D-PL-12111-01-01

CNAS L0447

Registration No.910917

# TEST REPORT

Report No.: SRTC2014-H024-E0026

Product Name: GSM/GPRS/EDGE/UMTS

Digital Mobile Phone with Bluetooth and WiFi

Product Model: 6037I

Applicant: TCT Mobile Limited

Manufacturer: TCT Mobile Limited

Specification: FCC Part15B (Certification)

(October 1, 2009 edition)

FCC ID: RAD458

The State Radio_monitoring_center Testing Center (SRTC)

No.80 Beilishi Road Xicheng District Beijing, China

Tel: 86-10-68009202 Fax: 86-10-68009205

# CONTENTS

# 1. General information

## 1.1 Notes of the test report

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The test results relate only to individual items of the samples which have been tested.

## 1.2 Information about the testing laboratory

Company: The State Radio_monitoring_center Testing Center (SRTC)
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## 1.3 Applicant's details

Company: TCT Mobile Limited
Address: 5F, C building, No. 232, Liang Jing Road ZhangJiang High-Tech Park, Pudong Area
City: Shanghai
Country or Region: P.R.China
Grantee Code: RAD
Contacted person: Gong Zhizhou
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Email: zhizhou.gong@tcl.com

## 1.4 Manufacturer's details

Company: TCT Mobile Limited
Address: 5F, C building, No. 232, Liang Jing Road ZhangJiang High-Tech Park, Pudong Area
City: Shanghai
Country or Region: P.R.China
Contacted person: Gong Zhizhou
Tel: +86-21-61460890
Fax: +86-21-61460602
Email: zhizhou.gong@tcl.com

## 1.5 Application details

Date of reception of test sample: 25th March 2014
Date of test: 25th March 2014 to 25th April 2014

## 1.6 Reference specification

FCC Part 15B October 1, 2009 (Certification)

## 1.7 Information of EUT

### 1.7.1 General information

| | |
|---|---|
| Name of EUT | GSM/GPRS/EDGE/UMTS Digital Mobile Phone with Bluetooth and WiFi |
| FCC ID | RAD458 |
| Frequency Range | GSM850/WCDMA Band V:<br>Tx:824~849MHz Rx:869~894MHz<br>PCS1900/WCDMA Band II:<br>Tx:1850~1910MHz Rx:1930~1990MHz |
| Rated Output Power | GSM850:33.0dBm<br>PCS1900:33.0dBm<br>WCDMA:24.0dBm |
| E.R.P. & E.I.R.P. | E.R.P.:32.9dBm<br>E.I.R.P.:30.2dBm |
| Modulation Type | GSM/GPRS:GMSK<br>EDGE:GMSK/8PSK<br>WCDMA:QPSK/16QAM (RX only) |
| Emission Designator | GSM/GPRS:300KGXW<br>EDGE:300KG7W<br>WCDMA:4M50F9W |
| Duplex Mode | FDD |
| Equipment Class | Class B |
| Duplex Spacing | GSM850/WCDMA Band V:45MHz<br>PCS1900/WCDMA Band II:80MHz |
| Antenna Type | Fixed Internal |
| Power Supply | Battery or Charger |
| Rated Power Supply Voltage | 3.8V |
| Extreme Temperature | Lowest: -30°C<br>Highest: +50°C |
| Extreme Voltage | Minimum: 3.5V<br>Maximum: 4.35V |
| HW Version | PIO |
| SW Version | v3EHG-US |

### 1.7.2 EUT details

| Product Name | Product Model | IMEI |
|---|---|---|
| GSM/GPRS/EDGE/UMTS Digital Mobile Phone with Bluetooth and WiFi | 6037I | 864191020900330 |

### 1.7.3 Auxiliary equipment details

AE (Auxiliary Equipment) 1#: Charger

| Equipment | Charger |
|---|---|
| Manufacturer | HUIZHOU BYD ELECTRONIC CO., LTD. |
| Model Number | one touch UC12US |
| Input Voltage | 100V-240V a.c. |
| Output Voltage | 5.0V d.c. |
| Frequency | 50/60Hz |

AE (Auxiliary Equipment) 2#: Charger

| Equipment | Charger |
|---|---|
| Manufacturer | HUIZHOU BYD ELECTRONIC CO., LTD. |
| Model Number | one touch UC12EU |
| Input Voltage | 100V-240V a.c. |
| Output Voltage | 5.0V d.c. |
| Frequency | 50/60Hz |

AE (Auxiliary Equipment) 3#: Charger

| Equipment | Charger |
|---|---|
| Manufacturer | HUIZHOU BYD ELECTRONIC CO., LTD. |
| Model Number | one touch UC12UK |
| Input Voltage | 100V-240V a.c. |
| Output Voltage | 5.0V d.c. |
| Frequency | 50/60Hz |

AE (Auxiliary Equipment) 4#: Battery

| Equipment | Battery |
|---|---|
| Manufacturer | SCUD (FUJIAN) Electronics Co., Ltd. |
| Model Number | TLp020C2 |
| Capacity | 2000mAh |
| Rated Voltage | 4.35V d.c. |

AE (Auxiliary Equipment) 5#: Headset

| Equipment | Headset |
|---|---|
| Manufacturer | Shenzhen Juwei Electronics Co., Ltd |
| Model Number | CCB3001A15C2 |

AE (Auxiliary Equipment) 6#: Headset

| Equipment | Headset |
|---|---|
| Manufacturer | Shenzhen Juwei Electronics Co., Ltd |
| Model Number | CCB3001A14C2 |

AE (Auxiliary Equipment) 7#: Headset

| Equipment | Headset |
|---|---|
| Manufacturer | Dongguan Superfine Electronic CO., Ltd |
| Model Number | CCB3001A15C4 |

AE (Auxiliary Equipment) 8#: Headset

| Equipment | Headset |
|---|---|
| Manufacturer | Dongguan Superfine Electronic CO., Ltd |
| Model Number | CCB3001A14C4 |

AE (Auxiliary Equipment) 9#: Data Cable

| Equipment | Data Cable |
|---|---|
| Manufacturer | Huizhou Shenghua Industry Co., Ltd. |
| Model Number | CDA0000025C1 |

AE (Auxiliary Equipment) 10#: Data Cable

| Equipment | Data Cable |
|---|---|
| Manufacturer | Shenzhen Juwei Electronics Co., Ltd. |
| Model Number | CDA0000025C2 |

Note:

All the auxiliary equipments have been labeled with number in order to identify the test sample.

As the information described above, there are three different models of charger manufactured by the same company, four different models of headset manufactured by two different companies and two different models of data cable manufactured by two different companies.

The relevant tests have been performed in order to verify in which combination case (EUT exercised by only one model of charger, one model of headset and one model of data cable) the EUT would have the worst features. So all the tests shown in this test report are performed when the EUT exercised by the charger one touch UC12US, the headset CCB3001A15C2 and the data cable CDA0000025C1.

# 2. Test information

## 2.1 Summary of the test results

| No. | Test case | FCC reference | Verdict |
|---|---|---|---|
| 1 | Conducted emissions | 15.107 | Pass |
| 2 | Radiated emissions | 15.109 | Pass |

| | |
|---|---|
| This Test Report Is Issued by:<br>Mr. Song Qizhu<br>Director of the test lab | Checked by:<br>Mr. Wang Junfeng<br>Deputy director of the test lab |
| Tested by:<br>Mr. Gong Jian<br>Test engineer | Issued date:<br>**2014.04.25** |

## 2.2 Test result

### 2.2.1 Conducted Emissions-FCC Part15.107

Ambient condition:

| Temperature | Relative humidity | Pressure |
|---|---|---|
| 21.2°C | 43.5% | 100.9kPa |

Test Setup:

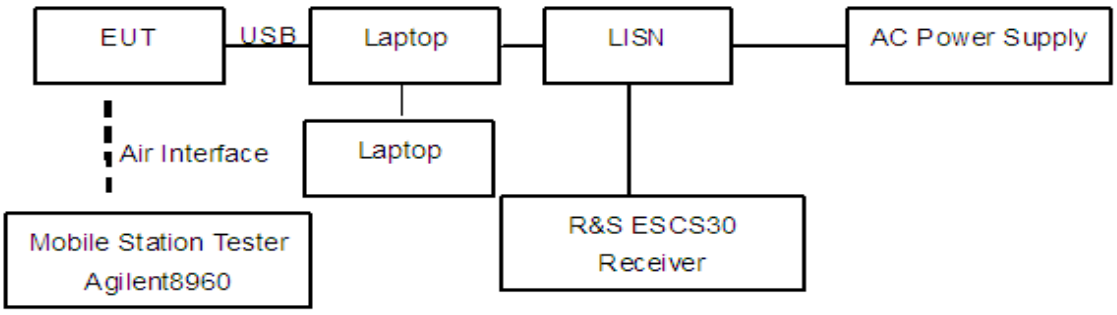



Figure 1

Test Procedure:

The EUT is placed on a non-metallic table 0.4m above the horizontal metal reference ground plane. The EUT connect with a laptop via the USB cable. The accessories of the EUT are connected with the EUT such as headset etc. During the test the data transferring via USB cable between EUT and laptop is maintained. The laptop's LAN port is connected with another laptop via cable. And the data transferring between two laptops is maintained.
The AC main power supply of the laptop is connected to LISN and LISN is connected to the reference ground. The test set-up and the test methods are performed according to ANSI C63.4:2009.
Then start the test software ES-K1. Sweep the whole frequency band through the range from 150 KHz to 30 MHz. The measurement should be done for both L line and N line. During pre-test, the receiver uses both peak detector and average detector. And the final test, the receiver uses both average detector and Quasi-peak detector.
The data of cable loss has been calibrated in full testing frequency range before the testing.

