

Prüfbericht-Nr.: <i>Test report No.:</i>	50082857 001	Auftrags-Nr.: <i>Order No.:</i>	164090498	Seite 1 von 26 Page 1 of 26
Kunden-Referenz-Nr.: <i>Client reference No.:</i>	N/A	Auftragsdatum: <i>Order date.:</i>	12.04.2017	
Auftraggeber: <i>Client:</i>	G.tech Technology Ltd. No.8, Jinyuan 1st Road, Tangjiawan Town, High-tech Zone, Zhuhai City, Guangdong, China			
Prüfgegenstand: <i>Test item:</i>	Lenovo Wireless Receiver			
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	RG202 (Lenovo)			
Auftrags-Inhalt: <i>Order content:</i>	FCC approval			
Prüfgrundlage: <i>Test specification:</i>	CFR47 FCC Part 15.249 CFR47 FCC Part 15.207 CFR47 FCC Part 15.209 CFR47 FCC Part 15.107 CFR47 FCC Part 15.109 FCC KDB publication 447498 D01 v06			
Wareneingangsdatum: <i>Date of receipt:</i>	12.04.2017	Please refer to photo documents		
Prüfmuster-Nr.: <i>Test sample No.:</i>	A000527401-003 A000527401-004			
Prüfzeitraum: <i>Testing period:</i>	28.04.2017 - 06.05.2017			
Ort der Prüfung: <i>Place of testing:</i>	Accurate Technology Co., Ltd.			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von / tested by:		kontrolliert von / reviewed by:		
 Alex Lan / Project Engineer		 Winnie Hou / Technical Certifier		
Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>
30.06.2017	Alex Lan / Project Engineer		30.06.2017	Winnie Hou / Technical Certifier
Sonstiges / Other:				
FCC ID: 009RG202				
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged:</i>		
* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specifications(s) F(ail) = failed a.m. test specifications(s)		N/A = nicht anwendbar N/T = nicht getestet N/A = not applicable N/T = not tested		
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

Test Summary

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 FIELD STRENGTH OF FUNDAMENTAL AND HARMONICS

RESULT: Pass

5.1.3 BANDWIDTH

RESULT: Pass

5.1.4 RADIATED SPURIOUS EMISSION & BAND EDGE

RESULT: Pass

5.1.5 CONDUCTED EMISSION

RESULT: Pass

5.1.6 RADIATED EMISSION

RESULT: Pass

6.1.1 ELECTROMAGNETIC FIELDS

RESULT: Pass

Contents

1	GENERAL REMARKS	4
1.1	COMPLEMENTARY MATERIALS	4
2	TEST SITES	4
2.1	TEST FACILITIES	4
2.2	LIST OF TEST AND MEASUREMENT INSTRUMENTS.....	5
2.3	TRACEABILITY	7
2.4	CALIBRATION	7
2.5	MEASUREMENT UNCERTAINTY.....	7
2.6	LOCATION OF ORIGINAL DATA.....	7
2.7	STATUS OF FACILITY USED FOR TESTING.....	7
3	GENERAL PRODUCT INFORMATION	8
3.1	PRODUCT FUNCTION AND INTENDED USE.....	8
3.2	RATINGS AND SYSTEM DETAILS	8
3.3	INDEPENDENT OPERATION MODES	9
3.4	NOISE GENERATING AND NOISE SUPPRESSING PARTS.....	9
3.5	SUBMITTED DOCUMENTS.....	9
4	TEST SET-UP AND OPERATION MODES	10
4.1	PRINCIPLE OF CONFIGURATION SELECTION	10
4.2	TEST OPERATION AND TEST SOFTWARE.....	10
4.3	SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT.....	10
4.4	COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE	10
4.5	TEST SETUP DIAGRAM	11
5	TEST RESULTS	13
5.1	TRANSMITTER REQUIREMENT & TEST SUITES	13
5.1.1	<i>Antenna Requirement</i>	<i>13</i>
5.1.2	<i>Field Strength of Fundamental and Harmonics</i>	<i>14</i>
5.1.3	<i>Bandwidth.....</i>	<i>15</i>
5.1.4	<i>Radiated Spurious Emission & Band Edge.....</i>	<i>18</i>
5.1.5	<i>Conducted Emission</i>	<i>19</i>
5.1.6	<i>Radiated Emission</i>	<i>20</i>
6	SAFETY HUMAN EXPOSURE	21
6.1	RADIO FREQUENCY EXPOSURE COMPLIANCE	21
6.1.1	<i>Electromagnetic Fields</i>	<i>21</i>
7	PHOTOGRAPHS OF THE TEST SET-UP	22
8	LIST OF TABLES.....	26
9	LIST OF PHOTOGRAPHS	26

1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:
Appendix A: Test Results.

2 Test Sites

2.1 Test Facilities

Accurate Technology Co., Ltd.

F1, Bldg. A, Changyuan New Material Port Keyuan Rd., Science & Industry Park, Nanshan Shenzhen,
518057, P.R. China

FCC Registration No.: 752051

Test site Industry Canada No.: 5077A-2

The tests at the test sites have been conducted under the supervision of a TÜV engineer.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Accurate Technology Co., Ltd.

Radio Spectrum Test				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Spectrum Analyzer	R&S	FSV40	101495	06.01.2018
Radiated Emission & Spurious Emission				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Spectrum Analyzer	R&S	FSV40	101495	06.01.2018
Test Receiver	R&S	ESCS30	100307	06.01.2018
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	09.01.2018
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	09.01.2018
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	09.01.2018
RF Switching Unit+PreAMP	Compliance Direction	RSU-M2	38322	09.01.2018
Pre-Amplifier	R&S	CBLU11835 40-01	3791	06.01.2018
50 Coaxial Switch	Anritsu Corp	MP59B	6200506474	06.01.2018
RF Coaxial Cable	SUHNER	N-3m	No.8	06.01.2018
RF Coaxial Cable	RESENBERGER	N-3.5m	No.9	06.01.2018
RF Coaxial Cable	SUHNER	N-6m	No.10	06.01.2018
RF Coaxial Cable	RESENBERGER	N-12m	No.11	06.01.2018
50_ Coaxial Switch	Anritsu Corp	MP59B	6200283933	06.01.2018
Conducted Emission				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Test Receiver	Rohde & Schwarz	ESCS30	100307	06.01.2018
L.I.S.N.	Schwarzbeck	NLSK8126	8126431	06.01.2018
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100815	09.01.2018
50Ω Coaxial Switch	Anritsu Corp	MP59B	6200283933	09.01.2018
VOLTAGE PROBE	Schwarzbeck	TK9416	N/A	09.01.2018
RF CURRENT PROBE	Rohde & Schwarz	EZ-17	100048	09.01.2018
8-Wire Impedance Stabilisation Network	Schwarzbeck	CAT5 8158	8158-0035	06.01.2018

Prüfbericht - Nr.: 50082857 001*Test Report No.*

Seite 6 von 26

Page 6 of 26

RF Coaxial Cable	SUHNER	N-2m	No.2	06.01.2018
RF Coaxial Cable	SUHNER	N-2m	No.3	06.01.2018
RF Coaxial Cable	SUHNER	N-2m	No.14	06.01.2018

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table

Item		Extended Uncertainty
Radiated Emission (9kHz-30MHz)	Field strength (dBμV/m)	U=3.08dB, k=2, σ=95%
Radiated Emission (30-1000MHz)	Field strength (dBμV/m)	U=4.42dB, k=2, σ=95%
Radiated Emission (above 1000MHz)	Field strength (dBμV/m)	U=4.06dB, k=2, σ=95%
Conducted Emission (0.15 - 30MHz)	Disturbance Voltage (dBuV)	U=±2.90dB, k=2, σ=95%
Radio Spectrum		± 0.60 dB
Ambient Temperature		25 °C
Relative Humidity		56 %
Atmospheric Pressure		101 kPa

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The Accurate Technology Co., Ltd. Test facility located at F1, Bldg. A, Changyuan New Material Port Keyuan Rd., Science & Industry Park, Nanshan Shenzhen, 518057, P.R. China is listed on the US Federal Communications Commission and Innovation, Science and Economic Development Canada list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The EUT is Lenovo Wireless Receiver device. It supports generic 2.4GHz wireless technology.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Technical Specification of Transmitter

Technical Specification	Value
Kind of Equipment	Lenovo Wireless Receiver
Type Designation	RG202
Trade mark	Lenovo
FCC ID	OO9RG202
IC / HVIN	20090-RG202 / RG202
Operating Frequency	2402 ~ 2479MHz
Operating Temperature Range	0 °C ~ +45 °C
Operating Voltage	DC 5.0V via USB port
Testing Voltage	DC 5.0V via USB port
Type of Modulation	GFSK
Channel Number	78 channels
Channel Separation	1 MHz
Antenna Type	PCB Layout Antenna
Antenna number	1
Antenna Gain	-2.26 dBi

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, transmitting mode
 - 1. Low channel
 - 2. Middle channel
 - 3. High channel
- B. On, wireless data transmitting
- C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- | | |
|---------------------------|-------------------------|
| - Application Form | |
| - Block Diagram | - Circuit Diagram |
| - FCC Label and Location | - Operation Description |
| - Model Difference Letter | - User Manual |

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.10: 2013 & ANSI C63.4: 2014.

4.3 Special Accessories and Auxiliary Equipment

Table 3: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N
Notebook	Lenovo	4290-RT8	R9-FW93G
Router	TP-Link	TL-WR847N	1161248001207

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

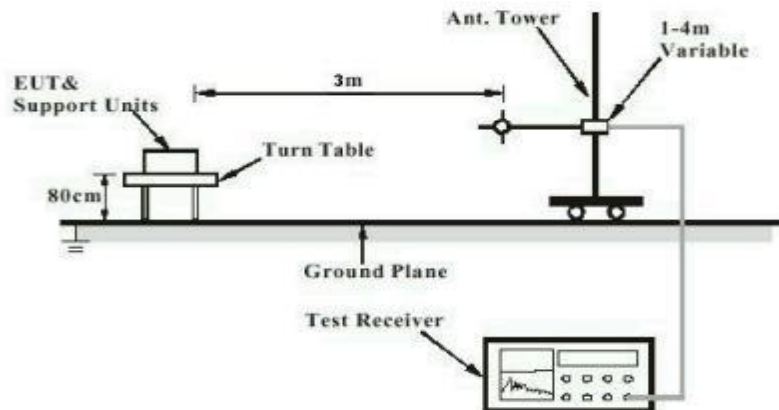


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

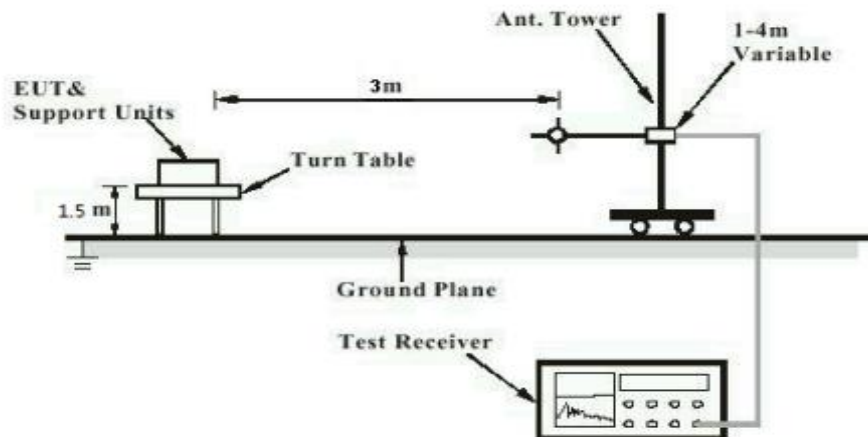


Diagram of Measurement Equipment Configuration for Mains Conduction Measurement

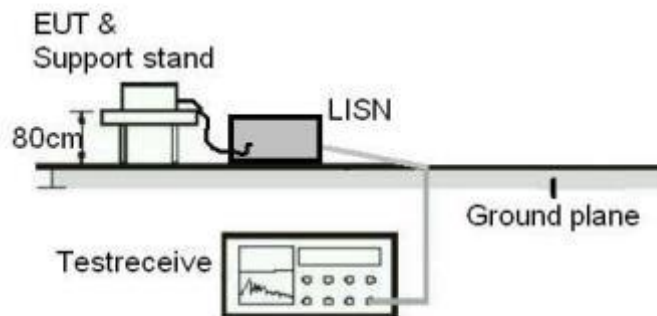
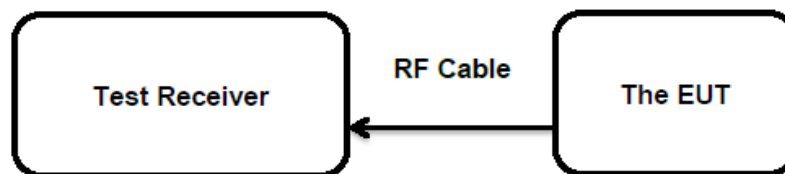


Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:

Pass

Test Specification

Test standard

FCC Part 15.203

Limit

the use of antennas with directional gains that do not exceed 6 dBi

According to the manufacturer declared, the EUT has an internal antennas, the directional gain of antenna is -2.26 dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

5.1.2 Field Strength of Fundamental and Harmonics

RESULT:**Pass****Test Specification**

Test standard	: FCC Part 15.249(a)
Basic standard	: ANSI C63.10: 2013
Limits	: Refer to FCC Part 15.209(a)
Kind of test site	: 3m Semi-anechoic Chamber

