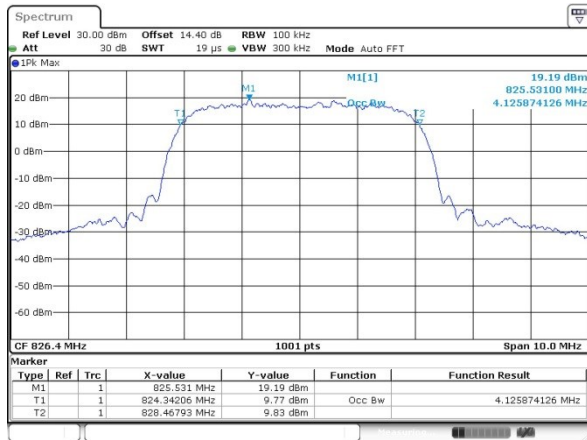




## WCDMA Band V (RMC 12.2Kbps)

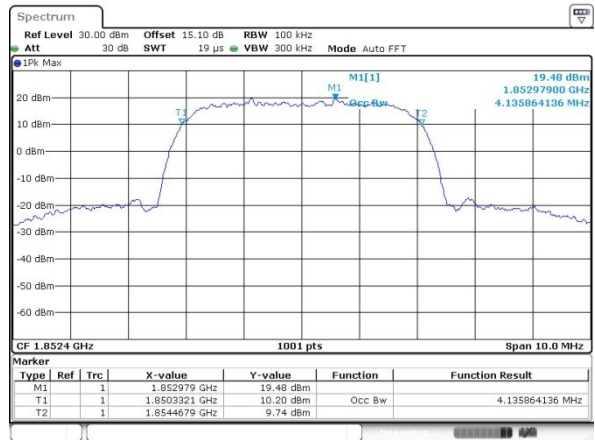
## Lowest Channel



Date: 13.AUG.2018 12:31:15

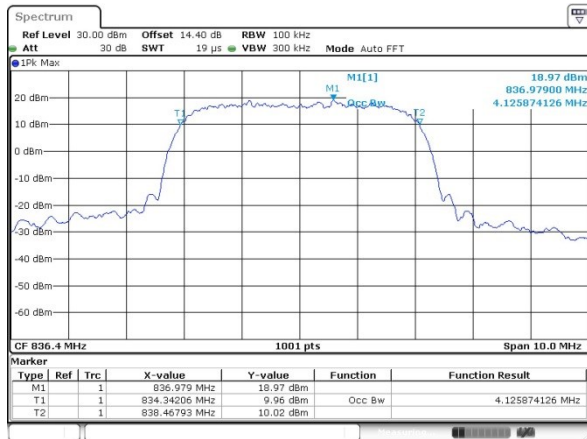
## WCDMA Band II (RMC 12.2Kbps)

