FCC PART 15.109

MEASUREMENT AND TEST REPORT

FOR

DynaPoint (Dong Guan) INC.

The Sixth Industrial Park. Shangsha, South Area ChangAn, DongGuan,

GuangDong, China

FCC ID: RYLH1I3003

Report Concerns: Original Report	**Equipment Type:** Mouse

Model: H1I3003

Report No.: STR08078094I

Test/Witness Engineer: Jason

Test Date: 2008-07-18 to 2008-07-23

Issued Date: 2008-07-24

Prepared By:

SEM.Test Compliance Service Co., Ltd.
3/F, Jinbao Commerce Building, Xin'an Fanshen Road,
Bao'an District, Shenzhen, P.R.C. (518101)

Approved & Authorized By:

Jandy So / PSQ Manager

Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by SEM.Test Compliance Service Co., Ltd.

TABLE OF CONTENTS

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	DynaPoint (Dong Guan) INC
Address of applicant:	The Sixth Industrial Park. Shsngsha, South Area ChangAn, DongGuan, GuangDong, China
Manufacturer:	DynaPoint (Dong Guan) INC
Address of manufacturer:	The Sixth Industrial Park. Shsngsha, South Area ChangAn, DongGuan, GuangDong, China

General Description of E.U.T

Items	Description
EUT Description:	Mouse
Trade Name:	/
Model No.:	H1I3003
Rated Voltage:	DC 5V
Rated Current:	/
Size:	10.5X6X3.5 cm
For more information refer to the circuit diagram form and the user's manual.	

The test data is gathered from a production sample provided by the manufacturer.

1.2 Test Standards

The following report is prepared on behalf of the Shenzhen DynaPoint (Dong Guan) INC. in accordance with Part 2, Subpart J, and Part 15, Subparts A and B of the Federal Communication Commissions rules.

The objective is to determine compliance with FCC Part 15, Subpart B, and section 15.107, and 15.109 rules.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission/immunity, should be checked to ensure compliance has been maintained.

1.3 Related Submittal(s)/Grant(s)

No Related Submittal(s).

1.4 Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2003, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

The equipment under test (EUT) was configured to measure its highest possible susceptibility against the tested phenomena. The test modes were adapted accordingly in reference to the Operating Instructions.

1.5 Test Facility

The Laboratory has been registered and fully described in a report filed with the (**FCC**) Federal Communications Commission. The acceptance letter from the FCC is maintained in files which the Registration No.: **994117**. Measurement required was performed at laboratory of SEM.Test Compliance Service Co., Ltd. at 3/F, Jinbao Commerce Building, Xin'an Fanshen Road, Bao'an District, Shenzhen, P.R.C. (518101).

1.6 EUT Exercise Software

The EUT exercise program used during radiated and conducted testing was designed to exercise the system components. The test software, provided by the customer, is started while the EUT is on to simulate the normal work.

1.7 Accessories Equipment List and Details

Manufacturer	Description	Model	Serial Number
IBM	Notebook	T22	LV14893
TP-LINK	Modem	TM-EC5658V	KT99CTQC-508
Lenovo	Printer	3110	OD65133711480

1.8 EUT Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
USB Cable	1	Shielded	Without Core

2. SUMMARY OF TEST RESULTS

Description of Test	Result
§15.107 (a) Conducted Emission	Compliant
§15.109(a) Radiated Emission	Compliant

3. §15.107 (a)- CONDUCTED EMISSION

3.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement is ± 1.5 dB.

