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

OF

GRAND PC2TV WIRELESS

MODEL No.: GRAND GT-6802;
GRAND GT-6803;
GTAND GT-685

BRAND NAME: GRANDTEC

FCC ID: PVCGTP221

REPORT NO: 020052-RF-ID

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Prepared for

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1. GENERAL INFORMATION

1.1 Product Description

The GRANDTEC ELECTRONIC CORP. Model: GRAND GT-6802; GRAND GT6803; GTAND GT-685 (referred to as the EUT in this report). The EUT is an short range, lower power, designed as an " wireless PC- TV converter Device". It is designed by way of utilizing the FM modulation achieves the system operating.

A major technical descriptions of EUT is described as following:

A). Operation Frequency: 2410 MHz, 2430 MHz, 2450 MHz, 2470 MHz, 4 channels by select switch.
B). Modulation: Frequency Modulation (FM).
C). Antenna Designation: Non-User Replaceable (Fixed)
D). Power Supply: 6 Vdc by AC/DC Power adaptor.

1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: PVCGTP221 filing to comply with Section 15.249 of the FCC Part 15, Subpart C Rules. The composite system (digital device) 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 (1992). 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: 1992 and CISPR 22/EN 55022 requirements.

1.5 Special Accessories

Not available for this EUT intended for grant.

1.6 Equipment Modifications

1. Two ferrite core provided at end of the Y type VGA Cabel, the cable will has good emi

shielded. Refer to Photo for detail.

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 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

The EUT is a placed on a table which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4-1992.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak detector mode.

2.3.2 Radiated Emissions

The EUT is a placed on a 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,according to the requirements in Section 13.1.4.1 of ANSI C63.4-1992.

2.4 Limitation

(1) Conducted Emission

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

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15 – 0.5	66 - 56	56 - 46
0.5 – 5	56	46
5 - 30	60	50

(2) Radiated Emission 15.249(a)

The field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following.

Frequency (MHz)	Field strength of Fundamental	Field strength of Harmonics	Distance(m)
902 - 928	50 mV/m (94dBuV/m)	500 uV/m (54dBuV/m)	3
2400 – 2483.5	50 mV/m (94dBuV/m)	500 uV/m (54dBuV/m)	3
5725 – 5875	50 mV/m (94dBuV/m)	500 uV/m (54dBuV/m)	3
24.0 – 24.25 GHz	250 mV/m (107.95dBuV/m)	2500 uV/m (67.95dBuV/m)	3

(3) Radiated Emission15.249(d)

Emission Radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50dB below the level of the fundamental or to the general radiated emission limits in Section 15.209 as below, whichever is the lesser attenuation.

Frequency (MHz)	Field strength μV/m	Distance(m)	Field strength at 3m dBμV/m
1.705-30	30	30	69.54
30-88	100	3	40
88-216	150	3	43.5
216-960	200	3	46
Above 960	500	3	54

(4) Radiated Emission 15.249(e)

For frequencies above 1000MHz, the above field strength limits are based on average limits. The peak filed strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20dB under any condition of modulation.

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. Only spurious frequency is permitted to locate within the Restricted Bands

specified in provision of ξ 15.205

4. Emission spurious frequency which appearing within the Restricted Bands specified in provision of ξ15.205, then the general radiated emission limits in ξ 15.209 apply.

2.5 Configuration of Tested System

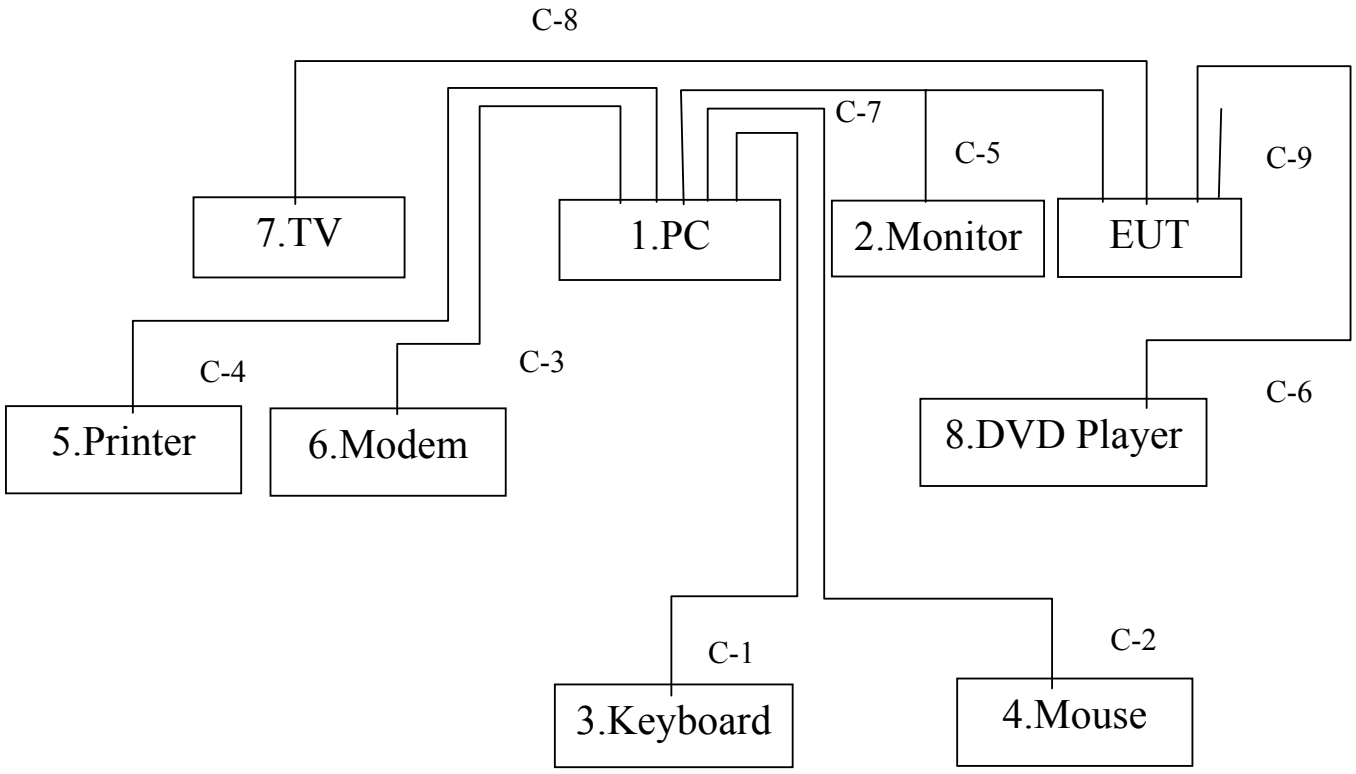


Fig. 2-1 Configuration of Tested System

Table 2-1 Equipment Used in Tested System

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
E-1	GRAND PC2TV WIRELESS	GRANDTEC	N/A	PVCGTP221	N/A	EUT
1	PC	Compaq	EVO D300	FCC DoC	6K1BKF83F0VE	
2	Monitor	SONY	CPD-G200	FCC DoC	2716043	
3	PS/2 Keyboard	Compaq	SK-2800C	GYUR79SK	B1C790BCPJ73JM	
4	PS/2 Mouse	Compaq	M-S34	DZL211029	113907-058	
5	Printer	HP	2225C	DSI6XU2225	3137S01428	
6	Modem	Hayes	231AA	BFJ9D93108US	A08431083982	
7	TV	PROTON	FT-21S	N/A	FT-21S00002CA00112	
8	DVD Player	TOSHIBA	SD-K350T	N/A	DZCM30030	

