



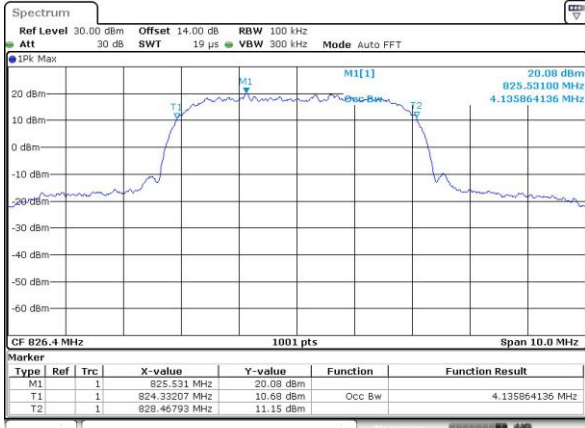
Occupied Bandwidth

| Mode | WCDMA Band V | WCDMA Band II | WCDMA Band IV |
|------------|--------------|---------------|---------------|
| Mod. | RMC 12.2Kbps | RMC 12.2Kbps | RMC 12.2Kbps |
| Lowest CH | 4.14 | 4.15 | 4.14 |
| Middle CH | 4.16 | 4.14 | 4.14 |
| Highest CH | 4.15 | 4.13 | 4.15 |



WCDMA Band V (RMC 12.2Kbps)

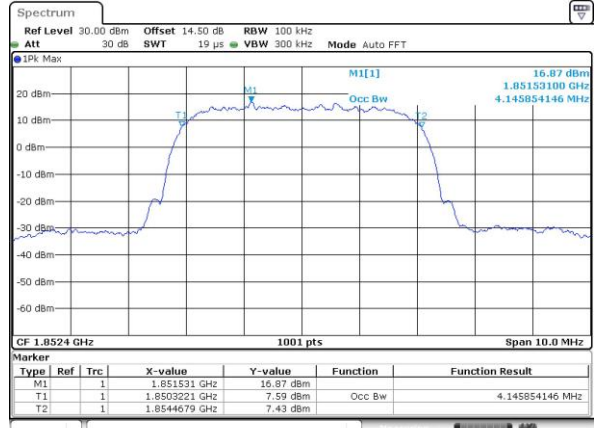
Lowest Channel



Date: 11.MAY.2020 07:37:49

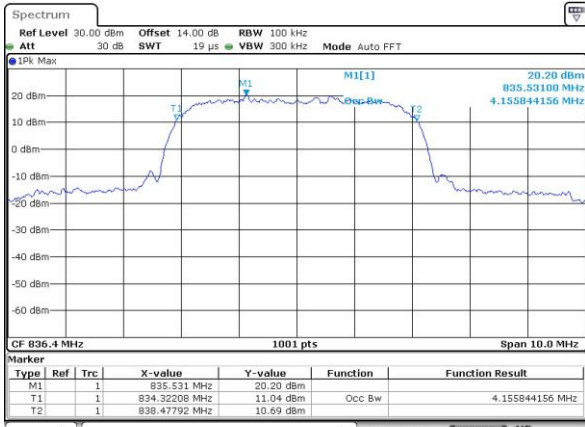
WCDMA Band II (RMC 12.2Kbps)