Test Setup

Date of testing	: 02.05.2017
Input voltage	: DC 5.0V via USB port
Operation mode	: A
Ambient temperature	: 23°C
Relative humidity	: 48 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

5.1.3 Bandwidth

RESULT:**Pass****Test Specification**

Test standard : FCC Part 15.215
Basic standard : ANSI C63.10: 2013
Kind of test site : Shielded Room

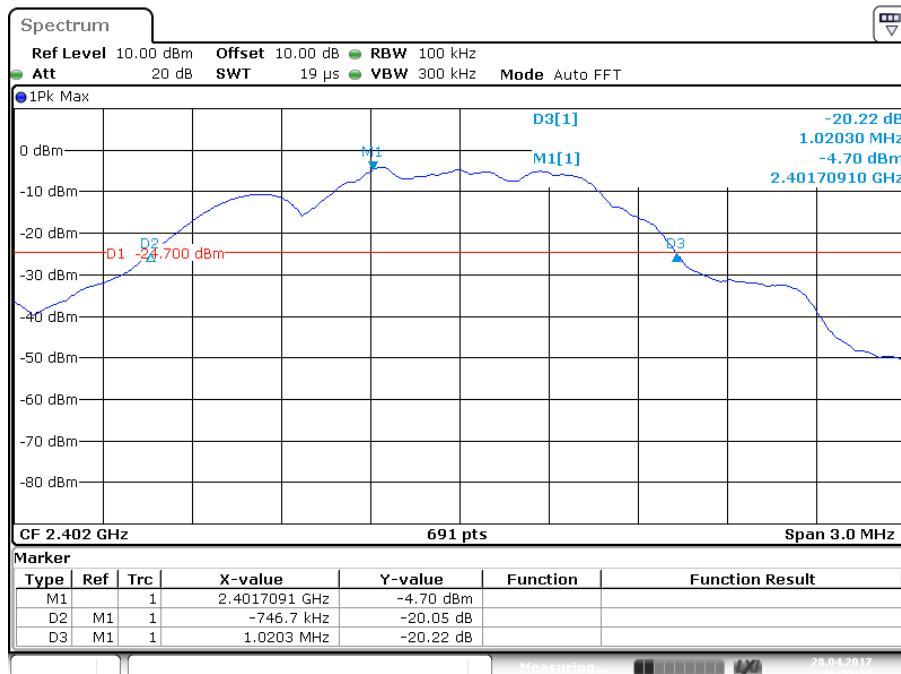
Test Setup

Date of testing : 28.04.2017
Input voltage : DC 5.0V via USB port
Operation mode : A
Ambient temperature : 23 °C
Relative humidity : 48 %
Atmospheric pressure : 101 kPa

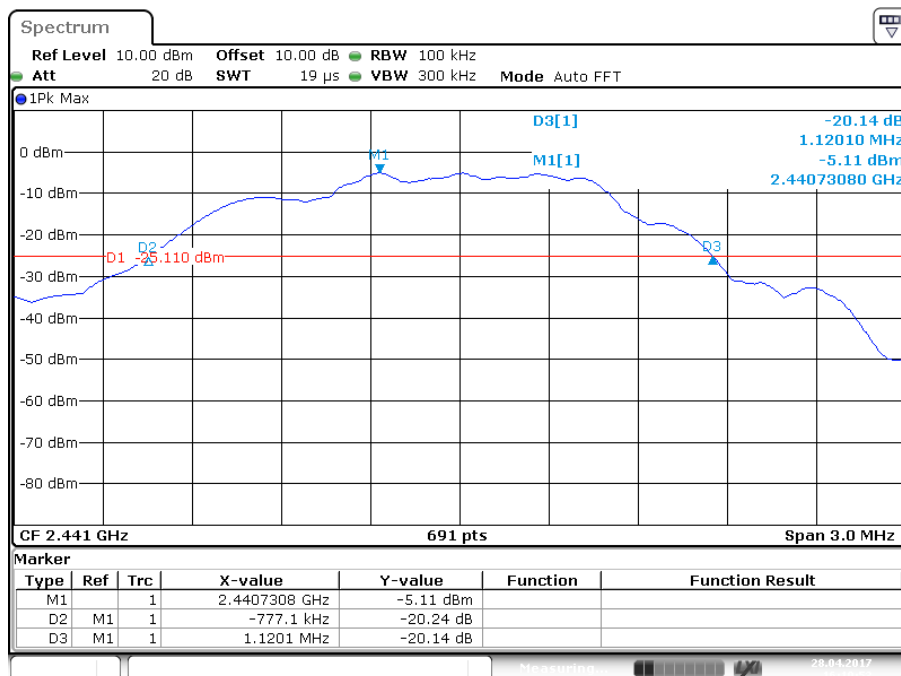
Table 4: Test Result of 20dB Bandwidth

2.4 GHz Wireless			
Channel	Channel Frequency (MHz)	20dB Bandwidth (kHz)	Verdict
Low Channel	2402	1767.0	Pass
Mid Channel	2441	1897.2	Pass
High Channel	2479	1858.1	Pass

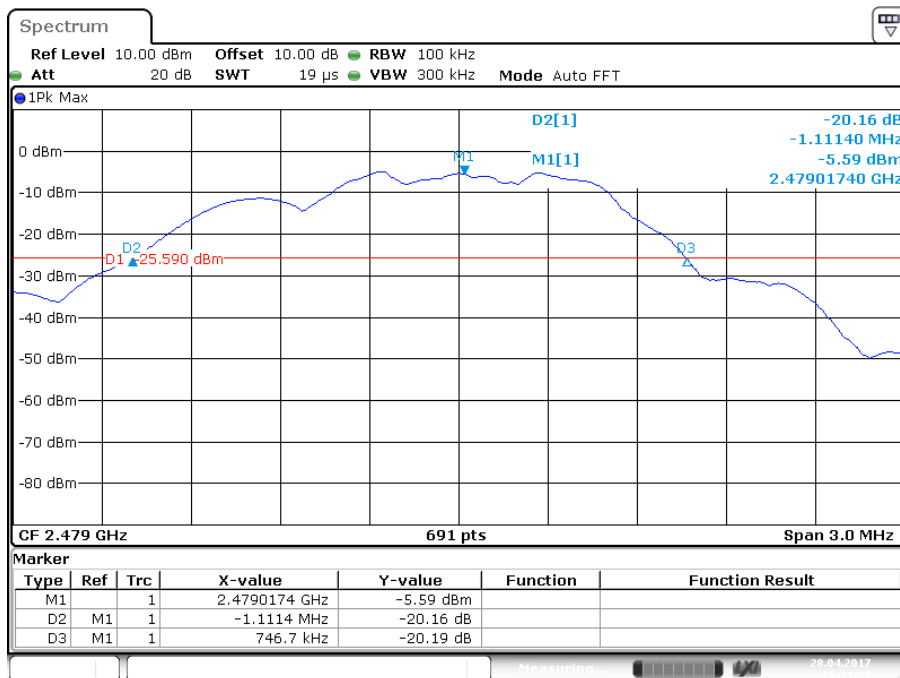
For the measurement records, refer to following test plot:

Test Plot of 20dB Bandwidth


Date: 28.APR.2017 16:23:38



Date: 28.APR.2017 16:19:53



Date: 28.APR.2017 16:21:28

5.1.4 Radiated Spurious Emission & Band Edge

RESULT:**Pass****Test Specification**

Test standard	: FCC Part 15.249 (d) & FCC Part 15.205
Basic standard	: ANSI C63.10: 2013
Limits	: Refer to FCC Part 15.209 (a) and 15.249 (d)
Kind of test site	: 3m Semi-anechoic Chamber

Test Setup

Date of testing	: 05.05.2017
Input voltage	: DC 5.0V via USB port
Operation mode	: A
Ambient temperature	: 23 °C
Relative humidity	: 48 %
Atmospheric pressure	: 101 kPa

Remark:

For the measurement records, refer to the appendix A.

5.1.5 Conducted Emission

RESULT:**Pass****Test Specification**

Test standard	: FCC Part 15.107(a) & FCC Part 15.207(a)
Basic standard	: ANSI C63.10: 2013 & ANSI C63.4: 2014
Frequency range	: 0.15 – 30MHz
Limits	: FCC Part 15.107(a) & FCC Part 15.207(a)
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 05.05.2017
Input voltage	: AC 120V, 60Hz
Operation mode	: A, B
Earthing	: Not Connected
Ambient temperature	: 23 °C
Relative humidity	: 48 %
Atmospheric pressure	: 101 kPa

Remark:

For the measurement records, refer to the appendix A.

5.1.6 Radiated Emission

RESULT:**Pass****Test Specification**

Test standard	FCC Part 15.109(a) & FCC Part 15.209(a)
Basic standard	ANSI C63.4: 2014
Frequency range	30 - 6000MHz
Classification	Class B
Limits	FCC Part 15.109(a) & FCC Part 15.209(a)
Kind of test site	3m Semi-anechoic Chamber

Test Setup

Date of testing	06.05.2017
Input voltage	DC 5.0V via USB port
Operation mode	A
Earthing	Not connected
Ambient temperature	23 °C
Relative humidity	48 %
Atmospheric pressure	101 kPa

For the measurement records, refer to the appendix A.

6 Safety Human Exposure

6.1 Radio Frequency Exposure Compliance

6.1.1 Electromagnetic Fields

RESULT:**Pass****Test Specification**

Test standard : CFR47 FCC Part 2.1093

Limit : FCC KDB Publication 447498 v06

Measurement Record:

The separation distance of the dongle should be 5mm. The measured maximum specified e.i.r.p of the dongle is 91.19dBuV/m $\approx$ -4.04dBm, which is far below the SAR exclusion threshold level 10 mW (Appendix A, SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and $\leq$ 50 mm), hence the EUT is excluded from SAR evaluation according to FCC KDB publication 447498 D01: Mobile and Portable RF Exposure. Guidance v06.

8 List of Tables

Table 1: List of Test and Measurement Equipment.....	5
Table 2: Technical Specification of Transmitter	8
Table 3: List of Accessories and Auxiliary Equipment.....	10
Table 4: Test Result of 20dB Bandwidth.....	15

9 List of Photographs

Photograph 1: Set-up for Radiated Spurious Emission (9kHz ~ 30MHz)	22
Photograph 2: Set-up for Radiated Spurious Emission (30MHz~1GHz)	22
Photograph 3: Set-up for Radiated Spurious Emission (1GHz ~ 18GHz).....	23
Photograph 4: Set-up for Radiated Spurious Emission (18GHz ~ 26GHz).....	23
Photograph 5: Set-up for Conducted Emission	24
Photograph 6: Set-up for Radiated Emission (30MHz ~ 1GHz)	24
Photograph 7: Set-up for Radiated Emission (1GHz ~ 6GHz).....	25

Appendix A

Test Results

APPENDIX A.....	1
APPENDIX A.1: TEST RESULTS OF RADIATED SPURIOUS EMISSIONS	2
APPENDIX A.2: TEST RESULTS OF RADIATED EMISSIONS IN RESTRICTED BANDS	29
APPENDIX A.3: TEST RESULTS OF CONDUCTED EMISSION.....	33
APPENDIX A.4: TEST RESULTS OF RADIATED EMISSION	37

Appendix A.1: Test Results of Radiated Spurious Emissions 9KHz - 30MHz

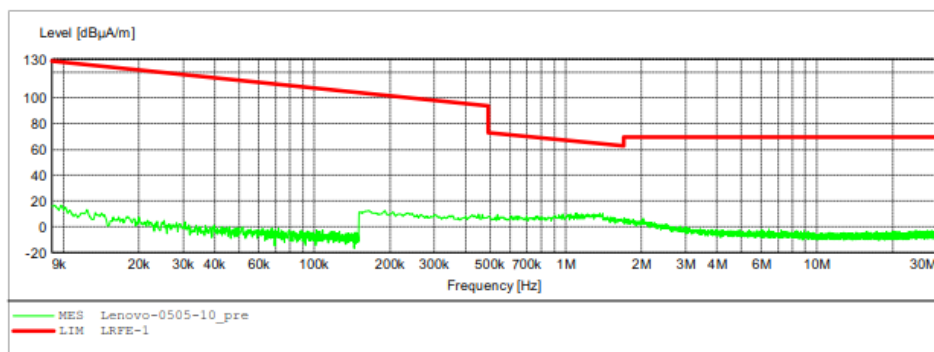
ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3M Radiated

EUT: Wireless Receiver M/N:RG202
Manufacturer: Lenovo
Operating Condition: TX 2402MHz
Test Site: 2# Chamber
Operator: WADE
Test Specification: DC 3.7V
Comment: X
Start of Test: 2017-5-5 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB STD VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



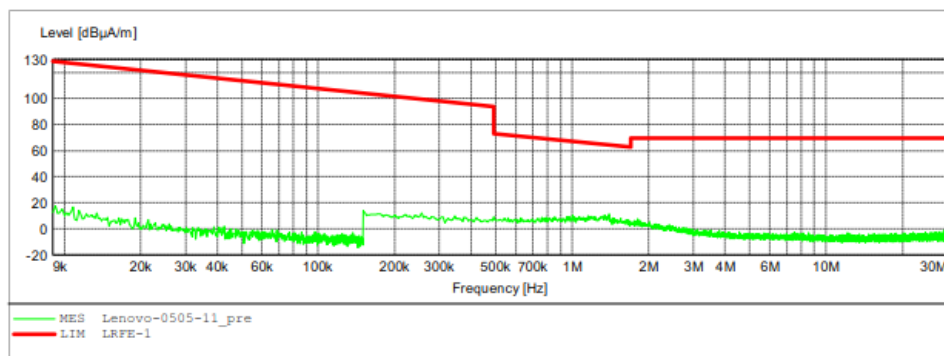
ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3M Radiated

