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 Tel: +82-31-321-2664 Fax: +82-31-321-1664
<http://www.digitalemc.com>

CERTIFICATE OF COMPLIANCE
FCC Part 15B Certification

Dates of Tests: June 14 ~ 26, 2006
 Test Report S/N:DR50110606N
 Test Site : DIGITAL EMC CO., LTD.

FCC ID.

P7KDDR6000R

APPLICANT

Diasonic Technology Co., Ltd.

FCC Classification	: Part 15 Class B Computing Device Peripheral
Device name	: Digital Voice Recorder
Manufacturer	: Diasonic Technology Co., Ltd. #321-43, Suksu-dong, Manan-ku, Anyang-city, Kyungki-do, Korea.
Model name(Brand Name)	: DDR-6000R (Voice Bank)
Test Device Serial number	: Identical prototype
FCC Rule Part(s)	: FCC Part 15 Subpart B; ANSI C 63.4-2003
Data of issue	: June 27, 2006

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.



NVLAP LAB CODE 200559-0

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1. General Informations

This report contains the result of tests performed by:

DIGITAL EMC CO., LTD.

Address : 683-3, Yubang-Dong, Yongin-Si, Kyunggi-Do, Korea. 449-080

<http://www.digitalemc.com> E-mail : shins@digitalemc.com

Tel: +82-31-321-2664 Fax: +82-31-321-1664

Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the

“General requirements for the competents of calibration and testing laboratory”.

This laboratory is accredited by NVLAP for NVLAP Lab. Code : 200559-0.

Test operator: Assistant Manager

June 27, 2006

Seung-Bum, Cho



Data

Name

Signature

Report Reviewed By: Technical Director

June 27, 2006

Harvey Sung



Data

Name

Signature

Ordering party:

Company name	:	Diasonic Technology Co., Ltd.
Address	:	#321-43, Suksu-dong, Manan-ku,
City/town	:	Anyang-city, Kyungki-do
Country	:	Korea.
Zip code	:	430-040
Date of order	:	June 09, 2006

2. Informations about test item

P7KDDR6000R

2.1 Equipment information

Kind of Equipment	Digital Voice Recorder
Model No.(Brand Name)	DDR-6000R (Voice Bank)
Add Model No.(Brand Name)	DDR-6000(Voice Bank) ; Deletion of FM Receiver
Serial No.	None
Memory Size	128MB, 256MB, 512MB, 1GB, 2GB
Type of Sample Tested	Pre-Production
Rating Power Supply (Used AC/DC adapter)	Model No : U045020D12 Manufacture : Ten Pao Industrial Co., Ltd. Input : AC120V, 60Hz, 6.5W Output : DC4.5V, 200mA
High Frequency	32.768kHz, 12MHz
Tested Power Supply	1 Phase 120Vac, 60Hz

2.2 Ancillary Equipment

Equipment	Model No.	Serial No.	Manufacturer
PC	Y8Y	408KIEV102124	LG
LCD Monitor	CT-150	R20110001B	COMTEC
Printer	SRP-770	SRP7708060035	SAMSUNG
Mouse	SMOP5000WX	04010159128	CHIC TECHNOLOGY
Keyboard	SEM-DT35US	N/A	GREAT PLEASURE ELECTRONICS

2.3 EMI Suppression Device(s)/Modifications

None

3. Test Report

3.1 Summary of tests

FCC Part Section(s)	Parameter	Status (note 1)
Transmitter requirements		
15.109	Radiated Emission	C
15.107	Conducted Emissions	C
Note 1: C= Complies NC=Not Complies NT=Not Tested NA=Not Applicable		

The sample was tested according to the following specification:

FCC Parts 15B; ANSI C-63.4-2003

3.2 Transmitter requirements

3.2.1 Radiated Emission

Procedure:

The EUT was placed on a 0.8m high wooden table inside a shielded enclosure. An antenna was placed near the EUT and measurements of frequencies and amplitudes of field strengths were recorded for reference during final measurements. For final radiated testing, measurements were performed in a OATS. Measurements were performed with the EUT oriented in 3 orthogonal axis and rotated 360 degrees to determine worst-case orientation for maximum emissions.

