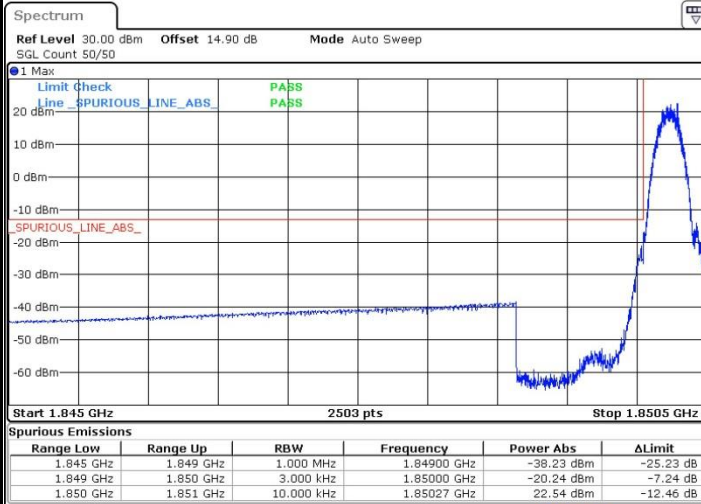


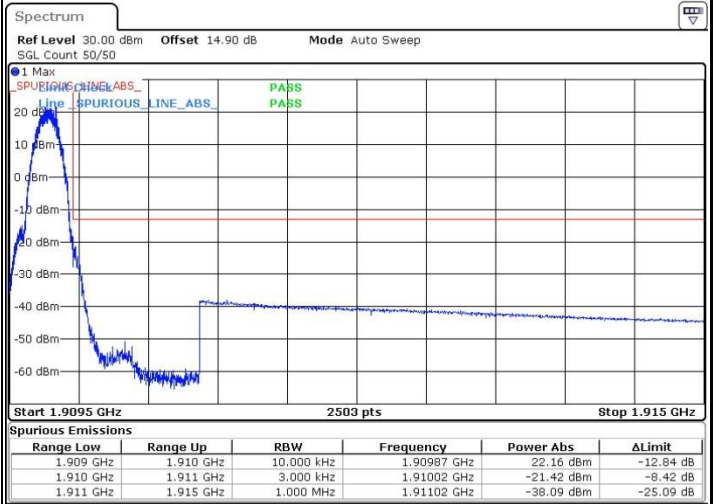


## GSM1900 (GSM)

## Lowest Band Edge

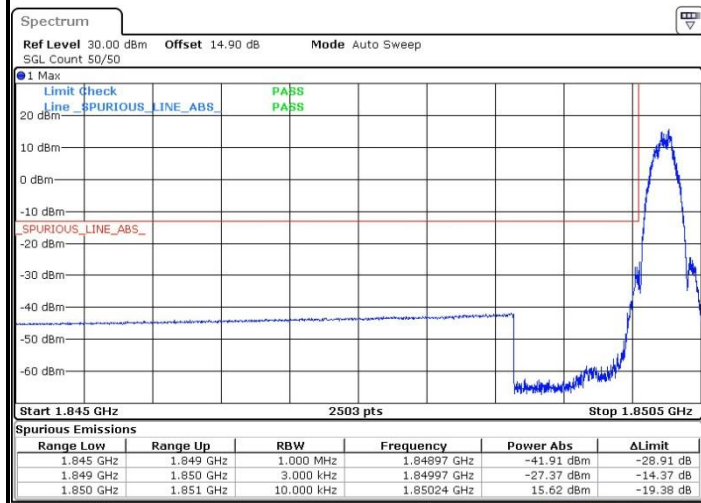


## Highest Band Edge

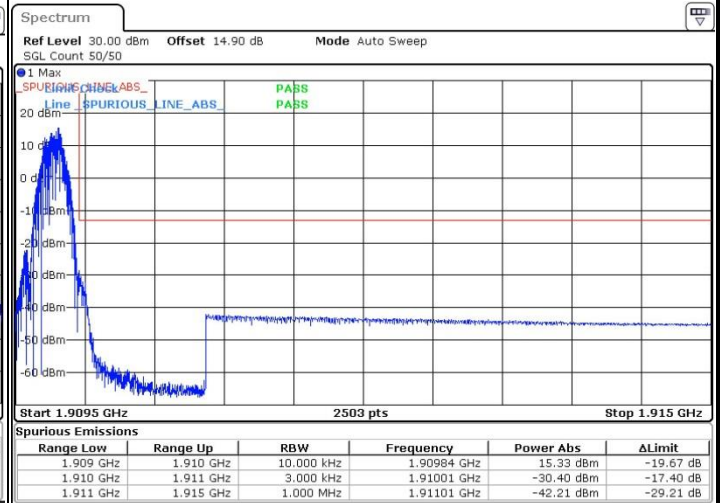


## GSM1900 (EDGE class 8)

## Lowest Band Edge



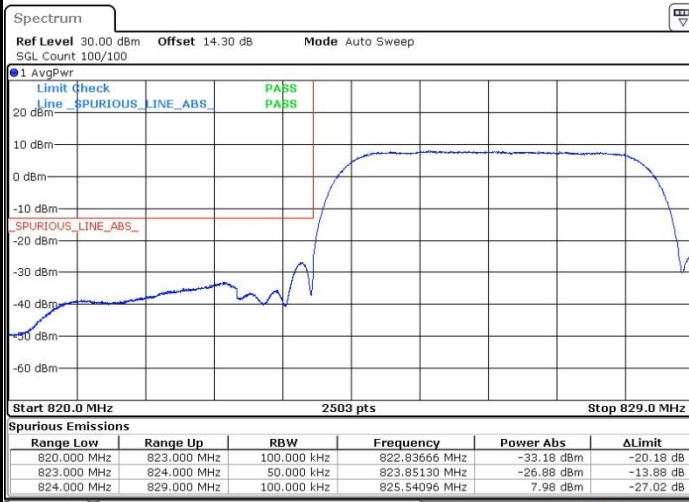
## Highest Band Edge





## WCDMA Band V (RMC 12.2Kbps)

## Lowest Band Edge

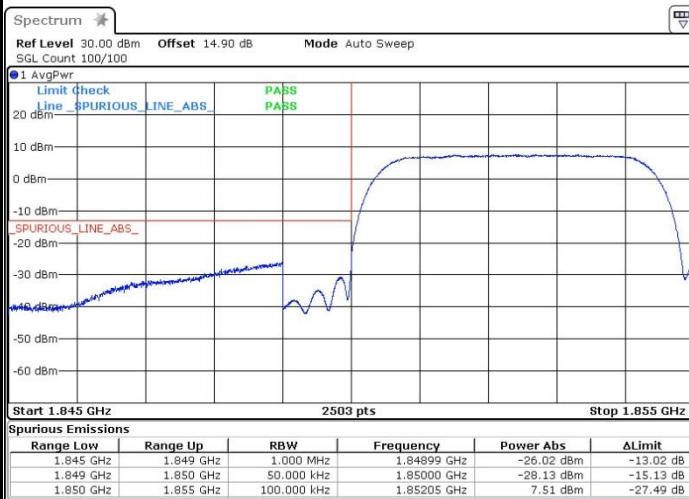


## Highest Band Edge



## WCDMA Band II (RMC 12.2Kbps)

## Lowest Band Edge



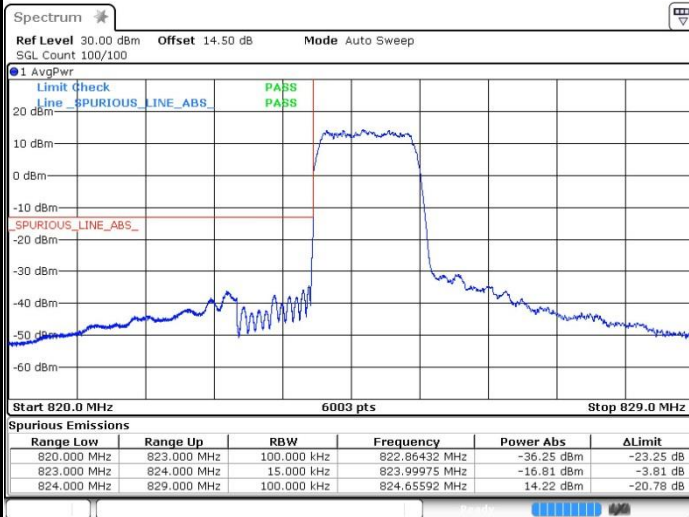
