# FCC Test Report

# (PART 24)

**Report No.:** RF150820E01C

**FCC ID:** 2AD8UFZPFWFF01

**Test Model:** FWFF

**Received Date:** Aug. 20, 2015

**Test Date:** Sep. 17 to Dec. 15, 2015

**Issued Date:** Jan. 15, 2016

**Applicant:** Nokia Solutions and Networks

**Address:** 1455 West Shure Drive, Arlington Heights, IL 60004, USA

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory

**Lab Address:** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.

**Test Location (1):** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.

**Test Location (2):** No. 49, Ln. 206, Wende Rd., Shangshan Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan R.O.C.

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## Release Control Record

| Issue No. | Description | Date Issued |
|---|---|---|
| RF150820E01C | Original release. | Jan. 15, 2016 |

## 1 Certificate of Conformity

**Product:** Flexi Zone Indoor Pico BTS

**Brand:** Nokia

**Test Model:** FWFF

**Sample Status:** MASS-PRODUCTION

**Applicant:** Nokia Solutions and Networks

**Test Date:** Sep. 17 to Dec. 15, 2015

**Standards:** FCC Part 24, Subpart E

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

**Prepared by :** _____ , **Date:** Jan. 15, 2016

Lori Chung / Specialist

**Approved by :** _____ , **Date:** Jan. 15, 2016

May Chen / Manager

## 2 Summary of Test Results

| Applied Standard: FCC Part 24 & Part 2 | | | |
|---|---|---|---|
| FCC Clause | Test Item | Result | Remarks |
| 2.1046<br>24.232 | Output Power | PASS | Meet the requirement of limit. |
| 2.1046<br>24.232(d) | Peak To Average Ratio | PASS | Meet the requirement of limit. |
| 2.1055<br>24.235 | Frequency Stability | PASS | Meet the requirement of limit. |
| 2.1049<br>24.238(b) | Occupied Bandwidth | PASS | Meet the requirement of limit. |
| 24.238(b) | Band Edge Measurements | PASS | Meet the requirement of limit. |
| 2.1051<br>24.238 | Conducted Spurious Emissions | PASS | Meet the requirement of limit. |
| 2.1053<br>24.238 | Radiated Spurious Emissions | PASS | Meet the requirement of limit.<br>Minimum passing margin is<br>-20.84dB at 19324MHz. |

### 2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

| Measurement | Frequency | Expended Uncertainty (k=2) (±) |
|---|---|---|
| Radiated Emissions up to 1 GHz | 30MHz ~ 1GHz – Chamber G | 5.37 dB |
| | 30MHz ~ 1GHz – Chamber 3 | 5.31 dB |
| Radiated Emissions above 1 GHz | 1GHz ~ 6GHz – Chamber G | 3.65 dB |
| | 1GHz ~ 6GHz – Chamber H | 3.72 dB |
| | 6GHz ~ 18GHz – Chamber G | 3.88 dB |
| | 6GHz ~ 18GHz – Chamber H | 4.00 dB |
| | 18GHz ~ 40GHz | 4.11 dB |

## 2.2 Test Site and Instruments

**For WCDMA SC MODE: Radiated spurious emissions test:**

| DESCRIPTION & MANUFACTURER | MODEL NO. | SERIAL NO. | CALIBRATED DATE | CALIBRATED UNTIL |
|---|---|---|---|---|
| Test Receiver Agilent | N9038A | MY51210105 | July 24, 2015 | July 23, 2016 |
| Pre-Amplifier Mini-Circuits | ZFL-1000VH2B | AMP-ZFL-03 | Nov. 12, 2014 | Nov. 11, 2015 |
| Trilog Broadband Antenna SCHWARZBECK | VULB 9168 | 9168-360 | Feb. 06, 2015 | Feb. 05, 2016 |
| RF Cable | 8D-FB | CHGCAB-001-1 CHGCAB-001-2 | Oct. 04, 2014 | Oct. 03, 2015 |
| | RF-141 | CHGCAB-004 | Oct. 04, 2014 | Oct. 03, 2015 |
| Horn_Antenna AISI | AIH.8018 | 0000320091110 | Feb. 09, 2015 | Feb. 08, 2016 |
| Pre-Amplifier Agilent | 8449B | 3008A02578 | June 23, 2015 | June 22, 2016 |
| RF Cable | NA | 131205 131216 131217 SNMY23684/4 | Jan. 16, 2015 | Jan. 15, 2016 |
| Spectrum Analyzer R&S | FSV40 | 100964 | June 26, 2015 | June 25, 2016 |
| Pre-Amplifier SPACEK LABS | SLKKa-48-6 | 9K16 | Dec. 12, 2014 | Dec. 11, 2015 |
| Horn_Antenna SCHWARZBECK | BBHA 9170 | 9170-424 | Feb. 05, 2015 | Feb. 04, 2016 |
| RF Cable | NA | 329751/4 RF104-204 | Dec. 11, 2014 | Dec. 10, 2015 |
| Software | ADT_Radiated_V8.7.07 | NA | NA | NA |
| Antenna Tower & Turn Table CT | NA | NA | NA | NA |

**Note:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. G.
3. The FCC Site Registration No. is 966073.
4. The VCCI Site Registration No. is G-137.
5. The CANADA Site Registration No. is IC 7450H-2.
6. Tested Date: Sep. 22, 2015

**For WCDMA MC MODE: Radiated spurious emissions below 1GHz test:**

| DESCRIPTION & MANUFACTURER | MODEL NO. | SERIAL NO. | CALIBRATED DATE | CALIBRATED UNTIL |
|---|---|---|---|---|
| Test Receiver<br>Agilent | N9038A | MY50010156 | Aug. 12, 2015 | Aug. 11, 2016 |
| Pre-Amplifier<br>Mini-Circuits | ZFL-1000VH2 B | AMP-ZFL-07 | May 08, 2015 | May 07, 2016 |
| Trilog Broadband Antenna<br>SCHWARZBECK | VULB 9168 | 138 | Feb. 03, 2015 | Feb. 02, 2016 |
| RF Cable | 8D | 966-3-1<br>966-3-2<br>966-3-3 | Apr. 03, 2015 | Apr. 02, 2016 |
| Software | ADT_Radiated _V8.7.07 | NA | NA | NA |
| Antenna Tower & Turn Table<br>CT | NA | NA | NA | NA |

**Note:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. 3.
3. The FCC Site Registration No. is 147459
4. The CANADA Site Registration No. is 20331-1
5. Tested Date: Dec. 09, 2015

**For WCDMA MC MODE: Radiated spurious emissions above 1GHz test:**

| DESCRIPTION & MANUFACTURER | MODEL NO. | SERIAL NO. | CALIBRATED DATE | CALIBRATED UNTIL |
|---|---|---|---|---|
| Test Receiver<br>Agilent | N9038A | MY51210202 | July 24, 2015 | July 23, 2016 |
| Horn_Antenna<br>AISI | AIH.8018 | 0000220091110 | Feb. 06, 2015 | Feb. 05, 2016 |
| Pre-Amplifier<br>Agilent | 8449B | 3008A01923 | Oct. 27, 2015 | Oct. 26, 2016 |
| RF Cable | NA | 131206<br>131213<br>131215<br>SNMY23685/4 | Jan. 16, 2015 | Jan. 15, 2016 |
| Spectrum Analyzer<br>R&S | FSV40 | 100964 | June 26, 2015 | June 25, 2016 |
| Pre-Amplifier<br>SPACEK LABS | SLKKa-48-6 | 9K16 | Dec. 11, 2015 | Dec. 10, 2016 |
| Horn_Antenna<br>SCHWARZBECK | BBHA 9170 | 9170-424 | Feb. 05, 2015 | Feb. 04, 2016 |
| RF Cable | NA | 329751/4<br>RF104-204 | Dec. 10, 2015 | Dec. 09, 2016 |
| Software | ADT_Radiated<br>_V8.7.07 | NA | NA | NA |
| Antenna Tower & Turn Table<br>CT | NA | NA | NA | NA |

**Note:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. H.
3. The FCC Site Registration No. is 797305.
4. The CANADA Site Registration No. is IC 7450H-3.
5. Tested Date: Dec. 14 to 15, 2015

**For other test items:**

| DESCRIPTION & MANUFACTURER | MODEL NO. | SERIAL NO. | CALIBRATED DATE | CALIBRATED UNTIL |
|---|---|---|---|---|
| Spectrum Analyzer R&S | FSP40 | 100036 | Jan. 22, 2015 | Jan. 21, 2016 |
| Spectrum Analyzer Agilent | E4446A | MY48250253 | Dec. 18, 2014 | Dec. 17, 2015 |
| AC Power Source EXTECH Electronics | 6502 | 1140503 | NA | NA |
| Temperature & Humidity Chamber TERCHY | MHU-225AU | 911033 | Dec. 08, 2014 | Dec. 07, 2015 |
| DC Power Supply GOOD WILL INSTRUMENT CO., LTD. | GPC - 3030D | 7700087 | NA | NA |
| ESG Vector signal generator Agilent | E4438C | MY47271330 506 602 UNJ | Apr. 28, 2015 | Apr. 27, 2016 |
| Power meter Anritsu | ML2495A | 0824006 | May 25, 2015 | May 24, 2016 |
| Power sensor Anritsu | MA2411B | 0738172 | May 25, 2015 | May 24, 2016 |
| Software | ADT_RF Test Software V6.6.5.3 | NA | NA | NA |

**NOTE:**
1. The test was performed in Oven room 1.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. Tested Date: Sep. 17 and Dec. 05, 2015

## 3 General Information

### 3.1 General Description of EUT

| | | |
|---|---|---|
| Product | Flexi Zone Indoor Pico BTS | |
| Brand | Nokia | |
| Test Model | FWFF | |
| Test Sample S/N | EA151910377 | |
| Hardware Version | 473237A.101 | |
| Status of EUT | MASS-PRODUCTION | |
| Power Supply Rating | 12Vdc from power adapter or 55Vdc from POE | |
| Modulation Type | WCDMA-Single Carrier | QPSK |
| | WCDMA–Dual Carrier | QPSK, 16QAM |
| Operating Frequency | Transmitter Frequency Range : 1932.4-1987.6 MHz<br>Receiver Frequency Range : 1852.4-1907.6 MHz | |
| Max. EIRP Power | Single carrier: 534.56mW (27.28dBm) | |
| | Dual Carriers: 749.89mW (28.75dBm) | |
| Emission Designator | Single carrier: 4M19G7D | |
| | Dual Carriers: 9M06G7D | |
| Antenna Type | Refer to note as below | |
| Antenna Connector | Refer to note as below | |
| Accessory Device | Adapter x1 | |
| Data Cable Supplied | NA | |

Note:

1. There are BT, WWAN and GPS technology used for the EUT.
2. The EUT's spec. as below table:

| Model name | WWAN | | | BT | GPS |
|---|---|---|---|---|---|
| | Freq.(MHz) | | Band | | |
| FWFF | UL | 1932.4~1987.6 | 2 | ✓ | ✓ |
| | DL | 1852.4-1907.6 | | | |

3. The emission of the simultaneous operation (BT & WWAN) has been evaluated and no non-compliance was found.
4. The EUT must be supplied with a POE(option) or power adapter as following table:

| Power adapter | | |
|---|---|---|
| Brand | Model No. | Spec. |
| DVE | DSA-60PFB-12 1 120500 | Input: 100-240V, 2.0A, 50/60Hz<br>AC input cable(1.8m, unshielded)<br>Output: 12V, 5A<br>DC output cable(1.2m, unshielded, with one core) |

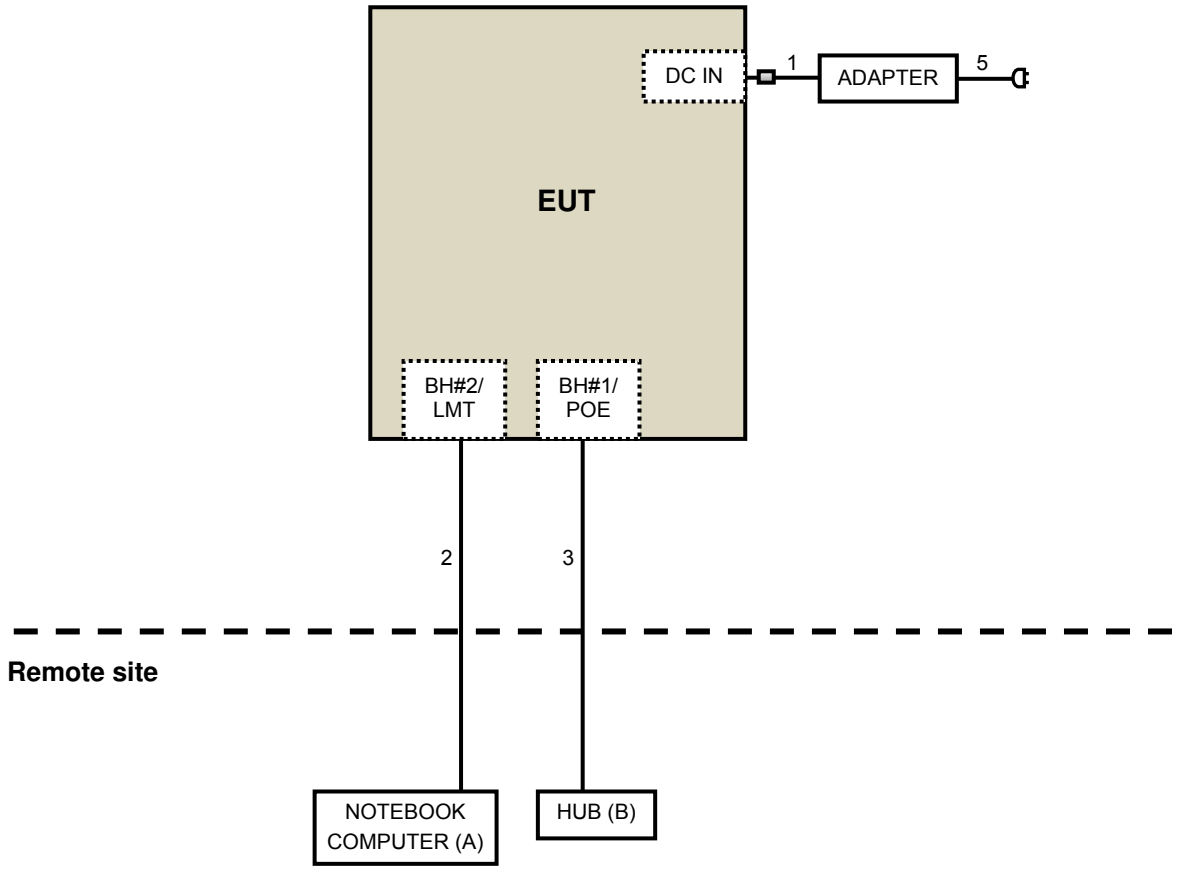
5. The antennas provided to the EUT, please refer to the following table:

| WWAN Antenna Spec. | | | | | | | |
|---|---|---|---|---|---|---|---|
| Antenna No | Brand | Model | Antenna Type | Antenna Connector | Gain(dBi) <Including cable loss> | Cable Length (mm) | Frequency (MHz) |
| Internal WWAN (Main) | TongDa | U81B045 | PIFA | i-pex(MHF) | 5.94 | 90 | 1930-1990 |
| Internal WWAN (Aux) | | | | | 4.5 | 225 | |

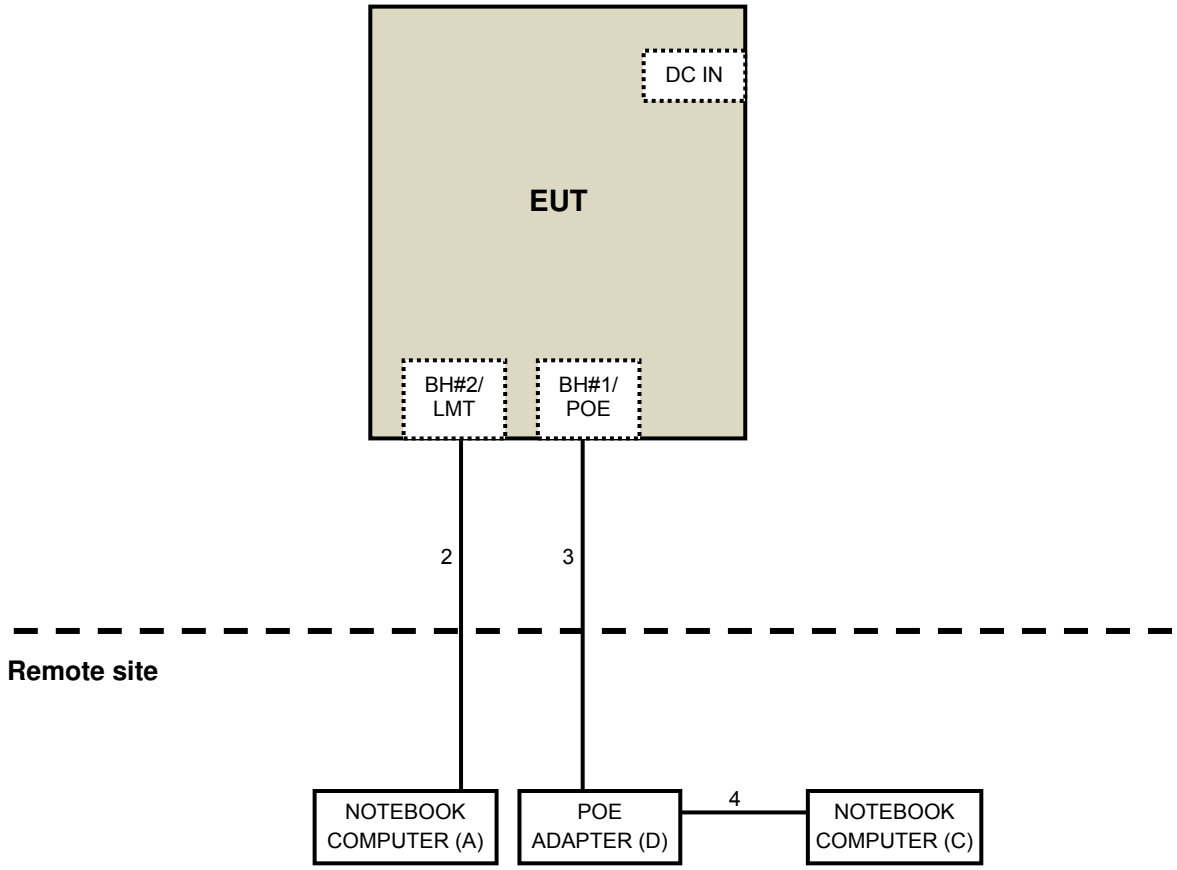
6. The EUT support Signle, Multi Carrier from single port configuration, Multi Carrier is intra-band contiguous only.
7. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

