FCC CERTIFICATION On Behalf of Comat Electronic (Shenzhen) Co., Ltd.

2.4G Wireless Mouse Model No.: CM9025G

FCC ID: RTX-CM9025G

Prepared for : Comat Electronic (Shenzhen) Co., Ltd.

Address : No.2 Lane 1, Xin'an 3rd 28 District, Baoan, Shenzhen,

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 : ATE20121915
Date of Test : August 17-31, 2012
Date of Report : September 6, 2012

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APPENDIX I (TEST CURVES) (28 pages)

7.2.

Test Report Certification

ApplicantComat Electronic (Shenzhen) Co., Ltd.ManufacturerComat Electronic (Shenzhen) Co., Ltd.

EUT Description : 2.4G Wireless Mouse

(A) MODEL NO.: CM9025G

(B) 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: 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 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 :	August 17-31, 2012	
Prepared by :	Kerry cheng	
	(Kelly Cheng, Engineer)	
Approved & Authorized Signer :	(Sean Liu, Manager)	

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT : 2.4G Wireless Mouse

Model Number : CM9025G Trade Name : COMAT

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

Operate Frequency : 2408.000-2474.000MHz

Applicant : Comat Electronic (Shenzhen) Co., Ltd.

Address : No.2 Lane 1, Xin'an 3rd 28 District, Baoan, Shenzhen,

China

Manufacturer : Comat Electronic (Shenzhen) Co., Ltd.

Address : No.2 Lane 1, Xin'an 3rd 28 District, Baoan, Shenzhen,

China

Date of sample received: August 17, 2012

Date of Test : August 17-31, 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 = 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	Туре	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

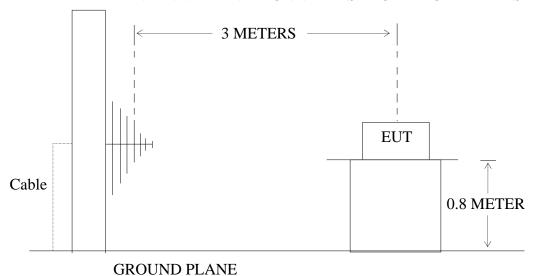
4.1.1.Block diagram of connection between the EUT and simulators

EUT

(EUT: 2.4G Wireless Mouse)

4.1.2.Semi-Anechoic Chamber Test Setup Diagram

ANTENNA ELEVATION VARIES FROM 1 TO 4 METERS



(EUT: 2.4G Wireless 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 Mouse (EUT)

Model Number : CM9025G

Serial Number : N/A

Manufacturer : Comat Electronic (Shenzhen) 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. 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:	August 24, 2012	Temperature:	25°C
EUT:	2.4G Wireless Mouse	Humidity:	50%
Model No.:	CM9025G	Power Supply:	DC 3V
Test Mode:	TX 2408.000MHz	Test Engineer:	Bob

Fundamental Radiated Emissions

Frequency	Reading(dBμV/m)	Factor(dB)	Result(c	lBμV/m)	Limit(d)	BμV/m)	Marg	in(dB)	Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2408.000	80.76	86.31	-7.44	73.32	78.87	94.00	114.00	-20.68	-35.13	Vertical
2408.000	81.05	86.46	-7.44	73.61	79.02	94.00	114.00	-20.39	-34.98	Horizontal

Harmonics Radiated Emissions

Frequency	Reading(dBμV/m)	Factor(dB)	Result(c	lBμV/m)	Limit(d	BμV/m)	Marg	in(dB)	Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
4816.000	43.21	48.33	-0.23	42.98	48.10	54.00	74.00	-11.02	-25.90	Vertical
4816.000	40.08	46.77	-0.23	39.85	46.54	54.00	74.00	-15.15	-27.46	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:	August 24, 2012	Temperature:	25°C
EUT:	2.4G Wireless Mouse	Humidity:	50%
Model No.:	CM9025G	Power Supply:	DC 3V
Test Mode:	TX 2440.000MHz	Test Engineer:	Bob

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m	Factor(dB) Corr.	Result(d	BμV/m)	Limit(dl	BμV/m)	Margi	n(dB)	Polarization
	AV	PEAK	Con.	AV	PEAK	AV	PEAK	AV	PEAK	
2440.000	81.64	86.26	-7.36	74.28	78.90	94.00	114.00	-19.72	-35.10	Vertical
2440.000	81.11	86.57	-7.36	73.35	79.21	94.00	114.00	-20.25	-34.79	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m	Factor(dB) Corr.	Result(d	BμV/m)	Limit(d)	BμV/m)	Margi	n(dB)	Polarization
(WITIZ)	AV	PEAK	Con.	AV	PEAK	AV	PEAK	AV	PEAK	
4880.000	42.27	47.81	0.13	42.40	47.94	54.00	74.00	-11.60	-26.06	Vertical
4880.000	41.56	46.17	0.13	41.69	46.30	54.00	74.00	-12.31	-27.70	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:	August 24, 2012	Temperature:	25°C
EUT:	2.4G Wireless Mouse	Humidity:	50%
Model No.:	CM9025G	Power Supply:	DC 3V
Test Mode:	TX 2474.000MHz	Test Engineer:	Bob

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m	Factor(dB) Corr.	Result(d	BμV/m)	Limit(dl	BμV/m)	Margi	in(dB)	Polarization
(WILL)	AV	PEAK	Con.	AV	PEAK	AV	PEAK	AV	PEAK	
2474.000	81.01	86.68	-7.37	73.64	79.31	94.00	114.00	-20.36	-34.69	Vertical
2474.000	81.49	86.85	-7.37	74.12	79.48	94.00	114.00	-19.88	-34.52	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m	Factor(dB) Corr.	Result(d	BμV/m)	Limit(d)	BμV/m)	Margi	in(dB)	Polarization
(WHIZ)	AV	PEAK	Con.	AV	PEAK	AV	PEAK	AV	PEAK	
4948.000	38.84	43.22	0.46	39.30	43.68	54.00	74.00	-14.70	-30.32	Vertical
4948.000	38.20	43.39	0.46	38.66	43.85	54.00	74.00	-15.34	-30.15	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)

