



**ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT
INTENTIONAL RADIATOR CERTIFICATION TO
FCC PART 15 SUBPART C REQUIREMENT**
OF

Wireless Doorbell

MODEL No.: A-148

BRAND NAME: ADVANTE

FCC ID: Q2IA148

REPORT NO: 030037-RF-ID

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Prepared for

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1. GENERAL INFORMATION

1.1 Product Description

The SHUNDE ADVANTE ELECTRON, Ltd. Model: A-148 (referred to as the EUT in this report) is a Transmitter of doorbell system. It offers wireless remote control, ideal for use in doorbell system to activate the function.

A major technical descriptions of EUT is described as following:

- A). Operation Frequency: 315 MHz
- B). Modulation: Pulse Modulation (PM)
- C). Antenna Designation: Non-User Replaceable (Fixed)
- D). Power Supply: 12V, Battery Operated.
- E). Transmitting Time: Periodic ≤ 5 seconds
- F). Receiver type: Super regeneracy

1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: Q2IA148 filing to comply with Section 15.231 of the FCC Part 15, Subpart C Rules. The composite system (receiver) is compliance with Subpart B is authorized under a DoC procedure.

1.3 Test Methodology

Both conducted and radiated testing was performed according to the procedures in ANSI C63.4 (2000). Radiated testing was performed at an antenna to EUT distance 3 meters.

1.4 Test Facility

The open area test site and conducted measurement facility used to collect the radiated data is located on the address of C&C Laboratory, Co., Ltd. No. 81-1, 210 Lane, Pa-de 2nd Road, Lu-Chu Hsiang, Taoyuan, Taiwan, R.O.C.. The Open Area Test Sites and the Line Conducted labs are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4: 2000 and CISPR 22/EN 55022 requirements.

1.5 Special Accessories

Not available for this EUT intended for grant.

1.6 Equipment Modifications

Not available for this EUT intended for grant.

2. System Test Configuration

2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.2 EUT Exercise

The EUT (Transmitter) was operated in the normal operating mode. the Tx frequency was fixed which was for the purpose of the measurements.

2.3 Test Procedure

2.3.1 Conducted Emissions (not apply in this report)

The EUT is a placed on as turn table which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4-2000. Conducted emissions from the EUT measured in the **frequency range between 0.15 MHz and 30MHz** using **CISPR Quasi-Peak and Average detector mode**.

2.3.2 Radiated Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter(EUT) was rotated through three orthogonal axes according to the requirements in Section 13.1.4.1 of ANSI C63.4-2000.

2.4 Limitation

(1) Conducted Emission (Not applicable in this report)

According to section 15.207(a) Conducted Emission Limits is as following.

| Frequency range MHz | Limits dB(uV) | |
|------------------------|------------------|----------|
| | Quasi-peak | Average |
| 0.15 to 0.50 | 66 to 56 | 56 to 46 |
| 0.50 to 5 | 56 | 46 |
| 5 to 30 | 60 | 50 |

Note

- 1.The lower limit shall apply at the transition frequencies
- 2.The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

(2) Radiated Emission

According to 15.231(b), the field strength of emissions from Intentional Radiators operated under this section shall not exceed the following:

| Fundamental Frequency (MHz) | Field Strength of Fundamental | | Field Strength of Spurious | |
|-----------------------------------|----------------------------------|---------------------|-------------------------------|---------------|
| | (dBuV/m) | (uV/m) | (dBuV/m) | (uV/m) |
| 40.66 - 40.70 | 67.04 | 2,250 | 47.04 | 225 |
| 70 - 130 | 61.94 | 1,250 | 41.94 | 125 |
| 130 - 174 | * 61.94 - 71.48 | * 1,250 - 3,750 | * 41.94 - 51.48 | * 125 - 375 |
| 174 - 260 | 71.48 | 3,750 | 51.48 | 375 |
| 260 - 470 | * 71.48 - 81.94 | * 3,750 - 12,500 | * 51.48 - 61.94 | * 375 - 1,250 |
| above 470 | 81.94 | 12,500 | 61.94 | 1,250 |



* Linear Interpolations.

- Remark:
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. Field strength of fundamental(limit = $20\log(56.81818 \times (F) - 6136.3636)$;
F : Fundamental Frequency (130-174MHz)
 4. Field strength of fundamental limit = $20\log(41.6667 \times (F) - 7083.3333)$;
F : Fundamental Frequency (260-470MHz)
 5. Field strength of spurious emission limit = The Limit of Fundamental Frequency – 20dB
 6. Only spurious frequency is permitted to locate within the Restricted Bands specified in provision of ξ 15.205
 7. Emission spurious frequency which appearing within the Restricted Bands specified in provision of ξ 15.205, then the general radiated emission limits in ξ 15.209 apply.