## 3.2 Configuration of System Under Test

**For Adapter mode:**



**For POE mode:**


DC IN
EUT
BH#2/
LMT
BH#1/
POE
2
3
Remote site
NOTEBOOK
COMPUTER (A)
POE
ADAPTER (D)
4
NOTEBOOK
COMPUTER (C)

### 3.2.1 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| No. | Product | Brand | Model No. | Serial No. | FCC ID | Remark |
|---|---|---|---|---|---|---|
| A | NOTEBOOK COMPUTER | DELL | E5430 | 4YV4VY1 | FCC DoC | Provided by Lab |
| B | HUB | ZyXEL | ES-116P | S060H02000215 | FCC DoC | Provided by Lab |
| C | NOTEBOOK COMPUTER | DELL | PP27L | 7YLB32S | FCC DoC | Provided by Lab |
| D | POE ADAPTER | NA | AP-PSBIAS-1P2-AFR | NA | NA | Provided by Lab |

**NOTE:**

1. All power cords of the above support units are non-shielded (1.8 m).

| No. | Cable | Qty. | Length (m) | Shielded (Yes/ No) | Cores (Number) | Remark |
|---|---|---|---|---|---|---|
| 1 | DC | 1 | 1.2 | No | 1 | Supplied by Client |
| 2 | RJ45 | 1 | 10 | No | 0 | Provided by Lab |
| 3 | RJ45 | 1 | 10 | No | 0 | Provided by Lab |
| 4 | RJ45 | 1 | 3 | No | 0 | Provided by Lab |
| 5 | AC | 1 | 1.8 | No | 0 | Supplied by Client |

**NOTE:**

1. The core(s) is(are) originally attached to the cable(s).

### 3.3 Test Mode Applicability and Tested Channel Detail

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XY axis and antenna ports
The worst case was found when positioned on X-plane (for below 1GHz) and Y-plane (for above 1GHz).
Following channel(s) was (were) selected for the final test as listed below:
Test results are presented in the report as below.

| Test Mode | Test Condition |
|---|---|
| A | Power from adapter |
| B | Power from POE |

**WCDMA SC MODE**

| EUT Configure Mode | Test Item | Available Channel | Tested Channel | Carrier Conf.Description | Ch.BW (MHz) | Modulation |
|---|---|---|---|---|---|---|
| A | EIRP | 9662 to 9938 | 9662, 9800, 9938 | 1 | 5 | QPSK |
| A | Frequency Stability | 9662 to 9938 | 9800 | 1 | 5 | QPSK |
| A | Occupied Bandwidth | 9662 to 9938 | 9662, 9800, 9938 | 1 | 5 | QPSK |
| A, B | Band Edge | 9662 to 9938 | 9662, 9938 | 1 | 5 | QPSK |
| A | Peak To Average Ratio | 9662 to 9938 | 9662, 9800, 9938 | 1 | 5 | QPSK |
| A, B | Condcudeted Emission | 9662 to 9938 | 9662, 9800, 9938 | 1 | 5 | QPSK |
| A, B | Radiated Emission Below 1GHz | 9662 to 9938 | 9662, 9800, 9938 | 1 | 5 | QPSK |
| A, B | Radiated Emission Above 1GHz | 9662 to 9938 | 9662, 9800, 9938 | 1 | 5 | QPSK |

**WCDMA MC MODE**

| EUT Configure Mode | Test Item | Available Channel | Tested Channel | Carrier Conf. Description | Ch. BW (MHz) | Modulaiton | Test configuration |
|---|---|---|---|---|---|---|---|
| A | EIRP | 9662 to 9938 | 9662+9687, 9788+9813, 9913+9938 | 2 | 5,5 | QPSK | UTC1 |
| A | Occupied Bandwidth | 9662 to 9938 | 9662+9687, 9788+9813, 9913+9938 | 2 | 5,5 | QPSK | UTC1 |
| A, B | Band Edge | 9662 to 9938 | 9662+9687, 9913+9938 | 2 | 5,5 | QPSK | UTC1 |
| A | Frequency Stability | 9662 to 9938 | 9800 | 2 | 5,5 | QPSK | SC |
| A | Peak To Average Ratio | 9662 to 9938 | 9662,9687, 9788,9813, 9913,9938 | 2 | 5,5 | QPSK | SC |
| A, B | Condcudeted Emission | 9662 to 9938 | 9662+9687, 9788+9813, 9913+9938 | 2 | 5,5 | QPSK | UTC1 |
| A, B | Radiated Emission Below 1GHz | 9662 to 9938 | 9662+9687, 9788+9813, 9913+9938 | 2 | 5,5 | QPSK | UTC1 |
| A, B | Radiated Emission Above 1GHz | 9662 to 9938 | 9662+9687, 9788+9813, 9913+9938 | 2 | 5,5 | QPSK | UTC1 |

**This product supports multiple carriers in contiguous spectrum operation, therefore test mode and test configuration follow 3GPP TS25.141 V12.6.0 by PBA process (TN 230386).**

**Test Condition:**

| Test Item | Environmental Conditions | Input Power | Tested By |
|---|---|---|---|
| EIRP | 25deg. C, 63%RH | 120Vac, 60Hz | Allen Chuang |
| | 23deg. C, 66%RH | 120Vac, 60Hz | Look Huang |
| Frequency Stability | 25deg. C, 63%RH | 120Vac, 60Hz | Allen Chuang |
| | 23deg. C, 66%RH | 120Vac, 60Hz | Look Huang |
| Occupied Bandwidth | 25deg. C, 63%RH | 120Vac, 60Hz | Allen Chuang |
| | 23deg. C, 66%RH | 120Vac, 60Hz | Look Huang |
| Band Edge | 25deg. C, 63%RH | 120Vac, 60Hz | Allen Chuang |
| | 23deg. C, 66%RH | 120Vac, 60Hz | Look Huang |
| Peak To Average Ratio | 25deg. C, 63%RH | 120Vac, 60Hz | Allen Chuang |
| | 23deg. C, 66%RH | 120Vac, 60Hz | Look Huang |
| Condcudeted Emission | 25deg. C, 63%RH | 120Vac, 60Hz | Allen Chuang |
| | 23deg. C, 66%RH | 120Vac, 60Hz | Look Huang |
| Radiated Emission | 25deg. C, 63%RH | 120Vac, 60Hz | Tim Ho |
| | 23deg. C, 66%RH | 120Vac, 60Hz | Gary Cheng |

### 3.4 EUT Operating Conditions

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency

### 3.5 General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

**FCC 47 CFR Part 2**

**FCC 47 CFR Part 24**

**KDB 971168 D01 Power Meas License Digital Systems v02r02**

**ANSI/TIA/EIA-603-C 2004**

**NOTE:** All test items have been performed and recorded as per the above standards.

# 4 Test Types and Results

## 4.1 Output Power Measurement

### 4.1.1 Limits of Output Power Measurement

Base stations with an emission bandwidth greater than 1 MHz are limited to 1640 watts/MHz equivalent isotropically radiated power (EIRP) with an antenna height up to 300 meters HAAT.

### 4.1.2 Test Procedures

**EIRP Measurement:**

a. All measurements were done at low, middle and high operational frequency range. RBW and VBW is 5MHz for WCDMA mode.

b. Substitution method is used for EIRP measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.

c. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a tx cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value“ of step b. Record the power level of S.G

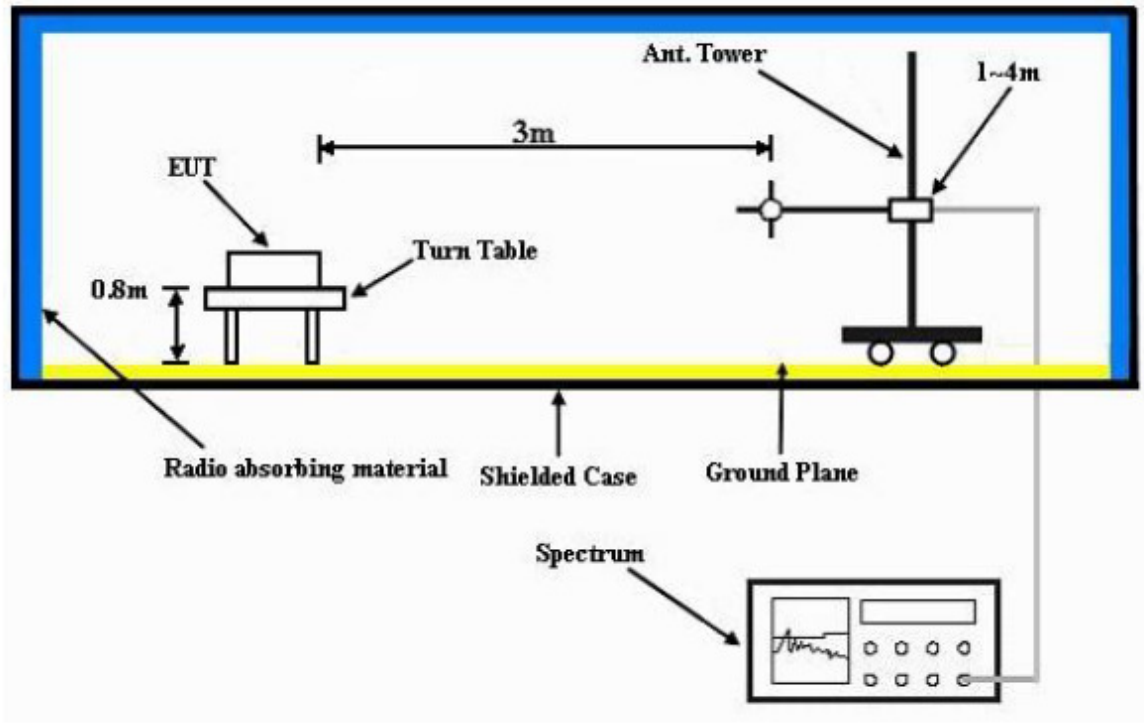
d. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.ERP power can be calculated form EIRP power by subtracting the gain of dipole, ERP power = EIRP power - 2.15dBi.

**Conducted Power Measurement:**

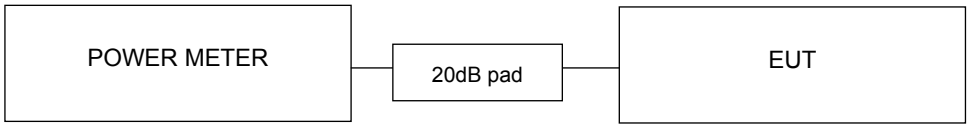
The EUT was set up for the maximum power with WCDMA link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

4.1.3 Test Setup

EIRP MEASUREMENT:




CONDUCTED POWER MEASUREMENT:



4.1.4 Test Results

**WCDMA SC MODE**

**CONDUCTED OUTPUT POWER (dBm)**

| Band | WCDMA II | | |
|---|---|---|---|
| Channel | 9662 | 9800 | 9938 |
| Frequency (MHz) | 1932.4 | 1960 | 1987.6 |
| Output power (dBm) | 23.32 | 23.41 | 23.24 |

EIRP Power (dBm)

| Plane | Channel | Frequency (MHz) | LVL (dBm) | Correction Factor (dB) | EIRP (dBm) | EIRP (mW) |
|---|---|---|---|---|---|---|
| Y | 9662 | 1932.4 | 20.58 | 6.6 | 27.19 | 523.60 |
| | 9800 | 1960 | 20.60 | 6.7 | 27.28 | 534.56 |
| | 9938 | 1987.6 | 20.46 | 6.7 | 27.13 | 516.42 |

**WCDMA MC MODE**

**CONDUCTED OUTPUT POWER (dBm)**

| Carrier Channel Cofiguration | Carrier Frequency Configuration (MHz) | Transmitter power (dBm) | | |
|---|---|---|---|---|
| | | Carrier 1 (dBm) | Carrier 2 (dBm) | Total power {Carrier 1+2} (dBm) |
| 9662+9687 | 1932.4+1937.4 | 21.06 | 21.34 | 24.21 |
| 9788+9813 | 1957.6+1962.6 | 21.06 | 21.13 | 24.11 |
| 9913+9938 | 1982.6+1987.6 | 21.02 | 22.43 | 24.79 |

EIRP Power (dBm)

| Plane | Carrier Channel Cofiguration | Carrier Frequency Configuration (MHz) | LVL (dBm) | Correction Factor (dB) | EIRP (dBm) | EIRP (mW) |
|---|---|---|---|---|---|---|
| Y | 9662+9687 | 1932.4+1937.4 | 21.76 | 6.6 | 28.37 | 687.07 |
| | 9788+9813 | 1957.6+1962.6 | 21.60 | 6.7 | 28.28 | 672.98 |
| | 9913+9938 | 1982.6+1987.6 | 22.08 | 6.7 | 28.75 | 749.89 |

## 4.2 Frequency Stability Measurement

### 4.2.1 Limits of Frequency Stabiliity Measurement

According to the FCC part 2.1055 shall be tested the frequency stability. The rule is defined that" The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block." The test extreme voltage is according to the 2.1055(d)(1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment and the extreme temperature rule is comply with specification of EUT -30℃ ~ 50℃.

### 4.2.2 Test Procedure

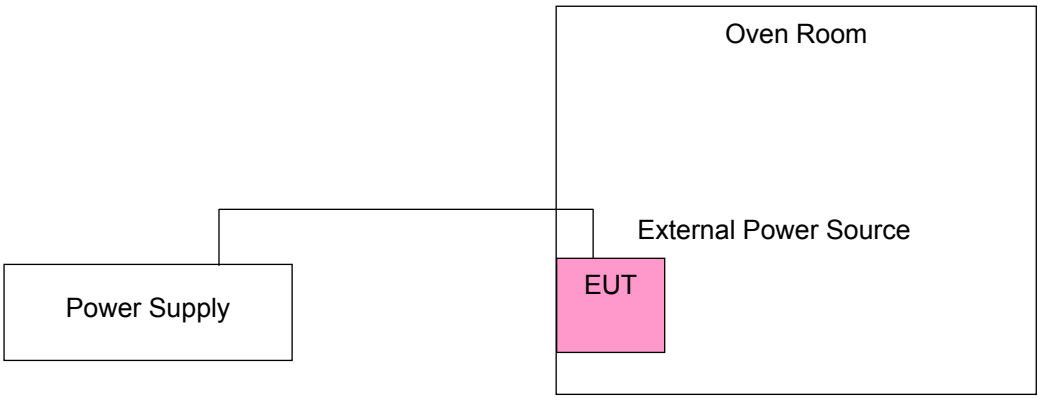
a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.

b. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.

c. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ±0.5 ℃ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

**NOTE:** The frequency error was recorded frequency error from the communication simulator.

### 4.2.3 Test Setup



4.2.4 Test Results

**WCDMA SC MODE**

Frequency Error vs. Voltage

| Voltage (Volts) | Frequency Error (ppm) | Result |
|---|---|---|
| | WCDMA | |
| 102 | 0.011 | Pass |
| 138 | 0.009 | Pass |

Frequency Error vs. Temperature.

| TEMP. (℃) | Frequency Error (ppm) | Result |
|---|---|---|
| | WCDMA | |
| 75 | 0.015 | Pass |
| 70 | 0.015 | Pass |
| 60 | 0.014 | Pass |
| 50 | 0.013 | Pass |
| 40 | 0.010 | Pass |
| 30 | 0.009 | Pass |
| 20 | 0.010 | Pass |
| 10 | 0.011 | Pass |
| 0 | 0.011 | Pass |
| -10 | 0.012 | Pass |
| -20 | 0.013 | Pass |
| -30 | 0.014 | Pass |

**WCDMA MC MODE**

Frequency Error vs. Voltage

| Voltage (Volts) | Frequency Error (ppm) | Result |
|---|---|---|
| | WCDMA | |
| 102 | 0.022 | Pass |
| 138 | 0.014 | Pass |

Frequency Error vs. Temperature.

| TEMP. (℃) | Frequency Error (ppm) | Result |
|---|---|---|
| | WCDMA | |
| 75 | 0.018 | Pass |
| 70 | 0.022 | Pass |
| 60 | 0.022 | Pass |
| 50 | 0.014 | Pass |
| 40 | 0.014 | Pass |
| 30 | 0.018 | Pass |
| 20 | 0.016 | Pass |
| 10 | 0.022 | Pass |
| 0 | 0.016 | Pass |
| -10 | 0.018 | Pass |
| -20 | 0.017 | Pass |
| -30 | 0.015 | Pass |

## 4.3 Occupied Bandwidth Measurement

### 4.3.1 Test Procedure

The EUT makes a call to the communication simulator. All measurements were done at low, middle and high operational frequency range. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

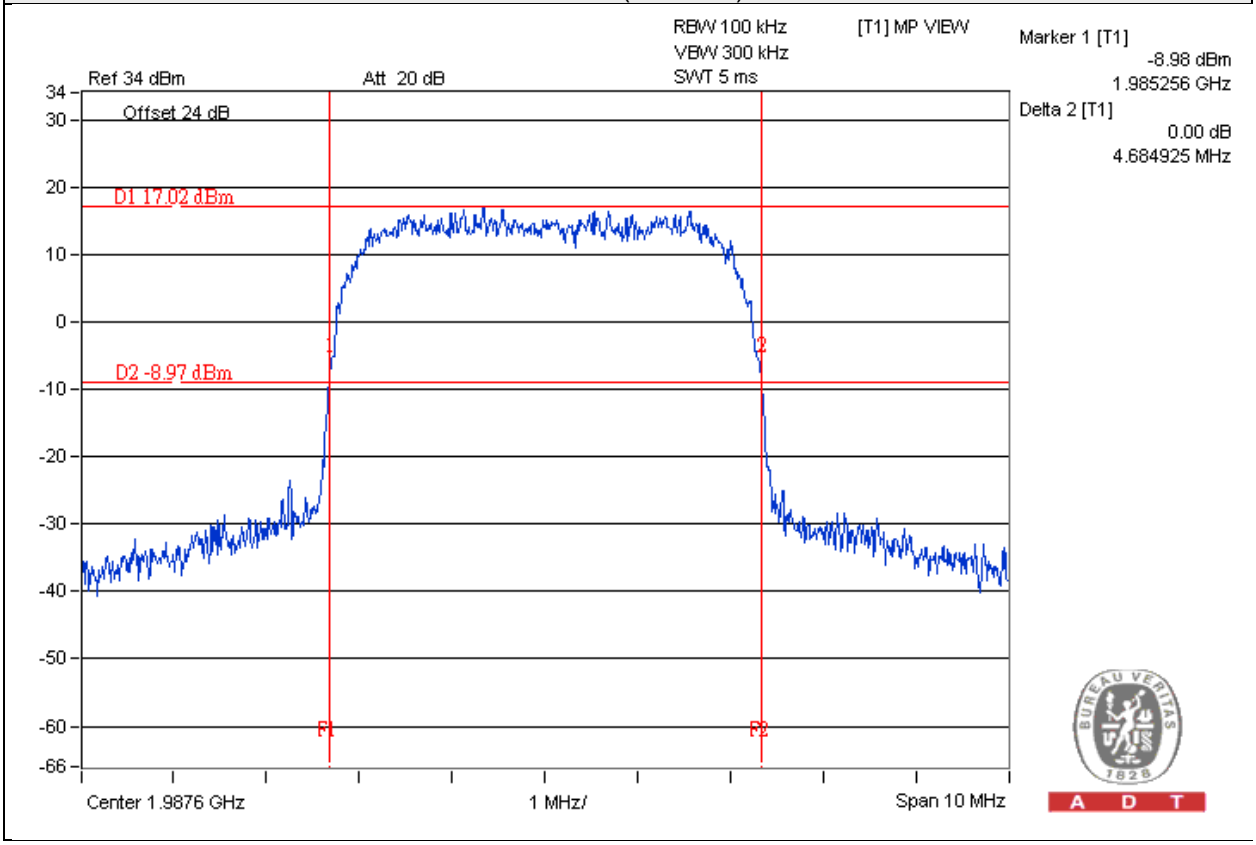
### 4.3.2 Test Setup

### 4.3.3 Test Result (-26dBc Bandwidth)

**WCDMA SC MODE**

| Channel | FREQ. (MHz) | -26dBc Bandwidth (MHz) |
|---|---|---|
| | | WCDMA |
| 9662 | 1932.4 | 4.67 |
| 9800 | 1960 | 4.66 |
| 9938 | 1987.6 | 4.68 |