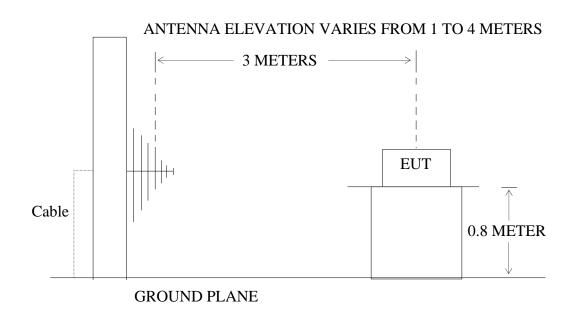
5.1.Block Diagram of Test Setup

5.1.1.Block diagram of connection between the EUT and simulators

EUT

(EUT: 2.4G Wireless Mouse)

5.1.2.Semi-Anechoic Chamber Test Setup Diagram



(EUT: 2.4G Wireless 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 (microvolts/meter)	Measurement Distance (meters)	The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is		
0.009 – 0.490	2400/F(kHz)	300	performed with Average detector.		

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

Model Number : CM9025G

Serial Number : N/A

Manufacturer : Comat Electronic (Shenzhen) 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 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: A	August 18, 2012	Temperature:	25°C
EUT: $\overline{2}$.4G Wireless Mouse	Humidity:	50%
Model No.: C	CM9025G	Power Supply:	DC 3V
Test Mode: T	TX 2408.000MHz	Test Engineer:	Bob

Below 30MHz

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

30MHz-25GHz

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:	August 18, 2012	Temperature:	25°C
EUT:	2.4G Wireless Mouse	Humidity:	50%
Model No.:	CM9025G	Power Supply:	DC 3V
Test Mode:	TX 2440.000MHz	Test Engineer:	Bob

Below 30MHz

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

30MHz-25GH

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:	August 18, 2012	Temperature:	25°C
EUT:	2.4G Wireless Mouse	Humidity:	50%
Model No.:	CM9025G	Power Supply:	DC 3V
Test Mode:	TX 2474.000MHz	Test Engineer:	Bob

Below 30MHz

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

30MHz-25GH

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

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 Mouse (EUT)

Model Number : CM9025G

Serial Number : N/A

Manufacturer : Comat Electronic (Shenzhen) 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 2474.000 MHz. We are select 2408.000MHz, 2440.000MHz, 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:August 24, 2012Temperature:25°CEUT:2.4G Wireless MouseHumidity:50%Model No.:CM9025GPower Supply:DC 3VTest Mode:TX 2408.000MHzTest Engineer:Bob

Frequency	Reading(dBµV/m)		Factor(dB)	Result(dBµV/m)		Limit(dBµV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2310.000	42.39	47.27	-7.81	34.58	39.46	54.00	74.00	-19.42	-34.54	Vertical
2369.550	41.05	46.50	-7.66	33.39	38.84	54.00	74.00	-20.61	-35.16	Vertical
2390.000	44.49	49.76	-7.53	36.96	42.23	54.00	74.00	-17.04	-31.77	Vertical
2310.000	41.13	46.85	-7.81	33.32	39.04	54.00	74.00	-20.68	-34.96	Horizontal
2369.480	42.26	47.32	-7.66	34.60	39.66	54.00	74.00	-19.40	-34.34	Horizontal
2390.150	47.73	53.00	-7.53	40.20	45.47	54.00	74.00	-13.80	-28.53	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:August 24, 2012Temperature:25°CEUT:2.4G Wireless MouseHumidity:50%Model No.:CM9025GPower Supply:DC 3VTest Mode:TX 2474.000MHzTest Engineer:Bob

Frequency	Reading(dBµV/m)		Factor(dB)	Result(dBµV/m)		Limit(dBµV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2483.950	49.33	54.97	-7.38	41.95	47.59	54.00	74.00	-12.05	-26.41	Vertical
2489.000	47.27	52.91	-7.39	39.88	45.52	54.00	74.00	-14.12	-28.48	Vertical
2500.000	41.90	46.42	-7.40	34.50	39.02	54.00	74.00	-19.50	-34.98	Vertical
2483.743	52.22	57.33	-7.38	44.85	49.96	54.00	74.00	-9.15	-24.04	Horizontal
2489.120	50.67	55.12	-7.39	43.28	47.73	54.00	74.00	-10.72	-26.27	Horizontal
2500.000	41.11	46.38	-7.40	33.71	38.98	54.00	74.00	-20.29	-35.02	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

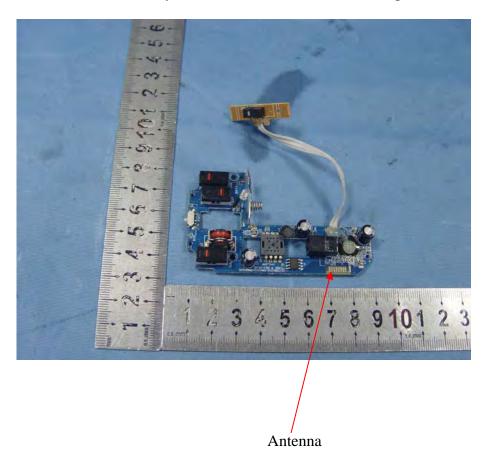
7. ANTENNA REQUIREMENT

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.