EUT: Wireless Receiver M/N:RG202
 Manufacturer: Lenovo
 Operating Condition: TX 2402MHz
 Test Site: 2# Chamber
 Operator: WADE
 Test Specification: DC 3.7V
 Comment: Y
 Start of Test: 2017-5-5 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB STD VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



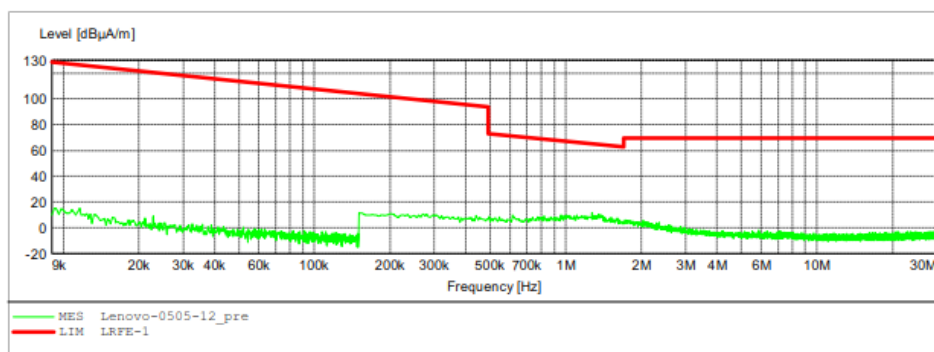
ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3M Radiated

EUT: Wireless Receiver M/N:RG202
 Manufacturer: Lenovo
 Operating Condition: TX 2402MHz
 Test Site: 2# Chamber
 Operator: WADE
 Test Specification: DC 3.7V
 Comment: Z
 Start of Test: 2017-5-5 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB STD VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



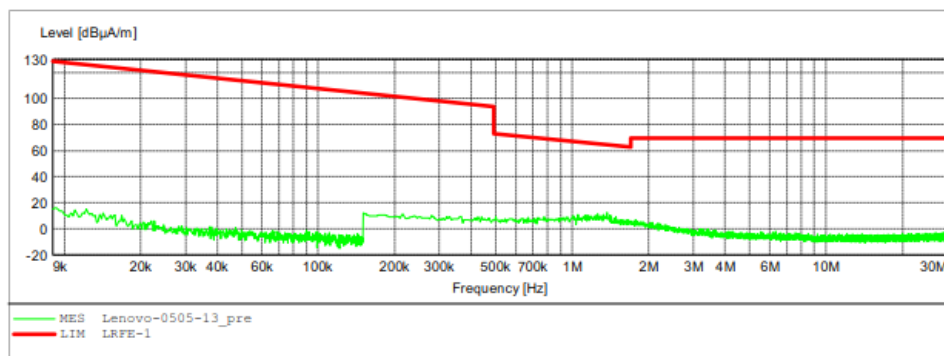
ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3M Radiated

EUT: Wireless Receiver M/N:RG202
 Manufacturer: Lenovo
 Operating Condition: TX 2441MHz
 Test Site: 2# Chamber
 Operator: WADE
 Test Specification: DC 3.7V
 Comment: X
 Start of Test: 2017-5-5 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB STD VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



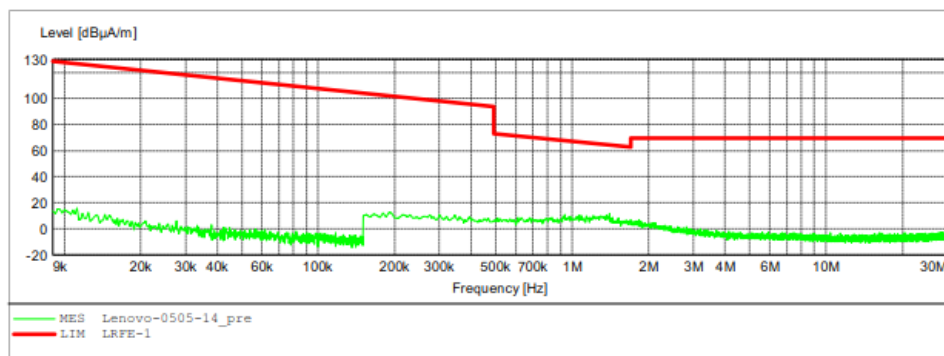
ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3M Radiated

EUT: Wireless Receiver M/N:RG202
 Manufacturer: Lenovo
 Operating Condition: TX 2441MHz
 Test Site: 2# Chamber
 Operator: WADE
 Test Specification: DC 3.7V
 Comment: Y
 Start of Test: 2017-5-5 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB STD VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



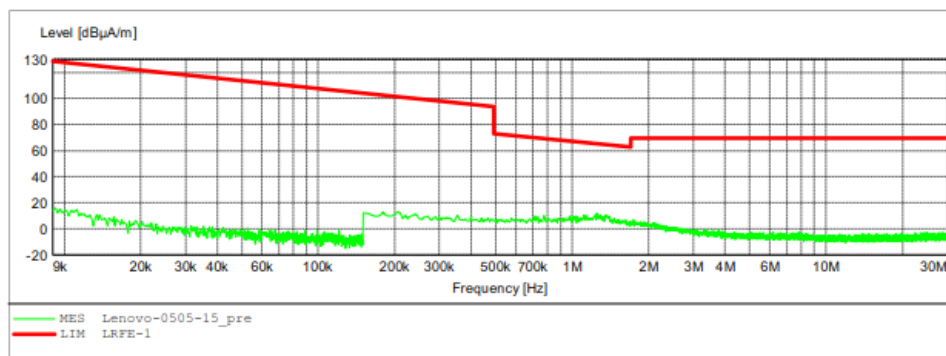
ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3M Radiated

EUT: Wireless Receiver M/N:RG202
 Manufacturer: Lenovo
 Operating Condition: TX 2441MHz
 Test Site: 2# Chamber
 Operator: WADE
 Test Specification: DC 3.7V
 Comment: Z
 Start of Test: 2017-5-5 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB STD VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



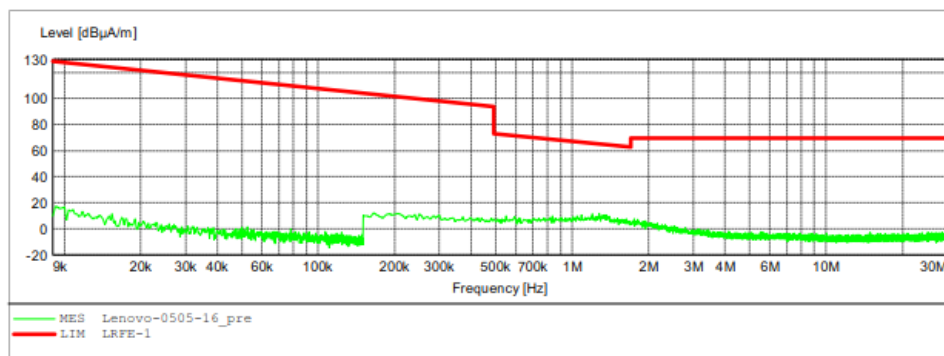
ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3M Radiated

EUT: Wireless Receiver M/N:RG202
 Manufacturer: Lenovo
 Operating Condition: TX 2479MHz
 Test Site: 2# Chamber
 Operator: WADE
 Test Specification: DC 3.7V
 Comment: X
 Start of Test: 2017-5-5 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB STD VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



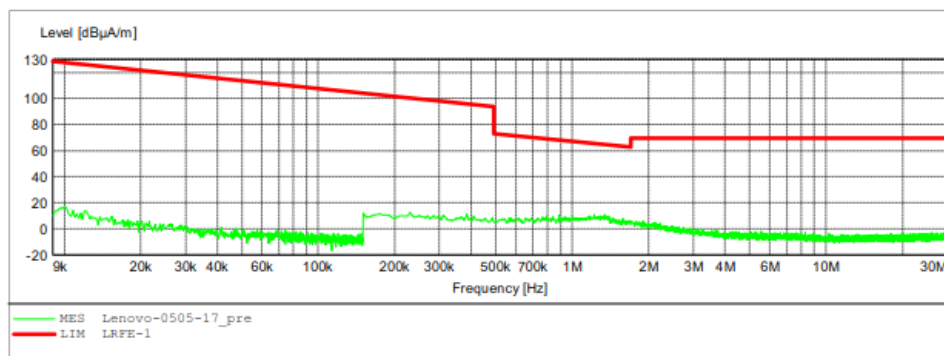
ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3M Radiated

EUT: Wireless Receiver M/N:RG202
 Manufacturer: Lenovo
 Operating Condition: TX 2479MHz
 Test Site: 2# Chamber
 Operator: WADE
 Test Specification: DC 3.7V
 Comment: Y
 Start of Test: 2017-5-5 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB STD VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



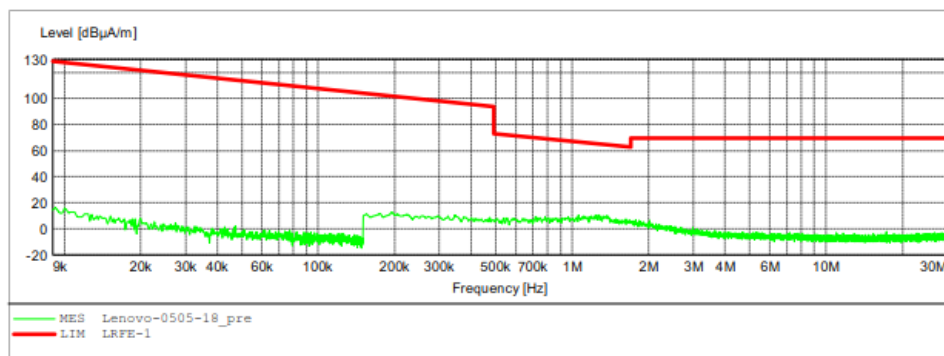
ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3M Radiated

EUT: Wireless Receiver M/N:RG202
 Manufacturer: Lenovo
 Operating Condition: TX 2479MHz
 Test Site: 2# Chamber
 Operator: WADE
 Test Specification: DC 3.7V
 Comment: Z
 Start of Test: 2017-5-5 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB STD VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



30MHz - 1GHz



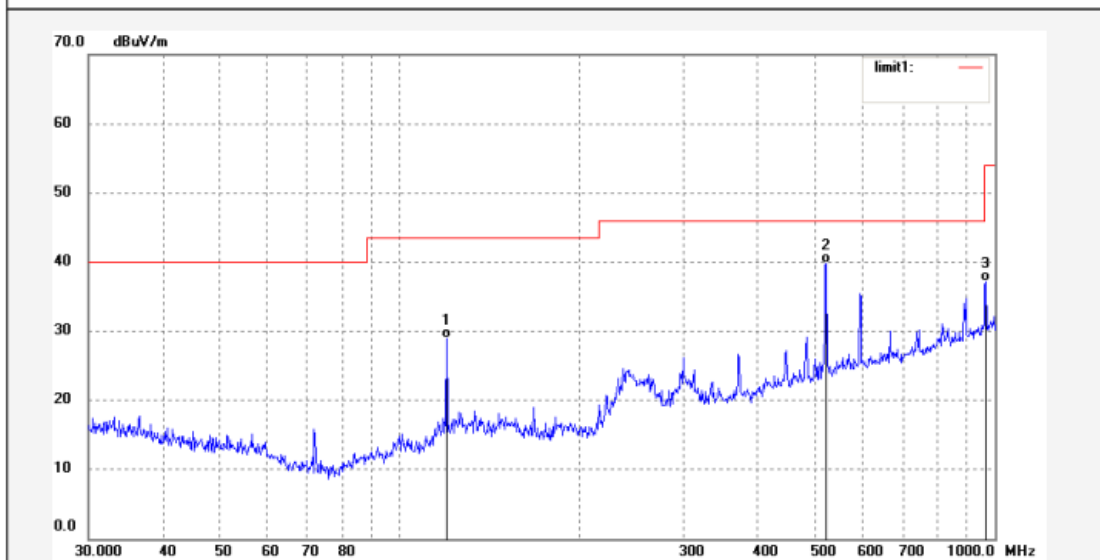
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1744	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 17/05/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Wireless Receiver	Engineer Signature: WADE
Mode: TX 2402MHz	Distance: 3m
Model: RG202	
Manufacturer: Lenovo	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	119.8555	42.06	-13.06	29.00	43.50	-14.50	QP			
2	520.8881	43.60	-3.80	39.80	46.00	-6.20	QP			
3	965.5421	33.84	3.35	37.19	54.00	-16.81	QP			



