

FCC CERTIFICATION
On Behalf of
COMAT ELECTRONIC (SHENZHEN) CO., LTD

2.4G Wireless Mouse
Model No.: CM9090G
FCC ID: RTX-CM9090G

Prepared for : COMAT ELECTRONIC (SHENZHEN) CO., LTD
Address : NO.2 Lane 1, Xin`an 3rd 28 District Baoan
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 : ATE20121916
Date of Test : Aug. 17-Aug. 23, 2012
Date of Report : Aug. 23, 2012

TABLE OF CONTENTS

Description	Page
Test Report Certification	
1. GENERAL INFORMATION	2
1.1. Description of Device (EUT).....	2
1.2. Description of Test Facility	2
1.3. Measurement Uncertainty.....	2
2. MEASURING DEVICE AND TEST EQUIPMENT	2
3. SUMMARY OF TEST RESULTS.....	2
4. FUNDAMENTAL AND HARMONICS RADIATED EMISSION FOR SECTION 15.249(A) 2	2
4.1. Block Diagram of Test Setup.....	2
4.2. The Emission Limit	2
4.3. Configuration of EUT on Measurement	2
4.4. Operating Condition of EUT	2
4.5. Test Procedure	2
4.6. The Field Strength of Radiation Emission Measurement Results	2
5. SPURIOUS RADIATED EMISSION FOR SECTION 15.249(D)	2
5.1. Block Diagram of Test Setup.....	2
5.2. The Emission Limit For Section 15.249(d)	2
5.3. EUT Configuration on Measurement	2
5.4. Operating Condition of EUT	2
5.5. Test Procedure	2
5.6. The Emission Measurement Result	2
6. BAND EDGES	2
6.1. The Requirement	2
6.2. EUT Configuration on Measurement	2
6.3. Operating Condition of EUT	2
6.4. Test Procedure	2
6.5. The Measurement Result	2
7. ANTENNA REQUIREMENT.....	2
7.1. The Requirement	2
7.2. Antenna Construction	2

APPENDIX I (TEST CURVES)

Test Report Certification

Applicant : COMAT ELECTRONIC (SHENZHEN) CO., LTD
 Manufacturer : COMAT ELECTRONIC (SHENZHEN) CO., LTD
 EUT Description : 2.4G Wireless Mouse
 (A) MODEL NO.: CM9090G
 (B) Trade Name.: COMAT
 (C) POWER SUPPLY: 3V DC ("AAA" batteries 2×)

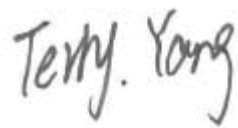
Measurement Procedure Used:

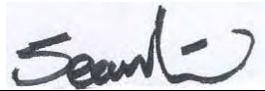
FCC Rules and Regulations Part 15 Subpart C Section 15.249 ANSI C63.4: 2009

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 : Aug. 17-Aug. 23, 2012

Prepared by : 
 (Engineer)

Approved & Authorized Signer : 
 (Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT	:	2.4G Wireless Mouse
Model Number	:	CM9090G
Power Supply	:	3V DC (“AAA” batteries 2×)
Operate Frequency	:	2402-2479MHz
Applicant	:	COMAT ELECTRONIC (SHENZHEN) CO., LTD
Address	:	No.2 Lane 1, Xin'an 3rd 28 District Baoan
Manufacturer	:	COMAT ELECTRONIC (SHENZHEN) CO., LTD
Address	:	No.2 Lane 1, Xin'an 3rd 28 District Baoan
Date of sample received	:	Aug. 17, 2012
Date of Test	:	Aug.17-Aug. 23, 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	Type	S/N	Calibrated date	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 7, 2012	Jan. 7, 2013
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 7, 2012	Jan. 7, 2013
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 7, 2012	Jan. 7, 2013
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 7, 2012	Jan. 7, 2013
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 7, 2012	Jan. 7, 2013
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 7, 2012	Jan. 7, 2013
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 7, 2012	Jan. 7, 2013
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 7, 2012	Jan. 7, 2013
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 7, 2012	Jan. 7, 2013
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 7, 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)

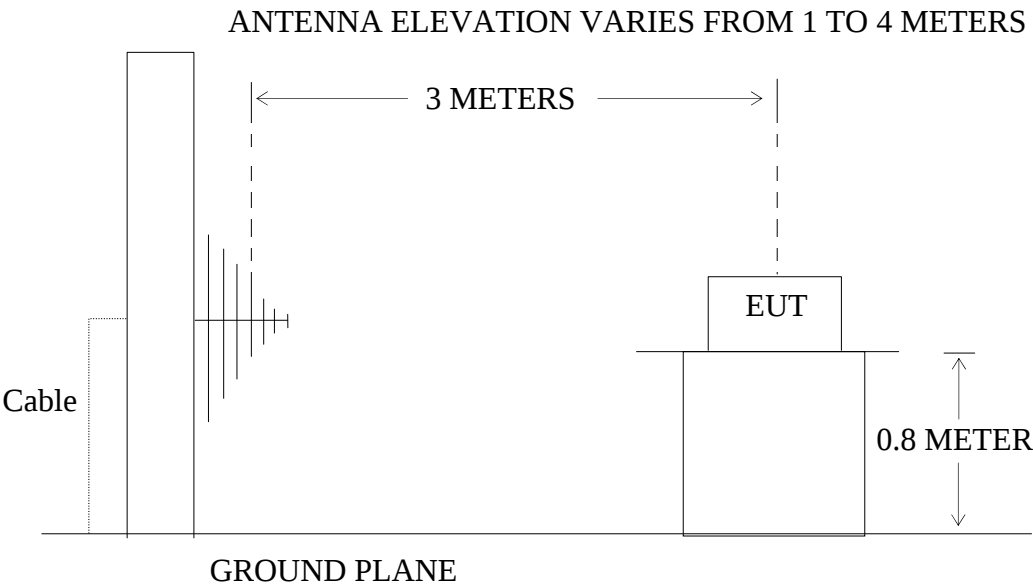
4.1. Block Diagram of Test Setup

4.1.1. Block diagram of connection between the EUT and simulators



(EUT: 2.4G Wireless Mouse)

4.1.2. Semi-Anechoic Chamber Test Setup Diagram



(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 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 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 : CM9090G
 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.. We are select 2402 MHz, 2439MHz and 2479MHz 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: 2009 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver is set at 1000 kHz.

4.6.The Field Strength of Radiation Emission Measurement Results

PASS.

Date of Test:	Aug 22-23, 2012	Temperature:	25°C
EUT:	2.4G Wireless Mouse	Humidity:	50%
Model No.:	CM9090G	Power Supply:	3V DC (“AAA” batteries 2×)
Test Mode:	TX 2402MHz	Test Engineer:	LGWADE

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	
2402.000	95.87	99.77	-7.59	88.28	92.18	94	114	-5.72	-24.82	Vertical
2402.000	100.25	103.37	-7.59	92.80	95.78	94	114	-1.20	-18.22	Horizontal

Harmonics and spurious 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	
4804.000	47.95	52.11	-0.71	47.24	51.40	54	74	-6.76	-22.60	Vertical
4804.000	49.03	52.22	-0.71	48.32	51.51	54	74	-5.68	-22.49	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:

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

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

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

Date of Test:	Aug 22-23, 2012	Temperature:	25°C
EUT:	2.4G Wireless Mouse	Humidity:	50%
Model No.:	CM9090G	Power Supply:	3V DC ("AAA" batteries 2 ×)
Test Mode:	TX 2439MHz	Test Engineer:	LGWADE

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	
2439.00	99.67	102.84	-7.42	92.25	95.42	94	114	-1.75	-18.58	Horizon
2439.00	95.78	98.94	-7.42	88.36	91.52	94	114	-5.645	-22.48	Vertical

Harmonics and Spurious 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	
4878.000	45.37	48.38	-0.23	45.14	48.15	54	74	-8.86	-20.10	Vertical
4878.000	52.97	55.91	-0.23	52.74	55.68	54	74	-1.26	-18.32	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:	Aug 22-23, 2012	Temperature:	25°C
EUT:	2.4G Wireless Mouse	Humidity:	50%
Model No.:	CM9090G	Power Supply:	3V DC ("AAA" batteries 2 ×)
Test Mode:	TX 2479MHz	Test Engineer:	LGWADE

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	
2479.000	99.35	102.30	-7.33	92.02	94.80	94	114	-5.55	-22.07	Horizon
2479.000	95.78	99.26	-7.33	46.26	78.25	94	114	-47.74	-35.75	Vertical

Harmonics and Spurious 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	
4958.00	47.70	50.93	0.24	47.94	51.17	54	74	-5.55	-22.07	Vertical
4958.00	51.08	54.92	0.24	51.32	54.92	54	74	-2.68	-29.48	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)

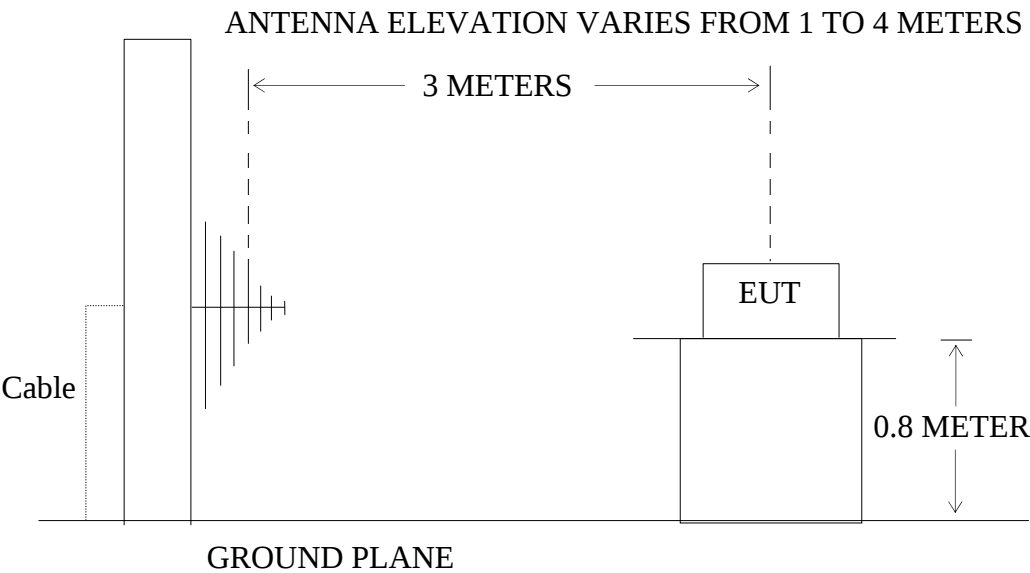
5.1. Block Diagram of Test Setup

5.1.1. Block diagram of connection between the EUT and simulators



(EUT: 2.4G Wireless 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

Frequency (MHz)	Limit		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.
	Field Strength of Quasi-peak Value (microvolts/m)	Field Strength of Quasi-peak Value (dBμV/m)	
30 - 88	100	40	
88 - 216	150	43.5	
216 - 960	200	46	
Above 960	500	54	

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 : CM9090G
 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 2402-2479MHz. We are select 2402MHz, 2439MHz, and 2479MHz 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 100 kHz in 30-1000MHz. and set at 1MHz in above 1000MHz.

