

Manufacturing Tune-up limit

WCDMA

WCDMA band II

| Mode | | Carrier frequency (MHz) | Channel No. | Full power Tune-up limit (dBm) | Reduced Power Tune-up limit (dBm) |
|------------|--------------|-------------------------|-------------|--------------------------------|-----------------------------------|
| Release 99 | RMC,12.2kbps | 1852.4 | 9262 | 22.0 | 14.0 |
| | | 1880.0 | 9400 | | |
| | | 1907.6 | 9538 | | |
| | RMC,64kbps | 1852.4 | 9262 | | |
| | | 1880.0 | 9400 | | |
| | | 1907.6 | 9538 | | |
| | RMC,144kbps | 1852.4 | 9262 | | |
| | | 1880.0 | 9400 | | |
| | | 1907.6 | 9538 | | |
| | RMC,384kbps | 1852.4 | 9262 | | |
| | | 1880.0 | 9400 | | |
| | | 1907.6 | 9538 | | |
| HSDPA | Subtest 1 | 1852.4 | 9262 | 21.5 | 13.5 |
| | | 1880.0 | 9400 | | |
| | | 1907.6 | 9538 | | |
| | Subtest 2 | 1852.4 | 9262 | | |
| | | 1880.0 | 9400 | | |
| | | 1907.6 | 9538 | | |
| | Subtest 3 | 1852.4 | 9262 | | |
| | | 1880.0 | 9400 | | |
| | | 1907.6 | 9538 | | |
| | Subtest 4 | 1852.4 | 9262 | | |
| | | 1880.0 | 9400 | | |
| | | 1907.6 | 9538 | | |
| HSUPA | Subtest 1 | 1852.4 | 9262 | 21.5 | 13.5 |
| | | 1880.0 | 9400 | | |
| | | 1907.6 | 9538 | | |
| | Subtest 2 | 1852.4 | 9262 | | |
| | | 1880.0 | 9400 | | |
| | | 1907.6 | 9538 | | |
| | Subtest 3 | 1852.4 | 9262 | | |
| | | 1880.0 | 9400 | | |
| | | 1907.6 | 9538 | | |
| | Subtest 4 | 1852.4 | 9262 | | |
| | | 1880.0 | 9400 | | |
| | | 1907.6 | 9538 | | |
| | Subtest 5 | 1852.4 | 9262 | | |
| | | 1880.0 | 9400 | | |
| | | 1907.6 | 9538 | | |
| HSPA+ | QPSK | 1852.4 | 9262 | 21.5 | 13.5 |
| | | 1880.0 | 9400 | | |
| | | 1907.6 | 9538 | | |
| | 16QAM | 1852.4 | 9262 | | |
| | | 1880.0 | 9400 | | |
| | | 1907.6 | 9538 | | |
| DA-HSDPA | Subtest 1 | 1852.4 | 9262 | 21.5 | 13.5 |
| | | 1880.0 | 9400 | | |

| | | | | | | | | |
|--|-----------|--------|--------|--|--|------|--|--|
| | Subtest 2 | 1907.6 | 9538 | | | | | |
| | | 1852.4 | 9262 | | | | | |
| | | 1880.0 | 9400 | | | | | |
| | Subtest 3 | 1907.6 | 9538 | | | | | |
| | | 1852.4 | 9262 | | | | | |
| | | 1880.0 | 9400 | | | | | |
| | Subtest 4 | 1907.6 | 9538 | | | | | |
| | | 1852.4 | 9262 | | | | | |
| | | 1880.0 | 9400 | | | | | |
| | | | 1907.6 | | | 9538 | | |

