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

2.4G Wireless Optical Mouse Model No.: DS-2310

FCC ID: TUV2310

Prepared for : Eastern Times Technology Co., Ltd.

Address : Building 5, Penghua Industry Park, Heping Rd.(W),

Longhua, Shenzhen, Guangdong, China

Prepared by : ACCURATE TECHNOLOGY CO. LTD

Address : F1, Bldg. A, Changyuan New Material Port, Keyuan Rd.

Science & Industry Park, Nanshan, Shenzhen, Guangdong

P.R. China

Tel: (0755) 26503290 Fax: (0755) 26503396

Report Number : ATE20091870

Date of Test : September 18-19, 2009 Date of Report : September 21, 2009

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APPENDIX I (TEST CURVES) (22 pages)

7.1.

7.2.

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-2310

(B) SERIAL NO.: N/A

(C) POWER SUPPLY: 3V DC ("AAA" batteries $2\times$)

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.249 ANSI C63.4: 2003

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 Section15.249 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 :	September 18-19, 2009	
Prepared by :	sky Long	
	(Engineer)	
Approved & Authorized Signer:	Searle)	
	(Manager)	

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT : 2.4G Wireless Optical Mouse

Model Number : DS-2310

Power Supply : 3V DC ("AAA" batteries $2 \times$)

Operate Frequency : 2402-2478MHz

Channel Number : 64

Applicant : Eastern Times Technology Co., Ltd.

Address : Building 5, Penghua Industry Park, Heping Rd.(W),

Longhua, Shenzhen, Guangdong, China

Manufacturer : Eastern Times Technology Co., Ltd.

Address : Building 5, Penghua Industry Park, Heping Rd.(W),

Longhua, Shenzhen, Guangdong, China

Date of sample received: September 14, 2009

Date of Test : September 18-19, 2009

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 = 3.08dB, k=2 (9kHz-30MHz)

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

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

2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	03.28.2010
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	03.28.2010
Spectrum Analyzer	Agilent	E7405A	MY45115511	03.28.2010
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	03.30.2010
Loop Antenna	Schwarzbeck	FMZB1516	1516131	03.28.2010
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	03.28.2010
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	12.19.2009
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	10.09.2009
LISN	Rohde&Schwarz	ESH3-Z5	100305	03.28.2010
LISN	Schwarzbeck	NSLK8126	8126431	03.28.2010

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

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

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

4.1.Block Diagram of Test Setup

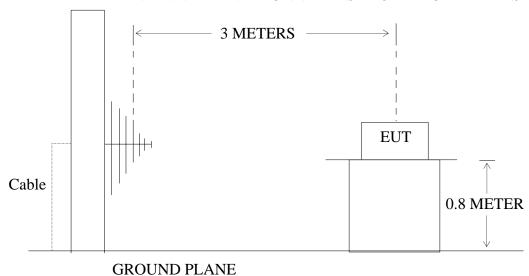
4.1.1.Block diagram of connection between the EUT and simulators

EUT

(EUT: 2.4G Wireless Optical Mouse)

4.1.2.Semi-Anechoic Chamber Test Setup Diagram

ANTENNA ELEVATION VARIES FROM 1 TO 4 METERS



(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	Field Strength of Fundamental	Field Strength of harmonics
Frequency	(millivolts/meter)	(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 Radiated 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-2310 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 2402-2478MHz. We are select 2402MHz, 2440MHz, 2478MHz 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 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: 2003 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver is set at 1MHz.

4.6. The Field Strength of Radiation Emission Measurement Results **PASS.**

Date of Test: September 18-19, 2009 Temperature: 25°C

EUT: 2.4G Wireless Optical Mouse Humidity: 50%

Model No.: DS-2310 Power Supply: 3V DC ("AAA" batteries 2×)

Test Mode: TX 2402MHz Test Engineer: Joe

Fundamental Radiated Emissions

Frequency	Reading(c	dBμV/m)	Factor(dB)	Result(c	lBμV/m)	Limit(dI	BμV/m)	Margi	n(dB)	Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2402.273	91.44	97.19	-7.45	83.99	89.74	94	114	-10.01	-24.26	Vertical
2402.273	96.27	102.02	-7.45	88.82	94.57	94	114	-5.18	-19.43	Horizontal

Harmonics Radiated Emissions

Frequency	Reading(c	dBμV/m)	Factor(dB)	Result(dBµV/m)		Limit(dBµV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
4804.511	44.13	49.89	-0.30	43.83	49.59	54	74	-10.17	-24.41	Vertical
4804.511	48.17	53.94	-0.30	47.87	53.64	54	74	-6.13	-20.36	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:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Amplifier Gain

Date of Test: September 18-19, 2009 Temperature: 25°C

EUT: 2.4G Wireless Optical Mouse Humidity: 50%

Model No.: DS-2310 Power Supply: 3V DC ("AAA" batteries $2\times$)