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

The final measurement in band 9-90 kHz, 110-490 kHz 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:	Aug 17, 2012	Temperature:	25°C
EUT:	2.4G Wireless Mouse	Humidity:	50%
Model No.:	CM9090G	Power Supply:	3V DC (“AAA” batteries 2×)
Test Mode:	TX 2402MHz	Test Engineer:	LGWADE

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
103.3353	14.29	13.94	28.23	43.50	-15.27	Vertical
358.4497	10.59	21.20	31.79	46.00	-14.21	Vertical
103.3353	11.79	13.94	25.73	43.50	-17.77	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:	Aug 17, 2012	Temperature:	25°C
EUT:	2.4G Wireless Mouse	Humidity:	50%
Model No.:	CM9090G	Power Supply:	3V DC (“AAA” batteries 2×)
Test Mode:	TX 2439MHz	Test Engineer:	LGWADE

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
103.3353	11.32	13.94	25.26	43.50	-18.24	Vertical
358.4497	9.36	21.20	30.56	46.00	-15.44	Vertical
103.3353	12.96	13.94	26.90	43.50	-16.60	Horizontal
358.4497	10.68	21.20	31.88	46.00	-14.12	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:	Aug 17, 2012	Temperature:	25°C
EUT:	2.4G Wireless Mouse	Humidity:	50%
Model No.:	CM9090G	Power Supply:	3V DC (“AAA” batteries 2×)
Test Mode:	TX 2479MHz	Test Engineer:	LGWADE

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
103.3353	13.06	13.94	27.00	43.50	-16.50	Vertical
358.4497	10.28	21.20	31.48	46.00	-14.52	Vertical
103.3353	13.40	13.94	27.34	43.50	-16.16	Horizontal
358.4497	11.34	21.20	32.54	46.00	-13.46	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:

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

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

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 Mouse (EUT)

Model Number : CM9090G
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 2402-2479MHz. We are select 2402MHz and 2479MHz 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:

6.5.The Measurement Result

Pass.

Date of Test:	Aug 22, 2012	Temperature:	25°C
EUT:	2.4G Wireless Mouse	Humidity:	50%
Model No.:	CM9090G	Power Supply:	3V DC (“AAA” batteries 2×)
Test Mode:	TX 2402MHz	Test Engineer:	LGWADE

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	
2400.000	55.44	59.40	-7.46	47.98	51.94	54	74	-6.02	-22.06	Vertical
2400.000	60.02	64.05	-7.46	52.56	56.59	54	74	-1.44	-17.41	Horizontal
2390.179	45.55	48.83	-7.53	38.02	41.30	54	74	-15.98	-32.70	Vertical
2390.068	47.58	52.29	-7.53	40.32	44.76	54	74	-13.68	-29.24	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 QP (up to 1G) and peak (above 1G) values.

Date of Test:	Aug 22, 2012	Temperature:	25°C
EUT:	2.4G Wireless Mouse	Humidity:	50%
Model No.:	CM9090G	Power Supply:	3V DC ("AAA" batteries 2×)
Test Mode:	TX 2479MHz	Test Engineer:	LGWADE

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	
2483.500	42.83	46.00	-7.37	35.46	38.63	54	74	-18.54	-35.37	Vertical
2483.500	45.49	47.80	-7.37	38.12	40.43	54	74	-15.88	-33.57	Horizontal
2491.127	46.03	49.30	-7.38	38.65	41.92	54	74	-15.35	-32.08	Vertical
2491.167	48.72	51.54	-7.38	41.34	44.16	54	74	-12.66	-29.84	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 QP (up to 1G) and peak (above 1G) values.

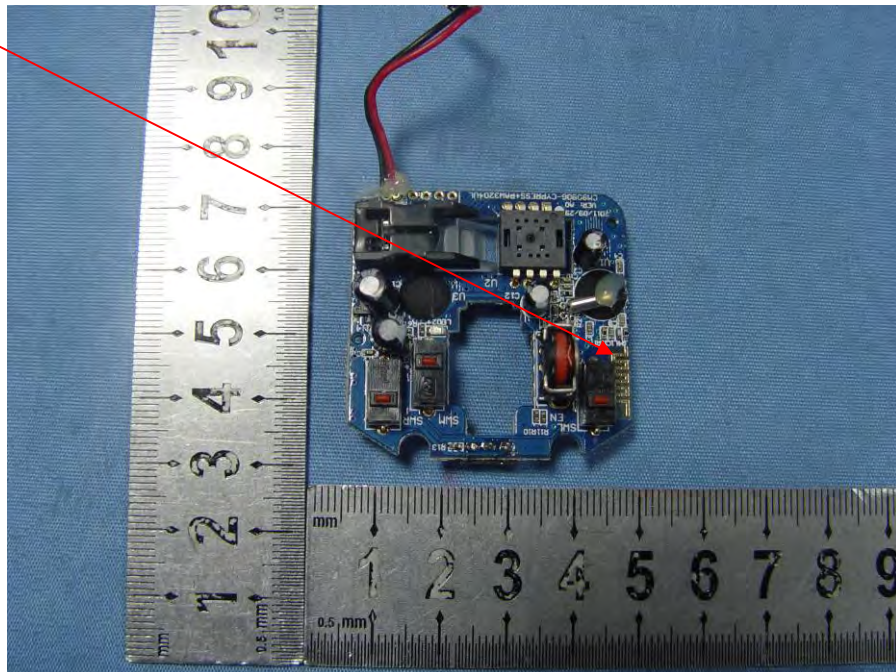
7. ANTENNA REQUIREMENT

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

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.: li #1

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: 2.4G WIRELESS MOUSE

Mode: TRANSMITTING(2402MHz)

Model: CM9090G

Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Polarization: Vertical

Power Source: DC 3V

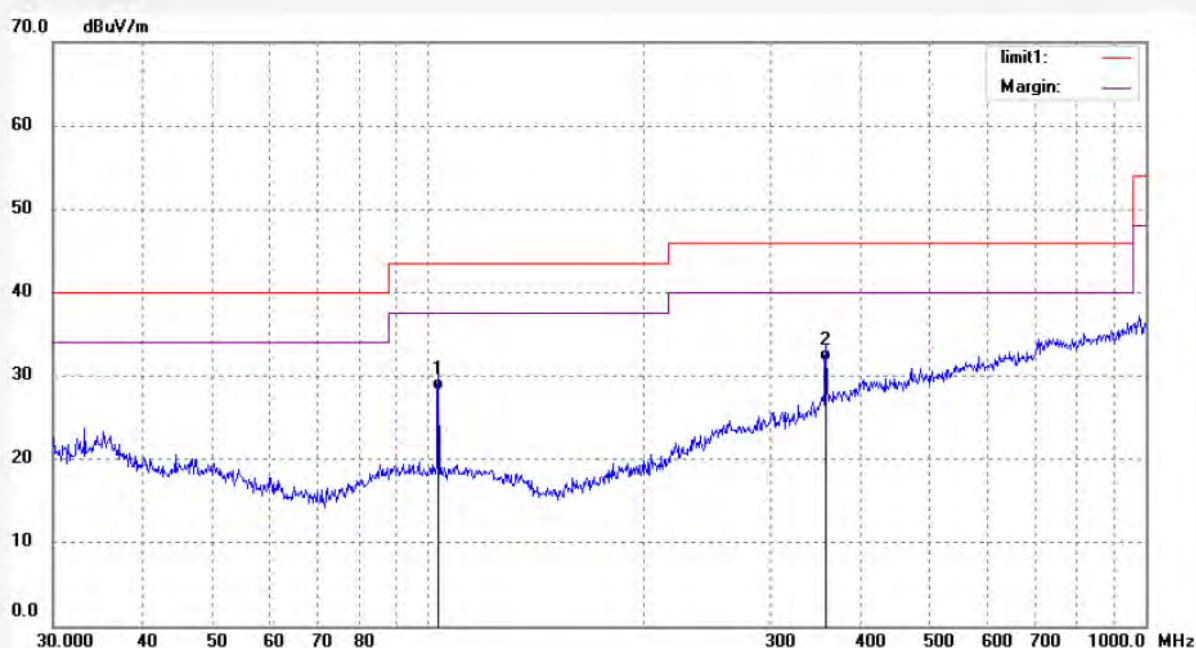
Date: 2012/08/17

Time: 14:57:56

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	103.3353	14.29	13.94	28.23	43.50	-15.27	QP			
2	358.4497	10.59	21.20	31.79	46.00	-14.21	QP			



ACCURATE TECHNOLOGY CO., LTD.

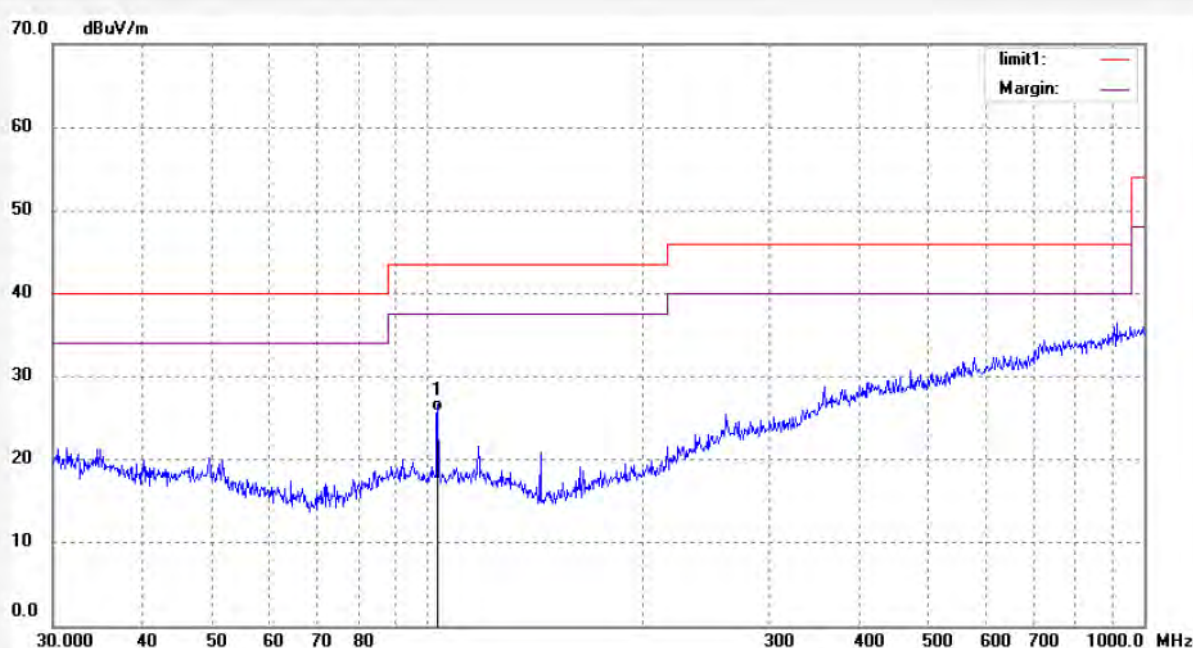
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: li #2
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: 2.4G WIRELESS MOUSE
Mode: TRANSMITTING(2402MHz)
Model: CM9090G
Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Polarization: Horizontal
Power Source: DC 3V
Date: 2012/08/17
Time: 15:00:21
Engineer Signature: LGWADE
Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	103.3353	11.79	13.94	25.73	43.50	-17.77	QP			