The spectrum analyzer is set to:

Frequency Range = 27 MHz ~ 10th harmonic.

RBW = 120 kHz (30MHz ~ 1 GHz) VBW RBW

$\equiv 1 \text{ MHz}$ (1 GHz $\sim 10^{\text{th}}$ harmonic)

Trace = max hold

Detector function = peak / Quasi-peak / average

Sweep = auto

Measurement Result: Complies

- Refer to the Next page

Minimum Standard: 10m measurement according to CISPR 22

Frequency (MHz)	Limit (uV/m) @ 10m
30 ~ 230	30
230 ~ 1000	37

Radiated Emissions

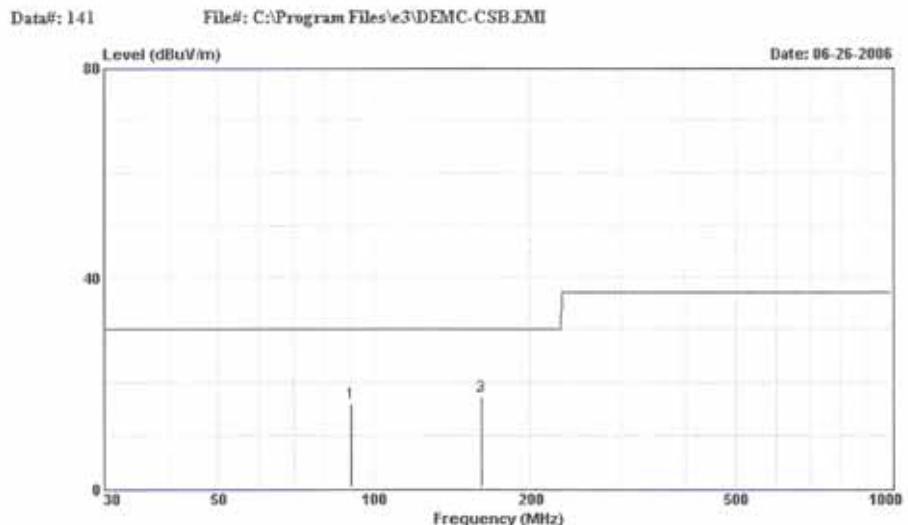
Measurement Data:

Remark: the other emission is less than 30dB.

Test mode : Play Mode



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Site : Digital EMC
Condition : CISPR CLASS-B 10m ANT 10(2006)
EUT : DDR-6000
Power : 120V
Memo : 24'C 52%
: PLAY MODE

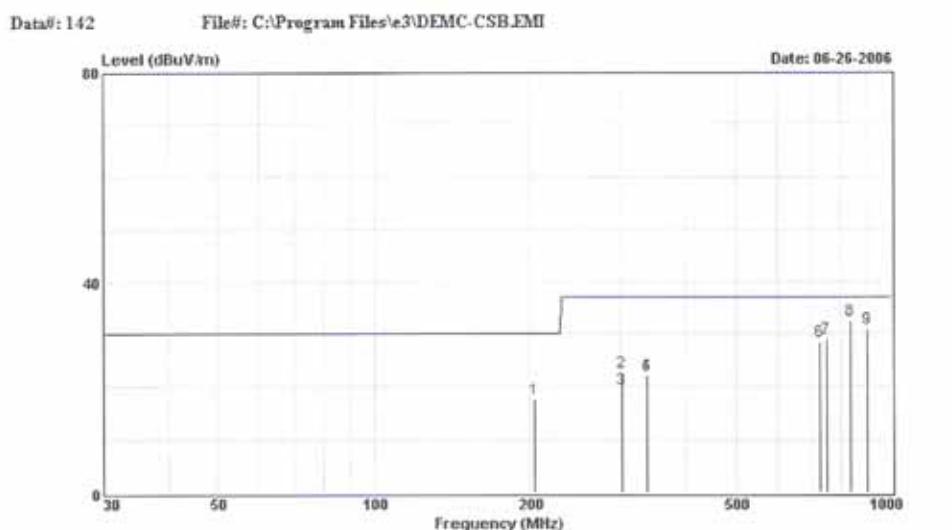
Freq	Remark	Read	Probe	Cable	Preamp	Limit	Over	
		Level	Factor	Loss	Factor			
MHz		dBuV	dB	dB	dB	dBuV/m	dBuV/m	dB
1	90.620 H	34.00	8.41	1.72	28.81	-17.88	16.12	30.00 -13.88
2	160.950 V	27.00	15.61	2.33	27.73	-9.79	17.21	30.00 -12.79
3	160.950 H	27.00	15.61	2.33	27.73	-9.79	17.21	30.00 -12.79