Test Mode: TX 2440MHz Test Engineer: Joe

Fundamental Radiated Emissions

Frequency	Reading(dBμV/m)	Factor(dB)	Result($dB\mu V/m$)		Limit(dBµV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2440.272	91.37	97.11	-7.36	84.01	89.75	94	114	-9.99	-24.25	Vertical
2440.272	96.20	101.92	-7.36	88.84	94.56	94	114	-5.16	-19.44	Horizontal

Harmonics Radiated Emissions

Frequency	Reading(c	dBμV/m)	Factor(dB)	lB) Result(dBμV		Limit(dBµV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
4880.510	43.70	49.44	0.13	43.83	49.57	54	74	-10.17	-24.43	Vertical
4880.510	47.32	53.08	0.13	47.45	53.21	54	74	-6.55	-20.79	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:

 $Result = Reading + Corrected \ Factor$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Amplifier Gain

Date of Test: September 18-19, 2009 Temperature: 25°C

EUT: 2.4G Wireless Optical Mouse Humidity: 50%

Model No.: DS-2310 Power Supply: 3V DC ("AAA" batteries $2\times$)

Test Mode: TX 2478MHz Test Engineer: Joe

Fundamental Radiated Emissions

Frequency	Reading(dBμV/m)	Factor(dB)	Result($dB\mu V/m$)		Limit(dBµV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2478.273	91.03	96.81	-7.37	83.66	89.44	94	114	-10.34	-24.56	Vertical
2478.273	96.16	101.95	-7.37	88.79	94.58	94	114	-5.21	-19.42	Horizontal

Harmonics Radiated Emissions

Frequency	Reading(c	dBμV/m)	Factor(dB)	Result(c	lBμV/m)	Limit(dI	BμV/m)	Margi	n(dB)	Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
4956.513	45.80	51.56	0.51	46.31	52.07	54	74	-7.69	-21.93	Vertical
4956.513	48.38	54.13	0.51	48.89	54.64	54	74	-5.11	-19.36	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:

 $Result = Reading + Corrected \ Factor$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Amplifier Gain

5. SPURIOUS RADIATED EMISSION FOR SECTION 15.249(D)

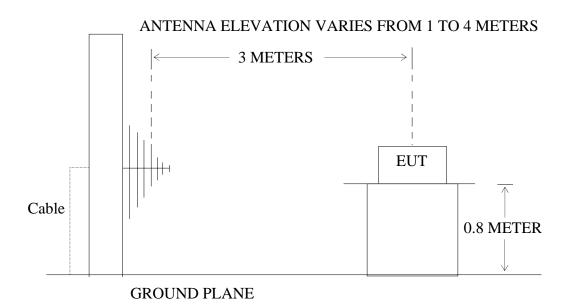
5.1.Block Diagram of Test Setup

5.1.1.Block diagram of connection between the EUT and simulators

EUT

(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

		Limit		
Frequency (MHz)	Field Strength of Quasi-peak Value (microvolts/m)	Field Strength of Quasi-peak Value (dBµV/m)	The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is	
30 - 88	100	40	performed with Average detector.	
88 - 216	150	43.5	Except those frequency bands mention above, the	
216 - 960	200	46	final measurement for frequencies below	
Above 960	500	54	1000MHz is performed with Quasi Peak detector.	

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-2310 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 2402-2478MHz. We are select 2402MHz, 2440MHz, 2478MHz 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: 2003 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.

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

5.6. The Emission Measurement Result

PASS.

Date of Test:	September 18-19, 2009	Temperature:	25°C
EUT:	2.4G Wireless Optical Mouse	Humidity:	50%
Model No.:	DS-2310	Power Supply:	3V DC ("AAA" batteries 2×)
Test Mode:	TX 2402MHz	Test Engineer:	Joe

Frequency	Reading	Factor(dB)	Result	Limit	Margin	Polarization
(MHz)	(dBµV/m)	Corr.	(dBµV/m)	(dBµV/m)	(dB)	
	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:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Amplifier Gain

Date of Test:September 18-19, 2009Temperature:25°CEUT:2.4G Wireless Optical MouseHumidity:50%Model No.:DS-2310Power Supply:3V DC ("AAA" batteries 2×)Test Mode:TX 2440MHzTest Engineer:Joe

Frequency	Reading	Factor(dB)	Result	Limit	Margin	Polarization
(MHz)	(dBµV/m)	Corr.	(dBµV/m)	(dBµV/m)	(dB)	
	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:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Amplifier Gain

Date of Test:September 18-19, 2009Temperature:25°CEUT:2.4G Wireless Optical MouseHumidity:50%Model No.:DS-2310Power Supply:3V DC ("AAA" batteries 2×)Test Mode:TX 2478MHzTest Engineer:Joe