## Highest Band Edge



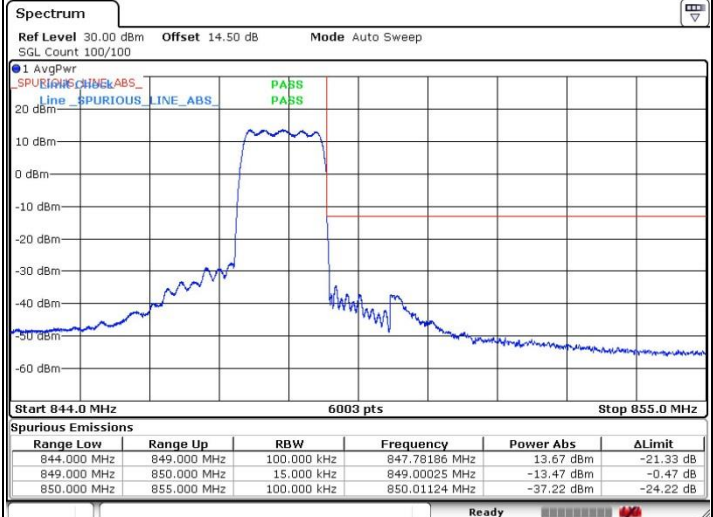


## CDMA BC0 (1xRTT)

## Lowest Band Edge

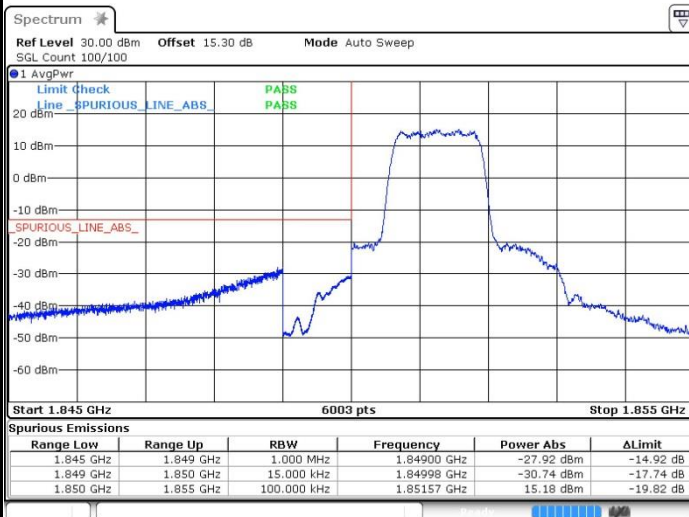


## Highest Band Edge

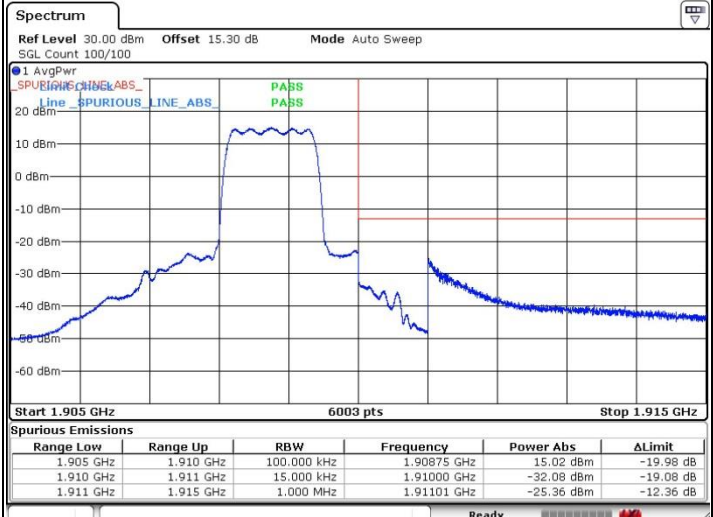


## CDMA BC1 (1xRTT)

## Lowest Band Edge



## Highest Band Edge

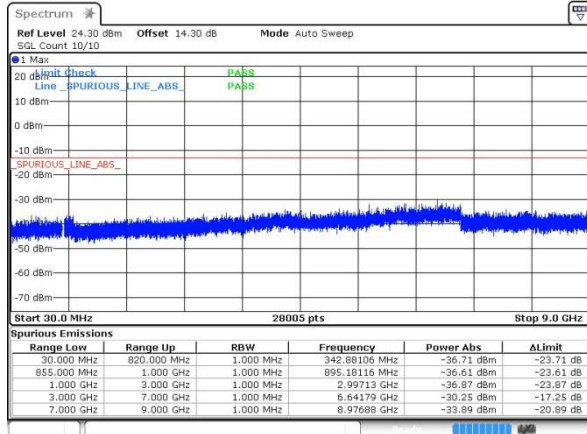




## Conducted Spurious Emission

### GSM850 (GSM)

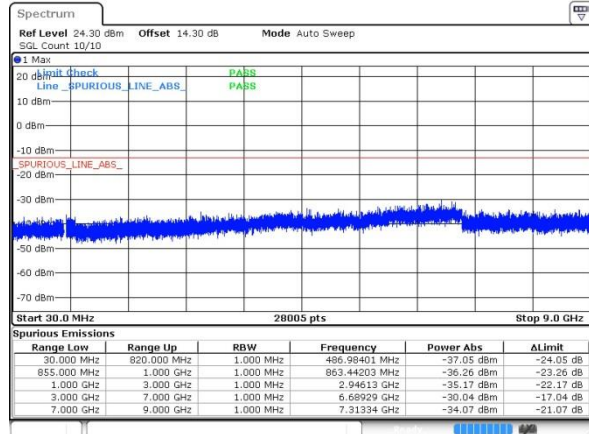
#### Lowest Channel



Date: 9.FEB.2019 20:32:30

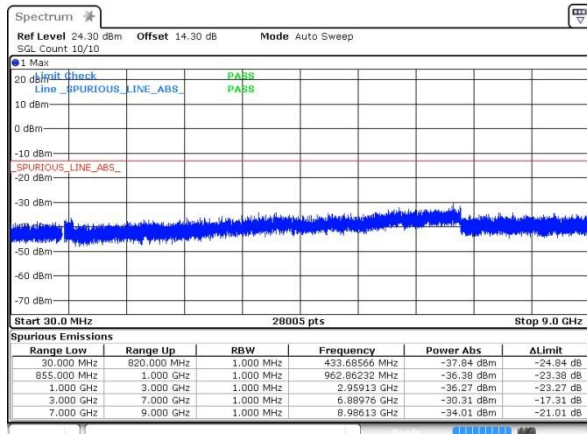
### GSM850 (EDGE class 8)

