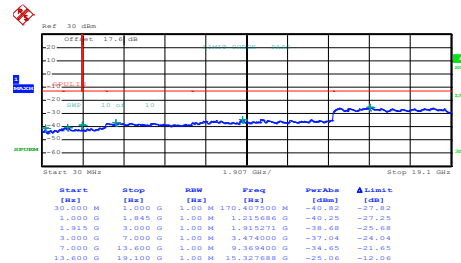
Date: 4.FEB.2020 14:28:12

**Middle Channel**

Date: 4.FEB.2020 15:57:15

**Highest Channel**

Date: 4.FEB.2020 14:31:03

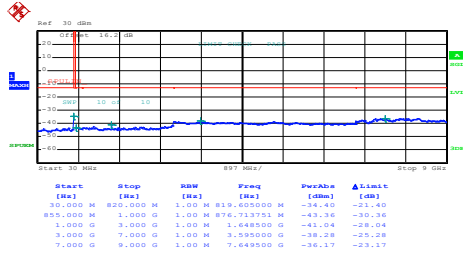
**Highest Channel**

Date: 4.FEB.2020 15:58:06



## CDMA BC0 (1xEV-DO Rev. 0)

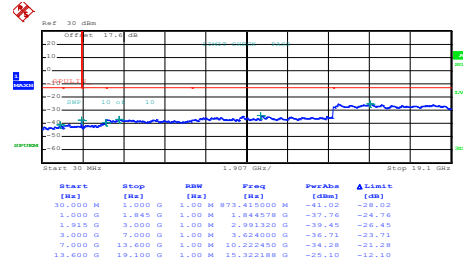
## Lowest Channel



Date: 18.MAR.2020 19:18:33

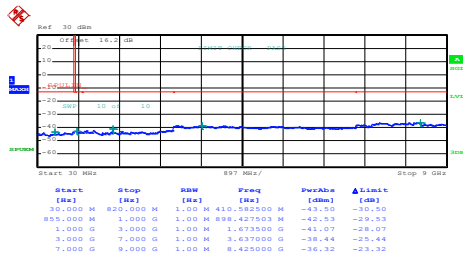
## CDMA BC1 (1xEV-DO Rev. 0)

## Lowest Channel



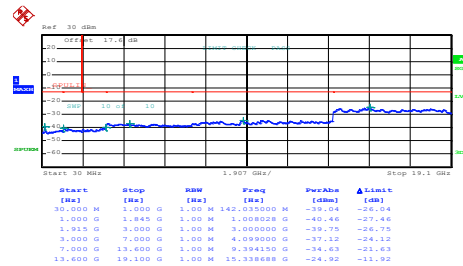
Date: 19.MAR.2020 10:15:10

## Middle Channel



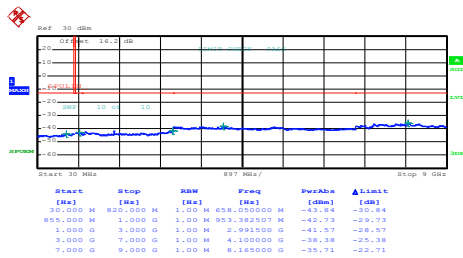
Date: 18.MAR.2020 19:19:24

## Middle Channel



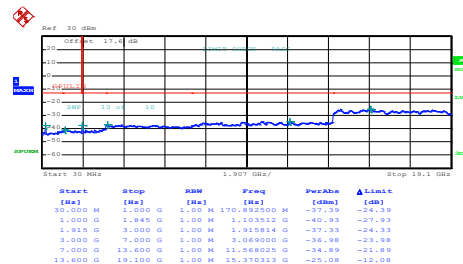
Date: 19.MAR.2020 10:16:01

## Highest Channel



Date: 18.MAR.2020 19:20:10

## Highest Channel



Date: 19.MAR.2020 10:16:52

**Frequency Stability**

| Test Conditions  | Middle Channel    | CDMA BC0<br>(1xRTT) | Limit<br>2.5ppm |
|------------------|-------------------|---------------------|-----------------|
| Temperature (°C) | Voltage (Volt)    | Deviation (ppm)     | Result          |
| 50               | Normal Voltage    | 0.0000              | PASS            |
| 40               | Normal Voltage    | 0.0012              |                 |
| 30               | Normal Voltage    | 0.0000              |                 |
| 20(Ref.)         | Normal Voltage    | 0.0000              |                 |
| 10               | Normal Voltage    | 0.0000              |                 |
| 0                | Normal Voltage    | 0.0000              |                 |
| -10              | Normal Voltage    | 0.0012              |                 |
| -20              | Normal Voltage    | 0.0012              |                 |
| -30              | Normal Voltage    | 0.0012              |                 |
| 20               | Maximum Voltage   | 0.0000              |                 |
| 20               | Normal Voltage    | 0.0000              |                 |
| 20               | Battery End Point | 0.0000              |                 |

| Test Conditions  | Middle Channel    | CDMA BC1<br>(1xRTT) | Limit<br>Note 2. |
|------------------|-------------------|---------------------|------------------|
| Temperature (°C) | Voltage (Volt)    | Deviation (ppm)     | Result           |
| 50               | Normal Voltage    | 0.0005              | PASS             |
| 40               | Normal Voltage    | 0.0016              |                  |
| 30               | Normal Voltage    | 0.0005              |                  |
| 20(Ref.)         | Normal Voltage    | 0.0000              |                  |
| 10               | Normal Voltage    | 0.0000              |                  |
| 0                | Normal Voltage    | 0.0011              |                  |
| -10              | Normal Voltage    | 0.0005              |                  |
| -20              | Normal Voltage    | 0.0021              |                  |
| -30              | Normal Voltage    | 0.0016              |                  |
| 20               | Maximum Voltage   | 0.0011              |                  |
| 20               | Normal Voltage    | 0.0000              |                  |
| 20               | Battery End Point | 0.0005              |                  |



| Test Conditions  | Middle Channel    | CDMA BC0<br>(1xEV-DO Rev. 0) | Limit<br>2.5ppm |
|------------------|-------------------|------------------------------|-----------------|
| Temperature (°C) | Voltage (Volt)    | Deviation (ppm)              | Result          |
| 50               | Normal Voltage    | 0.0000                       | PASS            |
| 40               | Normal Voltage    | 0.0000                       |                 |
| 30               | Normal Voltage    | 0.0000                       |                 |
| 20(Ref.)         | Normal Voltage    | 0.0000                       |                 |
| 10               | Normal Voltage    | 0.0012                       |                 |
| 0                | Normal Voltage    | 0.0048                       |                 |
| -10              | Normal Voltage    | 0.0060                       |                 |
| -20              | Normal Voltage    | 0.0060                       |                 |
| -30              | Normal Voltage    | 0.0048                       |                 |
| 20               | Maximum Voltage   | 0.0048                       |                 |
| 20               | Normal Voltage    | 0.0000                       |                 |
| 20               | Battery End Point | 0.0000                       |                 |

| Test Conditions  | Middle Channel    | CDMA BC1<br>(1xEV-DO Rev. 0) | Limit<br>Note 2. |
|------------------|-------------------|------------------------------|------------------|
| Temperature (°C) | Voltage (Volt)    | Deviation (ppm)              | Result           |
| 50               | Normal Voltage    | 0.0016                       | PASS             |
| 40               | Normal Voltage    | 0.0011                       |                  |
| 30               | Normal Voltage    | 0.0000                       |                  |
| 20(Ref.)         | Normal Voltage    | 0.0000                       |                  |
| 10               | Normal Voltage    | 0.0000                       |                  |
| 0                | Normal Voltage    | 0.0005                       |                  |
| -10              | Normal Voltage    | 0.0011                       |                  |
| -20              | Normal Voltage    | 0.0011                       |                  |
| -30              | Normal Voltage    | 0.0005                       |                  |
| 20               | Maximum Voltage   | 0.0000                       |                  |
| 20               | Normal Voltage    | 0.0000                       |                  |
| 20               | Battery End Point | 0.0000                       |                  |

**Note:**

1. Normal Voltage = 3.87V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V
2. The frequency fundamental emissions stay within the authorized frequency block.



