

FCC CERTIFICATION
On Behalf of
Hobbico Inc

Revell 2.4G 2 channel Radio System
Model No.: TX24202

FCC ID: IYFTX24202

Prepared for : Hobbico Inc
Address : 2904 Research Road, Champaign, Illinois United States
61821

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 : ATE20130973
Date of Test : May 20-29, 2013
Date of Report : May 31, 2013

TABLE OF CONTENTS

Description	Page
Test Report Certification	
1. GENERAL INFORMATION	4
1.1. Description of Device (EUT).....	4
1.2. Description of Test Facility	4
1.3. Measurement Uncertainty	5
2. MEASURING DEVICE AND TEST EQUIPMENT	6
3. SUMMARY OF TEST RESULTS.....	7
4. FUNDAMENTAL AND HARMONICS RADIATED EMISSION FOR SECTION 15.249(A) 8	8
4.1. Block Diagram of Test Setup.....	8
4.2. The Emission Limit	9
4.3. Configuration of EUT on Measurement	9
4.4. Operating Condition of EUT	9
4.5. Test Procedure	10
4.6. The Field Strength of Radiation Emission Measurement Results	11
5. SPURIOUS RADIATED EMISSION FOR SECTION 15.249(D)	14
5.1. Block Diagram of Test Setup.....	14
5.2. The Emission Limit For Section 15.249(d)	14
5.3. EUT Configuration on Measurement	15
5.4. Operating Condition of EUT	15
5.5. Test Procedure	16
5.6. The Emission Measurement Result	17
6. BAND EDGES	20
6.1. The Requirement	20
6.2. EUT Configuration on Measurement	20
6.3. Operating Condition of EUT	20
6.4. Test Procedure	20
6.5. The Measurement Result	21
7. ANTENNA REQUIREMENT.....	25
7.1. The Requirement	25
7.2. Antenna Construction	25

APPENDIX I (TEST CURVES) (26 pages)

Test Report Certification

Applicant : Hobbico Inc
Manufacturer : SHANG HAI C.C.LEE MODEL CO., LTD.
EUT Description : Revell 2.4G 2 channel Radio System
(A) MODEL NO.: TX24202
(B) POWER SUPPLY: 9V DC (“AA” batteries 6×)

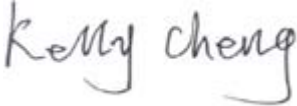
Measurement Procedure Used:


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

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

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

Date of Test : May 20-29, 2013

Prepared by : 
(Kelly Cheng, Engineer)

Approved & Authorized Signer : 
(Sean Liu, Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT : Revell 2.4G 2 channel Radio System

Model Number : TX24202

Power Supply : 9V DC (“AA” batteries 6×)

Operate Frequency : 2402.000-2480.000MHz

Modulation Type : GFSK

Applicant : Hobbico Inc
Address : 2904 Research Road, Champaign, Illinois United States
61821

Manufacturer : SHANG HAI C.C.LEE MODEL CO., LTD.
Address : No.1289, MIDDLE JIASONG ROAD, HUAXIN TOWN,
QINGPU AREA, SHANGHAI, CHINA

Date of sample received : May 15, 2013

Date of Test : May 20-29, 2013

1.2. Description of Test Facility

EMC Lab : Accredited by TUV Rheinland Shenzhen

Listed by FCC
The Registration Number is 752051

Listed by Industry Canada
The Registration Number is 5077A-2

Accredited by China National Accreditation Committee
for Laboratories
The Certificate Registration Number is L3193

Name of Firm : ACCURATE TECHNOLOGY CO. LTD
Site Location : F1, Bldg. A, Changyuan New Material Port, Keyuan Rd.
Science & Industry Park, Nanshan, Shenzhen, Guangdong
P.R. China

1.3.Measurement Uncertainty

Conducted Emission Expanded Uncertainty = 2.23dB, k=2

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

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

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

2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated date	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 12, 2013	Jan. 11, 2014
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 12, 2013	Jan. 11, 2014
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 12, 2013	Jan. 11, 2014
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 12, 2013	Jan. 11, 2014
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Feb. 06, 2013	Feb. 05, 2014
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Feb. 06, 2013	Feb. 05, 2014
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Feb. 06, 2013	Feb. 05, 2014
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Feb. 06, 2013	Feb. 05, 2014
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 12, 2013	Jan. 11, 2014
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 12, 2013	Jan. 11, 2014

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)

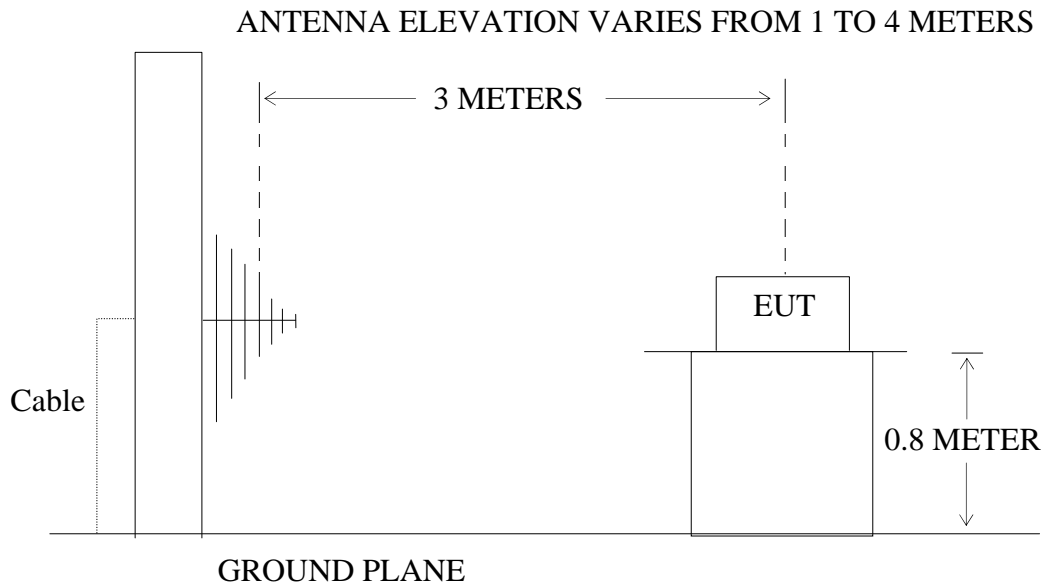
4.1. Block Diagram of Test Setup

4.1.1. Block diagram of connection between the EUT and simulators



(EUT: Revell 2.4G 2 channel Radio System)

4.1.2. Semi-Anechoic Chamber Test Setup Diagram



(EUT: Revell 2.4G 2 channel Radio System)

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. Revell 2.4G 2 channel Radio System (EUT)

Model Number : TX24202
 Serial Number : N/A
 Manufacturer : SHANG HAI C.C.LEE MODEL CO., LTD.

4.4.Operating Condition of EUT

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

4.4.2.Turn on the power of all equipment.

4.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2402.000-2480.000MHz. We are select 2402.000MHz, 2441.000MHz, 2480.000MHz TX frequency to transmit.

4.5. Test Procedure

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

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

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

4.6. The Field Strength of Radiation Emission Measurement Results

PASS.

Date of Test:	<u>May 20, 2013</u>	Temperature:	<u>25°C</u>
EUT:	<u>Revell 2.4G 2 channel Radio System</u>	Humidity:	<u>50%</u>
Model No.:	<u>TX24202</u>	Power Supply:	<u>DC 9V</u>
Test Mode:	<u>TX 2402.000MHz</u>	Test Engineer:	<u>Alen</u>

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	88.98	90.99	-7.54	81.44	83.45	94.00	114.00	-12.56	-30.55	Vertical
2402.000	89.36	91.63	-7.54	81.82	84.09	94.00	114.00	-12.68	-29.91	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
4804.000	49.14	51.26	-0.62	48.52	50.64	54.00	74.00	-5.48	-23.36	Vertical
4804.000	48.01	51.03	-0.71	47.30	50.32	54.00	74.00	-6.70	-23.68	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:	<u>May 20, 2013</u>	Temperature:	<u>25°C</u>
EUT:	<u>Revell 2.4G 2 channel Radio System</u>	Humidity:	<u>50%</u>
Model No.:	<u>TX24202</u>	Power Supply:	<u>DC 9V</u>
Test Mode:	<u>TX 2441.000MHz</u>	Test Engineer:	<u>Alen</u>

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	
2441.000	88.01	90.14	-7.42	80.59	82.72	94.00	114.00	-13.41	-31.28	Vertical
2441.000	84.43	86.42	-7.42	77.01	79.00	94.00	114.00	-16.99	-35.00	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
4876.000	50.32	52.57	-0.23	50.09	52.34	54.00	74.00	-3.91	-21.66	Vertical
4876.000	48.68	51.11	-0.23	48.45	50.88	54.00	74.00	-5.55	-23.12	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:	<u>May 20, 2013</u>	Temperature:	<u>25°C</u>
EUT:	<u>Revell 2.4G 2 channel Radio System</u>	Humidity:	<u>50%</u>
Model No.:	<u>TX24202</u>	Power Supply:	<u>DC 9V</u>
Test Mode:	<u>TX 2480.000MHz</u>	Test Engineer:	<u>Alen</u>

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	
2480.000	84.78	87.10	-7.33	77.45	79.77	94.00	114.00	-16.55	-34.23	Vertical
2480.000	88.36	90.66	-7.33	81.03	83.33	94.00	114.00	-12.79	-30.67	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
4960.000	49.35	51.42	0.30	49.65	51.72	54.00	74.00	-4.35	-22.28	Vertical
4960.000	46.21	48.34	0.30	46.51	48.64	54.00	74.00	-7.49	-25.36	Horizontal

Note:

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

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

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

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

5. SPURIOUS RADIATED EMISSION FOR SECTION 15.249(D)

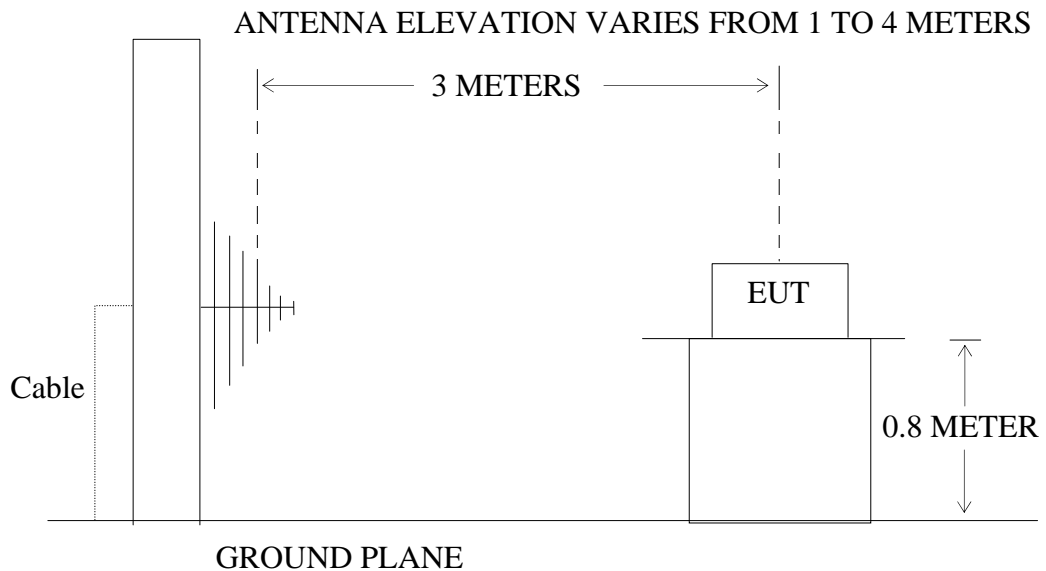
5.1. Block Diagram of Test Setup

5.1.1. Block diagram of connection between the EUT and simulators



(EUT: Revell 2.4G 2 channel Radio System)

5.1.2. Semi-Anechoic Chamber Test Setup Diagram



(EUT: Revell 2.4G 2 channel Radio System)

5.2. The Emission Limit For Section 15.249(d)

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

Radiation Emission Measurement Limits According to Section 15.209

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

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

5.3.EUT Configuration on Measurement

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

5.3.1. Revell 2.4G 2 channel Radio System (EUT)

Model Number : TX24202
Serial Number : N/A
Manufacturer : SHANG HAI C.C.LEE MODEL 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 2402.000-2480.000MHz. We are select 2402.000MHz, 2441.000MHz, 2480.000MHz TX frequency to transmit.

5.5. Test Procedure

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

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

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

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

5.6.The Emission Measurement Result

PASS.

Date of Test:	<u>May 20-29, 2013</u>	Temperature:	<u>25°C</u>
EUT:	<u>Revell 2.4G 2 channel Radio System</u>	Humidity:	<u>50%</u>
Model No.:	<u>TX24202</u>	Power Supply:	<u>DC 9V</u>
Test Mode:	<u>TX 2402.000MHz</u>	Test Engineer:	<u>Alen</u>

Below 30MHz

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

30MHz-25GHz

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

Note:

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

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

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:	May 20-29, 2013	Temperature:	25°C
EUT:	Revell 2.4G 2 channel Radio System	Humidity:	50%
Model No.:	TX24202	Power Supply:	DC 9V
Test Mode:	TX 2441.000MHz	Test Engineer:	Alen

Below 30MHz

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

30MHz-25GH

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

Note:

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

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

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

Date of Test:	May 20-29, 2013	Temperature:	25°C
EUT:	Revell 2.4G 2 channel Radio System	Humidity:	50%
Model No.:	TX24202	Power Supply:	DC 9V
Test Mode:	TX 2480.000MHz	Test Engineer:	Alen

Below 30MHz

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

30MHz-25GH

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

Note:

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

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

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

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. Revell 2.4G 2 channel Radio System (EUT)

Model Number : TX24202
 Serial Number : N/A
 Manufacturer : SHANG HAI C.C.LEE MODEL 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 2402.000-2480.000MHz MHz. We are select 2402.000MHz, 2480.000MHz TX frequency to transmit.

6.4.Test Procedure

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

6.5.The Measurement Result

Pass.

Date of Test:	<u>May 20, 2013</u>	Temperature:	<u>25°C</u>
EUT:	<u>Revell 2.4G 2 channel Radio System</u>	Humidity:	<u>50%</u>
Model No.:	<u>TX24201</u>	Power Supply:	<u>DC 9V</u>
Test Mode:	<u>TX 2402.000MHz (Hopping)</u>	Test Engineer:	<u>Alen</u>

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2310.000	43.00	48.43	-7.81	35.19	40.62	54	74	-18.81	-33.38	Vertical
2362.802	45.00	50.67	-7.71	37.29	42.96	54	74	-16.71	-31.04	Vertical
2390.000	45.02	50.02	-7.53	37.49	42.49	54	74	-16.51	-31.51	Vertical
2310.000	43.25	48.83	-7.81	35.44	41.02	54	74	-18.56	-32.98	Horizontal
2361.404	45.28	50.49	-7.71	37.57	42.78	54	74	-16.43	-31.22	Horizontal
2390.000	42.36	47.94	-7.53	34.83	40.41	54	74	-19.17	-33.59	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:	<u>May 20, 2013</u>	Temperature:	<u>25°C</u>
EUT:	<u>Revell 2.4G 2 channel Radio System</u>	Humidity:	<u>50%</u>
Model No.:	<u>TX24201</u>	Power Supply:	<u>DC 9V</u>
Test Mode:	<u>TX 2480.000MHz(Hopping)</u>	Test Engineer:	<u>Alen</u>

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2483.500	58.39	64.14	-7.37	51.02	56.77	54	74	-2.98	-17.23	Vertical
2486.874	45.02	52.98	-7.38	37.64	45.60	54	74	-16.36	-28.40	Vertical
2500.000	42.39	48.26	-7.40	34.99	40.86	54	74	-19.01	-33.14	Vertical
2483.500	51.00	58.38	-7.37	43.63	51.01	54	74	-10.37	-22.99	Horizontal
2490.517	42.69	49.50	-7.38	35.31	42.12	54	74	-18.69	-31.88	Horizontal
2500.000	41.00	47.69	-7.40	33.60	40.29	54	74	-20.40	-33.71	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:	<u>May 20, 2013</u>	Temperature:	<u>25°C</u>
EUT:	<u>Revell 2.4G 2 channel Radio System</u>	Humidity:	<u>50%</u>
Model No.:	<u>TX24201</u>	Power Supply:	<u>DC 9V</u>
Test Mode:	<u>TX 2402.000MHz (Non-hopping)</u>	Test Engineer:	<u>Alen</u>

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2310.000	41.23	45.09	-7.81	33.51	37.28	54.00	74.00	-20.49	-36.72	Vertical
2385.857	46.58	50.07	-7.56	39.02	42.51	54.00	74.00	-14.98	-31.49	Vertical
2390.000	39.30	43.52	-7.53	31.77	35.99	54.00	74.00	-22.23	-38.01	Vertical
2310.000	40.02	44.57	-7.81	32.21	36.76	54.00	74.00	-21.79	-37.24	Horizontal
2370.088	42.39	46.75	-7.66	34.73	39.09	54.00	74.00	-19.27	-34.91	Horizontal
2390.000	41.39	45.27	-7.53	33.86	37.74	54.00	74.00	-20.14	-36.26	Horizontal

Note:

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

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

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

Date of Test:	<u>May 20, 2013</u>	Temperature:	<u>25°C</u>
EUT:	<u>Revell 2.4G 2 channel Radio System</u>	Humidity:	<u>50%</u>
Model No.:	<u>TX24201</u>	Power Supply:	<u>DC 9V</u>
Test Mode:	<u>TX 2480.000MHz (Non-hopping)</u>	Test Engineer:	<u>Alen</u>

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2483.500	41.28	45.90	-7.37	33.91	38.53	54.00	74.00	-20.09	-35.47	Vertical
2495.912	43.28	48.71	-7.39	35.89	41.32	54.00	74.00	-18.11	-32.68	Vertical
2500.000	38.93	43.64	-7.40	31.53	36.24	54.00	74.00	-2.47	-37.76	Vertical
2483.500	41.88	45.96	-7.37	34.51	38.59	54.00	74.00	-19.49	-35.41	Horizontal
2495.912	42.28	48.11	-7.39	34.89	40.72	54.00	74.00	-19.11	-33.28	Horizontal
2500.000	38.92	44.22	-7.40	31.52	36.82	54.00	74.00	-22.48	-37.18	Horizontal

Note:

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

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

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

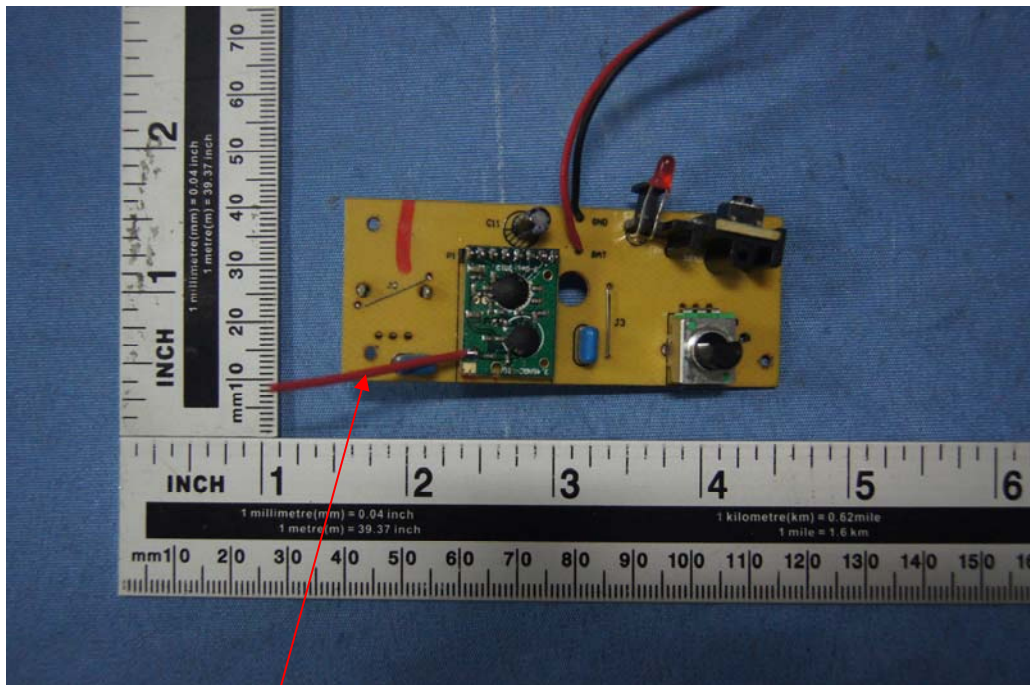
7. ANTENNA REQUIREMENT

7.1.The Requirement

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

7.2.Antenna Construction

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



Antenna

APPENDIX I (Test Curves)



