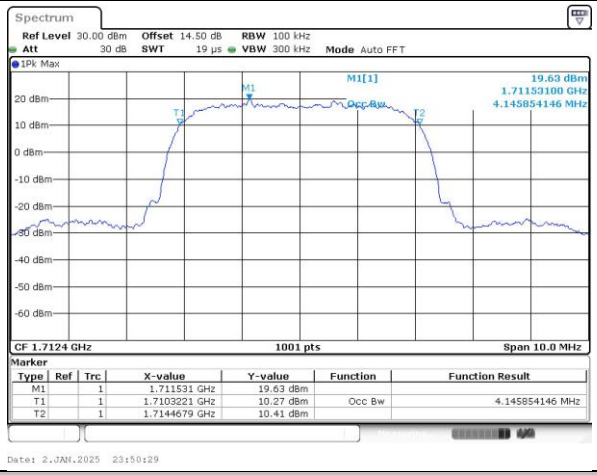
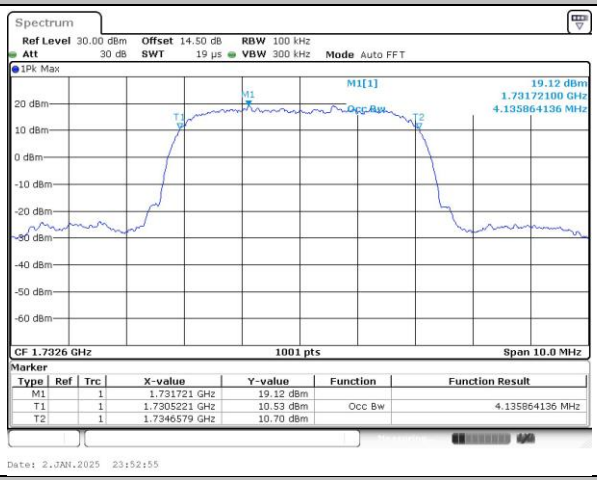
## WCDMA Band IV (RMC 12.2Kbps)

