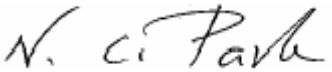
EMC Test Report

According to FCC Part 15 Subpart B

Project No.		**LBE050217**
Equipment under Test		
	Address	416 Maetan3-Dong,Yeongtong-Gu,Suwon-Si,Gyeonggi-Do, Korea,443-742
	Product Name	**DVD Player / Video Cassette Recorder**
	Model Name	**DVD-V8500**
	Manufacturer	SAMSUNG
	Brand Name	SAMSUNG
	FCC ID	A3LDVDV8500
	Broadcasting System	NTSC
	Variant Model	See Page 3
Date of Test		January 28 ~ February 2, 2005
Issued Date		February 4, 2005

	Name/Position	Signature
Tested by	Min Kyung Chul Test Engineer	
Reviewed by	No Cheon, Park Manager of EMC Lab.	
Authorized by	Seung Kyu, Cha Chief of EMC Lab.	

1. This test reports does not constitute an endorsement by NIST/NVLAP or U.S Government.
2. This test report is to certify that the tested device properly complies with the requirements of FCC Rules and Regulations Part 15 Subpart B Unintentional Radiators.
   All tests necessary to show compliance to the requirements were and these results met the specifications requirement.

This laboratory is registered by the NIST/NVLAP, U.S.A.
The test reported herein have been performed in accordance with its terms of registration.

NVLAP LAB CODE 200623-0

Table of Contents

1. General Information

1.1 Basic Information related Product

Applicant	Samsung Electronics Co. Ltd
Model name	DVD-V8500
Applicant Address	Samsung Electronics Co. Ltd; 416 Maetan3- Dong, Yeongtong-Gu, Suwon-Si, Gyeonggi-Do, Korea, 443-742
Contact Person	WOOSUNG CHO
Kind of product	**DVD Player / Video Cassette Recorder**
Valiant list	
Manufacturer	Samsung Electronics Co.Ltd

1.2 Detail Information related Product

Specification

Inputs	AUDIO	2 Stereo audio inputs, RCA Connector, -8dbm, 47KΩ, front and rear
	VIDEO	2 Composite video inputs, RCA Connector, 75Ω, 1Vp-p
	RF	Antenna or CATV Input, F-Connector, 75Ω
Outputs	AUDIO	1 Stereo audio outputs, RCA Connector, -8dbm, 1.5KΩ
	AUDIO (DVD only)	1 Digital audio output (1 coaxial) 1 pair Stereo audio outputs
	VIDEO	1 Composite video output, RCA Connector, 75Ω, 1Vp-p
	VIDEO (DVD only)	1 S-Video output, S-Connector, 75Ω, Y=1.0Vp-p, C=0.286Vp-p
		1 Component video output, 75Ω, Y=1.0Vp-p, Pb=0.7Vp-p, Pr=0.7Vp-p
VCR	RF	Channel 3 or 4
	VIDEO SYSTEM	1/2-inch VHS system, 4 rotary head helical scanning; FM azimuth luminance;chrominance: converted sub system phase shift
	AUDIO TRACK	Normal: 1 track; Hi-Fi: 2 track
	PLAY/RECORD TIME	T-180 tape: SP 3 hours, SLP 9 hours
	FF/REW TIME	T-120 tape: <2 minutes
	HEADS	Video: DA 4 rotary Audio: 2 rotary heads (Hi-Fi); 1 stationary head (Linear) Control: 1 stationary head Erase: 1 full track, 1 audio track
	WOW & FLUTTER	Less than 0.005% (Hi-Fi)
	FREQ. RESPONSE	20-20,000 Hz (Hi-Fi)
DVD	DISC COMPATIBILITY	CD, CD-R, CD-RW DVD-Video, CD-Digital Audio (5" and 3.5")
	FREQ. RESPONSE	96/48 kHz Sampling: 4 Hz-22kHz
	S/N RATIO	110 dB
	DYNAMIC RANGE	96 dB
	THD	0.003 %
SYSTEM	POWER REQUIREMENT	120V AC, 60 Hz, 25 watts
	ENVIRONMENT	41-104˚F (5-40˚C); 10%-75% humidity
	WEIGHT	13.8 lbs.

1.3 Operating Mode and Condition

The system was configured for testing in typical fashion use. Cable were attached to each of the available I/O Ports. The mode of operation utilized for testing was selected to best simulate typical EUT use.

This EUT has the following operating mode(s).

- VCR Record(NTSC)
- VCR Record(1V VITS)
- VCR Record(5V VITS)
- VCR Play
- DVD Play

1.4 Equipment Modifications

No equipment modifications were required.

1.5 Test Configuration

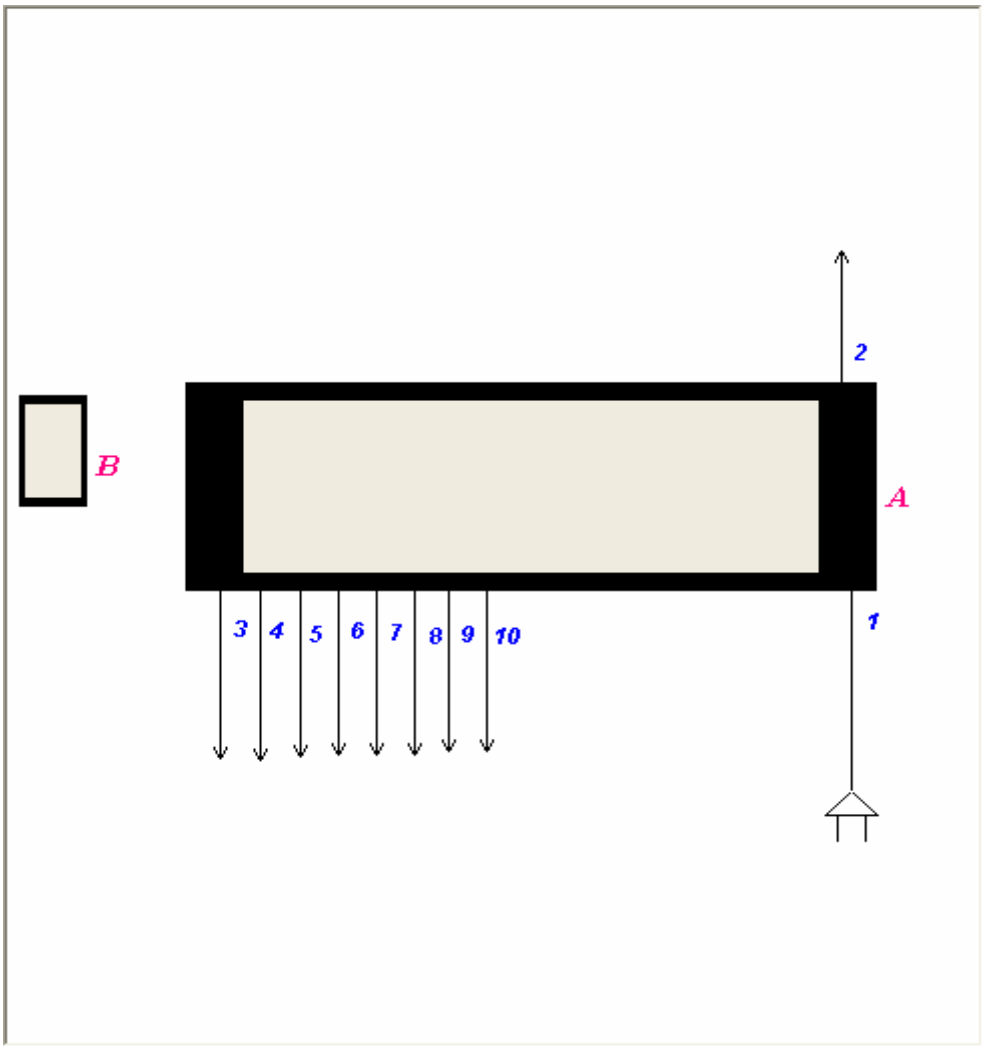
Used EUT and Peripherals

Seq	Device	Model Name	Serial #	Maker	Note
A	DVD Player / Video Cassette Recorder	DVD-V8500	-	SAMSUNG	EUT
B	Remote Controller	VR-6144	-	SAMSUNG	EUT

Used Cable Description

	Connect Cable	Length	Shielded [Y/N]	Remark
1	Mains	1.5	N	
2	Front AV In	1.5	N	
3	S-Video Out	1.0	N	
4	Componet Video Out	1.5	N	
5	Audio Out	1.5	N	
6	Digital Audio Out	1.5	N	
7	AV In 1	1.5	N	
8	AV Out	1.5	N	
9	Ant In	1.5	Y	
10	Ant Out	1.5	Y	

Block Diagram



1.6 Applied Standards

List

Applied Standards	Test Procedure
FCC Part15 Subpart B	ANSI C63.4 : 2003

1.7 Test Facility

General Information

The sites are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1, 16-2.

This EMC Testing Lab. is accredited by Korea Laboratory Accreditation Scheme(KOLAS) which signed the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) for the above test item(s) and test method(s).

This Lab. is operated as testing laboratory in accordance with the requirements of ISO/IEC 17025:1998.

Accreditation and Listing

Uncertainty

(According to NAMAS Pub.NIS81)

Test Item	Expanded Uncertainty
Radiated Disturbance	+/-5.09
Disturbance voltage at the mains terminals	+/-1.64

2. Summary of Test Results

Result : PASS

The equipment under test(EUT) has been found to comply with the applied standards.

Test Name		Applied Standard	Result
Electromagnetic Emission Test			
3.1	Conducted Emission	FCC Part15 Subpart B	Complied
3.2	Radiated Emission	FCC Part15 Subpart B	Complied
3.3	Output Signal Level	FCC Part15 Subpart B	Complied
3.4	Output Terminal Conducted Spurious Emission	FCC Part15 Subpart B	Complied
3.5	Ant. Transfer Switch	FCC Part15 Subpart B	Complied

3. Description of Individual Tests

3.1 Conducted Emission

Test Information		
	Test Engineer	Min Kyung Chul
	Test Date	January 29, 2005 ~ February 1, 2005
	Climate Condition	Ambient Temperature : 23℃ Relative Humidity : 41%
	Test Place	Shield Room #5

Test Equipments

Equipment	Modal Name	Manufacturer	Serial No.	Calibration	
				Next Date	Interval
L.I.S.N	ESH3-Z5	R&S	100262	2005-02-11	12
Test Software	EP5CE	TOYO	None	N/A	N/A
TV Signal Generator	PM5418-TDSI	PHILIPS	LO612437	2005-09-23	12
Field strength meter	ESS	R&S	844661/005	2006-01-11	12
RF Relais Matrix	PSU	R&S	861206/024	N/A	N/A
L.I.S.N	ESH3-Z5	R&S	100260	2005-07-06	12
EMC Analyzer	E7405A	Agilent	US41110272	2006-01-20	12

EUT Test Setup

The EUT was set up as per normal use on a wooden table 0.4m from a vertical ground reference plane, at least 0.8m from other conduction surfaces and 0.8m from the LISN.

See photo..

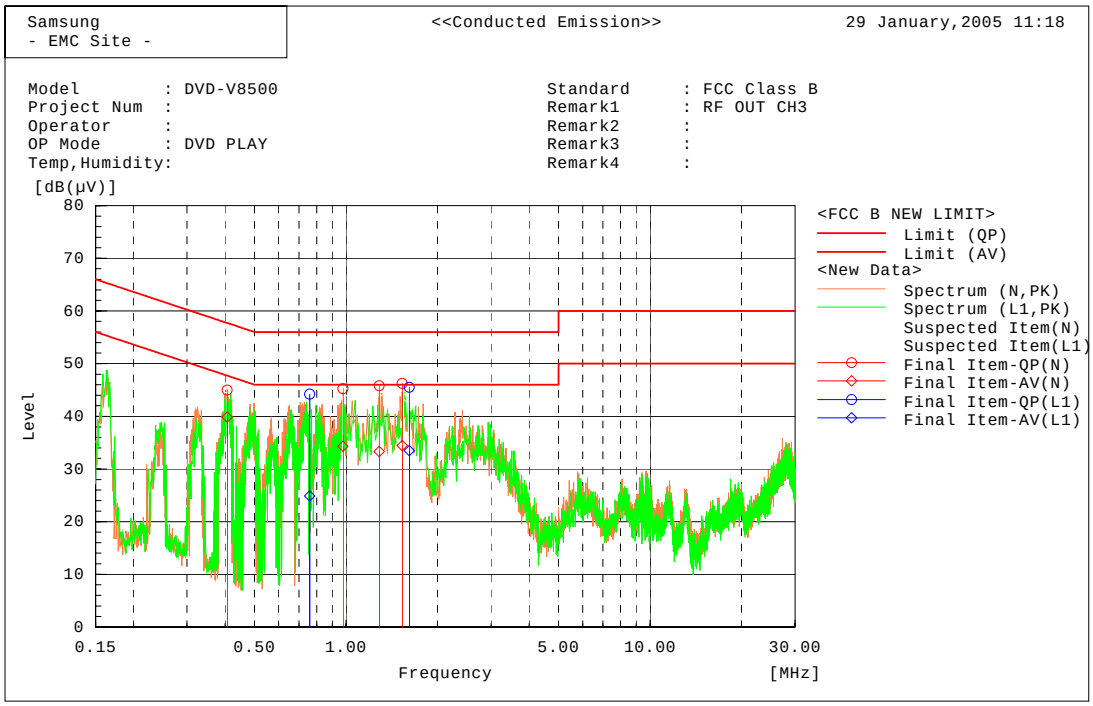
Test Result

Measurement Results	Pass The measured emissions of the EUT have found to be below the specified limits.

