



TEST REPORT

Applicant: MAXCOM MOBILE

Address of Applicant: Room 2202 International Science and Technology Building, Futian District, 3007 Shennan Road, Shenzhen, China

Equipment Under Test (EUT)

Product Name: GSM Mobile Phone

Model No.: GOODS-5130S, GOOD-5130, 5130, 5130S, COOL-5130, G5130, XTV-5130, LIKE-5130, SKIES-5130S

Trade mark : F.CELL, XTREME, MAXCOM, P.MOVIL, SKYNEW, PLAY, NEW, LIKE, HISKY

FCC ID: FWO5130S

Applicable standards: FCC CFR Title 47 Part 15 Subpart B

Date of sample receipt: Mar. 31, 2012

Date of Test: Apr. 05-25, 2012

Date of report issued: Apr. 25, 2012

Test Result : PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Stephen Guo
Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the CCIS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

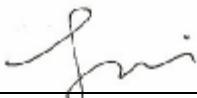
This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of CCIS International Electrical Approvals or testing done by CCIS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by CCIS International Electrical Approvals in writing.

This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

2 Version

| Version No. | Date | Description |
|-------------|---------------|-------------|
| 00 | Apr. 25, 2012 | Original |
| | | |
| | | |
| | | |
| | | |

Prepared By:

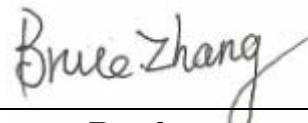


Date:

Apr. 25, 2012

Project Engineer

Check By:



Date:

Apr. 25, 2012

Reviewer

3 Contents

| | Page |
|---|------|
| 1 COVER PAGE | 1 |
| 2 VERSION | 2 |
| 3 CONTENTS | 3 |
| 4 TEST SUMMARY | 4 |
| 5 GENERAL INFORMATION | 5 |
| 5.1 CLIENT INFORMATION | 5 |
| 5.2 GENERAL DESCRIPTION OF E.U.T | 5 |
| 5.3 TEST MODE AND VOLTAGE | 5 |
| 5.4 TEST FACILITY | 6 |
| 5.5 TEST LOCATION | 6 |
| 5.6 DESCRIPTION OF SUPPORT UNITS | 6 |
| 5.7 DEVIATION FROM STANDARDS | 6 |
| 5.8 ABNORMALITIES FROM STANDARD CONDITIONS | 6 |
| 5.9 OTHER INFORMATION REQUESTED BY THE CUSTOMER | 6 |
| 6 TEST INSTRUMENTS LIST | 7 |
| 7 TEST RESULTS AND MEASUREMENT DATA | 8 |
| 7.1 CONDUCTED EMISSIONS | 8 |
| 7.2 RADIATED EMISSION | 11 |
| 8 TEST SETUP PHOTO | 16 |
| 9 EUT CONSTRUCTIONAL DETAILS | 17 |

4 Test Summary

| Test Item | Section in CFR 47 | Result |
|---------------------|-------------------|--------|
| Conducted Emission | Part15.107 | PASS |
| Readiated Emissions | Part15.109 | PASS |

PASS: The EUT complies with the essential requirements in the standard.

5 General Information

5.1 Client Information

| | |
|-------------------------|--|
| Applicant: | MAXCOM MOBILE |
| Address of Applicant: | Room 2202 International Science and Technology Building, Futian District, 3007 Shennan Road, Shenzhen, China |
| Manufacturer: | MAXCOM MOBILE |
| Address of Manufacturer | Room 2202 International Science and Technology Building, Futian District, 3007 Shennan Road, Shenzhen, China |

5.2 General Description of E.U.T.

| | |
|---------------|---|
| Product Name: | GSM Mobile Phone |
| Model No.: | GOODS-5130S, GOOD-5130, 5130, 5130S, COOL-5130, G5130, XTV-5130, LIKE-5130, SKIES-5130S |
| Trade mark: | F.CELL, XTREME, MAXCOM, P.MOVIL, SKYNEW, PLAY, NEW, LIKE, HISKY |
| AC adapter: | Trade Mark: jmc Input:100-240V AC,50/60Hz 80mA Output:4.5V-9.5V DC MAX 500mA |
| Power supply: | Rechargeable Li-ion Battery DC3.7V |
| Remark: | Just test the mode No. GOODS-5130S GOODS-5130S, GOOD-5130, 5130, 5130S, COOL-5130, G5130, XTV-5130, LIKE-5130 and SKIES-5130S are identical in the same PCB layout, interior structure and electrical circuits. The only differences are the model name, Trade mark and the color of the appearance. |