Table 2-2 Information of Interface Cable

Item	I/O Cable	Device Connected	Shielded Type	Ferrite Core	Detachable/ Permanently	Length	Note
C-1	Keyboard Cable	PC-Keyboard	Yes	No	Permanently attached on Keyboard	200cm	
C-2	Mouse Cable	PC-Mouse	Yes	No	Permanently attached on Mouse	180cm	
C-3	Modem Cable	PC- Modem	Yes	No	Part of Modem, Detachable	120cm	
C-4	Centronics Cable	PC-Printer	Yes	No	Part of Printer, Detachable	200cm	
C-5	VGA Cable	Y cable – Monitor	Yes	No	Permanently attached on Monitor	150cm	
C-6	Vedio and Audio in cable	EUT-DVD	Yes	No	Part of EUT	180cm	
C-7	Y type VGA cable	PC-EUT	Yes	Yes	Part of EUT, Detachable	90cm	
C-8	S and AV cable	EUT-TV	Yes	No	Part of EUT, Detachable	180cm	
C-9	RGB Cable	EUT	Yes	No	Part of EUT	180cm	

Note:

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

2.6 Summary Of Test Results

FCC Rules	Description Of Test	Result
§15.207	Conducted Emission	Compliant
§15.249(a)(e)	Radiated Emission	Compliant
§15.249(d)	Band Edge Emission	Compliant

2.7 Description of test modes

The EUT (**Wireless PC – TV Converter**) has been tested under normal operating condition.
The EUT stay in continuous transmitting mode. The Frequency 2470 MHz (Upper), 2430MHz (Middle) and 2410 MHz (Lower) for both VGA input and AV input are chosen for testing.

3. Conducted Emissions Test

3.1 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.

3.2 Test SET-UP (Block Diagram of Configuration)

3.3 Measurement Equipment Used:

Conducted Emission Test Site # 4					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
EMI Test Receiver	R&S	ESCS30	847793/012	12/19/2001	12/18/2002
LISN	R&S	ENV 4200	830326/016	02/08/2002	02/07/2003
LISN	EMCO	3825/2	9003/1382	02/18/2002	02/17/2003
Spectrum Analyzer	ADVANTEST	R3261AN	31720234	08/06/2002	08/05/2003
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

3.4 Measurement Result:

Operation Mode: VGA Mode
Test Date : Sep. 19, 2002
Fundamental Frequency: 2410 MHz
Test By: Markba
Temperature : 27 ℃
Humidity : 67 %
Judgement：Passed by -11.01 dB at 0.165 MHz At L2

Freq. (MHz)	Terminal L1/L2	Measured(dBuV) QP-Mode	Measured(dBuV) AV-Mode	Limits(dBuV) QP-Mode	Limits(dBuV) AV-Mode	Safe Margins (dBuV)	Note
0.156	L1	54.60	43.20	65.67	55.67	-11.07	(QP)
0.326	L1	47.40	---	59.55	49.55	-12.15	(QP)
0.411	L1	45.80	34.60	57.63	47.63	-11.83	(QP)
0.509	L1	44.00	---	56.00	46.00	-12.00	(QP)
0.693	L1	38.00	---	56.00	46.00	-18.00	(QP)
0.779	L1	37.40	---	56.00	46.00	-18.60	(QP)
0.165	L2	54.20	---	65.21	55.21	-11.01	(QP)
0.241	L2	49.80	---	62.06	52.06	-12.26	(QP)
0.384	L2	46.60	---	58.19	48.19	-11.59	(QP)
0.457	L2	45.20	---	56.75	46.75	-11.55	(QP)
0.528	L2	43.80	---	56.00	46.00	-12.20	(QP)
0.587	L2	41.60	---	56.00	46.00	-14.40	(QP)

Remark：

(1) Measuring frequencies from 0.15 MHz to 30MHz。

(2) The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Qusia-Peak detector and Average detector.

(3) "---" denotes the emission level was or more than 2dB below the Average limit, so no re-check anymore.

(4) The IF bandwidth of SPA between 0.15MHz to 30MHz was 10KHz;
The IF bandwidth of Test Receiver between 0.15MHz to 30MHz was 9KHz;

Operation Mode: AV Mode
Fundamental Frequency: 2410 MHz
Temperature : 27 ℃
Judgement：Passed by -8.5 dB at 0.15 MHz At L1

Test Date : Sep. 19, 2002
Test By: Markba
Humidity : 67 %

Freq. (MHz)	Terminal L/N	Measured(dBuV) QP-Mode	Measured(dBuV) AV-Mode	Limits(dBuV) QP-Mode	Limits(dBuV) AV-Mode	Safe Margins (dBuV)	Note
0.150	Line	57.50	45.20	66.00	56.00	-8.50	(QP)
0.248	Line	51.10	40.80	61.82	51.82	-10.72	(QP)
0.366	Line	49.40	37.20	58.59	48.59	-9.19	(QP)
0.415	Line	47.80	36.40	57.55	47.55	-9.75	(QP)
0.501	Line	46.20	35.80	56.00	46.00	-9.80	(QP)
0.575	Line	43.80	32.9	56.00	46.00	-12.20	(QP)
0.162	Neutral	54.10	44.30	65.36	55.36	-11.06	(AV)
0.257	Neutral	49.70	38.70	61.53	51.53	-11.83	(QP)
0.341	Neutral	47.80	37.50	59.18	49.18	-11.38	(QP)
0.411	Neutral	46.60	36.50	57.63	47.63	-11.03	(QP)
0.554	Neutral	43.10	---	56.00	46.00	-12.90	(QP)
0.586	Neutral	42.30	---	56.00	46.00	-13.70	(QP)

Remark：

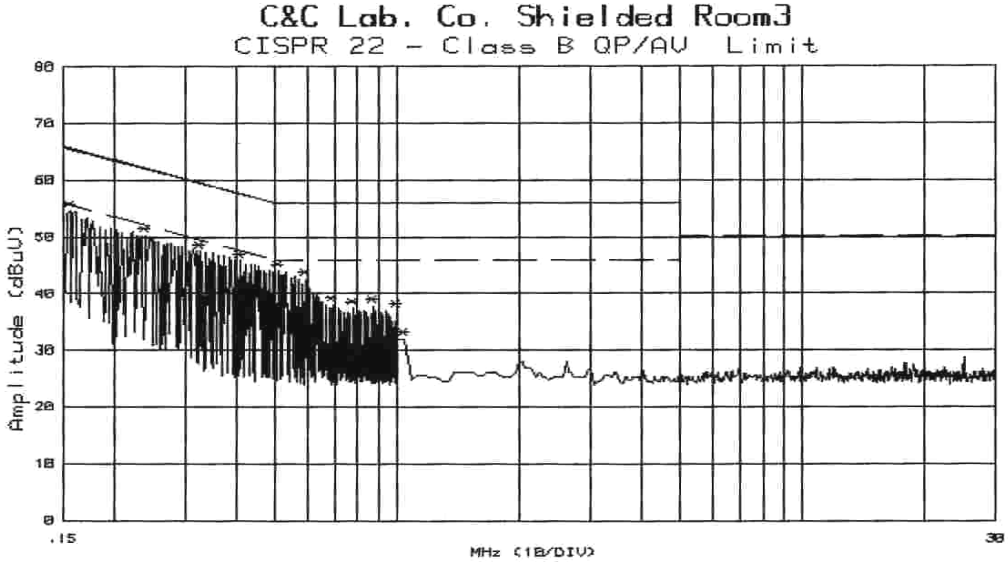
(1) Measuring frequencies from 0.15 MHz to 30MHz。

(2) The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Qusia-Peak detector and Average detector.

(3) **"**---" denotes the emission level was or more than 2dB below the Average limit, so no re-check anymore.

