D-PL-12111-01-01

CNAS L0447

Registration No.910917

# TEST REPORT

Report No.: SRTC2014-H024-E0042

Product Name: GSM/GPRS/EDGE/UMTS Digital Mobile Phone with Bluetooth and WiFi

Product Model: Philips S388

Applicant: Shenzhen Sang Fei Consumer Communications Co., Ltd.

Manufacturer: Shenzhen Sang Fei Consumer Communications Co., Ltd.

Specification: FCC Part15B (Certification) (October 1, 2013 edition)

FCC ID: VQRCTS388

The State Radio_monitoring_center Testing Center (SRTC)

No.80 Beilishi Road Xicheng District Beijing, China

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

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# 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) |
| Address: | No.80 Beilishi Road, Xicheng District, Beijing China |
| City: | Beijing |
| Country or Region: | China |
| Contacted person: | Wang Junfeng |
| Tel: | +86 10 68009181 +86 10 68009202 |
| Fax: | +86 10 68009195 +86 10 68009205 |
| Email: | wangjf@srrc.org.cn / wangjunfeng@srtc.org.cn |

## 1.3 Applicant's details

| | |
|---|---|
| Company: | Shenzhen Sang Fei Consumer Communications Co., Ltd. |
| Address: | 11 Science & Technology Rd., Shenzhen Hi-tech Industrial Park, Nanshan District |
| City: | Shenzhen |
| Country or Region: | China |
| Grantee Code: | VQR |
| Contacted person: | Helen.Lin |
| Tel: | 86-755-33308888 |
| Fax: | 86-755-26614979 |
| Email: | Helen.Lin@sangfei.com |

## 1.4 Manufacturer's details

| | |
|---|---|
| Company: | Shenzhen Sang Fei Consumer Communications Co., Ltd. |
| Address: | 11 Science & Technology Rd., Shenzhen Hi-tech Industrial Park, Nanshan District |
| City: | Shenzhen |
| Country or Region: | China |
| Contacted person: | Helen.Lin |
| Tel: | 86-755-33308888 |
| Fax: | 86-755-26614979 |
| Email: | Helen.Lin@sangfei.com |

## 1.5 Application details

Date of reception of test sample: 1st July 2014
Date of test: 1st July 2014 to 25thJuly 2014

## 1.6 Reference specification

FCC Part 15B October 1, 2013 (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 | VQRCTS388 |
| 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>PCS1900:30.0dBm<br>WCDMA:24.0dBm |
| E.R.P. & E.I.R.P. | E.R.P.:33.1dBm<br>E.I.R.P.:30.6dBm |
| Modulation Type | GSM/GPRS:GMSK<br>EDGE: GMSK(Uplink direction)<br>8PSK(Downlink direction)<br>WCDMA:QPSK |
| Emission Designator | GSM/GPRS/EDGE:300KGXW<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 | 3.7V |
| Extreme Temperature | Lowest: -30°C<br>Highest: +50°C |
| Extreme Voltage | Minimum: 3.5V<br>Maximum: 4.2V |
| HW Version | TMBKa |
| SW Version | S388_M6582M_1425_V01A_AM |

### 1.7.2 EUT details

| Product Name | Product Model | IMEI |
|---|---|---|
| GSM/GPRS/EDGE/UMTS Digital Mobile Phone with Bluetooth and WiFi | Philips S388 | 864359021775320 |

### 1.7.3 Auxiliary equipment details

AE (Auxiliary Equipment) 1#: Charger

| Equipment | Charger |
|---|---|
| Manufacturer | Salcomp (Shenzhen) Co., Ltd |
| Model Number | 3208SF |
| Input Voltage | 100V-240V a.c. |
| Output Voltage | 5.0V d.c. |
| Frequency | 50-60Hz |

AE (Auxiliary Equipment) 2#: Battery

| Equipment | Battery |
|---|---|
| Manufacturer | Shenzhen cyclelong power-tech Co., ltd |
| Model Number | AB1700AWML |
| Capacity | 1700mAh |
| Rated Voltage | 3.7V d.c. |

AE (Auxiliary Equipment) 3#: Headset

| Equipment | Headset |
|---|---|
| Manufacturer | Dongguan Tenji Industrial CO.,LTD |
| Model Number | TJ-101158 |

Note:

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

# 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. Dong Qifeng<br>Test engineer | Issued date:<br>**2014.07.28** |

## 2.2 Test result

### 2.2.1 Conducted Emissions-FCC Part15.107

Ambient condition:

| Temperature | Relative humidity | Pressure |
|---|---|---|
| 25.2°C | 43.5% | 100.2kPa |

Test Setup:

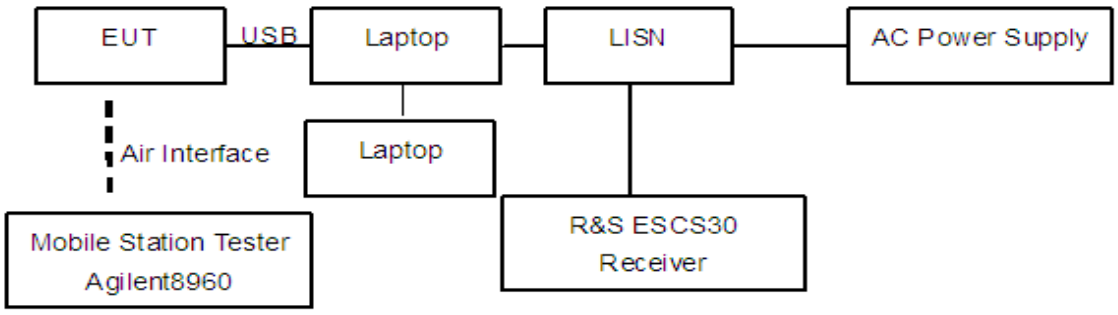



Figure 1

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.

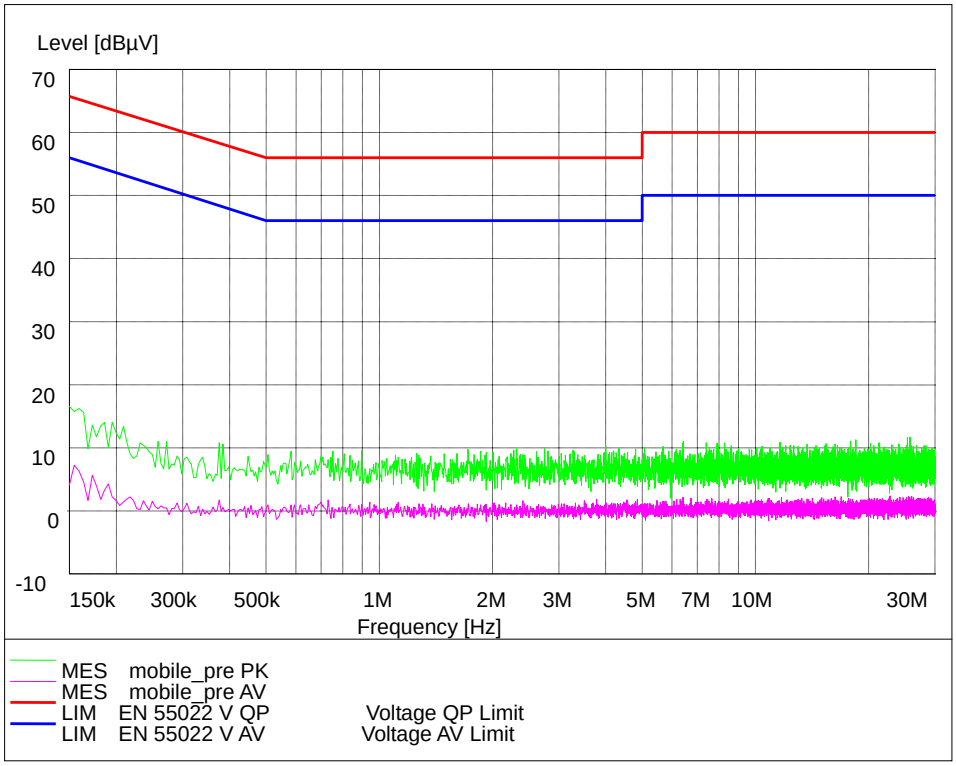
Limit:

| 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

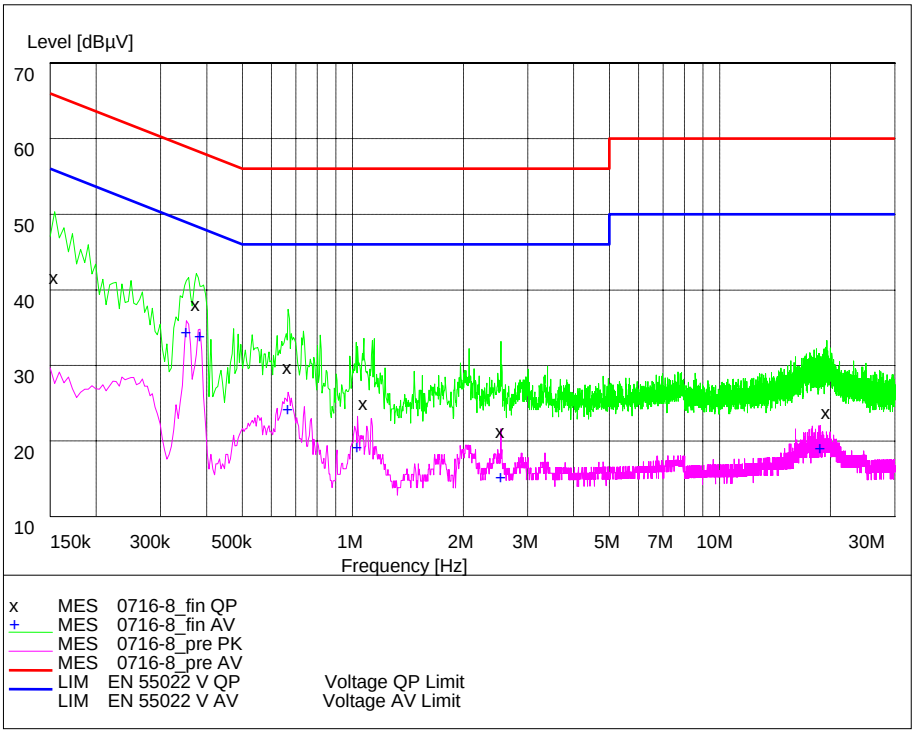
Test result:

Noise Level of The Measuring Instrument




L and N Line

GSM850 Laptop+ AE2#+AE3#




L and N Line

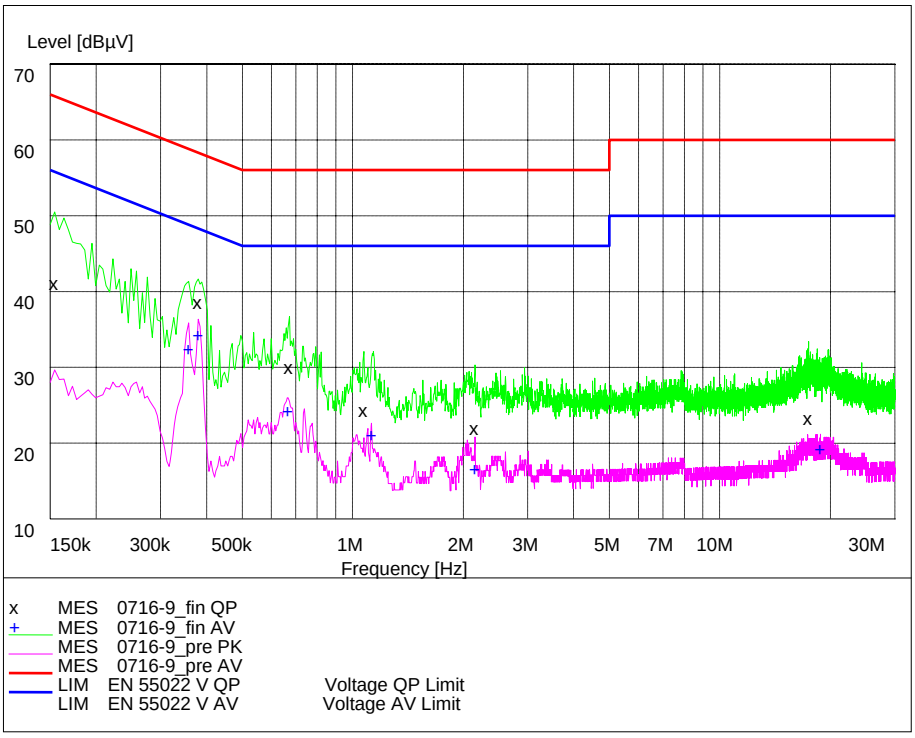
***MEASUREMENT RESULT: "MOBILE_fin QP"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.154500 | 43.10 | 20.1 | 66 | 22.7 | L | --- |
| 0.375000 | 39.50 | 20.3 | 58 | 18.9 | L | --- |
| 0.667500 | 31.20 | 20.4 | 56 | 24.8 | L | --- |
| 1.072500 | 26.50 | 20.3 | 56 | 29.5 | L | --- |
| 2.535000 | 22.70 | 20.3 | 56 | 33.3 | L | --- |
| 19.563000 | 25.20 | 21.2 | 60 | 34.8 | L | --- |

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

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.352500 | 35.80 | 20.3 | 49 | 13.1 | L | --- |
| 0.384000 | 35.30 | 20.3 | 48 | 12.9 | L | --- |
| 0.667500 | 25.70 | 20.4 | 46 | 20.3 | L | --- |
| 1.032000 | 20.60 | 20.2 | 46 | 25.4 | L | --- |
| 2.535000 | 16.70 | 20.3 | 46 | 29.3 | L | --- |
| 18.816000 | 20.50 | 21.2 | 50 | 29.5 | L | --- |

PCS 1900 Laptop+ AE2#+AE3#




L and N Line

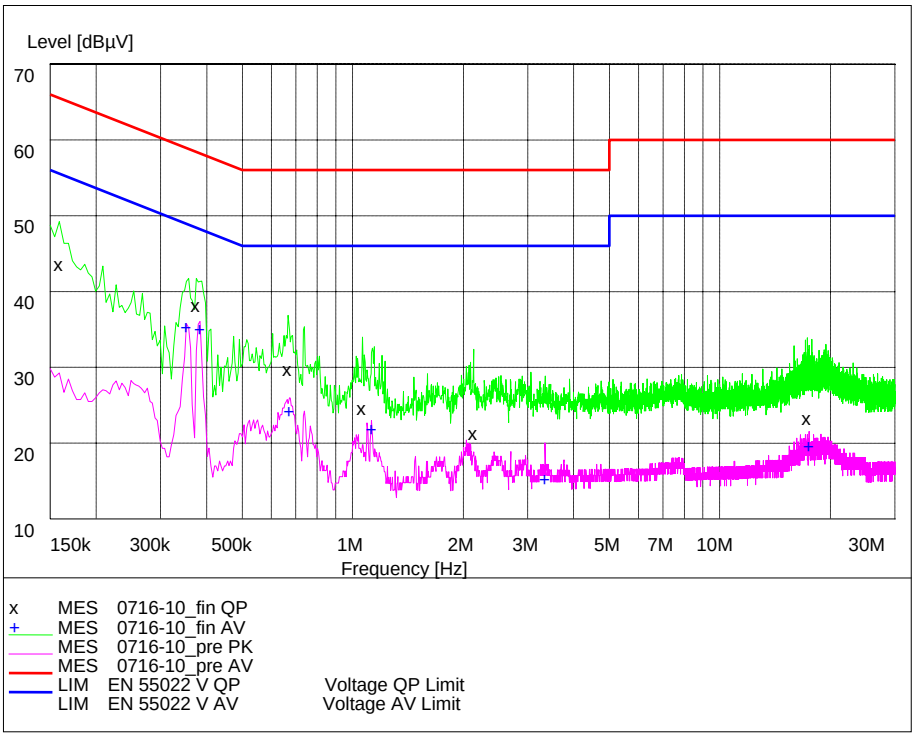
***MEASUREMENT RESULT: "MOBILE_fin QP"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.154500 | 42.60 | 20.1 | 66 | 23.2 | L | --- |
| 0.379500 | 40.00 | 20.3 | 58 | 18.3 | L | --- |
| 0.672000 | 31.50 | 20.4 | 56 | 24.5 | L | --- |
| 1.072500 | 25.80 | 20.3 | 56 | 30.2 | L | --- |
| 2.157000 | 23.40 | 20.3 | 56 | 32.6 | L | --- |
| 17.443500 | 24.80 | 21.1 | 60 | 35.2 | L | --- |

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

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.357000 | 33.80 | 20.3 | 49 | 15.0 | L | --- |
| 0.379500 | 35.70 | 20.3 | 48 | 12.6 | L | --- |
| 0.667500 | 25.60 | 20.4 | 46 | 20.4 | L | --- |
| 1.126500 | 22.50 | 20.2 | 46 | 23.5 | L | --- |
| 2.157000 | 18.00 | 20.3 | 46 | 28.0 | L | --- |
| 18.816000 | 20.70 | 21.2 | 50 | 29.3 | L | --- |