## Lowest Channel



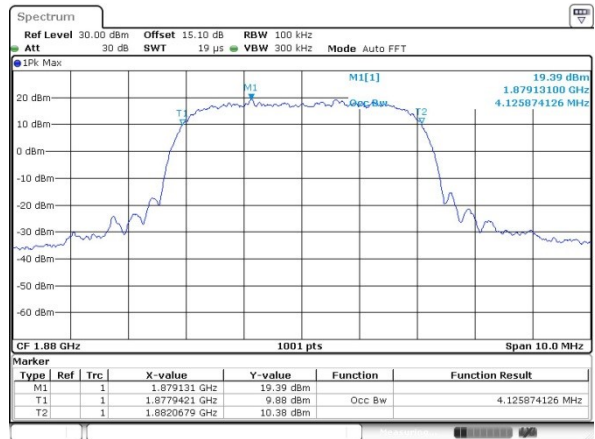
Date: 13.AUG.2018 11:50:34

## Middle Channel



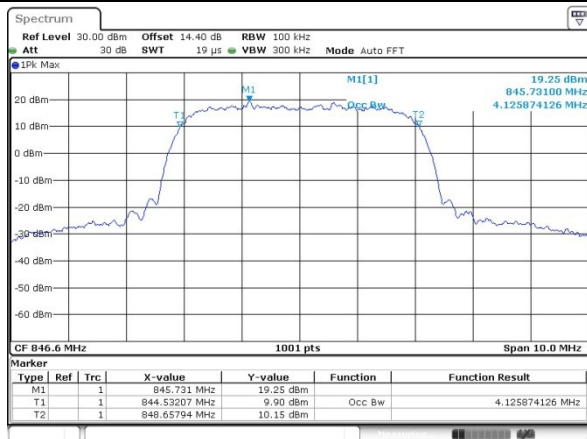
Date: 13.AUG.2018 12:31:49

## Middle Channel



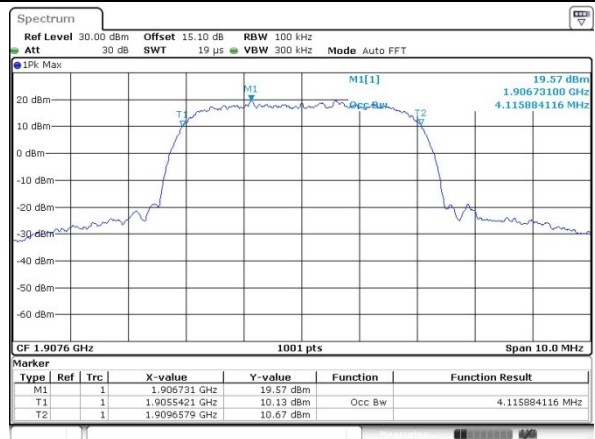
Date: 13.AUG.2018 11:51:06

## Highest Channel



Date: 13.AUG.2018 12:32:19

## Highest Channel

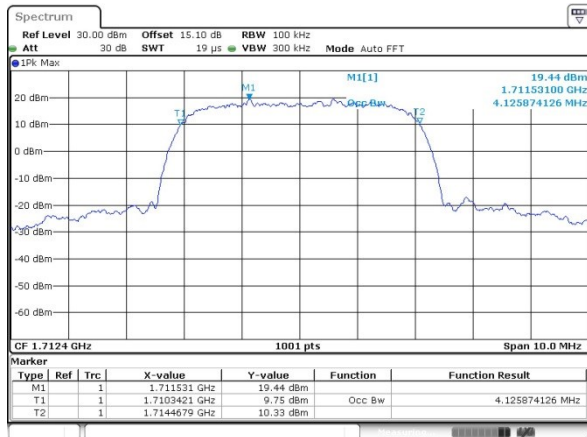


Date: 13.AUG.2018 11:51:39

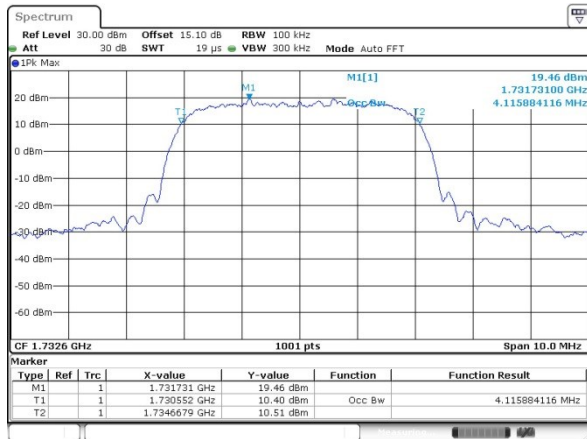


## WCDMA Band IV (RMC 12.2Kbps)

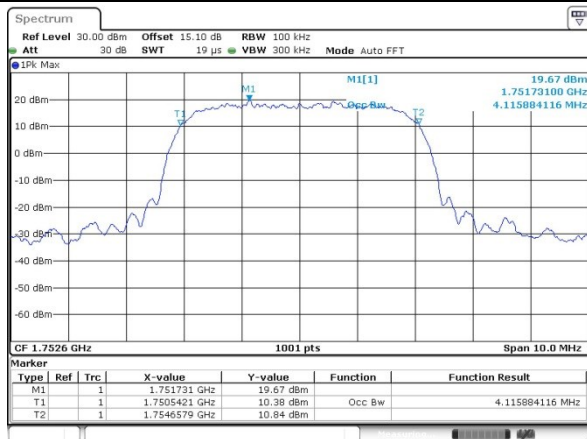