5.3 Test mode and voltage

| | |
|---------------|--|
| Test mode: | |
| Exchange mode | Keep the EUT in exchanging data between the EUT and PC |
| Test voltage: | AC 120V/60Hz |

5.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC —Registration No.:** 817957

China Certification & Inspection Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in out files. Registration 817957, February 27, 2012

● **Industry Canada (IC)**

The 3m Semi-anechoic chamber of China Certification & Inspection Services Co., Ltd. Has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

5.5 Test Location

All tests were performed at:

China Certification & Inspection Services Co., Ltd.

Address: 1st Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District, Shenzhen, China

Tel: 0755-23118282

Fax: 0755-23116366

5.6 Description of Support Units

| Manufacturer | Description | Model | Serial Number | FCC ID/DoC |
|--------------|-------------|-------------|---------------|------------|
| HP | Printer | CB495A | 05257893 | DoC |
| DELL | PC | OPTIPLEX745 | GTS312 | DoC |
| DELL | MONITOR | E178FPC | N/A | DoC |
| DELL | KEYBOARD | SK-8115 | N/A | DoC |
| DELL | MOUSE | MOC5UO | N/A | DoC |

5.7 Deviation from Standards

Biconical, log.per. antenna and horn antenna were used instead of dipole antenna.
Semi-anechoic Chamber was used as alternation of open air test sites, and all test suites were performed with radiated method in it.

5.8 Abnormalities from Standard Conditions

None.

5.9 Other Information Requested by the Customer

None.

6 Test Instruments list

| Radiated Emission: | | | | | | |
|--------------------|-------------------------------|-----------------------------------|-------------------|---------------|---------------------|-------------------------|
| Item | Test Equipment | Manufacturer | Model No. | Inventory No. | Cal.Date (dd-mm-yy) | Cal.Due date (dd-mm-yy) |
| 1 | 3m Semi- Anechoic Chamber | SAEMC | 9(L)*6(W)* 6(H) | CCIS0001 | Aug. 09 2011 | Aug. 09 2012 |
| 2 | EMI Test Receiver | Rohde & Schwarz | ESCI | CCIS0002 | June 16 2011 | June 16 2012 |
| 3 | BiConiLog Antenna | SCHWARZBECK MESS-ELEKTRONIK | VULB9163 | CCIS0005 | June 09 2011 | June 09 2012 |
| 4 | Double -ridged waveguide horn | SCHWARZBECK MESS-ELEKTRONIK | BBHA9120D | CCIS0006 | June 09 2011 | June 09 2012 |
| 5 | EMI Test Software | AUDIX | E3 | N/A | N/A | N/A |
| 6 | Coaxial Cable | CCIS | N/A | CCIS0016 | Mar. 01 2012 | Mar. 01 2013 |
| 7 | Coaxial Cable | CCIS | N/A | CCIS0017 | Mar. 01 2012 | Mar. 01 2013 |
| 8 | Coaxial cable | CCIS | N/A | CCIS0018 | Mar. 01 2012 | Mar. 01 2013 |
| 9 | Coaxial Cable | CCIS | N/A | CCIS0019 | Mar. 01 2012 | Mar. 01 2013 |
| 10 | Coaxial Cable | CCIS | N/A | CCIS0087 | Mar. 01 2012 | Mar. 01 2013 |
| 11 | Amplifier(10KHz-1.3GHz) | HP | 8447D | CCIS0003 | Aug. 03 2011 | Aug. 03 2012 |
| 12 | Amplifier(1GHz-18GHz) | Compliance Direction Systems Inc. | PAP-1G18 | CCIS0011 | Aug. 05 2011 | Aug. 05 2012 |
| 13 | Spectrum analyzer | Rohde & Schwarz | FSP | CCIS0023 | June 22 2011 | June 22 2012 |
| 14 | Printer | Hp | HP LaserJet P1007 | N/A | N/A | N/A |
| 15 | Positioning Controller | UC | UC3000 | CCIS0015 | N/A | N/A |