#### Lowest Channel



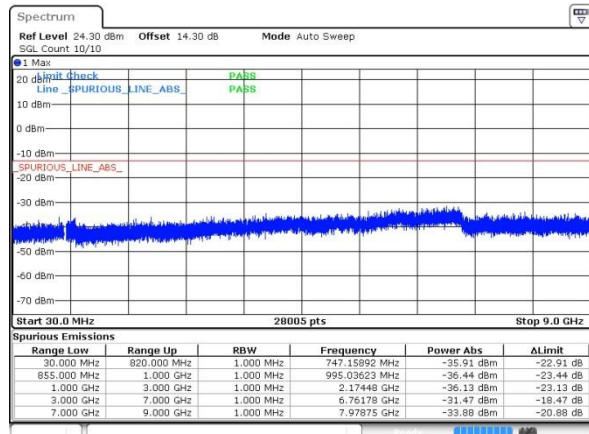
Date: 9.FEB.2019 20:46:27

#### Middle Channel



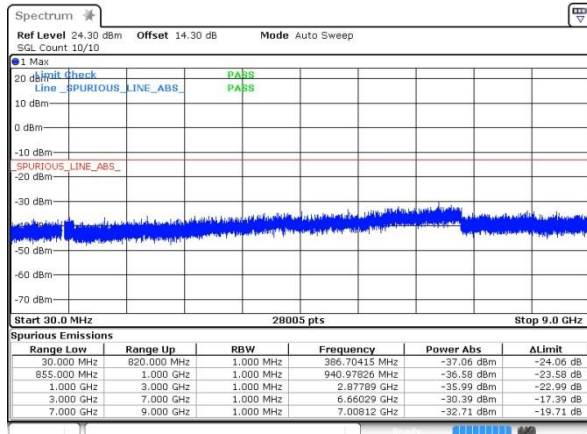
Date: 9.FEB.2019 20:33:50

#### Middle Channel



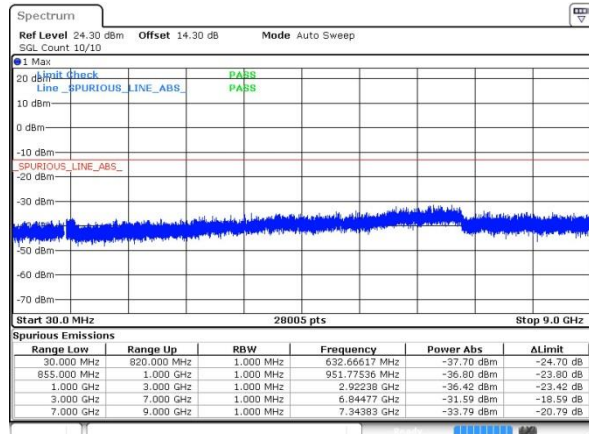
Date: 9.FEB.2019 20:47:44

#### Highest Channel



Date: 9.FEB.2019 20:35:10

#### Highest Channel

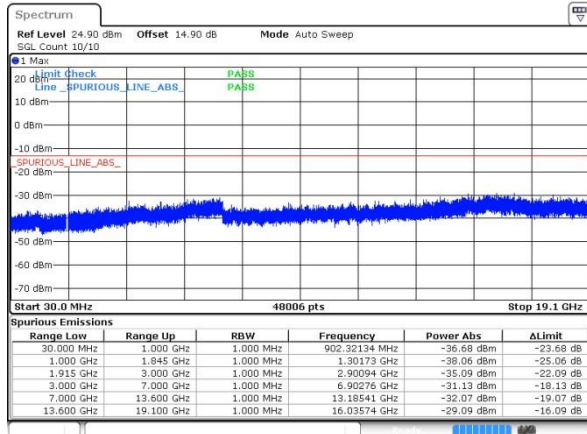


Date: 9.FEB.2019 20:49:04



## GSM1900 (GSM)

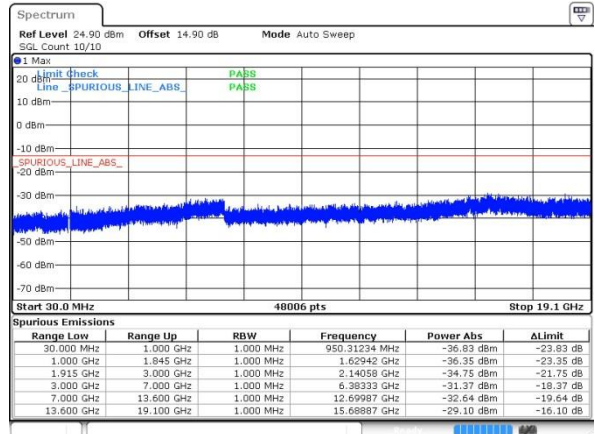
## Lowest Channel



Date: 9.FEB.2019 21:05:39

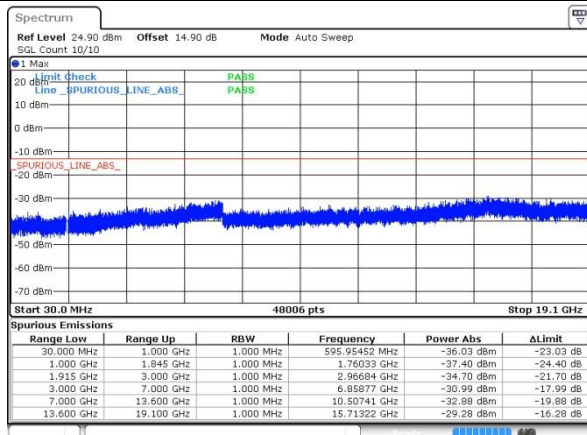
## GSM1900 (EDGE class 8)

