# EMC TEST Report

## FCC ID: TTG05DW-01

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

**Issued Date :** Aug. 14, 2006
**Report No. :** 0509065
**Equipment :** Door/Window Transmitter
**Model No. :** DW-01

**Applicant :** ACES TECHNOLOGY CO., LTD
**Address :** 9, LANE 369, SEC. 3, TA-TUNG RD., HIS-CHIH, TAIPEI, TAIWAN, R.O.C.

**Tested by:**
Neutron Engineering Inc. EMC Laboratory
**Data of Test:**
Sep. 12, 2005 ~ Jul. 17, 2006

Testing Engineer : Alan Liu (Alan Liu)

Technical Manager : (Jeff Yang)

Authorized Signatory : (Andy Chiu)

**NEUTRON ENGINEERING INC.**

**No. 132-1, Lane 329, Sec. 2, Palain Rd.,**
**Shijr City, Taipei, Taiwan**
***TEL : (02) 2646-5426 FAX : (02) 2646-6815***

NVLAP Lab Code: 200145-0 ilac-MRA TAF 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.

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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 : | Door/Window Transmitter |
| Trade Name : | ACES |
| Model No. : | DW-01 |
| Applicant : | ACES TECHNOLOGY CO., LTD |
| Data of Test : | Sep. 12, 2005 ~ Jul. 17, 2006 |
| Test Item : | ENGINEERING SAMPLE |
| Standards : | FCC Part15, Subpart C / RSS-210: 2004/ ANCI 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-FCCP-1-0509065) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP and CNLA according to the ISO-17025 quality assessment standard and technical standard(s).

## 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards: (Antenna to EUT distance is **3** m)

| **FCC Part15(15.231), Subpart C** | | |
|---|---|---|
| Standard | Test Item | Judgment |
| 15.207 | Conducted Emission | N/A |
| 15.209 & 15.231(b) | Radiated Emission | PASS |
| 15.231(c) | 20dB Occupied Bandwidth Measurement | 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 **OS01** 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 |
|---|---|---|---|---|---|
| OS-01 | ANSI | 30MHz ~ 200MHz | V | 3.82 | |
| | | 30MHz ~ 200MHz | H | 3.60 | |
| | | 200MHz ~ 1,000MHz | V | 3.86 | |
| | | 200MHz ~ 1,000MHz | H | 3.94 | |
| OS-02 | 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

| | |
|---|---|
| Equipment | Door/Window Transmitter |
| Trade Name | ACES |
| Model No. | DW-01 |
| OEM Brand/Model No. | N/A |
| Model Difference | N/A |
| Product Description | The EUT is a Door/Window Transmitter.<br>A. Operation Frequency: 433.9 MHz<br>B. Modulation Type: Pulse Modulation (ASK)<br>C. Antenna Designation: Integral<br>D. Number Of Channel: 1<br>E. Transmitting Time: Periodic ≤ 5 seconds<br>F. Associated Receiver: FCC DOC<br><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 Supply | DC 3.6V |
| Connecting I/O Port(s) | Please refer to the User's Manual |
| Products Covered | N/A |
| EUT Modification(s) | N/A |

Note:

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

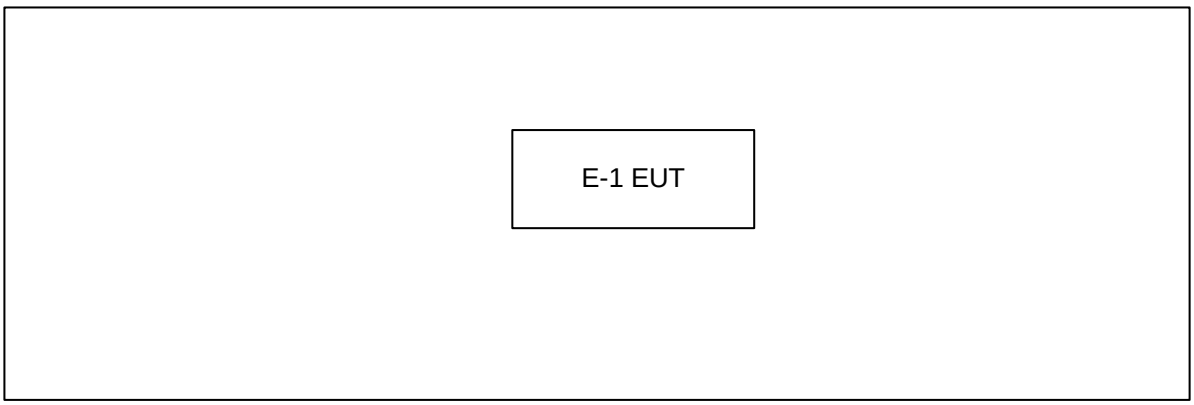
## 3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates 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 Test Mode | Description |
|---|---|
| Mode 1 | Vertical Stand |
| Mode 2 | Laid |
| Mode 3 | Side Stand |

| **For Conducted / Radiated Test** | |
|---|---|
| Final Test Mode | Description |
| Mode 1 | Vertical Stand |
| Mode 2 | Laid |
| Mode 3 | Side Stand |

3.3 BLOCK DIGRAM 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 | Door/Window Transmitter | ACES | DW-01 | TTG05DW-01 | N/A | EUT |
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| Item | Shielded Type | Ferrite Core | Length | Note |
|---|---|---|---|---|
| | N/A | N/A | N/A | |
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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 RADIATED EMISSION MEASUREMENT

4.1.1 RADIATED EMISSION LIMITS (Frequency Range 30MHz-1000MHz)

According to 15.231 the field strength of emissions from intentional radiators operated under these frequencies bands shall not exceed the following:

| Fundamental | Field Strength of Fundamental | | Field Strength of Spurious | |
|---|---|---|---|---|
| Frequency (MHz) | uV/meter | dBuV/meter | uV/meter | dBuV/meter |
| 40.66 – 40.70 | 2250 | 67.04 | 225 | 48.04 |
| 70 – 130 | 1250 | 61.94 | 125 | 41.94 |
| 130 – 174 | 1250 to 3750 | 61.94 to 71.48 | 125 to 375 | 41.94 to 51.48 |
| 174 – 260 | 3750 | 71.48 | 75 | 37.50 |
| 260 – 470 | 3750 to 12500 | 71.48 to 81.94 | 375 to 1250 | 51.48 to 61.94 |
| Above 470 | 12500 | 81.94 | 1250 | 61.94 |

Notes:

(1) Emission level in dBuV/m=20 log (uV/m)

(2) Measurement was performed at an antenna to the closed point of EUT distance of meters.

(3) Fundamental frequency shall not be located within the Restricted Bands specified in provision of 15.205.