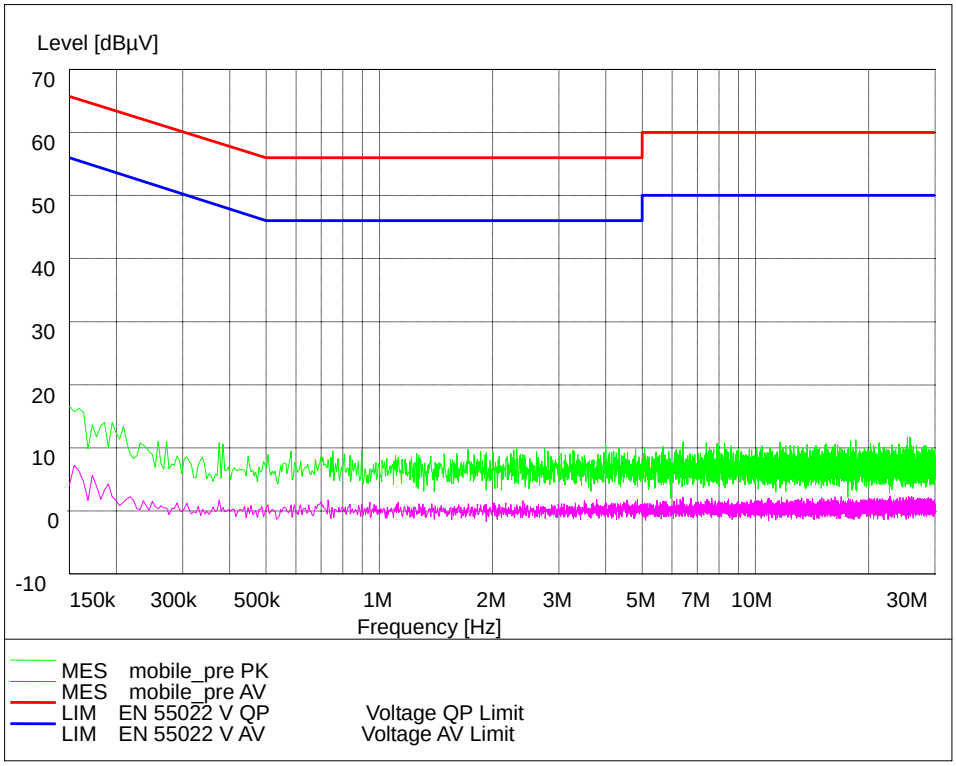
Limit:

| Frequency of Emission(MHz) | Limits(dBμV) | |
|---|---|---|
| | Quasi-peak | Average |
| 0.15～0.5 | 66 to 56* | 56 to 46* |
| 0.5～5 | 56 | 46 |
| 5～30 | 60 | 50 |

Note: * Decreases with the logarithm of the frequency

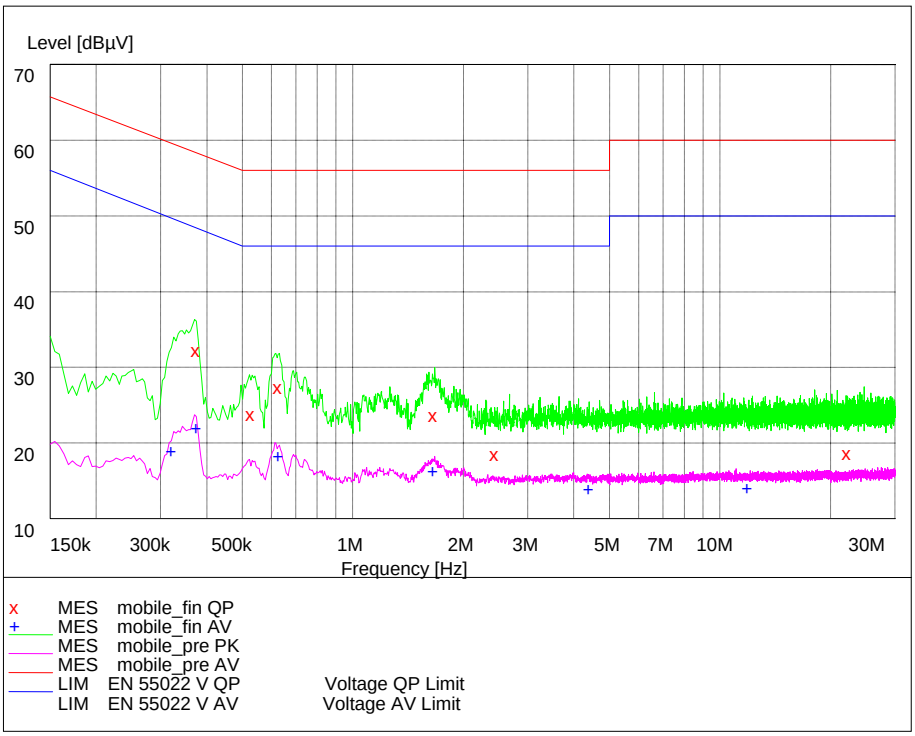
Test result:

Noise Level of The Measuring Instrument




L and N Line

GSM850 Laptop+ AE4#+AE5#+AE9#




L and N Line

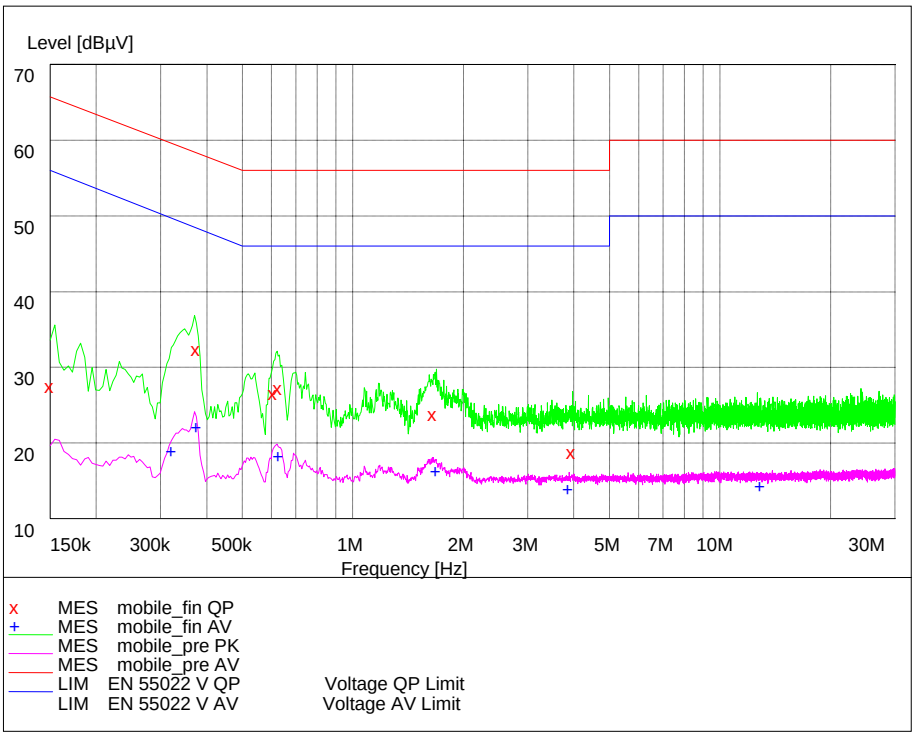
***MEASUREMENT RESULT: "MOBILE_fin QP"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.375000 | 33.70 | 20.2 | 58 | 24.6 | L | --- |
| 0.528000 | 25.20 | 20.3 | 56 | 30.8 | L | --- |
| 0.627000 | 28.80 | 20.3 | 56 | 27.2 | L | --- |
| 1.662000 | 25.10 | 20.2 | 56 | 30.9 | L | --- |
| 2.445000 | 19.90 | 20.3 | 56 | 36.1 | L | --- |
| 22.245000 | 20.10 | 21.0 | 60 | 39.9 | L | --- |

***MEASUREMENT RESULT: "MOBILE_fin AV"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.321000 | 20.30 | 20.2 | 50 | 29.4 | L | --- |
| 0.375000 | 23.40 | 20.2 | 48 | 25.0 | L | --- |
| 0.627000 | 19.70 | 20.3 | 46 | 26.3 | L | --- |
| 1.653000 | 17.70 | 20.2 | 46 | 28.3 | L | --- |
| 4.389000 | 15.40 | 20.4 | 46 | 30.6 | N | --- |
| 11.877000 | 15.50 | 20.7 | 50 | 34.5 | L | --- |

PCS1900 Laptop+ AE4#+AE5#+AE9#




L and N Line

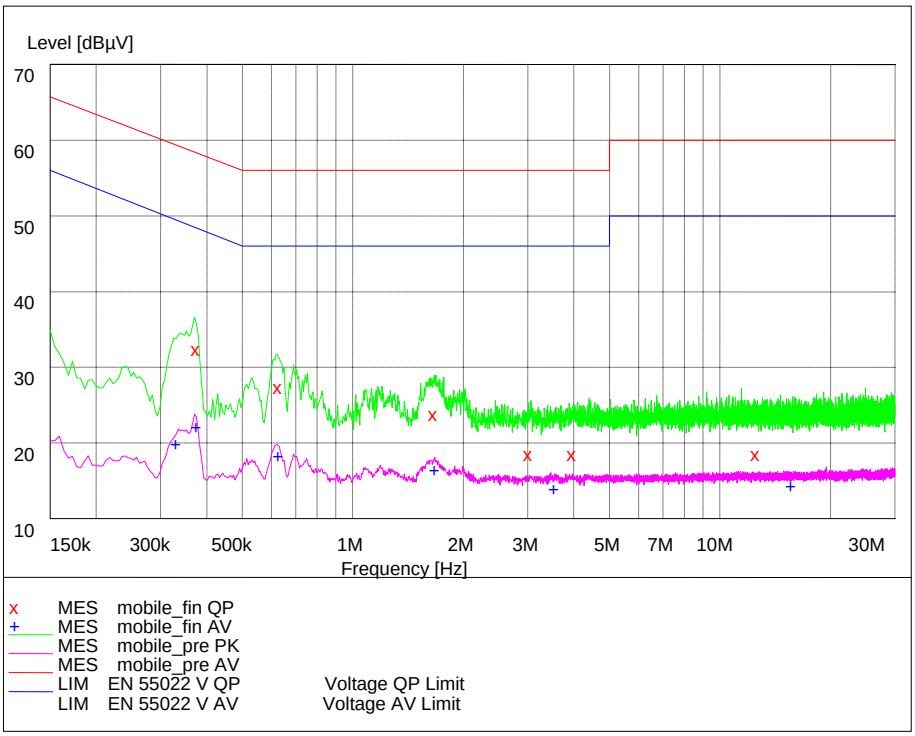
***MEASUREMENT RESULT: "MOBILE_fin QP"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.150000 | 28.90 | 20.1 | 66 | 36.8 | L | --- |
| 0.375000 | 33.80 | 20.2 | 58 | 24.6 | L | --- |
| 0.609000 | 28.00 | 20.3 | 56 | 28.0 | L | --- |
| 0.627000 | 28.70 | 20.3 | 56 | 27.3 | L | --- |
| 1.653000 | 25.20 | 20.2 | 56 | 30.8 | L | --- |
| 3.948000 | 20.20 | 20.3 | 56 | 35.8 | L | --- |