Frequency	Reading	Factor(dB)	Result	Limit	Margin	Polarization
(MHz)	(dBµV/m)	Corr.	(dBµV/m)	(dBµV/m)	(dB)	
	QP		QP	QP	QP	
_	-	1	1	-	-	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:

 $Result = Reading + Corrected \ Factor$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Amplifier Gain

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-2310 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 2402-2478MHz. We are select 2402MHz, 2478MHz 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:September 19, 2009Temperature:25°CEUT:2.4G Wireless Optical MouseHumidity:50%Model No.:DS-2310Power Supply:3V DC ("AAA" batteries 2×)Test Mode:TX 2402MHzTest Engineer:Joe

Frequency	Reading(dBµV/m)		Factor(dB)	Result(dBµV/m)		Limit(dBµV/m)		Margi	Polarization	
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2400.000	54.24	59.98	-7.46	46.78	52.52	54	74	-7.22	-21.48	Vertical
2400.000	54.34	60.07	-7.46	46.88	52.61	54	74	-7.12	-21.39	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:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Amplifier Gain

Date of Test:September 19, 2009Temperature:25°CEUT:2.4G Wireless Optical MouseHumidity:50%Model No.:DS-2310Power Supply:3V DC ("AAA" batteries 2×)Test Mode:TX 2478MHzTest Engineer:Joe

Frequency	Reading(dBµV/m)		Factor(dB)	Result(dBµV/m)		Limit(dBµV/m)		Margi	Polarization	
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2483.500	45.41	51.15	-7.37	38.04	43.78	54	74	-15.96	-30.22	Vertical
2483.500	44.73	50.46	-7.37	37.36	43.09	54	74	-16.64	-30.91	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:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Amplifier Gain

7. ANTENNA REQUIREMENT

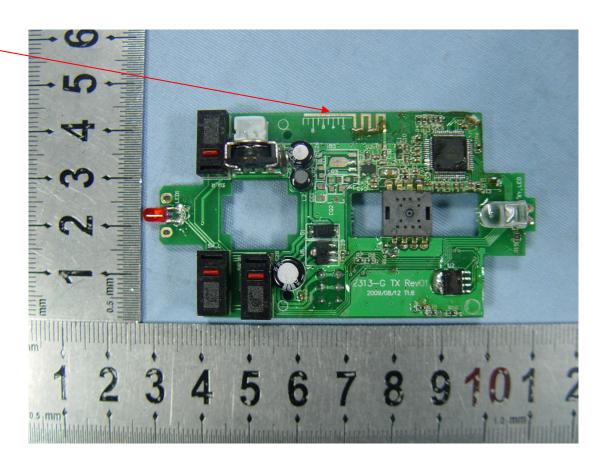
7.1.The Requirement

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)



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.: RTTE #3143

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: 2.4G Wireless Optical Mouse

Mode: TX 2402MHz Model: DS-2310

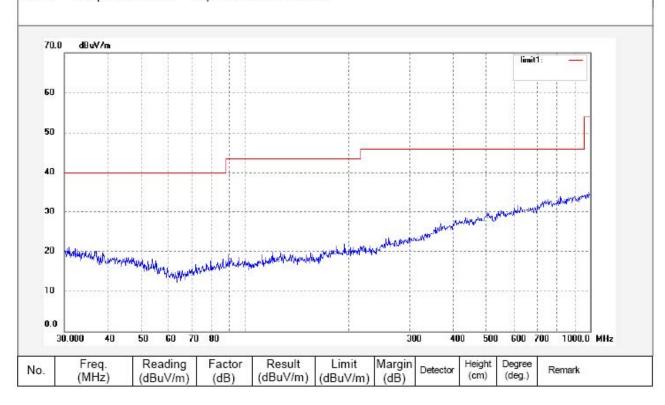
Manufacturer: Eastern Times Technology Co., Itd

Note: Sample No.:092077 Report No.:ATE20091870

Power Source: DC 3V Date: 2009/09/18 Time: 22:13:22

Engineer Signature: Joe

Polarization: Horizontal





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.: RTTE #3144 Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: 2.4G Wireless Optical Mouse

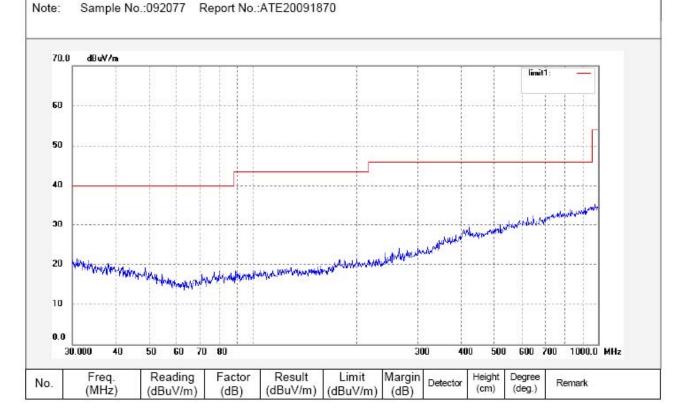
Mode: TX 2402MHz Model: DS-2310

Manufacturer: Eastern Times Technology Co., Itd

3, ,

Polarization: Vertical Power Source: DC 3V Date: 2009/09/18 Time: 22:16:26

Engineer Signature: Joe





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.: RTTE #3150

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: 2.4G Wireless Optical Mouse