(4) The IF bandwidth of SPA between 0.15MHz to 30MHz was 10KHz;
The IF bandwidth of Test Receiver between 0.15MHz to 30MHz was 9KHz;

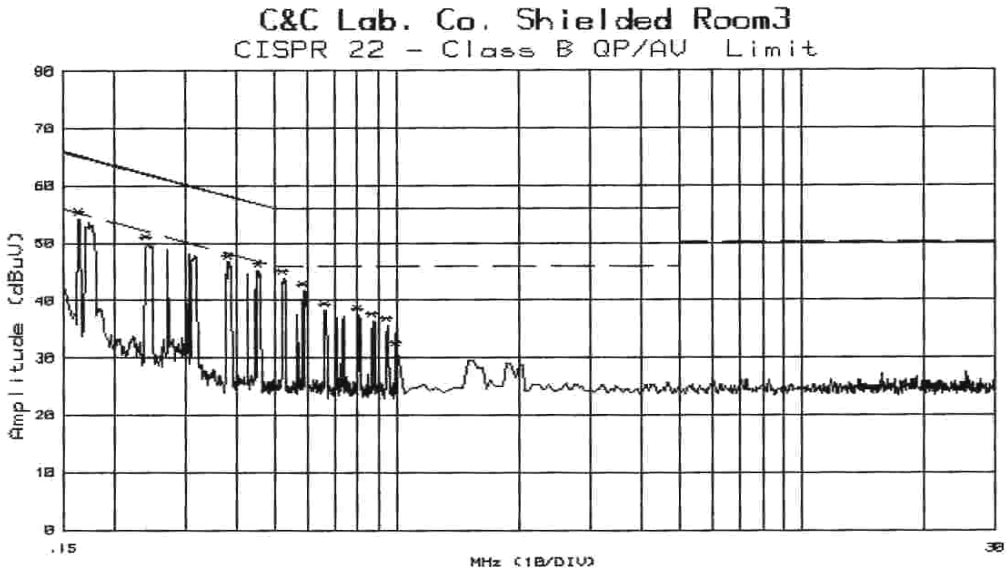
VGA Mode Conduction Plot



Customer:GRANDTEC
Model :GRAND PC2TV
Mode :
Reading :Peak(R3261C SPA)
Remark :TX-VGA-CH1-110V

File#: 1421
Humd.:67 (%)
Port :L1

Date :19 Sep 2002 17:23:12
Temp. :27 (C)
Tested by:MARKBA

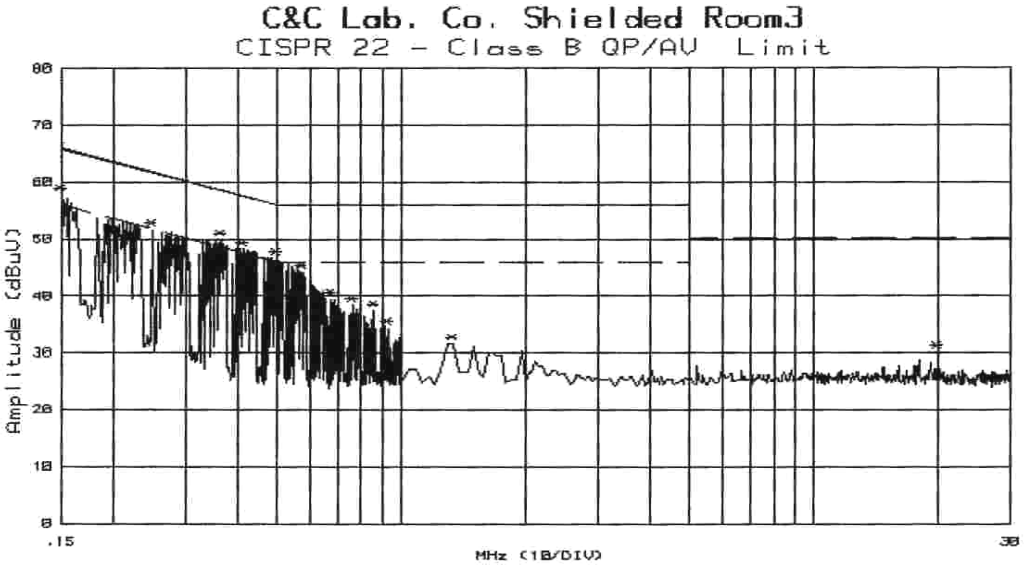


Customer:GRANDTEC
Model :GRAND PC2TV
Mode :
Reading :Peak(R3261C SPA)
Remark :TX-VGA-CH1-110V

File#: 1420
Humd.:67 (%)
Port :L2

Date :19 Sep 2002 17:20:22
Temp. :27 (C)
Tested by:MARKBA

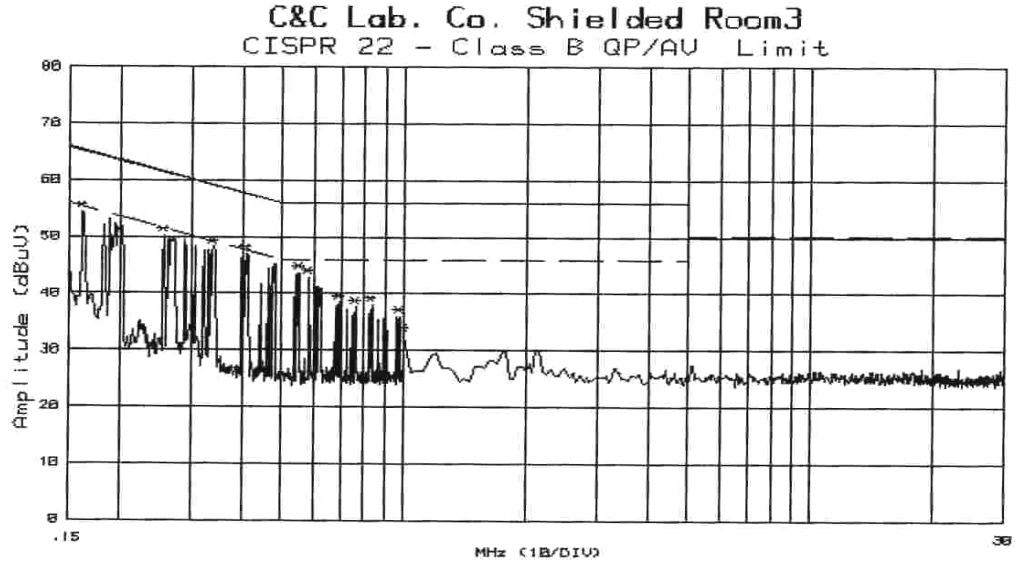
AV Mode Conduction Plot



Customer:GRANDTEC
Model :GRAND PC2TV
Mode :
Reading :Peak(R3261C SPA)
Remark :TX-AV-CH1-110V

File#: 1413
Humd.:67 (%)
Port :L1

Date :19 Sep 2002 17:06:41
Temp. :27 (C)
Tested by:MARKBA



Customer:GRANDTEC
Model :GRAND PC2TV
Mode :
Reading :Peak(R3261C SPA)
Remark :TX-AV-CH1-110V

