

FCC CERTIFICATION
On Behalf of
Eastern Times Technology Co., Ltd.

2.4G Wireless Optical Mouse
Model No.: DS-2440, DS-2406, DS-2456, DS-2449, DS-2419

FCC ID: TUVDS-2440

Prepared for : Eastern Times Technology Co., Ltd.
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APPENDIX I (TEST CURVES) (28 pages)

Test Report Certification

Applicant : Eastern Times Technology Co., Ltd.
Manufacturer : Eastern Times Technology Co., Ltd.
EUT Description : 2.4G Wireless Optical Mouse
(A) MODEL NO.: DS-2440, DS-2406, DS-2456, DS-2449, DS-2419
(B) POWER SUPPLY: 1.5V DC ("AA" batteries 1×)

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.249
ANSI C63.4: 2009

The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.249 limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY CO. LTD is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of ACCURATE TECHNOLOGY CO. LTD.

Date of Test : August 30-September 4, 2012

Prepared by : Apple Lv
(Engineer)

Approved & Authorized Signer : Heunbo
(Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT	:	2.4G Wireless Optical Mouse
Model Number	:	DS-2440, DS-2406, DS-2456, DS-2449, DS-2419 (Note: These samples are identical, except the appearance is difference. Therefore only model DS-2440 is tested for EMC tests.)
Power Supply	:	1.5V DC (“AA” batteries 1 ×)
Operate Frequency	:	2408.000-2474.000MHz
Applicant	:	Eastern Times Technology Co., Ltd.
Address	:	Building D, Nan An Industry Park, Youganpu Village Fenggang Town, Dongguan City, Guangdong, China
Manufacturer	:	Eastern Times Technology Co., Ltd.
Address	:	Building D, Nan An Industry Park, Youganpu Village Fenggang Town, Dongguan City, Guangdong, China
Date of sample received	:	August 30, 2012
Date of Test	:	August 30-September 4, 2012

1.2. Description of Test Facility

EMC Lab	:	Accredited by TUV Rheinland Shenzhen Listed by FCC The Registration Number is 752051 Listed by Industry Canada The Registration Number is 5077A-2 Accredited by China National Accreditation Committee for Laboratories The Certificate Registration Number is L3193
Name of Firm	:	ACCURATE TECHNOLOGY CO. LTD
Site Location	:	F1, Bldg. A, Changyuan New Material Port, Keyuan Rd. Science & Industry Park, Nanshan, Shenzhen, Guangdong P.R. China

1.3.Measurement Uncertainty

Conducted Emission Expanded Uncertainty = 2.23dB, k=2

Radiated emission expanded uncertainty
(9kHz-30MHz) = 3.08dB, k=2

Radiated emission expanded uncertainty
(30MHz-1000MHz) = 4.42dB, k=2

Radiated emission expanded uncertainty
(Above 1GHz) = 4.06dB, k=2

2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated dates	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 8, 2012	Jan. 7, 2013
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 8, 2012	Jan. 7, 2013
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 8, 2012	Jan. 7, 2013
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 8, 2012	Jan. 7, 2013
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 8, 2012	Jan. 7, 2013
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 8, 2012	Jan. 7, 2013
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 8, 2012	Jan. 7, 2013
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 8, 2012	Jan. 7, 2013
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 8, 2012	Jan. 7, 2013
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 8, 2012	Jan. 7, 2013

3. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
Section 15.207	Conducted Emission	N/A
Section 15.249(a)	Fundamental and Harmonics Radiated Emission	Compliant
Section 15.249(d)	Spurious Radiated Emission	Compliant
Section 15.249(d)	Band Edge	Compliant
Section 15.203	Antenna Requirement	Compliant

Remark: "N/A" means "Not applicable".

4. FUNDAMENTAL AND HARMONICS RADIATED EMISSION FOR SECTION 15.249(A)

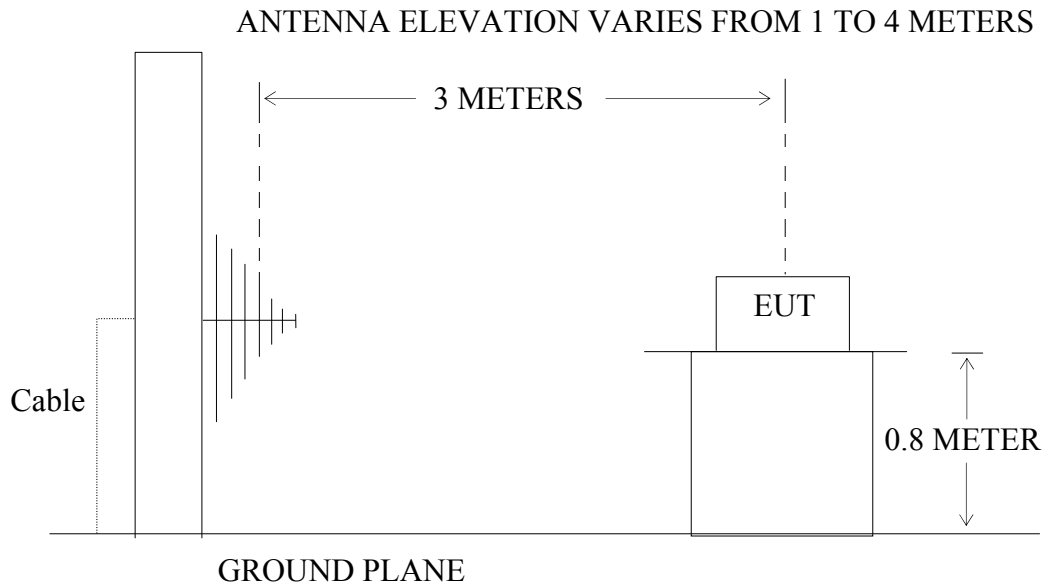
4.1. Block Diagram of Test Setup

4.1.1. Block diagram of connection between the EUT and simulators



(EUT: 2.4G Wireless Optical Mouse)

4.1.2. Semi-Anechoic Chamber Test Setup Diagram



(EUT: 2.4G Wireless Optical Mouse)

4.2. The Emission Limit

4.2.1. For intentional radiators, According to section 15.249(a), Operation within the frequency band of 2.4 to 2.4835GHz, The fundamental field strength shall not exceed 94 dB μ V/m and the harmonics shall not exceed 54 dB μ V/m.

Fundamental Frequency	Field Strength of Fundamental (millivolts/meter)	Field Strength of harmonics (microvolts/meter)
902-928MHz	50	500
2400-2483.5MHz	50	500
5725-5875MHz	50	500
24.0-24.25GHz	250	2500

4.2.2. According to section 15.249(e), as shown in section 15.35(b), the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

4.3. Configuration of EUT on Measurement

The following equipment are installed on Radi ated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

4.3.1. 2.4G Wireless Optical Mouse (EUT)

Model Number : DS-2440
 Serial Number : N/A
 Manufacturer : Eastern Times Technology Co., Ltd.

4.4. Operating Condition of EUT

4.4.1. Setup the EUT and simulator as shown as Section 4.1.

4.4.2. Turn on the power of all equipment.

4.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2408.000 - 2474.000 MHz MHz. We are select 2408.000MHz, 2440.000MHz, 2474.000MHz TX frequency to transmit.

4.5. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bi-log antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver is set at 120kHz in 30-1000MHz. and set at 1MHz in above 1000MHz.

The frequency range from 30MHz to 25000MHz is checked.

4.6. The Field Strength of Radiation Emission Measurement Results

PASS.

Date of Test:	September 1, 2012	Temperature:	25°C
EUT:	2.4G Wireless Optical Mouse	Humidity:	50%
Model No.:	DS-2440	Power Supply:	DC 1.5V
Test Mode:	TX 2408.000MHz	Test Engineer:	Pei

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2408.000	99.80	106.90	-7.44	92.36	99.46	94.00	114.00	-1.64	-14.54	Vertical
2408.000	100.51	106.19	-7.44	93.07	98.75	94.00	114.00	-0.93	-15.25	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
4816.000	40.17	45.25	-0.23	39.94	45.02	54.00	74.00	-14.06	-28.98	Vertical
4816.000	39.81	45.54	-0.23	39.58	45.31	54.00	74.00	-14.42	-28.69	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	September 1, 2012	Temperature:	25°C
EUT:	2.4G Wireless Optical Mouse	Humidity:	50%
Model No.:	DS-2440	Power Supply:	DC 1.5V
Test Mode:	TX 2440.000MHz	Test Engineer:	Pei

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2440.000	81.14	86.59	-7.36	73.78	79.23	94.00	114.00	-20.22	-34.77	Vertical
2440.000	81.23	86.85	-7.36	73.87	79.49	94.00	114.00	-20.13	-34.51	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
4880.000	41.11	46.78	0.13	41.24	46.91	54.00	74.00	-12.76	-27.09	Vertical
4880.000	40.02	45.70	0.13	40.15	45.83	54.00	74.00	-13.85	-28.17	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	September 1, 2012	Temperature:	25°C
EUT:	2.4G Wireless Optical Mouse	Humidity:	50%
Model No.:	DS-2440	Power Supply:	DC 1.5V
Test Mode:	TX 2474.000MHz	Test Engineer:	Pei

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2474.000	99.34	105.09	-7.37	91.97	97.72	94.00	114.00	-2.03	-16.28	Vertical
2474.000	82.21	87.00	-7.37	74.84	79.63	94.00	114.00	-19.16	-34.37	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
4948.000	40.06	45.56	0.46	40.52	46.02	54.00	74.00	-13.48	-27.98	Vertical
4948.000	40.48	45.87	0.46	40.94	46.33	54.00	74.00	-13.06	-27.67	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

3. The spectral diagrams in appendix I display the measurement of peak values.

5. SPURIOUS RADIATED EMISSION FOR SECTION 15.249(D)

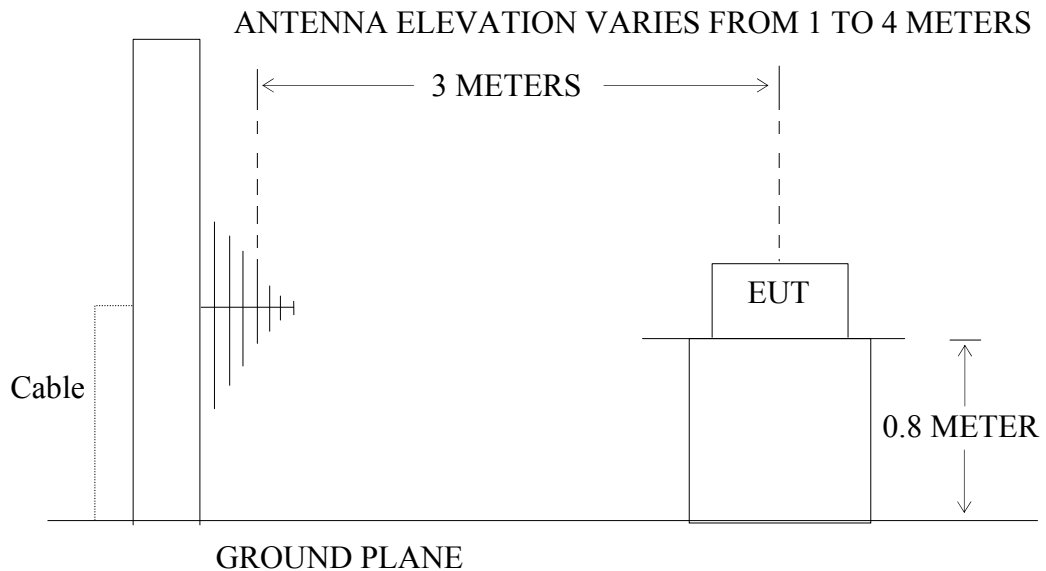
5.1. Block Diagram of Test Setup

5.1.1. Block diagram of connection between the EUT and simulators



(EUT: 2.4G Wireless Optical Mouse)

5.1.2. Semi-Anechoic Chamber Test Setup Diagram



(EUT: 2.4G Wireless Optical Mouse)

5.2. The Emission Limit For Section 15.249(d)

5.2.1. Emission radiated outside of the specified frequency bands, except for harmonics, shall be comply with the general radiated emission limits in Section 15.209.

Radiation Emission Measurement Limits According to Section 15.209

Frequency (MHz)	Limit		The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Average detector.
	Field Strength (microvolts/meter)	Measurement Distance (meters)	
0.009 – 0.490	2400/F(kHz)	300	

0.490 – 1.705	24000/F(kHz)	30	Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.
1.705 – 30.0	30	30	
30 - 88	100	3	
88 - 216	150	3	
216 - 960	200	3	
Above 960	500	3	

5.3.EUT Configuration on Measurement

The following equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

5.3.1. 2.4G Wireless Optical Mouse (EUT)

Model Number : DS-2440
Serial Number : N/A
Manufacturer : Eastern Times Technology Co., Ltd.

5.4.Operating Condition of EUT

5.4.1.Setup the EUT and simulator as shown as Section 5.1.

5.4.2.Turn on the power of all equipment.

5.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2408.000 - 2474.000 MHz. We are select 2408.000MHz, 2440.000MHz, 2474.000MHz TX frequency to transmit.

5.5. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver is set at 9kHz in below 30MHz, and set at 120kHz in 30-1000MHz, and 1MHz in above 1000MHz.

