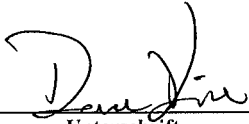
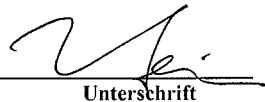


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Auftraggeber: <i>Client:</i>	Classic Tech Development Ltd. 11-12/F., YUE XIU IND'L BLDG. 87 HUNG TO ROAD, KWUN TONG, KOWLOON HONG KONG		
Gegenstand der Prüfung: <i>Test item:</i>	transmitter of Wireless Headphone System		
Bezeichnung: <i>Identification:</i>	HP491 HP891	FCC ID: <i>FCC ID</i>	REDHP491-001T
Wareneingangs-Nr.: <i>Receipt No.:</i>	73008804	Eingangsdatum: <i>Date of receipt:</i>	25.07.2003
Prüfört: <i>Testing location:</i>	Shenzhen Bureau of Quality Technical Supervision Shenzhen Academy of Metrology and Quality Inspection Bldg, of Shenzhen Academy of Metrology and Quality Inspection, Longzhu Road, Nanshan, Shenzhen, P.R. China		Listed test laboratory according to FCC rules section 2.948 for measuring devices under Parts 15
Prüfgrundlage: <i>Test specification:</i>	ANSI C63.4:1992 Conduct Emissions with limits described at FCC Part 15 subpart B section 15.207 Radiated Emissions with limits described at FCC Part 15 Subpart B section 15.209 and 15.249		
Prüfergebnis: <i>Test Result:</i>	Der vorstehend beschriebene Prüfgegenstand wurde geprüft und entspricht oben genannter Prüfgrundlage. The a. m. test item passed.		
Prüflaboratorium/ Testing Laboratory: zusammengestellt/ compiled by:			
		kontrolliert/ checked by:	
18.08.2003	Dave Xie		20.08.2003
Datum <i>Date</i>	Name <i>Name</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>
			Yuxin Huang
			
			Unterschrift <i>Signature</i>
Sonstiges/ Other Aspects:			
Abkürzungen: ok / P = entspricht Prüfgrundlage fail / F = entspricht nicht Prüfgrundlage n.a. / N = nicht anwendbar			
Abbreviations: ok / P = passed fail / F = failed n.a. / N = not applicable			
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.</i>			

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TEST SUMMARY

5.1 CONDUCTED EMISSION FOR FCC PART 15 PER SECTION 15.207(A)

RESULT: *ok*

5.2 RADIATED EMISSION FOR FCC PART 15 PER SECTION 15.209(A)

RESULT: *ok*

5.3 FUNDAMENTAL AND HARMONICS RADIATED EMISSION FOR FCC PART 15 PER SECTION 15.249(A)

RESULT: *ok*

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1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix 1: Test result

2 Test Sites

2.1 Test Facilities

Shenzhen SMQ

Shenzhen Bureau of Quality Technical Supervision
Shenzhen Academy of Metrology and Quality Inspection
Bldg, of Shenzhen Academy of Metrology and Quality Inspection
Longzhu Road, Nanshan, Shenzhen,
P.R. China

The tests at these test sites have been conducted under the supervision of a TÜV engineer.

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2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Kind of Equipment	Manufacturer	Type	S/N	Calibrated until
Antenna	Schwarzbeck	VUBA9117	115	08.06.2004
Horn Antenna	Rohde & Schwarz	HF906	100013	01.02.2004
Horn Antenna	Rohde & Schwarz	HF906	100014	01.02.2004
3m Semi-anechoic chamber	Albatross Projects	9X6X6	----	01.02.2004
EMI Test Receiver	Rohde & Schwarz	ESI26	838786/013	01.02.2004

2.3 Trace ability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, to equivalent nationally recognized standards organizations

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

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2.5 Measurement Uncertainty

The estimated combined standard uncertainty for conducted emissions measurements is ± 3 dB.
The estimated combined standard uncertainty for radiated emissions measurements is ± 3 dB.

2.6 Location of original data

The original copies of all test data taken during actual testing were attached at Appendix 1 of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Guangzhou) file for certification follow-up purposes.

2.7 Status of facility used for testing

Shenzhen Bureau of Quality Technical Supervision, Shenzhen Academy of Metrology and Quality Inspection, Bldg. of Shenzhen Academy of Metrology and Quality Inspection, Longzhu Road, Nanshan, Shenzhen, P.R.China is listed on the US Federal Communications Commission list of facilities approved to perform measurements

3 General Product Information

Brief description of the test sample:

The model HP491 and HP891 are transmitters of wireless headphone system.