## Appendix B. Test Results of ERP/EIRP and Radiated Test

### ERP/EIRP

#### <Primary Antenna>

| Channel | Mode                | Conducted   |               | ERP      |        |
|---------|---------------------|-------------|---------------|----------|--------|
|         |                     | Power (dBm) | Power (Watts) | ERP(dBm) | ERP(W) |
| Lowest  | GSM850              | 32.98       | 1.9861        | 28.63    | 0.7295 |
| Middle  | GPRS class 8        | 32.70       | 1.8621        | 28.35    | 0.6839 |
| Highest | (GT - LC = -2.2 dB) | 32.50       | 1.7783        | 28.15    | 0.6531 |
| Lowest  | GSM850              | 27.15       | 0.5188        | 22.80    | 0.1905 |
| Middle  | EDGE class 8        | 27.11       | 0.5140        | 22.76    | 0.1888 |
| Highest | (GT - LC = -2.2 dB) | 26.84       | 0.4831        | 22.49    | 0.1774 |
| Lowest  | WCDMA Band V        | 25.21       | 0.3319        | 20.86    | 0.1219 |
| Middle  | RMC 12.2Kbps        | 25.09       | 0.3228        | 20.74    | 0.1186 |
| Highest | (GT - LC = -2.2 dB) | 25.25       | 0.3350        | 20.90    | 0.1230 |
| Lowest  | CDMA BC0            | 24.86       | 0.3062        | 20.51    | 0.1125 |
| Middle  | 1xRTT               | 24.85       | 0.3055        | 20.50    | 0.1122 |
| Highest | (GT - LC = -2.2 dB) | 24.92       | 0.3105        | 20.57    | 0.1140 |
| Lowest  | CDMA BC0            | 24.65       | 0.2917        | 20.30    | 0.1072 |
| Middle  | 1xEV-DO             | 24.68       | 0.2938        | 20.33    | 0.1079 |
| Highest | (GT - LC = -2.2 dB) | 24.73       | 0.2972        | 20.38    | 0.1091 |
| Limit   | ERP < 7W            | Result      |               | PASS     |        |



| Channel | Mode               | Conducted   |               | EIRP      |         |
|---------|--------------------|-------------|---------------|-----------|---------|
|         |                    | Power (dBm) | Power (Watts) | EIRP(dBm) | EIRP(W) |
| Lowest  | GSM1900            | 29.63       | 0.9183        | 31.53     | 1.4223  |
| Middle  | GPRS class 8       | 29.72       | 0.9376        | 31.62     | 1.4521  |
| Highest | (GT - LC = 1.9 dB) | 29.84       | 0.9638        | 31.74     | 1.4928  |
| Lowest  | GSM1900            | 25.84       | 0.3837        | 27.74     | 0.5943  |
| Middle  | EDGE class 8       | 25.67       | 0.3690        | 27.57     | 0.5715  |
| Highest | (GT - LC = 1.9 dB) | 25.66       | 0.3681        | 27.56     | 0.5702  |
| Lowest  | WCDMA Band II      | 24.78       | 0.3006        | 26.68     | 0.4656  |
| Middle  | RMC 12.2Kbps       | 24.85       | 0.3055        | 26.75     | 0.4732  |
| Highest | (GT - LC = 1.9 dB) | 25.05       | 0.3199        | 26.95     | 0.4955  |
| Lowest  | CDMA BC1           | 24.93       | 0.3112        | 26.83     | 0.4819  |
| Middle  | 1xRTT              | 24.85       | 0.3055        | 26.75     | 0.4732  |
| Highest | (GT - LC = 1.9 dB) | 24.74       | 0.2979        | 26.64     | 0.4613  |
| Lowest  | CDMA BC1           | 24.88       | 0.3076        | 26.78     | 0.4764  |
| Middle  | 1xEV-DO            | 24.80       | 0.3020        | 26.70     | 0.4677  |
| Highest | (GT - LC = 1.9 dB) | 24.70       | 0.2951        | 26.60     | 0.4571  |
| Limit   | EIRP < 2W          | Result      |               | PASS      |         |

| Channel | Mode               | Conducted   |               | EIRP      |         |
|---------|--------------------|-------------|---------------|-----------|---------|
|         |                    | Power (dBm) | Power (Watts) | EIRP(dBm) | EIRP(W) |
| Lowest  | WCDMA Band IV      | 24.85       | 0.3055        | 25.95     | 0.3936  |
| Middle  | RMC 12.2Kbps       | 24.83       | 0.3041        | 25.93     | 0.3917  |
| Highest | (GT - LC = 1.1 dB) | 24.87       | 0.3069        | 25.97     | 0.3954  |
| Limit   | EIRP < 1W          | Result      |               | PASS      |         |


**<ASDIV Antenna>**

| Channel | Mode                | Conducted   |               | ERP      |        |
|---------|---------------------|-------------|---------------|----------|--------|
|         |                     | Power (dBm) | Power (Watts) | ERP(dBm) | ERP(W) |
| Lowest  | GSM850              | 32.29       | 1.6943        | 26.64    | 0.4613 |
| Middle  | GPRS class 8        | 32.37       | 1.7258        | 26.72    | 0.4699 |
| Highest | (GT - LC = -3.5 dB) | 32.19       | 1.6558        | 26.54    | 0.4508 |
| Lowest  | GSM850              | 26.82       | 0.4808        | 21.17    | 0.1309 |
| Middle  | EDGE class 8        | 26.76       | 0.4742        | 21.11    | 0.1291 |
| Highest | (GT - LC = -3.5 dB) | 26.56       | 0.4529        | 20.91    | 0.1233 |
| Lowest  | WCDMA Band V        | 24.85       | 0.3055        | 19.20    | 0.0832 |
| Middle  | RMC 12.2Kbps        | 24.74       | 0.2979        | 19.09    | 0.0811 |
| Highest | (GT - LC = -3.5 dB) | 24.86       | 0.3062        | 19.21    | 0.0834 |
| Lowest  | CDMA BC0            | 24.46       | 0.2793        | 18.81    | 0.0760 |
| Middle  | 1xRTT               | 24.45       | 0.2786        | 18.80    | 0.0759 |
| Highest | (GT - LC = -3.5 dB) | 24.52       | 0.2831        | 18.87    | 0.0771 |
| Lowest  | CDMA BC0            | 24.25       | 0.2661        | 18.60    | 0.0724 |
| Middle  | 1xEV-DO             | 24.28       | 0.2679        | 18.63    | 0.0729 |
| Highest | (GT - LC = -3.5 dB) | 24.33       | 0.2710        | 18.68    | 0.0738 |
| Limit   | ERP < 7W            | Result      |               | PASS     |        |



| Channel | Mode               | Conducted   |               | EIRP      |         |
|---------|--------------------|-------------|---------------|-----------|---------|
|         |                    | Power (dBm) | Power (Watts) | EIRP(dBm) | EIRP(W) |
| Lowest  | GSM1900            | 30.09       | 1.0209        | 31.79     | 1.5101  |
| Middle  | GPRS class 8       | 30.08       | 1.0186        | 31.78     | 1.5066  |
| Highest | (GT - LC = 1.7 dB) | 30.31       | 1.0740        | 32.01     | 1.5885  |
| Lowest  | GSM1900            | 26.04       | 0.4018        | 27.74     | 0.5943  |
| Middle  | EDGE class 8       | 26.10       | 0.4074        | 27.80     | 0.6026  |
| Highest | (GT - LC = 1.7 dB) | 26.23       | 0.4198        | 27.93     | 0.6209  |
| Lowest  | WCDMA Band II      | 25.15       | 0.3273        | 26.85     | 0.4842  |
| Middle  | RMC 12.2Kbps       | 25.04       | 0.3192        | 26.74     | 0.4721  |
| Highest | (GT - LC = 1.7 dB) | 25.19       | 0.3304        | 26.89     | 0.4887  |
| Lowest  | CDMA BC1           | 25.41       | 0.3475        | 27.11     | 0.5140  |
| Middle  | 1xRTT              | 25.34       | 0.3420        | 27.04     | 0.5058  |
| Highest | (GT - LC = 1.7 dB) | 25.22       | 0.3327        | 26.92     | 0.4920  |
| Lowest  | CDMA BC1           | 25.22       | 0.3327        | 26.92     | 0.4920  |
| Middle  | 1xEV-DO            | 25.14       | 0.3266        | 26.84     | 0.4831  |
| Highest | (GT - LC = 1.7 dB) | 25.11       | 0.3243        | 26.81     | 0.4797  |
| Limit   | EIRP < 2W          | Result      |               | PASS      |         |

| Channel | Mode                | Conducted   |               | EIRP      |         |
|---------|---------------------|-------------|---------------|-----------|---------|
|         |                     | Power (dBm) | Power (Watts) | EIRP(dBm) | EIRP(W) |
| Lowest  | WCDMA Band IV       | 25.17       | 0.3289        | 24.77     | 0.2999  |
| Middle  | RMC 12.2Kbps        | 25.16       | 0.3281        | 24.76     | 0.2992  |
| Highest | (GT - LC = -0.4 dB) | 25.14       | 0.3266        | 24.74     | 0.2979  |
| Limit   | EIRP < 1W           | Result      |               | PASS      |         |