The frequency range from 9kHz to 25GHz is checked.

The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Average detector. Except those frequency bands mentioned above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.

5.6.The Emission Measurement Result

PASS.

Date of Test:	<u>September 1, 2012</u>	Temperature:	<u>25°C</u>
EUT:	<u>2.4G Wireless Optical Mouse</u>	Humidity:	<u>50%</u>
Model No.:	<u>DS-2440</u>	Power Supply:	<u>DC 1.5V</u>
Test Mode:	<u>TX 2408.000MHz</u>	Test Engineer:	<u>Pei</u>

Below 30MHz

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	X
-	-	-	-	-	-	Y
-	-	-	-	-	-	Z

30MHz-25GHz

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP QP		
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	September 1, 2012	Temperature:	25°C
EUT:	2.4G Wireless Optical Mouse	Humidity:	50%
Model No.:	DS-2440	Power Supply:	DC 1.5V
Test Mode:	TX 2440.000MHz	Test Engineer:	Pei

Below 30MHz

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	X
-	-	-	-	-	-	Y
-	-	-	-	-	-	Z

30MHz-25GH

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP QP		
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$
3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	September 1, 2012	Temperature:	25°C
EUT:	2.4G Wireless Optical Mouse	Humidity:	50%
Model No.:	DS-2440	Power Supply:	DC 1.5V
Test Mode:	TX 2474.000MHz	Test Engineer:	Pei

Below 30MHz

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	X
-	-	-	-	-	-	Y
-	-	-	-	-	-	Z

30MHz-25GH

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP QP		
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$
3. The spectral diagrams in appendix I display the measurement of peak values.

6. BAND EDGES

6.1. The Requirement

6.1.1. Band Edge from 2400MHz to 2483.5MHz. Emission radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

6.2. EUT Configuration on Measurement

The following equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

6.2.1. 2.4G Wireless Optical Mouse (EUT)

Model Number : DS-2440
 Serial Number : N/A
 Manufacturer : Eastern Times Technology Co., Ltd.

6.3. Operating Condition of EUT

6.3.1. Setup the EUT and simulator as shown as Section 4.1.

6.3.2. Turn on the power of all equipment.

6.3.3. Let the EUT work in TX modes measure it. The transmit frequency are 2408.000-2474.000MHz. We are select 2408.000MHz, 2474.000MHz TX frequency to transmit.

6.4. Test Procedure

1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
 RBW=1MHz, VBW=1MHz

6.5.The Measurement Result

Pass.

Date of Test:	<u>September 1, 2012</u>	Temperature:	<u>25°C</u>
EUT:	<u>2.4G Wireless Optical Mouse</u>	Humidity:	<u>50%</u>
Model No.:	<u>DS-2440</u>	Power Supply:	<u>DC 1.5V</u>
Test Mode:	<u>TX 2408.000MHz</u>	Test Engineer:	<u>Pei</u>

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2310.000	41.69	46.17	-7.81	33.88	38.36	54.00	74.00	-20.12	-35.64	Vertical
2369.450	42.57	47.22	-7.66	34.91	39.56	54.00	74.00	-19.09	-34.44	Vertical
2390.000	44.40	49.09	-7.53	36.87	41.56	54.00	74.00	-17.13	-32.44	Vertical
2310.000	42.21	47.01	-7.81	34.40	39.20	54.00	74.00	-19.60	-34.80	Horizontal
2369.400	43.67	48.48	-7.66	36.01	40.82	54.00	74.00	-17.99	-33.18	Horizontal
2390.150	46.66	51.34	-7.53	39.13	43.81	54.00	74.00	-14.87	-30.19	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	September 1, 2012	Temperature:	25°C
EUT:	2.4G Wireless Optical Mouse	Humidity:	50%
Model No.:	DS-2440	Power Supply:	DC 1.5V
Test Mode:	TX 2474.000MHz	Test Engineer:	Pei

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2483.818	45.55	50.09	-7.38	38.17	42.71	54.00	74.00	-15.83	-31.29	Vertical
2489.349	47.46	52.21	-7.39	40.07	44.82	54.00	74.00	-13.93	-29.18	Vertical
2500.000	41.11	46.66	-7.40	33.71	39.26	54.00	74.00	-20.29	-34.74	Vertical
2483.901	49.41	54.18	-7.38	42.03	46.80	54.00	74.00	-11.97	-27.20	Horizontal
2489.349	48.84	54.45	-7.39	41.45	47.06	54.00	74.00	-12.55	-26.94	Horizontal
2500.000	40.02	45.75	-7.40	32.62	38.35	54.00	74.00	-35.65	-21.38	Horizontal

Note:

- Emissions attenuated more than 20 dB below the permissible value are not reported.
- The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$
- The spectral diagrams in appendix I display the measurement of peak values.

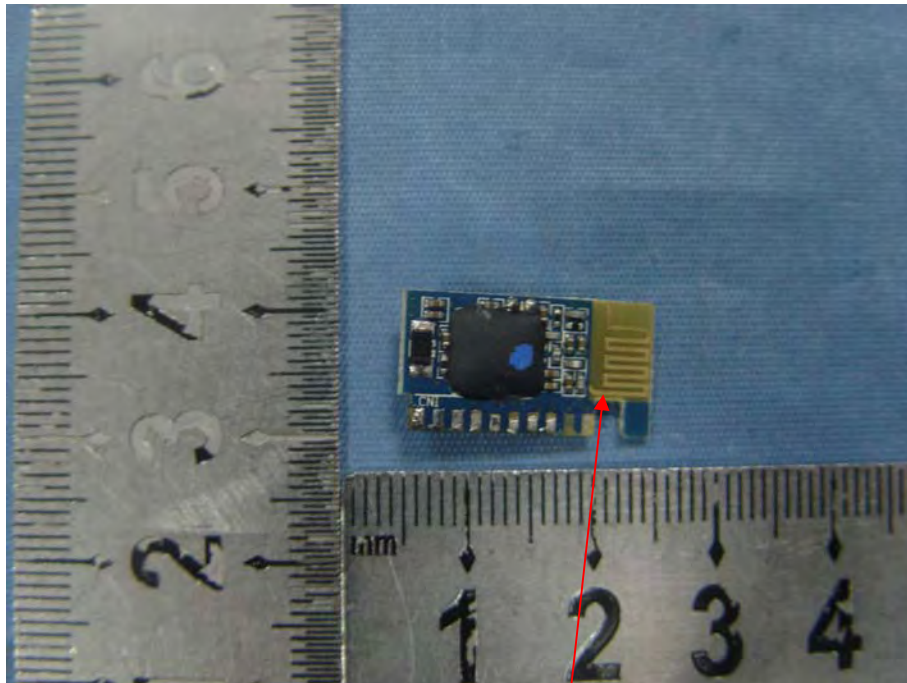
7. ANTENNA REQUIREMENT

7.1.The Requirement

7.1.1. According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

7.2. Antenna Construction

The antenna is PCB Layout antenna, no consideration of replacement.



Antenna

APPENDIX I (Test Curves)



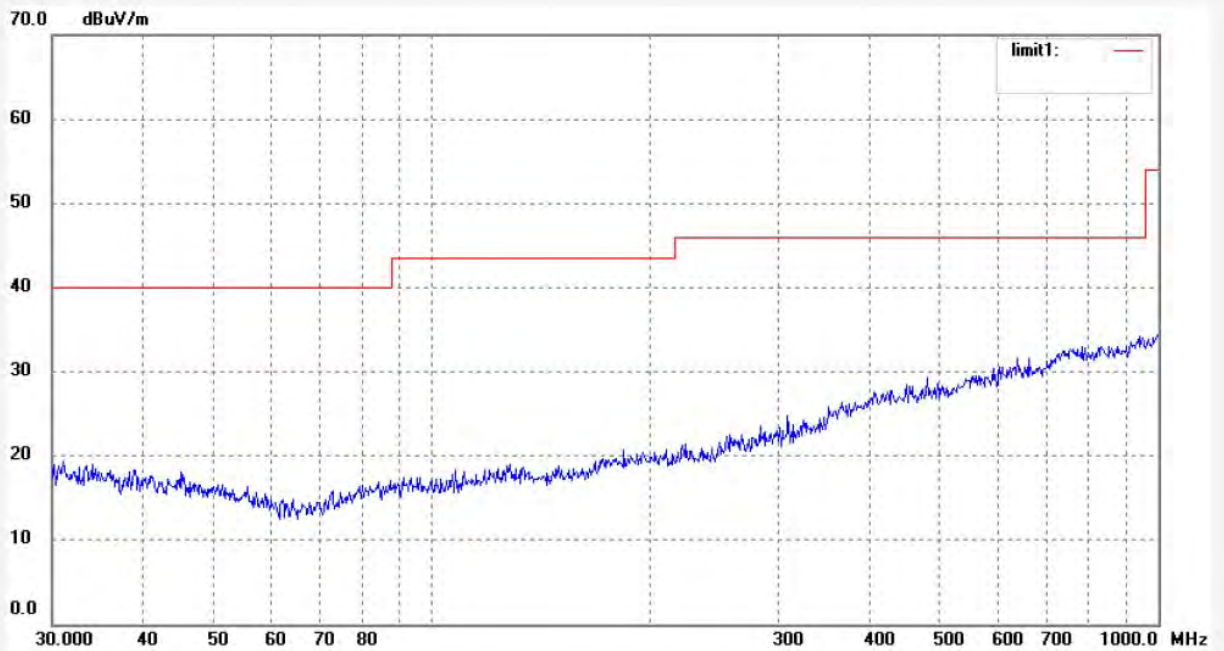
ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #813	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 1.5V
Test item: Radiation Test	Date: 12/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 9/02/44
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX 2408	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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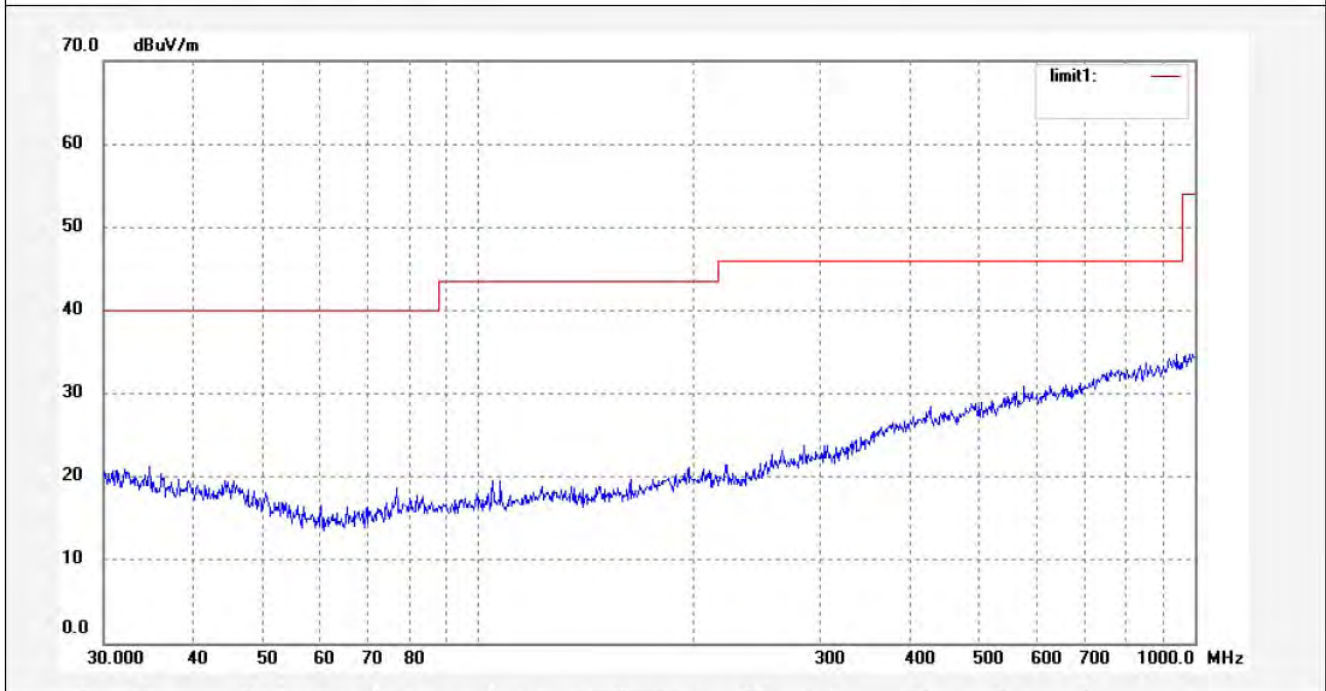
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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #812	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 1.5V
Test item: Radiation Test	Date: 12/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 9/02/04
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX 2408	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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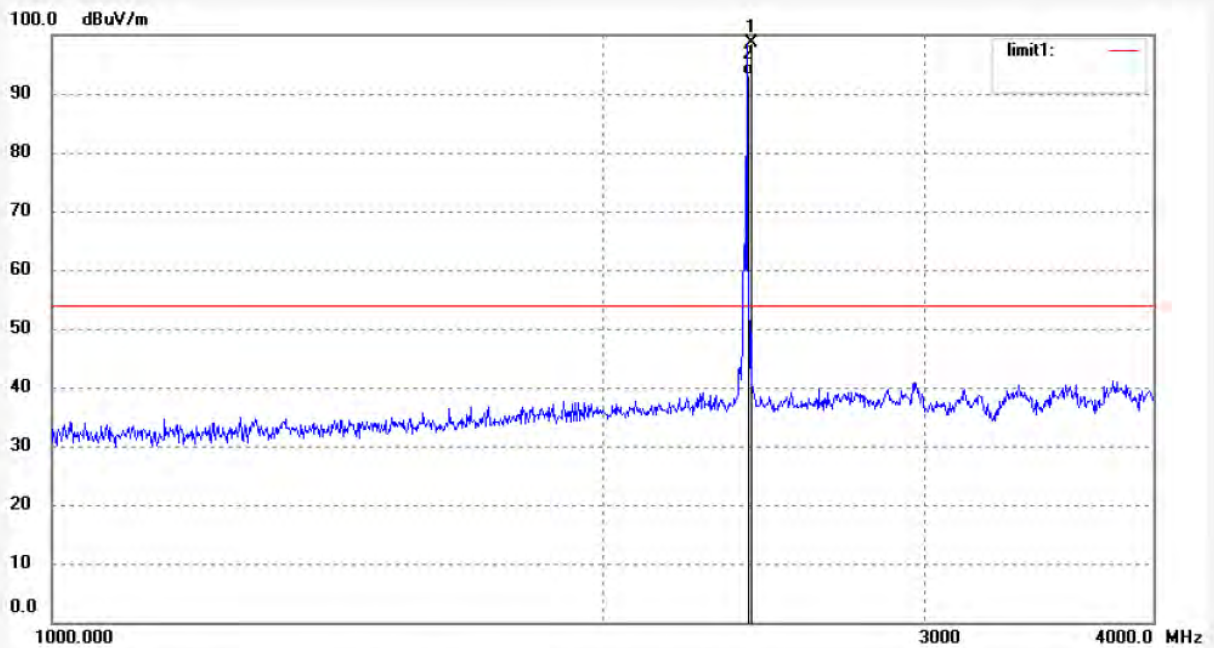
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Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #3247	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 13:34:50
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX2408	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2408.000	106.19	-7.44	98.75	114.00	-15.25	peak			
2	2408.000	100.51	-7.44	93.07	94.00	-0.93	AVG			