Lowest Channel



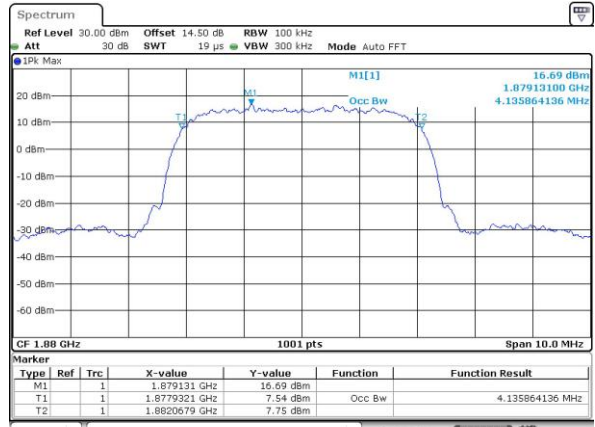
Date: 11.MAY.2020 07:51:42

Middle Channel



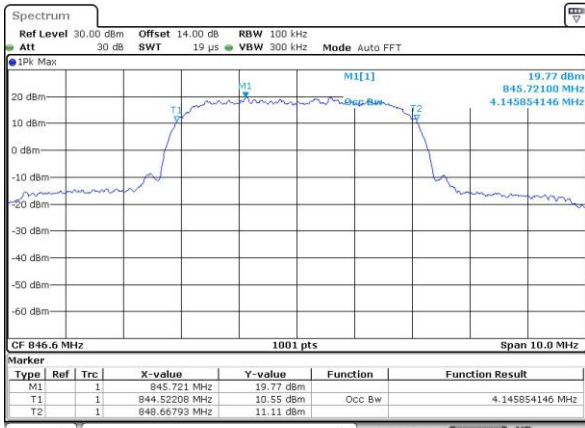
Date: 11.MAY.2020 07:38:18

Middle Channel



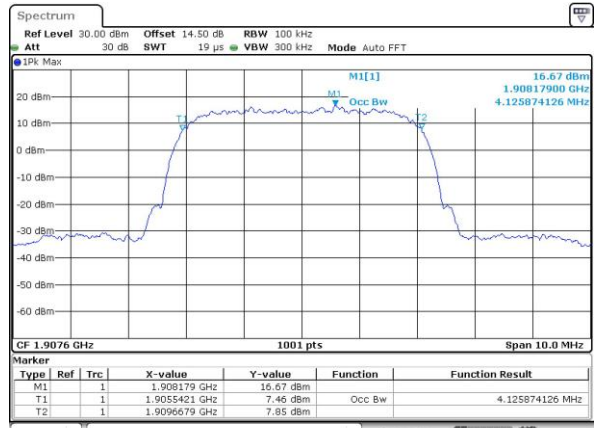
