



WCDMA Band IV (RMC 12.2Kbps)

Lowest Band Edge

Highest Band Edge



Date: 23 JUL 2016 22:56:59



Date: 23 JUL 2016 22:59:54

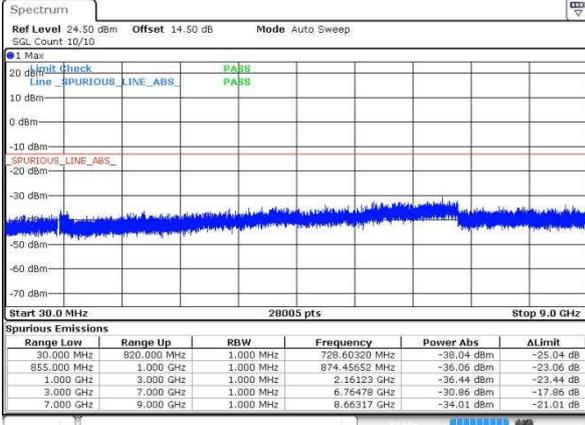


Conducted Spurious Emission



GSM850 (GPRS)

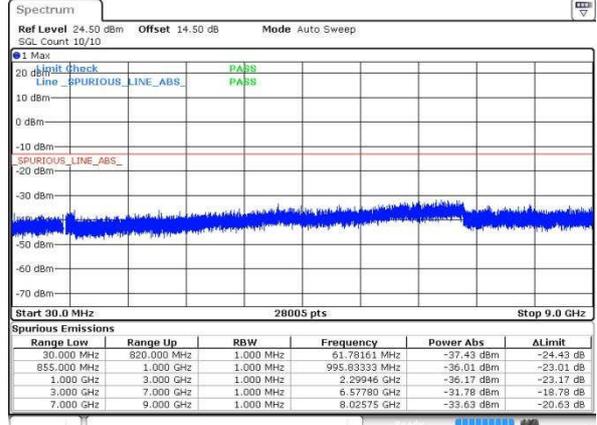
Lowest Channel



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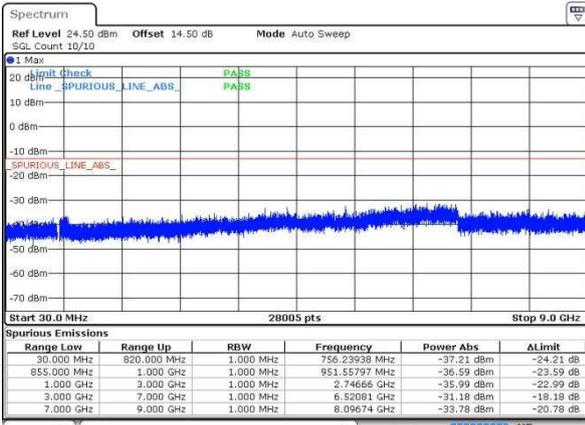
GSM850 (EDGE)

Lowest Channel



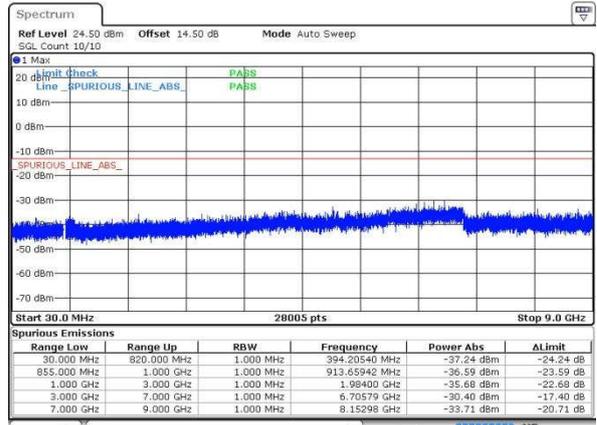
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Middle Channel



