# FCC TEST Report

**Issued Date** : Jun. 10, 2008
**Project No.** : 0803C086
**Equipment** : Internet radio/FM RDS table radio
Internet table radio
**Model Name** : NetWorks; NetWorks
**Applicant** : Tivoli Audio,LLC
**Address** : The Fargo Building 451 D Street,9th Floor Boston MA 02210 USA

**Tested by:**
Neutron Engineering Inc. EMC Laboratory
**Date of Test:**
Apr. 21, 2008 ~ Jun. 06, 2008

Testing Engineer : Tendy Huang (Tendy Huang)

Technical Manager : (Vic Chiu)

Authorized Signatory : (Steven Lu)

**NEUTRON ENGINEERING INC.**

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NVLAP Lab Code: 200145-0

ilac-MRA TAF Testing Laboratory 0659

VCCI R-2669 C-2918

## Declaration

**Neutron** represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C**., or National Institute of Standards and Technology (**NIST**) of **U.S.A.**

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**Neutron**'s laboratory quality assurance procedures are in compliance with the **ISO Guide 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

## Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

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## 1. CERTIFICATION

| | | |
|---|---|---|
| Equipment | : | Internet radio/FM RDS table radio<br>Internet table radio |
| Trade Name | : | Tivoli Audio |
| Model Name. | : | NetWorks; NetWorks |
| Applicant | : | Tivoli Audio,LLC |
| Date of Test | : | Apr. 21, 2008 ~ Jun. 06, 2008 |
| Test Item | : | ENGINEERING SAMPLE |
| Standards | : | FCC Part 15, Subpart B, Class B<br>CISPR 22: 1997+A1: 2000, Class B<br>ANSI C63.4-2003 |

The above equipment has been tested and found compliance with the requirement of the relative standards by Neutron Engineering Inc. EMC Laboratory.
The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FCCE-1-0803C086) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP and TAF according to the ISO-17025 quality assessment standard and technical standard(s).

## 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

| EMC Emission | | | | |
|---|---|---|---|---|
| Standard | Test Item | Limit | Judgment | Remark |
| FCC Part15, Subpart B CISPR 22:1997+A1: 2000 | Conducted Emission | Class B | PASS | |
| | Radiated Emission | Class B | PASS | |

NOTE:

(1)" N/A" denotes test is not applicable in this Test Report

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **C01/OS02** at the location of No.132-1, Lane 329, Sec. 2, Palain Road, Shijr City, Taipei, Taiwan.

2.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y** ± **U**，where expended uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k=2**，providing a level of confidence of approximately **95** %。

A. Conducted Measurement :

| Test Site | Method | Measurement Frequency Range | U，(dB) | NOTE |
|---|---|---|---|---|
| C01 | ANSI | 150 KHz ~ 30MHz | 1.94 | |

B. Radiated Measurement :

| Test Site | Method | Measurement Frequency Range | Ant. H / V | U，(dB) | NOTE |
|---|---|---|---|---|---|
| OS01 | ANSI | 30MHz ~ 200MHz | V | 3.82 | |
| | | 30MHz ~ 200MHz | H | 3.60 | |
| | | 200MHz ~ 1,000MHz | V | 3.86 | |
| | | 200MHz ~ 1,000MHz | H | 3.94 | |
| OS02 | ANSI | 30MHz ~ 200MHz | V | 2.48 | |
| | | 30MHz ~ 200MHz | H | 2.16 | |
| | | 200MHz ~ 1,000MHz | V | 2.50 | |
| | | 200MHz ~ 1,000MHz | H | 2.66 | |

## 3. GENERAL INFORMATION

### 3.1 GENERAL DESCRIPTION OF EUT

<table>
<tr><td>Equipment</td><td>Internet radio/FM RDS table radio<br>Internet table radio</td></tr>
<tr><td>Trade Name</td><td>Tivoli Audio</td></tr>
<tr><td>Model Name</td><td>NetWorks; NetWorks</td></tr>
<tr><td>OEM Brand/Model No.</td><td>N/A</td></tr>
<tr><td>Model Difference</td><td>The equipment models NetWorks and NetWorks are internet radio,video and similar electronic apparatus.<br>Models difference see note 4.</td></tr>
<tr><td>Product Description</td><td>The EUT is a Internet radio/FM RDS table radio.
<table>
<tr><td>Operation Frequency:</td><td>2412~2462 MHz</td></tr>
<tr><td>Product Class:</td><td>Class 1</td></tr>
<tr><td>Receiver Class:</td><td>Class 3</td></tr>
<tr><td>Modulation Type:</td><td>DSSS & OFDM</td></tr>
<tr><td>Bit Rate of Transmitter</td><td>802.11b:11/5.5/2/1Mbps<br>802.11g:<br>54/48/36/24/18/12/9/6 Mbps</td></tr>
<tr><td>Number Of Channel</td><td>11 CH, Please see Note 2.</td></tr>
<tr><td>Antenna Designation:<br>Antenna Gain(Peak)</td><td>Please see Note 3.</td></tr>
<tr><td>Output Power:</td><td>11B:16.90dBm<br>11G:15.94dBm</td></tr>
</table>
Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.</td></tr>
<tr><td>Power Source</td><td>DC Voltage supplied from AC Mains(AC transformer)<br>Model name:TPIT-033174</td></tr>
<tr><td>Power Rating</td><td>I/P :120V/60Hz O/P: 11.7VAC 1000mA</td></tr>
</table>

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2.

| Channel List | | | | | | | |
|---|---|---|---|---|---|---|---|
| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 01 | 2412 | 04 | 2427 | 07 | 2442 | 10 | 2457 |
| 02 | 2417 | 05 | 2432 | 08 | 2447 | 11 | 2462 |
| 03 | 2422 | 06 | 2437 | 09 | 2452 | | |

3. Table for Filed Antenna

| Ant. | Brand | Model Name | Antenna Type | Connector | Gain (dBi) |
|---|---|---|---|---|---|
| 1 | N/A | N/A | Inverted-F Antenna | N/A | -3.0 |

4 Models difference:

| Product name | Model | DAB function | FM function |
|---|---|---|---|
| Internet radio/FM RDS table radio | NetWorks | No | Yes |
| Internet table radio | NetWorks | No | No |

## 3.2 DESCRIPTION OF TEST MODES

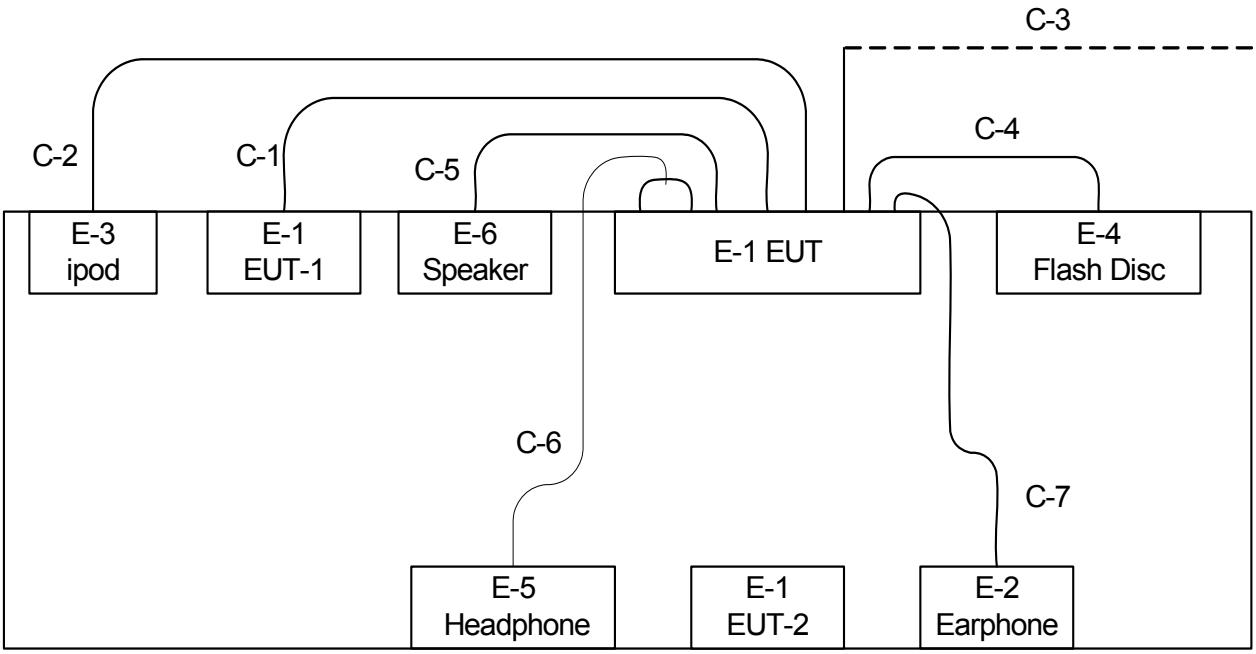
To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

| Pretest Mode | Description |
|---|---|
| | Internet radio/FM RDS table radio |
| Mode 1 | Normal Link –USB Play |
| Mode 2 | Normal Link –FM 87.5MHz |
| Mode 3 | Normal Link –FM 97.5MHz |
| Mode 4 | Normal Link –FM 107.5MHz |
| Mode 5 | Normal Link –Internet Radio |

| **For Conducted Test** | |
|---|---|
| Final Test Mode | Description |
| Mode 1 | Normal Link –USB Play |
| Mode 2 | Normal Link –FM 87.5MHz |
| Mode 3 | Normal Link –FM 97.5MHz |
| Mode 4 | Normal Link –FM 107.5MHz |
| Mode 5 | Normal Link –Internet Radio |

| **For Radiated Test** | |
|---|---|
| Final Test Mode | Description |
| Mode 1 | Normal Link –USB Play |
| Mode 2 | Normal Link –FM 87.5MHz |
| Mode 3 | Normal Link –FM 97.5MHz |
| Mode 4 | Normal Link –FM 107.5MHz |
| Mode 5 | Normal Link –Internet Radio |

3.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED




C-1: AUDIO cable
C-2: AUDIO cable
C-3: RJ-45 cable
C-4: USB cable
C-5: AUDIO cable
C-6: AUDIO cable
C-7: AUDIO cable

3.1 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.

| Item | Equipment | Mfr/Brand | Model/Type No. | FCC ID | Series No. | Note |
|---|---|---|---|---|---|---|
| E-1 | Internet radio/FM RDS table radio | Tivoli Audio | NetWorks | V7JNETWORKS | N/A | EUT |
| E-2 | Earphone | apple | N/A | N/A | N/A | |
| E-3 | iPod nano (2G) | Apple | A1199 | DOC | YM7214GEVQ5 | |
| E-4 | Flash Disk | Kingston | DTI | DOC | 520B21E4-819957C | |
| E-5 | Headphone | sony | N/A | N/A | N/A | |
| E-6 | Speaker | DELUX | N/A | N/A | N/A | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| Item | Shielded Type | Ferrite Core | Length | Note |
|---|---|---|---|---|
| C-1 | NO | NO | 4.5M | |
| C-2 | YES | NO | 1.5M | |
| C-3 | YES | NO | 10M | |
| C-4 | YES | NO | 0.5M | |
| C-5 | YES | NO | 1.5M | |
| C-6 | YES | NO | 1.8M | |
| C-7 | NO | NO | 1M | |
| | | | | |
| | | | | |

Note:

(1) The support equipment was authorized by Declaration of Confirmation.
(2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

## 4. EMC EMISSION TEST

### 4.1 CONDUCTED EMISSION MEASUREMENT

#### 4.1.1 POWER LINE CONDUCTED EMISSION (Frequency Range 150KHz-30MHz)

| FREQUENCY (MHz) | Class A (dBuV) | | Class B (dBuV) | |
|---|---|---|---|---|
| | Quasi-peak | Average | Quasi-peak | Average |
| 0.15 -0.5 | 79.00 | 66.00 | 66 - 56 * | 56 - 46 * |
| 0.50 -5.0 | 73.00 | 60.00 | 56.00 | 46.00 |
| 5.0 -30.0 | 73.00 | 60.00 | 60.00 | 50.00 |

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

#### 4.1.2 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|---|---|---|---|---|---|
| 1 | LISN | EMCO | 3816/2 | 00042991 | Jan. 24, 2009 |
| 2 | LISN | EMCO | 3816/2 | 00042990 | Jan. 24, 2009 |
| 3 | Pulse Limiter | Electro-Metrics | EM-7600 | 112644 | Nov. 27, 2008 |
| 4 | 50Ω Terminator | N/A | N/A | N/A | May.12, 2009 |
| 5 | Test Cable | N/A | C01 | N/A | Nov. 27, 2008 |
| 6 | EMI Test Receiver | R&S | ESCI | 100082 | Mar. 07, 2009 |

Remark: ” N/A” denotes No Model No. , Serial No. or No Calibration specified.

The following table is the setting of the receiver

| Receiver Parameters | Setting |
|---|---|
| Attenuation | 10 dB |
| Start Frequency | 0.15 MHz |
| Stop Frequency | 30 MHz |
| IF Bandwidth | 9 kHz |

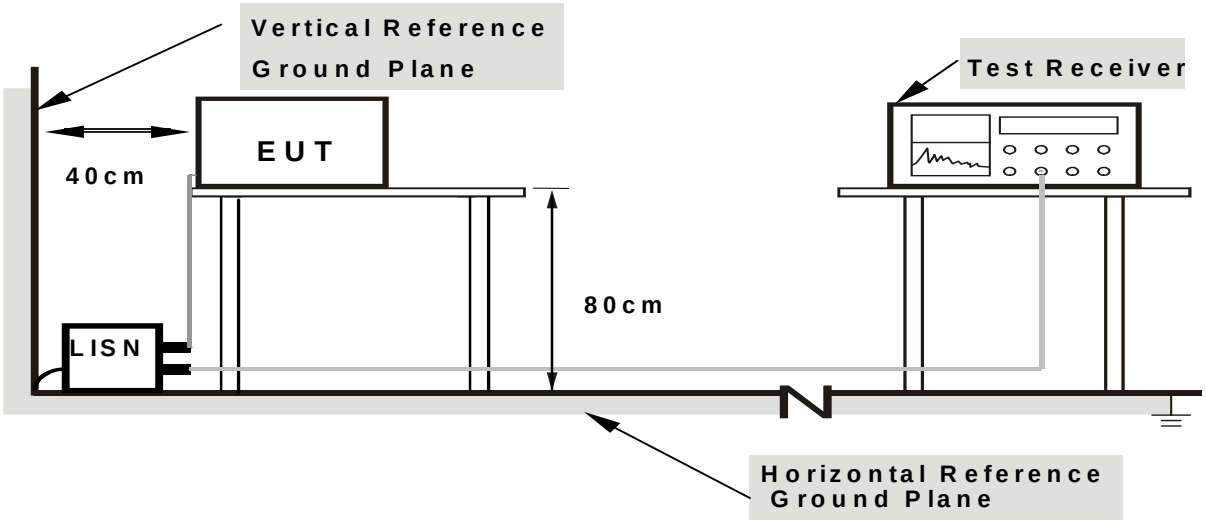
4.1.3 TEST PROCEDURE

a. The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
d. LISN at least 80 cm from nearest part of EUT chassis.
e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP




Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

4.1.6 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

4.1.7 TEST RESULTS

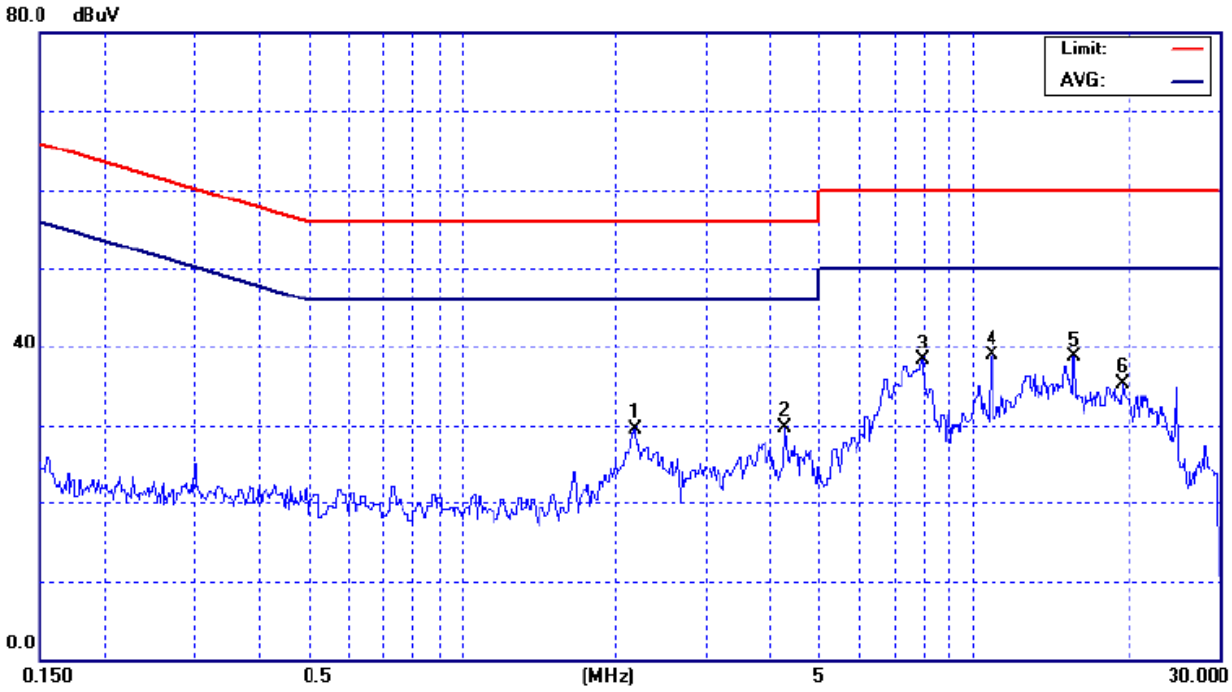
| | | | |
|---|---|---|---|
| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1008hPa | Test Voltage ： | AC 120V/60Hz |
| Test Mode： | Mode 1- USB PLAY | | |

| Freq. (MHz) | Terminal L/N | Measured(dBuV) | | Limits(dBuV) | | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| | | QP-Mode | AV-Mode | QP-Mode | AV-Mode | | |
| 2.19 | Line | 29.45 | * | 56.00 | 46.00 | -26.55 | (QP) |
| 4.29 | Line | 29.61 | * | 56.00 | 46.00 | -26.39 | (QP) |
| 7.94 | Line | 38.22 | * | 60.00 | 50.00 | -21.78 | (QP) |
| 10.81 | Line | 38.81 | * | 60.00 | 50.00 | -21.19 | (QP) |
| 15.69 | Line | 38.62 | * | 60.00 | 50.00 | -21.38 | (QP) |
| 19.50 | Line | 35.32 | * | 60.00 | 50.00 | -24.68 | (QP) |

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



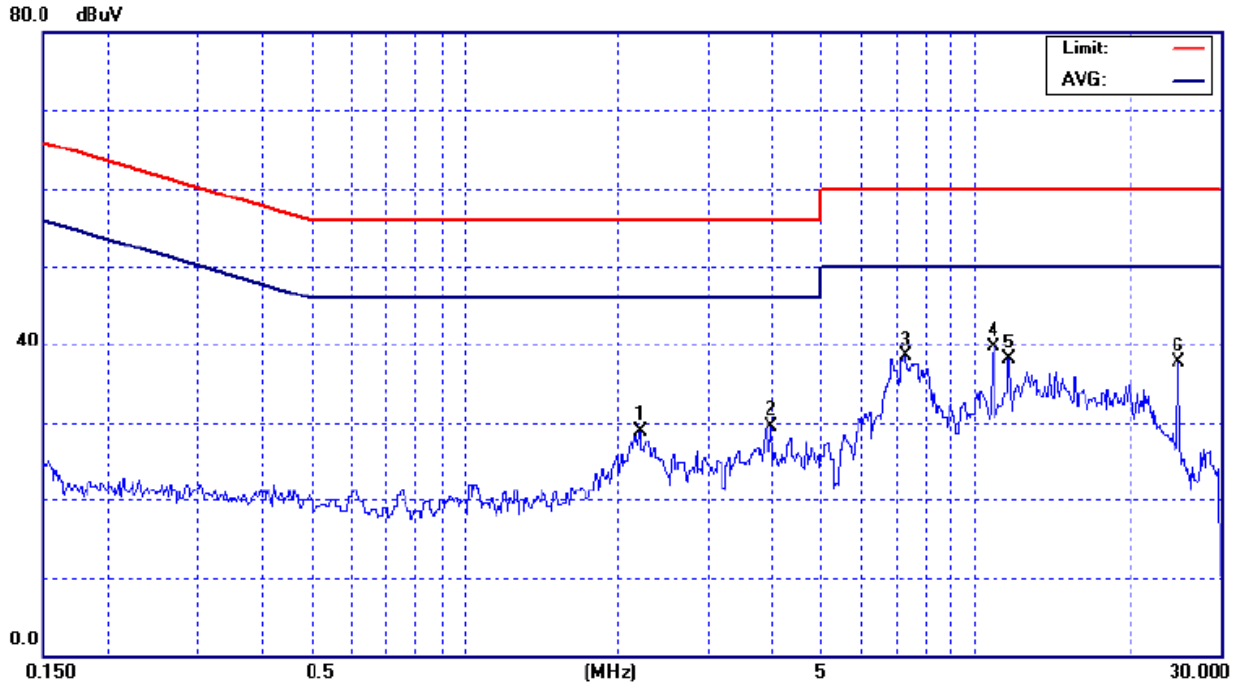
| EUT： | Internet radio/FM RDS table radio | Model Name： | NetWorks |
|---|---|---|---|
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1008hPa | Test Voltage ： | AC 120V/60Hz |
| Test Mode： | Mode 1- USB PLAY | | |

| Freq. (MHz) | Terminal L/N | Measured(dBuV) | | Limits(dBuV) | | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| | | QP-Mode | AV-Mode | QP-Mode | AV-Mode | | |
| 2.21 | Neutral | 28.92 | * | 56.00 | 46.00 | -27.08 | (QP) |
| 3.98 | Neutral | 29.54 | * | 56.00 | 46.00 | -26.46 | (QP) |
| 7.31 | Neutral | 38.42 | * | 60.00 | 50.00 | -21.58 | (QP) |
| 10.88 | Neutral | 39.75 | * | 60.00 | 50.00 | -20.25 | (QP) |
| 11.63 | Neutral | 38.07 | * | 60.00 | 50.00 | -21.93 | (QP) |
| 25.00 | Neutral | 37.78 | * | 60.00 | 50.00 | -22.22 | (QP) |

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



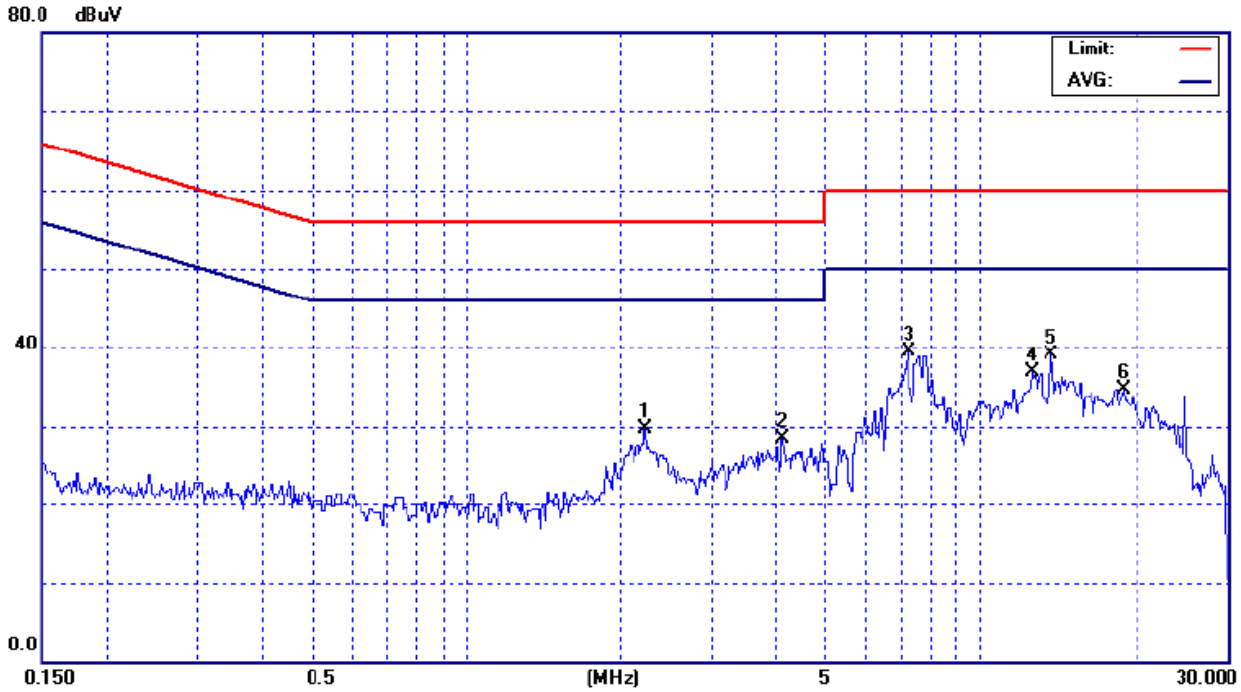
| | | | |
|---|---|---|---|
| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1008hPa | Test Voltage ： | AC 120V/60Hz |
| Test Mode： | Mode 2- FM 87.5MHz | | |

| Freq. (MHz) | Terminal L/N | Measured(dBuV) | | Limits(dBuV) | | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| | | QP-Mode | AV-Mode | QP-Mode | AV-Mode | | |
| 2.23 | Line | 29.67 | * | 56.00 | 46.00 | -26.33 | (QP) |
| 4.12 | Line | 28.57 | * | 56.00 | 46.00 | -27.43 | (QP) |
| 7.25 | Line | 39.44 | * | 60.00 | 50.00 | -20.56 | (QP) |
| 12.63 | Line | 36.93 | * | 60.00 | 50.00 | -23.07 | (QP) |
| 13.75 | Line | 39.09 | * | 60.00 | 50.00 | -20.91 | (QP) |
| 19.00 | Line | 34.69 | * | 60.00 | 50.00 | -25.31 | (QP) |

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



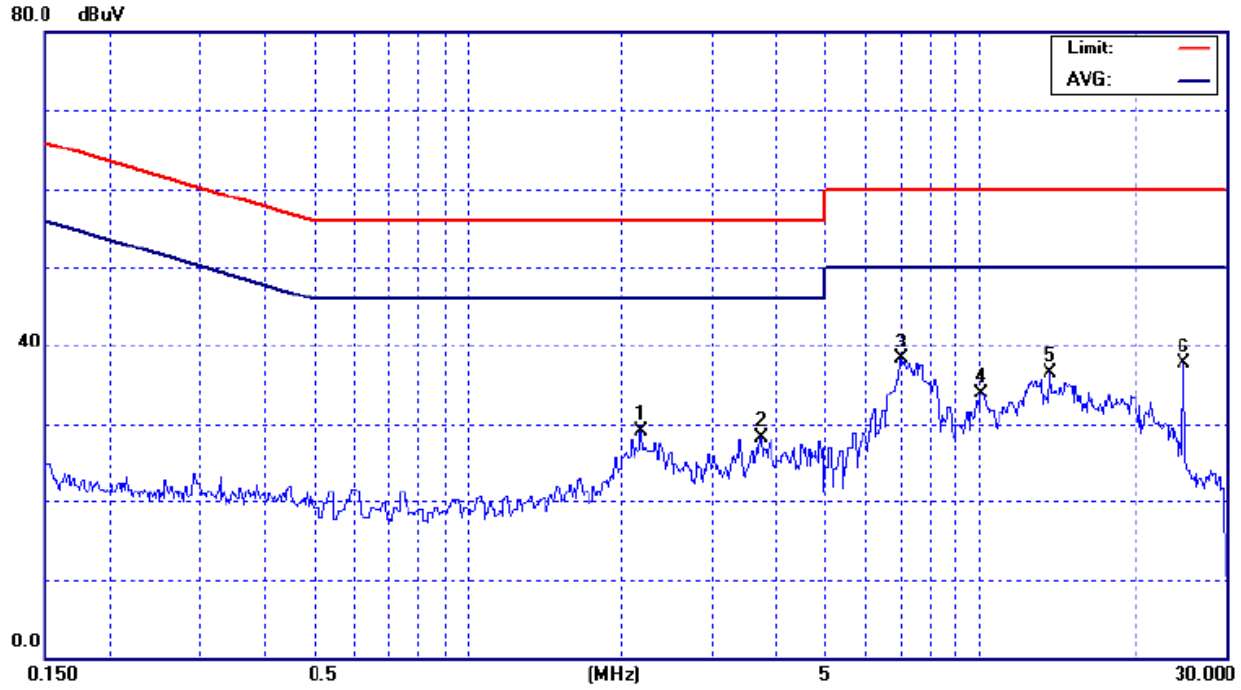
| EUT： | Internet radio/FM RDS table radio | Model Name： | NetWorks |
|---|---|---|---|
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1008hPa | Test Voltage ： | AC 120V/60Hz |
| Test Mode： | Mode 2- FM 87.5MHz | | |

| Freq. (MHz) | Terminal L/N | Measured(dBuV) | | Limits(dBuV) | | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| | | QP-Mode | AV-Mode | QP-Mode | AV-Mode | | |
| 2.19 | Neutral | 29.04 | * | 56.00 | 46.00 | -26.96 | (QP) |
| 3.73 | Neutral | 28.29 | * | 56.00 | 46.00 | -27.71 | (QP) |
| 7.00 | Neutral | 38.23 | * | 60.00 | 50.00 | -21.77 | (QP) |
| 10.06 | Neutral | 34.00 | * | 60.00 | 50.00 | -26.00 | (QP) |
| 13.75 | Neutral | 36.56 | * | 60.00 | 50.00 | -23.44 | (QP) |
| 25.00 | Neutral | 37.69 | * | 60.00 | 50.00 | -22.31 | (QP) |