## Radiated Spurious Emission

**<Primary Antenna>**

**<Ant. 0>**

### **GPRS850**

| GPRS 850 |                      |                |                  |                         |                         |                          |                            |                             |                       |
|----------|----------------------|----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel  | Frequency<br>( MHz ) | ERP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest   | 1648                 | -41.19         | -13              | -28.19                  | -54.16                  | -46.58                   | 1.23                       | 8.76                        | H                     |
|          | 2472                 | -54.31         | -13              | -41.31                  | -71.14                  | -61.20                   | 1.44                       | 10.48                       | H                     |
|          | 3297                 | -57.45         | -13              | -44.45                  | -76.05                  | -65.39                   | 1.70                       | 11.79                       | H                     |
|          | 1648                 | -40.66         | -13              | -27.66                  | -53.51                  | -46.05                   | 1.23                       | 8.76                        | V                     |
|          | 2472                 | -51.10         | -13              | -38.10                  | -68.22                  | -57.99                   | 1.44                       | 10.48                       | V                     |
|          | 3297                 | -56.72         | -13              | -43.72                  | -75.71                  | -64.66                   | 1.70                       | 11.79                       | V                     |
| Middle   | 1672                 | -55.11         | -13              | -42.11                  | -68.13                  | -60.58                   | 1.24                       | 8.85                        | H                     |
|          | 2509                 | -58.58         | -13              | -45.58                  | -75.35                  | -65.50                   | 1.44                       | 10.51                       | H                     |
|          | 3346                 | -57.32         | -13              | -44.32                  | -75.61                  | -65.36                   | 1.74                       | 11.94                       | H                     |
|          | 1672                 | -62.00         | -13              | -49.00                  | -74.91                  | -67.47                   | 1.24                       | 8.85                        | V                     |
|          | 2512                 | -58.55         | -13              | -45.55                  | -75.51                  | -65.47                   | 1.44                       | 10.51                       | V                     |
|          | 3344                 | -56.88         | -13              | -43.88                  | -75.7                   | -64.92                   | 1.74                       | 11.93                       | V                     |
| Highest  | 1696                 | -39.45         | -13              | -26.45                  | -52.51                  | -45.00                   | 1.24                       | 8.94                        | H                     |
|          | 2544                 | -48.95         | -13              | -35.95                  | -65.78                  | -55.89                   | 1.44                       | 10.54                       | H                     |
|          | 4248                 | -53.60         | -13              | -40.60                  | -74.19                  | -61.50                   | 2.05                       | 12.10                       | H                     |
|          | 1696                 | -38.69         | -13              | -25.69                  | -51.66                  | -44.24                   | 1.24                       | 8.94                        | V                     |
|          | 2544                 | -47.40         | -13              | -34.40                  | -64.44                  | -54.34                   | 1.44                       | 10.54                       | V                     |
|          | 4248                 | -54.24         | -13              | -41.24                  | -75.53                  | -62.14                   | 2.05                       | 12.10                       | V                     |

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

**EDGE850**

| EDGE 850 |                      |                |                  |                         |                         |                          |                            |                             |                       |
|----------|----------------------|----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel  | Frequency<br>( MHz ) | ERP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest   | 1648                 | -47.04         | -13              | -34.04                  | -60.01                  | -52.43                   | 1.23                       | 8.76                        | H                     |
|          | 2473                 | -56.81         | -13              | -43.81                  | -73.64                  | -63.70                   | 1.44                       | 10.48                       | H                     |
|          | 3297                 | -56.99         | -13              | -43.99                  | -75.59                  | -64.93                   | 1.70                       | 11.79                       | H                     |
|          | 1648                 | -48.10         | -13              | -35.10                  | -60.95                  | -53.49                   | 1.23                       | 8.76                        | V                     |
|          | 2473                 | -56.72         | -13              | -43.72                  | -73.84                  | -63.61                   | 1.44                       | 10.48                       | V                     |
|          | 3297                 | -56.85         | -13              | -43.85                  | -75.84                  | -64.79                   | 1.70                       | 11.79                       | V                     |
| Middle   | 1672                 | -48.33         | -13              | -35.33                  | -61.35                  | -53.80                   | 1.24                       | 8.85                        | H                     |
|          | 2509                 | -56.57         | -13              | -43.57                  | -73.34                  | -63.49                   | 1.44                       | 10.51                       | H                     |
|          | 3346                 | -57.49         | -13              | -44.49                  | -75.78                  | -65.53                   | 1.74                       | 11.94                       | H                     |
|          | 1672                 | -48.37         | -13              | -35.37                  | -61.28                  | -53.84                   | 1.24                       | 8.85                        | V                     |
|          | 2509                 | -56.72         | -13              | -43.72                  | -73.68                  | -63.64                   | 1.44                       | 10.51                       | V                     |
|          | 3346                 | -56.94         | -13              | -43.94                  | -75.76                  | -64.98                   | 1.74                       | 11.94                       | V                     |
| Highest  | 1696                 | -50.42         | -13              | -37.42                  | -63.48                  | -55.97                   | 1.24                       | 8.94                        | H                     |
|          | 2544                 | -53.06         | -13              | -40.06                  | -69.89                  | -60.00                   | 1.44                       | 10.54                       | H                     |
|          | 3395                 | -57.81         | -13              | -44.81                  | -75.8                   | -65.96                   | 1.78                       | 12.09                       | H                     |
|          | 1696                 | -46.52         | -13              | -33.52                  | -59.49                  | -52.07                   | 1.24                       | 8.94                        | V                     |
|          | 2544                 | -56.14         | -13              | -43.14                  | -73.18                  | -63.08                   | 1.44                       | 10.54                       | V                     |
|          | 3395                 | -57.20         | -13              | -44.20                  | -75.86                  | -65.35                   | 1.78                       | 12.09                       | V                     |

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

**WCDMA V**

| WCDMA V |                      |                |                  |                         |                         |                          |                            |                             |                       |
|---------|----------------------|----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel | Frequency<br>( MHz ) | ERP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest  | 1648                 | -59.96         | -13              | -46.96                  | -72.93                  | -65.35                   | 1.23                       | 8.76                        | H                     |
|         | 2480                 | -58.79         | -13              | -45.79                  | -75.6                   | -65.69                   | 1.44                       | 10.48                       | H                     |
|         | 3306                 | -57.11         | -13              | -44.11                  | -75.64                  | -65.07                   | 1.71                       | 11.82                       | H                     |
|         | 1648                 | -59.33         | -13              | -46.33                  | -72.18                  | -64.72                   | 1.23                       | 8.76                        | V                     |
|         | 2480                 | -58.08         | -13              | -45.08                  | -75.15                  | -64.98                   | 1.44                       | 10.48                       | V                     |
|         | 3306                 | -56.63         | -13              | -43.63                  | -75.59                  | -64.59                   | 1.71                       | 11.82                       | V                     |
| Middle  | 1672                 | -59.27         | -13              | -46.27                  | -72.29                  | -64.74                   | 1.24                       | 8.85                        | H                     |
|         | 2509                 | -58.17         | -13              | -45.17                  | -74.94                  | -65.09                   | 1.44                       | 10.51                       | H                     |
|         | 3346                 | -57.15         | -13              | -44.15                  | -75.44                  | -65.19                   | 1.74                       | 11.94                       | H                     |
|         | 1672                 | -58.84         | -13              | -45.84                  | -71.75                  | -64.31                   | 1.24                       | 8.85                        | V                     |
|         | 2509                 | -58.42         | -13              | -45.42                  | -75.38                  | -65.34                   | 1.44                       | 10.51                       | V                     |
|         | 3346                 | -56.46         | -13              | -43.46                  | -75.28                  | -64.50                   | 1.74                       | 11.94                       | V                     |
| Highest | 1696                 | -60.26         | -13              | -47.26                  | -73.32                  | -65.81                   | 1.24                       | 8.94                        | H                     |
|         | 2540                 | -58.46         | -13              | -45.46                  | -75.27                  | -65.40                   | 1.44                       | 10.53                       | H                     |
|         | 3386                 | -57.49         | -13              | -44.49                  | -75.53                  | -65.62                   | 1.78                       | 12.06                       | H                     |
|         | 1696                 | -59.08         | -13              | -46.08                  | -72.05                  | -64.63                   | 1.24                       | 8.94                        | V                     |
|         | 2540                 | -58.38         | -13              | -45.38                  | -75.41                  | -65.32                   | 1.44                       | 10.53                       | V                     |
|         | 3386                 | -56.92         | -13              | -43.92                  | -75.6                   | -65.05                   | 1.78                       | 12.06                       | V                     |

