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Ke Mei Ou Lab Corp.
**FEDERAL COMMUNICATIONS COMMISSION**
Registration Number: 125782
**INDUSTRY CANADA**
Registration Number: IC4986

# *FCC TEST REPORT*

Under

*FCC Part 74 Subpart H,*

Prepared For:

## Shen Zhen JWL Electronic Co., Ltd.

Room B-OP, 27/F Window to Modernization Building N. Hua Qiang Road, Futian District
Shenzhen, Guangdong, China

| |
|---|
| **FCC ID: PVDPDWM-2600** |
| **EUT: Wireless Microphone** |
| **Model: PDWM-2600** |

April 12, 2005

| |
|---|
| **Report Type:** Original Report |
| **Test Engineer:** Peter Lin |
| **Test Date:** March 26, 2005 |
|  **Review By:** Apollo Liu / Manager |

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# 1. General Information

## 1. 1 Notes

The test results of this report relate exclusively to the test item specified in 1.5. The KMO Lab does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of the KMO Lab.

## 1. 2 Testing Laboratory

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Site on File with the Federal Communications Commission – United Sates
Registration Number: 125782
For 3 & 10 meter OATS

Site Listed with Industry Canada of Ottawa, Canada
Registration Number: IC4986
For 3 & 10 meter OATS

## 1. 3 Details of Applicant

**Name : Shen Zhen JWL Electronic Co., Ltd.**
**Address : Room B-OP, 27/F Window to Modernization Building Hua Qiang Road North, Futian District Shenzhen, Guangdong, China.**
**Contact : James Wang / General Manager**
**Tel : + 86 755 83280107**
**Fax : + 86 755 83280117**

## 1. 4 Application Details

Date of Receipt of Application : February 28, 2005
Date of Receipt of Test Item : February 28, 2005
Date of Test : March 26~April 12, 2005

## 1. 5 Test Item

Manufacturer : See Applicant
Brand Name : PYLE®PRO, JWL
Model No. : PDWM-2600, UHF-02, UHF-07, UHF-06, UHF-08, UHF-2288, UHF-4288, PRA7000, PRA6000, PWMA-8380, PWMA-8480, PWMA-8580, PWMA-8280, PWMA-2007, UHF-138, UHF-238, UHF-438, UHF-638
Description : Wireless Microphone

## Additional Information

Frequency : 710.4MHz~805.9MHz
Modulation Mode : FM
Nominal Deviation : ±56KHz. with level limiting
Audio Frequency Response : 60Hz to 18KHz
S/N Ratio : ≥100dB
T.H.D : ≤0.5%
Service Areas : N/A
Power : Transmitter DC9V; Receiver 12V~15VDC/0.5A
Operating environment Temp. : N/A

## 1. 6 Test Standards

| *FCC Part 74 Subpart H* |
|---|

Note: All radiated measurements were made in all three orthogonal planes. The values reported are the maximum values.

# 2. Technical Test

## 2. 1 Summary of Test Results

**The EUT has been tested according to the following specifications:**

| Standard | Test Type | Result | Notes |
|---|---|---|---|
| FCC Part 15, Paragraph 15.207 | Conducted Test | N/A | Owing to the DC operation of EUT, this test item is not performed. |
| FCC Part 74, Paragraph 74.861(e)(1)(i) | Output Power Measurement | PASS | Complies. |
| FCC Part 2, Paragraph 2.1047(a) | Modulation Characteristics | PASS | Complies |
| FCC Part 2, Paragraph 2.1049 (c)(1) | Occupied Bandwidth of Emission | PASS | Complies. |
| FCC Part 2, Paragraph 2.1053 & FCC Part 74, Paragraph 74.861(e)(6) | Field Strength of Emission | PASS | Complies. |
| FCC Part 2, Paragraph 2.1055 (a)(1)(d)(2) & FCC Part 74, Paragraph 74.861(e)(4). | Frequency Stability | PASS | Complies. |

# 3. EUT Modifications

No modification by Ke Mei Ou Laboratory Co., Ltd.

# 4. Conducted Power Line Test

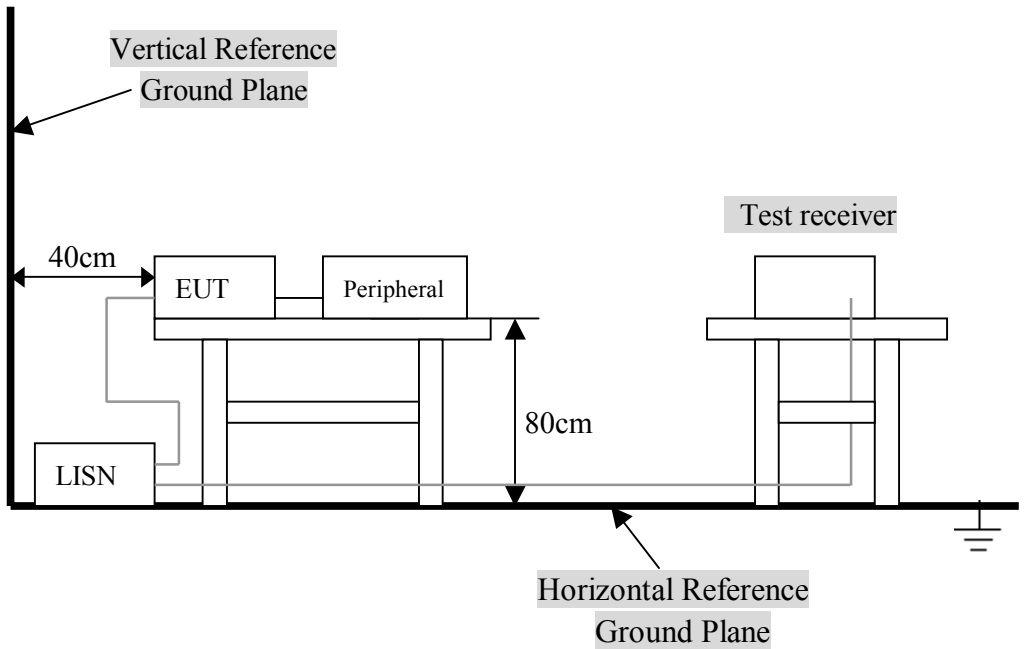
## 4. 1 Test Equipment

Please refer to Section 12 this report.

## 4. 2 Test Procedure

The EUT was tested according to ANSI C63.4 - 2001. The frequency spectrum from 0.15 MHz to 30 MHz was investigated. The LISN used was 50 ohm / 50 u-Henry as specified by section 5.1 of ANSI C63.4 - 2001.cables and peripherals were moved to find the maximum emission levels for each frequency.