File#: 1415
Humd.:67 (%)
Port :L2

Date :19 Sep 2002 17:08:49
Temp. :27 (C)
Tested by:MARKBA

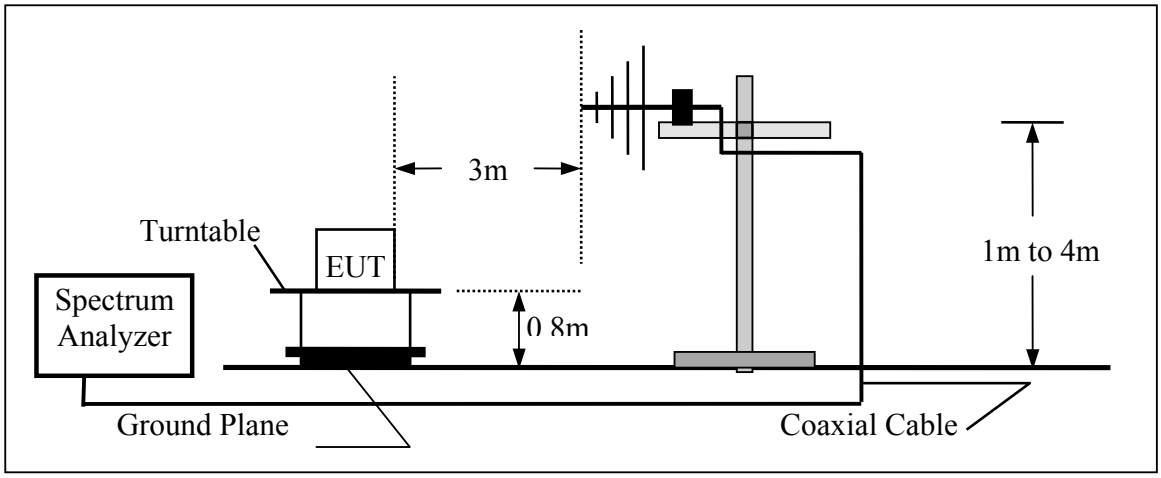
4. Radiated Emission Test

4.1 Measurement Procedure

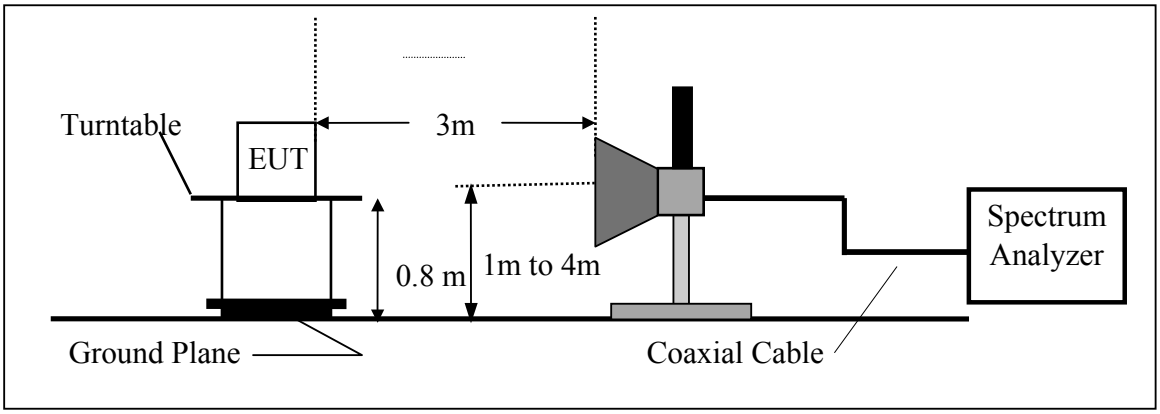
1. The EUT was placed on a turn table which is 0.8m above ground plane and 3m from the test antenna.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
4. Repeat above procedures until all frequency measured were complete.

4.2 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



4.3 Measurement Equipment Used:

Open Area Test Site # 3					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
Loop Antenna	EMCO	6502	2356	07/11/2002	07/10/2003
Bilog Antenna	SCHWAZBECK	VULB9163	145	07/06/2002	07/05/2003
Horn antenna	SCHWAZBECK	BBHA 9120	D210	2/24/2003	2/23/2004
Spectrum Analyzer	ADVANTEST	R3261A	N/A	03/19/2003	03/18/2004
Spectrum Analyzer	R&S	FSP30	100112	05/29/2003	05/28/2004
EMI Test Receiver	R&S	ESVS20	838804/004	01/05/2003	01/04/2004
Pre-Amplifier	HP	8447D	2944A09173	03/04/2003	03/03/2004
Pre-Amplifier	HP	8449B	3008B00965	10/01/2002	10/02/2003
RF Switch	ANRITSU	MP59B	M53867	N.C.R	N.C.R
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
Site NSA	C&C	N/A	N/A	11/17/2002	11/16/2003

4.4 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor(if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CL - AG

Where	FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
	RA = Reading Amplitude	AG = Amplifier Gain
	AF = Antenna Factor	

4.5 Measurement Result Below 1000MHz

Operation Mode: VGA Mode
Fundamental Frequency: 2410 MHz (ch1)
Temperature : 26 ℃
Humidity : 68 %
Judgment：Passed by -7.52 dB at 200.360 MHz At Hor.

Test Date : Sep. 19, 2002
Test By: Markba
Pol: Vertical/ Horizontal

Freq. (MHz)	Ant.Pol. H/V	DetectorMode (PK/QP)	Reading (dBuV)	Factor (dB)	Actual FS (dBuV/m)	Limit3m (dBuV/m)	Safe Margin (dB)
85.032	V	Peak	16.41	10.81	27.22	40.00	-12.78
218.312	V	Peak	16.53	15.21	31.74	46.00	-14.26
250.408	V	Peak	20.60	16.30	36.90	46.00	-9.10
298.280	V	Peak	18.45	16.61	35.06	46.00	-10.94
313.488	V	Peak	10.28	17.04	27.32	46.00	-18.68
371.216	V	Peak	9.39	19.17	28.56	46.00	-17.44
69.256	H	Peak	12.21	10.38	22.59	40.00	-17.41
175.336	H	Peak	14.81	12.57	27.38	43.50	-16.12
200.360	H	Peak	21.05	14.93	35.98	43.50	-7.52
218.312	H	Peak	18.87	15.21	34.08	46.00	-11.92
250.408	H	Peak	14.90	16.30	31.20	46.00	-14.80
313.488	H	Peak	11.39	17.04	28.43	46.00	-17.57

Remark：

(1) Measuring frequencies from 30 MHz to the 1GHz。
(2) 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.
(3) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column。
(4) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

Measurement Result Below 1000MHz

Operation Mode: VGA Mode
Fundamental Frequency: 2430 MHz (ch2)
Temperature : 26 ℃
Humidity : 68 %
Judgment：Passed by -8.17 dB at 200.36 MHz AT Hor.

Test Date : Jun. 02, 2003
Test By: Robin
Pol: Vertical/ Horizontal

Freq. (MHz)	Ant.Pol. H/V	DetectorMode (PK/QP)	Reading (dBuV)	Factor (dB)	Actual FS (dBuV/m)	Limit3m (dBuV/m)	Safe Margin (dB)
69.250	V	Peak	18.93	10.38	29.31	40.00	-10.69
200.360	V	Peak	20.30	14.93	35.23	43.50	-8.27
218.310	V	Peak	22.50	15.21	37.71	46.00	-8.29
250.400	V	Peak	20.50	16.30	36.80	46.00	-9.20
200.360	H	Peak	20.40	14.93	35.33	43.50	-8.17
250.400	H	Peak	18.50	15.21	33.71	46.00	-12.29
261.280	H	Peak	14.64	16.30	30.94	46.00	-15.06
614.800	H	Peak	9.56	25.22	34.78	46.00	-11.22

Remark：

(1) Measuring frequencies from 30 MHz to the 1GHz。
(2) 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.
(3) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column。
(4) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

Measurement Result Below 1000MHz

Operation Mode: VGA Mode
Fundamental Frequency: 2470 MHz (ch4)
Temperature : 26 ℃
Humidity : 68 %
Judgment：Passed by -6.66 dB at 200.360 MHz AT Ver.

