# Radio Test Report

## FCC ID: H8GRH10

**This report concerns (check one) :** ■ **Original Grant** □ **Class I Change**

**Issued Date** : Oct. 26, 2012
**Project No.** : 1209011
**Equipment** : 2.4G Headset Dongle
**Model Name** : RH-10

**Applicant** : A-FOUR TECH CO., LTD.
**Address** : 6F., No. 108, Min-Chuan Rd., Xindian Dist., New Taipei City, Taiwan R.O.C.

**Tested by:** Neutron Engineering Inc. EMC Laboratory
**Date of Receipt:** Sep. 04, 2012
**Date of Test:** Sep. 04, 2012 ~ Sep. 21, 2012

**Testing Engineer :** Rush Kao
(Rush Kao)

**Technical Manager :** Jeff Yang
(Jeff Yang)

**Authorized Signatory :** Andy Chiu
(Andy Chiu)

**Neutron Engineering Inc.**
B1, No. 37, Lane 365, YangGuang St.,
NeiHu District 114, Taipei, Taiwan.
TEL: +886-2-2657-3299
FAX: +886-2-2657-3331

Testing Laboratory
0659

## 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.**

**Neutron**'s reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **Neutron** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **Neutron** issued reports.

**Neutron**'s reports must not be used by the client to claim product endorsement by the authorities or any agency of the Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and **Neutron-self**, extracts from the test report shall not be reproduced except in full with **Neutron**'s authorized written approval.

**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.

## Table of Contents Page

## Table of Contents Page

## REPORT ISSUED HISTORY

| Revised Version No. | Description | Issued Date |
|---|---|---|
| - | Initial Issue. | Oct. 26, 2012 |

## 1. CERTIFICATION

Equipment : 2.4G Headset Dongle
Brand Name : A4TECH
Model Name : RH-10
Applicant : A-FOUR TECH CO., LTD.
Date of Test : Sep. 04, 2012 ~ Sep. 21, 2012
Standards : FCC Part15, Subpart C: 2010(15.247) / ANCI C63.4: 2009

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-FCCP-1-1209011) 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:

| FCC Part15, Subpart C: 2010 | | | |
|---|---|---|---|
| Standard Section | Test Item | Judgment | Remark |
| **15.207** | Conducted Emission | PASS | |
| **15.247 (c)** | Antenna conducted Spurious Emission | PASS | |
| **15.247 (a)(2)** | 6dB Bandwidth | PASS | |
| **15.247 (b)** | Peak Output Power | PASS | |
| **15.247 (c)** | Radiated Spurious Emission | PASS | |
| **15.247 (d)** | Power Spectral Density | PASS | |
| **15.203** | Antenna Requirement | PASS | |
| **1.1307 1.1310 2.1091 2.1093** | RF Exposure Compliance | 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:

**Conducted emission Test:**

**C02:** (VCCI RN: C-3477; FCC RN: 614388; FCC DN: TW1054)
1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

**Radiated emission Test (Below 1 GHz):**

**CB08:** (FCC RN: 614388; FCC DN: TW1054; IC Assigned Code: 4428C-1)
1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

**Radiated emission Test (Above 1 GHz):**

**CB08:** (VCCI RN: G-91; FCC RN: 614388; FCC DN: TW1054; IC Assigned Code: 4428C-1)
1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

## 2.2 MEASUREMENT UNCERTAINTY

**The measurement uncertainty is not specified by FCC rules and for reference only.**

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**%.

The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2.

A. Conducted emission test:

| Test Site | Measurement Frequency Range | U，(dB) | NOTE |
|---|---|---|---|
| C02 | 150 kHz ~ 30 MHz | 2.59 | |

B. Radiated emission test:

| Test Site | Item | Measurement Frequency Range | | Uncertainty | NOTE |
|---|---|---|---|---|---|
| CB08 | Radiated emission at 3m | Horizontal Polarization | 30 - 200MHz | 3.35 dB | |
| | | | 200 - 1000MHz | 3.11 dB | |
| | | | 1 - 18GHz | 3.97 dB | |
| | | | 18 - 40GHz | 4.01 dB | |
| | | Vertical Polarization | 30 - 200MHz | 3.22 dB | |
| | | | 200 - 1000MHz | 3.24 dB | |
| | | | 1 - 18GHz | 4.05 dB | |
| | | | 18 - 40GHz | 4.04 dB | |

Our calculated Measurement Instrumentation Uncertainty is shown in the tables above. These are our $U_{lab}$ values in CISPR 16-4-2 terminology.

Since Table 1 of CISPR 16-4-2 has values of measurement instrumentation uncertainty, called $U_{CISPR}$, as follows:

Conducted Disturbance (mains port) – 150 kHz – 30 MHz : 3.6 dB

Radiated Disturbance (electric field strength on an open area test site or alternative test site) – 30 MHz – 1000 MHz : 5.2 dB

It can be seen that our $U_{lab}$ values are smaller than $U_{CISPR}$.

# 3. GENERAL INFORMATION

## 3.1 GENERAL DESCRIPTION OF EUT

| | |
|---|---|
| Equipment | 2.4G Headset Dongle |
| Brand Name | A4TECH |
| Model Name | RH-10 |
| OEM Brand/Model Name | N/A |
| Model Difference | N/A |
| Product Description | The EUT is a 2.4G Headset Dongle.<br>Operation Frequency: 2403~2478 MHz<br>Modulation Type: GFSK<br>Number Of Channel Please refer to the Note 2.<br>Antenna Designation: Please refer to the Note 3.<br>Antenna Gain(Peak) Please refer to the Note 3.<br>Output Power: 1.18 dBm (Max.)<br>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. |
| Power Source | Supplied from PC USB port. |
| Power Rating | I/P: DC 5V |
| Connecting I/O Port(s | Please refer to the User's Manual |
| Products Covered | NA |

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) |
|---|---|---|---|---|---|
| 01 | 2403 | 27 | 2429 | 53 | 2455 |
| 02 | 2404 | 28 | 2430 | 54 | 2456 |
| 03 | 2405 | 29 | 2431 | 55 | 2457 |
| 04 | 2406 | 30 | 2432 | 56 | 2458 |
| 05 | 2407 | 31 | 2433 | 57 | 2459 |
| 06 | 2408 | 32 | 2434 | 58 | 2460 |
| 07 | 2409 | 33 | 2435 | 59 | 2461 |
| 08 | 2410 | 34 | 2436 | 60 | 2462 |
| 09 | 2411 | 35 | 2437 | 61 | 2463 |
| 10 | 2412 | 36 | 2438 | 62 | 2464 |
| 11 | 2413 | 37 | 2439 | 63 | 2465 |
| 12 | 2414 | 38 | 2440 | 64 | 2466 |
| 13 | 2415 | 39 | 2441 | 65 | 2467 |
| 14 | 2416 | 40 | 2442 | 66 | 2468 |
| 15 | 2417 | 41 | 2443 | 67 | 2469 |
| 16 | 2418 | 42 | 2444 | 68 | 2470 |
| 17 | 2419 | 43 | 2445 | 69 | 2471 |
| 18 | 2420 | 44 | 2446 | 70 | 2472 |
| 19 | 2421 | 45 | 2447 | 71 | 2473 |
| 20 | 2422 | 46 | 2448 | 72 | 2474 |
| 21 | 2423 | 47 | 2449 | 73 | 2475 |
| 22 | 2424 | 48 | 2450 | 74 | 2476 |
| 23 | 2425 | 49 | 2451 | 75 | 2477 |
| 24 | 2426 | 50 | 2452 | 76 | 2478 |
| 25 | 2427 | 51 | 2453 | | |
| 26 | 2428 | 52 | 2454 | | |

3. Table of Filed Antenna:

| Antenna | Brand | Model Name | Type | Connector Type | Gain (dBi) |
|---|---|---|---|---|---|
| 1 | N/A | N/A | Chip Ant. | N/A | -4.92 |

### 3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based 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.

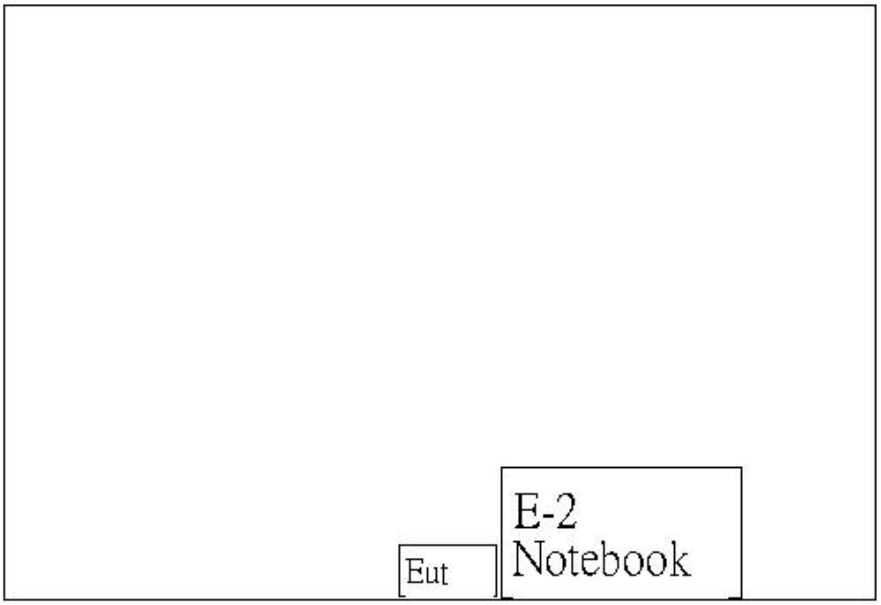
| Pretest Test Mode | Description |
|---|---|
| Mode 1 | 2403 MHz |
| Mode 2 | 2439 MHz |
| Mode 3 | 2478 MHz |

| **Conducted emission test** | |
|---|---|
| Final Test Mode | Description |
| Mode 2 | 2439 MHz |

| **Radiated Test (Below 1 GHz)** | |
|---|---|
| Final Test Mode | Description |
| Mode 2 | 2439 MHz |

| **Radiated Test (Above 1 GHz)** | |
|---|---|
| Final Test Mode | Description |
| Mode 1 | 2403 MHz |
| Mode 2 | 2439 MHz |
| Mode 3 | 2478 MHz |

### 3.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



### 3.4 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 | 2.4G Headset Dongle | A4TECH | RH-10 | H8GRH10 | N/A | EUT |

| Item | Shielded Type | Ferrite Core | Length | Note |
|---|---|---|---|---|
| N/A | - | - | - | - |

Note:

(1) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

# 4. EMC EMISSION TEST

## 4.1 CONDUCTED EMISSION TEST

### 4.1.1 LIMITS (FREQUENCY RANGE 150 KHZ-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.

(3) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor(if use)
Margin Level = Measurement Value – Limit Value

### 4.1.2 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|---|---|---|---|---|---|
| 1 | TWO-LINE V-NETWORK | R&S | ENV216 | 101050 | Apr. 06, 2013 |
| 2 | LISN | EMCO | 3816/2 | 00066528 | Mar. 26, 2013 |
| 3 | Test Cable | TIMES | CFD300-NL | 130 | Jun. 14, 2013 |
| 4 | EMI Test Receiver | Agilent | N9038A | MY51210215 | Jul. 26, 2013 |
| 5 | 50Ω BNC TYPE Terminator | N/A | N/A | 05 | Jun. 02, 2013 |

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

### 4.1.3 TEST PROCEDURE

a. The EUT was placed 0.8 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.

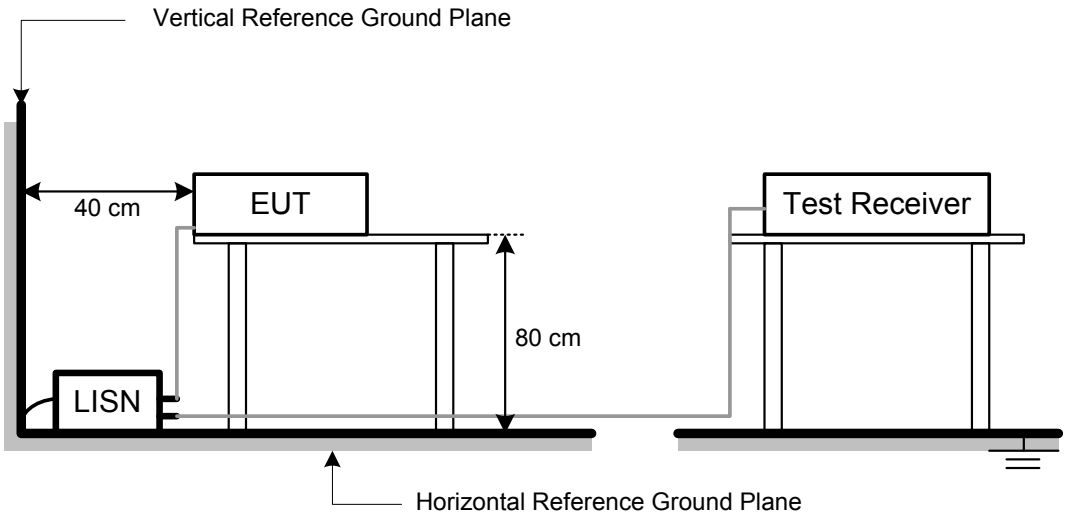
**NOTE:**

a. Reading in which marked as Peak, QP or AVG means measurements by using are Quasi-Peak or Average Mode with Detector BW=9 kHz (6 dB Bandwidth).
b. All readings are Peak Mode value unless otherwise stated QP or AVG in column of Note. If the Peak or 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 Peak or QP Mode was measured, but AVG Mode didn‘t perform.