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1745

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Receiver

Mode: TX 2402MHz

Model: RG202

Manufacturer: Lenovo

Polarization: Vertical

Power Source: DC 5V

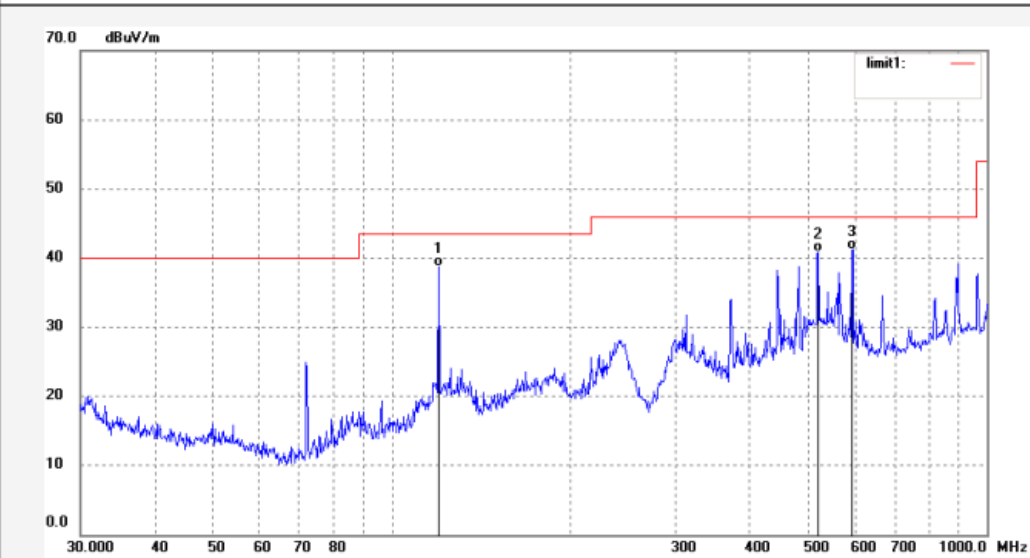
Date: 17/05/02/

Time:

Engineer Signature: WADE

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	119.8555	51.77	-13.06	38.71	43.50	-4.79	QP			
2	520.8881	44.67	-3.80	40.87	46.00	-5.13	QP			
3	593.0497	43.68	-2.45	41.23	46.00	-4.77	QP			



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: lenovo #1747

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Receiver

Mode: TX 2441MHz

Model: RG202

Manufacturer: Lenovo

Polarization: Horizontal

Power Source: DC 5V

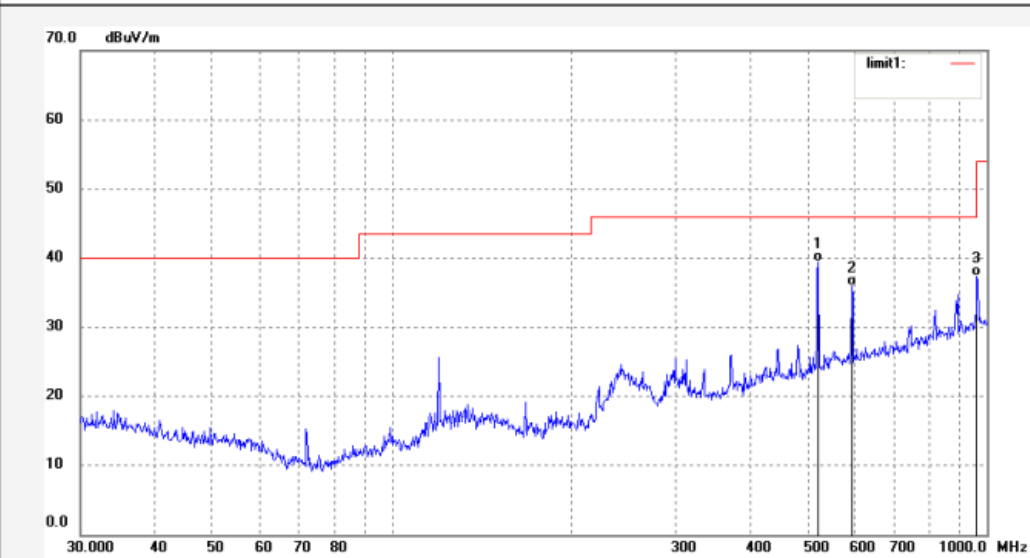
Date: 17/05/02/

Time:

Engineer Signature: WADE

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	520.8881	43.34	-3.80	39.54	46.00	-6.46	QP			
2	593.0497	38.44	-2.45	35.99	46.00	-10.01	QP			
3	962.1622	33.98	3.33	37.31	54.00	-16.69	QP			



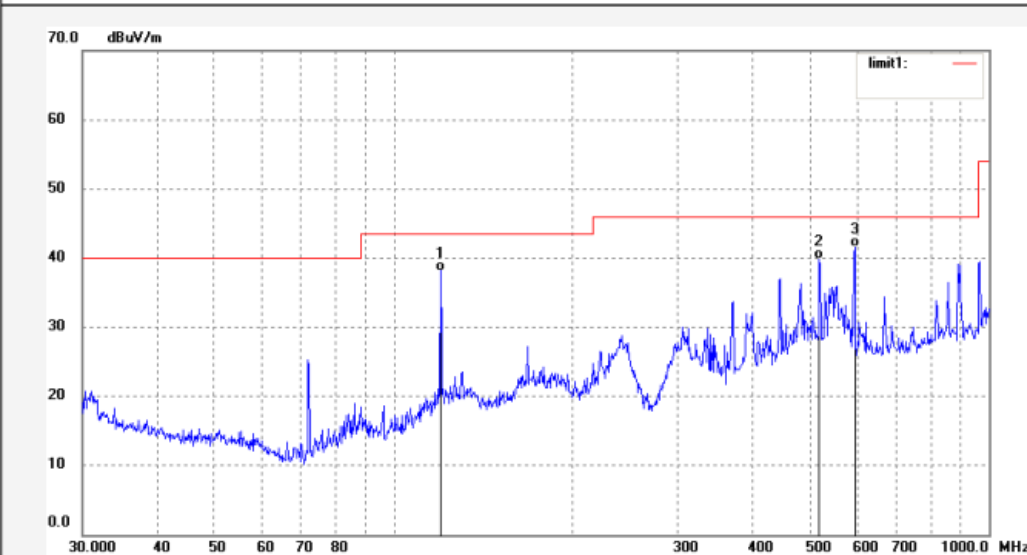
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1746	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 17/05/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Wireless Receiver	Engineer Signature: WADE
Mode: TX 2441MHz	Distance: 3m
Model: RG202	
Manufacturer: Lenovo	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	119.8555	51.21	-13.06	38.15	43.50	-5.35	QP			
2	519.0648	43.69	-3.86	39.83	46.00	-6.17	QP			
3	595.1327	43.92	-2.44	41.48	46.00	-4.52	QP			



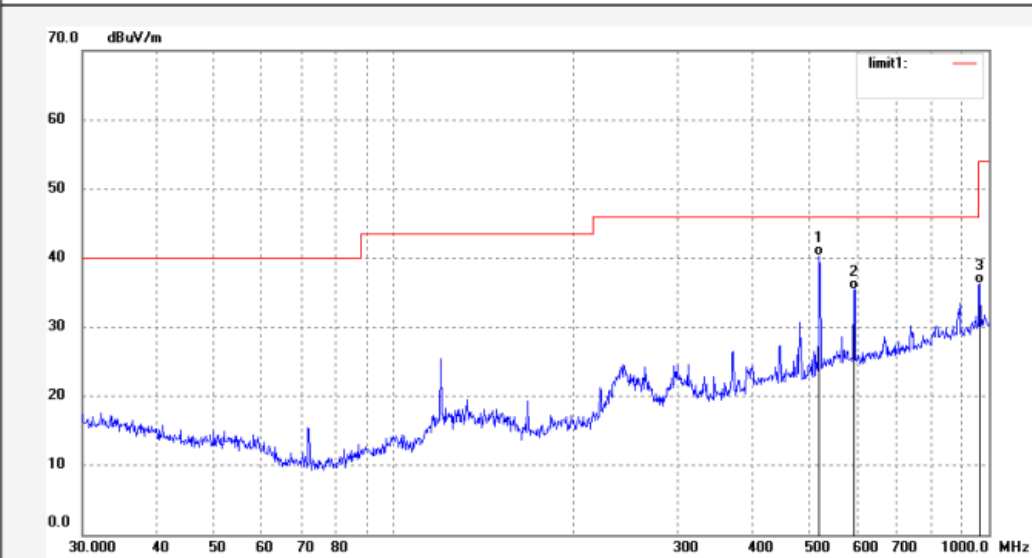
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1748	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 17/05/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Wireless Receiver	Engineer Signature: WADE
Mode: TX 2479MHz	Distance: 3m
Model: RG202	
Manufacturer: Lenovo	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	519.0648	44.15	-3.86	40.29	46.00	-5.71	QP			
2	593.0497	37.86	-2.45	35.41	46.00	-10.59	QP			
3	965.5421	32.94	3.35	36.29	54.00	-17.71	QP			



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: lenovo #1749

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Receiver

Mode: TX 2479MHz

Model: RG202

Manufacturer: Lenovo

Polarization: Vertical

Power Source: DC 5V

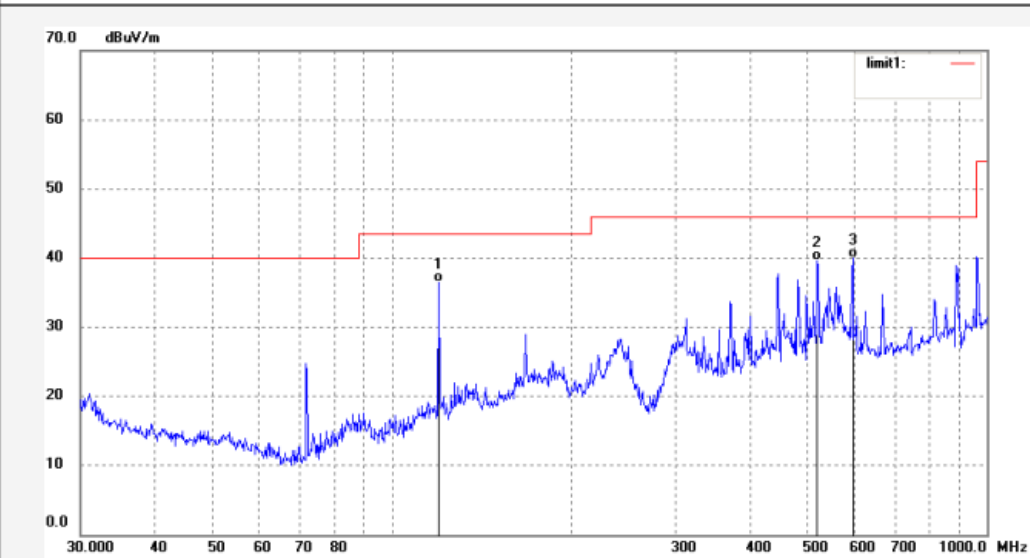
Date: 17/05/02/

Time:

Engineer Signature: WADE

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	119.8555	49.57	-13.06	36.51	43.50	-6.99	QP			
2	519.0648	43.43	-3.86	39.57	46.00	-6.43	QP			
3	595.1327	42.37	-2.44	39.93	46.00	-6.07	QP			

1GHz - 18GHz



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: lenovo #1692

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Receiver

Mode: TX 2402MHz

Model: RG202

Manufacturer: Lenovo

Polarization: Horizontal

Power Source: DC 5V

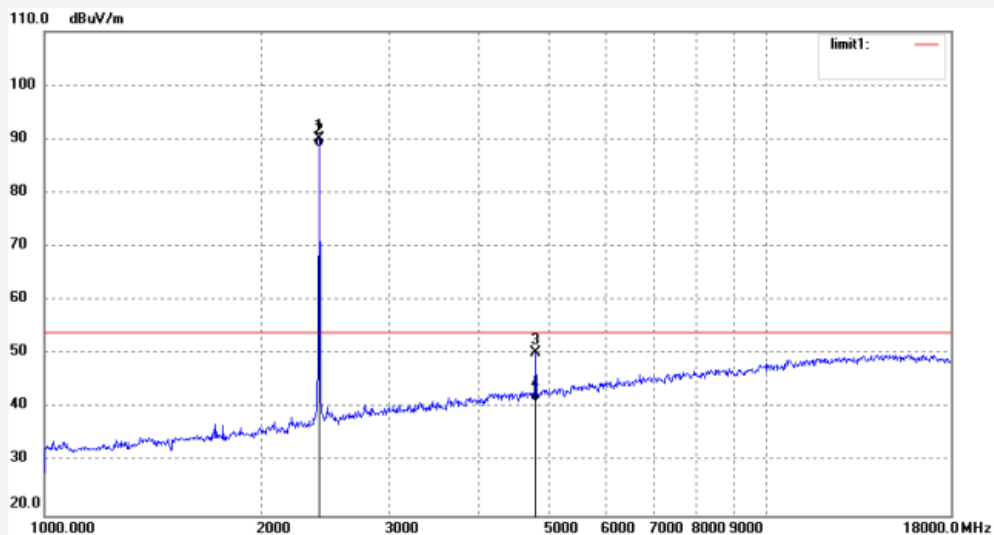
Date: 17/05/02/

Time:

Engineer Signature: WADE

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	91.62	-1.61	90.01	114.00	-23.99	peak			
2	2402.000	90.12	-1.61	88.51	94.00	-5.49	AVG			
3	4804.000	45.45	4.90	50.35	74.00	-23.65	peak			
4	4804.000	36.34	4.90	41.24	54.00	-12.76	AVG			