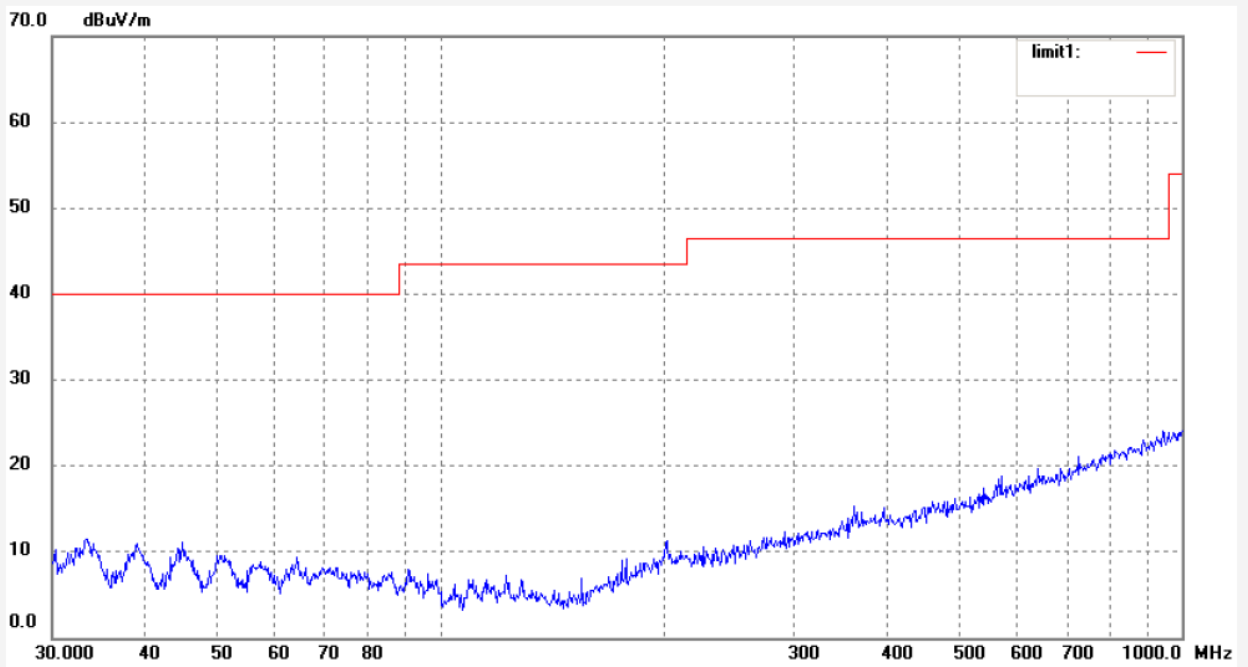
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: alen #629	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/20/
Temp.(C)/Hum.(%) 26 C / 55 %	Time: 10/31/13
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2402MHz	Distance: 3m
Model: TX24202	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



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: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: alen #630

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 26 C / 55 %

EUT: Revell 2.4G 2 Channel Radio System

Mode: TX 2402MHz

Model: TX24202

Manufacturer: C.C.LEE

Polarization: Vertical

Power Source: DC 9V

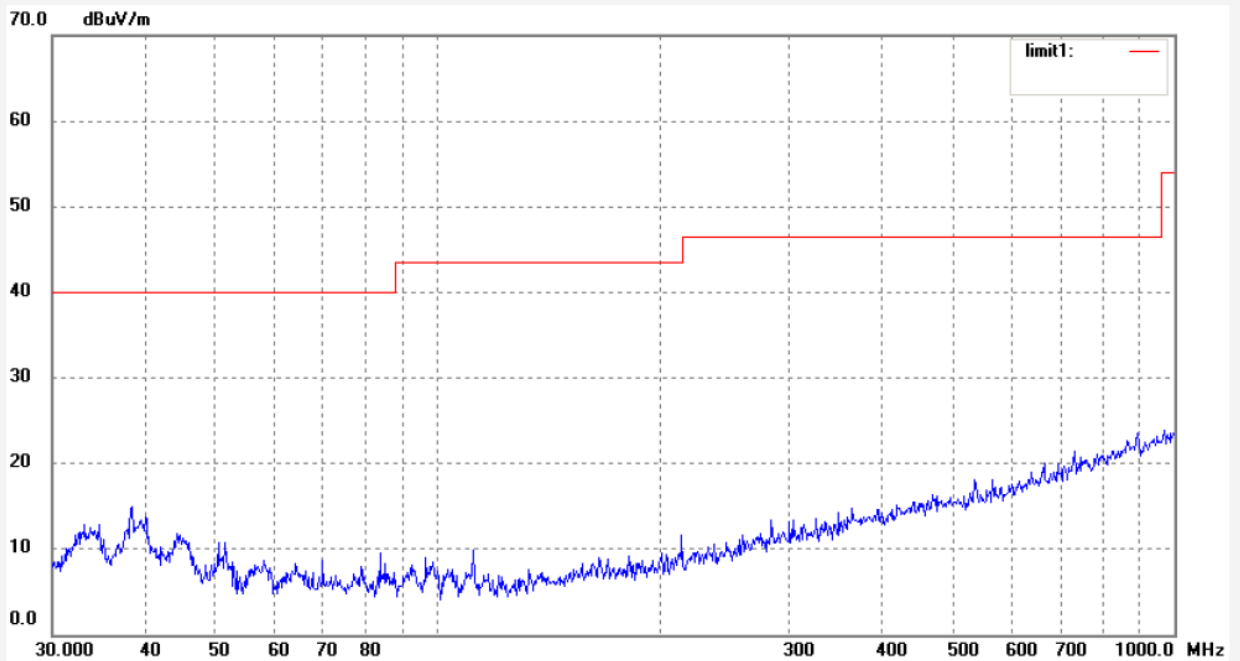
Date: 13/05/20/

Time: 10/32/02

Engineer Signature:

Distance: 3m

Note: Report No:ATE20130973



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.

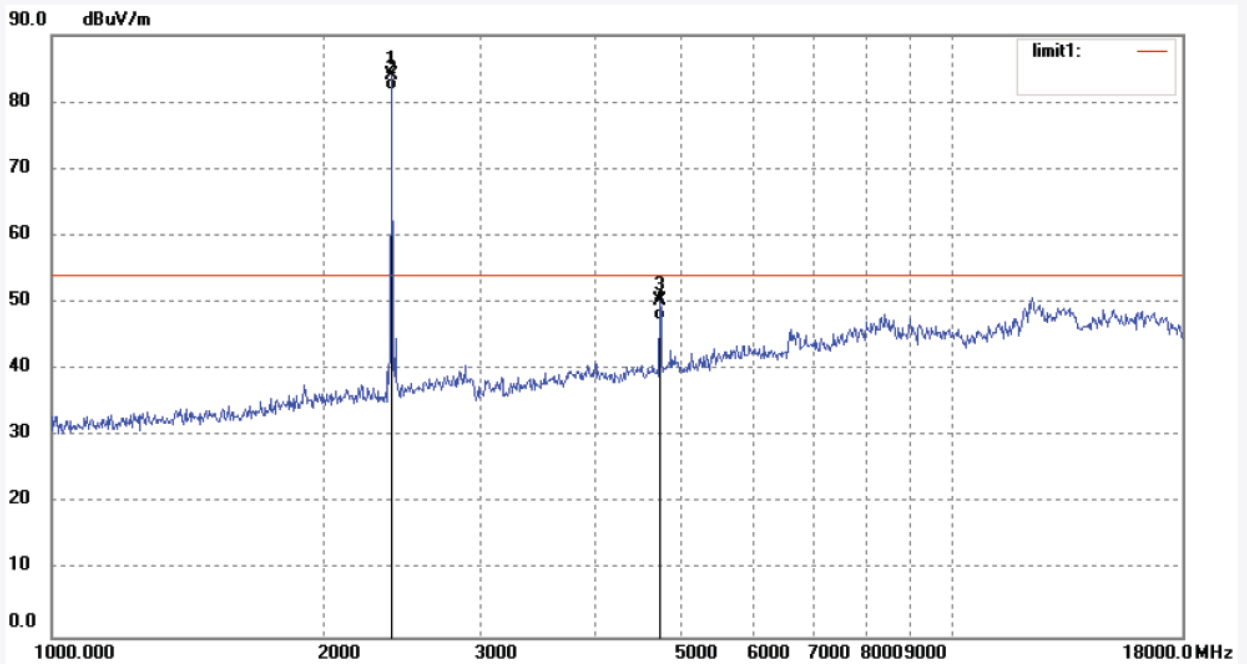
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: ALEN #1164
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Revell 2.4G 2 Channel Radio System
Mode: TX 2402MHz
Model: TX24202
Manufacturer: C.C.LEE

Polarization: Horizontal
Power Source: DC 9V
Date: 13/05/20/
Time: 9/08/15
Engineer Signature:
Distance: 3m

Note: Report No:ATE20130973



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	91.63	-7.54	84.09	114.00	-29.91	peak			
2	2402.000	89.36	-7.54	81.82	94.00	-12.68	AVG			
3	4804.000	51.03	-0.71	50.32	74.00	-23.68	peak			
4	4804.000	48.01	-0.71	47.30	54.00	-6.70	AVG			