### 4.1.4 DEVIATION FROM TEST STANDARD

No deviation

### 4.1.5 TEST SETUP



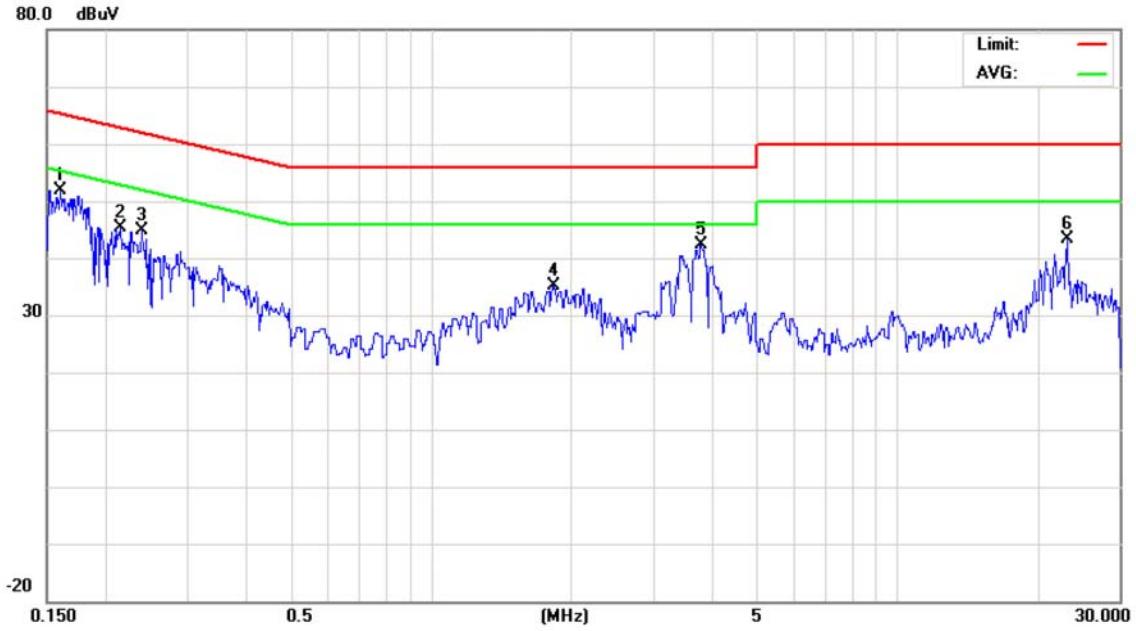
### 4.1.6 EUT OPERATING CONDITIONS

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

| E.U.T | 2.4G Headset Dongle | Model Name | RH-10 |
|---|---|---|---|
| Temperature | 24°C | Relative Humidity | 48% |
| Test Voltage | AC 120V/60Hz | | |
| Test Mode | 2439 MHz | | |

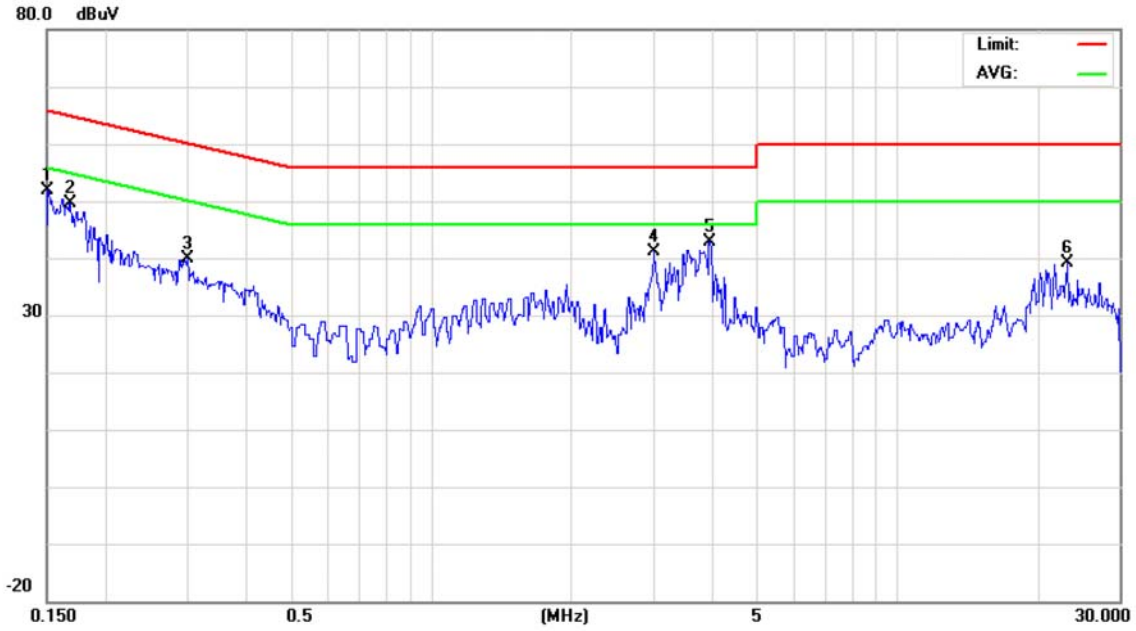
**Phase: Line**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | | 0.1604 | 42.10 | 9.78 | 51.88 | 65.44 | -13.56 | peak | |
| 2 | | 0.2155 | 35.64 | 9.75 | 45.39 | 62.99 | -17.60 | peak | |
| 3 | | 0.2391 | 35.03 | 9.74 | 44.77 | 62.13 | -17.36 | peak | |
| 4 | | 1.8274 | 25.40 | 9.68 | 35.08 | 56.00 | -20.92 | peak | |
| 5 | * | 3.7850 | 32.69 | 9.75 | 42.44 | 56.00 | -13.56 | peak | |
| 6 | | 23.1250 | 33.57 | 9.89 | 43.46 | 60.00 | -16.54 | peak | |

| E.U.T | 2.4G Headset Dongle | Model Name | RH-10 |
|---|---|---|---|
| Temperature | 24°C | Relative Humidity | 48% |
| Test Voltage | AC 120V/60Hz | | |
| Test Mode | 2439 MHz | | |

**Phase: Neutral**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | | 0.1508 | 42.18 | 9.78 | 51.96 | 65.96 | -14.00 | peak | |
| 2 | | 0.1683 | 39.83 | 9.77 | 49.60 | 65.04 | -15.44 | peak | |
| 3 | | 0.2996 | 30.16 | 9.72 | 39.88 | 60.25 | -20.37 | peak | |
| 4 | | 3.0087 | 31.38 | 9.71 | 41.09 | 56.00 | -14.91 | peak | |
| 5 | * | 3.9537 | 33.05 | 9.74 | 42.79 | 56.00 | -13.21 | peak | |
| 6 | | 23.1250 | 29.22 | 9.93 | 39.15 | 60.00 | -20.85 | peak | |

## 4.2 RADIATED EMISSION MEASUREMENT

### 4.2.1 LIMITS (Frequency Range 9kHz-1000MHz)

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on15.205(a), then the 15.209(a) limit in the table below has to be followed.

| Frequencies (MHz) | Field Strength (micorvolts/meter) | Measurement Distance (meters) |
|---|---|---|
| 0.009~0.490 | 2400/F(KHz) | 300 |
| 0.490~1.705 | 24000/F(KHz) | 30 |
| 1.705~30.0 | 30 | 30 |
| 30~88 | 100 | 3 |
| 88~216 | 150 | 3 |
| 216~960 | 200 | 3 |
| Above 960 | 500 | 3 |

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

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

Notes:

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

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

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

(4) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain(if use)
Margin Level = Measurement Value – Limit Value

### 4.2.2 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|---|---|---|---|---|---|
| 1 | Spectrum Analyzer | R&S | FSP-40 | 100129 | Aug. 29, 2013 |
| 2 | Horn Antenna | Schwarzbeck | BBHA 9120 | D-325 | Apr. 16, 2013 |
| 3 | Microwave Pre_amplifier | Agilent | 8449B | 3008A01714 | Apr. 17, 2013 |
| 4 | Microflex Cable | N/A | N/A | 1m | Apr. 14, 2013 |
| 5 | Microflex Cable | AISI | S104-SMAP-1 | 10m | Apr. 14, 2013 |
| 6 | Microflex Cable | N/A | N/A | 3m | Apr. 14, 2013 |
| 7 | Test Cable | N/A | LMR-400 | 966_12m | May. 15, 2013 |
| 8 | Test Cable | N/A | LMR-400 | 966_3m | May. 15, 2013 |
| 9 | Pre-Amplifier | EMC | EMC-330 | 980088 | Jul. 7, 2013 |
| 10 | Log-Bicon Antenna | Schwarzbeck | VULB9168-352 | 9168-352 | Jun. 12, 2013 |

Remark: “N/A” denotes No Model Name, No Serial No. or 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 3m or 10 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 radiated 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.
g. A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
h. EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand
i. During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

**NOTE: (30-1000MHz)**

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

**NOTE: (Above 1000MHz)**

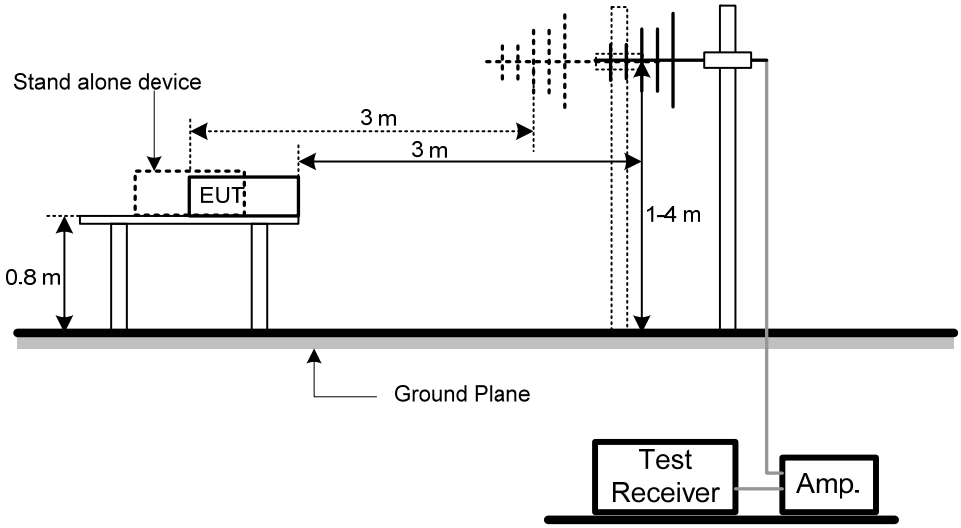
a. Reading in which marked as Peak means measurements by using are Peak Mode with instrument setting in RBW= 1 MHz, VBW= 1 MHz, Swp. Time = Auto.
Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW= 1 MHz, VBW= 10 Hz, Swp. Time = Auto.
b. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform.

### 4.2.4 DEVIATION FROM TEST STANDARD

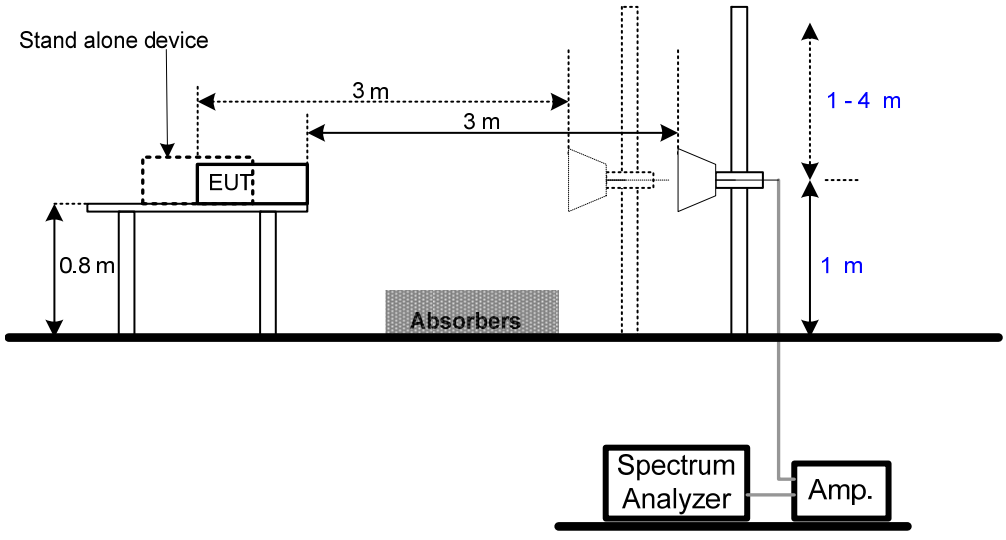
No deviation

### 4.2.5 TEST SETUP

**Below 1 GHz**




**Above 1 GHz**



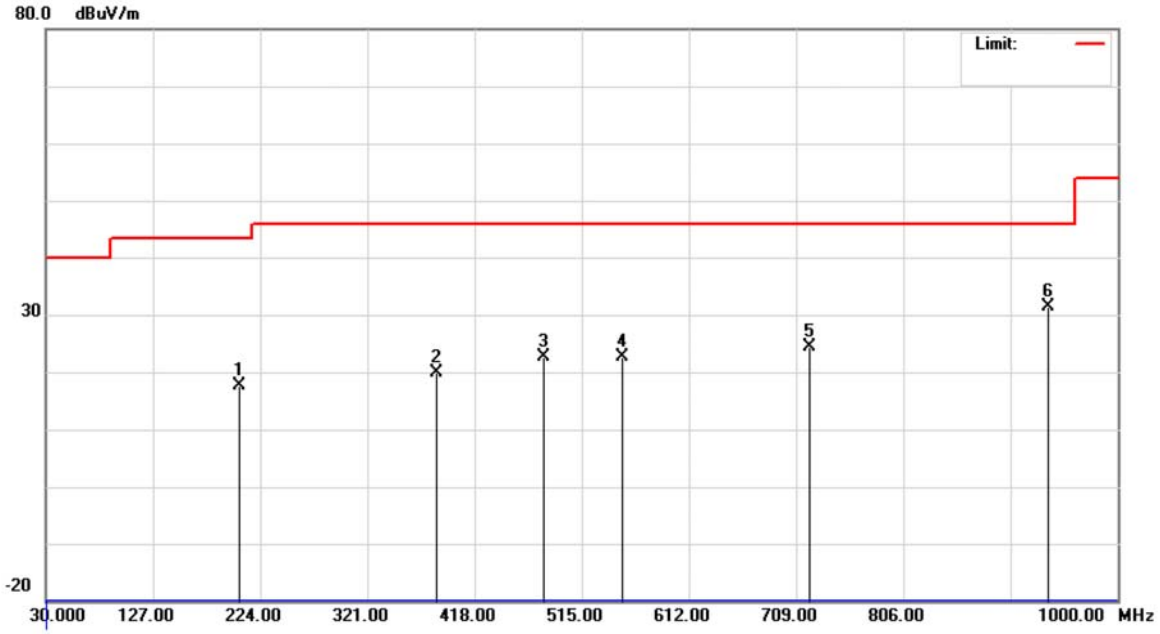

### 4.2.6 EUT OPERATING CONDITIONS

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 operation condition was tested and used to collect the included data.