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



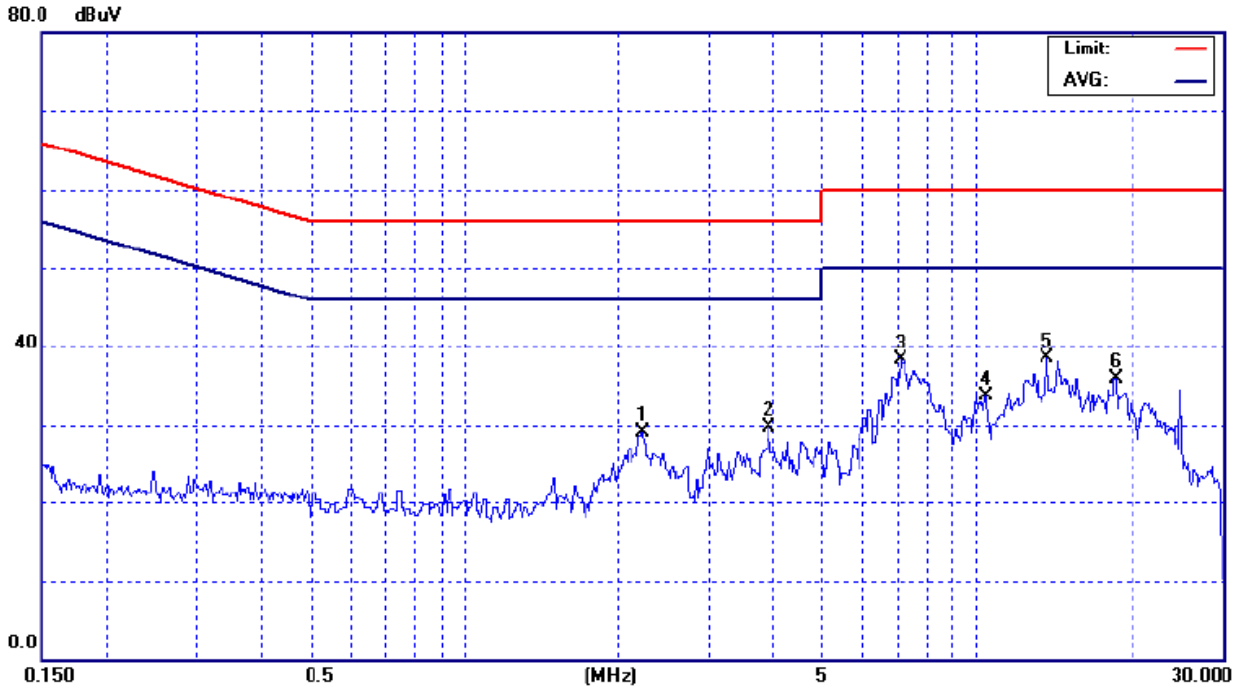
| | | | |
|---|---|---|---|
| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1008hPa | Test Voltage ： | AC 120V/60Hz |
| Test Mode： | Mode 3 -FM 97.5MHz | | |

| Freq. (MHz) | Terminal L/N | Measured(dBuV) | | Limits(dBuV) | | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| | | QP-Mode | AV-Mode | QP-Mode | AV-Mode | | |
| 2.23 | Line | 29.19 | * | 56.00 | 46.00 | -26.81 | (QP) |
| 3.93 | Line | 29.77 | * | 56.00 | 46.00 | -26.23 | (QP) |
| 7.13 | Line | 38.31 | * | 60.00 | 50.00 | -21.69 | (QP) |
| 10.38 | Line | 33.73 | * | 60.00 | 50.00 | -26.27 | (QP) |
| 13.75 | Line | 38.54 | * | 60.00 | 50.00 | -21.46 | (QP) |
| 18.63 | Line | 35.88 | * | 60.00 | 50.00 | -24.12 | (QP) |

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



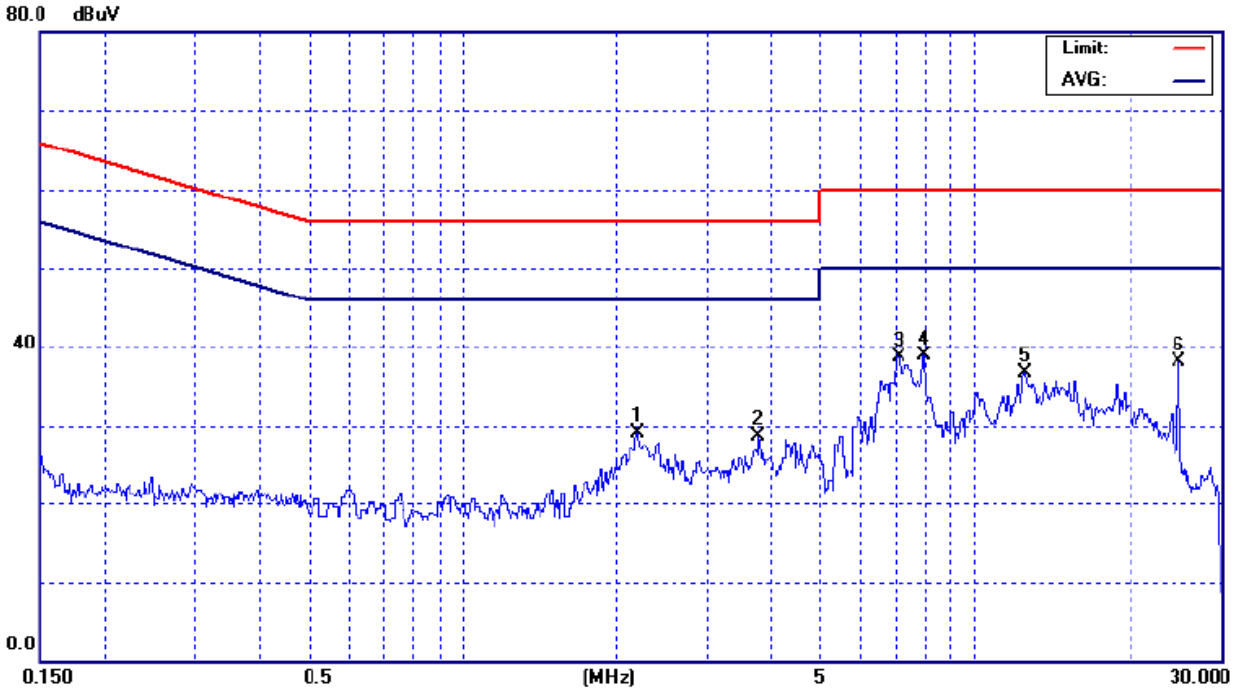
| EUT： | Internet radio/FM RDS table radio | Model Name： | NetWorks |
|---|---|---|---|
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1008hPa | Test Voltage ： | AC 120V/60Hz |
| Test Mode： | Mode 3 -FM 97.5MHz | | |

| Freq. (MHz) | Terminal L/N | Measured(dBuV) | | Limits(dBuV) | | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| | | QP-Mode | AV-Mode | QP-Mode | AV-Mode | | |
| 2.20 | Neutral | 29.06 | * | 56.00 | 46.00 | -26.94 | (QP) |
| 3.77 | Neutral | 28.72 | * | 56.00 | 46.00 | -27.28 | (QP) |
| 7.06 | Neutral | 38.74 | * | 60.00 | 50.00 | -21.26 | (QP) |
| 7.94 | Neutral | 38.86 | * | 60.00 | 50.00 | -21.14 | (QP) |
| 12.50 | Neutral | 36.70 | * | 60.00 | 50.00 | -23.30 | (QP) |
| 25.00 | Neutral | 38.04 | * | 60.00 | 50.00 | -21.96 | (QP) |

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



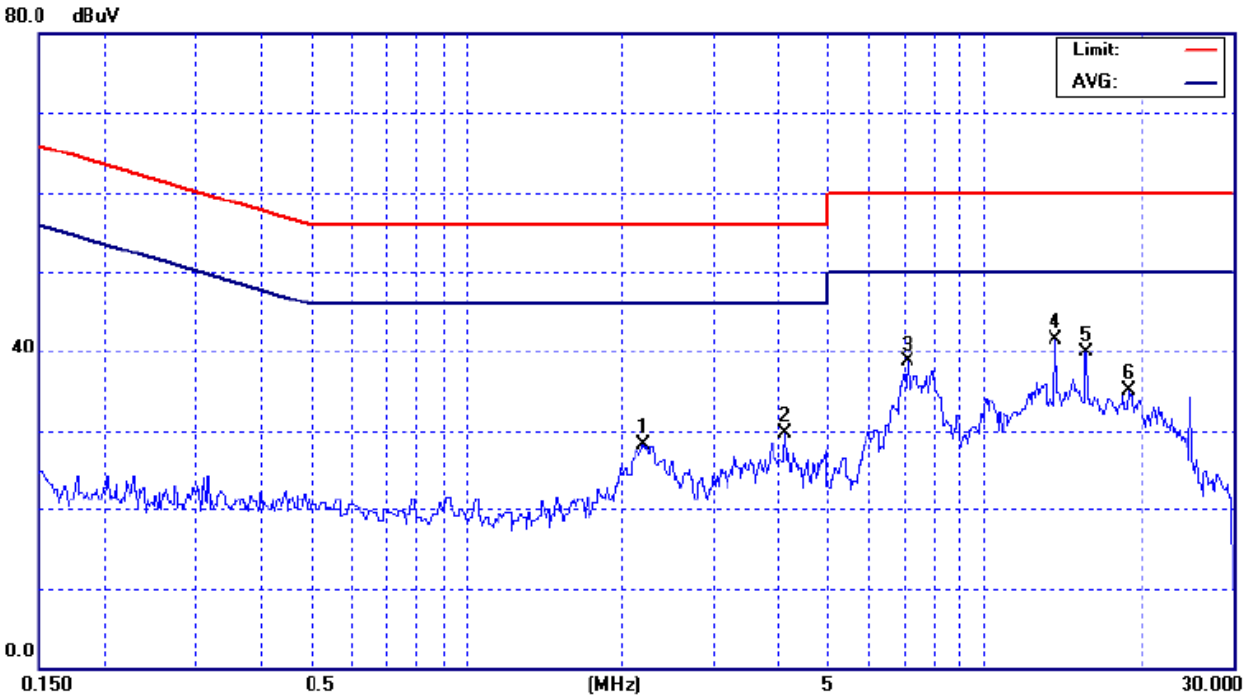
| | | | |
|---|---|---|---|
| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1008hPa | Test Voltage ： | AC 120V/60Hz |
| Test Mode： | Mode 4 -FM 107.5MHz | | |

| Freq. (MHz) | Terminal L/N | Measured(dBuV) | | Limits(dBuV) | | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| | | QP-Mode | AV-Mode | QP-Mode | AV-Mode | | |
| 2.20 | Line | 28.32 | * | 56.00 | 46.00 | -27.68 | (QP) |
| 4.13 | Line | 29.69 | * | 56.00 | 46.00 | -26.31 | (QP) |
| 7.13 | Line | 38.65 | * | 60.00 | 50.00 | -21.35 | (QP) |
| 13.75 | Line | 41.52 | * | 60.00 | 50.00 | -18.48 | (QP) |
| 15.69 | Line | 40.00 | * | 60.00 | 50.00 | -20.00 | (QP) |
| 19.00 | Line | 35.19 | * | 60.00 | 50.00 | -24.81 | (QP) |

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



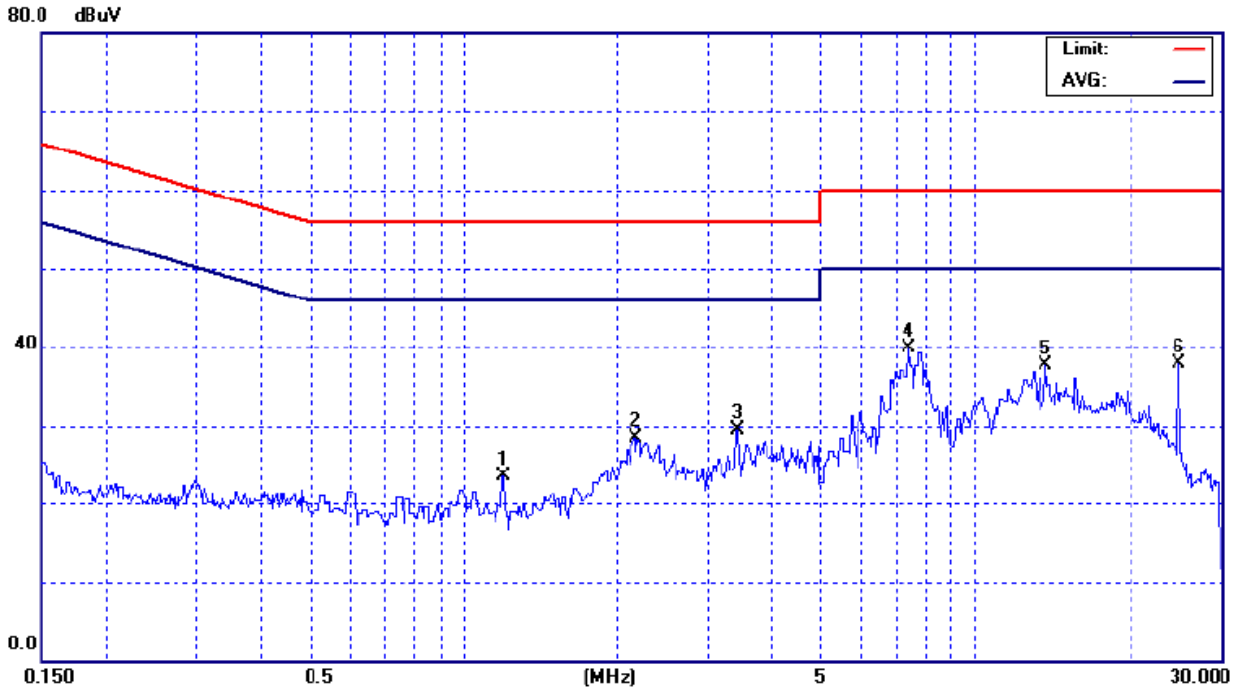
| EUT： | Internet radio/FM RDS table radio | Model Name： | NetWorks |
|---|---|---|---|
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1008hPa | Test Voltage ： | AC 120V/60Hz |
| Test Mode： | Mode 4 -FM 107.5MHz | | |

| Freq. (MHz) | Terminal L/N | Measured(dBuV) | | Limits(dBuV) | | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| | | QP-Mode | AV-Mode | QP-Mode | AV-Mode | | |
| 1.20 | Neutral | 23.57 | * | 56.00 | 46.00 | -32.43 | (QP) |
| 2.17 | Neutral | 28.47 | * | 56.00 | 46.00 | -27.53 | (QP) |
| 3.43 | Neutral | 29.46 | * | 56.00 | 46.00 | -26.54 | (QP) |
| 7.44 | Neutral | 39.81 | * | 60.00 | 50.00 | -20.19 | (QP) |
| 13.75 | Neutral | 37.66 | * | 60.00 | 50.00 | -22.34 | (QP) |
| 25.00 | Neutral | 37.96 | * | 60.00 | 50.00 | -22.04 | (QP) |

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



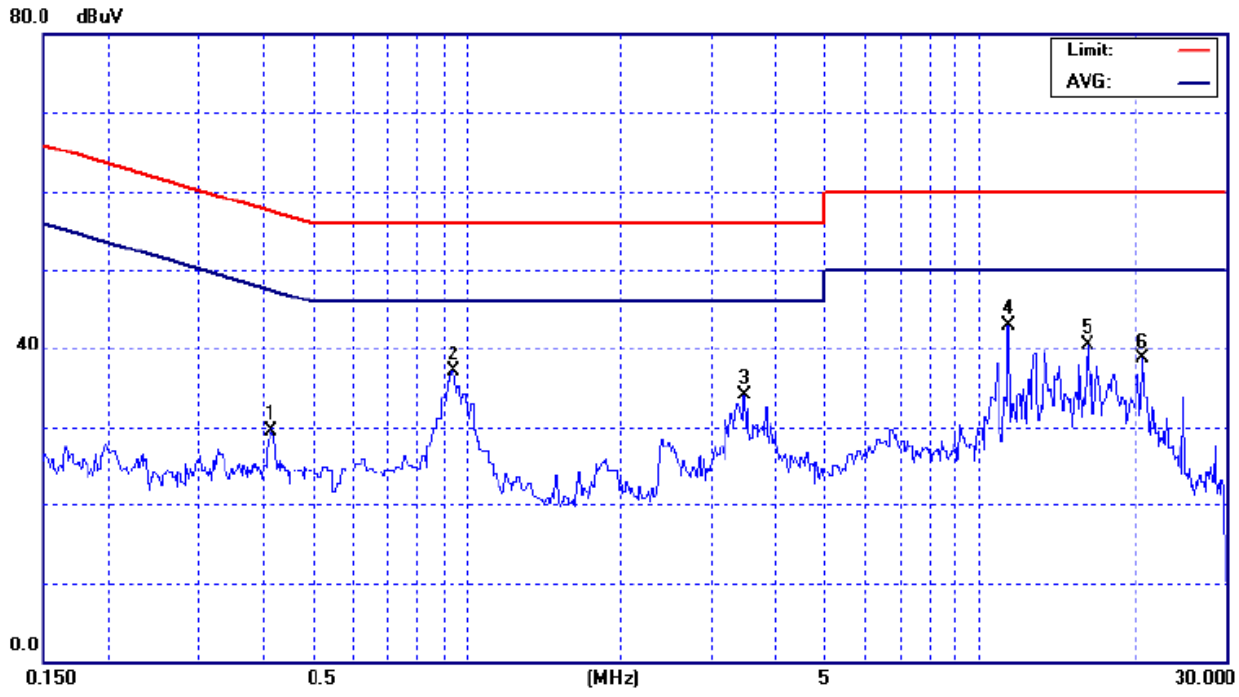
| | | | |
|---|---|---|---|
| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1008hPa | Test Voltage ： | AC 120V/60Hz |
| Test Mode： | Mode 5- Internet Radio | | |

| Freq. (MHz) | Terminal L/N | Measured(dBuV) | | Limits(dBuV) | | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| | | QP-Mode | AV-Mode | QP-Mode | AV-Mode | | |
| 0.42 | Line | 29.60 | * | 57.53 | 47.53 | -27.93 | (QP) |
| 0.94 | Line | 37.09 | * | 56.00 | 46.00 | -18.91 | (QP) |
| 3.48 | Line | 34.04 | * | 56.00 | 46.00 | -21.96 | (QP) |
| 11.44 | Line | 42.99 | * | 60.00 | 50.00 | -17.01 | (QP) |
| 16.25 | Line | 40.51 | * | 60.00 | 50.00 | -19.49 | (QP) |
| 20.81 | Line | 38.77 | * | 60.00 | 50.00 | -21.23 | (QP) |