WCDMA band IV

| Mode | | Carrier frequency (MHz) | Channel No. | Full power Tune-up limit (dBm) | Reduced Power Tune-up limit (dBm) |
|------------|--------------|-------------------------|-------------|--------------------------------|-----------------------------------|
| Release 99 | RMC,12.2kbps | 1712.4 | 1312 | 23.0 | 14.0 |
| | | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |
| | RMC,64kbps | 1712.4 | 1312 | | |
| | | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |
| | RMC,144kbps | 1712.4 | 1312 | | |
| | | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |
| | RMC,384kbps | 1712.4 | 1312 | | |
| | | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |
| HSDPA | Subtest 1 | 1712.4 | 1312 | 22.0 | 13.0 |
| | | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |
| | Subtest 2 | 1712.4 | 1312 | | |
| | | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |
| | Subtest 3 | 1712.4 | 1312 | | |
| | | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |
| | Subtest 4 | 1712.4 | 1312 | | |
| | | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |
| HSUPA | Subtest 1 | 1712.4 | 1312 | 22.0 | 13.0 |
| | | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |
| | Subtest 2 | 1712.4 | 1312 | | |
| | | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |
| | Subtest 3 | 1712.4 | 1312 | | |
| | | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |
| | Subtest 4 | 1712.4 | 1312 | | |
| | | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |
| | Subtest 5 | 1712.4 | 1312 | | |
| | | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |
| HSPA+ | QPSK | 1712.4 | 1312 | 22.0 | 13.0 |

| | | | | | |
|----------|-----------|--------|------|------|------|
| | 16QAM | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |
| | | 1712.4 | 1312 | | |
| | | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |
| DA-HSDPA | Subtest 1 | 1712.4 | 1312 | 22.0 | 13.0 |
| | | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |
| | Subtest 2 | 1712.4 | 1312 | | |
| | | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |
| | Subtest 3 | 1712.4 | 1312 | | |
| | | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |
| | Subtest 4 | 1712.4 | 1312 | | |
| | | 1732.4 | 1412 | | |
| | | 1752.6 | 1513 | | |

WCDMA band V

| Mode | | Carrier frequency (MHz) | Channel No. | Full power Tune-up limit (dBm) | Reduced Power Tune-up limit (dBm) |
|------------|--------------|-------------------------|-------------|--------------------------------|-----------------------------------|
| Release 99 | RMC,12.2kbps | 826.4 | 4132 | 23.0 | 19.0 |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |
| | RMC,64kbps | 826.4 | 4132 | | |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |
| | RMC,144kbps | 826.4 | 4132 | | |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |
| | RMC,384kbps | 826.4 | 4132 | | |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |
| HSDPA | Subtest 1 | 826.4 | 4132 | 22.0 | 18.0 |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |
| | Subtest 2 | 826.4 | 4132 | | |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |
| | Subtest 3 | 826.4 | 4132 | | |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |
| | Subtest 4 | 826.4 | 4132 | | |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |
| HSUPA | Subtest 1 | 826.4 | 4132 | 22.0 | 18.0 |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |
| | Subtest 2 | 826.4 | 4132 | | |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |
| | Subtest 3 | 826.4 | 4132 | | |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |

| | | | | | |
|----------|-----------|-------|------|------|------|
| | Subtest 4 | 826.4 | 4132 | | |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |
| | Subtest 5 | 826.4 | 4132 | | |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |
| HSPA+ | QPSK | 826.4 | 4132 | 22.0 | 18.0 |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |
| | 16QAM | 826.4 | 4132 | | |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |
| DA-HSDPA | Subtest 1 | 826.4 | 4132 | 22.0 | 18.0 |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |
| | Subtest 2 | 826.4 | 4132 | | |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |
| | Subtest 3 | 826.4 | 4132 | | |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |
| | Subtest 4 | 826.4 | 4132 | | |
| | | 836.6 | 4183 | | |
| | | 846.6 | 4233 | | |

LTE

Note: RB allocation mentioned below is for all Bandwidths, and the Frequency Range are divided to 3 ranges (Low, Mid, High)