| Conducted Emission: | | | | | | |
|---------------------|-------------------|--------------------|-----------------------|---------------|---------------------|-------------------------|
| Item | Test Equipment | Manufacturer | Model No. | Inventory No. | Cal.Date (dd-mm-yy) | Cal.Due date (dd-mm-yy) |
| 1 | Shielding Room | ZhongShuo Electron | 11.0(L)x4.0(W)x3.0(H) | CCIS0061 | Oct. 10 2011 | Oct. 10 2012 |
| 2 | EMI Test Receiver | Rohde & Schwarz | ESPI | CCIS0022 | Mar. 16 2012 | Mar. 16 2013 |
| 4 | LISN | CHASE | MN2050D | CCIS0074 | Apr. 14 2012 | Apr. 14 2013 |
| 5 | Coaxial Cable | CCIS | N/A | CCIS0086 | Mar. 01 2012 | Mar. 01 2013 |

7 Test results and Measurement Data

7.1 Conducted Emissions

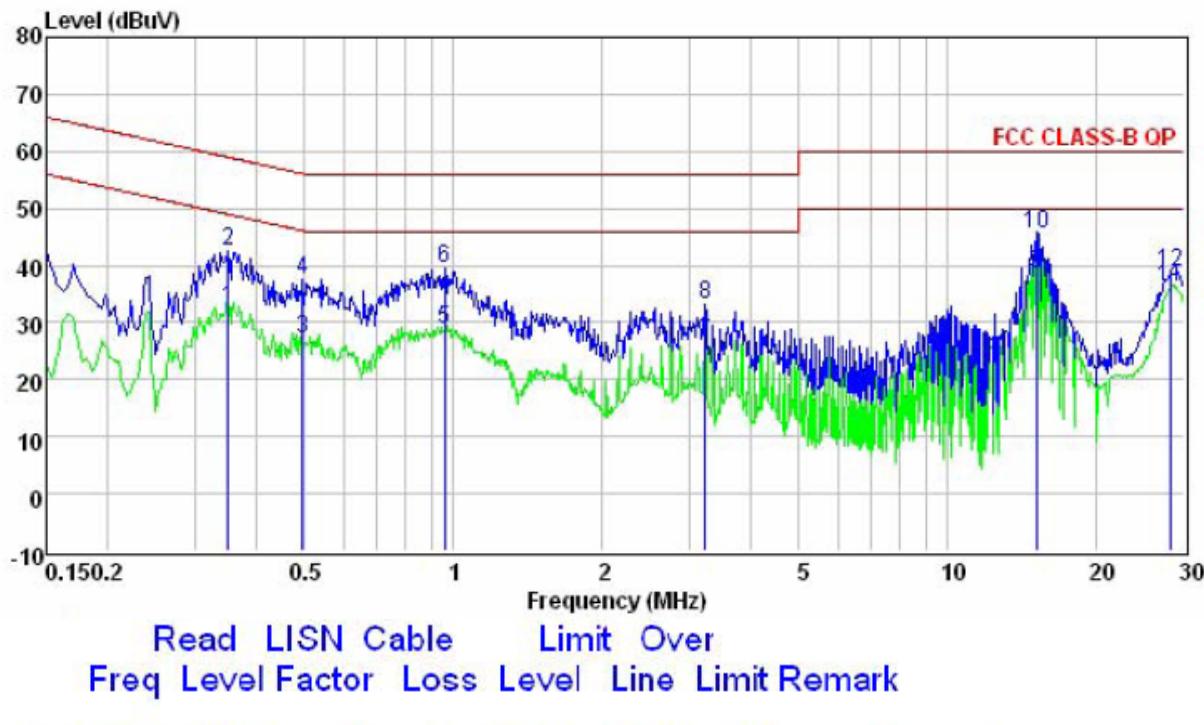
| Test Requirement: | FCC Part15 B Section 15.107 | | | | | | | | | | | | | | | | |
|-----------------------|--|-----------|---------|-----------------------|--------------------|-----------------------|------------|---------|----------|-----------|-----------|-------|----|----|--------|----|----|
| Test Method: | ANSI C63.4:2003 | | | | | | | | | | | | | | | | |
| Test Frequency Range: | 150kHz to 30MHz | | | | | | | | | | | | | | | | |
| Class / Severity: | Class B | | | | | | | | | | | | | | | | |
| Receiver setup: | RBW=9kHz, VBW=30kHz | | | | | | | | | | | | | | | | |
| Limit: | <table border="1"> <thead> <tr> <th rowspan="2">Frequency range (MHz)</th> <th colspan="2">Limit (dBμV)</th> </tr> <tr> <th>Quasi-peak</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td>0.15-0.5</td> <td>66 to 56*</td> <td>56 to 46*</td> </tr> <tr> <td>0.5-5</td> <td>56</td> <td>46</td> </tr> <tr> <td>0.5-30</td> <td>60</td> <td>50</td> </tr> </tbody> </table> | | | Frequency range (MHz) | Limit (dB μ V) | | Quasi-peak | Average | 0.15-0.5 | 66 to 56* | 56 to 46* | 0.5-5 | 56 | 46 | 0.5-30 | 60 | 50 |
| Frequency range (MHz) | Limit (dB μ V) | | | | | | | | | | | | | | | | |
| | Quasi-peak | Average | | | | | | | | | | | | | | | |
| 0.15-0.5 | 66 to 56* | 56 to 46* | | | | | | | | | | | | | | | |
| 0.5-5 | 56 | 46 | | | | | | | | | | | | | | | |
| 0.5-30 | 60 | 50 | | | | | | | | | | | | | | | |
| Test procedure | <p>The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.</p> | | | | | | | | | | | | | | | | |
| Test setup: | <p>Reference Plane</p> <p><i>Remark:</i> <i>E.U.T: Equipment Under Test</i> <i>LISN: Line Impedance Stabilization Network</i> <i>Test table height=0.8m</i></p> | | | | | | | | | | | | | | | | |
| Test environment: | Temp.: | 25 °C | Humid.: | 52% | Press.: | 1 012mbar | | | | | | | | | | | |
| Measurement Record: | | | | | | Uncertainty: ± 3.45dB | | | | | | | | | | | |
| Test Instruments: | Refer to section 6 for details | | | | | | | | | | | | | | | | |
| Test mode: | Refer to section 5.3 for details | | | | | | | | | | | | | | | | |
| Test results: | Pass | | | | | | | | | | | | | | | | |