HP891 has the same electrical construction with HP491, only the appearance of plastic enclosure is changed.

According to above mentioned, all the tests were performed on HP491. .

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3.1 Product Function and Intended Use

For details, refer to Technical Construction File and the user manual.

3.2 Ratings and System Details

Frequency range	:	913.0MHz, 912.5MHz, 912.0MHz
Number of channels	:	3 channels
Type of antenna	:	Integral antenna
FCC ID	:	REDHP491-001T
Power supply	:	AC/DC adaptor input
Ports	:	Audio input 12.5V DC input
RF Power level	:	<50 mV/m
Protection Class	:	III

Refer to the technical document for further information

3.3 Independent Operation Modes

The basic operation modes are:

Transmitting and standby

For further information refer to User Manual

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3.4 Submitted Documents

Block Diagram
Circuit Diagram
Components List
PCB layout
FCC label
Rating Label
User Manual
Photo document

4 Test Set-up and Operation Mode

4.1 Principle of Configuration Selection

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Refer to Test set-up in chapter 5.

4.3 Special Accessories and Auxiliary Equipment

The product has been tested together with the following AC/DC Adaptor:

Model	: PA-1215-DUA
Input	: AC 120V 60Hz
Output	: DC 12.5V / 150mA
Protection class	: II

4.4 Countermeasures to achieve EMC Compliance

The test sample, which has been tested, contained the noise suppression parts as described in the technical document. No additional measures were employed to achieve compliance.

4.5 Test set-up

Diagram 1 of Measurement Equipment Configuration for Testing Conducted Emission

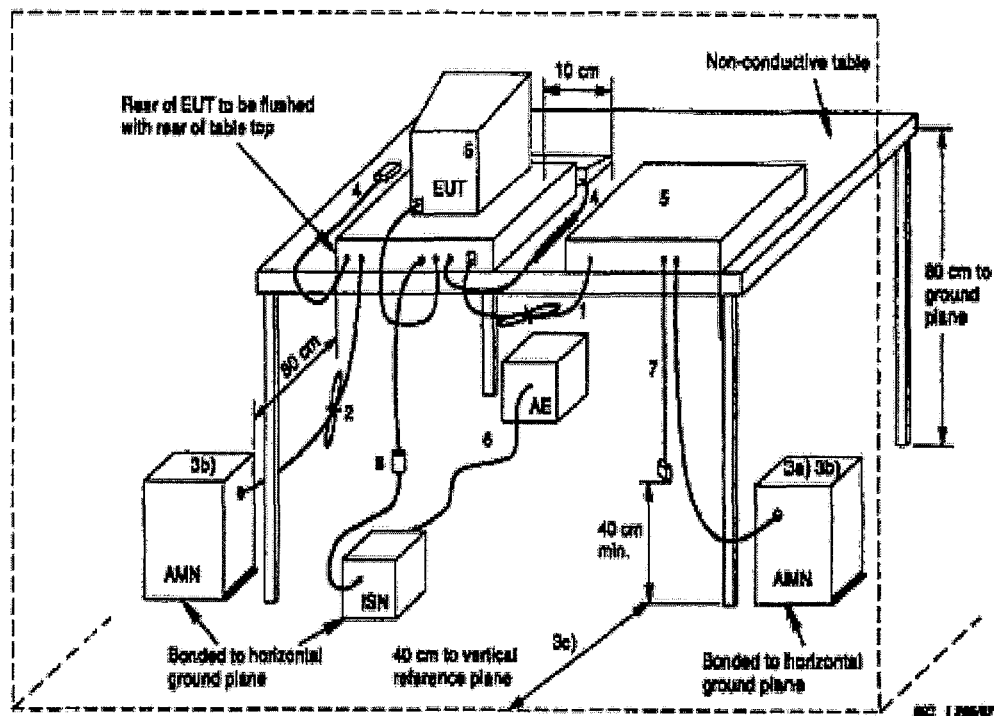
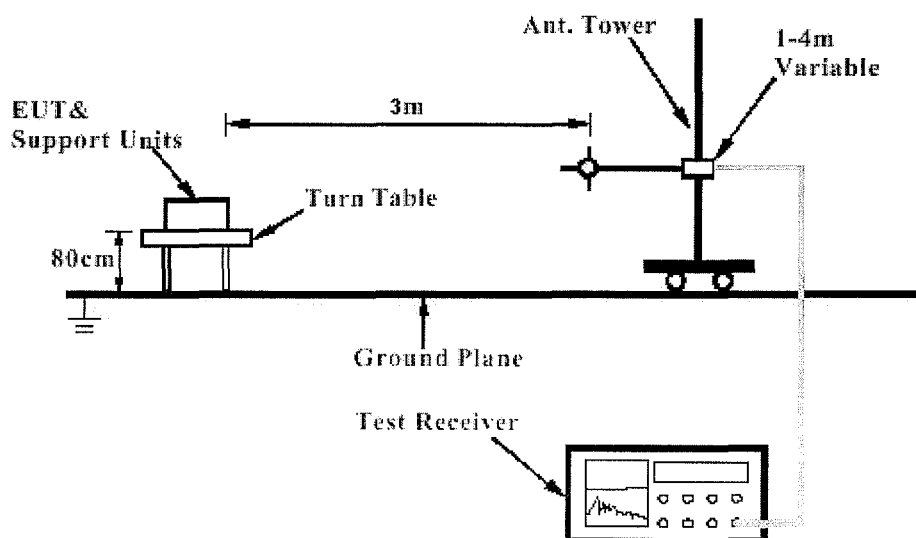