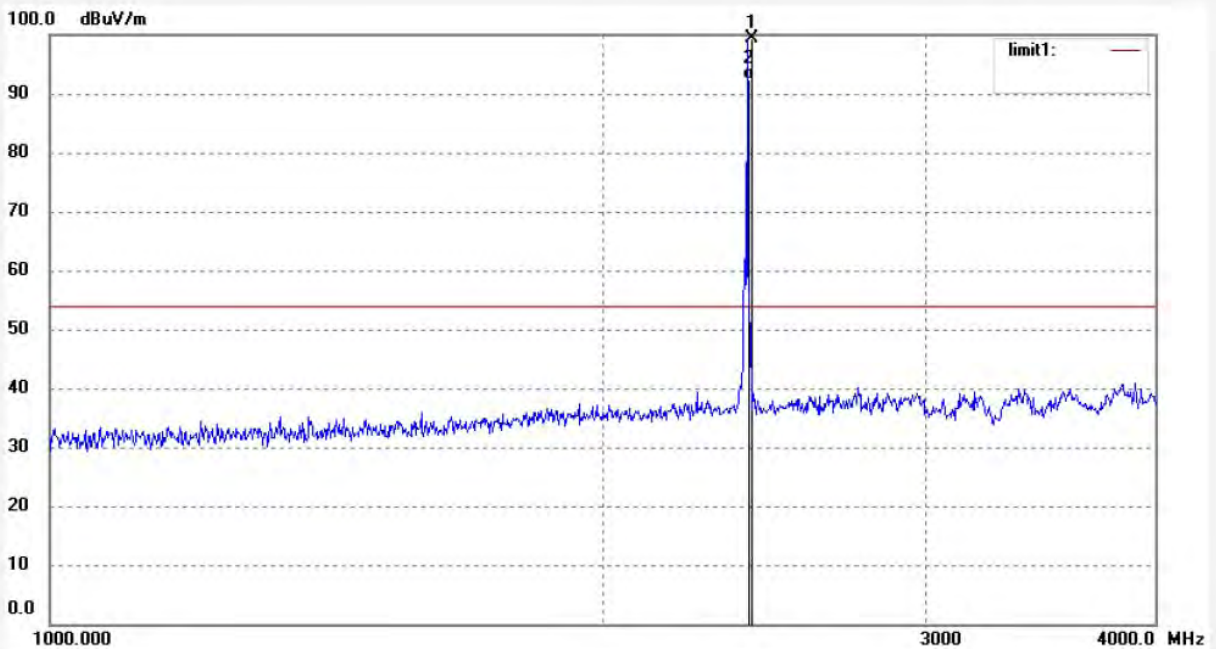
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Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #3248	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 13:39:01
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX2408	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2408.000	106.90	-7.44	99.46	114.00	-14.54	peak			
2	2408.000	99.80	-7.44	92.36	94.00	-1.64	AVG			



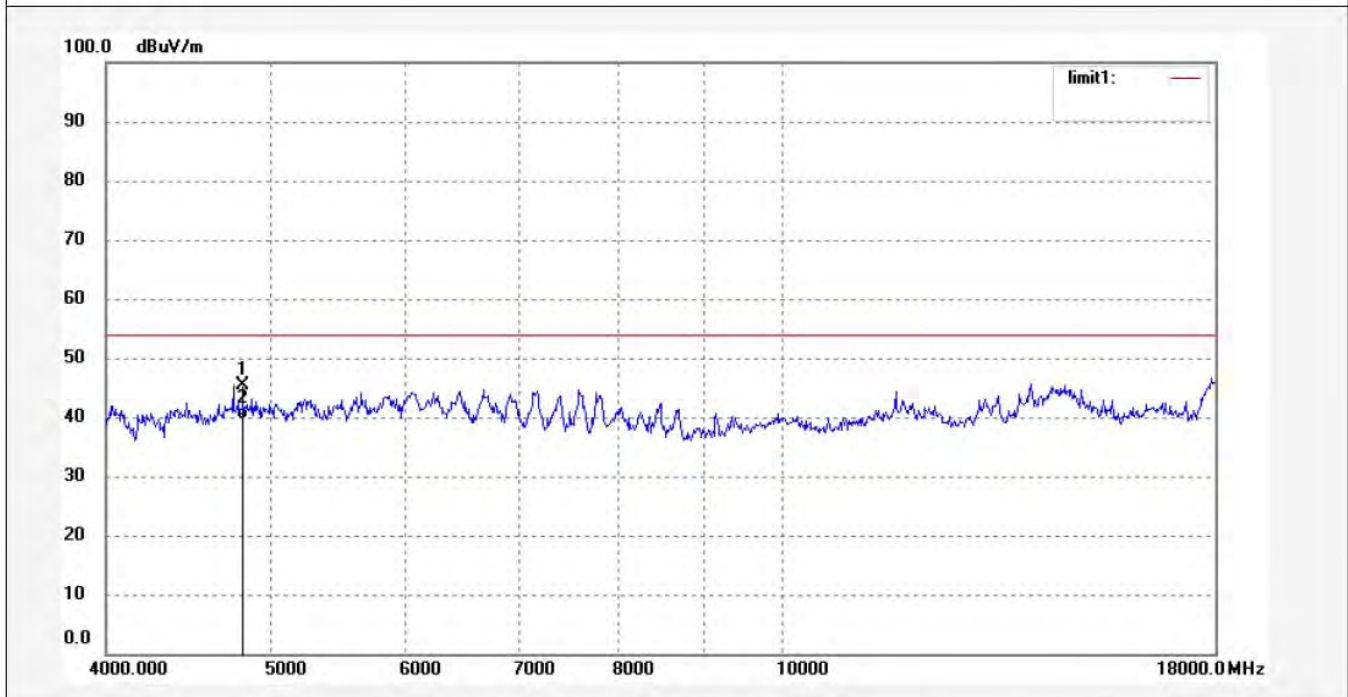
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Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #3250	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 13:43:24
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX2408	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	4816.000	45.54	-0.23	45.31	74.00	-28.69	peak			
2	4816.000	39.81	-0.23	39.58	54.00	-14.42	AVG			



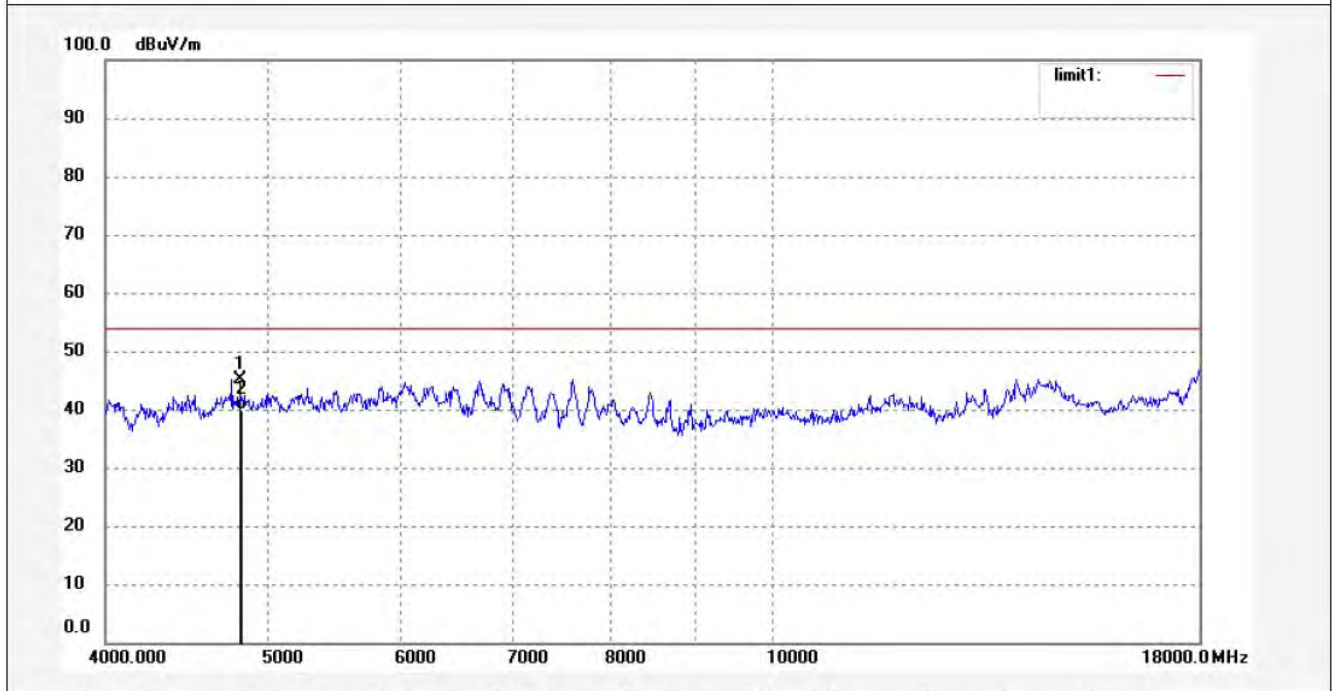
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Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #3249	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 13:41:14
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX2408	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	4816.000	45.25	-0.23	45.02	74.00	-28.98	peak			
2	4816.000	40.17	-0.23	39.94	54.00	-14.06	AVG			