Radiated Emissions**Measurement Data:**

Remark: the other emission is less than 30dB.

Test mode : USB download Mode

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Site : Digital EMC
Condition : CISPR CLASS-B 10m ANT 10(2006)
EUT : DDR-6000
Power : 120V
Memo : 24'C 52%
: PC LINK MODE

Freq	Remark	Read	Probe	Cable	Preamp	Limit	Over	
		Level	Factor	Loss	Factor			
10tr		dBuV	dB	dB	dB	dBuV/m	dBuV/m	dB
1	204.600 Hz	26.00	16.42	2.85	27.59	-8.32	17.68	30.00 -12.32
2	301.600 Hz	32.00	18.39	3.61	27.41	-9.41	22.59	37.00 -14.41
3	301.600 V	29.00	14.39	3.61	27.41	-9.41	19.59	37.00 -17.41
4	337.970 V	31.00	14.99	3.85	27.69	-8.85	22.15	37.00 -14.85
5	337.970 Hz	31.00	14.99	3.85	27.69	-8.85	22.15	37.00 -14.85
6	725.970 Hz	31.00	20.46	5.77	28.67	-2.44	28.56	37.00 -8.44
7	750.220 Hz	31.00	20.57	6.02	28.65	-2.06	28.94	37.00 -8.06
8	835.100 V	33.00	21.29	6.65	28.49	-0.55	32.45	37.00 -4.55
9	900.570 Hz	30.01	22.20	6.90	29.30	0.00	30.81	37.00 -6.19

3.2.2 Conducted Emission.

Procedure:

The conducted emissions are measured in the shielded room with a spectrum analyzer in peak hold. While the measurement, EUT had its receiving function. Emissions closest to the limit are measured in the quasi-peak mode (QP) with the tuned receiver using a bandwidth of 9 kHz. The emissions are maximized further by cable manipulation and Exerciser operation. The highest emissions relative to the limit are listed.

Measurement Data: **Complies**

- During the charging mode, this EUT was not applied because The EUT couldn't the transmission.