## 4. 3 Test Setup




**For the actual test configuration, Please refer to the related items – Photos of Testing.**

## 4. 4 Configuration of The EUT

Four frequencies are provide by EUT. The 4 frequencies of 710.4MHz, 734.6MHz, 802.525MHz, 805.9MHz were for test.
Note:

1) Below 1GHz, the frequency 710.4MHz, 734.6MHz, 802.525MHz, 805.9MHz were pre-tested in chamber. The frequency 710.4MHz, worst case one, was chosen for radiated emission test.
2) Above 1GHz, the frequency 710.4MHz, 734.6MHz, 802.525MHz, 805.9MHz were tested individually.

## A. EUT

| Device | Manufacturer | Model # | FCC ID |
|---|---|---|---|
| Wireless Microphone | Shen Zhen JWL Electronic Co., Ltd. | PDWM-2600 | PVDPDWM-2600 |

## B. Internal Devices

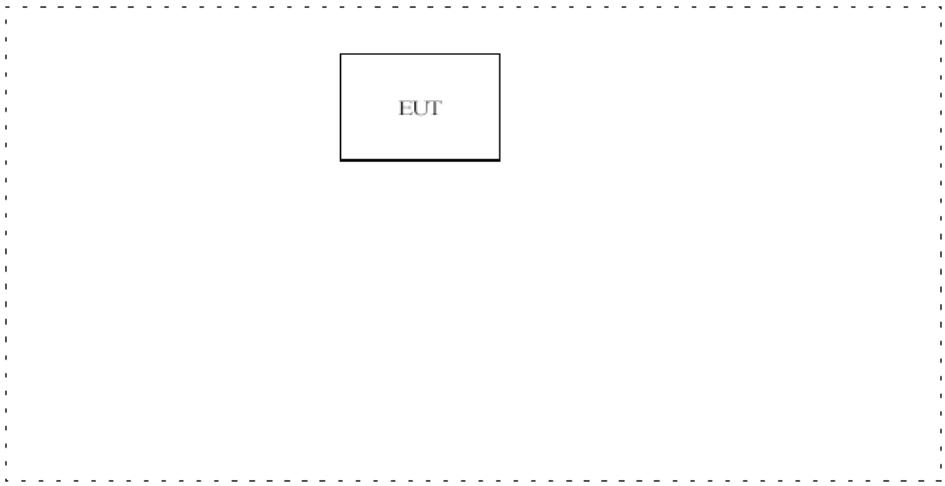
| Device | Manufacturer | Model # | FCCID / DoC |
|---|---|---|---|
| N/A | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

## C. Peripherals

| Device | Manufacturer | Model #<br>Serial # | FCC ID/<br>DoC | Cable |
|---|---|---|---|---|
| N/A | | | | |
| | | | | |
| | | | | |

## 4. 5 EUT Operating Condition

Operating condition is according to ANSI C63.4 - 1992.
A. Setup the EUT and simulators as shown on follow.
B. Enable RF signal and confirm EUT active.
C. Modulate output capacity of EUT up to specification.




## 4. 6 Conducted Power Line Emission Limits

| FCC Part 15 Paragraph 15.207 (dBuV) | | |
|---|---|---|
| **Frequency Range (MHz)** | **Class A QP/AV** | **Class B QP/AV** |
| 0.15 – 0.5 | 79/66 | 66-56/56-46 |
| 0.5 – 5.0 | 73/60 | 56/46 |
| 5.0 - 30 | 73/60 | 60/50 |

**NOTE** ：In the above table, the tighter limit applies at the band edges.

## 4. 7 Conducted Power Line Test Result

Owing to the DC operation of EUT, this test item is not performed.

# 5. Output Power Measurement

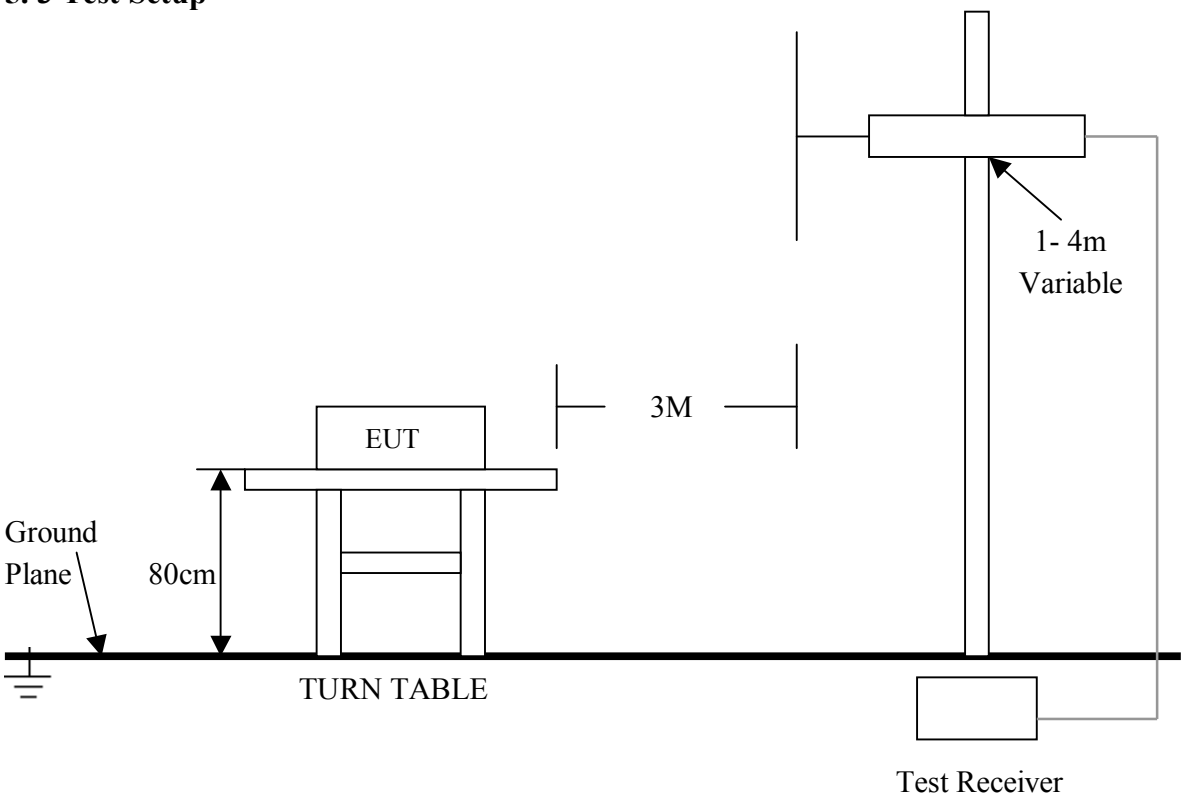
## 5. 1 Test Equipment

Please refer to Section 12 this report.