### 4.2.7 TEST RESULTS-BELLOW 1 GHZ

| | | | |
|---|---|---|---|
| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
| Temperature： | 26°C | Relative Humidity： | 60% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | 2439 MHz | | |

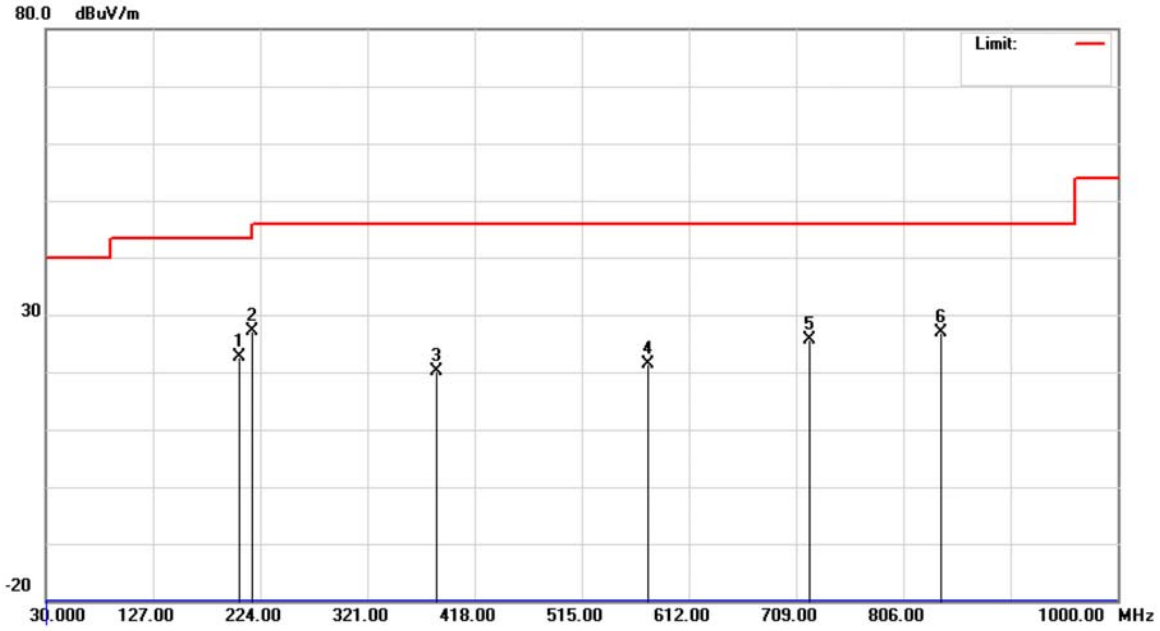
**Polarization: Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 204.6000 | 39.18 | -21.58 | 17.60 | 43.50 | -25.90 | peak | |
| 2 | | 384.0498 | 35.91 | -15.99 | 19.92 | 46.00 | -26.08 | peak | |
| 3 | | 481.0498 | 36.35 | -13.63 | 22.72 | 46.00 | -23.28 | peak | |
| 4 | | 551.3750 | 35.27 | -12.73 | 22.54 | 46.00 | -23.46 | peak | |
| 5 | | 721.1250 | 33.53 | -9.21 | 24.32 | 46.00 | -21.68 | peak | |
| 6 | * | 936.9500 | 37.08 | -5.75 | 31.33 | 46.00 | -14.67 | peak | |

| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
|---|---|---|---|
| Temperature： | 26°C | Relative Humidity： | 60% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | 2439 MHz | | |

**Polarization: Horizontal**

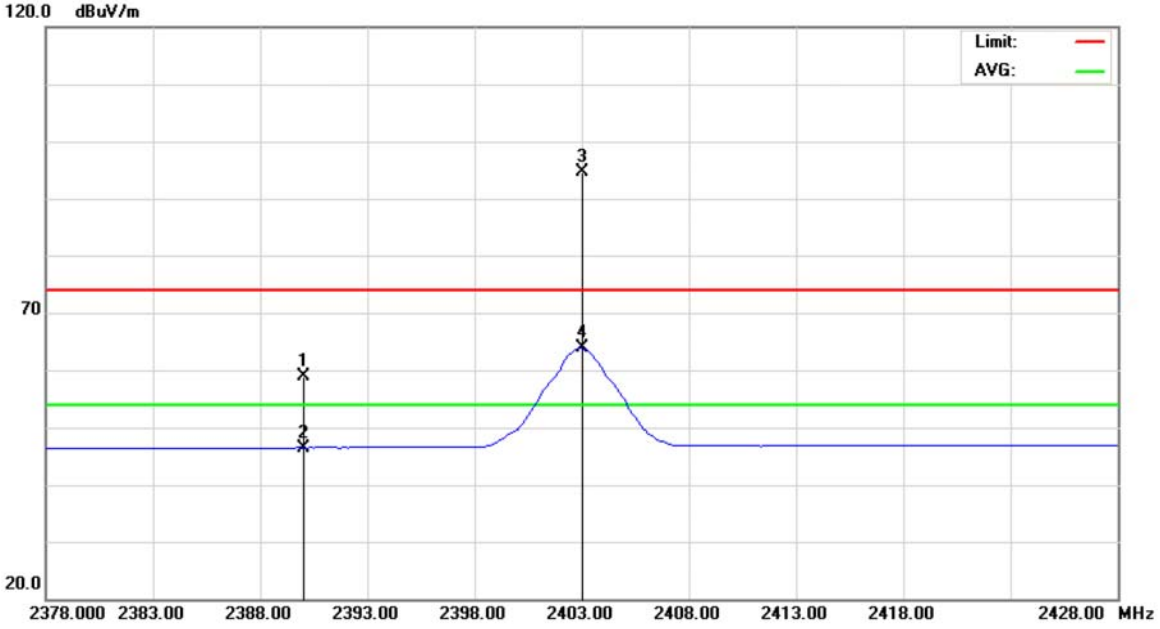



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 204.6000 | 44.21 | -21.58 | 22.63 | 43.50 | -20.87 | peak | |
| 2 | * | 216.7250 | 48.59 | -21.36 | 27.23 | 46.00 | -18.77 | peak | |
| 3 | | 384.0498 | 36.17 | -15.99 | 20.18 | 46.00 | -25.82 | peak | |
| 4 | | 575.6250 | 33.15 | -11.80 | 21.35 | 46.00 | -24.65 | peak | |
| 5 | | 721.1250 | 34.74 | -9.21 | 25.53 | 46.00 | -20.47 | peak | |
| 6 | | 839.9500 | 34.33 | -7.39 | 26.94 | 46.00 | -19.06 | peak | |

### 4.2.8 TEST RESULTS-ABOVE 1 GHZ

| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
|---|---|---|---|
| Temperature： | 26°C | Relative Humidity： | 60% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | 2403 MHz | | |

**Polarization: Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 2390.000 | 25.78 | 32.99 | 58.77 | 74.00 | -15.23 | peak | |
| 2 | | 2390.000 | 13.46 | 32.99 | 46.45 | 54.00 | -7.55 | AVG | |
| 3 | * | 2403.000 | 61.66 | 33.06 | 94.72 | 74.00 | 20.72 | peak | |
| 4 | X | 2403.000 | 30.70 | 33.06 | 63.76 | 54.00 | 9.76 | AVG | |

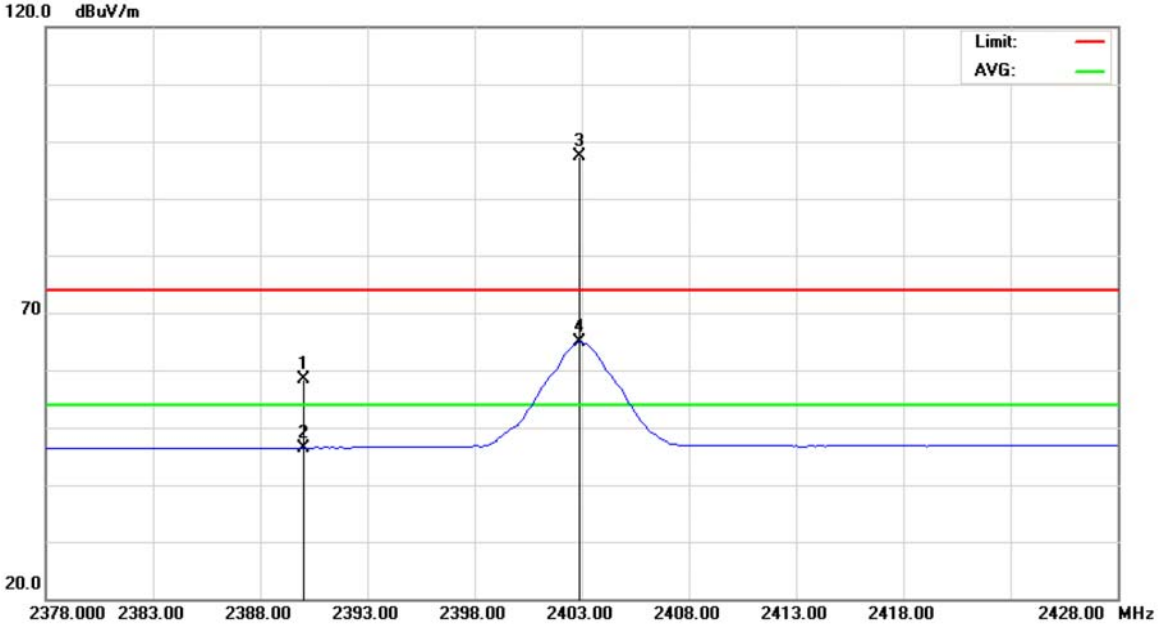
| | | | |
|---|---|---|---|
| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
| Temperature： | 26°C | Relative Humidity： | 60% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | 2403 MHz | | |

**Polarization: Vertical**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4806.250 | 38.98 | 7.42 | 46.40 | 74.00 | -27.60 | peak | |
| 2 | * | 4806.250 | 32.03 | 7.42 | 39.45 | 54.00 | -14.55 | AVG | |

| | | | |
|---|---|---|---|
| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
| Temperature： | 26°C | Relative Humidity： | 60% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | 2403 MHz | | |

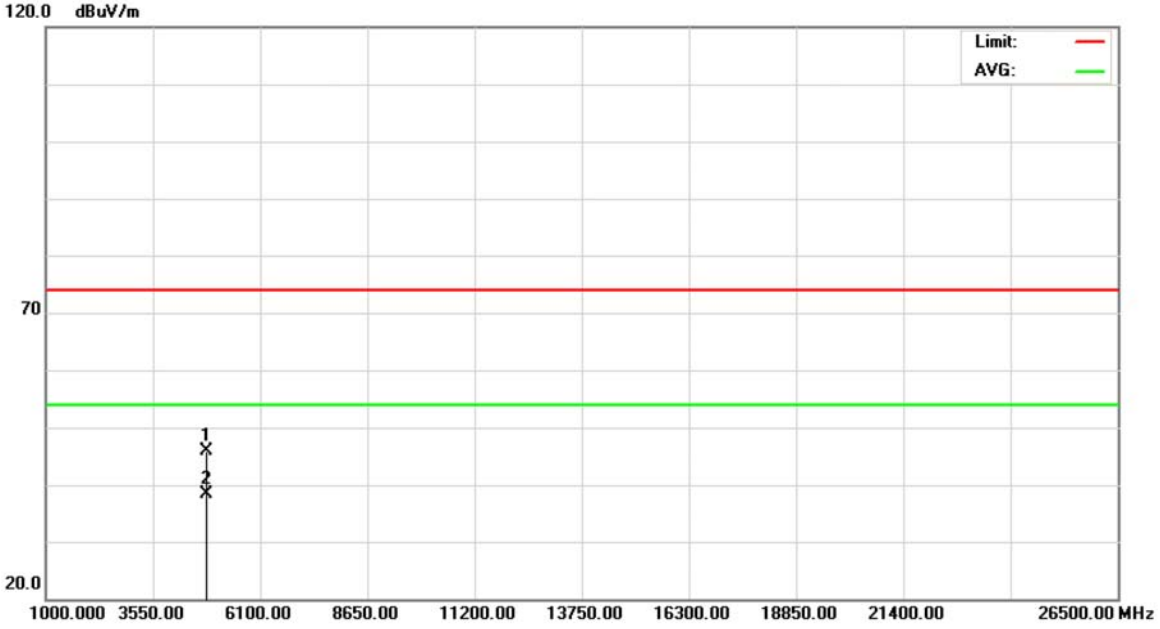
**Polarization: Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 2390.000 | 25.28 | 32.99 | 58.27 | 74.00 | -15.73 | peak | |
| 2 | | 2390.000 | 13.47 | 32.99 | 46.46 | 54.00 | -7.54 | AVG | |
| 3 | * | 2402.875 | 64.28 | 33.06 | 97.34 | 74.00 | 23.34 | peak | |
| 4 | X | 2402.875 | 31.71 | 33.06 | 64.77 | 54.00 | 10.77 | AVG | |

| | | | |
|---|---|---|---|
| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
| Temperature： | 26°C | Relative Humidity： | 60% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | 2403 MHz | | |