WCDMA BAND II Laptop+ AE2#+AE3#




L and N Line

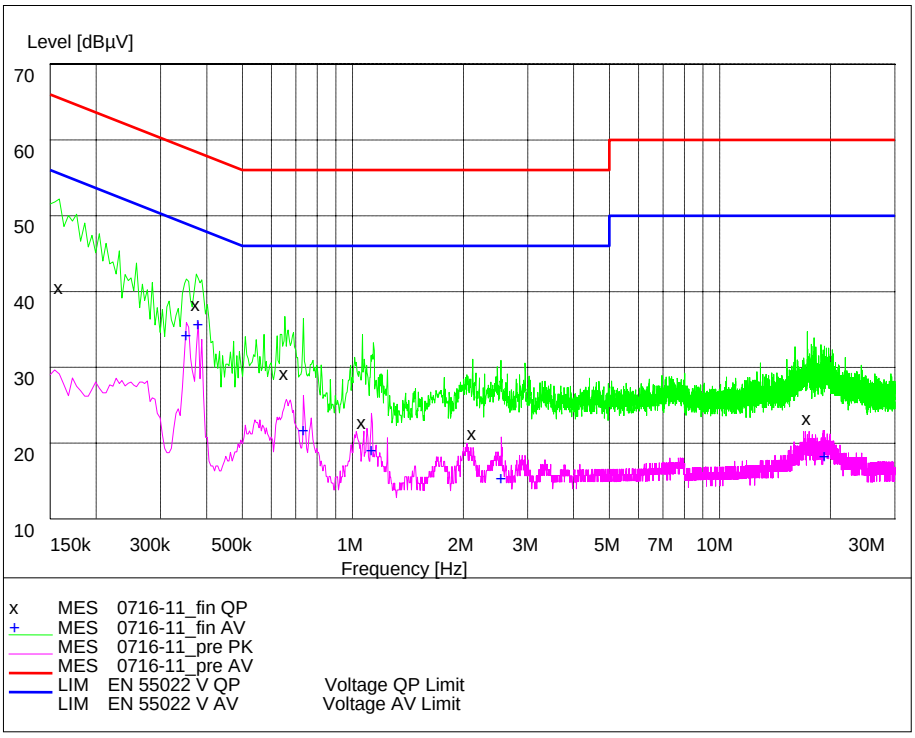
***MEASUREMENT RESULT: "MOBILE_fin QP"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.159000 | 45.00 | 20.2 | 66 | 20.5 | L | --- |
| 0.375000 | 39.60 | 20.3 | 58 | 18.8 | L | --- |
| 0.667500 | 31.20 | 20.4 | 56 | 24.8 | L | --- |
| 1.063500 | 26.10 | 20.3 | 56 | 29.9 | N | --- |
| 2.134500 | 22.70 | 20.3 | 56 | 33.3 | L | --- |
| 17.322000 | 24.80 | 21.1 | 60 | 35.2 | L | --- |

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

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.352500 | 36.70 | 20.3 | 49 | 12.2 | L | --- |
| 0.384000 | 36.50 | 20.3 | 48 | 11.7 | L | --- |
| 0.672000 | 25.60 | 20.4 | 46 | 20.4 | L | --- |
| 1.126500 | 23.30 | 20.2 | 46 | 22.7 | L | --- |
| 3.340500 | 16.70 | 20.5 | 46 | 29.3 | L | --- |
| 17.506500 | 21.00 | 21.1 | 50 | 29.0 | L | --- |

WCDMA BAND V Laptop+ AE2#+AE3#




L and N Line

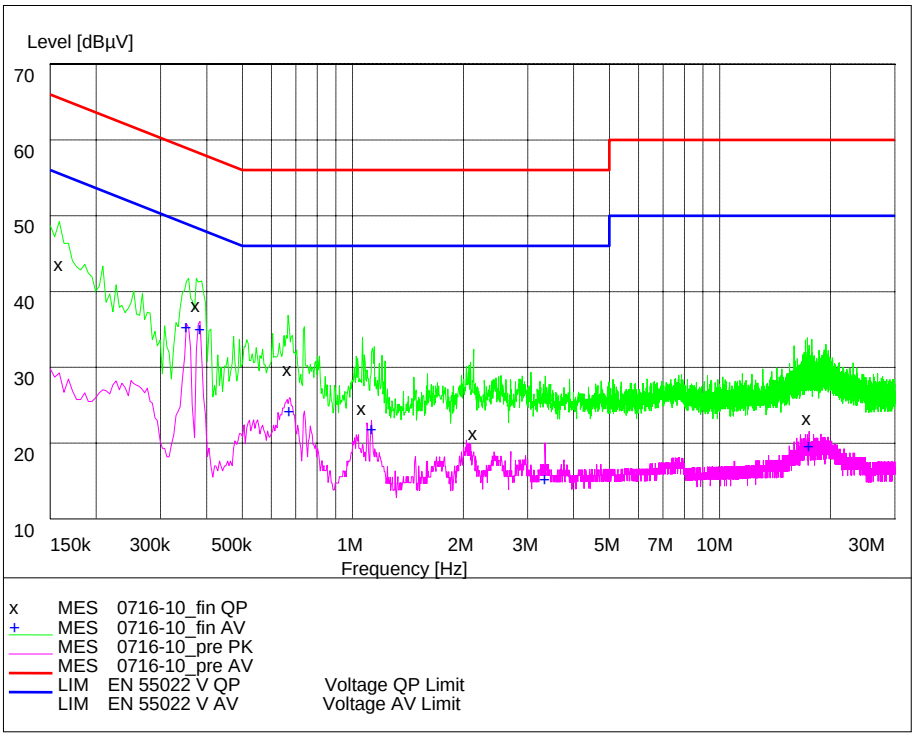
***MEASUREMENT RESULT: "MOBILE_fin QP"***

| 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+ AE2#+AE3#




L and N Line

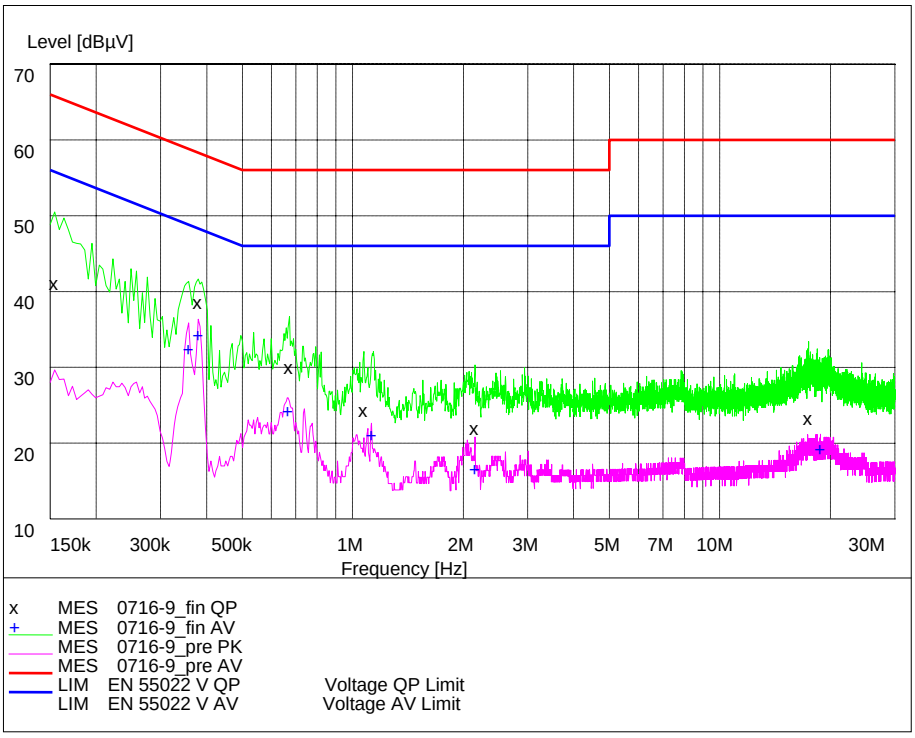
***MEASUREMENT RESULT: "MOBILE_fin QP"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.159000 | 45.00 | 20.2 | 66 | 20.5 | L | --- |
| 0.375000 | 39.60 | 20.3 | 58 | 18.8 | L | --- |
| 0.667500 | 31.20 | 20.4 | 56 | 24.8 | L | --- |
| 1.063500 | 26.10 | 20.3 | 56 | 29.9 | N | --- |
| 2.134500 | 22.70 | 20.3 | 56 | 33.3 | L | --- |
| 17.322000 | 24.80 | 21.1 | 60 | 35.2 | L | --- |

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

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.352500 | 36.70 | 20.3 | 49 | 12.2 | L | --- |
| 0.384000 | 36.50 | 20.3 | 48 | 11.7 | L | --- |
| 0.672000 | 25.60 | 20.4 | 46 | 20.4 | L | --- |
| 1.126500 | 23.30 | 20.2 | 46 | 22.7 | L | --- |
| 3.340500 | 16.70 | 20.5 | 46 | 29.3 | L | --- |
| 17.506500 | 21.00 | 21.1 | 50 | 29.0 | L | --- |