(4) If spurious frequency which falls within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

| Frequencies (MHz) | Field strength (microvolts/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 |

Notes:

As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.1.2 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|---|---|---|---|---|---|
| 1 | Log-Bicon Antenna | MESS-ELEKTRONIK | VULB 9160 | 3177 | Feb. 06, 2007 |
| 2 | Test Cable | N/A | 10M_OS01 | N/A | Nov. 29, 2006 |
| 3 | Test Cable | N/A | OS01-1/-2 | N/A | Nov. 29, 2006 |
| 4 | Pre-Amplifier | Anritsu | MH648A | M09961 | Nov. 29, 2006 |
| 5 | Spectrum Analyzer | ADVAN TEST | R3261C | 81720298 | Sep. 14, 2006 |
| 6 | Test Receiver | MEB | SMV41 | 130 | Nov. 22, 2006 |
| 7 | Horn Antenna | Schwarzbeck | BBHA9120D | 9120D-325 | Oct. 26, 2006 |
| 8 | Antenna Mast | Chance Most | CMTB-1.5 | N/A | N/A |
| 9 | Turn Table | Chance Most | CMTB-1.5 | N/A | N/A |

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

4.1.3 TEST PROCEDURE

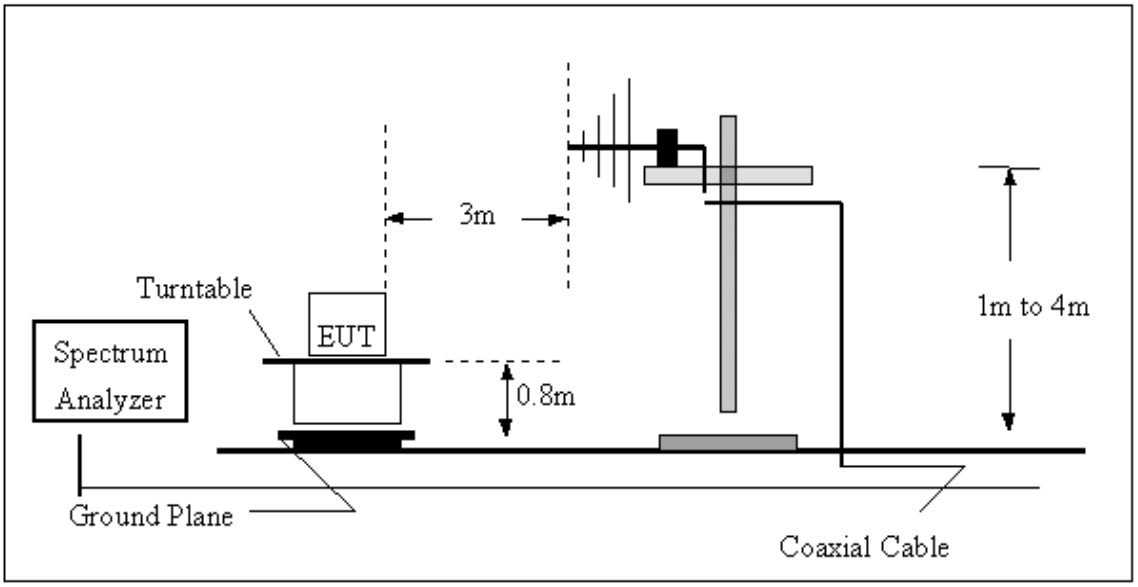
a. The measuring distance of at 10 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3m or 10 meter open area test site. The table was 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 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.

4.1.4 DEVIATION FROM TEST STANDARD

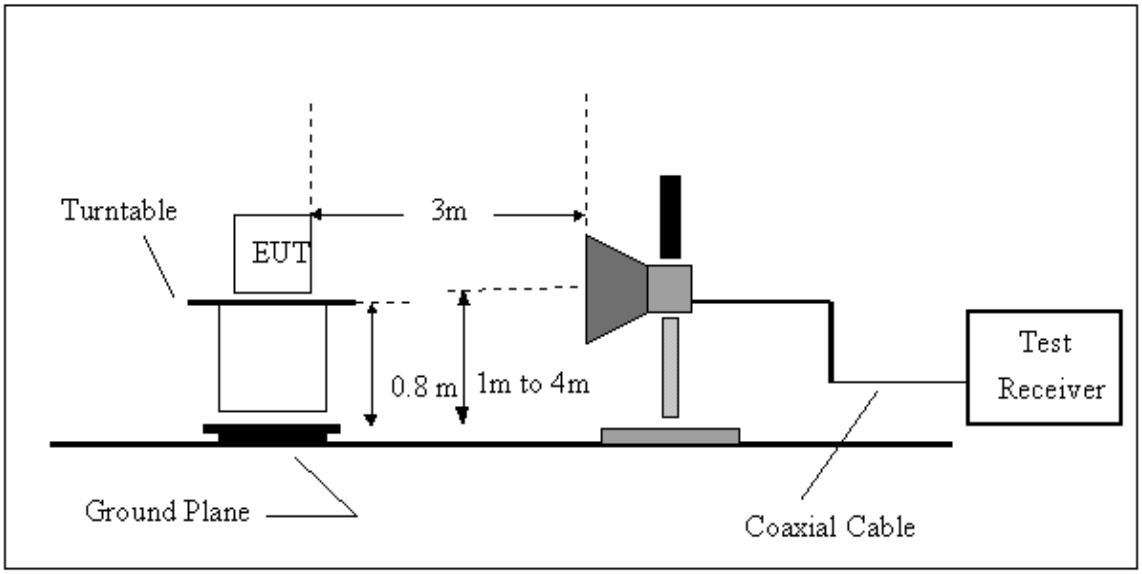
No deviation

4.1.5 TEST SETUP

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




(B) Radiated Emission Test Set-UP Frequency Over 1 GHz




4.1.6 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.

4.1.7 TEST RESULTS

| | | | |
|---|---|---|---|
| EUT： | Door/Window Transmitter | Model No. ： | DW-01 |
| Temperature： | 26 ℃ | Relative Humidity： | 76 % |
| Pressure： | 1016hPa | Test Power ： | DC 3.6V |
| Test band： | 30MHz ~ 1000MHz | | |
| Test Mode ： | Vertical Stand | | |
| The following table lists worst case data from TX with various orthogonal planes on the EUT antenna. | | | |

| Freq. (MHz) | Ant.Pol. H/V | DetectorMode (PK/AV) | Reading (dBuV) | Ant./CL/ Amp. CF(dB) | Actual FS (dBuV/m) | Limit-3m (dBuV/m) | Safe Margins (dBuV/m) | Note |
|---|---|---|---|---|---|---|---|---|
| 70.04 | V | Peak | 26.77 | - 6.99 | 19.78 | 40.00 | - 20.22 | |
| 110.96 | V | Peak | 24.82 | - 6.32 | 18.50 | 43.50 | - 25.00 | |
| 174.89 | V | Peak | 25.35 | - 4.69 | 20.66 | 43.50 | - 22.84 | |
| 427.17 | V | Peak | 34.00 | - 0.37 | 33.63 | 46.00 | - 12.37 | |
| 637.79 | V | Peak | 25.75 | 4.09 | 29.84 | 46.00 | - 16.16 | |
| 759.76 | V | Peak | 23.35 | 6.05 | 29.40 | 46.00 | - 16.60 | |

Remark：

(1) Spectrum Setting:
9 KHz – 150 KHz, RBW= 1 KHz, VBW=1 KHz, Sweep time = 200 ms.
150 K Hz – 30 MHz, RBW= 9 KHz, VBW=9 KHz, Sweep time = 200 ms.
30 MHz – 1000 MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

(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 measure-ment 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 how in table。

(5) EUT Orthogonal Axes：
“X” - denotes Laid on Table；”Y” - denotes Vertical Stand；”Z” - denotes Side Stand

| | | | |
|---|---|---|---|
| EUT： | Door/Window Transmitter | Model No. ： | DW-01 |
| Temperature： | 26 ℃ | Relative Humidity： | 76 % |
| Pressure： | 1016hPa | Test Power ： | DC 3.6V |
| Test band： | 30MHz ~ 1000MHz | | |
| Test Mode ： | Vertical Stand | | |
| The following table lists worst case data from TX with various orthogonal planes on the EUT antenna. | | | |

| Freq. (MHz) | Ant.Pol. H/V | DetectorMode (PK/AV) | Reading (dBuV) | Ant./CL/ Amp. CF(dB) | Actual FS (dBuV/m) | Limit-3m (dBuV/m) | Safe Margins (dBuV/m) | Note |
|---|---|---|---|---|---|---|---|---|
| 118.45 | H | Peak | 24.87 | - 5.60 | 19.27 | 43.50 | - 24.23 | |
| 279.00 | H | Peak | 23.55 | - 4.23 | 19.32 | 46.00 | - 26.68 | |
| 420.47 | H | Peak | 27.07 | - 0.53 | 26.54 | 46.00 | - 19.46 | |
| 427.17 | H | Peak | 31.52 | - 0.37 | 31.15 | 46.00 | - 14.85 | |
| 445.26 | H | Peak | 28.62 | 0.06 | 28.68 | 46.00 | - 17.32 | |
| 841.37 | H | Peak | 25.10 | 7.28 | 32.38 | 46.00 | - 13.62 | |