## Lowest Channel

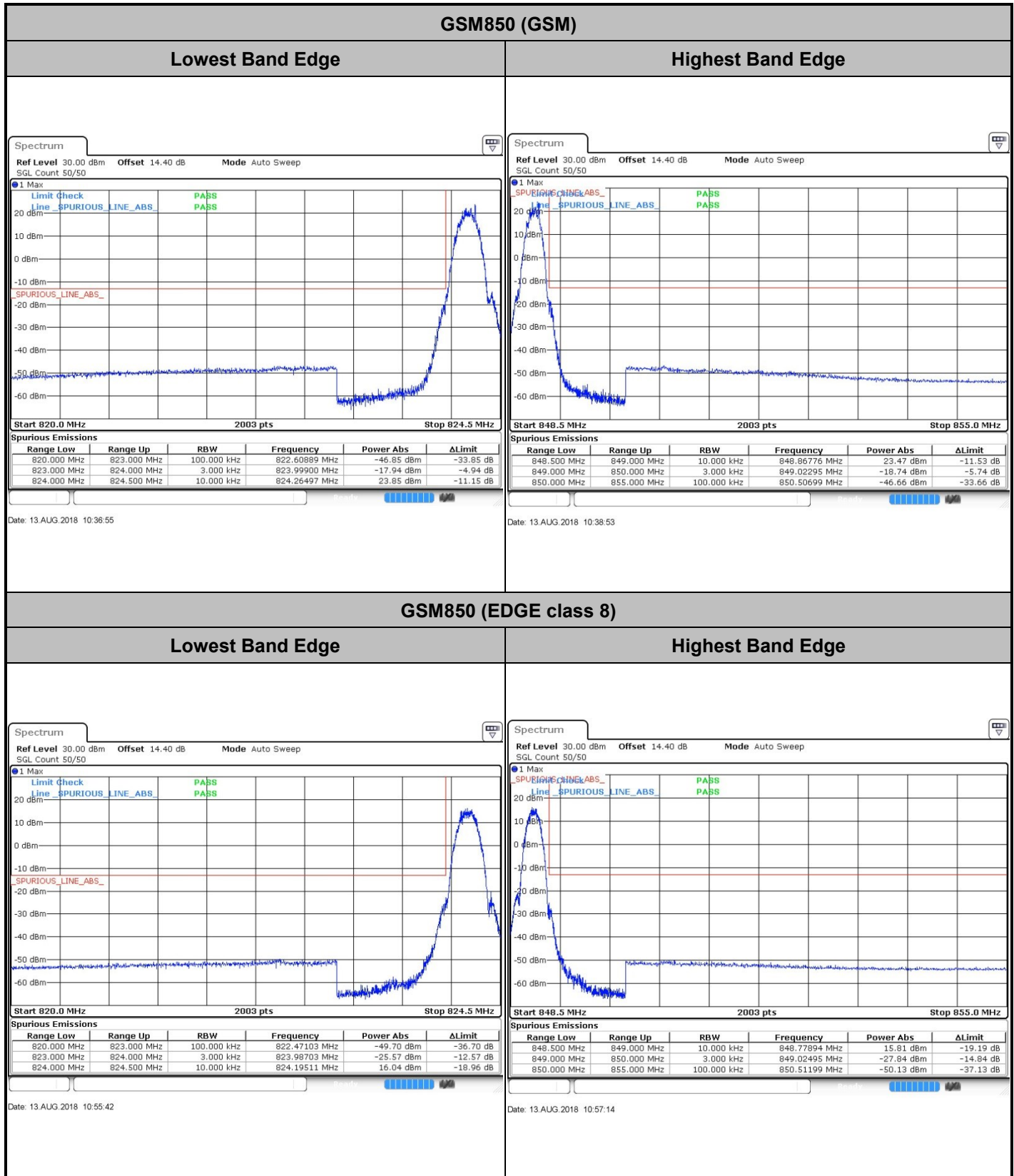


## Middle Channel



## Highest Channel

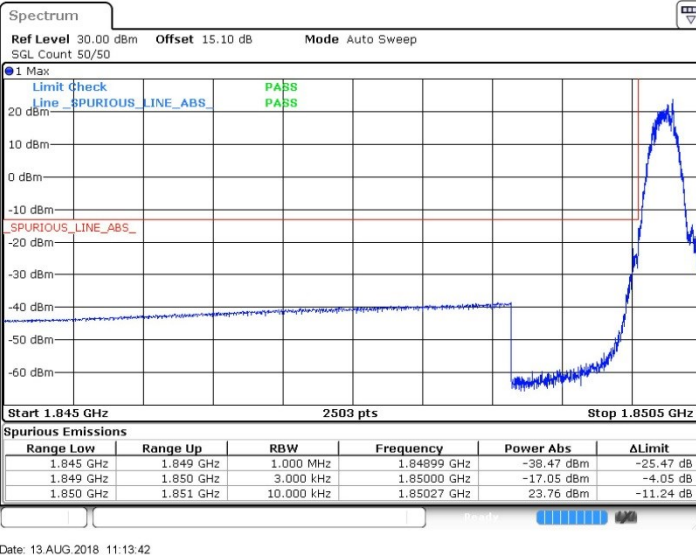


**Conducted Band Edge**

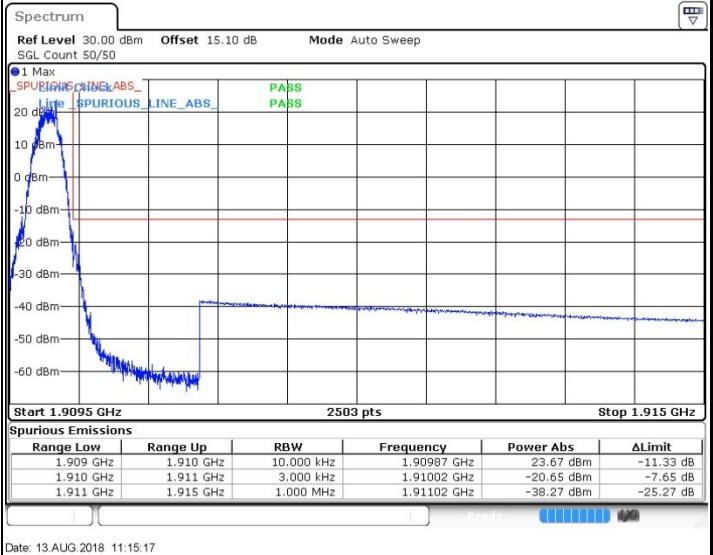


## GSM1900 (GSM)

## Lowest Band Edge

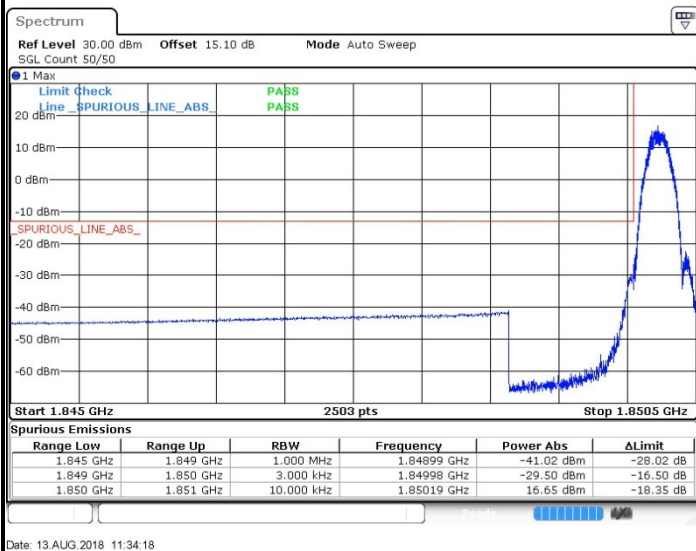


## Highest Band Edge

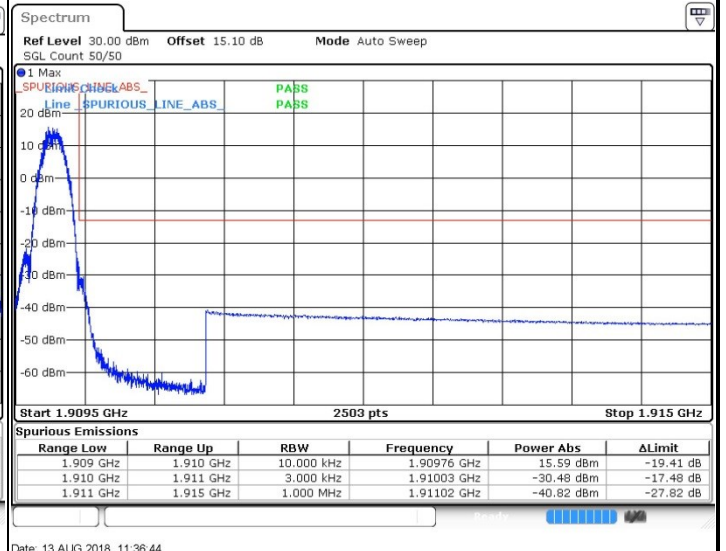


## GSM1900 (EDGE class 8)

## Lowest Band Edge



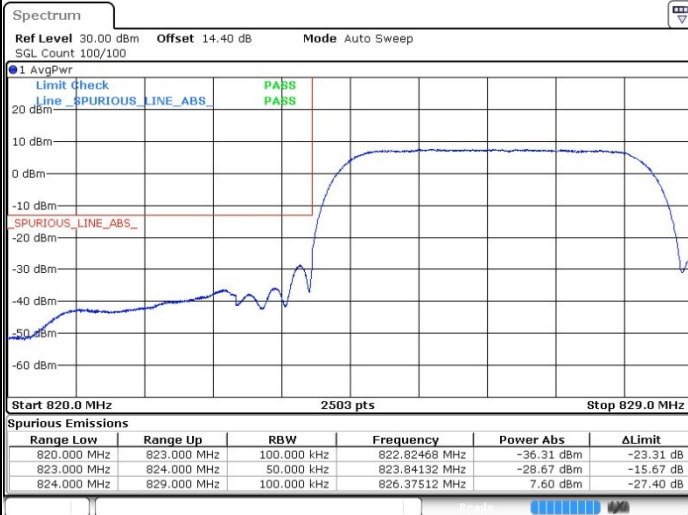
## Highest Band Edge





## WCDMA Band V (RMC 12.2Kbps)

## Lowest Band Edge

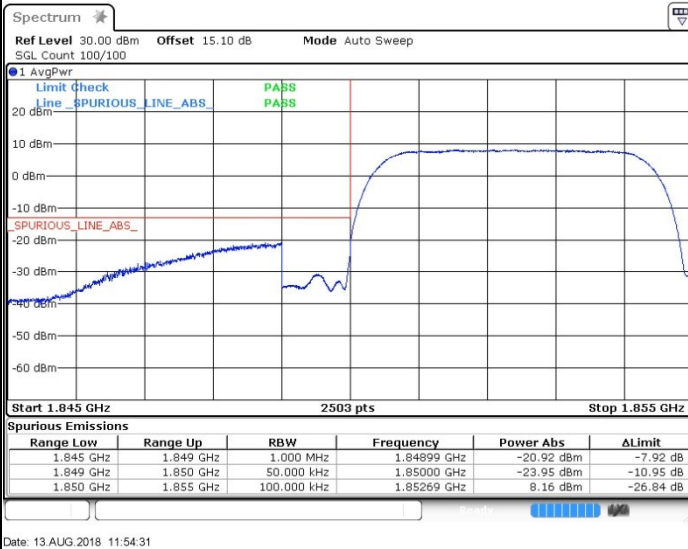