Test Date : Sep. 19, 2002
Test By: Markba
Pol: Vertical/ Horizontal

Freq. (MHz)	Ant.Pol. H/V	DetectorMode (PK/QP)	Reading (dBuV)	Factor (dB)	Actual FS (dBuV/m)	Limit3m (dBuV/m)	Safe Margin (dB)
69.250	V	Peak	18.93	10.38	29.31	40.00	-10.69
78.500	V	Peak	15.71	9.60	25.31	40.00	-14.69
175.330	V	Peak	14.41	12.57	26.98	43.50	-16.52
200.360	V	Peak	21.91	14.93	36.84	43.50	-6.66
218.310	V	Peak	18.03	15.21	33.24	46.00	-12.76
250.400	V	Peak	18.62	16.30	34.92	46.00	-11.08
175.330	H	Peak	16.85	12.57	29.42	43.50	-14.08
200.360	H	Peak	21.19	14.93	36.12	43.50	-7.38
250.400	H	Peak	17.34	15.21	32.55	46.00	-13.45
261.280	H	Peak	14.26	16.30	30.56	46.00	-15.44
261.280	H	Peak	15.17	16.04	31.21	46.00	-14.79
614.800	H	Peak	8.56	25.22	33.78	46.00	-12.22

Remark：

(1) Measuring frequencies from 30 MHz to the 1GHz。
(2) 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.
(3) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column。
(4) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

Measurement Result Below 1000MHz

Operation Mode: AV Mode
Fundamental Frequency: 2410 MHz (ch1)
Temperature : 26 ℃
Humidity : 68 %
Judgment：Passed by -1.45 dB at 393.74 MHz AT Hor.

Test Date : Sep. 19, 2002
Test By: Markba
Pol: Vertical/ Horizontal

Freq. (MHz)	Ant.Pol. H/V	DetectorMode (PK/QP)	Reading (dBuV)	Factor (dB)	Actual FS (dBuV/m)	Limit3m (dBuV/m)	Safe Margin (dB)
172.070	V	Peak	25.59	12.32	39.91	43.50	-3.59
186.210	V	Peak	26.50	13.55	40.05	43.50	-3.45
200.900	V	Peak	21.76	14.93	36.69	43.50	-6.81
472.590	V	Peak	21.13	21.23	42.36	46.00	-3.64
551.440	V	Peak	15.21	24.31	39.52	46.00	-6.48
709.130	V	Peak	17.56	25.79	43.35	46.00	-2.65
172.070	H	Peak	26.00	12.32	38.32	43.50	-5.18
186.210	H	Peak	27.32	13.55	40.87	43.50	-2.63
200.900	H	Peak	25.00	14.93	39.93	43.50	-3.57
215.040	H	Peak	21.75	15.16	36.91	43.50	-6.59
393.740	H	Peak	24.17	20.38	44.55	46.00	-1.45
472.590	H	Peak	20.08	21.23	41.31	46.00	-4.69
709.130	H	Peak	15.67	25.79	41.46	46.00	-4.54

Remark：

(1) Measuring frequencies from 30 MHz to the 1GHz。
(2) 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.
(3) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column。
(4) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

Measurement Result Below 1000MHz

Operation Mode: AV Mode
Fundamental Frequency: 2430 MHz (ch2)
Temperature : 26 ℃
Humidity : 68 %
Judgment：Passed by -1.28 dB at 393.70 MHz AT Hor.

Test Date : Jun. 02, 2003
Test By: Robin
Pol: Vertical/ Horizontal

Freq. (MHz)	Ant.Pol. H/V	DetectorMode (PK/QP)	Reading (dBuV)	Factor (dB)	Actual FS (dBuV/m)	Limit3m (dBuV/m)	Safe Margin (dB)
172.080	V	Peak	25.21	12.32	37.53	43.50	-5.97
186.210	V	Peak	26.50	13.55	40.05	43.50	-3.45
254.240	V	Peak	24.54	16.21	40.75	46.00	-5.25
472.560	V	Peak	21.60	21.23	42.83	46.00	-3.17
709.300	V	Peak	17.00	25.79	42.79	46.00	-3.21
172.070	H	Peak	26.50	12.32	38.82	43.50	-4.68
186.210	H	Peak	27.40	13.55	40.95	43.50	-2.55
393.700	H	Peak	24.34	20.38	44.72	46.00	-1.28
472.590	H	Peak	22.50	21.23	43.73	46.00	-2.27
709.150	H	Peak	16.50	25.79	42.29	46.00	-3.71

Remark：

(1) Measuring frequencies from 30 MHz to the 1GHz。
(2) 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.
(3) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column。
(4) Radiated emissions measured in frequency above 1000MHz were made made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column。
(5) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

Measurement Result Below 1000MHz

Operation Mode:	AV Mode	Test Date :	Sep. 18, 2002
Fundamental Frequency:	2470 MHz (ch4)	Test By:	Markba
Temperature :	26 ℃	Pol:	Vertical/ Horizontal
Humidity :	68 %		

Judgment：Passed by -1.28 dB at 393.74 MHz AT Hor

Freq. (MHz)	Ant.Pol. H/V	DetectorMode (PK/QP)	Reading (dBuV)	Factor (dB)	Actual FS (dBuV/m)	Limit3m (dBuV/m)	Safe Margin (dB)
172.070	V	Peak	25.21	12.32	37.53	43.50	-5.97
186.210	V	Peak	27.90	13.55	41.45	43.50	-2.05
200.900	V	Peak	21.75	14.93	36.68	43.50	-6.82
254.210	V	Peak	24.54	16.21	40.75	46.00	-5.25
472.590	V	Peak	22.80	21.23	44.11	46.00	-1.89
709.130	V	Peak	17.00	25.79	42.84	46.00	-3.16
172.070	H	Peak	24.10	12.32	36.51	43.50	-6.99
186.210	H	Peak	28.22	13.55	41.77	43.50	-1.73
200.900	H	Peak	22.49	14.93	37.42	43.50	-6.08
393.740	H	Peak	24.34	20.38	44.72	46.00	-1.28
472.590	H	Peak	23.22	21.23	44.45	46.00	-1.55
709.130	H	Peak	15.70	25.79	41.54	46.00	-4.46

Remark：

(1) Measuring frequencies from 30 MHz to the 1GHz。

(2) 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.

(3) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column。

(4) Radiated emissions measured in frequency above 1000MHz were made made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column。

(5) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

Measurement Result Above 1000MHz

Operation Mode: VGA Mode
Fundamental Frequency: 2410 MHz (ch1)
Temperature : 26 ℃
Humidity : 68 %
Judgment：Passed by -6.66 dB at 200.360 MHz AT Ver.

Test Date : Sep. 18, 2002
Test By: Markba
Pol: Vertical

Freq. (MHz)	Ant.Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Factor (dB)	Actual Peak FS (dBuV/m)	Actual AV FS dBuV/m	Peak Limit at 3m (dBuV/m)	AV Limit at 3m dBuV/m	Margin (dB)	
2410.0	V	78.96	--	-6.07	72.89	--	114.00	94.00	-21.11	F
4820.0	V	42.20	--	0.30	42.50	--	74.00	54.00	-11.50	H
7230.0	V	--	--			0.00	74.00	54.00		H
9640.0	V	--	--			0.00	74.00	54.00		H
12050.0	V	--	--			0.00	74.00	54.00		H
14460.0	V	--	--			0.00	74.00	54.00		H
16870.0	V	--	--			0.00	74.00	54.00		H
19280.0	V	--	--			0.00	74.00	54.00		H
21690.0	V	--	--			0.00	74.00	54.00		H
24100.0	V	--	--			0.00	74.00	54.00		H
1020.0	V	46.98		-11.64	35.34	--	74.00	54.00	-18.66	S
1180.0	V	48.23		-10.63	37.60	--	74.00	54.00	-16.40	S

Remark：

(1) Measuring frequencies from 1GHz to the 10tth of fundamental frequency。
(2) Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB
(3) "F" denotes fundamental frequency; "H" denotes harmonics frequency. "S" denotes spurious frequency.
(4) 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.
(5) The RBW,VBW of SPA for frequency above 1GHz was 1MHz for Peak Mode
The RBW= 1MHz, ,VBW= 10Hz of SPA for frequency above 1GHz for Average Mode.