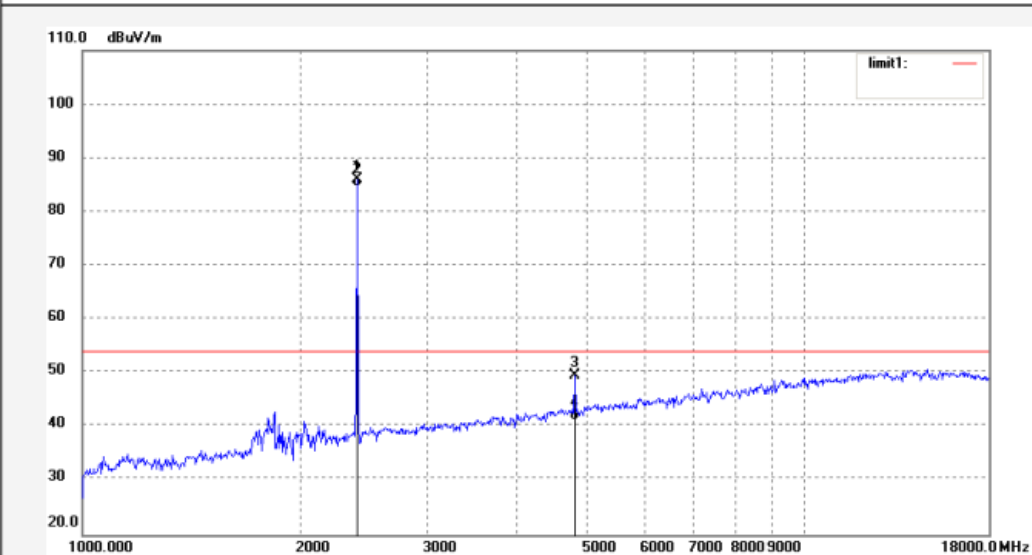
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1693	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 17/05/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Wireless Receiver	Engineer Signature: WADE
Mode: TX 2402MHz	Distance: 3m
Model: RG202	
Manufacturer: Lenovo	

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	87.74	-1.61	86.13	114.00	-27.87	peak			
2	2402.000	86.24	-1.61	84.63	94.00	-9.37	AVG			
3	4804.000	44.79	4.90	49.69	74.00	-24.31	peak			
4	4804.000	36.45	4.90	41.35	54.00	-12.65	AVG			



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1696

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Receiver

Mode: TX 2441MHz

Model: RG202

Manufacturer: Lenovo

Polarization: Horizontal

Power Source: DC 5V

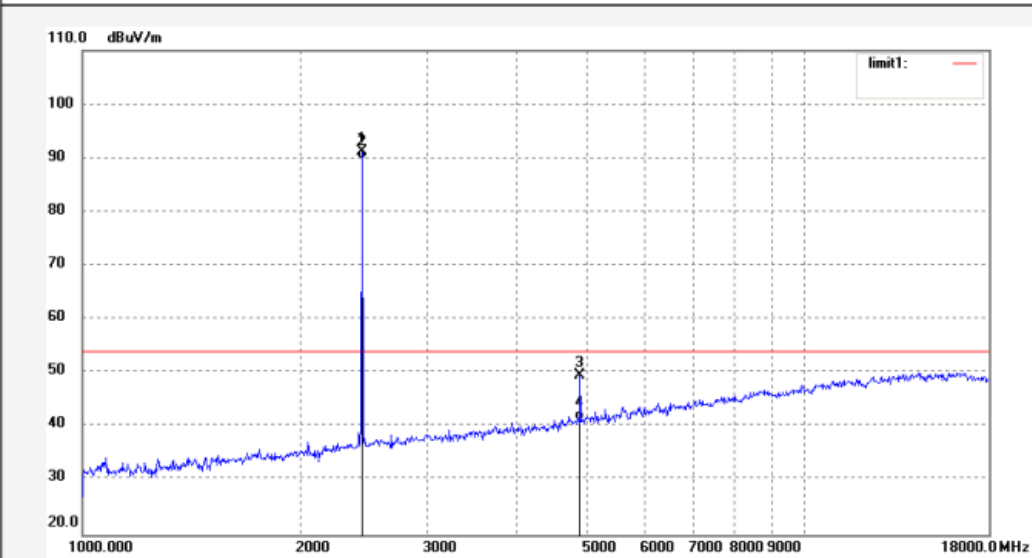
Date: 17/05/02/

Time:

Engineer Signature: WADE

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	2441.000	92.63	-1.44	91.19	114.00	-22.81	peak			
2	2441.000	91.33	-1.44	89.89	94.00	-4.11	AVG			
3	4882.000	43.91	5.61	49.52	74.00	-24.48	peak			
4	4882.000	35.71	5.61	41.32	54.00	-12.68	AVG			



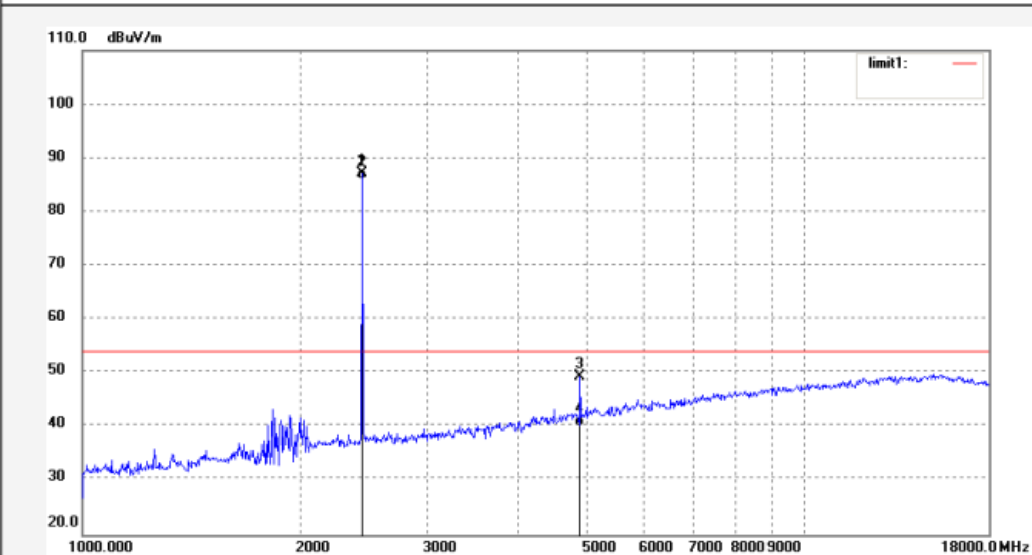
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1697	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 17/05/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Wireless Receiver	Engineer Signature: WADE
Mode: TX 2441MHz	Distance: 3m
Model: RG202	
Manufacturer: Lenovo	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.000	88.71	-1.44	87.27	114.00	-26.73	peak			
2	2441.000	87.41	-1.44	85.97	94.00	-8.03	AVG			
3	4882.000	43.75	5.61	49.36	74.00	-24.64	peak			
4	4882.000	34.60	5.61	40.21	54.00	-13.79	AVG			



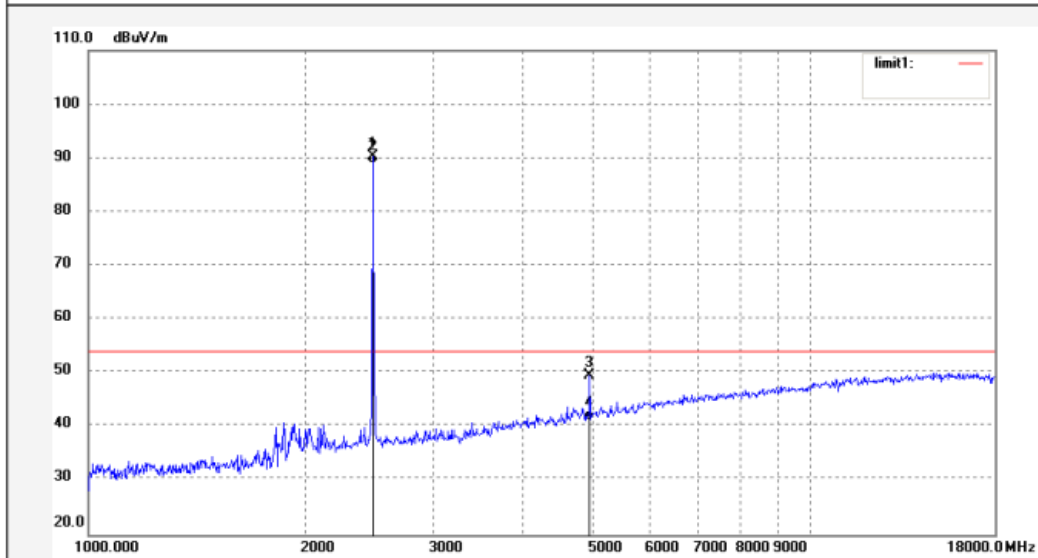
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1699	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 17/05/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Wireless Receiver	Engineer Signature: WADE
Mode: TX 2479MHz	Distance: 3m
Model: RG202	
Manufacturer: Lenovo	

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	91.78	-1.40	90.38	114.00	-23.62	peak			
2	2479.000	90.28	-1.40	88.88	94.00	-5.12	AVG			
3	4958.000	43.60	6.08	49.68	74.00	-24.32	peak			
4	4958.000	35.16	6.08	41.24	54.00	-12.76	AVG			



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: lenovo #1698

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Receiver

Mode: TX 2479MHz

Model: RG202

Manufacturer: Lenovo

Polarization: Vertical

Power Source: DC 5V

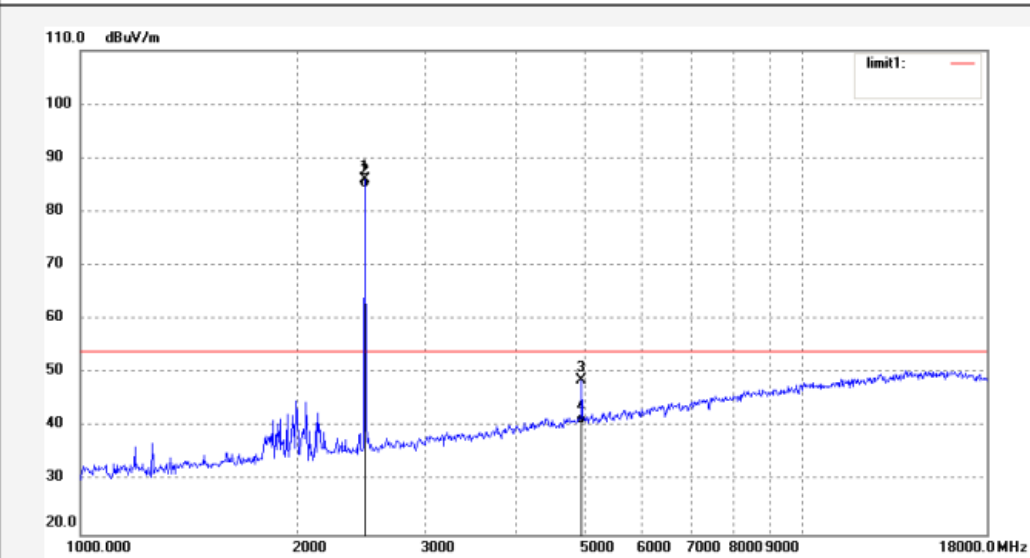
Date: 17/05/02/

Time:

Engineer Signature: WADE

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	87.42	-1.40	86.02	114.00	-27.98	peak			
2	2479.000	85.92	-1.40	84.52	94.00	-9.48	AVG			
3	4958.000	42.65	6.08	48.73	74.00	-25.27	peak			
4	4958.000	34.49	6.08	40.57	54.00	-13.43	AVG			

18GHz - 26.5GHz



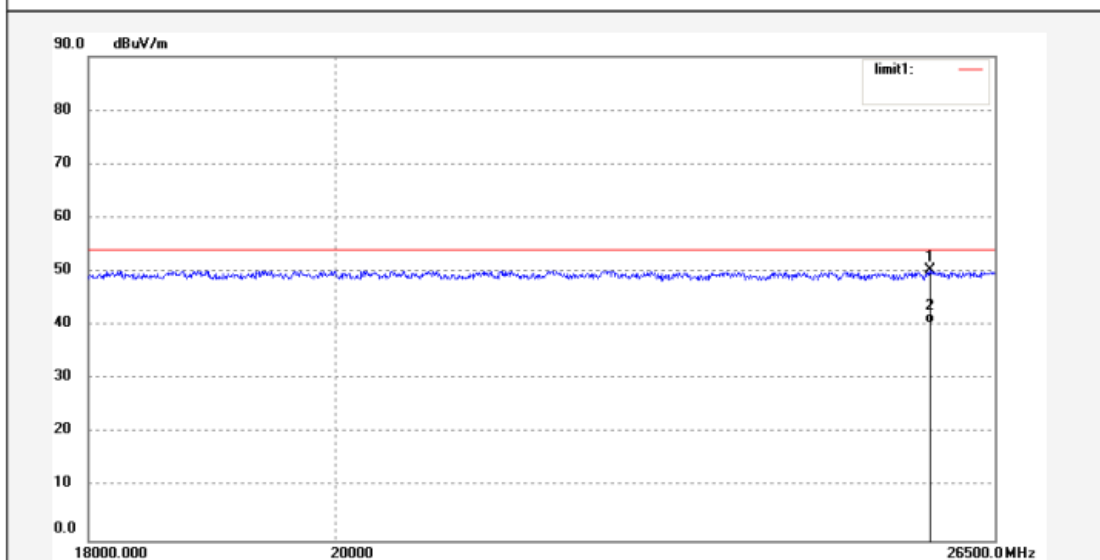
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1703	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 17/05/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Wireless Receiver	Engineer Signature: WADE
Mode: TX 2402MHz	Distance: 3m
Model: RG202	
Manufacturer: Lenovo	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	25772.218	10.08	40.13	50.21	74.00	-23.79	peak			
2	25772.218	0.22	40.13	40.35	54.00	-13.65	AVG			