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.: Bob #2660

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

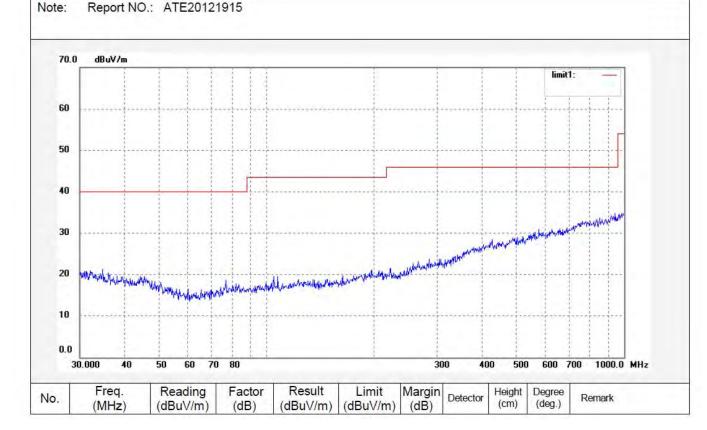
Model: TX 2408

Model: CM9025G

Manufacturer: COMAT

Polarization: Vertical Power Source: DC 3V

Date: 12/8/18/ Time: 9/02/04 Engineer Signature: Distance: 3m





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

Polarization:

Date: 12/8/18/ Time: 9/02/44

Distance: 3m

Power Source: DC 3V

Engineer Signature:

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

Horizontal

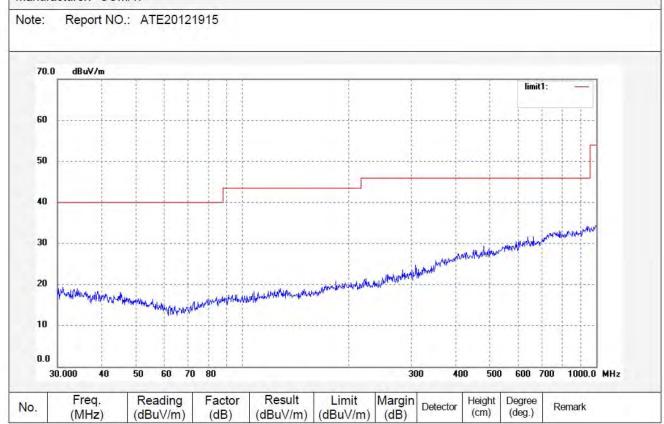
Job No.: Bob #2661 Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: 2.4G Wireless Mouse

Mode: TX 2408

Model: CM9025G

Manufacturer: COMAT





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 #3209

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

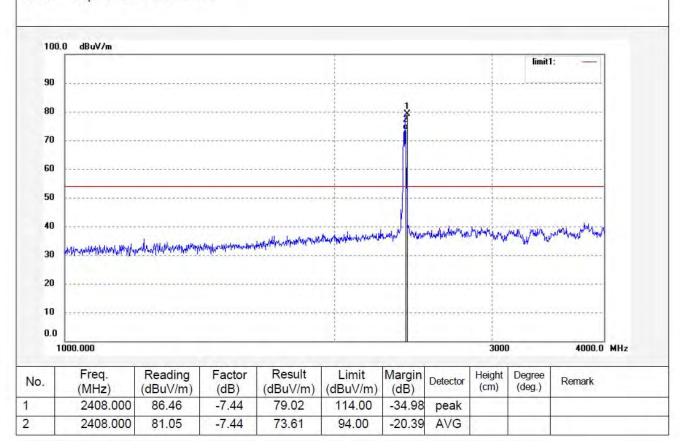
Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX2408 Model: CM9025G Manufacturer: COMAT

Note: Report NO.:ATE20121915

Polarization: Horizontal Power Source: DC 3V

Date: 2012/08/24 Time: 19:31:33 Engineer Signature: Distance: 3m





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 #3210

Standard: FCC Class B 3M Radiated

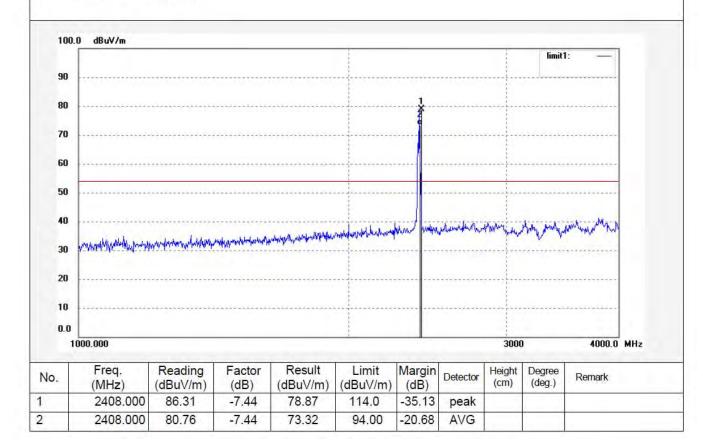
Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX2408 Model: CM9025G Manufacturer: COMAT Polarization: Vertical Power Source: DC 3V Date: 2012/08/24

Time: 19:34:32 Engineer Signature: Distance: 3m

Note: Report NO.:ATE20121915





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 #3211

Standard: FCC Class B 3M Radiated

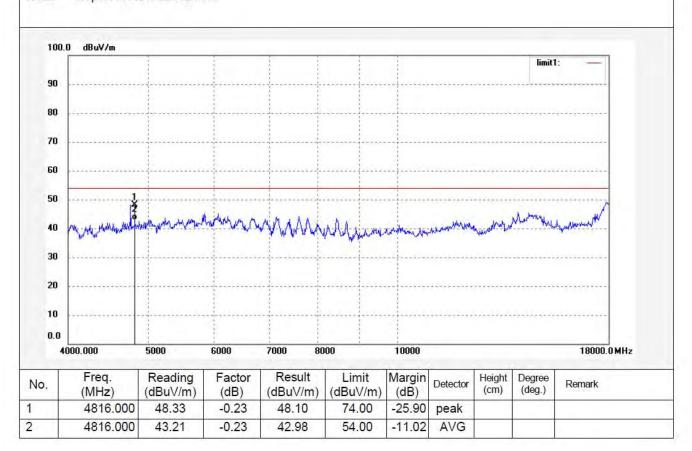
Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX2408 Model: CM9025G Manufacturer: COMAT