MP3/MP4 Laptop+ AE2#+AE3#




L and N Line

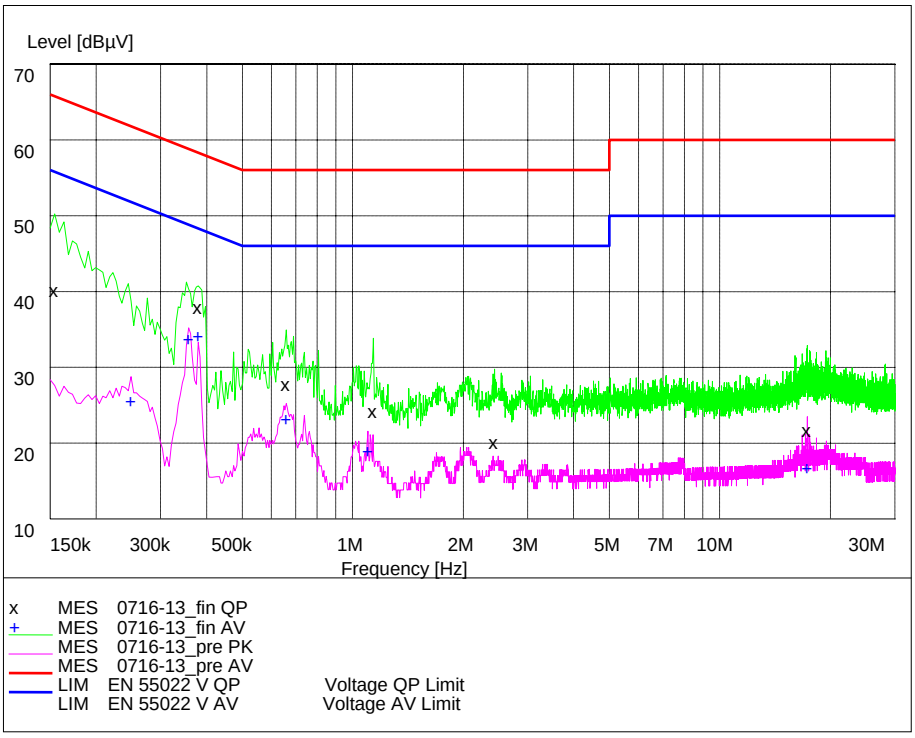
***MEASUREMENT RESULT: "MOBILE_fin QP"***

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.154500 | 42.60 | 20.1 | 66 | 23.2 | L | --- |
| 0.379500 | 40.00 | 20.3 | 58 | 18.3 | L | --- |
| 0.672000 | 31.50 | 20.4 | 56 | 24.5 | L | --- |
| 1.072500 | 25.80 | 20.3 | 56 | 30.2 | L | --- |
| 2.157000 | 23.40 | 20.3 | 56 | 32.6 | L | --- |
| 17.443500 | 24.80 | 21.1 | 60 | 35.2 | L | --- |

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

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.357000 | 33.80 | 20.3 | 49 | 15.0 | L | --- |
| 0.379500 | 35.70 | 20.3 | 48 | 12.6 | L | --- |
| 0.667500 | 25.60 | 20.4 | 46 | 20.4 | L | --- |
| 1.126500 | 22.50 | 20.2 | 46 | 23.5 | L | --- |
| 2.157000 | 18.00 | 20.3 | 46 | 28.0 | L | --- |
| 18.816000 | 20.70 | 21.2 | 50 | 29.3 | L | --- |

Camera Laptop+ AE2#+AE3#




L and N Line

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

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.154500 | 41.60 | 20.1 | 66 | 24.1 | L | --- |
| 0.379500 | 39.30 | 20.3 | 58 | 19.0 | L | --- |
| 0.658500 | 29.20 | 20.4 | 56 | 26.8 | L | --- |
| 1.140000 | 25.60 | 20.2 | 56 | 30.4 | L | --- |
| 2.436000 | 21.60 | 20.3 | 56 | 34.4 | L | --- |
| 17.295000 | 23.10 | 21.1 | 60 | 36.9 | L | --- |

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

| Frequency | Level | Transd | Limit | Margin | Line | PE |
|---|---|---|---|---|---|---|
| MHz | dBµV | dB | dBµV | dB | | |
| 0.249000 | 27.00 | 20.2 | 52 | 24.8 | L | --- |
| 0.357000 | 35.10 | 20.3 | 49 | 13.7 | L | --- |
| 0.379500 | 35.50 | 20.3 | 48 | 12.8 | L | --- |
| 0.658500 | 24.60 | 20.4 | 46 | 21.4 | L | --- |
| 1.099500 | 20.40 | 20.3 | 46 | 25.6 | L | --- |
| 17.299500 | 18.20 | 21.1 | 50 | 31.8 | L | --- |

### 2.2.2 Radiated Emissions-FCC Part15.109

Ambient condition:

| Temperature | Relative humidity | Pressure |
|---|---|---|
| 25.2°C | 43.5% | 100.2kPa |

Test Setup:

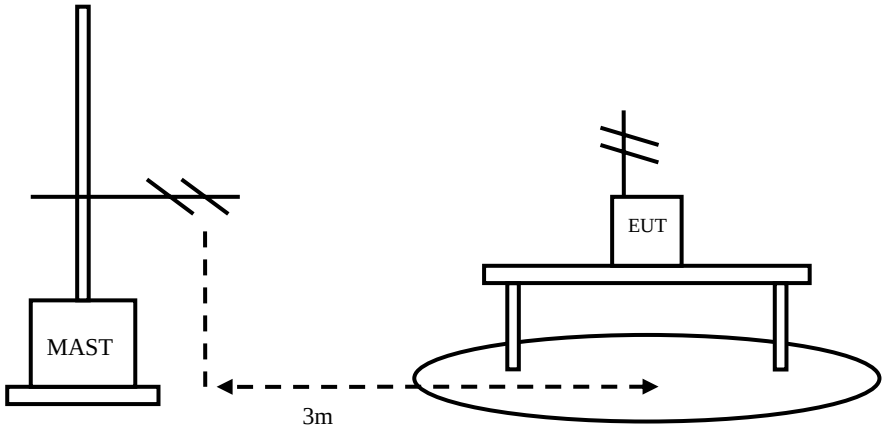



Figure 2

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 |
|---|---|---|---|---|
| 30.000000 | 27.1 | 15.3 | 11.8 | Vertica |
| 40.280561 | 24.9 | 15.8 | 9.1 | Horizontal |
| 479.559118 | 25.9 | 18.1 | 7.8 | Vertical |
| 750.300601 | 21.8 | 22.7 | 0.9 | Vertical |
| 837.274549 | 63.5 | 23.8 | 39.7 | Vertical |
| 876.553106 | 26.5 | 24.5 | 2.0 | Vertical |

PCS1900 Mode

| Frequency(MHz) | Result(dBuV/m) | $A_{Rpl}$ (dB) | $P_{mea}$ (dBuV/m) | Polarity |
|---|---|---|---|---|
| 30.240000 | 11.6 | 15.3 | -3.7 | Vertical |
| 198.220000 | 13.8 | 8.2 | 5.6 | Vertical |
| 202.300000 | 12.0 | 8.3 | 3.7 | Vertical |
| 213.280000 | 12.4 | 8.8 | 3.6 | Vertical |
| 477.760000 | 16.6 | 18.0 | -1.4 | Vertical |
| 906.560000 | 24.5 | 25.0 | -0.5 | Vertical |

WCDMA BAND II Mode

| Frequency(MHz) | Result(dBuV/m) | $A_{Rpl}$ (dB) | $P_{mea}$ (dBuV/m) | Polarity |
|---|---|---|---|---|
| 31.020000 | 11.8 | 15.3 | -3.5 | Vertica |
| 209.200000 | 13.6 | 8.5 | 5.1 | Vertical |
| 219.280000 | 10.6 | 9.2 | 1.4 | Horizontal |
| 520.040000 | 18.7 | 18.7 | 0 | Vertical |
| 766.700000 | 22.2 | 22.9 | -0.7 | Vertical |
| 940.580000 | 25.6 | 25.4 | 0.2 | Vertical |

WCDMA BAND V Mode

| Frequency(MHz) | Result(dBuV/m) | $A_{Rpl}$ (dB) | $P_{mea}$ (dBuV/m) | Polarity |
|---|---|---|---|---|
| 30.000000 | 27.9 | 15.3 | 12.6 | Vertical |
| 39.730000 | 26.3 | 16.0 | 10.3 | Horizontal |
| 479.550000 | 26.0 | 18.1 | 7.9 | Vertical |
| 826.050000 | 58.8 | 23.9 | 34.9 | Vertical |
| 870.940000 | 39.6 | 24.3 | 15.3 | Vertical |
| 941.080000 | 25.2 | 25.4 | -0.2 | Vertical |