Remark：

(1) Spectrum Setting:
9 KHz – 150 KHz, RBW= 1 KHz, VBW=1 KHz, Sweep time = 200 ms.
150 K Hz – 30 MHz, RBW= 9 KHz, VBW=9 KHz, Sweep time = 200 ms.
30 MHz – 1000 MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

(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 measure-ment 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 how in table ◦

(5) EUT Orthogonal Axes：
“X” - denotes Laid on Table；”Y” - denotes Vertical Stand；”Z” - denotes Side Stand

| | | | |
|---|---|---|---|
| EUT： | Door/Window Transmitter | Model No. ： | DW-01 |
| Temperature： | 26 ℃ | Relative Humidity： | 76 % |
| Pressure： | 1016hPa | Test Power ： | DC 3.6V |
| Test band： | 30MHz ~ 1000MHz | | |
| Test Mode ： | Laid | | |
| The following table lists worst case data from TX with various orthogonal planes on the EUT antenna. | | | |

| Freq. (MHz) | Ant.Pol. H/V | DetectorMode (PK/AV) | Reading (dBuV) | Ant./CL/ Amp. CF(dB) | Actual FS (dBuV/m) | Limit-3m (dBuV/m) | Safe Margins (dBuV/m) | Note |
|---|---|---|---|---|---|---|---|---|
| 134.38 | V | Peak | 31.25 | - 4.78 | 26.47 | 43.50 | - 17.03 | |
| 163.50 | V | Peak | 29.37 | - 3.87 | 25.50 | 43.50 | - 18.00 | |
| 420.44 | V | Peak | 31.95 | - 0.53 | 31.42 | 46.00 | - 14.58 | |
| 427.18 | V | Peak | 35.37 | - 0.37 | 35.00 | 46.00 | - 11.00 | |
| 761.26 | V | Peak | 22.77 | 6.07 | 28.84 | 46.00 | - 17.16 | |
| 766.04 | V | Peak | 24.60 | 6.16 | 30.76 | 46.00 | - 15.24 | |

Remark：

(1) Spectrum Setting:
9 KHz – 150 KHz, RBW= 1 KHz, VBW=1 KHz, Sweep time = 200 ms.
150 K Hz – 30 MHz, RBW= 9 KHz, VBW=9 KHz, Sweep time = 200 ms.
30 MHz – 1000 MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

(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 measure-ment 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 how in table。

(5) EUT Orthogonal Axes：
“X” - denotes Laid on Table；”Y” - denotes Vertical Stand；”Z” - denotes Side Stand

| | | | |
|---|---|---|---|
| EUT： | Door/Window Transmitter | Model No. ： | DW-01 |
| Temperature： | 26 ℃ | Relative Humidity： | 76 % |
| Pressure： | 1016hPa | Test Power ： | DC 3.6V |
| Test band： | 30MHz ~ 1000MHz | | |
| Test Mode ： | Laid | | |
| The following table lists worst case data from TX with various orthogonal planes on the EUT antenna. | | | |

| Freq. (MHz) | Ant.Pol. H/V | DetectorMode (PK/AV) | Reading (dBuV) | Ant./CL/ Amp. CF(dB) | Actual FS (dBuV/m) | Limit-3m (dBuV/m) | Safe Margins (dBuV/m) | Note |
|---|---|---|---|---|---|---|---|---|
| 48.02 | H | Peak | 29.27 | - 5.90 | 23.37 | 40.00 | - 16.63 | |
| 127.98 | H | Peak | 30.52 | - 5.12 | 25.40 | 43.50 | - 18.10 | |
| 420.49 | H | Peak | 31.50 | - 0.53 | 30.97 | 46.00 | - 15.03 | |
| 427.18 | H | Peak | 34.85 | - 0.37 | 34.48 | 46.00 | - 11.52 | |
| 649.80 | H | Peak | 27.67 | 4.25 | 31.92 | 46.00 | - 14.08 | |
| 766.20 | H | Peak | 26.54 | 6.17 | 32.71 | 46.00 | - 13.29 | |

Remark：

(1) Spectrum Setting:
9 KHz – 150 KHz, RBW= 1 KHz, VBW=1 KHz, Sweep time = 200 ms.
150 K Hz – 30 MHz, RBW= 9 KHz, VBW=9 KHz, Sweep time = 200 ms.
30 MHz – 1000 MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

(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 measure-ment 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 how in table。

(5) EUT Orthogonal Axes：
“X” - denotes Laid on Table；”Y” - denotes Vertical Stand；”Z” - denotes Side Stand

| | | | |
|---|---|---|---|
| EUT： | Door/Window Transmitter | Model No. ： | DW-01 |
| Temperature： | 26 ℃ | Relative Humidity： | 76 % |
| Pressure： | 1016hPa | Test Power ： | DC 3.6V |
| Test band： | 30MHz ~ 1000MHz | | |
| Test Mode ： | Side Stand | | |
| The following table lists worst case data from TX with various orthogonal planes on the EUT antenna. | | | |

| Freq. (MHz) | Ant.Pol. H/V | DetectorMode (PK/AV) | Reading (dBuV) | Ant./CL/ Amp. CF(dB) | Actual FS (dBuV/m) | Limit-3m (dBuV/m) | Safe Margins (dBuV/m) | Note |
|---|---|---|---|---|---|---|---|---|
| 47.02 | V | Peak | 27.07 | - 5.91 | 21.16 | 40.00 | - 18.84 | |
| 79.96 | V | Peak | 32.52 | - 9.38 | 23.14 | 40.00 | - 16.86 | |
| 160.87 | V | Peak | 24.55 | - 3.69 | 20.86 | 43.50 | - 22.64 | |
| 420.43 | V | Peak | 33.40 | - 0.53 | 32.87 | 46.00 | - 13.13 | |
| 759.44 | V | Peak | 24.95 | 6.05 | 31.00 | 46.00 | - 15.00 | |
| 853.32 | V | Peak | 22.85 | 7.43 | 30.28 | 46.00 | - 15.72 | |

Remark：

(1) Spectrum Setting:
9 KHz – 150 KHz, RBW= 1 KHz, VBW=1 KHz, Sweep time = 200 ms.
150 K Hz – 30 MHz, RBW= 9 KHz, VBW=9 KHz, Sweep time = 200 ms.
30 MHz – 1000 MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

(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 measure-ment 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 how in table ◦