Measurement Result Above 1000MHz

Operation Mode: VGA Mode
Fundamental Frequency: 2410 MHz (ch1)
Temperature : 26 ℃
Humidity : 68 %

Test Date : Sep. 18, 2002
Test By: Markba
Pol: Horizontal

Freq. (MHz)	Ant.Pol. H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Factor (dB)	Actual Peak FS (dBuV/m)	Actual AV FS (dBuV/m)	Peak Limit at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Margin (dB)	
2410.0	H	72.92		-6.06	66.86		114.00	94.00	-27.14	F
4820.0	H	--					74.00	54.00		H
7230.0	H	--					74.00	54.00		H
9640.0	H	--					74.00	54.00		H
12050.0	H	--					74.00	54.00		H
14460.0	H	--					74.00	54.00		H
16870.0	H	--					74.00	54.00		H
19280.0	H	--					74.00	54.00		H
21690.0	H	--					74.00	54.00		H
24100.0	H	--					74.00	54.00		H
1020.0	H	47.02		-11.64	35.38		74.00	54.00	-18.62	S
1180.0	H	50.38		-10.63	39.75		74.00	54.00	-14.25	S
1592.0	H	44.68		-8.91	35.77		74.00	54.00	-18.23	S
7920.0	H	42.93		7.50	50.43		74.00	54.00	-3.57	S

Remark：

(1) Measuring frequencies from 1GHz to the 10tth of fundamental frequency。

(2) Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB

(3) "F" denotes fundamental frequency; "H" denotes harmonics frequency. "S" denotes spurious frequency.

(4) 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.

(5) The RBW,VBW of SPA for frequency above 1GHz was 1MHz for Peak Mode
The RBW= 1MHz, ,VBW= 10Hz of SPA for frequency above 1GHz for Average Mode.

Measurement Result Above 1000MHz

Operation Mode: VGA Mode
Fundamental Frequency: 2430 MHz (ch2)
Temperature : 26 ℃
Humidity : 68 %

Test Date : Jun 02, 2003
Test By: Robin
Pol: Vertical

Freq. (MHz)	Ant.Pol. H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Factor (dB)	Actual Peak FS (dBuV/m)	Actual AV FS dBuV/m	Peak Limit at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Margin (dB)	
2430.0	V	80.20		-6.06	74.14		114.00	94.00	-19.86	F
4860.0	V	39.50		0.35	39.85		74.00	54.00	-14.15	H
7290.0	V	--					74.00	54.00		H
9720.0	V	--					74.00	54.00		H
12150.0	V	--					74.00	54.00		H
14580.0	V	--					74.00	54.00		H
17010.0	V	--					74.00	54.00		H
19440.0	V	--					74.00	54.00		H
21870.0	V	--					74.00	54.00		H
24300.0	V	--					74.00	54.00		H
1020.0	V	38.46		-11.64	26.82		74.00	54.00	-27.18	S
1180.0	V	39.28		-10.63	28.65		74.00	54.00	-25.35	S
6170.0	V	41.31		-9.51	31.80		74.00	54.00	-22.20	S

Remark：

(1) Measuring frequencies from 1GHz to the 10tth of fundamental frequency。

(2) Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB

(3) “F” denotes fundamental frequency; “H” denotes harmonics frequency. “S” denotes spurious frequency.

(4) 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.

(5) The RBW,VBW of SPA for frequency above 1GHz was 1MHz for Peak Mode
The RBW= 1MHz, ,VBW= 10Hz of SPA for frequency above 1GHz for Average Mode.

Measurement Result Above 1000MHz

Operation Mode:	VGA Mode	Test Date :	Jun 02, 2003
Fundamental Frequency:	2430 MHz (ch2)	Test By:	Robin
Temperature :	26 ℃	Pol:	Horizontal
Humidity :	68 %		

Freq. (MHz)	Ant.Pol. H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Factor (dB)	Actual Peak FS (dBuV/m)	Actual AV FS (dBuV/m)	Peak Limit at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Margin (dB)	
2430.0	H	73.50		-6.06	67.44		114.00	94.00	-26.56	F
4940.0	H	--					74.00	54.00		H
7290.0	H	--					74.00	54.00		H
9720.0	H	--					74.00	54.00		H
4860.0	H	--					74.00	54.00		H
14580.0	H	--					74.00	54.00		H
17010.0	H	--					74.00	54.00		H
7290.0	H	--					74.00	54.00		H
9720.0	H	--					74.00	54.00		H
4860.0	H	--					74.00	54.00		H
1020.0	H	48.58		-11.64	36.94		74.00	54.00	-17.06	S
1180.0	H	50.02		-10.63	39.39		74.00	54.00	-14.61	S
1472.0	H	45.29		-9.56	35.73		74.00	54.00	-18.27	S
1872.0	H	44.10		-8.10	36.00		74.00	54.00	-18.00	S
7870.0	H	41.77		7.40	49.17		74.00	54.00	-4.83	S

Remark：

(1) Measuring frequencies from 1GHz to the 10tth of fundamental frequency。

(2) Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB

(3) “F” denotes fundamental frequency; “H” denotes harmonics frequency. “S” denotes spurious frequency.

(4) 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.

(5) The RBW,VBW of SPA for frequency above 1GHz was 1MHz for Peak Mode
The RBW= 1MHz, ,VBW= 10Hz of SPA for frequency above 1GHz for Average Mode.

Measurement Result Above 1000MHz

Operation Mode: VGA Mode
Fundamental Frequency: 2470 MHz (ch4)
Temperature : 26 ℃
Humidity : 68 %

Test Date : Sep. 19, 2002
Test By: Markba
Pol: Vertical

Freq. (MHz)	Ant.Pol. H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Factor (dB)	Actual Peak FS (dBuV/m)	Actual AV FS dBuV/m	Peak Limit at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Margin (dB)	
2470.0	V	84.46		-5.85	78.61		114.00	94.00	-15.39	F
4940.0	V	42.20		0.41	42.61		74.00	54.00	-11.39	H
7410.0	V	--					74.00	54.00		H
9880.0	V	--					74.00	54.00		H
12350.0	V	--					74.00	54.00		H
14820.0	V	--					74.00	54.00		H
17290.0	V	--					74.00	54.00		H
19760.0	V	--					74.00	54.00		H
22230.0	V	--					74.00	54.00		H
24700.0	V	--					74.00	54.00		H
1020.0	V	38.46		-11.64	26.82		74.00	54.00	-27.18	S
1180.0	V	39.28		-10.63	28.65		74.00	54.00	-25.35	S
6170.0	V	41.31		-9.51	31.80		74.00	54.00	-22.20	S

Remark：

(1) Measuring frequencies from 1GHz to the 10tth of fundamental frequency。

(2) Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB

(3) “F” denotes fundamental frequency; “H” denotes harmonics frequency. “S” denotes spurious frequency.

(4) 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.

(5) The RBW,VBW of SPA for frequency above 1GHz was 1MHz for Peak Mode
The RBW= 1MHz, ,VBW= 10Hz of SPA for frequency above 1GHz for Average Mode.