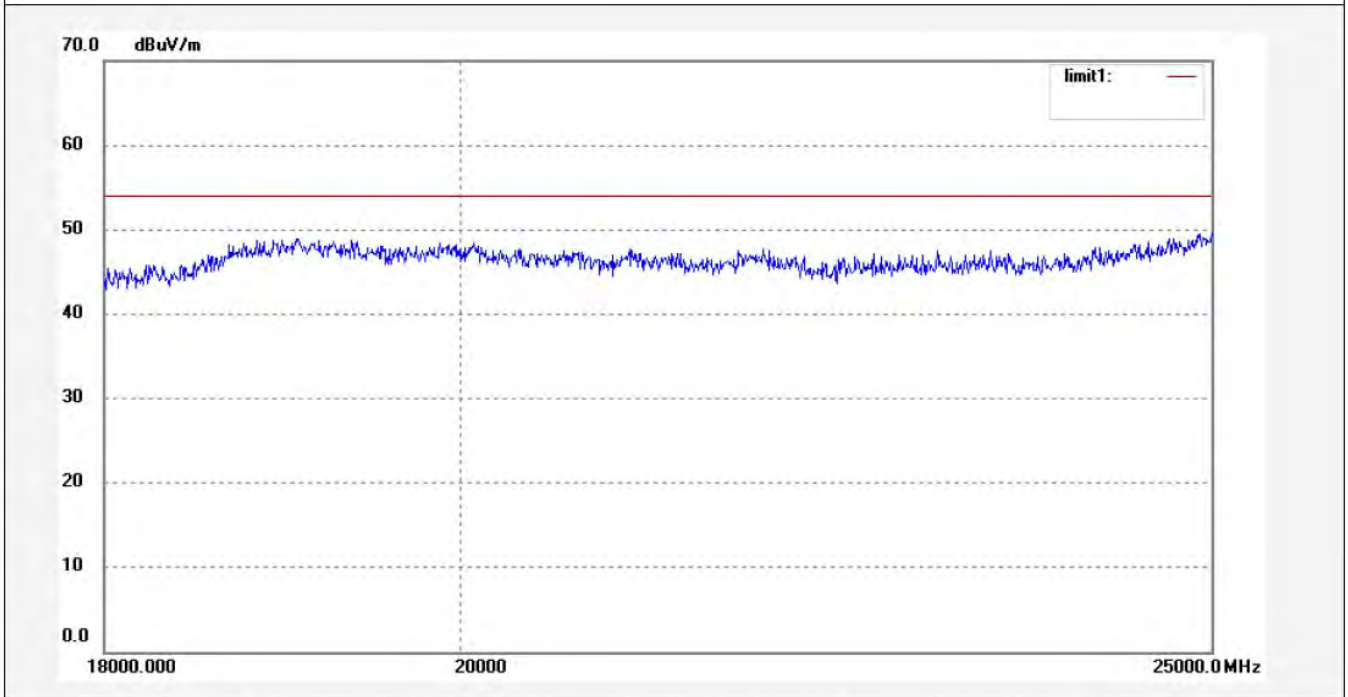
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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #895	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:25:08
EUT: 2.4G Wireless Optical Mouse	Engineer Signature: Bob
Mode: TX 2408	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report No.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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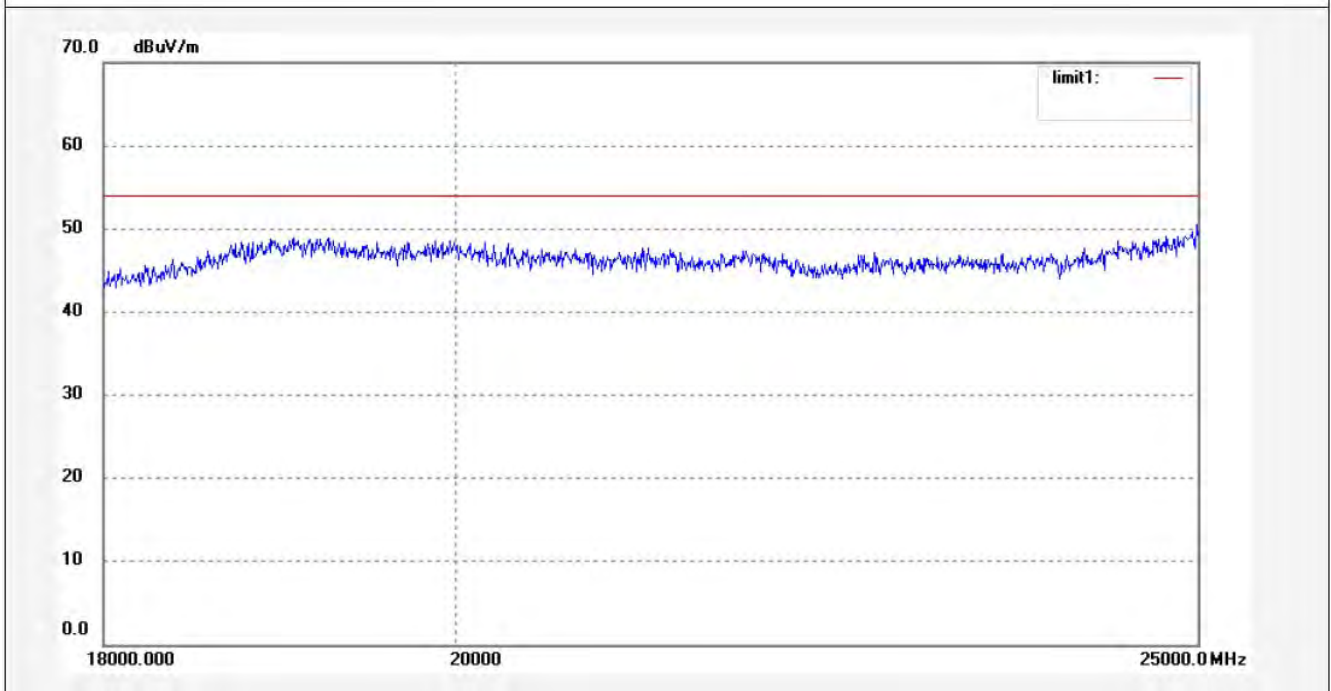
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Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #894	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:20:46
EUT: 2.4G Wireless Optical Mouse	Engineer Signature: Bob
Mode: TX 2408	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report No.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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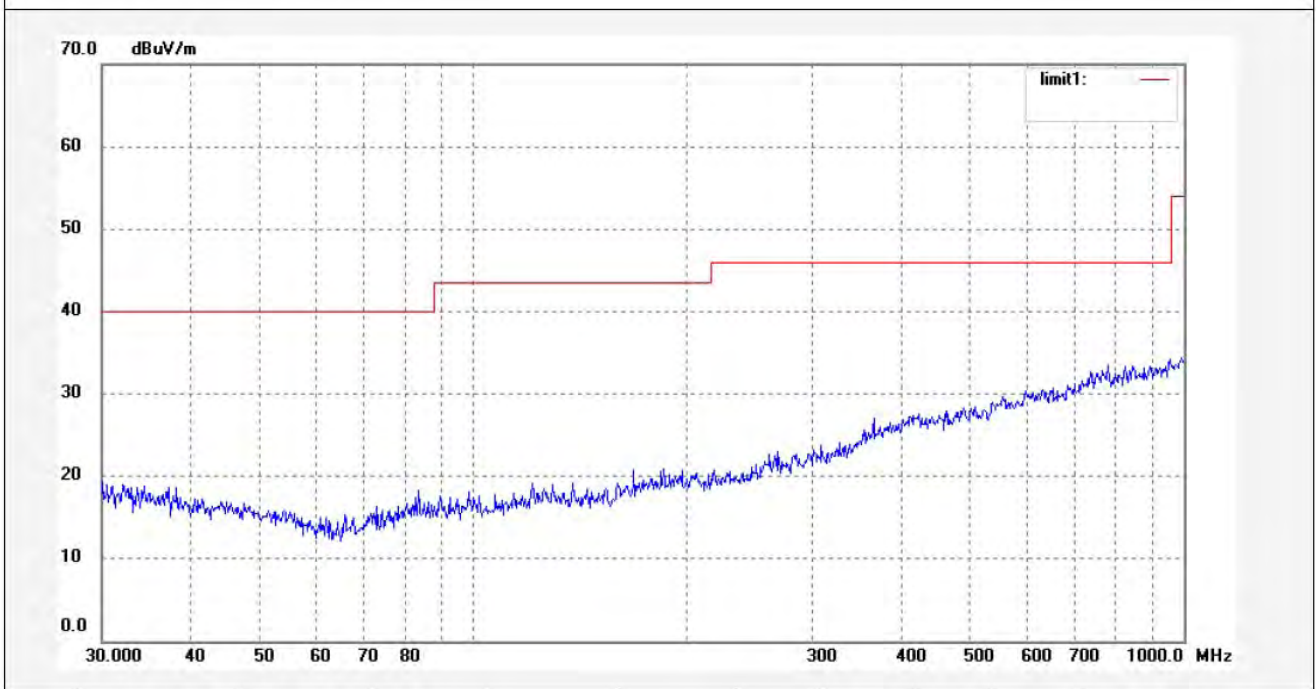
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Site: 966 chamber
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Fax:+86-0755-26503396

Job No.: Bob #814	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 1.5V
Test item: Radiation Test	Date: 12/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 9/03/06
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX 2440	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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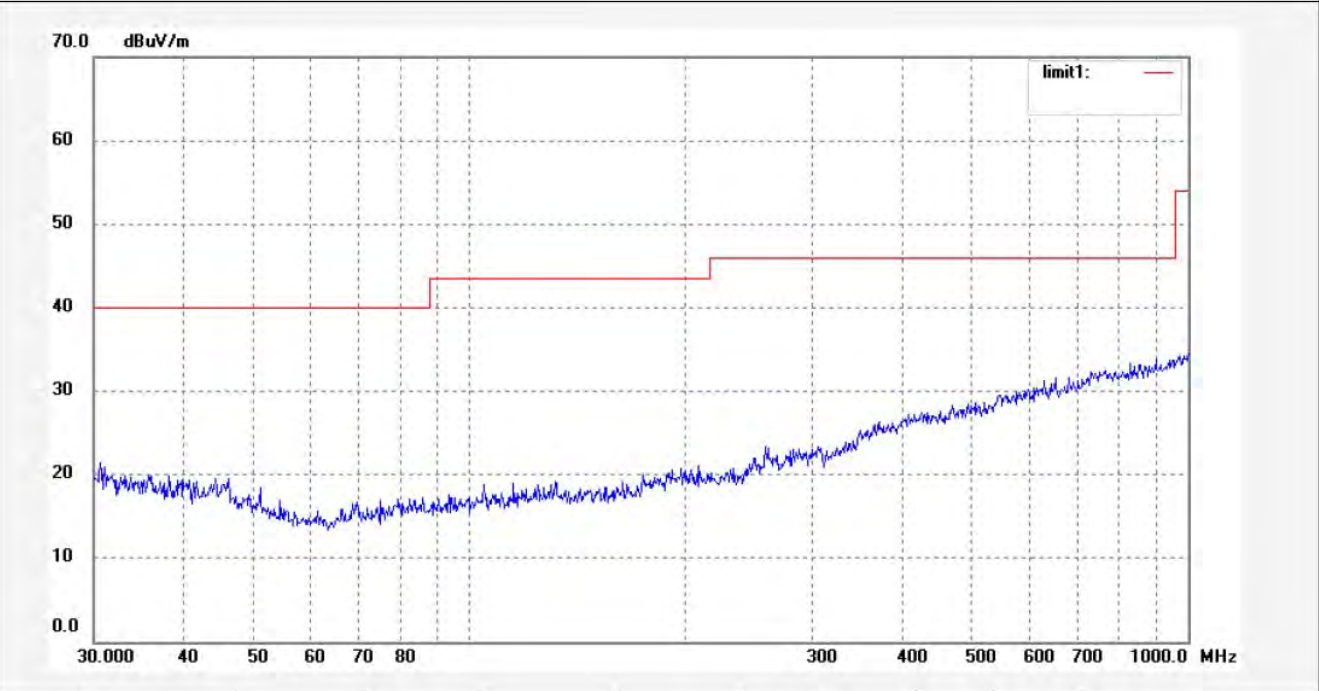
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Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #815	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 1.5V
Test item: Radiation Test	Date: 12/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 9/03/47
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX 2440	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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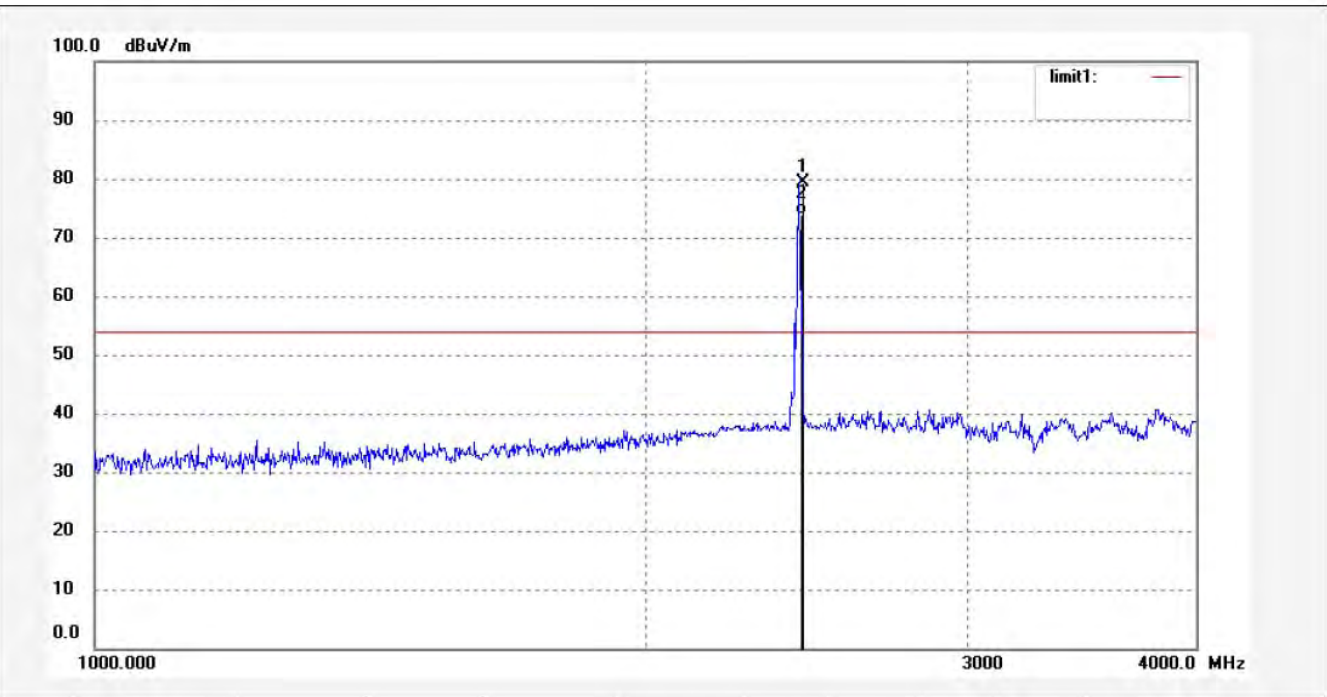
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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #3254	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 13:54:13
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX2440	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.000	86.85	-7.36	79.49	114.00	-34.51	peak			
2	2440.000	81.23	-7.36	73.87	94.00	-20.13	AVG			