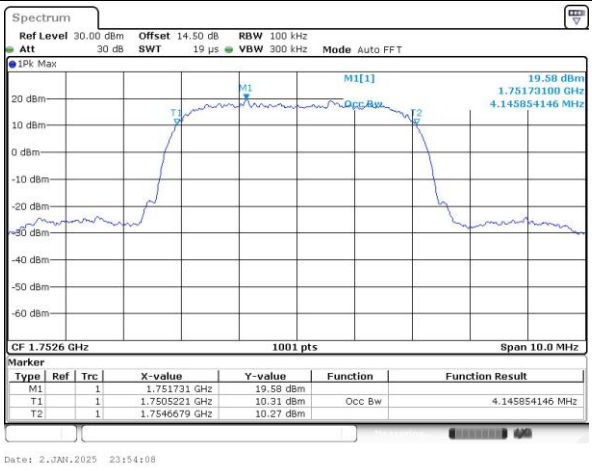
### Lowest Channel




### Middle Channel



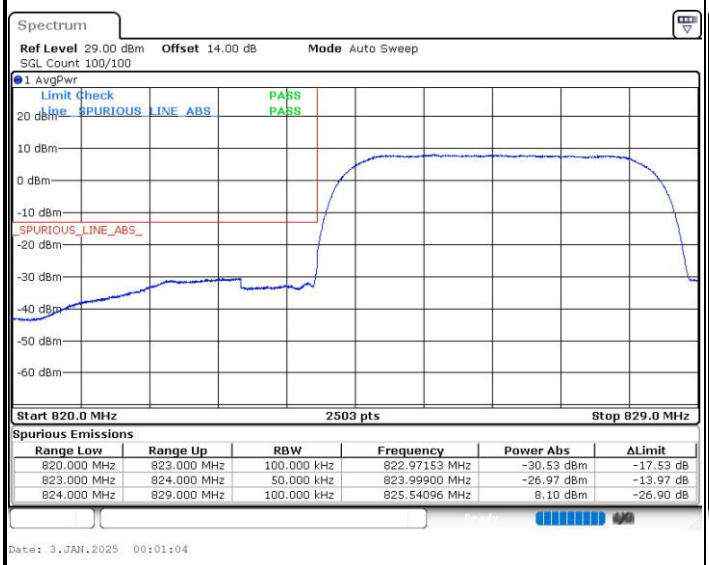

### Highest Channel



# Conducted Band Edge

## WCDMA Band V (RMC 12.2Kbps)

### Lowest Band Edge

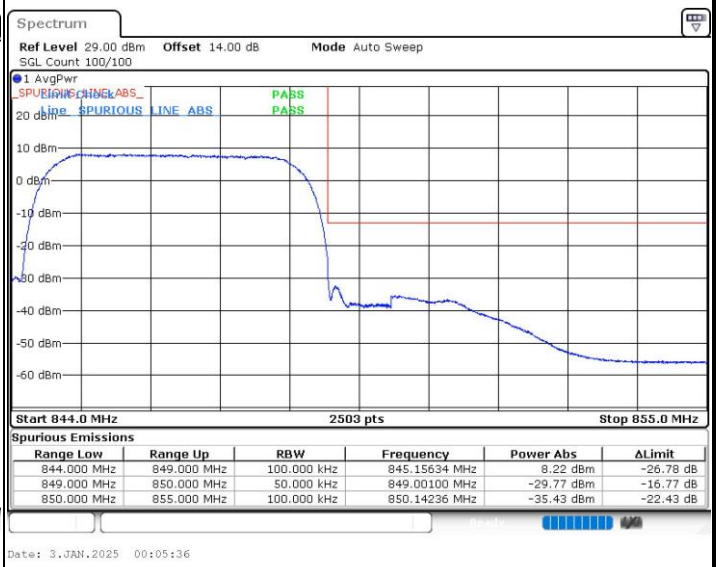



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 820.000 MHz | 823.000 MHz | 100.000 kHz | 822.97153 MHz | -30.53 dBm | -17.53 dB |
| 823.000 MHz | 824.000 MHz | 50.000 kHz | 823.99900 MHz | -26.97 dBm | -13.97 dB |
| 824.000 MHz | 829.000 MHz | 100.000 kHz | 825.54096 MHz | 8.10 dBm | -26.90 dB |

Date: 3.JAN.2025 00:01:04

### Highest Band Edge



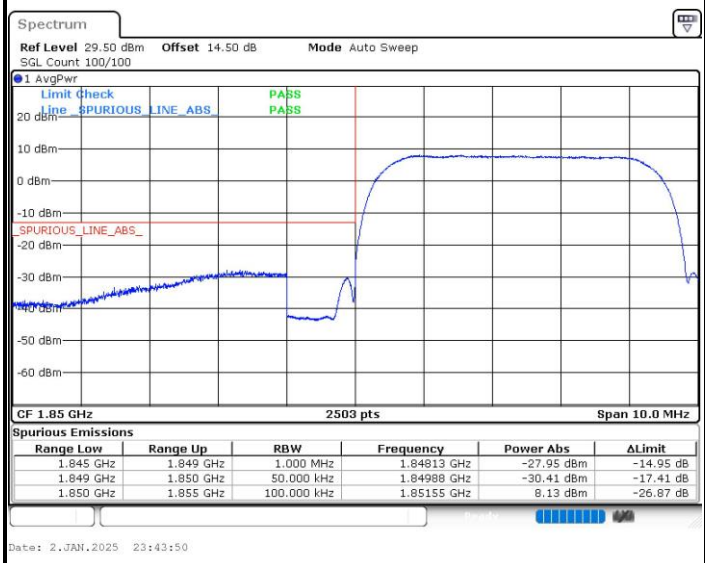

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 844.000 MHz | 849.000 MHz | 100.000 kHz | 845.15634 MHz | 8.22 dBm | -26.78 dB |
| 849.000 MHz | 850.000 MHz | 50.000 kHz | 849.00100 MHz | -29.77 dBm | -16.77 dB |
| 850.000 MHz | 855.000 MHz | 100.000 kHz | 850.14236 MHz | -35.43 dBm | -22.43 dB |