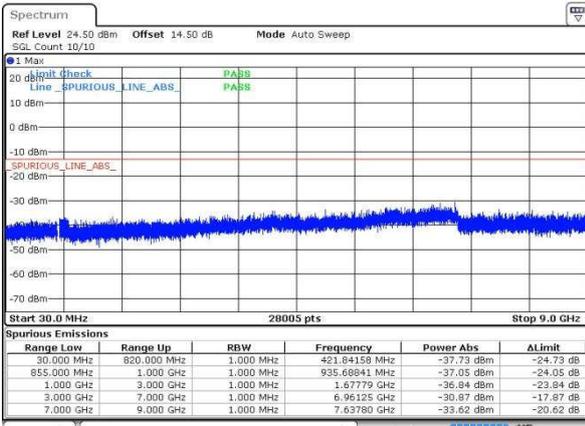
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Middle Channel



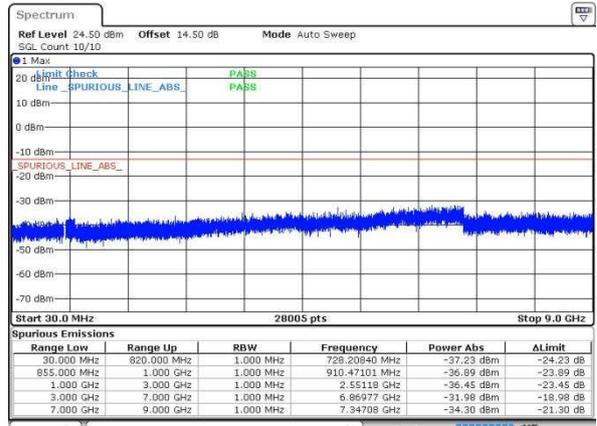
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Highest Channel



Date: 23 JUL 2016 21:31:42

Highest Channel

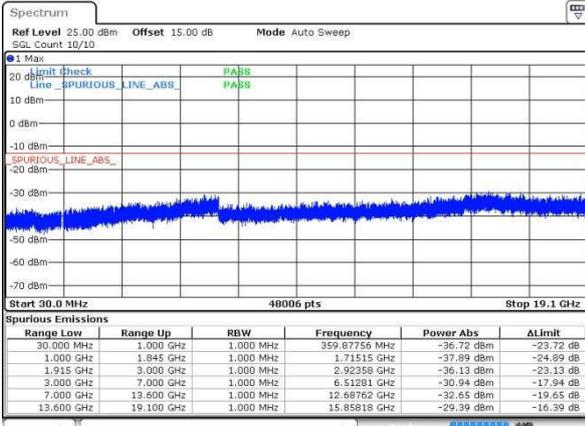


Date: 23 JUL 2016 21:50:03



GSM1900 (GPRS)

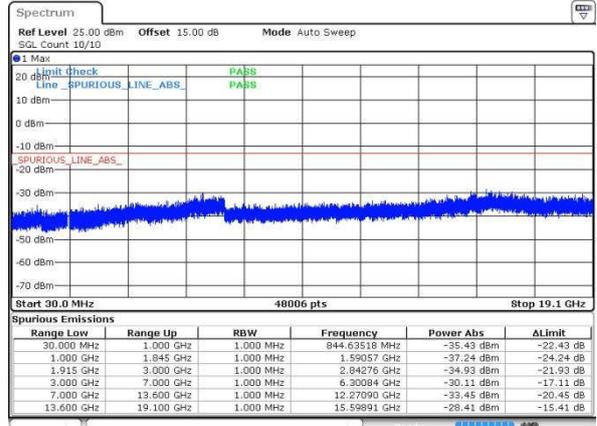
Lowest Channel



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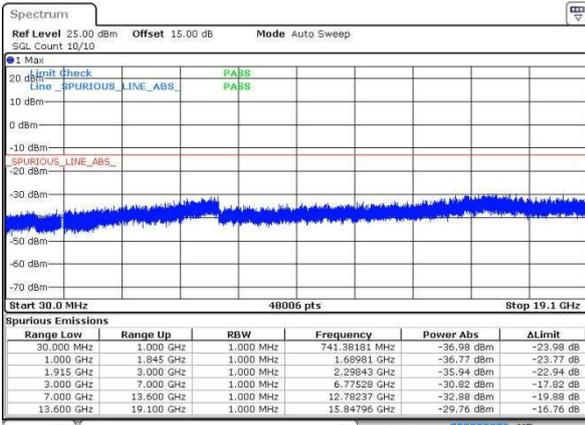
GSM1900 (EDGE)