Note: Report NO.:ATE20121915

Polarization: Vertical
Power Source: DC 3V
Date: 2012/08/24
Time: 19:36:33
Engineer Signature:
Distance: 3m





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 #3212

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

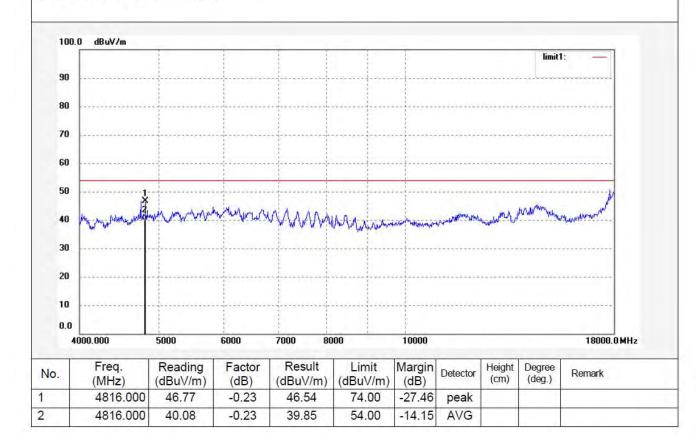
Mode: TX2408 Model: CM9025G Manufacturer: COMAT Polarization: Horizontal

Power Source: DC 3V

Date: 2012/08/24 Time: 19:38:20 Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20121915





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 #2727

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

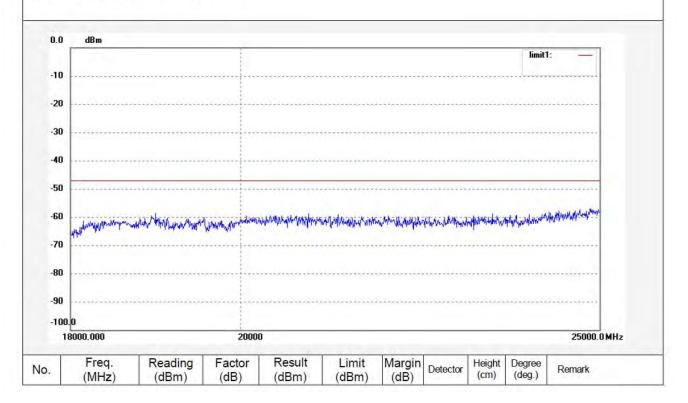
Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX 2408 Model: CM9025G Manufacturer: COMAT

Note: Report NO.:ATE20121915

Polarization: Vertical Power Source: DC 3V

Date: 12/8/18/ Time: 10/24/46 Engineer Signature: Distance: 3m





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 #2728

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

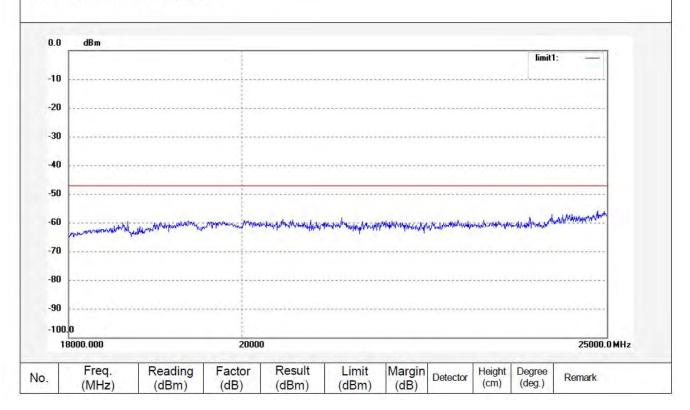
Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX 2408 Model: CM9025G Manufacturer: COMAT

Note: Report NO.:ATE20121915

Polarization: Horizontal Power Source: DC 3V

Date: 12/8/18/ Time: 10/26/23 Engineer Signature: Distance: 3m





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 #2662

Standard: FCC Class B 3M Radiated

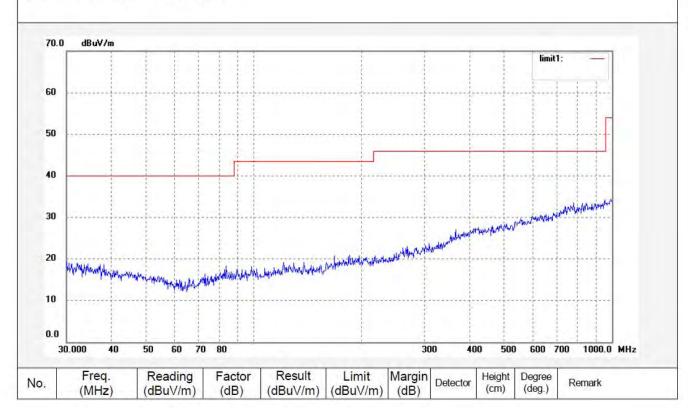
Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX 2440 Model: CM9025G Manufacturer: COMAT Polarization: Horizontal Power Source: DC 3V

Date: 12/8/18/ Time: 9/03/06 Engineer Signature: Distance: 3m

Note: Report NO.: ATE20121915





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 #2663

Standard: FCC Class B 3M Radiated

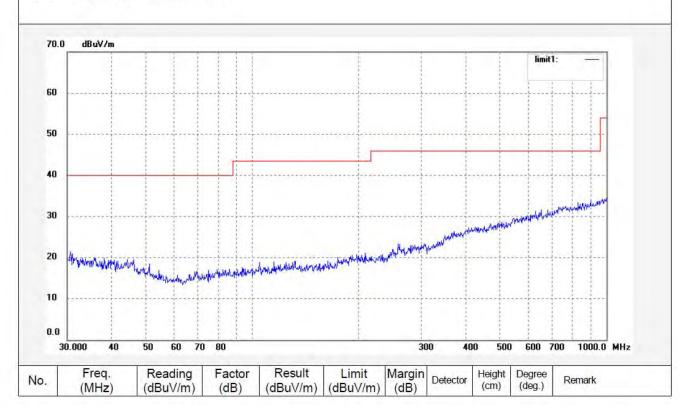
Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX 2440 Model: CM9025G Manufacturer: COMAT Polarization: Vertical Power Source: DC 3V