***MEASUREMENT RESULT: "MOBILE_fin AV"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.321000 | 20.30 | 20.2 | 50 | 29.4 | L | --- |
| 0.375000 | 23.50 | 20.2 | 48 | 24.9 | L | --- |
| 0.627000 | 19.70 | 20.3 | 46 | 26.3 | L | --- |
| 1.680000 | 17.70 | 20.2 | 46 | 28.3 | L | --- |
| 3.858000 | 15.40 | 20.3 | 46 | 30.6 | L | --- |
| 12.876000 | 15.70 | 20.8 | 50 | 34.3 | L | --- |

WCDMA BAND II Laptop+ AE4#+AE5#+AE9#




L and N Line

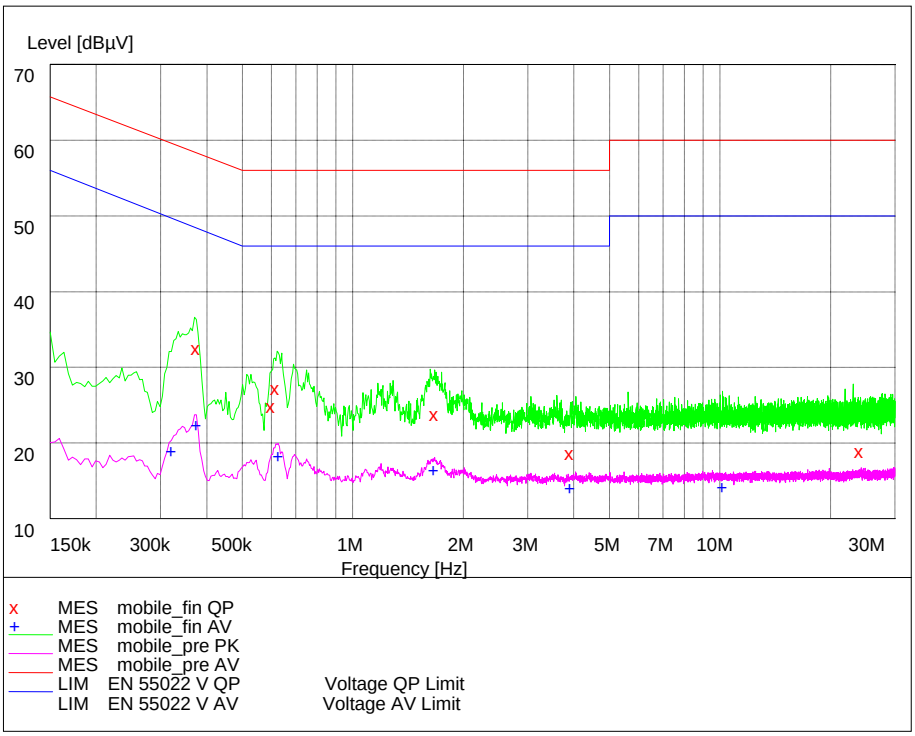
***MEASUREMENT RESULT: "MOBILE_fin QP"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.375000 | 33.80 | 20.2 | 58 | 24.5 | L | --- |
| 0.627000 | 28.80 | 20.3 | 56 | 27.2 | L | --- |
| 1.662000 | 25.20 | 20.2 | 56 | 30.8 | L | --- |
| 3.012000 | 19.90 | 20.3 | 56 | 36.1 | L | --- |
| 3.966000 | 19.90 | 20.3 | 56 | 36.1 | L | --- |
| 12.552000 | 20.00 | 20.7 | 60 | 40.0 | L | --- |

***MEASUREMENT RESULT: "MOBILE_fin AV"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.330000 | 21.30 | 20.2 | 50 | 28.2 | L | --- |
| 0.375000 | 23.50 | 20.2 | 48 | 24.9 | L | --- |
| 0.627000 | 19.70 | 20.3 | 46 | 26.3 | L | --- |
| 1.671000 | 17.80 | 20.2 | 46 | 28.2 | L | --- |
| 3.534000 | 15.40 | 20.3 | 46 | 30.6 | L | --- |
| 15.630000 | 15.70 | 20.8 | 50 | 34.3 | N | --- |

WCDMA BAND V Laptop+ AE4#+AE5#+AE9#




L and N Line

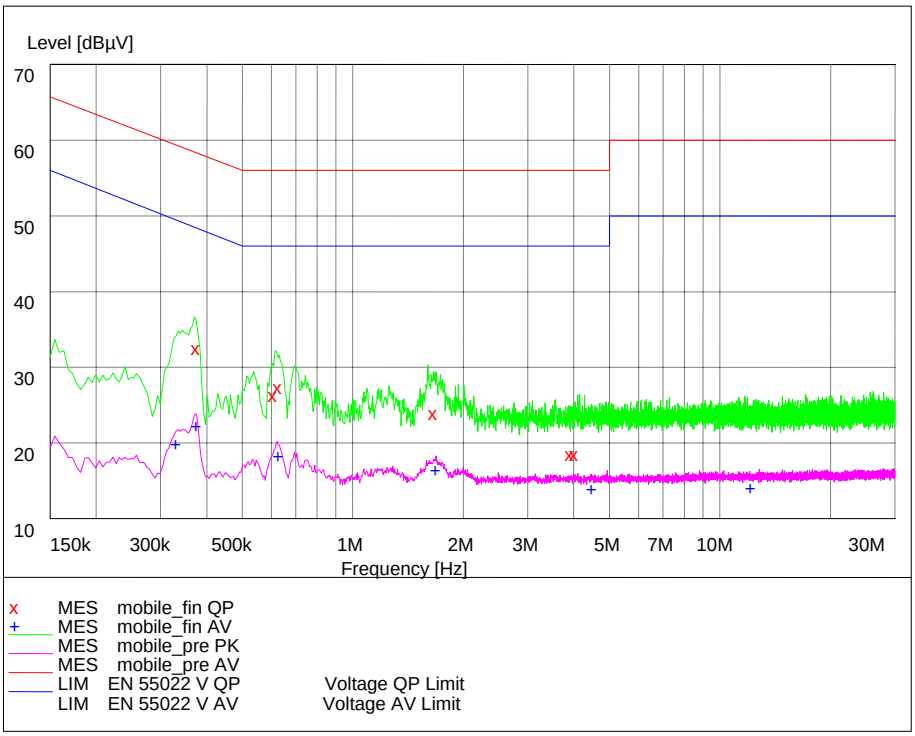
***MEASUREMENT RESULT: "MOBILE_fin QP"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.375000 | 34.00 | 20.2 | 58 | 24.4 | L | --- |
| 0.600000 | 26.30 | 20.3 | 56 | 29.7 | L | --- |
| 0.618000 | 28.70 | 20.3 | 56 | 27.3 | L | --- |
| 1.671000 | 25.20 | 20.2 | 56 | 30.8 | L | --- |
| 3.912000 | 20.10 | 20.3 | 56 | 35.9 | L | --- |
| 24.045000 | 20.40 | 21.0 | 60 | 39.6 | L | --- |

***MEASUREMENT RESULT: "MOBILE_fin AV"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.321000 | 20.30 | 20.2 | 50 | 29.4 | L | --- |
| 0.375000 | 23.80 | 20.2 | 48 | 24.6 | L | --- |
| 0.627000 | 19.70 | 20.3 | 46 | 26.3 | L | --- |
| 1.662000 | 17.80 | 20.2 | 46 | 28.2 | L | --- |
| 3.912000 | 15.50 | 20.3 | 46 | 30.5 | L | --- |
| 10.176000 | 15.60 | 20.6 | 50 | 34.4 | L | --- |

FM Radio Laptop+ AE4#+AE5#+AE9#




L and N Line

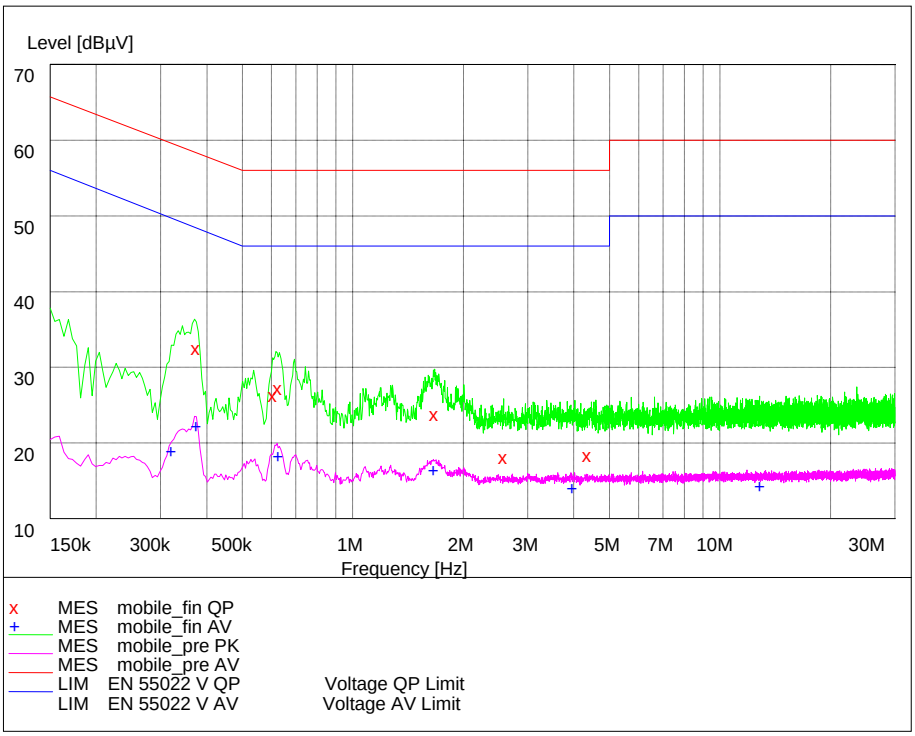
***MEASUREMENT RESULT: "MOBILE_fin QP"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.375000 | 34.00 | 20.2 | 58 | 24.3 | L | --- |
| 0.609000 | 27.80 | 20.3 | 56 | 28.2 | L | --- |
| 0.627000 | 28.80 | 20.3 | 56 | 27.2 | L | --- |
| 1.662000 | 25.40 | 20.2 | 56 | 30.6 | L | --- |
| 3.921000 | 19.90 | 20.3 | 56 | 36.1 | L | --- |
| 4.020000 | 20.00 | 20.3 | 56 | 36.0 | L | --- |