## Lowest Channel

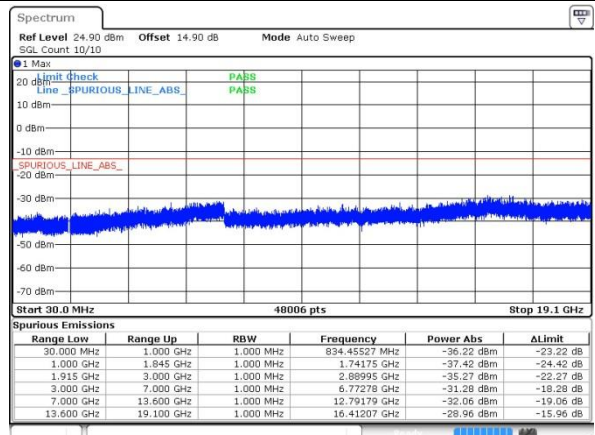


Date: 9.FEB.2019 21:26:43

## Middle Channel

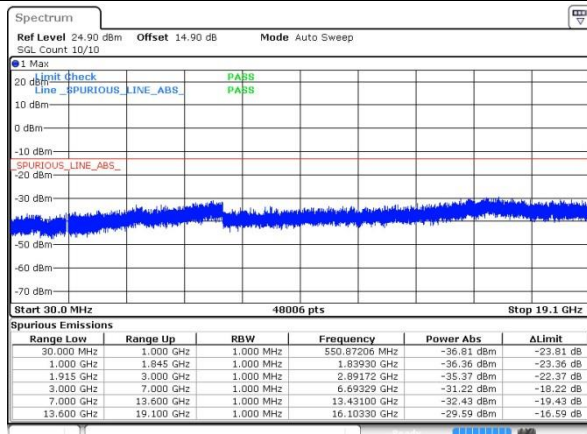


Date: 9.FEB.2019 21:06:57

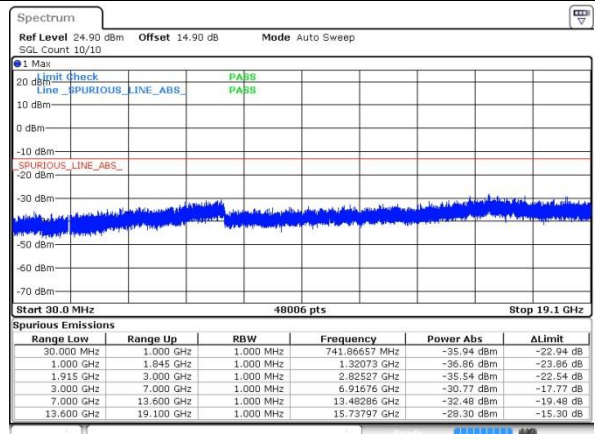


Date: 9.FEB.2019 21:28:01

## Highest Channel



Date: 9.FEB.2019 21:08:14

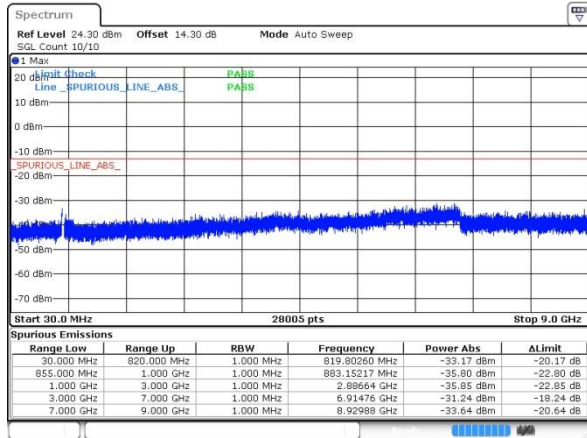


Date: 9.FEB.2019 21:28:49



## WCDMA Band V (RMC 12.2Kbps)

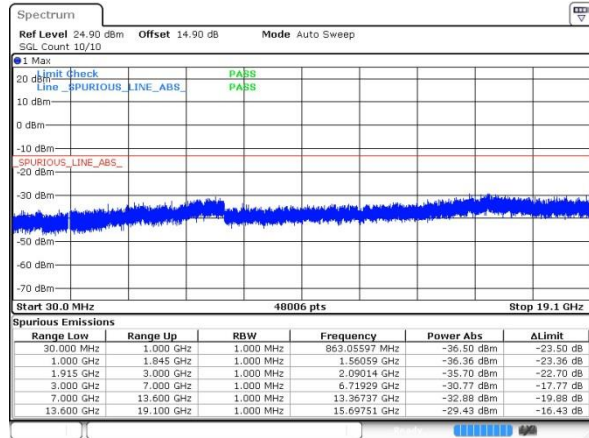
## Lowest Channel



Date: 9.FEB.2019 22:10:28

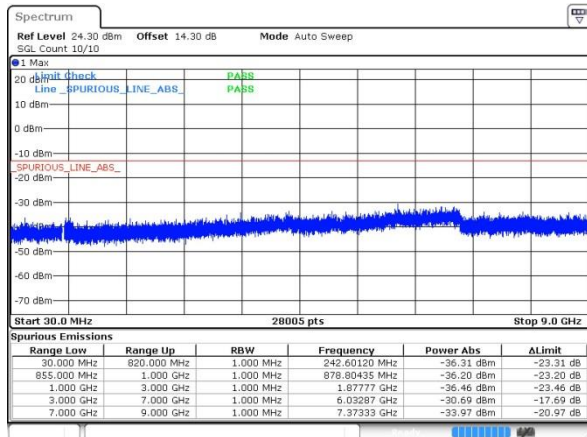
## WCDMA Band II (RMC 12.2Kbps)