FM Radio Mode

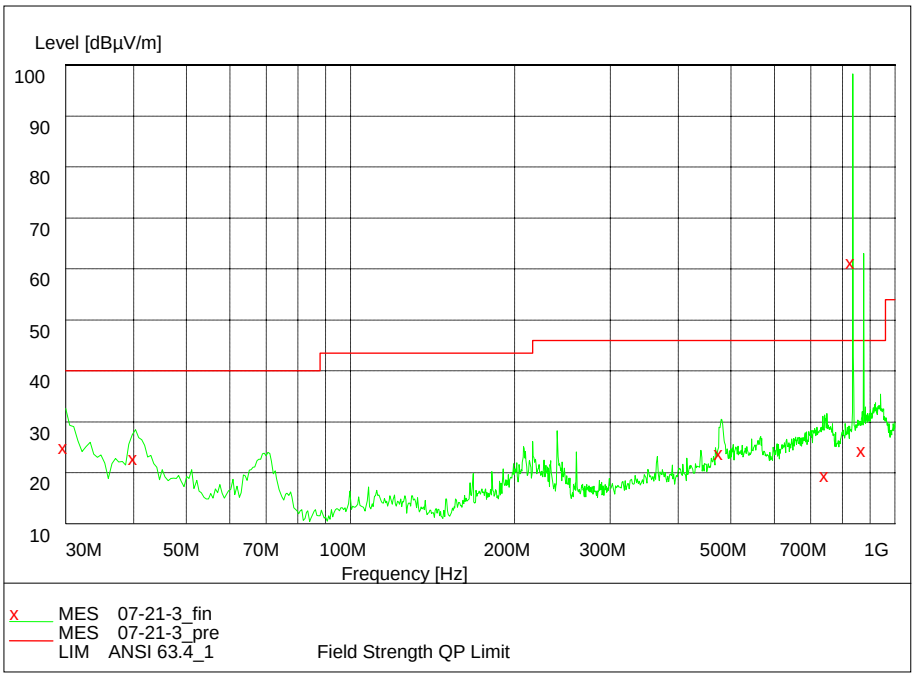
| Frequency(MHz) | Result(dBuV/m) | $A_{Rpl}$ (dB) | $P_{mea}$ (dBuV/m) | Polarity |
|---|---|---|---|---|
| 30.420000 | 11.6 | 15.3 | -3.7 | Vertical |
| 192.400000 | 12.1 | 8.0 | 4.1 | Vertical |
| 211.480000 | 13.9 | 8.7 | 5.2 | Horizontal |
| 550.340000 | 17.8 | 19.2 | -1.4 | Vertical |
| 739.940000 | 21.8 | 22.7 | -0.9 | Vertical |
| 935.540000 | 25.0 | 25.4 | -0.4 | Vertical |

MP3/MP4 Mode

| Frequency(MHz) | Result(dBuV/m) | $A_{Rpl}$ (dB) | $P_{mea}$ (dBuV/m) | Polarity |
|---|---|---|---|---|
| 30.420000 | 11.7 | 15.3 | -3.6 | Vertical |
| 187.480000 | 11.5 | 8.1 | 3.4 | Vertical |
| 216.400000 | 12.5 | 9.0 | 3.5 | Vertical |
| 508.100000 | 17.4 | 18.5 | -1.1 | Vertical |
| 740.480000 | 21.7 | 22.7 | -1.0 | Vertical |
| 930.260000 | 25.0 | 25.4 | -0.4 | Vertical |

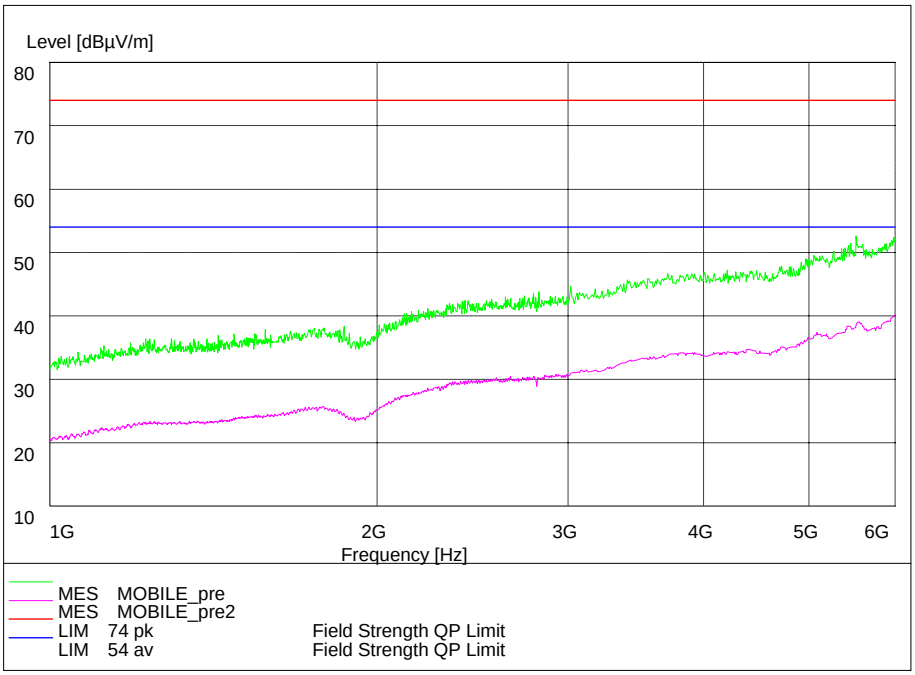
Camera Mode

| Frequency(MHz) | Result(dBuV/m) | $A_{Rpl}$ (dB) | $P_{mea}$ (dBuV/m) | Polarity |
|---|---|---|---|---|
| 30.900000 | 11.7 | 15.3 | -3.6 | Vertica |
| 182.740000 | 10.9 | 8.4 | 2.5 | Vertical |
| 208.780000 | 14.6 | 8.5 | 6.1 | Vertical |
| 558.080000 | 18.0 | 19.4 | -1.4 | Horizontal |
| 761.060000 | 22.1 | 22.7 | -0.6 | Vertical |
| 924.200000 | 25.1 | 25.5 | -0.4 | Vertical |

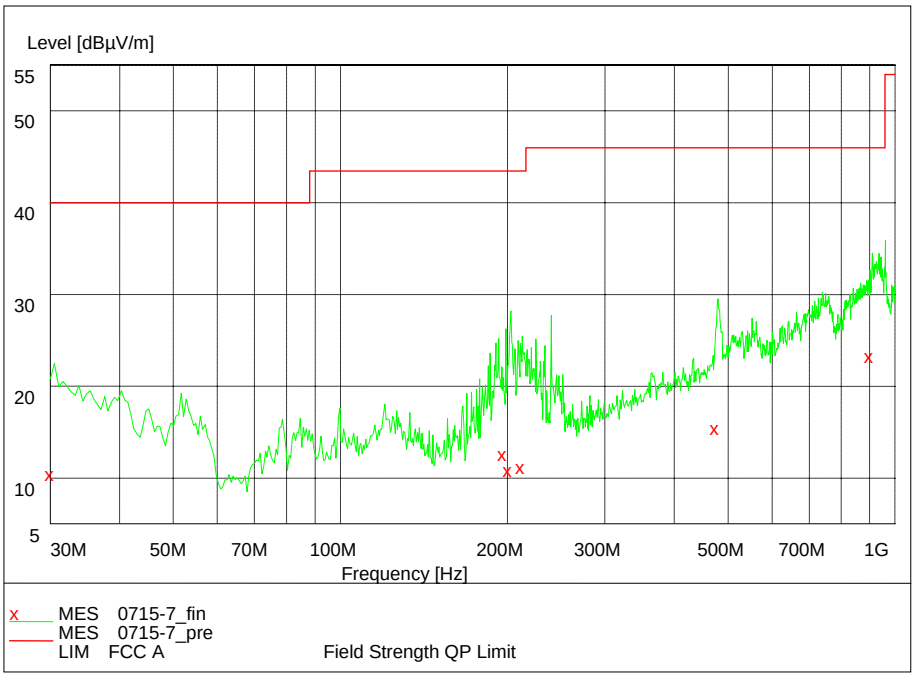



GSM850 (30MHz – 1GHz)

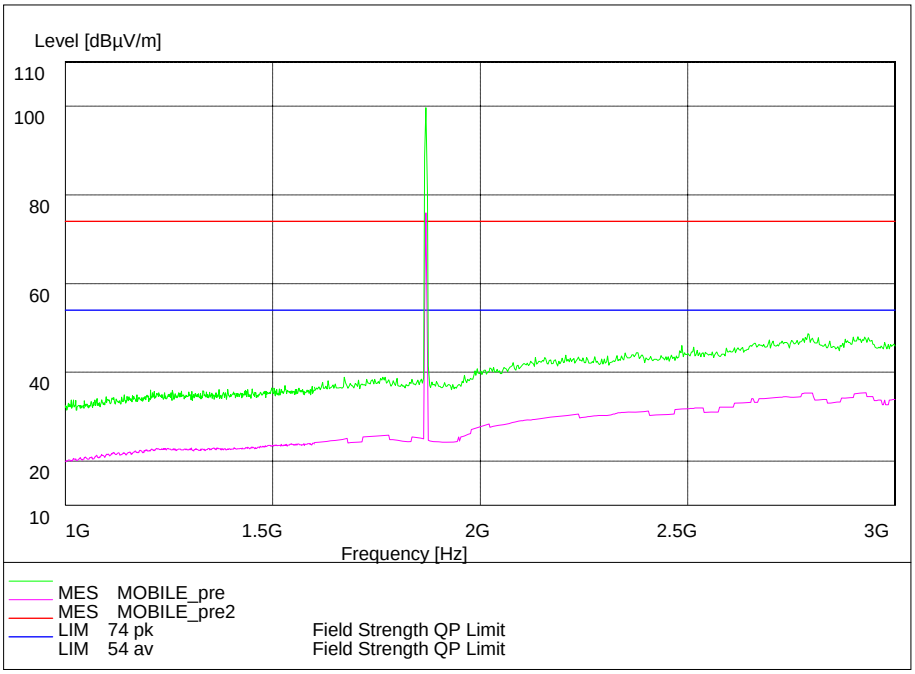
Note: The signal beyond the limit is the base station simulator carrier.