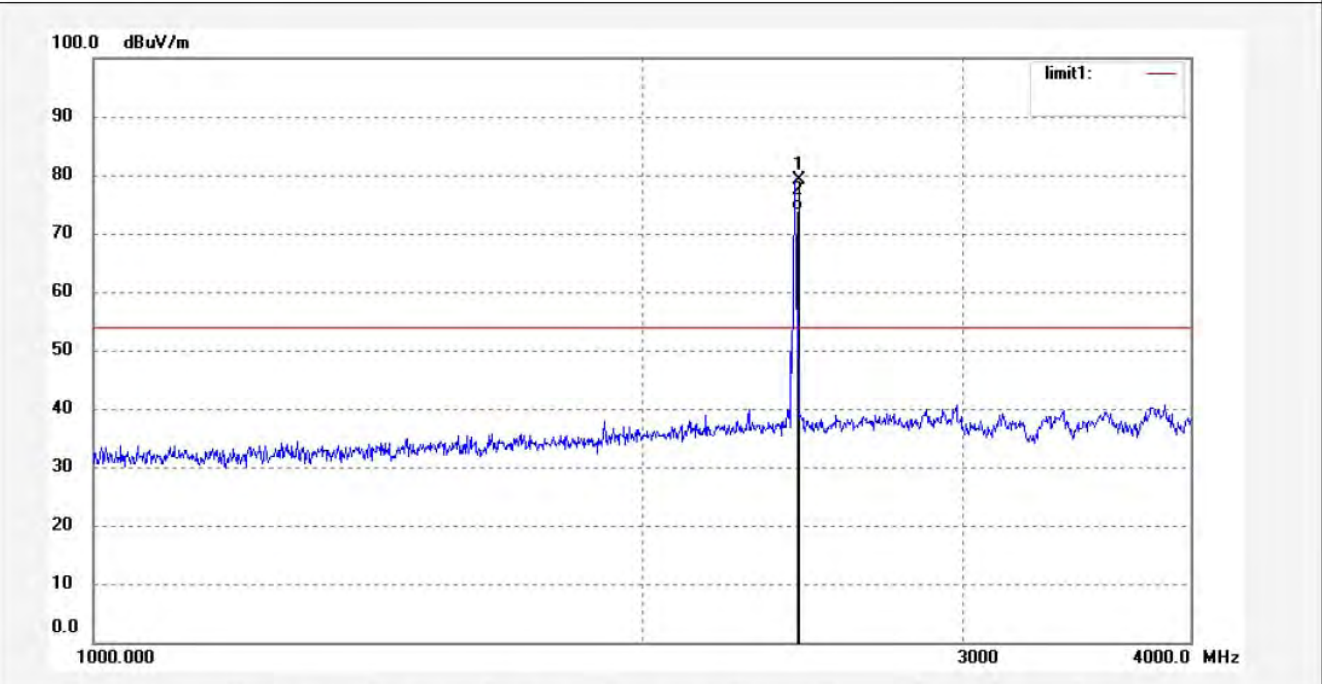
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Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #3253	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 13:52:03
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX2440	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.000	86.59	-7.36	79.23	114.00	-34.77	peak			
2	2440.000	81.14	-7.36	73.78	94.00	-20.22	AVG			



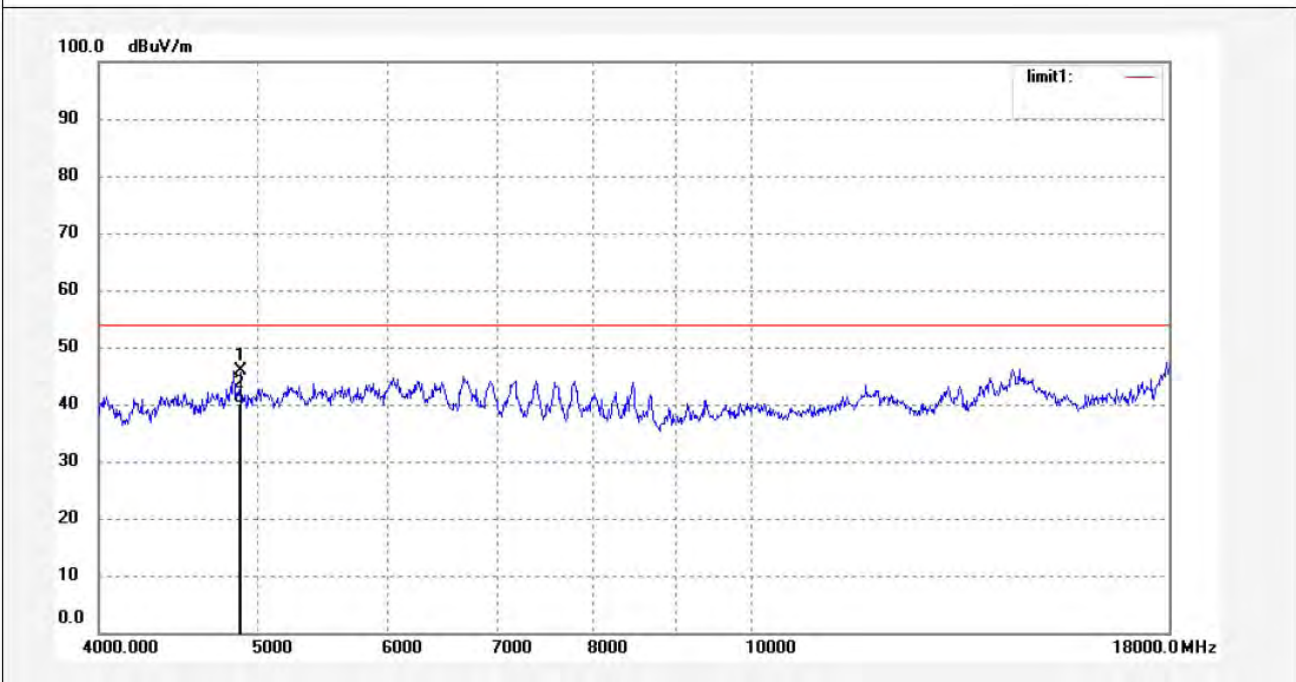
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Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #3255	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 13:57:40
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX2440	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	4880.000	45.70	0.13	45.83	74.00	-28.17	peak			
2	4880.000	40.02	0.13	40.15	54.00	-13.85	AVG			



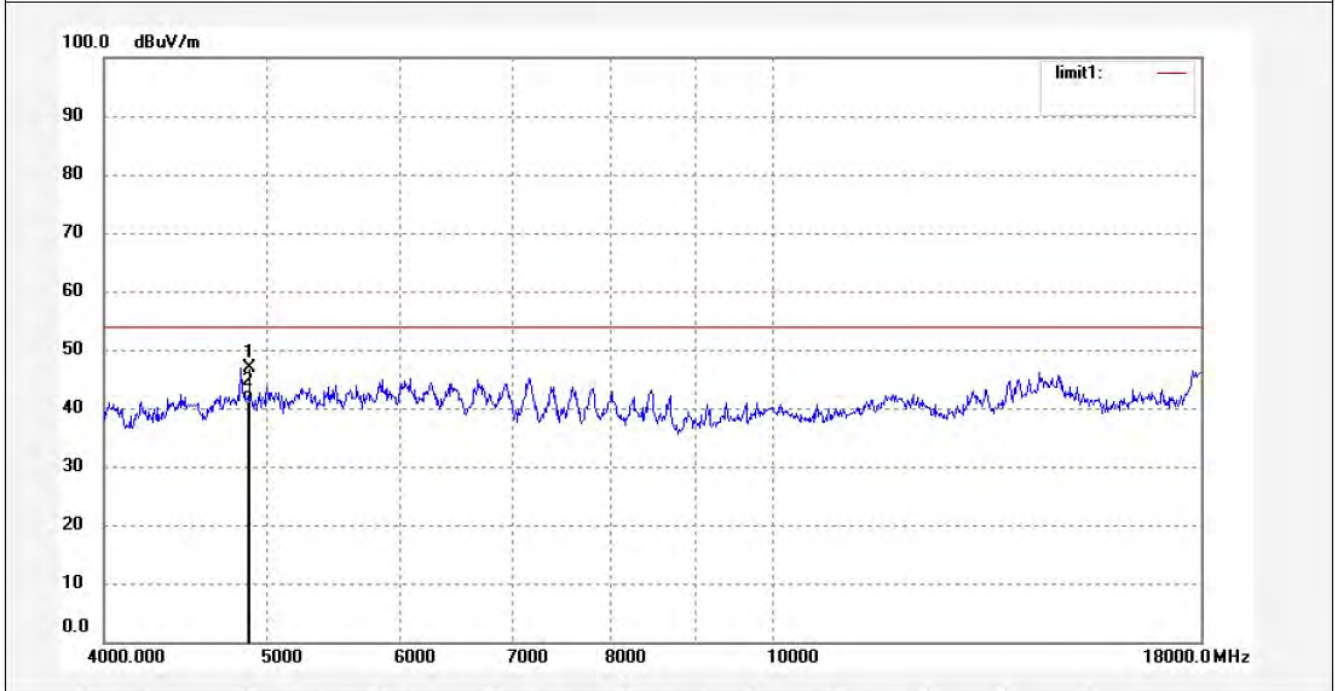
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Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #3256	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 13:59:31
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX2440	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	4880.000	46.78	0.13	46.91	74.00	-27.09	peak			
2	4880.000	41.11	0.13	41.24	54.00	-12.76	AVG			