Date: 3.JAN.2025 00:05:36

## WCDMA Band II (RMC 12.2Kbps)

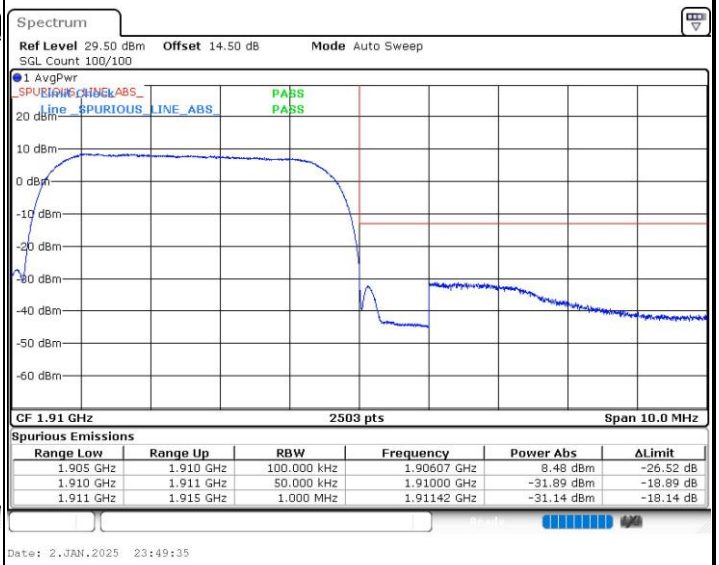
### Lowest Band Edge




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 1.845 GHz | 1.849 GHz | 1.000 MHz | 1.84813 GHz | -27.95 dBm | -14.95 dB |
| 1.849 GHz | 1.850 GHz | 50.000 kHz | 1.84988 GHz | -30.41 dBm | -17.41 dB |
| 1.850 GHz | 1.855 GHz | 100.000 kHz | 1.85155 GHz | 8.13 dBm | -26.87 dB |