## Highest Band Edge

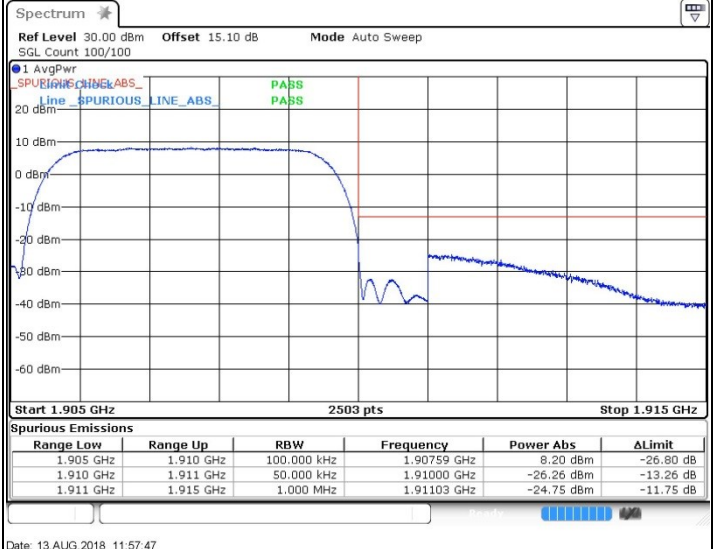


## WCDMA Band II (RMC 12.2Kbps)

## Lowest Band Edge



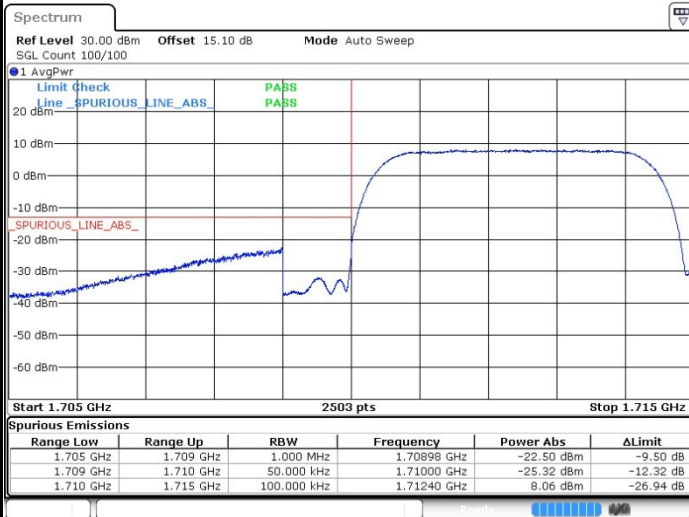
## Highest Band Edge





## WCDMA Band IV (RMC 12.2Kbps)

## Lowest Band Edge



## Highest Band Edge

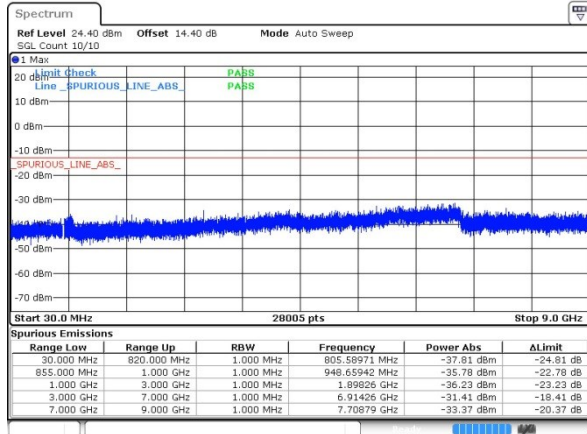




## Conducted Spurious Emission

### GSM850 (GSM)

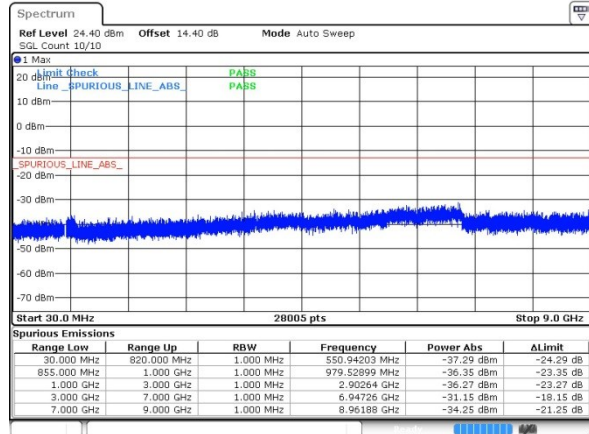
#### Lowest Channel



Date: 13 AUG 2018 10:40:14

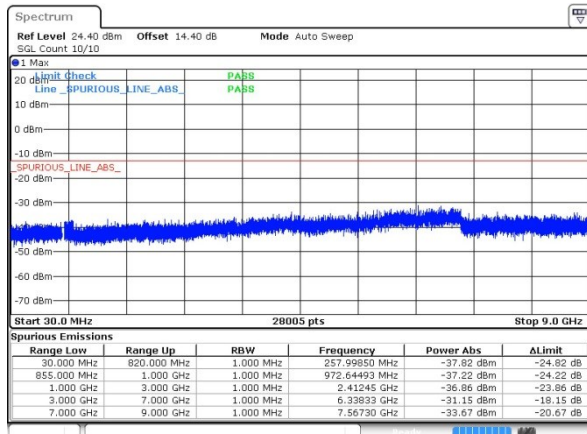
### GSM850 (EDGE class 8)