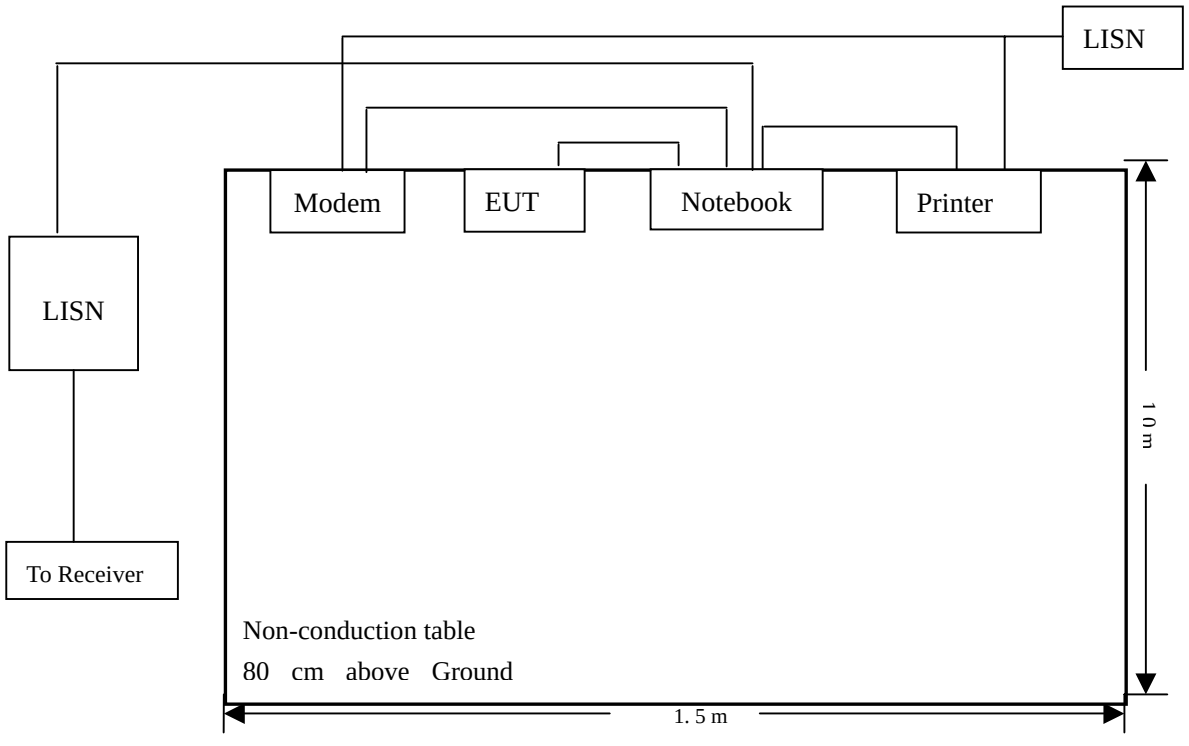
3.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
EMI Test Receiver	Rohde & Schwarz	ESCS30	830245/009	2008-01-25	2009-01-24
AMN	Rohde & Schwarz	ESH2-Z5	100002	2008-01-25	2009-01-24
Limiter	Rohde & Schwarz	ESH3-Z2	357.8810.52	2008-01-25	2009-01-24
AMN	Rohde & Schwarz	ESH3-Z5	828304/014	2008-01-25	2009-01-24
Spectrum Analyzer	Aglient	E4402B-ESA	US41192821	2008-01-25	2009-01-24

3.3 Test Procedure

The setup of EUT is according with per ANSI C63.4-2003 measurement procedure. The specification used was with the FCC Part 15.107 Limit.
The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.
The spacing between the peripherals was 10 cm.

3.4 Basic Test Setup Block Diagram



3.5 Environmental Conditions

Temperature:	18° C
Relative Humidity:	55%
ATM Pressure:	1012 mbar

3.6 Summary of Test Results/Plots

According to the data in section 3.8, the EUT complied with the FCC 15B Conducted margin for a Class B device, with the *worst* margin reading of:

-8.6 dBµV at **0.21MHz** in the **Line** mode**, 0.15-30MHz**

3.7 Conducted Emissions Test Data

LINE CONDUCTED EMISSIONS				FCC 15B CLASS B	
Frequency	Amplitude	Detector	Phase	Limit	Margin
MHz	dBµV	QP/Ave/Pk	Line/Neutral	dBµV	dB
0.21	44.5	Ave	Line	53.05	-8.6
0.17	55.0	Pk	Neutral	64.96	-10.0
0.21	43.0	Ave	Neutral	53.05	-10.1
0.21	52.5	Pk	Line	63.05	-10.5
4.44	34.2	Ave	Line	46	-11.8
4.73	31.8	Ave	Neutral	46	-14.2
0.64	30.7	Ave	Neutral	46	-15.3
0.63	29.5	Ave	Line	46	-16.5
0.99	28.7	Ave	Neutral	46	-17.3
4.30	38.2	Pk	Line	56	-17.8
0.41	39.6	Pk	Line	57.57	-17.9
5.64	31.8	Ave	Line	50	-18.2
0.47	37.2	Pk	Neutral	56.46	-19.2

Note: Emissions attenuated more than 20 dB below the permissible value are not reported.