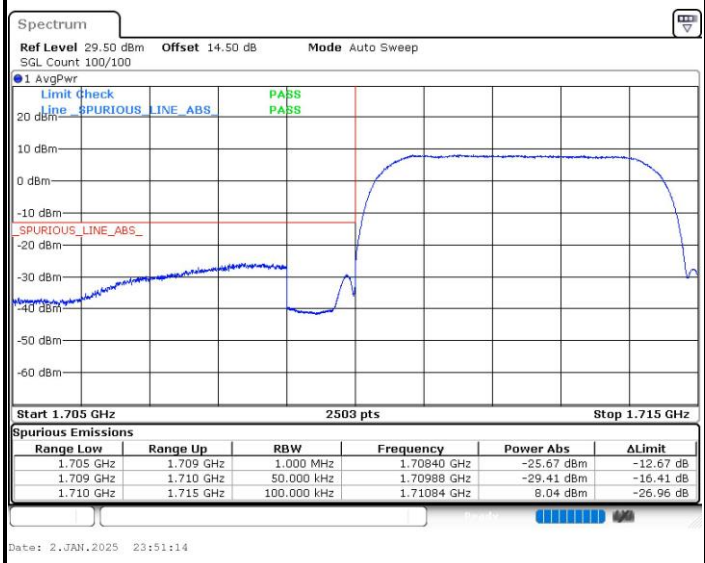
### Highest Band Edge

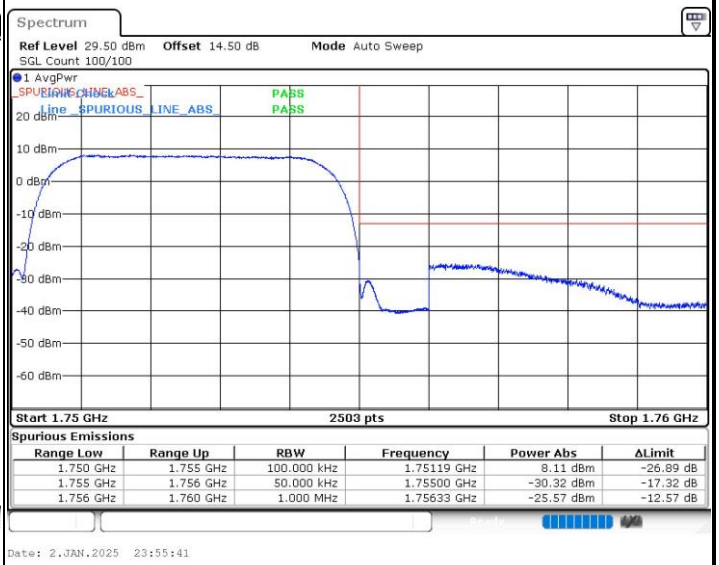



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 1.905 GHz | 1.910 GHz | 100.000 kHz | 1.90607 GHz | 8.48 dBm | -26.52 dB |
| 1.910 GHz | 1.911 GHz | 50.000 kHz | 1.91000 GHz | -31.89 dBm | -18.89 dB |
| 1.911 GHz | 1.915 GHz | 1.000 MHz | 1.91142 GHz | -31.14 dBm | -18.14 dB |

| WCDMA Band IV (RMC 12.2Kbps) | |
|---|---|
| **Lowest Band Edge** | **Highest Band Edge** |