#### Lowest Channel



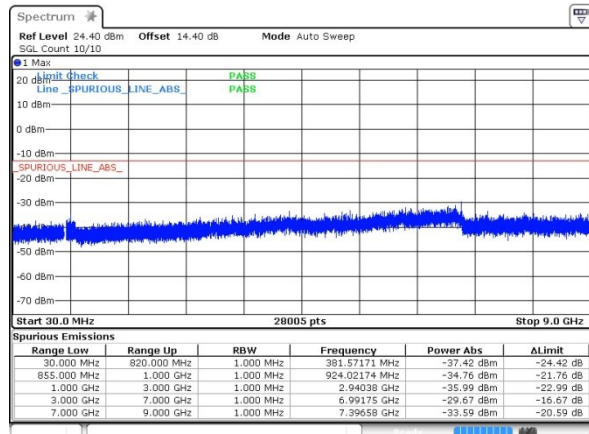
Date: 13 AUG 2018 11:00:00

#### Middle Channel



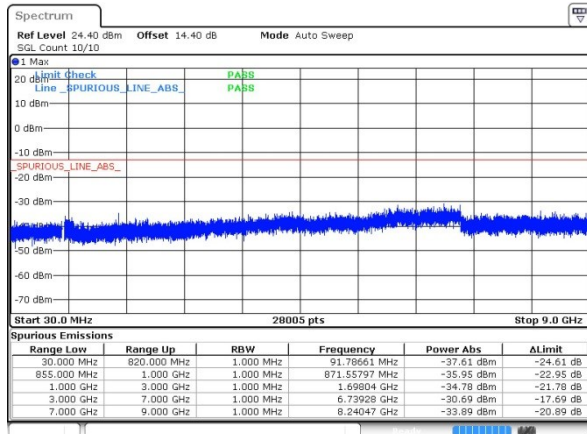
Date: 13 AUG 2018 10:42:58

#### Middle Channel



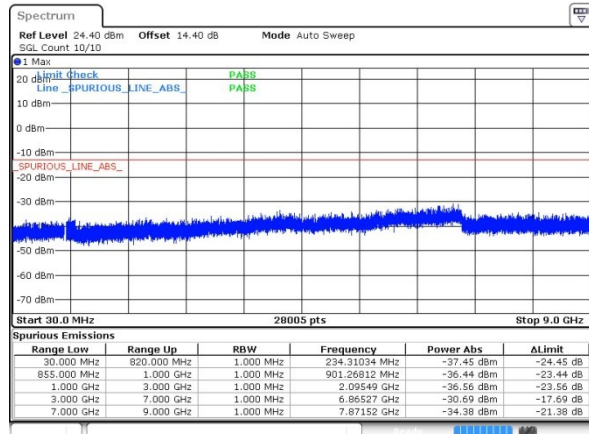
Date: 13 AUG 2018 11:01:24

#### Highest Channel



Date: 13 AUG 2018 10:44:27

#### Highest Channel

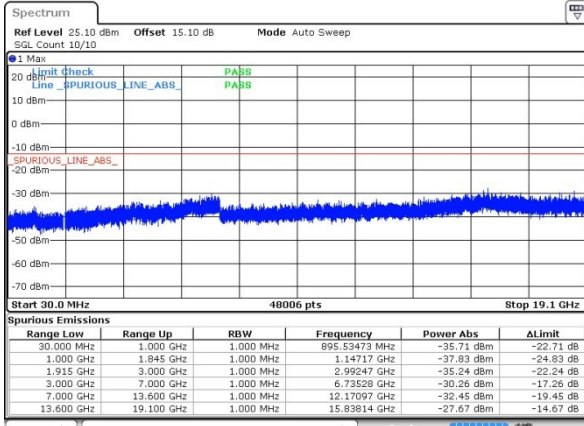


Date: 13 AUG 2018 11:02:45



## GSM1900 (GSM)

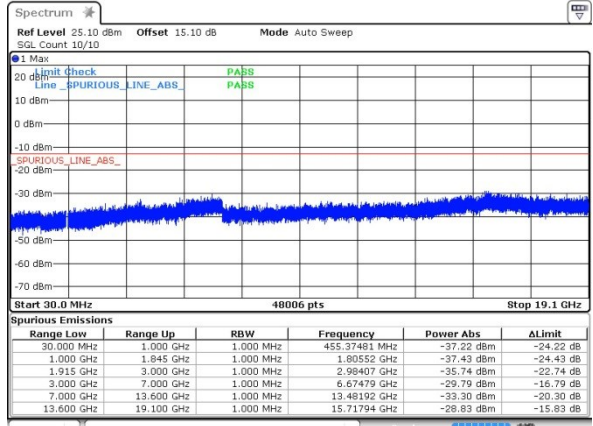
## Lowest Channel



Date: 13 AUG 2018 11:16:55

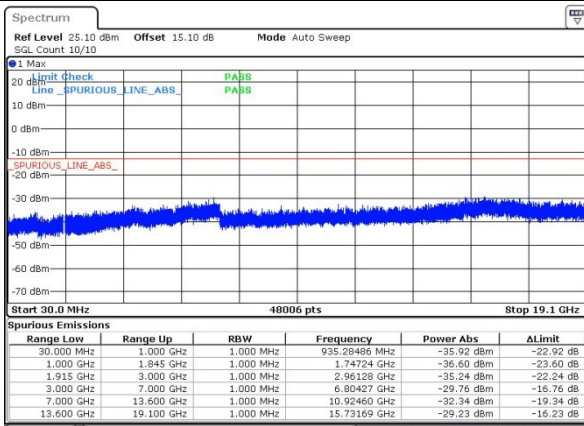
## GSM1900 (EDGE class 8)