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.: li #3

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: 2.4G WIRELESS MOUSE

Mode: TRANSMITTING(2402MHz)

Model: CM9090G

Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Polarization: Vertical

Power Source: DC 3V

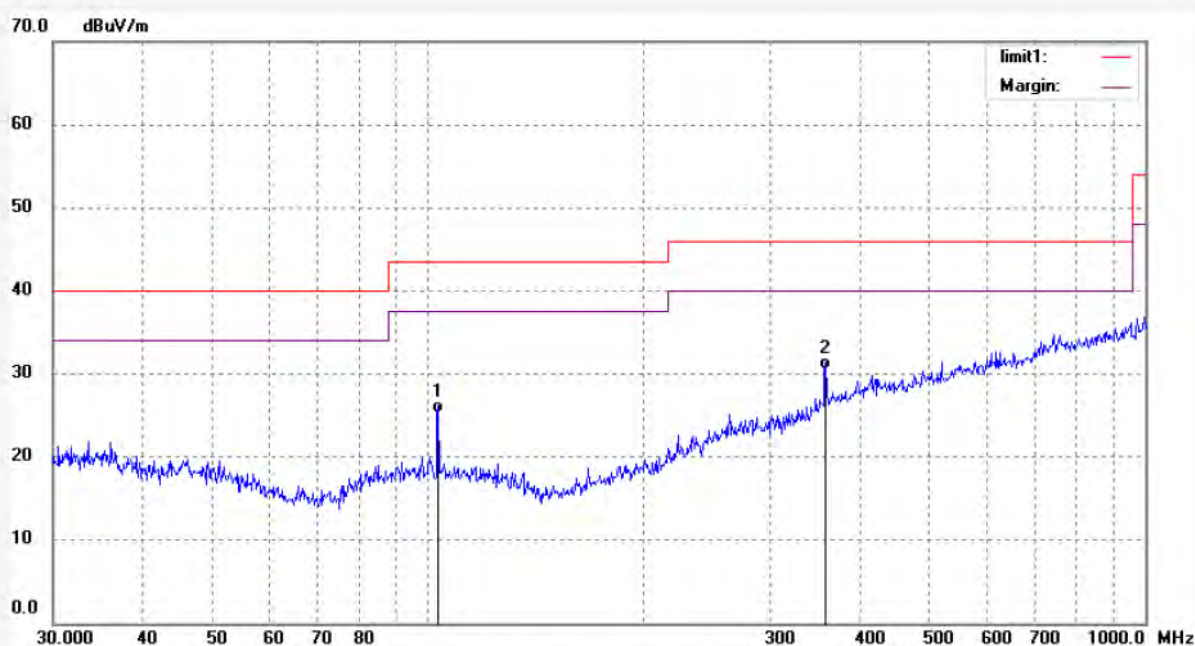
Date: 2012/08/17

Time: 15:03:01

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	103.3353	11.32	13.94	25.26	43.50	-18.24	QP			
2	358.4497	9.36	21.20	30.56	46.00	-15.44	QP			



ACCURATE TECHNOLOGY CO., LTD.

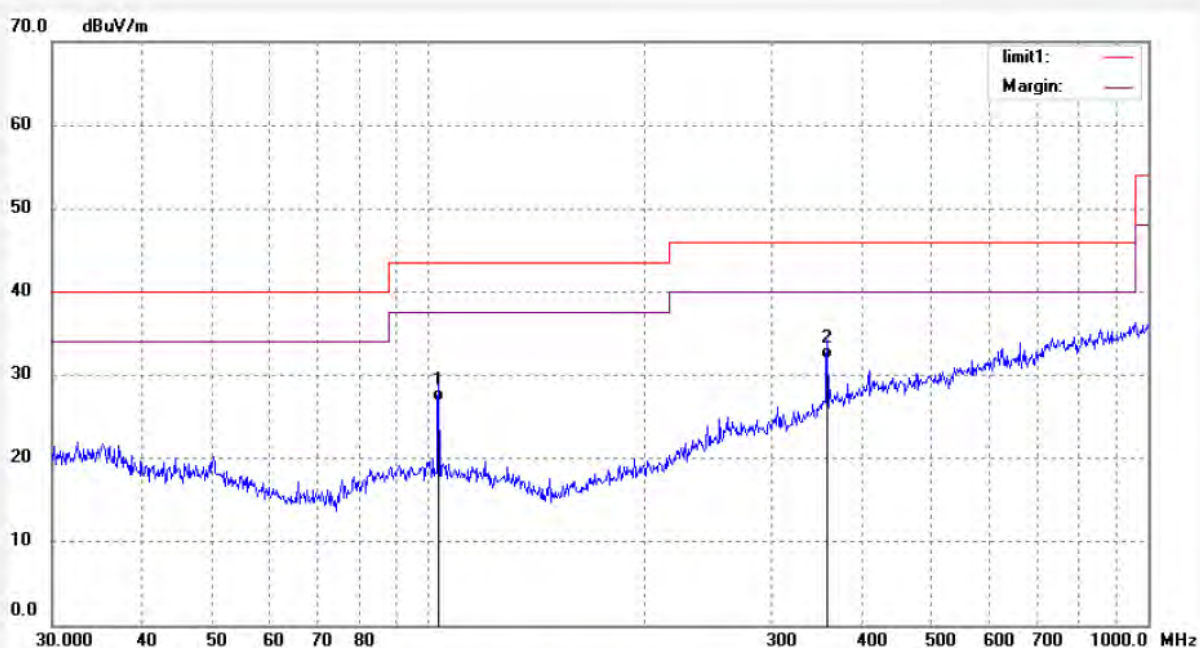
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: li #4
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: 2.4G WIRELESS MOUSE
Mode: TRANSMITTING(2439MHz)
Model: CM9090G
Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Polarization: Horizontal
Power Source: DC 3V
Date: 2012/08/17
Time: 15:05:33
Engineer Signature: LGWADE
Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	103.3353	12.96	13.94	26.90	43.50	-16.60	QP			
2	358.4497	10.68	21.20	31.88	46.00	-14.12	QP			



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.: li #5

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: 2.4G WIRELESS MOUSE

Mode: TRANSMITTING(2479MHz)

Model: CM9090G

Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Polarization: Vertical

Power Source: DC 3V

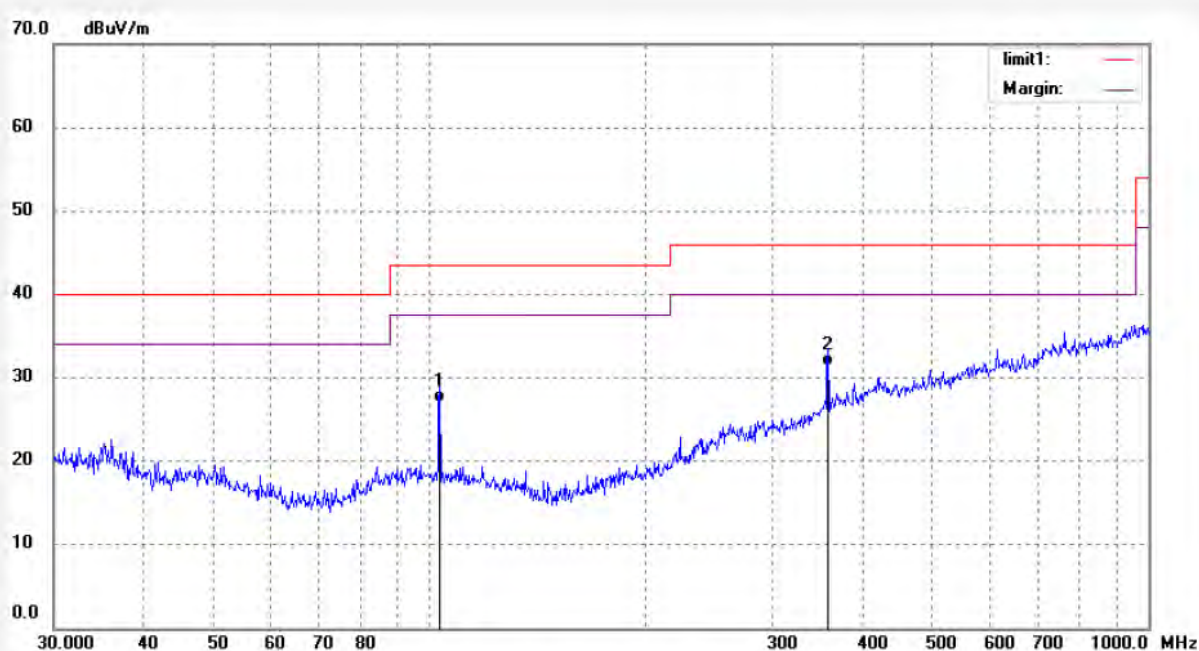
Date: 2012/08/17

Time: 15:07:40

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	103.3353	13.06	13.94	27.00	43.50	-16.50	QP			
2	358.4497	10.28	21.20	31.48	46.00	-14.52	QP			



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.: li #6

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: 2.4G WIRELESS MOUSE

Mode: TRANSMITTING(2479MHz)