***MEASUREMENT RESULT: "MOBILE_fin AV"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.330000 | 21.30 | 20.2 | 50 | 28.2 | L | --- |
| 0.375000 | 23.70 | 20.2 | 48 | 24.7 | L | --- |
| 0.627000 | 19.70 | 20.3 | 46 | 26.3 | L | --- |
| 1.680000 | 17.80 | 20.2 | 46 | 28.2 | L | --- |
| 4.479000 | 15.40 | 20.4 | 46 | 30.6 | L | --- |
| 12.129000 | 15.50 | 20.7 | 50 | 34.5 | L | --- |

MP3/MP4 Laptop+ AE4#+AE5#+AE9#




L and N Line

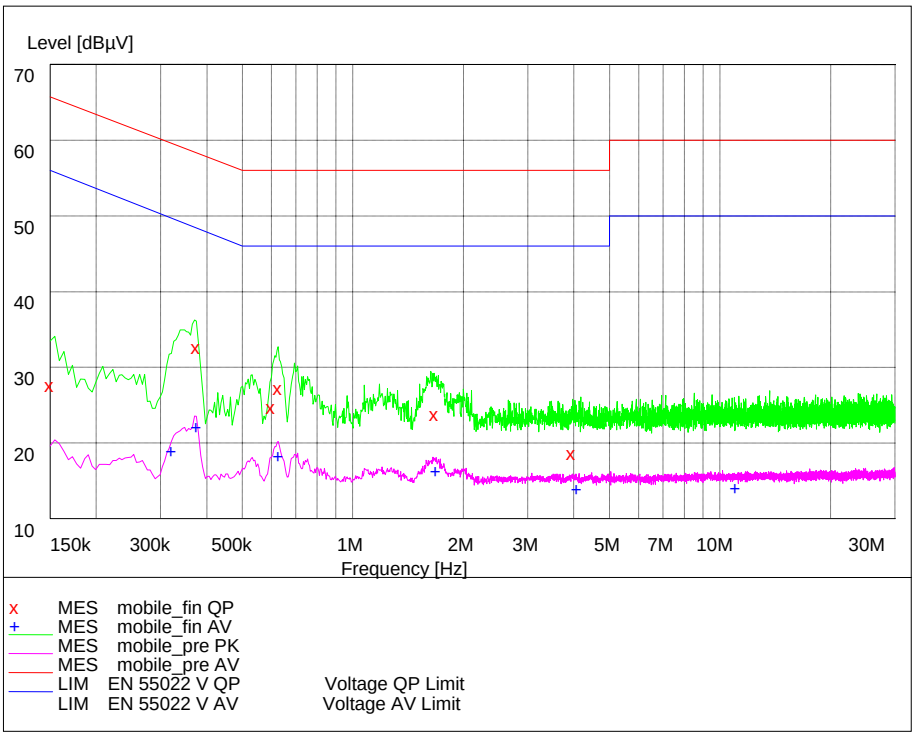
***MEASUREMENT RESULT: "MOBILE_fin QP"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.375000 | 34.00 | 20.2 | 58 | 24.4 | L | --- |
| 0.609000 | 27.80 | 20.3 | 56 | 28.2 | L | --- |
| 0.627000 | 28.70 | 20.3 | 56 | 27.3 | L | --- |
| 1.671000 | 25.20 | 20.2 | 56 | 30.8 | L | --- |
| 2.580000 | 19.60 | 20.3 | 56 | 36.4 | L | --- |
| 4.362000 | 19.80 | 20.4 | 56 | 36.2 | L | --- |

***MEASUREMENT RESULT: "MOBILE_fin AV"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.321000 | 20.30 | 20.2 | 50 | 29.4 | L | --- |
| 0.375000 | 23.70 | 20.2 | 48 | 24.7 | L | --- |
| 0.627000 | 19.70 | 20.3 | 46 | 26.3 | L | --- |
| 1.662000 | 17.80 | 20.2 | 46 | 28.2 | L | --- |
| 3.966000 | 15.50 | 20.3 | 46 | 30.5 | N | --- |
| 12.867000 | 15.70 | 20.8 | 50 | 34.3 | L | --- |

Camera Laptop+ AE4#+AE5#+AE9#




L and N Line

***MEASUREMENT RESULT: "MOBILE_fin QP"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.150000 | 29.10 | 20.1 | 66 | 36.6 | L | --- |
| 0.375000 | 34.10 | 20.2 | 58 | 24.3 | L | --- |
| 0.600000 | 26.20 | 20.3 | 56 | 29.8 | L | --- |
| 0.627000 | 28.70 | 20.3 | 56 | 27.3 | L | --- |
| 1.671000 | 25.30 | 20.2 | 56 | 30.7 | L | --- |
| 3.957000 | 20.10 | 20.3 | 56 | 35.9 | L | --- |

***MEASUREMENT RESULT: "MOBILE_fin AV"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.321000 | 20.30 | 20.2 | 50 | 29.4 | L | --- |
| 0.375000 | 23.60 | 20.2 | 48 | 24.8 | L | --- |
| 0.627000 | 19.70 | 20.3 | 46 | 26.3 | N | --- |
| 1.680000 | 17.70 | 20.2 | 46 | 28.3 | L | --- |
| 4.074000 | 15.40 | 20.4 | 46 | 30.6 | L | --- |
| 11.022000 | 15.50 | 20.7 | 50 | 34.5 | L | --- |

### 2.2.2 Radiated Emissions-FCC Part15.109

Ambient condition:

| Temperature | Relative humidity | Pressure |
|---|---|---|
| 21.2°C | 43.5% | 100.9kPa |

Test Setup:

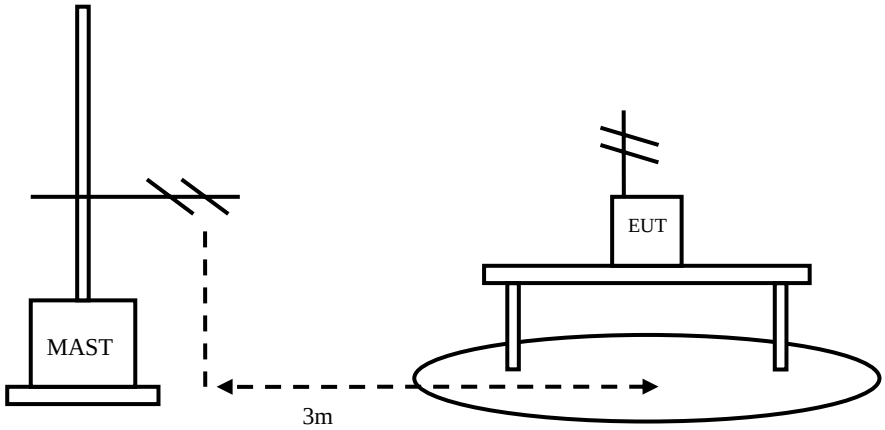



Figure 2

Test Procedure:

The EUT should be placed on a non-metallic table 80cm above the ground plane. The receive antennas shall be moved from 1 to 4 meters. The distance between EUT and receive antenna should be 3 meters.
The EUT should work in idle mode. The accessories of the EUT are connected with the EUT such as headset etc. The test set-up and the test methods are performed according to ANSI C63.4:2009.
Then start the test software ES-K1. Sweep the whole frequency band through the range from 30MHz to 1GHz, using receive log period antenna HL562.
During the test, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turn table shall be rotated from 0 to 360 degrees for detecting the maximum of radiated spurious signal level. The measurements shall be repeated with orthogonal polarization of the test antenna. The EUT is laid in two modes as follow: 1. put the EUT in horizontal direction; 2. put the EUT in vertical direction.
The data of cable loss and antenna factor have been calibrated in full testing frequency range before the testing.