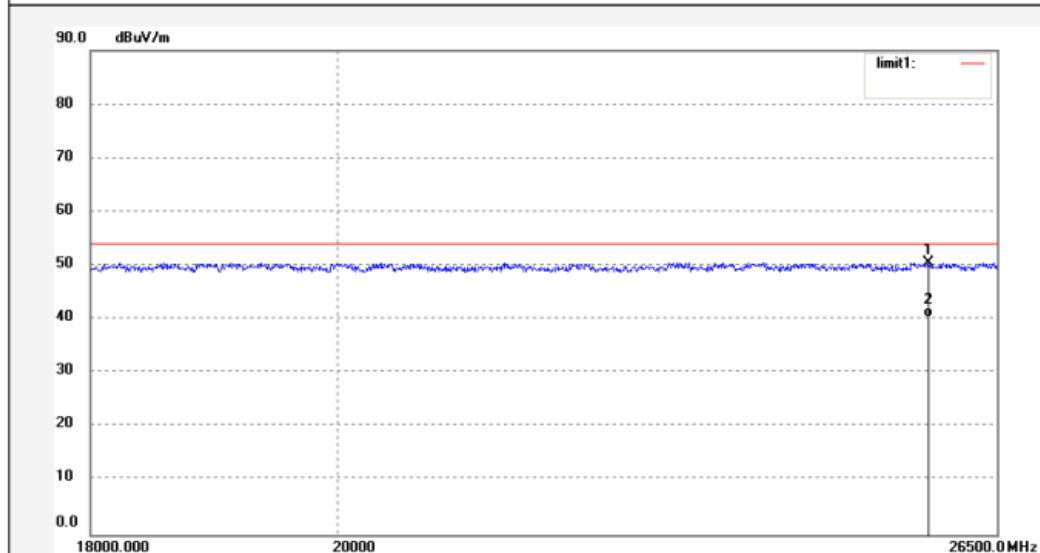
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1702	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 17/05/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Wireless Receiver	Engineer Signature: WADE
Mode: TX 2402MHz	Distance: 3m
Model: RG202	
Manufacturer: Lenovo	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	25732.376	9.40	41.02	50.42	74.00	-23.58	peak			
2	25732.376	-0.55	41.02	40.47	54.00	-13.53	AVG			



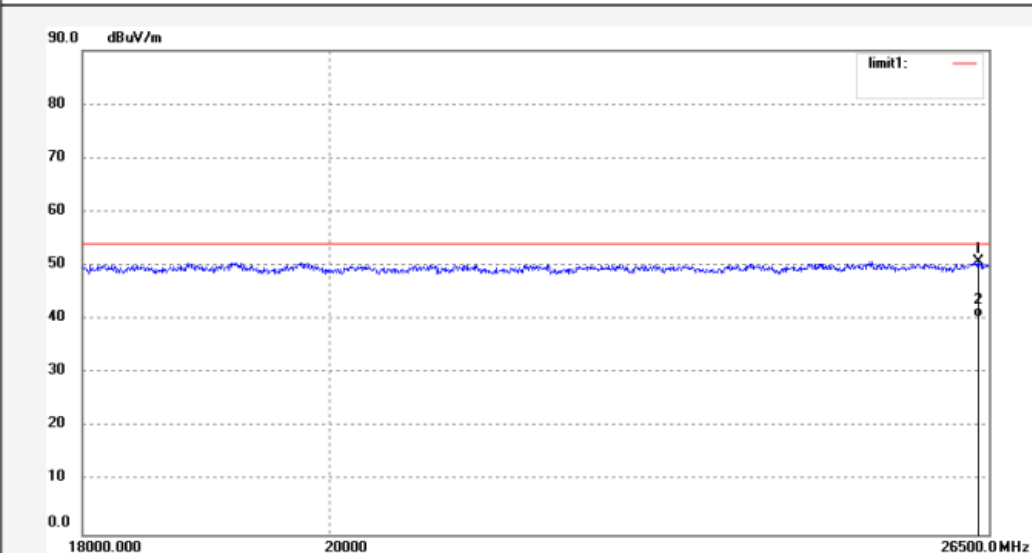
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1704	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 17/05/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Wireless Receiver	Engineer Signature: WADE
Mode: TX 2441MHz	Distance: 3m
Model: RG202	
Manufacturer: Lenovo	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26377.291	10.37	40.44	50.81	74.00	-23.19	peak			
2	26377.291	-0.09	40.44	40.35	54.00	-13.65	AVG			



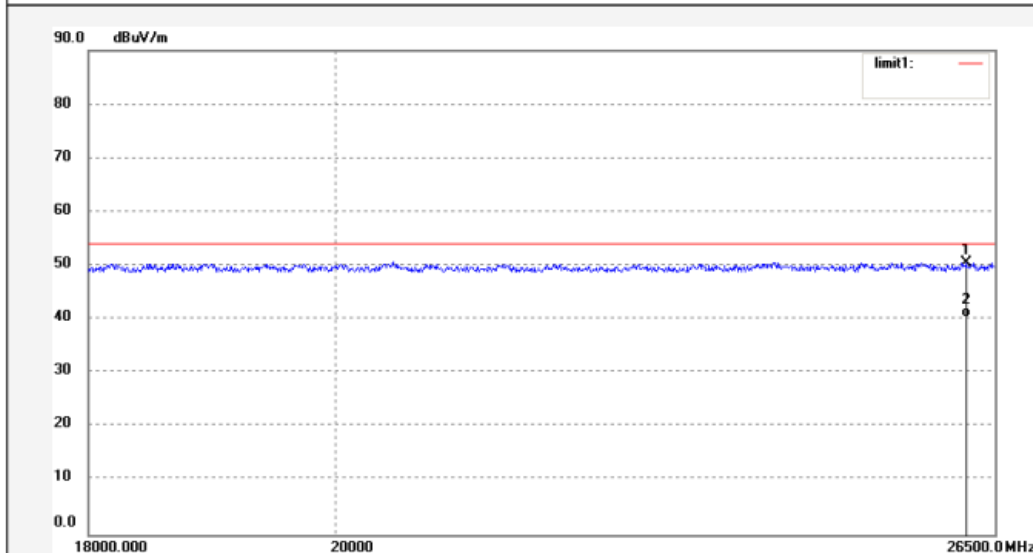
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1705	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 17/05/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Wireless Receiver	Engineer Signature: WADE
Mode: TX 2441MHz	Distance: 3m
Model: RG202	
Manufacturer: Lenovo	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26174.038	9.54	40.95	50.49	74.00	-23.51	peak			
2	26174.038	-0.54	40.95	40.41	54.00	-13.59	AVG			



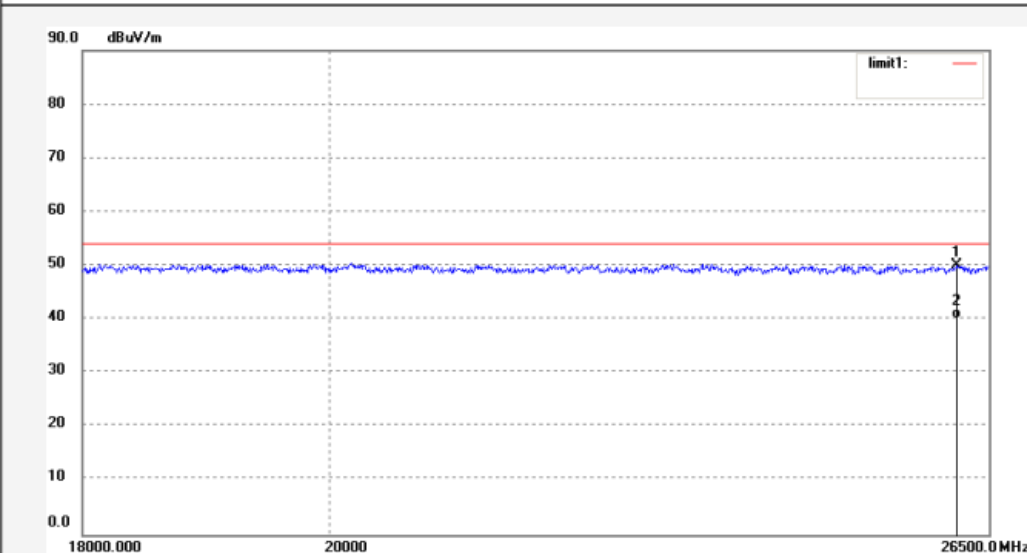
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1707	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 17/05/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Wireless Receiver	Engineer Signature: WADE
Mode: TX 2479MHz	Distance: 3m
Model: RG202	
Manufacturer: Lenovo	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26143.685	9.63	40.32	49.95	74.00	-24.05	peak			
2	26143.685	-0.08	40.32	40.24	54.00	-13.76	AVG			



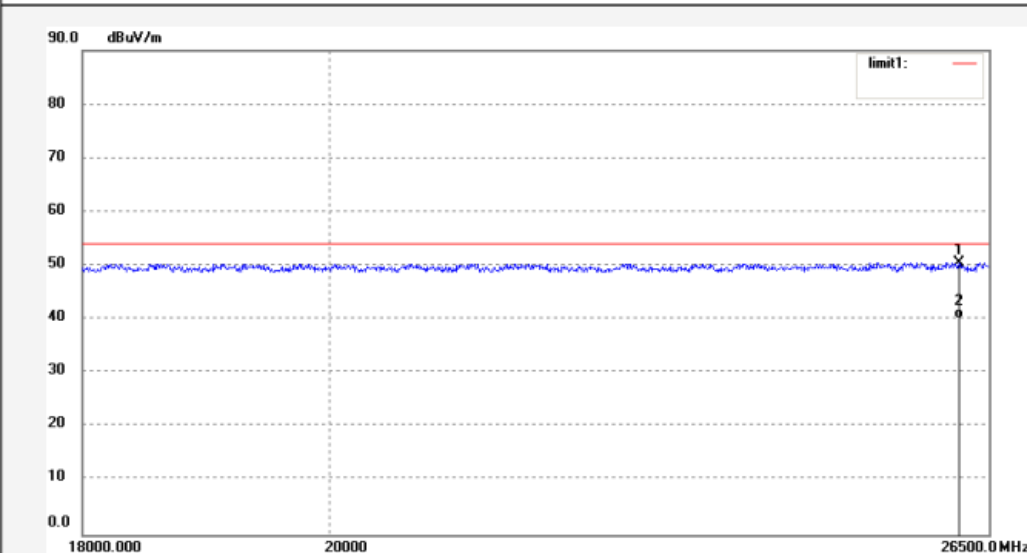
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1706	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 17/05/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Wireless Receiver	Engineer Signature: WADE
Mode: TX 2479MHz	Distance: 3m
Model: RG202	
Manufacturer: Lenovo	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26163.916	9.53	40.95	50.48	74.00	-23.52	peak			
2	26163.916	-0.71	40.95	40.24	54.00	-13.76	AVG			

Appendix A.2: Test Results of Radiated Emissions in Restricted Bands

Low channel



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1695

Standard: FCC (Band Edge)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Receiver

Mode: TX 2402MHz

Model: RG202

Manufacturer: Lenovo

Polarization: Horizontal

Power Source: DC 5V

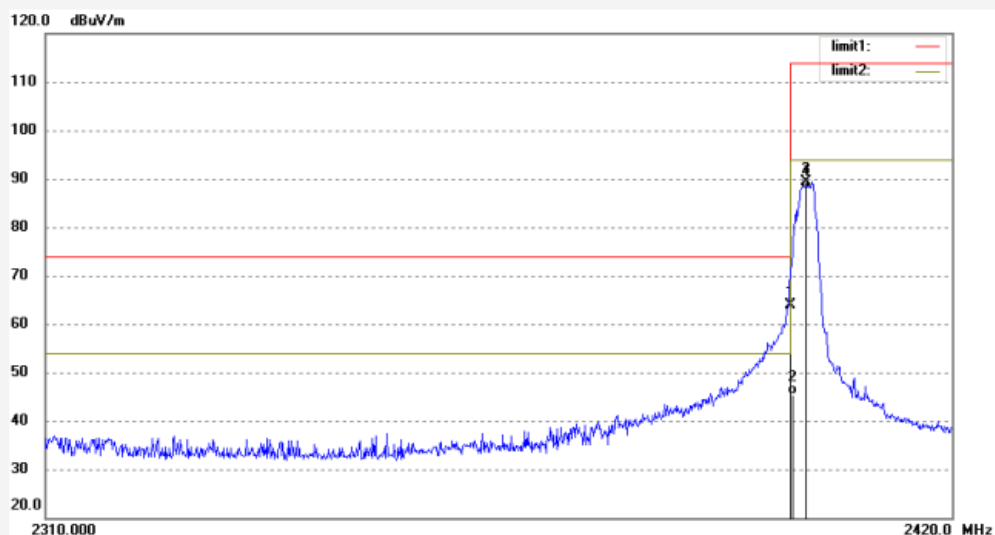
Date: 17/05/02/

Time:

Engineer Signature: WADE

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	2400.000	65.38	-1.62	63.76	74.00	-10.24	peak			
2	2400.000	46.88	-1.62	45.26	54.00	-8.74	AVG			
3	2402.000	91.04	-1.61	89.43	114.00	-24.57	peak			
4	2402.000	89.54	-1.61	87.93	94.00	-6.07	AVG			



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: lenovo #1694

Standard: FCC (Band Edge)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Receiver

Mode: TX 2402MHz

Model: RG202

Manufacturer: Lenovo

Polarization: Vertical

Power Source: DC 5V

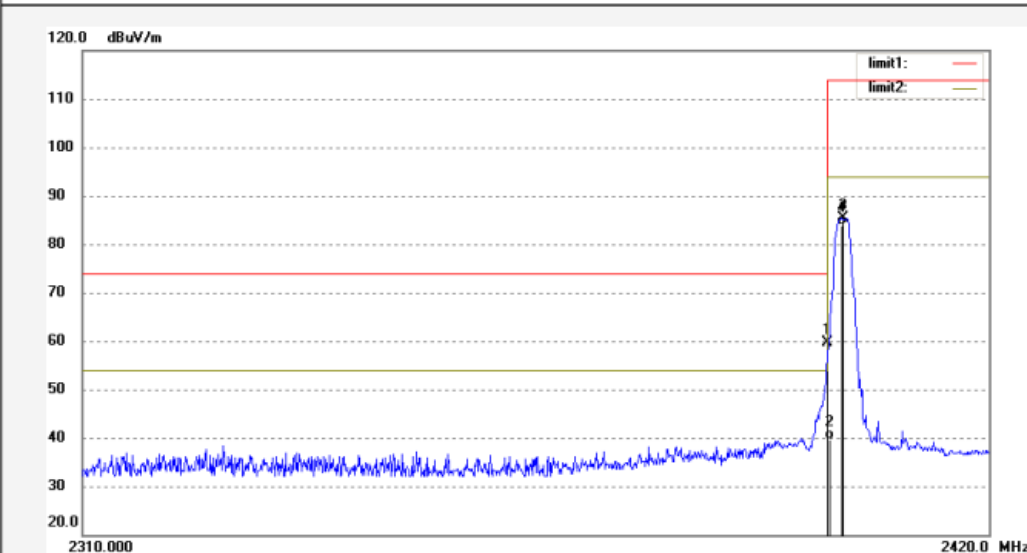
Date: 17/05/02/

Time:

Engineer Signature: WADE

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	2400.000	61.33	-1.62	59.71	74.00	-14.29	peak			
2	2400.000	41.24	-1.62	39.62	54.00	-14.38	AVG			
3	2402.000	86.88	-1.61	85.27	114.00	-28.73	peak			
4	2402.000	85.38	-1.61	83.77	94.00	-10.23	AVG			

High channel



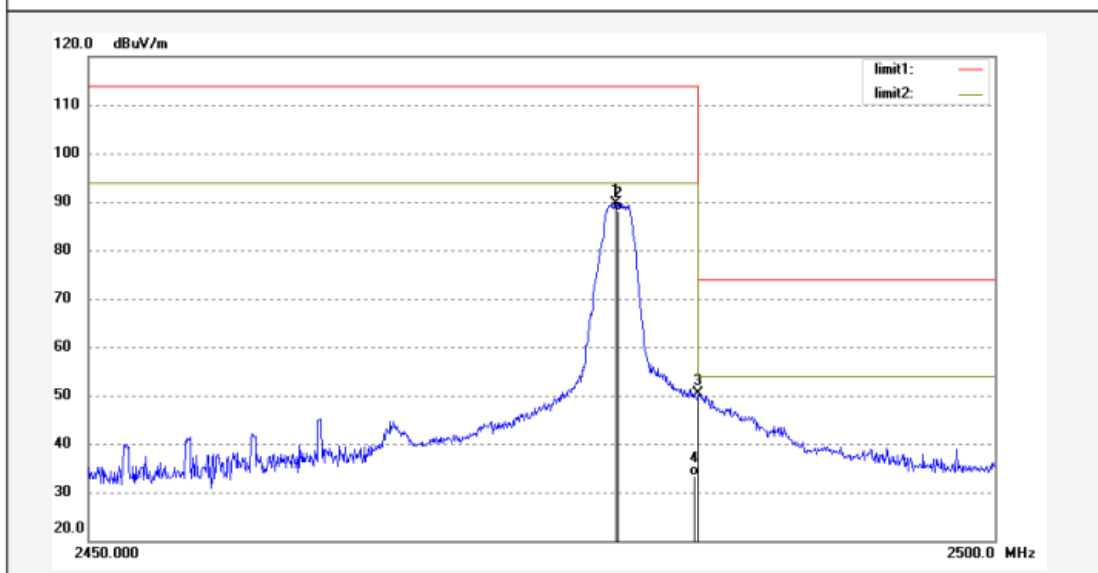
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1700	Polarization: Horizontal
Standard: FCC (Band Edge)	Power Source: DC 5V
Test item: Radiation Test	Date: 17/05/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Wireless Receiver	Engineer Signature: WADE
Mode: TX 2479MHz	Distance: 3m
Model: RG202	
Manufacturer: Lenovo	

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	91.14	-1.40	89.74	114.00	-24.26	peak			
2	2479.000	89.64	-1.40	88.24	94.00	-5.76	AVG			
3	2483.500	51.74	-1.40	50.34	74.00	-23.66	peak			
4	2483.500	34.87	-1.40	33.47	54.00	-20.53	AVG			



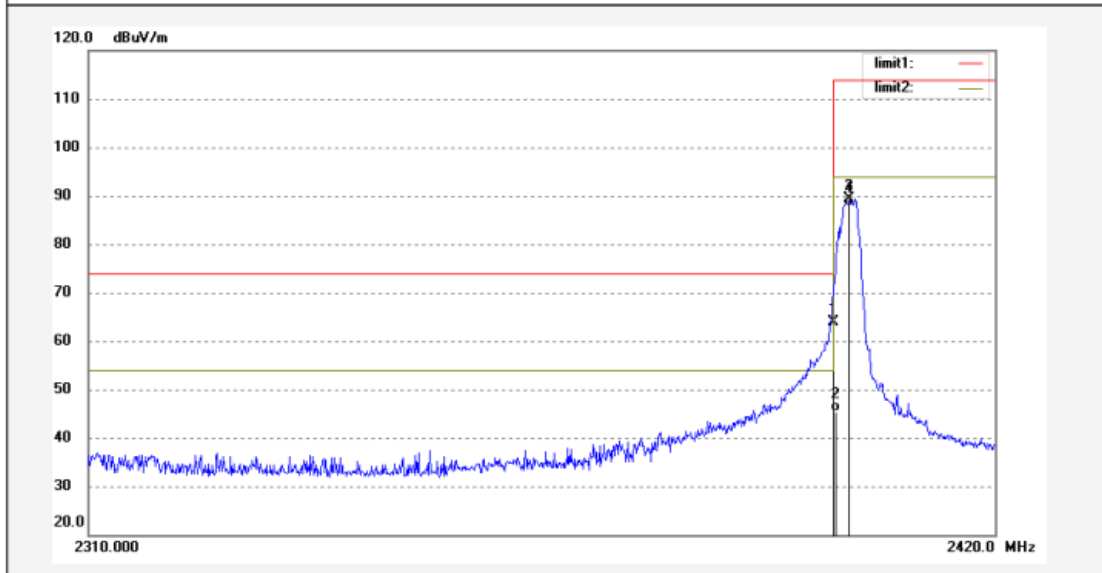
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1695	Polarization: Horizontal
Standard: FCC (Band Edge)	Power Source: DC 5V
Test item: Radiation Test	Date: 17/05/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Wireless Receiver	Engineer Signature: WADE
Mode: TX 2402MHz	Distance: 3m
Model: RG202	
Manufacturer: Lenovo	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2400.000	65.38	-1.62	63.76	74.00	-10.24	peak			
2	2400.000	46.88	-1.62	45.26	54.00	-8.74	AVG			
3	2402.000	91.04	-1.61	89.43	114.00	-24.57	peak			
4	2402.000	89.54	-1.61	87.93	94.00	-6.07	AVG			

Appendix A.3: Test Results of Conducted Emission A Mode

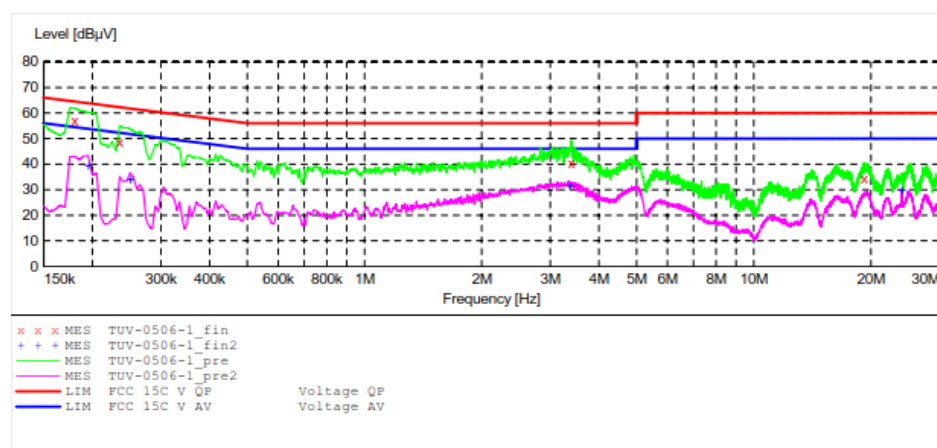
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 C

EUT: Wireless Receiver M/N:RG202
Manufacturer: Lenovo
Operating Condition: TX
Test Site: 1#Shielding Room
Operator: WADE
Test Specification: L 120V/60Hz
Comment: Mains Port
Start of Test: 5/6/2017 /

SCAN TABLE: "V 9K-30MHz fin"

Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	NSLK8126 2008
			Average			
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	NSLK8126 2008
			Average			



MEASUREMENT RESULT: "TUV-0506-1_fin"

5/6/2017

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.180000	57.00	10.5	65	7.5	QP	L1	GND
0.235000	48.80	10.6	62	13.5	QP	L1	GND
3.400000	40.50	11.1	56	15.5	QP	L1	GND
19.195000	34.60	11.4	60	25.4	QP	L1	GND

MEASUREMENT RESULT: "TUV-0506-1_fin2"

5/6/2017

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.195000	39.30	10.5	54	14.5	AV	L1	GND
0.250000	33.80	10.6	52	18.0	AV	L1	GND
3.360000	31.60	11.1	46	14.4	AV	L1	GND
23.995000	29.30	11.5	50	20.7	AV	L1	GND

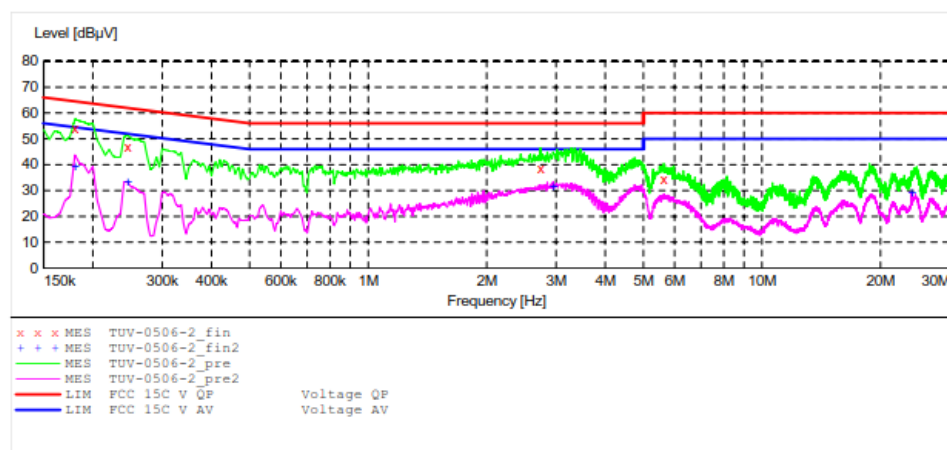
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15 C

EUT: Wireless Receiver M/N:RG202
 Manufacturer: Lenovo
 Operating Condition: TX
 Test Site: 1#Shielding Room
 Operator: WADE
 Test Specification: N 120V/60Hz
 Comment: Mains Port
 Start of Test: 5/6/2017 /

SCAN TABLE: "V 9K-30MHz fin"

Short Description: SUB STD VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008
 Average
 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average



MEASUREMENT RESULT: "TUV-0506-2_fin"

5/6/2017

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.180000	53.80	10.5	65	10.7	QP	N	GND
0.245000	47.00	10.6	62	14.9	QP	N	GND
2.740000	38.80	11.0	56	17.2	QP	N	GND
5.630000	34.40	11.2	60	25.6	QP	N	GND

MEASUREMENT RESULT: "TUV-0506-2_fin2"

5/6/2017

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.180000	39.20	10.5	55	15.3	AV	N	GND
0.245000	32.90	10.6	52	19.0	AV	N	GND
2.950000	31.60	11.1	46	14.4	AV	N	GND
23.995000	28.90	11.5	50	21.1	AV	N	GND