Date: 12/8/18/ Time: 9/03/47 Engineer Signature: Distance: 3m

Note: Report NO.: ATE20121915





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 #3215

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

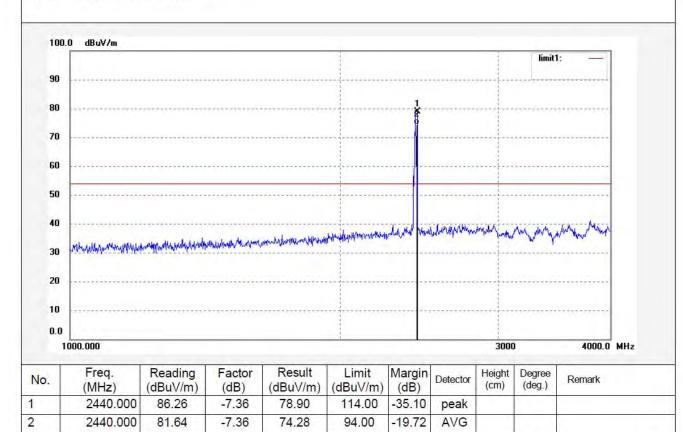
Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX2440 Model: CM9025G Manufacturer: COMAT Polarization: Vertical Power Source: DC 3V

Date: 2012/08/24 Time: 19:47:52 Engineer Signature: Distance: 3m

Distance: 3m

Note: Report NO.:ATE20121915





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 #3216

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

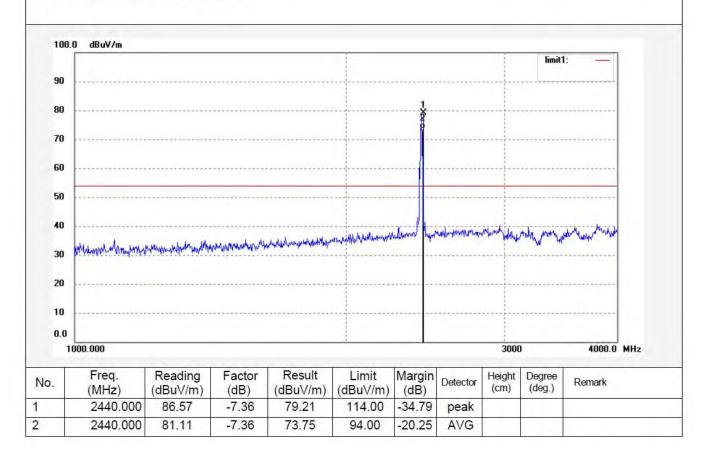
Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX2440 Model: CM9025G Manufacturer: COMAT

Note: Report NO.:ATE20121915

Polarization: Horizontal Power Source: DC 3V

Date: 2012/08/24 Time: 19:50:29 Engineer Signature: Distance: 3m





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 #3217

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

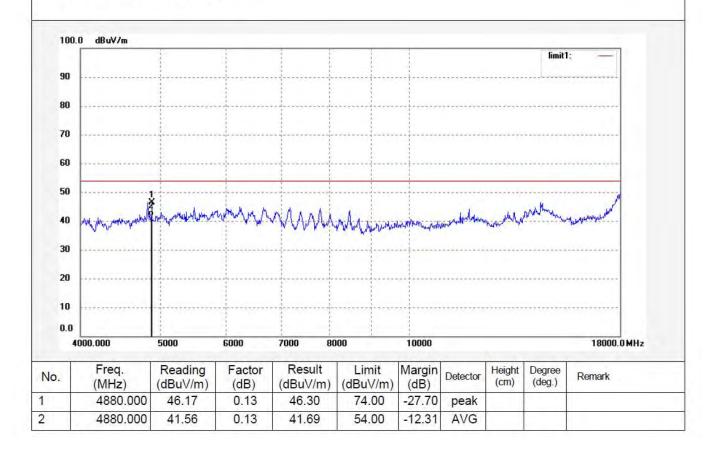
Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX2440 Model: CM9025G Manufacturer: COMAT

Note: Report NO.:ATE20121915

Polarization: Horizontal Power Source: DC 3V

Date: 2012/08/24 Time: 19:52:29 Engineer Signature: Distance: 3m





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 #3218

Standard: FCC Class B 3M Radiated

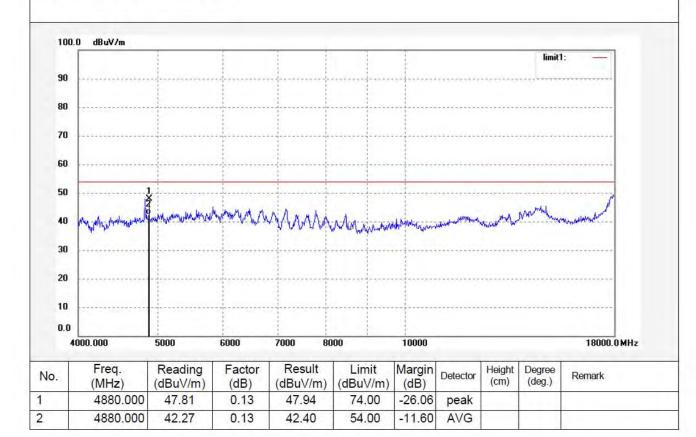
Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Model: TX2440 Model: CM9025G Manufacturer: COMAT Power Source: DC 3V Date: 2012/08/24