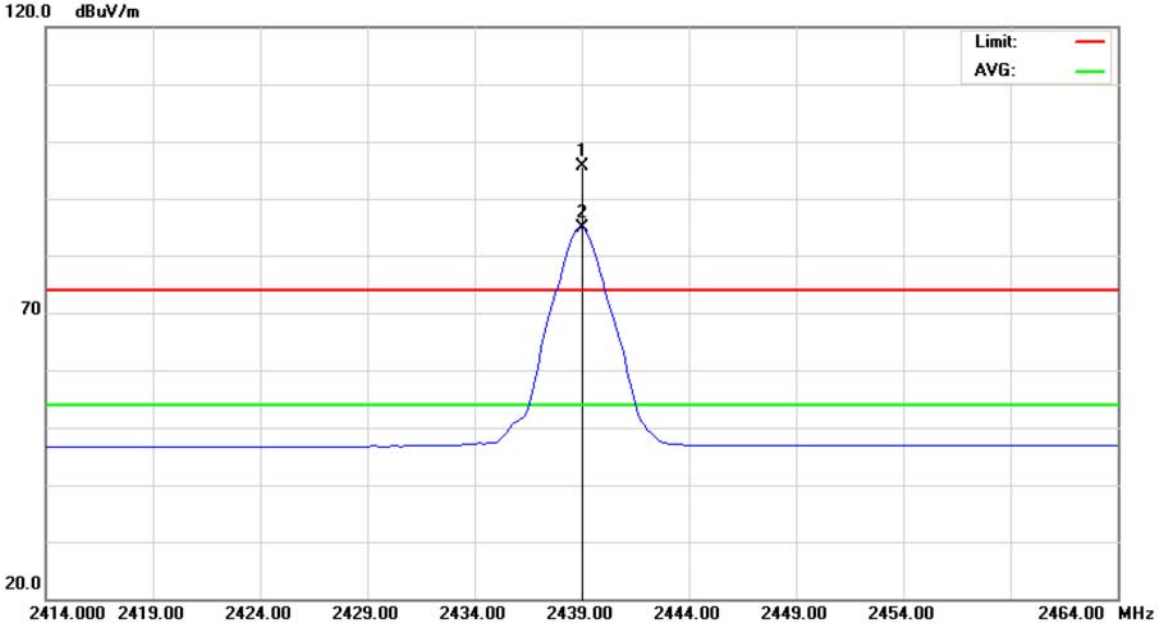
**Polarization: Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4806.075 | 38.50 | 7.42 | 45.92 | 74.00 | -28.08 | peak | |
| 2 | * | 4806.075 | 31.03 | 7.42 | 38.45 | 54.00 | -15.55 | AVG | |

| | | | |
|---|---|---|---|
| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
| Temperature： | 26°C | Relative Humidity： | 60% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | 2439 MHz | | |

**Polarization: Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | X | 2439.000 | 62.49 | 33.26 | 95.75 | 74.00 | 21.75 | peak | |
| 2 | * | 2439.000 | 51.71 | 33.26 | 84.97 | 54.00 | 30.97 | AVG | |

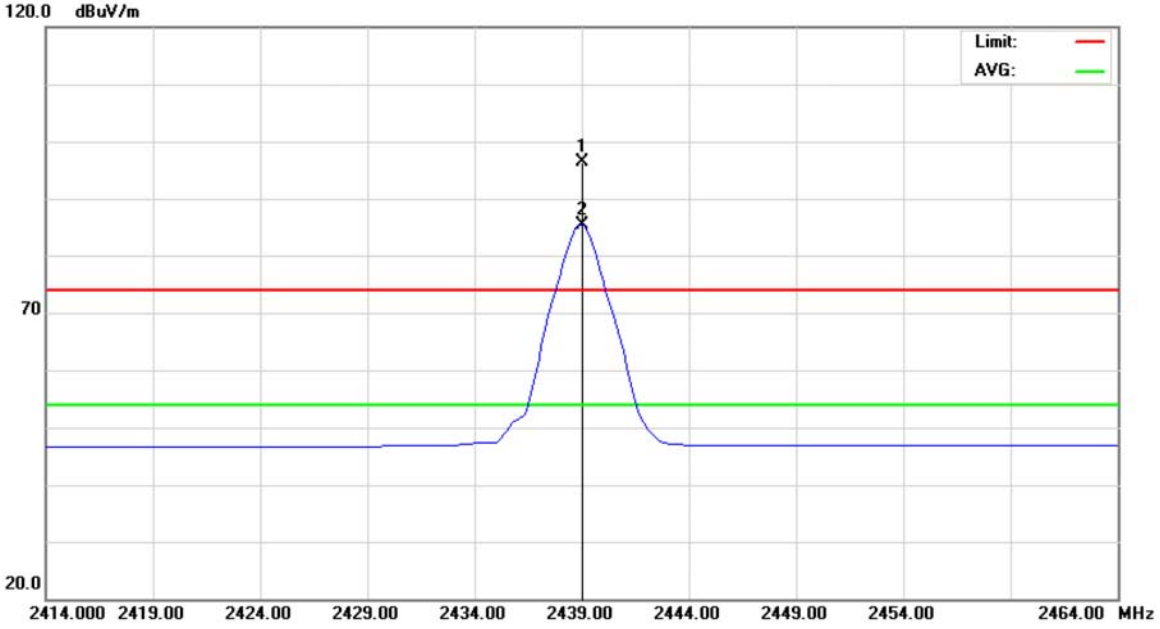
| | | | |
|---|---|---|---|
| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
| Temperature： | 26°C | Relative Humidity： | 60% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | 2439 MHz | | |

**Polarization: Vertical**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4877.500 | 37.35 | 6.84 | 44.19 | 74.00 | -29.81 | peak | |
| 2 | * | 4877.500 | 31.69 | 6.84 | 38.53 | 54.00 | -15.47 | AVG | |

| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
|---|---|---|---|
| Temperature： | 26°C | Relative Humidity： | 60% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | 2439 MHz | | |

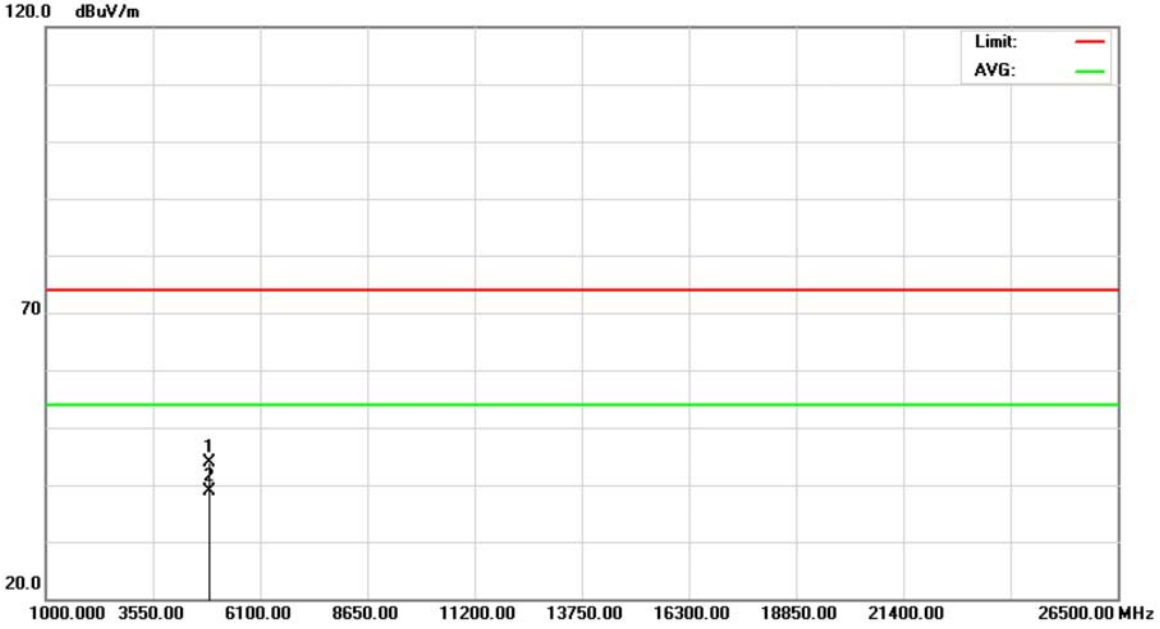
**Polarization: Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | X | 2439.000 | 63.06 | 33.26 | 96.32 | 74.00 | 22.32 | peak | |
| 2 | * | 2439.000 | 52.23 | 33.26 | 85.49 | 54.00 | 31.49 | AVG | |

| | | | |
|---|---|---|---|
| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
| Temperature： | 26°C | Relative Humidity： | 60% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | 2439 MHz | | |

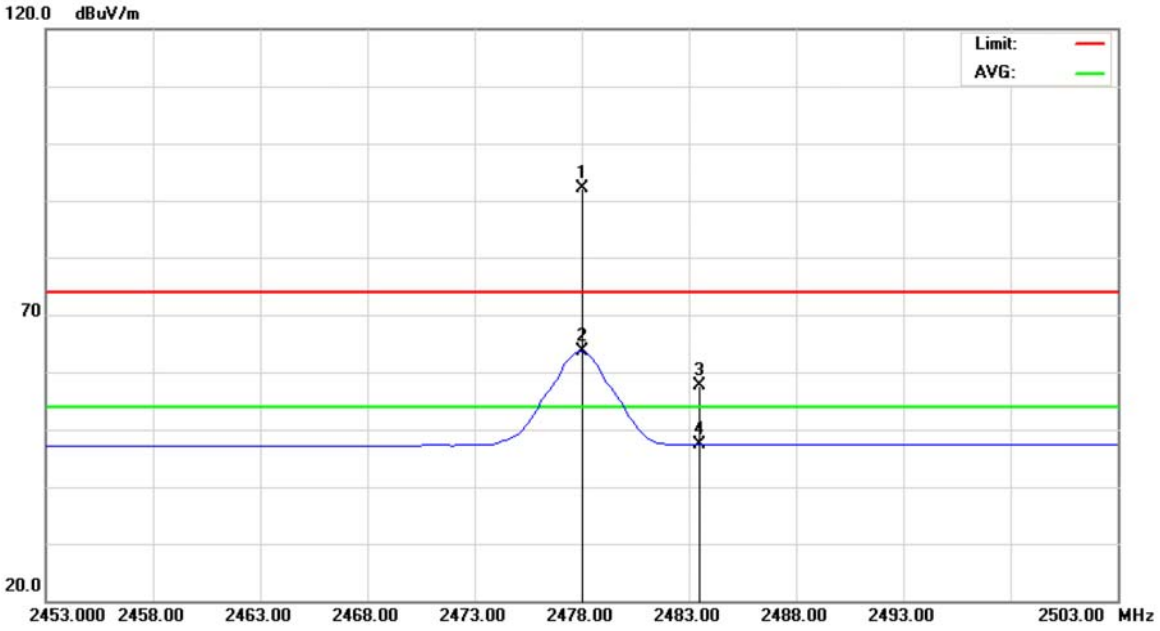
**Polarization: Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4878.000 | 37.03 | 6.84 | 43.87 | 74.00 | -30.13 | peak | |
| 2 | * | 4878.000 | 32.13 | 6.84 | 38.97 | 54.00 | -15.03 | AVG | |

| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
|---|---|---|---|
| Temperature： | 26°C | Relative Humidity： | 60% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | 2478 MHz | | |

**Polarization: Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 2478.000 | 58.66 | 33.47 | 92.13 | 74.00 | 18.13 | peak | |
| 2 | X | 2478.000 | 30.06 | 33.47 | 63.53 | 54.00 | 9.53 | AVG | |
| 3 | | 2483.500 | 24.13 | 33.50 | 57.63 | 74.00 | -16.37 | peak | |
| 4 | | 2483.500 | 13.81 | 33.50 | 47.31 | 54.00 | -6.69 | AVG | |

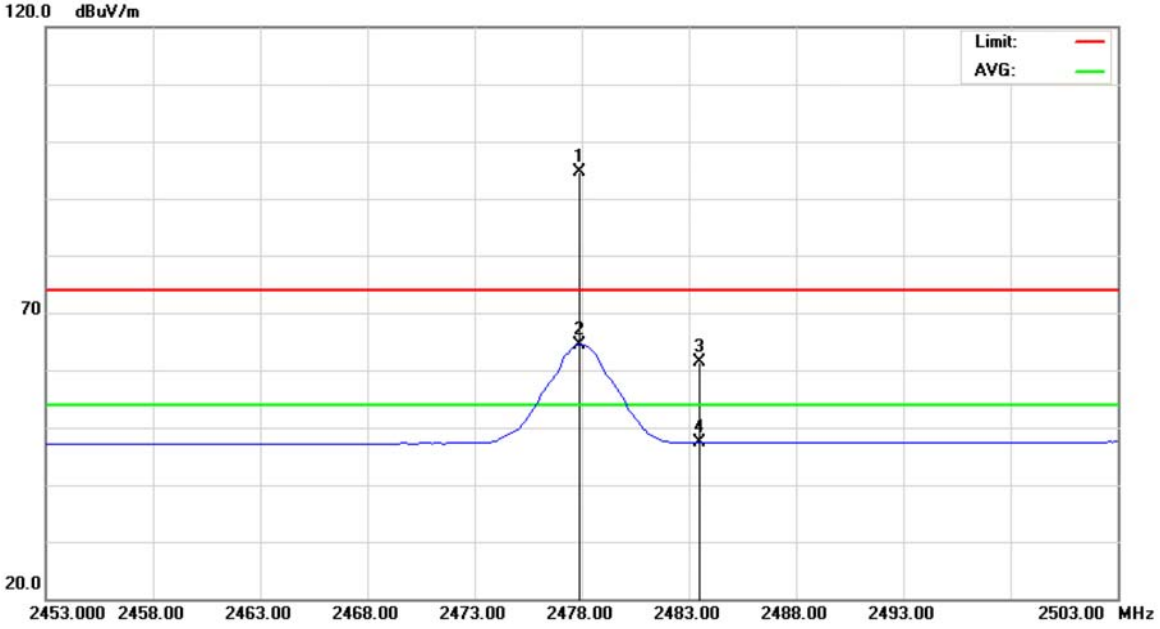
| | | | |
|---|---|---|---|
| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
| Temperature： | 26°C | Relative Humidity： | 60% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | 2478 MHz | | |