Model: CM9090G

Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Polarization: Horizontal

Power Source: DC 3V

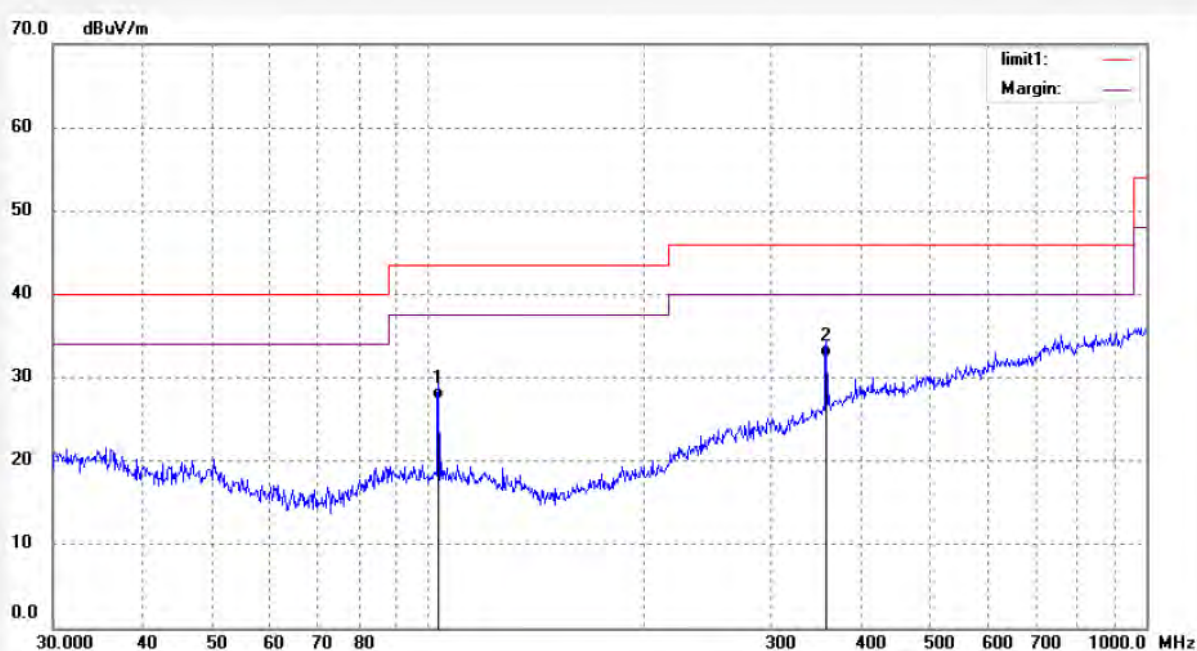
Date: 2012/08/17

Time: 15:09:41

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	103.3353	13.40	13.94	27.34	43.50	-16.16	QP			
2	358.4497	11.34	21.20	32.54	46.00	-13.46	QP			



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.: li #13

Standard: FCC 15C PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: 2.4G WIRELESS MOUSE

Mode: TRANSMITTING(2402MHz)

Model: CM9090G

Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Polarization: Horizontal

Power Source: DC 3V

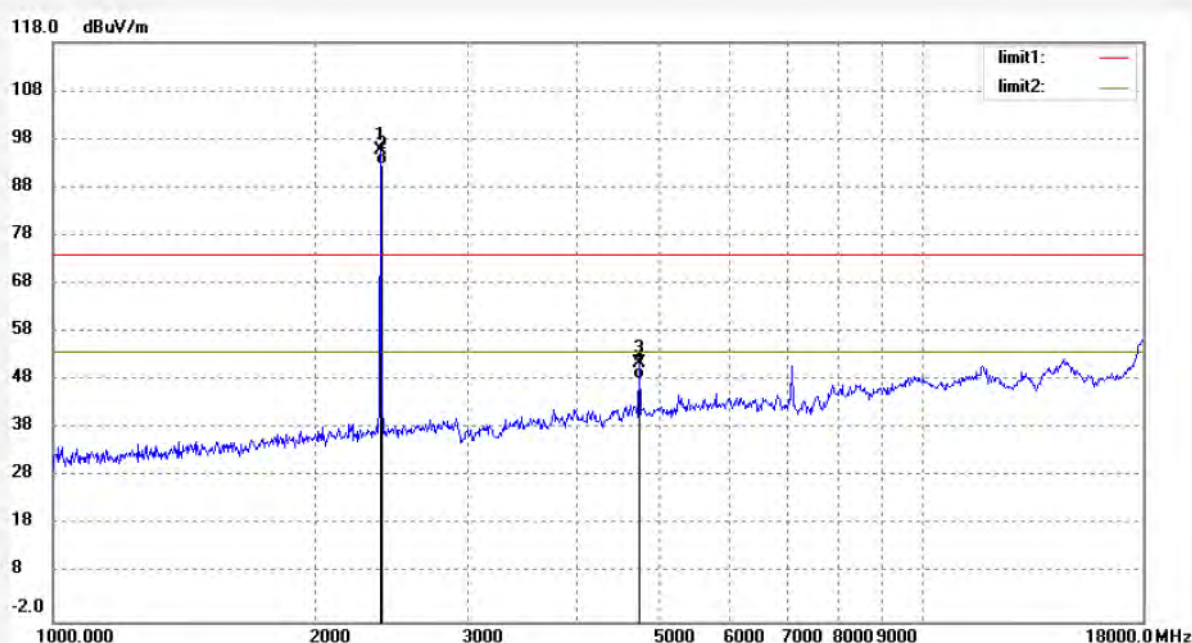
Date: 12/08/22/

Time: 8/28/11

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	103.37	-7.59	95.78	114.00	-18.22	peak			
2	2402.000	100.25	-7.45	92.80	94.00	-1.20	AVG			
3	4804.000	52.22	-0.71	51.51	74.00	-22.49	peak			
4	4804.000	49.03	-0.71	48.32	54.00	-5.68	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.: li #14

Standard: FCC 15C PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: 2.4G WIRELESS MOUSE

Mode: TRANSMITTING(2402MHz)

Model: CM9090G

Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Polarization: Vertical

Power Source: DC 3V

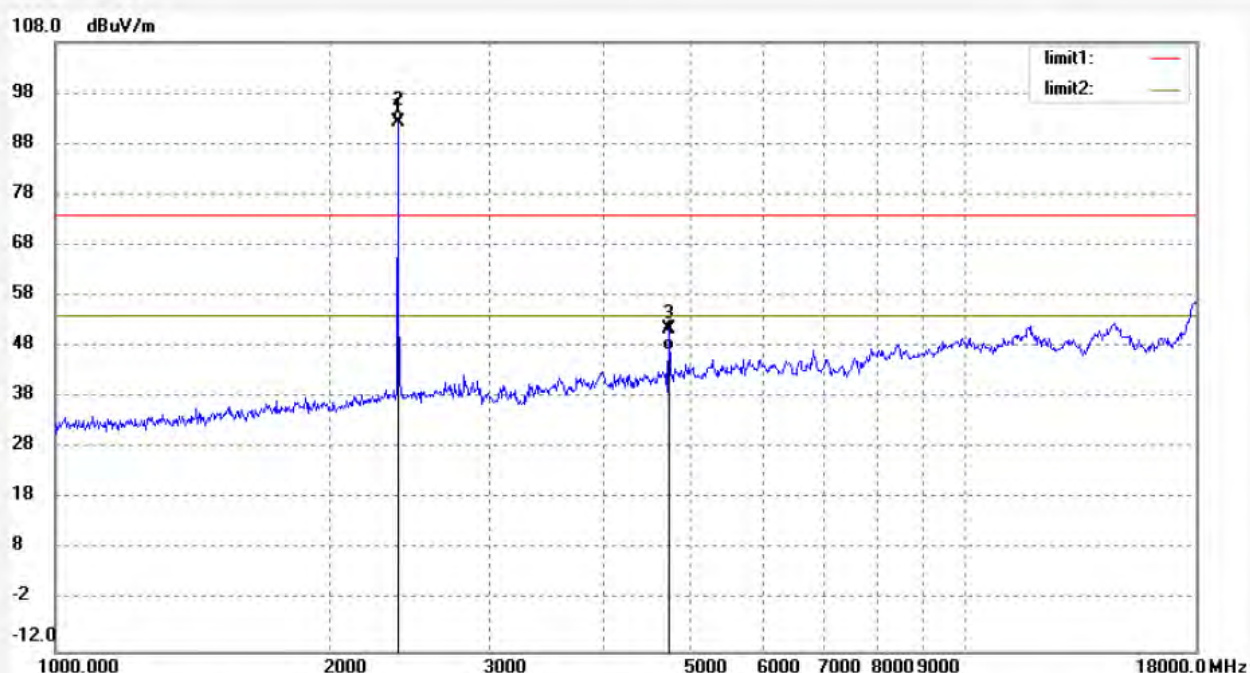
Date: 12/08/22/

Time: 8/47/23

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	99.77	-7.59	92.18	114.00	-24.82	peak			
2	2402.000	95.87	-7.59	88.28	94.00	-5.72	AVG			
3	4804.000	52.11	-0.71	51.40	74.00	-22.60	peak			
4	4804.000	47.95	-0.71	47.24	54.00	-6.76	AVG			



ACCURATE TECHNOLOGY CO., LTD.

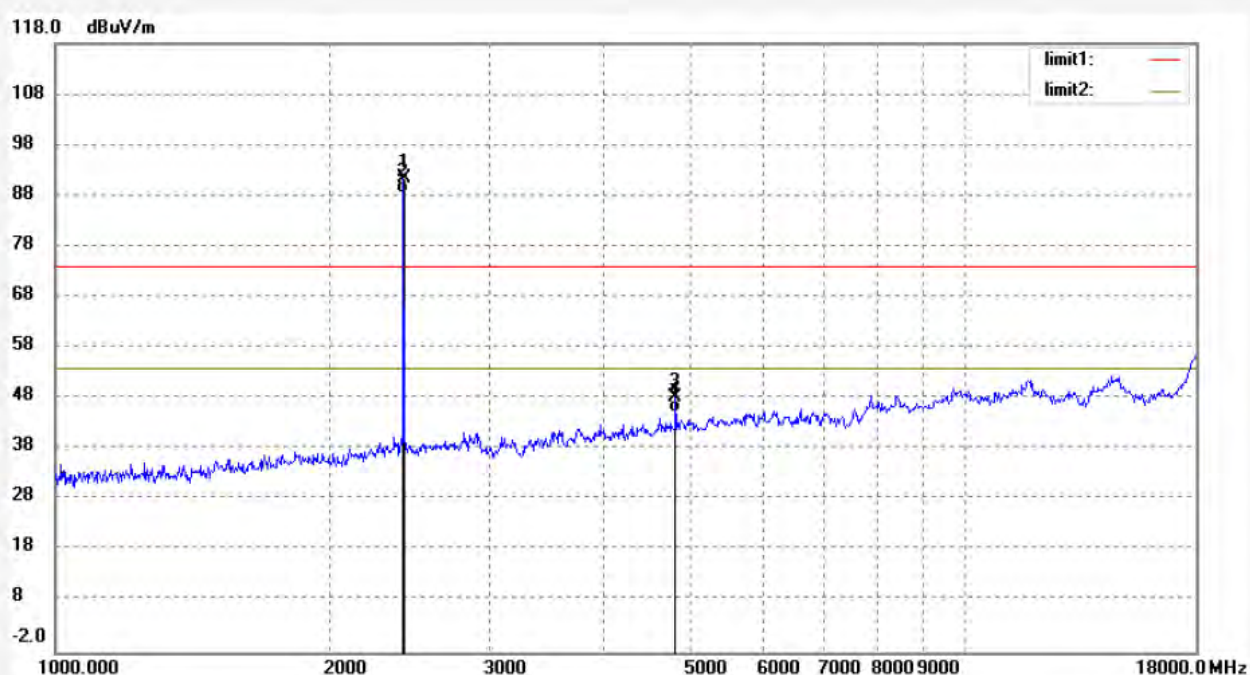
F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: li #15
Standard: FCC 15C PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: 2.4G WIRELESS MOUSE
Mode: TRANSMITTING(2439MHz)
Model: CM9090G
Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Polarization: Vertical
Power Source: DC 3V
Date: 12/08/22/
Time: 8/53/44
Engineer Signature: LGWADE
Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2439.000	98.94	-7.42	91.52	114.00	-22.48	peak			
2	2439.000	95.78	-7.42	88.36	94.00	-5.64	AVG			
3	4878.000	48.38	-0.23	48.15	74.00	-25.85	peak			
4	4878.000	45.37	-0.23	45.14	54.00	-8.86	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.: li #16