Time: 19:54:28
Engineer Signature:
Distance: 3m

Polarization: Vertical





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 #2729

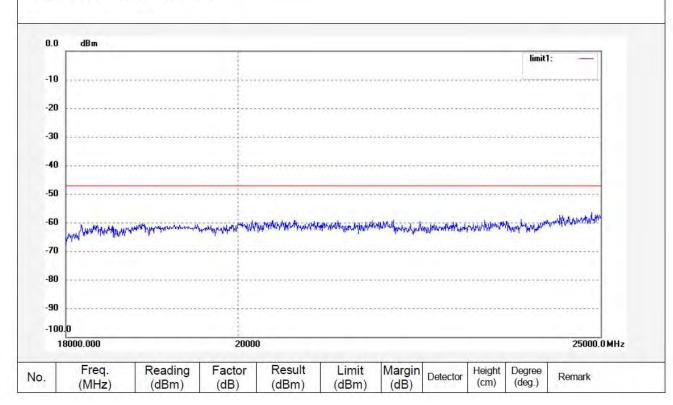
Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX 2440 Model: CM9025G Manufacturer: COMAT Polarization: Horizontal Power Source: DC 3V

Date: 12/8/18/ Time: 10/29/02 Engineer Signature: Distance: 3m





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 #2730

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

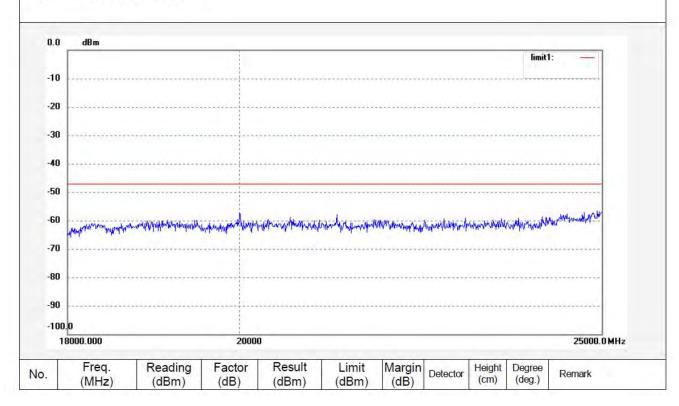
Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX 2440 Model: CM9025G Manufacturer: COMAT Polarization: Vertical Power Source: DC 3V

Date: 12/8/18/ Time: 10/31/36 Engineer Signature:

Distance: 3m

Report NO.:ATE20121915 Note:





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 #2664

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

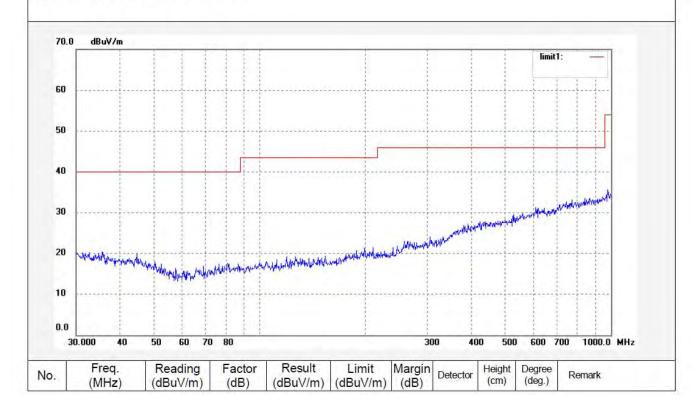
Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX 2474 Model: CM9025G Manufacturer: COMAT

Note: Report NO.: ATE20121915

Polarization: Vertical Power Source: DC 3V

Date: 12/8/18/
Time: 9/04/15
Engineer Signature:
Distance: 3m





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 #2665

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

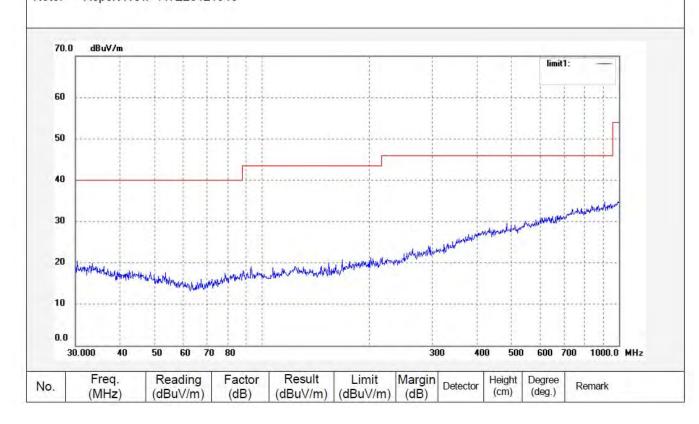
Mode: TX 2474

Model: CM9025G

Manufacturer: COMAT

Polarization: Horizontal Power Source: DC 3V

Date: 12/8/18/
Time: 9/05/24
Engineer Signature:
Distance: 3m





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 #3221

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

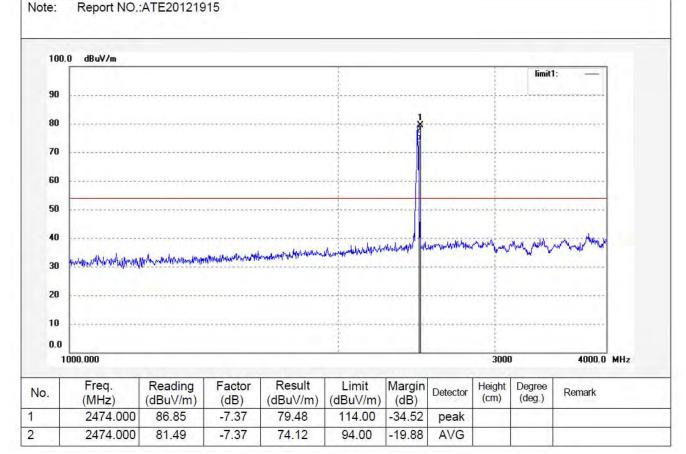
Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX2474 Model: CM9025G Manufacturer: COMAT