Minimum Standard: FCC Part 15.107/CISPR 22

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

* Decreases with the logarithm of the frequency

Measurement Setup

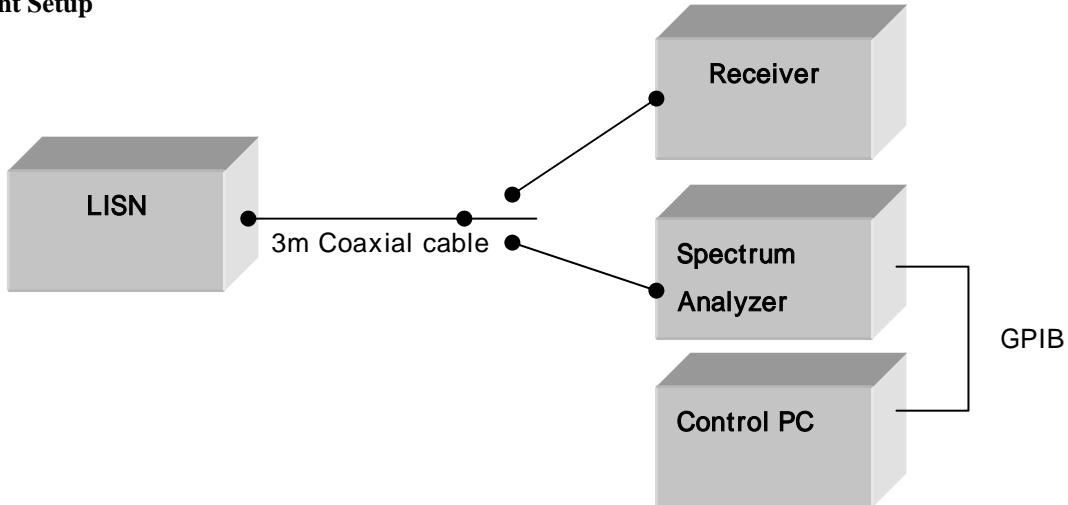
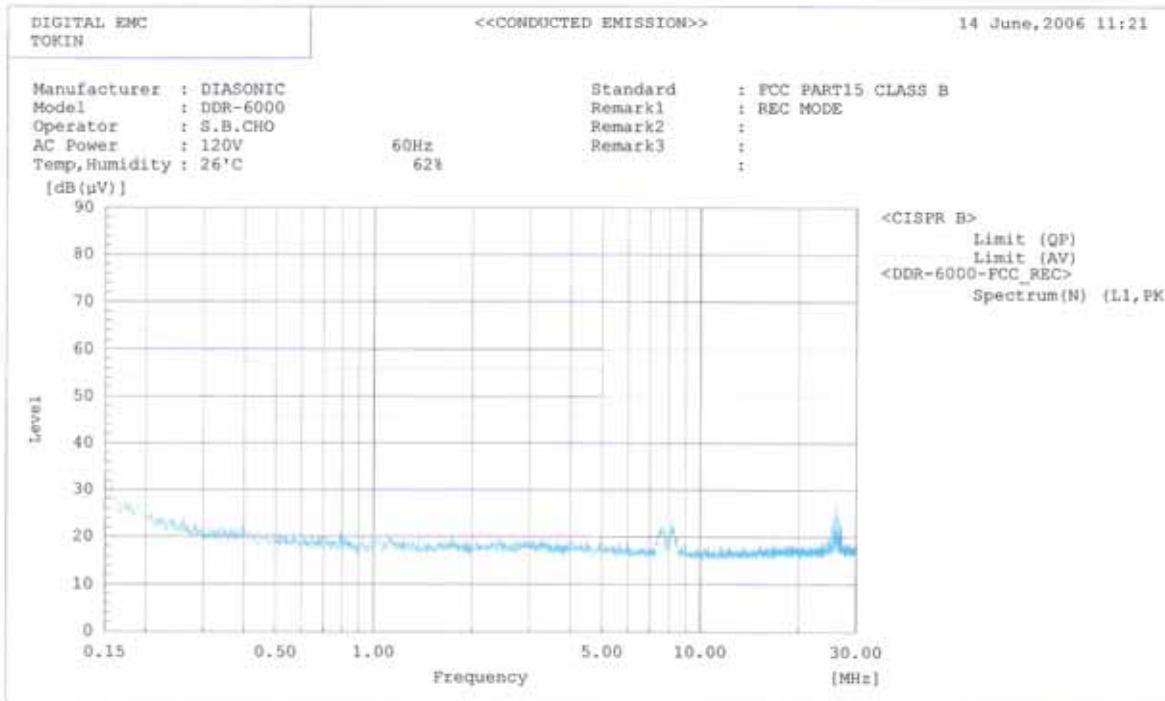