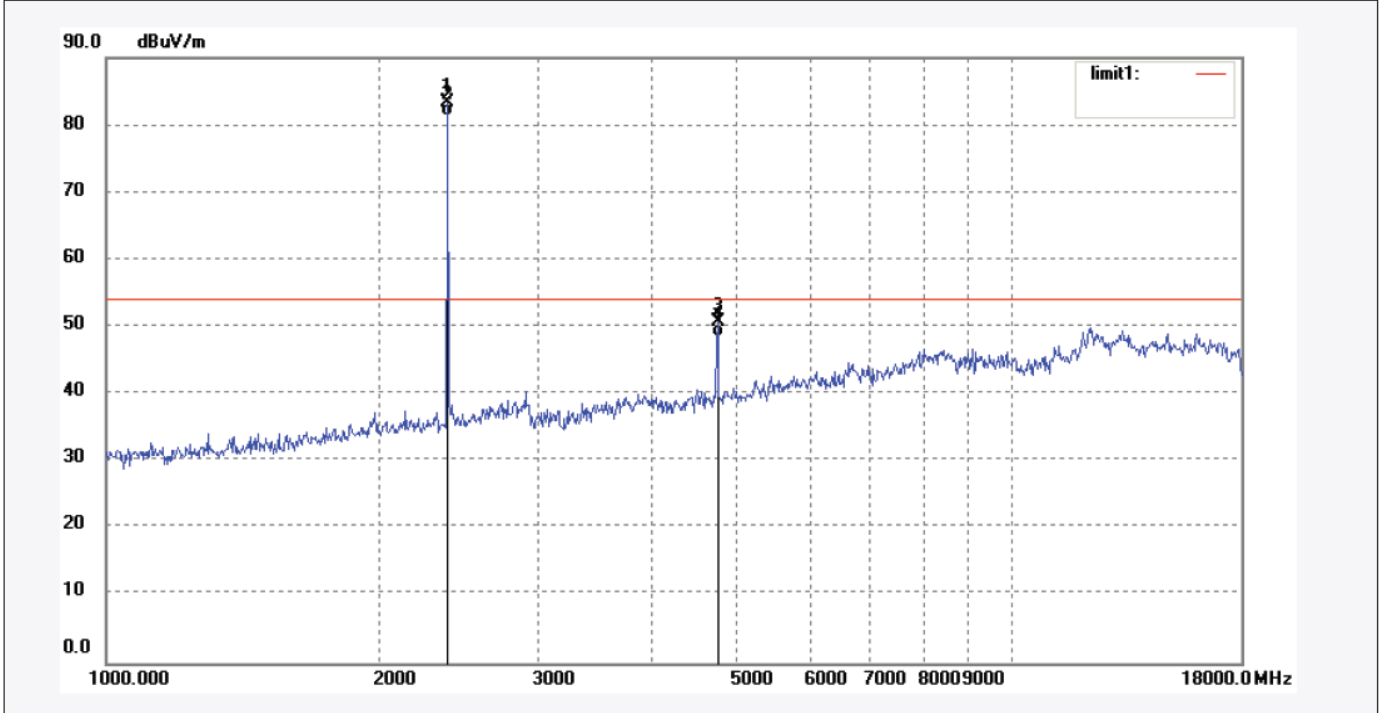
ACCURATE TECHNOLOGY CO., LTD.

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.: ALEN #1165	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/20/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 9/09/27
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2402MHz	Distance: 3m
Model: TX24202	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



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	90.99	-7.54	83.45	114.00	-30.55	peak			
2	2402.000	88.98	-7.54	81.44	94.00	-12.56	AVG			
3	4804.000	51.26	-0.62	50.64	74.00	-23.36	peak			
4	4804.000	49.14	-0.62	48.52	54.00	-5.48	AVG			



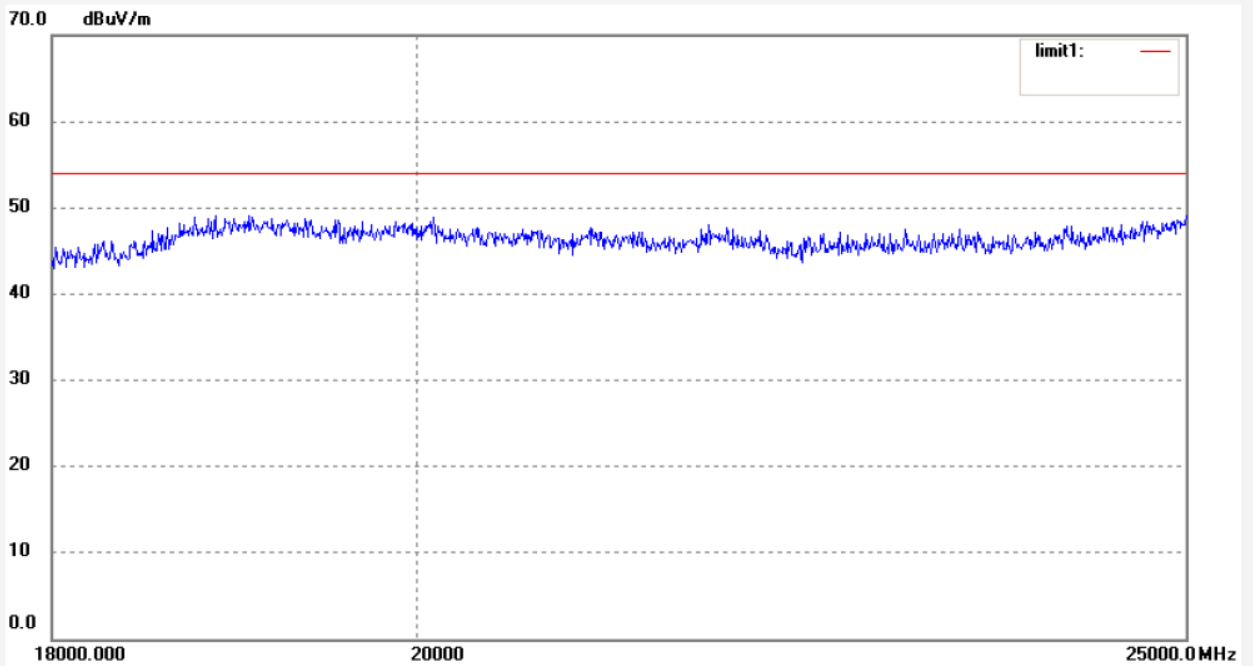
ACCURATE TECHNOLOGY CO., LTD.

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

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

Job No.: ALEN #677	Polarization: Horizontal
Standard: FCC 15C	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/29/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:35:56
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2402MHz	Distance: 3m
Model: TX24202	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



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



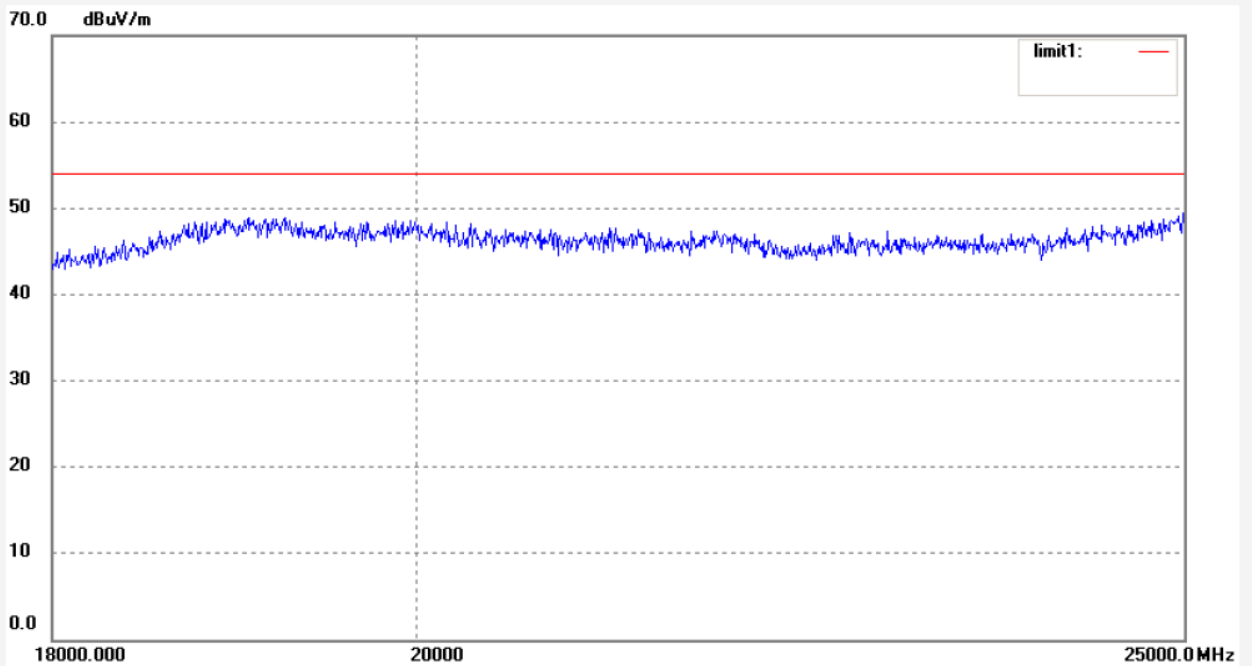
ACCURATE TECHNOLOGY CO., LTD.