Mode: TX 2402MHz Model: DS-2310

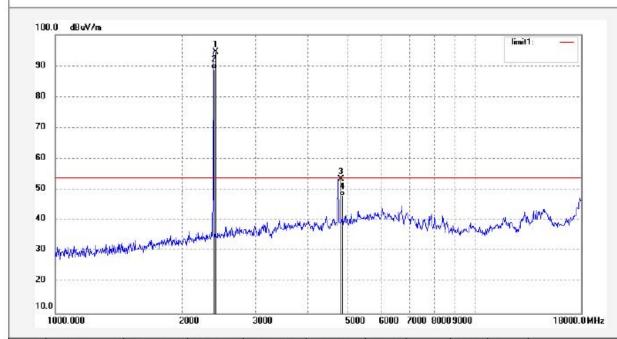
Manufacturer: Eastern Times Technology Co., Itd

Note: Sample No.:092077 Report No.:ATE20091870

Polarization: Horizontal Power Source: DC 3V

Date: 09/09/19/ Time: 9/25/20

Engineer Signature: Joe



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.273	102.02	-7.45	94.57	114.00	-19.43	peak			
2	2402.273	96.27	-7.45	88.82	94.00	-5.18	AVG			
3	4804.511	53.94	-0.30	53.64	74.00	-20.36	peak			
4	4804.511	48.17	-0.30	47.87	54.00	-6.13	AVG	3	22	3



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.: RTTE #3149

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: 2.4G Wireless Optical Mouse

Mode: TX 2402MHz Model: DS-2310

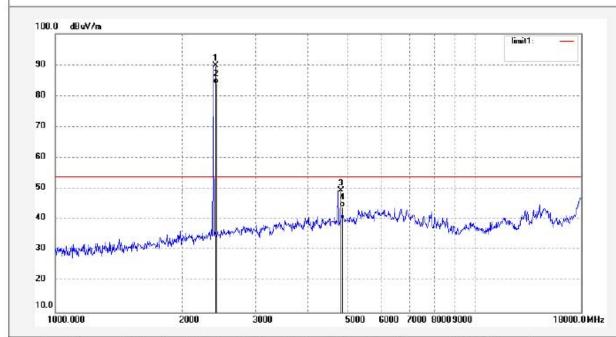
Manufacturer: Eastern Times Technology Co., Itd

Note: Sample No.:092077 Report No.:ATE20091870

Polarization: Vertical Power Source: DC 3V

> Date: 09/09/19/ Time: 9/22/13

Engineer Signature: Joe



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.273	97.19	-7.45	89.74	114.00	-24.26	peak			
2	2402.273	91.44	-7.45	83.99	94.00	-10.01	AVG			
3	4804.511	49.89	-0.30	49.59	74.00	-24.41	peak			
4	4804.511	44.13	-0.30	43.83	54.00	-10.17	AVG	3	23	3



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

Polarization:

Power Source: DC 3V

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

Horizontal

Job No.: RTTE #3167

Standard: FCC Class B 3M Radiated

Date: 09/09/19/ Test item: Radiation Test Temp.(C)/Hum.(%) 25 C / 50 % Time: 11/00/25 EUT: 2.4G Wireless Optical Mouse Engineer Signature: Joe Mode: TX 2402MHz Distance: 3m Model: DS-2310 Manufacturer: Eastern Times Technology Co., Itd Sample No.:092077 Report No.:ATE20091870 Note: 70.0 dBuV/m limit1 60 50 40 30 20 10 18000.000 20000 25000.0 MHz Reading Freq. Factor Result Limit Margin Height Degree

Detector No. Remark (deg.) (MHz) (dBuV/m) (dBuV/m) (dB) (dBuV/m) (dB)



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.: RTTE #3168

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: 2.4G Wireless Optical Mouse

Mode: TX 2402MHz Model: DS-2310

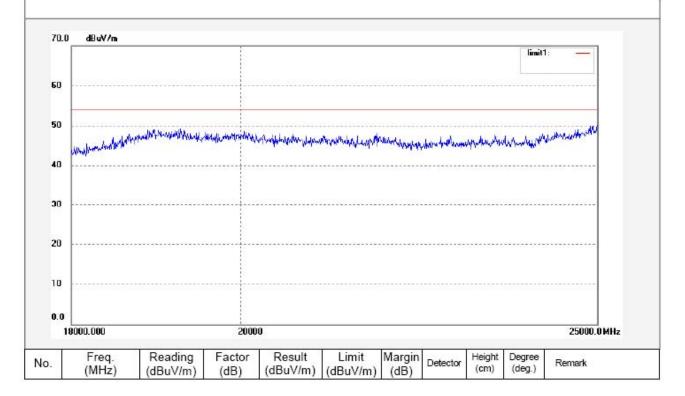
Manufacturer: Eastern Times Technology Co., Itd

