FCC PART 15.109
MEASUREMENT AND TEST REPORT
FOR

IDealltech Technology Corp

Rm 706, Yongjingting Building-C, Jianyi Paradise, HengGangTou,

Chang An Town, Dongguan, China

FCC ID: WQFIDL0014

Report Concerns: Original Report	**Equipment Type:** MOUSE

Model: MS0014

Report No.: STR08098056I

Test/Witness Engineer: John Shi

Test Date: 2008-09-13 to 2008-09-22

Issued Date: 2008-09-23

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

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:	IDealltech Technology Corp
Address of applicant:	Rm 706, Yongjingting Building-C, Jianyi Paradise, HengGangTou, Chang An Town, Dongguan, China
Manufacturer:	IDealltech Technology Corp
Address of manufacturer:	Rm 706, Yongjingting Building-C, Jianyi Paradise, HengGangTou, Chang An Town, Dongguan, China

General Description of E.U.T

Items	Description
EUT Description:	Mouse
Trade Name:	/
Model No.:	MS0014
Rate Current:	100mA
Rate Voltage:	USB 5V
Size:	10.0 x5.7 x3.5cm
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 IDealltech Technology Corp 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 immunity level. Test is carried with playing mode which worst case has been showed. Test setup was 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 Accessories Equipment List and Details

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

1.7 EUT Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
USB	1.35	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 ± 1.5dB.

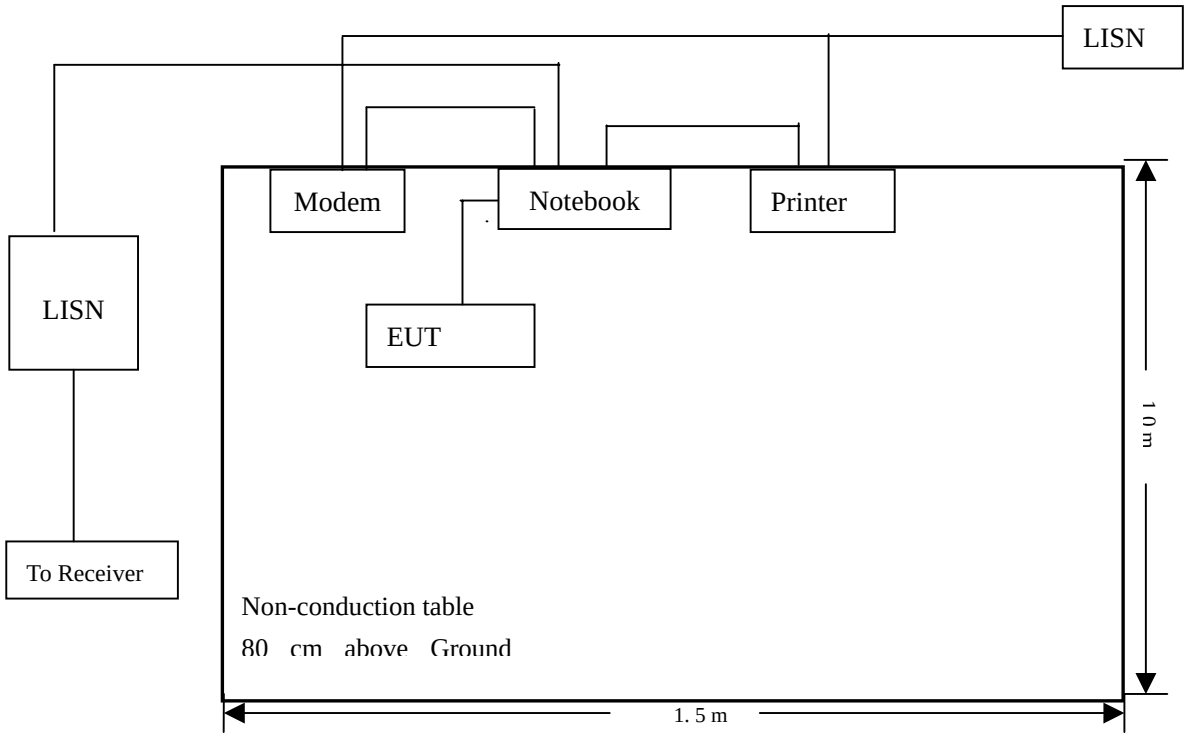
3.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2008-01-25	2009-01-24
L.I.S.N	Schwarz beck	NSLK8126	8126-224	2008-01-25	2009-01-24
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2008-01-25	2009-01-24
AMN	Rohde & Schwarz	ESH3-Z5	828304/014	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:	25° C
Relative Humidity:	55%
ATM Pressure:	1010 mbar