Diagram 2 of Measurement Equipment Configuration for Testing Radiated Emission



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Diagram 3 of Equipment Configuration for Testing Conducted Emission

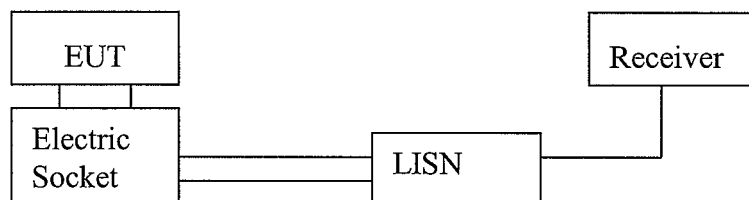
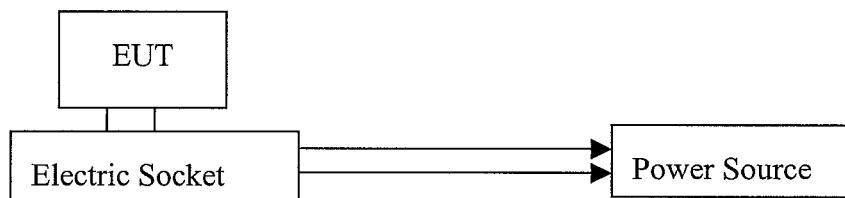


Diagram 4 of Equipment Configuration for Testing Radiated Emission



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5 Test Results EMISSION

5.1 Conducted Emission for FCC Part 15 Per Section 15.207(a)

RESULT:

ok

Date of testing	:	02.08.2003
Test specification	:	FCC Part 15 Per Section 15.207(a)
Limits	:	FCC Part 15 Per Section 15.207(a)
Deviations from Standard Test procedures	:	None
Test procedure	:	Procedure specified in ANSI C63.4 were followed
Kind of test site	:	Shielded room

Refer to appendix 1 for test result.

5.2 Radiated Emission for FCC Part 15 Per Section 15.209(a)

RESULT:

ok

Date of testing	:	03.08.2003
Test specification	:	FCC Part 15 Per Section 15.209(a)
Limits	:	FCC Part 15 Per Section 15.209(a)
Deviations from Standard Test procedures	:	None
Test procedure	:	Procedure specified in ANSI C63.4 were followed
Kind of test site	:	3m Semi-anechoic chamber

Refer to Appendix 1 for test result.

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5.3 Fundamental and harmonics Radiated Emission for FCC Part 15 Per Section 15.249(a)

RESULT:

ok

Date of testing : 29.07.2003 / 01.08.2003
Test specification : FCC Part 15 Per Section 15.249(a)
Limits : FCC Part 15 Per Section 15.249(a)
Deviations from Standard Test procedures : None
Test procedure : Procedure specified in ANSI C63.4 were followed
Kind of test site : 3m Semi-anechoic chamber

Measurement was performed with unmodulated signal.

Polarization of the measurement for the larger power level: Vertical

Test conditions		Fundamental Frequency	
		Channel 2 (912.543MHz)	
T _{nom} (25°C)	Unit	(dBμV/m)	(mV/m)
	Horizontal	88.5	26.61
	Vertical	90.3	32.74
limit		93.979	50