**Polarization: Vertical**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4955.950 | 38.13 | 7.96 | 46.09 | 74.00 | -27.91 | peak | |
| 2 | * | 4955.950 | 33.33 | 7.96 | 41.29 | 54.00 | -12.71 | AVG | |

| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
|---|---|---|---|
| Temperature： | 26°C | Relative Humidity： | 60% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | 2478 MHz | | |

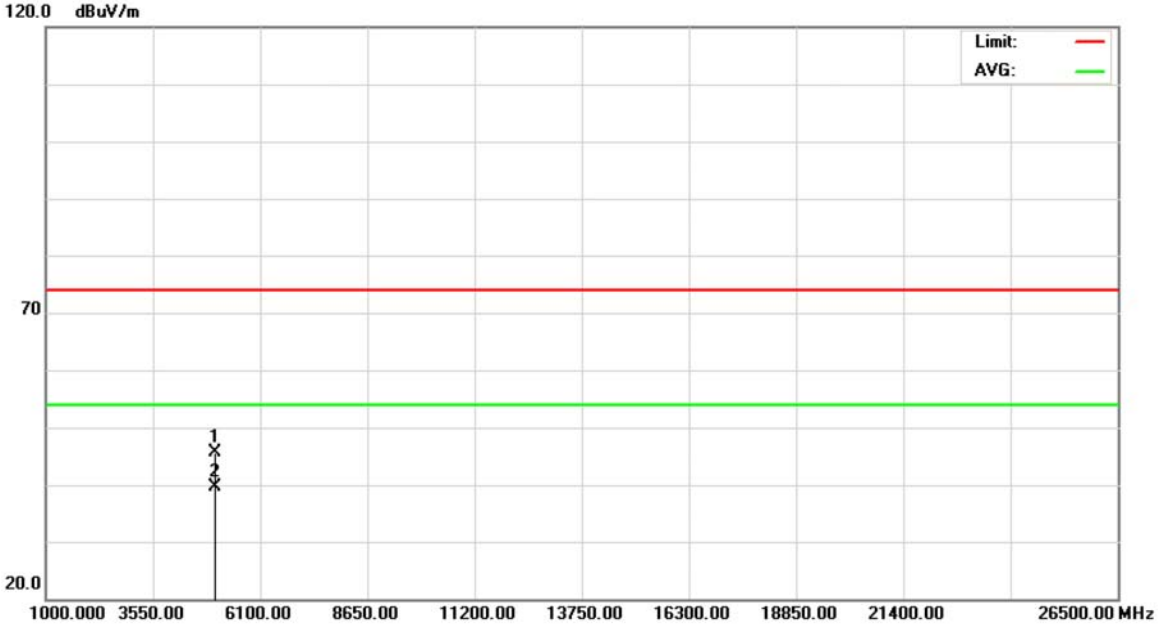
**Polarization: Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 2477.875 | 61.17 | 33.47 | 94.64 | 74.00 | 20.64 | peak | |
| 2 | X | 2477.875 | 31.02 | 33.47 | 64.49 | 54.00 | 10.49 | AVG | |
| 3 | | 2483.500 | 27.83 | 33.50 | 61.33 | 74.00 | -12.67 | peak | |
| 4 | | 2483.500 | 13.81 | 33.50 | 47.31 | 54.00 | -6.69 | AVG | |

| | | | |
|---|---|---|---|
| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
| Temperature： | 26°C | Relative Humidity： | 60% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | 2478 MHz | | |

**Polarization: Horizontal**

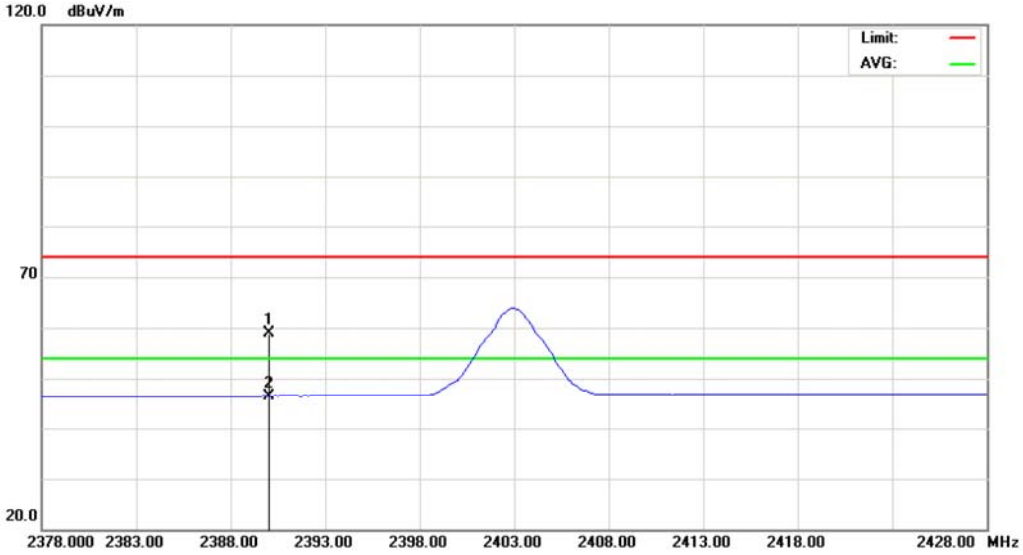



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4955.950 | 37.59 | 7.96 | 45.55 | 74.00 | -28.45 | peak | |
| 2 | * | 4955.950 | 31.75 | 7.96 | 39.71 | 54.00 | -14.29 | AVG | |

### 4.2.9 TEST RESULTS-RESTRICTED BANDS REQUIREMENTS

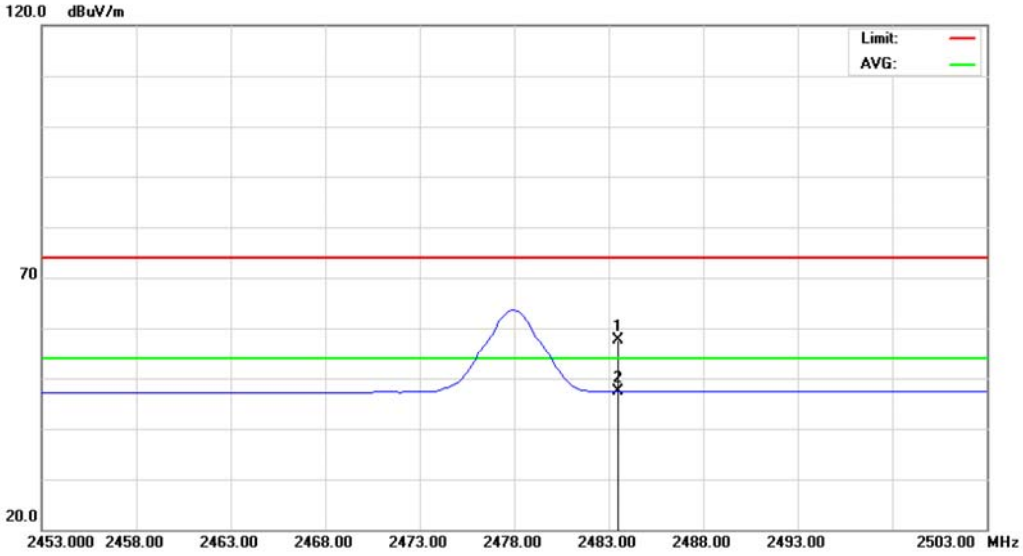
| | | | |
|---|---|---|---|
| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
| Temperature： | 26°C | Relative Humidity： | 60% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | TX CH 2403 MHz/2478 MHz(Vertical) | | |
| Note： | The emission of the carrier radiated field strength is measured for (Peak and AV) as following:<br>1. The transmitter was then configured with the worst case antenna and setup to transmit at the lowest channel (2403 MHz). Then the field strength was measured at 2310-2390 MHz.<br>2. The transmitter was configured with the worst case antenna and setup to transmit at the highest channel (2478 MHz). Then the field strength was measured at 2483.5-2500 MHz. | | |

**2403 MHz/ Orthogonal Axes: X Polarization: Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 2390.000 | 25.78 | 32.99 | 58.77 | 74.00 | -15.23 | peak | |
| 2 | * | 2390.000 | 13.46 | 32.99 | 46.45 | 54.00 | -7.55 | AVG | |

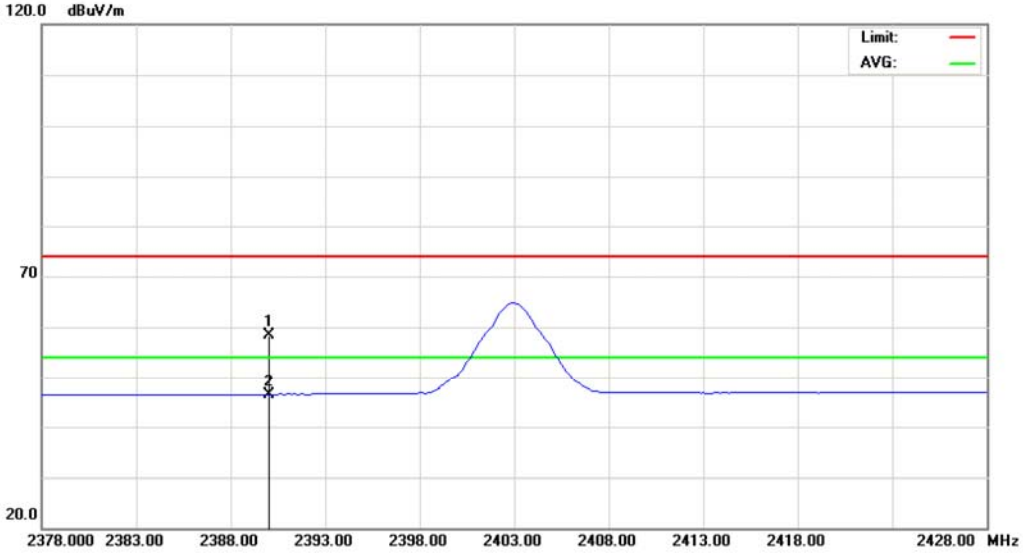
**2478 MHz/ Orthogonal Axes: X Polarization: Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 2483.500 | 24.13 | 33.50 | 57.63 | 74.00 | -16.37 | peak | |
| 2 | * | 2483.500 | 13.81 | 33.50 | 47.31 | 54.00 | -6.69 | AVG | |

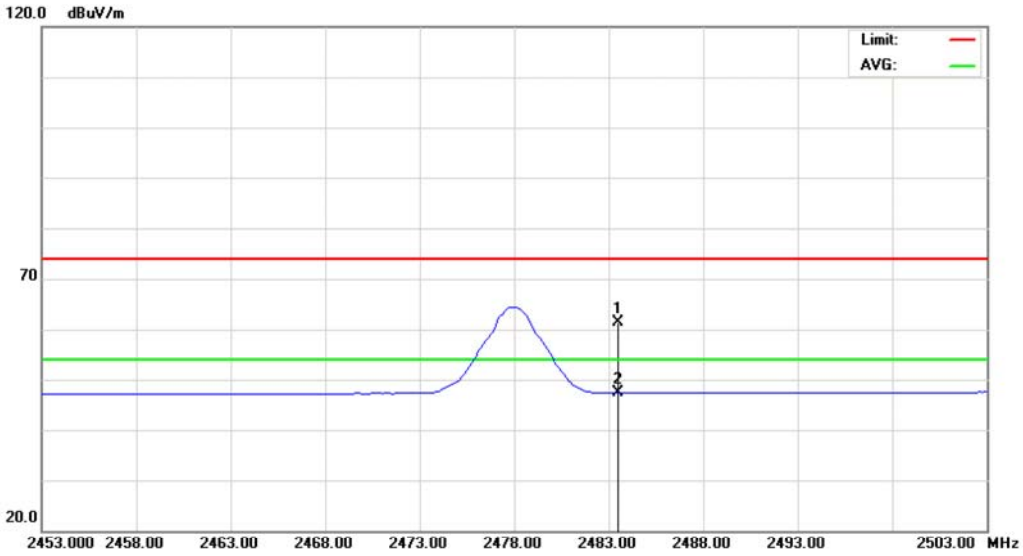
| | | | |
|---|---|---|---|
| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
| Temperature： | 26°C | Relative Humidity： | 60% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | TX CH 2403 MHz/2478 MHz (Horizontal) | | |
| Note： | The emission of the carrier radiated field strength is measured for (Peak and AV) as following:<br>1. The transmitter was then configured with the worst case antenna and setup to transmit at the lowest channel (2403 MHz). Then the field strength was measured at 2310-2390 MHz.<br>2. The transmitter was configured with the worst case antenna and setup to transmit at the highest channel (2478 MHz). Then the field strength was measured at 2483.5-2500 MHz. | | |

**2403 MHz/ Orthogonal Axes: X Polarization: Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 2390.000 | 25.28 | 32.99 | 58.27 | 74.00 | -15.73 | peak | |
| 2 | * | 2390.000 | 13.47 | 32.99 | 46.46 | 54.00 | -7.54 | AVG | |

**2478 MHz/ Orthogonal Axes: X Polarization: Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 2483.500 | 27.83 | 33.50 | 61.33 | 74.00 | -12.67 | peak | |
| 2 | * | 2483.500 | 13.81 | 33.50 | 47.31 | 54.00 | -6.69 | AVG | |

# 5. BANDWIDTH TEST

## 5.1 APPLIED PROCEDURES / LIMIT

| FCC Part15, Subpart C: 2010 | | | |
|---|---|---|---|
| Test Item | Limit | Frequency Range (MHz) | Result |
| Bandwidth | >= 500KHz (6dB bandwidth) | 2400-2483.5 | PASS |

## 5.2 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|---|---|---|---|---|---|
| 1 | Spectrum Analyzer | R&S | FSP-40 | 100129 | Aug. 29, 2013 |

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

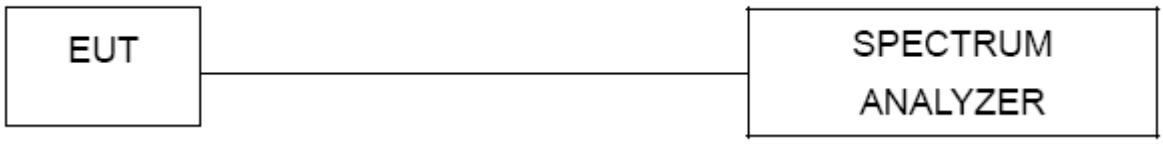
## 5.3 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
b. Spectrum Setting : RBW= 100KHz, VBW=100KHz, Sweep time = Auto.