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



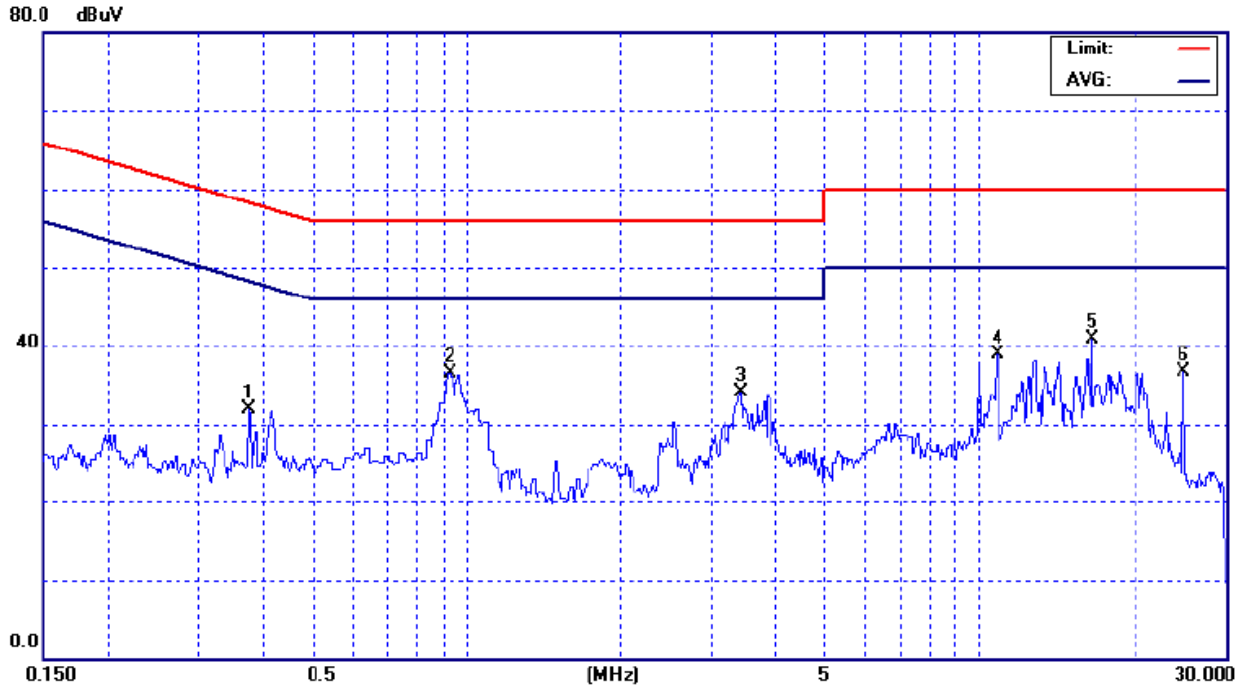
| EUT： | Internet radio/FM RDS table radio | Model Name： | NetWorks |
|---|---|---|---|
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1008hPa | Test Voltage ： | AC 120V/60Hz |
| Test Mode： | Mode 5- Internet Radio | | |

| Freq. (MHz) | Terminal L/N | Measured(dBuV) | | Limits(dBuV) | | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| | | QP-Mode | AV-Mode | QP-Mode | AV-Mode | | |
| 0.38 | Neutral | 31.87 | * | 58.35 | 48.35 | -26.48 | (QP) |
| 0.93 | Neutral | 36.54 | * | 56.00 | 46.00 | -19.46 | (QP) |
| 3.43 | Neutral | 34.09 | * | 56.00 | 46.00 | -21.91 | (QP) |
| 10.81 | Neutral | 38.82 | * | 60.00 | 50.00 | -21.18 | (QP) |
| 16.56 | Neutral | 40.91 | * | 60.00 | 50.00 | -19.09 | (QP) |
| 25.00 | Neutral | 36.72 | * | 60.00 | 50.00 | -23.28 | (QP) |

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



## 4.2 RADIATED EMISSION MEASUREMENT

### 4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT (Below 1000MHz)

| Frequencies (MHz) | Field Strength (micorvolts/meter) | Measurement Distance (meters) |
|---|---|---|
| 30~88 | 100 | 3 |
| 88~216 | 150 | 3 |
| 216~960 | 200 | 3 |
| Above 960 | 500 | 3 |

Notes:

(1) The limit for radiated test was performed according to as following: CISPR 22/ FCC PART 15B /ICES-003.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

| FREQUENCY (MHz) | Class A (dBuV/m) (at 3m) | | Class B (dBuV/m) (at 3m) | |
|---|---|---|---|---|
| | PEAK | AVERAGE | PEAK | AVERAGE |
| Above 1000 | 80 | 60 | 74 | 54 |

Notes:

(1) The limit for radiated test was performed according to FCC PART 15B.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

| Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz) | Range (MHz) |
|---|---|
| Below 1.705 | 30 |
| 1.705 – 108 | 1000 |
| 108 – 500 | 2000 |
| 500 – 1000 | 5000 |
| Above 1000 | $5^{th}$ harmonic of the highest frequency or 40 GHz, whichever is lower |

4.2.2 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|---|---|---|---|---|---|
| 1 | Log-Bicon Antenna | Schwarzbeck | VULB 9160 | 3058 | Nov. 27, 2008 |
| 2 | Test Cable | N/A | 10M_OS02 | N/A | Nov. 27, 2008 |
| 3 | Test Cable | N/A | OS02-1/-2/-3 | N/A | Nov. 27, 2008 |
| 4 | Pre-Amplifier | Anritsu | MH648A | M09961 | Nov. 27, 2008 |
| 5 | EMI Test Receiver | R&S | ESCI | 100082 | Jan. 30, 2009 |
| 6 | Antenna Mast | Chance Most | CMTB-1.5 | N/A | N/A |
| 7 | Turn Table | Chance Most | CMTB-1.5 | N/A | N/A |
| 8 | Spectrum Analyzer | R&S | FSP_40 | 100129 | Jan. 07, 2009 |
| 9 | Horn Antenna | Schwarzbeck | BBHA9120D | 9120D-325 | Oct. 24, 2008 |
| 10 | Horn Antenna | Schwarzbeck | BBHA9170 | 9170187 | Oct. 24, 2008 |
| 11 | Microwave Pre_amplifier | Agilent | 8449B | 3008A01714 | Mar. 09, 2009 |
| 12 | Microflex Cable | United Microwave | 57793 | 1m | Mar. 09, 2009 |
| 13 | Microflex Cable | United Microwave | A30A30-5006 | 10M | Jul. 07, 2008 |

Remark: ” N/A” denotes No Model No. / Serial No. and No Calibration specified.

4.2.3 TEST PROCEDURE

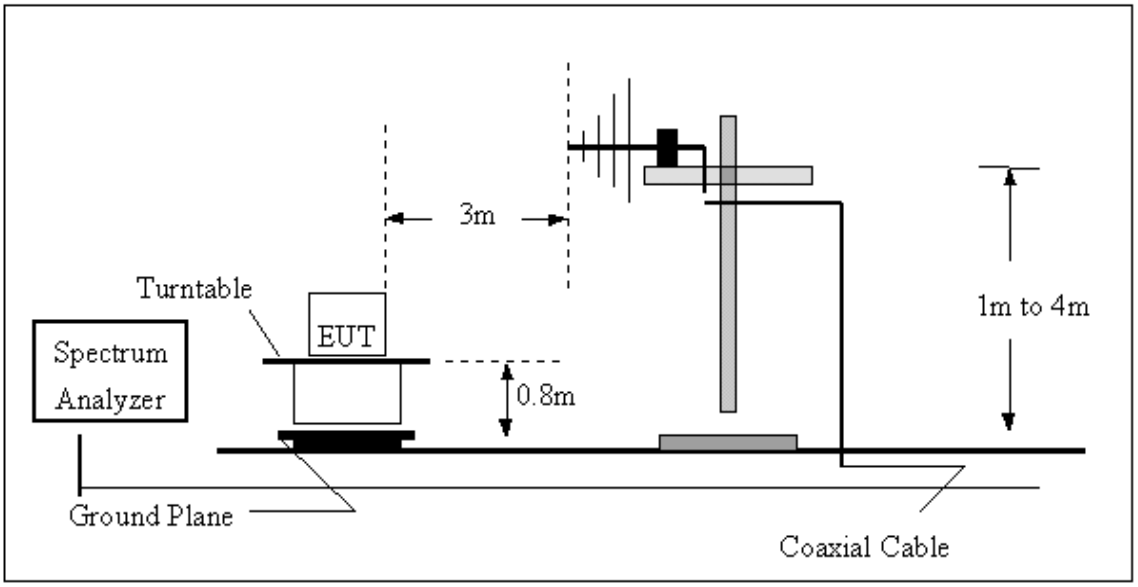
a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.4 DEVIATION FROM TEST STANDARD

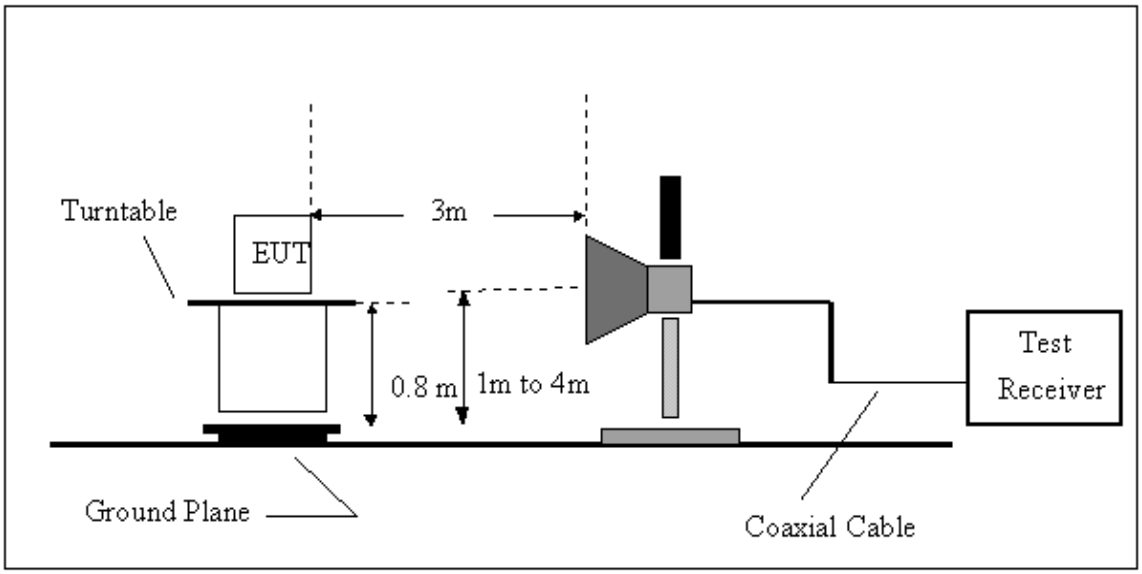
No deviation

4.2.5 TEST SETUP

(A) Radiated Emission Test Set-Up, Frequency Below 1000MHz




(B) Radiated Emission Test Set-Up Frequency Above 1 GHz




4.2.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **4.1.6** Unless otherwise a special operating condition is specified in the follows during the testing.

4.2.7 TEST RESULTS (30~1000MHz)

| | | | |
|---|---|---|---|
| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1010 hPa | Test Power ： | AC 120V/60Hz |
| Test Mode ： | RX CH01 11B | | |

| Freq. (MHz) | Ant. H/V | Reading(RA) (dBuV) | Corr.Factor(CF) (dB) | Measured(FS) (dBuV/m) | Limits(QP) (dBuV/m) | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| 189.08 | V | 46.32 | -19.15 | 27.17 | 43.50 | - 16.33 | |
| 253.10 | V | 45.29 | -16.63 | 28.66 | 46.00 | - 17.34 | |
| 330.70 | V | 43.65 | -13.83 | 29.82 | 46.00 | - 16.18 | |
| 396.66 | V | 38.79 | -12.36 | 26.43 | 46.00 | - 19.57 | |
| 580.96 | V | 33.02 | -8.90 | 24.12 | 46.00 | - 21.88 | |
| 664.38 | V | 39.31 | -6.81 | 32.50 | 46.00 | - 13.50 | |

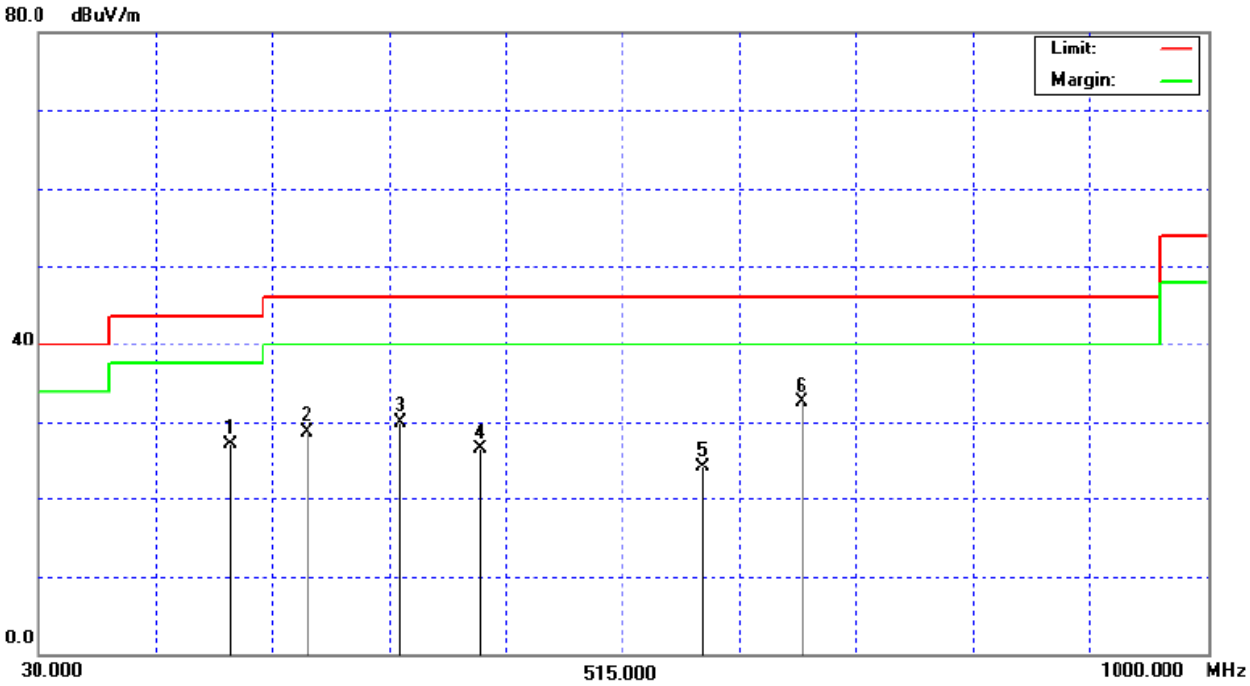
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table。



| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
|---|---|---|---|
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1010 hPa | Test Power ： | AC 120V/60Hz |
| Test Mode ： | RX CH01 11B | | |

| Freq. (MHz) | Ant. H/V | Reading(RA) (dBuV) | Corr.Factor(CF) (dB) | Measured(FS) (dBuV/m) | Limits(QP) (dBuV/m) | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| 262.80 | H | 50.87 | -16.42 | 34.45 | 46.00 | - 11.55 | |
| 278.32 | H | 48.13 | -15.98 | 32.15 | 46.00 | - 13.85 | |
| 305.48 | H | 46.98 | -14.71 | 32.27 | 46.00 | - 13.73 | |
| 359.80 | H | 39.04 | -13.13 | 25.91 | 46.00 | - 20.09 | |
| 449.04 | H | 32.84 | -11.59 | 21.25 | 46.00 | - 24.75 | |
| 561.56 | H | 31.89 | -9.18 | 22.71 | 46.00 | - 23.29 | |