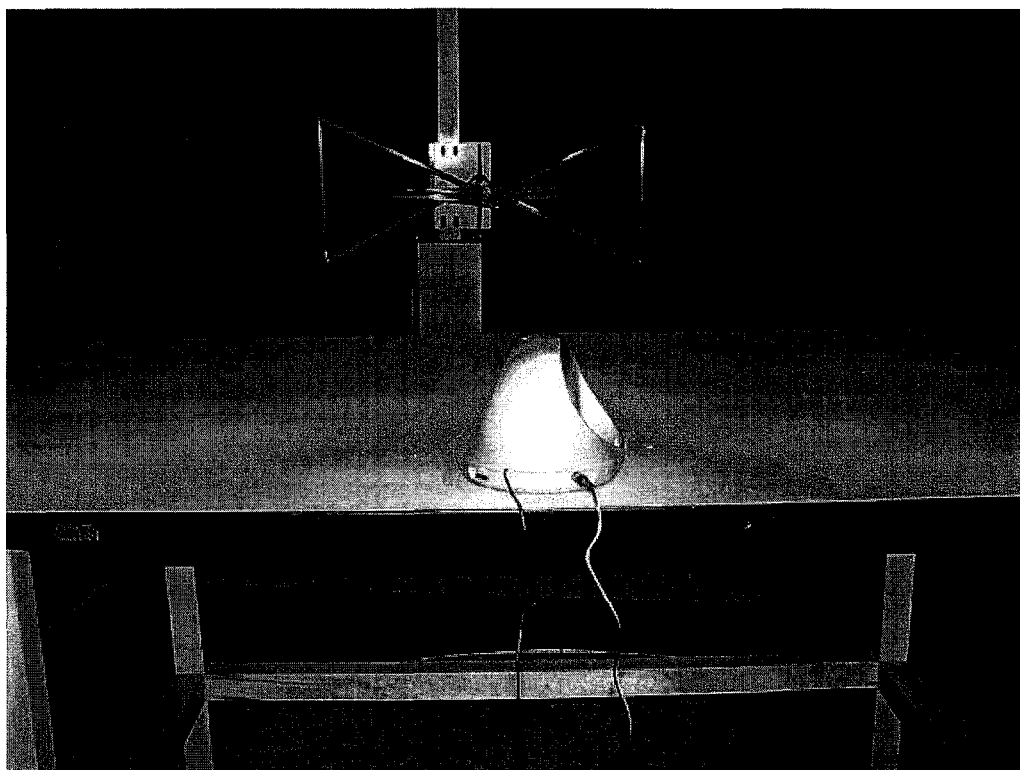
Refer to Appendix 1 for test result.

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6 Photographs of the Test Set-Up

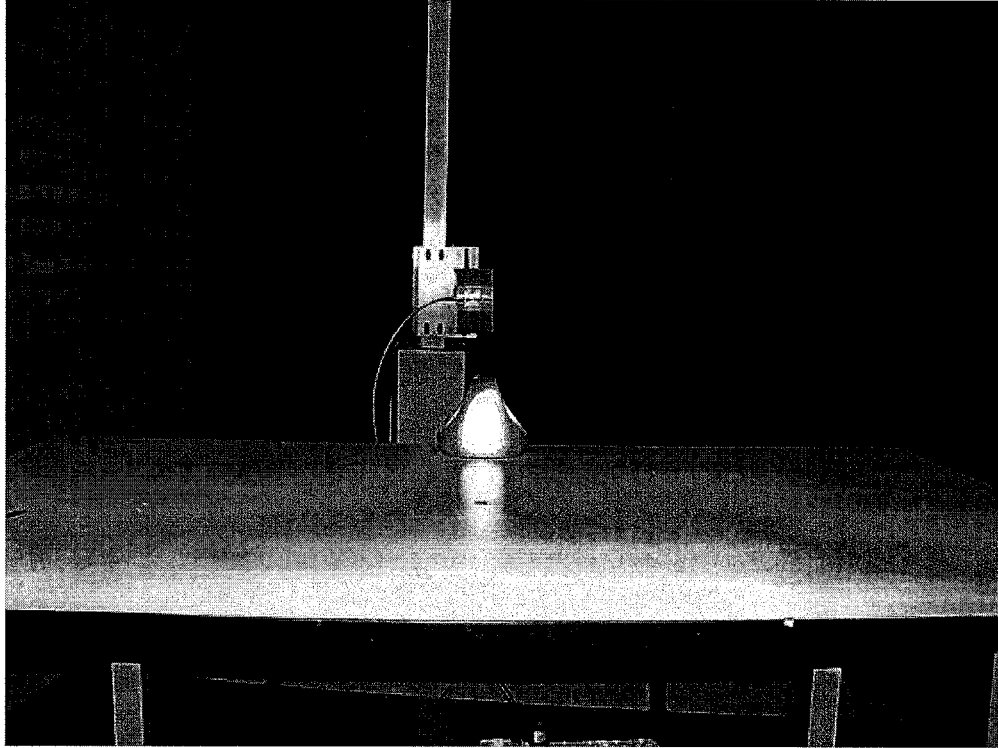
Photograph 1: Set-up for Radiation Measurement Below 1GHz