## 5. 2 Test Procedure

1. Setup the configuration as section 5.3 this report test setup for frequencies measured below and above 1GHz respectively. adjusting the input voltage to produce the maximum power as measured.
2. Adjust the analyzer for each frequency measured in chapter 6 on a 1MHz frequency span and 1MHz resolution bandwidth.
3. The search antenna is to be raised and lowered over a range from 1 to 4 meters in horizontally polarized orientation. Position the highness when the highest value is indicated on test receiver, then change the orientation of EUT on test table over a range from 0 degree to 360 degree, and record the highest value indicated on test receiver as reference value.
4. Repeat step 3 until all frequencies need to be measured were complete.
5. Repeat step 4 with search antenna in vertical polarized orientations.
6. Replace the EUT with a tuned dipole antenna (horn antenna for above 1GHz) relative to each frequency in horizontally polarized orientation and as the same polarized orientation with search antenna. Connect the tuned dipole antenna to a standard signal generator(SG) via a low loss cable. Power on the SG and tune the right frequency in measuring as well as set SG at a appreciated output level. Rise and lower the search antenna to get the highest value on test receiver, and then hold this position. Adjust the SG output to get a identical value derived from step 3 on test receiver. Record this value for result calculated.
7. Repeat step 6 until all frequencies need to be measured were complete.
8. Repeat step 7 with both dipole antenna (horn antenna for above 1 GHz) and search antenna in vertical polarized orientations.

## 5. 3 Test Setup




**For the actual test configuration , please refer to the related items – Photos of Testing.**

## 5. 4 Configuration of The EUT
Same as section 4 . 4 of this report

## 5. 5 EUT Operating Condition
Same as section 4 . 5 of this report.

## 5. 6 Rules and Specification Limits
According to § 74.861(e)(1)(i), the output power shall not exceed 50 milliwatts.

## 5. 7 Output Power Test Result

### A. 710.4MHz (ERP)

| | | | |
|---|---|---|---|
| Product | : Wireless Microphone | Test Mode | : 710.4MHz |
| Test Item | : Output Power Measurement | Temperature | : 25 ℃ |
| Test Voltage | : DC 9V | Humidity | : 56%RH |
| Test Result | : **PASS** | | |

| Frequency. (MHz) | Result (dBm) | Output Power (mW) | Limit (mW) |
|---|---|---|---|
| 710.4 | 0.14 | 1.03 | 50.0 |

### B. 734.6MHz (ERP)

| | | | |
|---|---|---|---|
| Product | : Wireless Microphone | Test Mode | : 734.6MHz |
| Test Item | : Output Power Measurement | Temperature | : 25 ℃ |
| Test Voltage | : DC 9V | Humidity | : 56%RH |
| Test Result | : **PASS** | | |

| Frequency. (MHz) | Result (dBm) | Output Power (mW) | Limit (mW) |
|---|---|---|---|
| 734.6 | -0.50 | 0.89 | 50.0 |

### C. 802.525MHz (ERP)

| | | | |
|---|---|---|---|
| Product | : Wireless Microphone | Test Mode | : 802.525MHz |
| Test Item | : Output Power Measurement | Temperature | : 25 ℃ |
| Test Voltage | : DC 9V | Humidity | : 56%RH |
| Test Result | : **PASS** | | |

| Frequency. (MHz) | Result (dBm) | Output Power (mW) | Limit (mW) |
|---|---|---|---|
| 802.525 | -0.51 | 0.89 | 50.0 |

### D. 805.9MHz (ERP)

| | | | |
|---|---|---|---|
| Product | : Wireless Microphone | Test Mode | : 805.9MHz |
| Test Item | : Output Power Measurement | Temperature | : 25 ℃ |
| Test Voltage | : DC 9V | Humidity | : 56%RH |
| Test Result | : **PASS** | | |

| Frequency. (MHz) | Result (dBm) | Output Power (mW) | Limit (mW) |
|---|---|---|---|
| 805.9 | -0.08 | 0.98 | 50.0 |

**Note:** For measured frequency below 1GHz, a tuned dipole antenna is used.

## 5. 8 Result Calculation

Result calculation is as following:
Result = SG Reading + Cable Loss + Antenna Gain Corrected
Antenna Gain Corrected: is used for antenna other than dipole to convert radiated power to ERP.

$$mW = \log^{-1}\left[\frac{Result(dBm)}{10}\right]$$

# 6. Modulation Characteristics

## 6. 1 Test Equipment

Please refer to Section 12 this report.

## 6. 2 Test Procedure

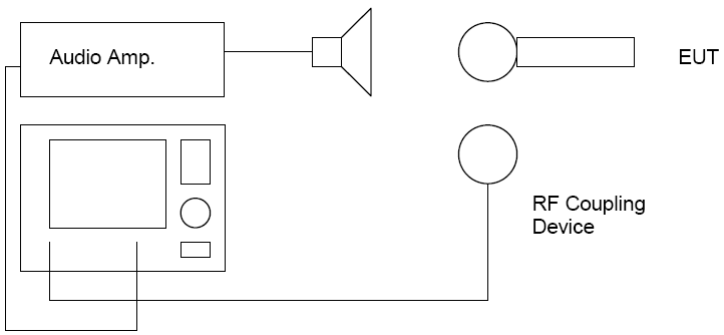
A. Audio Frequency Response

1) The audio signal was coupled to the microphone via a calibrated loudspeaker.
2) The audio signal was adjusted for 20% nominal modulation at 1 kHz. This was taken as 0 dB reference.
3) With input level held constant, the audio signal was varied from 100Hz to 30kHz.
4) The response was measured and recorded with a CMS54 Radiocommunication Tester.

B. Modulation Limit

1) The audio signal was coupled to the microphone via a calibrated loudspeaker.
2) The modulation response was measured for 100Hz to 15kHz including the frequency with maximum response found during "Audio Frequency Response Test".
3) The input level was varied from 30% modulation to 20 dB higher than the saturation point. The resulting deviation was measured with a CMS54 Radiocommunication Tester.
4) Measurements were performed for positive and negative deviation.