Note: Sample No.:092077 Report No.:ATE20091870

Power Source: DC 3V Date: 09/09/19/ Time: 11/03/17

Polarization: Vertical

Engineer Signature: Joe





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

Polarization: Horizontal

Power Source: DC 3V

Date: 2009/09/18

Time: 22:23:27

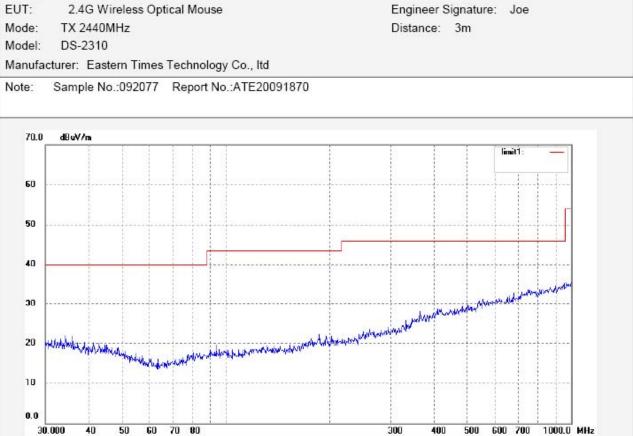
Job No.: RTTE #3146

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: 2.4G Wireless Optical Mouse





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.: RTTE #3145

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: 2.4G Wireless Optical Mouse

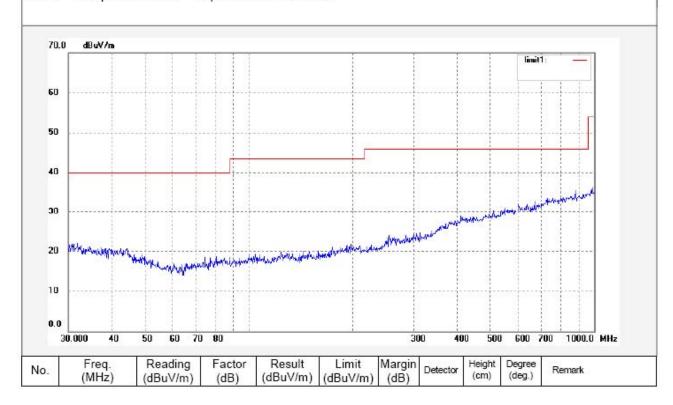
Mode: TX 2440MHz Model: DS-2310

Manufacturer: Eastern Times Technology Co., Itd

Note: Sample No.:092077 Report No.:ATE20091870



Engineer Signature: Joe





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.: RTTE #3151

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: 2.4G Wireless Optical Mouse

Mode: TX 2440MHz Model: DS-2310

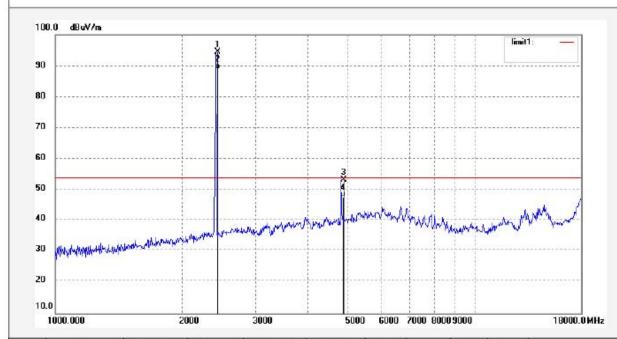
Manufacturer: Eastern Times Technology Co., Itd

Note: Sample No.:092077 Report No.:ATE20091870

Polarization: Horizontal Power Source: DC 3V

Date: 09/09/19/ Time: 9/29/11

Engineer Signature: Joe



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.272	101.92	-7.36	94.56	114.00	-19.44	peak			
2	2440.272	96.20	-7.36	88.84	94.00	-5.16	AVG			
3	4880.510	53.08	0.13	53.21	74.00	-20.79	peak			
4	4880.510	47.32	0.13	47.45	54.00	-6.55	AVG	3	22	3



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.: RTTE #3152

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: 2.4G Wireless Optical Mouse