Band 2

| BW | Modulation | RB allocation with different offset | Frequency range | Full power Tune-up limit (dBm) | Reduced Power Tune-up limit (dBm) |
|---------------|------------|-------------------------------------|-----------------|--------------------------------|-----------------------------------|
| All Bandwidth | QPSK | 1 | Low | 21.5 | 14.5 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 20.5 | 13.5 |
| | | | Mid | | |
| | | | High | | |
| | | 100% | Low | 20.5 | 13.5 |
| | | | Mid | | |
| | | | High | | |
| | 16QAM | 1 | Low | 20.5 | 13.5 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 19.5 | 12.5 |
| | | | Mid | | |
| | | | High | | |
| 100% | | Low | 19.5 | 12.5 | |
| | | Mid | | | |
| | | High | | | |

Band 4

| BW | Modulation | RB allocation with different offset | Frequency range | Full power Tune-up limit (dBm) | Reduced Power Tune-up limit (dBm) |
|---------------|------------|-------------------------------------|-----------------|--------------------------------|-----------------------------------|
| All Bandwidth | QPSK | 1 | Low | 23.5 | 14.5 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 22.5 | 13.5 |
| | | | Mid | | |
| | | | High | | |
| | | 100% | Low | 22.5 | 13.5 |
| | | | Mid | | |
| | | | High | | |
| | 16QAM | 1 | Low | 22.5 | 13.5 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 21.5 | 12.5 |
| | | | Mid | | |
| | | | High | | |
| 100% | | Low | 21.5 | 12.5 | |
| | | Mid | | | |
| | | High | | | |

Band 5

| BW | Modulation | RB allocation with different offset | Frequency range | Full power Tune-up limit (dBm) | Reduced Power Tune-up limit (dBm) |
|---------------|------------|-------------------------------------|-----------------|--------------------------------|-----------------------------------|
| All Bandwidth | QPSK | 1 | Low | 23.5 | 18.5 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 22.5 | 17.5 |
| | | | Mid | | |
| | | | High | | |
| | | 100% | Low | 22.5 | 17.5 |
| | | | Mid | | |
| | | | High | | |
| | 16QAM | 1 | Low | 22.5 | 17.5 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 21.5 | 16.5 |
| | | | Mid | | |
| | | | High | | |
| 100% | | Low | 21.5 | 16.5 | |
| | | Mid | | | |
| | | High | | | |

Band 12

| BW | Modulation | RB allocation with different offset | Frequency range | Full power Tune-up limit (dBm) | Reduced Power Tune-up limit (dBm) |
|---------------|------------|-------------------------------------|-----------------|--------------------------------|-----------------------------------|
| All Bandwidth | QPSK | 1 | Low | 22.0 | 20.0 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 21.0 | 19.0 |
| | | | Mid | | |
| | | | High | | |
| | | 100% | Low | 21.0 | 19.0 |
| | | | Mid | | |
| | | | High | | |
| | 16QAM | 1 | Low | 21.0 | 19.0 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 20.0 | 18.0 |
| | | | Mid | | |
| | | | High | | |
| 100% | | Low | 20.0 | 18.0 | |
| | | Mid | | | |
| | | High | | | |

Band 13

| BW | Modulation | RB allocation with different offset | Frequency range | Full power Tune-up limit (dBm) | Reduced Power Tune-up limit (dBm) |
|---------------|------------|-------------------------------------|-----------------|--------------------------------|-----------------------------------|
| All Bandwidth | QPSK | 1 | Low | 24.0 | 20.0 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 23.0 | 19.0 |
| | | | Mid | | |
| | | | High | | |
| | | 100% | Low | 23.0 | 19.0 |
| | | | Mid | | |
| | | | High | | |
| | 16QAM | 1 | Low | 23.0 | 19.0 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 22.0 | 18.0 |
| | | | Mid | | |
| | | | High | | |
| 100% | | Low | 22.0 | 18.0 | |
| | | Mid | | | |
| | | High | | | |

Band 25

| BW | Modulation | RB allocation with different offset | Frequency range | Full power Tune-up limit (dBm) | Reduced Power Tune-up limit (dBm) |
|---------------|------------|-------------------------------------|-----------------|--------------------------------|-----------------------------------|
| All Bandwidth | QPSK | 1 | Low | 21.5 | 14.5 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 20.5 | 13.5 |
| | | | Mid | | |
| | | | High | | |
| | | 100% | Low | 20.5 | 13.5 |
| | | | Mid | | |
| | | | High | | |
| | 16QAM | 1 | Low | 20.5 | 13.0 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 19.5 | 12.5 |
| | | | Mid | | |
| | | | High | | |
| 100% | | Low | 19.5 | 12.5 | |
| | | Mid | | | |
| | | High | | | |