A “reference path loss” is established and the $A_{Rpl}$ is the attenuation of “reference path loss”, and including the gain of receive antenna, the gain of the preamplifier, the cable loss.
The measurement results are obtained as described below:
Result= $P_{mea}$ + $A_{Rpl}$

Limit:

| Frequency of Emission(MHz) | Limits | |
|---|---|---|
| | Detector | Unit (dBμV/m) |
| 30～88 | Quasi-peak | 40 |
| 88～216 | Quasi-peak | 43.5 |
| 216～960 | Quasi-peak | 46 |
| 960～1000 | Quasi-peak | 54 |
| 1000～5th harmonic of the highest frequency or 40GHz, whichever is lower | Average<br>Peak | 54<br>74 |

Test result:

GSM850 Mode

| Frequency(MHz) | Result(dBuV/m) | $A_{Rpl}$ (dB) | $P_{mea}$ (dBuV/m) | Polarity |
|---|---|---|---|---|
| 64.789579 | 17.8 | 6.1 | 11.7 | Vertica |
| 85.551102 | 16.6 | 8.0 | 8.6 | Horizontal |
| 168.13627 | 12.4 | 7.4 | 5.0 | Vertical |
| 174.5491 | 7.9 | 7.7 | 0.2 | Vertical |
| 184.16834 | 25.7 | 7.9 | 17.8 | Vertical |
| 607.21443 | 19.8 | 19.3 | 0.5 | Vertical |

PCS1900 Mode

| Frequency(MHz) | Result(dBuV/m) | $A_{Rpl}$ (dB) | $P_{mea}$ (dBuV/m) | Polarity |
|---|---|---|---|---|
| 65.350701 | 15.6 | 6.1 | 9.5 | Vertical |
| 85.551102 | 16.0 | 8.0 | 8.0 | Vertical |
| 168.13627 | 13.9 | 7.4 | 6.5 | Vertical |
| 174.5491 | 8.0 | 7.7 | 0.3 | Vertical |
| 184.16834 | 25.9 | 7.9 | 18.0 | Vertical |
| 786.57315 | 21.0 | 22.2 | -1.2 | Vertical |

WCDMA BAND II Mode

| Frequency(MHz) | Result(dBuV/m) | $A_{Rpl}$ (dB) | $P_{mea}$ (dBuV/m) | Polarity |
|---|---|---|---|---|
| 65.07014 | 17.6 | 6.1 | 11.5 | Vertica |
| 85.551102 | 16.0 | 8.0 | 8.0 | Vertical |
| 168.13627 | 12.8 | 7.4 | 5.4 | Horizontal |
| 174.5491 | 8.6 | 7.7 | 0.9 | Vertical |
| 184.16834 | 26.4 | 7.9 | 18.5 | Vertical |
| 951.90381 | 23.5 | 24.4 | -0.9 | Vertical |

WCDMA BAND V Mode

| Frequency(MHz) | Result(dBuV/m) | $A_{Rpl}$ (dB) | $P_{mea}$ (dBuV/m) | Polarity |
|---|---|---|---|---|
| 63.527054 | 17.5 | 5.9 | 11.6 | Vertical |
| 79.378758 | 13.2 | 7.6 | 5.6 | Vertical |
| 85.551102 | 15.9 | 8.0 | 7.9 | Vertical |
| 174.5491 | 8.7 | 7.7 | 1.0 | Vertical |
| 184.16834 | 26.2 | 7.9 | 18.3 | Vertical |
| 605.21042 | 19.7 | 19.3 | 0.4 | Vertical |

FM Radio Mode

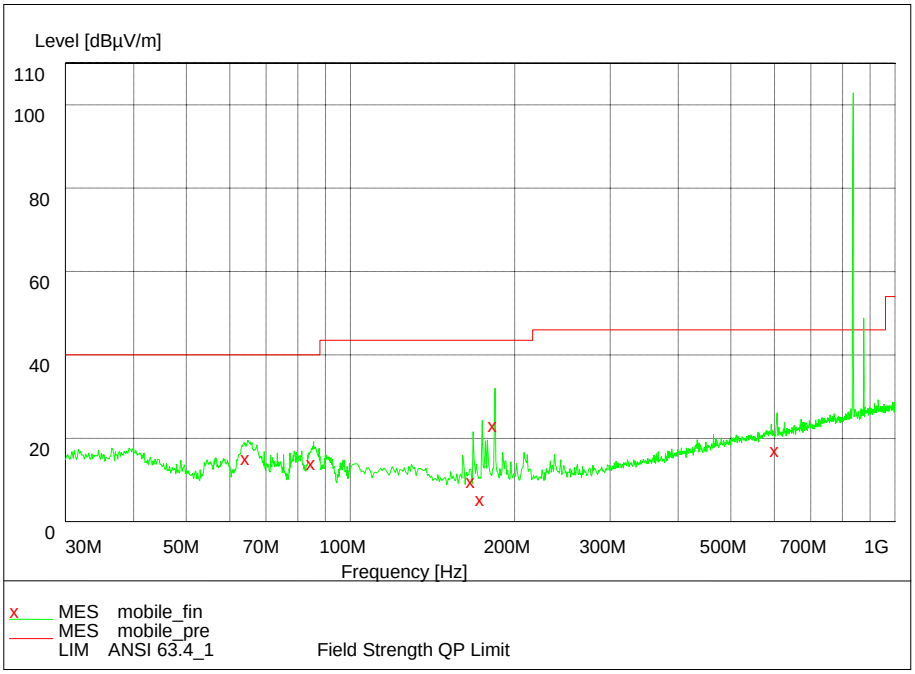
| Frequency(MHz) | Result(dBuV/m) | $A_{Rpl}$ (dB) | $P_{mea}$ (dBuV/m) | Polarity |
|---|---|---|---|---|
| 65.350701 | 17.4 | 6.1 | 11.3 | Vertical |
| 85.691383 | 15.7 | 8.0 | 7.7 | Vertical |
| 168.13627 | 13.4 | 7.4 | 6.0 | Horizontal |
| 174.5491 | 7.0 | 7.7 | -0.7 | Vertical |
| 184.16834 | 26.0 | 7.9 | 18.1 | Vertical |
| 872.74549 | 22.3 | 23.5 | -1.2 | Vertical |

MP3/MP4 Mode

| Frequency(MHz) | Result(dBuV/m) | $A_{Rpl}$ (dB) | $P_{mea}$ (dBuV/m) | Polarity |
|---|---|---|---|---|
| 65.210421 | 17.8 | 6.1 | 11.7 | Vertical |
| 85.831663 | 16.2 | 8.0 | 8.2 | Vertical |
| 168.13627 | 12.7 | 7.4 | 5.3 | Vertical |
| 174.5491 | 7.0 | 7.7 | -0.7 | Vertical |
| 184.16834 | 26.4 | 7.9 | 18.5 | Vertical |
| 949.8998 | 23.4 | 24.4 | -1.0 | Vertical |

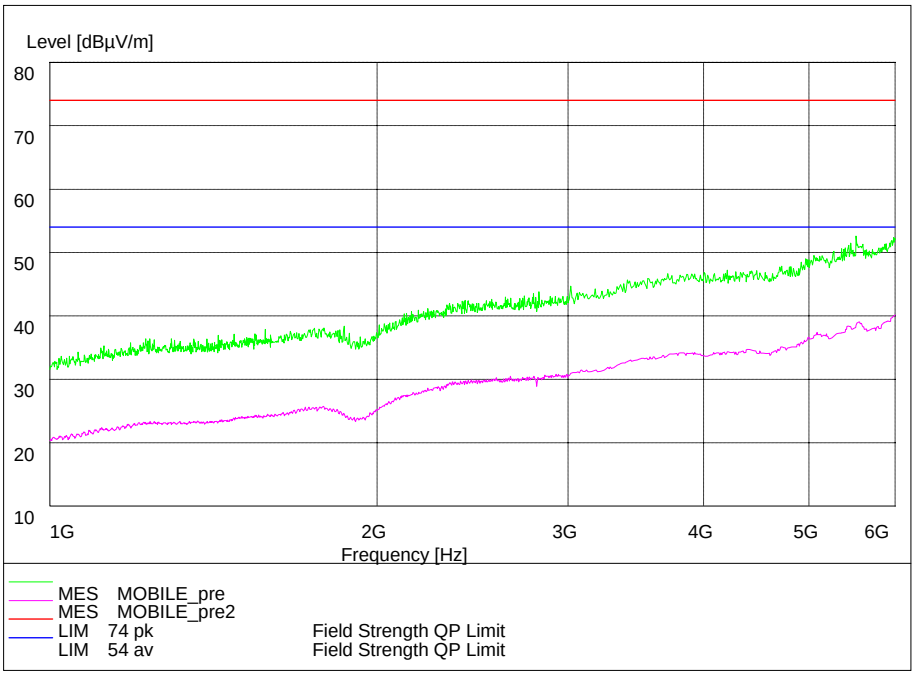
Camera Mode

| Frequency(MHz) | Result(dBuV/m) | $A_{Rpl}$ (dB) | $P_{mea}$ (dBuV/m) | Polarity |
|---|---|---|---|---|
| 39.819639 | 12.7 | 15.8 | -3.1 | Vertica |
| 64.789579 | 15.3 | 6.1 | 9.2 | Vertical |
| 85.410822 | 15.8 | 8.0 | 7.8 | Vertical |
| 174.5491 | 7.2 | 7.7 | -0.5 | Horizontal |
| 184.16834 | 26.0 | 7.9 | 18.1 | Vertical |
| 897.79559 | 22.7 | 23.9 | -1.2 | Vertical |

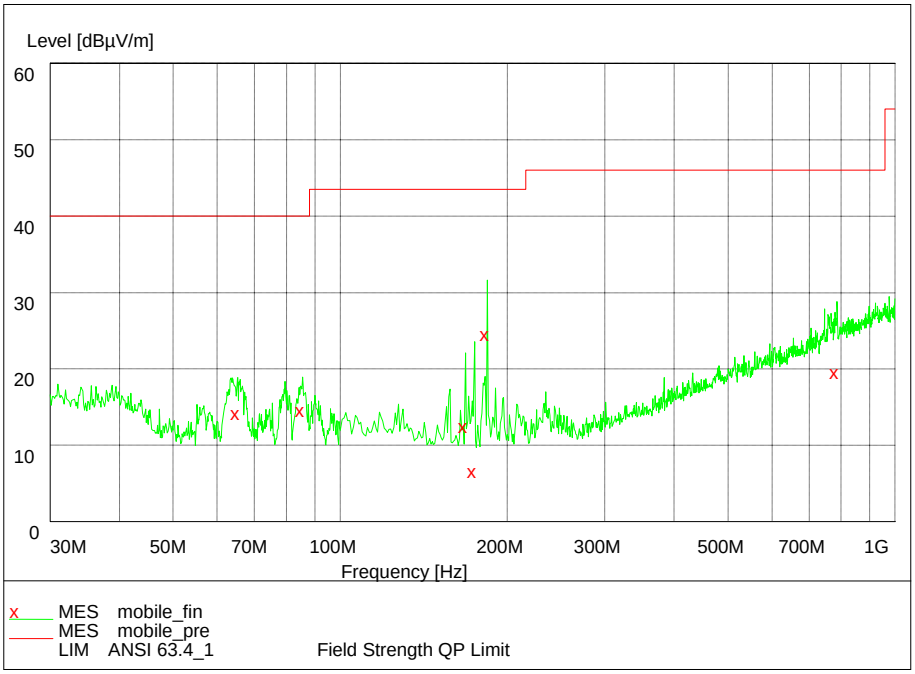



GSM850 (30MHz – 1GHz)