(3) Occupied Bandwidth

According to 15.231(c), The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.

| FREQUENCY (MHz) | BANDWIDTH LIMIT(kHz) |
|-----------------|--|
| Above 70-900 | $0.25\% \times \text{Center Frequency(MHz)}$ |
| Above 900 | $0.5\% \times \text{Center Frequency(MHz)}$ |

2.5 Configuration of Tested System

Fig. 2-1 Configuration of Tested System

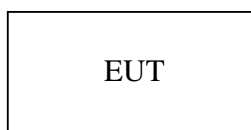




Table 2-1 Equipment Used in Tested System

| Item | Equipment | Mfr/Brand | Model/ Type No. | FCC ID | Series No. | Data Cable | Power Cord |
|------|-----------|-----------|--------------------|--------|------------|------------|------------|
| | N/A | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Note:

- (1) Unless otherwise denoted as EUT in 『Remark』 column , device(s) used in tested system is a support equipment.



3. Summary Of Test Results

| FCC Rules | Description Of Test | Result |
|-----------|------------------------------------|-----------|
| §15.207 | Conducted Emission | N/A |
| §15.231 | Radiated Emission | Compliant |
| §15.231 | 20dB Bandwidth | Compliant |
| §15.35 | Duty Cycle Test (Pulse Modulation) | N/A |

4. Description of test modes

The EUT (Doorbell Transmitter) has been tested under engineering test mode condition. and the EUT staying in continuous transmitting mode.

The Frequency 315MHz is chosen for testing at x 、 y and z axes.

5. Conducted Emissions Test (Not applicable in this report)

5.1 Measurement Procedure:

1. The EUT was placed on a table which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.

5.2 Test SET-UP (Block Diagram of Configuration)

5.3 Measurement Equipment Used:

| Conducted Emission Test Site # 3 | | | | | |
|----------------------------------|-----------|--------------|---------------|------------|------------|
| EQUIPMENT TYPE | MFR | MODEL NUMBER | SERIAL NUMBER | LAST CAL. | CAL DUE. |
| EMI Test Receiver | R&S | ESHS30 | 828144/003 | 08/08/2002 | 08/07/2003 |
| LISN | R&S | ESH2-Z5 | 843285/010 | 10/17/2002 | 10/16/2003 |
| LISN | EMCO | 3825/2 | 9003-1628 | 07/26/2002 | 07/25/2003 |
| Spectrum Analyzer | ADVANTEST | R3261A | 91720031 | N/A | N/A |
| 2X2 WIRE ISN | R&S | ENY22 | 100020 | 06/20/2002 | 06/19/2003 |
| FOUR WIRE ISN | R&S | ENY41 | 100006 | 06/20/2002 | 06/19/2003 |