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

**CDMA2000 BC0**

| CDMA2000 BC0 |                      |                |                  |                         |                         |                          |                            |                             |                       |
|--------------|----------------------|----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel      | Frequency<br>( MHz ) | ERP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest       | 1648                 | -60.48         | -13              | -47.48                  | -73.45                  | -65.87                   | 1.23                       | 8.76                        | H                     |
|              | 2474                 | -58.31         | -13              | -45.31                  | -75.14                  | -65.20                   | 1.44                       | 10.48                       | H                     |
|              | 3298                 | -57.19         | -13              | -44.19                  | -75.78                  | -65.13                   | 1.70                       | 11.79                       | H                     |
|              | 1648                 | -59.29         | -13              | -46.29                  | -72.14                  | -64.68                   | 1.23                       | 8.76                        | V                     |
|              | 2474                 | -57.71         | -13              | -44.71                  | -74.82                  | -64.60                   | 1.44                       | 10.48                       | V                     |
|              | 3298                 | -57.11         | -13              | -44.11                  | -76.1                   | -65.05                   | 1.70                       | 11.79                       | V                     |
| Middle       | 1672                 | -59.48         | -13              | -46.48                  | -72.5                   | -64.95                   | 1.24                       | 8.85                        | H                     |
|              | 2509                 | -58.60         | -13              | -45.60                  | -75.37                  | -65.52                   | 1.44                       | 10.51                       | H                     |
|              | 3346                 | -57.20         | -13              | -44.20                  | -75.49                  | -65.24                   | 1.74                       | 11.94                       | H                     |
|              | 1672                 | -57.97         | -13              | -44.97                  | -70.88                  | -63.44                   | 1.24                       | 8.85                        | V                     |
|              | 2509                 | -58.44         | -13              | -45.44                  | -75.4                   | -65.36                   | 1.44                       | 10.51                       | V                     |
|              | 3346                 | -57.18         | -13              | -44.18                  | -76.01                  | -65.22                   | 1.74                       | 11.94                       | V                     |
| Highest      | 1696                 | -60.74         | -13              | -47.74                  | -73.8                   | -66.29                   | 1.24                       | 8.94                        | H                     |
|              | 2544                 | -57.91         | -13              | -44.91                  | -74.74                  | -64.85                   | 1.44                       | 10.54                       | H                     |
|              | 3393                 | -57.78         | -13              | -44.78                  | -75.79                  | -65.93                   | 1.78                       | 12.08                       | H                     |
|              | 1696                 | -59.57         | -13              | -46.57                  | -72.54                  | -65.12                   | 1.24                       | 8.94                        | V                     |
|              | 2544                 | -58.75         | -13              | -45.75                  | -75.79                  | -65.69                   | 1.44                       | 10.54                       | V                     |
|              | 3393                 | -57.50         | -13              | -44.50                  | -76.17                  | -65.65                   | 1.78                       | 12.08                       | V                     |

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



&lt;Ant. 2&gt;

**GPRS1900**

| GPRS 1900 |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|-----------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel   | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest    | 3700                 | -41.04          | -13              | -28.04                  | -61.58                  | -51.35                   | 1.97                       | 12.28                       | H                     |
|           | 5548                 | -45.23          | -13              | -32.23                  | -68.81                  | -55.35                   | 2.14                       | 12.27                       | H                     |
|           | 7403                 | -47.39          | -13              | -34.39                  | -75.5                   | -55.39                   | 2.17                       | 10.17                       | H                     |
|           | 3700                 | -43.08          | -13              | -30.08                  | -64.14                  | -53.39                   | 1.97                       | 12.28                       | V                     |
|           | 5548                 | -41.80          | -13              | -28.80                  | -66                     | -51.92                   | 2.14                       | 12.27                       | V                     |
|           | 7403                 | -47.90          | -13              | -34.90                  | -75.97                  | -55.90                   | 2.17                       | 10.17                       | V                     |
| Middle    | 3763                 | -38.08          | -13              | -25.08                  | -58.77                  | -48.32                   | 2.01                       | 12.24                       | H                     |
|           | 5639                 | -40.58          | -13              | -27.58                  | -64.24                  | -50.85                   | 2.12                       | 12.39                       | H                     |
|           | 7522                 | -47.67          | -13              | -34.67                  | -75.45                  | -55.63                   | 2.11                       | 10.08                       | H                     |
|           | 3763                 | -39.55          | -13              | -26.55                  | -60.74                  | -49.79                   | 2.01                       | 12.24                       | V                     |
|           | 5639                 | -41.27          | -13              | -28.27                  | -65.55                  | -51.54                   | 2.12                       | 12.39                       | V                     |
|           | 7522                 | -46.58          | -13              | -33.58                  | -74.26                  | -54.54                   | 2.11                       | 10.08                       | V                     |
| Highest   | 3819                 | -41.79          | -13              | -28.79                  | -62.59                  | -51.96                   | 2.04                       | 12.21                       | H                     |
|           | 5730                 | -44.16          | -13              | -31.16                  | -68.25                  | -54.58                   | 2.10                       | 12.52                       | H                     |
|           | 7641                 | -47.52          | -13              | -34.52                  | -74.84                  | -55.91                   | 2.11                       | 10.51                       | H                     |
|           | 3819                 | -46.41          | -13              | -33.41                  | -67.68                  | -56.58                   | 2.04                       | 12.21                       | V                     |
|           | 5730                 | -45.12          | -13              | -32.12                  | -69.76                  | -55.54                   | 2.10                       | 12.52                       | V                     |
|           | 7641                 | -45.47          | -13              | -32.47                  | -72.84                  | -53.86                   | 2.11                       | 10.51                       | V                     |

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

**EDGE1900**

| EDGE 1900 |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|-----------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel   | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest    | 3700                 | -45.53          | -13              | -32.53                  | -66.07                  | -55.84                   | 1.97                       | 12.28                       | H                     |
|           | 5548                 | -50.15          | -13              | -37.15                  | -73.73                  | -60.27                   | 2.14                       | 12.27                       | H                     |
|           | 7403                 | -47.81          | -13              | -34.81                  | -75.92                  | -55.81                   | 2.17                       | 10.17                       | H                     |
|           | 3700                 | -48.15          | -13              | -35.15                  | -69.21                  | -58.46                   | 1.97                       | 12.28                       | V                     |
|           | 5548                 | -46.84          | -13              | -33.84                  | -71.04                  | -56.96                   | 2.14                       | 12.27                       | V                     |
|           | 7403                 | -47.79          | -13              | -34.79                  | -75.86                  | -55.79                   | 2.17                       | 10.17                       | V                     |
| Middle    | 3763                 | -44.94          | -13              | -31.94                  | -65.63                  | -55.18                   | 2.01                       | 12.24                       | H                     |
|           | 5639                 | -50.20          | -13              | -37.20                  | -73.86                  | -60.47                   | 2.12                       | 12.39                       | H                     |
|           | 7522                 | -48.23          | -13              | -35.23                  | -76.01                  | -56.19                   | 2.11                       | 10.08                       | H                     |
|           | 3763                 | -45.99          | -13              | -32.99                  | -67.18                  | -56.23                   | 2.01                       | 12.24                       | V                     |
|           | 5639                 | -47.99          | -13              | -34.99                  | -72.27                  | -58.26                   | 2.12                       | 12.39                       | V                     |
|           | 7522                 | -47.94          | -13              | -34.94                  | -75.62                  | -55.90                   | 2.11                       | 10.08                       | V                     |
| Highest   | 3819                 | -48.72          | -13              | -35.72                  | -69.52                  | -58.89                   | 2.04                       | 12.21                       | H                     |
|           | 5730                 | -50.90          | -13              | -37.90                  | -74.99                  | -61.32                   | 2.10                       | 12.52                       | H                     |
|           | 7641                 | -48.12          | -13              | -35.12                  | -75.44                  | -56.51                   | 2.11                       | 10.51                       | H                     |
|           | 3819                 | -51.12          | -13              | -38.12                  | -72.39                  | -61.29                   | 2.04                       | 12.21                       | V                     |
|           | 5730                 | -49.53          | -13              | -36.53                  | -74.17                  | -59.95                   | 2.10                       | 12.52                       | V                     |
|           | 7641                 | -48.00          | -13              | -35.00                  | -75.37                  | -56.39                   | 2.11                       | 10.51                       | V                     |