B Mode

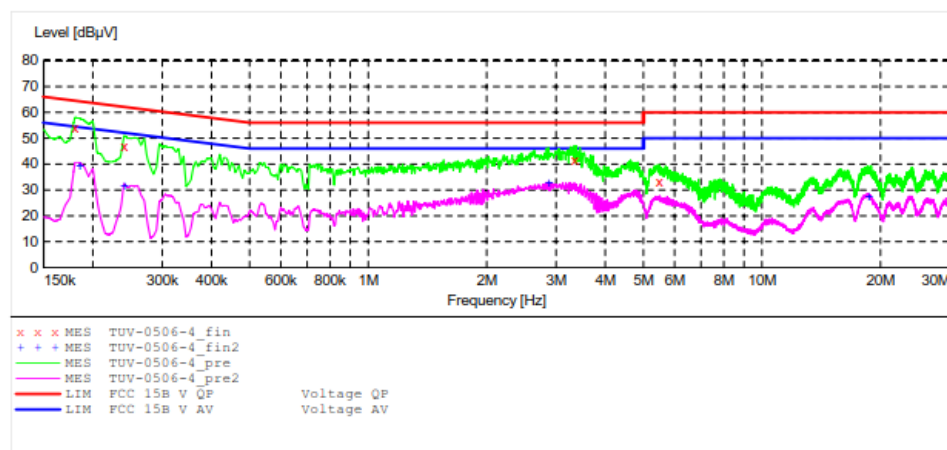
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Wireless Receiver M/N:RG202
 Manufacturer: Lenovo
 Operating Condition: On
 Test Site: 1#Shielding Room
 Operator: WADE
 Test Specification: L 120V/60Hz
 Comment: Mains Port
 Start of Test: 5/6/2017 /

SCAN TABLE: "V 9K-30MHz fin"

Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	NSLK8126 2008
150.0 kHz	30.0 MHz	5.0 kHz	Average	1.0 s	9 kHz	NSLK8126 2008



MEASUREMENT RESULT: "TUV-0506-4_fin"

5/6/2017

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.180000	54.30	10.5	65	10.2	QP	L1	GND
0.240000	46.90	10.6	62	15.2	QP	L1	GND
3.340000	41.30	11.1	56	14.7	QP	L1	GND
5.480000	33.40	11.2	60	26.6	QP	L1	GND

MEASUREMENT RESULT: "TUV-0506-4_fin2"

5/6/2017

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.185000	39.30	10.5	54	15.0	AV	L1	GND
0.240000	31.50	10.6	52	20.6	AV	L1	GND
2.870000	32.30	11.0	46	13.7	AV	L1	GND
18.625000	27.50	11.4	50	22.5	AV	L1	GND

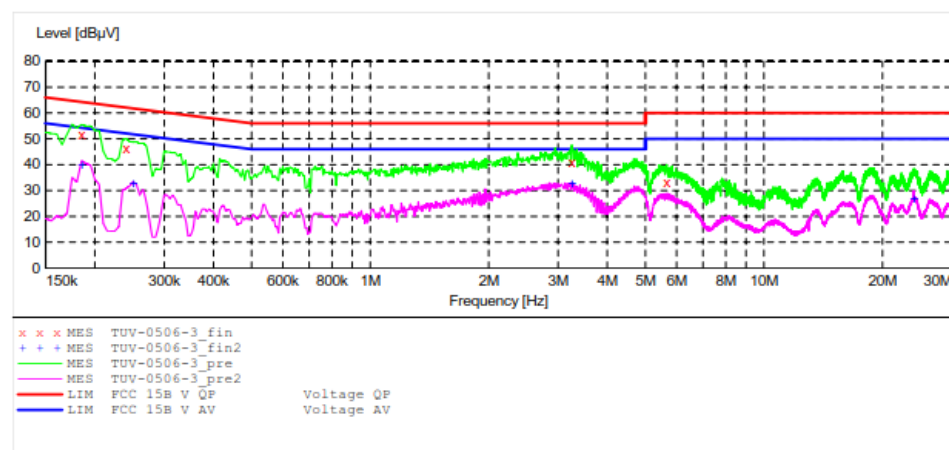
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Wireless Receiver M/N:RG202
 Manufacturer: Lenovo
 Operating Condition: On
 Test Site: 1#Shielding Room
 Operator: WADE
 Test Specification: N 120V/60Hz
 Comment: Mains Port
 Start of Test: 5/6/2017 /

SCAN TABLE: "V 9K-30MHz fin"

Short Description: SUB STD VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008
 Average
 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average



MEASUREMENT RESULT: "TUV-0506-3_fin"

5/6/2017

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.185000	51.90	10.5	64	12.4	QP	N	GND
0.240000	46.00	10.6	62	16.1	QP	N	GND
3.250000	40.90	11.1	56	15.1	QP	N	GND
5.660000	33.30	11.2	60	26.7	QP	N	GND

MEASUREMENT RESULT: "TUV-0506-3_fin2"

5/6/2017

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.185000	39.80	10.5	54	14.5	AV	N	GND
0.250000	32.50	10.6	52	19.3	AV	N	GND
3.250000	32.50	11.1	46	13.5	AV	N	GND
23.995000	26.50	11.5	50	23.5	AV	N	GND

Appendix A.4: Test Results of Radiated Emission



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1811

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Receiver

Mode: On

Model: RG202

Manufacturer: Lenovo

Polarization: Horizontal

Power Source: DC 5V

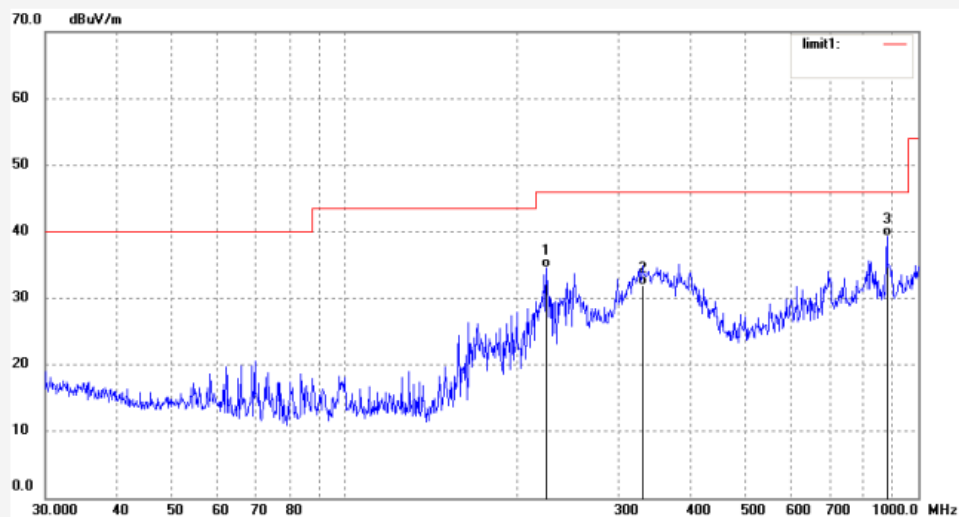
Date: 17/05/06/

Time:

Engineer Signature: WADE

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	224.5192	45.81	-11.26	34.55	46.00	-11.45	QP			
2	330.1949	39.93	-8.03	31.90	46.00	-14.10	QP			
3	881.4067	37.16	2.04	39.20	46.00	-6.80	QP			



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: lenovo #1810

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Receiver

Mode: On

Model: RG202

Manufacturer: Lenovo

Polarization: Vertical

Power Source: DC 5V

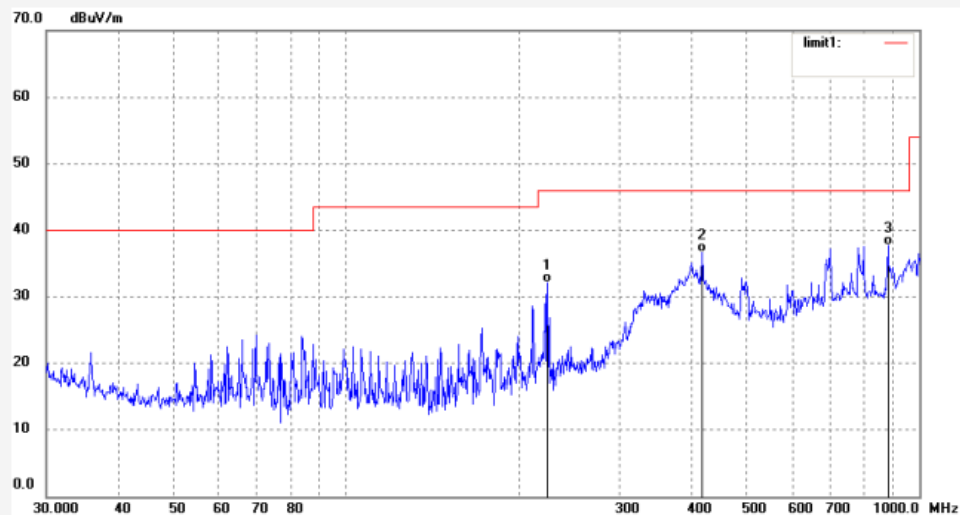
Date: 17/05/06/

Time:

Engineer Signature: WADE

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	224.5192	43.42	-11.26	32.16	46.00	-13.84	QP			
2	417.6409	42.50	-5.87	36.63	46.00	-9.37	QP			
3	881.4067	35.72	2.04	37.76	46.00	-8.24	QP			



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: lenovo #1813

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Receiver

Mode: On

Model: RG202

Manufacturer: Lenovo

Polarization: Vertical

Power Source: DC 5V

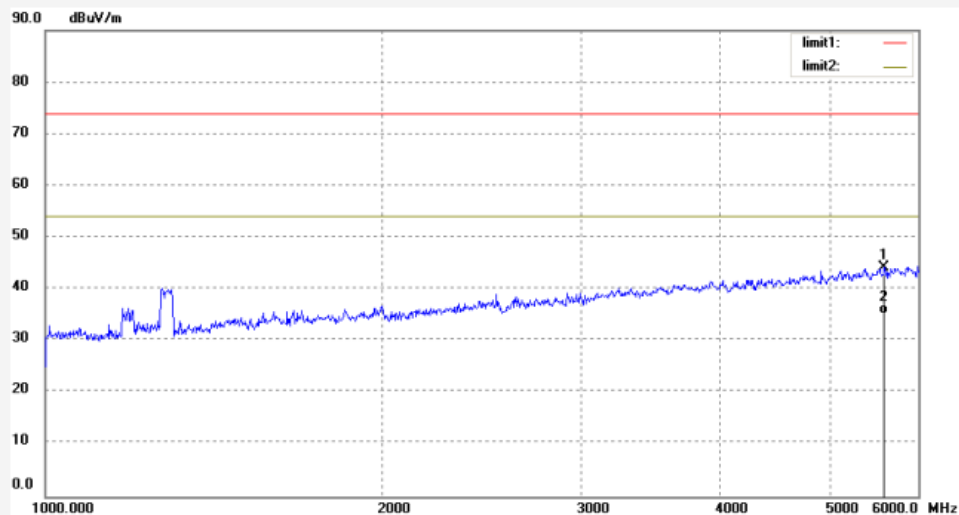
Date: 17/05/06/

Time:

Engineer Signature: WADE

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	5595.042	36.59	7.69	44.28	74.00	-29.72	peak			
2	5595.042	27.55	7.69	35.24	54.00	-18.76	AVG			



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #1812

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Receiver

Mode: On

Model: RG202

Manufacturer: Lenovo

Polarization: Horizontal

Power Source: DC 5V

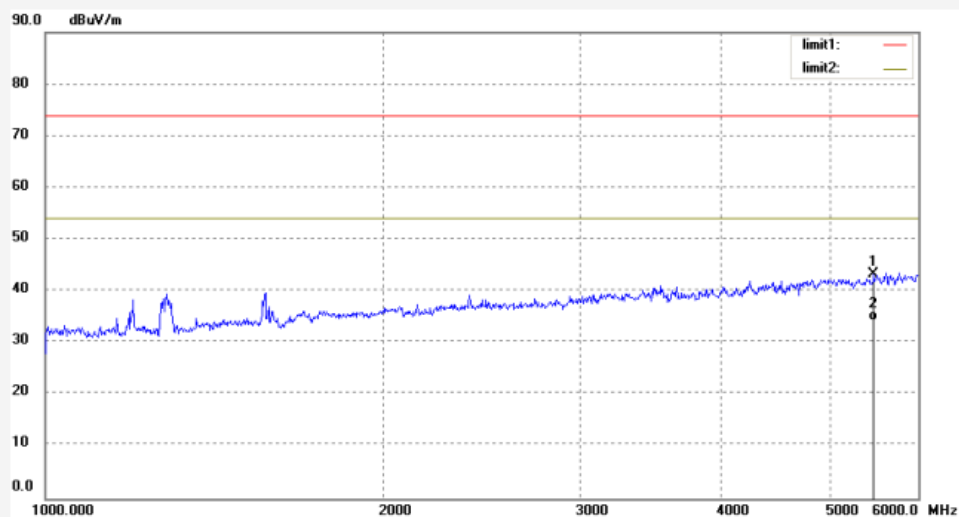
Date: 17/05/06/

Time:

Engineer Signature: WADE

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	5476.026	36.05	7.27	43.32	74.00	-30.68	peak			
2	5476.026	26.97	7.27	34.24	54.00	-19.76	AVG			