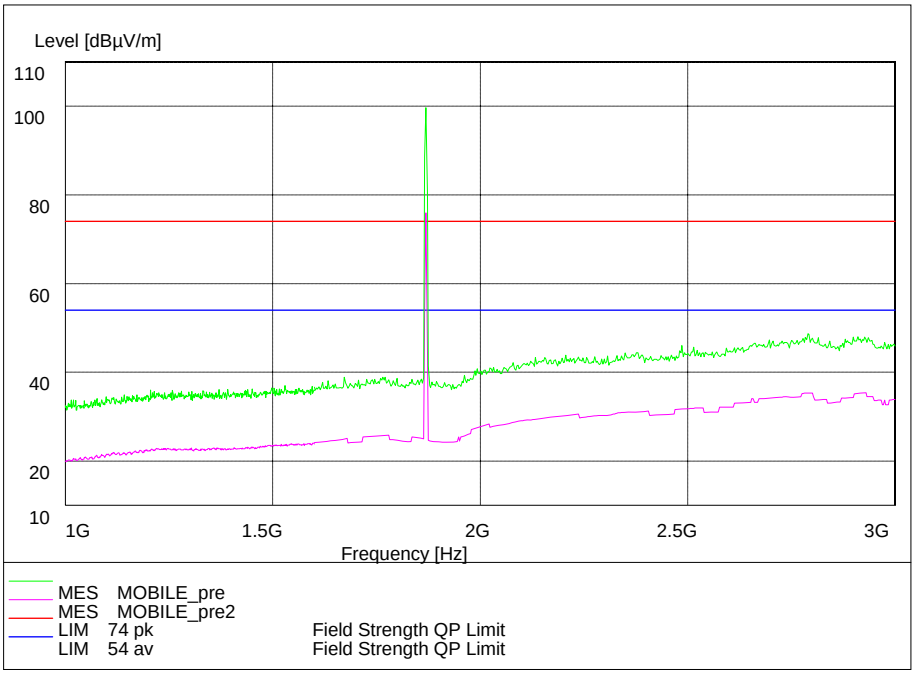
Note: The signal beyond the limit is the base station simulator carrier.




GSM850 (1GHz – 6GHz)

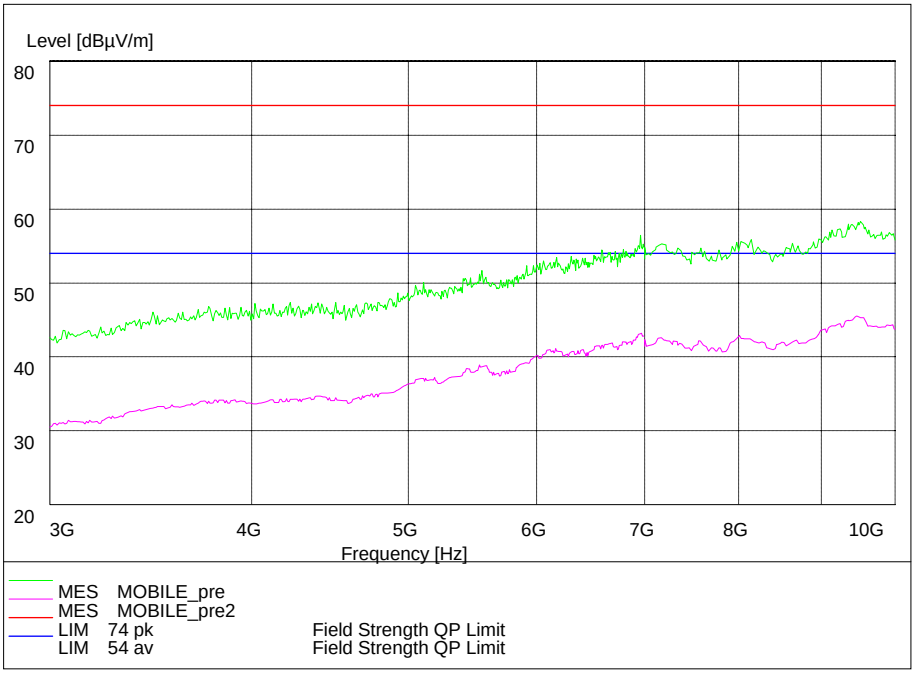



PCS1900 (30MHz – 1GHz)

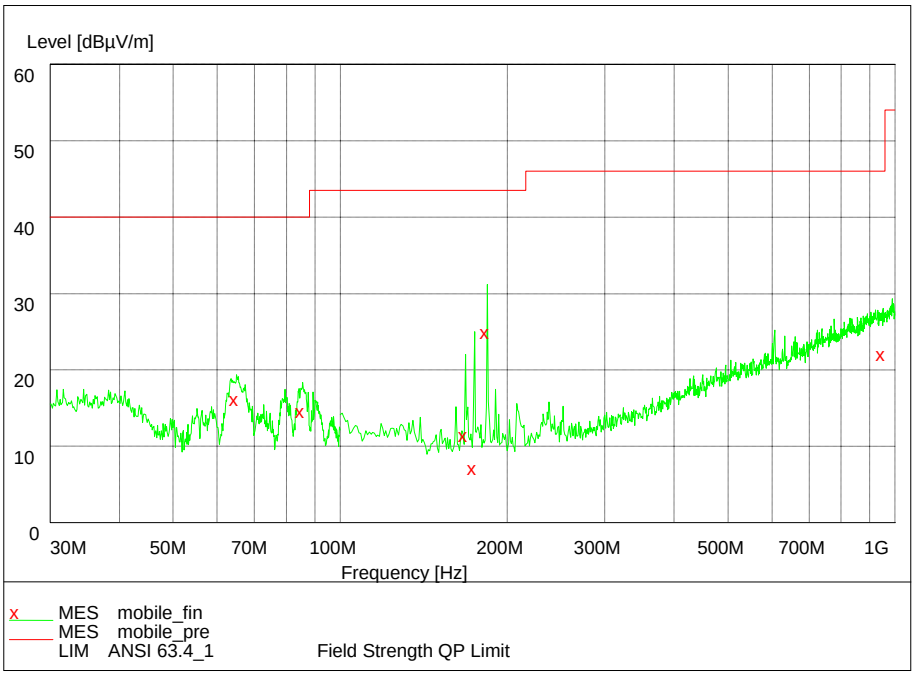



PCS1900 (1GHz – 3GHz)

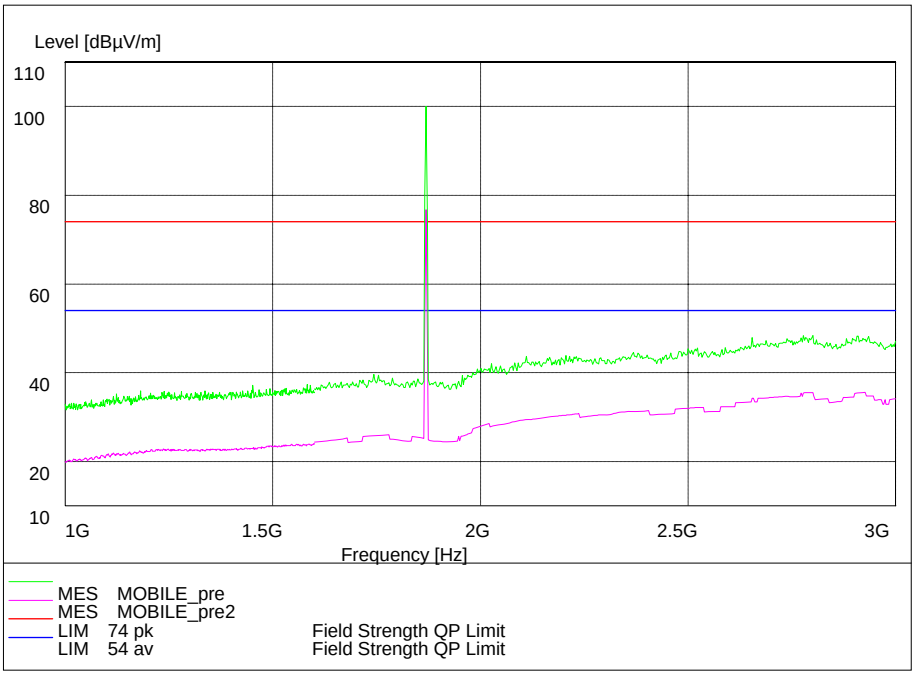
Note: The signals beyond the limit are the base station and simulator carrier.