Standard: FCC 15C PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: 2.4G WIRELESS MOUSE

Mode: TRANSMITTING(2439MHz)

Model: CM9090G

Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Polarization: Horizontal

Power Source: DC 3V

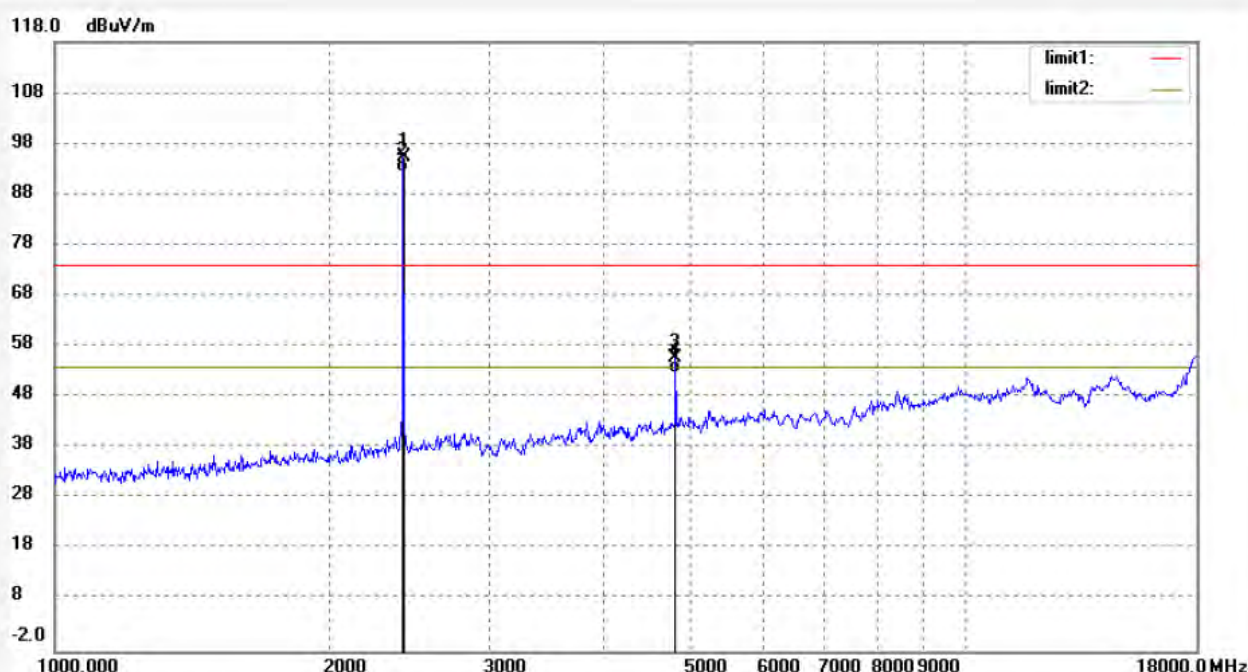
Date: 12/08/22/

Time: 8/56/57

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2439.000	102.84	-7.42	95.42	114.00	-18.58	peak			
2	2439.000	99.67	-7.42	92.25	94.00	-1.75	AVG			
3	4878.000	55.91	-0.23	55.68	74.00	-18.32	peak			
4	4878.000	52.97	-0.23	52.74	54.00	-1.26	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.: li #17

Standard: FCC 15C PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: 2.4G WIRELESS MOUSE

Mode: TRANSMITTING(2479MHz)

Model: CM9090G

Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Polarization: Horizontal

Power Source: DC 3V

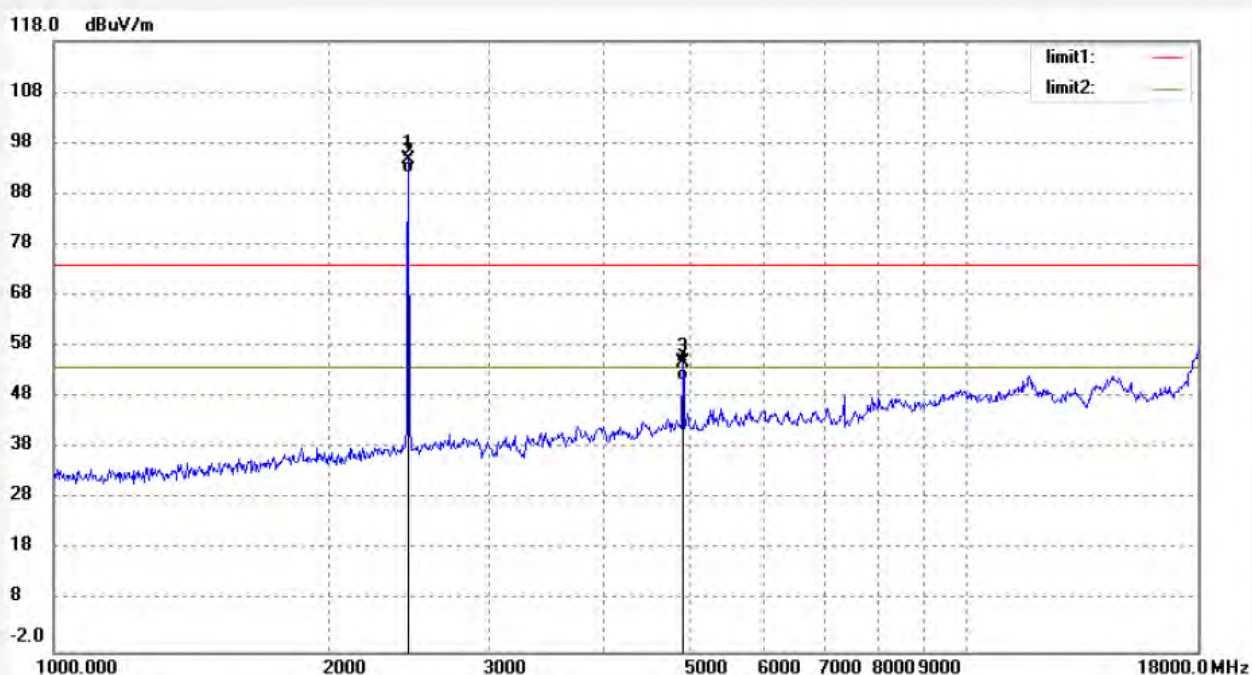
Date: 12/08/22/

Time: 8/59/32

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2479.000	102.13	-7.33	94.80	114.00	-19.20	peak			
2	2479.000	99.35	-7.33	92.02	94.00	-1.98	AVG			
3	4958.000	54.68	0.24	54.92	74.00	-19.08	peak			
4	4958.000	51.08	0.24	51.32	54.00	-2.68	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.: li #18

Standard: FCC 15C PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: 2.4G WIRELESS MOUSE

Mode: TRANSMITTING(2479MHz)

Model: CM9090G

Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Polarization: Vertical

Power Source: DC 3V

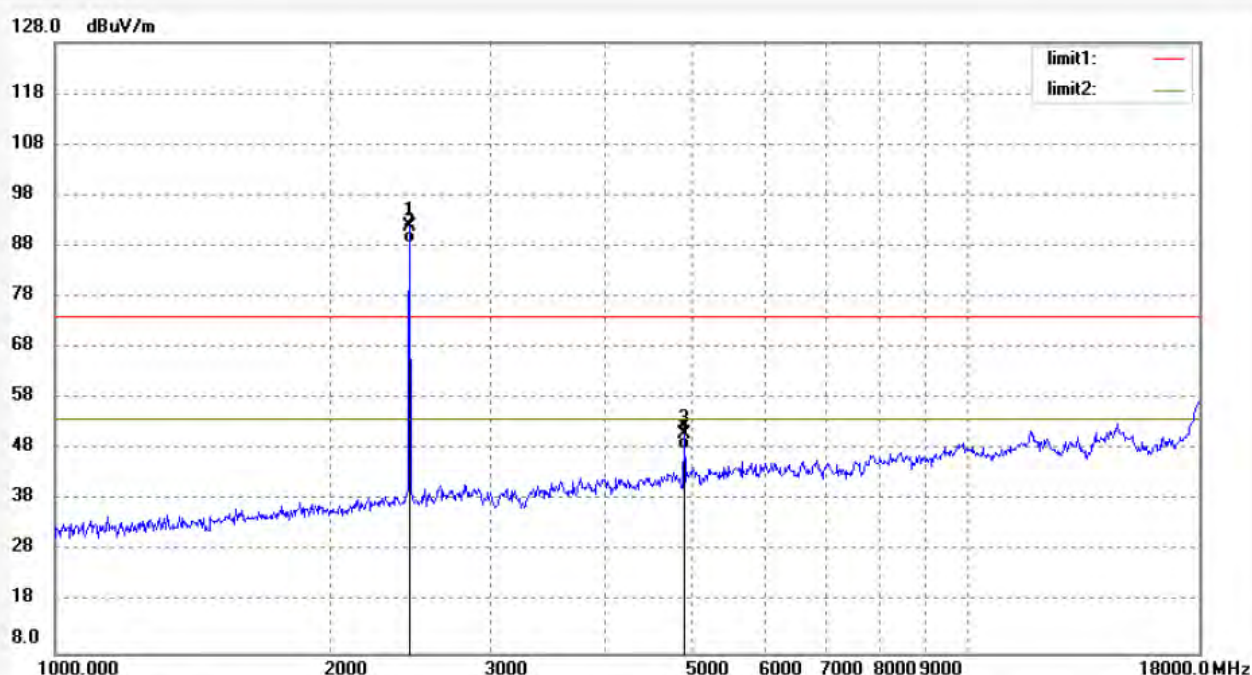
Date: 12/08/22/

Time: 9/04/39

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2479.000	99.26	-7.33	91.93	114.0	-22.07	peak			
2	2479.000	95.78	-7.33	88.45	94.00	-5.55	AVG			
3	4958.000	50.93	0.24	51.17	74.00	-22.83	peak			
4	4958.000	47.70	0.24	47.94	54.00	-6.06	AVG			