## 6. 3 Test Setup

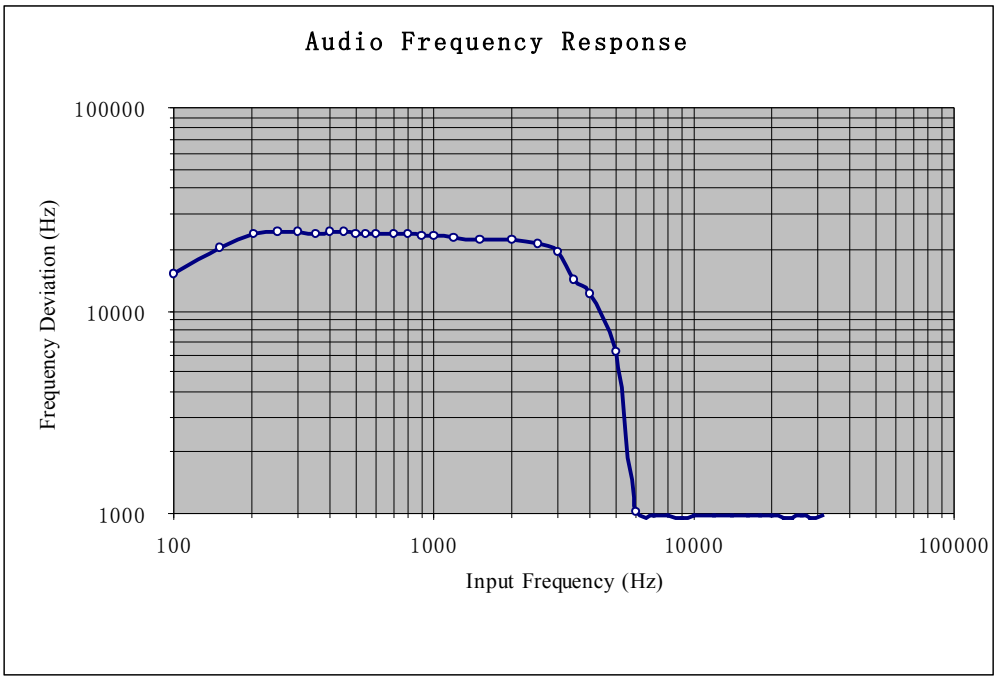



## 6.4 Rules and Specification Limits

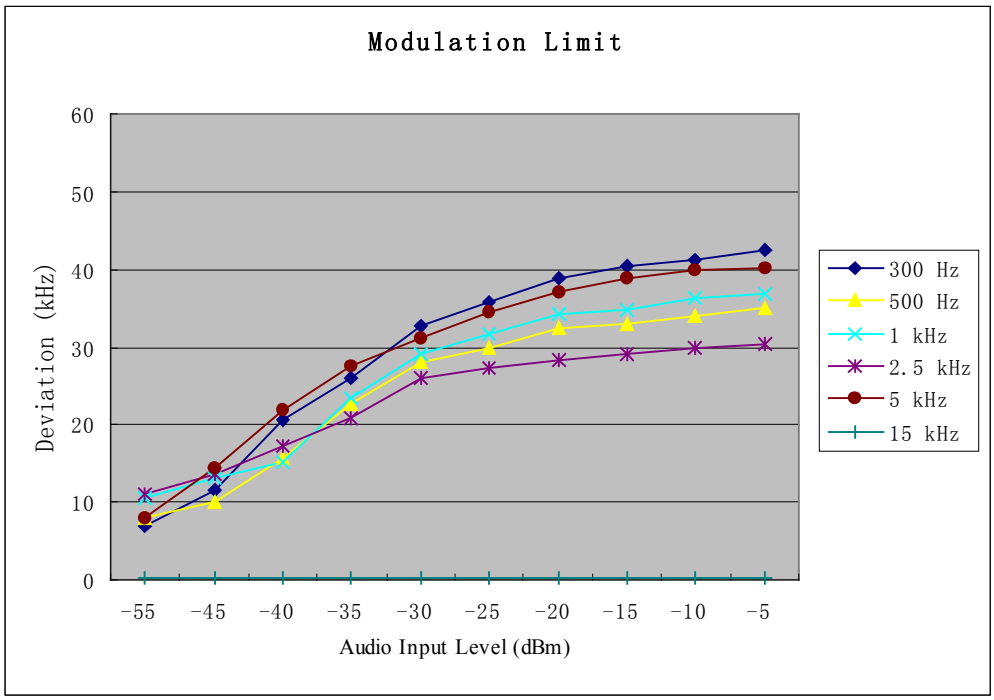
According to § 2.1047 (a), for Voice Modulated Communication Equipment, the frequency response of the audio modulating circuit over a range of 100 to 5000 Hz shall be measured.

## 6. 5 Test Result

A. Audio Frequency Response




B. Modulation Limit



# 7. Occupied Bandwidth of Emission

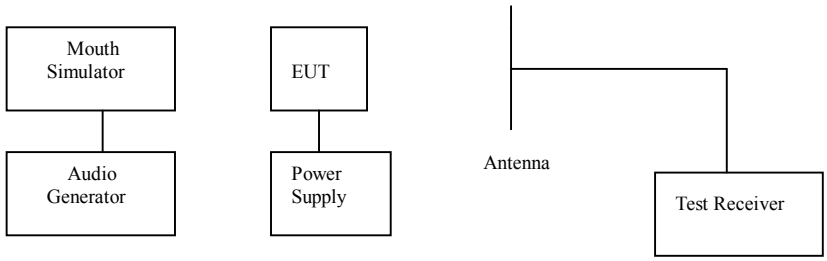
## 7. 1 Test Equipment

Please refer to Section 12 this report.

## 7. 2 Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Set the output of the signal generator to 15KHz. Increase the amplitude of the signal, while monitoring the modulation meter. Until modulation is maximum measure the bandwidth under 26dB compared to the unmodulated fundamental carrier peak level of the modulated signal displayed on the test receiver

## 7. 3 Test Setup




## 7. 4 Rules and Specification Limits

According to § 2.1049 (c)(1): ANSI / TIA / EIA-603-1992, Paragraph 2.2.11

According to § 74.861 (e)(3), Any form of modulation may be used. A maximum deviation of ±75 KHz is permitted when frequency modulation is employed.

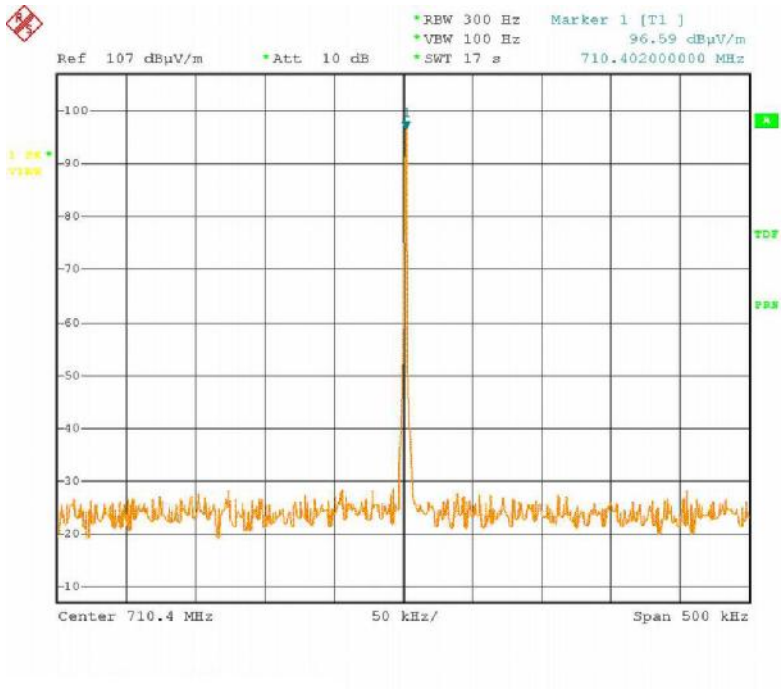
According to § The operation bandwidth shall not exceed 200KHz.