PCS1900 (3GHz – 10GHz)

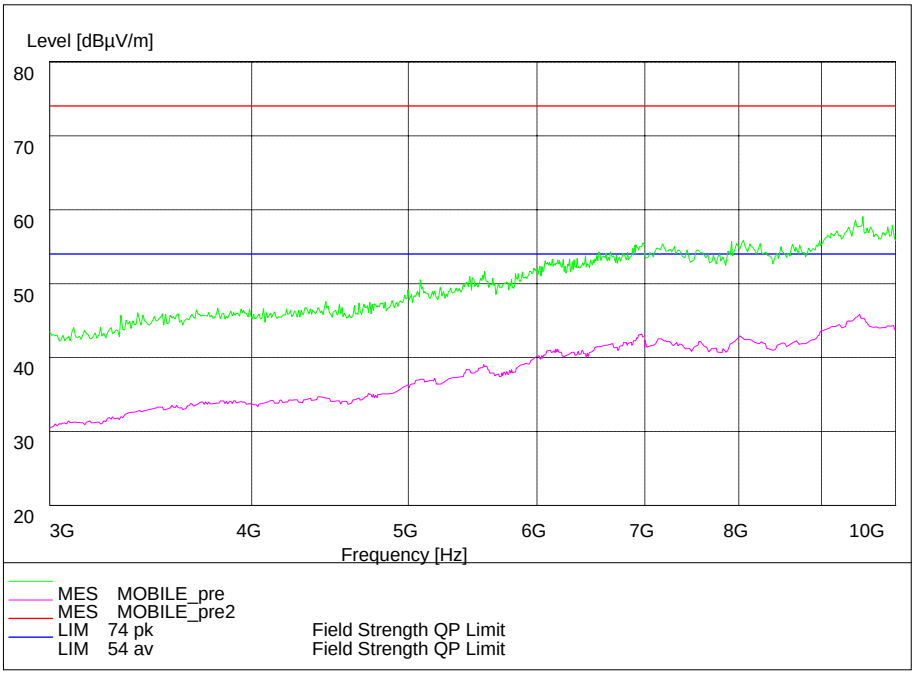



WCDMA BAND II (30MHz – 1GHz)

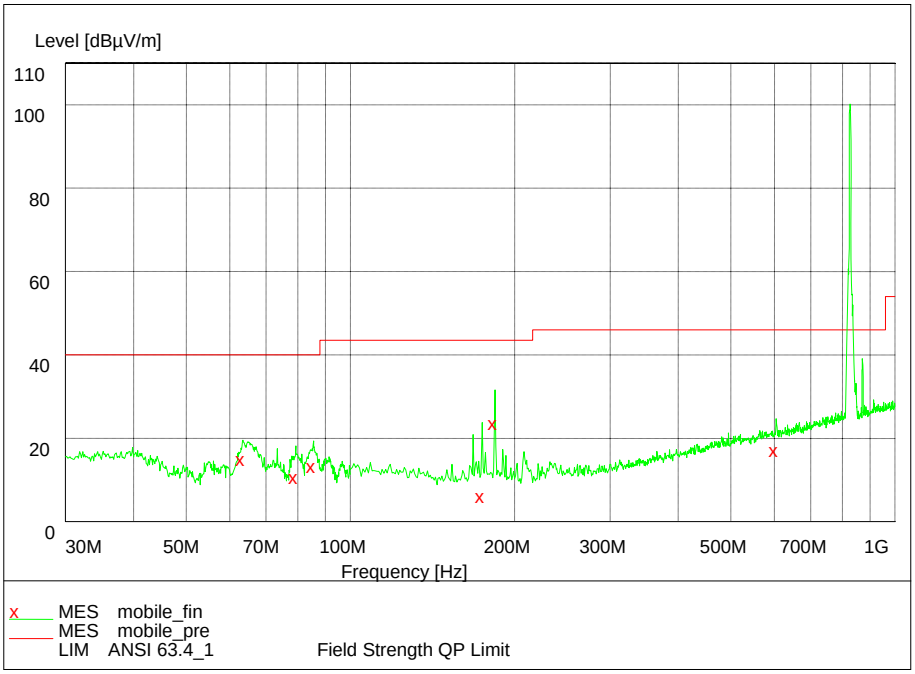



WCDMA BAND II (1GHz – 3GHz)

Note: The signal beyond the limit is the base station simulator carrier.

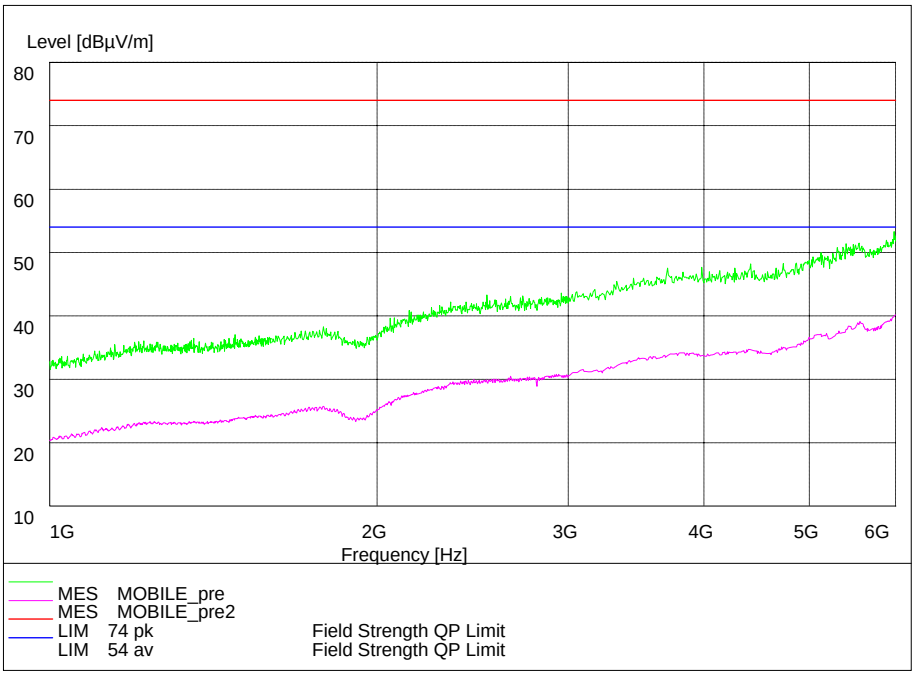



WCDMA BAND II (3GHz – 10GHz)

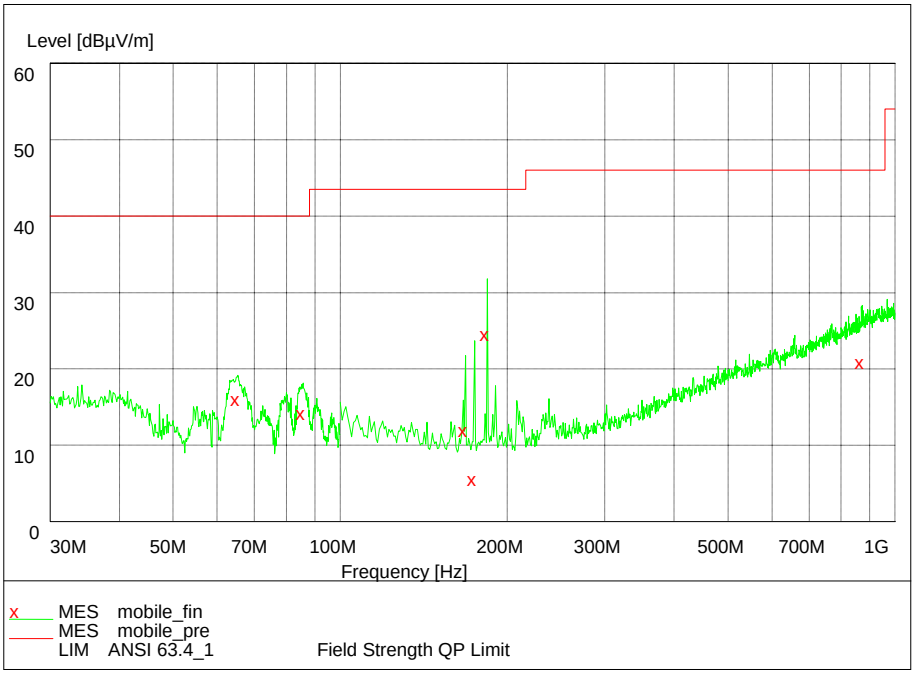



WCDMA BAND V (30MHz – 1GHz)

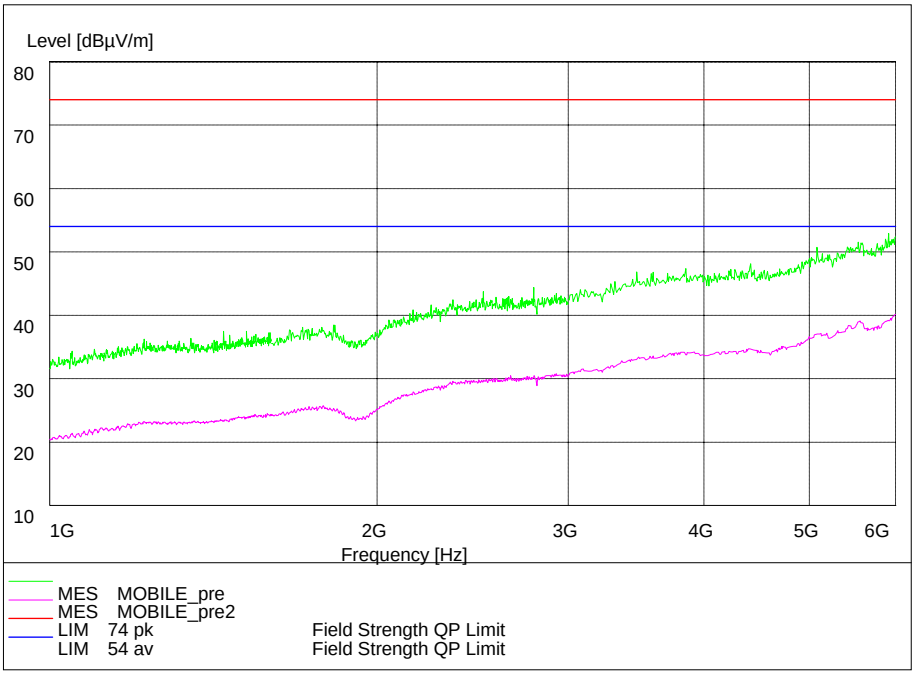
Note: The signals beyond the limit are the base station and simulator carrier.