Lowest Channel



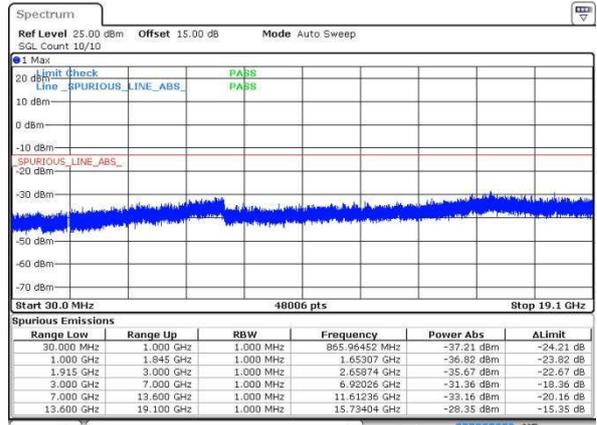
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Middle Channel



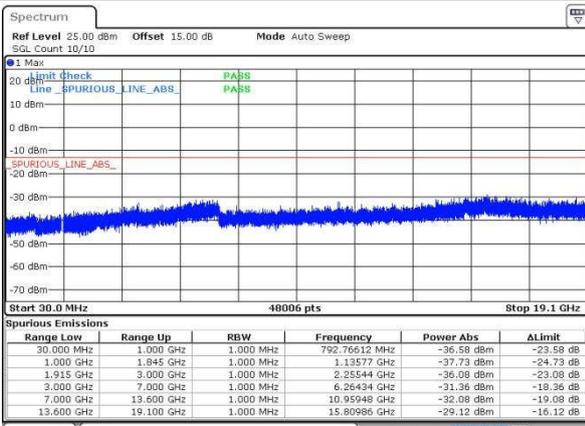
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Middle Channel



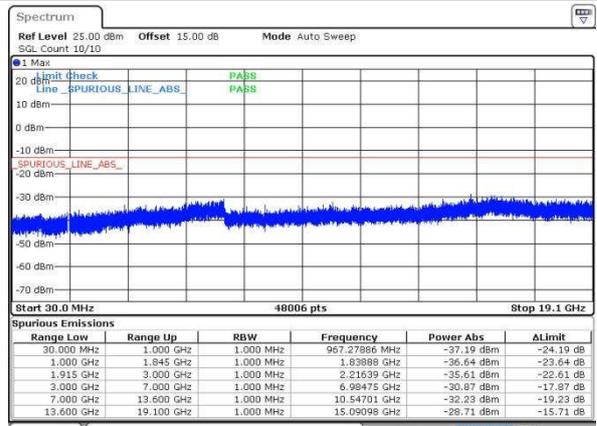
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Highest Channel