Report NO.:ATE20121915

Polarization: Horizontal Power Source: DC 3V

Date: 2012/08/24 Time: 20:00:13 Engineer Signature: Distance: 3m





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 #3222

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX2474 Model: CM9025G Manufacturer: COMAT

50

40

30

20

turer: COMAT
Report NO.:ATE20121915

Polarization: Vertical Power Source: DC 3V

Date: 2012/08/24 Time: 20:03:00 Engineer Signature: Distance: 3m

	1000.000							3000	ı	4000.0	MHz
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	86.68	-7.37	79.31	114.00	-34.69	peak				
2	2474.000	81.01	-7.37	73.64	94.00	-20.36	AVG				



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 #3220

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

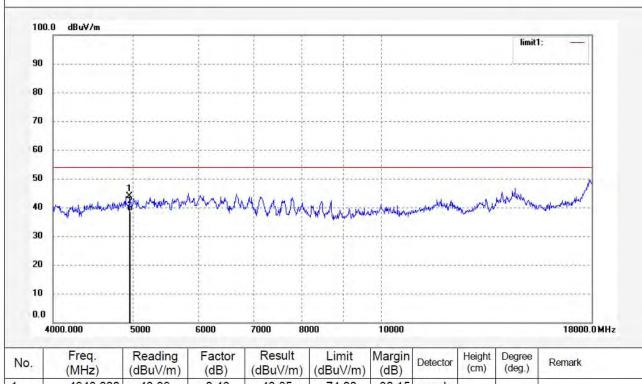
Temp.(C)/Hum.(%) 24 C / 48 % 2.4G Wireless Mouse EUT:

Mode: TX2474 CM9025G Model: Manufacturer: COMAT

Report NO.:ATE20121915

Polarization: Horizontal Power Source: DC 3V Date: 2012/08/24 Time: 19:58:10

Engineer Signature: Distance: 3m





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 #3219

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

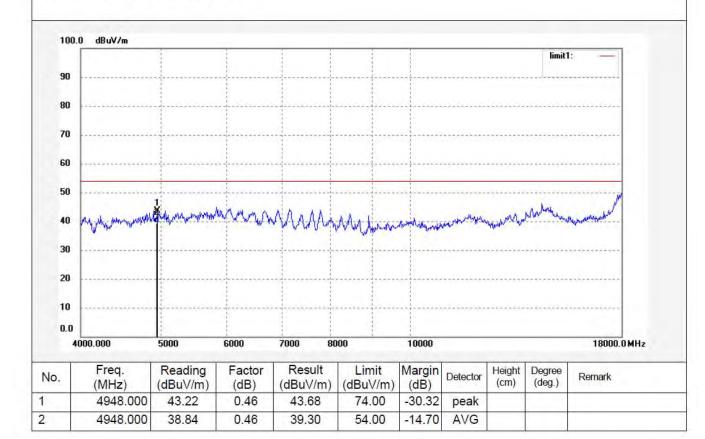
Mode: TX2474

Model: CM9025G

Manufacturer: COMAT

Polarization: Vertical Power Source: DC 3V Date: 2012/08/24

Time: 19:56:19
Engineer Signature:
Distance: 3m





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 #2731

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX 2474

Model: CM9025G

Manufacturer: COMAT

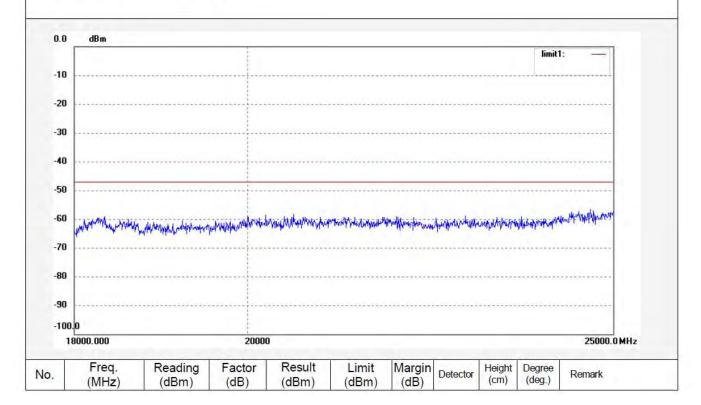
Note:

TX 2474

Report NO.:ATE20121915

Polarization: Vertical Power Source: DC 3V

Date: 12/8/18/ Time: 10/33/11 Engineer Signature: Distance: 3m





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: 12/8/18/

Time: 10/36/47

Distance: 3m

Engineer Signature:

Job No.: Bob #2732

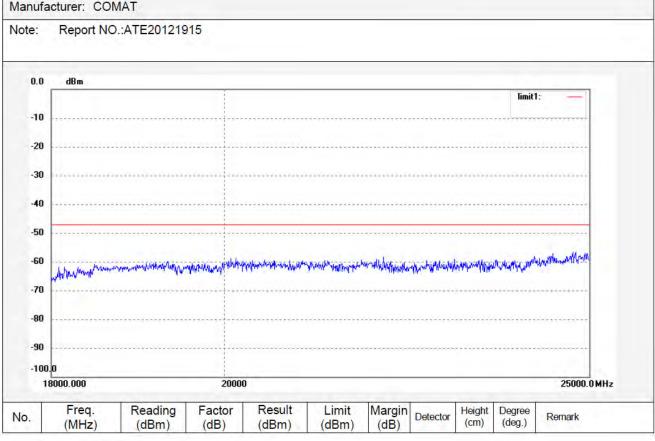
Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: Model: CM9025G Manufacturer: COMAT

TX 2474





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 #3213 Standard: FCC 15C PK Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX2408