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Photograph 2: Set-up for Radiation Measurement Above 1GHz



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Photograph 2: Set-up for Radiation Measurement Above 1GHz..... 14

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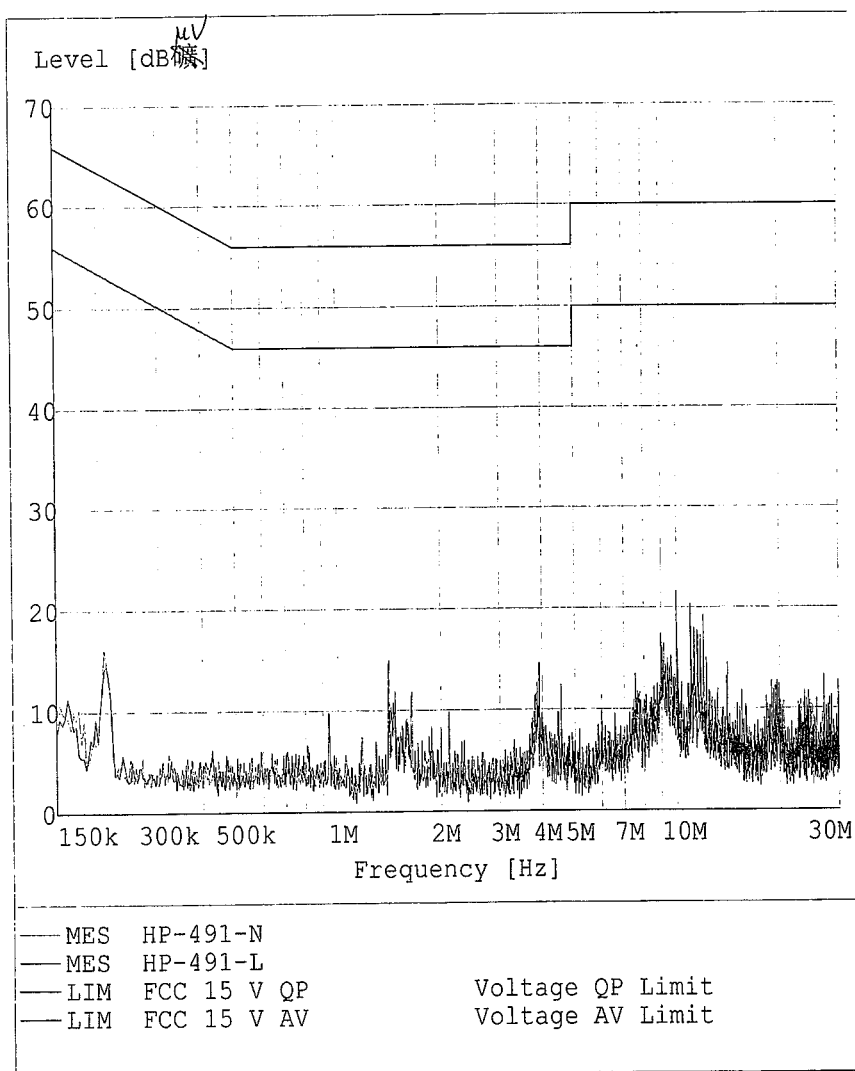
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Conducted Disturbance

EN55022

EUT: M/N:HP491
Manufacturer:
Operating Condition: Input 1KHz Signal & 1/8 Output Power
Test Site: SMQ EMC Lab
Operator:
Test Specification: L&N
Comment: AC120V/60Hz



8/2/03 10:47AM

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Radiated Disturbance

FCC

EUT: M/N:HP491

Manufacturer:

Operating Condition: TX

Test Site: SMQ EMC Lab.SAC

Operator:

Test Specification: Vertical Horizontal

Comment:

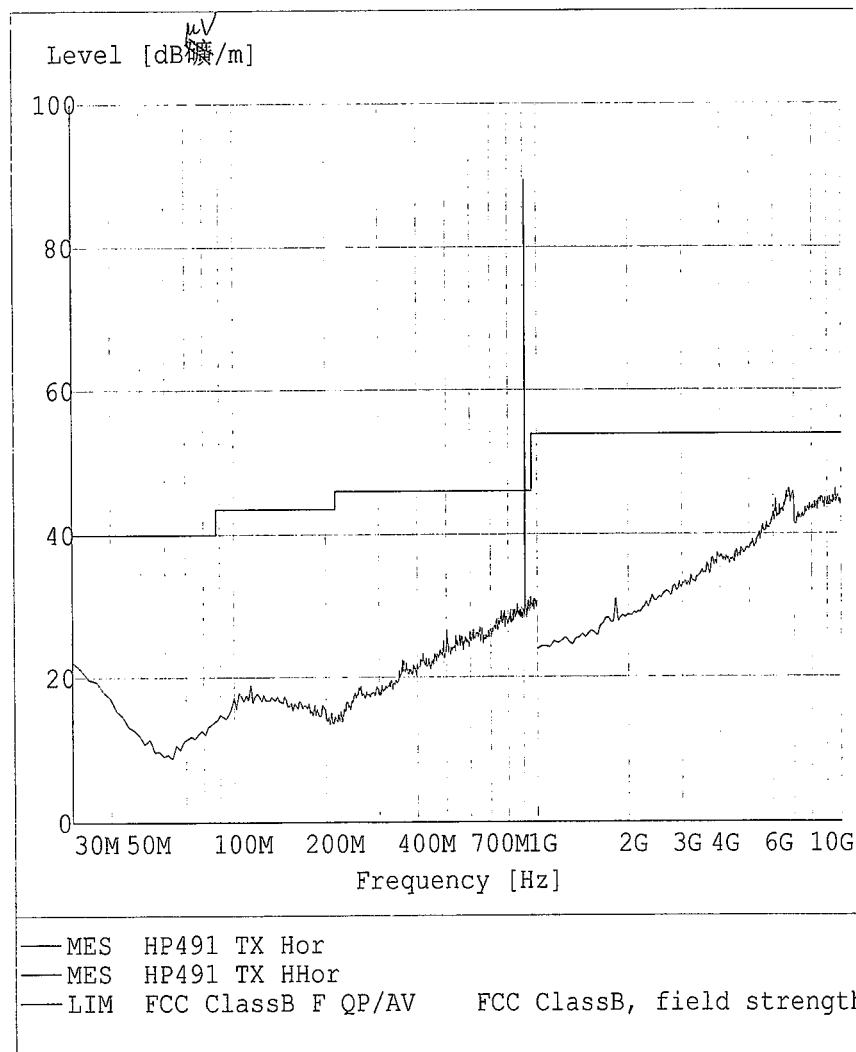
read value:

Limit:

fre: 912.543 MHz

88.5 dB μ V/m

94 dB μ V/m



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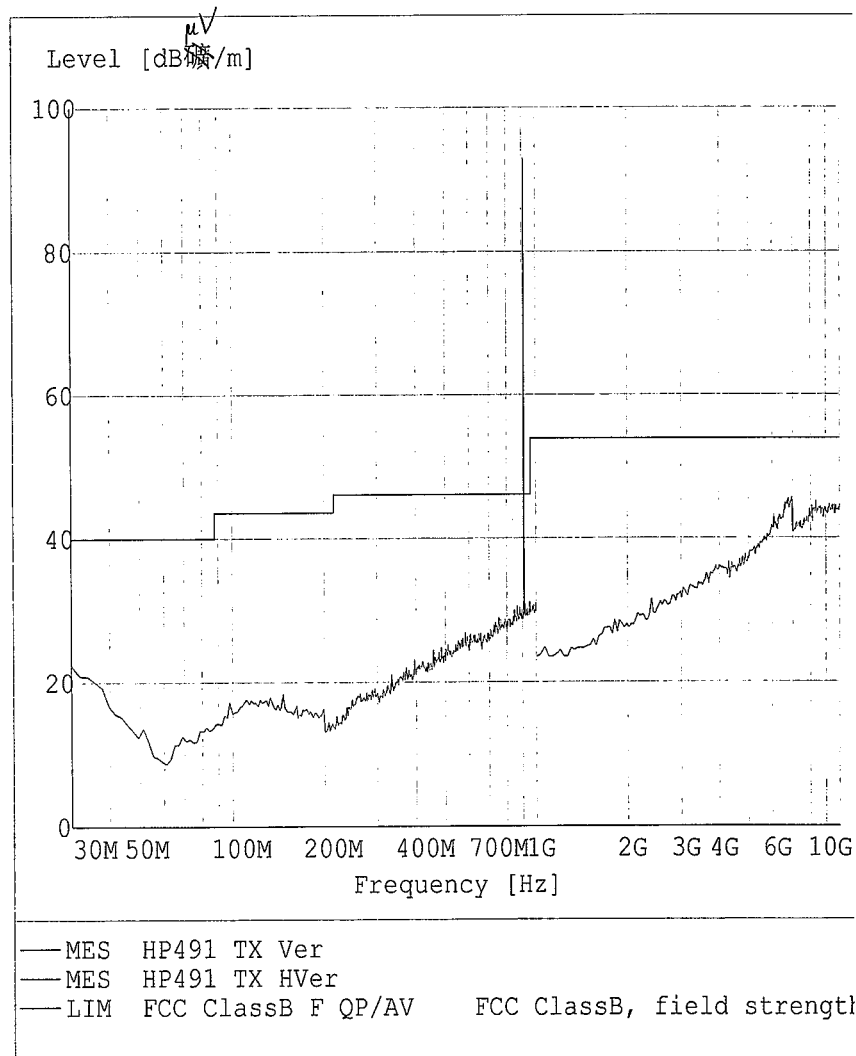
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Radiated Disturbance