Date: 11.MAY.2020 07:52:13

Highest Channel

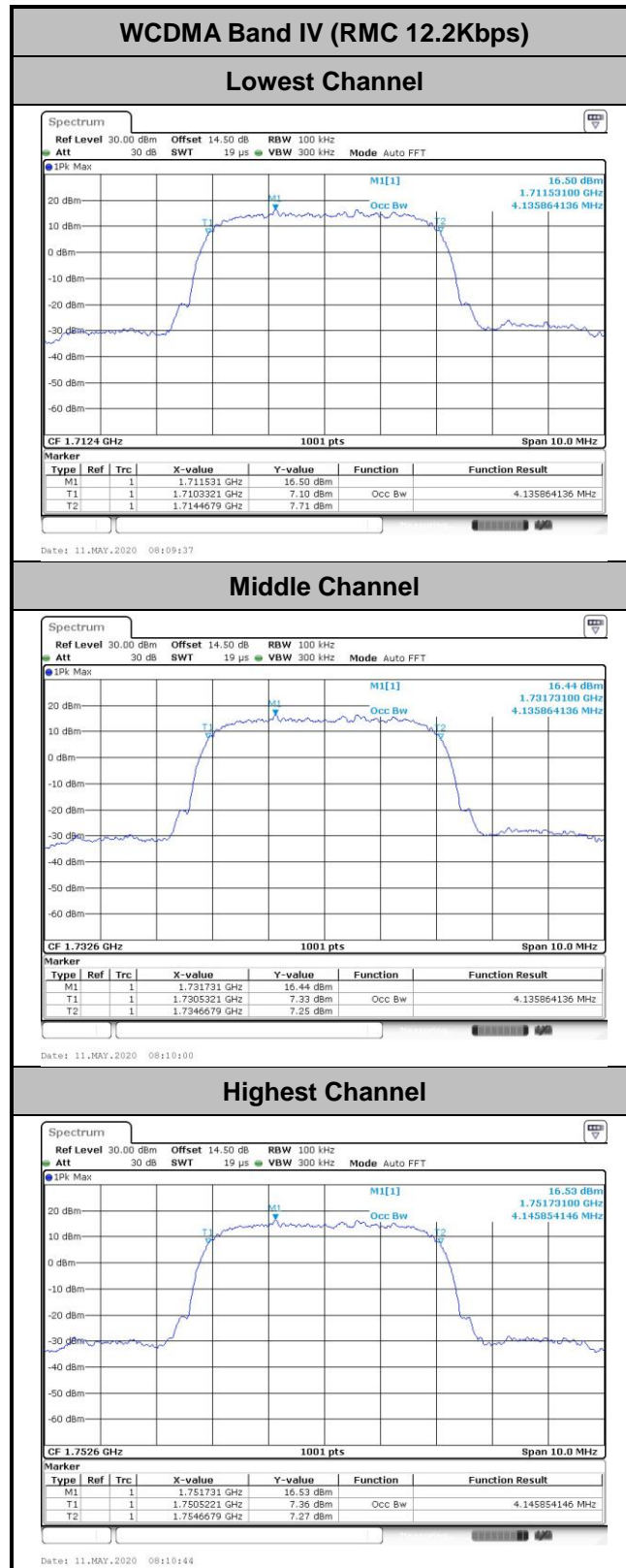


Date: 11.MAY.2020 07:38:43

Highest Channel

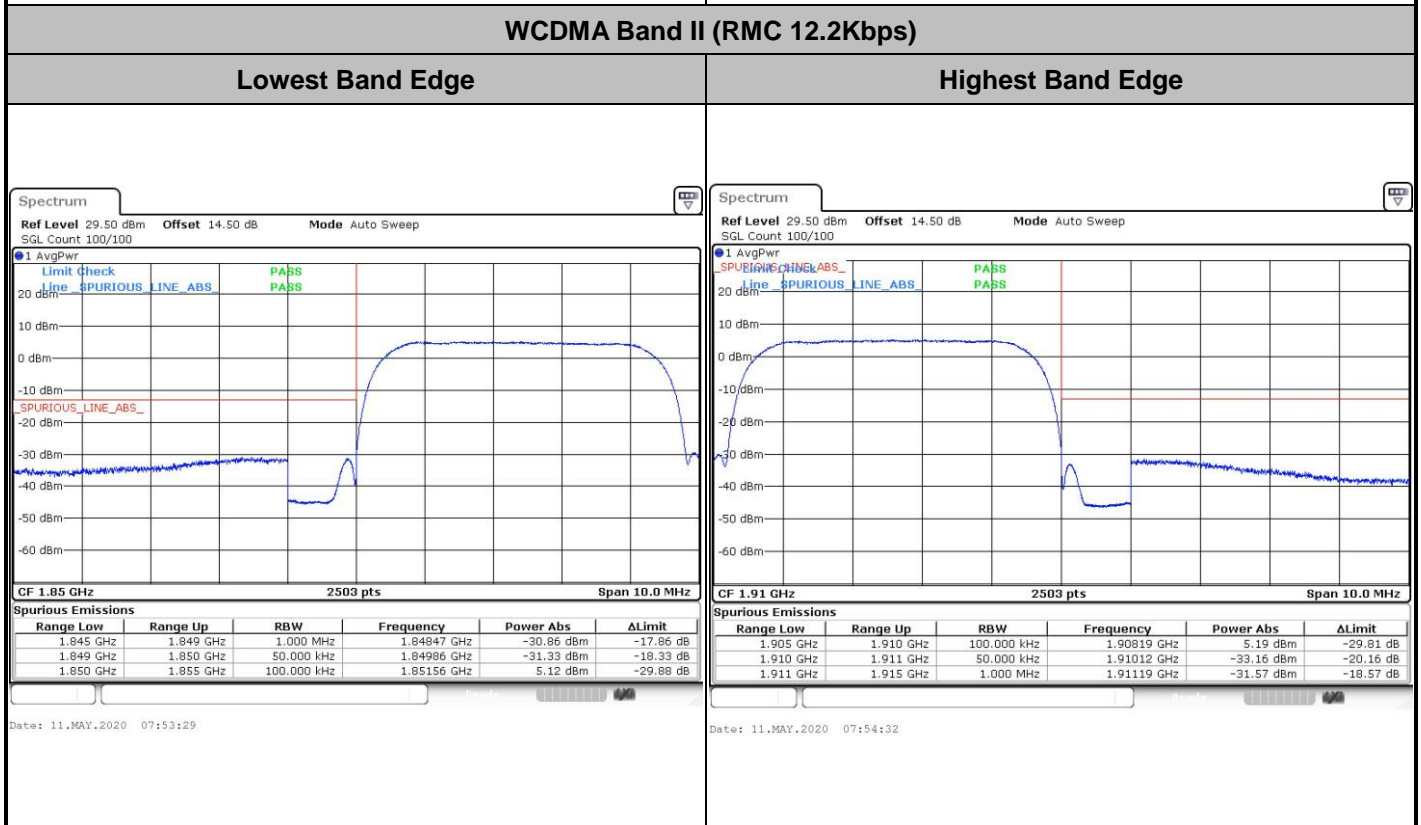
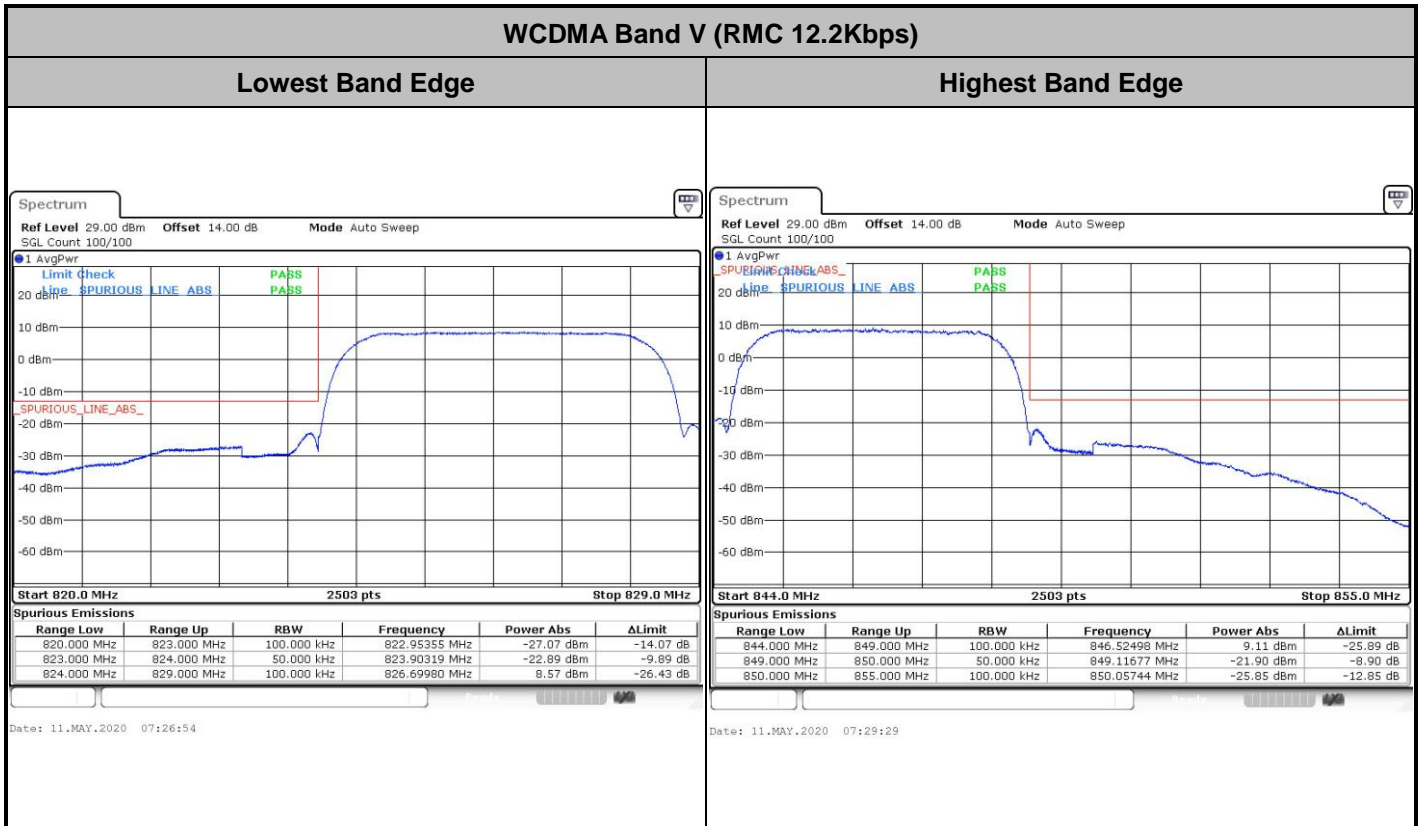