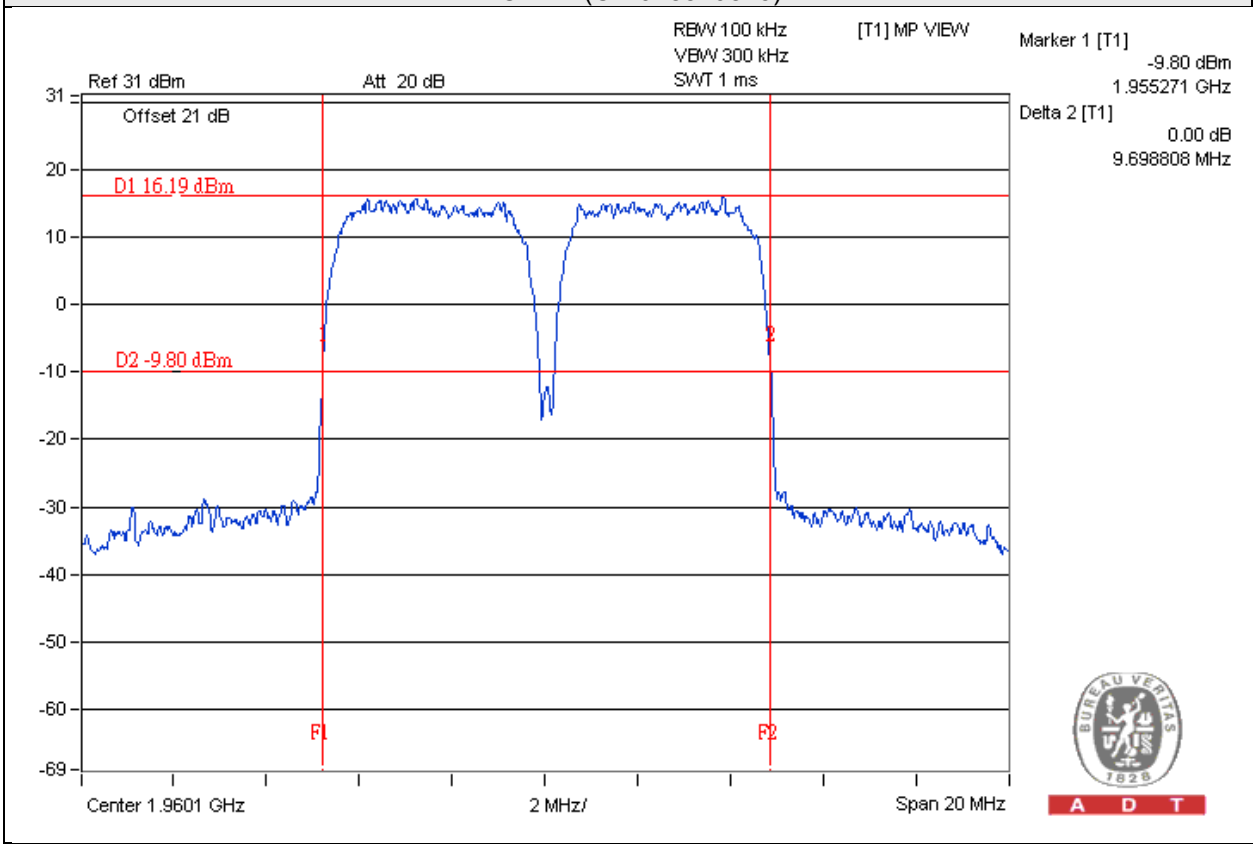
| Spectrum Plot Of Worst Value |
|---|
| WCDMA (CH 9938) |



## WCDMA MC MODE

| Carrier Channel Cofiguration | Carrier Frequency Configuration (MHz) | -26dBc Bandwidth (MHz) |
|---|---|---|
| | | WCDMA |
| 9662+9687 | 1932.4+1937.4 | 9.68 |
| 9788+9813 | 1957.6+1962.6 | 9.70 |
| 9913+9938 | 1982.6+1987.6 | 9.70 |

| Spectrum Plot Of Worst Value |
|---|
| WCDMA (CH 9788+9813) |

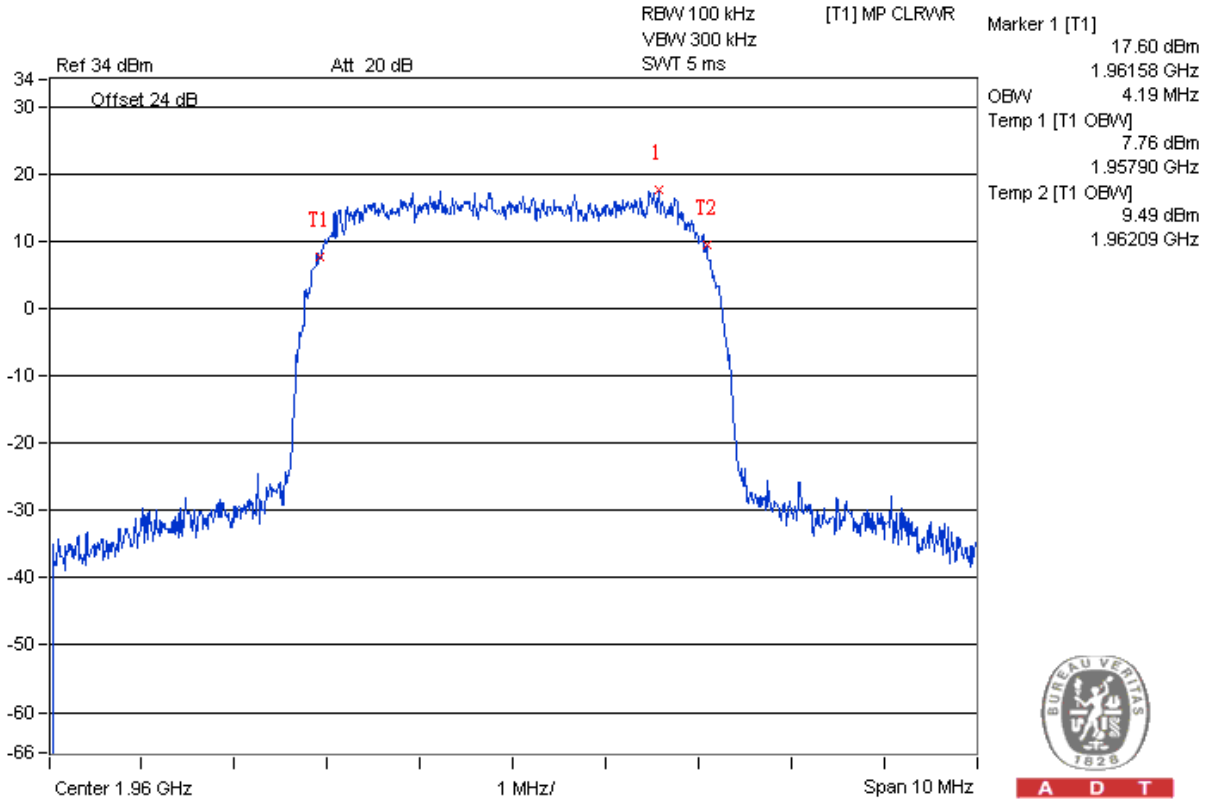


4.3.4 Test Result (Occupied Bandwidth)

**WCDMA SC MODE**

| Channel | FREQ. (MHz) | 99% Occupied Bandwidth (MHz) |
|---|---|---|
| | | WCDMA |
| 9662 | 1932.4 | 4.15 |
| 9800 | 1960 | 4.19 |
| 9938 | 1987.6 | 4.17 |

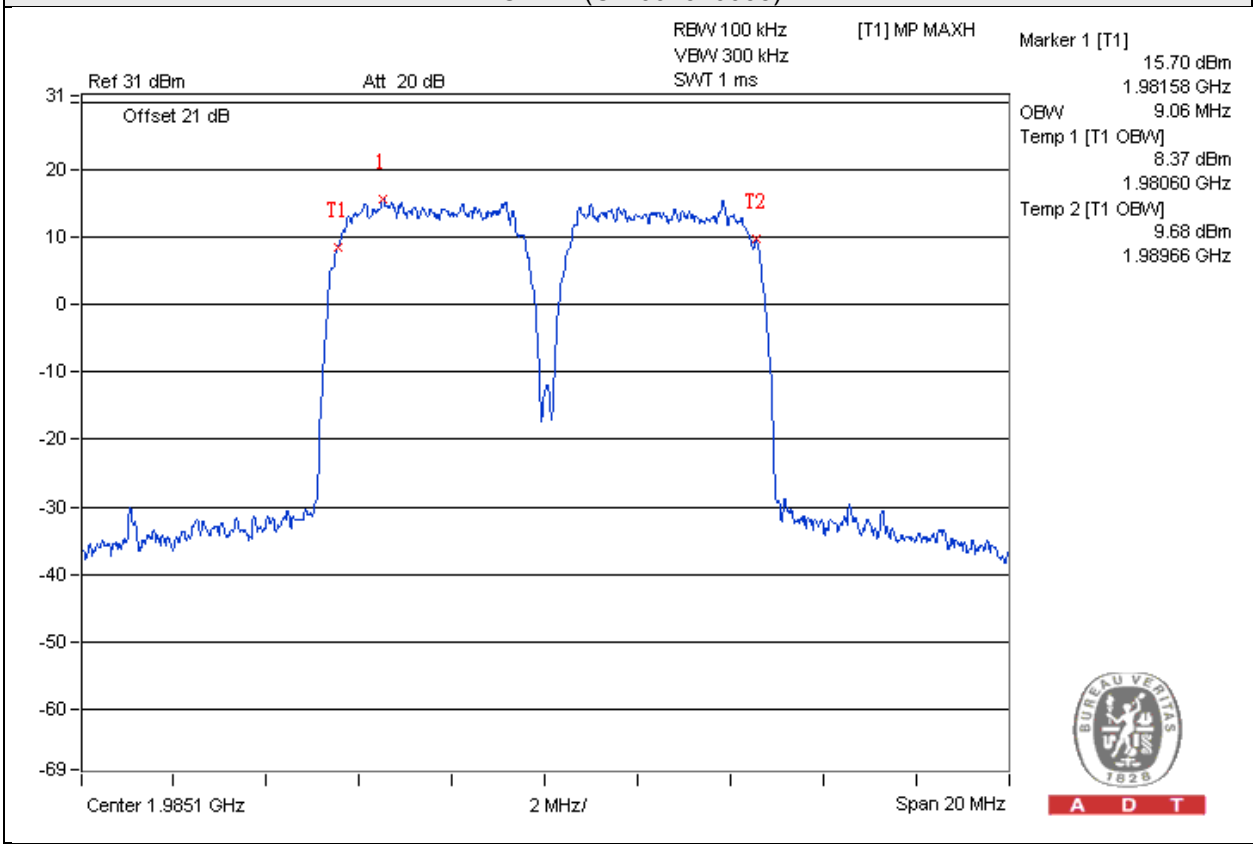
| Spectrum Plot Of Worst Value |
|---|
| WCDMA (CH 9800) |



## WCDMA MC MODE

| Carrier Channel Cofiguration | Carrier Frequency Configuration (MHz) | 99% Occupied Bandwidth (MHz) |
|---|---|---|
| | | WCDMA |
| 9662+9687 | 1932.4+1937.4 | 9.04 |
| 9788+9813 | 1957.6+1962.6 | 9.06 |
| 9913+9938 | 1982.6+1987.6 | 9.06 |

| Spectrum Plot Of Worst Value |
|---|
| WCDMA (CH 9913+9938) |



## 4.4 Band Edge Measurement

### 4.4.1 Limits of Band Edge Measurement

Power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

### 4.4.2 Test Setup

### 4.4.3 Test Procedures

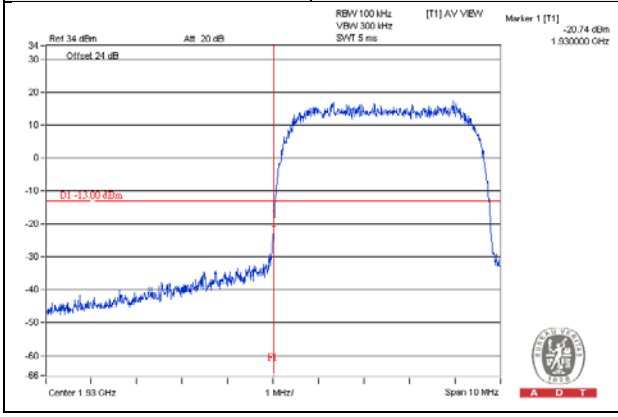
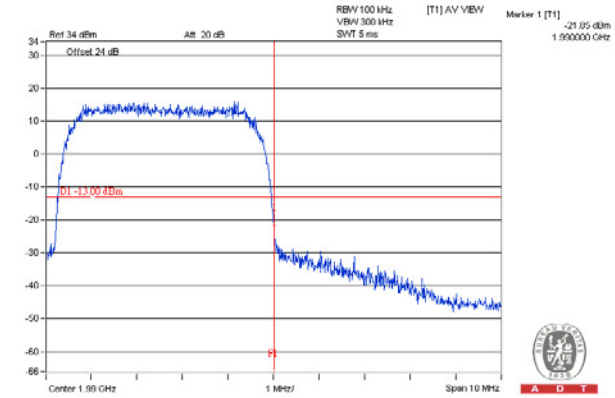
a. All measurements were done at low and high operational frequency range.

b. The center frequency of spectrum is the band edge frequency and span is 10MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (WCDMA).

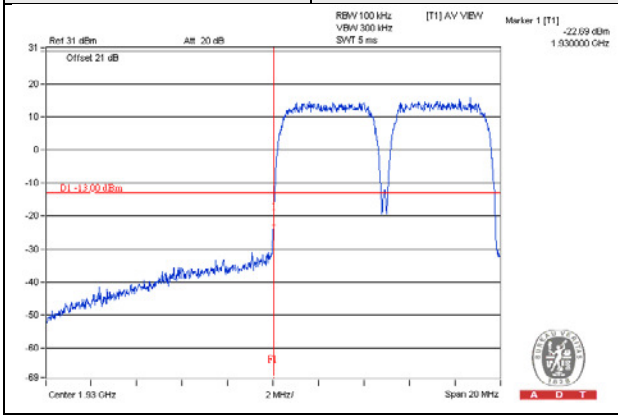
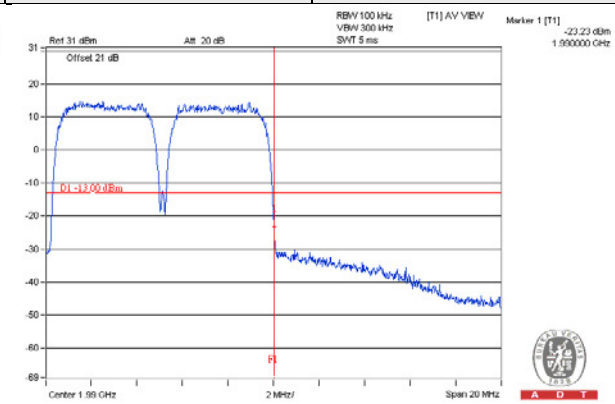
c. Record the max trace plot into the test report.