Plot of Conducted Emissions Test Data

Conducted Disturbance

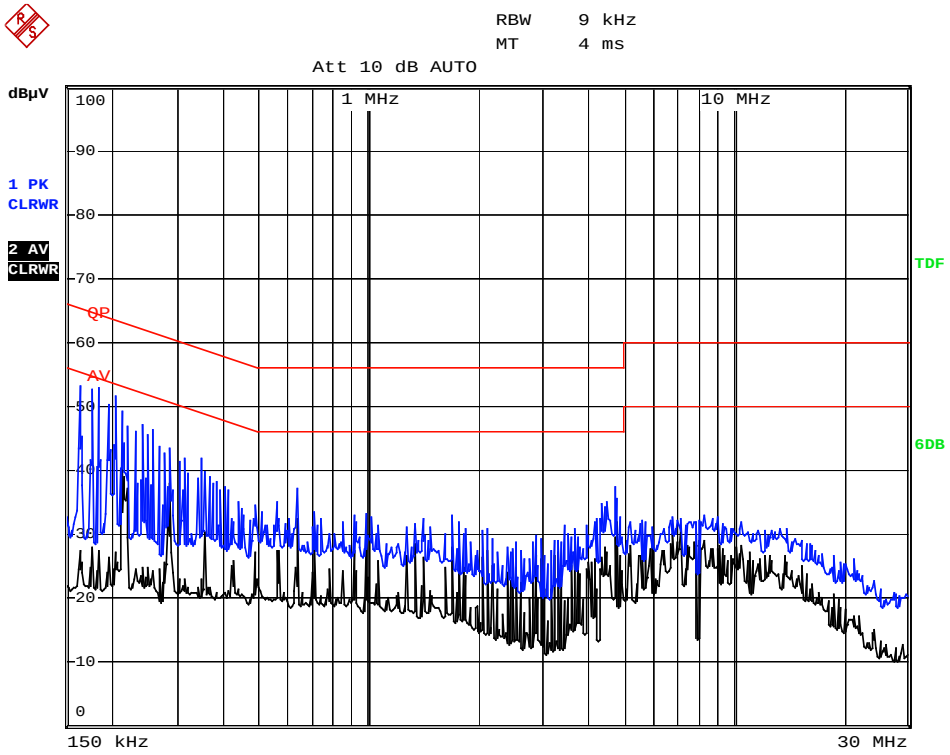
EUT: Mouse

M/N: H1I3003

Operating Condition: Running

Test Specification: N

Comment: Connect to pc



Date: 19.JUL.2008 10:44:35

Plot of Conducted Emissions Test Data

Conducted Disturbance

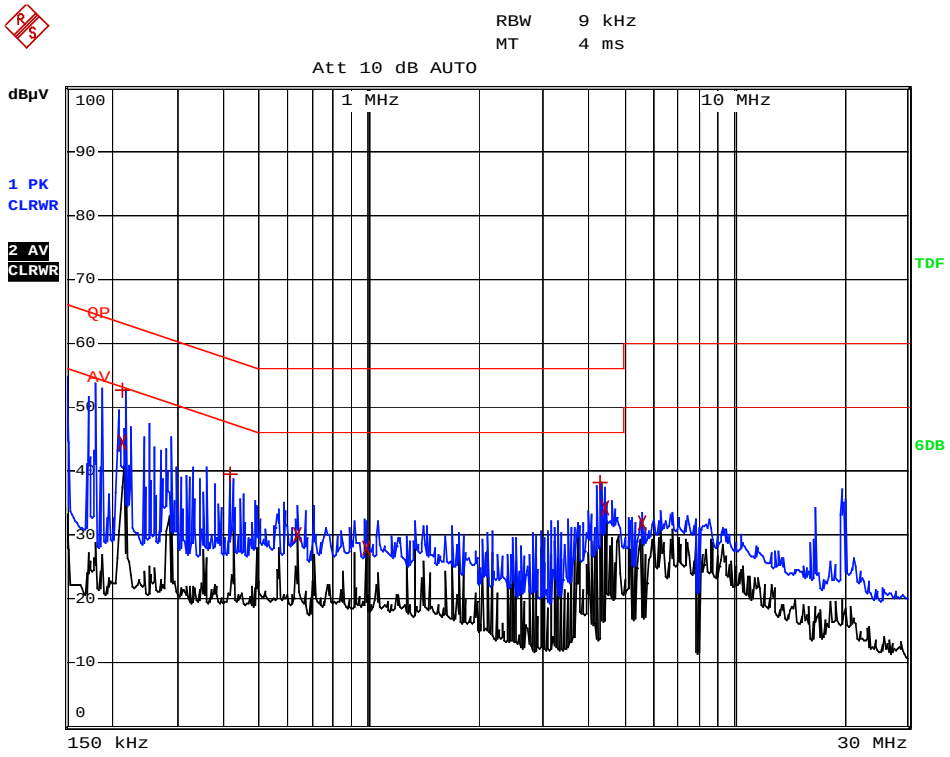
EUT: Mouse

M/N: H1I3003

Operating Condition: Running

Test Specification: L

Comment: Connect to pc



Date: 23.JUL.2008 11:29:41

4. §15.109(a)- RADIATED EMISSION

4.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any radiation emissions measurement is ± 3.0 dB.

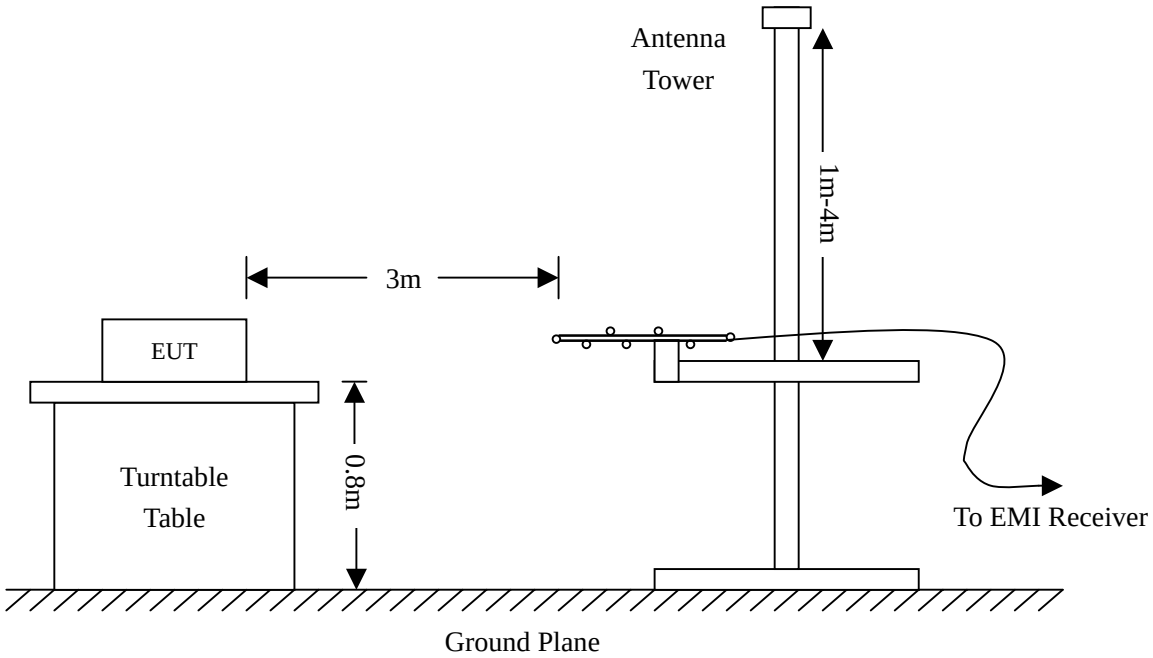
4.2 Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	ROHDE&SCHWARZ	FSEA20	DE25181	2008-01-25	2009-01-24
Positioning Controller	C&C	CC-C-1F	N/A	2008-01-25	2009-01-24
Trilog Broadband Antenna	SCHWARZBECK	VULB9163	9163-333	2008-01-25	2009-01-24
Horn Antenna	SCHWARZBECK	BBHX 9120	9120-426	2008-01-25	2009-01-24
RF Switch	EM	EMSW18	SW060023	2008-01-25	2009-01-24
Amplifier	Agilent	8447F	3113A06717	2008-01-25	2009-01-24
Coaxial Cable	SCHWARZBECK	AK9513	9513-10	2008-01-25	2009-01-24
EMI Test Receiver	ROHDE&SCHWARZ	ESPI	25498514	2008-01-25	2009-01-24

4.3 Test Procedure

The setup of EUT is according with per ANSI C63.4-2003 measurement procedure. The specification used was with the FCC Part 15.205 and FCC Part 15.109 Limit.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.
The spacing between the peripherals was 10 cm.