## 5.4 DEVIATION FROM STANDARD

No deviation.

## 5.5 TEST SETUP




## 5.6 EUT OPERATION CONDITIONS

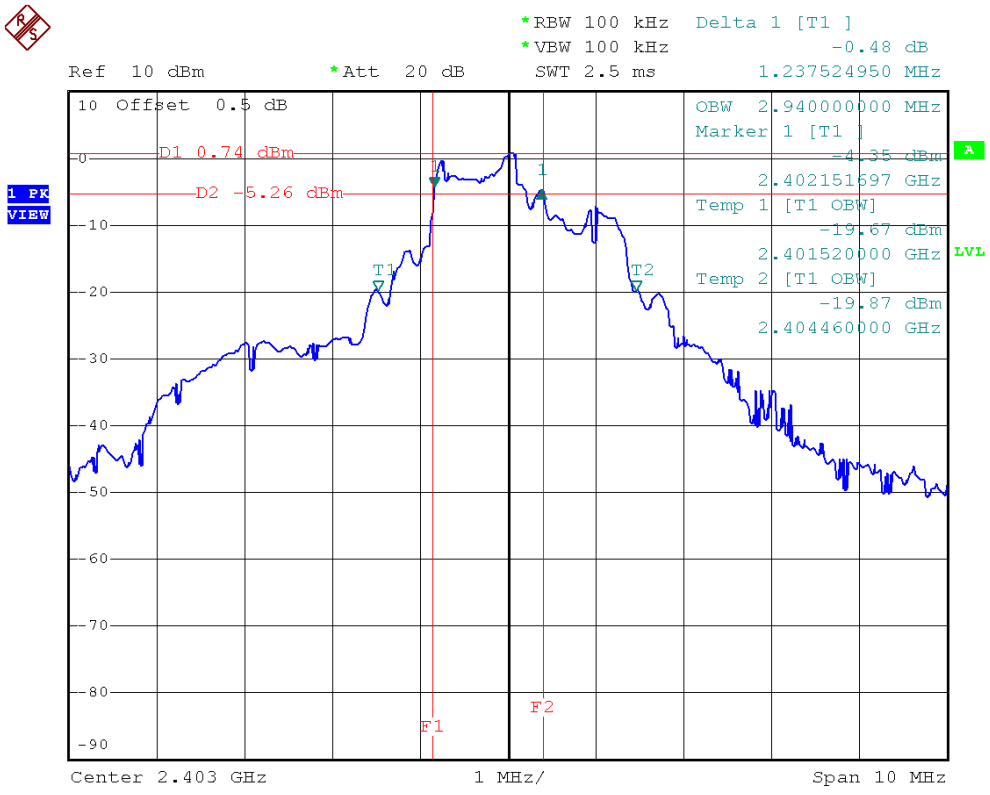
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

## 5.7 TEST RESULTS

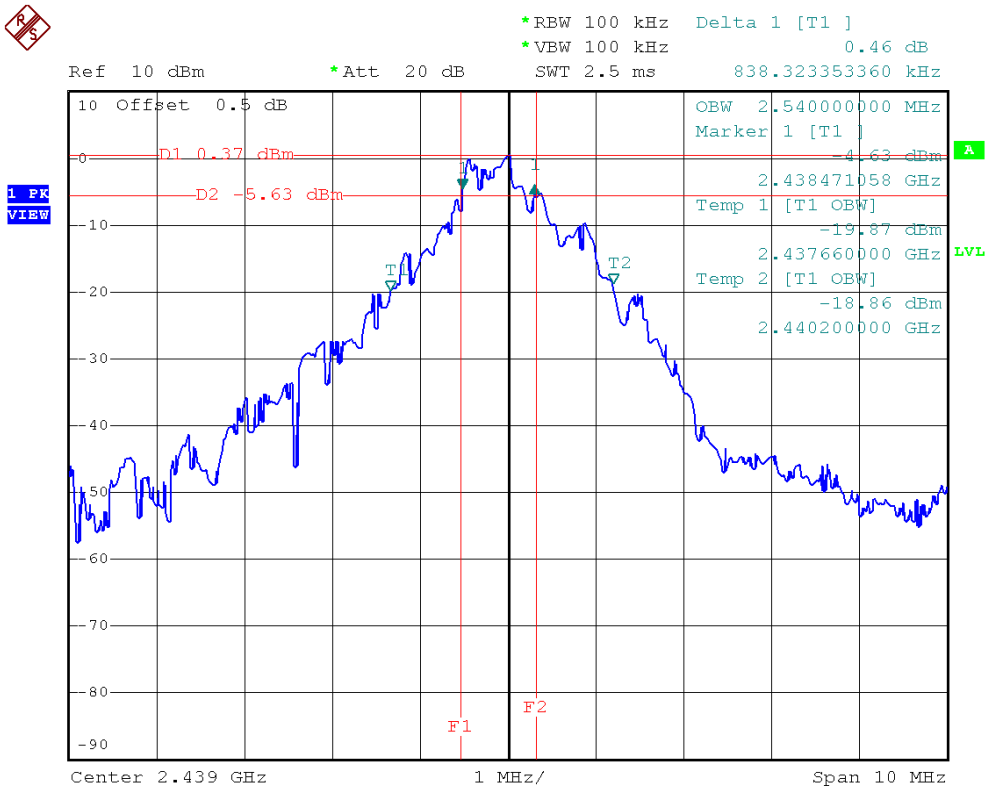
| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
|---|---|---|---|
| Temperature： | 26°C | Relative Humidity： | 60% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | 2403 MHz/2439 MHz/2478 MHz | | |

| Frequency | Bandwidth (MHz) | 99% Occupied BW (MHz) | LIMIT (MHz) |
|---|---|---|---|
| 2403 MHz | 1.24 | 2.94 | >=500KHz |
| 2439 MHz | 0.84 | 2.54 | >=500KHz |
| 2478 MHz | 0.96 | 2.52 | >=500KHz |

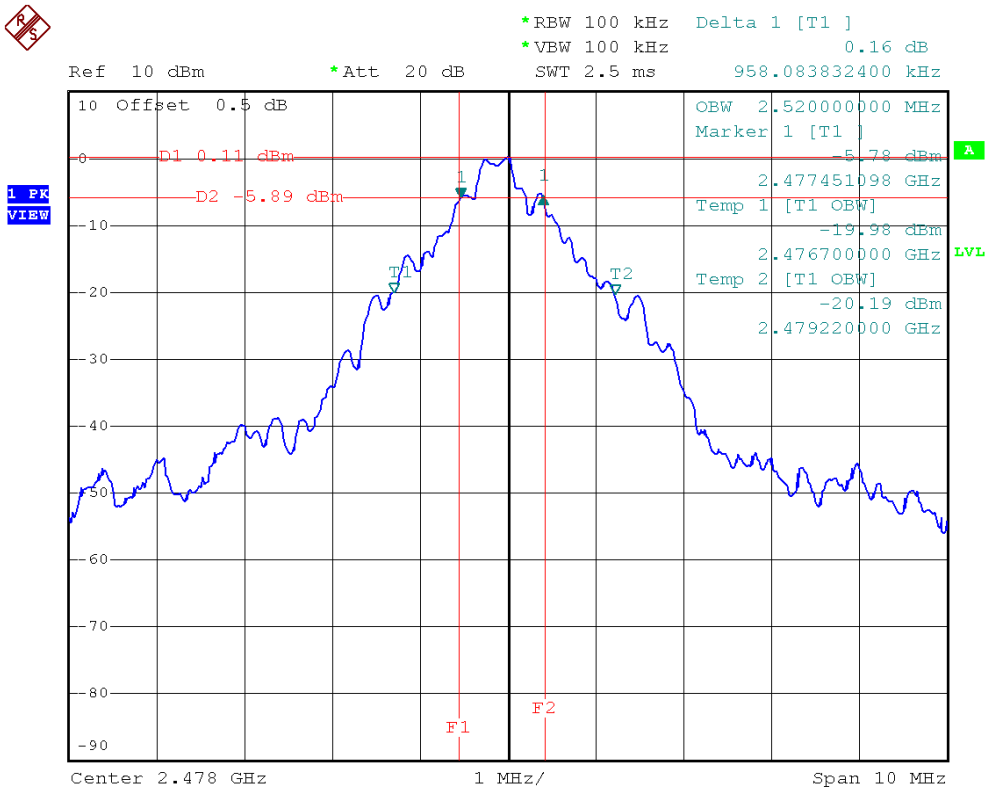
**2403 MHz**



## 2439 MHz




## 2478 MHz



# 6. PEAK OUTPUT POWER TEST

## 6.1 APPLIED PROCEDURES / LIMIT

| FCC Part15, Subpart C: 2010 | | | |
|---|---|---|---|
| Test Item | Limit | Frequency Range (MHz) | Result |
| Peak Output Power | 1 watt or 30dBm | 2400-2483.5 | PASS |

## 6.2 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|---|---|---|---|---|---|
| 1 | Power Meter | Anritsu | ML2495A | 1128008 | Feb,20,2013 |
| 2 | Power Meter Sensor | Anritsu | MA2411B | 1126001 | Feb,20,2013 |

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

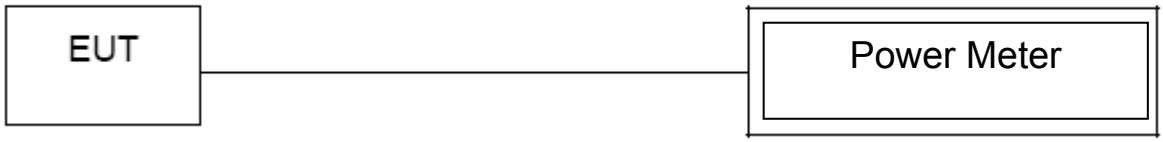
## 6.3 TEST PROCEDURE

The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,

## 6.4 DEVIATION FROM STANDARD

No deviation.

## 6.5 TEST SETUP




## 6.6 EUT OPERATION 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.

## 6.7 TEST RESULTS

| | | | |
|---|---|---|---|
| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
| Temperature： | 26°C | Relative Humidity : | 60% |
| Test Voltage : | DC 5V | | |
| Test Mode ： | 2403 MHz/2439 MHz/2478 MHz | | |

| Frequency | Peak Output Power (dBm) | LIMIT (dBm) | LIMIT (W) |
|---|---|---|---|
| 2403 MHz | 1.02 | 30 | 1 |
| 2439 MHz | 1.18 | 30 | 1 |
| 2478 MHz | 0.52 | 30 | 1 |

# 7. ANTENNA CONDUCTED SPURIOUS EMISSION

## 7.1 APPLIED PROCEDURES / LIMIT

| FCC Part15, Subpart C: 2010 | | | |
|---|---|---|---|
| Test Item | Limit | Frequency Range (MHz) | Result |
| Antenna conducted Spurious Emission | 20dB less than the peak value of fundamental frequency | 30-25000 | PASS |

## 7.2 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|---|---|---|---|---|---|
| 1 | Spectrum Analyzer | R&S | FSP-40 | 100129 | Aug. 29, 2013 |

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

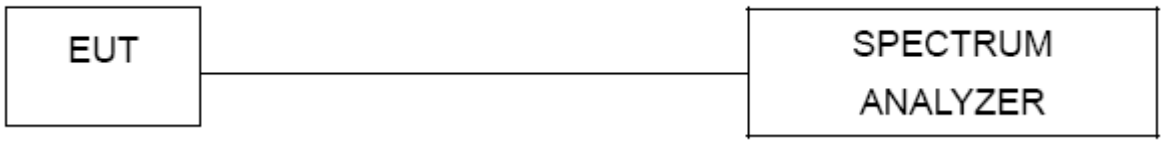
## 7.3 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
b. Spectrum Setting: RBW= 100KHz, VBW=100KHz, Sweep time = Auto.