### 4.4.4 Test Results (With Adapter)

**WCDMA SC MODE**

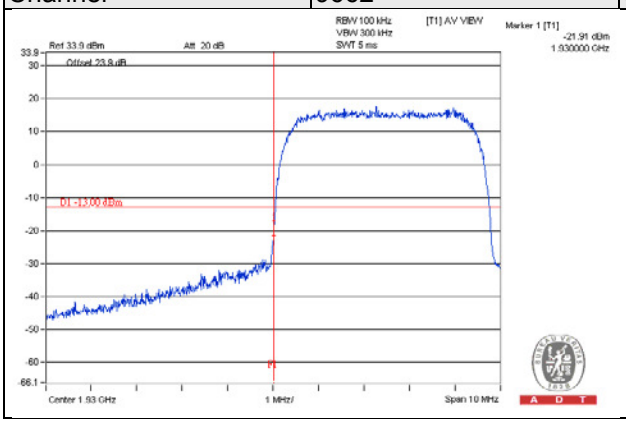
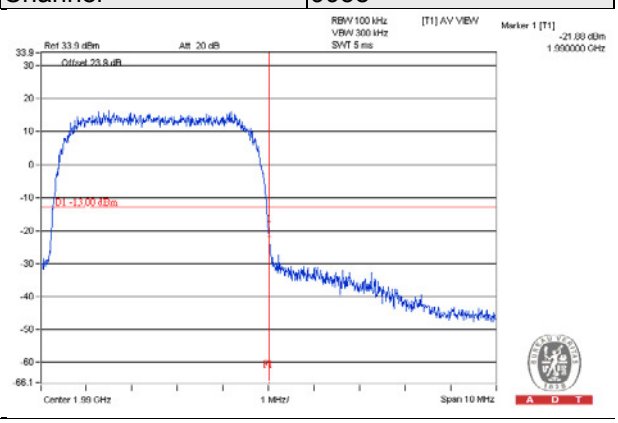
| Channel | 9662 | Channel | 9938 |
|---|---|---|---|
|  | |  | |

**WCDMA MC MODE**

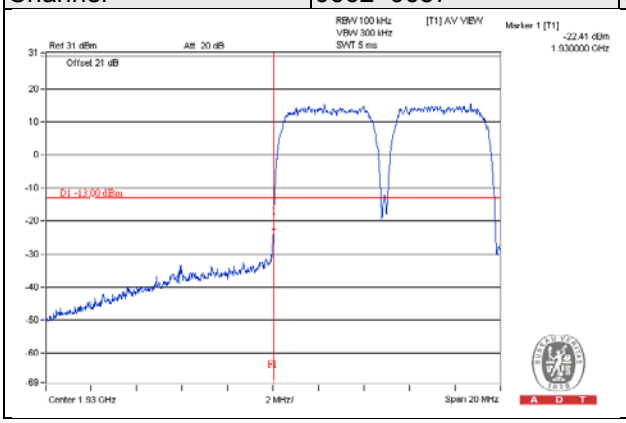
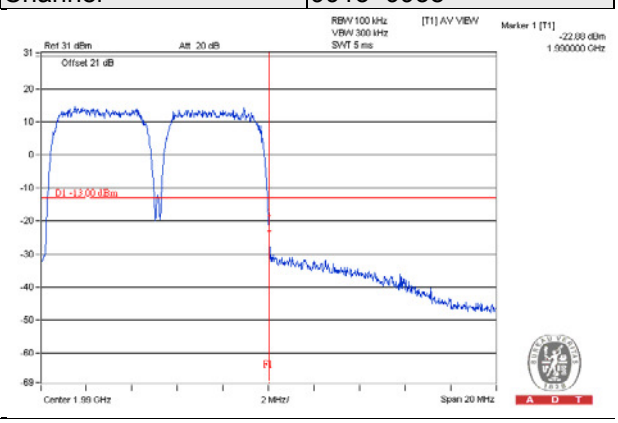
| Channel | 9662+9687 | Channel | 9913+9938 |
|---|---|---|---|
|  | |  | |

### 4.4.5 Test Results (With POE)

**WCDMA SC MODE**

| Channel | 9662 | Channel | 9938 |
|---|---|---|---|
|  | |  | |

**WCDMA MC MODE**

| Channel | 9662+9687 | Channel | 9913+9938 |
|---|---|---|---|
|  | |  | |

## 4.5 Peak to Average Ratio

### 4.5.1 Limits of Peak to Average Ratio Measurement

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB

### 4.5.2 Test Setup

### 4.5.3 Test Procedures

1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.

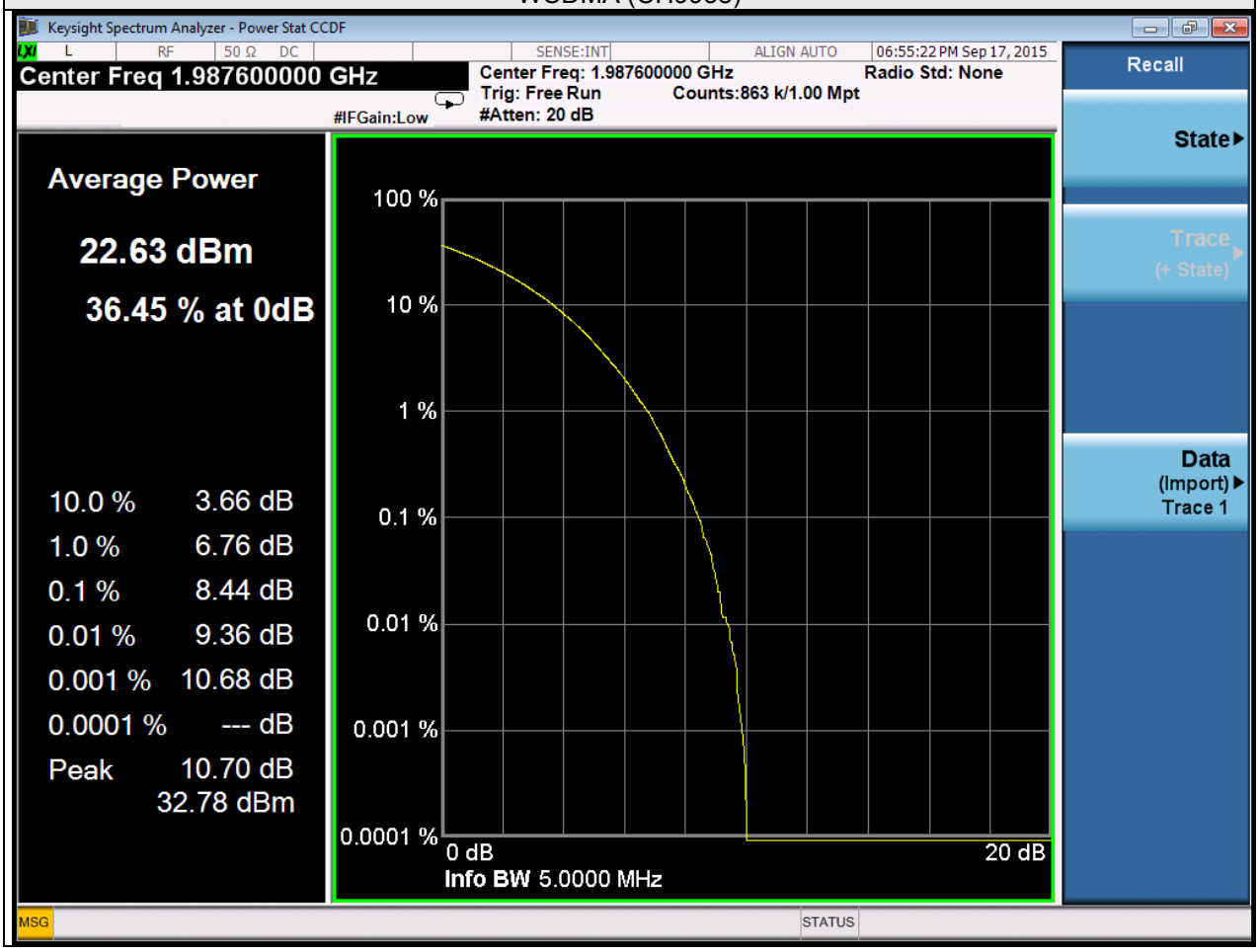
4.5.4 Test Results

**WCDMA SC MODE**

| Channel | Freq. (MHz) | Peak To Average Ratio (dB) |
|---|---|---|
| | | WCDMA |
| 9662 | 1932.4 | 8.41 |
| 9800 | 1960 | 8.38 |
| 9938 | 1987.6 | 8.44 |

Spectrum Plot Of Worst Value

WCDMA (CH9938)

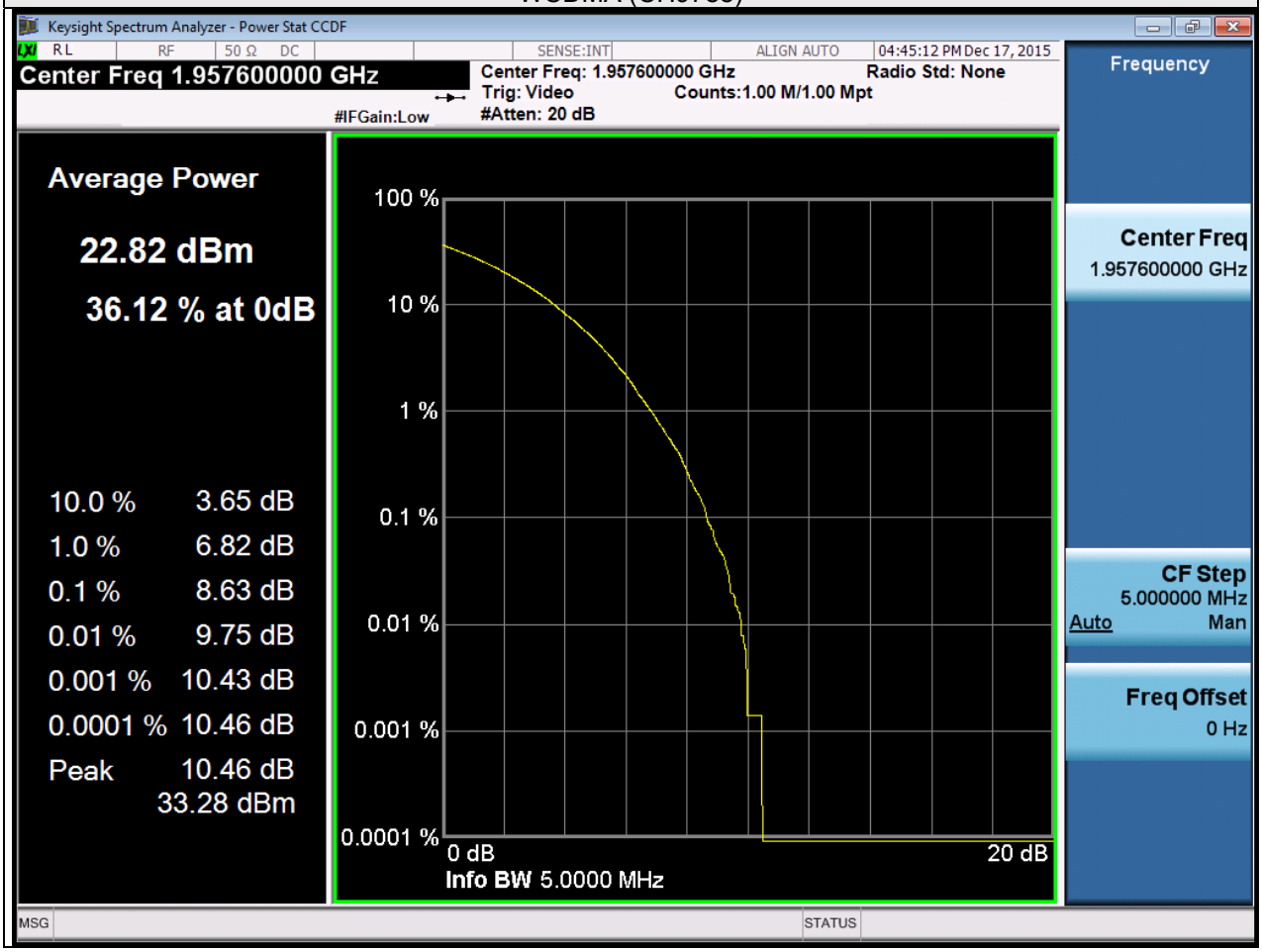


## WCDMA MC MODE

| Carrier Channel Cofiguration | Carrier Frequency Configuration (MHz) | Peak To Average Ratio (dB) |
|---|---|---|
| | | WCDMA |
| 9662 | 1932.4 | 8.6 |
| 9687 | 1937.4 | 8.58 |
| 9788 | 1957.6 | 8.63 |
| 9813 | 1962.6 | 8.6 |
| 9913 | 1982.6 | 8.5 |
| 9938 | 1987.6 | 8.59 |

Spectrum Plot Of Worst Value

WCDMA (CH9788)



## 4.6 Conducted Spurious Emissions

### 4.6.1 Limits of Conducted Spurious Emissions Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to –13dBm.

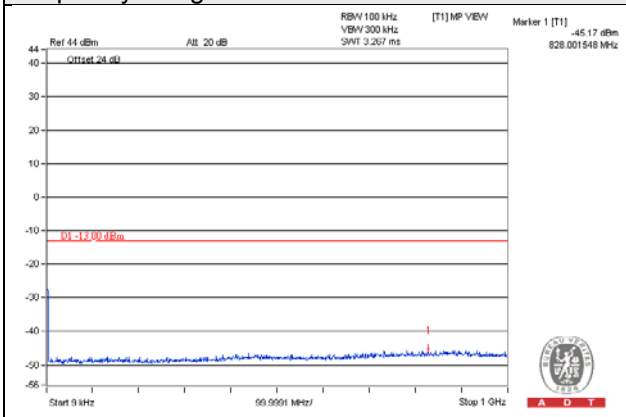
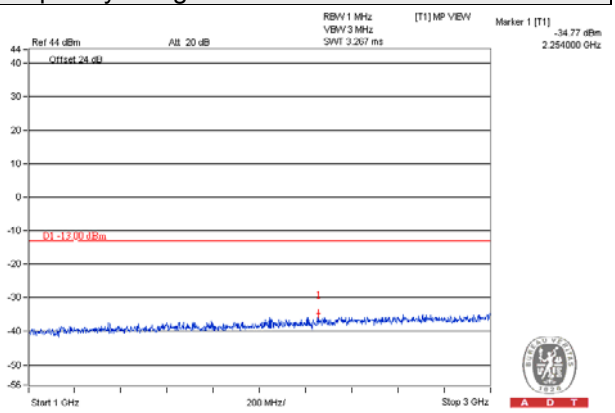
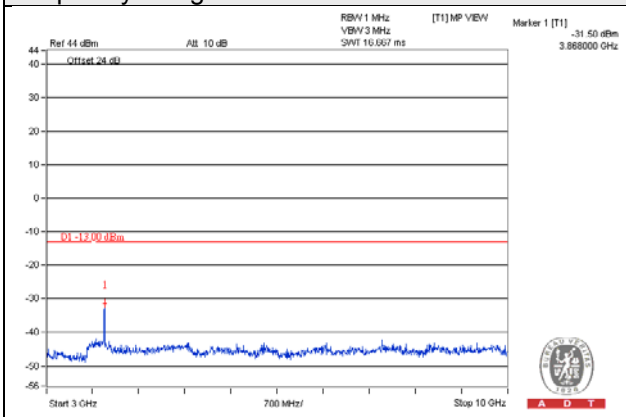
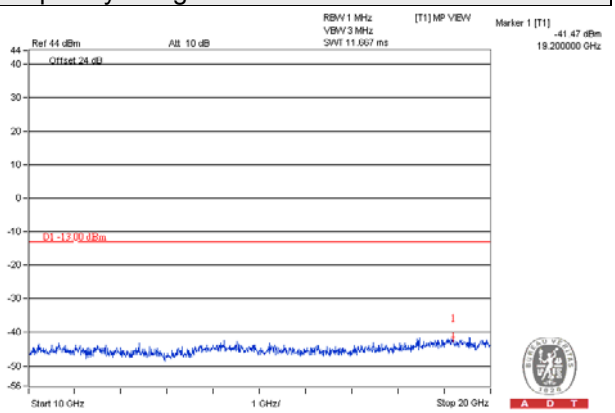
### 4.6.2 Test Setup

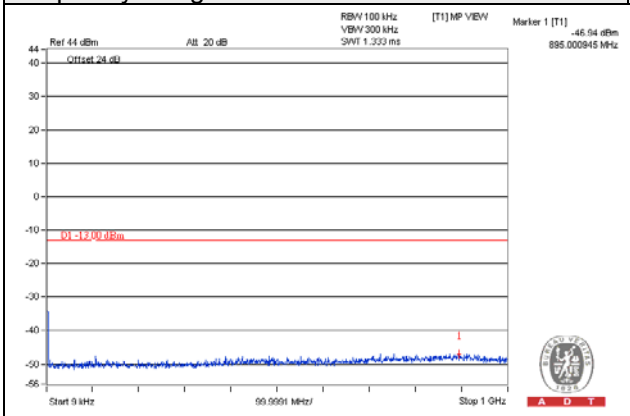
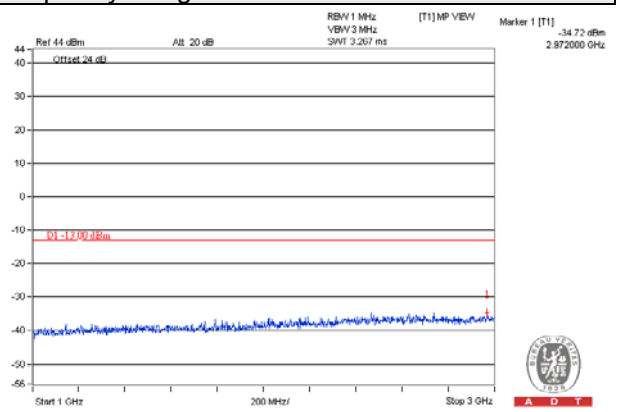
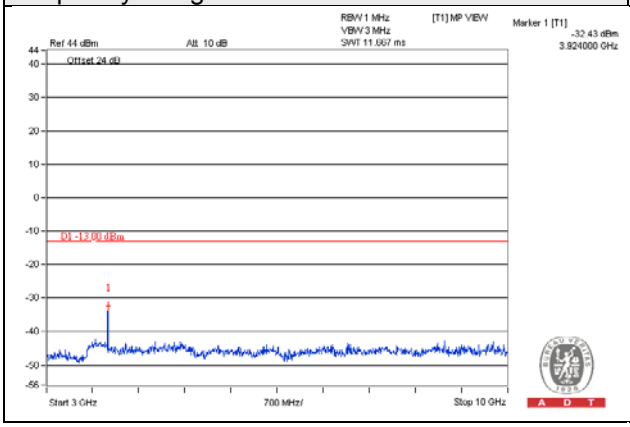
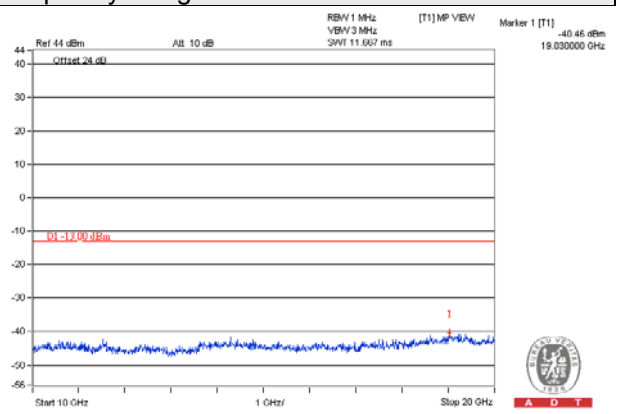
### 4.6.3 Test Procedure