## Lowest Channel



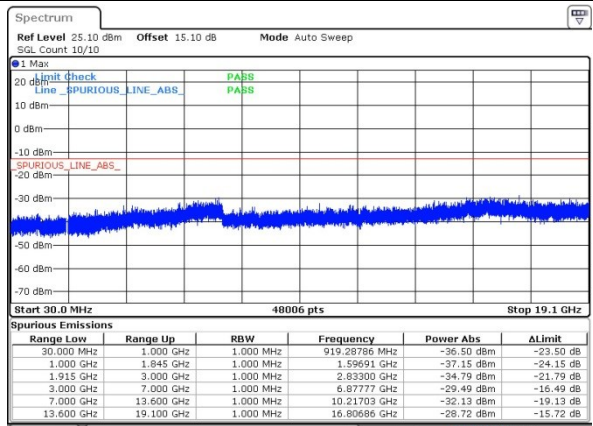
Date: 13 AUG 2018 11:38:06

## Middle Channel



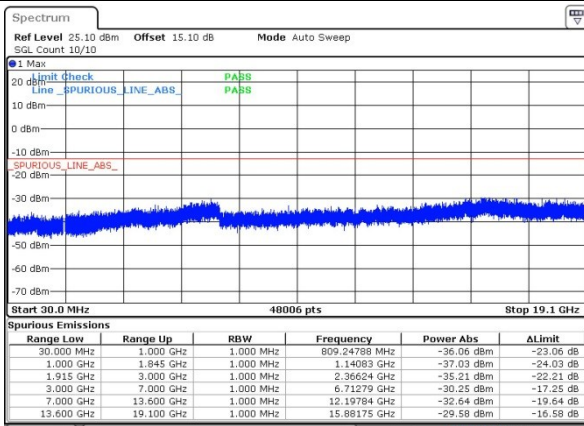
Date: 13 AUG 2018 11:18:19

## Middle Channel



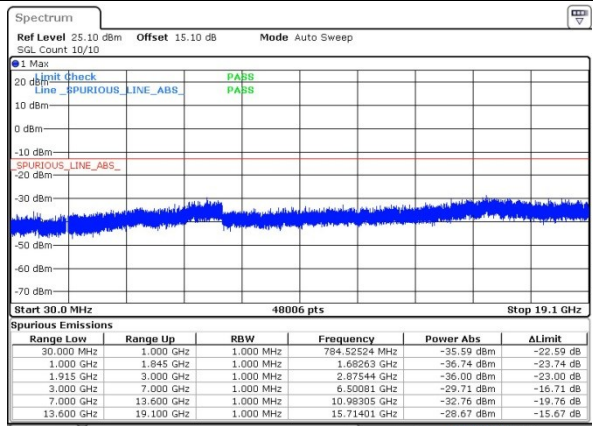
Date: 13 AUG 2018 11:39:26

## Highest Channel



Date: 13 AUG 2018 11:19:47

## Highest Channel

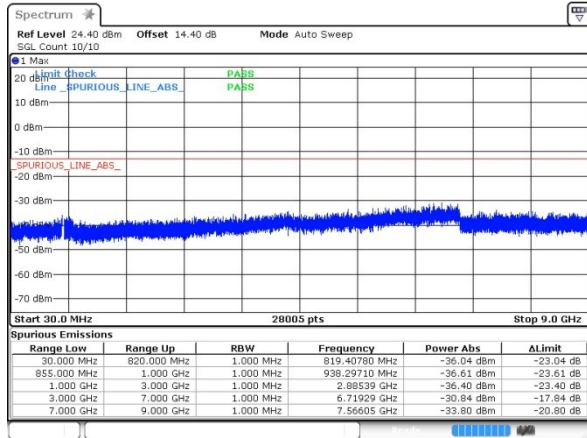


Date: 13 AUG 2018 11:41:07



## WCDMA Band V (RMC 12.2Kbps)

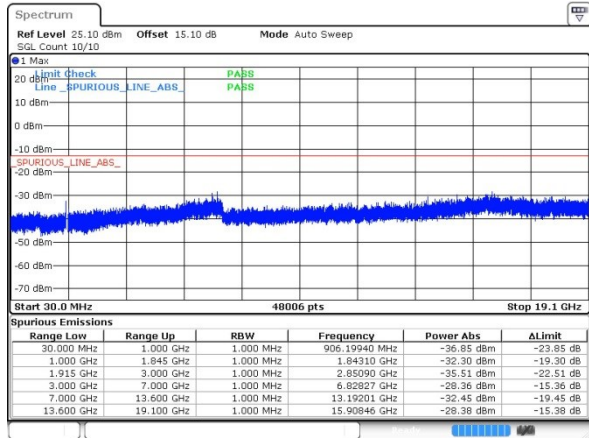
## Lowest Channel



Date: 13 AUG 2018 12:39:36

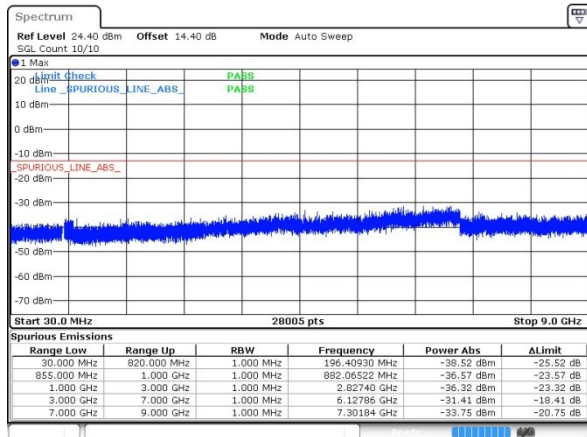
## WCDMA Band II (RMC 12.2Kbps)

## Lowest Channel



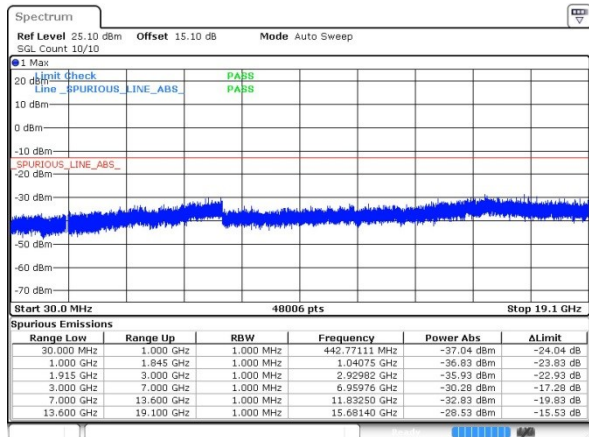
Date: 13 AUG 2018 12:00:03

## Middle Channel



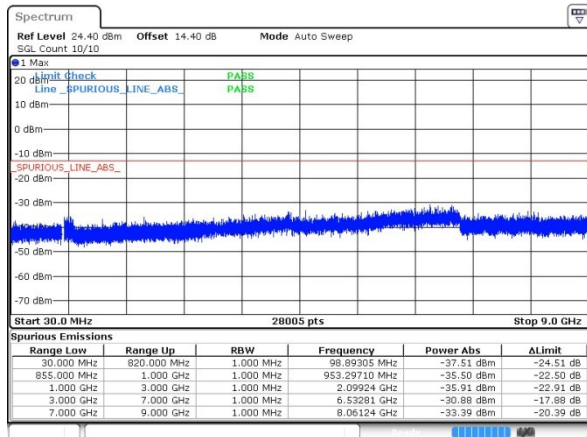
Date: 13 AUG 2018 12:41:03

## Middle Channel



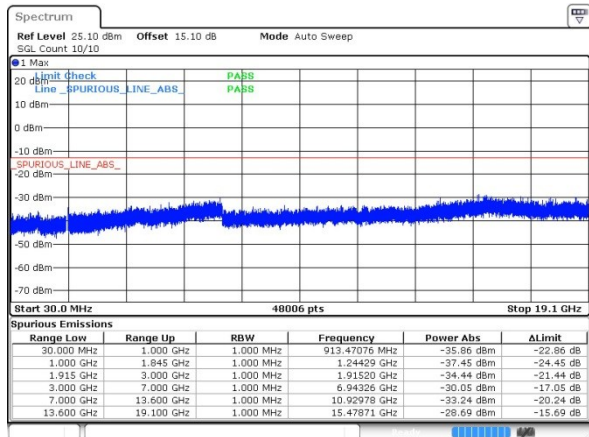
Date: 13 AUG 2018 12:01:33

## Highest Channel



Date: 13 AUG 2018 12:42:46

## Highest Channel

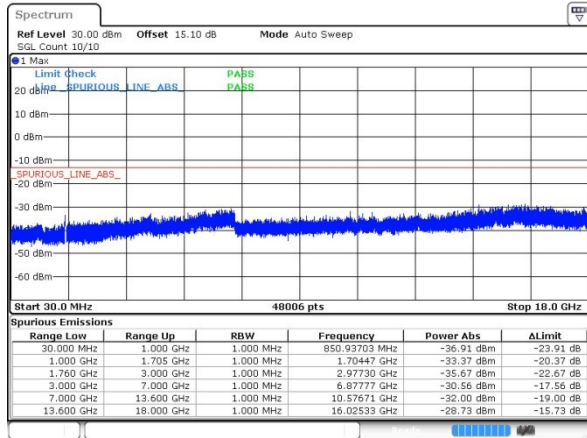


Date: 13 AUG 2018 12:02:55



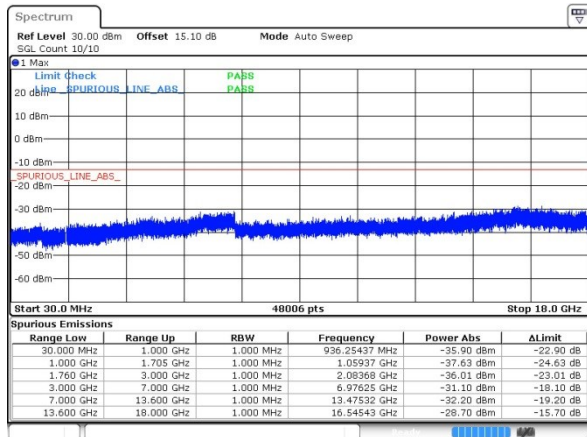
## WCDMA Band IV (RMC 12.2Kbps)

## Lowest Channel



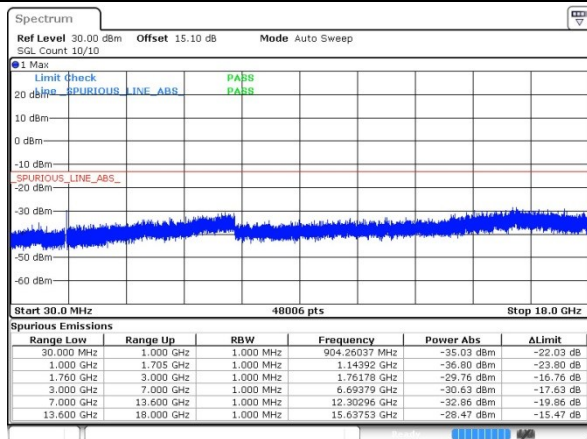
Date: 13 AUG 2018 12:21:02

## Middle Channel



Date: 13 AUG 2018 12:22:19

## Highest Channel



Date: 13 AUG 2018 12:23:42

**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    | 0.0407          | 0.0418                   | PASS            |
| 40               | Normal Voltage    | 0.0371          | 0.0191                   |                 |
| 30               | Normal Voltage    | 0.0502          | 0.0084                   |                 |
| 20(Ref.)         | Normal Voltage    | 0.0000          | 0.0000                   |                 |
| 10               | Normal Voltage    | 0.0060          | 0.0191                   |                 |
| 0                | Normal Voltage    | 0.0347          | 0.0299                   |                 |
| -10              | Normal Voltage    | 0.0538          | 0.0407                   |                 |
| -20              | Normal Voltage    | 0.0383          | 0.0395                   |                 |
| -30              | Normal Voltage    | 0.0395          | 0.0323                   |                 |
| 20               | Maximum Voltage   | 0.0430          | 0.0371                   |                 |
| 20               | Normal Voltage    | 0.0000          | 0.0000                   |                 |
| 20               | Battery End Point | 0.0323          | 0.0215                   |                 |