4.4 Test Receiver Setup

During the conducted emission test, the test receiver was set with the following configurations:

Start Frequency ..... 30 MHz
Stop Frequency ..... 1000 MHz
Sweep Speed ..... Auto
IF Bandwidth ..... 10 kHz
Quasi-Peak Adapter Bandwidth ..... 120 kHz
Quasi-Peak Adapter Mode ..... Normal

4.5 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading – Corr. Factor

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dBμV means the emission is 6dBμV below the maximum limit for Class B. The equation for margin calculation is as follows:

Margin = Corr. Ampl. – FCC Part 15B Limit

4.6 Environmental Conditions

Temperature:	22° C
Relative Humidity:	52%
ATM Pressure:	1011 mbar

4.7 Summary of Test Results/Plots

According to the data, the EUT complied with the FCC 15B Class B standards, and had the worst margin of:

-4.12 dBμV at **54.9011 MHz** in the **Vertical** polarization, , **30 MHz to 1 GHz, 3Meters**

Plot of Radiation Emissions Test Data

Radiated Emission

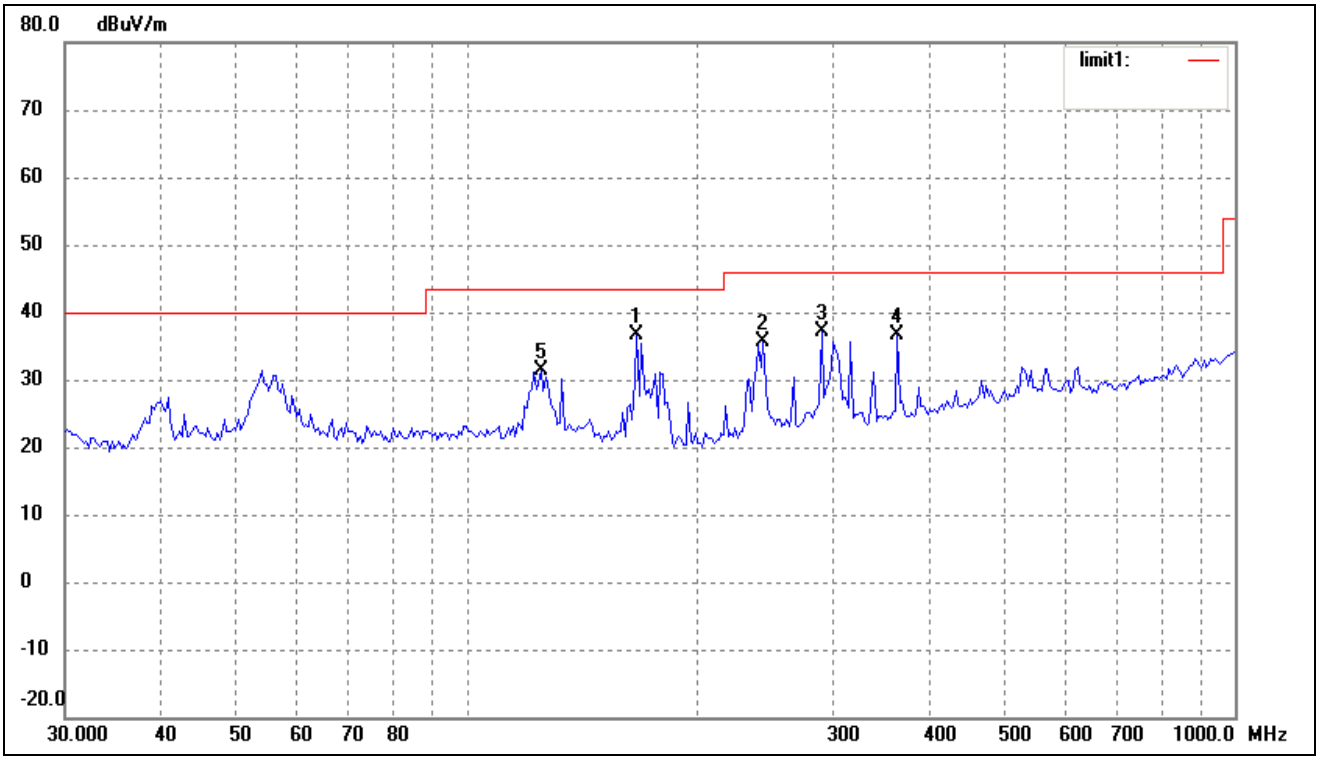
EUT: Mouse

M/N: H1I3003

Operating Condition: Running

Test Specification: Horizontal & Vertical

Horizontal:



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	166.6385	31.97	4.77	36.74	43.50	-6.76	258	121	peak
2	243.5431	27.02	8.53	35.55	46.00	-10.45	229	140	peak
3	290.3170	27.48	9.66	37.14	46.00	-8.86	248	100	peak
4	363.5231	25.64	10.95	36.59	46.00	-9.41	261	154	peak
5	124.9249	26.15	5.26	31.41	43.50	-12.09	235	105	peak

Plot of Radiation Emissions Test Data

Radiated Emission

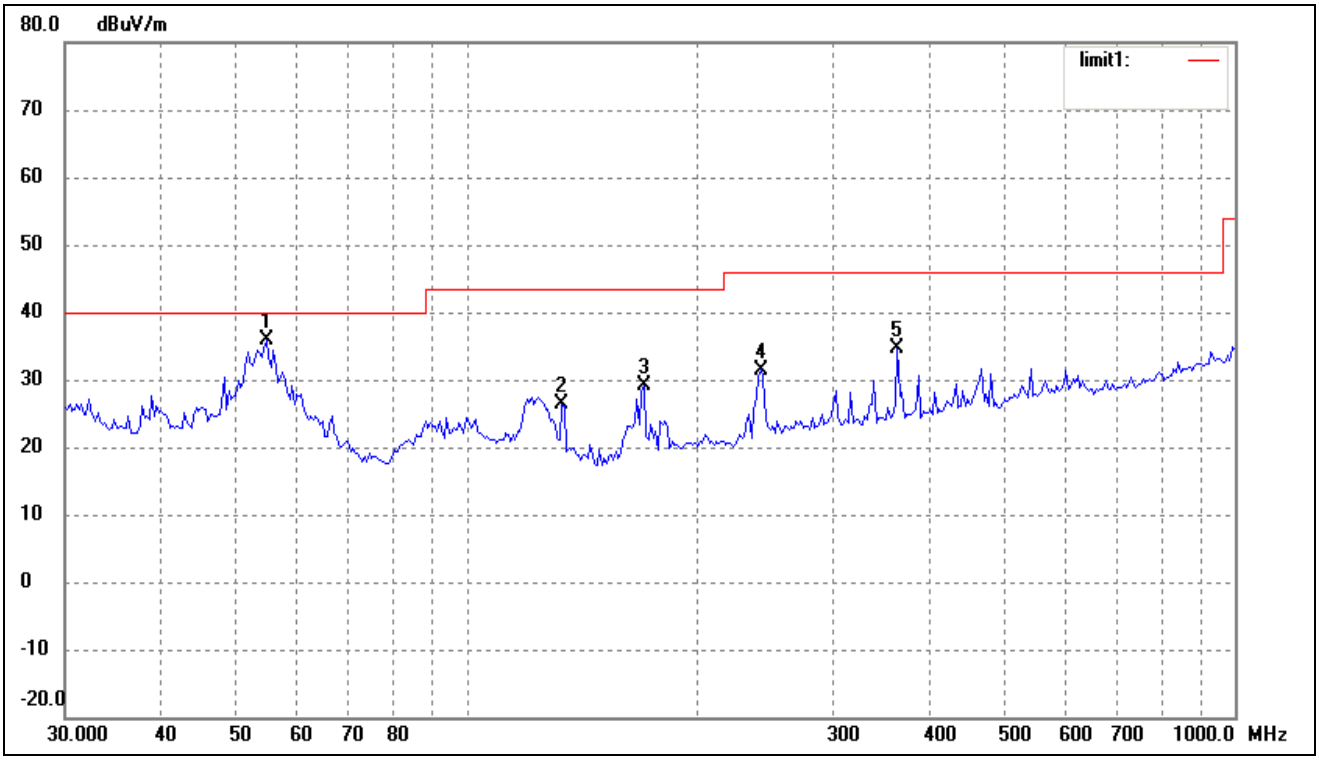
EUT: Mouse

M/N: H1I3003

Operating Condition: Running

Test Specification: Horizontal & Vertical

Vertical:



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	54.9011	28.11	7.77	35.88	40.00	-4.12	228	114	QP
2	133.0809	21.89	4.38	26.27	43.50	-17.23	236	105	peak
3	170.1888	24.29	4.89	29.18	43.50	-14.32	258	117	peak
4	241.8377	23.02	8.48	31.50	46.00	-14.50	245	104	peak
5	363.5231	23.64	10.95	34.59	46.00	-11.41	128	125	peak