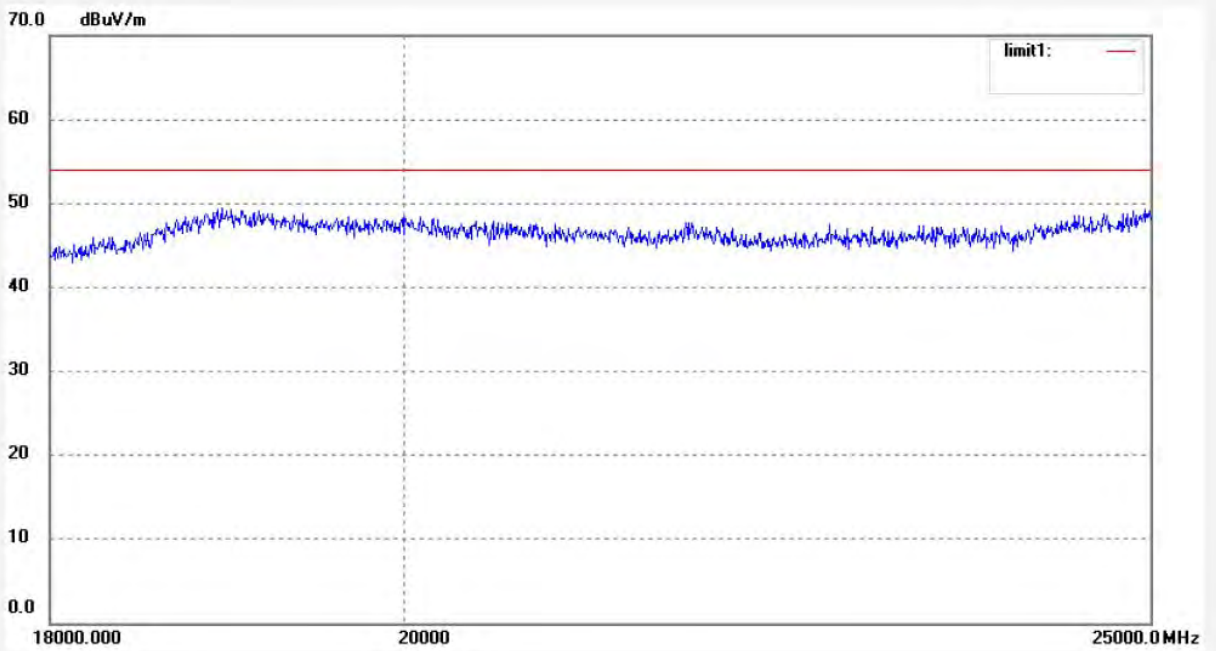
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Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #896	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:30:31
EUT: 2.4G Wireless Optical Mouse	Engineer Signature: Bob
Mode: TX 2440	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report No.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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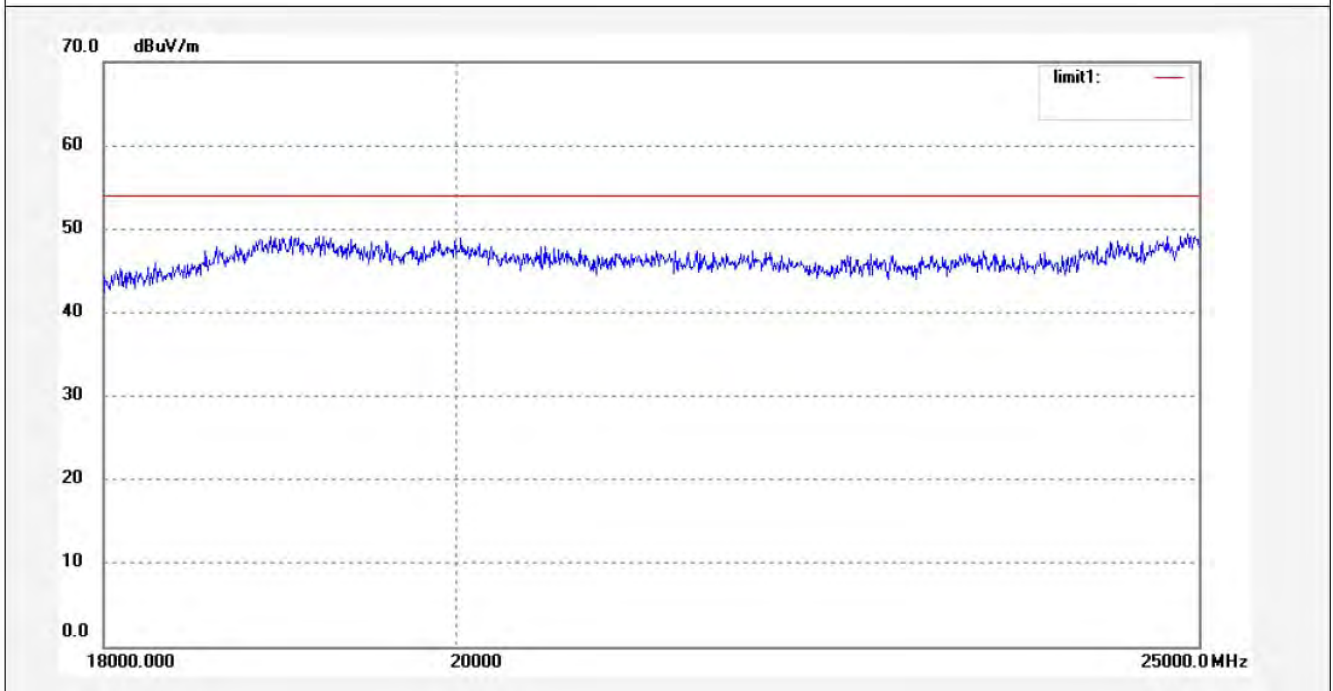
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Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #897	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:34:51
EUT: 2.4G Wireless Optical Mouse	Engineer Signature: Bob
Mode: TX 2440	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report No.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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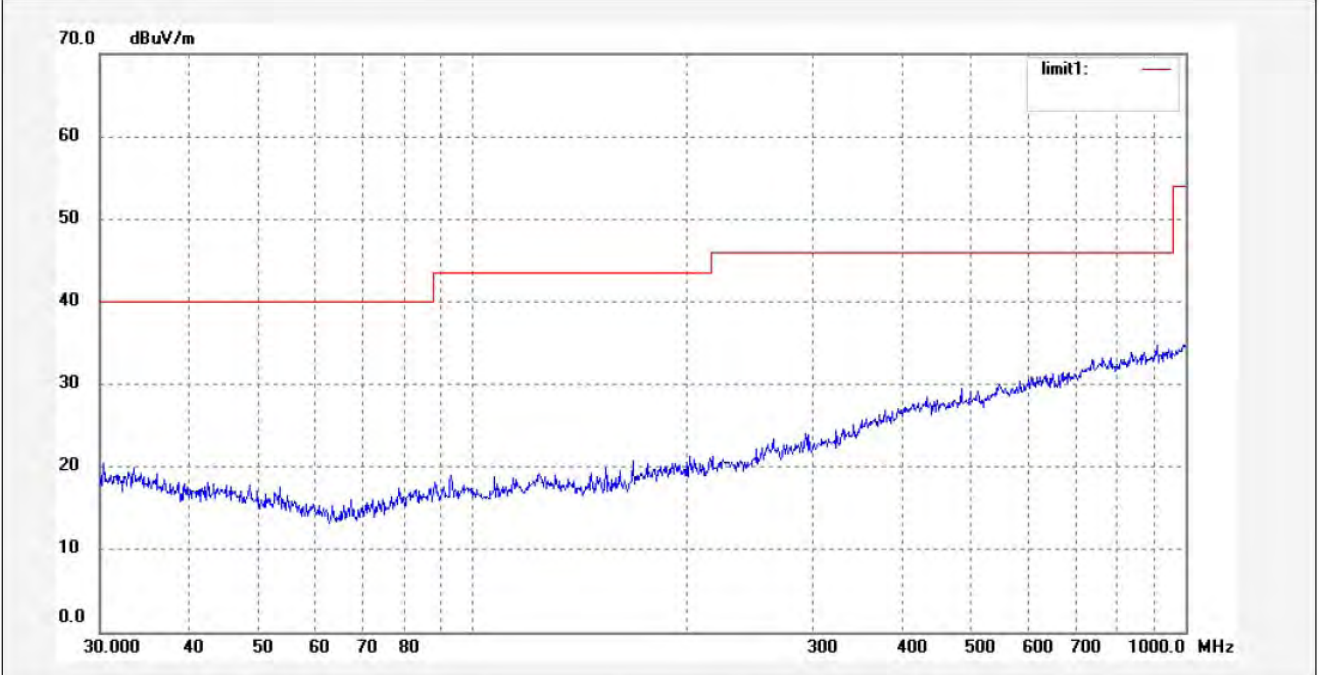
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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #817	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 1.5V
Test item: Radiation Test	Date: 12/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 9/05/24
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX 2474	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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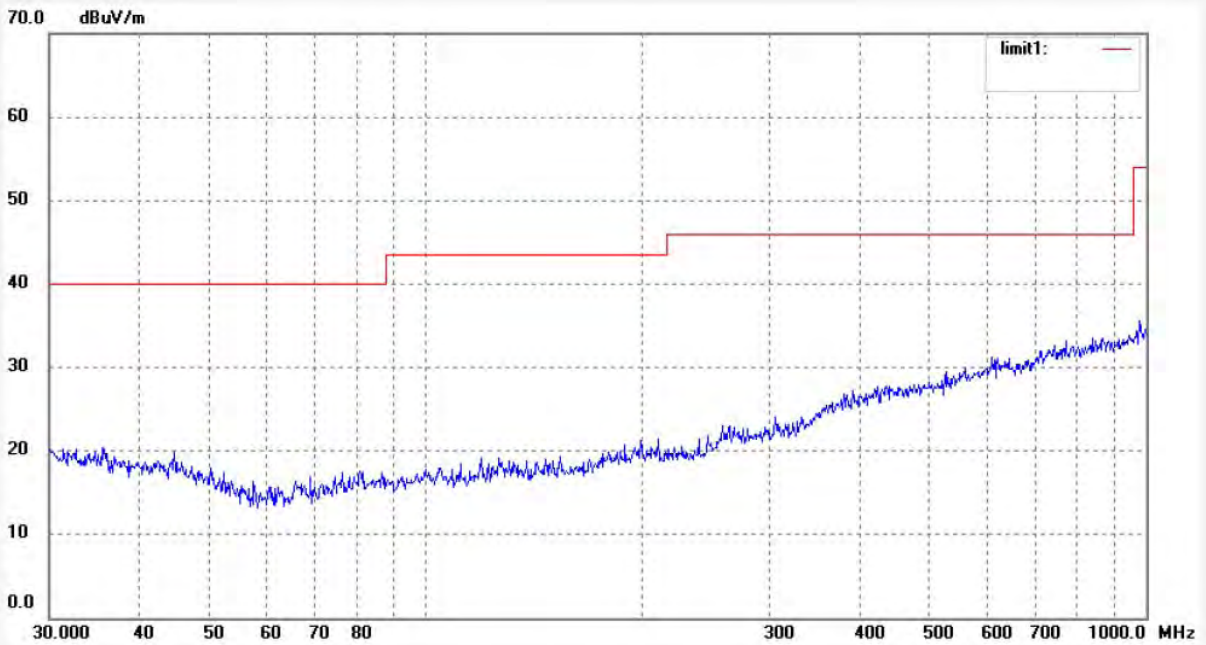
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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #816	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 1.5V
Test item: Radiation Test	Date: 12/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 9/04/15
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX 2474	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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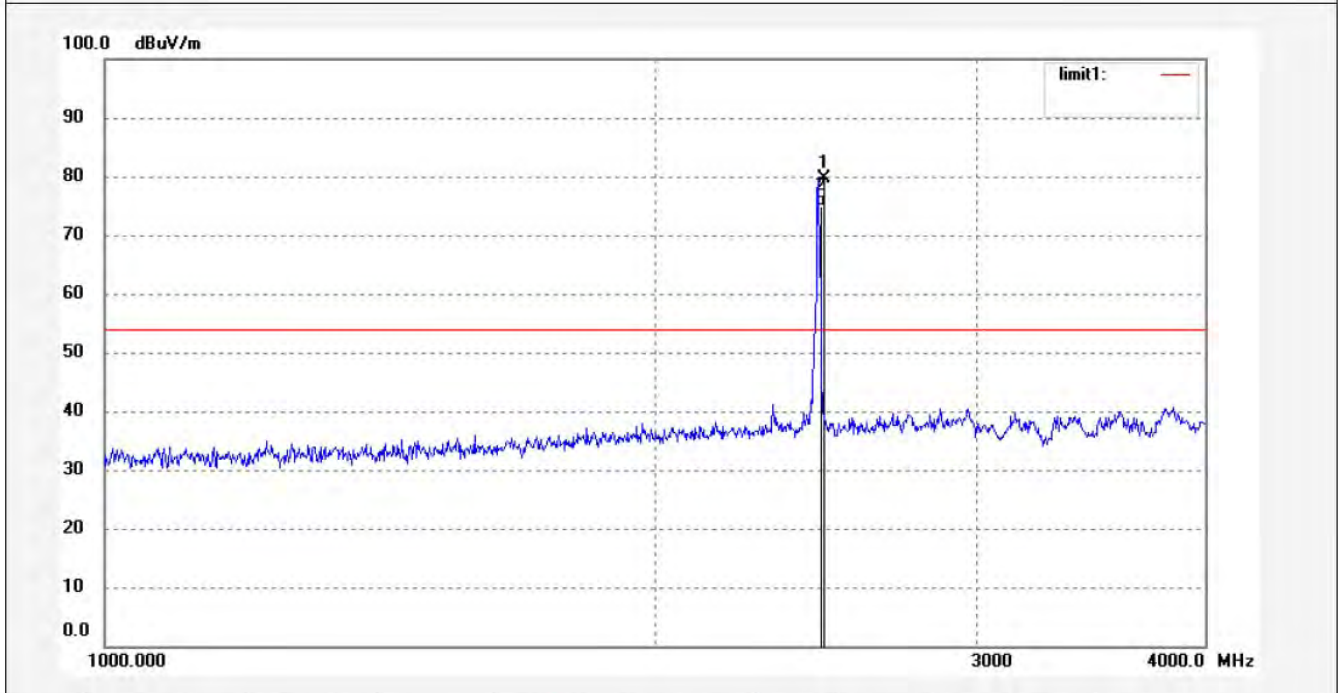
ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #3259	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 14:04:35
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX2474	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2474.000	87.00	-7.37	79.63	114.00	-34.37	peak			
2	2474.000	82.21	-7.37	74.84	94.00	-19.16	AVG			



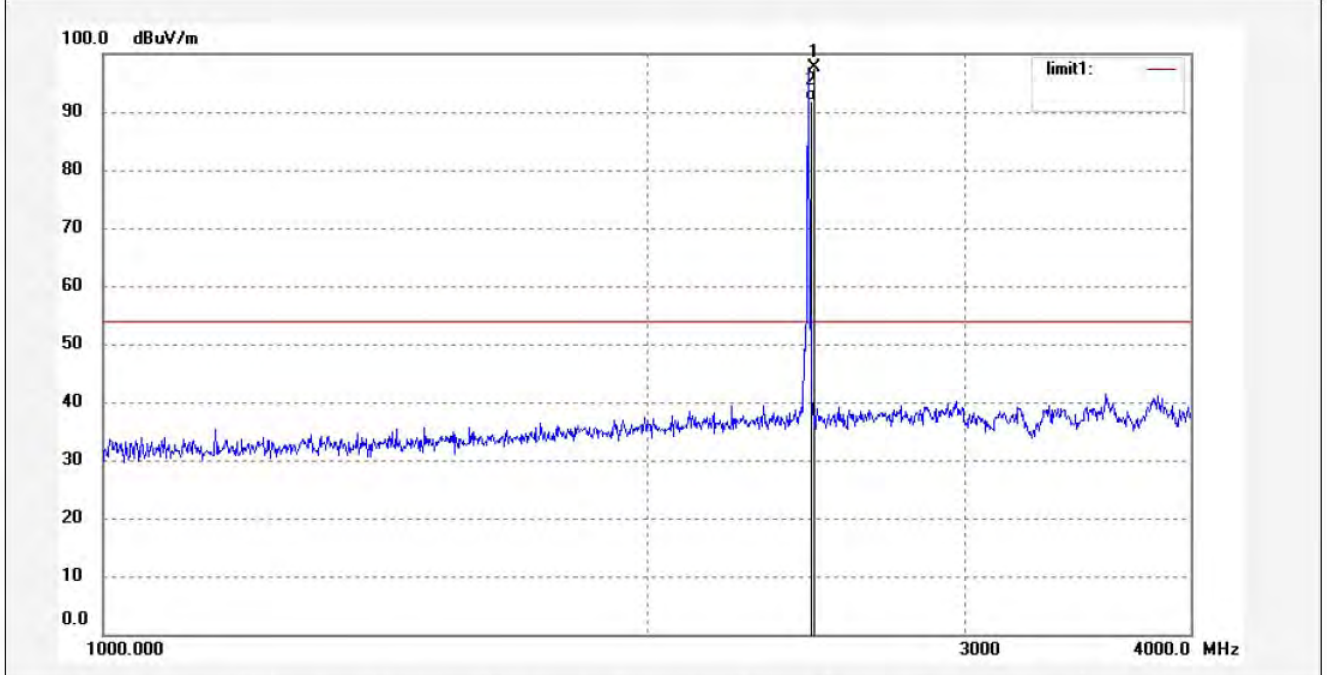
ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #3260	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 14:06:49
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX2474	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2474.000	105.09	-7.37	97.72	114.00	-16.28	peak			
2	2474.000	99.34	-7.37	91.97	94.00	-2.03	AVG			