5.4 Measurement Result:

N/A

5.5 Conducted Measurement Photos:

N/A



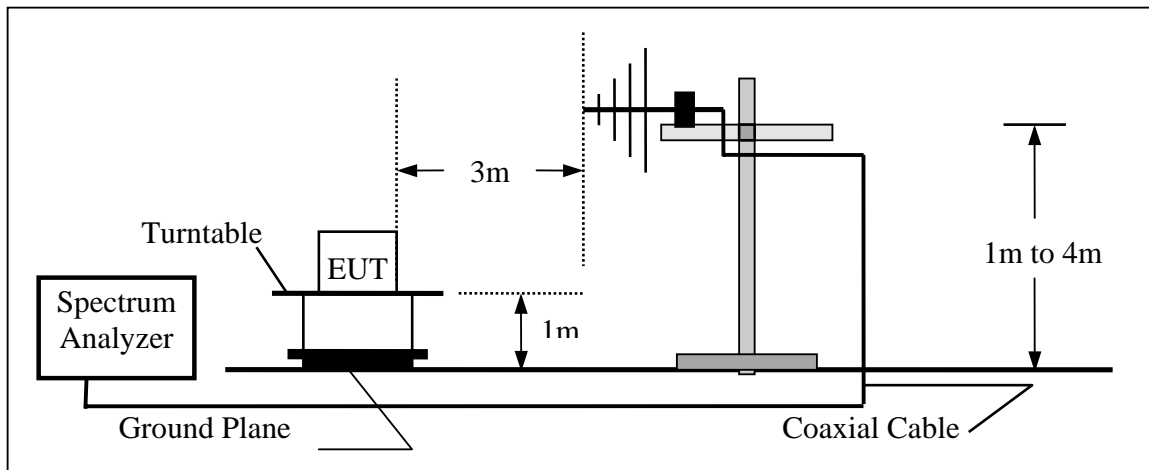
6. Radiated Emission Test

6.1 Measurement Procedure

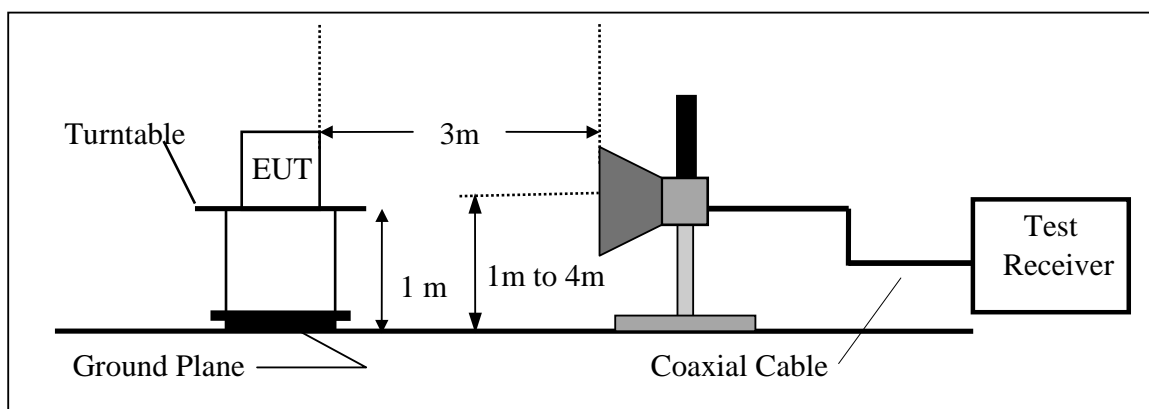
1. The EUT was placed on a turn table which is 0.8m above ground plane. .
2. The turn table shall rotate 360 degrees to determine the position of maximum emission level. 3
3. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until all frequency measured were complete.

6.2 Test SET-UP (Block Diagram of Configuration)

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



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



6.3 Measurement Equipment Used:

| Open Area Test Site # 3 | | | | | |
|-------------------------|-----------------|--------------|---------------|------------|------------|
| EQUIPMENT TYPE | MFR | MODEL NUMBER | SERIAL NUMBER | LAST CAL. | CAL DUE. |
| Spectrum Analyzer | ADVANTEST | R3261A | N/A | 03/18/2003 | 03/17/2004 |
| Spectrum Analyzer | Advantest | R3182 | 110600647 | 11/16/2002 | 11/15/2003 |
| Spectrum Analyzer | ROHDE & SCHWARZ | FSP30 | 100112 | 06/29/2002 | 06/28/2003 |
| EMI Test Receiver | R&S | ESVS20 | 838804/004 | 01/04/2003 | 01/03/2004 |
| Pre-Amplifier | HP | 8447D | 2944A09173 | 03/03/2003 | 03/02/2004 |
| Bi-log Antenna | SCHWAZBECK | VULB9163 | 145 | 07/06/2002 | 07/05/2003 |
| Turn Table | EMCO | 2081-1.21 | 9709-1885 | N.C.R | N.C.R |
| Antenna Tower | EMCO | 2075-2 | 9707-2060 | N.C.R | N.C.R |
| Controller | EMCO | 2090 | 9709-1256 | N.C.R | N.C.R |
| RF Switch | ANRITSU | MP59B | M53867 | N.C.R | N.C.R |
| Site NSA | C&C | N/A | N/A | 11/17/2002 | 11/16/2003 |
| Horn antenna | Schwarzbeck | BBHA 9120 | D210 | 2/23/2003 | 2/22/2004 |
| Horn antenna | EMCO | 3116 | 2487 | 11/11/2002 | 11/10/2003 |
| Pre-Amplifier | HP | 8449B | 3008B00965 | 10/01/2002 | 10/02/2003 |

6.4 Field Strength Calculation

Adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain calculate the Factor. The basic equation with a sample calculation is as follows:

$$F = AF + CL - AG$$

| | |
|---------------------|--|
| Where F = Factor | CL = Cable Attenuation Factor (Cable Loss) |
| AF = Antenna Factor | AG = Amplifier Gain |