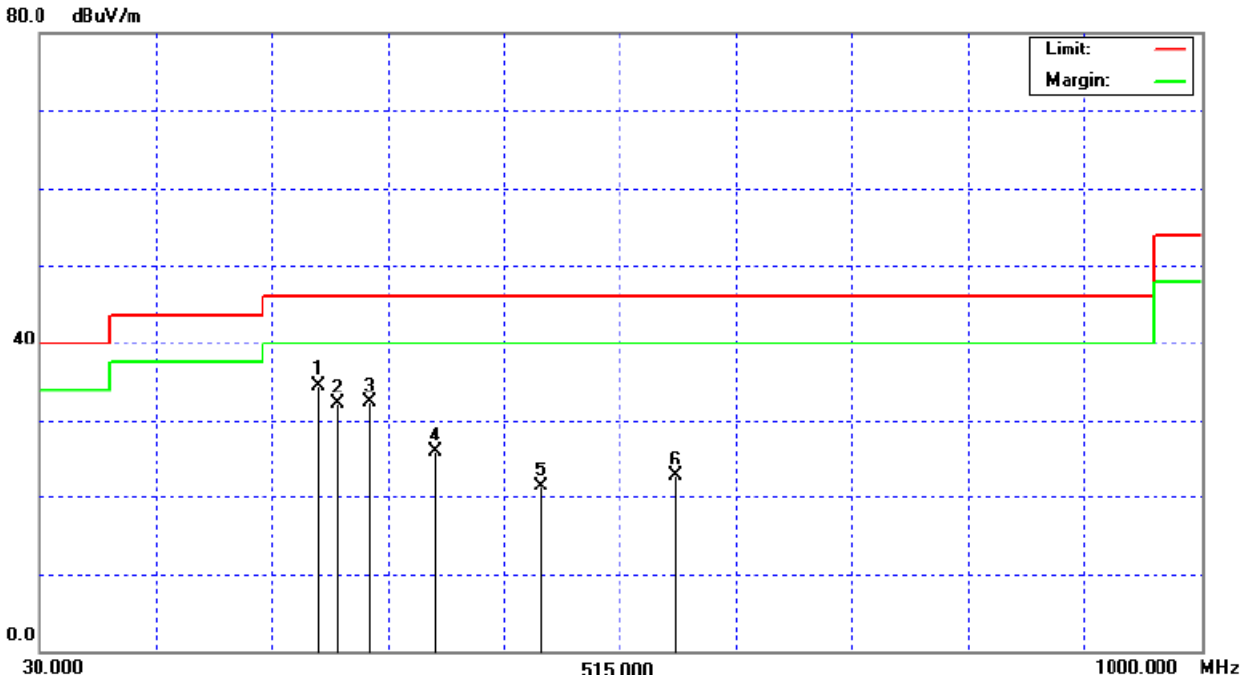
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table。



| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
|---|---|---|---|
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1010 hPa | Test Power ： | AC 120V/60Hz |
| Test Mode ： | RX CH01 11G | | |

| Freq. (MHz) | Ant. H/V | Reading(RA) (dBuV) | Corr.Factor(CF) (dB) | Measured(FS) (dBuV/m) | Limits(QP) (dBuV/m) | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| 41.64 | V | 42.36 | -17.52 | 24.84 | 40.00 | - 15.16 | |
| 142.52 | V | 44.97 | -20.91 | 24.06 | 43.50 | - 19.44 | |
| 338.46 | V | 43.99 | -13.66 | 30.33 | 46.00 | - 15.67 | |
| 458.74 | V | 35.46 | -11.24 | 24.22 | 46.00 | - 21.78 | |
| 532.46 | V | 35.67 | -9.65 | 26.02 | 46.00 | - 19.98 | |
| 666.32 | V | 41.47 | -6.77 | 34.70 | 46.00 | - 11.30 | |

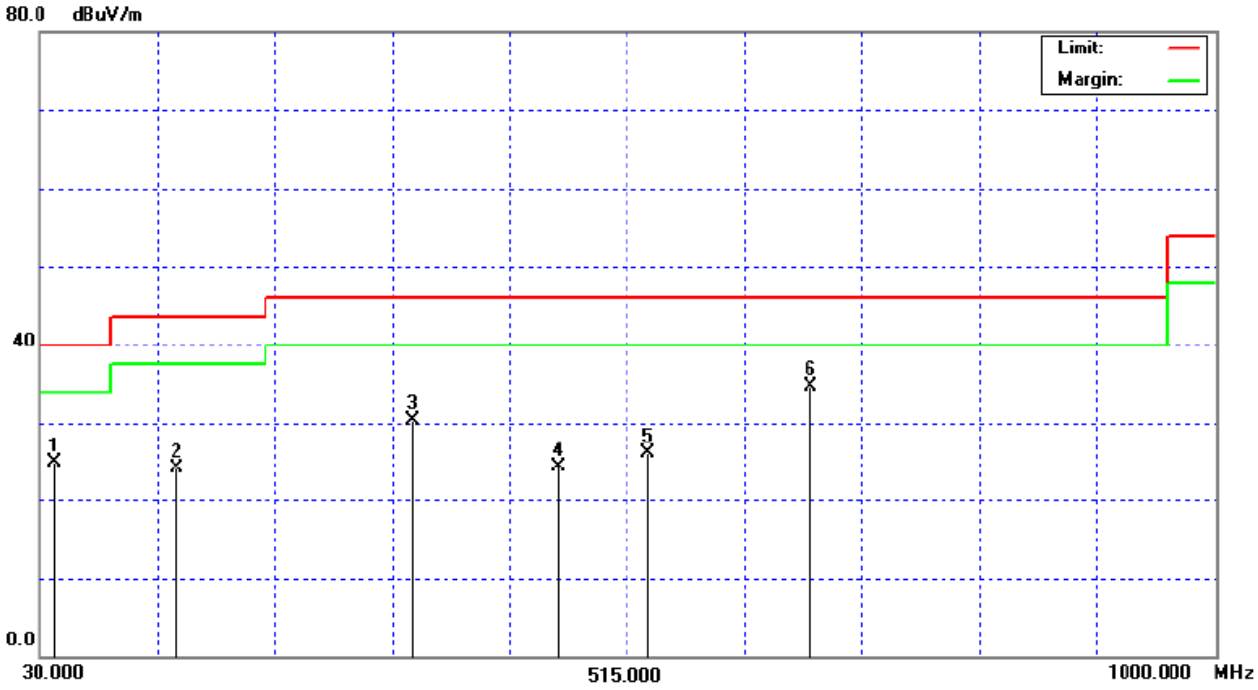
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table。



| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
|---|---|---|---|
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1010 hPa | Test Power ： | AC 120V/60Hz |
| Test Mode ： | RX CH01 11G | | |

| Freq. (MHz) | Ant. H/V | Reading(RA) (dBuV) | Corr.Factor(CF) (dB) | Measured(FS) (dBuV/m) | Limits(QP) (dBuV/m) | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| 43.58 | H | 39.58 | -18.28 | 21.30 | 40.00 | - 18.70 | |
| 64.92 | H | 42.65 | -22.53 | 20.12 | 40.00 | - 19.88 | |
| 88.20 | H | 45.68 | -21.00 | 24.68 | 43.50 | - 18.82 | |
| 134.76 | H | 47.72 | -21.44 | 26.28 | 43.50 | - 17.22 | |
| 213.76 | H | 50.68 | -17.38 | 33.30 | 46.00 | - 12.70 | |
| 258.92 | H | 51.67 | -16.50 | 35.17 | 46.00 | - 10.83 | |

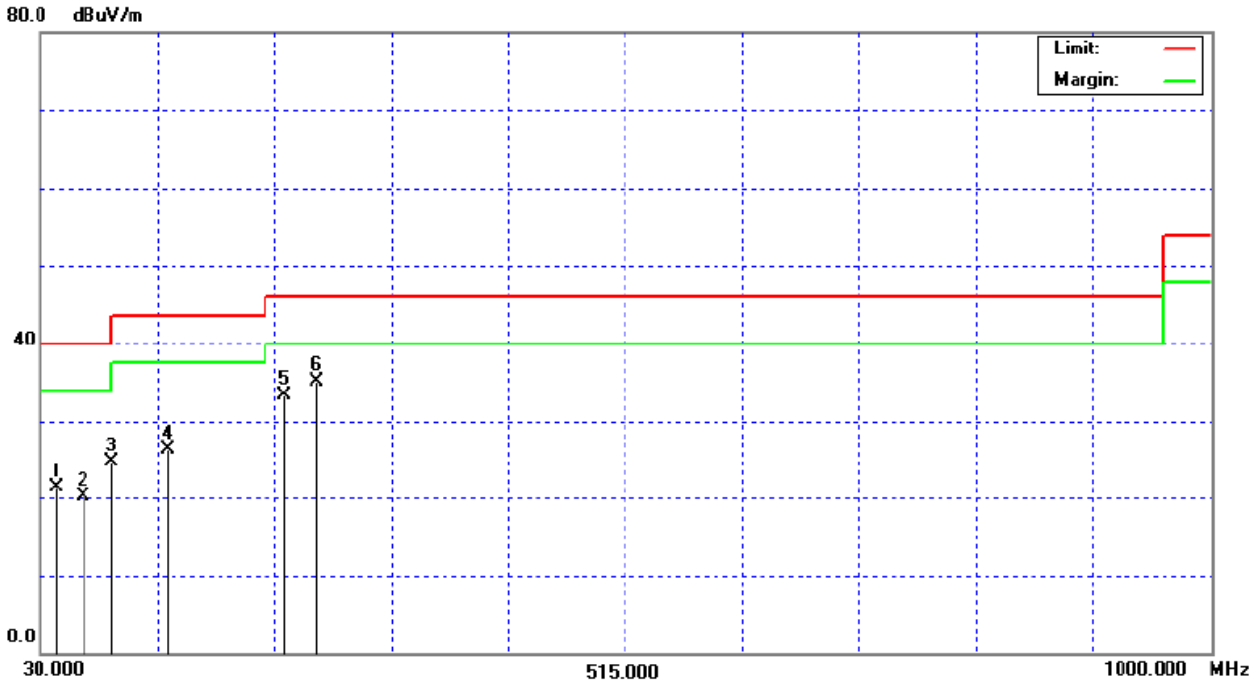
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table。



| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
|---|---|---|---|
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1010 hPa | Test Power ： | AC 120V/60Hz |
| Test Mode ： | Mode 1 - USB PLAY | | |

| Freq. (MHz) | Ant. H/V | Reading(RA) (dBuV) | Corr.Factor(CF) (dB) | Measured(FS) (dBuV/m) | Limits(QP) (dBuV/m) | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| 134.76 | V | 63.84 | -21.88 | 41.96 | 43.50 | - 1.54 | |
| 534.40 | V | 45.58 | -9.44 | 36.14 | 46.00 | - 9.86 | |
| 600.36 | V | 44.95 | -8.08 | 36.87 | 46.00 | - 9.13 | |
| 666.32 | V | 44.71 | -6.54 | 38.17 | 46.00 | - 7.83 | |
| 800.18 | V | 45.32 | -5.48 | 39.84 | 46.00 | - 6.16 | |
| 840.92 | V | 46.94 | -4.87 | 42.07 | 46.00 | - 3.93 | |

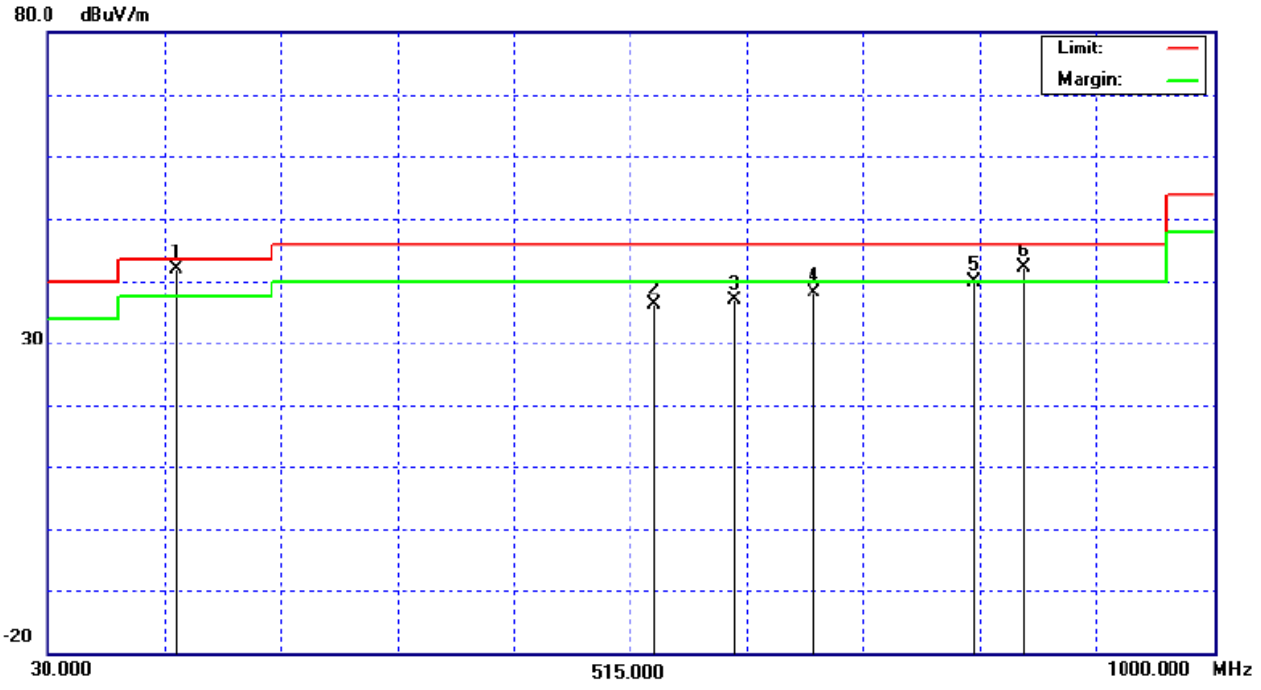
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table。



| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
|---|---|---|---|
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1010 hPa | Test Power ： | AC 120V/60Hz |
| Test Mode ： | Mode 1 - USB PLAY | | |

| Freq. (MHz) | Ant. H/V | Reading(RA) (dBuV) | Corr.Factor(CF) (dB) | Measured(FS) (dBuV/m) | Limits(QP) (dBuV/m) | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| 134.76 | H | 63.35 | -21.88 | 41.47 | 43.50 | - 2.03 | |
| 200.72 | H | 51.78 | -19.26 | 32.52 | 43.50 | - 10.98 | |
| 289.96 | H | 48.47 | -15.72 | 32.75 | 46.00 | - 13.25 | |
| 400.54 | H | 47.48 | -12.40 | 35.08 | 46.00 | - 10.92 | |
| 480.08 | H | 45.52 | -10.60 | 34.92 | 46.00 | - 11.08 | |
| 666.32 | H | 43.83 | -6.54 | 37.29 | 46.00 | - 8.71 | |