FCC

EUT: M/N:HP491
Manufacturer:
Operating Condition: TX
Test Site: SMQ EMC Lab.SAC
Operator:
Test Specification: Vertical
Comment:

fre: 992.543 MHz
read value: 90.3 dB μ V/m
limit 94 dB μ V/m



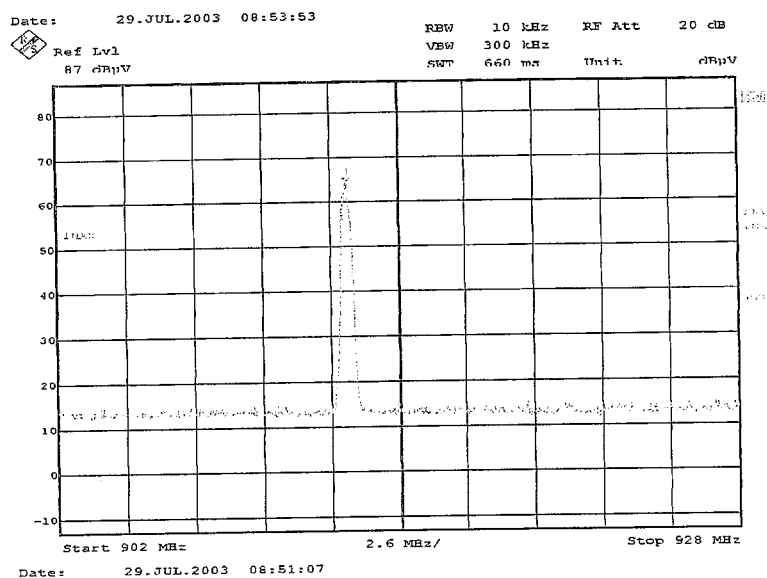
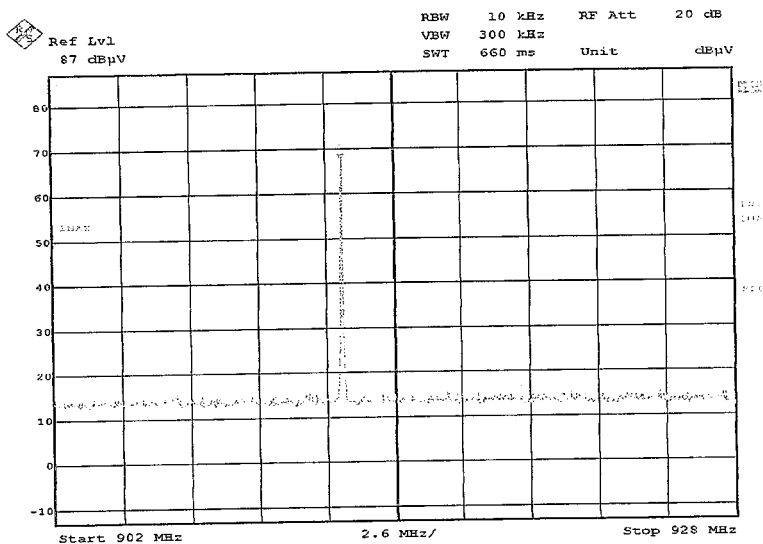