6.5 Measurement Result

Operation Mode: Transmitting Mode

Test Date : Mar. 18, 2003

Fundamental Frequency: 315MHz

Test By: James

Temperature : 23

Humidity : 58 %

 Judgement : Passed by -13.22 dB at 315 MHz

 EUT Axis X

| Frequency (MHz) | Ant.Pol. (H/V) | Peak Reading (dBuV) | Fact (dB) | Duty cycle (dB) | Emission level (dBuV/m) | | Limit (dBuV/m) | | Margin (dB) | |
|-----------------|----------------|---------------------|-----------|-----------------|-------------------------|-------|----------------|-------|-------------|--------|
| | | | | | PK | AV | PK | AV | PK | AV |
| 315.0000(F) | V | 39.93 | 17.06 | -14.68 | 56.99 | 42.31 | 95.56 | 75.56 | -38.57 | -33.25 |
| 630.4000 | V | 9.05 | 25.07 | -14.68 | 34.12 | 19.44 | 75.56 | 55.56 | -41.44 | -36.12 |
| 315.0000(F) | H | 59.96 | 17.06 | -14.68 | 77.02 | 62.34 | 95.56 | 75.56 | -18.54 | -13.22 |
| 630.4000 | H | 26.23 | 25.07 | -14.68 | 51.3 | 36.62 | 75.56 | 55.56 | -24.26 | -18.94 |
| 945.4000 | H | 3.10 | 28.79 | -14.68 | 31.89 | 17.21 | 75.56 | 55.56 | -43.67 | -38.35 |
| 1892.0000 | H | 49.02 | -5.13 | -14.68 | 43.89 | 29.21 | 75.56 | 55.56 | -31.67 | -26.35 |
| 2208.0000 | H | 48.53 | -3.70 | -14.68 | 44.83 | 30.15 | 74.00 | 54.00 | -29.17 | -23.85 |

Remark :

- (1) F : denotes Fundamental Frequency ;
- (2) EUT Orthogonal Axes : X denotes Laid on Table ; Y denotes Vertical Stand .Z denote 45° on Table.
- (3) Emission level PK (dBuV/m)=Reading (dBuV)+ Factor(dB)
Emission level AV (dBuV/m)=Reading (dBuV)+ Factor(dB) + Duty cycle(dB)
- (4) Measuring frequencies from 30 MHz to the 10th harmonic of fundamental frequency of 315 MHz.
- (5) Datas of measurement within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) * denotes spurious frequency which falls within the Restricted Bands specified in provision of ξ15.205, then the general radiated emission limits in ξ 15.209 apply.
- (7) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 8GHz, RBW= 1MHz, VBW= 1MHz, Sweep time= 200 ms

Operation Mode: Transmitting Mode

Test Date : Mar. 18, 2003

Fundamental Frequency: 315MHz

Test By: James

Temperature : 23

Humidity : 58 %

Judgement : Passed by -13.36 dB at 315 MHz

EUT Axis Y

| Frequency (MHz) | Ant.Pol. (H/V) | Peak Reading (dBuV) | Fact (dB) | Duty cycle (dB) | Emission level (dBuV/m) | | Limit (dBuV/m) | | Margin (dB) | |
|-----------------|----------------|---------------------|-----------|-----------------|-------------------------|-------|----------------|-------|-------------|--------|
| | | | | | PK | AV | PK | AV | PK | AV |
| 315.0000 | V | 59.82 | 17.06 | -14.68 | 76.88 | 62.20 | 95.56 | 75.56 | -18.68 | -13.36 |
| 630.4000 | V | 25.69 | 25.07 | -14.68 | 50.76 | 36.08 | 75.56 | 55.56 | -24.80 | -19.48 |
| 945.4000 | V | 2.92 | 28.79 | -14.68 | 31.71 | 17.03 | 75.56 | 55.56 | -43.85 | -38.53 |
| 1260.0000 | V | 47.28 | -8.80 | -14.68 | 38.48 | 23.80 | 75.56 | 55.56 | -37.08 | -31.76 |
| 1892.0000 | V | 48.20 | -5.13 | -14.68 | 43.07 | 28.39 | 75.56 | 55.56 | -32.49 | -27.17 |
| 2208.0000 | V | 46.14 | -3.70 | -14.68 | 42.44 | 27.76 | 74.00 | 54.00 | -31.56 | -26.24 |
| 315.0000 | H | 42.66 | 17.06 | -14.68 | 59.72 | 45.04 | 95.56 | 75.56 | -35.84 | -30.52 |
| 630.4000 | H | 13.87 | 25.07 | -14.68 | 38.94 | 24.26 | 75.56 | 55.56 | -36.62 | -31.30 |
| 945.4000 | H | -1.96 | 28.79 | -14.68 | 26.83 | 12.15 | 75.56 | 55.56 | -48.73 | -43.41 |
| 1260.0000 | H | 47.42 | -8.80 | -14.68 | 38.62 | 23.94 | 75.56 | 55.56 | -36.94 | -31.62 |
| 1888.0000 | H | 48.26 | -5.15 | -14.68 | 43.11 | 28.43 | 75.56 | 55.56 | -32.45 | -27.13 |
| 2208.0000 | H | 46.62 | -3.70 | -14.68 | 42.92 | 28.24 | 74.00 | 54.00 | -31.08 | -25.76 |

Remark :

- (1) F : denotes Fundamental Frequency ;
- (2) EUT Orthogonal Axes : X denotes Laid on Table ; Y denotes Vertical Stand .Z denote 45° on Table.
- (3) Emission level PK (dBuV/m)=Reading (dBuV)+ Factor(dB)
Emission level AV (dBuV/m)=Reading (dBuV)+ Factor(dB) + Duty cycle(dB)
- (4) Measuring frequencies from 30 MHz to the 10th harmonic of fundamental frequency of 315 MHz.
- (5) Datas of measurement within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) * denotes spurious frequency which falls within the Restricted Bands specified in provision of ξ15.205, then the general radiated emission limits in ξ 15.209 apply.
- (7) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 8GHz, RBW= 1MHz, VBW= 1MHz, Sweep time= 200 ms