## Lowest Channel



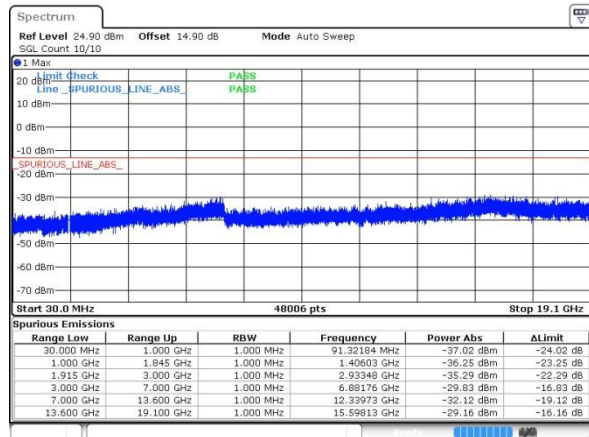
Date: 9.FEB.2019 21:51:46

## Middle Channel



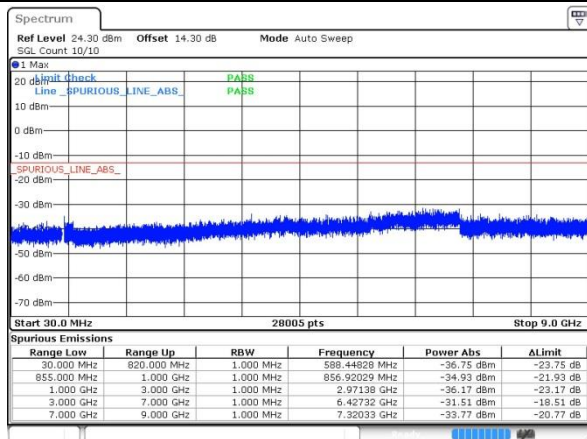
Date: 9.FEB.2019 22:12:15

## Middle Channel



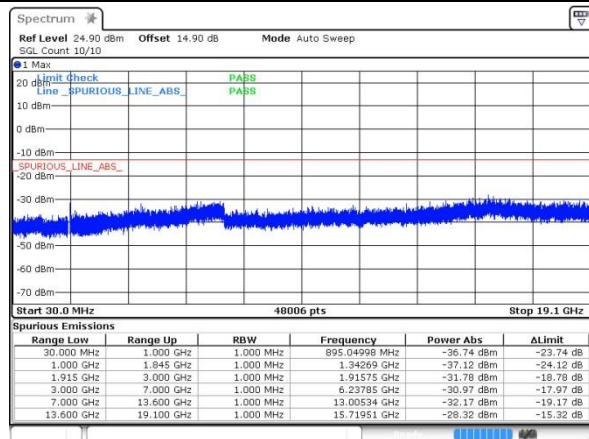
Date: 9.FEB.2019 21:53:03

## Highest Channel



Date: 9.FEB.2019 22:13:31

## Highest Channel

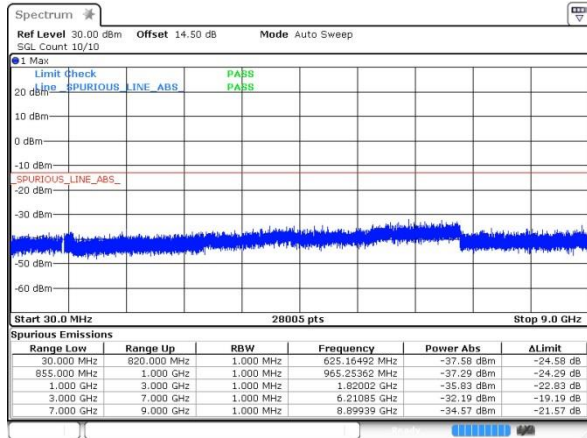


Date: 9.FEB.2019 21:54:22



## CDMA BC0 (1xRTT)

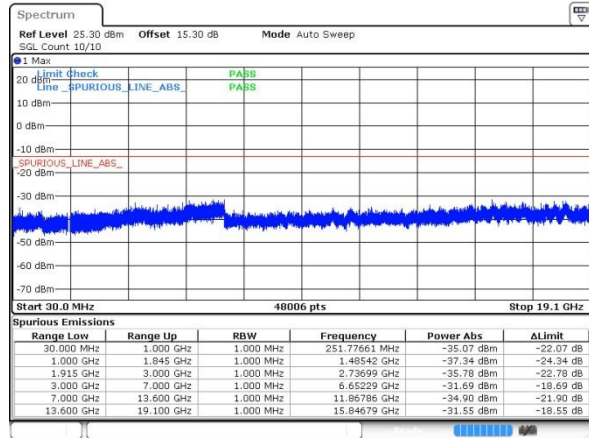
## Lowest Channel



Date: 15 FEB 2019 13:12:38

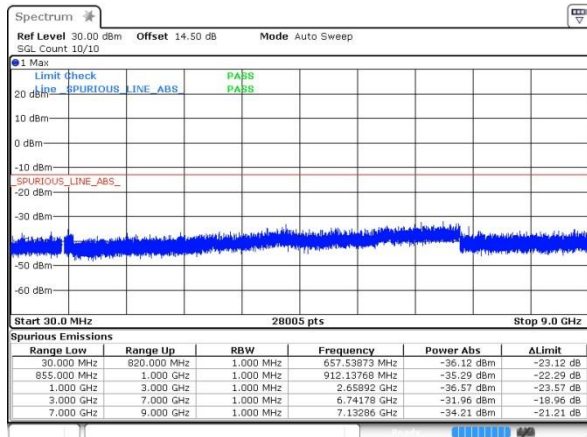
## CDMA BC1 (1xRTT)

## Lowest Channel



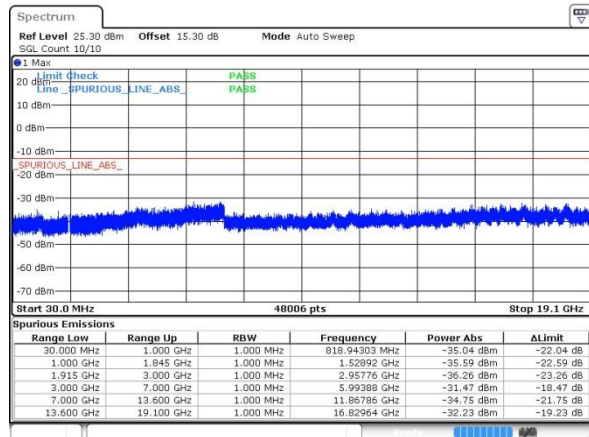
Date: 14 FEB 2019 11:12:53

## Middle Channel



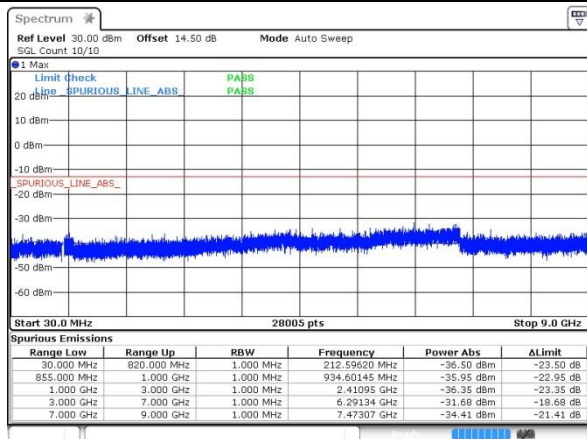
Date: 15 FEB 2019 13:14:02

## Middle Channel



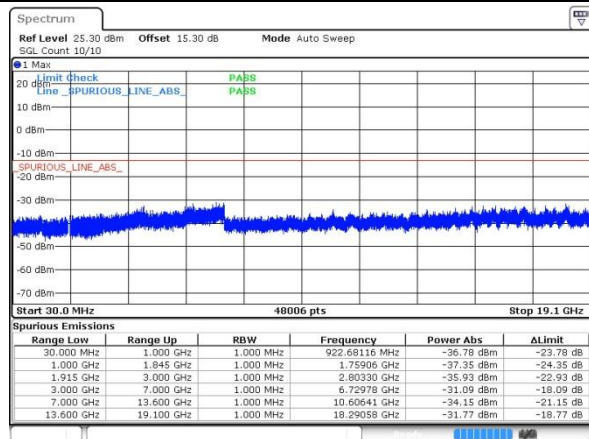
Date: 14 FEB 2019 11:14:14

## Highest Channel



Date: 15 FEB 2019 13:15:52

## Highest Channel



Date: 14 FEB 2019 11:56:20

**Frequency Stability**

| Test Conditions  | Middle Channel    | GSM850<br>(GSM) | GSM850<br>(EDGE class 8) | Limit<br>2.5ppm |
|------------------|-------------------|-----------------|--------------------------|-----------------|
| Temperature (°C) | Voltage (Volt)    | Deviation (ppm) |                          | Result          |
| 50               | Normal Voltage    | 0.0048          | 0.0060                   | PASS            |
| 40               | Normal Voltage    | 0.0526          | 0.0167                   |                 |
| 30               | Normal Voltage    | 0.0120          | 0.0538                   |                 |
| 20(Ref.)         | Normal Voltage    | 0.0000          | 0.0000                   |                 |
| 10               | Normal Voltage    | 0.0574          | 0.0335                   |                 |
| 0                | Normal Voltage    | 0.0191          | 0.0538                   |                 |
| -10              | Normal Voltage    | 0.0084          | 0.0466                   |                 |
| -20              | Normal Voltage    | 0.0143          | 0.0167                   |                 |
| -30              | Normal Voltage    | 0.0108          | 0.0478                   |                 |
| 20               | Maximum Voltage   | 0.0466          | 0.0514                   |                 |
| 20               | Normal Voltage    | 0.0000          | 0.0000                   |                 |
| 20               | Battery End Point | 0.0395          | 0.0395                   |                 |