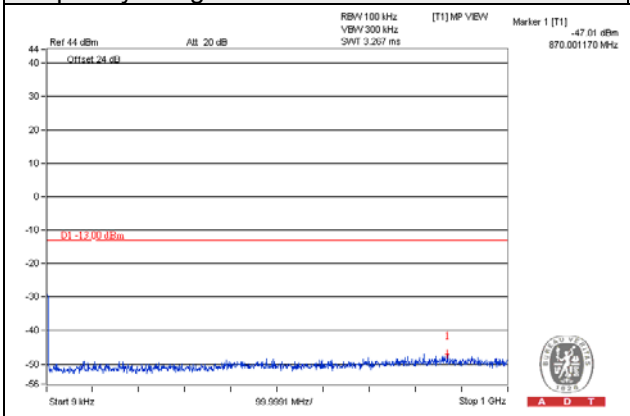
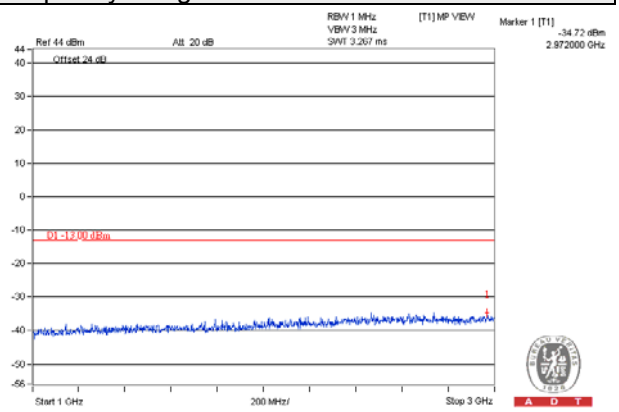
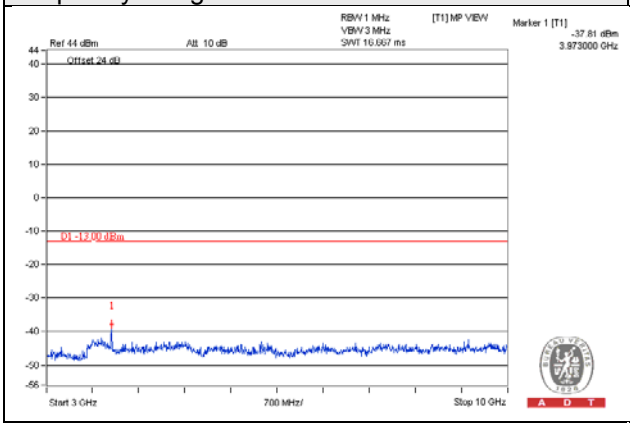
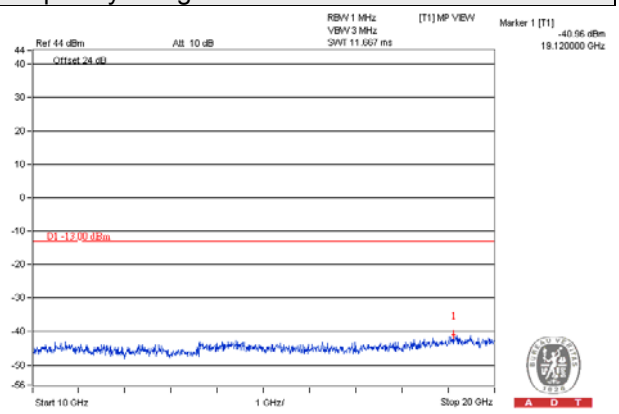
a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
b. Measuring frequency range is from 9 kHz to 20GHz. 20dB attenuation pad is connected with spectrum. Below 1GHz: RBW=100kHz and VBW=300kHz ; Above 1GHz: RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

### 4.6.4 Test Results (With Adapter)

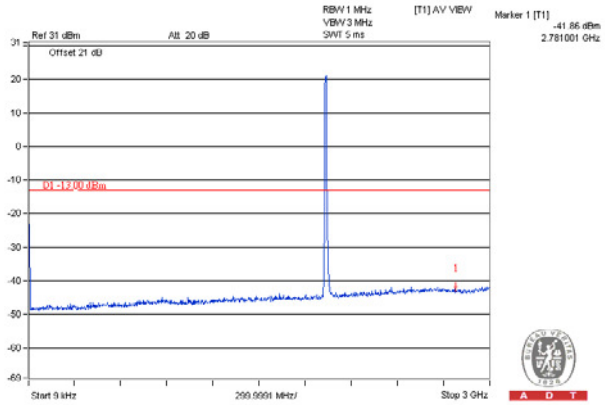
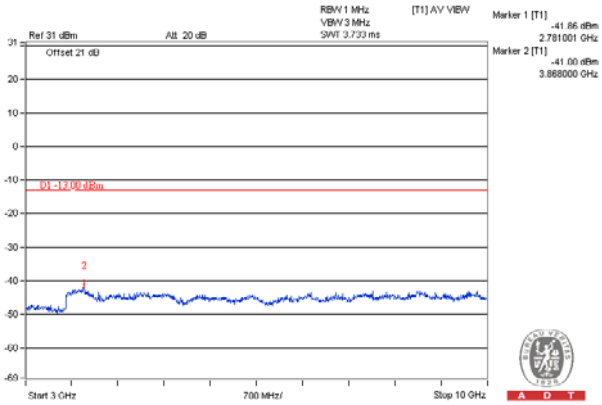
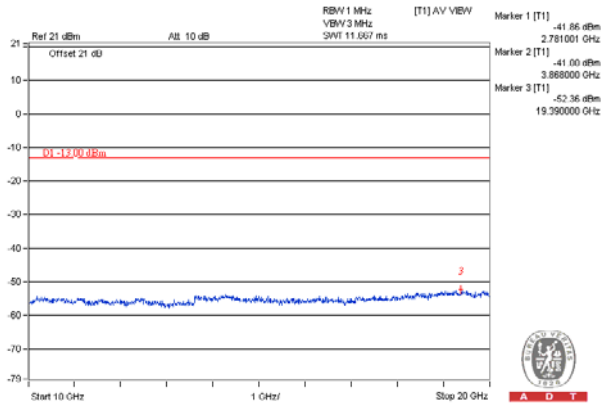
**WCDMA SC MODE**

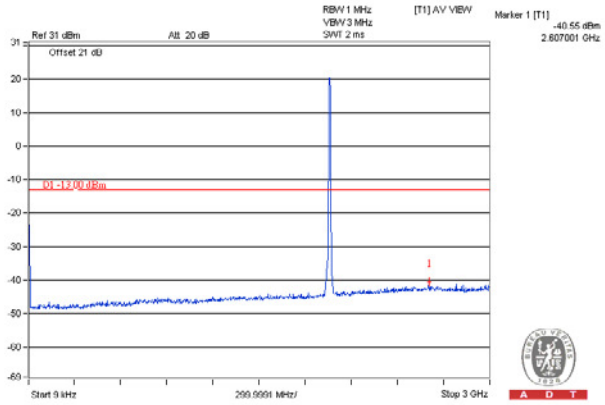
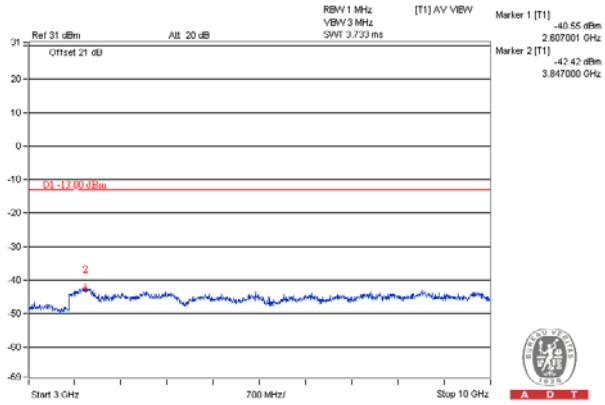
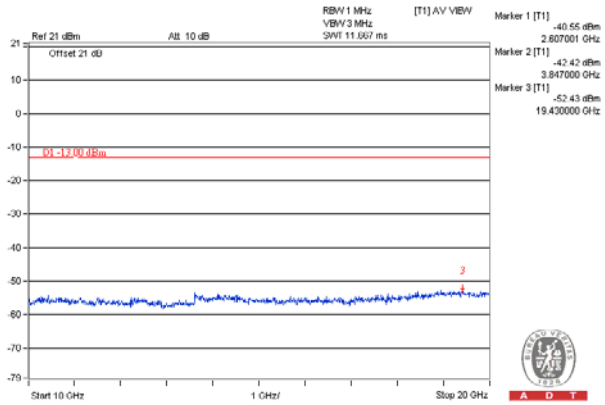
| Channel 9662 | |
|---|---|
| Frequency Range : 9kHz~1GHz | Frequency Range : 1GHz~3GHz |
|  |  |
| Frequency Range : 3GHz~10GHz | Frequency Range : 10GHz~20GHz |
|  |  |

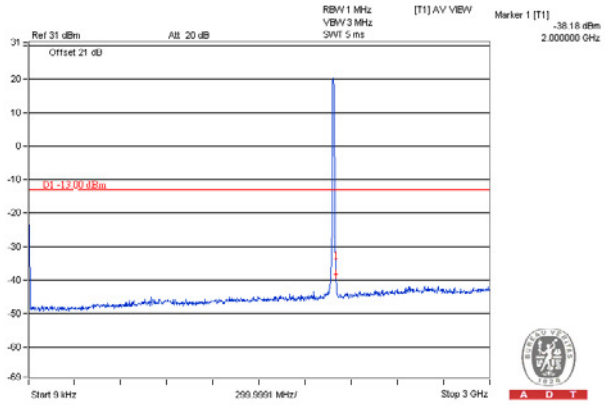
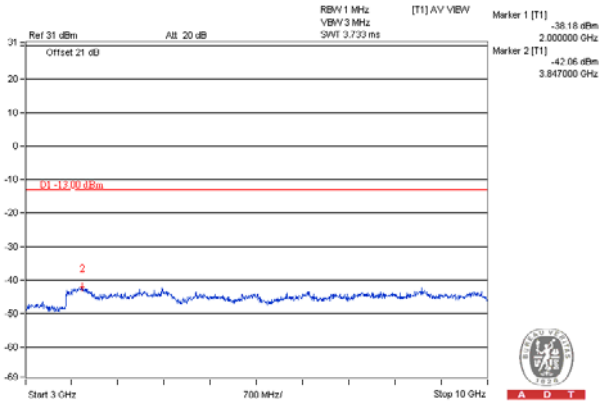
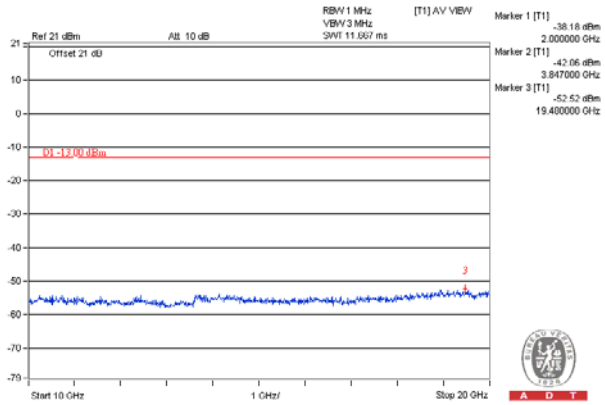
| Channel 9800 | |
|---|---|
| Frequency Range : 9kHz~1GHz | Frequency Range : 1GHz~3GHz |
|  |  |
| Frequency Range : 3GHz~10GHz | Frequency Range : 10GHz~20GHz |
|  |  |

| Channel 9938 | |
|---|---|
| Frequency Range : 9kHz~1GHz | Frequency Range : 1GHz~3GHz |
|  |  |
| Frequency Range : 3GHz~10GHz | Frequency Range : 10GHz~20GHz |
|  |  |

## WCDMA MC MODE

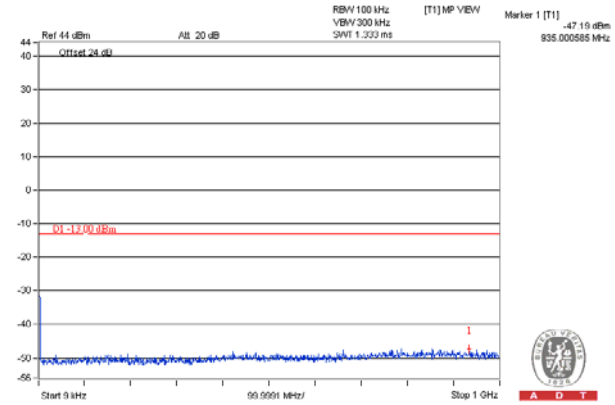
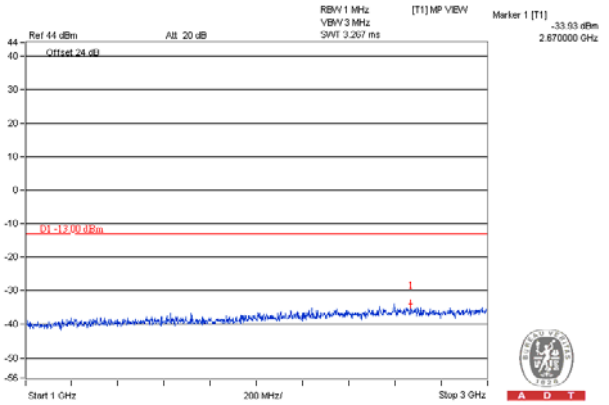
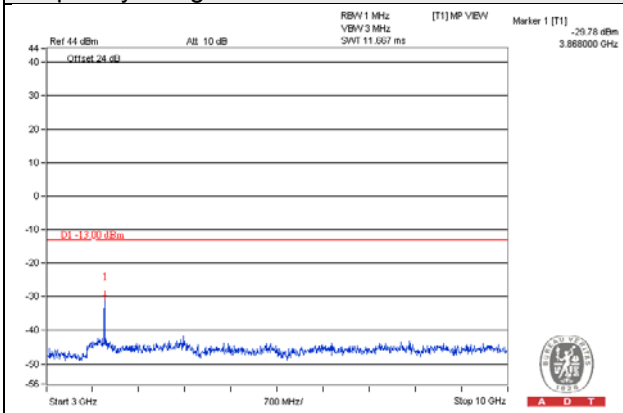
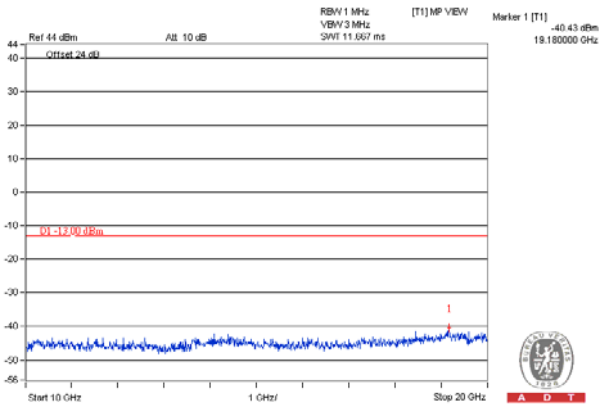
| Channel 9662+9687 | |
|---|---|
| Frequency Range : 9kHz~3GHz | Frequency Range : 3GHz~10GHz |
|  |  |
| Frequency Range : 10GHz~20GHz | |
|  | |

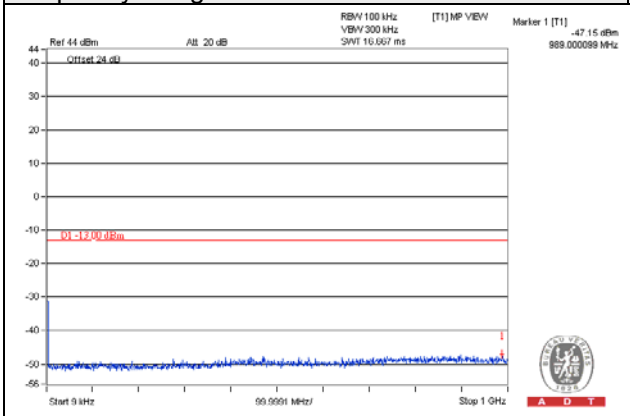
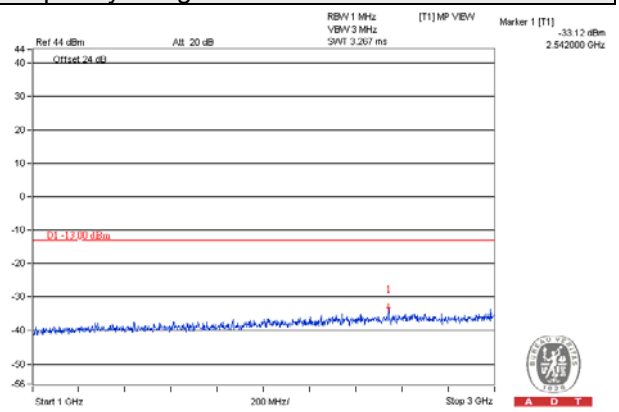
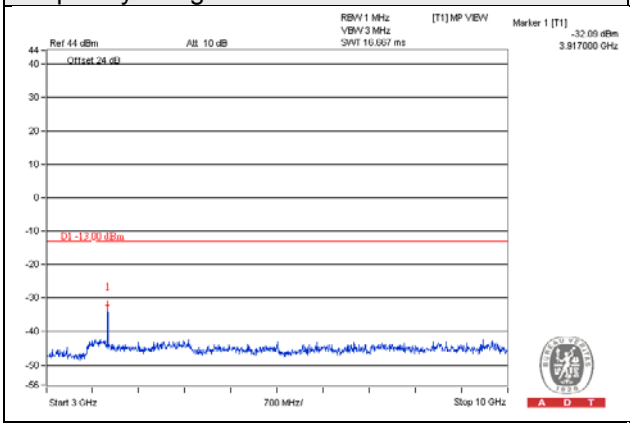
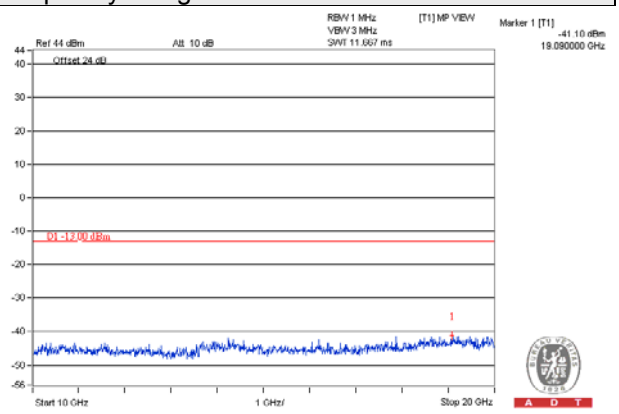
| Channel 9788+9813 | |
|---|---|
| Frequency Range : 9kHz~3GHz | Frequency Range : 3GHz~10GHz |
|  |  |
| Frequency Range : 10GHz~20GHz | |
|  | |