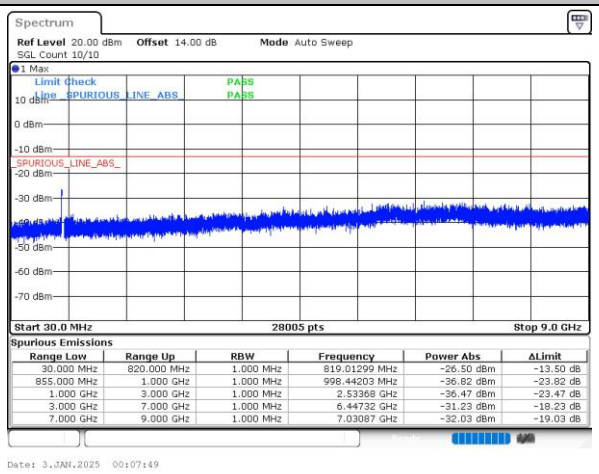


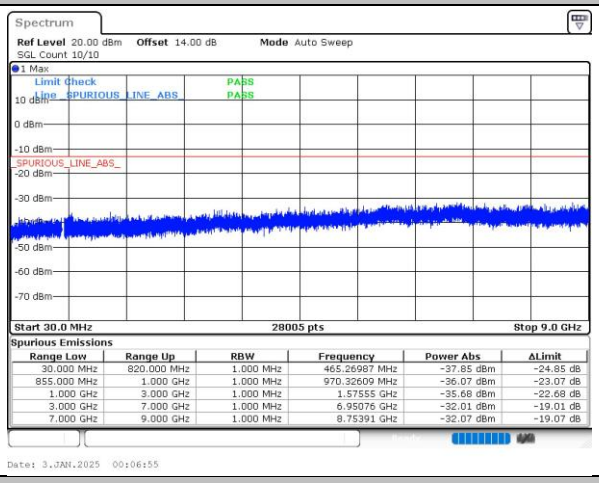
# Conducted Spurious Emission

## WCDMA Band V (RMC 12.2Kbps)

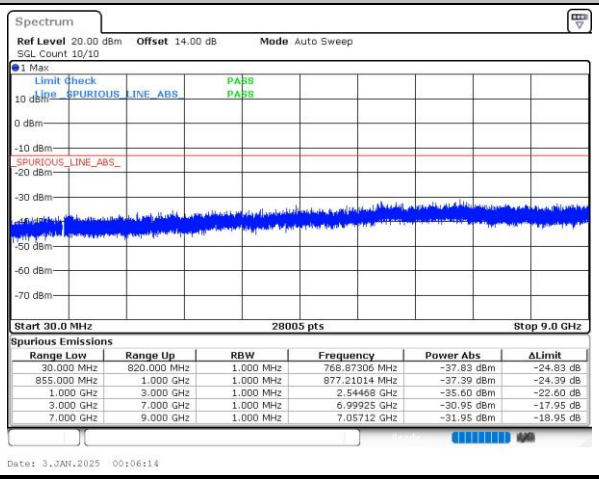
### Lowest Channel




### Middle Channel

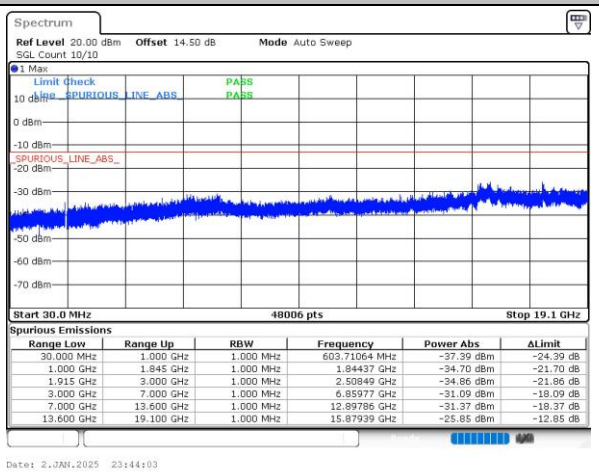



### Highest Channel

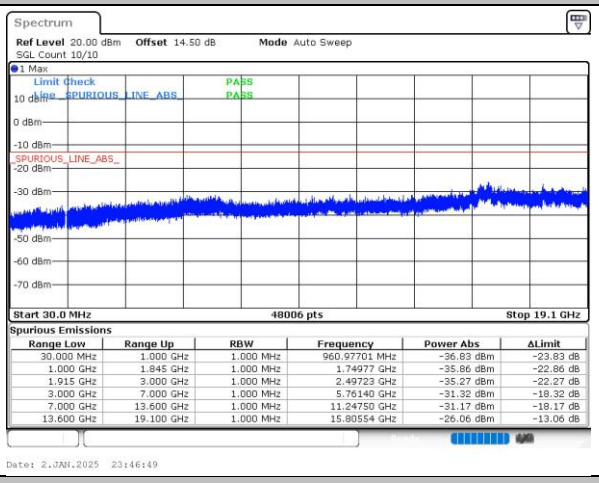



## WCDMA Band II (RMC 12.2Kbps)

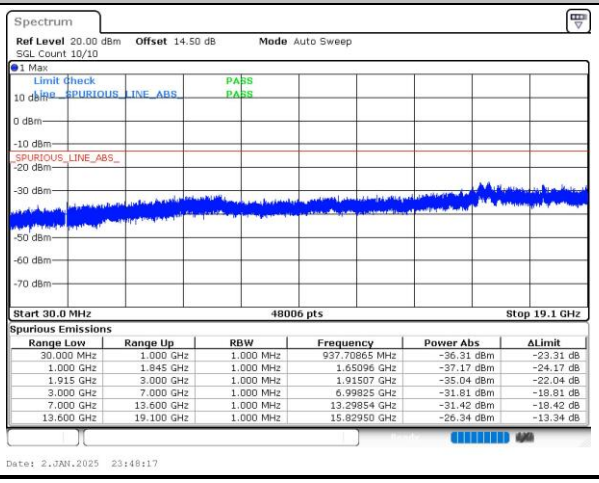
### Lowest Channel




### Middle Channel

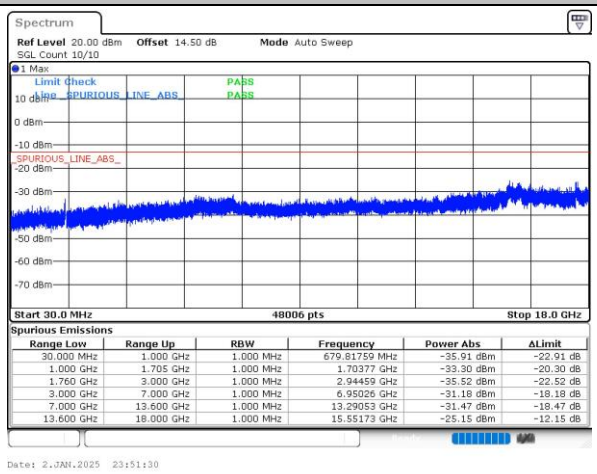



### Highest Channel



## WCDMA Band IV (RMC 12.2Kbps)

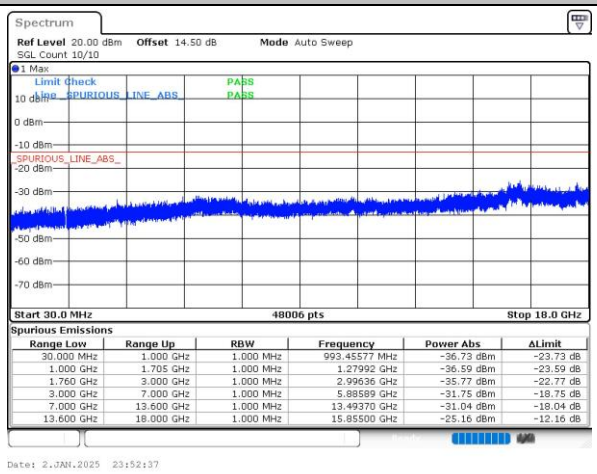
### Lowest Channel




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 679.81759 MHz | -35.91 dBm | -22.91 dB |
| 1.000 GHz | 1.705 GHz | 1.000 MHz | 1.70377 GHz | -33.30 dBm | -20.30 dB |
| 1.760 GHz | 3.000 GHz | 1.000 MHz | 2.94459 GHz | -35.52 dBm | -22.52 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.95026 GHz | -31.18 dBm | -18.18 dB |
| 7.000 GHz | 13.600 GHz | 1.000 MHz | 13.29053 GHz | -31.47 dBm | -18.47 dB |
| 13.600 GHz | 18.000 GHz | 1.000 MHz | 15.55173 GHz | -25.15 dBm | -12.15 dB |