Test Data

■ Operating Mode : DVD PLAY-RF OUT CH03

[Graph and Data]



Final Result

--- N Phase ---

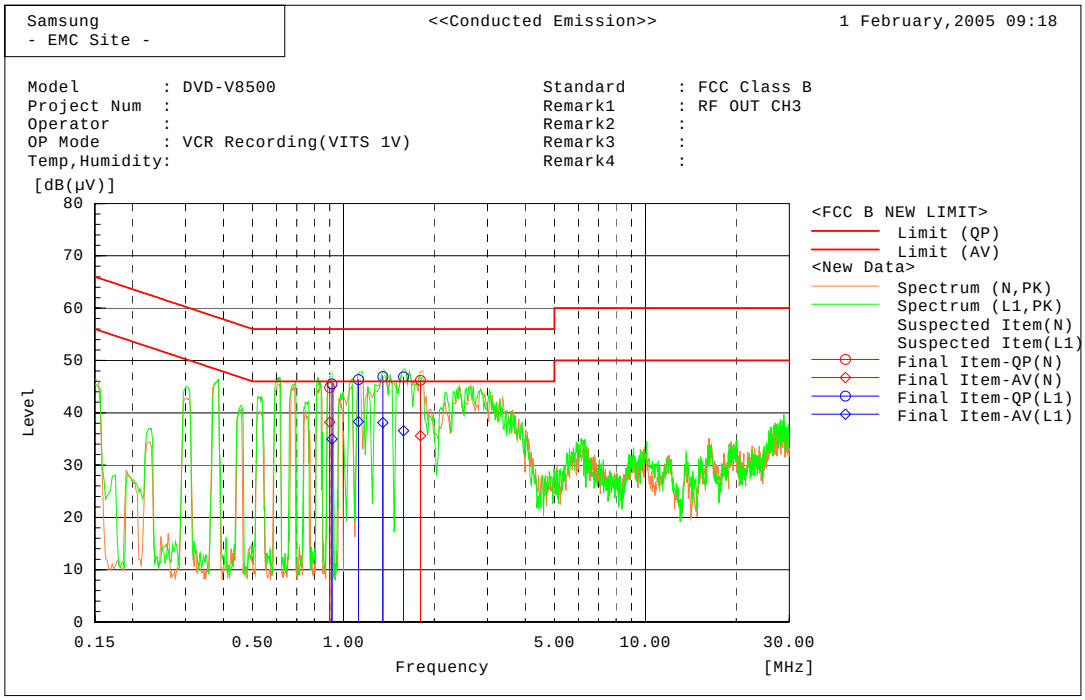
No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c.f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]
1	0.40601	44.9	39.7	0.1	45.0	39.8	57.7	47.7	12.7	7.9
2	0.97695	45.2	34.2	0.1	45.3	34.3	56.0	46.0	10.7	11.7
3	1.28469	45.7	33.2	0.1	45.8	33.3	56.0	46.0	10.2	12.7
4	1.53038	46.1	34.3	0.1	46.2	34.4	56.0	46.0	9.8	11.6

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c.f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]
1	0.75852	44.1	24.8	0.1	44.2	24.9	56.0	46.0	11.8	21.1
2	1.61263	45.4	33.4	0.1	45.5	33.5	56.0	46.0	10.5	12.5

■ Operating Mode : VCR REC(1V VITS)-RF OUT CH03

[Graph and Data]



Final Result

--- N Phase ---

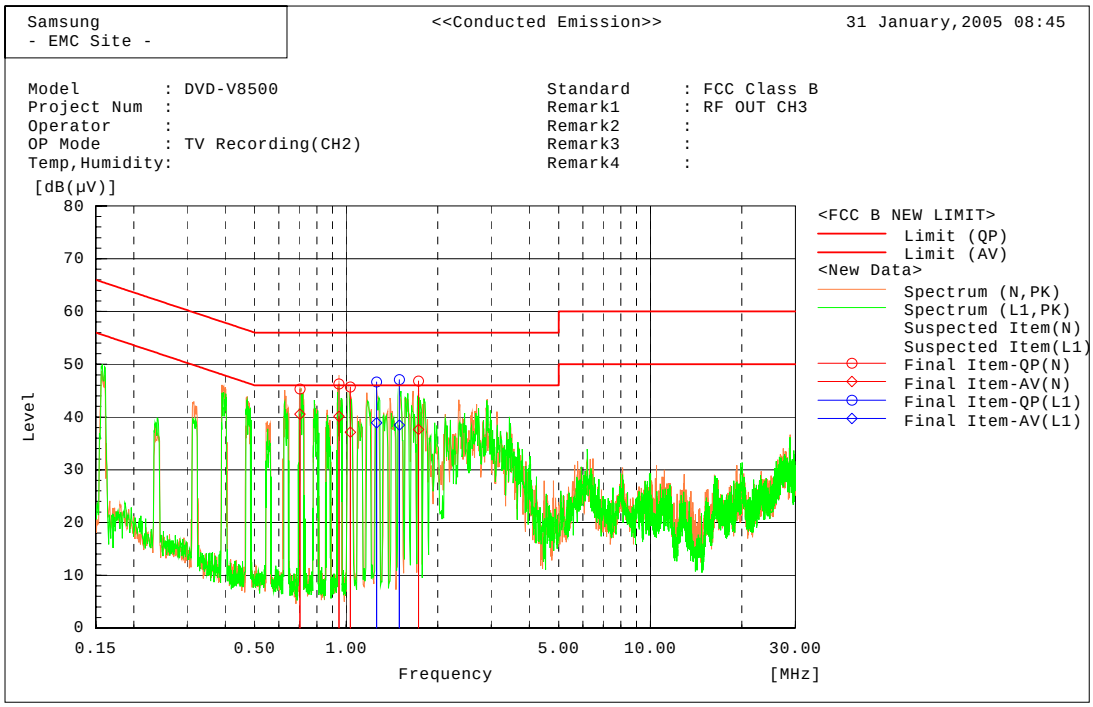
No.	Frequency [MHz]	Reading QP [dB(µV)]	Reading AV [dB(µV)]	c.f [dB]	Result QP [dB(µV)]	Result AV [dB(µV)]	Limit QP [dB(µV)]	Limit AV [dB(µV)]	Margin QP [dB]	Margin AV [dB]
1	0.89951	44.6	38.0	0.2	44.8	38.2	56.0	46.0	11.2	7.8
2	1.7983	46.1	35.5	0.1	46.2	35.6	56.0	46.0	9.8	10.4

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(µV)]	Reading AV [dB(µV)]	c.f [dB]	Result QP [dB(µV)]	Result AV [dB(µV)]	Limit QP [dB(µV)]	Limit AV [dB(µV)]	Margin QP [dB]	Margin AV [dB]
1	0.91564	45.3	34.8	0.2	45.5	35.0	56.0	46.0	10.5	11.0
2	1.12105	46.2	38.1	0.2	46.4	38.3	56.0	46.0	9.6	7.7
3	1.3501	46.7	37.9	0.2	46.9	38.1	56.0	46.0	9.1	7.9
4	1.58163	46.7	36.4	0.2	46.9	36.6	56.0	46.0	9.1	9.4

■ Operating Mode : VCR REC(NTSC)-RF OUT CH03

[Graph and Data]



Final Result

--- N Phase ---

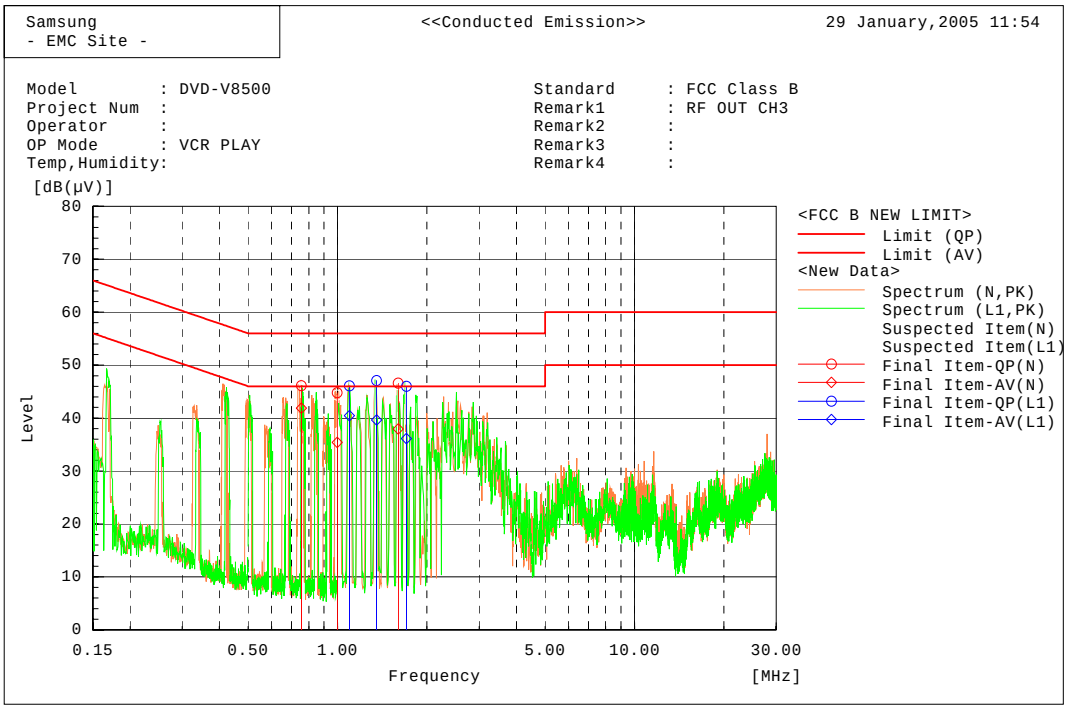
No.	Frequency [MHz]	Reading QP [dB(µV)]	Reading AV [dB(µV)]	c.f [dB]	Result QP [dB(µV)]	Result AV [dB(µV)]	Limit QP [dB(µV)]	Limit AV [dB(µV)]	Margin QP [dB]	Margin AV [dB]
1	0.70441	45.2	40.4	0.1	45.3	40.5	56.0	46.0	10.7	5.5
2	0.94589	46.2	40.0	0.1	46.3	40.1	56.0	46.0	9.7	5.9
3	1.0317	45.6	37.0	0.1	45.7	37.1	56.0	46.0	10.3	8.9
4	1.72982	46.7	37.6	0.1	46.8	37.7	56.0	46.0	9.2	8.4

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(µV)]	Reading AV [dB(µV)]	c.f [dB]	Result QP [dB(µV)]	Result AV [dB(µV)]	Limit QP [dB(µV)]	Limit AV [dB(µV)]	Margin QP [dB]	Margin AV [dB]
1	1.25768	46.5	38.8	0.1	46.6	38.9	56.0	46.0	9.4	7.1
2	1.49615	47.0	38.4	0.1	47.1	38.5	56.0	46.0	8.9	7.6

■ Operating Mode : VCR PLAY-RF OUT CH03

[Graph and Data]



Final Result

--- N Phase ---

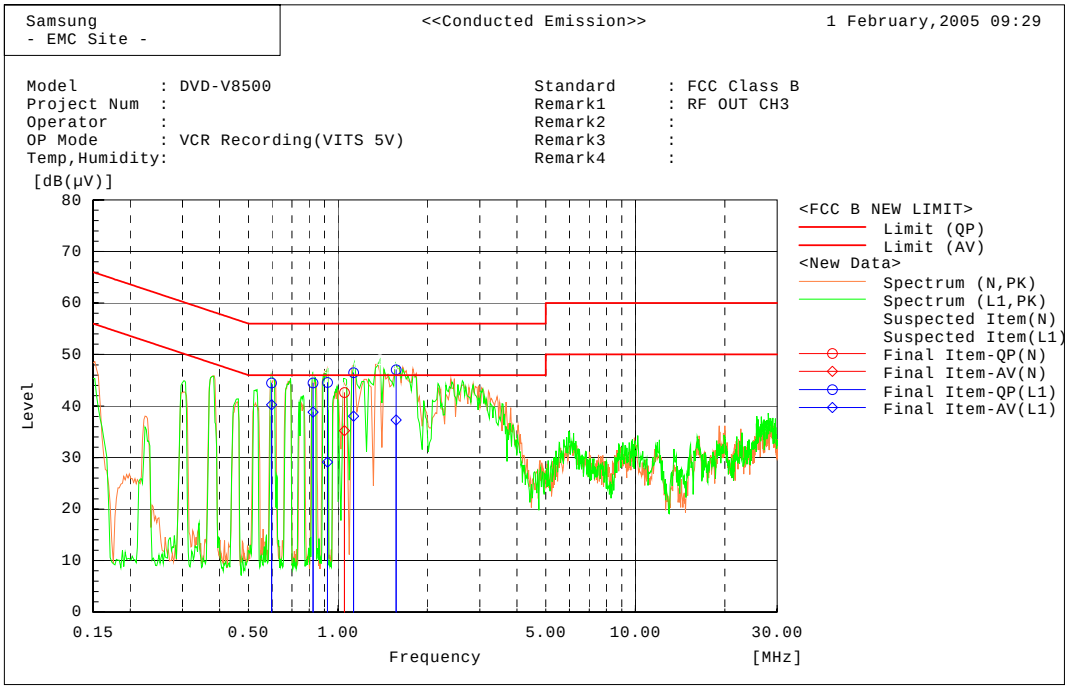
No.	Frequency [MHz]	Reading QP [dB(µV)]	Reading AV [dB(µV)]	c.f [dB]	Result QP [dB(µV)]	Result AV [dB(µV)]	Limit QP [dB(µV)]	Limit AV [dB(µV)]	Margin QP [dB]	Margin AV [dB]
1	0.75551	46.0	41.8	0.1	46.1	41.9	56.0	46.0	9.9	4.1
2	1.6006	46.5	37.8	0.1	46.6	37.9	56.0	46.0	9.4	8.1
3	0.99699	44.7	35.3	0.1	44.8	35.4	56.0	46.0	11.2	10.6