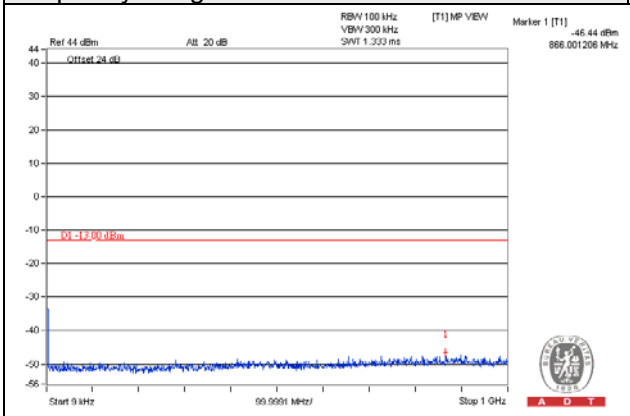
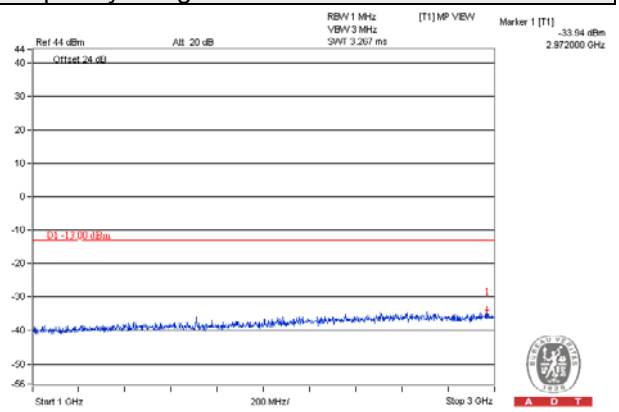
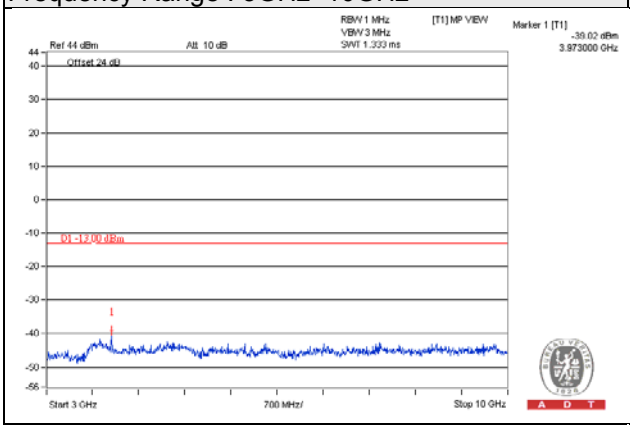
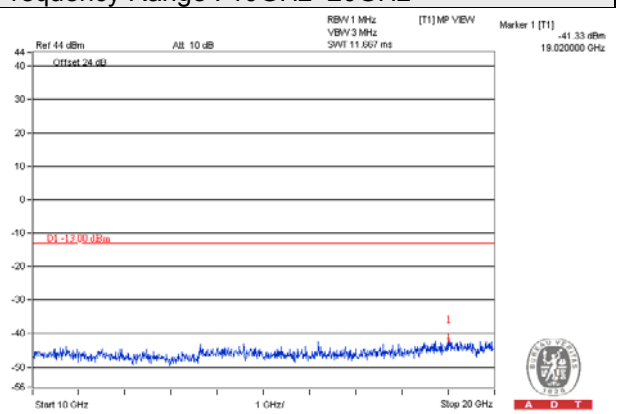
| Channel 9913+9938 | |
|---|---|
| Frequency Range : 9kHz~3GHz | Frequency Range : 3GHz~10GHz |
|  |  |
| Frequency Range : 10GHz~20GHz | |
|  | |

4.6.5 Test Results (With POE)

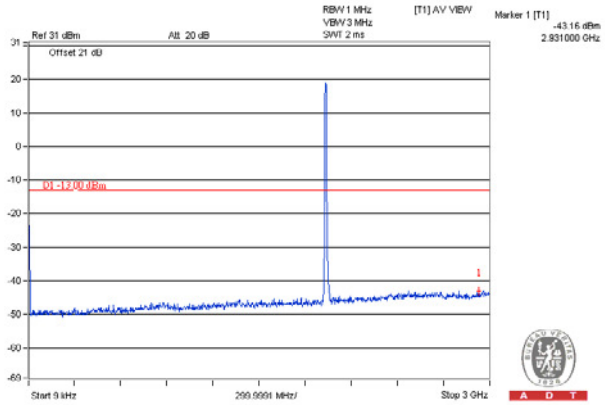
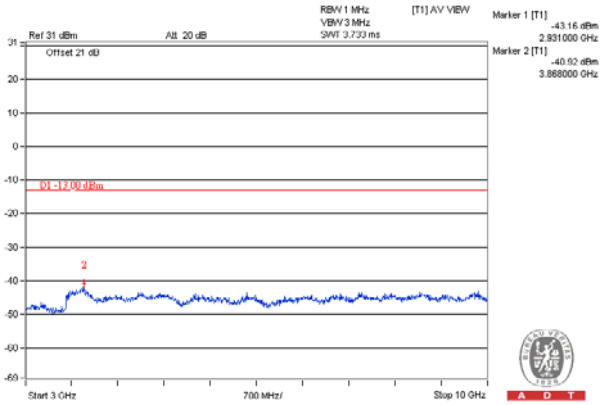
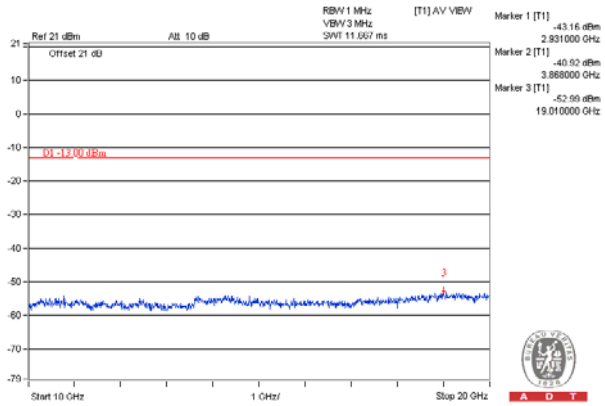
**WCDMA SC MODE**

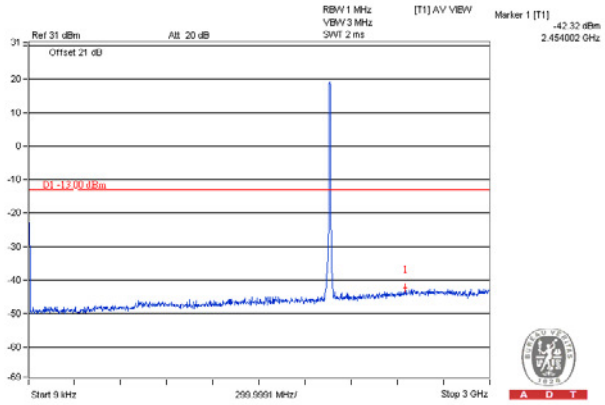
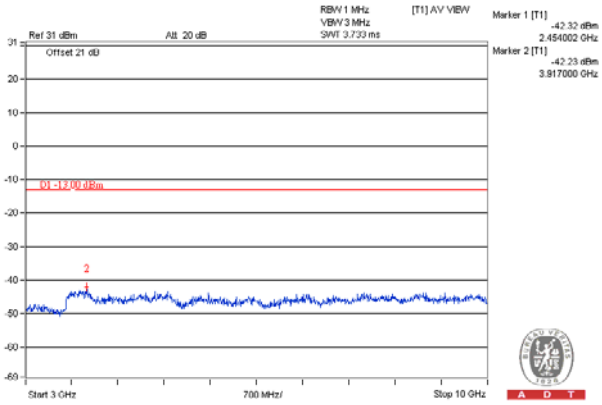
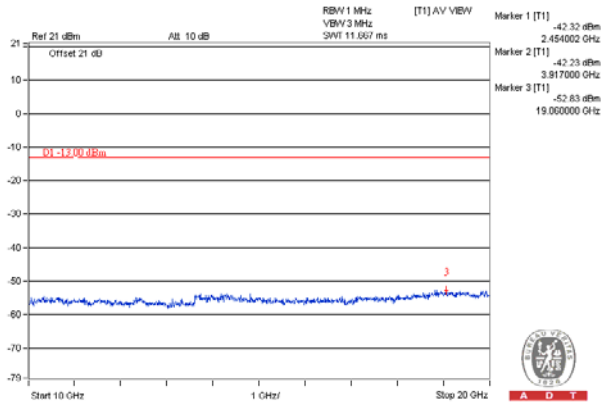
| Channel 9662 | |
|---|---|
| Frequency Range : 9kHz~1GHz | Frequency Range : 1GHz~3GHz |
|  |  |
| Frequency Range : 3GHz~10GHz | Frequency Range : 10GHz~20GHz |
|  |  |

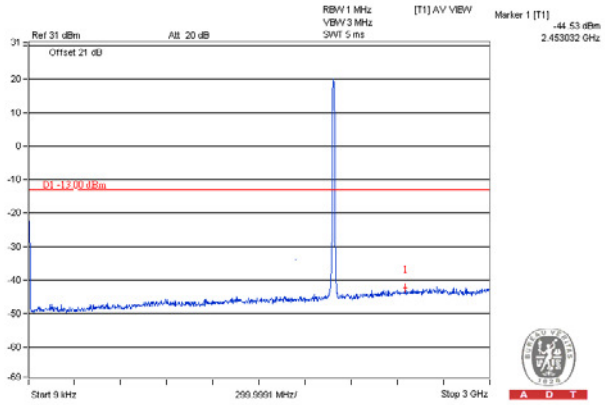
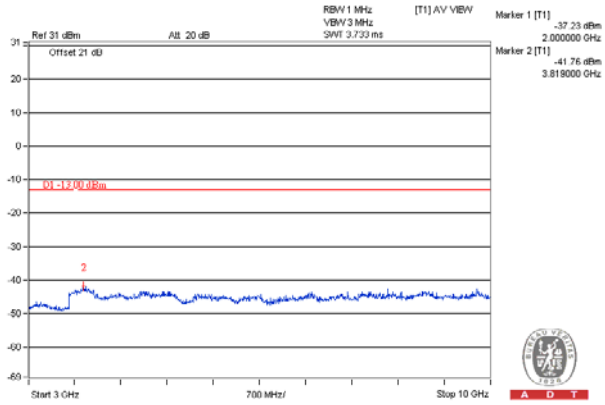
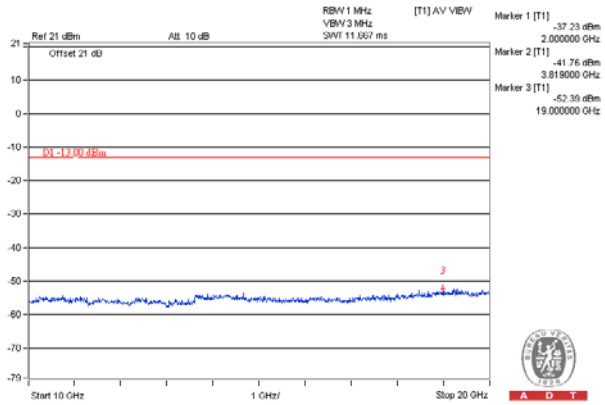
| Channel 9800 | |
|---|---|
| Frequency Range : 9kHz~1GHz | Frequency Range : 1GHz~3GHz |
|  |  |
| Frequency Range : 3GHz~10GHz | Frequency Range : 10GHz~20GHz |
|  |  |

| Channel 9938 | |
|---|---|
| Frequency Range : 9kHz~1GHz | Frequency Range : 1GHz~3GHz |
|  |  |
| Frequency Range : 3GHz~10GHz | Frequency Range : 10GHz~20GHz |
|  |  |

## WCDMA MC MODE

| Channel 9662+9687 | |
|---|---|
| Frequency Range : 9kHz~3GHz | Frequency Range : 3GHz~10GHz |
|  |  |
| Frequency Range : 10GHz~20GHz | |
|  | |

| Channel 9788+9813 | |
|---|---|
| Frequency Range : 9kHz~3GHz | Frequency Range : 3GHz~10GHz |
|  |  |
| Frequency Range : 10GHz~20GHz | |
|  | |

| Channel 9913+9938 | |
|---|---|
| Frequency Range : 9kHz~3GHz | Frequency Range : 3GHz~10GHz |
|  |  |
| Frequency Range : 10GHz~20GHz | |
|  | |

## 4.7 Radiated Emission Measurement

### 4.7.1 Limits of Radiated Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to –13dBm.

### 4.7.2 Test Procedure

a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.

b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value “ of step a. Record the power level of S.G

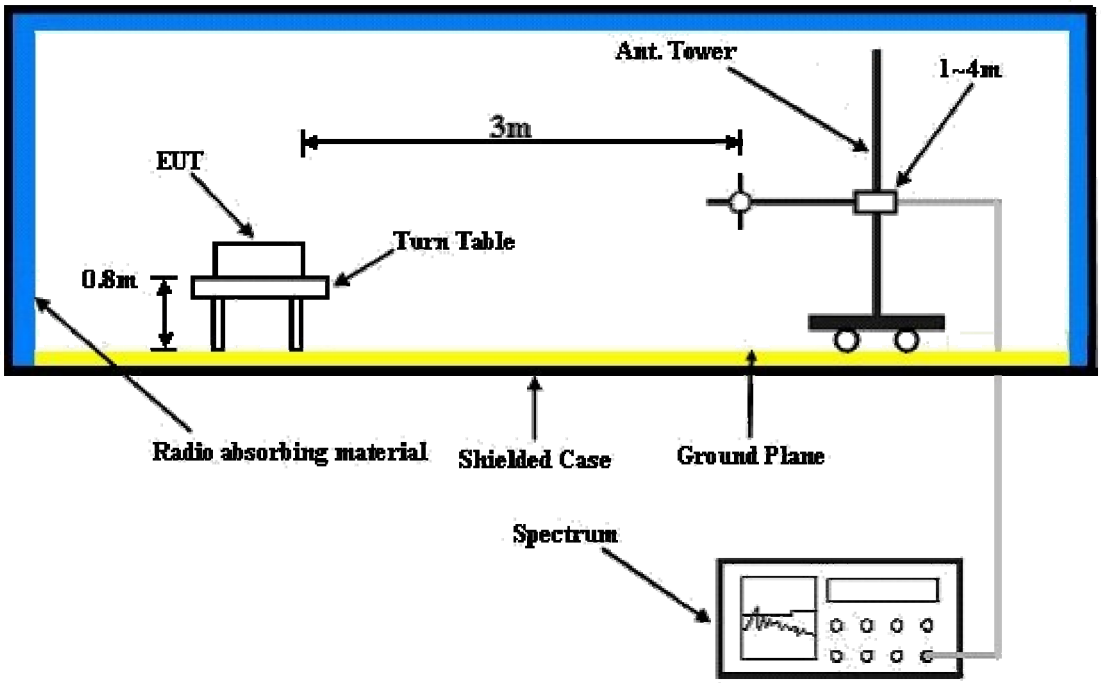
c. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.

**NOTE:** The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 100 kHz/ 300kHz (Below 1GHz) and 1MHz/3MHz (Above 1GHz).

### 4.7.3 Deviation from Test Standard

No deviation.

4.7.4 Test Setup




For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.7.5 Test Results (With Adapter)

**WCDMA SC MODE**

**Below 1GHz**

| Mode | TX channel 9662 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 64 | 29.89 | -54.63 | -6.42 | -61.05 | -13 | -48.05 |
| 2 | 232.39 | 37.28 | -58.10 | 3.92 | -54.19 | -13 | -41.19 |
| 3 | 298.74 | 36.87 | -58.87 | 3.72 | -55.15 | -13 | -42.15 |
| 4 | 697.02 | 34.73 | -61.53 | 1.63 | -59.90 | -13 | -46.90 |
| 5 | 921.62 | 40.92 | -57.57 | 0.43 | -57.14 | -13 | -44.14 |
| 6 | 959.99 | 37.30 | -60.53 | 0.39 | -60.14 | -13 | -47.14 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 165.99 | 33.99 | -55.89 | 0.17 | -55.72 | -13 | -42.72 |
| 2 | 298.69 | 34.01 | -61.73 | 3.72 | -58.01 | -13 | -45.01 |
| 3 | 313.92 | 32.36 | -64.00 | 3.68 | -60.32 | -13 | -47.32 |
| 4 | 698.38 | 34.44 | -61.85 | 1.62 | -60.23 | -13 | -47.23 |
| 5 | 798.19 | 33.64 | -65.00 | 1.53 | -63.47 | -13 | -50.47 |
| 6 | 921.62 | 44.20 | -54.29 | 0.43 | -53.86 | -13 | -40.86 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 9800 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 63.7 | 29.60 | -54.74 | -6.51 | -61.25 | -13 | -48.25 |
| 2 | 232.7 | 37.70 | -57.68 | 3.91 | -53.77 | -13 | -40.77 |
| 3 | 298.5 | 36.70 | -59.04 | 3.72 | -55.32 | -13 | -42.32 |
| 4 | 697.2 | 35.20 | -61.06 | 1.63 | -59.43 | -13 | -46.43 |
| 5 | 921.9 | 41.40 | -56.43 | 0.39 | -56.04 | -13 | -43.04 |
| 6 | 960.7 | 37.80 | -60.03 | 0.39 | -59.64 | -13 | -46.64 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 165.7 | 33.90 | -55.90 | 0.12 | -55.77 | -13 | -42.77 |
| 2 | 298.9 | 34.30 | -61.45 | 3.72 | -57.73 | -13 | -44.73 |
| 3 | 314 | 32.50 | -63.87 | 3.68 | -60.19 | -13 | -47.19 |
| 4 | 698.3 | 34.20 | -62.09 | 1.62 | -60.47 | -13 | -47.47 |
| 5 | 798.5 | 33.70 | -64.95 | 1.53 | -63.42 | -13 | -50.42 |
| 6 | 921.3 | 44.00 | -54.49 | 0.43 | -54.06 | -13 | -41.06 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 9938 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 63.7 | 29.90 | -54.44 | -6.51 | -60.95 | -13 | -47.95 |
| 2 | 232.7 | 36.90 | -58.48 | 3.91 | -54.57 | -13 | -41.57 |
| 3 | 298.5 | 37.20 | -58.54 | 3.72 | -54.81 | -13 | -41.81 |
| 4 | 696.9 | 34.40 | -61.86 | 1.63 | -60.23 | -13 | -47.23 |
| 5 | 921.3 | 40.60 | -57.89 | 0.43 | -57.46 | -13 | -44.46 |
| 6 | 960.2 | 37.30 | -60.53 | 0.39 | -60.14 | -13 | -47.14 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 166 | 33.90 | -55.98 | 0.17 | -55.81 | -13 | -42.81 |
| 2 | 298.7 | 33.80 | -61.94 | 3.72 | -58.22 | -13 | -45.22 |
| 3 | 314.1 | 32.50 | -63.87 | 3.68 | -60.19 | -13 | -47.19 |
| 4 | 698 | 34.20 | -62.08 | 1.62 | -60.46 | -13 | -47.46 |
| 5 | 798.6 | 33.90 | -64.76 | 1.53 | -63.22 | -13 | -50.22 |
| 6 | 921.5 | 43.80 | -54.69 | 0.43 | -54.26 | -13 | -41.26 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