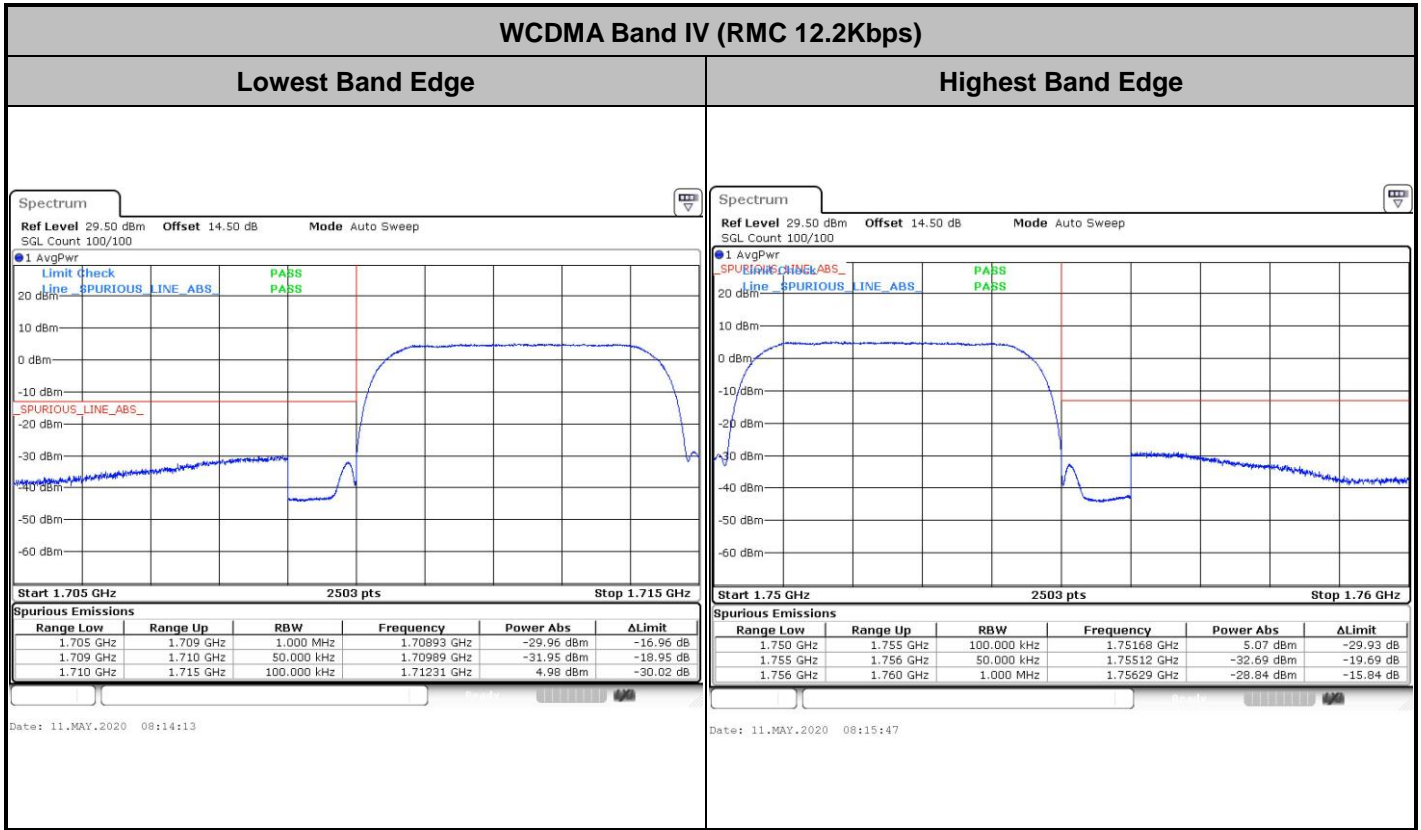
Date: 11.MAY.2020 07:52:34





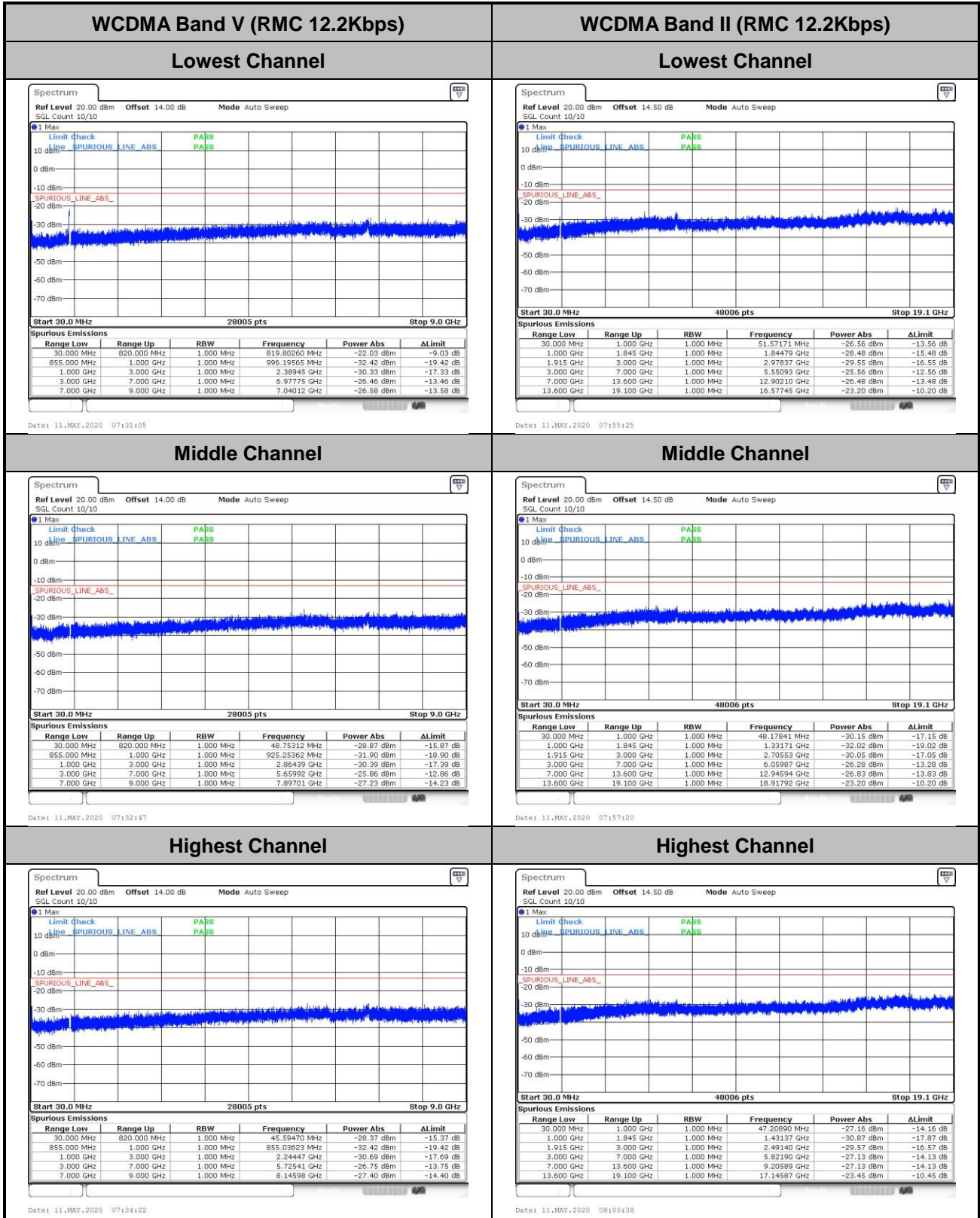
Conducted Band Edge

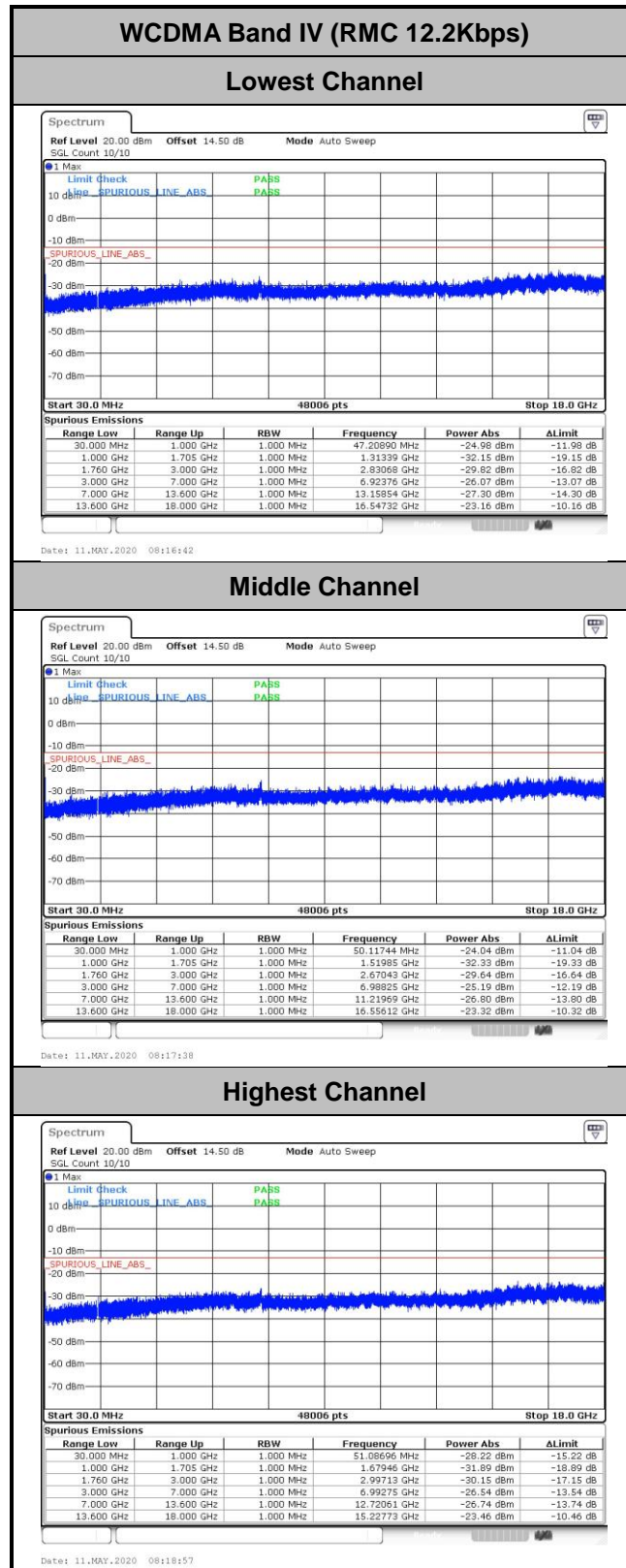






Conducted Spurious Emission







Frequency Stability

| Test Conditions | Middle Channel | WCDMA Band V (RMC 12.2KbpsRMC 12.2Kbps) | Limit 2.5ppm |
|------------------|-------------------|--------------------------------------------|-----------------|
| Temperature (°C) | Voltage (Volt) | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0002 | PASS |
| 40 | Normal Voltage | 0.0006 | |
| 30 | Normal Voltage | 0.0002 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0001 | |
| 0 | Normal Voltage | 0.0006 | |
| -10 | Normal Voltage | 0.0005 | |
| -20 | Normal Voltage | 0.0006 | |
| -30 | Normal Voltage | 0.0007 | |
| 20 | Maximum Voltage | 0.0001 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0004 | |

Note: Normal Voltage = 3.85V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage =4.4 V

| Test Conditions | Middle Channel | WCDMA Band II (RMC 12.2Kbps) | Limit Note 2. |
|------------------|-------------------|---------------------------------|------------------|