Operation Mode: Transmitting Mode

Test Date : Mar. 18, 2003

Fundamental Frequency: 315MHz

Test By: James

Temperature : 23

Humidity : 58 %

 Judgement : Passed by -15.64 dB at 315 MHz

 EUT Axis Z

| Frequency (MHz) | Ant.Pol. (H/V) | Peak Reading (dBuV) | Fact (dB) | Duty cycle (dB) | Emission level (dBuV/m) | | Limit (dBuV/m) | | Margin (dB) | |
|--------------------|-------------------|---------------------------|--------------|-----------------------|-------------------------------|-------|-------------------|-------|----------------|--------|
| | | | | | PK | AV | PK | AV | PK | AV |
| 315.0000 | V | 45.86 | 17.06 | -14.68 | 62.92 | 48.24 | 95.56 | 75.56 | -32.64 | -27.32 |
| 630.4000 | V | 16.48 | 25.07 | -14.68 | 41.55 | 26.87 | 75.56 | 55.56 | -34.01 | -28.69 |
| 945.4000 | V | 1.91 | 28.79 | -14.68 | 30.70 | 16.02 | 75.56 | 55.56 | -44.86 | -39.54 |
| 1892.0000 | V | 46.12 | -5.13 | -14.68 | 40.99 | 26.31 | 75.56 | 55.56 | -34.57 | -29.25 |
| 2208.0000 | V | 45.98 | -3.70 | -14.68 | 42.28 | 27.60 | 74.00 | 54.00 | -31.72 | -26.40 |
| 2524.0000 | V | 46.82 | -2.70 | -14.68 | 44.12 | 29.44 | 75.56 | 55.56 | -31.44 | -26.12 |
| 315.0000 | H | 57.54 | 17.06 | -14.68 | 74.6 | 59.92 | 95.56 | 75.56 | -20.96 | -15.64 |
| 630.4000 | H | 23.79 | 25.07 | -14.68 | 48.86 | 34.18 | 75.56 | 55.56 | -26.70 | -21.38 |
| 1892.0000 | H | 47.27 | -5.13 | -14.68 | 42.14 | 27.46 | 75.56 | 55.56 | -33.42 | -28.10 |

Remark :

- (1) F : denotes Fundamental Frequency ;
- (2) EUT Orthogonal Axes : X denotes Laid on Table ; Y denotes Vertical Stand .Z denote 45° on Table.
- (3) Emission level PK (dBuV/m)=Reading (dBuV)+ Factor(dB)
Emission level AV (dBuV/m)=Reading (dBuV)+ Factor(dB) + Duty cycle(dB)
- (4) Measuring frequencies from 30 MHz to the 10th harmonic of fundamental frequency of 315 MHz.
- (5) Datas of measurement within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) * denotes spurious frequency which falls within the Restricted Bands specified in provision of §15.205, then the general radiated emission limits in § 15.209 apply.
- (7) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 8GHz, RBW= 1MHz, VBW= 1MHz, Sweep time= 200 ms

7. Occupied Bandwidth

7.1 Measurement Procedure

1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Set ETU normal operating mode.
3. Set SPA Center Frequency = fundamental frequency, RBW, VBW= 10KHz, Span =200kHz.
4. Set SPA Max hold. Mark peak, and mark delta 20dB down bandwidth.

7.2 Test SET-UP (Block Diagram of Configuration)

Same as 4.2 Radiated Emission Measurements.

7.3 Measurement Equipment Used:

Same as 4.2 Radiated Emission Measurement.

7.4 Measurement Results: Refer to attached data chart.

| | | | |
|--------------------|--------------|------------|------------------|
| Temperature: | <u>25 °C</u> | Humidity: | <u>60%RH</u> |
| Receiver Detector: | <u>PK.</u> | Tested by: | <u>James Lee</u> |
| Test Result: | <u>Pass</u> | | |

| CHANNEL | FREQUENCY (MHz) | <u>20</u> dB DOWN BANDWIDTH (kHz) | MINIMUM LIMIT (kHz) | MAXMUM LIMIT (kHz) |
|---------|--------------------|--|---------------------------|--------------------------|
| 1 | 315.04 | 74.4 | N/A | 787.6 |
| | | | | |