(5) EUT Orthogonal Axes：
“X” - denotes Laid on Table；”Y” - denotes Vertical Stand；”Z” - denotes Side Stand

| | | | |
|---|---|---|---|
| EUT： | Door/Window Transmitter | Model No. ： | DW-01 |
| Temperature： | 26 ℃ | Relative Humidity： | 76 % |
| Pressure： | 1016hPa | Test Power ： | DC 3.6V |
| Test band： | 30MHz ~ 1000MHz | | |
| Test Mode ： | Side Stand | | |
| The following table lists worst case data from TX with various orthogonal planes on the EUT antenna. | | | |

| Freq. (MHz) | Ant.Pol. H/V | DetectorMode (PK/AV) | Reading (dBuV) | Ant./CL/ Amp. CF(dB) | Actual FS (dBuV/m) | Limit-3m (dBuV/m) | Safe Margins (dBuV/m) | Note |
|---|---|---|---|---|---|---|---|---|
| 30.03 | H | Peak | 29.22 | - 6.47 | 22.75 | 40.00 | - 17.25 | |
| 47.96 | H | Peak | 27.42 | - 5.90 | 21.52 | 40.00 | - 18.48 | |
| 160.96 | H | Peak | 23.87 | - 3.70 | 20.17 | 43.50 | - 23.33 | |
| 296.96 | H | Peak | 24.27 | - 3.56 | 20.71 | 46.00 | - 25.29 | |
| 427.16 | H | Peak | 34.12 | - 0.37 | 33.75 | 46.00 | - 12.25 | |
| 454.27 | H | Peak | 31.12 | 0.27 | 31.39 | 46.00 | - 14.61 | |

Remark：

(1) Spectrum Setting:
9 KHz – 150 KHz, RBW= 1 KHz, VBW=1 KHz, Sweep time = 200 ms.
150 K Hz – 30 MHz, RBW= 9 KHz, VBW=9 KHz, Sweep time = 200 ms.
30 MHz – 1000 MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

(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 measure-ment 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 how in table ◦

(5) EUT Orthogonal Axes：
“X” - denotes Laid on Table；”Y” - denotes Vertical Stand；”Z” - denotes Side Stand

| | | | |
|---|---|---|---|
| EUT： | Door/Window Transmitter | Model No. ： | DW-01 |
| Temperature： | 26 ℃ | Relative Humidity： | 76 % |
| Pressure： | 1016hPa | Test Power ： | DC 3.6V |
| Test band： | 30MHz ~ 5000MHz (Fundamental & Spurious) | | |
| Test Mode ： | Vertical Stand | | |
| The following table lists worst case data from TX with various orthogonal planes on the EUT antenna. | | | |
| ***About the duty cycle correction factor calculated, please refer to the next page (Table-1).*** | | | |

| Freq. (MHz) | F/S | Ant.Pol. H/V | Reading (dBuV) | Ant./CL CF(dB) | Duty Cycle CF(dB) | Peak (dBuV/m) | AV (dBuV/m) | Peak Limit (dBuV/m) | AV Limit (dBuV/m) | Safe Margins (dBuV/m) | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 433.94 | F | V | 68.70 | -0.21 | - 1.33 | 68.49 | 67.16 | 100.83 | 80.83 | - 13.67 | AV |
| 867.89 | S | V | 27.10 | 7.63 | - 1.33 | 34.73 | 33.40 | 80.83 | 60.83 | - 27.43 | AV |
| 1296.00 | S | V | 53.52 | -6.89 | - 1.33 | 46.63 | 45.30 | 80.83 | 60.83 | - 15.53 | AV |
| 1735.60 | S | V | 54.34 | -4.51 | - 1.33 | 49.83 | 48.50 | 80.83 | 60.83 | - 12.33 | AV |
| 2168.00 | S | V | 43.02 | -2.45 | - 1.33 | 40.57 | 39.24 | 80.83 | 60.83 | - 21.59 | AV |
| 2600.00 | S | V | 45.83 | -1.18 | - 1.33 | 44.65 | 43.32 | 80.83 | 60.83 | - 17.51 | AV |
| 3040.00 | S | V | 52.01 | 0.68 | - 1.33 | 52.69 | 51.36 | 80.83 | 60.83 | - 9.47 | AV |
| 3471.20 | S | V | 41.45 | 2.03 | - 1.33 | 43.48 | 42.15 | 80.83 | 60.83 | - 18.68 | AV |
| 3912.00 | S | V | 47.66 | 3.50 | - 1.33 | 51.16 | 49.83 | 54.00 | 54.00 | - 2.84 | Peak |
| 4339.00 | S | V | 40.40 | 3.81 | - 1.33 | 44.21 | 42.88 | 54.00 | 54.00 | - 9.79 | Peak |

Remark：

(1) Spectrum Setting:
9 KHz – 150 KHz, RBW= 1 KHz, VBW=1 KHz, Sweep time = 200 ms.
150 K Hz – 30 MHz, RBW= 9 KHz, VBW=9 KHz, Sweep time = 200 ms.
30 MHz – 1000 MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

(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 measure-ment didn't perform。

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

(4) The average value of fundamental frequency is:
Average = Peak value + 20log(Duty cycle)

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

| | | | |
|---|---|---|---|
| EUT： | Door/Window Transmitter | Model No. ： | DW-01 |
| Temperature： | 26 ℃ | Relative Humidity： | 76 % |
| Pressure： | 1016hPa | Test Power ： | DC 3.6V |
| Test band： | 30MHz ~ 5000MHz (Fundamental & Spurious) | | |
| Test Mode ： | Vertical Stand | | |
| The following table lists worst case data from TX with various orthogonal planes on the EUT antenna. | | | |
| ***About the duty cycle correction factor calculated, please refer to the next page (Table-1).*** | | | |

| Freq. (MHz) | F/S | Ant.Pol. H/V | Reading (dBuV) | Ant./CL CF(dB) | Duty Cycle CF(dB) | Peak (dBuV/m) | AV (dBuV/m) | Peak Limit (dBuV/m) | AV Limit (dBuV/m) | Safe Margins (dBuV/m) | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 433.94 | F | H | 72.57 | -0.21 | - 1.33 | 72.36 | 71.03 | 100.83 | 80.83 | - 9.80 | AV |
| 867.89 | S | H | 29.72 | 7.63 | - 1.33 | 37.35 | 36.02 | 80.83 | 60.83 | - 24.81 | AV |
| 1296.00 | S | H | 43.53 | -6.89 | - 1.33 | 36.64 | 35.31 | 80.83 | 60.83 | - 25.52 | AV |
| 1735.60 | S | H | 45.89 | -4.51 | - 1.33 | 41.38 | 40.05 | 80.83 | 60.83 | - 20.78 | AV |
| 2169.50 | S | H | 39.26 | -2.45 | - 1.33 | 36.81 | 35.48 | 80.83 | 60.83 | - 25.35 | AV |
| 2600.00 | S | H | 45.19 | -1.18 | - 1.33 | 44.01 | 42.68 | 80.83 | 60.83 | - 18.15 | AV |
| 3040.00 | S | H | 47.81 | 0.68 | - 1.33 | 48.49 | 47.16 | 80.83 | 60.83 | - 13.67 | AV |
| 3472.00 | S | H | 42.72 | 2.03 | - 1.33 | 44.75 | 43.42 | 80.83 | 60.83 | - 17.41 | AV |
| 3912.00 | S | H | 47.96 | 3.50 | - 1.33 | 51.46 | 50.13 | 54.00 | 54.00 | - 2.54 | Peak |
| 4288.00 | S | H | 41.35 | 3.81 | - 1.33 | 45.16 | 43.83 | 54.00 | 54.00 | - 8.84 | Peak |

Remark：

(1) Spectrum Setting:
9 KHz – 150 KHz, RBW= 1 KHz, VBW=1 KHz, Sweep time = 200 ms.
150 K Hz – 30 MHz, RBW= 9 KHz, VBW=9 KHz, Sweep time = 200 ms.
30 MHz – 1000 MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

(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 measure-ment didn‘t perform。