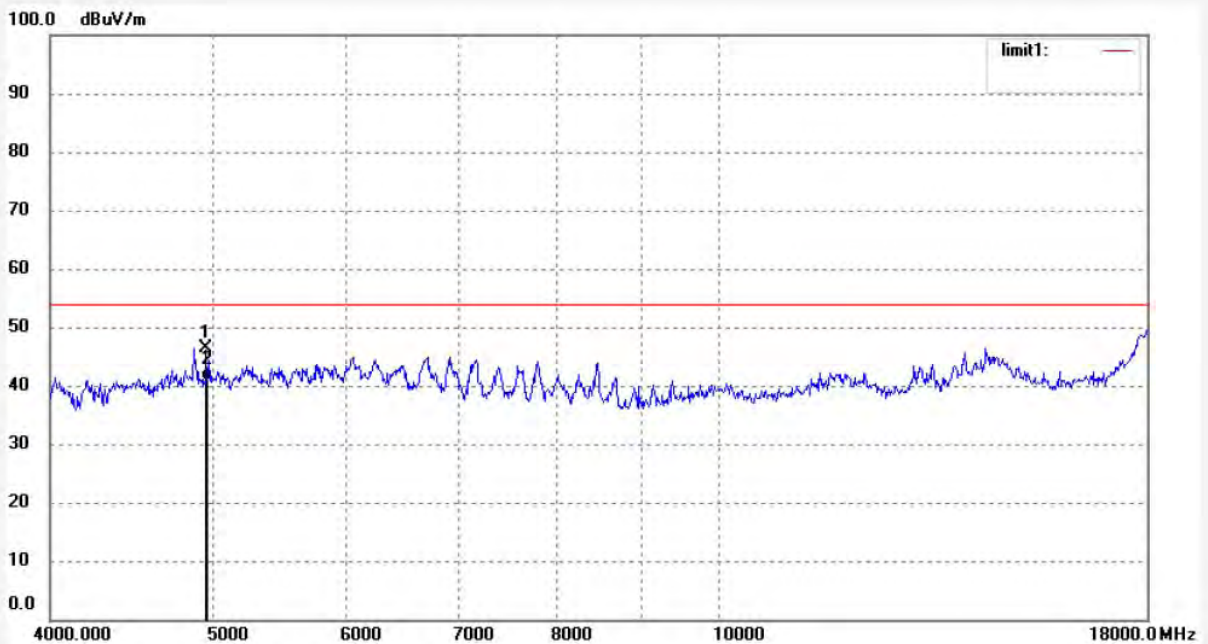
ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #3258	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 14:03:01
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX2474	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	4948.000	45.87	0.46	46.33	74.00	-27.67	peak			
2	4948.000	40.48	0.46	40.94	54.00	-13.06	AVG			



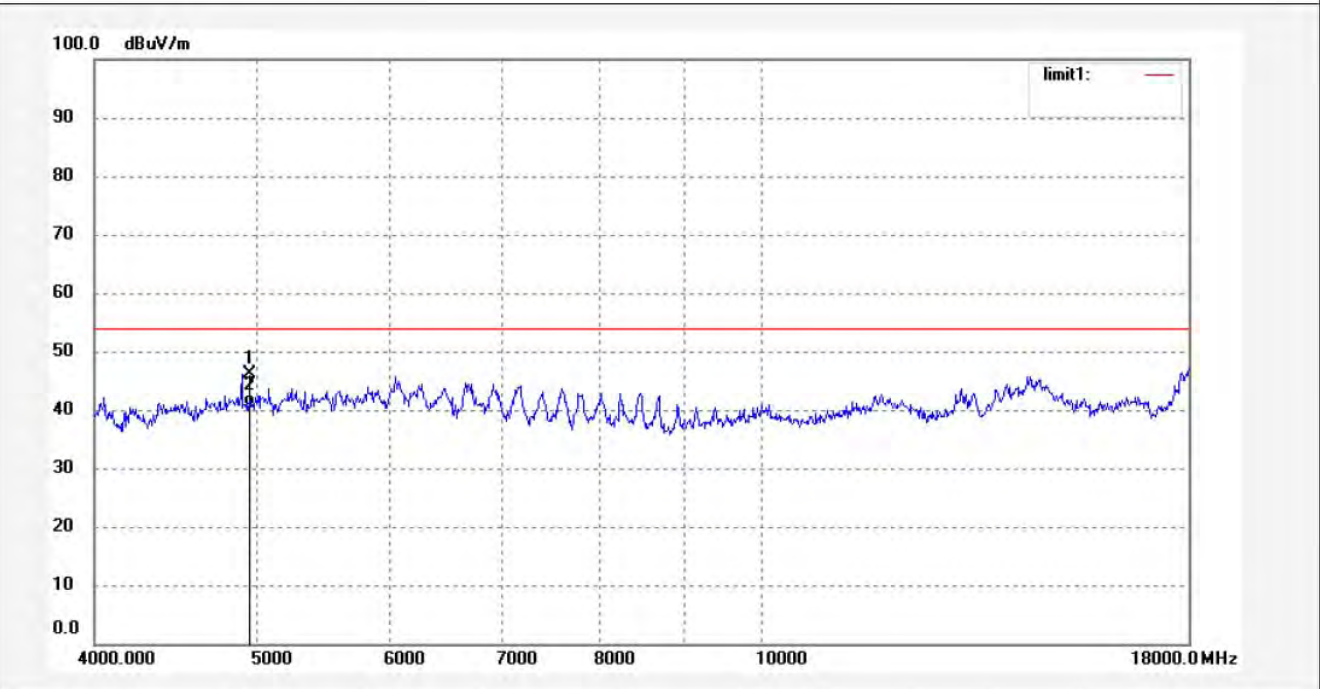
ACCURATE TECHNOLOGY CO., LTD.

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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #3257	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 14:01:10
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX2474	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	4948.000	45.56	0.46	46.02	74.00	-27.98	peak			
2	4948.000	40.06	0.46	40.52	54.00	-13.48	AVG			



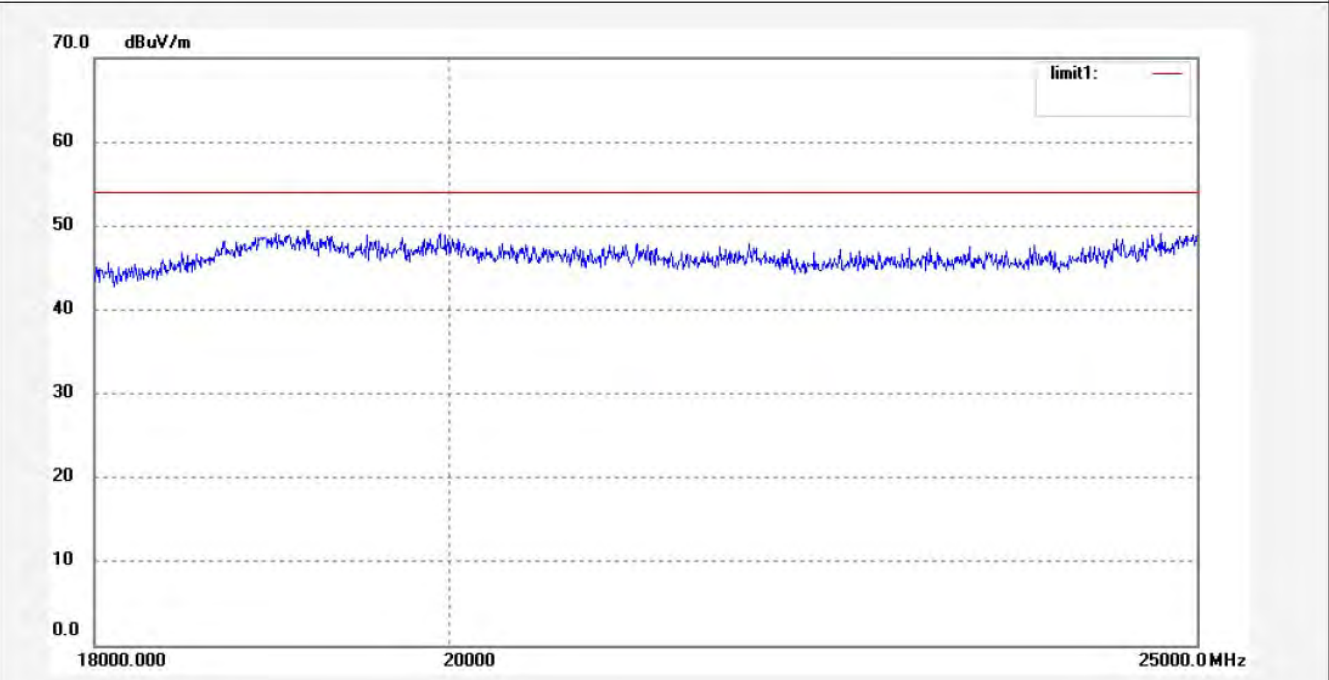
ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #899	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:44:35
EUT: 2.4G Wireless Optical Mouse	Engineer Signature: Bob
Mode: TX 2474	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report No.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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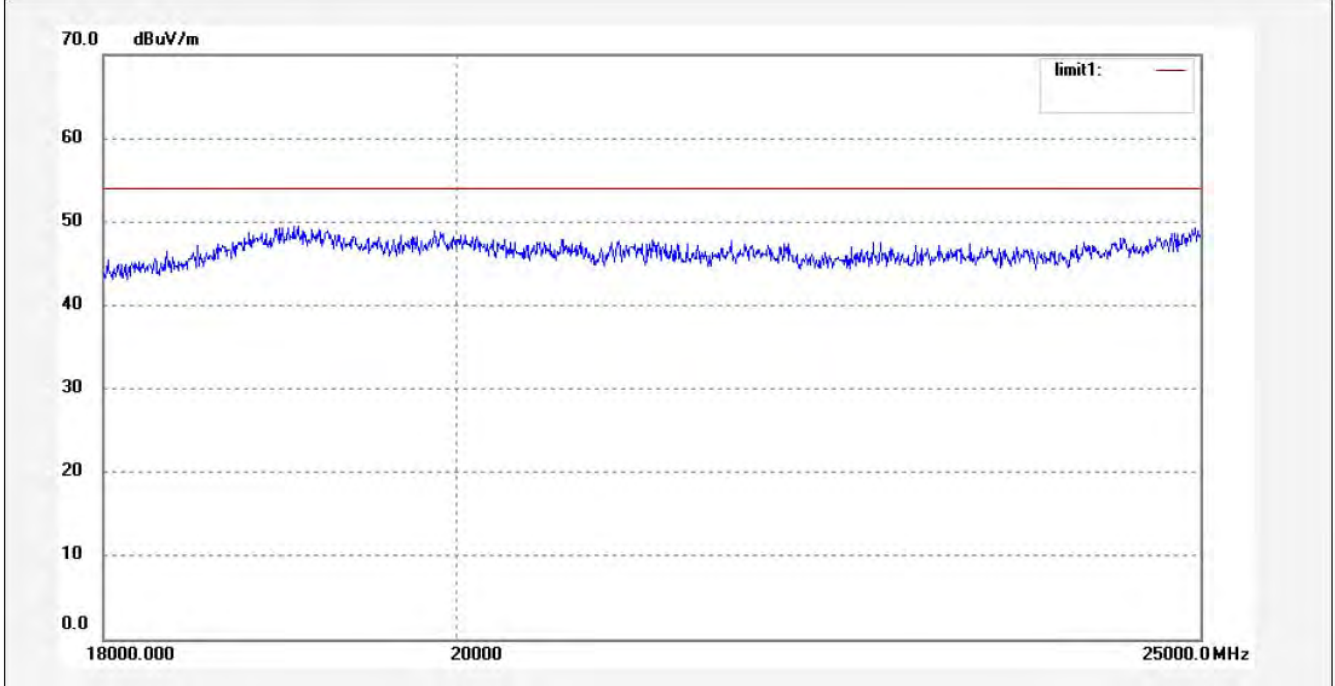
ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #898	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:40:09
EUT: 2.4G Wireless Optical Mouse	Engineer Signature: Bob
Mode: TX 2474	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report No.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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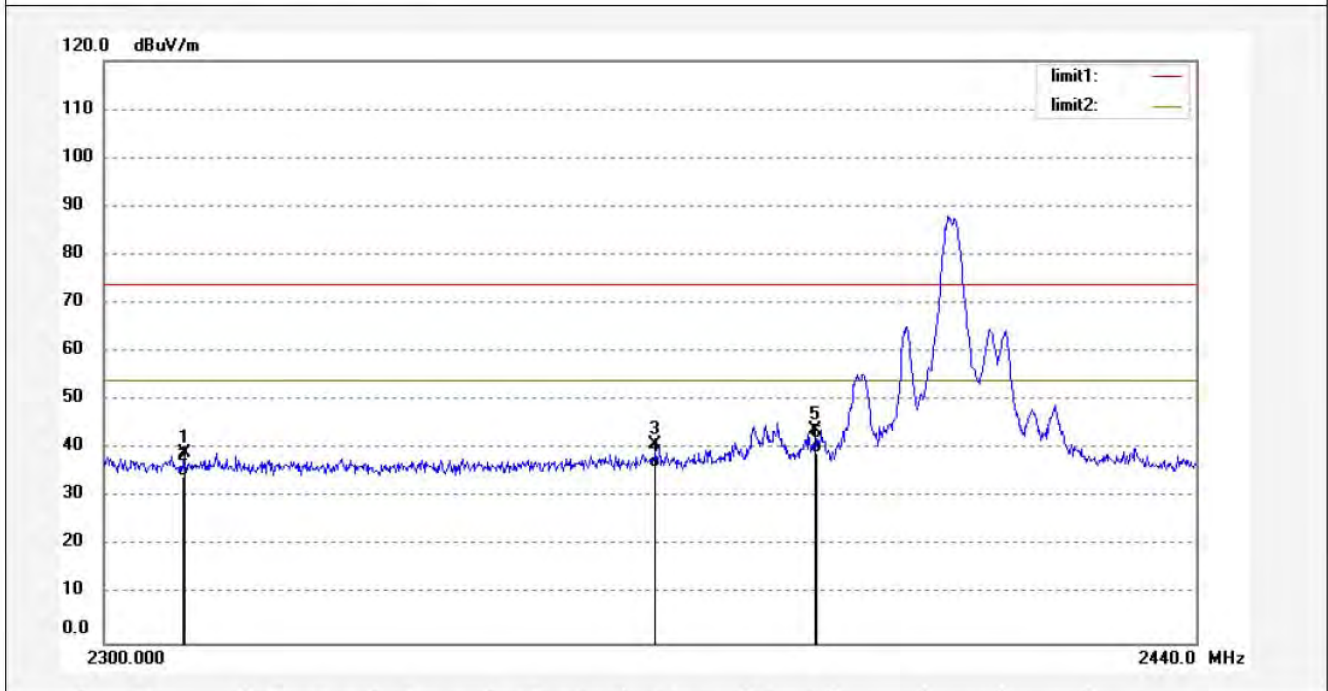
ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #3251	Polarization: Horizontal
Standard: FCC 15C PK	Power Source: DC 1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 13:47:13
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX2408	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	47.01	-7.81	39.20	74.00	-34.80	peak			
2	2310.000	42.21	-7.81	34.40	54.00	-19.60	AVG			
3	2369.400	48.48	-7.66	40.82	74.00	-33.18	peak			
4	2369.400	43.67	-7.66	36.01	54.00	-17.99	AVG			
5	2390.150	51.34	-7.53	43.81	74.00	-30.19	peak			
6	2390.150	46.66	-7.53	39.13	54.00	-14.87	AVG			