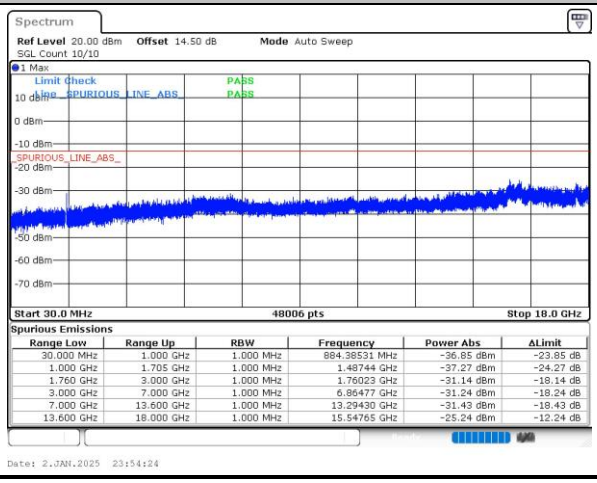
### Middle Channel




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 993.45577 MHz | -36.73 dBm | -23.73 dB |
| 1.000 GHz | 1.705 GHz | 1.000 MHz | 1.27992 GHz | -36.59 dBm | -23.59 dB |
| 1.760 GHz | 3.000 GHz | 1.000 MHz | 2.99636 GHz | -35.77 dBm | -22.77 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 5.88589 GHz | -31.75 dBm | -18.75 dB |
| 7.000 GHz | 13.600 GHz | 1.000 MHz | 13.49370 GHz | -31.04 dBm | -18.04 dB |
| 13.600 GHz | 18.000 GHz | 1.000 MHz | 15.85500 GHz | -25.16 dBm | -12.16 dB |

### Highest Channel




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 884.38531 MHz | -36.85 dBm | -23.85 dB |
| 1.000 GHz | 1.705 GHz | 1.000 MHz | 1.48744 GHz | -37.27 dBm | -24.27 dB |
| 1.760 GHz | 3.000 GHz | 1.000 MHz | 1.76023 GHz | -31.14 dBm | -18.14 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.86477 GHz | -31.24 dBm | -18.24 dB |
| 7.000 GHz | 13.600 GHz | 1.000 MHz | 13.29430 GHz | -31.43 dBm | -18.43 dB |
| 13.600 GHz | 18.000 GHz | 1.000 MHz | 15.54765 GHz | -25.24 dBm | -12.24 dB |