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(µV)]	Reading AV [dB(µV)]	c.f [dB]	Result QP [dB(µV)]	Result AV [dB(µV)]	Limit QP [dB(µV)]	Limit AV [dB(µV)]	Margin QP [dB]	Margin AV [dB]
1	1.09567	46.0	40.3	0.1	46.1	40.4	56.0	46.0	9.9	5.6
2	1.35251	47.0	39.5	0.1	47.1	39.6	56.0	46.0	8.9	6.4
3	1.70441	45.9	36.0	0.1	46.0	36.1	56.0	46.0	10.0	9.9

■ Operating Mode : VCR REC(5V VITS)-RF OUT CH03

[Graph and Data]



Final Result

--- N Phase ---

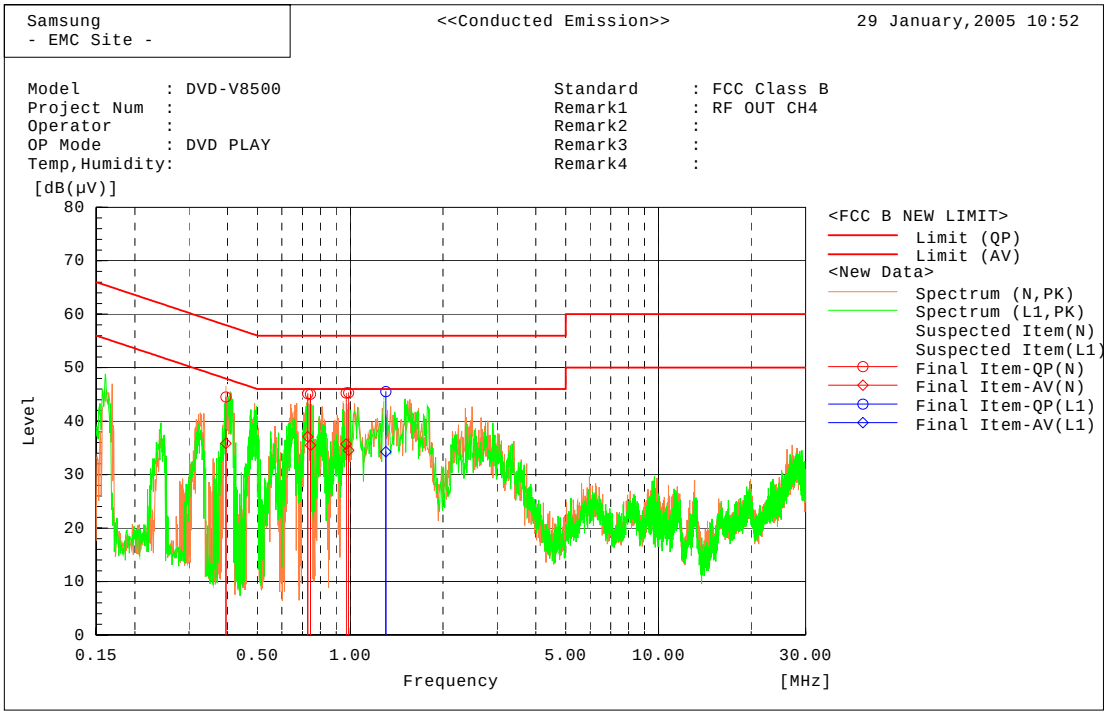
No.	Frequency [MHz]	Reading QP [dB(µV)]	Reading AV [dB(µV)]	c.f [dB]	Result QP [dB(µV)]	Result AV [dB(µV)]	Limit QP [dB(µV)]	Limit AV [dB(µV)]	Margin QP [dB]	Margin AV [dB]
1	1.05107	42.4	35.0	0.2	42.6	35.2	56.0	46.0	13.4	10.8

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(µV)]	Reading AV [dB(µV)]	c.f [dB]	Result QP [dB(µV)]	Result AV [dB(µV)]	Limit QP [dB(µV)]	Limit AV [dB(µV)]	Margin QP [dB]	Margin AV [dB]
1	0.59789	44.3	40.0	0.2	44.5	40.2	56.0	46.0	11.5	5.8
2	0.82407	44.3	38.6	0.2	44.5	38.8	56.0	46.0	11.5	7.2
3	0.92214	44.4	28.9	0.2	44.6	29.1	56.0	46.0	11.4	16.9
4	1.12938	46.3	37.8	0.2	46.5	38.0	56.0	46.0	9.5	8.0
5	1.57038	46.8	37.1	0.2	47.0	37.3	56.0	46.0	9.0	8.7

■ Operating Mode : DVD PLAY-RF OUT CH04

[Graph and Data]



Final Result

--- N Phase ---

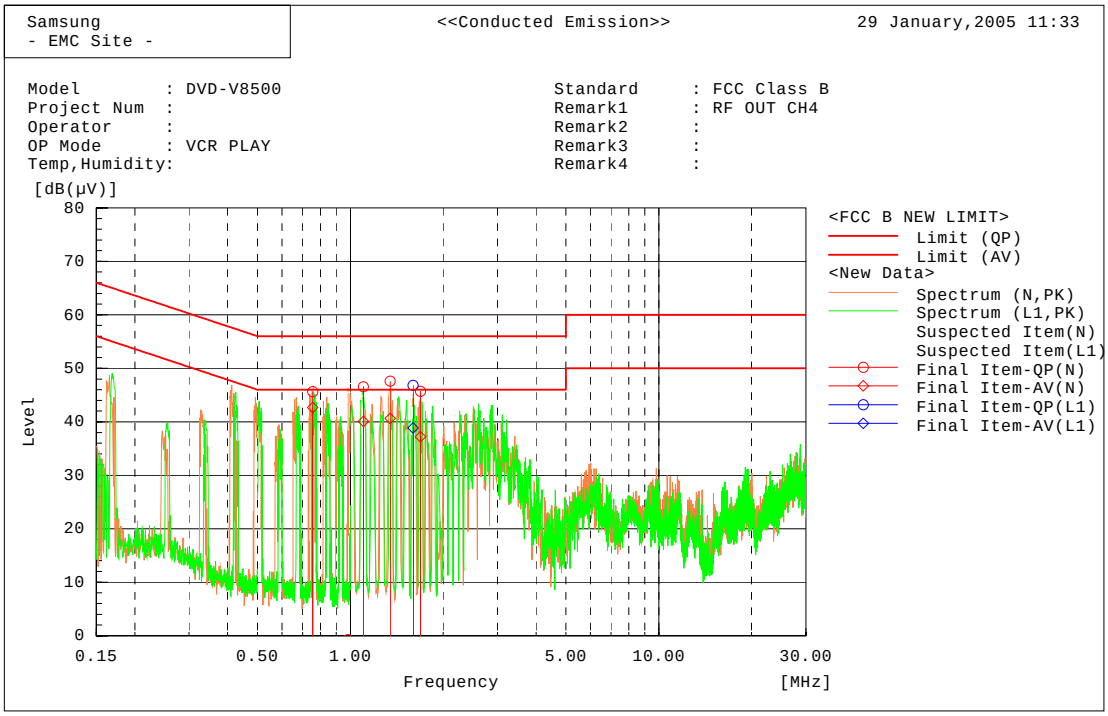
No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c.f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]
1	0.39479	44.4	35.7	0.1	44.5	35.8	58.0	48.0	13.5	12.2
2	0.72846	45.0	37.0	0.1	45.1	37.1	56.0	46.0	10.9	8.9
3	0.74349	45.0	35.4	0.1	45.1	35.5	56.0	46.0	11.0	10.5
4	0.96994	45.2	35.6	0.1	45.3	35.7	56.0	46.0	10.8	10.3
5	0.98798	45.2	34.4	0.1	45.3	34.5	56.0	46.0	10.7	11.5

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c.f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]
1	1.30553	45.4	34.2	0.1	45.5	34.3	56.0	46.0	10.5	11.7

■ Operating Mode : VCR PLAY-RF OUT CH04

[Graph and Data]



Final Result

--- N Phase ---

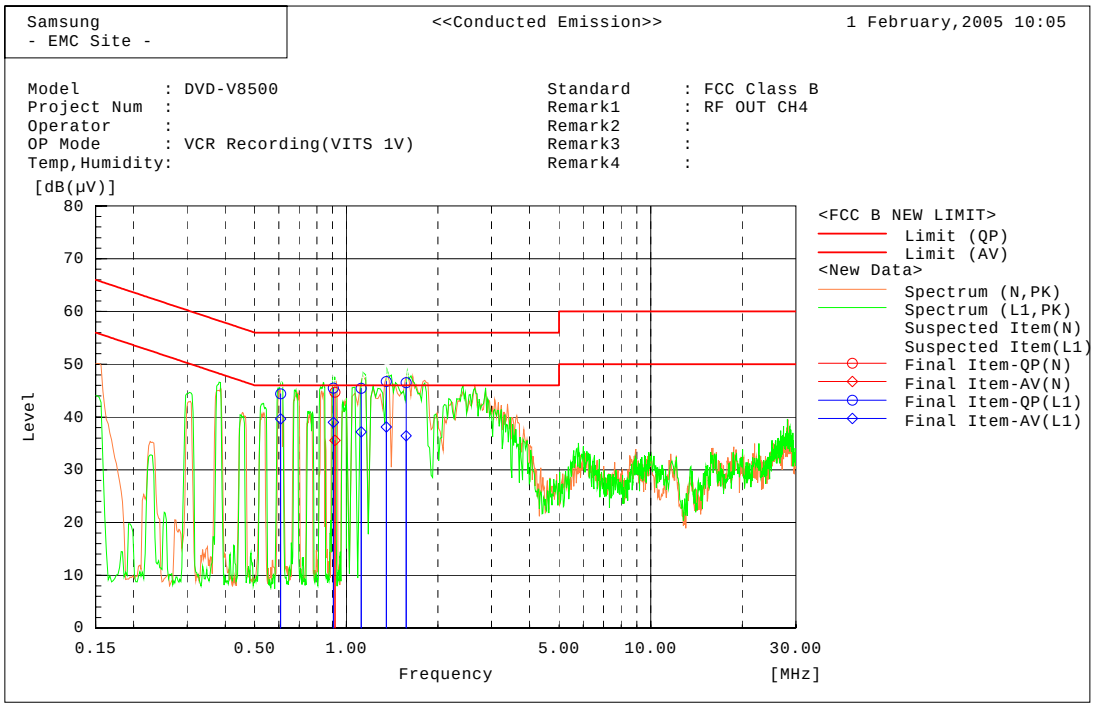
No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c.f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]
1	0.75551	45.5	42.6	0.1	45.6	42.7	56.0	46.0	10.4	3.3
2	0.98196	-0.8	-10.0	0.1	-0.7	-9.9	56.0	46.0	56.7	55.9
3	1.10144	46.5	40.0	0.1	46.6	40.1	56.0	46.0	9.4	5.9
4	1.34585	47.5	40.5	0.1	47.6	40.6	56.0	46.0	8.4	5.4
5	1.6887	45.6	37.1	0.1	45.7	37.2	56.0	46.0	10.3	8.8

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c.f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]
1	1.59555	46.7	38.8	0.1	46.8	38.9	56.0	46.0	9.2	7.2

■ Operating Mode : VCR REC(1V VITS)-RF OUT CH04

[Graph and Data]