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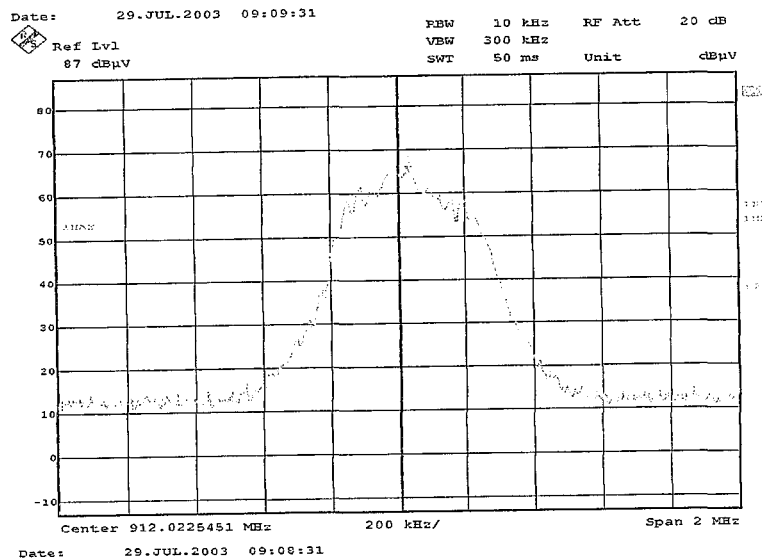
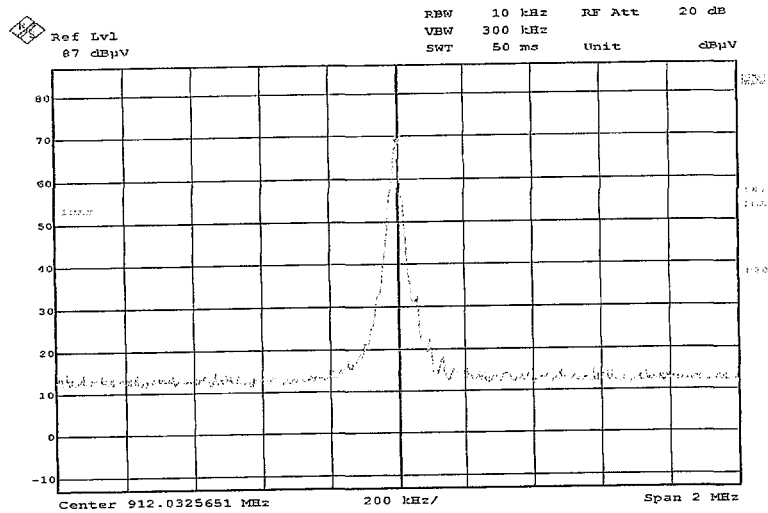
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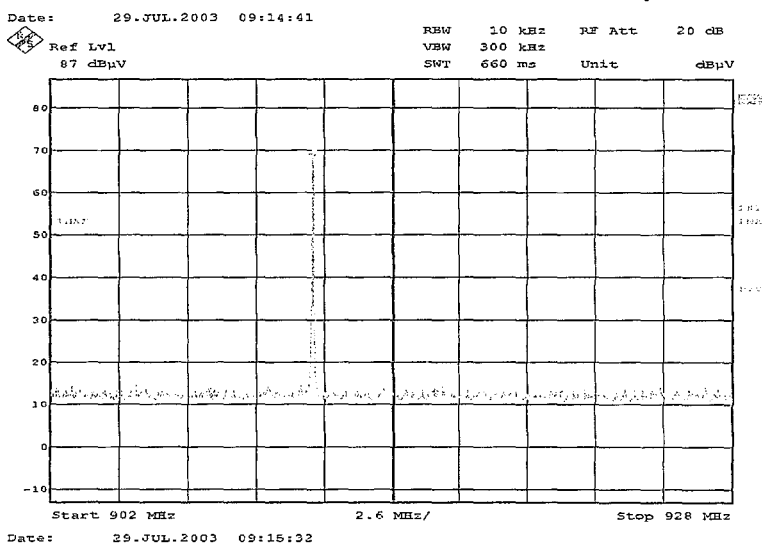
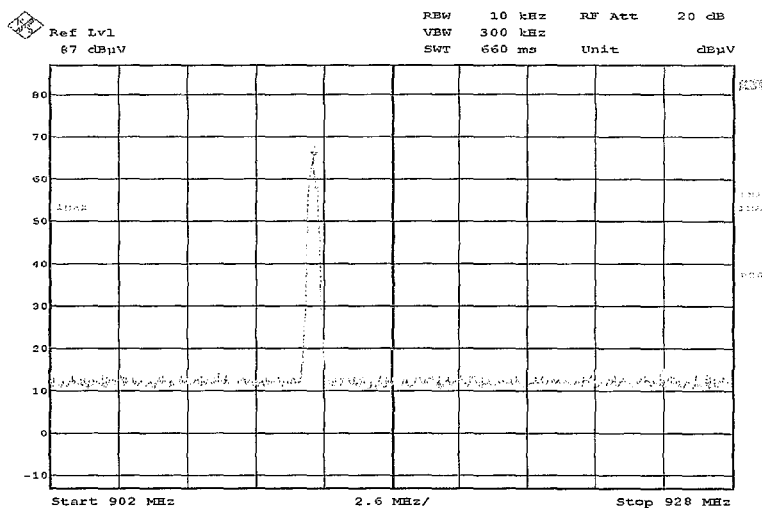
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