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

(4) The average value of fundamental frequency is:
Average = Peak value + 20log(Duty cycle)

(5) EUT Orthogonal Axes：
“X” - denotes Laid on Table；”Y” - denotes Vertical Stand；”Z” - denotes Side Stand

| | | | |
|---|---|---|---|
| EUT： | Door/Window Transmitter | Model No. ： | DW-01 |
| Temperature： | 26 ℃ | Relative Humidity： | 76 % |
| Pressure： | 1016hPa | Test Power ： | DC 3.6V |
| Test band： | 30MHz ~ 5000MHz (Fundamental & Spurious) | | |
| Test Mode ： | Laid | | |
| The following table lists worst case data from TX with various orthogonal planes on the EUT antenna. | | | |
| ***About the duty cycle correction factor calculated, please refer to the next page (Table-1).*** | | | |

| Freq. (MHz) | F/S | Ant.Pol. H/V | Reading (dBuV) | Ant./CL CF(dB) | Duty Cycle CF(dB) | Peak (dBuV/m) | AV (dBuV/m) | Peak Limit (dBuV/m) | AV Limit (dBuV/m) | Safe Margins (dBuV/m) | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 433.94 | F | V | 68.00 | -0.21 | - 1.33 | 67.79 | 66.46 | 100.83 | 80.83 | - 14.37 | AV |
| 867.90 | S | V | 28.92 | 7.63 | - 1.33 | 36.55 | 35.22 | 80.83 | 60.83 | - 25.61 | AV |
| 1296.00 | S | V | 46.68 | -6.89 | - 1.33 | 39.79 | 38.46 | 80.83 | 60.83 | - 22.37 | AV |
| 1735.60 | S | V | 47.02 | -4.51 | - 1.33 | 42.51 | 41.18 | 80.83 | 60.83 | - 19.65 | AV |
| 2169.50 | S | V | 39.62 | -2.45 | - 1.33 | 37.17 | 35.84 | 80.83 | 60.83 | - 24.99 | AV |
| 2600.00 | S | V | 45.27 | -1.18 | - 1.33 | 44.09 | 42.76 | 80.83 | 60.83 | - 18.07 | AV |
| 3040.00 | S | V | 50.96 | 0.68 | - 1.33 | 51.64 | 50.31 | 80.83 | 60.83 | - 10.52 | AV |
| 3472.00 | S | V | 44.66 | 2.03 | - 1.33 | 46.69 | 45.36 | 80.83 | 60.83 | - 15.47 | AV |
| 3912.00 | S | V | 43.12 | 3.50 | - 1.33 | 46.62 | 45.29 | 54.00 | 54.00 | - 7.38 | Peak |
| 4339.00 | S | V | 39.51 | 3.81 | - 1.33 | 43.32 | 41.99 | 54.00 | 54.00 | - 10.68 | Peak |

Remark：

(1) Spectrum Setting:
9 KHz – 150 KHz, RBW= 1 KHz, VBW=1 KHz, Sweep time = 200 ms.
150 K Hz – 30 MHz, RBW= 9 KHz, VBW=9 KHz, Sweep time = 200 ms.
30 MHz – 1000 MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

(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 measure-ment didn't perform。

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

(4) The average value of fundamental frequency is:
Average = Peak value + 20log(Duty cycle)

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

| | | | |
|---|---|---|---|
| EUT： | Door/Window Transmitter | Model No. ： | DW-01 |
| Temperature： | 26 ℃ | Relative Humidity： | 76 % |
| Pressure： | 1016hPa | Test Power ： | DC 3.6V |
| Test band： | 30MHz ~ 5000MHz (Fundamental & Spurious) | | |
| Test Mode ： | Laid | | |
| The following table lists worst case data from TX with various orthogonal planes on the EUT antenna. | | | |
| ***About the duty cycle correction factor calculated, please refer to the next page (Table-1).*** | | | |

| Freq. (MHz) | F/S | Ant.Pol. H/V | Reading (dBuV) | Ant./CL CF(dB) | Duty Cycle CF(dB) | Peak (dBuV/m) | AV (dBuV/m) | Peak Limit (dBuV/m) | AV Limit (dBuV/m) | Safe Margins (dBuV/m) | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 433.94 | F | H | 66.97 | -0.21 | -1.33 | 66.76 | 65.43 | 100.83 | 80.83 | - 15.40 | AV |
| 867.91 | S | H | 26.57 | 7.63 | -1.33 | 34.20 | 32.87 | 80.83 | 60.83 | - 27.96 | AV |
| 1296.00 | S | H | 50.01 | -6.89 | -1.33 | 43.12 | 41.79 | 80.83 | 60.83 | - 19.04 | AV |
| 1735.60 | S | H | 47.57 | -4.51 | -1.33 | 43.06 | 41.73 | 80.83 | 60.83 | - 19.10 | AV |
| 2169.50 | S | H | 40.13 | -2.45 | -1.33 | 37.68 | 36.35 | 80.83 | 60.83 | - 24.48 | AV |
| 2600.00 | S | H | 43.68 | -1.18 | -1.33 | 42.50 | 41.17 | 80.83 | 60.83 | - 19.66 | AV |
| 3040.00 | S | H | 45.11 | 0.68 | -1.33 | 45.79 | 44.46 | 80.83 | 60.83 | - 16.37 | AV |
| 3440.00 | S | H | 41.99 | 1.93 | -1.33 | 43.92 | 42.59 | 80.83 | 60.83 | - 18.24 | AV |
| 3905.10 | S | H | 41.80 | 3.47 | -1.33 | 45.27 | 43.94 | 54.00 | 54.00 | - 8.73 | Peak |
| 4339.00 | S | H | 39.67 | 3.81 | -1.33 | 43.48 | 42.15 | 54.00 | 54.00 | - 10.52 | Peak |

Remark：

(1) Spectrum Setting:
9 KHz – 150 KHz, RBW= 1 KHz, VBW=1 KHz, Sweep time = 200 ms.
150 K Hz – 30 MHz, RBW= 9 KHz, VBW=9 KHz, Sweep time = 200 ms.
30 MHz – 1000 MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

(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 measure-ment didn‘t perform。

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

(4) The average value of fundamental frequency is:
Average = Peak value + 20log(Duty cycle)

(5) EUT Orthogonal Axes：
“X” - denotes Laid on Table；”Y” - denotes Vertical Stand；”Z” - denotes Side Stand

| | | | |
|---|---|---|---|
| EUT： | Door/Window Transmitter | Model No. ： | DW-01 |
| Temperature： | 26 ℃ | Relative Humidity： | 76 % |
| Pressure： | 1016hPa | Test Power ： | DC 3.6V |
| Test band： | 30MHz ~ 5000MHz (Fundamental & Spurious) | | |
| Test Mode ： | Side Stand | | |
| The following table lists worst case data from TX with various orthogonal planes on the EUT antenna. | | | |
| ***About the duty cycle correction factor calculated, please refer to the next page (Table-1).*** | | | |