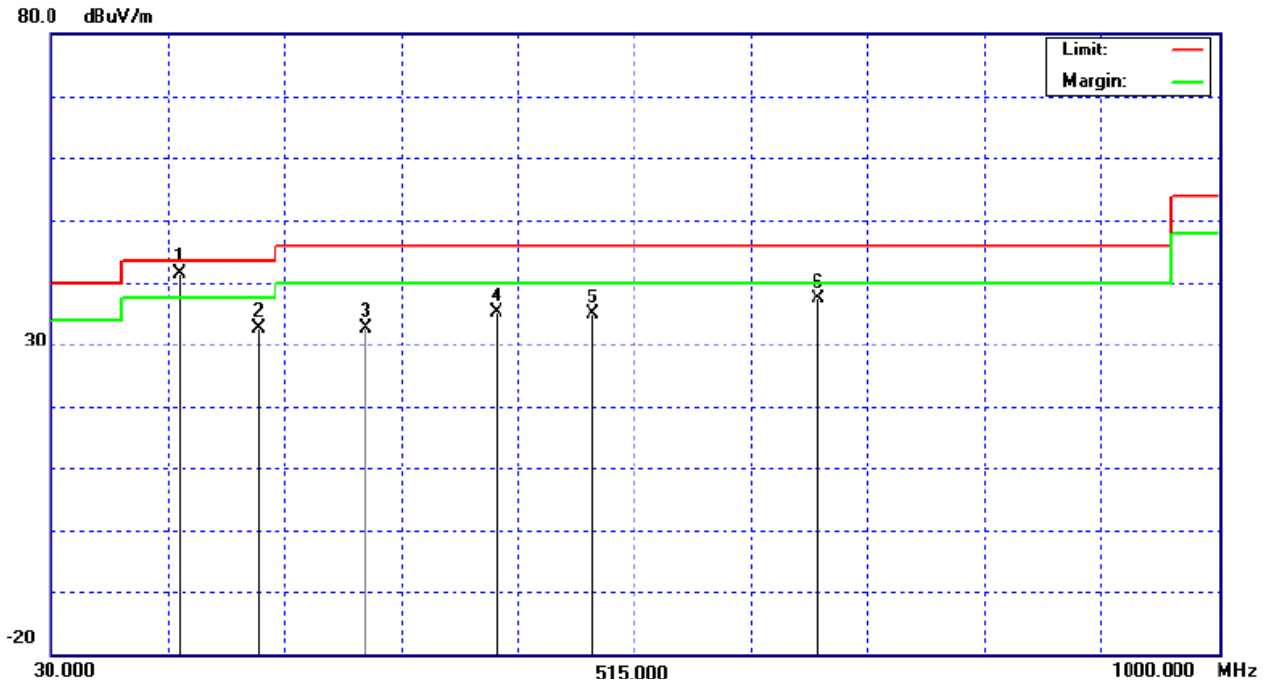
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table。



| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
|---|---|---|---|
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1010 hPa | Test Power ： | AC 120V/60Hz |
| Test Mode ： | Mode 2 - FM 87.5MHz | | |

| Freq. (MHz) | Ant. H/V | Reading(RA) (dBuV) | Corr.Factor(CF) (dB) | Measured(FS) (dBuV/m) | Limits(QP) (dBuV/m) | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| 134.76 | V | 62.90 | -21.88 | 41.02 | 43.50 | - 2.48 | |
| 480.08 | V | 46.37 | -10.60 | 35.77 | 46.00 | - 10.23 | |
| 532.46 | V | 46.50 | -9.49 | 37.01 | 46.00 | - 8.99 | |
| 600.36 | V | 42.95 | -8.08 | 34.87 | 46.00 | - 11.13 | |
| 800.18 | V | 45.25 | -5.48 | 39.77 | 46.00 | - 6.23 | |
| 840.92 | V | 47.52 | -4.87 | 42.65 | 46.00 | - 3.35 | |

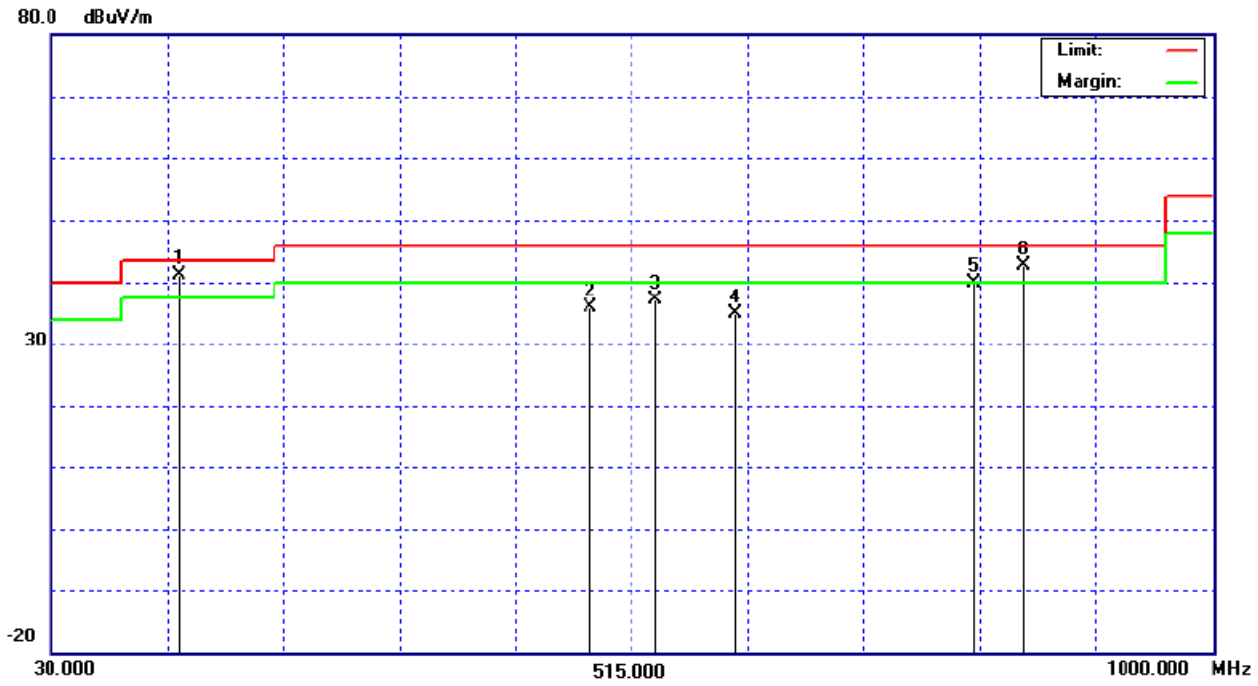
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table。



| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
|---|---|---|---|
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1010 hPa | Test Power ： | AC 120V/60Hz |
| Test Mode ： | Mode 2 - FM 87.5MHz | | |

| Freq. (MHz) | Ant. H/V | Reading(RA) (dBuV) | Corr.Factor(CF) (dB) | Measured(FS) (dBuV/m) | Limits(QP) (dBuV/m) | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| 134.76 | H | 58.13 | -21.88 | 36.25 | 43.50 | - 7.25 | |
| 200.72 | H | 53.79 | -19.26 | 34.53 | 43.50 | - 8.97 | |
| 241.46 | H | 53.14 | -17.21 | 35.93 | 46.00 | - 10.07 | |
| 400.54 | H | 47.11 | -12.40 | 34.71 | 46.00 | - 11.29 | |
| 480.08 | H | 45.94 | -10.60 | 35.34 | 46.00 | - 10.66 | |
| 666.32 | H | 44.59 | -6.54 | 38.05 | 46.00 | - 7.95 | |

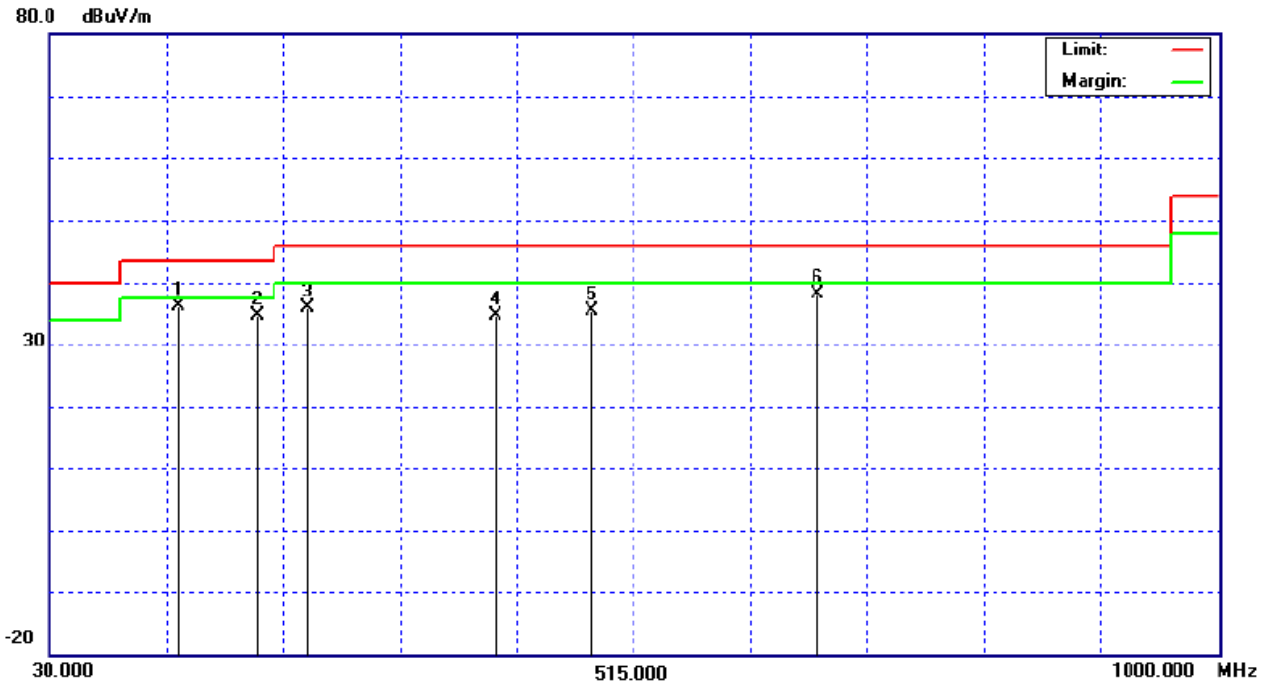
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table。



| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
|---|---|---|---|
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1010 hPa | Test Power ： | AC 120V/60Hz |
| Test Mode ： | Mode 3 - FM 97.5MHz | | |

| Freq. (MHz) | Ant. H/V | Reading(RA) (dBuV) | Corr.Factor(CF) (dB) | Measured(FS) (dBuV/m) | Limits(QP) (dBuV/m) | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| 134.76 | V | 65.05 | -21.88 | 43.17 | 43.50 | - 0.33 | (QP) |
| 241.46 | V | 49.62 | -14.21 | 35.41 | 46.00 | - 10.59 | |
| 400.54 | V | 47.61 | -12.40 | 35.21 | 46.00 | - 10.79 | |
| 480.08 | V | 50.56 | -10.60 | 39.96 | 46.00 | - 6.04 | |
| 666.32 | V | 47.93 | -6.54 | 41.39 | 46.00 | - 4.61 | |
| 840.92 | V | 47.50 | -4.87 | 42.63 | 46.00 | - 3.37 | (QP) |

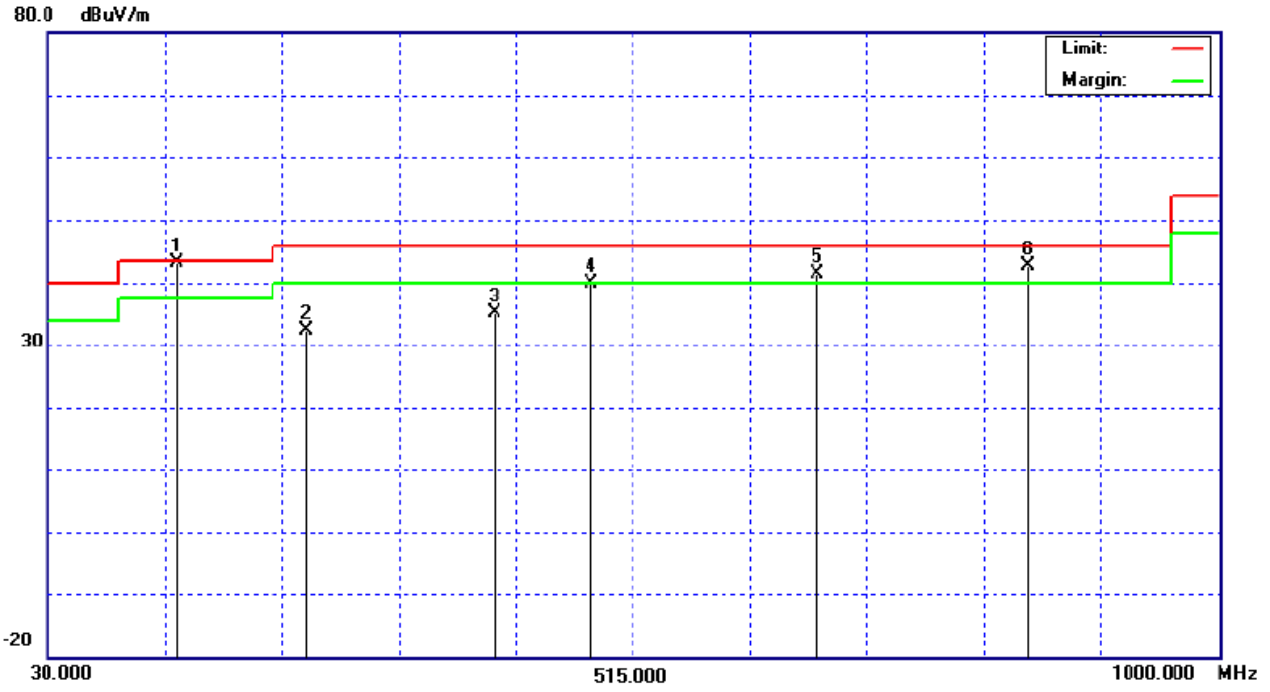
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table。



| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
|---|---|---|---|
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1010 hPa | Test Power ： | AC 120V/60Hz |
| Test Mode ： | Mode 3 - FM 97.5MHz | | |

| Freq. (MHz) | Ant. H/V | Reading(RA) (dBuV) | Corr.Factor(CF) (dB) | Measured(FS) (dBuV/m) | Limits(QP) (dBuV/m) | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| 134.76 | H | 64.24 | -21.88 | 42.36 | 43.50 | - 1.14 | |
| 400.54 | H | 47.04 | -12.40 | 34.64 | 46.00 | - 11.36 | |
| 480.08 | H | 44.73 | -10.60 | 34.13 | 46.00 | - 11.87 | |
| 600.36 | H | 46.09 | -8.08 | 38.01 | 46.00 | - 7.99 | |
| 666.32 | H | 45.79 | -6.54 | 39.25 | 46.00 | - 6.75 | |
| 800.18 | H | 43.42 | -5.48 | 37.94 | 46.00 | - 8.06 | |