Measurement Result Above 1000MHz

Operation Mode: VGA Mode
Fundamental Frequency: 2470 MHz (ch4)
Temperature : 26 ℃
Humidity : 68 %

Test Date : Sep. 19, 2002
Test By: Markba
Pol: Horizontal

Freq. (MHz)	Ant.Pol. H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Factor (dB)	Actual Peak FS (dBuV/m)	Actual AV FS dBuV/m	Peak Limit at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Margin (dB)	
2470.0	H	76.60		-5.85	70.75		114.00	94.00	-23.25	F
4940.0	H	--					74.00	54.00		H
7410.0	H	--					74.00	54.00		H
9880.0	H	--					74.00	54.00		H
4940.0	H	--					74.00	54.00		H
14820.0	H	--					74.00	54.00		H
17290.0	H	--					74.00	54.00		H
7410.0	H	--					74.00	54.00		H
9880.0	H	--					74.00	54.00		H
4940.0	H	--					74.00	54.00		H
1020.0	H	48.58		-11.64	36.94		74.00	54.00	-17.06	S
1180.0	H	50.02		-10.63	39.39		74.00	54.00	-14.61	S
1472.0	H	45.29		-9.56	35.73		74.00	54.00	-18.27	S
1872.0	H	44.10		-8.10	36.00		74.00	54.00	-18.00	S
7870.0	H	41.77		7.40	49.17		74.00	54.00	-4.83	S

Remark：

(1) Measuring frequencies from 1GHz to the 10tth of fundamental frequency。

(2) Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB

(3) “F” denotes fundamental frequency; “H” denotes harmonics frequency. “S” denotes spurious frequency.

(4) 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.

(5) The RBW,VBW of SPA for frequency above 1GHz was 1MHz for Peak Mode
The RBW= 1MHz, ,VBW= 10Hz of SPA for frequency above 1GHz for Average Mode.

Measurement Result Above 1000MHz

Operation Mode: AV Mode
Fundamental Frequency: 2410 MHz (ch1)
Temperature : 26 ℃
Humidity : 68 %

Test Date : Sep. 19, 2002
Test By: Markba
Pol: Vertical

Freq. (MHz)	Ant.Pol. H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Factor (dB)	Actual Peak FS (dBuV/m)	Actual AV FS dBuV/m	Peak Limit at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Margin (dB)	
2410.0	V	98.62		-6.07	92.55		114.00	94.00	-1.45	F
4820.0	V	58.33	45.61	0.30	58.63	45.91	74.00	54.00	-8.09	H
7230.0	V	--					74.00	54.00		H
9640.0	V	--					74.00	54.00		H
12050.0	V	--					74.00	54.00		H
14460.0	V	--					74.00	54.00		H
16870.0	V	--					74.00	54.00		H
19280.0	V	--					74.00	54.00		H
21690.0	V	--					74.00	54.00		H
24100.0	V	--					74.00	54.00		H
1020.0	V	50.40		-11.64	38.76		74.00	54.00	-15.24	S
1100.0	V	49.60		-11.11	38.49		74.00	54.00	-15.51	S
1184.0	V	51.63		-10.61	41.02		74.00	54.00	-12.98	S
1340.0	V	47.70		-10.14	37.56		74.00	54.00	-16.44	S

Remark：

(1) Measuring frequencies from 1GHz to the 10tth of fundamental frequency。

(2) Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB

(3) “F” denotes fundamental frequency; “H” denotes harmonics frequency. “S” denotes spurious frequency.

(4) 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.

(5) The RBW,VBW of SPA for frequency above 1GHz was 1MHz for Peak Mode
The RBW= 1MHz, ,VBW= 10Hz of SPA for frequency above 1GHz for Average Mode.

Measurement Result Above 1000MHz

Operation Mode: AV Mode
Fundamental Frequency: 2410 MHz (ch1)
Temperature : 26 ℃
Humidity : 68 %

Test Date : Sep. 19, 2002
Test By: Markba
Pol: Horizontal

Freq. (MHz)	Ant.Pol. H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Factor (dB)	Actual Peak FS (dBuV/m)	Actual AV FS (dBuV/m)	Peak Limi at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Margin (dB)	
2410.0	H	92.37		-6.06	86.31		114.00	94.00	-7.69	F
4820.0	H	50.73		0.30	51.03		74.00	54.00	-2.97	H
7230.0	H	--					74.00	54.00		H
9640.0	H	--					74.00	54.00		H
12050.0	H	--					74.00	54.00		H
14460.0	H	--					74.00	54.00		H
16870.0	H	--					74.00	54.00		H
19280.0	H	--					74.00	54.00		H
21690.0	H	--					74.00	54.00		H
24100.0	H	--					74.00	54.00		H
1024.0	H	50.68		-11.68	39.00		74.00	54.00	-15.00	S
1184.0	H	49.90		-10.61	39.29		74.00	54.00	-14.71	S
1496.0	H	48.15		-9.42	38.73		74.00	54.00	-15.27	S
1596.0	H	46.66		-8.89	37.77		74.00	54.00	-16.23	S

Remark：

(1) Measuring frequencies from 1GHz to the 10tth of fundamental frequency。

(2) Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB

(3) “F” denotes fundamental frequency; “H” denotes harmonics frequency. “S” denotes spurious frequency.

(4) 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.

(5) The RBW,VBW of SPA for frequency above 1GHz was 1MHz for Peak Mode
The RBW= 1MHz, ,VBW= 10Hz of SPA for frequency above 1GHz for Average Mode.

Measurement Result Above 1000MHz

Operation Mode: AV Mode
Fundamental Frequency: 2430 MHz (ch2)
Temperature : 26 ℃
Humidity : 68 %

Test Date : Jun. 02, 2003
Test By: Robin
Pol: Vertical

Freq. (MHz)	Ant.Pol. H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Factor (dB)	Actual Peak FS (dBuV/m)	Actual AV FS (dBuV/m)	Peak Limit at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Margin (dB)	
2430.0	V	96.20		-6.06	90.14		114.00	94.00	-3.86	F
4860.0	V	55.30	41.30	0.35	55.65	41.65	74.00	54.00	-12.35	H
7290.0	V	--					74.00	54.00		H
9720.0	V	--					74.00	54.00		H
12150.0	V	--					74.00	54.00		H
14580.0	V	--					74.00	54.00		H
17010.0	V	--					74.00	54.00		H
19440.0	V	--					74.00	54.00		H
21870.0	V	--					74.00	54.00		H
24300.0	V	--					74.00	54.00		H
1184.0	V	53.56		-10.61	42.95		74.00	54.00	-11.05	S
1340.0	V	48.46		-10.14	38.32		74.00	54.00	-15.68	S
1496.0	V	50.33		-9.42	40.91		74.00	54.00	-13.09	S

Remark：

(1) Measuring frequencies from 1GHz to the 10tth of fundamental frequency。

(2) Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB

(3) “F” denotes fundamental frequency; “H” denotes harmonics frequency. “S” denotes spurious frequency.

(4) 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.

(5) The RBW,VBW of SPA for frequency above 1GHz was 1MHz for Peak Mode
The RBW= 1MHz, ,VBW= 10Hz of SPA for frequency above 1GHz for Average Mode.