| Freq. (MHz) | F/S | Ant.Pol. H/V | Reading (dBuV) | Ant./CL CF(dB) | Duty Cycle CF(dB) | Peak (dBuV/m) | AV (dBuV/m) | Peak Limit (dBuV/m) | AV Limit (dBuV/m) | Safe Margins (dBuV/m) | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 433.94 | F | V | 65.32 | -0.21 | -1.33 | 65.11 | 63.78 | 100.83 | 80.83 | - 17.05 | AV |
| 867.88 | S | V | 26.05 | 7.63 | -1.33 | 33.68 | 32.35 | 80.83 | 60.83 | - 28.48 | AV |
| 1296.00 | S | V | 46.37 | -6.89 | -1.33 | 39.48 | 38.15 | 80.83 | 60.83 | - 22.68 | AV |
| 1735.60 | S | V | 48.05 | -4.51 | -1.33 | 43.54 | 42.21 | 80.83 | 60.83 | - 18.62 | AV |
| 2168.00 | S | V | 41.99 | -2.45 | -1.33 | 39.54 | 38.21 | 80.83 | 60.83 | - 22.62 | AV |
| 2600.00 | S | V | 48.23 | -1.18 | -1.33 | 47.05 | 45.72 | 80.83 | 60.83 | - 15.11 | AV |
| 3040.00 | S | V | 45.26 | 0.68 | -1.33 | 45.94 | 44.61 | 80.83 | 60.83 | - 16.22 | AV |
| 3472.00 | S | V | 44.79 | 2.03 | -1.33 | 46.82 | 45.49 | 80.83 | 60.83 | - 15.34 | AV |
| 3912.00 | S | V | 42.94 | 3.50 | -1.33 | 46.44 | 45.11 | 54.00 | 54.00 | - 7.56 | Peak |
| 4339.00 | S | V | 39.21 | 3.81 | -1.33 | 43.02 | 41.69 | 54.00 | 54.00 | - 10.98 | Peak |

Remark：

(1) Spectrum Setting:
9 KHz – 150 KHz, RBW= 1 KHz, VBW=1 KHz, Sweep time = 200 ms.
150 K Hz – 30 MHz, RBW= 9 KHz, VBW=9 KHz, Sweep time = 200 ms.
30 MHz – 1000 MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

(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 measure-ment didn‘t perform。

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

(4) The average value of fundamental frequency is:
Average = Peak value + 20log(Duty cycle)

(5) EUT Orthogonal Axes：
“X” - denotes Laid on Table；”Y” - denotes Vertical Stand；”Z” - denotes Side Stand

| | | | |
|---|---|---|---|
| EUT： | Door/Window Transmitter | Model No. ： | DW-01 |
| Temperature： | 26 ℃ | Relative Humidity： | 76 % |
| Pressure： | 1016hPa | Test Power ： | DC 3.6V |
| Test band： | 30MHz ~ 5000MHz (Fundamental & Spurious) | | |
| Test Mode ： | Side Stand | | |
| The following table lists worst case data from TX with various orthogonal planes on the EUT antenna. | | | |
| ***About the duty cycle correction factor calculated, please refer to the next page (Table-1).*** | | | |

| Freq. (MHz) | F/S | Ant.Pol. H/V | Reading (dBuV) | Ant./CL CF(dB) | Duty Cycle CF(dB) | Peak (dBuV/m) | AV (dBuV/m) | Peak Limit (dBuV/m) | AV Limit (dBuV/m) | Safe Margins (dBuV/m) | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 433.94 | F | H | 70.57 | -0.21 | -1.33 | 70.36 | 69.03 | 100.83 | 80.83 | - 11.80 | AV |
| 867.90 | S | H | 30.35 | 7.63 | -1.33 | 37.98 | 36.65 | 80.83 | 60.83 | - 24.18 | AV |
| 1296.00 | S | H | 48.13 | -6.89 | -1.33 | 41.24 | 39.91 | 80.83 | 60.83 | - 20.92 | AV |
| 1735.60 | S | H | 47.03 | -4.51 | -1.33 | 42.52 | 41.19 | 80.83 | 60.83 | - 19.64 | AV |
| 2169.50 | S | H | 39.81 | -2.45 | -1.33 | 37.36 | 36.03 | 80.83 | 60.83 | - 24.80 | AV |
| 2480.00 | S | H | 41.35 | -1.66 | -1.33 | 39.69 | 38.36 | 80.83 | 60.83 | - 22.47 | AV |
| 2603.40 | S | H | 39.54 | -1.16 | -1.33 | 38.38 | 37.05 | 80.83 | 60.83 | - 23.78 | AV |
| 3040.00 | S | H | 45.29 | 0.68 | -1.33 | 45.97 | 44.64 | 80.83 | 60.83 | - 16.19 | AV |
| 3472.00 | S | H | 42.42 | 2.03 | -1.33 | 44.45 | 43.12 | 80.83 | 60.83 | - 17.71 | AV |
| 3905.10 | S | H | 40.48 | 3.47 | -1.33 | 43.95 | 42.62 | 54.00 | 54.00 | - 10.05 | Peak |
| 3968.00 | S | H | 41.26 | 3.68 | -1.33 | 44.94 | 43.61 | 54.00 | 54.00 | - 9.06 | Peak |
| 4320.00 | S | H | 41.02 | 3.81 | -1.33 | 44.83 | 43.50 | 54.00 | 54.00 | - 9.17 | Peak |
| 4339.00 | S | H | 38.73 | 3.81 | -1.33 | 42.54 | 41.21 | 54.00 | 54.00 | - 11.46 | Peak |

Remark：

(1) Spectrum Setting:
9 KHz – 150 KHz, RBW= 1 KHz, VBW=1 KHz, Sweep time = 200 ms.
150 K Hz – 30 MHz, RBW= 9 KHz, VBW=9 KHz, Sweep time = 200 ms.
30 MHz – 1000 MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

(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 measure-ment didn‘t perform。

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

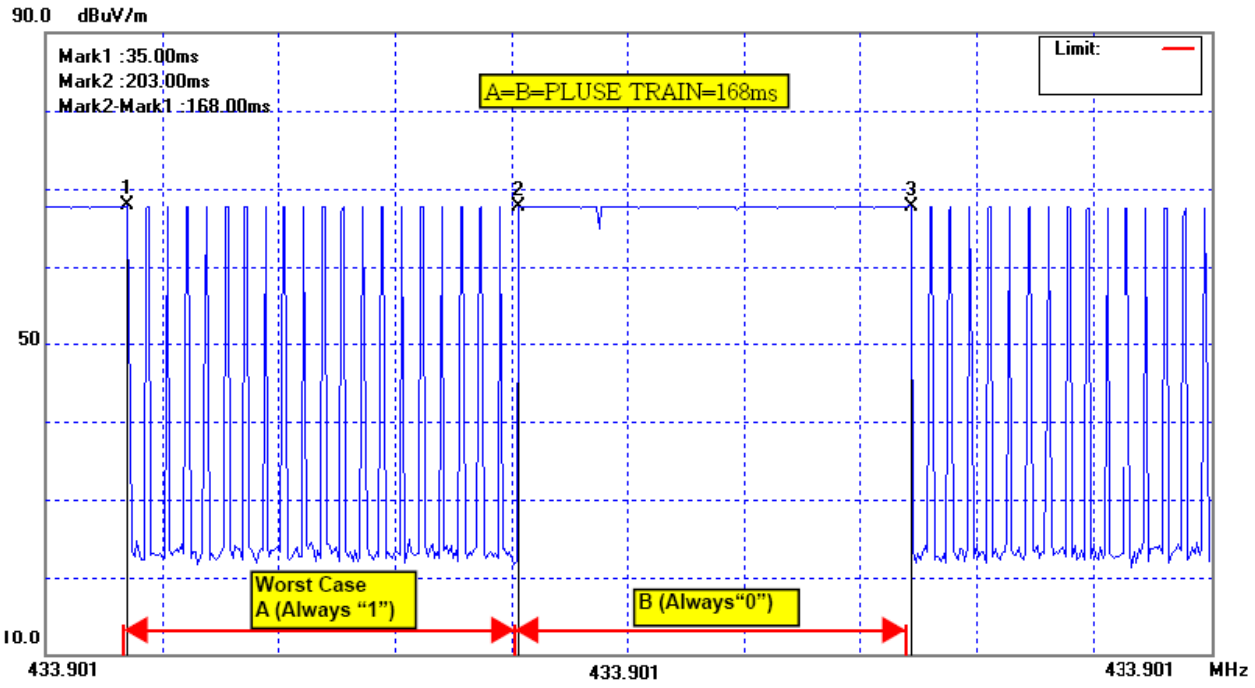
(4) The average value of fundamental frequency is:
Average = Peak value + 20log(Duty cycle)