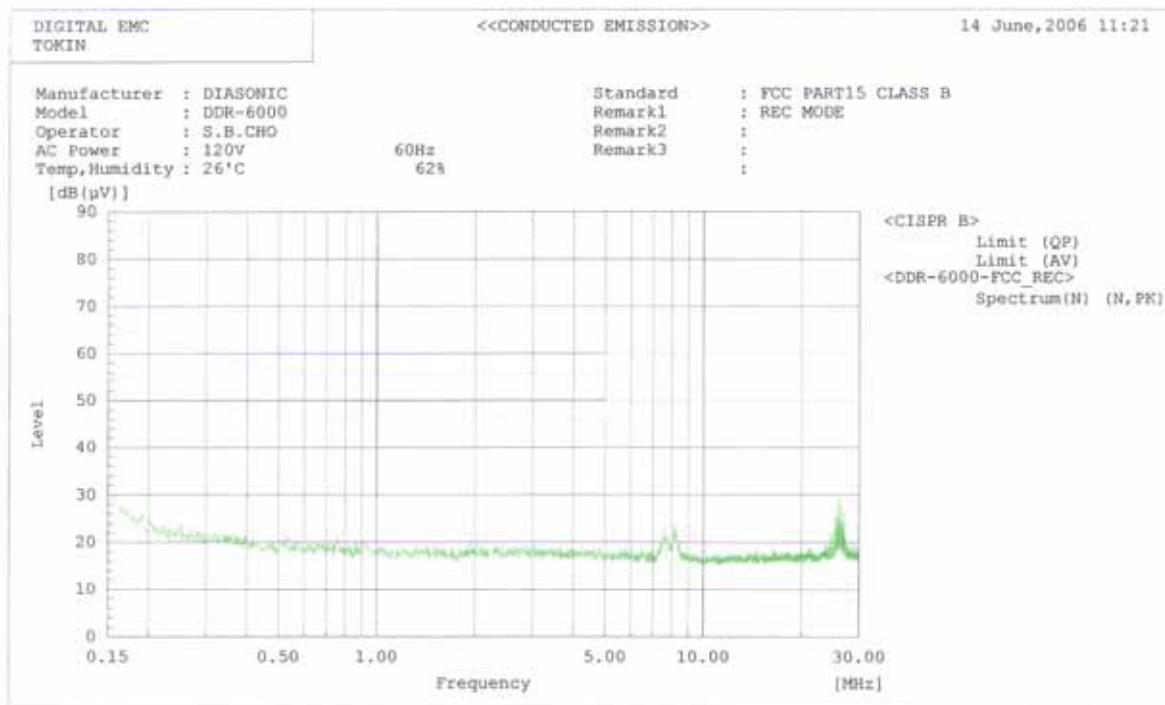
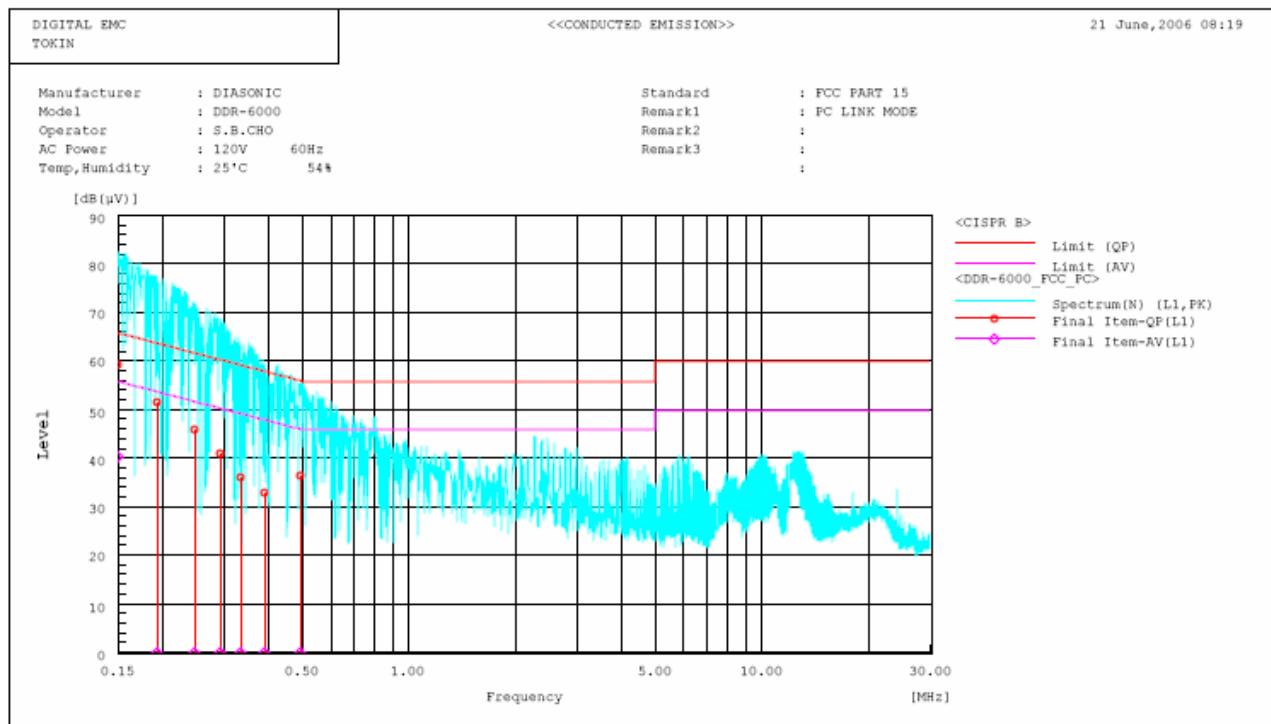
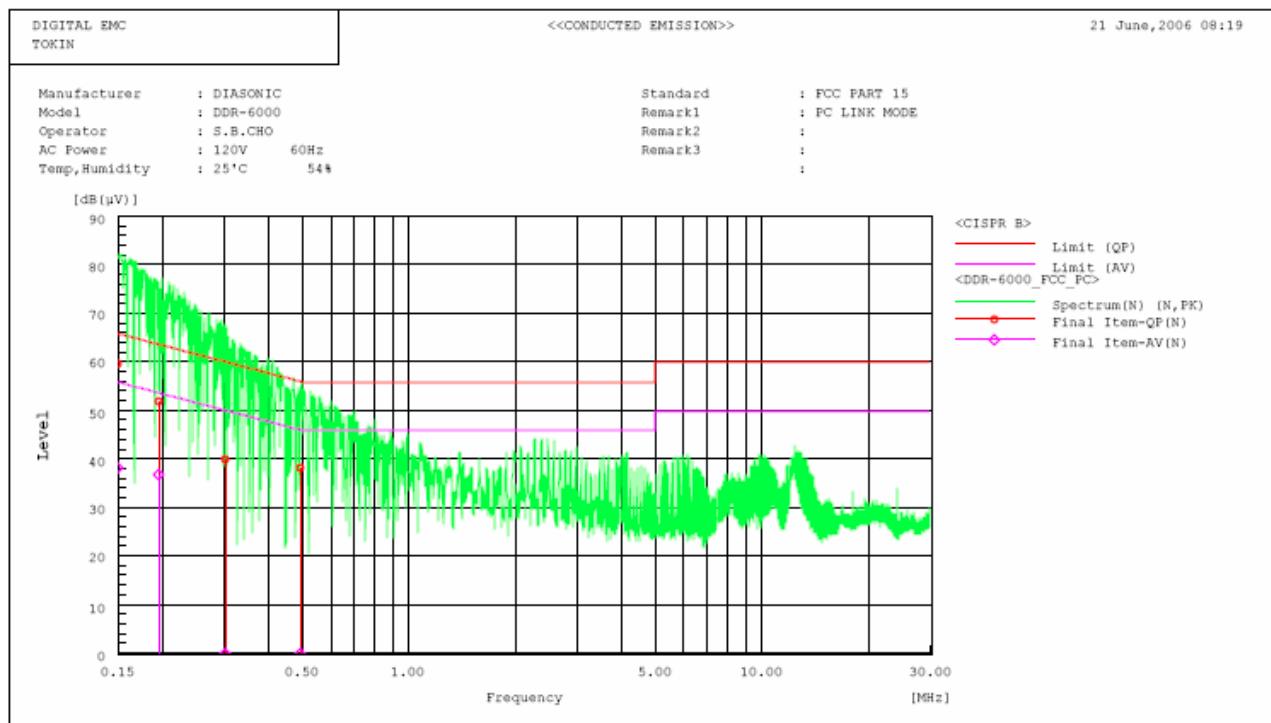