# Frequency Stability

| Test Conditions | Middle Channel | WCDMA Band V (RMC 12.2Kbps) | Limit 2.5ppm |
|---|---|---|---|
| Temperature (°C) | Voltage (Volt) | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0013 | PASS |
| 40 | Normal Voltage | 0.0006 | |
| 30 | Normal Voltage | 0.0023 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0005 | |
| 0 | Normal Voltage | 0.0009 | |
| -10 | Normal Voltage | 0.0017 | |
| -20 | Normal Voltage | 0.0019 | |
| -30 | Normal Voltage | 0.0021 | |
| 20 | Maximum Voltage | 0.0011 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0004 | |

| Test Conditions | Middle Channel | WCDMA Band II (RMC 12.2Kbps) | Limit Note 2. |
|---|---|---|---|
| Temperature (°C) | Voltage (Volt) | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0008 | PASS |
| 40 | Normal Voltage | 0.0004 | |
| 30 | Normal Voltage | 0.0013 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0004 | |
| 0 | Normal Voltage | 0.0006 | |
| -10 | Normal Voltage | 0.0010 | |
| -20 | Normal Voltage | 0.0011 | |
| -30 | Normal Voltage | 0.0012 | |
| 20 | Maximum Voltage | 0.0007 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0003 | |

| Test Conditions | Middle Channel | WCDMA Band IV (RMC 12.2Kbps) | Limit Note 2. |
|---|---|---|---|
| Temperature (°C) | Voltage (Volt) | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0007 | PASS |
| 40 | Normal Voltage | 0.0004 | |
| 30 | Normal Voltage | 0.0012 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0004 | |
| 0 | Normal Voltage | 0.0005 | |
| -10 | Normal Voltage | 0.0009 | |
| -20 | Normal Voltage | 0.0010 | |
| -30 | Normal Voltage | 0.0011 | |
| 20 | Maximum Voltage | 0.0006 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0003 | |

**Note:**

1. Normal Voltage = 3.91V；Minimum Voltage = 3.6 V；Maximum Voltage =4.5 V
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

| Test Engineer : | Kuang Jia | Temperature : | 22~25℃ |
|---|---|---|---|
| | | Relative Humidity : | 48~52% |

Note: Pre-scanned harmonic for the different antennas, we choose the worst antenna mode to perform final test and record in the report.

| GSM850 (GSM)_ANT0 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Channel | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle | 1672.8 | -61.87 | -13 | -48.87 | -73.55 | -65.12 | 4.00 | 9.40 | H |
| | 2509.2 | -57.17 | -13 | -44.17 | -76.17 | -60.74 | 4.88 | 10.60 | H |
| | 3345.6 | -56.30 | -13 | -43.30 | -77.27 | -61.23 | 5.52 | 12.60 | H |
| | 1672.8 | -55.96 | -13 | -42.96 | -68.35 | -59.21 | 4.00 | 9.40 | V |
| | 2509.2 | -57.38 | -13 | -44.38 | -76.59 | -60.95 | 4.88 | 10.60 | V |
| | 3345.6 | -56.24 | -13 | -43.24 | -77.51 | -61.17 | 5.52 | 12.60 | V |

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

| GSM850 (EDGE 1 Tx slots) _ANT0 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Channel | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle | 1672.8 | -62.92 | -13 | -49.92 | -74.60 | -66.17 | 4.00 | 9.40 | H |
| | 2509.2 | -58.36 | -13 | -45.36 | -77.36 | -61.93 | 4.88 | 10.60 | H |
| | 3345.6 | -58.01 | -13 | -45.01 | -78.98 | -62.94 | 5.52 | 12.60 | H |
| | 1672.8 | -57.59 | -13 | -44.59 | -69.98 | -60.84 | 4.00 | 9.40 | V |
| | 2509.2 | -57.07 | -13 | -44.07 | -76.28 | -60.64 | 4.88 | 10.60 | V |
| | 3345.6 | -57.48 | -13 | -44.48 | -78.75 | -62.41 | 5.52 | 12.60 | V |