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.: ALEN #676	Polarization: Vertical
Standard: FCC 15C	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/29/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:32:05
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2402MHz	Distance: 3m
Model: TX24202	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



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



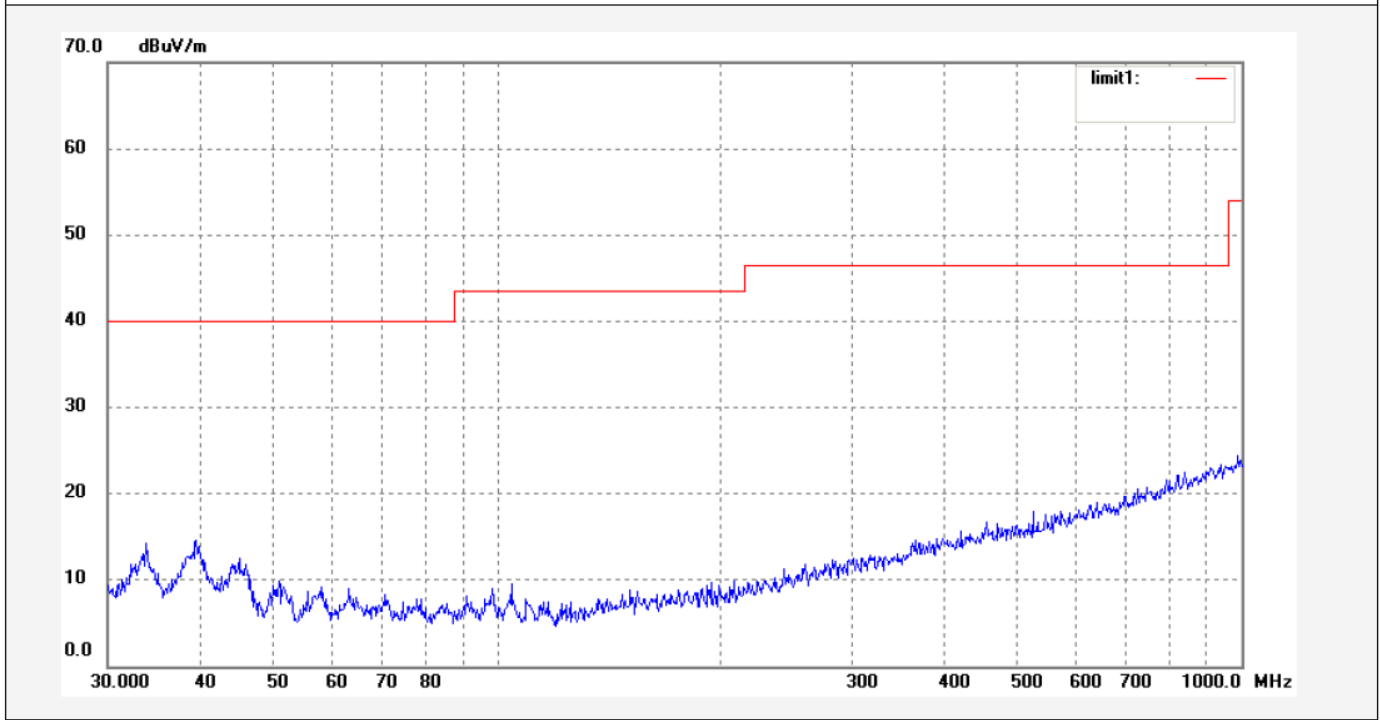
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: alen #631	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/20/
Temp.(C)/Hum.(%) 26 C / 55 %	Time: 10/33/12
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2441MHz	Distance: 3m
Model: TX24202	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



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



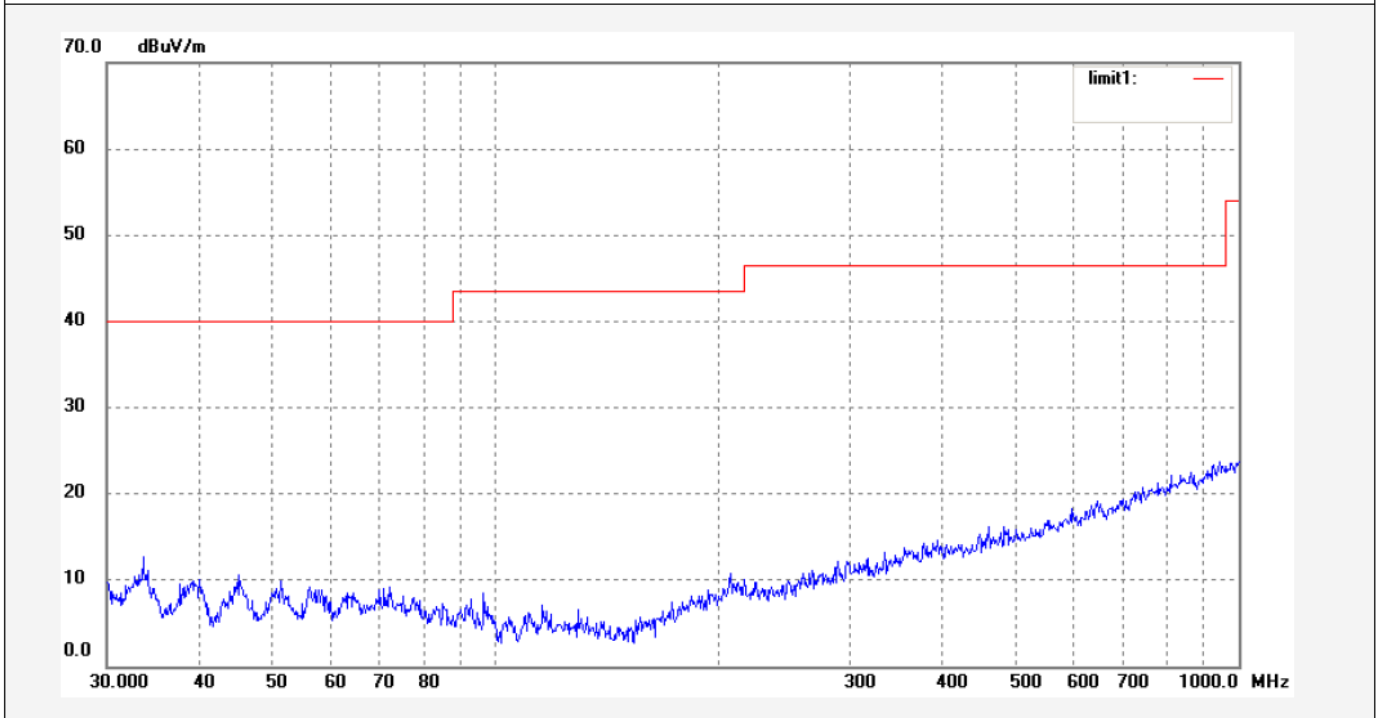
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: alen #632	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/20/
Temp.(C)/Hum.(%) 26 C / 55 %	Time: 10/33/42
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2441MHz	Distance: 3m
Model: TX24202	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



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



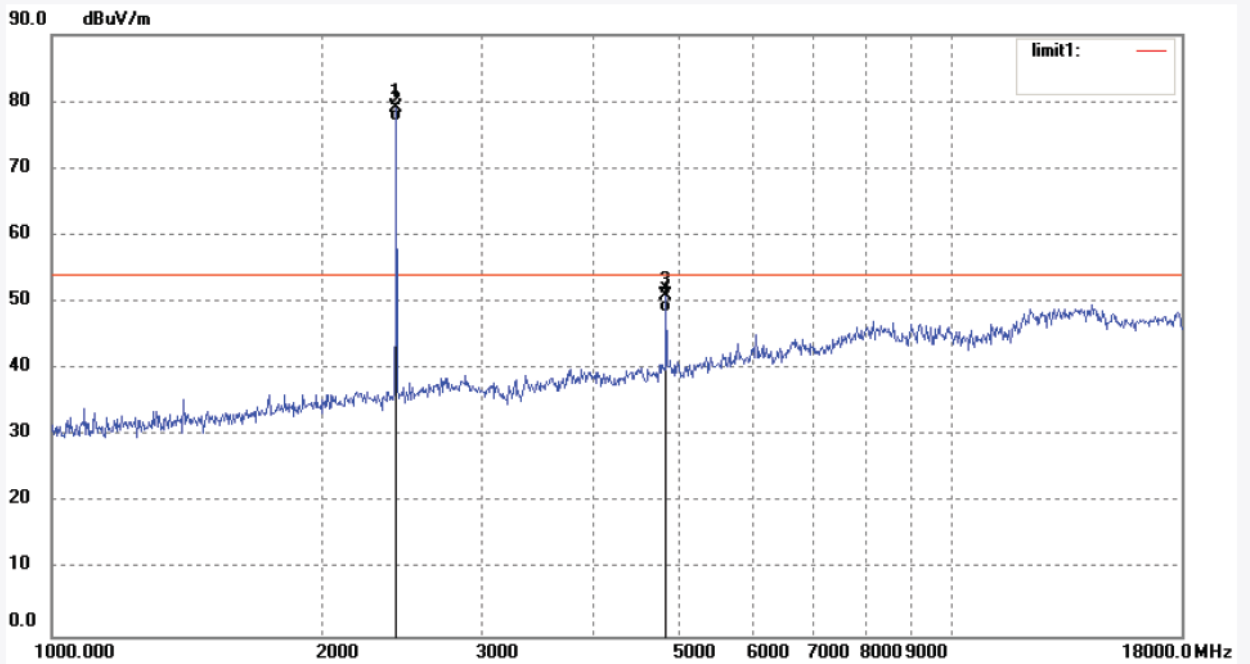
ACCURATE TECHNOLOGY CO., LTD.