(5) EUT Orthogonal Axes：
“X” - denotes Laid on Table；”Y” - denotes Vertical Stand；”Z” - denotes Side Stand

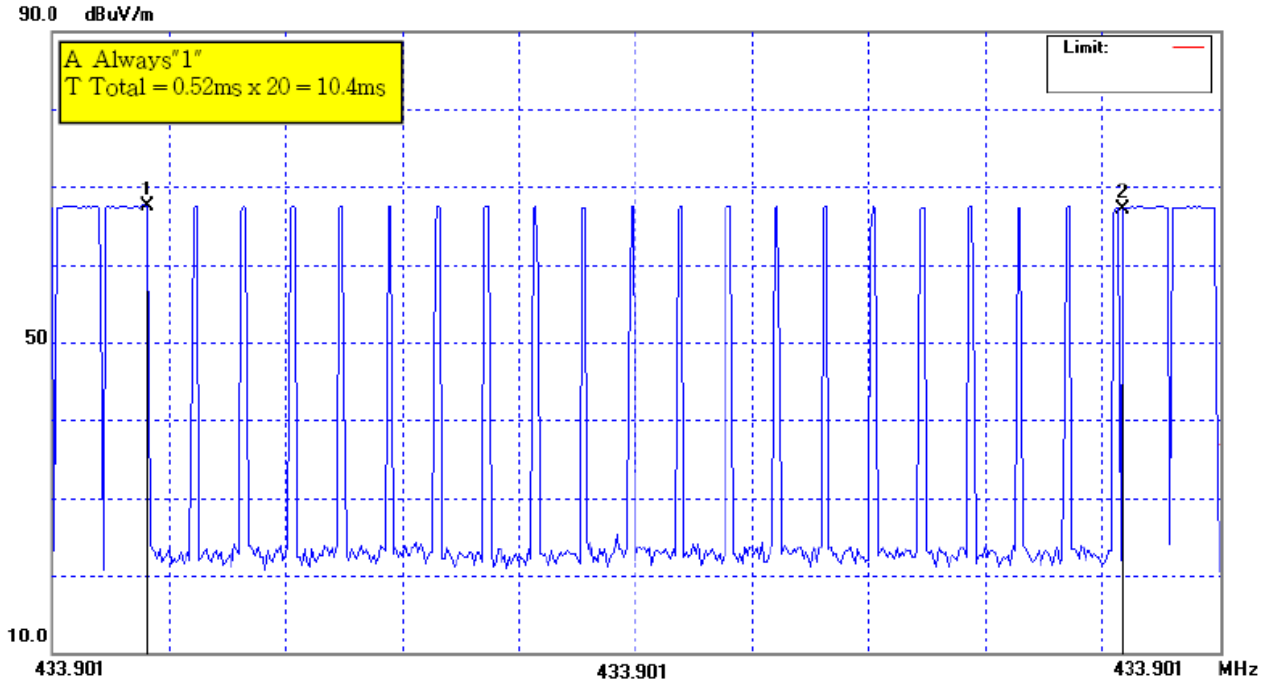
| Duty Cycle Correction Factor Calculated | | | |
|---|---|---|---|
| EUT： | Door/Window Transmitter | Model No. ： | DW-01 |
| Temperature： | 23 ℃ | Relative Humidity： | 51 % |
| Pressure： | 1012hPa | Test Power ： | DC 3.6V |

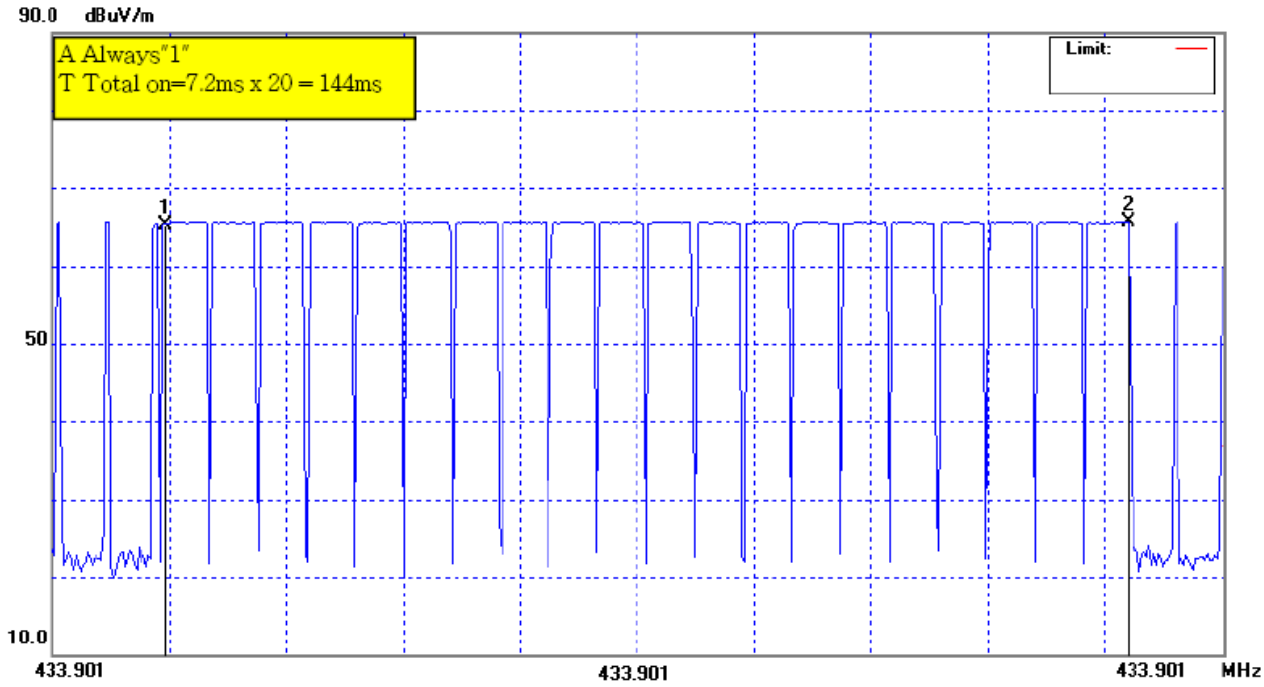
| Frequency (MHz) | Pulse Train $T_{(P)}$ (ms) | Total Duration of EUT at active state($T_{(on)}$) (ms) | Factor = 20 log[ $T_{(on)}$/ $T_{(P)}$ ] |
|---|---|---|---|
| 433.9 | 168 ms | 144 ms (The data is always “1” ) | -1.33 dB |
| | | 10.4 ms (The data is always “0” ) | -24.16 dB |
| Note: The final calculate will be used the worst case condition:” The data is always “ 1 “ | | | |