Measurement Data

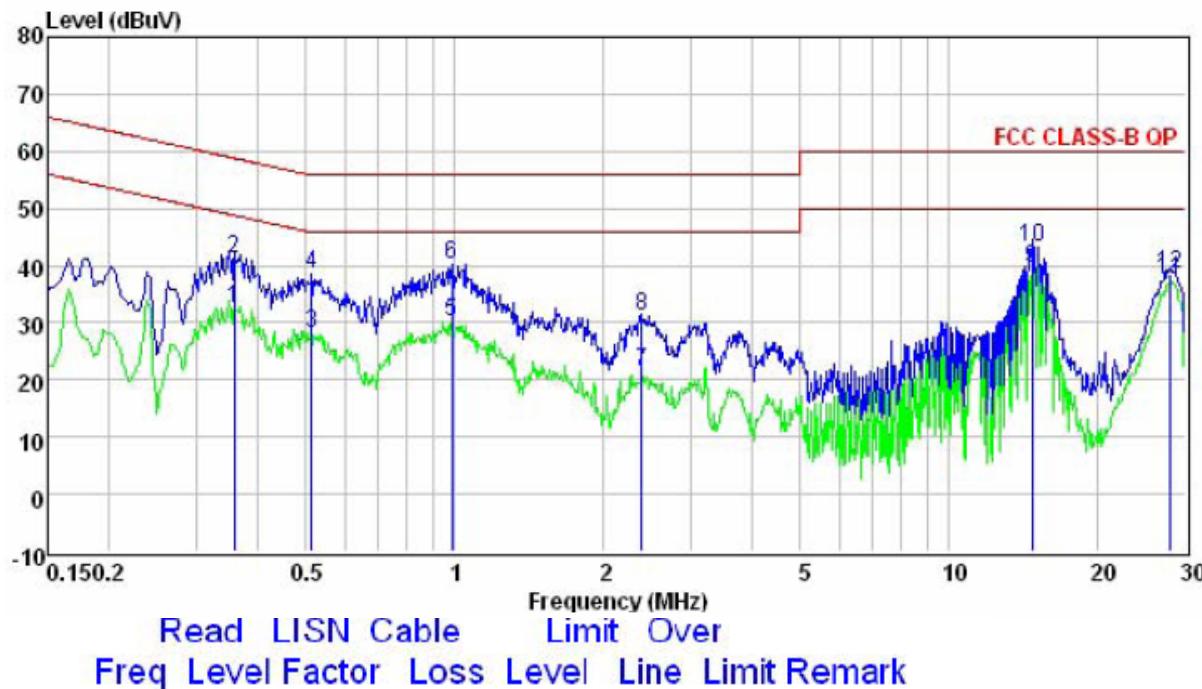
An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Line:



Neutral:



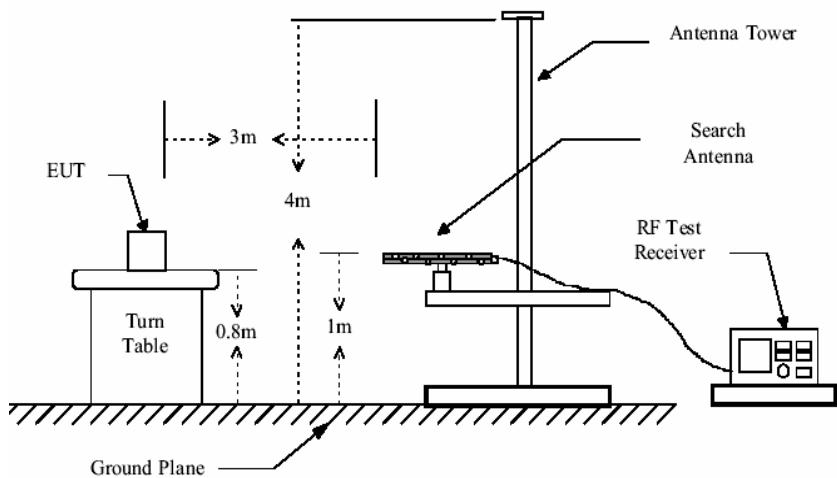
| 1 | 0.36 | 21.44 | 10.25 | 0.73 | 32.42 | 48.78 | -16.36 | Average |
|----|-------|-------|-------|------|-------|-------|--------|---------|
| 2 | 0.36 | 30.26 | 10.25 | 0.73 | 41.24 | 58.78 | -17.54 | QP |
| 3 | 0.51 | 16.95 | 10.27 | 0.76 | 27.98 | 46.00 | -18.02 | Average |
| 4 | 0.51 | 27.41 | 10.27 | 0.76 | 38.44 | 56.00 | -17.56 | QP |
| 5 | 0.98 | 18.97 | 10.20 | 0.87 | 30.04 | 46.00 | -15.96 | Average |
| 6 | 0.98 | 29.09 | 10.20 | 0.87 | 40.16 | 56.00 | -15.84 | QP |
| 7 | 2.38 | 10.27 | 10.27 | 0.94 | 21.48 | 46.00 | -24.52 | Average |
| 8 | 2.38 | 19.86 | 10.27 | 0.94 | 31.07 | 56.00 | -24.93 | QP |
| 9 | 14.67 | 28.34 | 10.23 | 0.90 | 39.47 | 50.00 | -10.53 | Average |
| 10 | 14.67 | 32.02 | 10.23 | 0.90 | 43.15 | 60.00 | -16.85 | QP |
| 11 | 27.86 | 25.90 | 10.74 | 0.87 | 37.51 | 50.00 | -12.49 | Average |
| 12 | 27.86 | 26.85 | 10.74 | 0.87 | 38.46 | 60.00 | -21.54 | QP |

Notes:

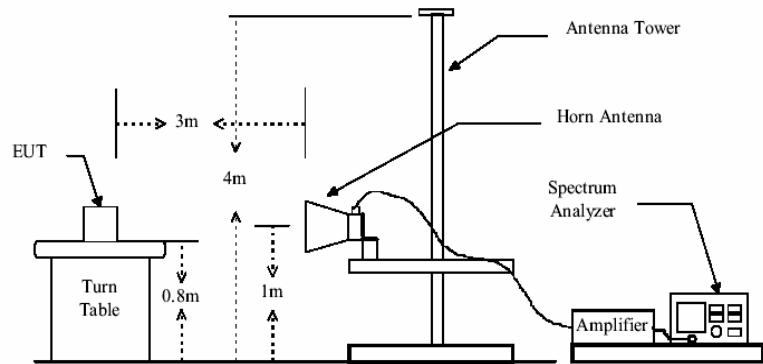
1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.