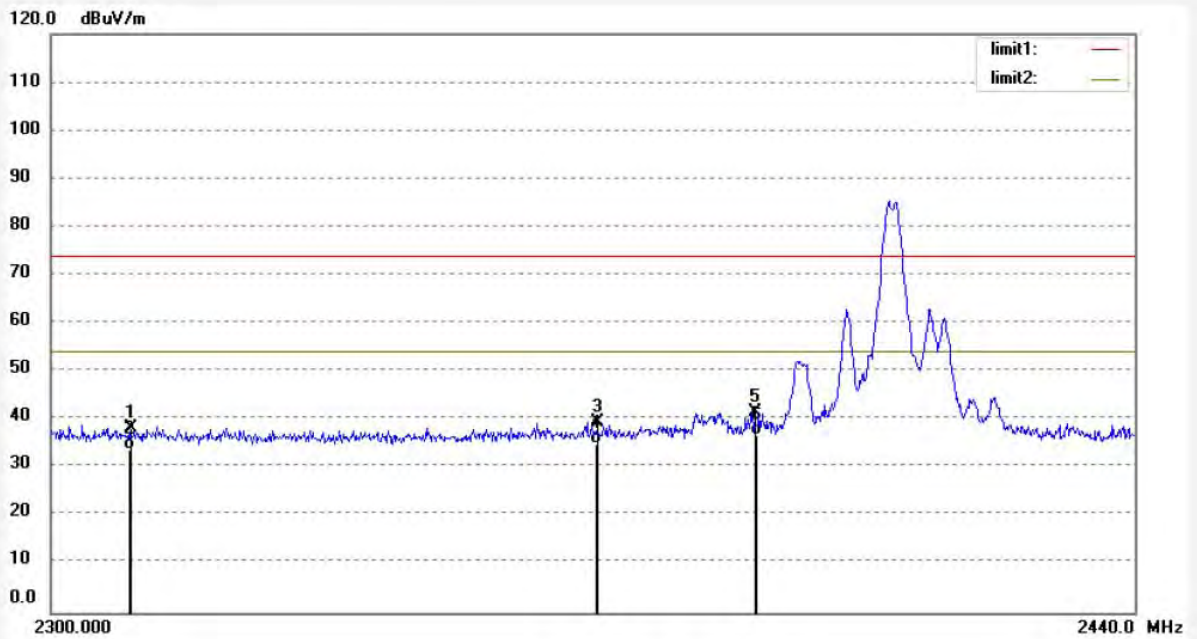
ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #3252	Polarization: Vertical
Standard: FCC 15C PK	Power Source: DC 1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 13:49:36
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX2408	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	46.17	-7.81	38.36	74.00	-35.64	peak			
2	2310.000	41.69	-7.81	33.88	54.00	-20.12	AVG			
3	2369.450	47.22	-7.66	39.56	74.00	-34.44	peak			
4	2369.450	42.57	-7.66	34.91	54.00	-19.09	AVG			
5	2390.000	49.09	-7.53	41.56	74.00	-32.44	peak			
6	2390.000	44.40	-7.53	36.87	54.00	-17.13	AVG			



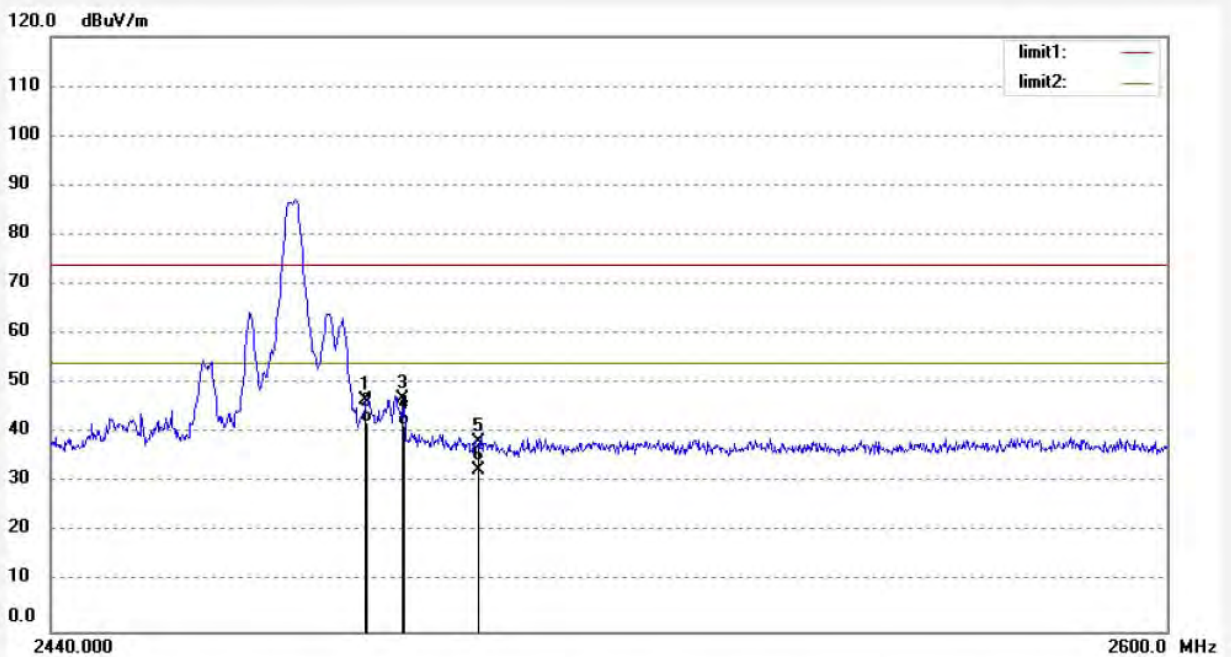
ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #3262	Polarization: Horizontal
Standard: FCC 15C PK	Power Source: DC 1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 14:12:06
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX2474	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.901	54.18	-7.38	46.80	74.00	-27.20	peak			
2	2483.901	49.41	-7.38	42.03	54.00	-11.97	AVG			
3	2489.349	54.45	-7.39	47.06	74.00	-26.94	peak			
4	2489.349	48.84	-7.39	41.45	54.00	-12.55	AVG			
5	2500.000	45.75	-7.40	38.35	74.00	-35.65	peak			
6	2500.000	40.02	-7.40	32.62	54.00	-21.38	peak			



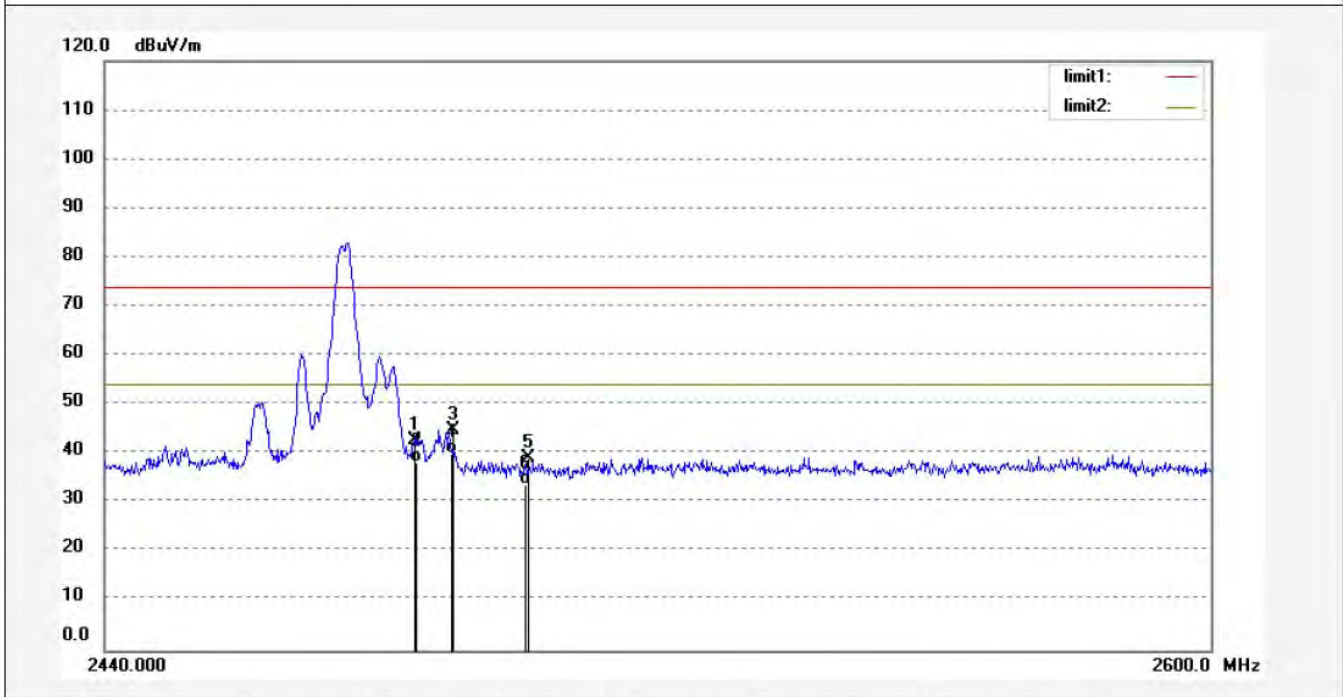
ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #3261	Polarization: Vertical
Standard: FCC 15C PK	Power Source: DC 1.5V
Test item: Radiation Test	Date: 2012/09/01
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 14:08:59
EUT: 2.4G Wireless Optical Mouse	Engineer Signature:
Mode: TX2474	Distance: 3m
Model: DS2440	
Manufacturer: Eastern Times	

Note: Report NO.:ATE20122039



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.818	50.09	-7.38	42.71	74.00	-31.29	peak			
2	2483.818	45.55	-7.38	38.17	54.00	-15.83	AVG			
3	2489.349	52.21	-7.39	44.82	74.00	-29.18	peak			
4	2489.349	47.46	-7.39	40.07	54.00	-13.93	AVG			
5	2500.000	46.66	-7.40	39.26	74.00	-34.74	peak			
6	2500.000	41.11	-7.40	33.71	54.00	-20.29	AVG			