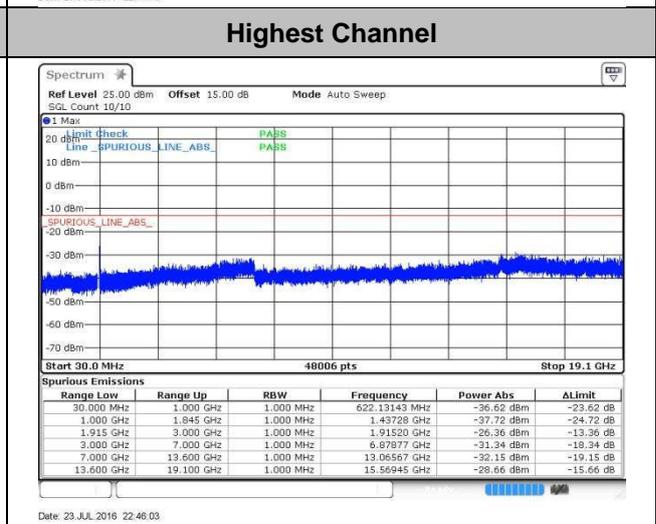
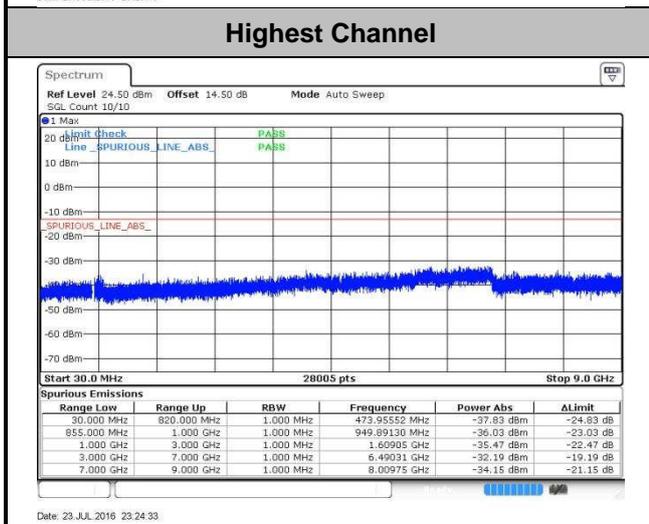
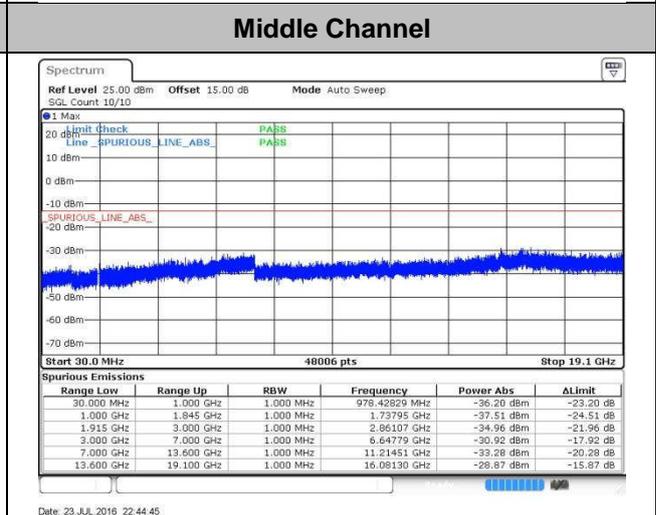
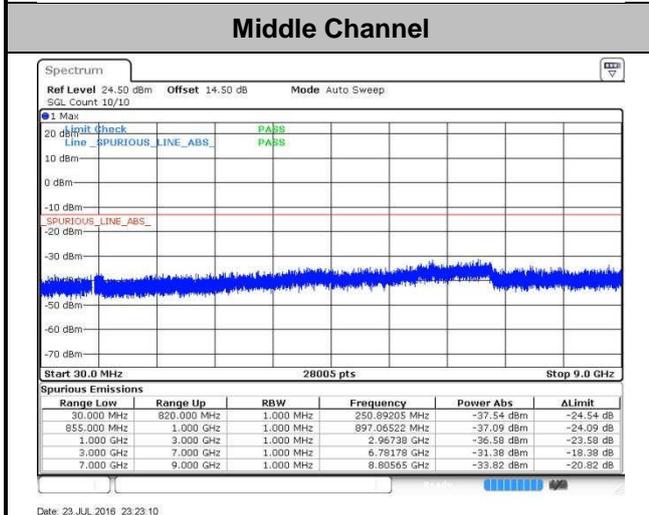
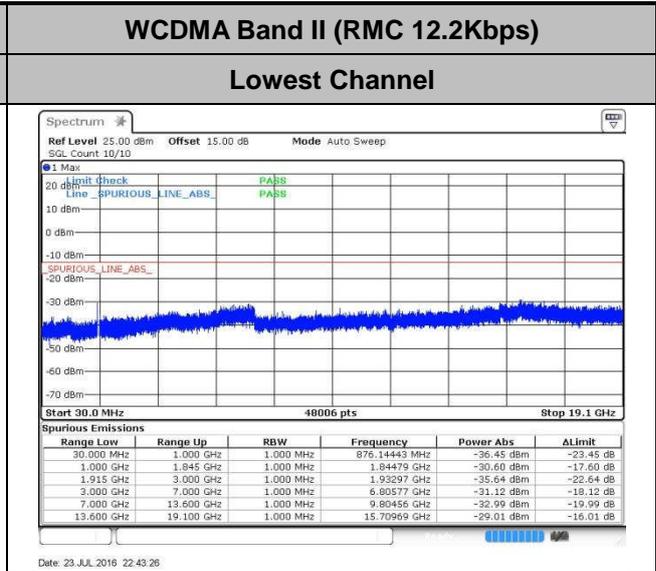
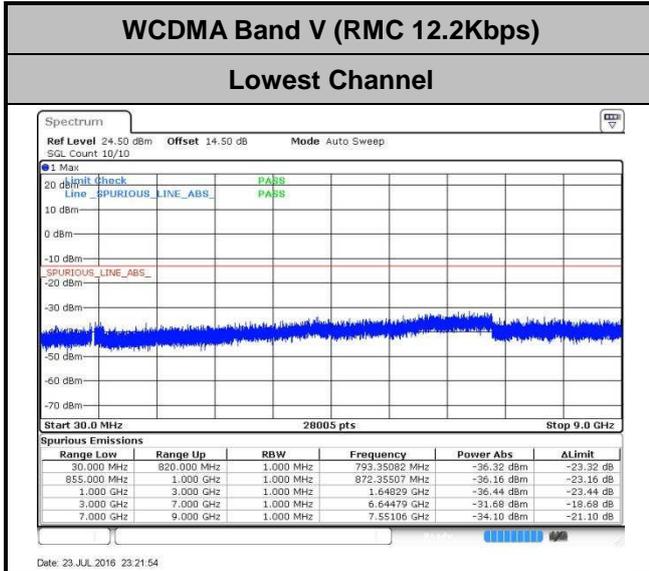