Final Result

--- N Phase ---

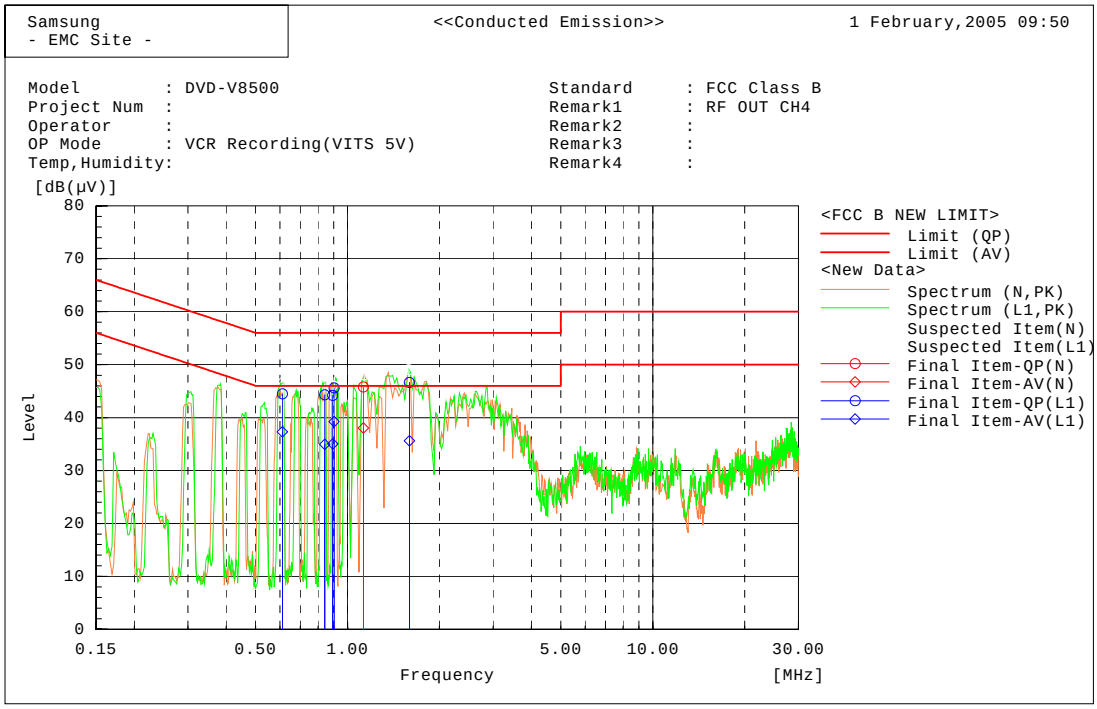
No.	Frequency [MHz]	Reading QP [dB(µV)]	Reading AV [dB(µV)]	c.f [dB]	Result QP [dB(µV)]	Result AV [dB(µV)]	Limit QP [dB(µV)]	Limit AV [dB(µV)]	Margin QP [dB]	Margin AV [dB]
1	0.91791	44.5	35.4	0.2	44.7	35.6	56.0	46.0	11.3	10.5

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(µV)]	Reading AV [dB(µV)]	c.f [dB]	Result QP [dB(µV)]	Result AV [dB(µV)]	Limit QP [dB(µV)]	Limit AV [dB(µV)]	Margin QP [dB]	Margin AV [dB]
1	0.60877	44.2	39.4	0.2	44.4	39.6	56.0	46.0	11.6	6.4
2	0.90644	45.3	38.8	0.2	45.5	39.0	56.0	46.0	10.5	7.0
3	1.11947	45.2	37.0	0.2	45.4	37.2	56.0	46.0	10.6	8.8
4	1.3519	46.5	37.9	0.2	46.7	38.1	56.0	46.0	9.3	7.9
5	1.57285	46.3	36.3	0.2	46.5	36.5	56.0	46.0	9.5	9.6

■ Operating Mode : VCR REC(5V VITS)-RF OUT CH04

[Graph and Data]



Final Result

--- N Phase ---

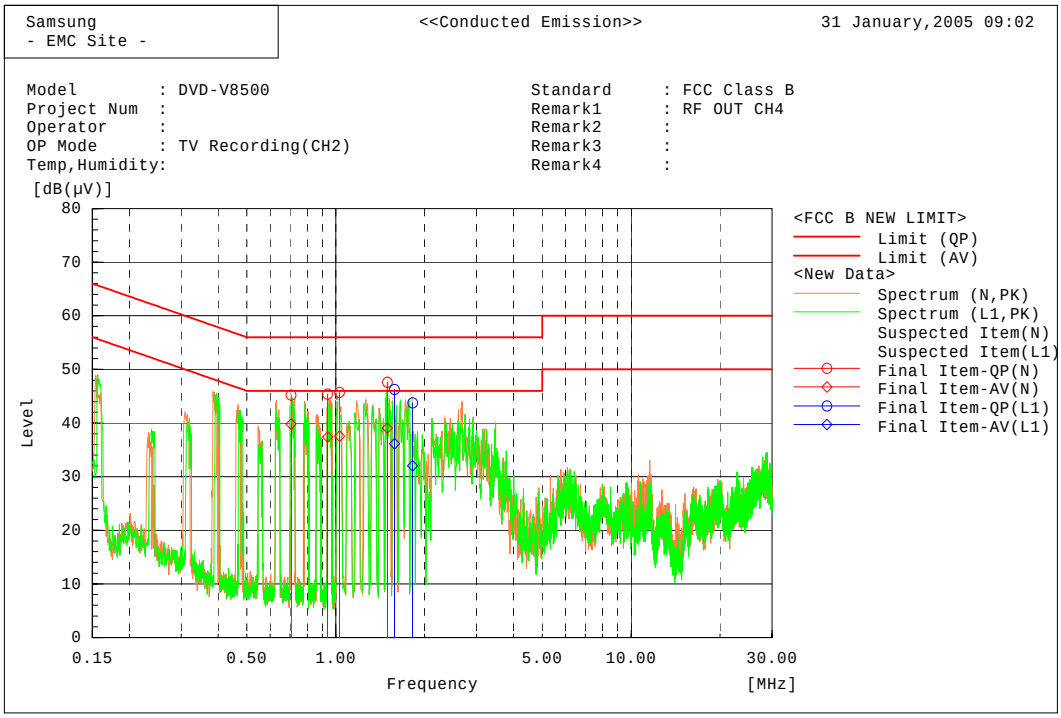
No.	Frequency [MHz]	Reading QP [dB(µV)]	Reading AV [dB(µV)]	c.f [dB]	Result QP [dB(µV)]	Result AV [dB(µV)]	Limit QP [dB(µV)]	Limit AV [dB(µV)]	Margin QP [dB]	Margin AV [dB]
1	1.12735	45.7	37.9	0.1	45.8	38.0	56.0	46.0	10.2	8.0

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(µV)]	Reading AV [dB(µV)]	c.f [dB]	Result QP [dB(µV)]	Result AV [dB(µV)]	Limit QP [dB(µV)]	Limit AV [dB(µV)]	Margin QP [dB]	Margin AV [dB]
1	0.61191	44.3	37.1	0.2	44.5	37.3	56.0	46.0	11.5	8.7
2	0.84171	44.1	34.8	0.2	44.3	35.0	56.0	46.0	11.7	11.0
3	0.89333	44.0	34.9	0.2	44.2	35.1	56.0	46.0	11.8	10.9
4	0.90391	45.4	39.0	0.2	45.6	39.2	56.0	46.0	10.4	6.8
5	1.59332	46.4	35.4	0.2	46.6	35.6	56.0	46.0	9.4	10.4

■ Operating Mode : VCR REC(NTSC)-RF OUT CH04

[Graph and Data]



Final Result

--- N Phase ---

No.	Frequency [MHz]	Reading QP [dB(µV)]	Reading AV [dB(µV)]	c.f [dB]	Result QP [dB(µV)]	Result AV [dB(µV)]	Limit QP [dB(µV)]	Limit AV [dB(µV)]	Margin QP [dB]	Margin AV [dB]
1	0.70541	45.1	39.7	0.1	45.2	39.8	56.0	46.0	10.8	6.2
2	0.93788	45.3	37.3	0.1	45.4	37.4	56.0	46.0	10.6	8.6
3	1.03018	45.6	37.5	0.1	45.7	37.6	56.0	46.0	10.3	8.4
4	1.49591	47.5	39.0	0.1	47.6	39.1	56.0	46.0	8.4	6.9

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(µV)]	Reading AV [dB(µV)]	c.f [dB]	Result QP [dB(µV)]	Result AV [dB(µV)]	Limit QP [dB(µV)]	Limit AV [dB(µV)]	Margin QP [dB]	Margin AV [dB]
1	1.580	46.2	36.0	0.1	46.3	36.1	56.0	46.0	9.7	9.9
2	1.8208	43.7	31.9	0.1	43.8	32.0	56.0	46.0	12.2	14.0

3.2 Radiated Emission

Test Information		
	Test Engineer	Min Kyung Chul
	Test Date	January 28 ~ 31, 2005
	Climate Condition	Ambient Temperature : 24 Relative Humidity : 43%
	Test Place	10m Semi-anechoic Chamber

Test Equipments

Equipment	Modal Name	Manufacturer	Serial No.	Calibration	
				Next Date	Interval
RF Selector	NS4900	TOYO	0303-015	N/A	N/A
Biconilog Antenna	6112B	SCHAFFNER	2767	2005-05-22	12
Mast Controller	HD2000	HD	HD20000902027	N/A	N/A
Test Software	EP5RET	TOYO	None	N/A	N/A
Test Software	EP5RE	TOYO	None	N/A	N/A
TV Signal Generator	PM5418-TDSI	PHILIPS	LO612437	2005-09-23	12
AMPLIFIER	8447D	Agilent	2944A10430	2005-07-20	12
Spectrum Analyzer	E7405A	Agilent	MY42000052	2005-08-26	12
Field strength meter	ESCS30	R&S	839809/002	2005-04-28	12

EUT Test Setup

EUT set up in semi-anechoic chamber. EUT positioned at 3m from antenna in center of table.

All ports terminated into characteristic loads.

Test Result

Measurement Results	Pass

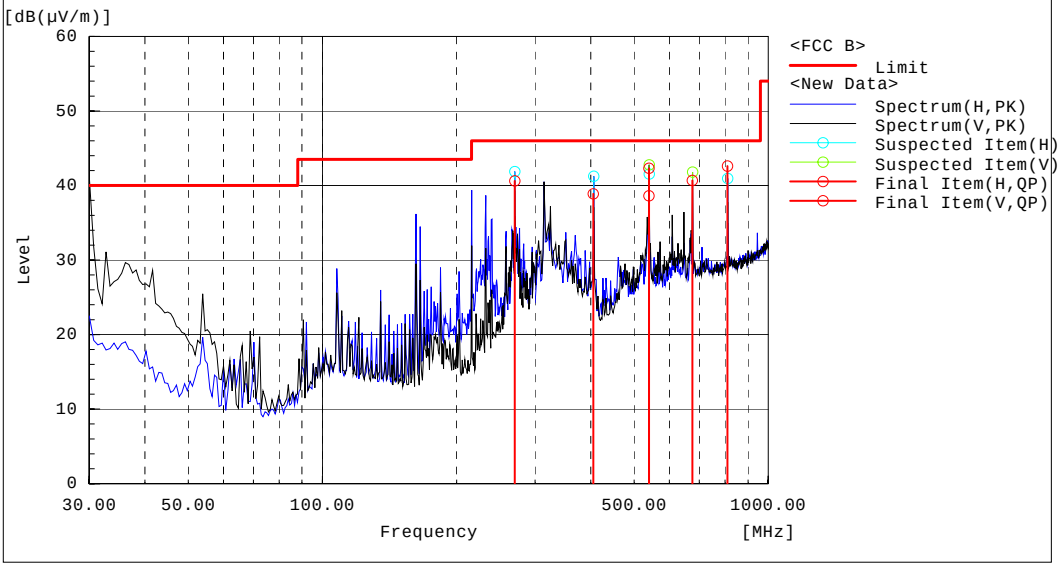
Test Data (Other Frequency)

■ Operating Mode : DVD PLAY-RF OUT CH03

SAMSUNG EMC LAB. <<Radiated Emission>> 28 January,2005 10:23

Model Name : DVD-V8500
Serial Num. : -
Test Enginee:
AC Power :
OP Mode : DVD PLAY

Standard : FCC Part.15 Class B 3m
Remark 1 : RF OUT CH3
Remark 2 :



Final Result

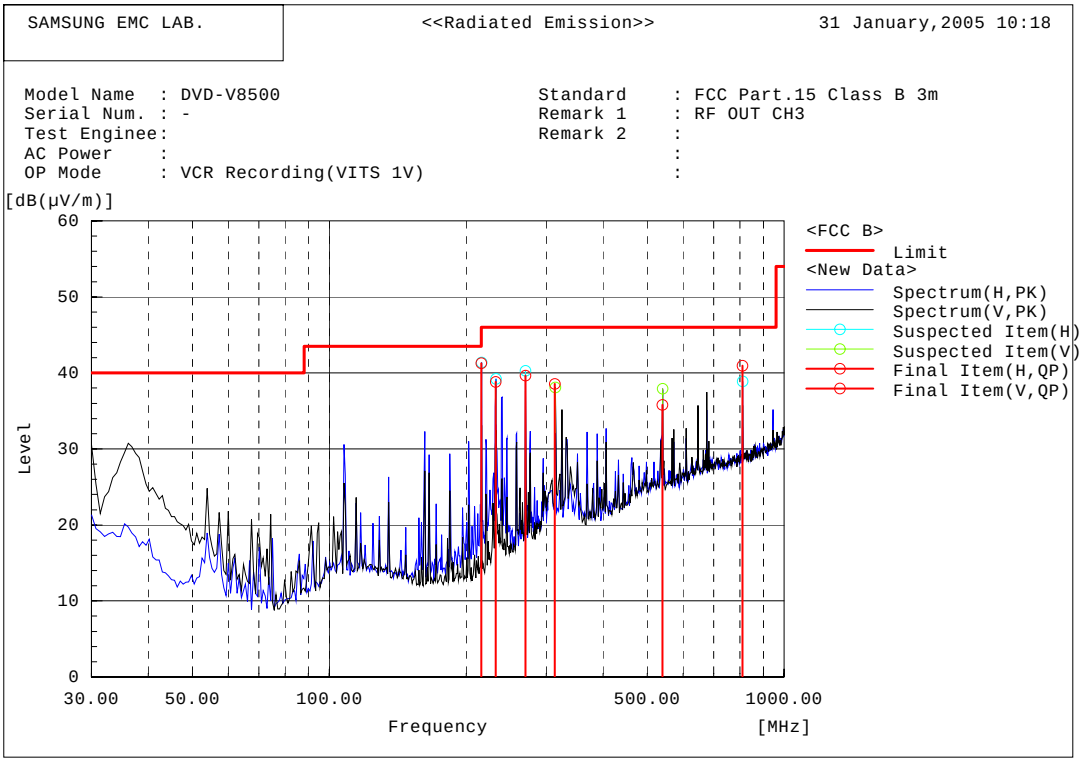
--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Remark
1	270.010	49.6	-9.0	40.6	46.0	5.4	
2	405.020	44.1	-5.2	38.9	46.0	7.1	
3	540.030	40.6	-2.0	38.6	46.0	7.4	
4	810.020	41.0	1.6	42.6	46.0	3.4	