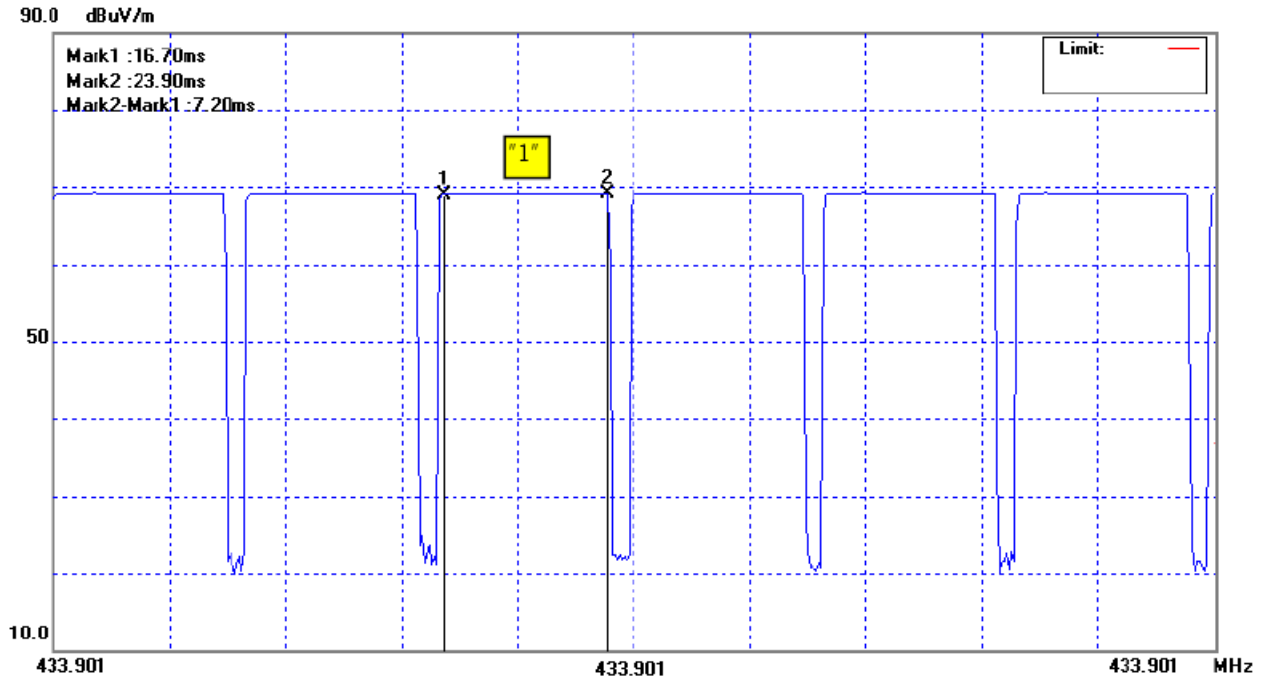
***Plot For Pulse Train: $T_{(P)}$***

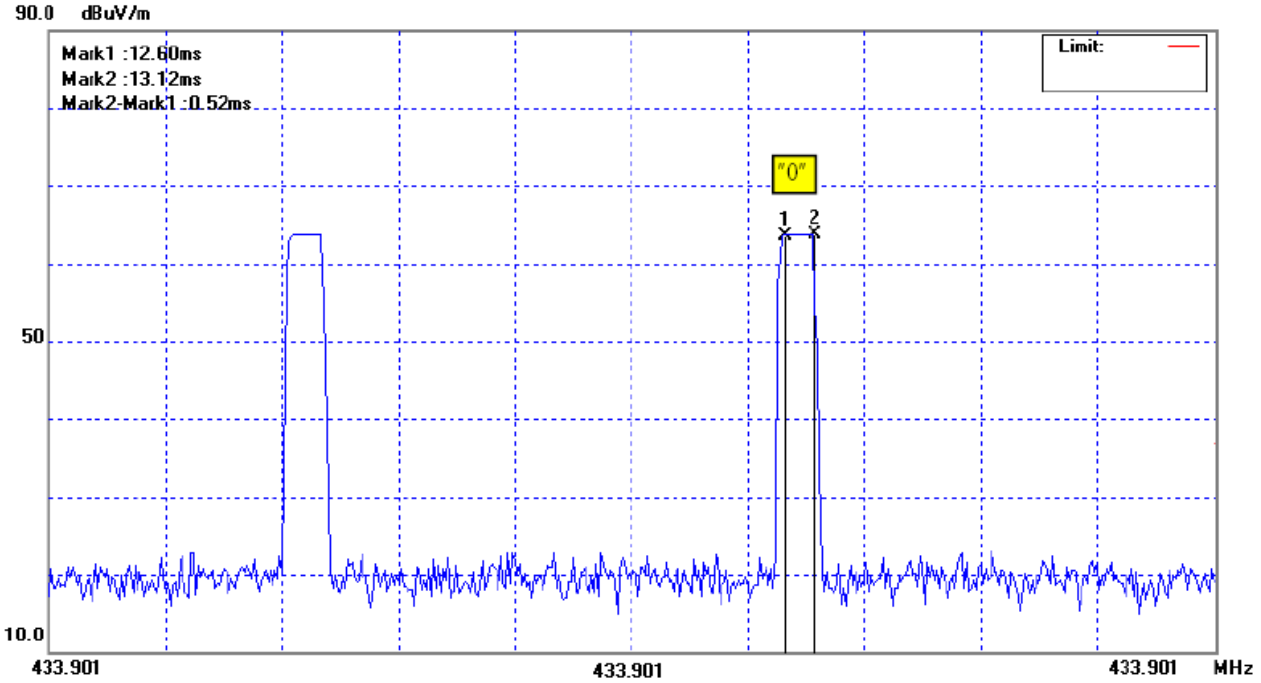


***Plot For Total Duration of EUT at active state: $T_{(on)}$***




90.0 dBuV/m
Mark1 :16.70ms
Mark2 :23.90ms
Mark2-Mark1 :7.20ms
Limit:
"1"
1
2
50
10.0
433.901
433.901
433.901
MHz


90.0 dBuV/m
Mark1 :12.60ms
Mark2 :13.12ms
Mark2-Mark1 :0.52ms
Limit:
"0"
1 2
50
10.0
433.901
433.901
433.901
MHz

## 4.2 20dB OCCUPIED BANDWIDTH MEASUREMENT

### 4.2.1 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|---|---|---|---|---|---|
| 1 | Spectrum Analyzer | ADVAN TEST | R3132 | 81700025 | Feb. 21, 2007 |
| 2 | Log-Bicon Antenna | MESS-ELEKTRONIK | VULB 9160 | 3177 | Feb. 06, 2007 |

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

### 4.2.2 TEST RESULTS

| | | | |
|---|---|---|---|
| EUT： | Door/Window Transmitter | Model No. ： | DW-01 |
| Temperature： | 23 ℃ | Relative Humidity： | 51 % |
| Pressure： | 1016hPa | Test Power ： | DC 3.6V |

| Frequency (MHz) | 20 dB Bandwidth (KHz) | Max. Limit (KHz) | Test Result |
|---|---|---|---|
| 433.9 | 462 | 1084.8 | PASS |

Note:
The bandwidth of the emission shall be no wider than 0.25% of the center frequency for device operating above 70 MHz and below 900 MHz.


Mon 2005 Dec 19 22:39
REF 100.0 dBµV
MKΔ 462 kHz
10dB/ A_View Posi B_Blank Posi -0.10 dB
DELTA MKR
462 kHz
Marker
1 Normal
2 Delta
3 Peak Menu
4 Sig Track
ON OFF
5 MKR Trace
A B
6 Marker OFF
7 1/2,more
CENTER 433.920 MHz
SPAN 1.000 MHz
*RBW 100 kHz *VBW 100 kHz *SWP 20 ms ATT 5 dB
TP501

# ATTACHMENT

# PHOTOGRAPHS OF EUT