Band 26

| BW | Modulation | RB allocation with different offset | Frequency range | Full power Tune-up limit (dBm) | Reduced Power Tune-up limit (dBm) |
|---------------|------------|-------------------------------------|-----------------|--------------------------------|-----------------------------------|
| All Bandwidth | QPSK | 1 | Low | 24.0 | 19.0 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 23.0 | 18.0 |
| | | | Mid | | |
| | | | High | | |
| | | 100% | Low | 23.0 | 18.0 |
| | | | Mid | | |
| | | | High | | |
| | 16QAM | 1 | Low | 23.0 | 18.0 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 22.0 | 17.0 |
| | | | Mid | | |
| | | | High | | |
| 100% | | Low | 22.0 | 17.0 | |
| | | Mid | | | |
| | | High | | | |

Band 41

| BW | Modulation | RB allocation with different offset | Frequency range | Full power Tune-up limit (dBm) | Reduced Power Tune-up limit (dBm) |
|---------------|------------|-------------------------------------|-----------------|--------------------------------|-----------------------------------|
| All Bandwidth | QPSK | 1 | Low | 24.5 | 19.5 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 23.5 | 18.5 |
| | | | Mid | | |
| | | | High | | |
| | | 100% | Low | 23.5 | 18.5 |
| | | | Mid | | |
| | | | High | | |
| | 16QAM | 1 | Low | 23.5 | 18.5 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 22.5 | 17.5 |
| | | | Mid | | |
| | | | High | | |
| 100% | | Low | 22.5 | 17.5 | |
| | | Mid | | | |
| | | High | | | |

Band 66

| BW | Modulation | RB allocation with different offset | Frequency range | Full power Tune-up limit (dBm) | Reduced Power Tune-up limit (dBm) |
|---------------|------------|-------------------------------------|-----------------|--------------------------------|-----------------------------------|
| All Bandwidth | QPSK | 1 | Low | 24.5 | 15.5 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 23.5 | 14.5 |
| | | | Mid | | |
| | | | High | | |
| | | 100% | Low | 23.5 | 14.5 |
| | | | Mid | | |
| | | | High | | |
| | 16QAM | 1 | Low | 23.5 | 14.0 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 22.5 | 13.5 |
| | | | Mid | | |
| | | | High | | |
| 100% | | Low | 22.5 | 13.5 | |
| | | Mid | | | |
| | | High | | | |

Band 71

| BW | Modulation | RB allocation with different offset | Frequency range | Full power Tune-up limit (dBm) | Reduced Power Tune-up limit (dBm) |
|---------------|------------|-------------------------------------|-----------------|--------------------------------|-----------------------------------|
| All Bandwidth | QPSK | 1 | Low | 24.5 | 20.5 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 23.5 | 19.5 |
| | | | Mid | | |
| | | | High | | |
| | | 100% | Low | 23.5 | 19.5 |
| | | | Mid | | |
| | | | High | | |
| | 16QAM | 1 | Low | 23.5 | 19.5 |
| | | | Mid | | |
| | | | High | | |
| | | 50% | Low | 22.5 | 18.5 |
| | | | Mid | | |
| | | | High | | |
| 100% | | Low | 22.5 | 18.5 | |
| | | Mid | | | |
| | | High | | | |

WLAN 2.4GHz

| Modulation type | Full power Tune-up limit (dBm) | | |
|-----------------|--------------------------------|---------|---------|
| | 2412MHz | 2437MHz | 2462MHz |
| 11b | 16.0 | | |
| 11g | 14.0 | | |
| 11n HT20 | 13.0 | | |
| Modulation type | 2422MHz | 2437MHz | 2452MHz |
| 11n HT40 | 12.0 | | |