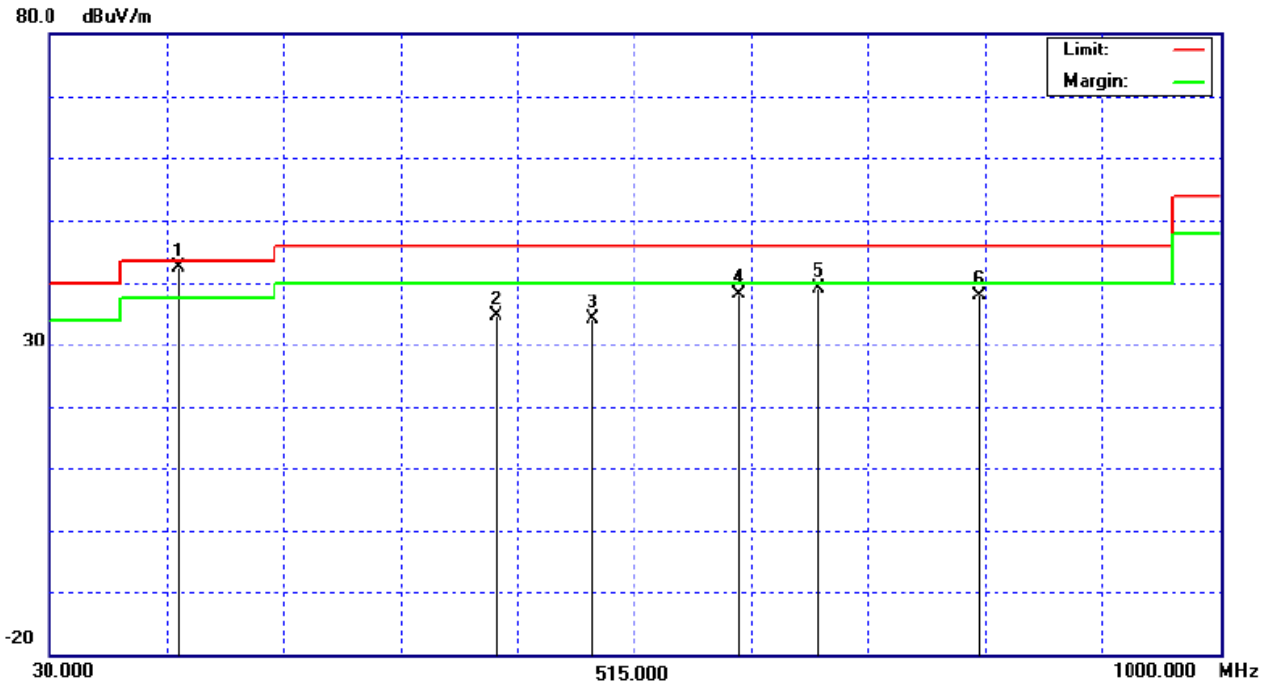
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table。



| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
|---|---|---|---|
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1010 hPa | Test Power ： | AC 120V/60Hz |
| Test Mode ： | Mode 4 - FM 107.5MHz | | |

| Freq. (MHz) | Ant. H/V | Reading(RA) (dBuV) | Corr.Factor(CF) (dB) | Measured(FS) (dBuV/m) | Limits(QP) (dBuV/m) | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| 134.76 | V | 62.72 | -21.88 | 40.84 | 43.50 | - 2.66 | (QP) |
| 400.54 | V | 45.93 | -12.40 | 33.53 | 46.00 | - 12.47 | |
| 534.40 | V | 43.05 | -9.44 | 33.61 | 46.00 | - 12.39 | |
| 600.36 | V | 46.32 | -8.08 | 38.24 | 46.00 | - 7.76 | |
| 666.32 | V | 45.59 | -6.54 | 39.05 | 46.00 | - 6.95 | |
| 800.18 | V | 44.09 | -5.48 | 38.61 | 46.00 | - 7.39 | |

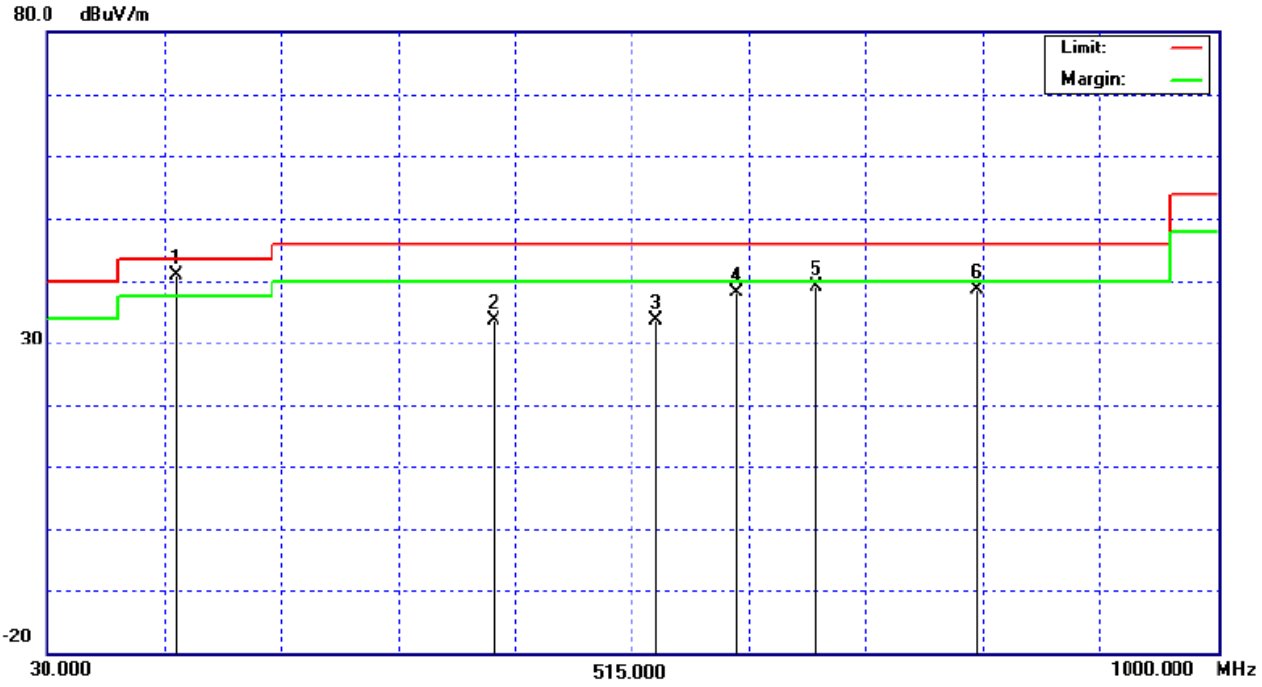
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table。



| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
|---|---|---|---|
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1010 hPa | Test Power ： | AC 120V/60Hz |
| Test Mode ： | Mode 4 - FM 107.5MHz | | |

| Freq. (MHz) | Ant. H/V | Reading(RA) (dBuV) | Corr.Factor(CF) (dB) | Measured(FS) (dBuV/m) | Limits(QP) (dBuV/m) | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| 134.76 | H | 62.83 | -21.88 | 40.95 | 43.50 | - 2.55 | (QP) |
| 480.08 | H | 49.41 | -10.60 | 38.81 | 46.00 | - 7.19 | |
| 534.40 | H | 48.06 | -9.44 | 38.62 | 46.00 | - 7.38 | |
| 666.32 | H | 47.77 | -6.54 | 41.23 | 46.00 | - 4.77 | |
| 800.18 | H | 47.43 | -5.48 | 41.95 | 46.00 | - 4.05 | |
| 840.92 | H | 48.10 | -4.87 | 43.23 | 46.00 | - 2.77 | (QP) |

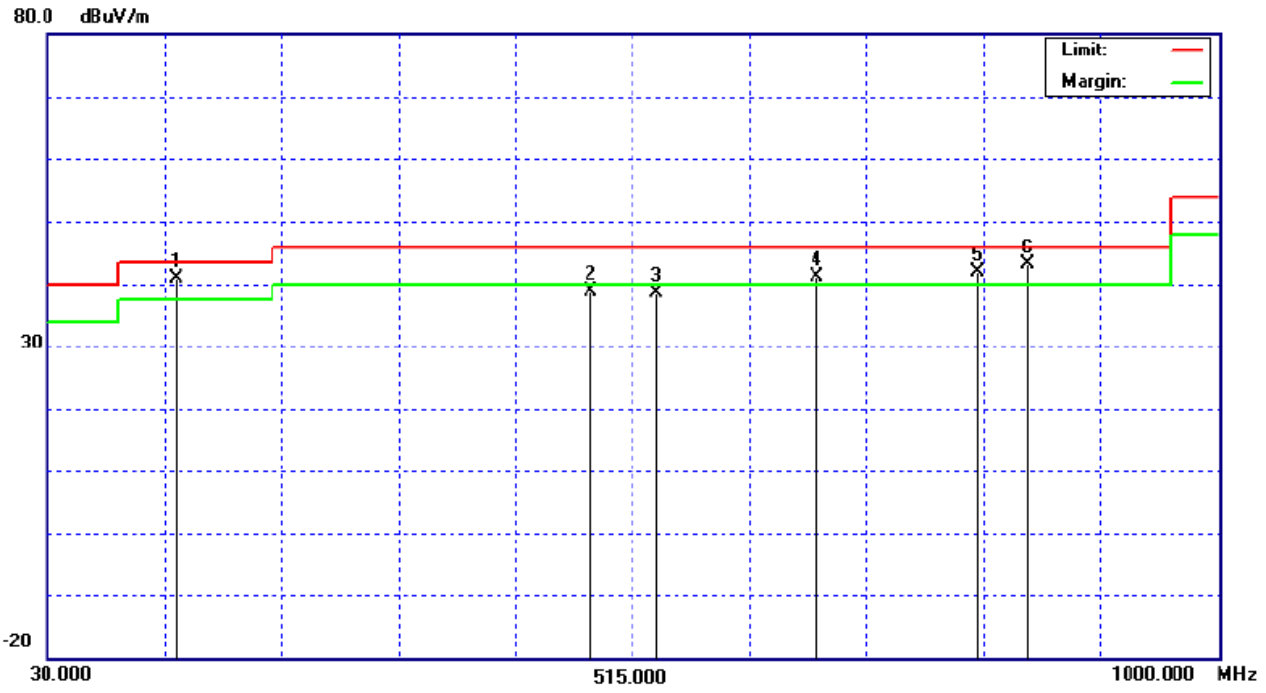
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table。



| | | | |
|---|---|---|---|
| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1010 hPa | Test Power ： | AC 120V/60Hz |
| Test Mode ： | Mode 5 – Internet radio | | |

| Freq. (MHz) | Ant. H/V | Reading(RA) (dBuV) | Corr.Factor(CF) (dB) | Measured(FS) (dBuV/m) | Limits(QP) (dBuV/m) | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| 74.62 | V | 59.27 | -22.68 | 36.59 | 40.00 | - 3.41 | |
| 134.76 | V | 65.35 | -21.88 | 43.47 | 43.50 | - 0.03 | |
| 534.40 | V | 53.00 | -9.44 | 43.56 | 46.00 | - 2.44 | |
| 600.36 | V | 48.11 | -8.08 | 40.03 | 46.00 | - 5.97 | |
| 666.32 | V | 46.41 | -6.54 | 39.87 | 46.00 | - 6.13 | |
| 840.92 | V | 47.40 | -4.87 | 42.53 | 46.00 | - 3.47 | |

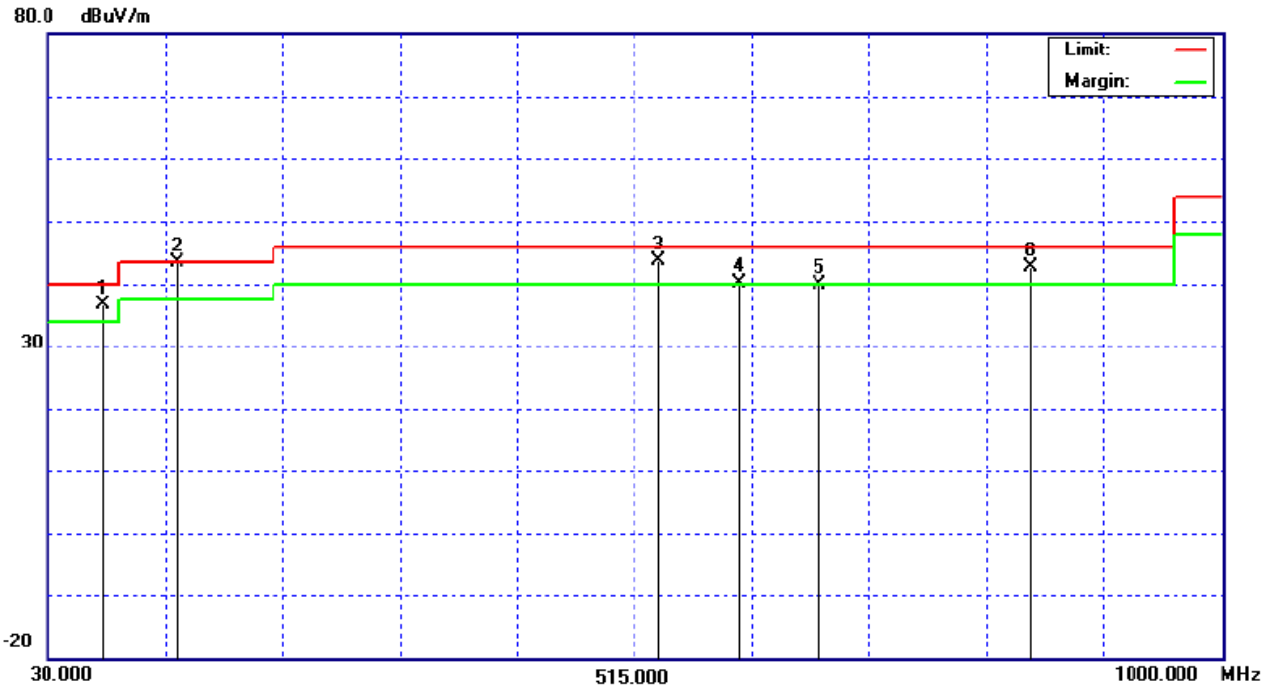
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table。



| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
|---|---|---|---|
| Temperature： | 25 ℃ | Relative Humidity： | 60% |
| Pressure： | 1010 hPa | Test Power ： | AC 120V/60Hz |
| Test Mode ： | Mode 5 – Internet radio | | |

| Freq. (MHz) | Ant. H/V | Reading(RA) (dBuV) | Corr.Factor(CF) (dB) | Measured(FS) (dBuV/m) | Limits(QP) (dBuV/m) | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| 94.05 | H | 60.71 | -21.14 | 39.57 | 43.50 | - 3.93 | |
| 134.76 | H | 62.55 | -21.88 | 40.67 | 43.50 | - 2.83 | |
| 400.54 | H | 50.29 | -12.40 | 37.89 | 46.00 | - 8.11 | |
| 480.08 | H | 48.89 | -10.60 | 38.29 | 46.00 | - 7.71 | |
| 600.36 | H | 43.38 | -8.08 | 35.30 | 46.00 | - 10.70 | |
| 666.32 | H | 48.09 | -6.54 | 41.55 | 46.00 | - 4.45 | |

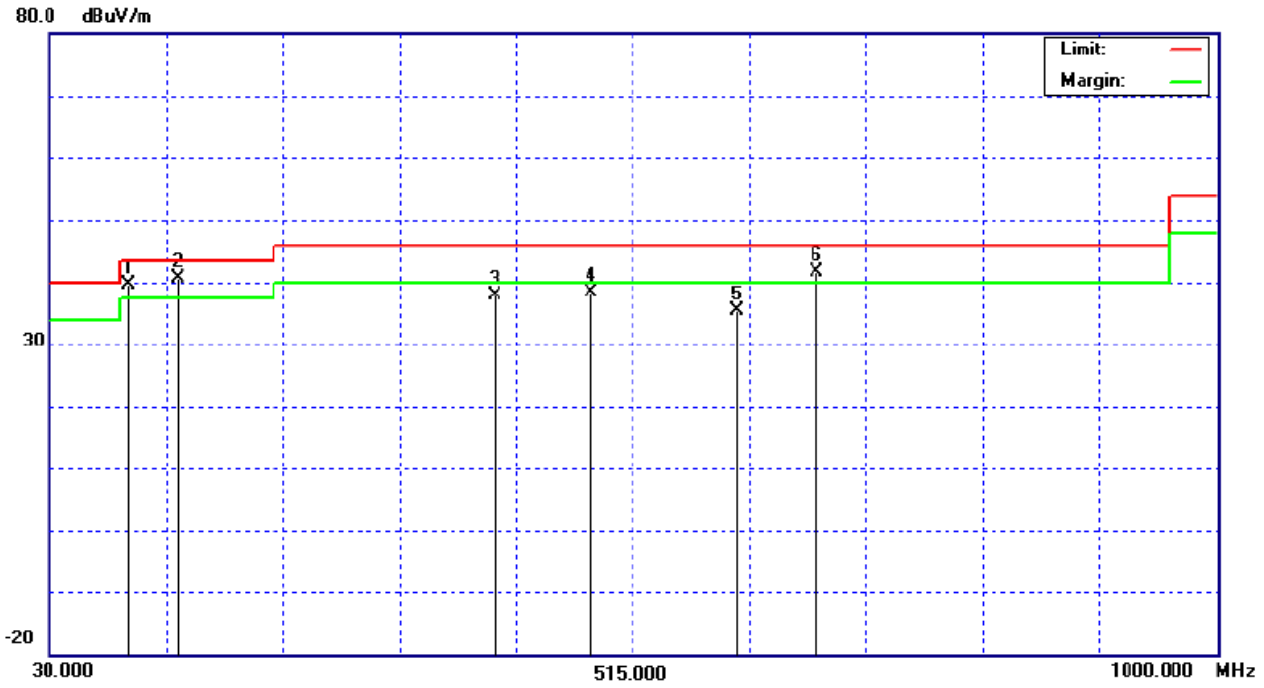
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table。