20dB Bandwidth Test Data

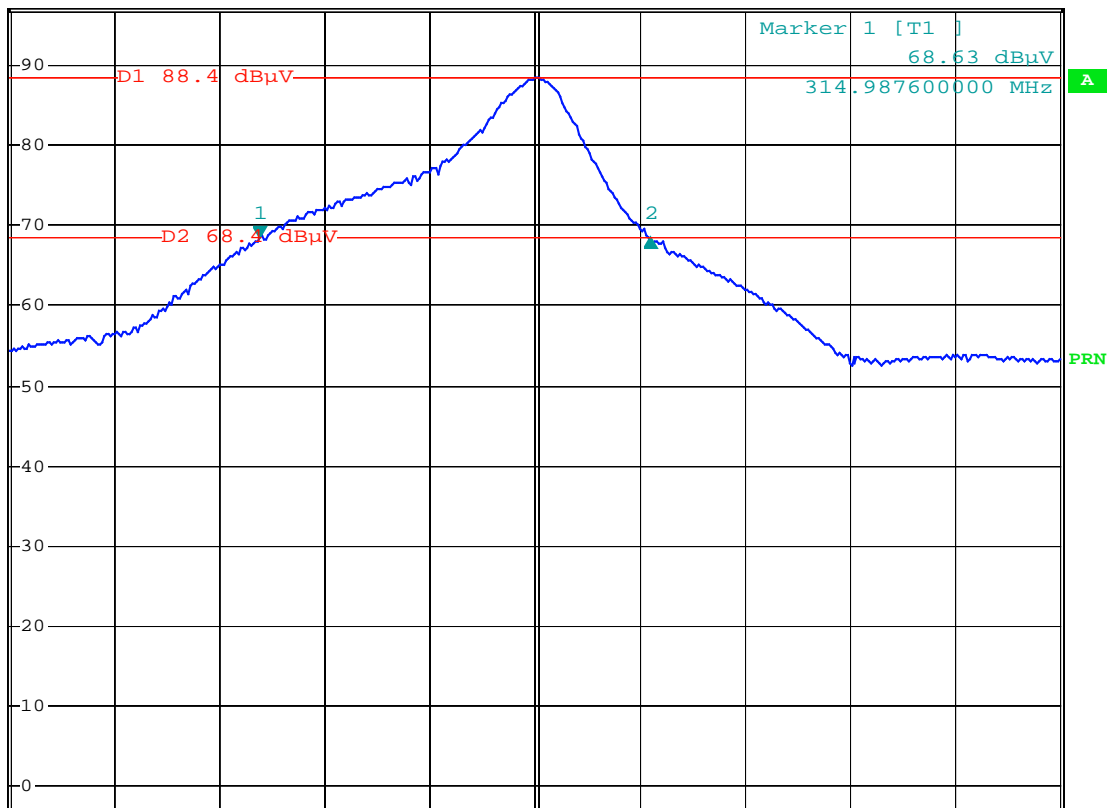


*RBW 10 kHz Delta 2 [T1]
*VBW 10 kHz -0.03 dB
SWT 5 ms 74.400000000 kHz

Ref 97 dB μ V

*Att 0 dB

1 PK
VIEW



Center 315.04 MHz

20 kHz/

Span 200 kHz

Date: 14.MAR.2003 09:59:45

8. Duty Cycle Measurement

8.1 Measurement Procedure

1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Set ETU normal operating mode.
3. Set SPA Center Frequency = fundamental frequency , RBW,VBW= 100KHz, Span =0 Hz. Adjacent sweep.
4. Set SPA View. Mark delta.

8.2 Test SET-UP (Block Diagram of Configuration)

Same as 4.2 Radiated Emission Measurement.

8.3 Measurement Equipment Used:

Same as 4.2 Radiated Emission Measurement.

8.4 Measurement Results: Refer to attached data chart.

| Total Time (ms) | Total on Time (ms) | Duty cycle | Duty cycle (%) | Duty cycle Fact (dB) |
|-----------------|--------------------|------------|----------------|----------------------|
| 27.8 | 5.128 | 0.184 | 18.4 | -14.68 |

Note: 1. Total on Time(ms)= $0.136(\text{ms}) \times 21(\text{number of on time-1}) + 0.568 \times 4(\text{number of on time-2})=2.856+2.272=5.128\text{ms}$