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

## WCDMA II

| WCDMA II |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|----------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel  | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest   | 3700                 | -50.01          | -13              | -37.01                  | -70.55                  | -60.32                   | 1.97                       | 12.28                       | H                     |
|          | 5555                 | -51.88          | -13              | -38.88                  | -75.45                  | -62.01                   | 2.14                       | 12.28                       | H                     |
|          | 7410                 | -47.08          | -13              | -34.08                  | -75.16                  | -55.07                   | 2.17                       | 10.16                       | H                     |
|          | 3700                 | -52.49          | -13              | -39.49                  | -73.55                  | -62.80                   | 1.97                       | 12.28                       | V                     |
|          | 5555                 | -49.97          | -13              | -36.97                  | -74.16                  | -60.10                   | 2.14                       | 12.28                       | V                     |
|          | 7410                 | -47.35          | -13              | -34.35                  | -75.39                  | -55.34                   | 2.17                       | 10.16                       | V                     |
| Middle   | 3756                 | -47.04          | -13              | -34.04                  | -67.71                  | -57.28                   | 2.00                       | 12.25                       | H                     |
|          | 5646                 | -51.53          | -13              | -38.53                  | -75.21                  | -61.81                   | 2.12                       | 12.40                       | H                     |
|          | 7515                 | -47.68          | -13              | -34.68                  | -75.51                  | -55.62                   | 2.11                       | 10.05                       | H                     |
|          | 3756                 | -51.37          | -13              | -38.37                  | -72.54                  | -61.61                   | 2.00                       | 12.25                       | V                     |
|          | 5646                 | -49.38          | -13              | -36.38                  | -73.68                  | -59.66                   | 2.12                       | 12.40                       | V                     |
|          | 7515                 | -46.80          | -13              | -33.80                  | -74.51                  | -54.74                   | 2.11                       | 10.05                       | V                     |
| Highest  | 3819                 | -51.99          | -13              | -38.99                  | -72.79                  | -62.16                   | 2.04                       | 12.21                       | H                     |
|          | 5723                 | -52.30          | -13              | -39.30                  | -76.35                  | -62.71                   | 2.10                       | 12.51                       | H                     |
|          | 7634                 | -48.44          | -13              | -35.44                  | -75.75                  | -56.81                   | 2.11                       | 10.48                       | H                     |
|          | 3819                 | -52.89          | -13              | -39.89                  | -74.16                  | -63.06                   | 2.04                       | 12.21                       | V                     |
|          | 5723                 | -50.48          | -13              | -37.48                  | -75.09                  | -60.89                   | 2.10                       | 12.51                       | V                     |
|          | 7634                 | -46.60          | -13              | -33.60                  | -73.95                  | -54.97                   | 2.11                       | 10.48                       | V                     |

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

**CDMA2000 BC1**

| CDMA2000 BC1 |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|--------------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel      | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest       | 3700                 | -46.40          | -13              | -33.40                  | -66.94                  | -56.71                   | 1.97                       | 12.28                       | H                     |
|              | 5555                 | -50.27          | -13              | -37.27                  | -73.84                  | -60.40                   | 2.14                       | 12.28                       | H                     |
|              | 7405                 | -46.68          | -13              | -33.68                  | -74.78                  | -54.68                   | 2.17                       | 10.17                       | H                     |
|              | 3700                 | -49.96          | -13              | -36.96                  | -71.02                  | -60.27                   | 1.97                       | 12.28                       | V                     |
|              | 5555                 | -47.00          | -13              | -34.00                  | -71.19                  | -57.13                   | 2.14                       | 12.28                       | V                     |
|              | 7405                 | -46.54          | -13              | -33.54                  | -74.61                  | -54.54                   | 2.17                       | 10.17                       | V                     |
| Middle       | 3763                 | -56.89          | -13              | -43.89                  | -77.58                  | -67.13                   | 2.01                       | 12.24                       | H                     |
|              | 5640                 | -53.34          | -13              | -40.34                  | -77                     | -63.61                   | 2.12                       | 12.40                       | H                     |
|              | 7520                 | -48.53          | -13              | -35.53                  | -76.33                  | -56.49                   | 2.11                       | 10.07                       | H                     |
|              | 3763                 | -47.77          | -13              | -34.77                  | -68.96                  | -58.01                   | 2.01                       | 12.24                       | V                     |
|              | 5640                 | -47.86          | -13              | -34.86                  | -72.14                  | -58.13                   | 2.12                       | 12.40                       | V                     |
|              | 7520                 | -46.36          | -13              | -33.36                  | -74.04                  | -54.32                   | 2.11                       | 10.07                       | V                     |
| Highest      | 3819                 | -50.73          | -13              | -37.73                  | -71.53                  | -60.90                   | 2.04                       | 12.21                       | H                     |
|              | 5730                 | -50.07          | -13              | -37.07                  | -74.16                  | -60.49                   | 2.10                       | 12.52                       | H                     |
|              | 7635                 | -47.83          | -13              | -34.83                  | -75.14                  | -56.20                   | 2.11                       | 10.49                       | H                     |
|              | 3819                 | -52.38          | -13              | -39.38                  | -73.65                  | -62.55                   | 2.04                       | 12.21                       | V                     |
|              | 5730                 | -47.35          | -13              | -34.35                  | -71.96                  | -57.77                   | 2.10                       | 12.52                       | V                     |
|              | 7635                 | -45.71          | -13              | -32.71                  | -73.06                  | -54.08                   | 2.11                       | 10.49                       | V                     |

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

## WCDMA IV

| WCDMA IV |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|----------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel  | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest   | 3427                 | -51.31          | -13              | -38.31                  | -70.41                  | -61.68                   | 1.81                       | 12.18                       | H                     |
|          | 5141                 | -52.60          | -13              | -39.60                  | -76.01                  | -62.43                   | 2.30                       | 12.13                       | H                     |
|          | 6854                 | -49.34          | -13              | -36.34                  | -75.56                  | -58.02                   | 2.37                       | 11.05                       | H                     |
|          | 3427                 | -50.73          | -13              | -37.73                  | -70.45                  | -61.10                   | 1.81                       | 12.18                       | V                     |
|          | 5141                 | -52.15          | -13              | -39.15                  | -76.13                  | -61.98                   | 2.30                       | 12.13                       | V                     |
|          | 6854                 | -49.16          | -13              | -36.16                  | -75.94                  | -57.84                   | 2.37                       | 11.05                       | V                     |
| Middle   | 3464                 | -51.15          | -13              | -38.15                  | -70.6                   | -61.60                   | 1.84                       | 12.29                       | H                     |
|          | 5198                 | -52.71          | -13              | -39.71                  | -76.17                  | -62.57                   | 2.28                       | 12.14                       | H                     |
|          | 6928                 | -49.27          | -13              | -36.27                  | -75.71                  | -57.85                   | 2.40                       | 10.97                       | H                     |
|          | 3464                 | -50.39          | -13              | -37.39                  | -70.37                  | -60.84                   | 1.84                       | 12.29                       | V                     |
|          | 5198                 | -52.76          | -13              | -39.76                  | -76.77                  | -62.62                   | 2.28                       | 12.14                       | V                     |
|          | 6928                 | -48.84          | -13              | -35.84                  | -75.9                   | -57.42                   | 2.40                       | 10.97                       | V                     |
| Highest  | 3504                 | -49.18          | -13              | -36.18                  | -68.98                  | -59.71                   | 1.87                       | 12.40                       | H                     |
|          | 5256                 | -51.88          | -13              | -38.88                  | -75.39                  | -61.78                   | 2.26                       | 12.15                       | H                     |
|          | 7008                 | -48.43          | -13              | -35.43                  | -75.15                  | -56.90                   | 2.42                       | 10.89                       | H                     |
|          | 3504                 | -48.87          | -13              | -35.87                  | -69.12                  | -59.40                   | 1.87                       | 12.40                       | V                     |
|          | 5256                 | -52.67          | -13              | -39.67                  | -76.71                  | -62.57                   | 2.26                       | 12.15                       | V                     |
|          | 7008                 | -48.12          | -13              | -35.12                  | -75.5                   | -56.59                   | 2.42                       | 10.89                       | V                     |