4.2.8 TEST RESULTS (Above 1000 MHz)

| | | | |
|---|---|---|---|
| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
| Temperature： | 25℃ | Relative Humidity： | 60% |
| Pressure： | 1010 hPa | Test Voltage ： | AC 120V/60Hz |
| Test Mode ： | RX Mode – CH01 11B | | |

| Freq. | Ant.Pol. | Reading | | Ant./CF | Act. | | Limit | | Note |
|---|---|---|---|---|---|---|---|---|---|
| | | Peak | AV | | Peak | AV | Peak | AV | |
| (MHz) | H/V | (dBuV) | (dBuV) | CF(dB) | (dBuV/m) | (dBuV/m) | (dBuV/m) | (dBuV/m) | |
| 1598.02 | V | 43.12 | 34.58 | -6.53 | 36.59 | 28.05 | 74.00 | 54.00 | X/H |

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

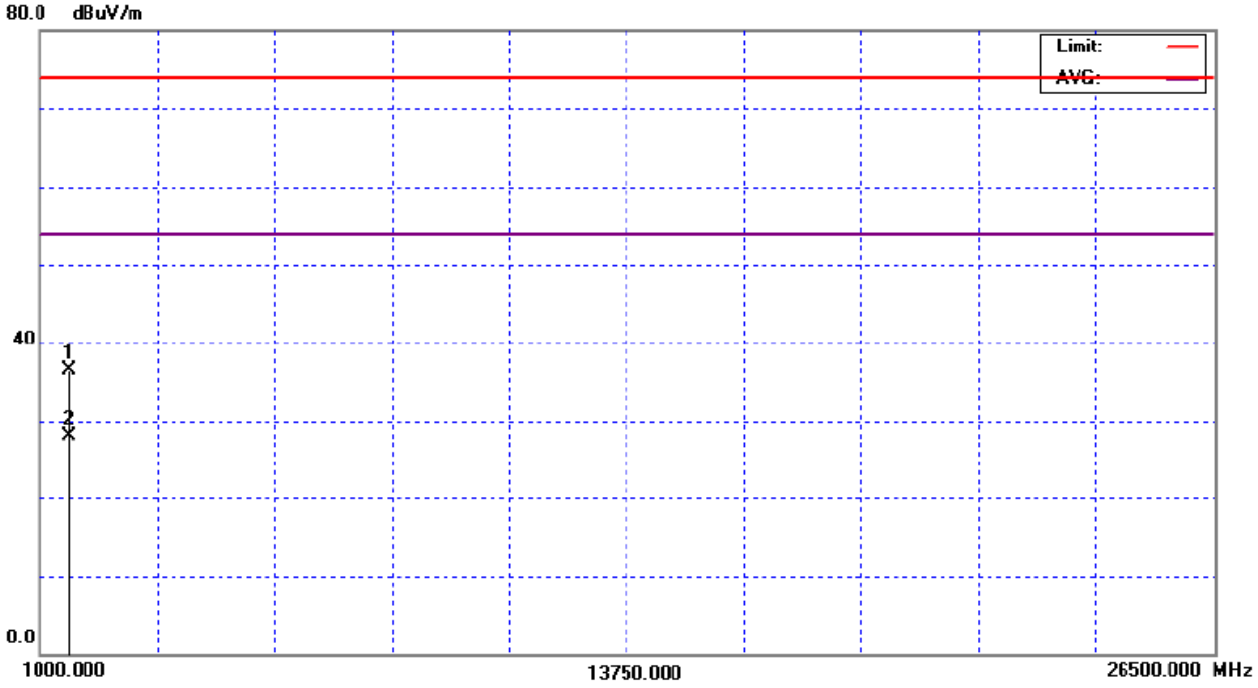
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：

"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

**RX Mode(Above 1000 MHz, Vertical)**



| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
|---|---|---|---|
| Temperature： | 25℃ | Relative Humidity： | 60% |
| Pressure： | 1010 hPa | Test Voltage ： | AC 120V/60Hz |
| Test Mode ： | RX Mode – CH01 11B | | |

| Freq. | Ant.Pol. | Reading | | Ant./CF | Act. | | Limit | | Note |
|---|---|---|---|---|---|---|---|---|---|
| | | Peak | AV | | Peak | AV | Peak | AV | |
| (MHz) | H/V | (dBuV) | (dBuV) | CF(dB) | (dBuV/m) | (dBuV/m) | (dBuV/m) | (dBuV/m) | |
| 1598.03 | H | 44.98 | 35.47 | -6.53 | 38.45 | 28.94 | 74.00 | 54.00 | X/H |

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

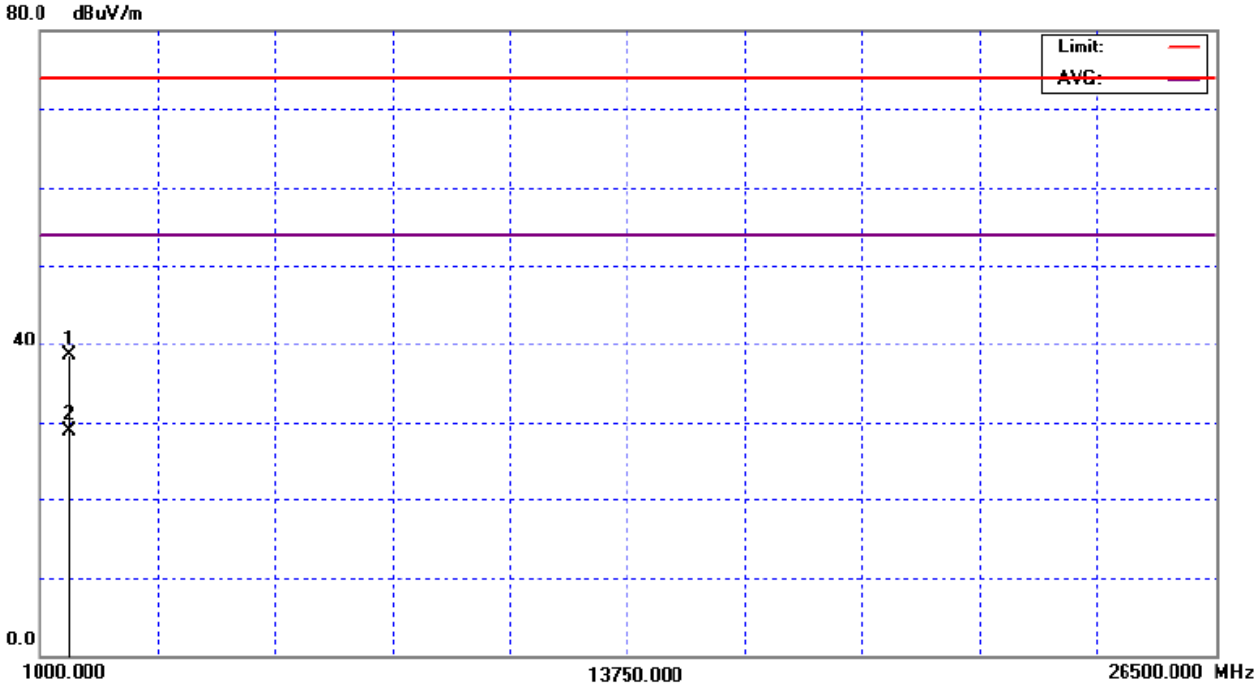
(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

**RX Mode(Above 1000 MHz, Horizontal)**



| | | | |
|---|---|---|---|
| EUT： | Internet radio/FM RDS table radio | Model Name ： | NetWorks |
| Temperature： | 25℃ | Relative Humidity： | 60% |
| Pressure： | 1010 hPa | Test Voltage ： | AC 120V/60Hz |
| Test Mode ： | RX Mode – CH01 11G | | |

| Freq. | Ant.Pol. | Reading | | Ant./CF | Act. | | Limit | | Note |
|---|---|---|---|---|---|---|---|---|---|
| | | Peak | AV | | Peak | AV | Peak | AV | |
| (MHz) | H/V | (dBuV) | (dBuV) | CF(dB) | (dBuV/m) | (dBuV/m) | (dBuV/m) | (dBuV/m) | |
| 1597.30 | V | 46.97 | 37.65 | -6.54 | 40.43 | 31.11 | 74.00 | 54.00 | X/H |

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

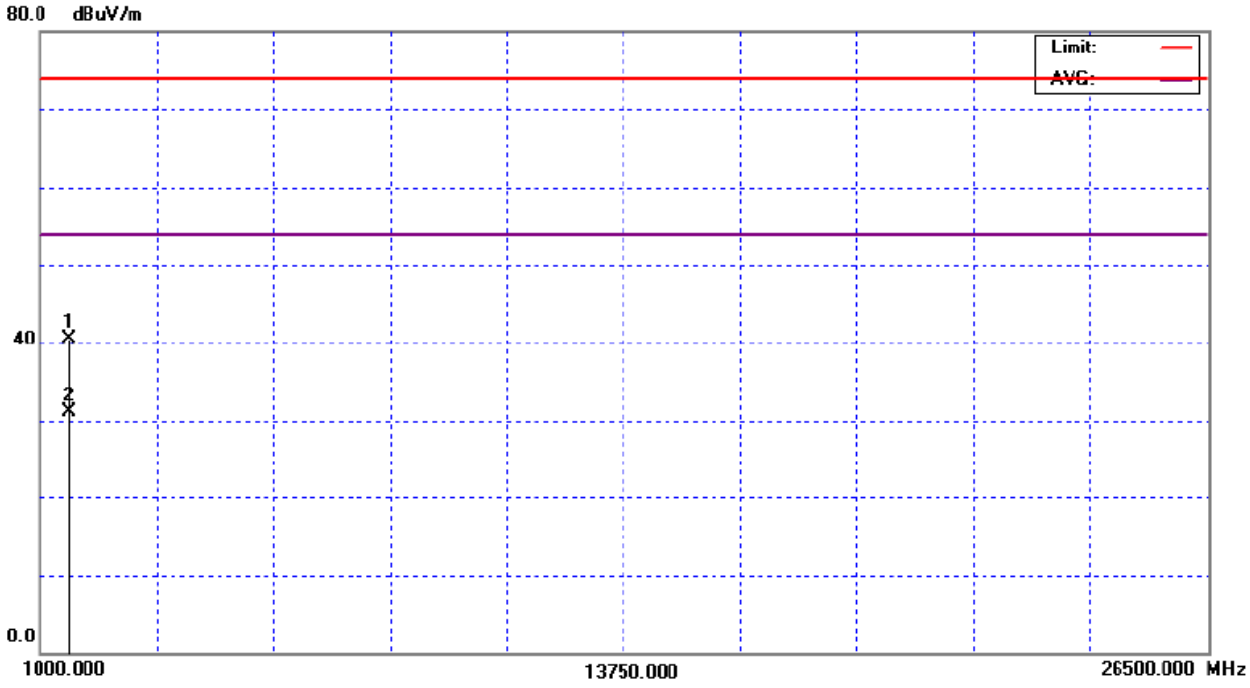
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：

"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

**RX Mode(Above 1000 MHz, Vertical)**



| | | | |
|---|---|---|---|
| EUT： | Internet radio/FM RDS table radio | Model Name： | NetWorks |
| Temperature： | 25℃ | Relative Humidity： | 60% |
| Pressure： | 1010 hPa | Test Voltage ： | AC 120V/60Hz |
| Test Mode ： | RX Mode – CH01 11G | | |

| Freq. | Ant.Pol. | Reading | | Ant./CF | Act. | | Limit | | Note |
|---|---|---|---|---|---|---|---|---|---|
| | | Peak | AV | | Peak | AV | Peak | AV | |
| (MHz) | H/V | (dBuV) | (dBuV) | CF(dB) | (dBuV/m) | (dBuV/m) | (dBuV/m) | (dBuV/m) | |
| 1597.30 | H | 43.21 | 34.26 | -6.54 | 36.67 | 27.72 | 74.00 | 54.00 | X/H |

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

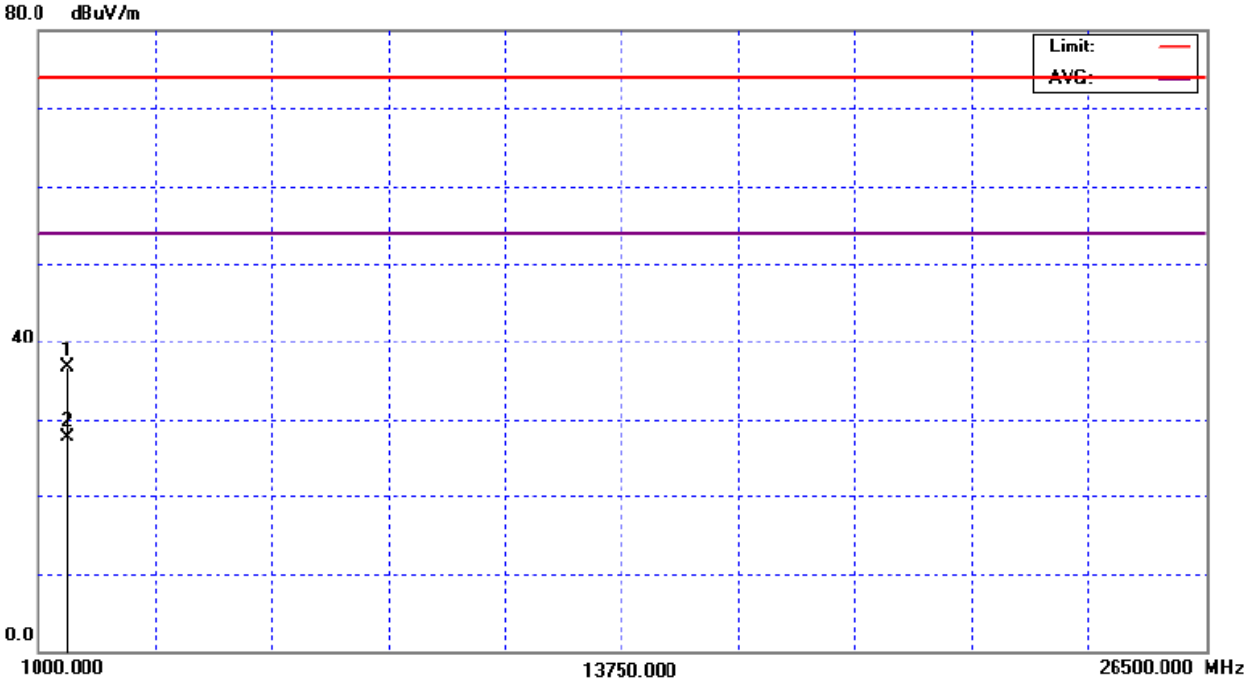
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：

"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

**RX Mode(Above 1000 MHz, Horizontal)**



## 5. EUT TEST PHOTO

**Conducted Measurement Photos**


**Radiated Measurement Photos**