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Remark
1	540.030	44.3	-2.0	42.3	46.0	3.7	
2	675.030	40.5	0.2	40.7	46.0	5.3	

■ Operating Mode : VCR REC(1V VITS)-RF OUT CH03



Final Result

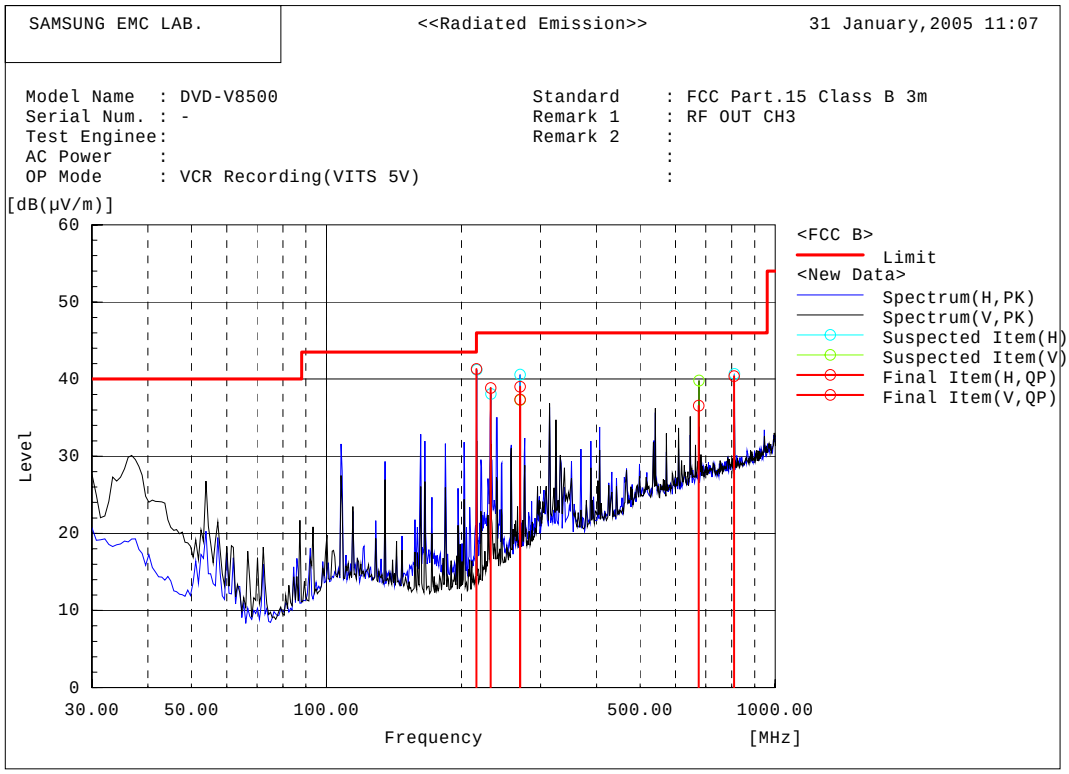
--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Remark
1	216.003	55.0	-13.7	41.3	46.0	4.7	
2	232.203	50.8	-12.0	38.8	46.0	7.2	
3	270.010	48.7	-9.0	39.7	46.0	6.4	
4	810.020	39.3	1.6	40.9	46.0	5.1	

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Remark
1	313.370	46.1	-7.6	38.5	46.0	7.5	
2	540.010	37.8	-2.0	35.8	46.0	10.2	

■ Operating Mode : VCR REC(5V VITS)-RF OUT CH03



Final Result

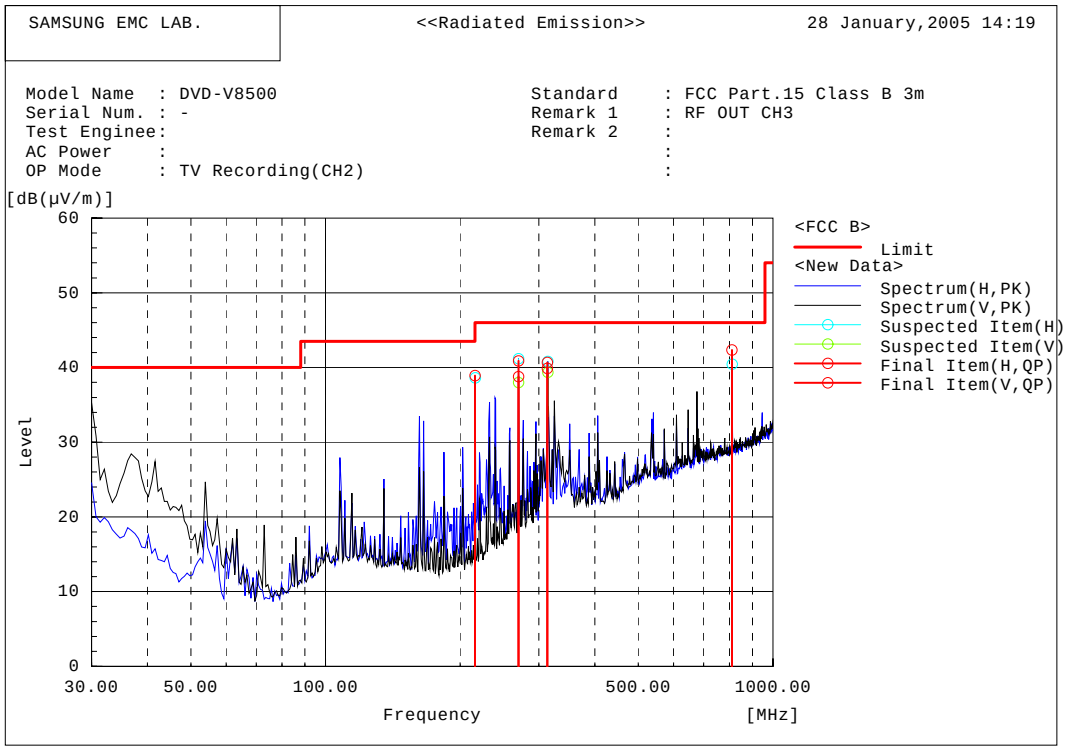
--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Remark
1	216.003	55.0	-13.7	41.3	46.0	4.7	
2	232.203	50.8	-12.0	38.8	46.0	7.2	
3	270.003	48.0	-9.0	39.0	46.0	7.0	
4	810.040	38.8	1.6	40.4	46.0	5.6	

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Remark
1	270.003	46.4	-9.0	37.4	46.0	8.7	
2	675.010	36.4	0.2	36.6	46.0	9.5	

■ Operating Mode : VCR REC(NTSC)-RF OUT CH03



Final Result

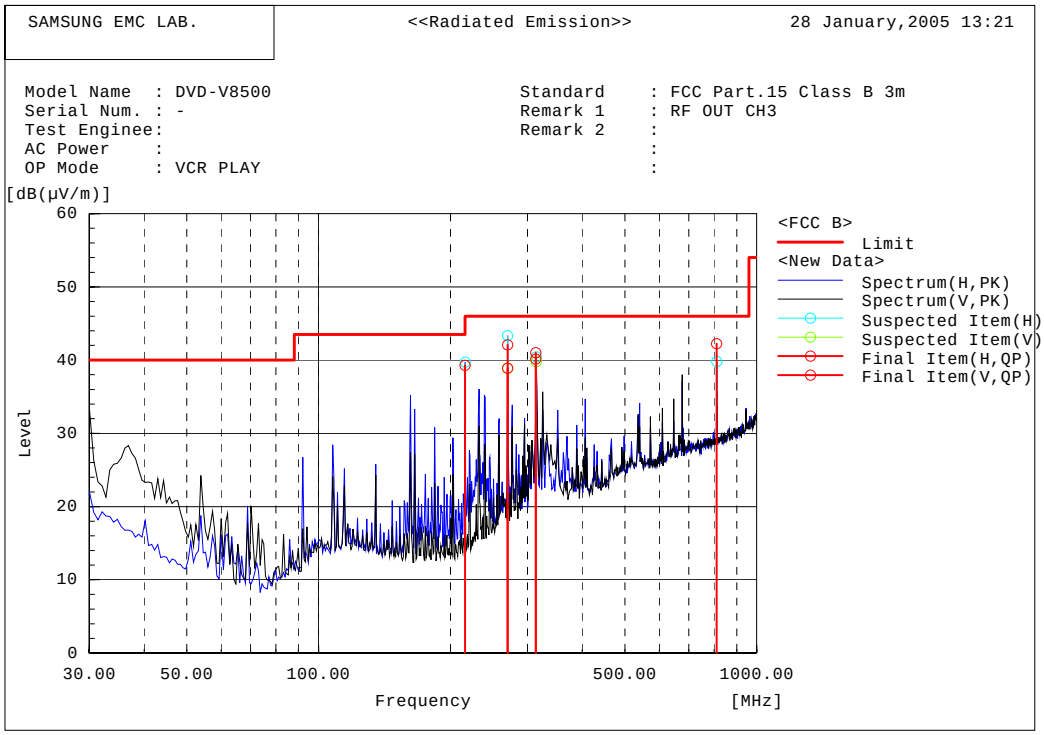
--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Remark
1	216.003	52.6	-13.7	38.9	46.0	7.1	
2	270.010	49.9	-9.0	40.9	46.0	5.1	
3	313.370	48.3	-7.6	40.7	46.0	5.3	
4	810.000	40.8	1.6	42.4	46.0	3.7	

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Remark
1	270.010	47.8	-9.0	38.8	46.0	7.2	
2	313.370	47.5	-7.6	39.9	46.0	6.1	

■ Operating Mode : VCR PLAY-CH03



Final Result

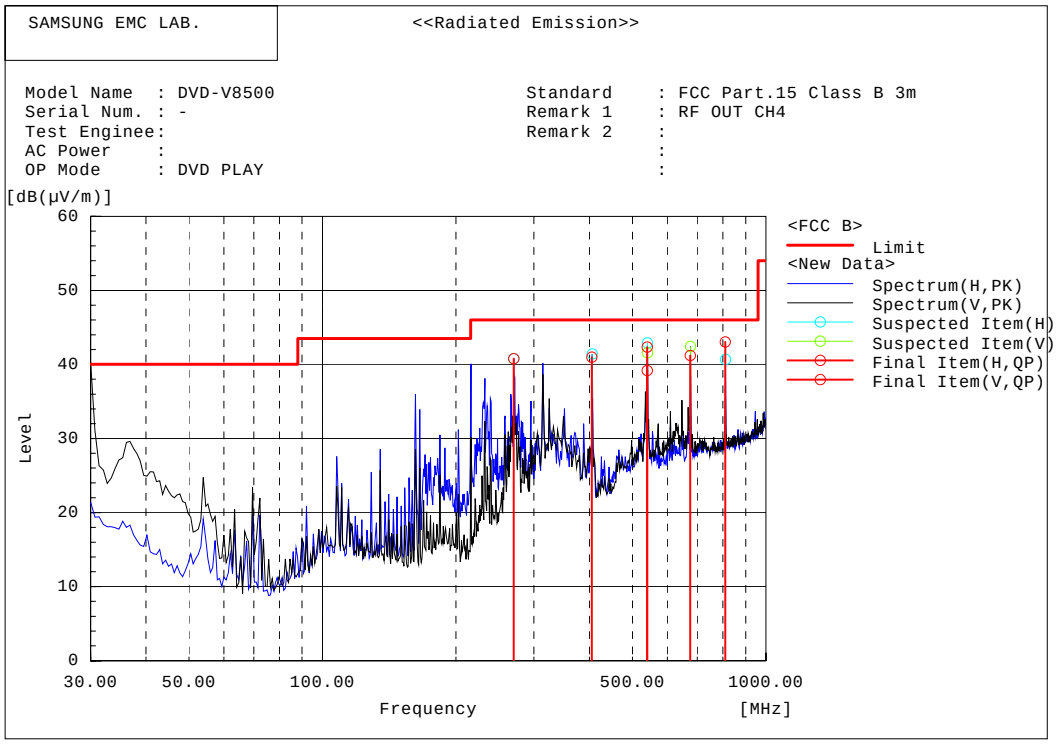
--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Remark
1	216.003	53.0	-13.7	39.3	46.0	6.7	
2	270.010	51.1	-9.0	42.1	46.0	3.9	
3	313.370	48.6	-7.6	41.0	46.0	5.0	
4	810.020	40.6	1.6	42.2	46.0	3.8	