## 7.4 DEVIATION FROM STANDARD

No deviation.

## 7.5 TEST SETUP




## 7.6 EUT OPERATION CONDITIONS

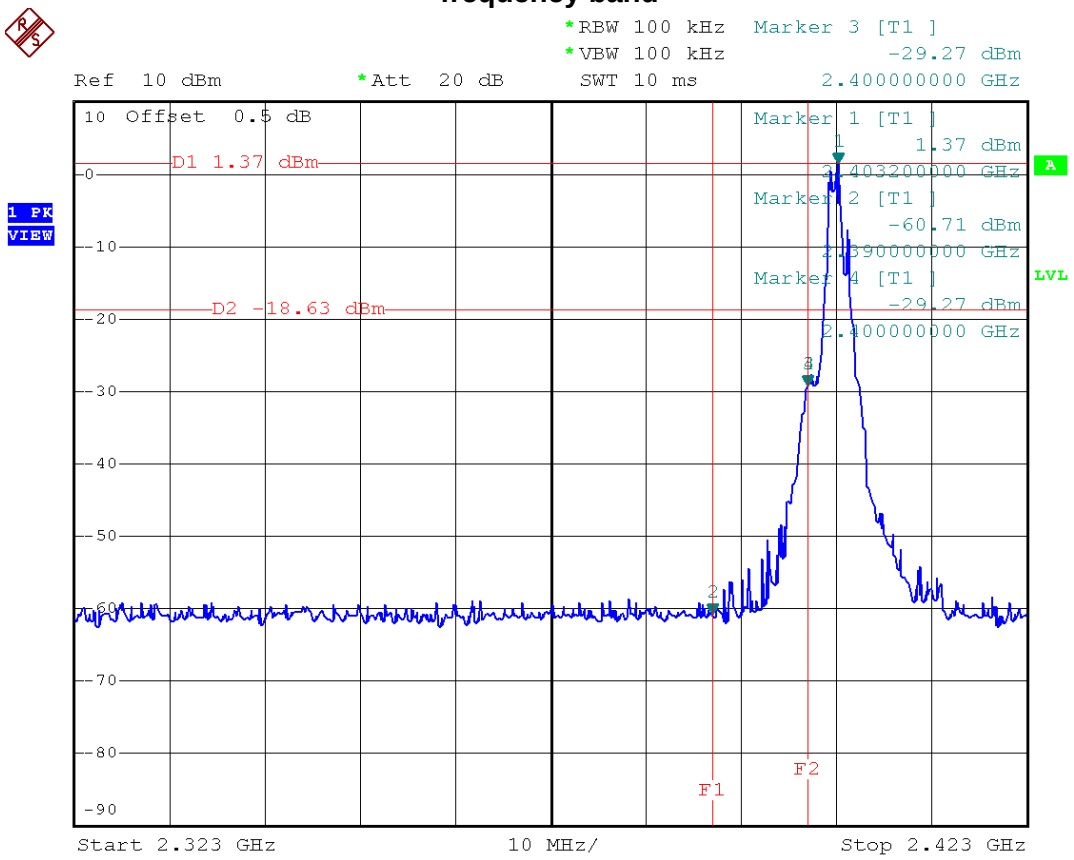
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

## 7.7 TEST RESULTS

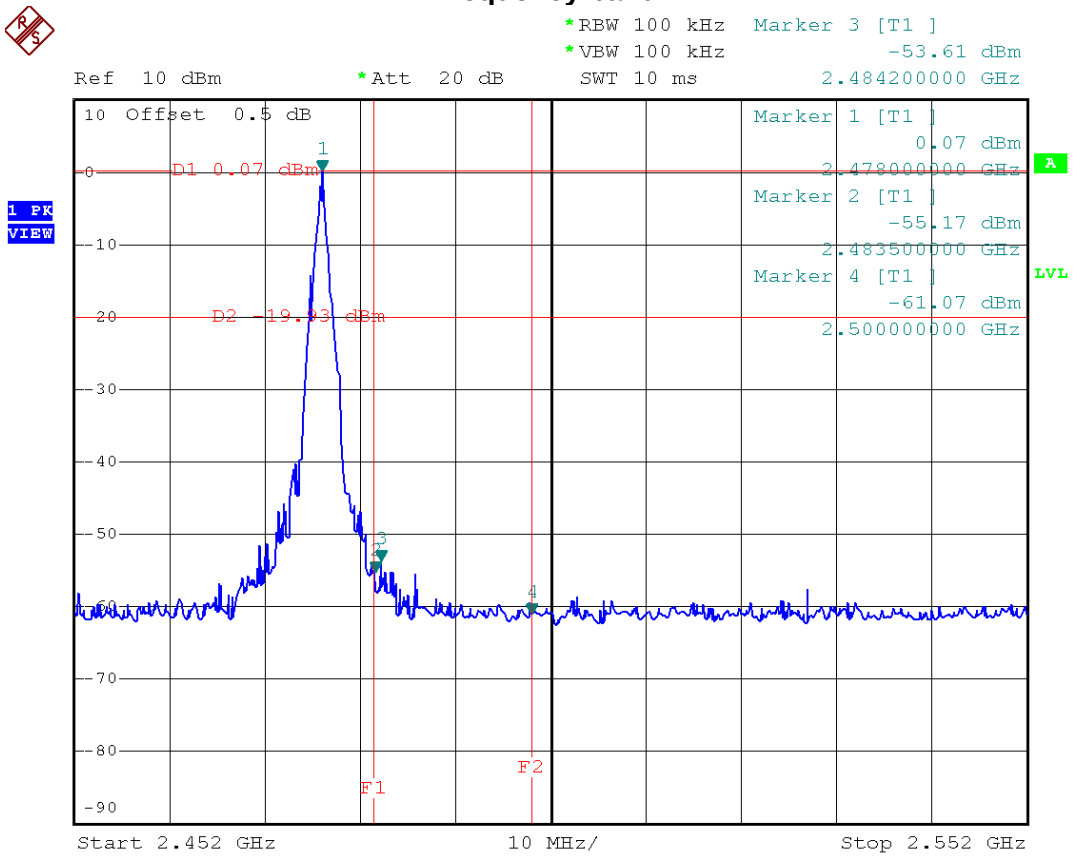
| | | | |
|---|---|---|---|
| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
| Temperature： | 24°C | Relative Humidity： | 54% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | 2403 MHz/2478 MHz | | |

| Channel of Worst Data | | | |
|---|---|---|---|
| The max. radio frequency power in any 100kHz bandwidth outside the frequency band | | The max. radio frequency power in any 100 kHz bandwidth within the frequency band. | |
| FREQUENCY(MHz) | POWER(dBm) | FREQUENCY(MHz) | POWER(dBm) |
| 2400.00 | -29.27 | 2484.20 | -53.61 |
| Result | | | |
| In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power. | | | |

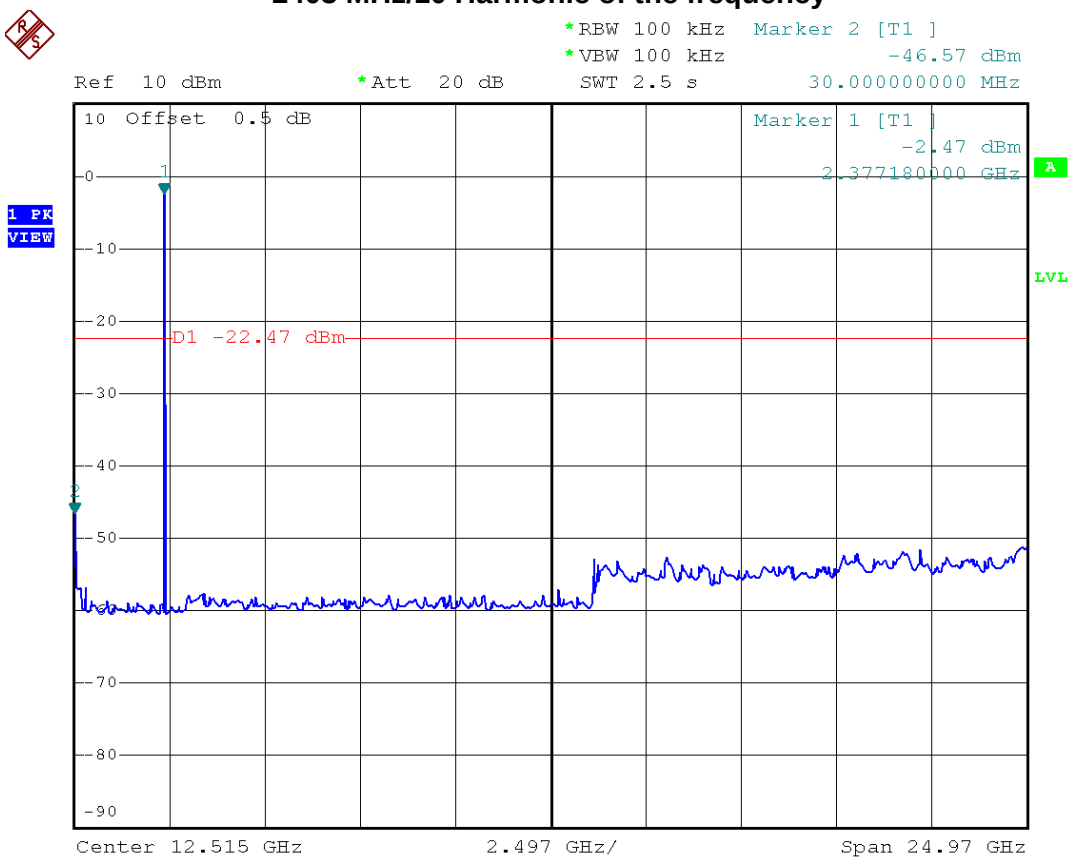
**2403 MHz/The max. radio frequency power in any 100kHz bandwidth outside the frequency band**