**Note:** Normal Voltage = 3.8V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4 V



| Test Conditions  | Middle Channel    | GSM1900<br>(GSM) | GSM1900<br>(EDGE class 8) | Limit<br>Note 2. |
|------------------|-------------------|------------------|---------------------------|------------------|
| Temperature (°C) | Voltage (Volt)    | Deviation (ppm)  |                           | Result           |
| 50               | Normal Voltage    | 0.0053           | 0.0005                    | PASS             |
| 40               | Normal Voltage    | 0.0016           | 0.0016                    |                  |
| 30               | Normal Voltage    | 0.0027           | 0.0021                    |                  |
| 20(Ref.)         | Normal Voltage    | 0.0000           | 0.0000                    |                  |
| 10               | Normal Voltage    | 0.0170           | 0.0255                    |                  |
| 0                | Normal Voltage    | 0.0074           | 0.0186                    |                  |
| -10              | Normal Voltage    | 0.0160           | 0.0011                    |                  |
| -20              | Normal Voltage    | 0.0218           | 0.0037                    |                  |
| -30              | Normal Voltage    | 0.0005           | 0.0213                    |                  |
| 20               | Maximum Voltage   | 0.0053           | 0.0160                    |                  |
| 20               | Normal Voltage    | 0.0000           | 0.0000                    |                  |
| 20               | Battery End Point | 0.0133           | 0.0011                    |                  |

**Note:**

1. Normal Voltage = 3.8V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4 V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



| 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    | 0.0060                         | PASS            |
| 40               | Normal Voltage    | 0.0395                         |                 |
| 30               | Normal Voltage    | 0.0442                         |                 |
| 20(Ref.)         | Normal Voltage    | 0.0000                         |                 |
| 10               | Normal Voltage    | 0.0072                         |                 |
| 0                | Normal Voltage    | 0.0323                         |                 |
| -10              | Normal Voltage    | 0.0048                         |                 |
| -20              | Normal Voltage    | 0.0167                         |                 |
| -30              | Normal Voltage    | 0.0311                         |                 |
| 20               | Maximum Voltage   | 0.0442                         |                 |
| 20               | Normal Voltage    | 0.0000                         |                 |
| 20               | Battery End Point | 0.0012                         |                 |

**Note:** Normal Voltage = 3.8V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4 V



| 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    | 0.0186                          | PASS             |
| 40               | Normal Voltage    | 0.0128                          |                  |
| 30               | Normal Voltage    | 0.0165                          |                  |
| 20(Ref.)         | Normal Voltage    | 0.0000                          |                  |
| 10               | Normal Voltage    | 0.0117                          |                  |
| 0                | Normal Voltage    | 0.0154                          |                  |
| -10              | Normal Voltage    | 0.0239                          |                  |
| -20              | Normal Voltage    | 0.0005                          |                  |
| -30              | Normal Voltage    | 0.0117                          |                  |
| 20               | Maximum Voltage   | 0.0165                          |                  |
| 20               | Normal Voltage    | 0.0000                          |                  |
| 20               | Battery End Point | 0.0032                          |                  |

**Note:**

1. Normal Voltage = 3.8V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



| Test Conditions  | Middle Channel    | CDMA BC0<br>(1xRTT) | Limit<br>2.5ppm |
|------------------|-------------------|---------------------|-----------------|
| Temperature (°C) | Voltage (Volt)    | Deviation (ppm)     | Result          |
| 50               | Normal Voltage    | 0.0012              | PASS            |
| 40               | Normal Voltage    | 0.0155              |                 |
| 30               | Normal Voltage    | 0.0072              |                 |
| 20(Ref.)         | Normal Voltage    | 0.0000              |                 |
| 10               | Normal Voltage    | 0.0048              |                 |
| 0                | Normal Voltage    | 0.0215              |                 |
| -10              | Normal Voltage    | 0.0048              |                 |
| -20              | Normal Voltage    | 0.0179              |                 |
| -30              | Normal Voltage    | 0.0251              |                 |
| 20               | Maximum Voltage   | 0.0024              |                 |
| 20               | Normal Voltage    | 0.0000              |                 |
| 20               | Battery End Point | 0.0191              |                 |

**Note:**

1. Normal Voltage = 3.8V. ; Battery End Point (BEP) = 3.6V. ; Maximum Voltage =4.4V



| Test Conditions  | Middle Channel    | CDMA BC1<br>(1xRTT) | Limit<br>Note 2. |
|------------------|-------------------|---------------------|------------------|
| Temperature (°C) | Voltage (Volt)    | Deviation (ppm)     | Result           |
| 50               | Normal Voltage    | 0.0037              | PASS             |
| 40               | Normal Voltage    | 0.0027              |                  |
| 30               | Normal Voltage    | 0.0011              |                  |
| 20(Ref.)         | Normal Voltage    | 0.0000              |                  |
| 10               | Normal Voltage    | 0.0064              |                  |
| 0                | Normal Voltage    | 0.0085              |                  |
| -10              | Normal Voltage    | 0.0005              |                  |
| -20              | Normal Voltage    | 0.0096              |                  |
| -30              | Normal Voltage    | 0.0133              |                  |
| 20               | Maximum Voltage   | 0.0021              |                  |
| 20               | Normal Voltage    | 0.0000              |                  |
| 20               | Battery End Point | 0.0011              |                  |

**Note:**

1. Normal Voltage = 3.8V. ; Battery End Point (BEP) = 3.6V. ; Maximum Voltage =4.4V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



## Appendix B. Test Results of Radiated Test

### Radiated Spurious Emission

| GSM850 (GSM) |                   |             |               |                   |                    |                      |                       |                    |
|--------------|-------------------|-------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel      | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle       | 1672              | -60.65      | -13           | -47.65            | -61.86             | 2.32                 | 5.68                  | H                  |
|              | 2508              | -50.97      | -13           | -37.97            | -51.60             | 3.02                 | 5.80                  | H                  |
|              | 3348              | -64.93      | -13           | -51.93            | -67.39             | 3.27                 | 7.88                  | H                  |
|              | 1672              | -58.00      | -13           | -45.00            | -59.21             | 2.32                 | 5.68                  | V                  |
|              | 2508              | -51.12      | -13           | -38.12            | -51.75             | 3.02                 | 5.80                  | V                  |
|              | 3348              | -64.48      | -13           | -51.48            | -66.94             | 3.27                 | 7.88                  | V                  |