7.2 Radiated Emission

| Test Requirement: | FCC Part15 B Section 15.109 | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|------------------|--------|------------------|--|-----------|--------------------|--------|-------------|--------|------------------|--------------|--------|------------------|------------------|------------|------------------|-------------|------|------------------|------------|------|---------------|------|---------------|------------|
| Test Method: | ANSI C63.4:2003 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Test Frequency Range: | 30MHz to 6000MHz | | | | | | | | | | | | | | | | | | | | | | | | | |
| Test site: | Measurement Distance: 3m (Semi-Anechoic Chamber) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Receiver setup: | <table border="1"> <thead> <tr> <th>Frequency</th><th>Detector</th><th>RBW</th><th>VBW</th><th>Remark</th></tr> </thead> <tbody> <tr> <td>30MHz-1GHz</td><td>Quasi-peak</td><td>100KHz</td><td>300KHz</td><td>Quasi-peak Value</td></tr> <tr> <td>Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak Value</td></tr> <tr> <td></td><td>Peak</td><td>1MHz</td><td>10Hz</td><td>Average Value</td></tr> </tbody> </table> | | | | | Frequency | Detector | RBW | VBW | Remark | 30MHz-1GHz | Quasi-peak | 100KHz | 300KHz | Quasi-peak Value | Above 1GHz | Peak | 1MHz | 3MHz | Peak Value | | Peak | 1MHz | 10Hz | Average Value | |
| Frequency | Detector | RBW | VBW | Remark | | | | | | | | | | | | | | | | | | | | | | |
| 30MHz-1GHz | Quasi-peak | 100KHz | 300KHz | Quasi-peak Value | | | | | | | | | | | | | | | | | | | | | | |
| Above 1GHz | Peak | 1MHz | 3MHz | Peak Value | | | | | | | | | | | | | | | | | | | | | | |
| | Peak | 1MHz | 10Hz | Average Value | | | | | | | | | | | | | | | | | | | | | | |
| Limit: | <table border="1"> <thead> <tr> <th>Frequency</th><th>Limit (dBuV/m @3m)</th><th>Remark</th></tr> </thead> <tbody> <tr> <td>30MHz-88MHz</td><td>40.0</td><td>Quasi-peak Value</td></tr> <tr> <td>88MHz-216MHz</td><td>43.5</td><td>Quasi-peak Value</td></tr> <tr> <td>216MHz-960MHz</td><td>46.0</td><td>Quasi-peak Value</td></tr> <tr> <td>960MHz-1GHz</td><td>54.0</td><td>Quasi-peak Value</td></tr> <tr> <td>Above 1GHz</td><td>54.0</td><td>Average Value</td></tr> <tr> <td></td><td>74.0</td><td>Peak Value</td></tr> </tbody> </table> | | | | | Frequency | Limit (dBuV/m @3m) | Remark | 30MHz-88MHz | 40.0 | Quasi-peak Value | 88MHz-216MHz | 43.5 | Quasi-peak Value | 216MHz-960MHz | 46.0 | Quasi-peak Value | 960MHz-1GHz | 54.0 | Quasi-peak Value | Above 1GHz | 54.0 | Average Value | | 74.0 | Peak Value |
| Frequency | Limit (dBuV/m @3m) | Remark | | | | | | | | | | | | | | | | | | | | | | | | |
| 30MHz-88MHz | 40.0 | Quasi-peak Value | | | | | | | | | | | | | | | | | | | | | | | | |
| 88MHz-216MHz | 43.5 | Quasi-peak Value | | | | | | | | | | | | | | | | | | | | | | | | |
| 216MHz-960MHz | 46.0 | Quasi-peak Value | | | | | | | | | | | | | | | | | | | | | | | | |
| 960MHz-1GHz | 54.0 | Quasi-peak Value | | | | | | | | | | | | | | | | | | | | | | | | |
| Above 1GHz | 54.0 | Average Value | | | | | | | | | | | | | | | | | | | | | | | | |
| | 74.0 | Peak Value | | | | | | | | | | | | | | | | | | | | | | | | |
| Test Procedure: | <ol style="list-style-type: none"> The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. | | | | | | | | | | | | | | | | | | | | | | | | | |
| Test setup: | Below 1GHz | | | | | | | | | | | | | | | | | | | | | | | | | |