Figure 2: Measurement setup for AC Conducted Emission

Recording Mode / Graph



USB download Mode / Graph



USB download Mode / Data

***** DIGITAL EMC *****
«CONDUCTED EMISSIONS»

21 June, 2006 08:19

Standard	PCC PART 15
Manufacturer	DIASONIC
Model	DDR-6000
Operator	S.B. CHO
AC Power	120V
Temp. Humidity	60Hz 25°C 54%
Remark1	PC LINK MODE
Remark2	
Remark3	

--- N Phase ---											
No.	Frequency	Reading	Reading	c.v.	Result	Result	limit	limit	Margin	Margin	Remark
		QP	AV	[dB]	QP	AV	[dB]	[dB]	QP	AV	
		[MHz]	[dB (μV)]	[dB (μV)]	[MHz]	[dB (μV)]	[dB (μV)]	[dB (μV)]	[MHz]	[dB (μV)]	
1	0.150	59.3	37.8	0.4	59.7	38.2	66.0	56.0	6.3	17.8	
2	0.195	51.5	36.6	0.4	52.0	37.0	63.9	53.8	11.8	16.8	
3	0.304	39.9	0.0	0.3	40.2	0.0	60.1	50.1	9.9	0.0	
4	0.495	37.9	0.0	0.3	38.2	0.0	56.1	46.1	17.9	0.0	
--- L1 Phase ---											
No.	Frequency	Reading	Reading	c.v.	Result	Result	Limit	Limit	Margin	Margin	Remark
		QP	AV	[dB]	QP	AV	[dB]	[dB]	QP	AV	
		[MHz]	[dB (μV)]	[dB]	[MHz]	[dB (μV)]	[dB (μV)]	[dB (μV)]	[MHz]	[dB (μV)]	
1	0.150	59.0	40.2	0.3	59.3	40.5	66.0	55.0	6.7	15.5	
2	0.194	51.5	0.0	0.2	51.7	0.0	63.9	53.9	12.2	0.0	
3	0.248	45.8	0.0	0.2	46.0	0.0	61.8	51.8	15.9	0.0	
4	0.293	41.1	0.0	0.2	41.3	0.0	60.4	50.4	19.1	0.0	
5	0.336	36.0	0.2	0.2	36.2	0.0	59.3	49.3	23.1	0.0	
6	0.490	33.0	0.0	0.2	33.2	0.0	58.1	48.1	24.9	0.0	
7	0.495	36.4	0.0	0.2	36.6	0.0	56.1	46.1	19.5	0.0	

APPENDIX

TEST EQUIPMENT USED FOR TESTS

To facilitate inclusion on each page of the test equipment used for related tests, each item of test equipment.

	Type	Manufacturer	Model	Cal.Due.Date (dd/mm/yy)	S/N
01	Spectrum Analyzer	HP	8591E	21/03/07	3649A05889
02	RFI/Field intensity Meter	Kyoritsu Electrical Works	KNW-2402	11/07/07	4N-170-3
03	LISN	Kyoritsu Electrical Works	KNW-407	11/08/06	8-317-8
04	LISN	Kyoritsu Electrical Works	KNW-242	27/09/06	8-654-15
05	RFI/Field intensity Meter	KYORITSU	KNM-504D	21/07/07	4N-161-4
06	Frequency Converter	KYORITSU	KCV-604C	21/07/07	4-230-3
07	Spectrum Analyzer	HP	8563E	06/10/10	3551A04634
08	BICONICAL ANT.	SCHWARZBECK	VHA 9103	18/11/06	VHA91031946
09	LOG-PERIODIC ANT.	SCHWARZBECK	UHALP 9108-A1	29/09/06	1098
10	Horn Antenna	EMC	3115	03/06/07	6419
11	Amplifier (25dB)	Agilent	8447D	12/04/07	2944A10144
12	Position Controller	TOKIN	5901T	N/A	14173
13	DRIVER	TOKIN	5902T2	N/A	14174
14	Spectrum Analyzer	Agilent	E4411B	21/07/07	US41062735
15	Amplifier (25dB)	Agilent	8447D	06/07/07	2443A03690
16	BILOG ANTENNA	SCHAFFNER	CBL6111B	24/04/07	2737
17	CONTROLLER	TOKIN	5900	N/A	N/A