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



&lt;ASDIV Antenna&gt;

&lt;Ant. 0&gt;

**GPRS1900**

| GPRS 1900 |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|-----------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel   | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest    | 3700                 | -47.62          | -13              | -34.62                  | -68.16                  | -57.93                   | 1.97                       | 12.28                       | H                     |
|           | 5548                 | -36.15          | -13              | -23.15                  | -59.73                  | -46.27                   | 2.14                       | 12.27                       | H                     |
|           | 9251                 | -44.42          | -13              | -31.42                  | -75.96                  | -54.30                   | 2.22                       | 12.10                       | H                     |
|           | 3700                 | -47.54          | -13              | -34.54                  | -68.6                   | -57.85                   | 1.97                       | 12.28                       | V                     |
|           | 5548                 | -36.44          | -13              | -23.44                  | -60.64                  | -46.56                   | 2.14                       | 12.27                       | V                     |
|           | 9251                 | -43.18          | -13              | -30.18                  | -74.08                  | -53.06                   | 2.22                       | 12.10                       | V                     |
| Middle    | 3763                 | -53.85          | -13              | -40.85                  | -74.54                  | -64.09                   | 2.01                       | 12.24                       | H                     |
|           | 5639                 | -35.12          | -13              | -22.12                  | -58.78                  | -45.39                   | 2.12                       | 12.39                       | H                     |
|           | 9400                 | -43.55          | -13              | -30.55                  | -75.37                  | -53.31                   | 2.16                       | 11.92                       | H                     |
|           | 3763                 | -53.19          | -13              | -40.19                  | -74.38                  | -63.43                   | 2.01                       | 12.24                       | V                     |
|           | 5639                 | -38.97          | -13              | -25.97                  | -63.25                  | -49.24                   | 2.12                       | 12.39                       | V                     |
|           | 9400                 | -42.49          | -13              | -29.49                  | -73.24                  | -52.25                   | 2.16                       | 11.92                       | V                     |
| Highest   | 3819                 | -51.22          | -13              | -38.22                  | -72.2                   | -61.39                   | 2.04                       | 12.21                       | H                     |
|           | 5730                 | -30.91          | -13              | -17.91                  | -55                     | -41.33                   | 2.10                       | 12.52                       | H                     |
|           | 7641                 | -47.66          | -13              | -34.66                  | -74.98                  | -56.05                   | 2.11                       | 10.51                       | H                     |
|           | 9552                 | -43.41          | -13              | -30.41                  | -74.86                  | -53.12                   | 2.09                       | 11.80                       | H                     |
|           | 3819                 | -49.44          | -13              | -36.44                  | -70.71                  | -59.61                   | 2.04                       | 12.21                       | V                     |
|           | 5730                 | -40.09          | -13              | -27.09                  | -64.73                  | -50.51                   | 2.10                       | 12.52                       | V                     |
|           | 7641                 | -45.41          | -13              | -32.41                  | -72.78                  | -53.80                   | 2.11                       | 10.51                       | V                     |
|           | 9552                 | -43.35          | -13              | -30.35                  | -73.63                  | -53.06                   | 2.09                       | 11.80                       | V                     |

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

**EDGE1900**

| EDGE 1900 |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|-----------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel   | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest    | 3700                 | -51.36          | -13              | -38.36                  | -71.9                   | -61.67                   | 1.97                       | 12.28                       | H                     |
|           | 5548                 | -42.46          | -13              | -29.46                  | -66.04                  | -52.58                   | 2.14                       | 12.27                       | H                     |
|           | 7400                 | -47.99          | -13              | -34.99                  | -76.1                   | -55.99                   | 2.18                       | 10.18                       | H                     |
|           | 3700                 | -50.83          | -13              | -37.83                  | -71.89                  | -61.14                   | 1.97                       | 12.28                       | V                     |
|           | 5548                 | -39.74          | -13              | -26.74                  | -63.94                  | -49.86                   | 2.14                       | 12.27                       | V                     |
|           | 7400                 | -47.54          | -13              | -34.54                  | -75.62                  | -55.54                   | 2.18                       | 10.18                       | V                     |
| Middle    | 3763                 | -55.09          | -13              | -42.09                  | -75.78                  | -65.33                   | 2.01                       | 12.24                       | H                     |
|           | 5639                 | -46.97          | -13              | -33.97                  | -70.63                  | -57.24                   | 2.12                       | 12.39                       | H                     |
|           | 7522                 | -47.55          | -13              | -34.55                  | -75.33                  | -55.51                   | 2.11                       | 10.08                       | H                     |
|           | 3763                 | -54.41          | -13              | -41.41                  | -75.59                  | -64.65                   | 2.01                       | 12.24                       | V                     |
|           | 5639                 | -49.19          | -13              | -36.19                  | -73.47                  | -59.46                   | 2.12                       | 12.39                       | V                     |
|           | 7522                 | -48.06          | -13              | -35.06                  | -75.75                  | -56.02                   | 2.11                       | 10.08                       | V                     |
| Highest   | 3819                 | -54.40          | -13              | -41.40                  | -75.2                   | -64.57                   | 2.04                       | 12.21                       | H                     |
|           | 5730                 | -49.59          | -13              | -36.59                  | -73.68                  | -60.01                   | 2.10                       | 12.52                       | H                     |
|           | 7641                 | -48.10          | -13              | -35.10                  | -75.42                  | -56.49                   | 2.11                       | 10.51                       | H                     |
|           | 3819                 | -54.62          | -13              | -41.62                  | -75.89                  | -64.79                   | 2.04                       | 12.21                       | V                     |
|           | 5730                 | -46.01          | -13              | -33.01                  | -70.65                  | -56.43                   | 2.10                       | 12.52                       | V                     |
|           | 7641                 | -47.07          | -13              | -34.07                  | -74.44                  | -55.46                   | 2.11                       | 10.51                       | V                     |

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

## WCDMA II

| WCDMA II |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|----------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel  | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest   | 3700                 | -54.69          | -13              | -41.69                  | -75.24                  | -65.00                   | 1.97                       | 12.28                       | H                     |
|          | 5557                 | -52.48          | -13              | -39.48                  | -76.05                  | -62.62                   | 2.14                       | 12.28                       | H                     |
|          | 7410                 | -47.59          | -13              | -34.59                  | -75.68                  | -55.58                   | 2.17                       | 10.16                       | H                     |
|          | 3700                 | -53.41          | -13              | -40.41                  | -74.49                  | -63.72                   | 1.97                       | 12.28                       | V                     |
|          | 5557                 | -51.89          | -13              | -38.89                  | -76.08                  | -62.03                   | 2.14                       | 12.28                       | V                     |
|          | 7410                 | -46.04          | -13              | -33.04                  | -74.08                  | -54.03                   | 2.17                       | 10.16                       | V                     |
| Middle   | 3756                 | -54.91          | -13              | -41.91                  | -75.6                   | -65.15                   | 2.00                       | 12.25                       | H                     |
|          | 5646                 | -51.52          | -13              | -38.52                  | -75.18                  | -61.80                   | 2.12                       | 12.40                       | H                     |
|          | 7520                 | -47.72          | -13              | -34.72                  | -75.52                  | -55.68                   | 2.11                       | 10.07                       | H                     |
|          | 3756                 | -53.14          | -13              | -40.14                  | -74.31                  | -63.38                   | 2.00                       | 12.25                       | V                     |
|          | 5646                 | -51.80          | -13              | -38.80                  | -76.09                  | -62.08                   | 2.12                       | 12.40                       | V                     |
|          | 7520                 | -47.39          | -13              | -34.39                  | -75.07                  | -55.35                   | 2.11                       | 10.07                       | V                     |
| Highest  | 3815                 | -53.90          | -13              | -40.90                  | -74.69                  | -64.08                   | 2.03                       | 12.21                       | H                     |
|          | 5723                 | -52.22          | -13              | -39.22                  | -76.27                  | -62.63                   | 2.10                       | 12.51                       | H                     |
|          | 7630                 | -47.89          | -13              | -34.89                  | -75.19                  | -56.24                   | 2.11                       | 10.47                       | H                     |
|          | 3815                 | -50.49          | -13              | -37.49                  | -71.76                  | -60.67                   | 2.03                       | 12.21                       | V                     |
|          | 5723                 | -51.67          | -13              | -38.67                  | -76.27                  | -62.08                   | 2.10                       | 12.51                       | V                     |
|          | 7630                 | -46.90          | -13              | -33.90                  | -74.24                  | -55.25                   | 2.11                       | 10.47                       | V                     |