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Highest Channel



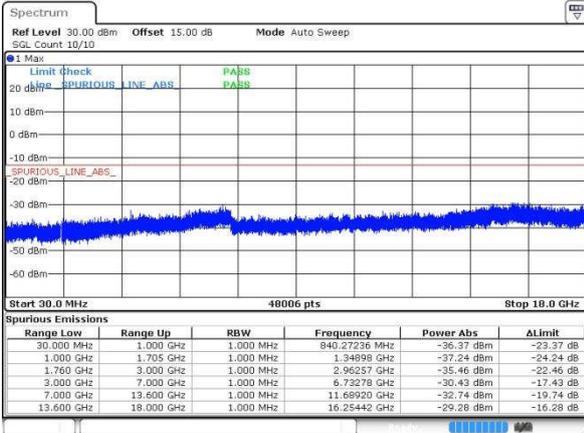
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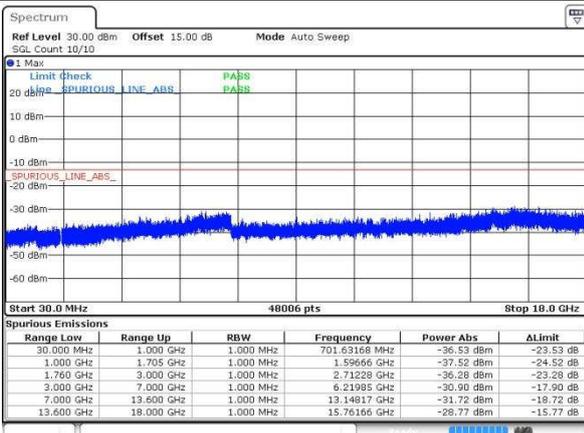
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



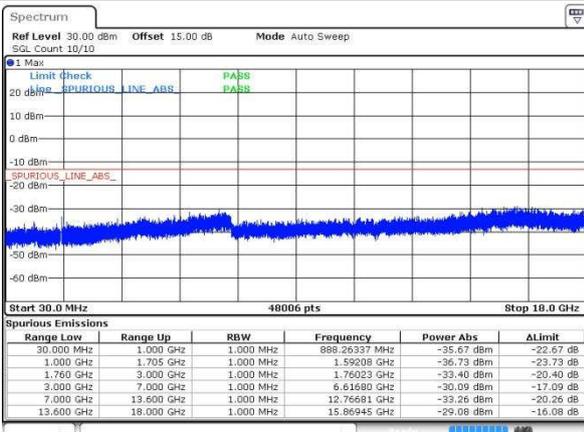
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Middle Channel