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

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

Job No.: ALEN #1167	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/20/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 9/14/03
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2441MHz	Distance: 3m
Model: TX24202	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2438.000	86.42	-7.42	79.00	114.00	-35.00	peak			
2	2438.000	84.43	-7.42	77.01	94.00	-16.99	AVG			
3	4876.000	51.11	-0.23	50.88	74.00	-23.12	peak			
4	4876.000	48.68	-0.23	48.45	54.00	-5.55	AVG			



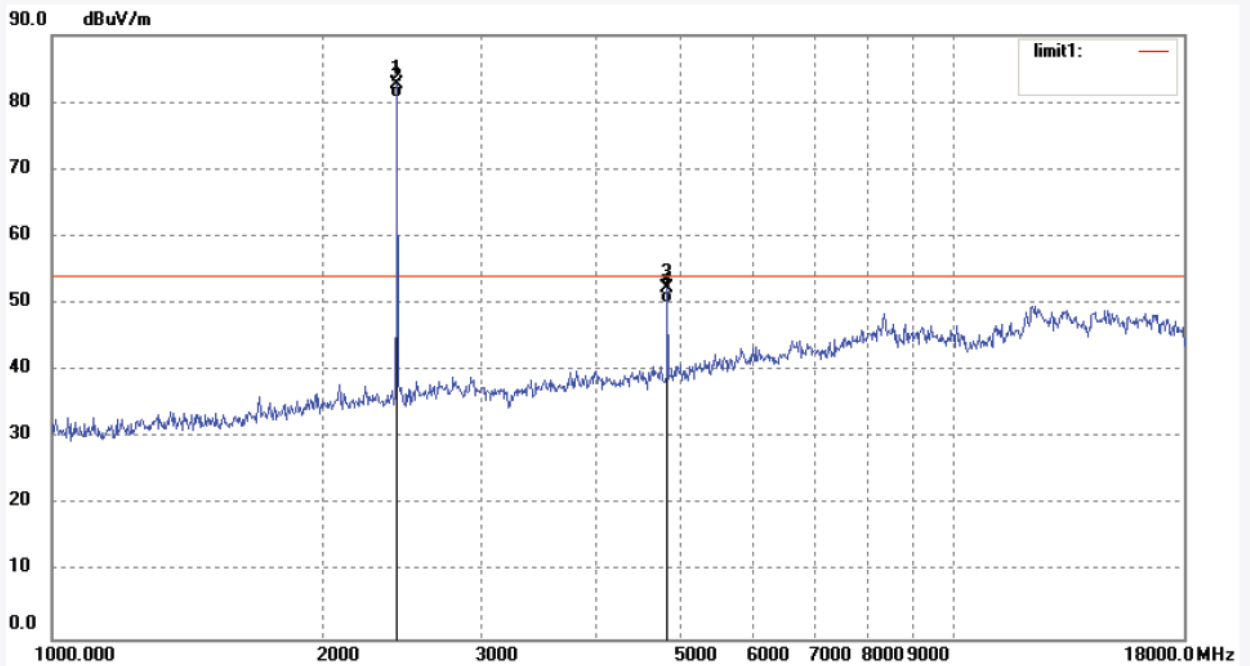
ACCURATE TECHNOLOGY CO., LTD.

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.: ALEN #1166	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/20/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 9/10/49
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2441MHz	Distance: 3m
Model: TX24202	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2438.000	90.14	-7.42	82.72	114.00	-31.28	peak			
2	2438.000	88.01	-7.42	80.59	94.00	-13.41	AVG			
3	4876.000	52.57	-0.23	52.34	74.00	-21.66	peak			
4	4876.000	50.32	-0.23	50.09	54.00	-3.91	AVG			



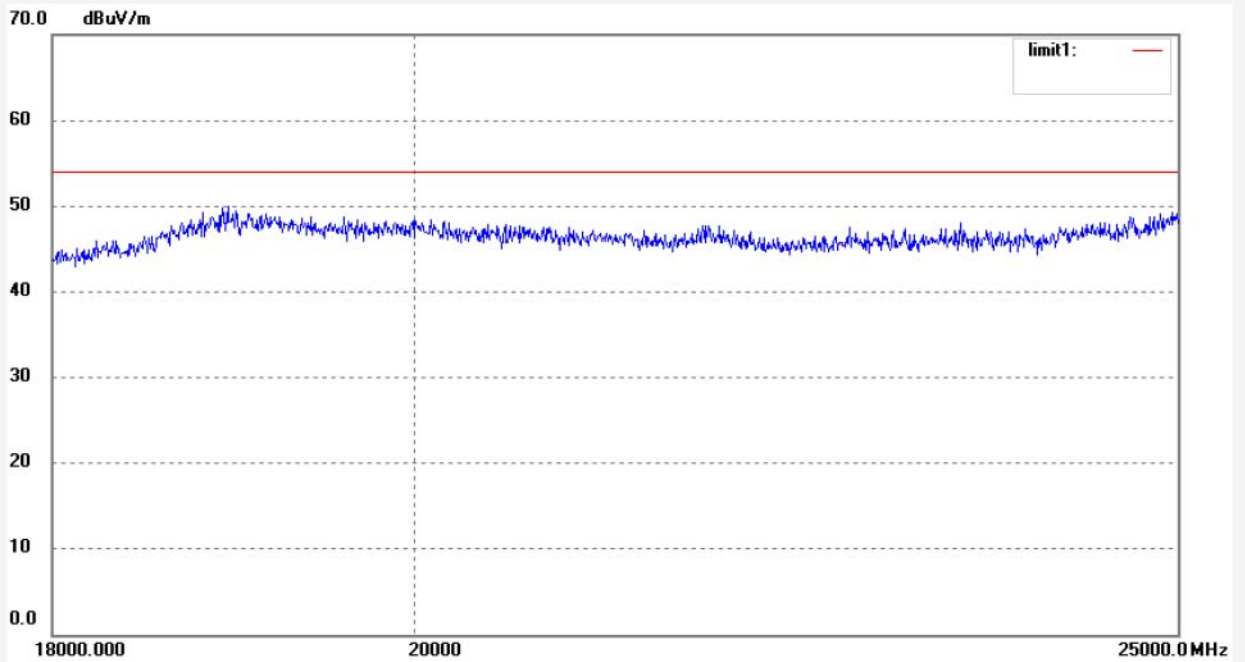
ACCURATE TECHNOLOGY CO., LTD.

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.: ALEN #678	Polarization: Horizontal
Standard: FCC I5C	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/29/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:38:38
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2441MHz	Distance: 3m
Model: TX24202	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



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



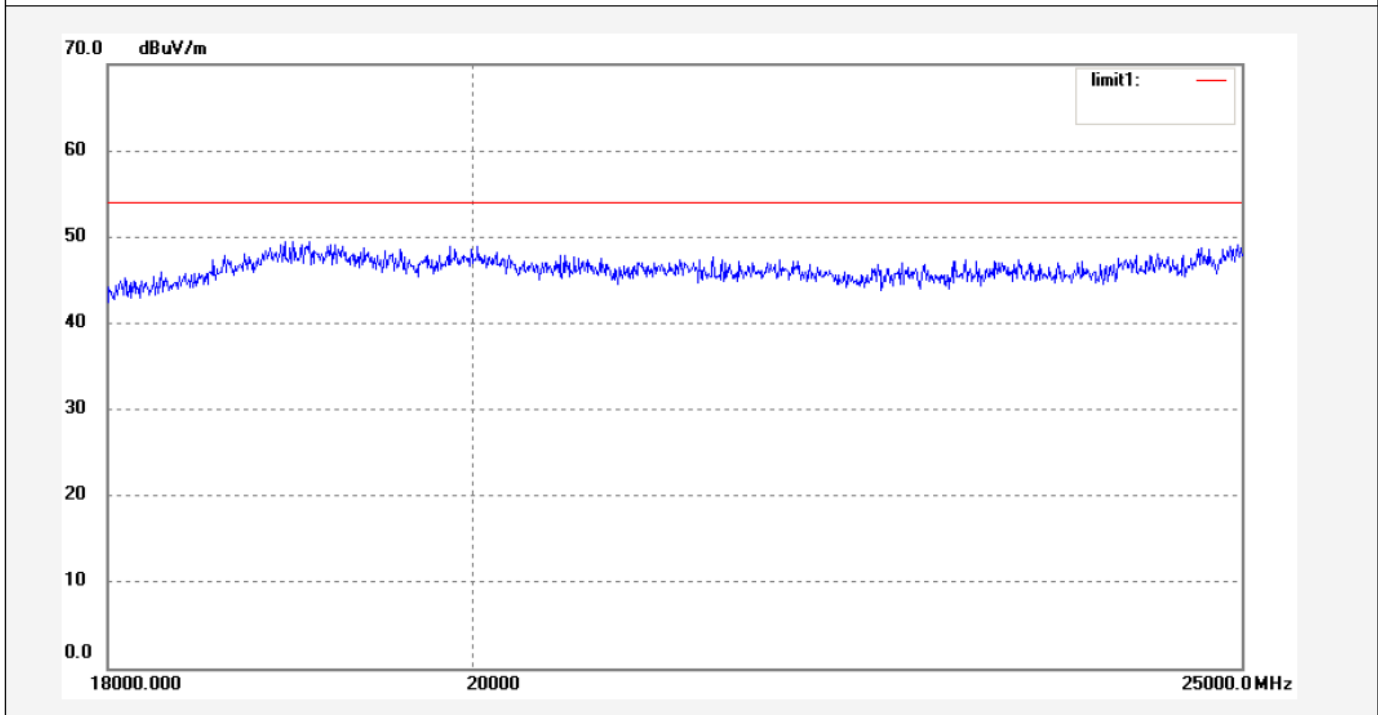
ACCURATE TECHNOLOGY CO., LTD.

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.: ALEN #679	Polarization: Vertical
Standard: FCC 15C	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/29/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:43:17
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2441MHz	Distance: 3m
Model: TX24202	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



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



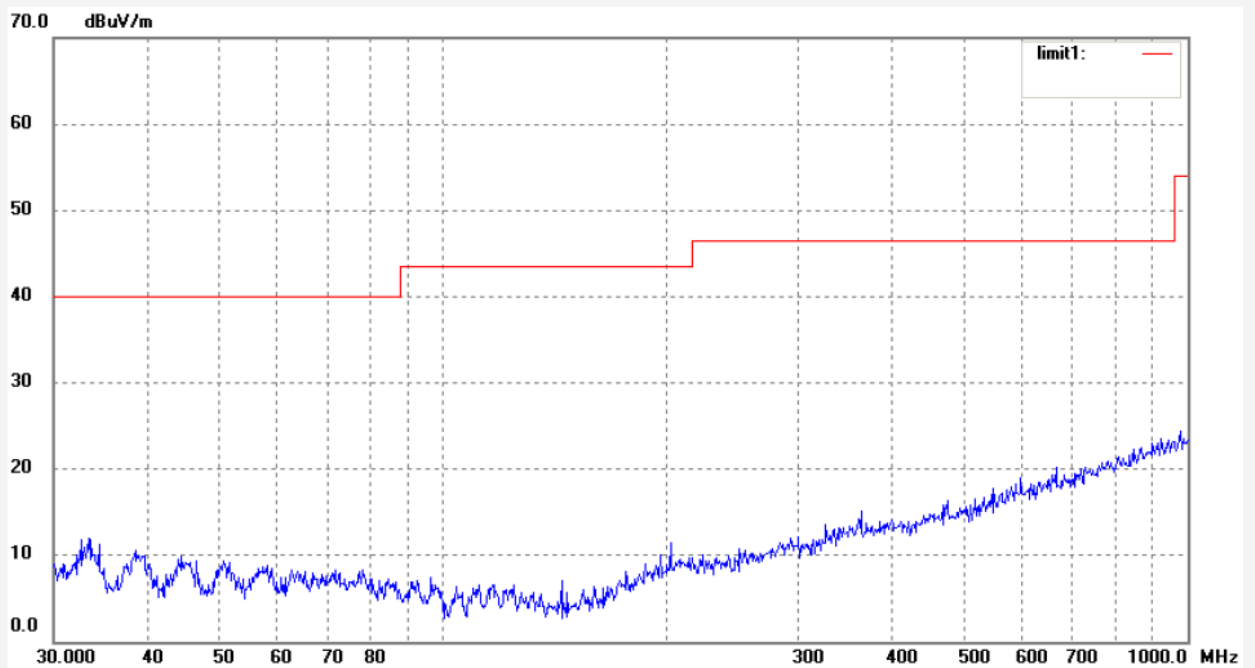
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: alen #633	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/20/
Temp.(C)/Hum.(%) 26 C / 55 %	Time: 10/34/08
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: TX24202	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