Mode: TX 2440MHz Model: DS-2310

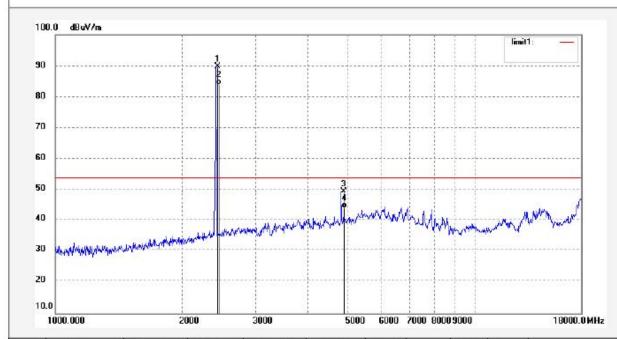
Manufacturer: Eastern Times Technology Co., Itd

Note: Sample No.:092077 Report No.:ATE20091870

Polarization: Vertical Power Source: DC 3V

> Date: 09/09/19/ Time: 9/32/27

Engineer Signature: Joe



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.272	97.11	-7.36	89.75	114.00	-24.25	peak			
2	2440.272	91.37	-7.36	84.01	94.00	-9.99	AVG			
3	4880.510	49.44	0.13	49.57	74.00	-24.43	peak			
4	4880.510	43.70	0.13	43.83	54.00	-10.17	AVG	3	22	3



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

Polarization:

Date: 09/09/19/

Time: 11/10/34

Power Source: DC 3V

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

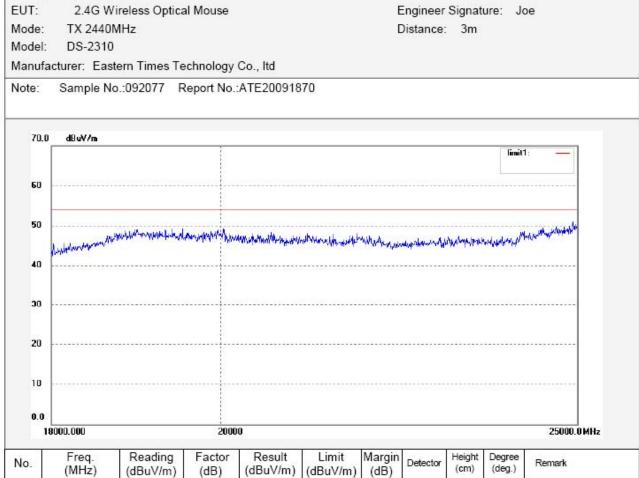
Horizontal

Job No.: RTTE #3170

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %





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

Polarization: Vertical

Job No.: RTTE #3169

Standard: FCC Class B 3M Radiated

Power Source: DC 3V Date: 09/09/19/ Test item: Radiation Test Temp.(C)/Hum.(%) 25 C / 50 % Time: 11/07/29 EUT: 2.4G Wireless Optical Mouse Engineer Signature: Joe Mode: TX 2440MHz Distance: 3m Model: DS-2310 Manufacturer: Eastern Times Technology Co., Itd Sample No.:092077 Report No.:ATE20091870 Note: 70.0 dBuV/m limit1 60 50 40 30 20 10 18000.000 20000 25000.0 MHz

Freq. Reading Factor Result Limit Margin Height Degree Detector No. Remark (deg.) (MHz) (dBuV/m) (dBuV/m) (dB) (dBuV/m) (dB)



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.: RTTE #3147

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: 2.4G Wireless Optical Mouse

Mode: TX 2478MHz Model: DS-2310

Note:

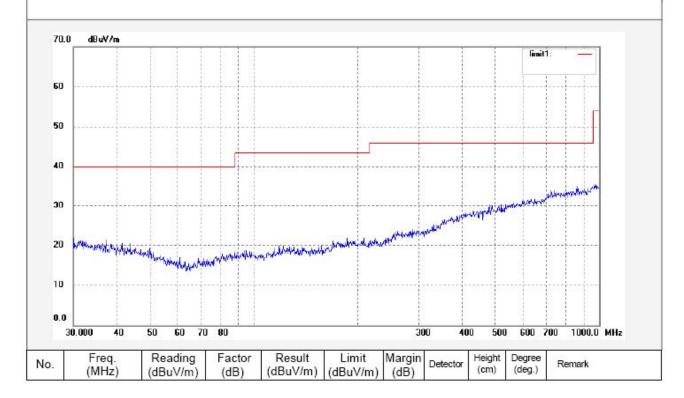
Manufacturer: Eastern Times Technology Co., Itd