Date: 23.JUL.2016 23:06:52

Highest Channel



Date: 23.JUL.2016 23:08:32



Frequency Stability

| Test Conditions | Middle Channel | GSM850 (GPRS) | GSM850 (EDGE) | Limit 2.5ppm |
|------------------|-------------------|-----------------|---------------|--------------|
| Temperature (°C) | Voltage (Volt) | Deviation (ppm) | | Result |
| 50 | Normal Voltage | 0.0574 | 0.0036 | PASS |
| 40 | Normal Voltage | 0.0538 | 0.0155 | |
| 30 | Normal Voltage | 0.0036 | 0.0084 | |
| 20(Ref.) | Normal Voltage | 0.0000 | 0.0000 | |
| 10 | Normal Voltage | 0.0048 | 0.0012 | |
| 0 | Normal Voltage | 0.0012 | 0.0143 | |
| -10 | Normal Voltage | 0.0024 | 0.0072 | |
| -20 | Normal Voltage | 0.0096 | 0.0096 | |
| -30 | Normal Voltage | 0.0526 | 0.0012 | |
| 20 | Maximum Voltage | 0.0048 | 0.0096 | |
| 20 | Normal Voltage | 0.0072 | 0.0024 | |
| 20 | Battery End Point | 0.0000 | 0.0048 | |

| Test Conditions | Middle Channel | GSM1900 (GPRS) | GSM1900 (EDGE) | Limit Note 2. |
|------------------|-------------------|-----------------|----------------|---------------|
| Temperature (°C) | Voltage (Volt) | Deviation (ppm) | | Result |
| 50 | Normal Voltage | 0.0053 | 0.0133 | PASS |
| 40 | Normal Voltage | 0.0027 | 0.0016 | |
| 30 | Normal Voltage | 0.0016 | 0.0117 | |
| 20(Ref.) | Normal Voltage | 0.0000 | 0.0000 | |
| 10 | Normal Voltage | 0.0021 | 0.0016 | |
| 0 | Normal Voltage | 0.0005 | 0.0128 | |
| -10 | Normal Voltage | 0.0037 | 0.0101 | |
| -20 | Normal Voltage | 0.0011 | 0.0005 | |
| -30 | Normal Voltage | 0.0053 | 0.0112 | |
| 20 | Maximum Voltage | 0.0016 | 0.0005 | |
| 20 | Normal Voltage | 0.0053 | 0.0011 | |
| 20 | Battery End Point | 0.0011 | 0.0122 | |

Note:

1. Normal Voltage = 3.75V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage =4.2 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 (RMC 12.2Kbps) | Limit 2.5ppm |
|------------------|-------------------|--------------------------------|-----------------|
| Temperature (°C) | Voltage (Volt) | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0084 | PASS |
| 40 | Normal Voltage | 0.0143 | |
| 30 | Normal Voltage | 0.0072 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0072 | |
| 0 | Normal Voltage | 0.0024 | |
| -10 | Normal Voltage | 0.0072 | |
| -20 | Normal Voltage | 0.0096 | |
| -30 | Normal Voltage | 0.0060 | |
| 20 | Maximum Voltage | 0.0060 | |
| 20 | Normal Voltage | 0.0108 | |
| 20 | Battery End Point | 0.0048 | |

| Test Conditions | Middle Channel | WCDMA Band II (RMC 12.2Kbps) | Limit Note 2. |
|------------------|-------------------|---------------------------------|------------------|
| Temperature (°C) | Voltage (Volt) | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0080 | PASS |
| 40 | Normal Voltage | 0.0053 | |
| 30 | Normal Voltage | 0.0021 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0016 | |
| 0 | Normal Voltage | 0.0005 | |
| -10 | Normal Voltage | 0.0048 | |
| -20 | Normal Voltage | 0.0059 | |
| -30 | Normal Voltage | 0.0005 | |
| 20 | Maximum Voltage | 0.0048 | |
| 20 | Normal Voltage | 0.0053 | |
| 20 | Battery End Point | 0.0000 | |

Note:

1. Normal Voltage = 3.75V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage =4.2V
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 | 0.0058 | PASS |
| 40 | Normal Voltage | 0.0092 | |
| 30 | Normal Voltage | 0.0052 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0040 | |
| 0 | Normal Voltage | 0.0046 | |
| -10 | Normal Voltage | 0.0046 | |
| -20 | Normal Voltage | 0.0081 | |
| -30 | Normal Voltage | 0.0006 | |
| 20 | Maximum Voltage | 0.0000 | |
| 20 | Normal Voltage | 0.0035 | |
| 20 | Battery End Point | 0.0040 | |

Note:

1. Normal Voltage = 3.75V. ; Battery End Point (BEP) = 3.6V. ; Maximum Voltage =4.2V
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

ERP/EIRP

| Channel | Mode | Horizontal | | Vertical | |
|---------|------------------------------|------------|--------|----------|--------|
| | | ERP(dBm) | ERP(W) | ERP(dBm) | ERP(W) |
| Lowest | GSM850 GPRS class 8 | 25.05 | 0.3199 | 26.79 | 0.4778 |
| Middle | | 25.60 | 0.3632 | 26.77 | 0.4748 |
| Highest | | 26.22 | 0.4189 | 27.07 | 0.5098 |
| Lowest | GSM850 EDGE class 8 | 19.90 | 0.0976 | 21.31 | 0.1353 |
| Middle | | 20.10 | 0.1023 | 21.71 | 0.1484 |
| Highest | | 20.53 | 0.1129 | 21.56 | 0.1433 |
| Lowest | WCDMA Band V RMC 12.2Kbps | 17.96 | 0.0625 | 19.48 | 0.0887 |
| Middle | | 18.59 | 0.0722 | 19.54 | 0.0901 |
| Highest | | 18.24 | 0.0667 | 19.82 | 0.0960 |
| Limit | ERP < 7W | Result | | PASS | |



| Channel | Mode | Horizontal | | Vertical | |
|---------|-------------------------------|------------|---------|-----------|---------|
| | | EIRP(dBm) | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest | GSM1900 GPRS class 8 | 26.19 | 0.4158 | 29.12 | 0.8175 |
| Middle | | 27.69 | 0.5877 | 29.65 | 0.9217 |
| Highest | | 28.79 | 0.7574 | 30.41 | 1.0992 |
| Lowest | GSM1900 EDGE class 8 | 22.48 | 0.1772 | 25.44 | 0.3498 |
| Middle | | 23.52 | 0.2251 | 25.39 | 0.3458 |
| Highest | | 24.61 | 0.2893 | 26.25 | 0.4219 |
| Lowest | WCDMA Band II RMC 12.2Kbps | 20.85 | 0.1217 | 23.63 | 0.2308 |
| Middle | | 22.02 | 0.1594 | 23.80 | 0.2398 |
| Highest | | 23.31 | 0.2142 | 24.42 | 0.2770 |
| Limit | EIRP < 2W | Result | | PASS | |

| Channel | Mode | Horizontal | | Vertical | |
|---------|-------------------------------|------------|---------|-----------|---------|
| | | EIRP(dBm) | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest | WCDMA Band IV RMC 12.2Kbps | 20.18 | 0.1042 | 21.39 | 0.1377 |
| Middle | | 20.15 | 0.1034 | 22.03 | 0.1594 |
| Highest | | 20.22 | 0.1052 | 22.49 | 0.1774 |
| Limit | EIRP < 1W | Result | | PASS | |



Radiated Spurious Emission

| GSM850 (GPRS class 8) | | | | | | | | | |
|-----------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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 | -47.95 | -13 | -34.95 | -50.69 | -54.64 | 0.56 | 9.40 | H |
| | 2510 | -33.39 | -13 | -20.39 | -39.77 | -41.09 | 0.75 | 10.60 | H |
| | 3346 | -53.49 | -13 | -40.49 | -62.79 | -63.09 | 0.85 | 12.60 | H |
| | 1672 | -39.48 | -13 | -26.48 | -45.05 | -46.17 | 0.56 | 9.40 | V |
| | 2510 | -26.37 | -13 | -13.37 | -35.27 | -34.07 | 0.75 | 10.60 | V |
| | 3346 | -52.54 | -13 | -39.54 | -59.40 | -62.14 | 0.85 | 12.60 | 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) | SPA Reading (dBm) | S.G. Power (dBm) | TX Cable loss (dB) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle | 1672 | -50.62 | -13 | -37.62 | -52.94 | -57.31 | 0.56 | 9.40 | H |
| | 2510 | -42.67 | -13 | -29.67 | -48.51 | -50.37 | 0.75 | 10.60 | H |
| | 3346 | -56.15 | -13 | -43.15 | -65.45 | -65.75 | 0.85 | 12.60 | H |
| | 1672 | -39.88 | -13 | -26.88 | -45.46 | -46.57 | 0.56 | 9.40 | V |
| | 2510 | -32.12 | -13 | -19.12 | -40.72 | -39.82 | 0.75 | 10.60 | V |
| | 3346 | -54.91 | -13 | -41.91 | -61.77 | -64.51 | 0.85 | 12.60 | V |