2. Duty cycle= Total on time/Total Time (on + off time)=0.184

3. Duty cycle(%)=Duty cycle \times 100%=18.4%

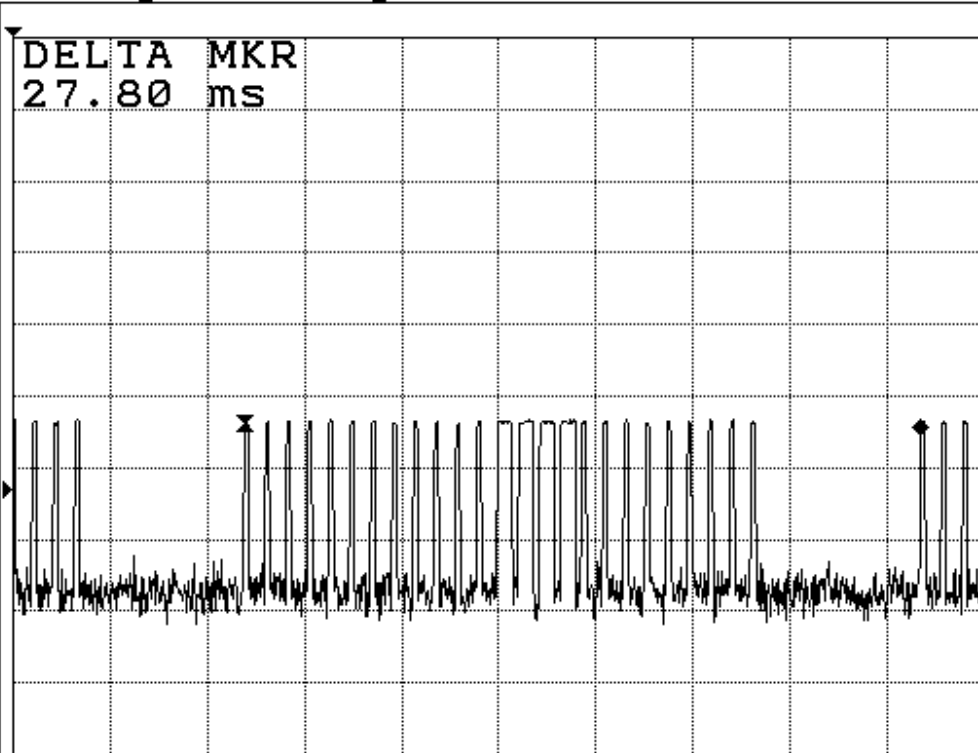
4. Duty cycle factor= $20 \log (\text{Duty cycle})=-14.68\text{dB}$



Total Time:

Fri 2003 Mar 14 13:39

REF 23.0 dBm MKΔ 27.80 ms
10dB/ A_View Posi B_Blank Norm -0.46 dB



Marker

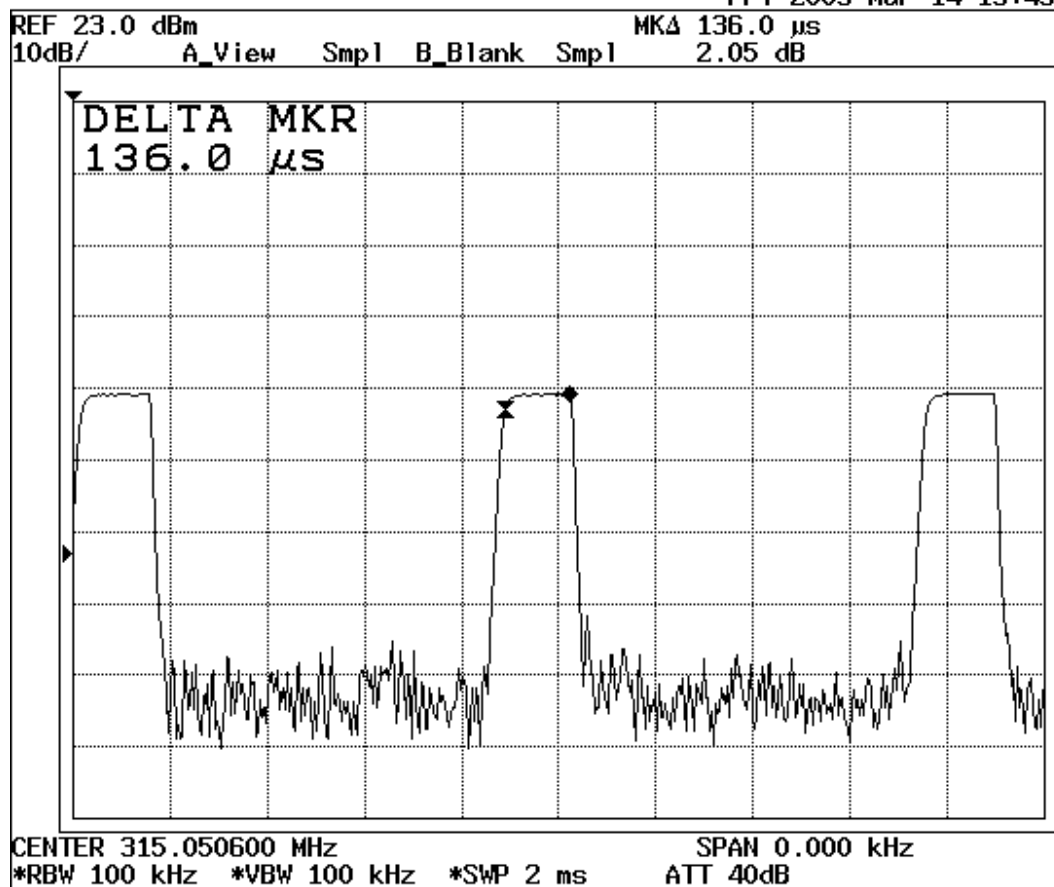
| | |
|---|---------------------|
| 1 | Normal |
| 2 | Delta |
| 3 | Peak Menu |
| 4 | Sig Track ON OFF |
| 5 | MKR Trace A B |
| 6 | Marker OFF |
| 7 | 1/2, more |