Measurement Result Above 1000MHz

Operation Mode: AV Mode
Fundamental Frequency: 2430 MHz (ch2)
Temperature : 26 ℃
Humidity : 68 %

Test Date : Jun. 02, 2003
Test By: Robin
Pol: Horizontal

Freq. (MHz)	Ant.Pol. H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Factor (dB)	Actual AV FS (dBuV/m)	Actual at 3m dBuV/m	Peak Limit at 3m (dBuV/m)	AV Limit Margin (dBuV/m)	Note (dB)	
2430.0	H	90.20		-6.06	84.14		114.00	94.00	-9.86	F
4860.0	H	44.60		0.35	44.95		74.00	54.00	-9.05	H
7290.0	H	--					74.00	54.00		H
9720.0	H	--					74.00	54.00		H
12150.0	H	--					74.00	54.00		H
14580.0	H	--					74.00	54.00		H
17010.0	H	--					74.00	54.00		H
19440.0	H	--					74.00	54.00		H
21870.0	H	--					74.00	54.00		H
24300.0	H	--					74.00	54.00		H
1184.0	H	50.86		-10.61	40.25		74.00	54.00	-13.75	S
1496.0	H	48.10		-9.42	38.68		74.00	54.00	-15.32	S
1656.0	H	47.17		-8.72	38.45		74.00	54.00	-15.55	S

Remark：

(1) Measuring frequencies from 1GHz to the 10tth of fundamental frequency。

(2) Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB

(3) "F" denotes fundamental frequency; "H" denotes harmonics frequency. "S" denotes spurious frequency.

(4) 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.

(5) The RBW,VBW of SPA for frequency above 1GHz was 1MHz for Peak Mode
The RBW= 1MHz, ,VBW= 10Hz of SPA for frequency above 1GHz for Average Mode.

Measurement Result Above 1000MHz

Operation Mode: AV Mode
Fundamental Frequency: 2470 MHz (ch4)
Temperature : 26 ℃
Humidity : 68 %

Test Date : Sep. 19, 2002
Test By: Markba
Pol: Vertical

Freq. (MHz)	Ant.Pol. H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Factor (dB)	Actual Peak FS (dBuV/m)	Actual AV FS (dBuV/m)	Peak Limit at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Margin (dB)	
2470.0	V	99.57	95.20	-5.85	93.72	89.35	114.00	94.00	-4.65	F
4940.0	V	57.42	43.12	0.41	57.83	43.53	74.00	54.00	-10.47	H
7410.0	V	--					74.00	54.00		H
9880.0	V	--					74.00	54.00		H
12350.0	V	--					74.00	54.00		H
14820.0	V	--					74.00	54.00		H
17290.0	V	--					74.00	54.00		H
19760.0	V	--					74.00	54.00		H
22230.0	V	--					74.00	54.00		H
24700.0	V	--					74.00	54.00		H
1184.0	V	53.56		-10.61	42.95		74.00	54.00	-11.05	S
1340.0	V	48.46		-10.14	38.32		74.00	54.00	-15.68	S
1496.0	V	50.33		-9.42	40.91		74.00	54.00	-13.09	S

Remark：

(1) Measuring frequencies from 1GHz to the 10tth of fundamental frequency。

(2) Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB

(3) "F" denotes fundamental frequency; "H" denotes harmonics frequency. "S" denotes spurious frequency.

(4) 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.

(5) The RBW,VBW of SPA for frequency above 1GHz was 1MHz for Peak Mode
The RBW= 1MHz, ,VBW= 10Hz of SPA for frequency above 1GHz for Average Mode.

Measurement Result Above 1000MHz

Operation Mode: AV Mode
Fundamental Frequency: 2470 MHz (ch4)
Temperature : 26 ℃
Humidity : 68 %

Test Date : Sep. 19, 2002
Test By: Markba
Pol: Horizontal

Freq. (MHz)	Ant.Pol. H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Factor (dB)	Actual AV FS (dBuV/m)	Actual at 3m (dBuV/m)	Peak Limit at 3m (dBuV/m)	AV Limit Margin (dBuV/m)	Note (dB)	
2470.0	H	92.44		-5.85	86.59		114.00	94.00	-7.41	F
4940.0	H	46.36		0.41	46.77		74.00	54.00	-7.23	H
7410.0	H	--					74.00	54.00		H
9880.0	H	--					74.00	54.00		H
12350.0	H	--					74.00	54.00		H
14820.0	H	--					74.00	54.00		H
17290.0	H	--					74.00	54.00		H
19760.0	H	--					74.00	54.00		H
22230.0	H	--					74.00	54.00		H
24700.0	H	--					74.00	54.00		H
1184.0	H	50.86		-10.61	40.25		74.00	54.00	-13.75	S
1496.0	H	48.10		-9.42	38.68		74.00	54.00	-15.32	S
1656.0	H	47.17		-8.72	38.45		74.00	54.00	-15.55	S

Remark：

(1) Measuring frequencies from 1GHz to the 10tth of fundamental frequency。

(2) Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB

(3) "F" denotes fundamental frequency; "H" denotes harmonics frequency. "S" denotes spurious frequency.

(4) 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.

(5) The RBW,VBW of SPA for frequency above 1GHz was 1MHz for Peak Mode
The RBW= 1MHz, ,VBW= 10Hz of SPA for frequency above 1GHz for Average Mode.

5. Band Edge Emission Measurement

5.1 Measurement Procedure

1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Set EUT as normal operation
3. Set SPA Center Frequency = fundamental frequency, RBW, VBW= 1MHz, Span =50MHz.
4. Turning table and set SPA Max hold. Mark peak and band edge frequency.
5. Repeat above procedures for both polarization of receiving antenna horizontal and vertical.

5.2 Test SET-UP (Block Diagram of Configuration)

Same as 4.2 Radiated Emission Measurements.

5.3 Measurement Equipment Used:

Same as 4.2 Radiated Emission Measurements.

5.4 Band Edge Measurement Results:

Operation Mode:	VGA Mode	Test Date :	Sep. 19, 2002
Fundamental Frequency:	2410 MHz (CH1) / 2470 MHz (CH4)	Test By:	Markba
Temperature :	26 ℃	Pol:	Ver./ Hor.
Humidity :	68 %		

Freq. (MHz)	Ant.Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Factor (dB)	Actual Peak FS (dBuV/m)	Actual AV FS (dBuV/m)	Peak Limit at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Margin (dB)	Note
CH1										
2399.3	V	56	---	-6.12	49.88	---	74.00	54.00	-4.12	Peak
2399.3	H	48.83	---	-6.12	42.71	---	74.00	54.00	-11.29	Peak
CH4										
2483.5	V	56.67	---	-5.81	50.86	---	74.00	54.00	-3.14	Peak
2483.5	H	50.00	---	-5.81	44.19	---	74.00	54.00	-9.81	Peak

Remark：

(1) The RBW,VBW of SPA for frequency above 1GHz was 1MHz for Peak Mode
The RBW= 1MHz, ,VBW= 10Hz of SPA for frequency above 1GHz for Average Mode.

Band Edge Measurement Results:

Operation Mode:	AV Mode	Test Date :	Sep. 19, 2002
Fundamental Frequency:	2410 MHz (CH1) / 2470MHz (CH4)	Test By:	Markba
Temperature :	26 ℃	Pol:	
Humidity :	68 %		

Freq. (MHz)	Ant.Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Factor (dB)	Actual Peak FS (dBuV/m)	Actual AV FS (dBuV/m)	Peak Limit at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Margin (dB)	Note
CH1										
######	V	61.67	38.83	-6.12	55.55	32.71	74.00	54.00	-21.29	AV
######	H	53.83	35.67	-6.12	47.71	29.55	74.00	54.00	-6.29	Peak
CH4										
######	V	61.50	44.17	-5.81	55.69	38.36	74.00	54.00	-15.64	AV
######	H	53.17	37.17	-5.81	47.36	31.36	74.00	54.00	-6.64	Peak

Remark：

(1) The RBW,VBW of SPA for frequency above 1GHz was 1MHz for Peak Mode
The RBW= 1MHz, ,VBW= 10Hz of SPA for frequency above 1GHz for Average Mode.