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

## CDMA2000 BC1

| CDMA2000 BC1 |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|--------------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel      | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest       | 3700                 | -54.68          | -13              | -41.68                  | -75.22                  | -64.99                   | 1.97                       | 12.28                       | H                     |
|              | 5553                 | -52.51          | -13              | -39.51                  | -76.08                  | -62.64                   | 2.14                       | 12.27                       | H                     |
|              | 7405                 | -47.74          | -13              | -34.74                  | -75.84                  | -55.74                   | 2.17                       | 10.17                       | H                     |
|              | 3700                 | -53.24          | -13              | -40.24                  | -74.3                   | -63.55                   | 1.97                       | 12.28                       | V                     |
|              | 5553                 | -51.71          | -13              | -38.71                  | -75.9                   | -61.84                   | 2.14                       | 12.27                       | V                     |
|              | 7405                 | -46.52          | -13              | -33.52                  | -74.59                  | -54.52                   | 2.17                       | 10.17                       | V                     |
| Middle       | 3763                 | -55.42          | -13              | -42.42                  | -76.11                  | -65.66                   | 2.01                       | 12.24                       | H                     |
|              | 5640                 | -52.82          | -13              | -39.82                  | -76.48                  | -63.09                   | 2.12                       | 12.40                       | H                     |
|              | 7520                 | -48.06          | -13              | -35.06                  | -75.86                  | -56.02                   | 2.11                       | 10.07                       | H                     |
|              | 3763                 | -52.89          | -13              | -39.89                  | -74.08                  | -63.13                   | 2.01                       | 12.24                       | V                     |
|              | 5640                 | -51.94          | -13              | -38.94                  | -76.22                  | -62.21                   | 2.12                       | 12.40                       | V                     |
|              | 7520                 | -47.49          | -13              | -34.49                  | -75.18                  | -55.45                   | 2.11                       | 10.07                       | V                     |
| Highest      | 3819                 | -53.86          | -13              | -40.86                  | -74.66                  | -64.03                   | 2.04                       | 12.21                       | H                     |
|              | 5726                 | -52.48          | -13              | -39.48                  | -76.55                  | -62.89                   | 2.10                       | 12.52                       | H                     |
|              | 7635                 | -47.65          | -13              | -34.65                  | -74.96                  | -56.02                   | 2.11                       | 10.49                       | H                     |
|              | 3819                 | -51.16          | -13              | -38.16                  | -72.43                  | -61.33                   | 2.04                       | 12.21                       | V                     |
|              | 5726                 | -51.48          | -13              | -38.48                  | -76.11                  | -61.89                   | 2.10                       | 12.52                       | V                     |
|              | 7635                 | -45.79          | -13              | -32.79                  | -73.14                  | -54.16                   | 2.11                       | 10.49                       | V                     |

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

## WCDMA IV

| WCDMA IV |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|----------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel  | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest   | 3420                 | -54.14          | -13              | -41.14                  | -73.17                  | -64.50                   | 1.80                       | 12.16                       | H                     |
|          | 5128                 | -52.96          | -13              | -39.96                  | -76.36                  | -62.78                   | 2.31                       | 12.13                       | H                     |
|          | 6850                 | -48.37          | -13              | -35.37                  | -74.57                  | -57.05                   | 2.37                       | 11.05                       | H                     |
|          | 3420                 | -55.85          | -13              | -42.85                  | -45.51                  | -66.21                   | 1.80                       | 12.16                       | V                     |
|          | 5128                 | -52.12          | -13              | -39.12                  | -76.1                   | -61.94                   | 2.31                       | 12.13                       | V                     |
|          | 6850                 | -49.02          | -13              | -36.02                  | -75.78                  | -57.70                   | 2.37                       | 11.05                       | V                     |
| Middle   | 3464                 | -54.30          | -13              | -41.30                  | -73.75                  | -64.75                   | 1.84                       | 12.29                       | H                     |
|          | 5196                 | -53.15          | -13              | -40.15                  | -76.61                  | -63.01                   | 2.28                       | 12.14                       | H                     |
|          | 6928                 | -49.03          | -13              | -36.03                  | -75.47                  | -57.61                   | 2.40                       | 10.97                       | H                     |
|          | 3464                 | -55.79          | -13              | -42.79                  | -75.77                  | -66.24                   | 1.84                       | 12.29                       | V                     |
|          | 5196                 | -52.59          | -13              | -39.59                  | -76.6                   | -62.45                   | 2.28                       | 12.14                       | V                     |
|          | 6928                 | -48.74          | -13              | -35.74                  | -75.8                   | -57.32                   | 2.40                       | 10.97                       | V                     |
| Highest  | 3504                 | -52.84          | -13              | -39.84                  | -72.64                  | -63.37                   | 1.87                       | 12.40                       | H                     |
|          | 5254                 | -53.19          | -13              | -40.19                  | -76.69                  | -63.08                   | 2.26                       | 12.15                       | H                     |
|          | 7008                 | -48.50          | -13              | -35.50                  | -75.22                  | -56.97                   | 2.42                       | 10.89                       | H                     |
|          | 3504                 | -54.36          | -13              | -41.36                  | -74.61                  | -64.89                   | 1.87                       | 12.40                       | V                     |
|          | 5254                 | -51.87          | -13              | -38.87                  | -76.91                  | -61.76                   | 2.26                       | 12.15                       | V                     |
|          | 7008                 | -48.21          | -13              | -35.21                  | -75.59                  | -56.68                   | 2.42                       | 10.89                       | V                     |

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



&lt;Ant. 1&gt;

**GPRS850**

| GPRS 850 |                      |                |                  |                         |                         |                          |                            |                             |                       |
|----------|----------------------|----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel  | Frequency<br>( MHz ) | ERP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest   | 1648                 | -42.01         | -13              | -29.01                  | -54.98                  | -47.40                   | 1.23                       | 8.76                        | H                     |
|          | 2472                 | -43.36         | -13              | -30.36                  | -60.19                  | -50.25                   | 1.44                       | 10.48                       | H                     |
|          | 4120                 | -55.18         | -13              | -42.18                  | -75.56                  | -63.04                   | 2.09                       | 12.10                       | H                     |
|          | 1648                 | -39.22         | -13              | -26.22                  | -52.07                  | -44.61                   | 1.23                       | 8.76                        | V                     |
|          | 2472                 | -34.13         | -13              | -21.13                  | -51.25                  | -41.02                   | 1.44                       | 10.48                       | V                     |
|          | 4120                 | -53.52         | -13              | -40.52                  | -74.47                  | -61.38                   | 2.09                       | 12.10                       | V                     |
| Middle   | 1672                 | -42.59         | -13              | -29.59                  | -55.61                  | -48.06                   | 1.24                       | 8.85                        | H                     |
|          | 2512                 | -50.89         | -13              | -37.89                  | -67.66                  | -57.81                   | 1.44                       | 10.51                       | H                     |
|          | 4184                 | -54.17         | -13              | -41.17                  | -74.49                  | -62.05                   | 2.07                       | 12.10                       | H                     |
|          | 1672                 | -41.68         | -13              | -28.68                  | -54.59                  | -47.15                   | 1.24                       | 8.85                        | V                     |
|          | 2512                 | -41.05         | -13              | -28.05                  | -58.01                  | -47.97                   | 1.44                       | 10.51                       | V                     |
|          | 4184                 | -51.00         | -13              | -38.00                  | -71.98                  | -58.88                   | 2.07                       | 12.10                       | V                     |
| Highest  | 1696                 | -44.54         | -13              | -31.54                  | -57.6                   | -50.09                   | 1.24                       | 8.94                        | H                     |
|          | 2544                 | -47.89         | -13              | -34.89                  | -64.72                  | -54.83                   | 1.44                       | 10.54                       | H                     |
|          | 4248                 | -54.08         | -13              | -41.08                  | -74.67                  | -61.98                   | 2.05                       | 12.10                       | H                     |
|          | 1696                 | -42.65         | -13              | -29.65                  | -55.62                  | -48.20                   | 1.24                       | 8.94                        | V                     |
|          | 2544                 | -41.43         | -13              | -28.43                  | -58.47                  | -48.37                   | 1.44                       | 10.54                       | V                     |
|          | 4248                 | -50.57         | -13              | -37.57                  | -71.86                  | -58.47                   | 2.05                       | 12.10                       | V                     |