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

| GSM850 (EDGE class 8) |                   |             |               |                   |                    |                      |                       |                    |
|-----------------------|-------------------|-------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel               | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle                | 1672              | -67.18      | -13           | -54.18            | -68.39             | 2.32                 | 5.68                  | H                  |
|                       | 2510              | -59.43      | -13           | -46.43            | -60.06             | 3.02                 | 5.80                  | H                  |
|                       | 3348              | -64.77      | -13           | -51.77            | -67.23             | 3.27                 | 7.88                  | H                  |
|                       | 1672              | -63.77      | -13           | -50.77            | -64.98             | 2.32                 | 5.68                  | V                  |
|                       | 2508              | -60.07      | -13           | -47.07            | -60.70             | 3.02                 | 5.80                  | V                  |
|                       | 3348              | -64.77      | -13           | -51.77            | -67.23             | 3.27                 | 7.88                  | V                  |

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



| GSM1900 (GSM) |                      |                 |                  |                         |                          |                            |                             |                       |
|---------------|----------------------|-----------------|------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel       | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Middle        | 3759                 | -59.21          | -13              | -46.21                  | -64.08                   | 3.55                       | 8.42                        | H                     |
|               | 5640                 | -53.12          | -13              | -40.12                  | -59.46                   | 4.34                       | 10.68                       | H                     |
|               | 7521                 | -51.39          | -13              | -38.39                  | -58.19                   | 5.14                       | 11.94                       | H                     |
|               | 3759                 | -58.27          | -13              | -45.27                  | -63.14                   | 3.55                       | 8.42                        | V                     |
|               | 5640                 | -50.45          | -13              | -37.45                  | -56.79                   | 4.34                       | 10.68                       | V                     |
|               | 7521                 | -51.50          | -13              | -38.50                  | -58.30                   | 5.14                       | 11.94                       | V                     |

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

| GSM1900 (EDGE class 8) |                      |                 |                  |                         |                          |                            |                             |                       |
|------------------------|----------------------|-----------------|------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Middle                 | 3759                 | -60.29          | -13              | -47.29                  | -65.16                   | 3.55                       | 8.42                        | H                     |
|                        | 5640                 | -56.68          | -13              | -43.68                  | -63.02                   | 4.34                       | 10.68                       | H                     |
|                        | 7521                 | -51.91          | -13              | -38.91                  | -58.71                   | 5.14                       | 11.94                       | H                     |
|                        | 3759                 | -60.21          | -13              | -47.21                  | -65.08                   | 3.55                       | 8.42                        | V                     |
|                        | 5640                 | -56.41          | -13              | -43.41                  | -62.75                   | 4.34                       | 10.68                       | V                     |
|                        | 7521                 | -51.79          | -13              | -38.79                  | -58.59                   | 5.14                       | 11.94                       | V                     |

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



| WCDMA Band V(RMC 12.2Kbps) |                   |             |               |                   |                    |                      |                       |                    |
|----------------------------|-------------------|-------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                    | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle                     | 1672              | -68.91      | -13           | -55.91            | -70.12             | 2.32                 | 5.68                  | H                  |
|                            | 2510              | -66.22      | -13           | -53.22            | -66.85             | 3.02                 | 5.80                  | H                  |
|                            | 3348              | -64.75      | -13           | -51.75            | -67.21             | 3.27                 | 7.88                  | H                  |
|                            | 1672              | -69.30      | -13           | -56.30            | -70.51             | 2.32                 | 5.68                  | V                  |
|                            | 2510              | -66.87      | -13           | -53.87            | -67.50             | 3.02                 | 5.80                  | V                  |
|                            | 3348              | -64.99      | -13           | -51.99            | -67.45             | 3.27                 | 7.88                  | V                  |

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

| WCDMA Band II(RMC 12.2Kbps) |                   |              |               |                   |                    |                      |                       |                    |
|-----------------------------|-------------------|--------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                     | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle                      | 3759              | -60.19       | -13           | -47.19            | -65.06             | 3.55                 | 8.42                  | H                  |
|                             | 5640              | -56.57       | -13           | -43.57            | -62.91             | 4.34                 | 10.68                 | H                  |
|                             | 7521              | -51.78       | -13           | -38.78            | -58.58             | 5.14                 | 11.94                 | H                  |
|                             | 3759              | -60.13       | -13           | -47.13            | -65.00             | 3.55                 | 8.42                  | V                  |
|                             | 5640              | -56.98       | -13           | -43.98            | -63.32             | 4.34                 | 10.68                 | V                  |
|                             | 7521              | -51.87       | -13           | -38.87            | -58.67             | 5.14                 | 11.94                 | V                  |

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

| CDMA BC0(1xRTT) |                      |                |                  |                         |                          |                            |                             |                       |
|-----------------|----------------------|----------------|------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel         | Frequency<br>( MHz ) | ERP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Highest         | 1672                 | -66.93         | -13              | -53.93                  | -68.14                   | 2.32                       | 5.68                        | H                     |
|                 | 2508                 | -50.21         | -13              | -37.21                  | -50.84                   | 3.02                       | 5.80                        | H                     |
|                 | 3348                 | -65.27         | -13              | -52.27                  | -67.73                   | 3.27                       | 7.88                        | H                     |
|                 | 1674                 | -69.16         | -13              | -56.16                  | -70.37                   | 2.32                       | 5.68                        | V                     |
|                 | 2508                 | -54.14         | -13              | -41.14                  | -54.77                   | 3.02                       | 5.80                        | V                     |
|                 | 3348                 | -65.07         | -13              | -52.07                  | -67.53                   | 3.27                       | 7.88                        | V                     |

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

| CDMA BC1(1xRTT) |                      |                 |                  |                         |                          |                            |                             |                       |
|-----------------|----------------------|-----------------|------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel         | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Middle          | 3759                 | -59.84          | -13              | -46.84                  | -64.71                   | 3.55                       | 8.42                        | H                     |
|                 | 5640                 | -49.35          | -13              | -36.35                  | -55.69                   | 4.34                       | 10.68                       | H                     |
|                 | 7524                 | -51.91          | -13              | -38.91                  | -58.71                   | 5.14                       | 11.94                       | H                     |
|                 | 3759                 | -60.04          | -13              | -47.04                  | -64.91                   | 3.55                       | 8.42                        | V                     |
|                 | 5640                 | -50.49          | -13              | -37.49                  | -56.83                   | 4.34                       | 10.68                       | V                     |
|                 | 7524                 | -51.46          | -13              | -38.46                  | -58.26                   | 5.14                       | 11.94                       | V                     |

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