| Temperature (°C) | Voltage (Volt) | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0012 | PASS |
| 40 | Normal Voltage | 0.0009 | |
| 30 | Normal Voltage | 0.0003 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0004 | |
| 0 | Normal Voltage | 0.0000 | |
| -10 | Normal Voltage | 0.0003 | |
| -20 | Normal Voltage | 0.0007 | |
| -30 | Normal Voltage | 0.0004 | |
| 20 | Maximum Voltage | 0.0003 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0001 | |

Note:

1. Normal Voltage = 3.85V. ; Battery End Point (BEP) = 3.6 V. ; 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 IV (RMC 12.2Kbps) | Limit Note 2. |
|------------------|-------------------|---------------------------------|------------------|
| Temperature (°C) | Voltage (Volt) | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0002 | PASS |
| 40 | Normal Voltage | 0.0005 | |
| 30 | Normal Voltage | 0.0001 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0001 | |
| 0 | Normal Voltage | 0.0004 | |
| -10 | Normal Voltage | 0.0007 | |
| -20 | Normal Voltage | 0.0010 | |
| -30 | Normal Voltage | 0.0005 | |
| 20 | Maximum Voltage | 0.0005 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0003 | |

Note:

1. Normal Voltage = 3.85V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage =4.4 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

Top Antenna

| GSM850 (GSM) | | | | | | | | | |
|--------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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 | -53.88 | -13 | -40.88 | -48.96 | -57.13 | 4.00 | 9.40 | H |
| | 2509.2 | -45.09 | -13 | -32.09 | -43.65 | -48.66 | 4.88 | 10.60 | H |
| | 3345.6 | -60.43 | -13 | -47.43 | -61.99 | -65.36 | 5.52 | 12.60 | H |
| | 4182 | -57.07 | -13 | -44.07 | -62.05 | -61.54 | 6.00 | 12.62 | H |
| | 5018.4 | -55.26 | -13 | -42.26 | -63.15 | -58.67 | 7.14 | 12.70 | H |
| | 1672.8 | -53.08 | -13 | -40.08 | -48.01 | -56.33 | 4.00 | 9.40 | V |
| | 2509.2 | -41.73 | -13 | -28.73 | -40.60 | -45.30 | 4.88 | 10.60 | V |
| | 3345.6 | -59.97 | -13 | -46.97 | -61.89 | -64.90 | 5.52 | 12.60 | V |
| | 4182 | -56.83 | -13 | -43.83 | -61.71 | -61.30 | 6.00 | 12.62 | V |
| 5018.4 | -55.09 | -13 | -42.09 | -63.27 | -58.50 | 7.14 | 12.70 | V | |