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



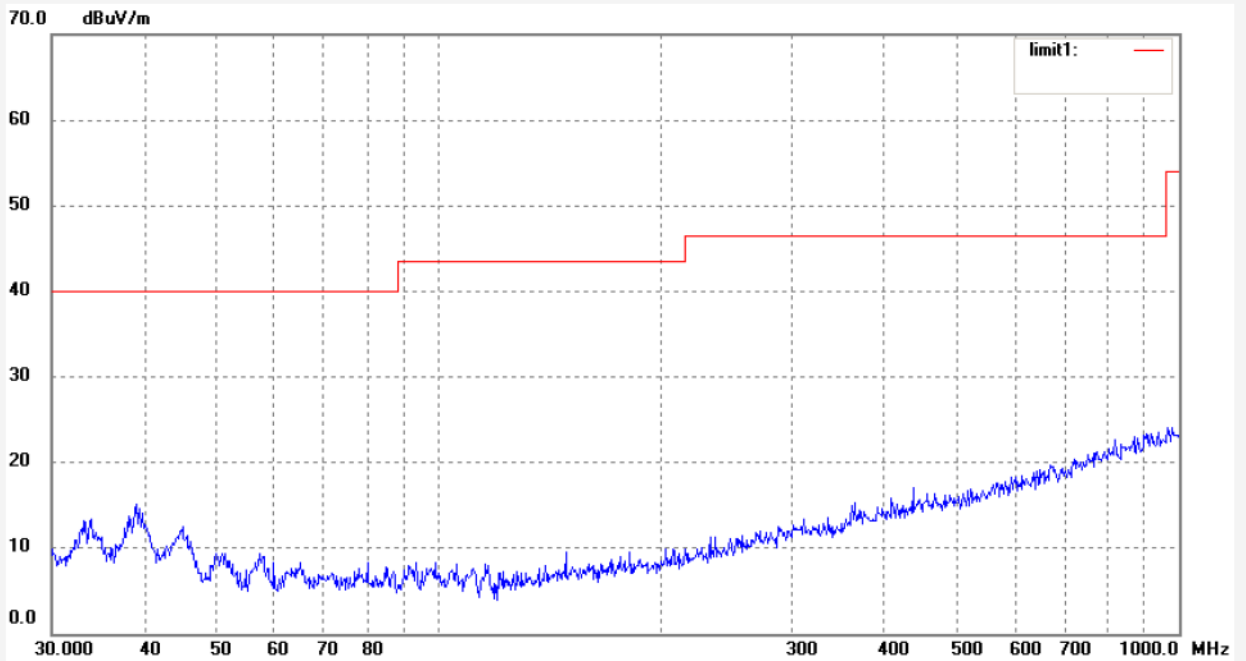
ACCURATE TECHNOLOGY CO., LTD.

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

Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: alen #634	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/20/
Temp.(C)/Hum.(%) 26 C / 55 %	Time: 10/34/42
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: TX24202	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



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



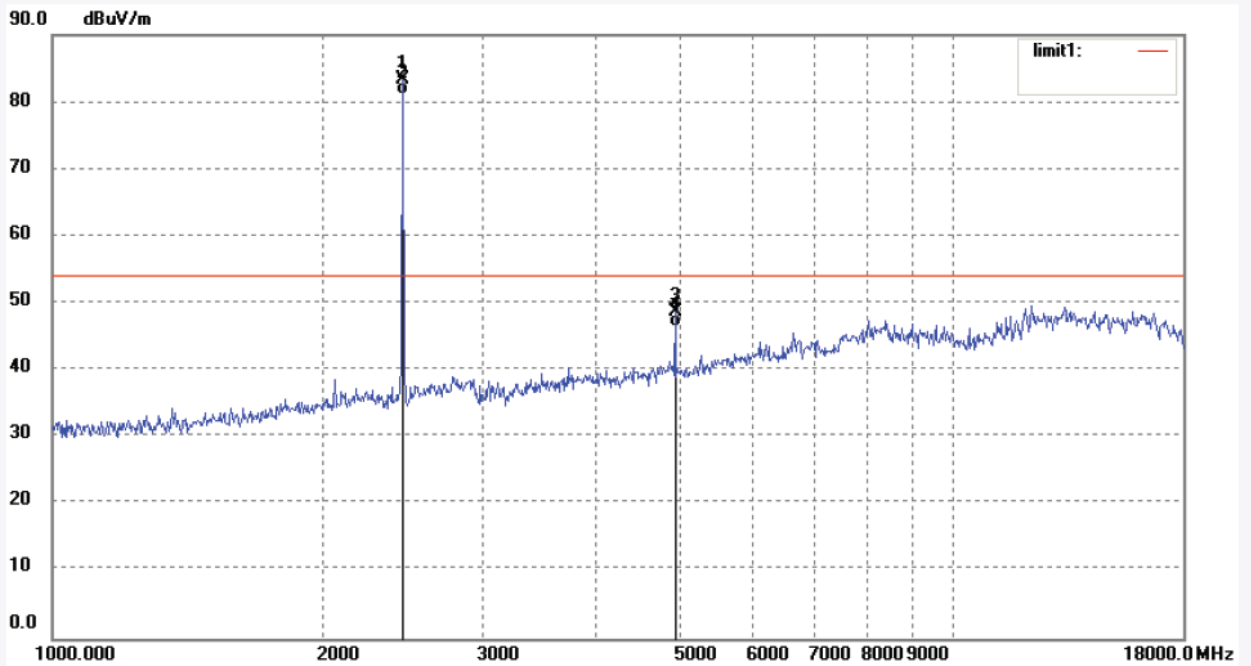
ACCURATE TECHNOLOGY CO., LTD.

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

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

Job No.: ALEN #1169 Standard: FCC Class B 3M Radiated Test item: Radiation Test Temp.(C)/Hum.(%) 25 C / 55 % EUT: Revell 2.4G 2 Channel Radio System Mode: TX 2480MHz Model: TX24202 Manufacturer: C.C.LEE	Polarization: Horizontal Power Source: DC 9V Date: 13/05/20/ Time: 9/16/56 Engineer Signature: Distance: 3m
--	--

Note: Report No:ATE20130973



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.000	90.66	-7.33	83.33	114.00	-30.67	peak			
2	2480.000	88.36	-7.33	81.03	94.00	-12.79	AVG			
3	4960.000	48.34	0.30	48.64	74.00	-25.36	peak			
4	4960.000	46.21	0.30	46.51	54.00	-7.49	AVG			



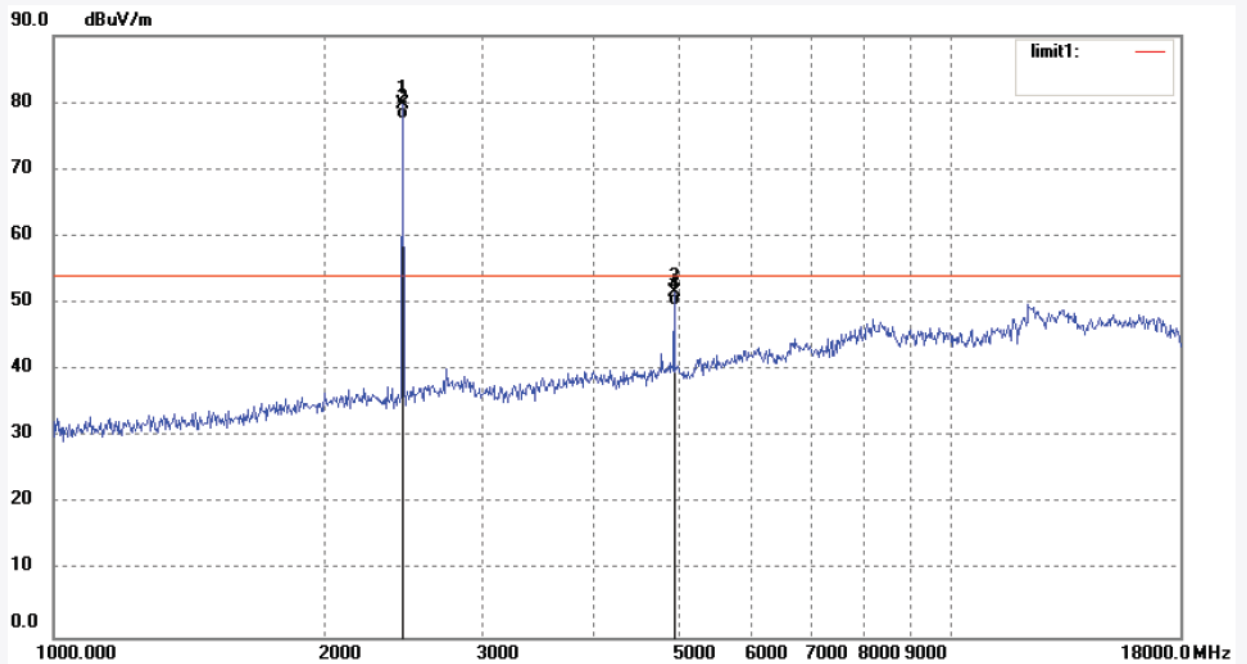
ACCURATE TECHNOLOGY CO., LTD.