## 7. 5 Occupied Bandwidth Test Result

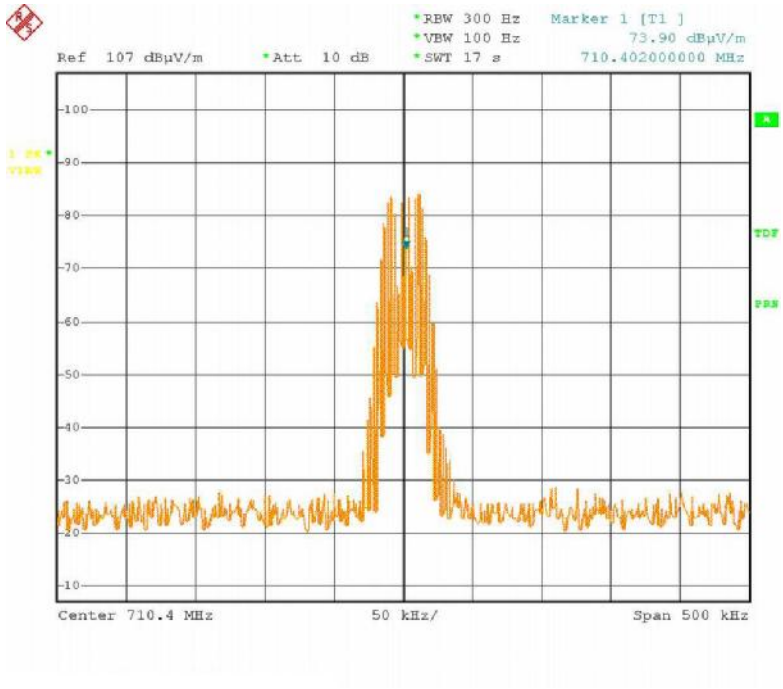
The occupied bandwidth's plot is presented on following pager, which illustrates compliance with the rules.
Calculation of Necessary Bandwidth (Bn)
Bn = 2M +2DK
M = Max. Modulation Frequency = 15.0 KHz
D = Peak Frequency Deviation = 42.5KHz
K = 1
Bn = 115KHz

| | | | |
|---|---|---|---|
| Product | : Wireless Microphone | Test Mode | : 710.4MHz |
| Test Item | : Output Power Measurement | Temperature | : 25 ℃ |
| Test Voltage | : DC 9V | Humidity | : 56%RH |
| Test Result | : **PASS** | | |

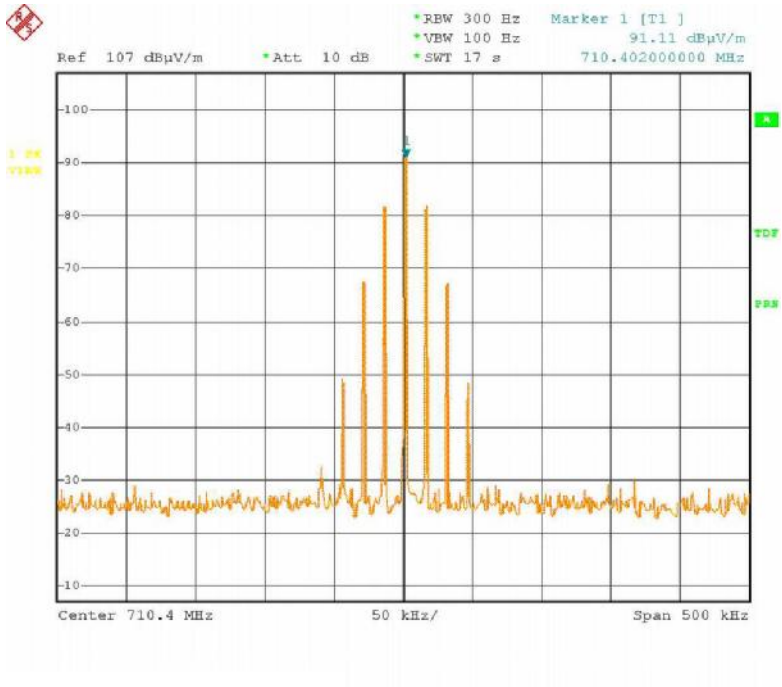
**Unmodulated**




**2.5 kHz Modulation**



**15KHz modulation**



# 8. Field Strength of Emission

## 8. 1 Test Equipment

Please refer to Section 12 this report.

## 8. 2 Test Procedure

1. Setup the configuration in Section 5.3 this report for frequencies measured below and above 1GHz respectively, adjusting the input voltage to produce the maximum power as measured in Section 5 this report.
2. Adjust the test receiver for each frequency measured on a 1MHz frequency span and 1MHz resolution bandwidth.
3. The search antenna is to be raised and lowered over a range from 1 to 4 meters in horizontally polarized orientation. Position the highness when the highest value is indicated on test receiver. Then change the orientation of EUT on test table over a range from 0 degree to 360 degree, and record the highest value indicated on test receiver as reference value.
4. Repeat step 3 until all frequencies need to be measured were complete.
5. Repeat step 4 with search antenna in vertical polarized orientations.
6. Replace the EUT with a tuned dipole antenna (horn antenna for above 1GHz) relative to each frequency in horizontally polarized orientation and as the same polarized orientation with search antenna. Connect the tuned dipole antenna to a standard signal generator (SG) via a low loss cable. Power on the SG and tune right frequency in measuring as well as set SG at a appreciated output level. Rise and lower the search antenna to get the highest value on test receiver, and then hold this position. Adjust the SG output to get a identical value derived from step 3 on test receiver. Record this value for result calculated.
7. Repeat step 6 until all frequency need to be measured were complete.
8. Repeat step 7 with both dipole antenna (horn antenna for above 1GHz) and search antenna in vertical polarized orientations.

## 8. 3 Rules and Specification Limits

According to § 2.1053(a): ANSI/ TIA/ EIA-603-1992, Paragraph 2.2.12,

Measurements shall be made to detect spurious emissions that may be radiated directly from the cabinet, control circuits, Power leads, or intermediate circuit elements under normal conditions of installation and operation.

According to § 74.861 (e)(6)(iii):

Spurious and harmonics must be at least 43 + 10log(Output Power) below the carrier peak.

According to § 2.1057:

In all measurements set forth, the test receiver should be investigated from the lowest radio frequency generated in the equipment up to at least the $10^{th}$ harmonic of the carrier frequency.