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

| GSM850 (EDGE 1 Tx slots) | | | | | | | | | |
|--------------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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 | -67.10 | -13 | -54.10 | -62.18 | -70.35 | 4.00 | 9.40 | H |
| | 2509.2 | -63.65 | -13 | -50.65 | -62.21 | -67.22 | 4.88 | 10.60 | H |
| | 3345.6 | -60.74 | -13 | -47.74 | -62.30 | -65.67 | 5.52 | 12.60 | H |
| | 1672.8 | -66.85 | -13 | -53.85 | -61.78 | -70.10 | 4.00 | 9.40 | V |
| | 2509.2 | -63.15 | -13 | -50.15 | -62.02 | -66.72 | 4.88 | 10.60 | V |
| | 3345.6 | -60.39 | -13 | -47.39 | -62.31 | -65.32 | 5.52 | 12.60 | V |

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



| GSM1900 (GSM) | | | | | | | | | |
|---------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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 | 3760 | -56.94 | -13 | -43.94 | -60.85 | -63.69 | 5.85 | 12.60 | H |
| | 5640 | -53.19 | -13 | -40.19 | -63.32 | -58.99 | 7.30 | 13.10 | H |
| | 7520 | -51.07 | -13 | -38.07 | -65.18 | -54.22 | 8.35 | 11.50 | H |
| | 3760 | -57.39 | -13 | -44.39 | -61.17 | -64.14 | 5.85 | 12.60 | V |
| | 5640 | -53.46 | -13 | -40.46 | -63.29 | -59.26 | 7.30 | 13.10 | V |
| | 7520 | -51.10 | -13 | -38.10 | -65.31 | -54.25 | 8.35 | 11.50 | V |

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

| GSM1900 (EDGE 1 Tx slots) | | | | | | | | | |
|---------------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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 | 3760 | -58.51 | -13 | -45.51 | -62.42 | -65.26 | 5.85 | 12.60 | H |
| | 5640 | -52.70 | -13 | -39.70 | -62.83 | -58.50 | 7.30 | 13.10 | H |
| | 7520 | -50.95 | -13 | -37.95 | -65.06 | -54.10 | 8.35 | 11.50 | H |
| | 3760 | -58.68 | -13 | -45.68 | -62.46 | -65.43 | 5.85 | 12.60 | V |
| | 5640 | -52.93 | -13 | -39.93 | -62.76 | -58.73 | 7.30 | 13.10 | V |
| | 7520 | -51.03 | -13 | -38.03 | -65.24 | -54.18 | 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) | | | | | | | | | |
|----------------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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 | -66.56 | -13 | -53.56 | -61.64 | -69.81 | 4.00 | 9.40 | H |
| | 2509.2 | -62.87 | -13 | -49.87 | -61.43 | -66.44 | 4.88 | 10.60 | H |
| | 3345.6 | -60.43 | -13 | -47.43 | -61.99 | -65.36 | 5.52 | 12.60 | H |
| | 1672.8 | -66.97 | -13 | -53.97 | -61.90 | -70.22 | 4.00 | 9.40 | V |
| | 2509.2 | -61.82 | -13 | -48.82 | -60.69 | -65.39 | 4.88 | 10.60 | V |
| | 3345.6 | -60.26 | -13 | -47.26 | -62.18 | -65.19 | 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) | | | | | | | | | |
|-----------------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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 | 3760 | -56.35 | -13 | -43.35 | -60.26 | -63.10 | 5.85 | 12.60 | H |
| | 5640 | -52.97 | -13 | -39.97 | -63.10 | -58.77 | 7.30 | 13.10 | H |
| | 7520 | -50.98 | -13 | -37.98 | -65.09 | -54.13 | 8.35 | 11.50 | H |
| | 3760 | -57.92 | -13 | -44.92 | -61.7 | -64.67 | 5.85 | 12.60 | V |
| | 5640 | -53.34 | -13 | -40.34 | -63.17 | -59.14 | 7.30 | 13.10 | V |
| | 7520 | -51.11 | -13 | -38.11 | -65.32 | -54.26 | 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) | | | | | | | | | |
|-----------------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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 | 3465.2 | -60.33 | -13 | -47.33 | -62.57 | -67.18 | 5.65 | 12.50 | H |
| | 5197.8 | -52.87 | -13 | -39.87 | -61.38 | -58.54 | 7.13 | 12.80 | H |
| | 6930.4 | -51.61 | -13 | -38.61 | -64.78 | -55.01 | 8.40 | 11.80 | H |
| | 3465.2 | -60.30 | -13 | -47.30 | -62.56 | -67.15 | 5.65 | 12.50 | V |
| | 5197.8 | -54.41 | -13 | -41.41 | -62.71 | -60.08 | 7.13 | 12.80 | V |
| | 6930.4 | -51.99 | -13 | -38.99 | -64.93 | -55.39 | 8.40 | 11.80 | V |

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



Bottom Antenna

| GSM850 (GSM) | | | | | | | | | |
|--------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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 | -53.58 | -13 | -40.58 | -48.66 | -56.83 | 4.00 | 9.40 | H |
| | 2509.2 | -47.22 | -13 | -34.22 | -45.78 | -50.79 | 4.88 | 10.60 | H |
| | 3345.6 | -60.41 | -13 | -47.41 | -61.97 | -65.34 | 5.52 | 12.60 | H |
| | 1672.8 | -51.97 | -13 | -38.97 | -46.90 | -55.22 | 4.00 | 9.40 | V |
| | 2509.2 | -51.35 | -13 | -38.35 | -50.22 | -54.92 | 4.88 | 10.60 | V |
| | 3345.6 | -60.11 | -13 | -47.11 | -62.03 | -65.04 | 5.52 | 12.60 | V |