## Above 1GHz

| Mode | TX channel 9662 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3864.8 | 46.60 | -57.94 | 7.61 | -50.32 | -13 | -37.32 |
| 2 | 5797.2 | 56.30 | -48.18 | 6.91 | -41.27 | -13 | -28.27 |
| 3 | 7729.6 | 54.60 | -48.02 | 4.35 | -43.67 | -13 | -30.67 |
| 4 | 9662 | 47.10 | -54.50 | 4.14 | -50.36 | -13 | -37.36 |
| 5 | 11594.4 | 47.60 | -53.85 | 3.90 | -49.94 | -13 | -36.94 |
| 6 | 13526.8 | 50.30 | -49.79 | 3.19 | -46.60 | -13 | -33.60 |
| 7 | 15459.2 | 50.50 | -46.85 | 3.70 | -43.15 | -13 | -30.15 |
| 8 | 17391.6 | 57.20 | -40.15 | 3.70 | -36.45 | -13 | -23.45 |
| 9 | 19324 | 61.30 | -37.71 | 3.77 | -33.94 | -13 | -20.94 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3864.8 | 51.9 | -52.64 | 7.61 | -45.02 | -13 | -32.02 |
| 2 | 5797.2 | 51.6 | -52.88 | 6.91 | -45.97 | -13 | -32.97 |
| 3 | 7729.6 | 47.8 | -54.82 | 4.35 | -50.47 | -13 | -37.47 |
| 4 | 9662 | 45.9 | -55.70 | 4.14 | -51.56 | -13 | -38.56 |
| 5 | 11594.4 | 47.1 | -54.35 | 3.90 | -50.44 | -13 | -37.44 |
| 6 | 13526.8 | 49.6 | -50.49 | 3.19 | -47.30 | -13 | -34.30 |
| 7 | 15459.2 | 50.8 | -46.55 | 3.70 | -42.85 | -13 | -29.85 |
| 8 | 17391.6 | 56.6 | -40.75 | 3.70 | -37.05 | -13 | -24.05 |
| **9** | **19324** | **61.4** | **-37.61** | **3.77** | **-33.84** | **-13** | **-20.84** |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 9800 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3920 | 46.50 | -58.24 | 7.57 | -50.66 | -13 | -37.66 |
| 2 | 5880 | 56.60 | -47.74 | 6.85 | -40.89 | -13 | -27.89 |
| 3 | 7840 | 54.70 | -47.92 | 4.25 | -43.67 | -13 | -30.67 |
| 4 | 9800 | 46.6 | -54.98 | 4.10 | -50.89 | -13 | -37.89 |
| 5 | 11760 | 48.2 | -53.24 | 4.11 | -49.14 | -13 | -36.14 |
| 6 | 13720 | 49.7 | -50.14 | 2.77 | -47.37 | -13 | -34.37 |
| 7 | 15680 | 51.1 | -46.25 | 3.70 | -42.55 | -13 | -29.55 |
| 8 | 17640 | 56.7 | -40.65 | 3.70 | -36.95 | -13 | -23.95 |
| 9 | 19600 | 60.8 | -39.62 | 3.82 | -35.80 | -13 | -22.80 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3920 | 51.5 | -53.24 | 7.57 | -45.66 | -13 | -32.66 |
| 2 | 5880 | 52.1 | -52.24 | 6.85 | -45.39 | -13 | -32.39 |
| 3 | 7840 | 47.9 | -54.72 | 4.25 | -50.47 | -13 | -37.47 |
| 4 | 9800 | 46.6 | -54.98 | 4.10 | -50.89 | -13 | -37.89 |
| 5 | 11760 | 47.9 | -53.54 | 4.11 | -49.44 | -13 | -36.44 |
| 6 | 13720 | 49.6 | -50.24 | 2.77 | -47.47 | -13 | -34.47 |
| 7 | 15680 | 50.4 | -46.95 | 3.70 | -43.25 | -13 | -30.25 |
| 8 | 17640 | 57 | -40.35 | 3.70 | -36.65 | -13 | -23.65 |
| 9 | 19600 | 61.5 | -38.92 | 3.82 | -35.10 | -13 | -22.10 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 9938 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3975.2 | 46.40 | -58.54 | 7.54 | -51.00 | -13 | -38.00 |
| 2 | 5962.8 | 56.30 | -47.90 | 6.80 | -41.11 | -13 | -28.11 |
| 3 | 7950.4 | 55.00 | -47.62 | 4.16 | -43.46 | -13 | -30.46 |
| 4 | 9938 | 47.40 | -54.17 | 4.06 | -50.11 | -13 | -37.11 |
| 5 | 11925.6 | 47.90 | -53.54 | 4.31 | -49.24 | -13 | -36.24 |
| 6 | 13913.2 | 50.00 | -49.58 | 2.35 | -47.24 | -13 | -34.24 |
| 7 | 15900.8 | 50.30 | -47.05 | 3.70 | -43.35 | -13 | -30.35 |
| 8 | 17888.4 | 57.70 | -39.65 | 3.70 | -35.95 | -13 | -22.95 |
| 9 | 19876 | 61.40 | -40.44 | 3.87 | -36.56 | -13 | -23.56 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3975.2 | 51.8 | -53.14 | 7.54 | -45.60 | -13 | -32.60 |
| 2 | 5962.8 | 52.4 | -51.80 | 6.80 | -45.01 | -13 | -32.01 |
| 3 | 7950.4 | 47.3 | -55.32 | 4.16 | -51.16 | -13 | -38.16 |
| 4 | 9938 | 46.1 | -55.47 | 4.06 | -51.41 | -13 | -38.41 |
| 5 | 11925.6 | 48 | -53.44 | 4.31 | -49.14 | -13 | -36.14 |
| 6 | 13913.2 | 49.8 | -49.78 | 2.35 | -47.44 | -13 | -34.44 |
| 7 | 15900.8 | 50.7 | -46.65 | 3.70 | -42.95 | -13 | -29.95 |
| 8 | 17888.4 | 57.5 | -39.85 | 3.70 | -36.15 | -13 | -23.15 |
| 9 | 19876 | 61.5 | -40.34 | 3.87 | -36.46 | -13 | -23.46 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

**WCDMA MC MODE**

**Below 1GHz**

| Mode | TX channel 9662+9687 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 64.04 | 27.00 | -57.54 | -6.41 | -63.95 | -13 | -50.95 |
| 2 | 231.67 | 23.15 | -72.53 | 3.75 | -68.78 | -13 | -55.78 |
| 3 | 297.82 | 28.31 | -67.38 | 3.72 | -63.66 | -13 | -50.66 |
| 4 | 698.54 | 31.16 | -65.18 | 1.64 | -63.54 | -13 | -50.54 |
| 5 | 922.14 | 33.69 | -66.85 | 0.25 | -66.60 | -13 | -53.60 |
| 6 | 961.16 | 32.00 | -73.44 | 0.53 | -72.92 | -13 | -59.92 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 165.77 | 31.13 | -46.22 | -9.89 | -56.11 | -13 | -43.11 |
| 2 | 298.42 | 31.47 | -59.08 | -1.21 | -60.29 | -13 | -47.29 |
| 3 | 313.5 | 30.35 | -64.58 | 3.90 | -60.68 | -13 | -47.68 |
| 4 | 698.52 | 32.93 | -64.93 | 3.49 | -61.43 | -13 | -48.43 |
| 5 | 799.05 | 32.52 | -68.00 | 0.26 | -67.75 | -13 | -54.75 |
| 6 | 920.65 | 41.64 | -63.76 | 0.53 | -63.24 | -13 | -50.24 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 9788+9813 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 63.82 | 27.11 | -57.30 | -6.47 | -63.77 | -13 | -50.77 |
| 2 | 231.62 | 24.16 | -71.52 | 3.75 | -67.77 | -13 | -54.77 |
| 3 | 298.41 | 27.43 | -68.29 | 3.72 | -64.57 | -13 | -51.57 |
| 4 | 698.69 | 30.90 | -65.44 | 1.64 | -63.80 | -13 | -50.80 |
| 5 | 923.1 | 34.22 | -66.40 | 0.24 | -66.15 | -13 | -53.15 |
| 6 | 961.61 | 31.61 | -73.88 | 0.53 | -73.36 | -13 | -60.36 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 165.92 | 31.20 | -58.66 | 0.16 | -58.50 | -13 | -45.50 |
| 2 | 298.27 | 32.83 | -62.88 | 3.72 | -59.16 | -13 | -46.16 |
| 3 | 313.82 | 30.24 | -67.64 | 3.78 | -63.86 | -13 | -50.86 |
| 4 | 698.14 | 33.38 | -62.96 | 1.65 | -61.31 | -13 | -48.31 |
| 5 | 797.67 | 32.34 | -66.57 | 1.58 | -65.00 | -13 | -52.00 |
| 6 | 921.03 | 43.00 | -58.04 | 0.50 | -57.54 | -13 | -44.54 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 9913+9938 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 64.58 | 27.85 | -57.02 | -6.25 | -63.27 | -13 | -50.27 |
| 2 | 231.2 | 24.43 | -71.27 | 3.75 | -67.52 | -13 | -54.52 |
| 3 | 297.44 | 28.31 | -67.37 | 3.72 | -63.65 | -13 | -50.65 |
| 4 | 697.66 | 31.67 | -64.67 | 1.66 | -63.01 | -13 | -50.01 |
| 5 | 923.12 | 34.63 | -65.99 | 0.24 | -65.75 | -13 | -52.75 |
| 6 | 960.81 | 32.67 | -72.73 | 0.53 | -72.21 | -13 | -59.21 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 166.16 | 32.47 | -57.46 | 0.19 | -57.26 | -13 | -44.26 |
| 2 | 297.86 | 32.87 | -62.82 | 3.72 | -59.11 | -13 | -46.11 |
| 3 | 315 | 31.62 | -66.26 | 3.78 | -62.48 | -13 | -49.48 |
| 4 | 697.61 | 33.82 | -62.52 | 1.66 | -60.86 | -13 | -47.86 |
| 5 | 799.43 | 33.10 | -65.67 | 1.56 | -64.11 | -13 | -51.11 |
| 6 | 921.72 | 43.08 | -58.04 | 0.50 | -57.53 | -13 | -44.53 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

## Above 1GHz

| Mode | TX channel 9662+9687 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3865.8 | 42.36 | -62.80 | 7.58 | -55.22 | -13 | -42.22 |
| 2 | 5798.7 | 51.50 | -52.97 | 6.91 | -46.06 | -13 | -33.06 |
| 3 | 7731.6 | 53.10 | -49.52 | 4.07 | -45.45 | -13 | -32.45 |
| 4 | 9664.5 | 53.29 | -48.31 | 4.14 | -44.17 | -13 | -31.17 |
| 5 | 11597.4 | 47.46 | -53.99 | 3.92 | -50.06 | -13 | -37.06 |
| 6 | 13530.3 | 49.93 | -50.14 | 3.15 | -46.99 | -13 | -33.99 |
| 7 | 15463.2 | 50.44 | -46.91 | 3.70 | -43.21 | -13 | -30.21 |
| 8 | 17396.1 | 58.02 | -39.33 | 3.70 | -35.63 | -13 | -22.63 |
| 9 | 19329 | 61.18 | -37.96 | 3.77 | -34.19 | -13 | -21.19 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3865.8 | 51.9 | -53.26 | 7.58 | -45.68 | -13 | -32.68 |
| 2 | 5798.7 | 51.6 | -52.87 | 6.91 | -45.96 | -13 | -32.96 |
| 3 | 7731.6 | 47.8 | -54.82 | 4.07 | -50.75 | -13 | -37.75 |
| 4 | 9664.5 | 45.9 | -55.70 | 4.14 | -51.56 | -13 | -38.56 |
| 5 | 11597.4 | 47.1 | -54.35 | 3.92 | -50.42 | -13 | -37.42 |
| 6 | 13530.3 | 49.6 | -50.47 | 3.15 | -47.32 | -13 | -34.32 |
| 7 | 15463.2 | 50.8 | -46.55 | 3.70 | -42.85 | -13 | -29.85 |
| 8 | 17396.1 | 56.6 | -40.75 | 3.70 | -37.05 | -13 | -24.05 |
| **9** | 19329 | 61.4 | -37.74 | 3.77 | -33.97 | -13 | -20.97 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 9788+9813 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3920.2 | 42.26 | -62.85 | 7.56 | -55.29 | -13 | -42.29 |
| 2 | 5880.3 | 51.45 | -52.69 | 6.97 | -45.72 | -13 | -32.72 |
| 3 | 7840.4 | 52.00 | -50.62 | 4.09 | -46.53 | -13 | -33.53 |
| 4 | 9800.5 | 53.79 | -47.55 | 4.22 | -43.32 | -13 | -30.32 |
| 5 | 11760.6 | 45.99 | -55.45 | 4.11 | -51.35 | -13 | -38.35 |
| 6 | 13720.7 | 50.18 | -49.66 | 2.77 | -46.89 | -13 | -33.89 |
| 7 | 15680.8 | 50.16 | -47.19 | 3.70 | -43.49 | -13 | -30.49 |
| 8 | 17640.9 | 57.61 | -39.74 | 3.70 | -36.04 | -13 | -23.04 |
| 9 | 19601 | 61 | -39.43 | 3.82 | -35.61 | -13 | -22.61 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3920.2 | 51.5 | -53.61 | 7.56 | -46.05 | -13 | -33.05 |
| 2 | 5880.3 | 52.1 | -52.04 | 6.97 | -45.07 | -13 | -32.07 |
| 3 | 7840.4 | 47.9 | -54.72 | 4.09 | -50.63 | -13 | -37.63 |
| 4 | 9800.5 | 46.6 | -54.74 | 4.22 | -50.51 | -13 | -37.51 |
| 5 | 11760.6 | 47.9 | -53.54 | 4.11 | -49.44 | -13 | -36.44 |
| 6 | 13720.7 | 49.6 | -50.24 | 2.77 | -47.47 | -13 | -34.47 |
| 7 | 15680.8 | 50.4 | -46.95 | 3.70 | -43.25 | -13 | -30.25 |
| 8 | 17640.9 | 57 | -40.35 | 3.70 | -36.65 | -13 | -23.65 |
| 9 | 19601 | 61.5 | -38.93 | 3.82 | -35.11 | -13 | -22.11 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 9913+9938 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3970.2 | 41.15 | -63.91 | 7.54 | -56.38 | -13 | -43.38 |
| 2 | 5955.3 | 50.41 | -53.73 | 6.85 | -46.88 | -13 | -33.88 |
| 3 | 7940.4 | 53.78 | -48.84 | 4.11 | -44.73 | -13 | -31.73 |
| 4 | 9925.5 | 53.36 | -48.12 | 4.11 | -44.01 | -13 | -31.01 |
| 5 | 11910.6 | 46.09 | -55.32 | 4.41 | -50.91 | -13 | -37.91 |
| 6 | 13895.7 | 49.53 | -50.22 | 1.99 | -48.23 | -13 | -35.23 |
| 7 | 15880.8 | 50.77 | -46.58 | 3.70 | -42.88 | -13 | -29.88 |
| 8 | 17865.9 | 57.02 | -40.33 | 3.70 | -36.63 | -13 | -23.63 |
| 9 | 19851 | 60.25 | -41.46 | 3.87 | -37.59 | -13 | -24.59 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3970.2 | 51.8 | -53.26 | 7.54 | -45.73 | -13 | -32.73 |
| 2 | 5955.3 | 52.4 | -51.74 | 6.85 | -44.89 | -13 | -31.89 |
| 3 | 7940.4 | 47.3 | -55.32 | 4.11 | -51.21 | -13 | -38.21 |
| 4 | 9925.5 | 46.1 | -55.38 | 4.11 | -51.27 | -13 | -38.27 |
| 5 | 11910.6 | 48 | -53.41 | 4.41 | -49.00 | -13 | -36.00 |
| 6 | 13895.7 | 49.8 | -49.95 | 1.99 | -47.96 | -13 | -34.96 |
| 7 | 15880.8 | 50.7 | -46.65 | 3.70 | -42.95 | -13 | -29.95 |
| 8 | 17865.9 | 57.5 | -39.85 | 3.70 | -36.15 | -13 | -23.15 |
| 9 | 19851 | 61.5 | -40.21 | 3.87 | -36.34 | -13 | -23.34 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