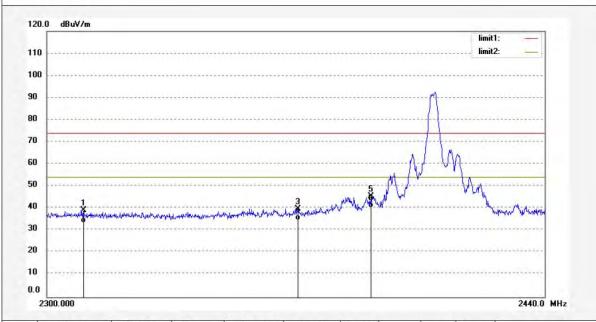
Model: CM9025G

Manufacturer: COMAT

Note: Report NO.:ATE20121915

Polarization: Horizontal Power Source: DC 3V Date: 2012/08/24 Time: 19:41:07

Engineer Signature: Distance: 3m



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	46.85	-7.81	39.04	74.00	-34.96	peak			
2	2310.000	41.13	-7.81	33.32	54.00	-20.68	AVG			
3	2369.480	47.32	-7.66	39.66	74.00	-34.34	peak			
4	2369.480	42.26	-7.66	34.60	54.00	-19.40	AVG			
5	2390.150	53.00	-7.53	45.47	74.00	-28.53	peak			
6	2390.150	47.73	-7.53	40.20	54.00	-13.80	AVG			



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

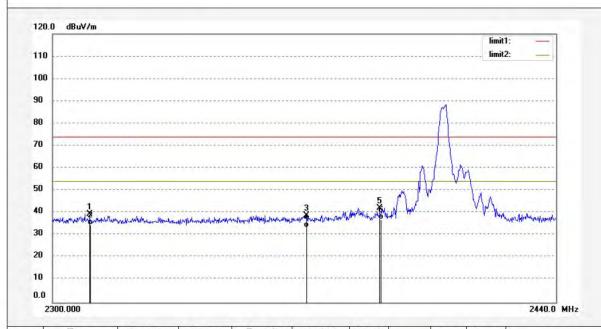
Job No.: Bob #3214 Standard: FCC 15C PK Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX2408 Model: CM9025G Manufacturer: COMAT

Note: Report NO.:ATE20121915

Polarization: Vertical
Power Source: DC 3V
Date: 2012/08/24
Time: 19:44:16
Engineer Signature:
Distance: 3m



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	47.27	-7.81	39.46	74.00	-34.54	peak			
2	2310.000	42.39	-7.81	34.58	54.00	-19.42	AVG			
3	2369.550	46.50	-7.66	38.84	74.00	-35.16	peak			
4	2369.550	41.05	-7.66	33.39	54.00	-20.61	AVG			
5	2390.000	49.76	-7.53	42.23	74.00	-31.77	peak			
6	2390.000	44.49	-7.53	36.96	54.00	-17.04	AVG			



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 #3223 Standard: FCC 15C PK Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

Mode: TX2474 Model: CM9025G Manufacturer: COMAT

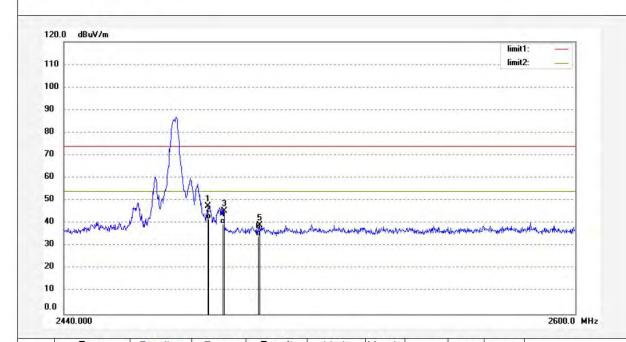
Date: 2012/08/24 Time: 20:04:55 Engineer Signature:

Distance: 3m

Polarization: Vertical

Power Source: DC 3V

Report NO.:ATE20121915



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	2483.950	54.97	-7.38	47.59	74.00	-26.41	peak				
2	2483.950	49.33	-7.38	41.95	54.00	-12.05	AVG				
3	2489.000	52.91	-7.39	45.52	74.00	-28.48	peak				
4	2489.000	47.27	-7.39	39.88	54.00	-14.12	AVG				
5	2500.000	46.42	-7.40	39.02	74.00	-34.98	peak				
6	2500.000	41.90	-7.40	34.50	54.00	-19.50	AVG				



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 #3224 Standard: FCC 15C PK Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: 2.4G Wireless Mouse

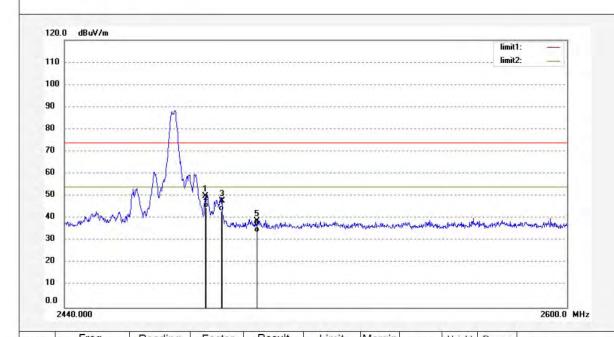
Model: TX2474

Model: CM9025G

Manufacturer: COMAT

Polarization: Horizontal Power Source: DC 3V Date: 2012/08/24

Time: 20:08:47
Engineer Signature:
Distance: 3m



No.	Freq. (MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.743	57.33	-7.37	49.96	74.00	-24.04	peak			
2	2483.743	52.22	-7.37	44.85	54.00	-9.15	AVG			
3	2489.120	55.12	-7.39	47.73	74.00	-26.27	peak			
4	2489.120	50.67	-7.39	43.28	54.00	-10.72	AVG			
5	2500.000	46.38	-7.40	38.98	74.00	-35.02	peak			
6	2500.000	41.11	-7.40	33.71	54.00	-20.29	AVG			