Sample No.:092077 Report No.:ATE20091870



Polarization: Horizontal

Power Source: DC 3V





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

Polarization: Vertical

Power Source: DC 3V

Date: 2009/09/18

Time: 22:30:34

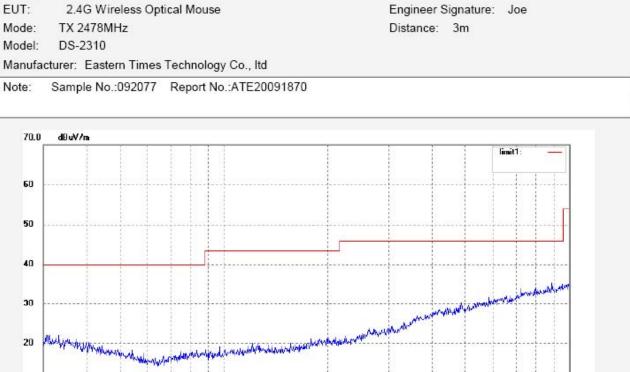
Job No.: RTTE #3148

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: 2.4G Wireless Optical Mouse



300

400

500

600 700

1000.0 MHz

10

30.000

40

60 70 80



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.: RTTE #3154 Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.(C)/Hum.(%) 25 C / 50 % EUT: 2.4G Wireless Optical Mouse

Mode: TX 2478MHz Model: DS-2310

(MHz)

2478.273

2478.273

4956.513

4956.513

(dBuV/m)

101.95

96.16

54.13

48.38

(dB)

-7.37

-7.37

0.51

0.51

(dBuV/m)

94.58

88.79

54.64

48.89

Manufacturer: Eastern Times Technology Co., Itd

Sample No.:092077 Report No.:ATE20091870 Note:

Polarization: Horizontal Power Source: DC 3V

Date: 09/09/19/ Time: 9/39/45

Engineer Signature: Joe

(cm)

(deg.)

Distance: 3m

		*					limit1: —
90						<u> </u>	
80						 	
70						ļļļ	
60				3			
50)			
40			LALLE MANAGEMAN	of Jongton and the	MANAGO	Mary Mary and a second	washing the same
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20							
10.0							
11	000.000	2000	3000	5000	6000	7000 8000 9000	19000.0 MI

(dBuV/m)

94.00

74.00

54.00

114.00

(dB)

-19.42

-5.21

-19.36

-5.11

peak

AVG

peak

AVG

1

2

3

4



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.: RTTE #3153 Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %

EUT: 2.4G Wireless Optical Mouse

Mode: TX 2478MHz Model: DS-2310

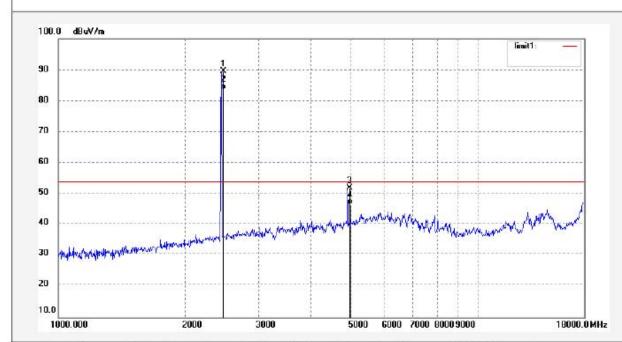
Manufacturer: Eastern Times Technology Co., Itd

Note: Sample No.:092077 Report No.:ATE20091870

Polarization: Vertical Power Source: DC 3V

Date: 09/09/19/ Time: 9/36/29

Engineer Signature: Joe



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	2478.273	96.81	-7.37	89.44	114.00	-24.56	peak				
2	2478.273	91.03	-7.37	83.66	94.00	-10.34	AVG				
3	4956.513	51.56	0.51	52.07	74.00	-21.93	peak				
4	4956.513	45.80	0.51	46.31	54.00	-7.69	AVG	3	23		



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

Polarization:

Date: 09/09/19/

Power Source: DC 3V

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

Horizontal

Job No.: RTTE #3171

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 % Time: 11/14/43 EUT: 2.4G Wireless Optical Mouse Engineer Signature: Joe Mode: TX 2478MHz Distance: 3m Model: DS-2310 Manufacturer: Eastern Times Technology Co., Itd Sample No.:092077 Report No.:ATE20091870 Note: 70.0 dBuV/m limit1 60 50 40 30 20 10 18000.000 20000 25000.0 MHz Reading Freq. Factor Result Limit Margin Height Degree Detector No. Remark (deg.) (MHz) (dBuV/m) (dBuV/m) (dB) (dBuV/m) (dB)

FCC ID: TUV2310



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

Polarization: Vertical

Power Source: DC 3V

Job No.: RTTE #3172

Standard: FCC Class B 3M Radiated

Date: 09/09/19/ Test item: Radiation Test Temp.(C)/Hum.(%) 25 C / 50 % Time: 11/18/01 EUT: 2.4G Wireless Optical Mouse Engineer Signature: Joe Mode: TX 2478MHz Distance: 3m Model: DS-2310 Manufacturer: Eastern Times Technology Co., Itd Sample No.:092077 Report No.:ATE20091870 Note: 70.0 dBuV/m limit1 60 50 40 30 20 10 18000.000 20000 25000.0 MHz Reading Freq. Factor Result Limit Margin Height Degree Detector No. Remark