GSM850 (1GHz – 6GHz)

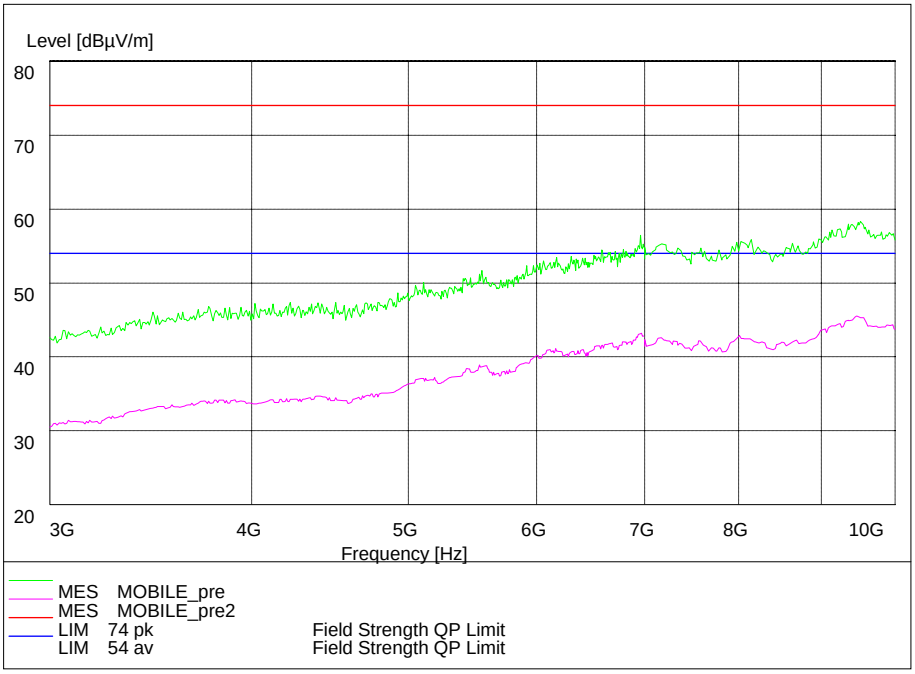



PCS1900 (30MHz – 1GHz)

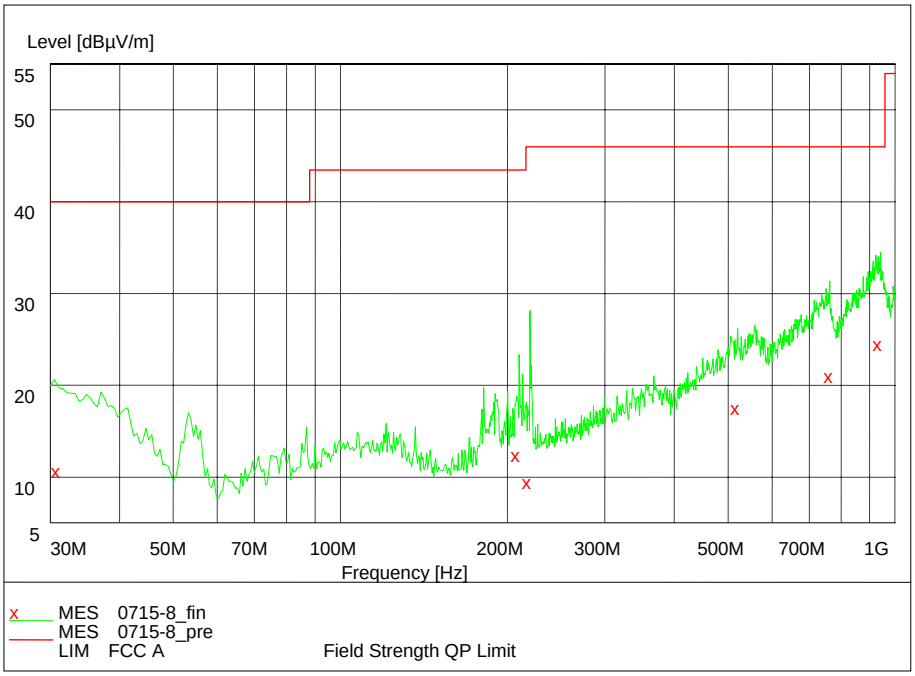



PCS1900 (1GHz – 3GHz)

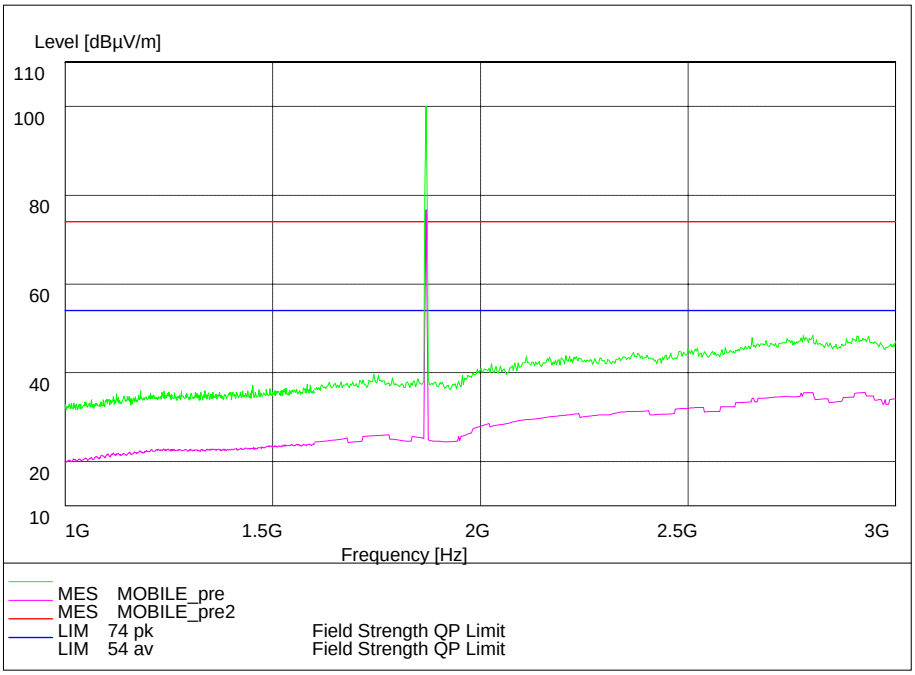
Note: The signals beyond the limit are the base station and simulator carrier.