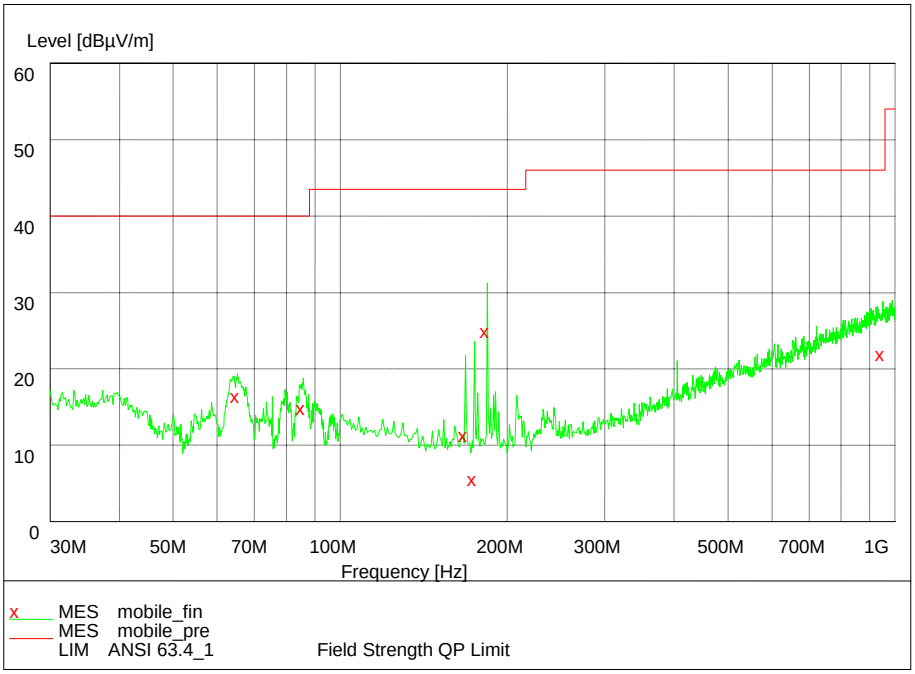

WCDMA BAND V (1GHz – 6GHz)



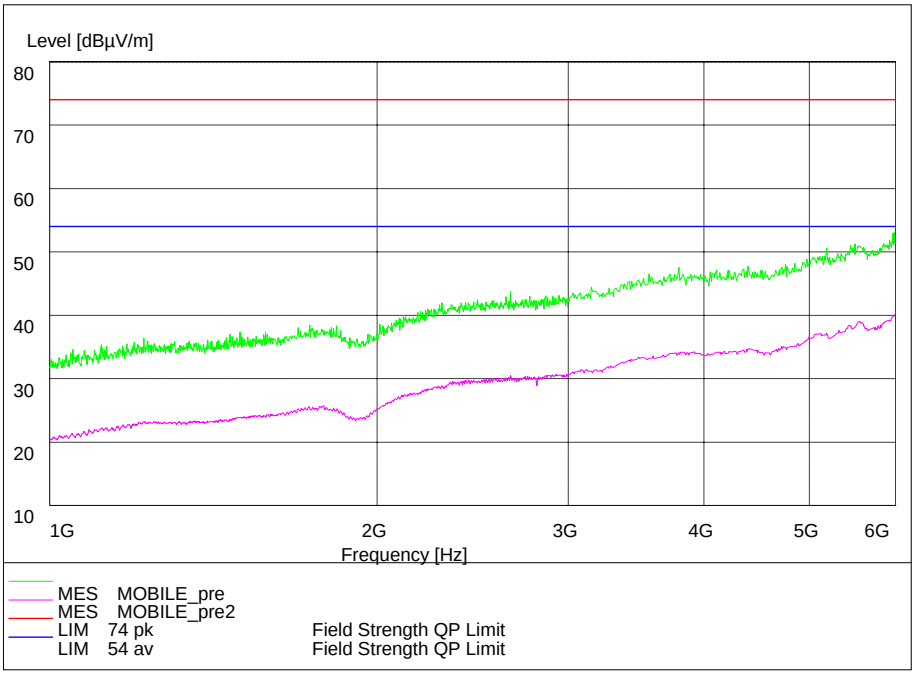

FM Radio (30MHz – 1GHz)



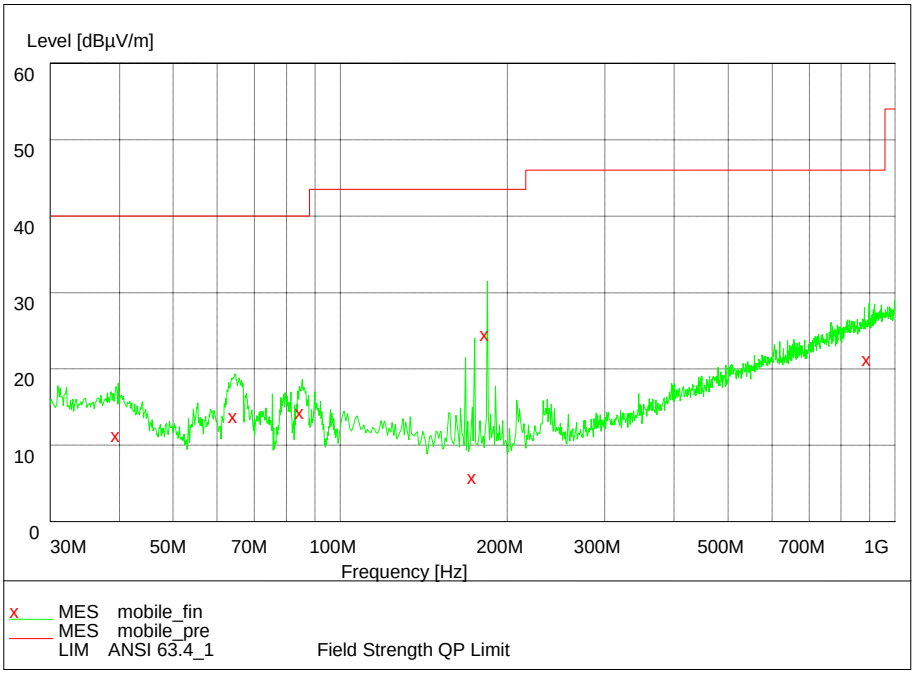

FM Radio (1GHz – 6GHz)



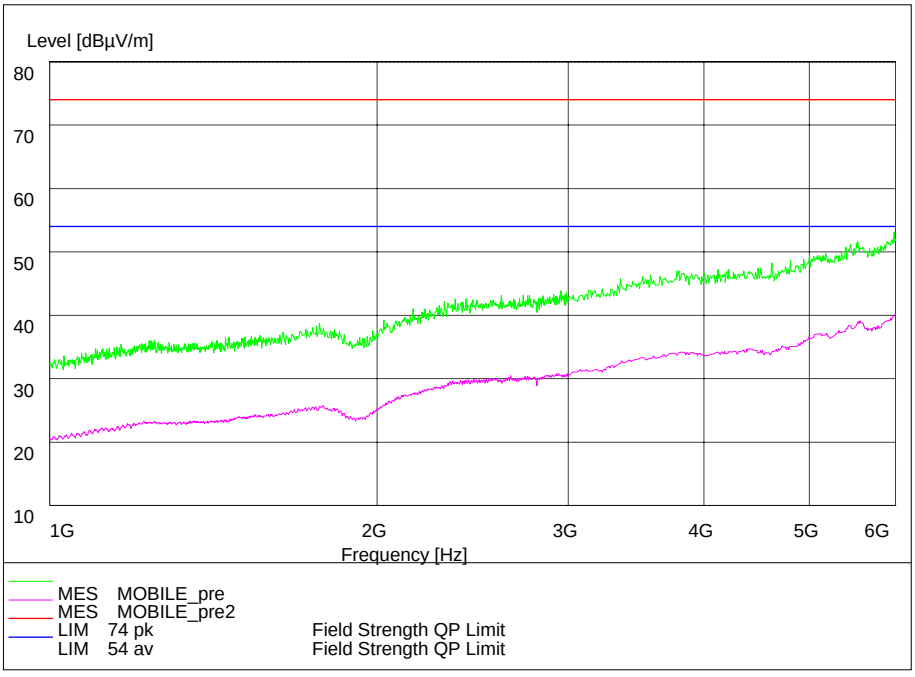

MP3/MP4 (30MHz – 1GHz)




MP3/MP4 (1GHz – 6GHz)




Camera (30MHz – 1GHz)




Camera (1GHz – 6GHz)

## 2.3. List of test equipments

| No. | Name/Model | Manufacturer | S/N | Calibration Due Date |
|---|---|---|---|---|
| 1 | 23.18m×16.88m×9.60m Semi-Anechoic Chamber | FRANKONIA | ----- | 19th Aug. 2014 |
| 2 | ESI 40 EMI test receiver | R&S | 100015 | 19th Aug. 2014 |
| 3 | E5515C(8960) Mobile Station Tester | Agilent | GB44050904 | 19th Aug. 2014 |
| 4 | 9.080m×5.255m×3.525m Shielding room | FRANKONIA | ----- | 19th Aug. 2014 |
| 5 | ESCS30 EMI test receiver | R&S | 100029 | 19th Aug. 2014 |
| 6 | HL562 Ultra log test antenna | R&S | 100016 | 19th Aug. 2014 |
| 7 | ESH3-Z2 Pulse limiter | R&S | 10002 | 19th Aug. 2014 |
| 8 | ESH3-Z5 Attenuator | R&S | 100020 | 19th Aug. 2014 |
| 9 | ESH2Z11 LISN | R&S | 50FH-020-10 | 19th Aug. 2014 |
| 10 | HF 906 Double-Ridged Waveguide Horn Antenna | R&S | 100030 | 19th Aug. 2014 |
| 11 | HF 906 Double-Ridged Waveguide Horn Antenna | R&S | 100029 | 19th Aug. 2014 |
| 12 | PS2000 Turn Table | FRANKONIA | ----- | 19th Aug. 2014 |
| 13 | MA260 Antenna Master | FRANKONIA | ----- | 19th Aug. 2014 |
| 14 | ES-K1EMI test software | R&S | ----- | 19th Aug. 2014 |
| 15 | HL562 Receive antenna | R&S | 100167 | 19th Aug. 2014 |

# Appendix

## Appendix1 Test Setup