3.6 Summary of Test Results/Plots

According to the data in section 3.7, the EUT complied with the FCC 15B Conducted margin for a Class B device, with the *worst* margin reading of:

-13.6 dBμV at **0.49 MHz** in the **Line** mode**, Ave** detector, **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
0.49	32.6	Ave	Line	46.17	-13.6
0.56	32.1	Ave	Neutral	46	-13.9
0.21	38.7	Ave	Line	53.05	-14.3
0.21	38.4	Ave	Neutral	53.21	-14.8
0.15	49.97	QP	Neutral	66	-16.0
4.09	28.7	Ave	Neutral	46	-17.3
0.166	45.86	QP	Neutral	65.16	-19.3
1.20	26.5	Ave	Line	46	-19.5
0.19	44.36	QP	Line	64.04	-19.7
0.56	35.87	QP	Neutral	56	-20.1
4.37	32.22	QP	Line	56	-23.8
0.37	31.1	QP	Line	58.5	-27.4

Plot of Conducted Emissions Test Data

Conducted Disturbance

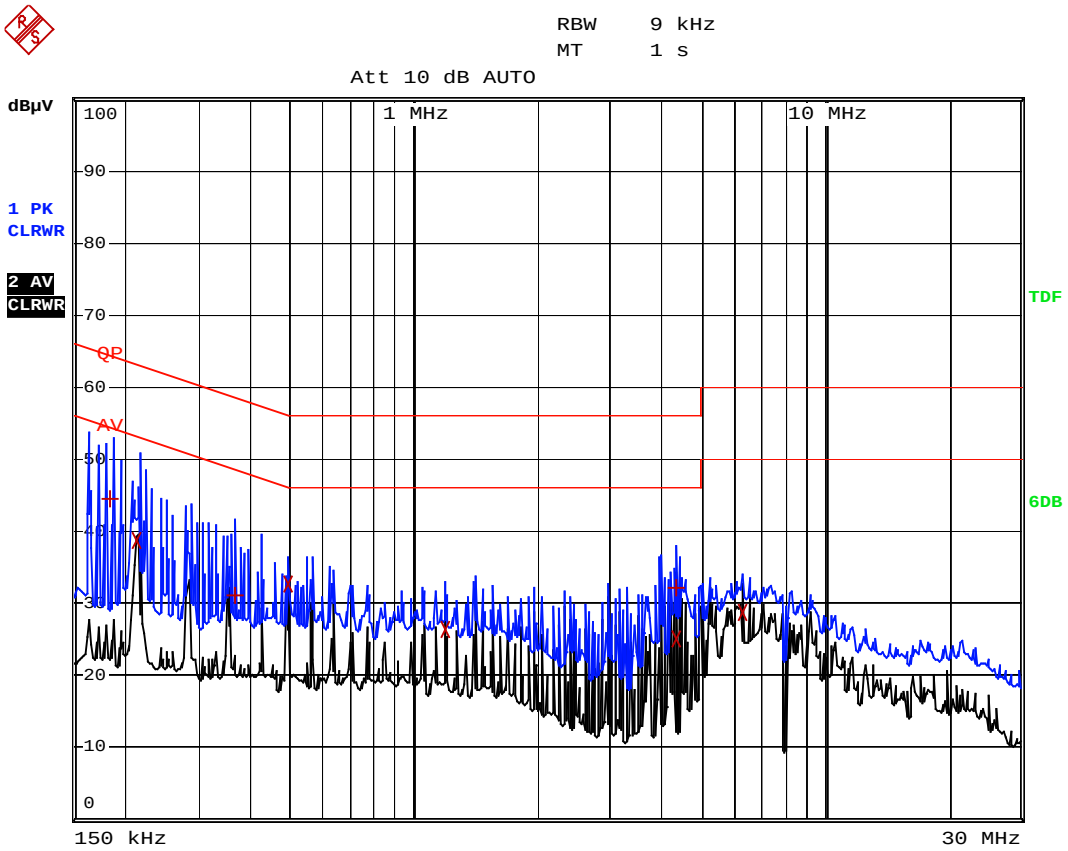
EUT: Mouse

M/N: MS0014

Operating Condition: Running

Test Specification: L

Comment: AC120V/60Hz USB 5V



Date: 17.SEP.2008 16:40:39

Plot of Conducted Emissions Test Data

Conducted Disturbance

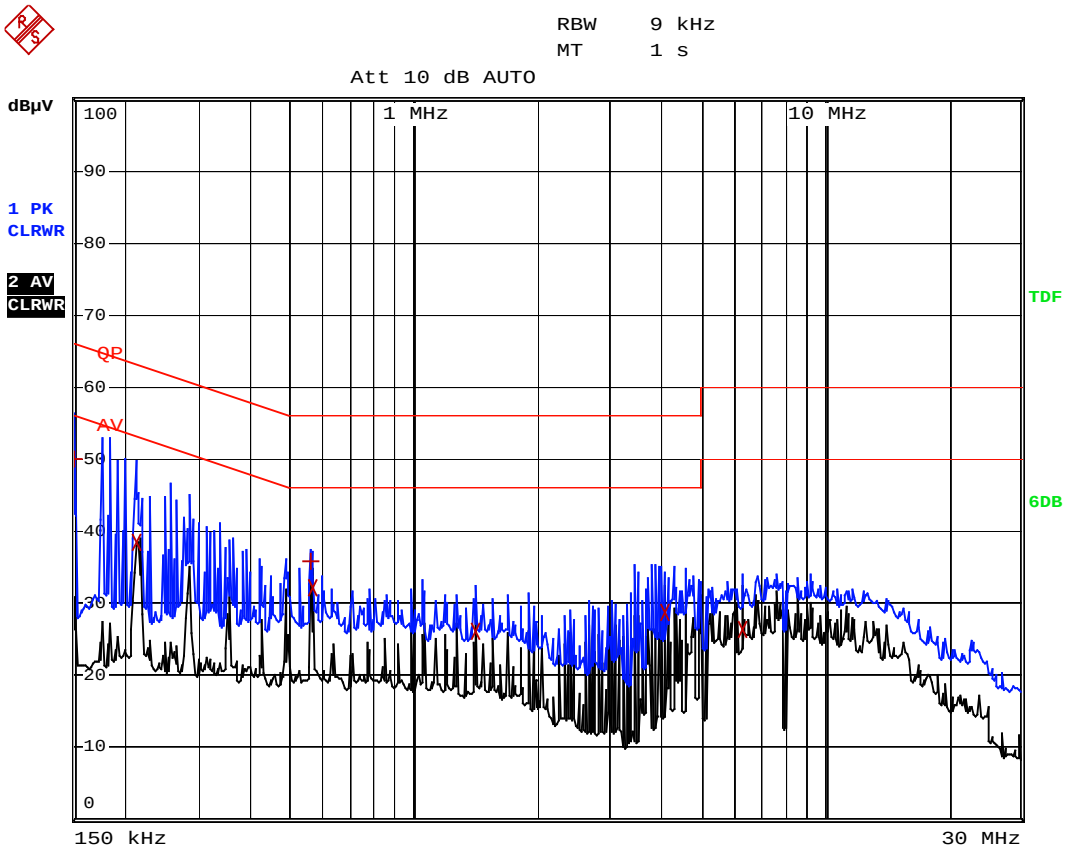
EUT: Mouse

M/N: MS0014

Operating Condition: Running

Test Specification: N

Comment: AC120V/60Hz USB 5V



Date: 17.SEP.2008 16:42:42

4. §15.109(a)- RADIATED EMISSION

4.1 Measurement Uncertainty

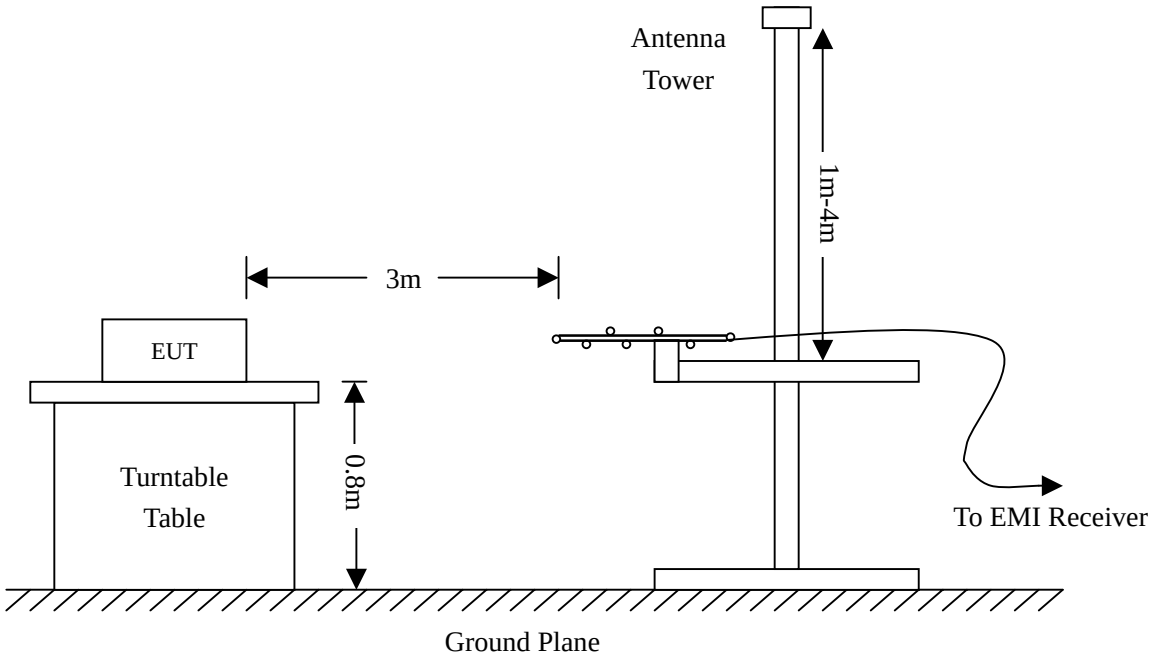
Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any radiation emissions measurement is ± 3.0 dB.