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

**EDGE850**

| EDGE 850 |                      |                |                  |                         |                         |                          |                            |                             |                       |
|----------|----------------------|----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel  | Frequency<br>( MHz ) | ERP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest   | 1648                 | -56.72         | -13              | -43.72                  | -69.69                  | -62.11                   | 1.23                       | 8.76                        | H                     |
|          | 2472                 | -46.59         | -13              | -33.59                  | -63.42                  | -53.48                   | 1.44                       | 10.48                       | H                     |
|          | 4120                 | -54.48         | -13              | -41.48                  | -74.78                  | -62.34                   | 2.09                       | 12.10                       | H                     |
|          | 1648                 | -54.02         | -13              | -41.02                  | -66.87                  | -59.41                   | 1.23                       | 8.76                        | V                     |
|          | 2472                 | -52.60         | -13              | -39.60                  | -69.72                  | -59.49                   | 1.44                       | 10.48                       | V                     |
|          | 4120                 | -54.99         | -13              | -41.99                  | -75.94                  | -62.85                   | 2.09                       | 12.10                       | V                     |
| Middle   | 1672                 | -50.66         | -13              | -37.66                  | -63.68                  | -56.13                   | 1.24                       | 8.85                        | H                     |
|          | 2512                 | -49.83         | -13              | -36.83                  | -66.6                   | -56.75                   | 1.44                       | 10.51                       | H                     |
|          | 3344                 | -57.29         | -13              | -44.29                  | -75.59                  | -65.33                   | 1.74                       | 11.93                       | H                     |
|          | 1672                 | -46.93         | -13              | -33.93                  | -59.84                  | -52.40                   | 1.24                       | 8.85                        | V                     |
|          | 2512                 | -52.99         | -13              | -39.99                  | -69.95                  | -59.91                   | 1.44                       | 10.51                       | V                     |
|          | 3344                 | -56.92         | -13              | -43.92                  | -75.75                  | -64.96                   | 1.74                       | 11.93                       | V                     |
| Highest  | 1696                 | -49.55         | -13              | -36.55                  | -62.61                  | -55.10                   | 1.24                       | 8.94                        | H                     |
|          | 2544                 | -50.47         | -13              | -37.47                  | -67.3                   | -57.41                   | 1.44                       | 10.54                       | H                     |
|          | 3395                 | -57.87         | -13              | -44.87                  | -75.86                  | -66.02                   | 1.78                       | 12.09                       | H                     |
|          | 1696                 | -46.11         | -13              | -33.11                  | -59.08                  | -51.66                   | 1.24                       | 8.94                        | V                     |
|          | 2544                 | -47.55         | -13              | -34.55                  | -64.59                  | -54.49                   | 1.44                       | 10.54                       | V                     |
|          | 3395                 | -57.41         | -13              | -44.41                  | -76.08                  | -65.56                   | 1.78                       | 12.09                       | V                     |

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

## WCDMA V

| WCDMA V |                      |                |                  |                         |                         |                          |                            |                             |                       |
|---------|----------------------|----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel | Frequency<br>( MHz ) | ERP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest  | 1652                 | -55.65         | -13              | -42.65                  | -68.64                  | -61.05                   | 1.23                       | 8.78                        | H                     |
|         | 2479                 | -58.33         | -13              | -45.33                  | -75.14                  | -65.23                   | 1.44                       | 10.48                       | H                     |
|         | 3305                 | -57.52         | -13              | -44.52                  | -76.06                  | -65.47                   | 1.71                       | 11.82                       | H                     |
|         | 1652                 | -57.49         | -13              | -44.49                  | -70.35                  | -62.89                   | 1.23                       | 1652                        | V                     |
|         | 2479                 | -56.06         | -13              | -43.06                  | -73.13                  | -62.96                   | 1.44                       | 2479                        | V                     |
|         | 3305                 | -57.35         | -13              | -44.35                  | -76.31                  | -65.30                   | 1.71                       | 3305                        | V                     |
| Middle  | 1672                 | -56.62         | -13              | -43.62                  | -69.64                  | -62.09                   | 1.24                       | 8.85                        | H                     |
|         | 2509                 | -58.09         | -13              | -45.09                  | -74.86                  | -65.01                   | 1.44                       | 10.51                       | H                     |
|         | 3346                 | -57.57         | -13              | -44.57                  | -75.87                  | -65.61                   | 1.74                       | 11.94                       | H                     |
|         | 1672                 | -55.91         | -13              | -42.91                  | -68.82                  | -61.38                   | 1.24                       | 8.85                        | V                     |
|         | 2509                 | -48.99         | -13              | -35.99                  | -65.94                  | -55.91                   | 1.44                       | 10.51                       | V                     |
|         | 3346                 | -56.94         | -13              | -43.94                  | -75.77                  | -64.98                   | 1.74                       | 11.94                       | V                     |
| Highest | 1696                 | -57.37         | -13              | -44.37                  | -70.43                  | -62.92                   | 1.24                       | 8.94                        | H                     |
|         | 2544                 | -58.68         | -13              | -45.68                  | -75.51                  | -65.62                   | 1.44                       | 10.54                       | H                     |
|         | 3384                 | -58.08         | -13              | -45.08                  | -76.13                  | -66.21                   | 1.77                       | 12.05                       | H                     |
|         | 1696                 | -57.18         | -13              | -44.18                  | -70.15                  | -62.73                   | 1.24                       | 8.94                        | V                     |
|         | 2544                 | -56.66         | -13              | -43.66                  | -73.7                   | -63.60                   | 1.44                       | 10.54                       | V                     |
|         | 3384                 | -57.01         | -13              | -44.01                  | -75.69                  | -65.14                   | 1.77                       | 12.05                       | V                     |

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

**CDMA2000 BC0**

| CDMA2000 BC0 |                      |                |                  |                         |                         |                          |                            |                             |                       |
|--------------|----------------------|----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel      | Frequency<br>( MHz ) | ERP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest       | 1648                 | -57.76         | -13              | -44.76                  | -70.73                  | -63.15                   | 1.23                       | 8.76                        | H                     |
|              | 2474                 | -57.97         | -13              | -44.97                  | -74.8                   | -64.86                   | 1.44                       | 10.48                       | H                     |
|              | 3298                 | -56.44         | -13              | -43.44                  | -75.03                  | -64.38                   | 1.70                       | 11.79                       | H                     |
|              | 1648                 | -53.96         | -13              | -40.96                  | -66.81                  | -59.35                   | 1.23                       | 8.76                        | V                     |
|              | 2474                 | -54.33         | -13              | -41.33                  | -71.45                  | -61.22                   | 1.44                       | 10.48                       | V                     |
|              | 3298                 | -57.32         | -13              | -44.32                  | -76.31                  | -65.26                   | 1.70                       | 11.79                       | V                     |
| Middle       | 1672                 | -51.17         | -13              | -38.17                  | -64.19                  | -56.64                   | 1.24                       | 8.85                        | H                     |
|              | 2509                 | -58.82         | -13              | -45.82                  | -75.59                  | -65.74                   | 1.44                       | 10.51                       | H                     |
|              | 3346                 | -57.79         | -13              | -44.79                  | -76.08                  | -65.83                   | 1.74                       | 11.94                       | H                     |
|              | 1672                 | -49.50         | -13              | -36.50                  | -62.41                  | -54.97                   | 1.24                       | 8.85                        | V                     |
|              | 2509                 | -57.85         | -13              | -44.85                  | -74.81                  | -64.77                   | 1.44                       | 10.51                       | V                     |
|              | 3346                 | -57.33         | -13              | -44.33                  | -76.16                  | -65.37                   | 1.74                       | 11.94                       | V                     |
| Highest      | 1696                 | -55.47         | -13              | -42.47                  | -68.53                  | -61.02                   | 1.24                       | 8.94                        | H                     |
|              | 2544                 | -57.95         | -13              | -44.95                  | -74.78                  | -64.89                   | 1.44                       | 10.54                       | H                     |
|              | 3393                 | -58.44         | -13              | -45.44                  | -76.45                  | -66.59                   | 1.78                       | 12.08                       | H                     |
|              | 1696                 | -54.74         | -13              | -41.74                  | -67.71                  | -60.29                   | 1.24                       | 8.94                        | V                     |
|              | 2544                 | -56.93         | -13              | -43.93                  | -73.97                  | -63.87                   | 1.44                       | 10.54                       | V                     |
|              | 3393                 | -57.42         | -13              | -44.42                  | -76.09                  | -65.57                   | 1.78                       | 12.08                       | V                     |

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

—————THE END—————