## 8. 4 Test Result

| | | | |
|---|---|---|---|
| Product | : Wireless Microphone | Test Mode | : 710.4MHz |
| Test Item | : Field Strength of Emission | Temperature | : 25 ℃ |
| Test Voltage | : DC 9V | Humidity | : 56%RH |
| Test Result | : **PASS** | | |

Unmodulated carrier output power is 0.14 dBm, or 1.03 mW(ERP). The limit of spurious or harmonics is calculated as following:

0.14 –[43+10log(carrier output power in W)], or –13dBm

**710.4MHz**

| Frequency (MHz) | Result (dBm) Hori. / Vert. | | Limit (dBm) | Margin (dB) Hori. / Vert. | |
|---|---|---|---|---|---|
| 355.200 | -52.10 | -46.60 | -13 | -39.10 | -33.60 |
| 749.880 | -44.18 | -45.21 | -13 | -31.18 | -32.21 |
| 828.800 | -52.68 | -47.35 | -13 | -39.68 | -34.35 |
| 1420.800 | -54.01 | -52.88 | -13 | -41.01 | -39.88 |
| 2131.200 | -54.55 | -54.25 | -13 | -41.55 | -41.25 |
| 7104.000 | -53.52 | -53.14 | -13 | -40.52 | -40.14 |

**Note:** a. For measured frequency below 1GHz, a tuned dipole antenna is used.
b. Result calculation is as following:
Result = SG Reading + Cable Loss + Antenna Gain Corrected.
Antenna Gain Corrected: is used for antenna other than dipole to convert radiated power to ERP.
c. Spurious or harmonics above 1 GHz is too low to be detected or attenuated more than 60dB from limit value.

| | | | |
|---|---|---|---|
| Product | : Wireless Microphone | Test Mode | : 734.6MHz |
| Test Item | : Field Strength of Emission | Temperature | : 25 ℃ |
| Test Voltage | : DC 9V | Humidity | : 56%RH |
| Test Result | : **PASS** | | |

Unmodulated carrier output power is –0.50 dBm, or 0.89 mW(ERP). The limit of spurious or harmonics is calculated as following:

-0.50 –[43+10log(carrier output power in W)], or –13dBm

**734.6MHz**

| Frequency (MHz) | Result (dBm) Hori. / Vert. | | Limit (dBm) | Margin (dB) Hori. / Vert. | |
|---|---|---|---|---|---|
| 40.800 | -66.01 | -59.15 | -13 | -53.01 | -46.15 |
| 122.440 | -69.57 | -58.69 | -13 | -56.57 | -45.69 |
| 367.320 | -54.51 | -46.85 | -13 | -41.51 | -33.85 |
| 1469.200 | -52.59 | -52.56 | -13 | -39.59 | -39.56 |
| 2203.800 | -53.61 | -53.24 | -13 | -40.61 | -40.24 |
| 7346.000 | -53.28 | -52.94 | -13 | -40.28 | -39.94 |

**Note:** a. For measured frequency below 1GHz, a tuned dipole antenna is used.
b. Result calculation is as following:
Result = SG Reading + Cable Loss + Antenna Gain Corrected.
Antenna Gain Corrected: is used for antenna other than dipole to convert radiated power to ERP.
c. Spurious or harmonics above 1 GHz is too low to be detected or attenuated more than 60dB from limit value.

| | | | |
|---|---|---|---|
| Product | : Wireless Microphone | Test Mode | : 802.525MHz |
| Test Item | : Field Strength of Emission | Temperature | : 25 ℃ |
| Test Voltage | : DC 9V | Humidity | : 56%RH |
| Test Result | : **PASS** | | |

Unmodulated carrier output power is -0.51 dBm, or 0.89mW(ERP). The limit of spurious or harmonics is calculated as following:

-0.51 –[43+10log(carrier output power in W)], or –13dBm

**802.525MHz**

| Frequency (MHz) | Result (dBm) Hori. / Vert. | | Limit (dBm) | Margin (dB) Hori. / Vert. | |
|---|---|---|---|---|---|
| 36.720 | -65.48 | -66.69 | -13 | -52.48 | -53.69 |
| 133.760 | -62.84 | -58.46 | -13 | -49.84 | -45.46 |
| 401.280 | -51.21 | -58.46 | -13 | -38.21 | -45.46 |
| 1605.050 | -52.64 | -52.56 | -13 | -39.64 | -39.56 |
| 2407.575 | -54.85 | -54.04 | -13 | -41.85 | -41.04 |
| 8025.250 | -54.01 | -52.69 | -13 | -41.01 | -39.69 |

**Note:** a. For measured frequency below 1GHz, a tuned dipole antenna is used.
b. Result calculation is as following:
Result = SG Reading + Cable Loss + Antenna Gain Corrected.
Antenna Gain Corrected: is used for antenna other than dipole to convert radiated power to ERP.
c. Spurious or harmonics above 1 GHz is too low to be detected or attenuated more than 60dB from limit value.

| | | | |
|---|---|---|---|
| Product | : Wireless Microphone | Test Mode | : 805.9MHz |
| Test Item | : Field Strength of Emission | Temperature | : 25 ℃ |
| Test Voltage | : DC 9V | Humidity | : 56%RH |
| Test Result | : **PASS** | | |

Unmodulated carrier output power is -0.08 dBm, or 0.98mW(ERP). The limit of spurious or harmonics is calculated as following:

-0.08 –[43+10log(carrier output power in W)], or –13dBm

**805.9MHz**

| Frequency (MHz) | Result (dBm) Hori. / Vert. | | Limit (dBm) | Margin (dB) Hori. / Vert. | |
|---|---|---|---|---|---|
| 34.000 | -65.51 | -63.88 | -13 | -52.51 | -50.88 |
| 134.320 | -64.46 | -62.98 | -13 | -51.46 | -49.98 |
| 268.640 | -59.77 | -56.70 | -13 | -46.77 | -43.70 |
| 1611.800 | -54.18 | -54.03 | -13 | -41.18 | -41.03 |
| 2417.700 | -54.57 | -54.24 | -13 | -41.57 | -41.24 |
| 8059.000 | -53.88 | -53.47 | -13 | -40.88 | -40.47 |

**Note:** a. For measured frequency below 1GHz, a tuned dipole antenna is used.
b. Result calculation is as following:
Result = SG Reading + Cable Loss + Antenna Gain Corrected.
Antenna Gain Corrected: is used for antenna other than dipole to convert radiated power to ERP.
c. Spurious or harmonics above 1 GHz is too low to be detected or attenuated more than 60dB from limit value.