PCS1900 (3GHz – 10GHz)

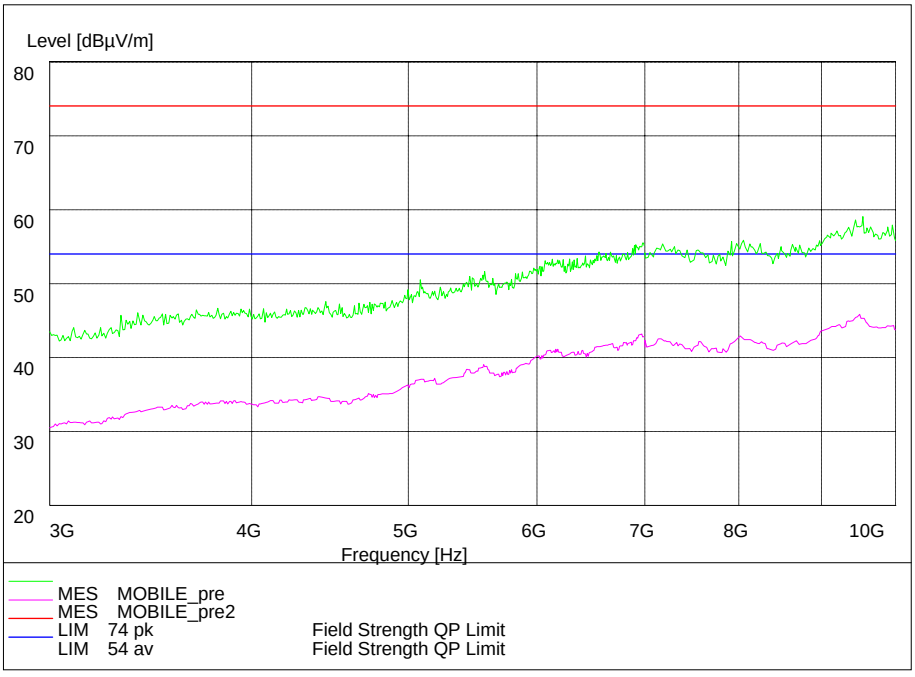



WCDMA BAND II (30MHz – 1GHz)

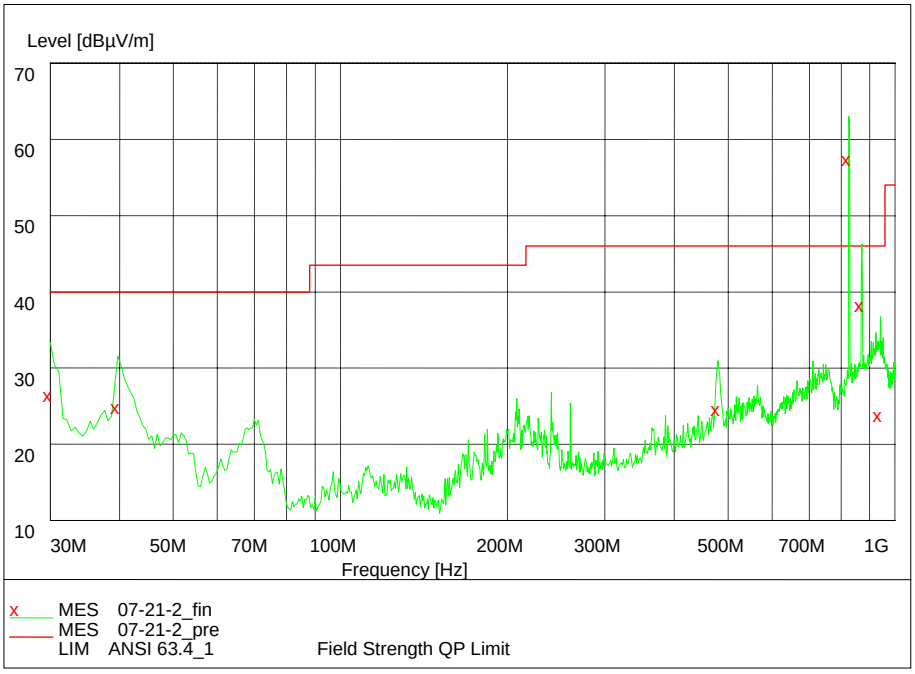



WCDMA BAND II (1GHz – 3GHz)

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

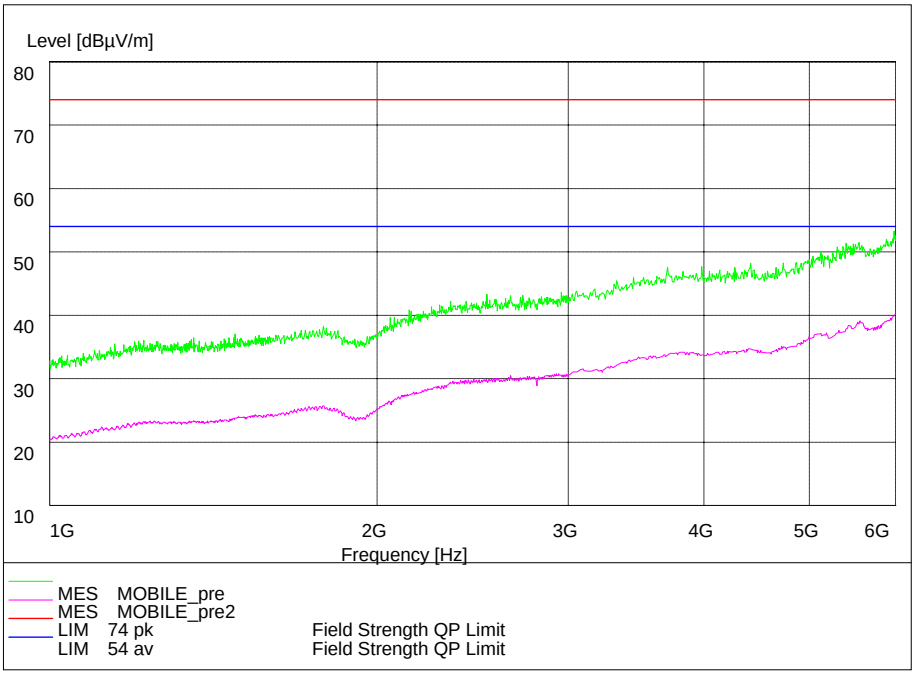



WCDMA BAND II (3GHz – 10GHz)

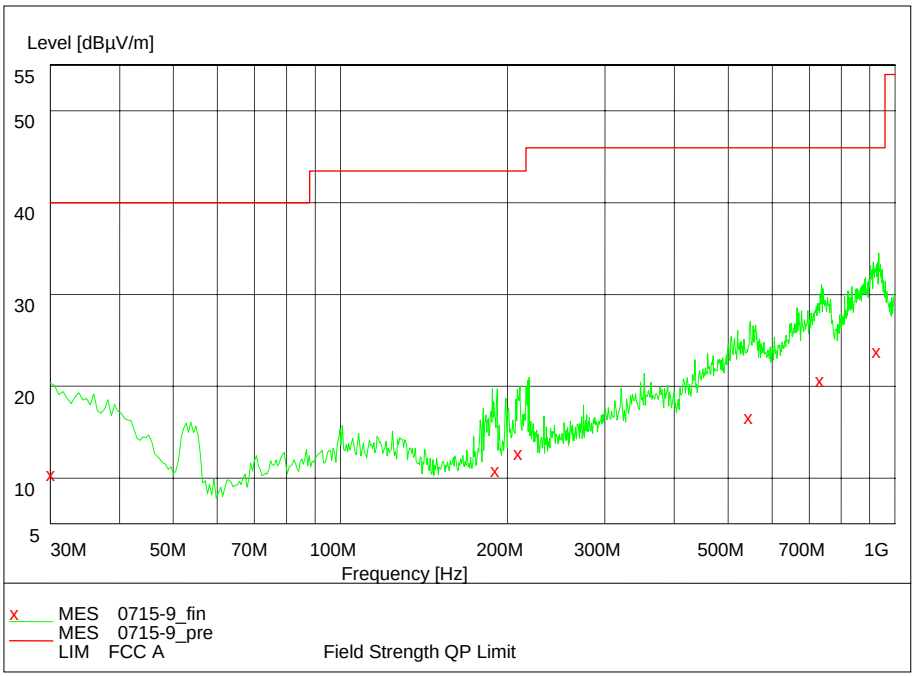



WCDMA BAND V (30MHz – 1GHz)

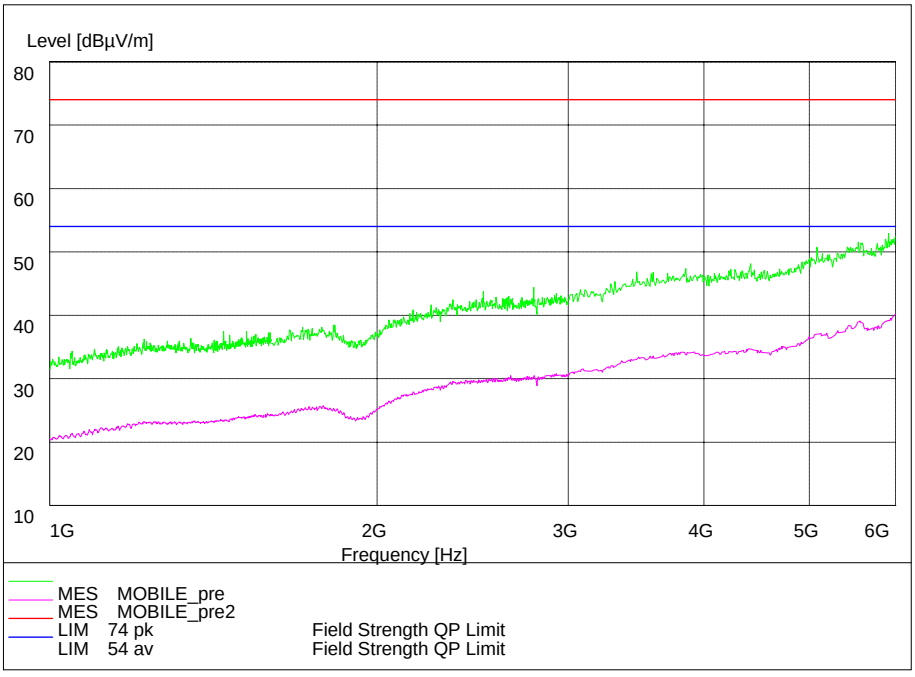
Note: The signals beyond the limit are the base station and simulator carrier.