(deg.) (MHz) (dBuV/m) (dBuV/m) (dB) (dBuV/m) (dB)



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.: RTTE #3163
Standard: ECC Part 15 PEAK 2.46

Standard: FCC Part 15 PEAK 2.4G

Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: 2.4G Wireless Optical Mouse

Mode: TX 2402MHz

Model: DS-2310

2400.000

2400.000

60.07

54.34

-7.46

-7.46

52.61

46.88

74.00

54.00

-21.39

-7.12

peak

AVG

Manufacturer: Eastern Times Technology Co., Itd

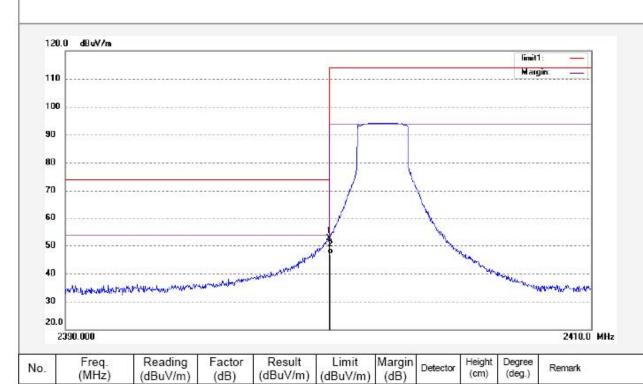
Note: Sample No.:092077 Report No.:ATE20091870

Polarization: Horizontal Power Source: DC 3V

> Date: 09/09/19/ Time: 10/29/24

Engineer Signature: Joe

Distance: 3m



1

2



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.: RTTE #3164 Standard: FCC Part 15 PEAK 2.4G

Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: 2.4G Wireless Optical Mouse

Mode: TX 2402MHz

Model: DS-2310

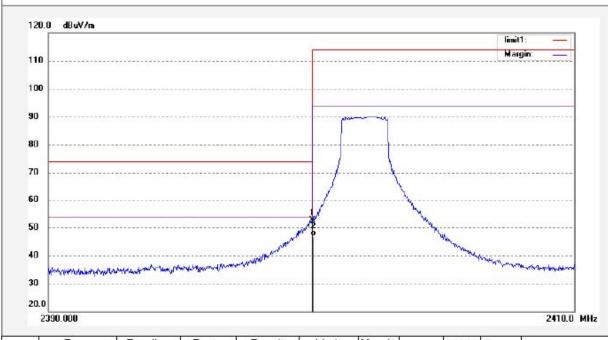
Manufacturer: Eastern Times Technology Co., Itd

Note: Sample No.:092077 Report No.:ATE20091870

Polarization: Vertical Power Source: DC 3V

Date: 09/09/19/ Time: 10/32/41

Engineer Signature: Joe





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.: RTTE #3166 Standard: FCC Part 15 PEAK 2.4G

Standard: FCC Part 15 PEAK 2.4G Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %
EUT: 2.4G Wireless Optical Mouse

Mode: TX 2478MHz Model: DS-2310

Note:

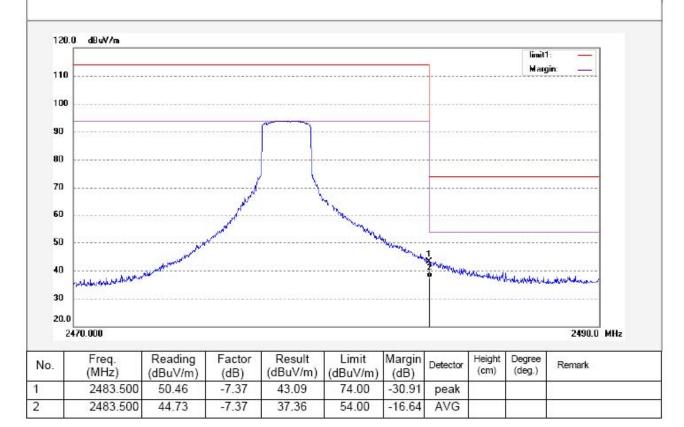
Manufacturer: Eastern Times Technology Co., Itd

Sample No.:092077 Report No.:ATE20091870

Polarization: Horizontal Power Source: DC 3V

Date: 09/09/19/ Time: 10/39/52

Engineer Signature: Joe





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.: RTTE #3165 Standard: FCC Part 15 PEAK 2.4G

Standard: FCC Part 15 PEAK 2.4G

Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: 2.4G Wireless Optical Mouse

Mode: TX 2478MHz

Model: DS-2310

Note:

Manufacturer: Eastern Times Technology Co., Itd

Sample No.:092077 Report No.:ATE20091870

Polarization: Vertical Power Source: DC 3V

Date: 09/09/19/ Time: 10/36/35

Engineer Signature: Joe