4.7.6 Test Results (With POE)

**WCDMA SC MODE**

**Below 1GHz**

| Mode | TX channel 9662 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 66.47 | 30.51 | -55.49 | -5.70 | -61.19 | -13 | -48.19 |
| 2 | 232 | 35.23 | -60.15 | 3.92 | -56.23 | -13 | -43.23 |
| 3 | 299.32 | 37.61 | -58.15 | 3.72 | -54.44 | -13 | -41.44 |
| 4 | 697.89 | 35.81 | -60.47 | 1.62 | -58.85 | -13 | -45.85 |
| 5 | 921.6 | 44.48 | -54.01 | 0.43 | -53.58 | -13 | -40.58 |
| 6 | 959.99 | 38.49 | -59.34 | 0.39 | -58.95 | -13 | -45.95 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 31.89 | 31.14 | -40.80 | -14.44 | -55.24 | -13 | -42.24 |
| 2 | 68.8 | 31.15 | -56.25 | -5.03 | -61.27 | -13 | -48.27 |
| 3 | 165.99 | 35.22 | -54.66 | 0.17 | -54.49 | -13 | -41.49 |
| 4 | 697.02 | 35.70 | -60.56 | 1.63 | -58.93 | -13 | -45.93 |
| 5 | 921.62 | 41.71 | -56.78 | 0.43 | -56.35 | -13 | -43.35 |
| 6 | 959.99 | 38.33 | -59.50 | 0.39 | -59.11 | -13 | -46.11 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 9800 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 66.5 | 30.40 | -55.62 | -5.69 | -61.31 | -13 | -48.31 |
| 2 | 232.4 | 35.40 | -59.98 | 3.92 | -56.07 | -13 | -43.07 |
| 3 | 299 | 37.60 | -56.37 | 4.10 | -52.27 | -13 | -39.27 |
| 4 | 697.8 | 35.50 | -60.76 | 1.63 | -59.13 | -13 | -46.13 |
| 5 | 921.4 | 44.30 | -53.53 | 0.39 | -53.14 | -13 | -40.14 |
| 6 | 959.6 | 38.20 | -59.63 | 0.39 | -59.24 | -13 | -46.24 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 32.2 | 31.50 | -41.39 | -13.80 | -55.19 | -13 | -42.19 |
| 2 | 68.3 | 30.80 | -46.92 | -9.71 | -56.63 | -13 | -43.63 |
| 3 | 166.5 | 35.60 | -54.42 | 0.24 | -54.18 | -13 | -41.18 |
| 4 | 697.3 | 36.10 | -60.17 | 1.62 | -58.54 | -13 | -45.54 |
| 5 | 921.9 | 42.10 | -56.39 | 0.43 | -55.96 | -13 | -42.96 |
| 6 | 959.9 | 38.10 | -60.39 | 0.43 | -59.96 | -13 | -46.96 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 9938 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 66.3 | 30.40 | -55.50 | -5.75 | -61.25 | -13 | -48.25 |
| 2 | 232 | 35.40 | -59.98 | 3.92 | -56.06 | -13 | -43.06 |
| 3 | 298.6 | 37.10 | -56.99 | 4.08 | -52.91 | -13 | -39.91 |
| 4 | 698.2 | 35.90 | -60.36 | 1.63 | -58.73 | -13 | -45.73 |
| 5 | 921.2 | 44.20 | -53.63 | 0.39 | -53.24 | -13 | -40.24 |
| 6 | 960 | 38.40 | -59.43 | 0.39 | -59.04 | -13 | -46.04 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 31.9 | 31.10 | -41.71 | -13.86 | -55.56 | -13 | -42.56 |
| 2 | 68.8 | 31.40 | -51.23 | -7.33 | -58.56 | -13 | -45.56 |
| 3 | 165.4 | 34.80 | -54.91 | 0.08 | -54.83 | -13 | -41.83 |
| 4 | 696.7 | 35.40 | -60.86 | 1.63 | -59.23 | -13 | -46.23 |
| 5 | 921.6 | 41.90 | -56.59 | 0.43 | -56.16 | -13 | -43.16 |
| 6 | 960.2 | 38.70 | -59.13 | 0.39 | -58.74 | -13 | -45.74 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

## Above 1GHz

| Mode | TX channel 9662 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3864.8 | 46.50 | -58.04 | 7.61 | -50.42 | -13 | -37.42 |
| 2 | 5797.2 | 55.90 | -48.58 | 6.91 | -41.67 | -13 | -28.67 |
| 3 | 7729.6 | 55.00 | -47.62 | 4.35 | -43.27 | -13 | -30.27 |
| 4 | 9662 | 46.70 | -54.90 | 4.14 | -50.76 | -13 | -37.76 |
| 5 | 11594.4 | 47.50 | -53.95 | 3.90 | -50.04 | -13 | -37.04 |
| 6 | 13526.8 | 49.50 | -50.59 | 3.19 | -47.40 | -13 | -34.40 |
| 7 | 15459.2 | 50.30 | -47.05 | 3.70 | -43.35 | -13 | -30.35 |
| 8 | 17391.6 | 56.80 | -40.55 | 3.70 | -36.85 | -13 | -23.85 |
| 9 | 19324 | 61.10 | -37.91 | 3.77 | -34.14 | -13 | -21.14 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3864.8 | 52 | -52.54 | 7.61 | -44.92 | -13 | -31.92 |
| 2 | 5797.2 | 52.1 | -52.38 | 6.91 | -45.47 | -13 | -32.47 |
| 3 | 7729.6 | 47.7 | -54.92 | 4.35 | -50.57 | -13 | -37.57 |
| 4 | 9662 | 46.3 | -55.30 | 4.14 | -51.16 | -13 | -38.16 |
| 5 | 11594.4 | 47.6 | -53.85 | 3.90 | -49.94 | -13 | -36.94 |
| 6 | 13526.8 | 49.9 | -50.19 | 3.19 | -47.00 | -13 | -34.00 |
| 7 | 15459.2 | 50.9 | -46.45 | 3.70 | -42.75 | -13 | -29.75 |
| 8 | 17391.6 | 57 | -40.35 | 3.70 | -36.65 | -13 | -23.65 |
| **9** | **19324** | **61.4** | **-37.61** | **3.77** | **-33.84** | **-13** | **-20.84** |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 9800 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3920 | 46.90 | -57.84 | 7.57 | -50.26 | -13 | -37.26 |
| 2 | 5880 | 55.60 | -48.74 | 6.85 | -41.89 | -13 | -28.89 |
| 3 | 7840 | 54.50 | -48.12 | 4.25 | -43.87 | -13 | -30.87 |
| 4 | 9800 | 46.4 | -55.18 | 4.10 | -51.09 | -13 | -38.09 |
| 5 | 11760 | 47.5 | -53.94 | 4.11 | -49.84 | -13 | -36.84 |
| 6 | 13720 | 49.6 | -50.24 | 2.77 | -47.47 | -13 | -34.47 |
| 7 | 15680 | 50.1 | -47.25 | 3.70 | -43.55 | -13 | -30.55 |
| 8 | 17640 | 56.5 | -40.85 | 3.70 | -37.15 | -13 | -24.15 |
| 9 | 19600 | 61.5 | -38.92 | 3.82 | -35.10 | -13 | -22.10 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3920 | 52.4 | -52.34 | 7.57 | -44.76 | -13 | -31.76 |
| 2 | 5880 | 52.3 | -52.04 | 6.85 | -45.19 | -13 | -32.19 |
| 3 | 7840 | 48 | -54.62 | 4.25 | -50.37 | -13 | -37.37 |
| 4 | 9800 | 46 | -55.58 | 4.10 | -51.49 | -13 | -38.49 |
| 5 | 11760 | 47.8 | -53.64 | 4.11 | -49.54 | -13 | -36.54 |
| 6 | 13720 | 50.1 | -49.74 | 2.77 | -46.97 | -13 | -33.97 |
| 7 | 15680 | 50.5 | -46.85 | 3.70 | -43.15 | -13 | -30.15 |
| 8 | 17640 | 56.8 | -40.55 | 3.70 | -36.85 | -13 | -23.85 |
| 9 | 19600 | 61.4 | -39.02 | 3.82 | -35.20 | -13 | -22.20 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 9938 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3975.2 | 46.40 | -58.54 | 7.54 | -51.00 | -13 | -38.00 |
| 2 | 5962.8 | 56.30 | -47.90 | 6.80 | -41.11 | -13 | -28.11 |
| 3 | 7950.4 | 54.90 | -47.72 | 4.16 | -43.56 | -13 | -30.56 |
| 4 | 9938 | 46.90 | -54.67 | 4.06 | -50.61 | -13 | -37.61 |
| 5 | 11925.6 | 47.70 | -53.74 | 4.31 | -49.44 | -13 | -36.44 |
| 6 | 13913.2 | 49.90 | -49.68 | 2.35 | -47.34 | -13 | -34.34 |
| 7 | 15900.8 | 50.70 | -46.65 | 3.70 | -42.95 | -13 | -29.95 |
| 8 | 17888.4 | 57.20 | -40.15 | 3.70 | -36.45 | -13 | -23.45 |
| 9 | 19876 | 61.20 | -40.64 | 3.87 | -36.76 | -13 | -23.76 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3975.2 | 52.2 | -52.74 | 7.54 | -45.20 | -13 | -32.20 |
| 2 | 5962.8 | 52.4 | -51.80 | 6.80 | -45.01 | -13 | -32.01 |
| 3 | 7950.4 | 48.1 | -54.52 | 4.16 | -50.36 | -13 | -37.36 |
| 4 | 9938 | 45.8 | -55.77 | 4.06 | -51.71 | -13 | -38.71 |
| 5 | 11925.6 | 47.5 | -53.94 | 4.31 | -49.64 | -13 | -36.64 |
| 6 | 13913.2 | 50 | -49.58 | 2.35 | -47.24 | -13 | -34.24 |
| 7 | 15900.8 | 50.7 | -46.65 | 3.70 | -42.95 | -13 | -29.95 |
| 8 | 17888.4 | 56.6 | -40.75 | 3.70 | -37.05 | -13 | -24.05 |
| 9 | 19876 | 61.1 | -40.74 | 3.87 | -36.86 | -13 | -23.86 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

**WCDMA MC MODE**

**Below 1GHz**

| Mode | TX channel 9662+9687 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 51.702 | 27.68 | -49.47 | -9.98 | -59.45 | -13 | -46.45 |
| 2 | 124.19 | 19.39 | -71.12 | -1.21 | -72.33 | -13 | -59.33 |
| 3 | 251.37 | 25.04 | -69.87 | 3.91 | -65.97 | -13 | -52.97 |
| 4 | 369.34 | 25.05 | -72.81 | 3.49 | -69.31 | -13 | -56.31 |
| 5 | 921.624 | 31.34 | -69.16 | 0.26 | -68.90 | -13 | -55.90 |
| 6 | 961.114 | 28.19 | -77.25 | 0.53 | -76.72 | -13 | -63.72 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 31.57 | 29.65 | -42.18 | -14.52 | -56.70 | -13 | -43.70 |
| 2 | 68.29 | 30.41 | -56.68 | -5.17 | -61.86 | -13 | -48.86 |
| 3 | 166.54 | 33.23 | -56.80 | 0.25 | -56.56 | -13 | -43.56 |
| 4 | 697.18 | 34.21 | -62.13 | 1.66 | -60.46 | -13 | -47.46 |
| 5 | 920.77 | 40.85 | -59.58 | 0.27 | -59.31 | -13 | -46.31 |
| 6 | 961.8 | 36.93 | -68.58 | 0.53 | -68.06 | -13 | -55.06 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 9788+9813 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 52.032 | 26.91 | -50.43 | -9.89 | -60.32 | -13 | -47.32 |
| 2 | 125.12 | 18.35 | -72.36 | -1.22 | -73.57 | -13 | -60.57 |
| 3 | 250.31 | 25.01 | -69.94 | 3.90 | -66.05 | -13 | -53.05 |
| 4 | 369.66 | 25.16 | -72.70 | 3.49 | -69.20 | -13 | -56.20 |
| 5 | 922.584 | 31.42 | -69.16 | 0.25 | -68.91 | -13 | -55.91 |
| 6 | 960.094 | 27.90 | -77.43 | 0.53 | -76.90 | -13 | -63.90 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 33.16 | 28.84 | -43.56 | -14.13 | -57.69 | -13 | -44.69 |
| 2 | 67.85 | 30.73 | -56.10 | -5.30 | -61.40 | -13 | -48.40 |
| 3 | 165.49 | 32.72 | -57.02 | 0.09 | -56.92 | -13 | -43.92 |
| 4 | 696.2 | 33.53 | -62.81 | 1.68 | -61.13 | -13 | -48.13 |
| 5 | 922.03 | 40.50 | -60.03 | 0.26 | -59.78 | -13 | -46.78 |
| 6 | 961.49 | 36.73 | -68.75 | 0.53 | -68.22 | -13 | -55.22 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 9913+9938 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 51.242 | 28.07 | -48.80 | -10.12 | -58.92 | -13 | -45.92 |
| 2 | 124.61 | 19.73 | -70.87 | -1.21 | -72.08 | -13 | -59.08 |
| 3 | 250.83 | 26.32 | -68.61 | 3.90 | -64.71 | -13 | -51.71 |
| 4 | 369.94 | 26.35 | -71.51 | 3.49 | -68.02 | -13 | -55.02 |
| 5 | 921.714 | 31.56 | -68.94 | 0.26 | -68.69 | -13 | -55.69 |
| 6 | 960.044 | 28.94 | -76.38 | 0.53 | -75.85 | -13 | -62.85 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 32.16 | 30.30 | -41.74 | -14.37 | -56.11 | -13 | -43.11 |
| 2 | 68.34 | 31.23 | -55.89 | -5.16 | -61.05 | -13 | -48.05 |
| 3 | 165.59 | 33.55 | -56.22 | 0.11 | -56.11 | -13 | -43.11 |
| 4 | 695.38 | 34.81 | -61.52 | 1.69 | -59.83 | -13 | -46.83 |
| 5 | 920.92 | 41.08 | -59.36 | 0.27 | -59.09 | -13 | -46.09 |
| 6 | 961 | 37.63 | -67.79 | 0.53 | -67.27 | -13 | -54.27 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

## Above 1GHz

| Mode | TX channel 9662+9687 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3865.8 | 42.65 | -62.51 | 7.58 | -54.93 | -13 | -41.93 |
| 2 | 5798.7 | 51.35 | -53.12 | 6.91 | -46.21 | -13 | -33.21 |
| 3 | 7731.6 | 52.40 | -50.22 | 4.07 | -46.15 | -13 | -33.15 |
| 4 | 9664.5 | 52.74 | -48.86 | 4.14 | -44.72 | -13 | -31.72 |
| 5 | 11597.4 | 47.05 | -54.40 | 3.92 | -50.47 | -13 | -37.47 |
| 6 | 13530.3 | 49.79 | -50.28 | 3.15 | -47.13 | -13 | -34.13 |
| 7 | 15463.2 | 50.95 | -46.40 | 3.70 | -42.70 | -13 | -29.70 |
| 8 | 17396.1 | 58.43 | -38.92 | 3.70 | -35.22 | -13 | -22.22 |
| 9 | 19329 | 62.03 | -37.11 | 3.77 | -33.34 | -13 | -20.34 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3865.8 | 40.77 | -64.39 | 7.58 | -56.81 | -13 | -43.81 |
| 2 | 5798.7 | 47.71 | -56.76 | 6.91 | -49.85 | -13 | -36.85 |
| 3 | 7731.6 | 48.93 | -53.69 | 4.07 | -49.62 | -13 | -36.62 |
| 4 | 9664.5 | 52.92 | -48.68 | 4.14 | -44.54 | -13 | -31.54 |
| 5 | 11597.4 | 48.47 | -52.98 | 3.92 | -49.05 | -13 | -36.05 |
| 6 | 13530.3 | 48.08 | -51.99 | 3.15 | -48.84 | -13 | -35.84 |
| 7 | 15463.2 | 50.09 | -47.26 | 3.70 | -43.56 | -13 | -30.56 |
| 8 | 17396.1 | 57.58 | -39.77 | 3.70 | -36.07 | -13 | -23.07 |
| 9 | 19329 | 61.16 | -37.98 | 3.77 | -34.21 | -13 | -21.21 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 9788+9813 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3920.2 | 42.25 | -62.86 | 7.56 | -55.30 | -13 | -42.30 |
| 2 | 5880.3 | 50.92 | -53.22 | 6.97 | -46.25 | -13 | -33.25 |
| 3 | 7840.4 | 53.08 | -49.54 | 4.09 | -45.45 | -13 | -32.45 |
| 4 | 9800.5 | 52.23 | -49.11 | 4.22 | -44.88 | -13 | -31.88 |
| 5 | 11760.6 | 47.35 | -54.09 | 4.11 | -49.99 | -13 | -36.99 |
| 6 | 13720.7 | 49.98 | -49.86 | 2.77 | -47.09 | -13 | -34.09 |
| 7 | 15680.8 | 51.44 | -45.91 | 3.70 | -42.21 | -13 | -29.21 |
| 8 | 17640.9 | 57.66 | -39.69 | 3.70 | -35.99 | -13 | -22.99 |
| 9 | 19601 | 61.61 | -38.82 | 3.82 | -35.00 | -13 | -22.00 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3920.2 | 40.76 | -64.35 | 7.56 | -56.79 | -13 | -43.79 |
| 2 | 5880.3 | 46.7 | -57.44 | 6.97 | -50.47 | -13 | -37.47 |
| 3 | 7840.4 | 50.52 | -52.10 | 4.09 | -48.01 | -13 | -35.01 |
| 4 | 9800.5 | 53.86 | -47.48 | 4.22 | -43.25 | -13 | -30.25 |
| 5 | 11760.6 | 47.46 | -53.98 | 4.11 | -49.88 | -13 | -36.88 |
| 6 | 13720.7 | 48.12 | -51.72 | 2.77 | -48.95 | -13 | -35.95 |
| 7 | 15680.8 | 48.79 | -48.56 | 3.70 | -44.86 | -13 | -31.86 |
| 8 | 17640.9 | 57.06 | -40.29 | 3.70 | -36.59 | -13 | -23.59 |
| 9 | 19601 | 60.75 | -39.68 | 3.82 | -35.86 | -13 | -22.86 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 9913+9938 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3970.2 | 42.73 | -62.33 | 7.54 | -54.80 | -13 | -41.80 |
| 2 | 5955.3 | 51.73 | -52.41 | 6.85 | -45.56 | -13 | -32.56 |
| 3 | 7940.4 | 51.41 | -51.21 | 4.11 | -47.10 | -13 | -34.10 |
| 4 | 9925.5 | 52.06 | -49.42 | 4.11 | -45.31 | -13 | -32.31 |
| 5 | 11910.6 | 47.80 | -53.61 | 4.41 | -49.20 | -13 | -36.20 |
| 6 | 13895.7 | 48.85 | -50.90 | 1.99 | -48.91 | -13 | -35.91 |
| 7 | 15880.8 | 50.60 | -46.75 | 3.70 | -43.05 | -13 | -30.05 |
| 8 | 17865.9 | 59.30 | -38.05 | 3.70 | -34.35 | -13 | -21.35 |
| 9 | 19851 | 61.70 | -40.01 | 3.87 | -36.14 | -13 | -23.14 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 3970.2 | 40.31 | -64.75 | 7.54 | -57.22 | -13 | -44.22 |
| 2 | 5955.3 | 46.76 | -57.38 | 6.85 | -50.53 | -13 | -37.53 |
| 3 | 7940.4 | 49.71 | -52.91 | 4.11 | -48.80 | -13 | -35.80 |
| 4 | 9925.5 | 53.53 | -47.95 | 4.11 | -43.84 | -13 | -30.84 |
| 5 | 11910.6 | 47.69 | -53.72 | 4.41 | -49.31 | -13 | -36.31 |
| 6 | 13895.7 | 48.75 | -51.00 | 1.99 | -49.01 | -13 | -36.01 |
| 7 | 15880.8 | 49.5 | -47.85 | 3.70 | -44.15 | -13 | -31.15 |
| 8 | 17865.9 | 57.02 | -40.33 | 3.70 | -36.63 | -13 | -23.63 |
| 9 | 19851 | 61.53 | -40.18 | 3.87 | -36.31 | -13 | -23.31 |

Remarks:

1. EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

## 5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

## Appendix – Information on the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following: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The address and road map of all our labs can be found in our web site also.

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