# 9. Frequency Stability Measurement

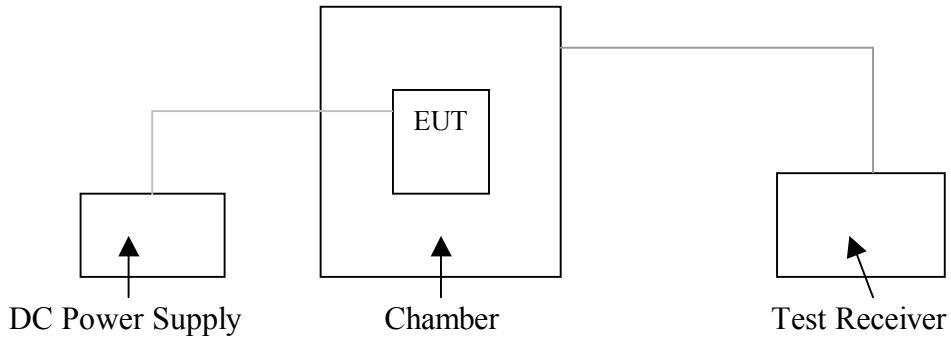
## 9. 1 Test Equipment

Please refer to Section 12 this report.

## 9. 2 Test Procedure

1. Place the EUT in the chamber, powered in its normal operation.
2. Set the temperature of the chamber –30 degree Centigrade. Allow the equipment to stabilize at that temperature.
3. Measurement the carrier frequency using preamplifier and frequency counter.
4. Repeated procedures 1 to 3 from –20 to 50 degree Centigrade at internals of 10 degree.

## 9. 3 Test Setup




## 9. 4 Rules and Specification Limits

According to § 2.1055 (a)(1), The frequency stability shall be measured with variation of ambient temperature from -30℃ to + 50℃ centigrade, and according to § 2.1055 (d)(2), the frequency stability shall be measured with reducing primary supply voltage to the battery operating end point which is specified by the manufacturer.

According to § 74.861(e)(4): The frequency tolerance of the transmitter shall be 0.005 percent.

## 9. 5 Test Result

**Frequency stability versus environment temperature**
**Wireless Microphone Transmitter: DC9V**

| Environment Temperature (℃) | Power Supplied (Vdc) | Frequency Measured (MHz) | Frequency Tolerance (ppm) | Nominal Frequency | Limit (ppm) |
|---|---|---|---|---|---|
| 50 | New Batt. | 710.3890 | -15.4842 | 710.400 | 50 |
| 40 | New Batt. | 710.3927 | -10.2759 | 710.400 | 50 |
| 30 | New Batt. | 710.3960 | -5.6306 | 710.400 | 50 |
| 20 | New Batt. | 710.4030 | 4.2230 | 710.400 | 50 |
| 10 | New Batt. | 710.4056 | 7.8829 | 710.400 | 50 |
| 0 | New Batt. | 710.4058 | 8.1644 | 710.400 | 50 |
| -10 | New Batt. | 710.4071 | 9.9944 | 710.400 | 50 |
| -20 | New Batt. | 710.4084 | 11.8243 | 710.400 | 50 |
| -30 | New Batt. | 710.4098 | 13.7950 | 710.400 | 50 |

**Frequency stability versus end-point supplied voltage (DC7V)**

| Environment Temperature (℃) | Power Supplied (Vdc) | Frequency Measured (MHz) | Frequency Tolerance (ppm) | Nominal Frequency | Limit (ppm) |
|---|---|---|---|---|---|
| 25 | End-Point | 710.402 | 2.8153 | 710.400 | 50 |