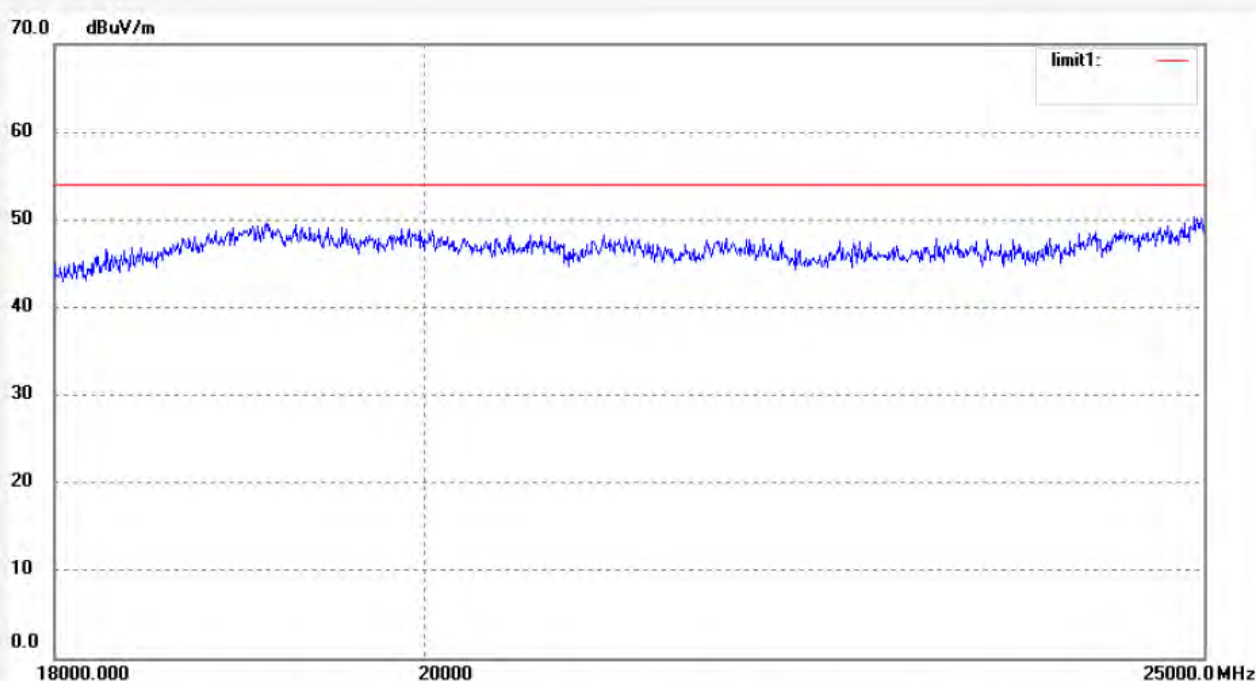
ACCURATE TECHNOLOGY CO., LTD.

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.: li#23	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC3V
Test item: Radiation Test	Date: 2012/8/23
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 20:40:21
EUT: 2.4G Wireless Optical Mouse	Engineer Signature: LGWADE
Mode: TRANSMITTING(2402MHz)	Distance: 3m
Model: CM9090G	
Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD	

Note: Report No.:ATE20121916



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


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.: li #24

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: 2.4G Wireless Optical Mouse

Mode: TRANSMITTING(2402MHz)

Model: CM9090G

Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Polarization: Vertical

Power Source: DC3V

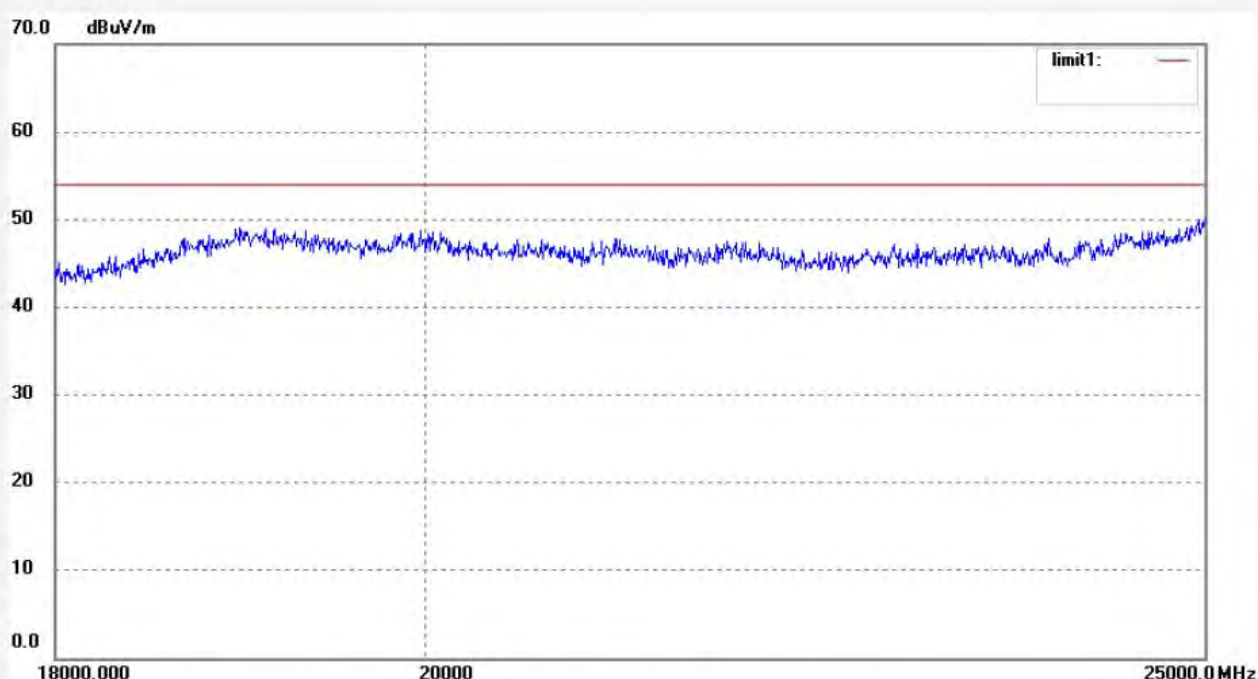
Date: 2012/8/23

Time: 20:42:32

Engineer Signature: LGWADE

Distance: 3m

Note: Report No.:ATE20121916



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



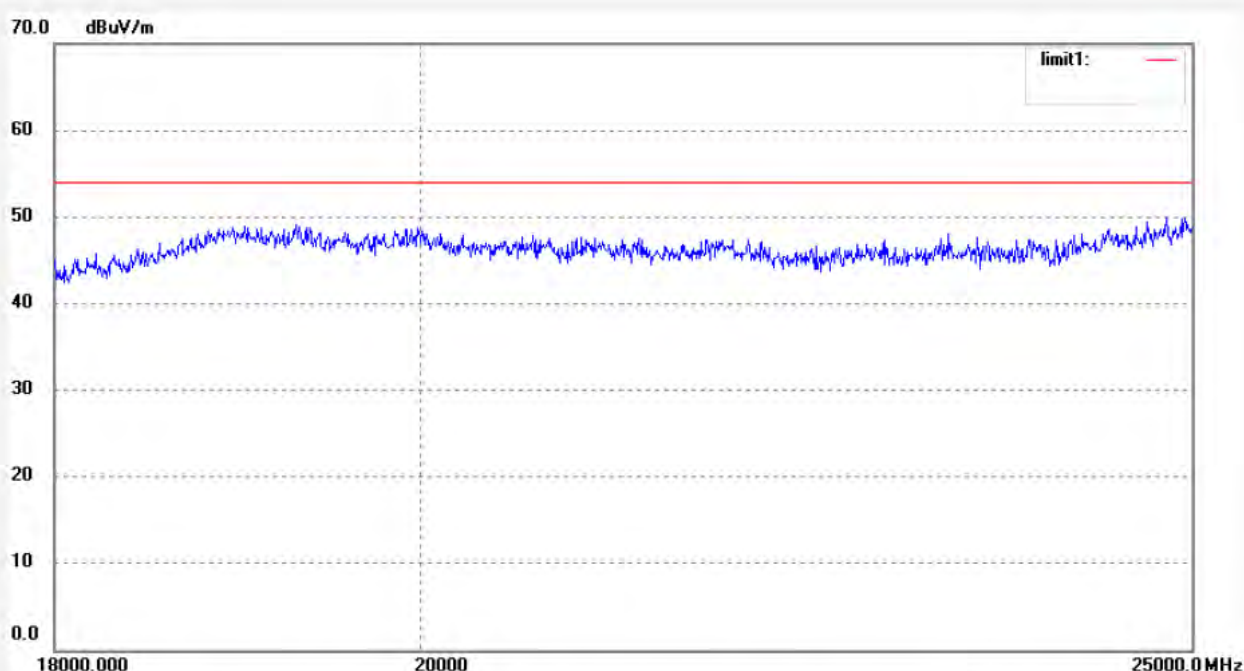
ACCURATE TECHNOLOGY CO., LTD.