**Note:** Normal Voltage = 3.85V. ; Battery End Point (BEP) =3.65V. ; 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    | 0.0239           | 0.0234                    | PASS             |
| 40               | Normal Voltage    | 0.0207           | 0.0218                    |                  |
| 30               | Normal Voltage    | 0.0021           | 0.0101                    |                  |
| 20(Ref.)         | Normal Voltage    | 0.0000           | 0.0000                    |                  |
| 10               | Normal Voltage    | 0.0186           | 0.0021                    |                  |
| 0                | Normal Voltage    | 0.0197           | 0.0239                    |                  |
| -10              | Normal Voltage    | 0.0059           | 0.0245                    |                  |
| -20              | Normal Voltage    | 0.0218           | 0.0069                    |                  |
| -30              | Normal Voltage    | 0.0064           | 0.0293                    |                  |
| 20               | Maximum Voltage   | 0.0074           | 0.0229                    |                  |
| 20               | Normal Voltage    | 0.0000           | 0.0000                    |                  |
| 20               | Battery End Point | 0.0181           | 0.0234                    |                  |

**Note:**

1. Normal Voltage = 3.85V. ; Battery End Point (BEP) =3.65V. ; 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    | 0.0012                         | PASS            |
| 40               | Normal Voltage    | 0.0191                         |                 |
| 30               | Normal Voltage    | 0.0179                         |                 |
| 20(Ref.)         | Normal Voltage    | 0.0000                         |                 |
| 10               | Normal Voltage    | 0.0060                         |                 |
| 0                | Normal Voltage    | 0.0239                         |                 |
| -10              | Normal Voltage    | 0.0215                         |                 |
| -20              | Normal Voltage    | 0.0036                         |                 |
| -30              | Normal Voltage    | 0.0155                         |                 |
| 20               | Maximum Voltage   | 0.0048                         |                 |
| 20               | Normal Voltage    | 0.0000                         |                 |
| 20               | Battery End Point | 0.0143                         |                 |

**Note:** Normal Voltage = 3.85 V. ; Battery End Point (BEP) =3.65V. ; Maximum Voltage =4.4V



| 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    | 0.0048                          | PASS             |
| 40               | Normal Voltage    | 0.0037                          |                  |
| 30               | Normal Voltage    | 0.0032                          |                  |
| 20(Ref.)         | Normal Voltage    | 0.0000                          |                  |
| 10               | Normal Voltage    | 0.0011                          |                  |
| 0                | Normal Voltage    | 0.0043                          |                  |
| -10              | Normal Voltage    | 0.0021                          |                  |
| -20              | Normal Voltage    | 0.0064                          |                  |
| -30              | Normal Voltage    | 0.0027                          |                  |
| 20               | Maximum Voltage   | 0.0053                          |                  |
| 20               | Normal Voltage    | 0.0000                          |                  |
| 20               | Battery End Point | 0.0016                          |                  |

**Note:**

1. Normal Voltage = 3.85 V. ; Battery End Point (BEP) =3.65V. ; 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    | WCDMA Band IV<br>(RMC 12.2Kbps) | Limit<br>Note 2. |
|------------------|-------------------|---------------------------------|------------------|
| Temperature (°C) | Voltage (Volt)    | Deviation (ppm)                 | Result           |
| 50               | Normal Voltage    | 0.0121                          | PASS             |
| 40               | Normal Voltage    | 0.0139                          |                  |
| 30               | Normal Voltage    | 0.0023                          |                  |
| 20(Ref.)         | Normal Voltage    | 0.0000                          |                  |
| 10               | Normal Voltage    | 0.0092                          |                  |
| 0                | Normal Voltage    | 0.0063                          |                  |
| -10              | Normal Voltage    | 0.0029                          |                  |
| -20              | Normal Voltage    | 0.0052                          |                  |
| -30              | Normal Voltage    | 0.0017                          |                  |
| 20               | Maximum Voltage   | 0.0087                          |                  |
| 20               | Normal Voltage    | 0.0000                          |                  |
| 20               | Battery End Point | 0.0081                          |                  |

**Note:**

1. Normal Voltage = 3.85 V. ; Battery End Point (BEP) =3.65 V. ; 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 Conducted Test

### Radiated Spurious Emission

Note: Antenna 1 is Bottom Antenna, Antenna 2 is Top Antenna, the Antenna 2 verify worse case of Antenna 1.

| GSM850 (GSM) for Antenna 1 |                   |             |               |                   |                    |                      |                       |                    |
|----------------------------|-------------------|-------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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              | -53.48      | -13           | -40.48            | -55.39             | 1.14                 | 5.20                  | H                  |
|                            | 2510              | -34.48      | -13           | -21.48            | -37.11             | 1.12                 | 5.90                  | H                  |
|                            | 3345              | -59.89      | -13           | -46.89            | -63.10             | 1.34                 | 6.70                  | H                  |
|                            | 4182              | -47.21      | -13           | -34.21            | -50.67             | 1.59                 | 7.20                  | H                  |
|                            | 1672              | -61.98      | -13           | -48.98            | -63.89             | 1.14                 | 5.20                  | V                  |
|                            | 2510              | -38.80      | -13           | -25.80            | -41.43             | 1.12                 | 5.90                  | V                  |
|                            | 3345              | -59.49      | -13           | -46.49            | -62.70             | 1.34                 | 6.70                  | V                  |
|                            | 4182              | -53.68      | -13           | -40.68            | -57.14             | 1.59                 | 7.20                  | V                  |

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

| GSM850 (EDGE class 8) for Antenna 1 |                   |             |               |                   |                    |                      |                       |                    |
|-------------------------------------|-------------------|-------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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              | -55.38      | -13           | -42.38            | -57.29             | 1.14                 | 5.20                  | H                  |
|                                     | 2508              | -55.32      | -13           | -42.32            | -57.95             | 1.12                 | 5.90                  | H                  |
|                                     | 3345              | -59.48      | -13           | -46.48            | -62.69             | 1.34                 | 6.70                  | H                  |
|                                     | 1672              | -62.05      | -13           | -49.05            | -63.96             | 1.14                 | 5.20                  | V                  |
|                                     | 2510              | -54.69      | -13           | -41.69            | -57.32             | 1.12                 | 5.90                  | V                  |
|                                     | 3345              | -59.49      | -13           | -46.49            | -62.70             | 1.34                 | 6.70                  | V                  |