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



| GSM1900 (GPRS class 8) | | | | | | | | | |
|------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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 | -43.93 | -13 | -30.93 | -55.18 | -55.66 | 0.87 | 12.60 | H |
| | 5640 | -44.33 | -13 | -31.33 | -60.21 | -56.36 | 1.07 | 13.10 | H |
| | 7520 | -48.73 | -13 | -35.73 | -67.05 | -58.34 | 1.69 | 11.30 | H |
| | 3760 | -39.25 | -13 | -26.25 | -52.55 | -50.98 | 0.87 | 12.60 | V |
| | 5640 | -48.48 | -13 | -35.48 | -64.8 | -60.51 | 1.07 | 13.10 | V |
| | 7520 | -50.69 | -13 | -37.69 | -68.91 | -60.30 | 1.69 | 11.30 | V |

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

| GSM1900 (EDGE class 8) | | | | | | | | | |
|------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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 | -48.33 | -13 | -35.33 | -59.58 | -60.06 | 0.87 | 12.60 | H |
| | 5640 | -48.01 | -13 | -35.01 | -63.89 | -60.04 | 1.07 | 13.10 | H |
| | 7520 | -50.65 | -13 | -37.65 | -68.97 | -60.26 | 1.69 | 11.30 | H |
| | 3760 | -44.71 | -13 | -31.71 | -57.18 | -56.44 | 0.87 | 12.60 | V |
| | 5640 | -51.41 | -13 | -38.41 | -67.73 | -63.44 | 1.07 | 13.10 | V |
| | 7520 | -50.42 | -13 | -37.42 | -68.64 | -60.03 | 1.69 | 11.30 | 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 | -55.83 | -13 | -42.83 | -57.44 | -62.52 | 0.56 | 9.40 | H |
| | 2510 | -57.10 | -13 | -44.10 | -61.00 | -64.80 | 0.75 | 10.60 | H |
| | 3346 | -54.99 | -13 | -41.99 | -64.29 | -64.59 | 0.85 | 12.60 | H |
| | 1672 | -60.27 | -13 | -47.27 | -62.72 | -66.96 | 0.56 | 9.40 | V |
| | 2510 | -53.68 | -13 | -40.68 | -58.06 | -61.38 | 0.75 | 10.60 | V |
| | 3346 | -58.45 | -13 | -45.45 | -65.31 | -68.05 | 0.85 | 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) | 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 | -41.41 | -13 | -28.41 | -52.80 | -53.14 | 0.87 | 12.60 | H |
| | 5640 | -41.32 | -13 | -28.32 | -57.20 | -53.35 | 1.07 | 13.10 | H |
| | 7520 | -49.64 | -13 | -36.64 | -67.96 | -59.25 | 1.69 | 11.30 | H |
| | 3760 | -42.46 | -13 | -29.46 | -54.93 | -54.19 | 0.87 | 12.60 | V |
| | 5640 | -46.85 | -13 | -33.85 | -63.17 | -58.88 | 1.07 | 13.10 | V |
| | 7520 | -51.07 | -13 | -38.07 | -69.29 | -60.68 | 1.69 | 11.30 | V |

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



| WCDMA Band IV(RMC 12.2Kbps) | | | | | | | | | |
|-----------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| 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 | -45.42 | -13 | -32.42 | -57.22 | -57.17 | 0.85 | 12.60 | H |
| | 5197.5 | -41.21 | -13 | -28.21 | -57.08 | -52.96 | 0.95 | 12.70 | H |
| | 6930 | -51.96 | -13 | -38.96 | -68.59 | -62.48 | 1.18 | 11.70 | H |
| | 3465 | -44.05 | -13 | -31.05 | -54.9 | -55.84 | 0.81 | 12.60 | V |
| | 5197.5 | -33.67 | -13 | -20.67 | -50.96 | -45.42 | 0.95 | 12.70 | V |
| | 6930 | -50.86 | -13 | -37.86 | -68.04 | -61.43 | 1.13 | 11.70 | V |

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