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Remark
1	270.010	47.9	-9.0	38.9	46.0	7.1	
2	313.370	47.7	-7.6	40.1	46.0	5.9	

■ Operating Mode : DVD PLAY-RF OUT CH04



Final Result

--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Remark
1	270.010	49.8	-9.0	40.8	46.0	5.2	
2	405.020	46.2	-5.2	41.0	46.0	5.0	
3	540.030	41.2	-2.0	39.2	46.0	6.8	
4	810.040	41.5	1.6	43.1	46.0	3.0	

--- Vertical Polarization (QP)---

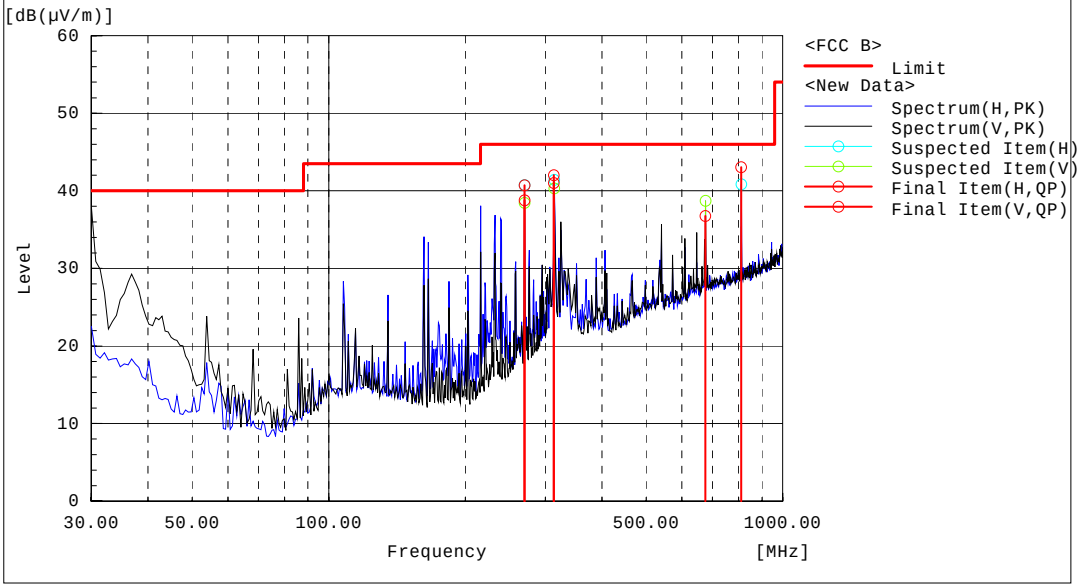
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Remark
1	540.010	44.4	-2.0	42.4	46.0	3.7	
2	675.030	41.0	0.2	41.2	46.0	4.8	

■ Operating Mode : VCR REC(1V VITS)-RF OUT CH04

SAMSUNG EMC LAB. <<Radiated Emission>> 28 January,2005 16:14

Model Name : DVD-V8500
Serial Num. : -
Test Enginee:
AC Power :
OP Mode : VCR Recording(VITS 1V)

Standard : FCC Part.15 Class B 3m
Remark 1 : RF OUT CH4
Remark 2 :



Final Result

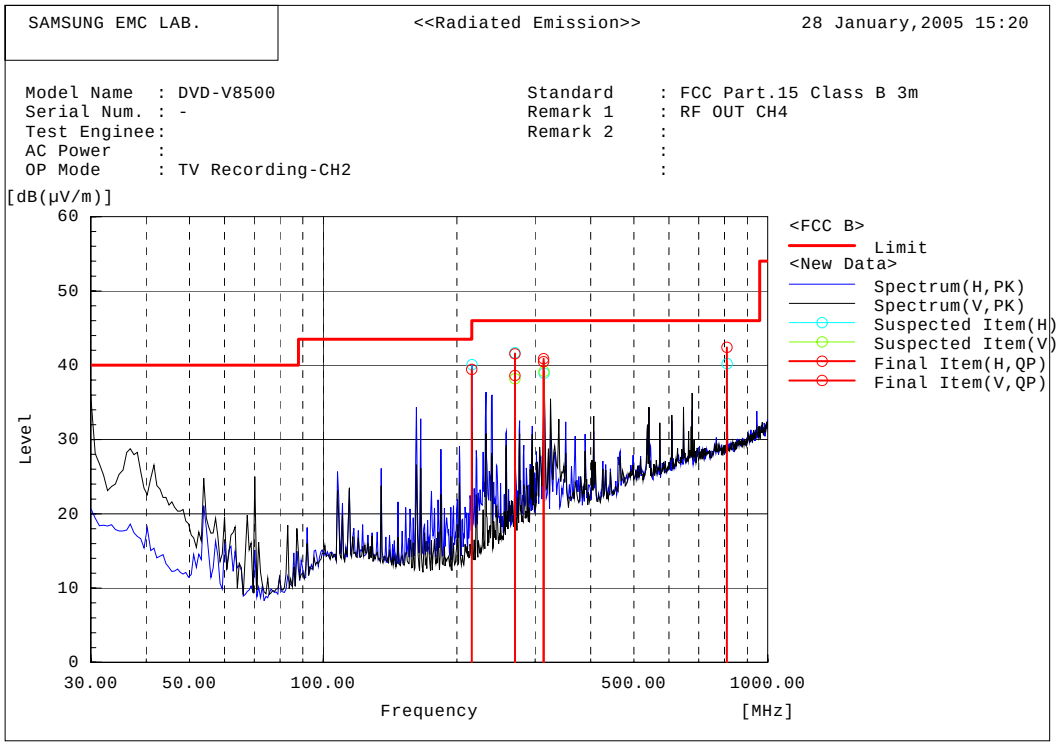
--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(µV)]	c.f [dB(1/m)]	Result [dB(µV/m)]	Limit [dB(µV/m)]	Margin [dB]	Remark
1	270.010	49.7	-9.0	40.7	46.0	5.3	
2	313.370	49.6	-7.6	42.0	46.0	4.0	
3	810.020	41.5	1.6	43.1	46.0	3.0	

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(µV)]	c.f [dB(1/m)]	Result [dB(µV/m)]	Limit [dB(µV/m)]	Margin [dB]	Remark
1	270.003	47.8	-9.0	38.8	46.0	7.2	
2	313.370	48.6	-7.6	41.0	46.0	5.0	
3	675.010	36.6	0.2	36.8	46.0	9.3	

■ Operating Mode : VCR REC(NTSC)-RF OUT CH04



Final Result

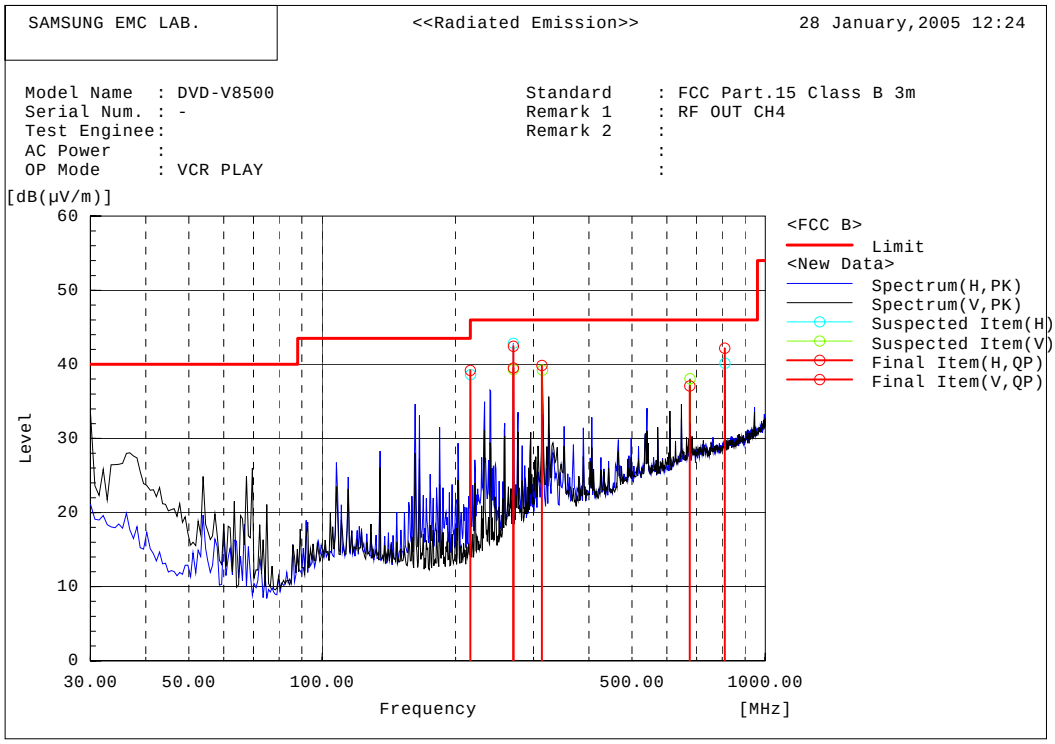
--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(µV)]	c.f [dB(1/m)]	Result [dB(µV/m)]	Limit [dB(µV/m)]	Margin [dB]	Remark
1	216.003	53.1	-13.7	39.4	46.0	6.6	
2	270.010	50.6	-9.0	41.6	46.0	4.5	
3	313.370	48.5	-7.6	40.9	46.0	5.1	
4	810.040	40.8	1.6	42.4	46.0	3.6	

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(µV)]	c.f [dB(1/m)]	Result [dB(µV/m)]	Limit [dB(µV/m)]	Margin [dB]	Remark
1	270.010	47.6	-9.0	38.6	46.0	7.4	
2	313.370	48.1	-7.6	40.5	46.0	5.5	

■ Operating Mode : VCR PLAY-RF OUT CH04



Final Result

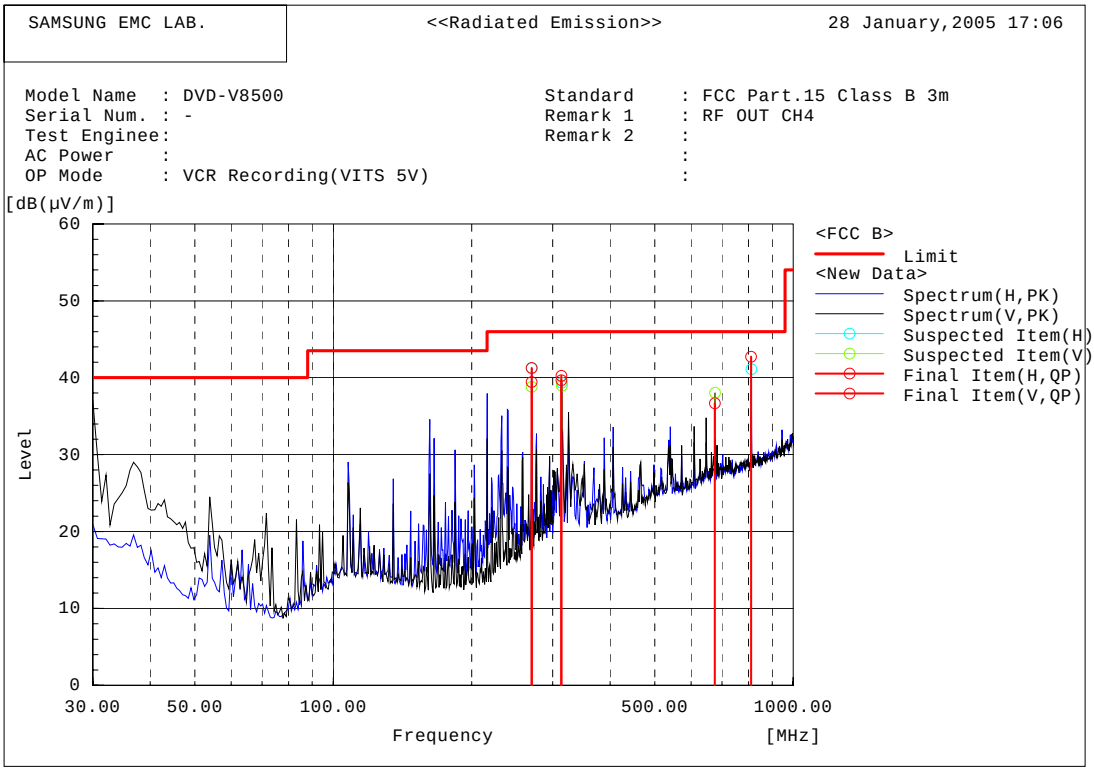
--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Remark
1	216.003	52.9	-13.7	39.2	46.0	6.8	
2	270.010	51.5	-9.0	42.5	46.0	3.6	
3	810.040	40.6	1.6	42.2	46.0	3.8	

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Remark
1	270.010	48.5	-9.0	39.5	46.0	6.5	
2	313.370	47.4	-7.6	39.8	46.0	6.2	
3	675.030	36.9	0.2	37.1	46.0	8.9	

■ Operating Mode : VCR REC(5V VITS)-RF OUT CH04



Final Result

--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Remark
1	270.010	50.3	-9.0	41.3	46.0	4.7	
2	313.370	47.8	-7.6	40.2	46.0	5.8	
3	810.020	41.2	1.6	42.8	46.0	3.3	

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Remark
1	270.010	48.4	-9.0	39.4	46.0	6.6	
2	313.370	47.3	-7.6	39.7	46.0	6.3	
3	675.030	36.5	0.2	36.7	46.0	9.3	

3.3 Output Signal Level

Test Information		
	Test Engineer	Min Kyung Chul
	Test Date	February 2, 2005
	Climate Condition	Ambient Temperature : 24℃ Relative Humidity : 40%
	Test Place	Shied Room #5

Test Equipments

Equipment	Modal Name	Manufacturer	Serial No.	Calibration	
				Next Date	Interval
TV Signal Generator	PM5418-TDSI	PHILIPS	LO612437	2005-09-23	12
Pre-Amplifier	310N	SONOMA	185861	2005-10-08	12
Field strength meter	ESS	R&S	844661/005	2006-01-11	12
Matching Pad	RAM	R&S	834188/009	2006-01-08	12
EMC Analyzer	E7405A	Agilent	US41110272	2006-01-20	12
RF Matrix	PSU	R&S	861206/024	N/A	12

EUT Test Setup

The RF output terminal was connected to the test receiver through the matching pad(75-50 ohm) with a cable. Then, the RF output signal level was measured under the EUT Operating mode(s).