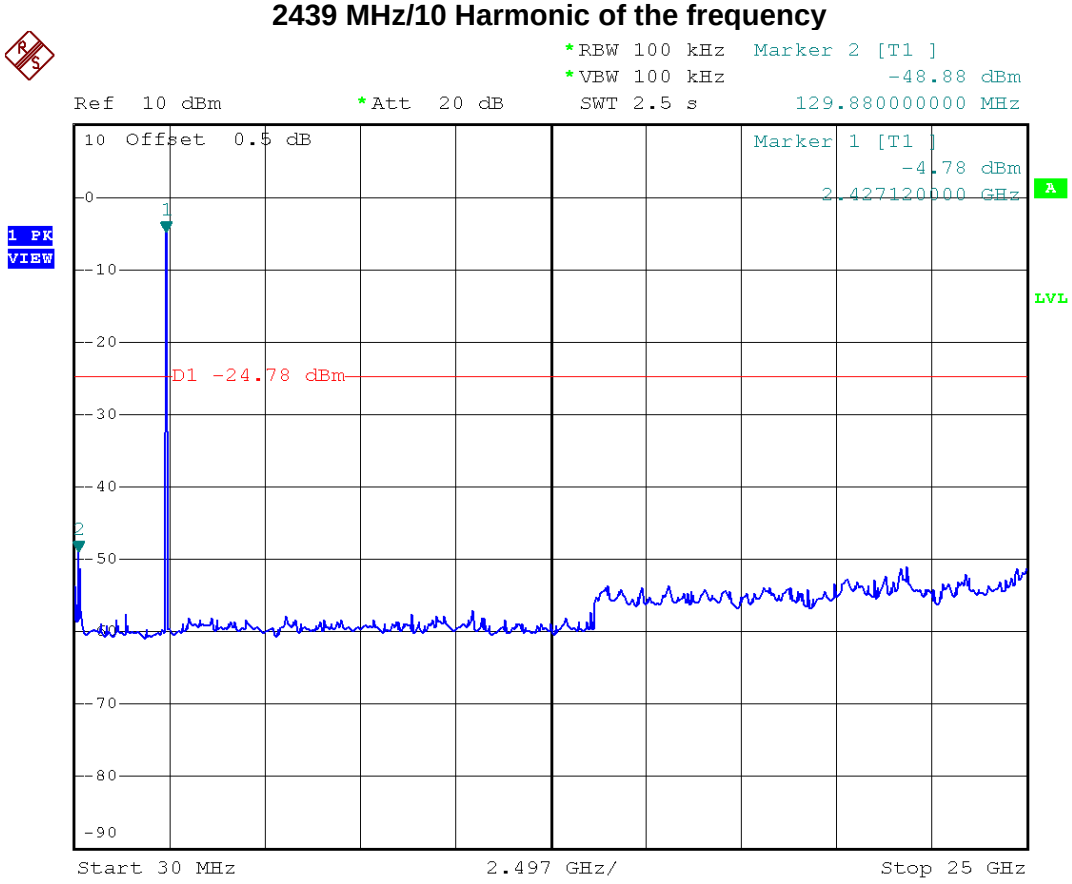

**2478 MHz/The max. radio frequency power in any 100 kHz bandwidth within the frequency band**



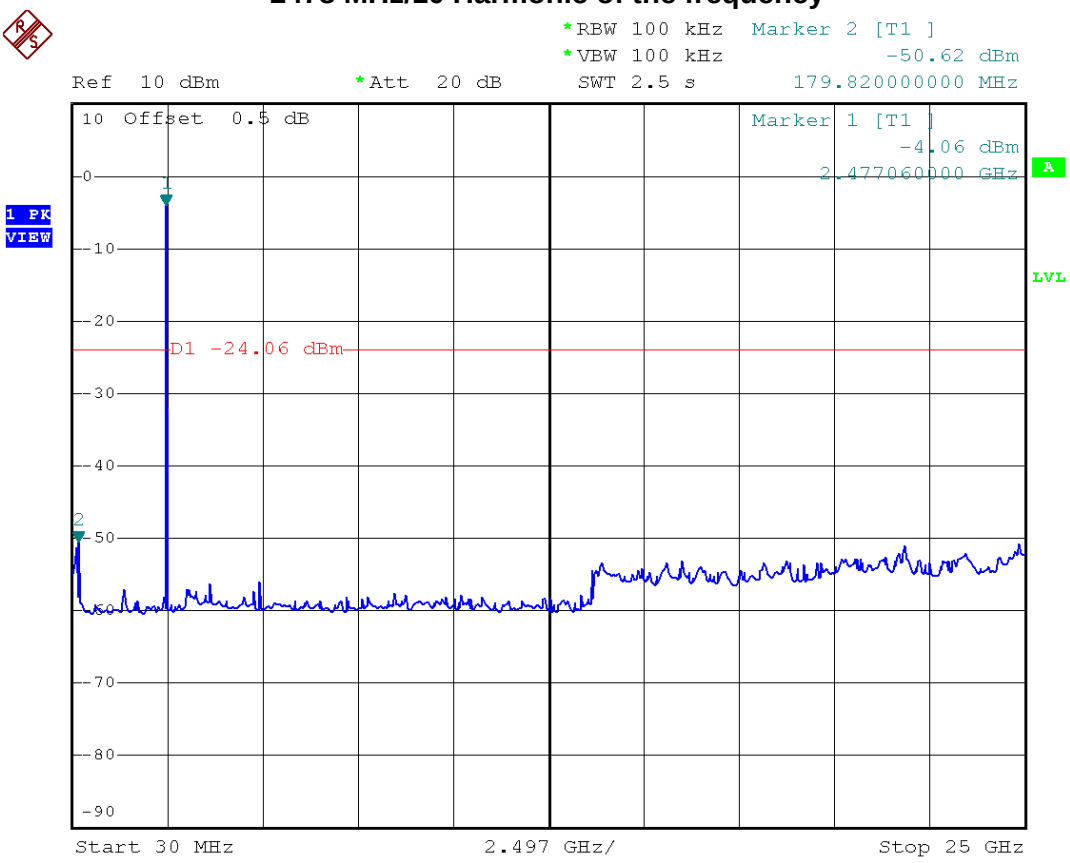
## 2403 MHz/10 Harmonic of the frequency




## 2439 MHz/10 Harmonic of the frequency



## 2478 MHz/10 Harmonic of the frequency



# 8. POWER SPECTRAL DENSITY TEST

## 8.1 APPLIED PROCEDURES / LIMIT

| FCC Part15, Subpart C: 2010 | | | |
|---|---|---|---|
| Test Item | Limit | Frequency Range (MHz) | Result |
| Power Spectral Density | 8 dBm (in any 3KHz) | 2400-2483.5 | PASS |

## 8.2 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|---|---|---|---|---|---|
| 1 | Spectrum Analyzer | R&S | FSP-40 | 100129 | Aug. 29, 2013 |

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

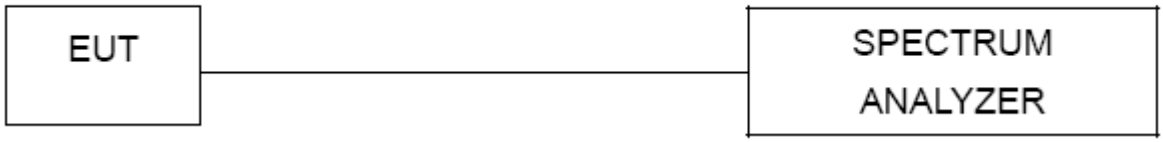
## 8.3 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
b. Spectrum Setting : RBW=3KHz, VBW=30KHz, Sweep time = 500s.

## 8.4 DEVIATION FROM STANDARD

No deviation.

## 8.5 TEST SETUP




## 8.6 EUT OPERATION CONDITIONS

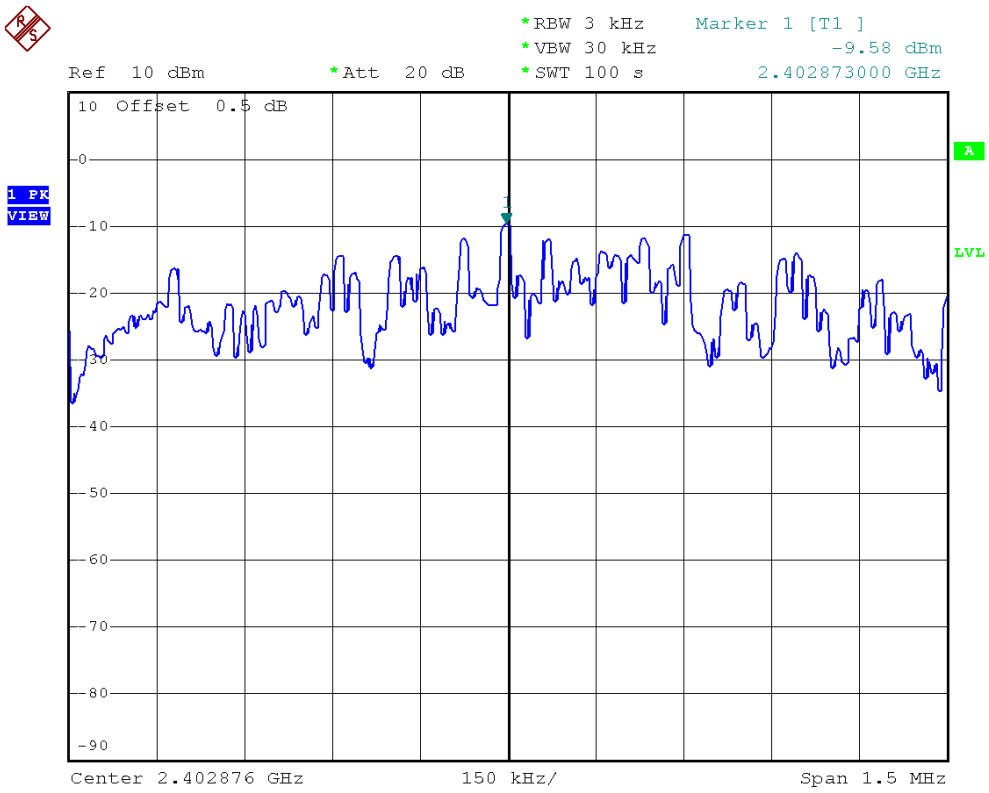
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

## 8.7 TEST RESULTS

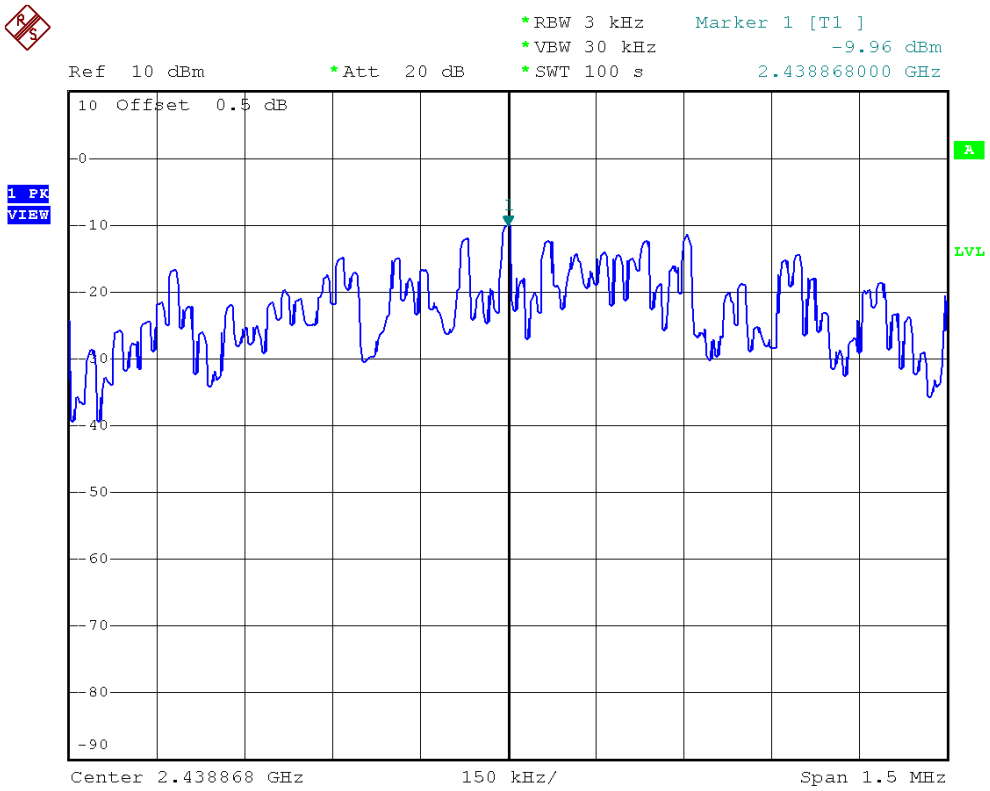
| | | | |
|---|---|---|---|
| EUT： | 2.4G Headset Dongle | Model Name ： | RH-10 |
| Temperature： | 24°C | Relative Humidity： | 54% |
| Test Voltage： | DC 5V | | |
| Test Mode ： | 2403 MHz/2439 MHz/2478 MHz | | |

| Frequency | Power Density (dBm) | LIMIT (dBm) |
|---|---|---|
| 2403 MHz | -9.58 | 8 |
| 2439 MHz | -9.96 | 8 |
| 2478 MHz | -10.25 | 8 |

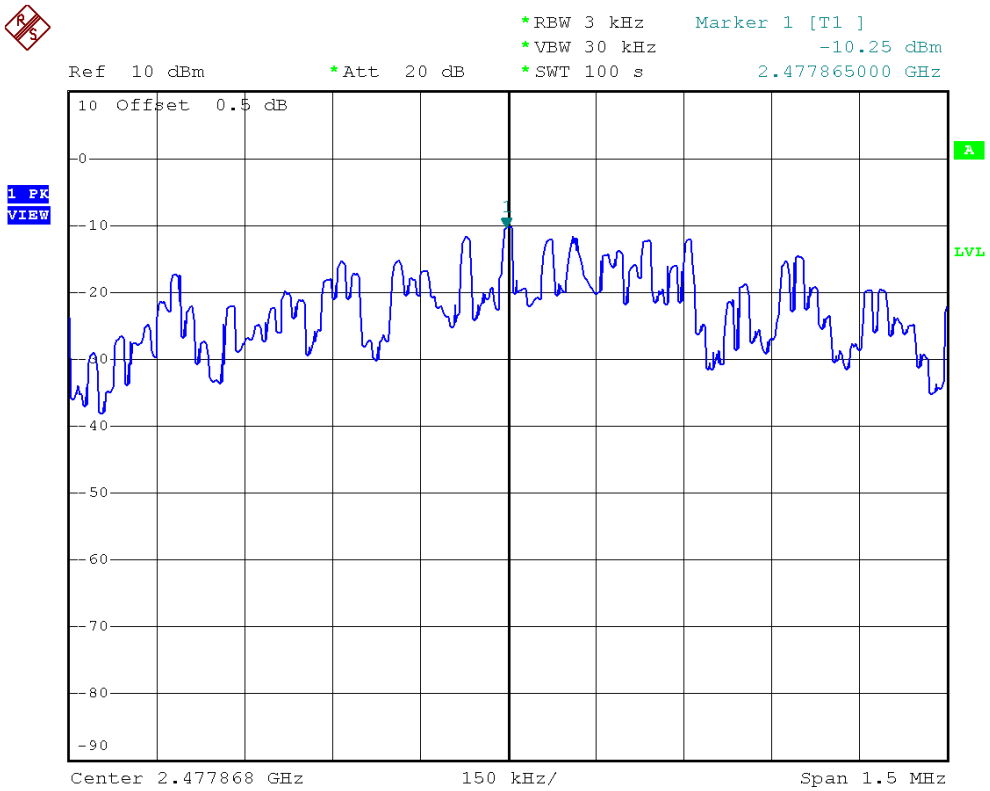
**2403 MHz**



**2439 MHz**




**2478 MHz**



# 9. RF EXPOSURE TEST

## 9.1 APPLIED PROCEDURES / LIMIT

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure.

(A) Limits for Occupational / Controlled Exposure

| Frequency Range (MHz) | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/ $cm^2$) | Averaging Time $\|E\|^2$,$\|H\|^2$or S (minutes) |
|---|---|---|---|---|
| 0.3-3.0 | 614 | 1.63 | (100)* | 6 |
| 3.0-30 | 1842 / f | 4.89 / f | (900 / f)* | 6 |
| 30-300 | 61.4 | 0.163 | 1.0 | 6 |
| 300-1500 | | | F/300 | 6 |
| 1500-100,000 | | | 5 | 6 |

(B) Limits for General Population / Uncontrolled Exposure

| Frequency Range (MHz) | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/ $cm^2$) | Averaging Time $\|E\|^2$,$\|H\|^2$ or S (minutes) |
|---|---|---|---|---|
| 0.3-1.34 | 614 | 1.63 | (100)* | 30 |
| 1.34-30 | 824/f | 2.19/f | (180/f)* | 30 |
| 30-300 | 27.5 | 0.073 | 0.2 | 30 |
| 300-1500 | | | F/1500 | 30 |
| 1500-100,000 | | | 1.0 | 30 |

Note: f = frequency in MHz ; *Plane-wave equivalent power density

## 9.2 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|---|---|---|---|---|---|
| 1 | Power Meter | Anritsu | ML2495A | 1128008 | Feb,20,2013 |
| 2 | Power Meter Sensor | Anritsu | MA2411B | 1126001 | Feb,20,2013 |

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

## 9.3 MPE CALCULATION METHOD & TEST RESULTS

The power is too low, so no RF calculations are needed.