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



| GSM1900 (GSM) for Antenna 1 |                   |              |               |                   |                    |                      |                       |                    |
|-----------------------------|-------------------|--------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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              | -28.86       | -13           | -15.86            | -30.58             | 5.08                 | 6.80                  | H                  |
|                             | 5640              | -53.88       | -13           | -40.88            | -55.55             | 8.03                 | 9.70                  | H                  |
|                             | 7521              | -50.26       | -13           | -37.26            | -52.64             | 9.43                 | 11.81                 | H                  |
|                             | 3759              | -34.09       | -13           | -21.09            | -35.81             | 5.08                 | 6.80                  | V                  |
|                             | 5640              | -50.54       | -13           | -37.54            | -52.21             | 8.03                 | 9.70                  | V                  |
|                             | 7521              | -50.10       | -13           | -37.10            | -52.48             | 9.43                 | 11.81                 | V                  |

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

| GSM1900 (EDGE class 8) for Antenna 1 |                   |              |               |                   |                    |                      |                       |                    |
|--------------------------------------|-------------------|--------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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              | -33.09       | -13           | -20.09            | -34.81             | 5.08                 | 6.80                  | H                  |
|                                      | 5640              | -48.41       | -13           | -35.41            | -50.08             | 8.03                 | 9.70                  | H                  |
|                                      | 7521              | -50.00       | -13           | -37.00            | -52.38             | 9.43                 | 11.81                 | H                  |
|                                      | 3759              | -38.40       | -13           | -25.40            | -40.12             | 5.08                 | 6.80                  | V                  |
|                                      | 5640              | -52.31       | -13           | -39.31            | -53.98             | 8.03                 | 9.70                  | V                  |
|                                      | 7521              | -50.18       | -13           | -37.18            | -52.56             | 9.43                 | 11.81                 | V                  |

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



| WCDMA Band V(RMC 12.2Kbps) for Antenna 1 |                   |             |               |                   |                    |                      |                       |                    |
|------------------------------------------|-------------------|-------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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              | -64.86      | -13           | -51.86            | -66.77             | 1.14                 | 5.20                  | H                  |
|                                          | 2510              | -60.44      | -13           | -47.44            | -63.07             | 1.12                 | 5.90                  | H                  |
|                                          | 3345              | -58.20      | -13           | -45.20            | -61.41             | 1.34                 | 6.70                  | H                  |
|                                          | 1672              | -63.56      | -13           | -50.56            | -65.47             | 1.14                 | 5.20                  | V                  |
|                                          | 2510              | -60.06      | -13           | -47.06            | -62.69             | 1.12                 | 5.90                  | V                  |
|                                          | 3345              | -59.00      | -13           | -46.00            | -62.21             | 1.34                 | 6.70                  | V                  |

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

| WCDMA Band II(RMC 12.2Kbps) for Antenna 1 |                   |              |               |                   |                    |                      |                       |                    |
|-------------------------------------------|-------------------|--------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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                                    | 3762              | -39.35       | -13           | -26.35            | -41.07             | 5.08                 | 6.80                  | H                  |
|                                           | 5643              | -49.99       | -13           | -36.99            | -51.66             | 8.03                 | 9.70                  | H                  |
|                                           | 7521              | -50.34       | -13           | -37.34            | -52.72             | 9.43                 | 11.81                 | H                  |
|                                           | 3762              | -43.16       | -13           | -30.16            | -44.88             | 5.08                 | 6.80                  | V                  |
|                                           | 5643              | -52.22       | -13           | -39.22            | -53.89             | 8.03                 | 9.70                  | V                  |
|                                           | 7521              | -50.20       | -13           | -37.20            | -52.58             | 9.43                 | 11.81                 | V                  |

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

| WCDMA Band IV(RMC 12.2Kbps) for Antenna 1 |                   |              |               |                   |                    |                      |                       |                    |
|-------------------------------------------|-------------------|--------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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                                    | 3465              | -59.03       | -13           | -46.03            | -63.00             | 4.87                 | 8.84                  | H                  |
|                                           | 5199              | -46.89       | -13           | -33.89            | -48.33             | 7.70                 | 9.14                  | H                  |
|                                           | 6930              | -51.86       | -13           | -38.86            | -53.55             | 8.98                 | 10.66                 | H                  |
|                                           | 3462              | -58.30       | -13           | -45.30            | -62.27             | 4.87                 | 8.84                  | V                  |
|                                           | 5199              | -50.51       | -13           | -37.51            | -51.95             | 7.70                 | 9.14                  | V                  |
|                                           | 6930              | -51.96       | -13           | -38.96            | -53.65             | 8.98                 | 10.66                 | V                  |

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



| GSM850 (GSM) for Antenna 2 |                   |             |               |                   |                    |                      |                       |                    |
|----------------------------|-------------------|-------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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              | -48.96      | -13           | -35.96            | -50.87             | 1.14                 | 5.20                  | H                  |
|                            | 2510              | -53.36      | -13           | -40.36            | -55.99             | 1.12                 | 5.90                  | H                  |
|                            | 3345              | -59.55      | -13           | -46.55            | -62.76             | 1.34                 | 6.70                  | H                  |
|                            | 1672              | -49.00      | -13           | -36.00            | -50.91             | 1.14                 | 5.20                  | V                  |
|                            | 2510              | -53.83      | -13           | -40.83            | -56.46             | 1.12                 | 5.90                  | V                  |
|                            | 3345              | -59.33      | -13           | -46.33            | -62.54             | 1.34                 | 6.70                  | V                  |

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

| GSM1900 (GSM) for Antenna 2 |                   |              |               |                   |                    |                      |                       |                    |
|-----------------------------|-------------------|--------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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              | -26.89       | -13           | -13.89            | -28.61             | 5.08                 | 6.80                  | H                  |
|                             | 5640              | -53.25       | -13           | -40.25            | -54.92             | 8.03                 | 9.70                  | H                  |
|                             | 7521              | -49.94       | -13           | -36.94            | -52.32             | 9.43                 | 11.81                 | H                  |
|                             | 3759              | -33.17       | -13           | -20.17            | -34.89             | 5.08                 | 6.80                  | V                  |
|                             | 5640              | -51.31       | -13           | -38.31            | -52.98             | 8.03                 | 9.70                  | V                  |
|                             | 7521              | -50.29       | -13           | -37.29            | -52.67             | 9.43                 | 11.81                 | V                  |

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

| WCDMA Band IV(RMC 12.2Kbps) for Antenna 2 |                   |              |               |                   |                    |                      |                       |                    |
|-------------------------------------------|-------------------|--------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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                                    | 3465              | -58.36       | -13           | -45.36            | -62.33             | 4.87                 | 8.84                  | H                  |
|                                           | 5198              | -56.55       | -13           | -43.55            | -57.99             | 7.70                 | 9.14                  | H                  |
|                                           | 6930              | -52.10       | -13           | -39.10            | -53.79             | 8.98                 | 10.66                 | H                  |
|                                           | 3465              | -58.46       | -13           | -45.46            | -62.43             | 4.87                 | 8.84                  | V                  |
|                                           | 5198              | -56.22       | -13           | -43.22            | -57.66             | 7.70                 | 9.14                  | V                  |
|                                           | 6930              | -51.98       | -13           | -38.98            | -53.67             | 8.98                 | 10.66                 | V                  |

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