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

| GSM850 (EDGE 1 Tx slots) | | | | | | | | | |
|--------------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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 | -67.01 | -13 | -54.01 | -62.09 | -70.26 | 4.00 | 9.40 | H |
| | 2509.2 | -63.66 | -13 | -50.66 | -62.22 | -67.23 | 4.88 | 10.60 | H |
| | 3345.6 | -60.23 | -13 | -47.23 | -61.79 | -65.16 | 5.52 | 12.60 | H |
| | 1672.8 | -66.83 | -13 | -53.83 | -61.76 | -70.08 | 4.00 | 9.40 | V |
| | 2509.2 | -63.38 | -13 | -50.38 | -62.25 | -66.95 | 4.88 | 10.60 | V |
| | 3345.6 | -60.23 | -13 | -47.23 | -62.15 | -65.16 | 5.52 | 12.60 | V |

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



| GSM1900 (GSM) | | | | | | | | | |
|---------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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 | 3760 | -57.08 | -13 | -44.08 | -60.99 | -63.83 | 5.85 | 12.60 | H |
| | 5640 | -53.20 | -13 | -40.20 | -63.33 | -59.00 | 7.30 | 13.10 | H |
| | 7520 | -51.17 | -13 | -38.17 | -65.28 | -54.32 | 8.35 | 11.50 | H |
| | 3760 | -56.55 | -13 | -43.55 | -60.33 | -63.30 | 5.85 | 12.60 | V |
| | 5640 | -53.21 | -13 | -40.21 | -63.04 | -59.01 | 7.30 | 13.10 | V |
| | 7520 | -50.84 | -13 | -37.84 | -65.05 | -53.99 | 8.35 | 11.50 | V |

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

| GSM1900 (EDGE 1 Tx slots) | | | | | | | | | |
|---------------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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 | 3760 | -58.61 | -13 | -45.61 | -62.52 | -65.36 | 5.85 | 12.60 | H |
| | 5640 | -53.19 | -13 | -40.19 | -63.32 | -58.99 | 7.30 | 13.10 | H |
| | 7520 | -50.82 | -13 | -37.82 | -64.93 | -53.97 | 8.35 | 11.50 | H |
| | 3760 | -58.70 | -13 | -45.70 | -62.48 | -65.45 | 5.85 | 12.60 | V |
| | 5640 | -53.44 | -13 | -40.44 | -63.27 | -59.24 | 7.30 | 13.10 | V |
| | 7520 | -50.91 | -13 | -37.91 | -65.12 | -54.06 | 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) | | | | | | | | | |
|----------------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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 | -66.53 | -13 | -53.53 | -61.61 | -69.78 | 4.00 | 9.40 | H |
| | 2509.2 | -63.69 | -13 | -50.69 | -62.25 | -67.26 | 4.88 | 10.60 | H |
| | 3345.6 | -60.65 | -13 | -47.65 | -62.21 | -65.58 | 5.52 | 12.60 | H |
| | 1672.8 | -66.77 | -13 | -53.77 | -61.70 | -70.02 | 4.00 | 9.40 | V |
| | 2509.2 | -63.25 | -13 | -50.25 | -62.12 | -66.82 | 4.88 | 10.60 | V |
| | 3345.6 | -60.15 | -13 | -47.15 | -62.07 | -65.08 | 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) | | | | | | | | | |
|-----------------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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 | 3760 | -58.44 | -13 | -45.44 | -62.35 | -65.19 | 5.85 | 12.60 | H |
| | 5640 | -50.09 | -13 | -37.09 | -60.22 | -55.89 | 7.30 | 13.10 | H |
| | 7520 | -51.10 | -13 | -38.10 | -65.21 | -54.25 | 8.35 | 11.50 | H |
| | 3760 | -55.49 | -13 | -42.49 | -59.27 | -62.24 | 5.85 | 12.60 | V |
| | 5640 | -44.69 | -13 | -31.69 | -54.52 | -50.49 | 7.30 | 13.10 | V |
| | 7520 | -50.89 | -13 | -37.89 | -65.1 | -54.04 | 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) | | | | | | | | | |
|-----------------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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 | 3465.2 | -59.28 | -13 | -46.28 | -61.52 | -66.13 | 5.65 | 12.50 | H |
| | 5197.8 | -44.70 | -13 | -31.70 | -53.21 | -50.37 | 7.13 | 12.80 | H |
| | 6930.4 | -51.14 | -13 | -38.14 | -64.31 | -54.54 | 8.40 | 11.80 | H |
| | 3465.2 | -59.22 | -13 | -46.22 | -61.48 | -66.07 | 5.65 | 12.50 | V |
| | 5197.8 | -41.81 | -13 | -28.81 | -50.11 | -47.48 | 7.13 | 12.80 | V |
| | 6930.4 | -51.47 | -13 | -38.47 | -64.41 | -54.87 | 8.40 | 11.80 | V |

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