Above 1GHz

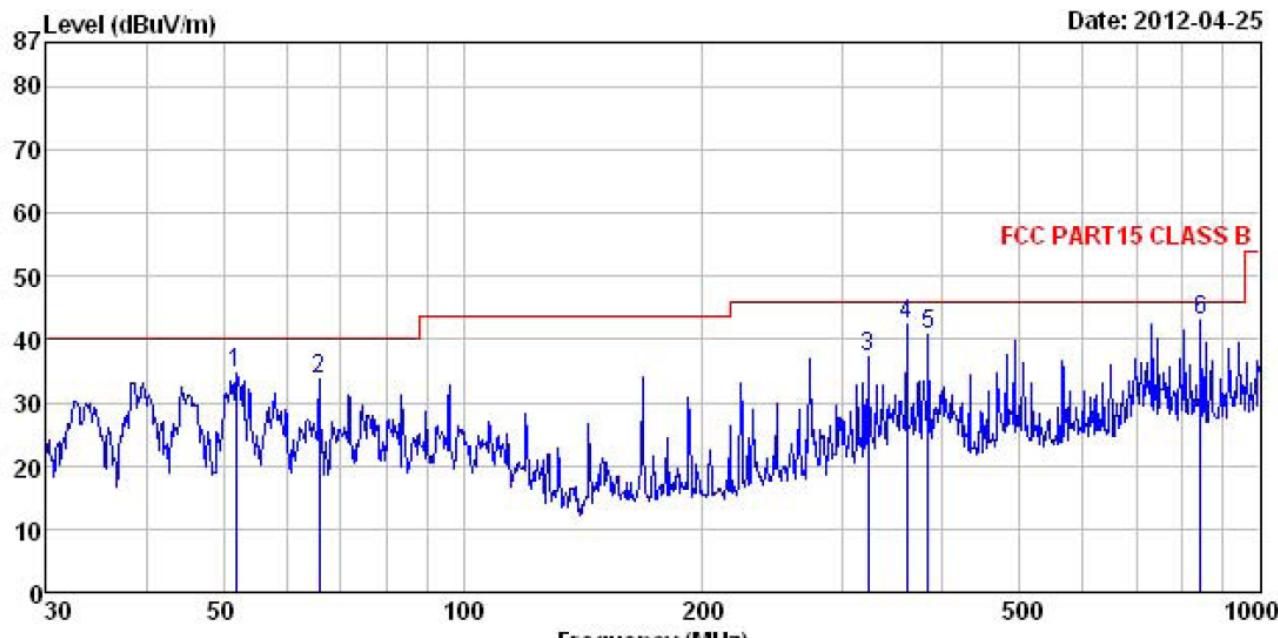


| | | | |
|---------------------|----------------------------------|-------------|-------------------|
| Test environment: | Temp.: 25 °C | Humid.: 52% | Press.: 1 012mbar |
| Measurement Record: | Uncertainty: $\pm 4.5\text{dB}$ | | |
| Test Instruments: | Refer to section 6 for details | | |
| Test mode: | Refer to section 5.3 for details | | |
| Test results: | Pass | | |