Test Result

Measurement Results	Pass No Operation errors were detected during or after the applied test.

Test Data

■ Operating Mode : VCR REC(NTSC) RF Output CH No. :3CH

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
56.755	76.0	-24.7	51.3	56.5	5.2
61.255	90.3	-24.7	65.6	69.5	3.9
65.747	74.8	-24.7	50.1	56.5	6.4

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(NTSC) RF Output CH No. :4CH

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
62.752	75.3	-24.7	50.6	56.5	5.9
67.240	89.6	-24.7	64.9	69.5	4.6
71.735	74.1	-24.7	49.4	56.5	7.1

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(1V VITS) RF Output CH No. :3CH

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
56.752	75.9	-24.7	51.2	56.5	5.3
61.255	90.2	-24.7	65.5	69.5	4.0
65.750	74.6	-24.7	49.9	56.5	6.6

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(1V VITS) RF Output CH No. :4CH

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
62.745	75.3	-24.7	50.6	56.5	5.9
67.247	89.6	-24.7	64.9	69.5	4.6
71.747	74.2	-24.7	49.5	56.5	7.0

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(5V VITS) RF Output CH No. :3CH

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
56.762	76.1	-24.7	51.4	56.5	5.1
61.257	89.8	-24.7	65.1	69.5	4.4
65.757	74.8	-24.7	50.1	56.5	6.4

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(5V VITS) RF Output CH No. :4CH

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
62.742	75.3	-24.7	50.66	56.5	5.9
67.237	88.9	-24.7	64.2	69.5	5.3
71.735	74.0	-24.7	49.3	56.5	7.2

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR PLAY RF Output CH No. :3CH

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
56.755	75.9	-24.7	51.2	56.5	5.3
61.252	90.1	-24.7	65.4	69.5	4.1
65.752	74.6	-24.7	49.9	56.5	6.6

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR PLAY RF Output CH No. :4CH

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
62.740	75.2	-24.7	50.5	56.5	6.0
67.237	89.2	-24.7	64.5	69.5	5.0
71.735	73.9	-24.7	49.2	56.5	7.3

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : DVD PLAY RF Output CH No. :3CH

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
56.75	75.9	-24.7	51.2	56.5	5.3
61.255	90.4	-24.7	65.7	69.5	3.9
65.747	74.6	-24.7	49.9	56.5	6.6

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : DVD PLAY RF Output CH No. :4CH

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
62.735	75.1	-24.7	50.4	56.5	6.1
67.240	89.7	-24.7	65	69.5	4.6
71.745	74.2	-24.7	49.5	56.5	7.0

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

3.4 Output Terminal Conducted Spurious

Test Information		
	Test Engineer	Min Kyung Chul
	Test Date	February 2, 2005
	Climate Condition	Ambient Temperature : 24℃ Relative Humidity : 40%
	Test Place	Shied Room #5

Test Equipments

Equipment	Modal Name	Manufacturer	Serial No.	Calibration	
				Next Date	Interval
TV Signal Generator	PM5418-TDSI	PHILIPS	LO612437	2005-09-23	12
Pre-Amplifier	310N	SONOMA	185861	2005-10-08	12
Field strength meter	ESS	R&S	844661/005	2006-01-11	12
Matching Pad	RAM	R&S	834188/009	2006-01-08	12
EMC Analyzer	E7405A	Agilent	US41110272	2006-01-20	12
RF Matrix	PSU	R&S	861206/024	N/A	12

EUT Test Setup

The RF output terminal was connected to the test receiver through the matching pad(75-50 ohm) with a cable. Then, the RF output signal level was measured under the EUT Operating mode(s).

Tested frequency range were from 30MHz to more than 4.6MHz below the visual carrier frequency, and from more than 7.4MHz above the visual carrier frequency to 1000MHz

Test Result

Measurement Results	Pass No Operation errors were detected during or after the applied test.

Test Data

■ Operating Mode : VCR REC(NTSC) RF Output CH No. :3CH[Spurious Low]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
32.616	37.0	-24.9	12.1	39.5	27.4
46.934	37.1	-24.8	12.3	39.5	27.2
47.752	39.3	-24.8	14.5	39.5	25.0

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(NTSC) RF Output CH No. :3CH[Spurious High]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
122.514	42.2	-24.5	17.7	39.5	21.8
552.499	39.5	-23.4	16.1	39.5	23.4
810.025	36.6	-22.9	13.7	39.5	25.8

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(NTSC) RF Output CH No. :4CH[Spurious Low]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
38.603	38.1	-24.8	13.3	39.5	26.2
52.921	36.2	-24.7	11.5	39.5	28.0
53.739	38.6	-24.7	13.9	39.5	25.6

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(NTSC) RF Output CH No. :4CH[Spurious High]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
80.743	35.3	-24.6	10.7	39.5	28.8
552.499	40.4	-23.4	17.0	39.5	22.5
810.000	36.6	-22.9	13.7	39.5	25.8

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(1V VITS) RF Output CH No. :3CH[Spurious Low]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
47.750	39.3	-24.8	14.5	39.5	25.1
53.072	37.6	-24.7	12.9	39.5	26.6
56.270	39.1	-24.7	14.4	39.5	25.1

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(1V VITS) RF Output CH No. :3CH[Spurious High]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
122.504	41.7	-24.5	17.2	39.5	22.3
552.499	40.6	-23.4	17.2	39.5	22.3
809.987	36.5	-22.9	13.6	39.5	26.0

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(1V VITS) RF Output CH No. :4CH[Spurious Low]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
53.739	38.6	-24.7	13.9	39.5	25.6
59.041	37.0	-24.7	12.3	39.5	27.2
61.997	38.2	-24.7	13.5	39.5	26.1

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(1V VITS) RF Output CH No. :4CH[Spurious High]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
134.486	36.7	-24.4	12.3	39.5	27.2
552.499	40.6	-23.4	17.2	39.5	22.3
810.025	36.6	-22.9	13.7	39.5	25.9

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(5V VITS) RF Output CH No. :3CH[Spurious Low]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
49.013	40.3	-24.8	15.5	39.5	24.0
50.545	40.2	-24.8	15.4	39.5	24.1
55.963	39.5	-24.7	14.8	39.5	24.7

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(5V VITS) RF Output CH No. :3CH[Spurious High]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
122.504	41.2	-24.5	16.7	39.5	22.8
552.499	40.6	-23.4	17.2	39.5	22.3
810.025	36.6	-22.9	13.7	39.5	25.9

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(5V VITS) RF Output CH No. :4CH[Spurious Low]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
54.933	39.5	-24.7	14.8	39.5	24.7
56.525	39.3	-24.7	14.6	39.5	24.9
61.952	38.7	-24.7	14.0	39.5	25.5

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(5V VITS) RF Output CH No. :4CH[Spurious High]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
134.496	37.1	-24.4	12.7	39.5	26.8
552.499	40.6	-23.4	17.2	39.5	22.3
810.025	36.4	-22.9	13.5	39.5	26.0

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR PLAY RF Output CH No. :3CH[Spurious Low]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
32.6176	36.1	-24.9	11.2	39.5	28.3
47.752	39.4	-24.8	14.6	39.5	25.0
55.949	30.3	-24.7	5.6	39.5	33.9

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR PLAY RF Output CH No. :3CH[Spurious High]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
74.759	36.1	-24.7	11.4	39.5	28.1
122.514	41.9	-24.5	17.4	39.5	22.1
810.025	36.6	-22.9	13.7	39.5	25.8

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR PLAY RF Output CH No. :4CH[Spurious Low]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
38.602	37.0	-24.8	12.2	39.5	27.3
52.922	33.1	-24.7	8.4	39.5	31.1
53.739	38.6	-24.7	13.9	39.5	25.6

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR PLAY RF Output CH No. :4CH[Spurious High]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
134.486	37.3	-24.4	12.9	39.5	26.6
672.400	33.2	-23.4	9.8	39.5	29.8
810.0255	36.6	-22.9	13.7	39.5	25.8

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : DVD PLAY RF Output CH No. :3CH[Spurious Low]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
47.752	39.4	-24.8	14.6	39.5	25.0
55.256	31.8	-24.8	7.0	39.5	32.6
56.244	50.3	-24.7	25.6	39.5	13.9

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : DVD PLAY RF Output CH No. :3CH[Spurious High]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
74.759	36.1	-24.7	11.4	39.5	28.1
122.504	42.3	-24.5	17.8	39.5	21.7
810.025	35.5	-22.9	12.6	39.5	27.0

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : DVD PLAY RF Output CH No. :4CH[Spurious Low]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
53.739	38.6	-24.7	13.9	39.5	25.6
58.237	30.9	-24.7	6.2	39.5	33.3
62.074	28.0	-22.7	3.3	39.5	36.2

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : DVD PLAY RF Output CH No. :4CH[Spurious High]

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
80.743	35.4	-24.6	10.8	39.5	28.7
134.486	36.9	-24.4	12.5	39.5	27.0
810.050	35.3	-22.9	12.4	39.5	27.1

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

3.5 Antenna Transfer Switch Measurement

Test Information		
	Test Engineer	Min Kyung Chul
	Test Date	February 2, 2005
	Climate Condition	Ambient Temperature : 24℃ Relative Humidity : 40%
	Test Place	Shied Room #5

Test Equipments

Equipment	Modal Name	Manufacturer	Serial No.	Calibration	
				Next Date	Interval
TV Signal Generator	PM5418-TDSI	PHILIPS	LO612437	2005-09-23	12
Pre-Amplifier	310N	SONOMA	185861	2005-10-08	12
Field strength meter	ESS	R&S	844661/005	2006-01-11	12
Matching Pad	RAM	R&S	834188/009	2006-01-08	12
EMC Analyzer	E7405A	Agilent	US41110272	2006-01-20	12
RF Matrix	PSU	R&S	861206/024	N/A	12

EUT Test Setup

The Antenna input terminal is connected to the test receiver through the matching pad (75 – 50 ohm) with a calibrated cable. Then, the RF output leakage level is measured under the EUT operating mode(s).

Test Result

Measurement Results	Pass No Operation errors were detected during or after the applied test.