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.: li #25	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC3V
Test item: Radiation Test	Date: 2012/8/23
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 20:45:17
EUT: 2.4G Wireless Optical Mouse	Engineer Signature: LGWADE
Mode: TRANSMITTING(2439MHz)	Distance: 3m
Model: CM9090G	
Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD	

Note: Report No.:ATE20121916



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



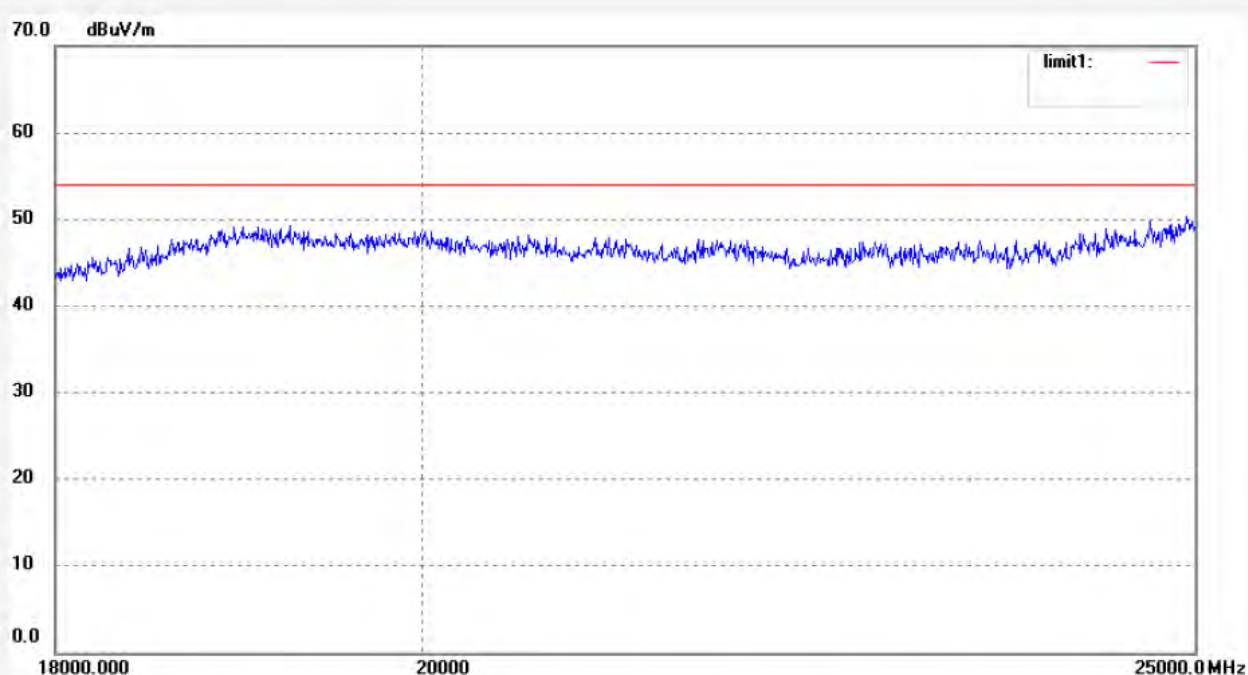
ACCURATE TECHNOLOGY CO., LTD.

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.: li #26	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC3V
Test item: Radiation Test	Date: 2012/8/23
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 20:49:26
EUT: 2.4G Wireless Optical Mouse	Engineer Signature: LGWADE
Mode: TRANSMITTING(2439MHz)	Distance: 3m
Model: CM9090G	
Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD	

Note: Report No.:ATE20121916



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


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.: li #27

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: 2.4G Wireless Optical Mouse

Mode: TRANSMITTING(2479MHz)

Model: CM9090G

Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Polarization: Horizontal

Power Source: DC3V

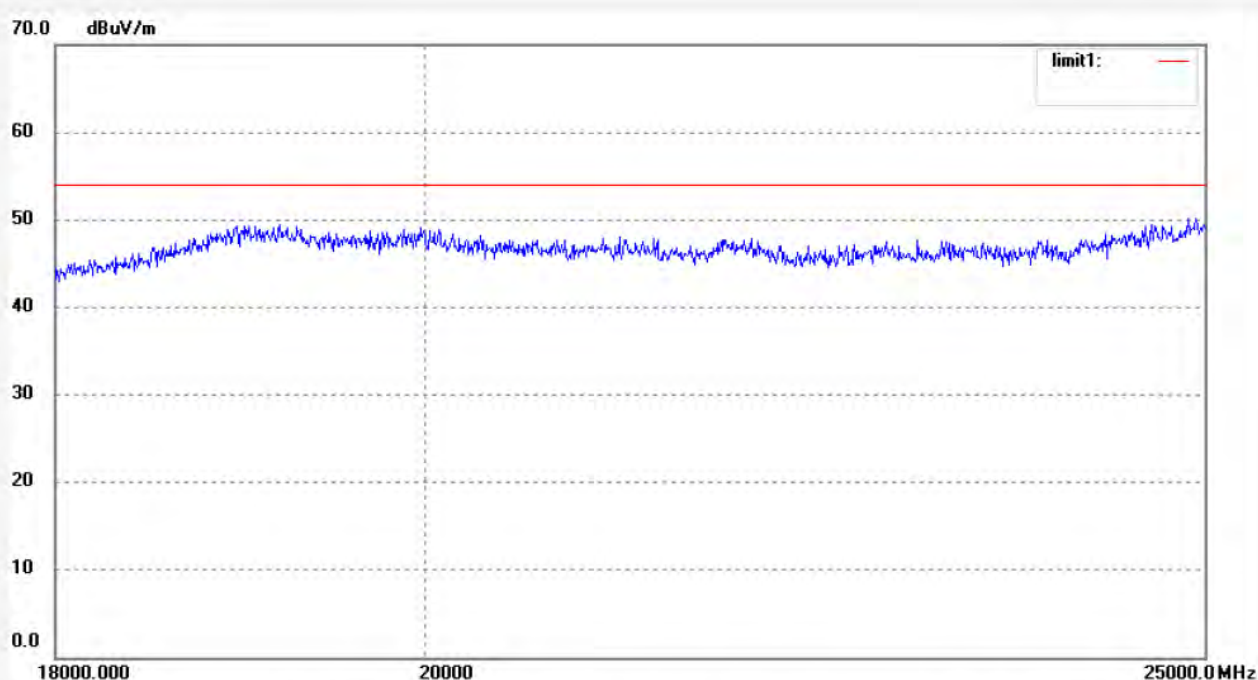
Date: 2012/8/23

Time: 20:52:36

Engineer Signature: LGWADE

Distance: 3m

Note: Report No.:ATE20121916



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


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.: li #28

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: 2.4G Wireless Optical Mouse

Mode: TRANSMITTING(2479MHz)

Model: CM9090G

Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Polarization: Vertical

Power Source: DC3V

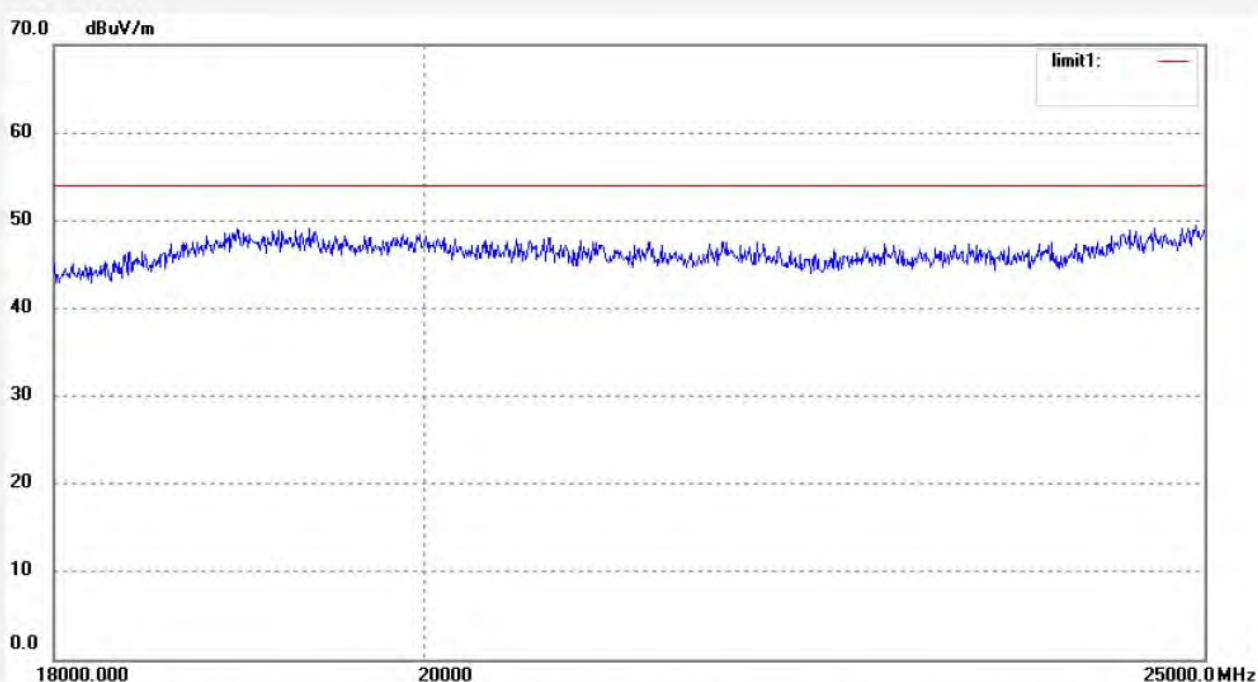
Date: 2012/8/23

Time: 20:58:26

Engineer Signature: LGWADE

Distance: 3m

Note: Report No.:ATE20121916



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



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.: li #21

Standard: FCC 15C PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: 2.4G WIRELESS MOUSE

Mode: TRANSMITTING(2402MHz)

Model: CM9090G

Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Polarization: Horizontal

Power Source: DC 3V

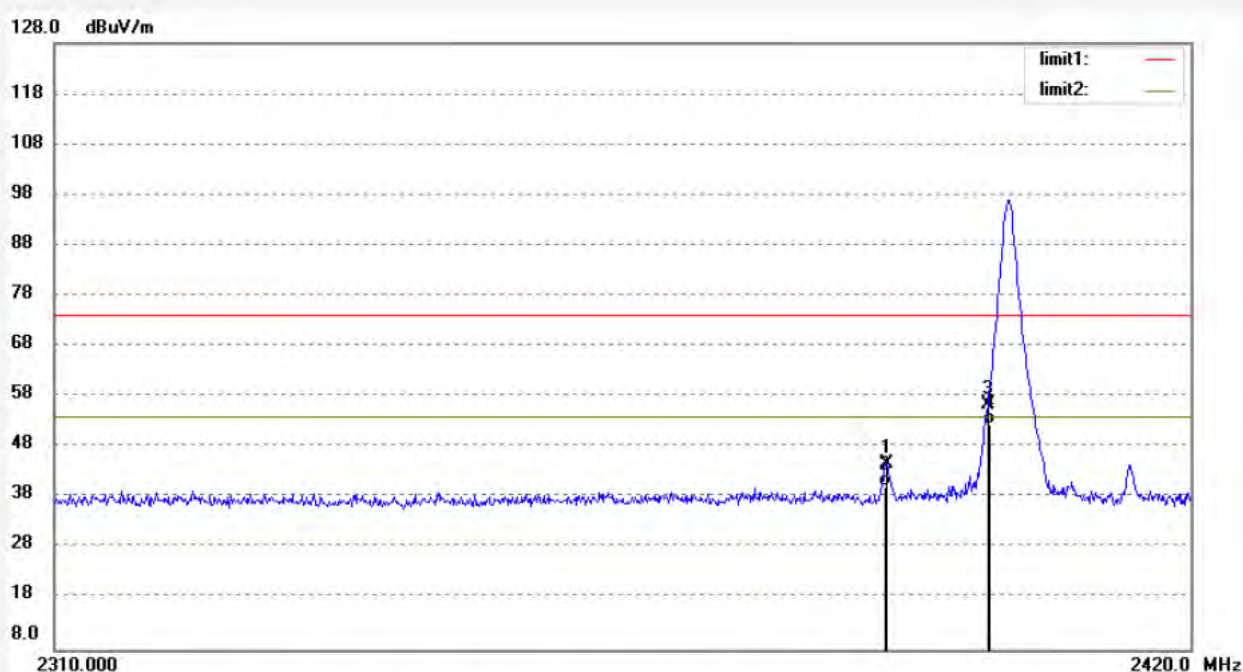
Date: 12/08/22/

Time: 9/13/34

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.068	52.29	-7.53	44.76	74.00	-29.24	peak			
2	2390.068	47.85	-7.53	40.32	54.00	-13.68	AVG			
3	2400.000	64.05	-7.46	56.59	74.00	-17.41	peak			
4	2400.000	60.02	-7.46	52.56	54.00	-1.44	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.: li #22