CENTER 315.050600 MHz SPAN 0.000 kHz
*RBW 100 kHz *VBW 100 kHz *SWP 40 ms ATT 40dB



On Time-1:

Fri 2003 Mar 14 13:43



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

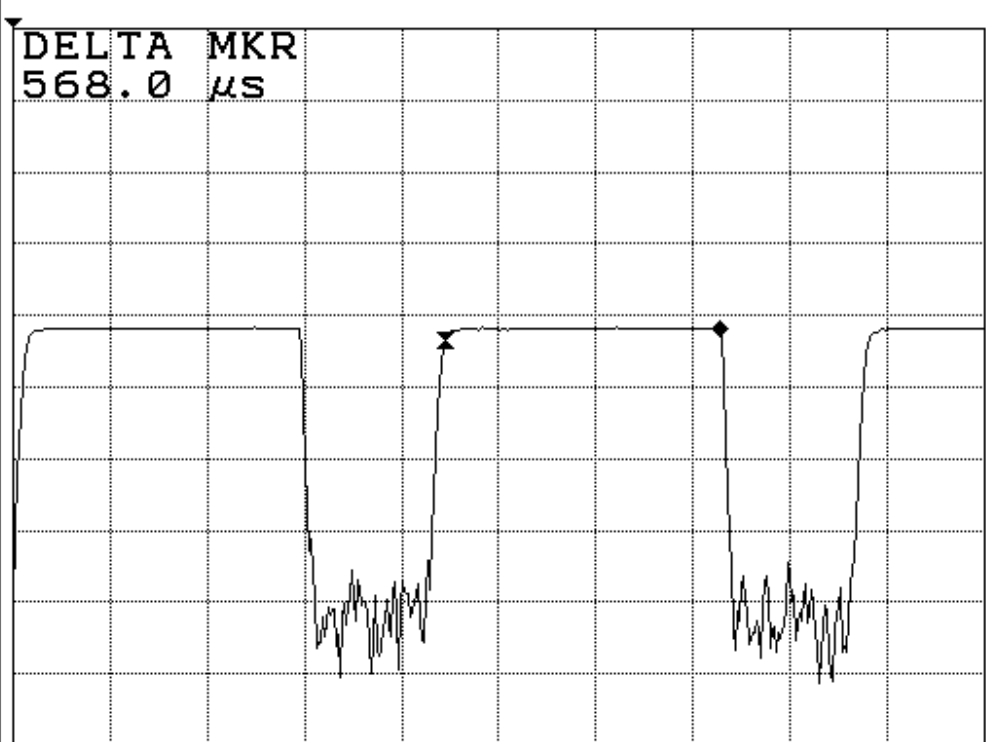
TP501



On Time -2:

Fri 2003 Mar 14 13:45

REF 23.0 dBm MKΔ 568.0 μs
10dB/ A_View Smp1 B_Blank Smp1 1.62 dB



| | |
|---|--|
| 1 | Marker |
| | Normal |
| 2 | Delta |
| 3 | Peak Menu |
| 4 | Sig Track <input type="checkbox"/> ON <input checked="" type="checkbox"/> OFF |
| 5 | MKR Trace <input checked="" type="checkbox"/> A <input type="checkbox"/> B |
| 6 | Marker OFF |
| 7 | 1/2, more |

CENTER 315.050600 MHz SPAN 0.000 kHz
*RBW 100 kHz *VBW 100 kHz *SWP 2 ms ATT 40dB

TP501

9. TERMS OF ABRIVATION

| | |
|-----------------|---|
| ANSI | Americal National Standard Institute |
| Ant. | Antenna |
| AV. | Average detection |
| CAL. | Calibration |
| Correct. | Correction |
| dBc | dB relative to fundamental frequency level |
| EUT | Equipment Under Test |
| Fact | Factor |
| FREQ. | Frequency |
| H | Horizontal direction |
| LISN | Line Impedance Stabilization Network |
| MFR | Manufacturer |
| NSA | Normalized Site Attenuation |
| PK | Peak detection |
| Pol. | Polarization |
| Pre-amp. | Pre-amplifier |
| Q.P. | Quasi-peak detection |
| RBW | Resolution bandwidth |
| SRA | Spectrum analyzer |
| V | Vertical direction |
| VBW | Video bandwidth |