Test Data

■ Operating Mode : VCR REC(1V VITS) RF Output CH No. :3CH

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
61.254	26.4	-24.7	1.7	9.5	7.8

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(1V VITS) RF Output CH No. :4CH

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
67.245	25.0	-24.7	0.3	9.5	9.2

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(5V VITS) RF Output CH No. :3CH

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[Db]
61.256	26.8	-24.7	2.1	9.5	7.4

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR REC(5V VITS) RF Output CH No. :4CH

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
67.245	24.7	-24.7	0.0	9.5	9.5

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR PLAY RF Output CH No. :3CH

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
61.251	26.5	-24.7	1.8	9.5	7.74

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : VCR PLAY RF Output CH No. :4CH

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
67.240	25.2	-24.7	0.5	9.5	9.0

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

■ Operating Mode : DVD PLAY RF Output CH No. :3CH

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
61.251	26.2	-24.7	1.5	9.5	8.0

* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

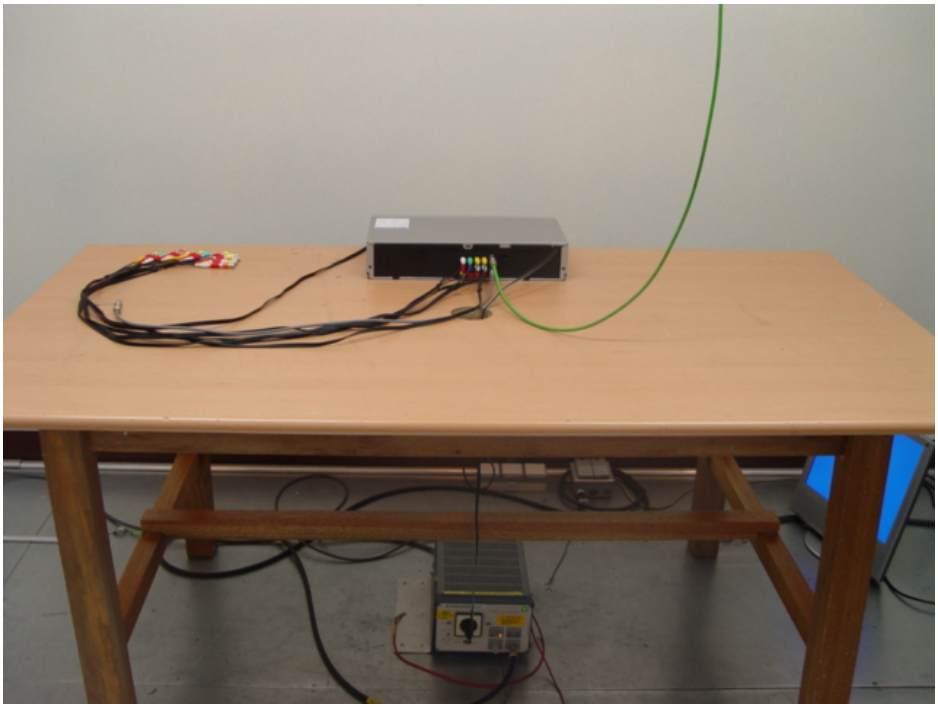
■ Operating Mode : DVD PLAY RF Output CH No. :4CH

Frequency	Reading	Factor	Level	Limit	Margin
[MHz]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dB]
67.240	25.2	-24.7	0.5	9.5	9.0

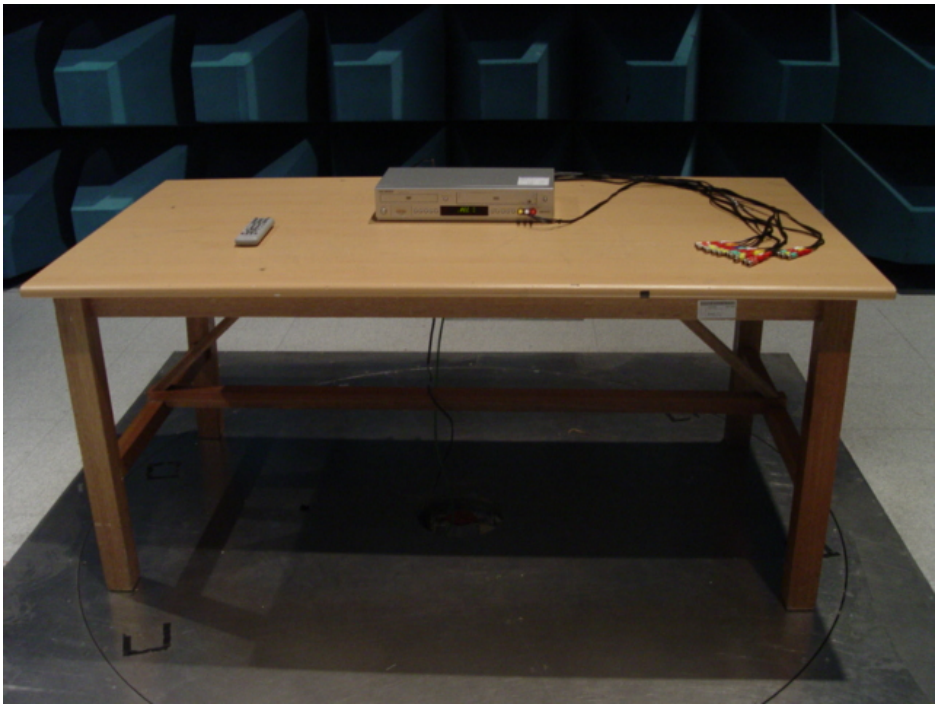
* Factor = Preamp Gain + Matching Pad Loss + Cable Loss

4. Appendix A

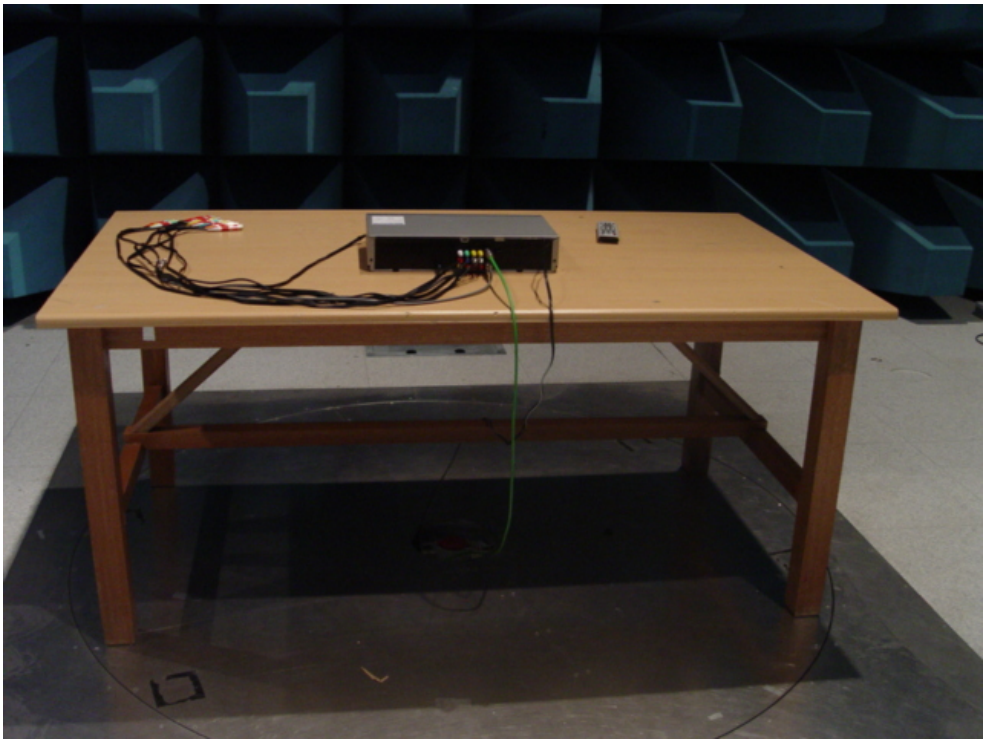
4.1 Test Photography



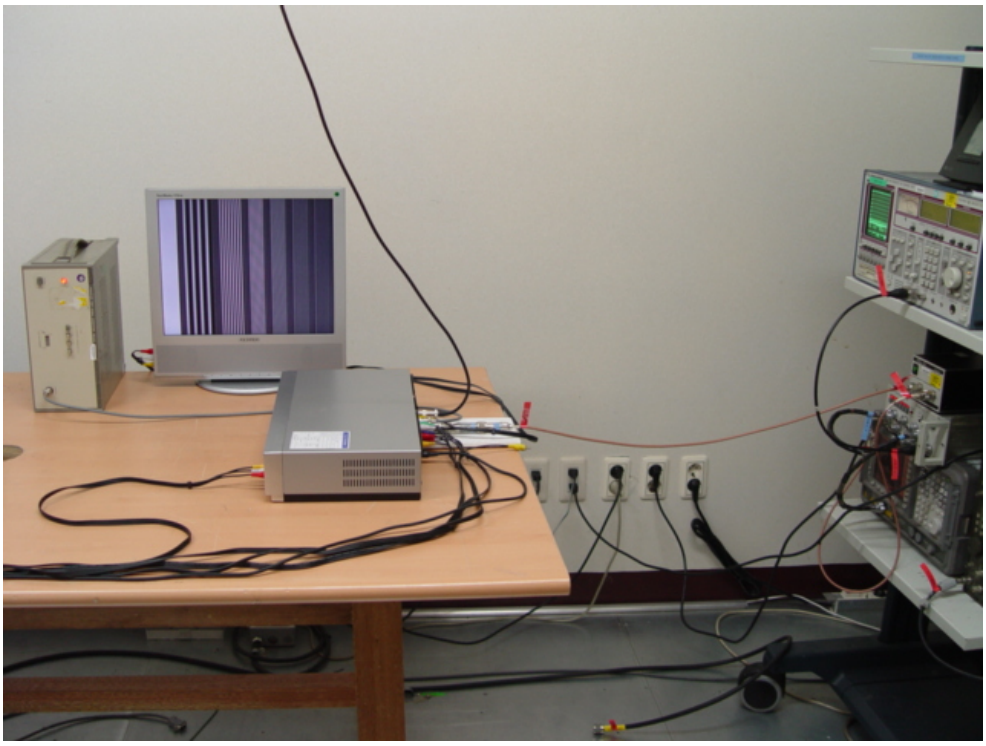
Picture 1. Conducted Emission (Front)



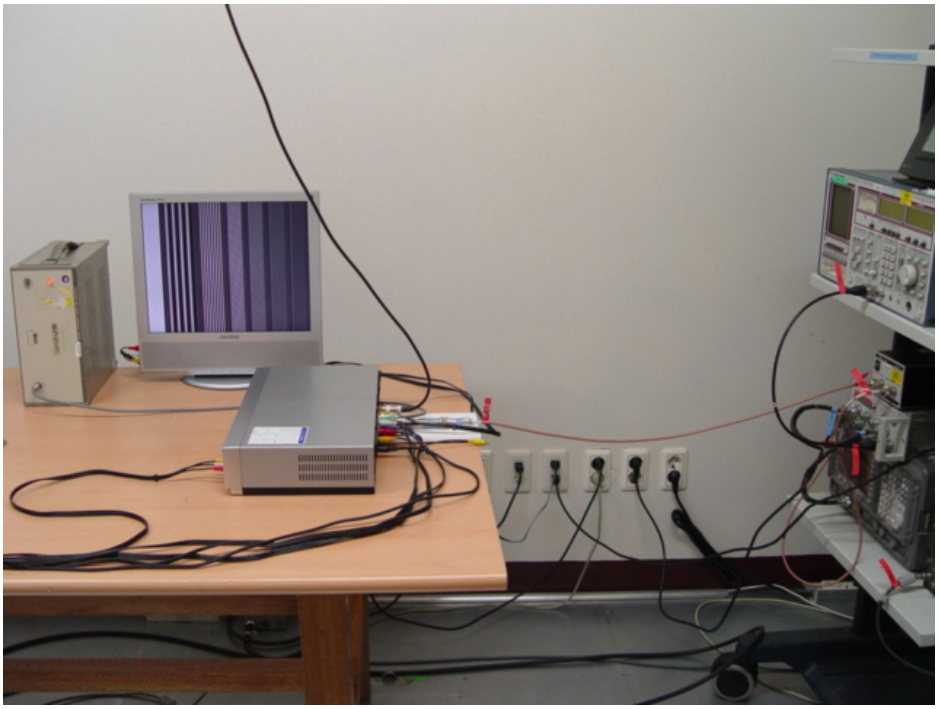
Picture 2. Radiated Emission (Front)



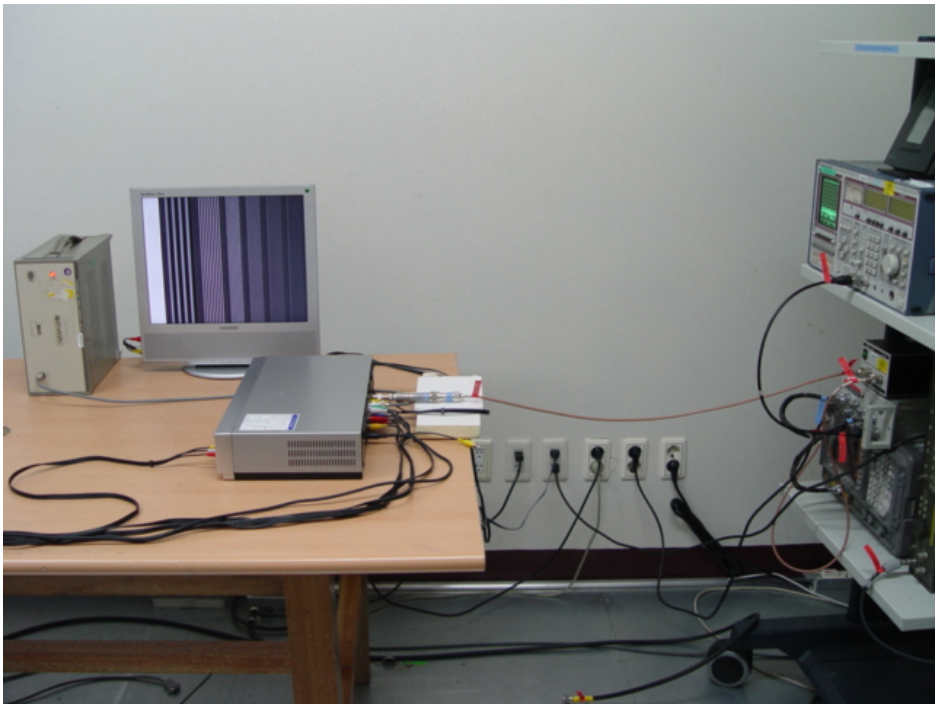
Picture 3. Radiated Emission (Rear)



Picture 4. Output Signal Level



Picture 5. Output Terminal Conducted Spurious Emission



Picture 6. Ant. Transfer Switch

4.2 EUT Photography

Picture 7. EUT (Front)

Picture 8. EUT (Rear)