Standard: FCC 15C PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: 2.4G WIRELESS MOUSE

Mode: TRANSMITTING(2402MHz)

Model: CM9090G

Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Polarization: Vertical

Power Source: DC 3V

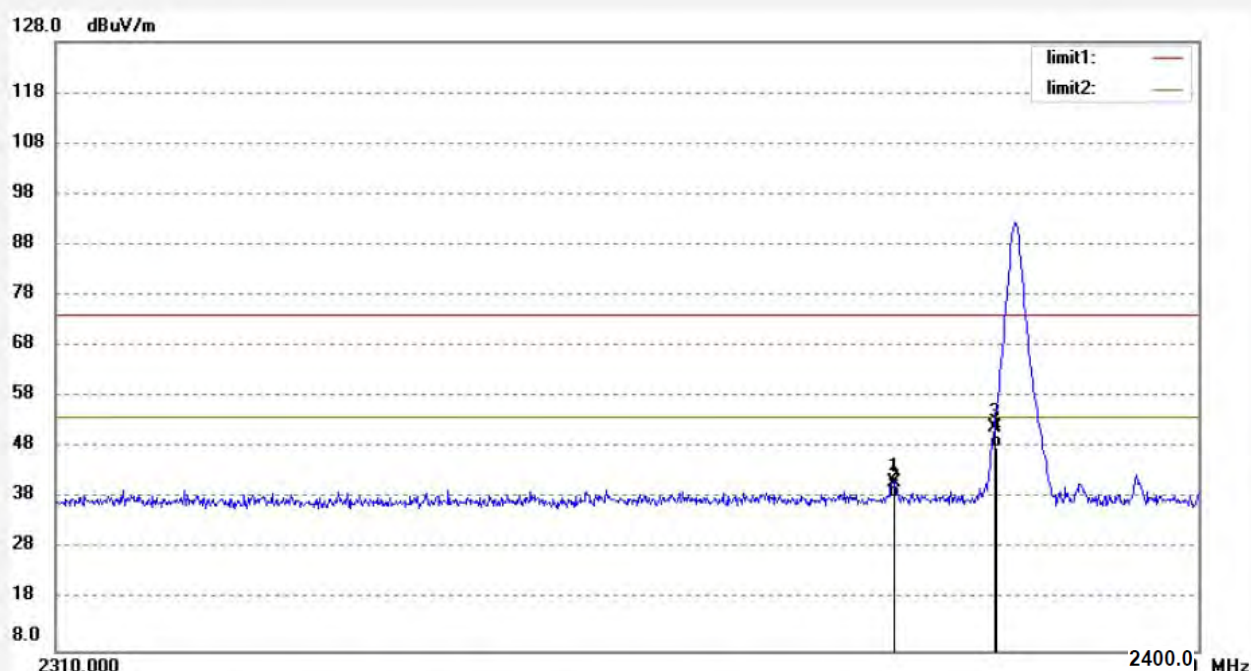
Date: 12/08/22/

Time: 9/17/19

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.179	48.83	-7.53	41.30	74.00	-32.70	peak			
2	2390.179	45.55	-7.53	38.02	54.00	-15.98	AVG			
3	2400.000	59.40	-7.46	51.94	74.00	-22.06	peak			
4	2400.000	55.44	-7.46	47.98	54.00	-6.02	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.: li #20

Standard: FCC 15C PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: 2.4G WIRELESS MOUSE

Mode: TRANSMITTING(2479MHz)

Model: CM9090G

Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Polarization: Horizontal

Power Source: DC 3V

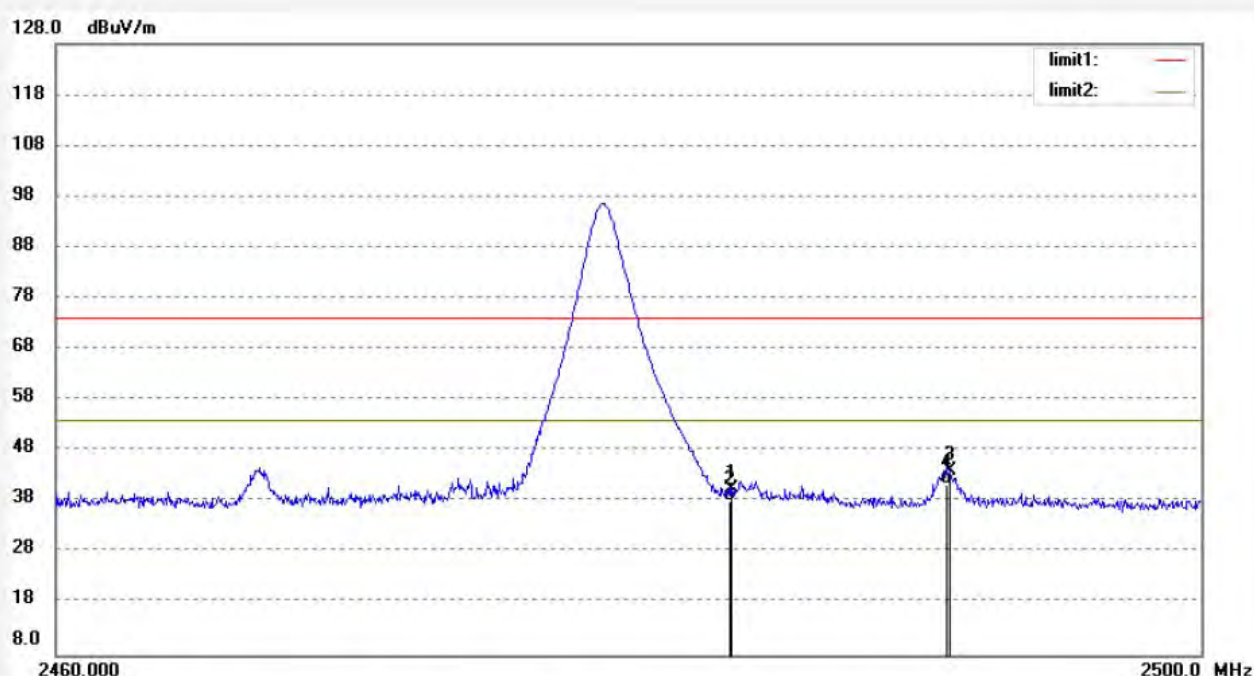
Date: 12/08/22/

Time: 9/11/38

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	47.80	-7.37	40.43	74.00	-33.57	peak			
2	2483.500	45.49	-7.37	38.12	54.00	-15.88	AVG			
3	2491.167	51.54	-7.38	44.16	74.00	-29.84	peak			
4	2491.167	48.72	-7.38	41.34	54.00	-12.66	AVG			

2481MHz Transmitting Restricted Band Spurious:

**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.: li #19

Polarization: Vertical

Standard: FCC 15C PK

Power Source: DC 3V

Test item: Radiation Test

Date: 12/08/22/

Temp.(C)/Hum.(%) 24 C / 48 %

Time: 9/09/26

EUT: 2.4G WIRELESS MOUSE

Engineer Signature: LGWADE

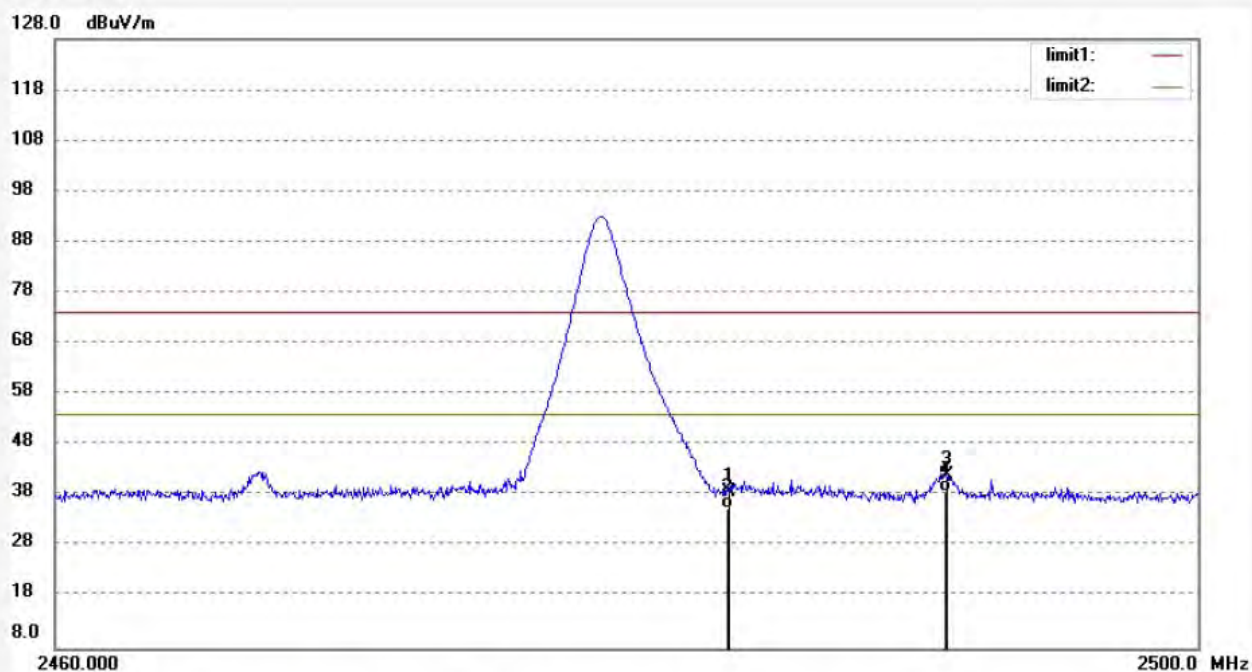
Mode: TRANSMITTING(2479MHz)

Distance: 3m

Model: CM9090G

Manufacturer: COMAT ELECTRONIC (SHENZHEN) CO.,LTD

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	46.00	-7.37	38.63	74.00	-35.37	peak			
2	2483.500	42.83	-7.37	35.46	54.00	-18.54	AVG			
3	2491.127	49.30	-7.38	41.92	74.00	-32.08	peak			
4	2491.127	46.03	-7.38	38.65	54.00	-15.35	AVG			