# 10. Photos of Testing

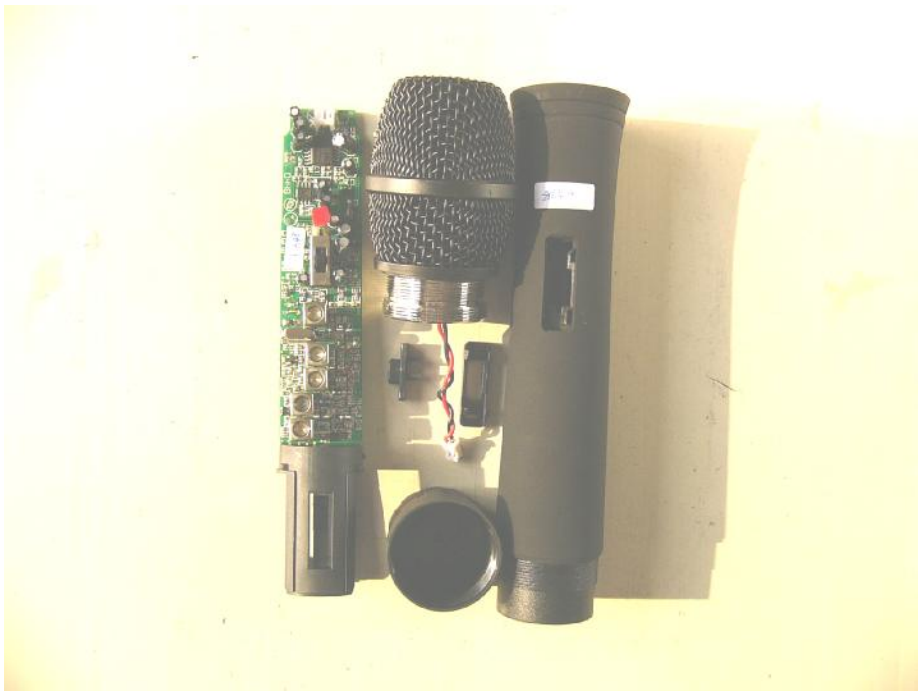
## 10. 1 EUT Test Photographs

Radiated emission test view

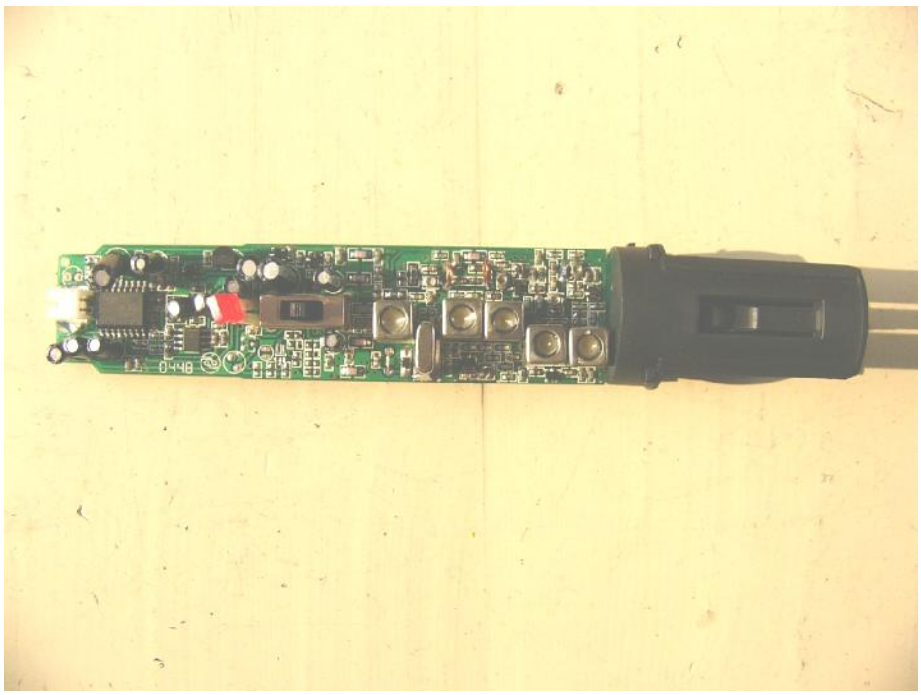
## 10. 2 EUT Detailed Photographs

Tx EUT view

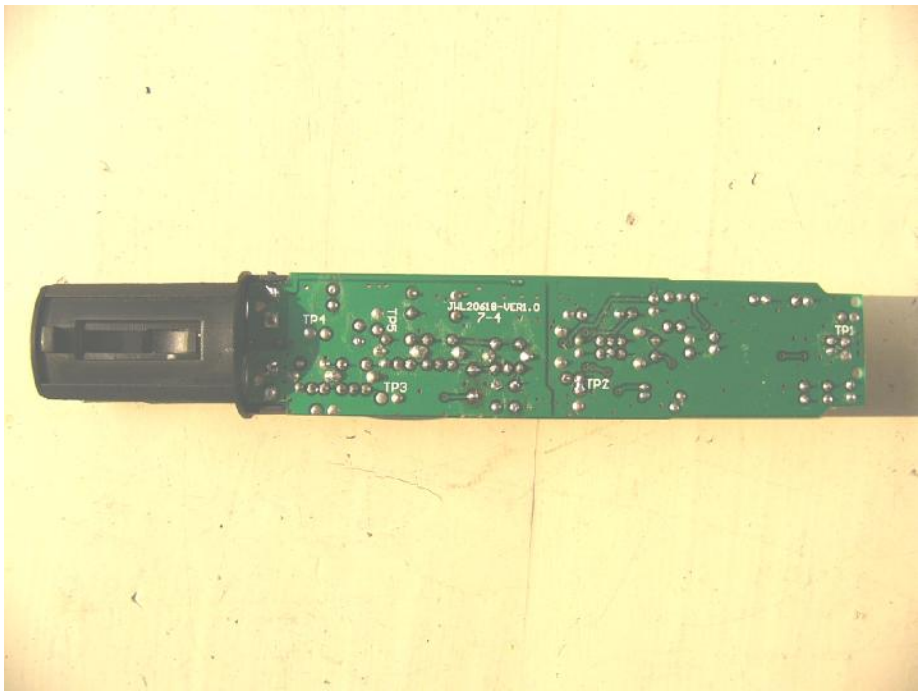
Tx EUT inside whole view



Tx Main board component side



Tx Main board solder side



# 11. FCC ID Label

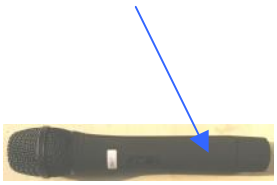
**FCC ID: PVDPDWM-2600**

**This device complies with Part 74 of the FCC Rules.**

The Label must not be a stick-on paper label. The Label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

**Proposed Label Location on EUT**

EUT Bottom View/Proposed FCC ID Location



# 12. Test Equipment

The following test equipments were used during the radiated & conducted emission test:

| Equipment/ Facilities | Manufacturer | Model # | Serial No. | Date of Cal. | Due Date |
|---|---|---|---|---|---|
| Turntable | KMO | KSZ001T | 200306 | NCR | NCR |
| Antenna Tower | KMO | KSZ002AT | 200307 | NCR | NCR |
| OATS | KMO | KSZSITE001 | N/A | July 06, 2004 | July 06, 2005 |
| EMI Test Receiver | Rohde & Schwarz | ESPI3 | 100180 | Oct.18, 2004 | Oct.18, 2005 |
| Signal Generator | Rohde & Schwarz | SMT03 | 100059 | Feb.01, 2005 | Feb.01, 2006 |
| Signal Generator | FLUKE | PM5418+Y/C | LO747012 | Feb 01, 2005 | Feb 01, 2006 |
| Signal Generator | FLUKE | PM5418TX | LO738007 | Feb 01, 2005 | Feb 01, 2006 |
| Biconical Antenna | Rohde & Schwarz | HK116 | EMC0502 | Dec. 14,2004 | Dec. 14,2005 |
| Bilog Antenna | Chase | CBL6111C | 2576 | Feb.01, 2005 | Feb.01, 2006 |
| Ultra Broadband Antenna | Rohde & Schwarz | HL 562 | 100110 | June.05, 2004 | June.05, 2005 |
| AMN | Rohde & Schwarz | ESH3-Z5 | 100196 | Oct. 23,2004 | Oct. 23, 2005 |
| AMN | Rohde & Schwarz | ESH3-Z5 | 100197 | Oct. 23,2004 | Oct. 23, 2005 |
| Pulse Limiter | Rohde & Schwarz | ESH3-Z2 | N/A | N/A | N/A |
| Absorbing Clamp | Rohde & Schwarz | MDS-21 | N/A | Oct. 29,2004 | Oct. 29,2005 |
| KMO Shielded Room | KMO | KMO-001 | N/A | N/A | N/A |
| EMI Test Receiver | Rohde & Schwarz | ESCS30 | 100003 | Feb. 27, 2005 | Feb.27, 2006 |
| AMN | Rohde & Schwarz | ESH3-Z5 | 100002 | Feb. 01, 2005 | Feb.01, 2006 |
| LISN | Kyoritsu | KNW-407 | 8-1441-8 | Feb. 23, 2005 | Feb.23, 2006 |
| EMI Test Receiver | Rohde & Schwarz | ESI26 | 838786/013 | Feb. 01, 2005 | Feb.01, 2006 |
| Bilog Antenna | Chase | CBL6112B | 2591 | Feb. 01, 2005 | Feb.01, 2006 |
| Horn Antenna | Rohde & Schwarz | HF906 | 100014 | Feb. 01, 2005 | Feb.01, 2006 |
| Power Meter | Rohde & Schwarz | NRVD | 100041 | Feb. 01, 2005 | Feb.01, 2006 |
| Radio Communication Test Set | Rohde & Schwarz | CMS 54 | 846621/024 | Feb 01, 2005 | Feb 01, 2006 |
| Modulation Analyzer | Hewlett-Packard | 8901B | 2303A00362 | Feb 01, 2005 | Feb 01, 2006 |
| Temperature Chamber | TABAI | PSL-4GTW | N/A | Feb 06, 2005 | Feb 06, 2006 |
| 3m Semi-Anechoic Chamber | Albatross Projects | 9mX6mX6m | N/A | Feb. 01, 2005 | Feb.01, 2006 |