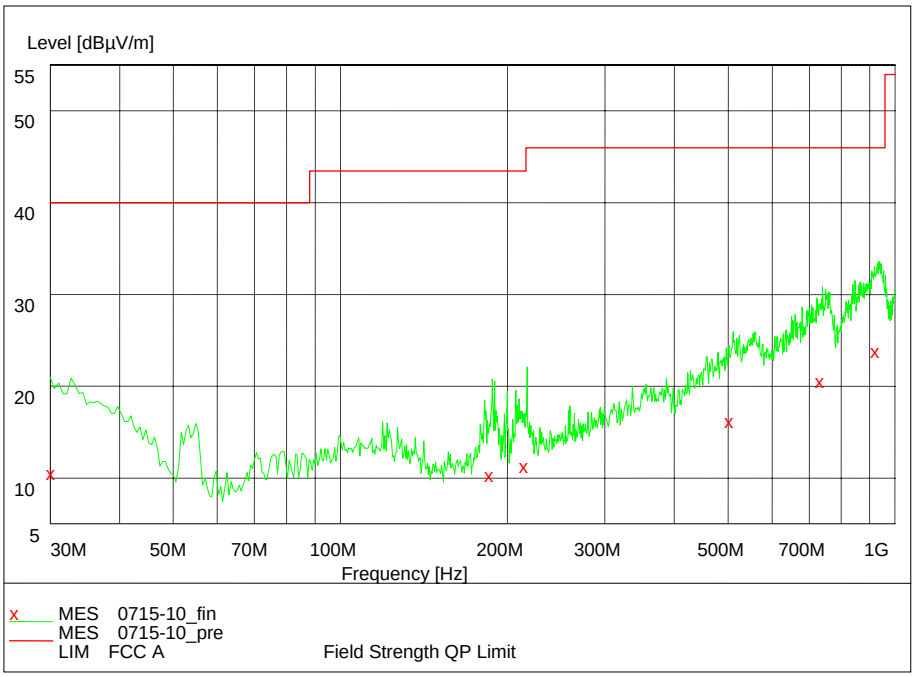

WCDMA BAND V (1GHz – 6GHz)



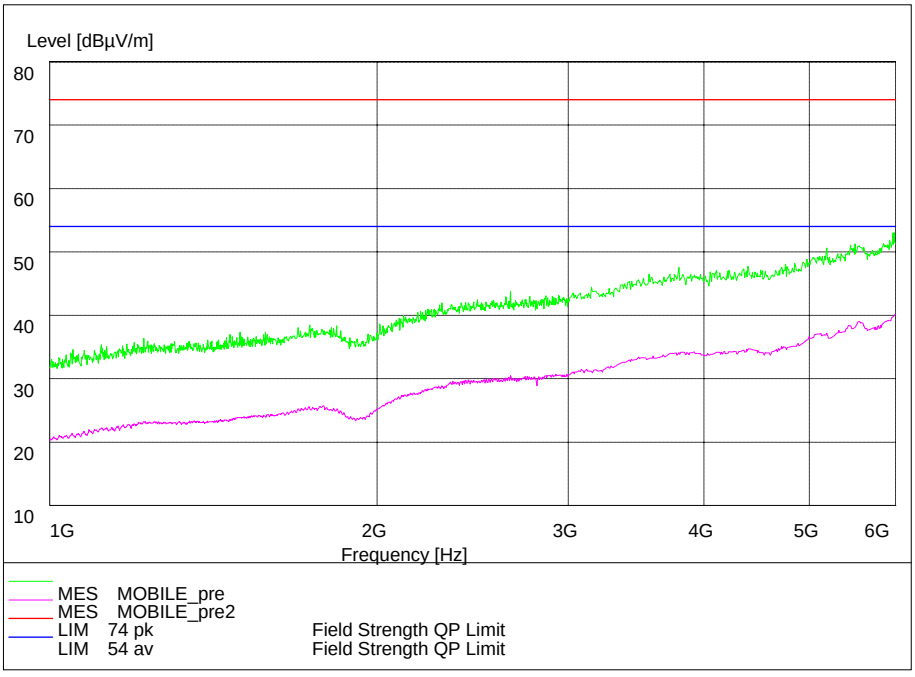

FM Radio (30MHz – 1GHz)



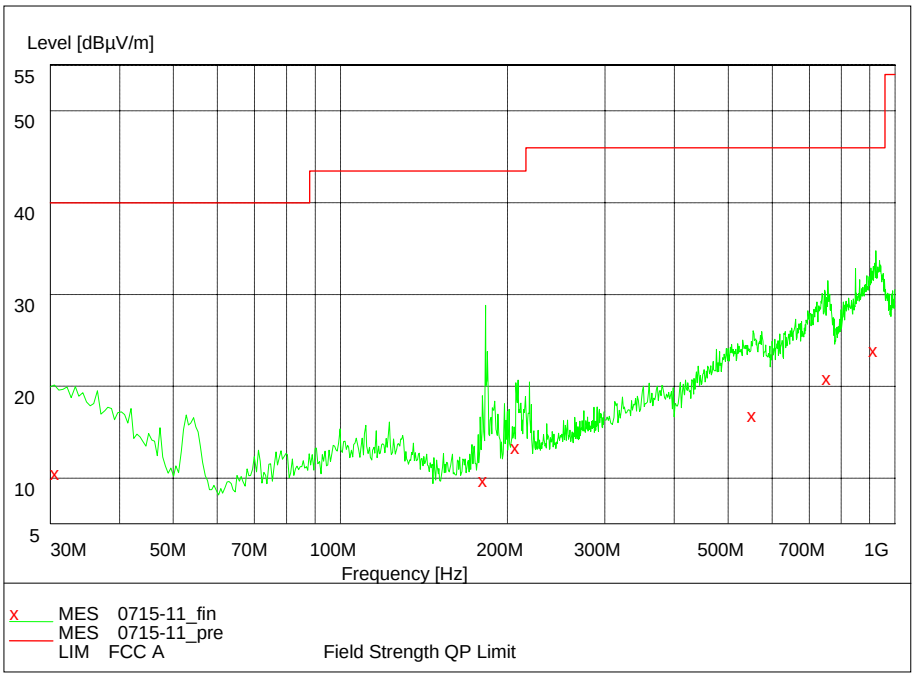

FM Radio (1GHz – 6GHz)



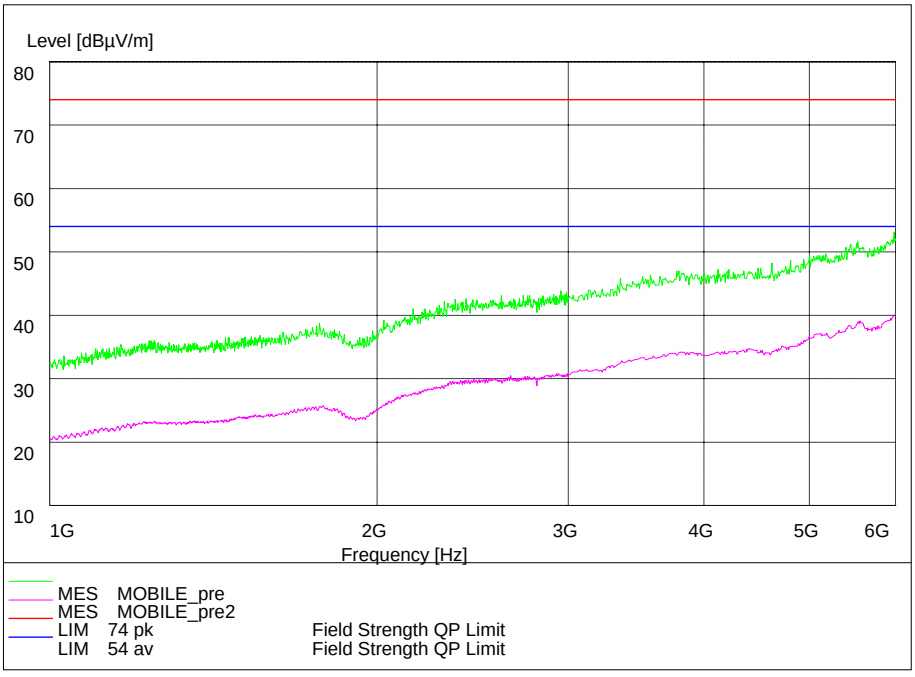

MP3/MP4 (30MHz – 1GHz)




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