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

| GSM1900 (GSM) _ANT2 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Channel | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle | 3760 | -57.79 | -13 | -44.79 | -80.08 | -64.54 | 5.85 | 12.60 | H |
| | 5640 | -57.64 | -13 | -44.64 | -81.60 | -63.44 | 7.30 | 13.10 | H |
| | 7520 | -55.64 | -13 | -42.64 | -82.13 | -58.79 | 8.35 | 11.50 | H |
| | 3760 | -55.57 | -13 | -42.57 | -81.02 | -62.32 | 5.85 | 12.60 | V |
| | 5640 | -57.27 | -13 | -44.27 | -81.38 | -63.07 | 7.30 | 13.10 | V |
| | 7520 | -55.59 | -13 | -42.59 | -82.06 | -58.74 | 8.35 | 11.50 | V |

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

| GSM1900 (EDGE 1 Tx slots) _ANT2 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Channel | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle | 3760 | -57.87 | -13 | -44.87 | -80.16 | -64.62 | 5.85 | 12.60 | H |
| | 5640 | -57.59 | -13 | -44.59 | -81.55 | -63.39 | 7.30 | 13.10 | H |
| | 7520 | -54.95 | -13 | -41.95 | -81.44 | -58.10 | 8.35 | 11.50 | H |
| | 3760 | -55.62 | -13 | -42.62 | -81.07 | -62.37 | 5.85 | 12.60 | V |
| | 5640 | -57.38 | -13 | -44.38 | -81.49 | -63.18 | 7.30 | 13.10 | V |
| | 7520 | -55.40 | -13 | -42.40 | -81.87 | -58.55 | 8.35 | 11.50 | V |

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

| WCDMA Band V(RMC 12.2Kbps) _ANT0 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Channel | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle | 1672.8 | -67.14 | -13 | -54.14 | -78.82 | -70.39 | 4.00 | 9.40 | H |
| | 2509.2 | -61.19 | -13 | -48.19 | -80.19 | -64.76 | 4.88 | 10.60 | H |
| | 3345.6 | -60.76 | -13 | -47.76 | -81.73 | -65.69 | 5.52 | 12.60 | H |
| | 1672.8 | -65.88 | -13 | -52.88 | -78.27 | -69.13 | 4.00 | 9.40 | V |
| | 2509.2 | -61.21 | -13 | -48.21 | -80.42 | -64.78 | 4.88 | 10.60 | V |
| | 3345.6 | -60.17 | -13 | -47.17 | -81.44 | -65.10 | 5.52 | 12.60 | V |

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

| WCDMA Band II(RMC 12.2Kbps) _ANT2 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Channel | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle | 3760 | -57.86 | -13 | -44.86 | -80.15 | -64.61 | 5.85 | 12.60 | H |
| | 5640 | -57.59 | -13 | -44.59 | -81.55 | -63.39 | 7.30 | 13.10 | H |
| | 7520 | -54.91 | -13 | -41.91 | -81.40 | -58.06 | 8.35 | 11.50 | H |
| | 3760 | -55.47 | -13 | -42.47 | -80.92 | -62.22 | 5.85 | 12.60 | V |
| | 5640 | -57.42 | -13 | -44.42 | -81.53 | -63.22 | 7.30 | 13.10 | V |
| | 7520 | -55.49 | -13 | -42.49 | -81.96 | -58.64 | 8.35 | 11.50 | V |

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

| WCDMA Band IV(RMC 12.2Kbps) _ANT2 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Channel | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle | 3465.2 | -59.82 | -13 | -46.82 | -81.67 | -66.67 | 5.65 | 12.50 | H |
| | 5197.8 | -57.70 | -13 | -44.70 | -81.76 | -63.37 | 7.13 | 12.80 | H |
| | 6930.4 | -56.68 | -13 | -43.68 | -82.30 | -60.08 | 8.40 | 11.80 | H |
| | 3465.2 | -59.51 | -13 | -46.51 | -81.16 | -66.36 | 5.65 | 12.50 | V |
| | 5197.8 | -57.55 | -13 | -44.55 | -81.88 | -63.22 | 7.13 | 12.80 | V |
| | 6930.4 | -55.61 | -13 | -42.61 | -82.15 | -59.01 | 8.40 | 11.80 | V |

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