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 15.109 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 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

4.5 Environmental Conditions

Temperature:	25° C
Relative Humidity:	52%
ATM Pressure:	1012 mbar

4.6 Summary of Test Results/Plots

According to the data in section 4.6, the EUT complied with the FCC 15 Class B standards, and had the worst margin is:

-1.50 dBμV at **66.8395 MHz** in the, **Horizontal** polarization, **30 MHz to 1 GHz, 3Meters**

Plot of Radiation Emissions Test Data

Radiated Emission

EUT: MOUSE

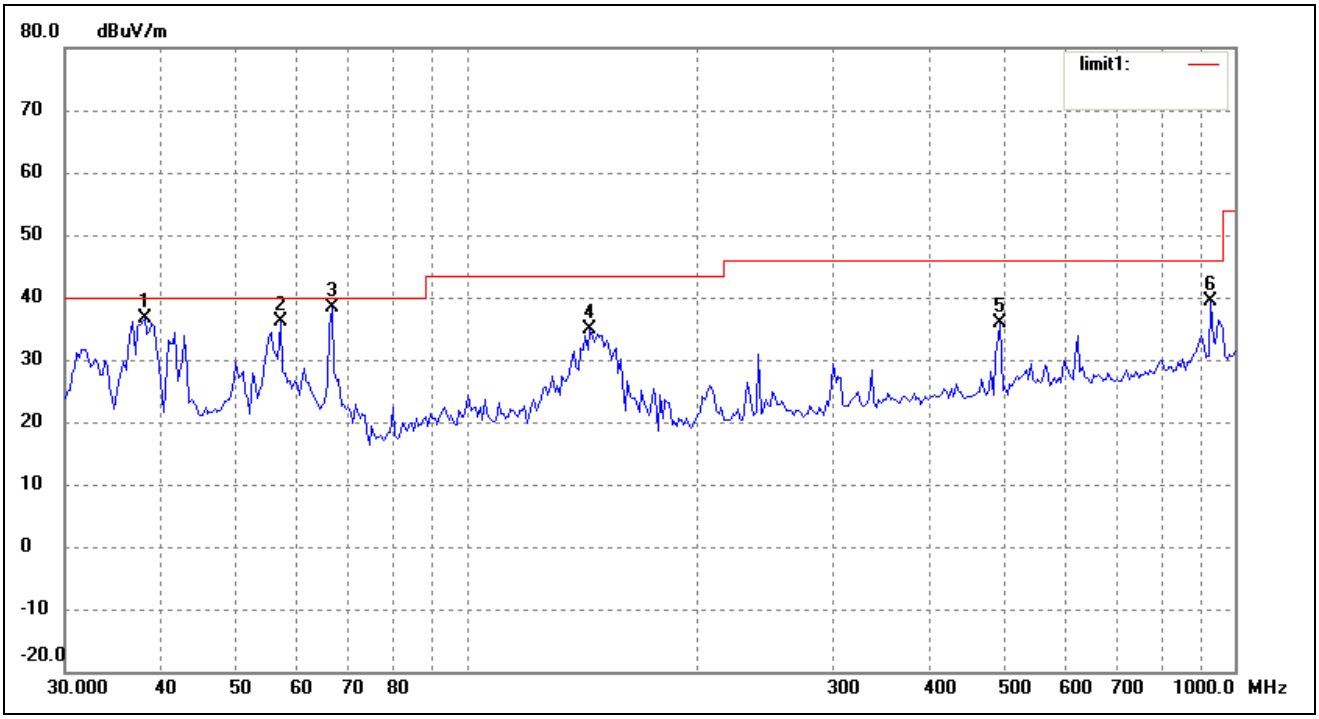
M/N: MS0014

Operating Condition: Running

Test Specification: Horizontal & Vertical

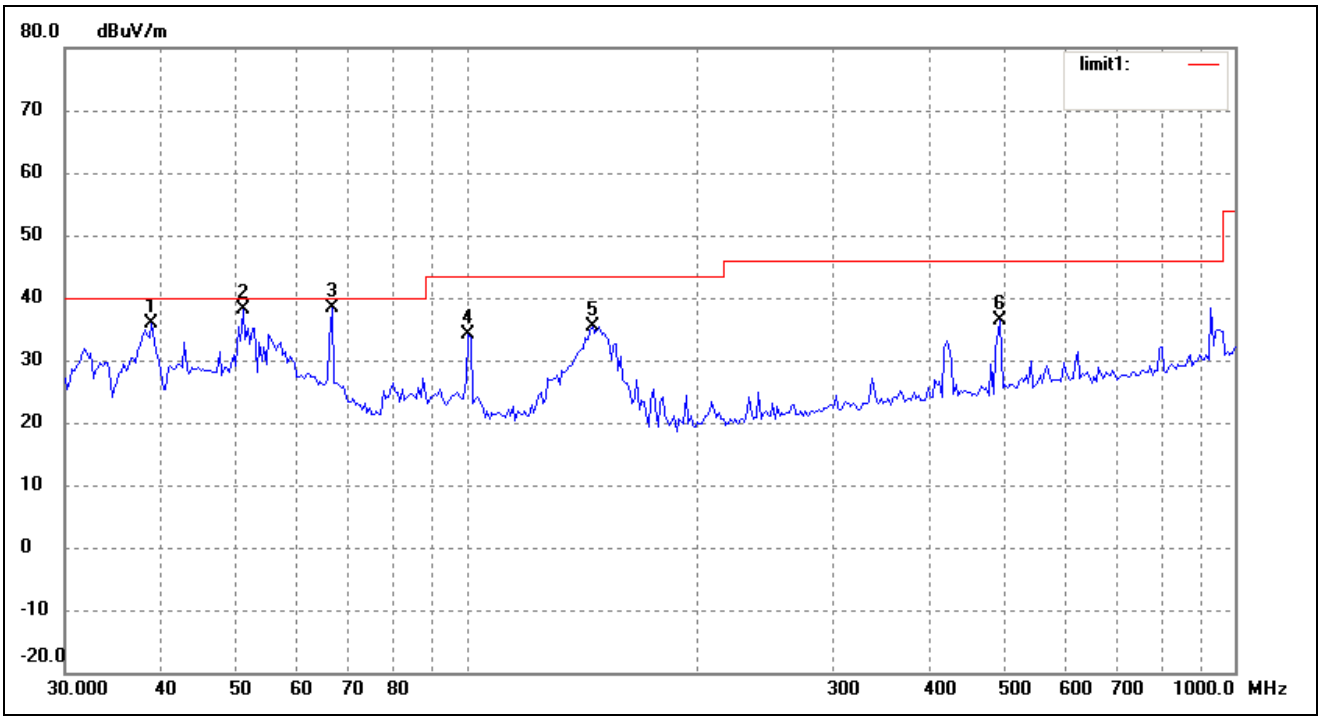
Comment: AC120V/60Hz; USB 5V

Horizontal:



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	38.0964	29.11	7.42	36.53	40.00	-3.47	252	100	QP
2	57.2653	28.77	7.33	36.10	40.00	-3.90	221	100	QP
3	66.8395	34.03	4.47	38.50	40.00	-1.50	180	100	QP
4	144.7898	31.53	3.26	34.79	43.50	-8.71	346	100	peak
5	495.2379	25.20	10.71	35.91	46.00	-10.09	347	100	peak
6	932.1404	24.09	15.19	39.28	46.00	-6.72	0	100	peak

Vertical



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	38.9080	28.29	7.64	35.93	40.00	-4.07	252	100	QP
2	51.1756	30.55	7.64	38.19	40.00	-1.81	221	100	QP
3	66.8395	33.95	4.47	38.42	40.00	-1.58	180	100	QP
4	100.4711	26.44	7.77	34.21	43.50	-9.29	346	100	peak
5	145.8109	32.18	3.27	35.45	43.50	-8.05	347	100	peak
6	495.2379	25.60	10.71	36.31	46.00	-9.69	121	110	peak

******* END OF REPORT *******