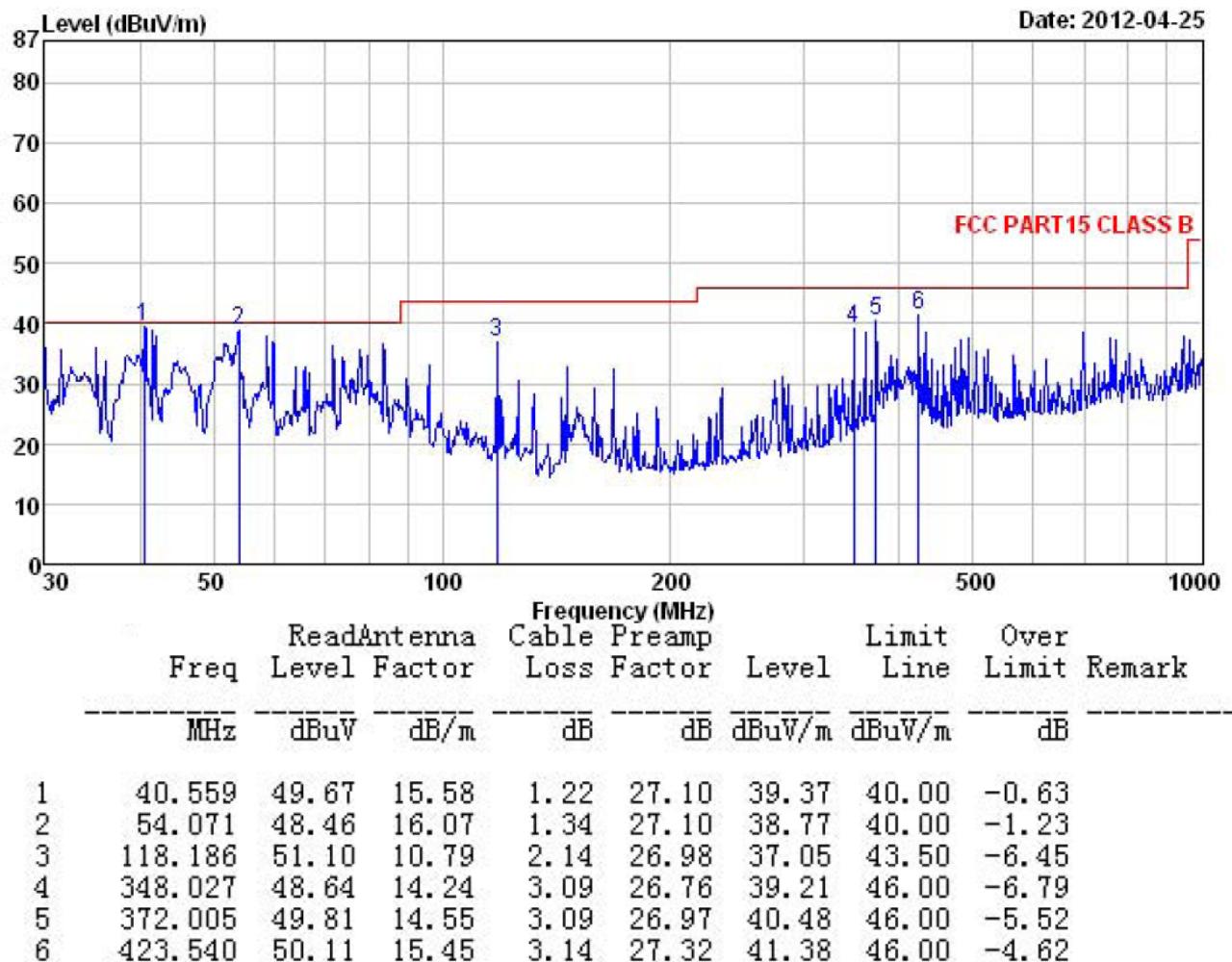
Measurement Data

Below 1G

Horizontal:



Vertical:



Note:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading + Antenna Factor + Cable Factor - Preamplifier Factor

Above 1G

Peak Value :

| Frequency (MHz) | Reading level (dBm) | Antenna factor (dB /m) | Cable loss (dB) | Preamp factor (dB) | Level (dBuV/m) | Limit line (dBuV/m) | Over limit dB | Polarization |
|-----------------|---------------------|------------------------|-----------------|--------------------|----------------|---------------------|---------------|--------------|
| 1112.25 | 44.25 | 23.05 | 3.82 | 24.38 | 46.74 | 74.00 | -27.26 | Vertical |
| 1358.66 | 46.38 | 25.76 | 3.85 | 24.62 | 51.37 | 74.00 | -22.63 | Vertical |
| 2252.48 | 45.12 | 30.04 | 3.96 | 25.12 | 54.00 | 74.00 | -20.00 | Horizontal |
| 3589.66 | 43.38 | 32.35 | 4.52 | 25.09 | 55.16 | 74.00 | -18.84 | Horizontal |

Average Value:

| Frequency (MHz) | Reading level (dBm) | Antenna factor dB /m | Cable loss dB | Preamp factor dB | Level dBuv/m | Limit line (dBuV/m) | Over limit dB | Polarization |
|-----------------|---------------------|----------------------|---------------|------------------|--------------|---------------------|---------------|--------------|
| 1112.25 | 36.38 | 23.05 | 3.82 | 24.38 | 38.87 | 54.00 | -15.13 | Vertical |
| 1358.66 | 38.42 | 25.76 | 3.85 | 24.62 | 43.41 | 54.00 | -10.59 | Vertical |
| 2252.48 | 37.18 | 30.04 | 3.96 | 25.12 | 46.06 | 54.00 | -7.94 | Horizontal |
| 3589.66 | 32.95 | 32.35 | 4.52 | 25.09 | 44.73 | 54.00 | -9.27 | Horizontal |