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.: ALEN #1168	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/20/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 9/15/32
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: TX24202	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.000	87.10	-7.33	79.77	114.00	-34.23	peak			
2	2480.000	84.78	-7.33	77.45	94.00	-16.55	AVG			
3	4960.000	51.42	0.30	51.72	74.00	-22.28	peak			
4	4960.000	49.35	0.30	49.65	54.00	-4.35	AVG			



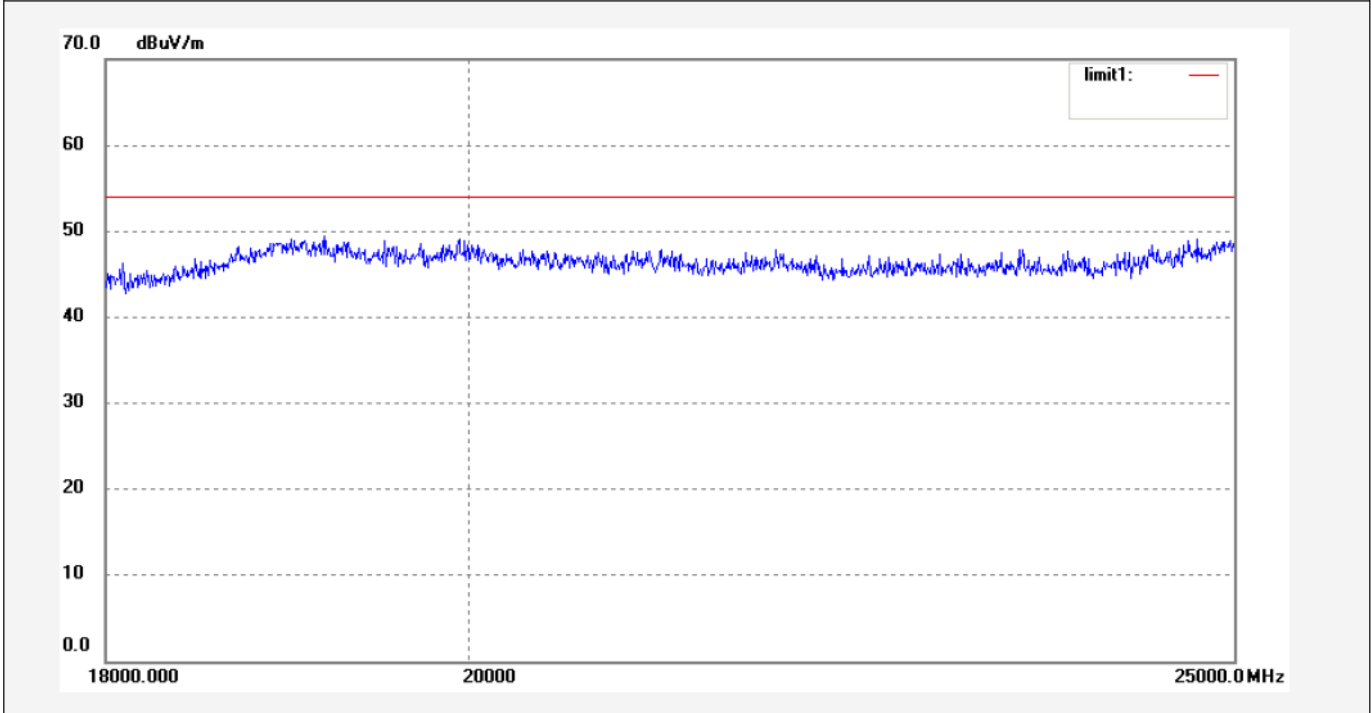
ACCURATE TECHNOLOGY CO., LTD.

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.: ALEN #681	Polarization: Horizontal
Standard: FCC 15C	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/29/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:50:47
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: TX24202	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



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



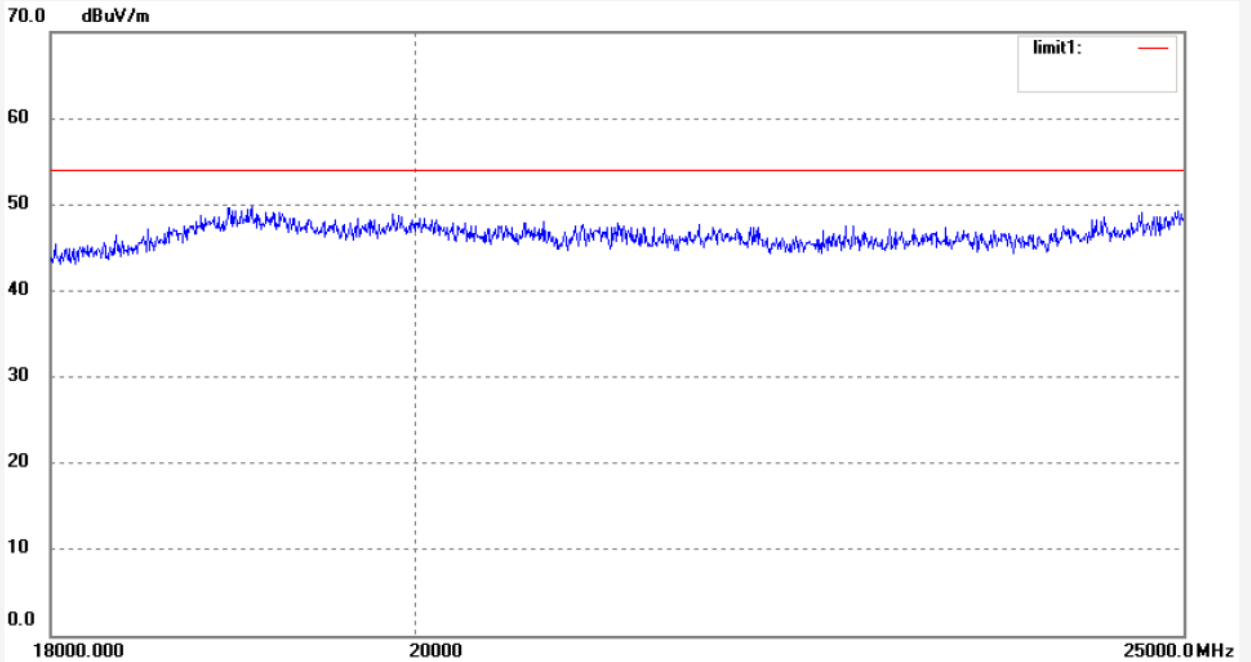
ACCURATE TECHNOLOGY CO., LTD.

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.: ALEN #680	Polarization: Vertical
Standard: FCC 15C	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/29/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:47:55
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: TX24202	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



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



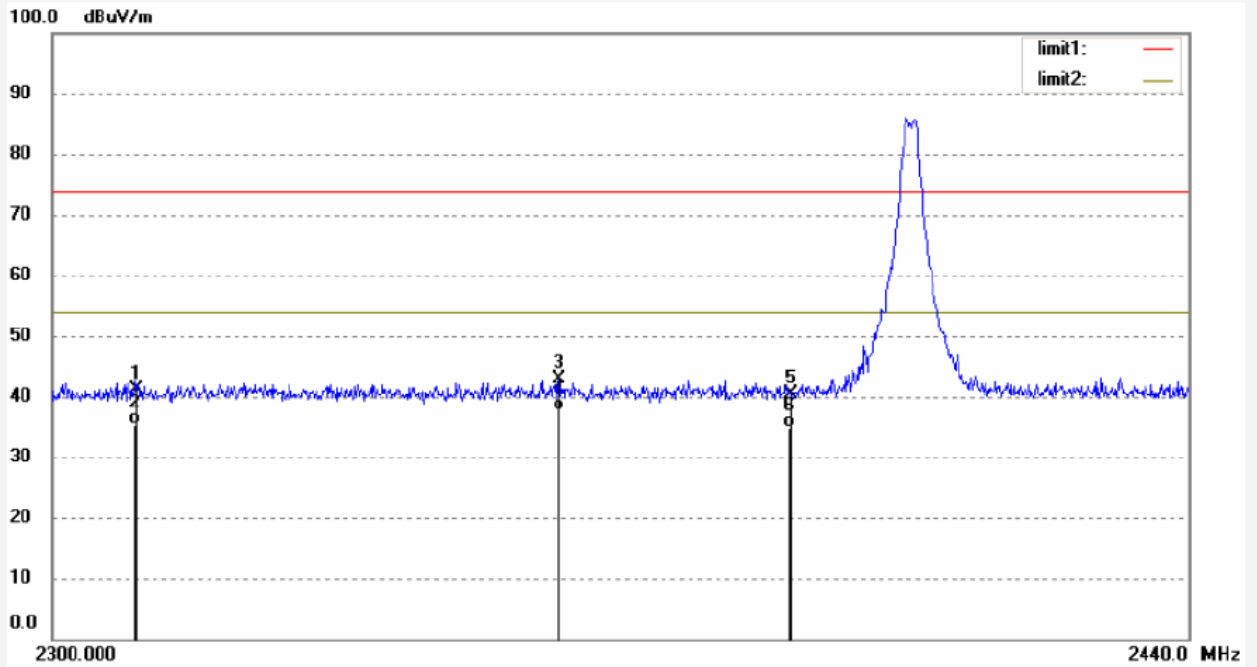
ACCURATE TECHNOLOGY CO., LTD.

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

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

Job No.: ALEN #1172	Polarization: Horizontal
Standard: FCC PK	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/20/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 9/22/17
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2402MHz	Distance: 3m
Model: TX24202 (Hopping)	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	48.83	-7.81	41.02	74.00	-32.98	peak			
2	2310.000	43.25	-7.81	35.44	54.00	-18.56	AVG			
3	2361.404	50.49	-7.71	42.78	74.00	-31.22	peak			
4	2361.404	45.28	-7.71	37.57	54.00	-16.43	AVG			
5	2390.000	47.94	-7.53	40.41	74.00	-33.59	peak			
6	2390.000	42.36	-7.53	34.83	54.00	-19.17	AVG			



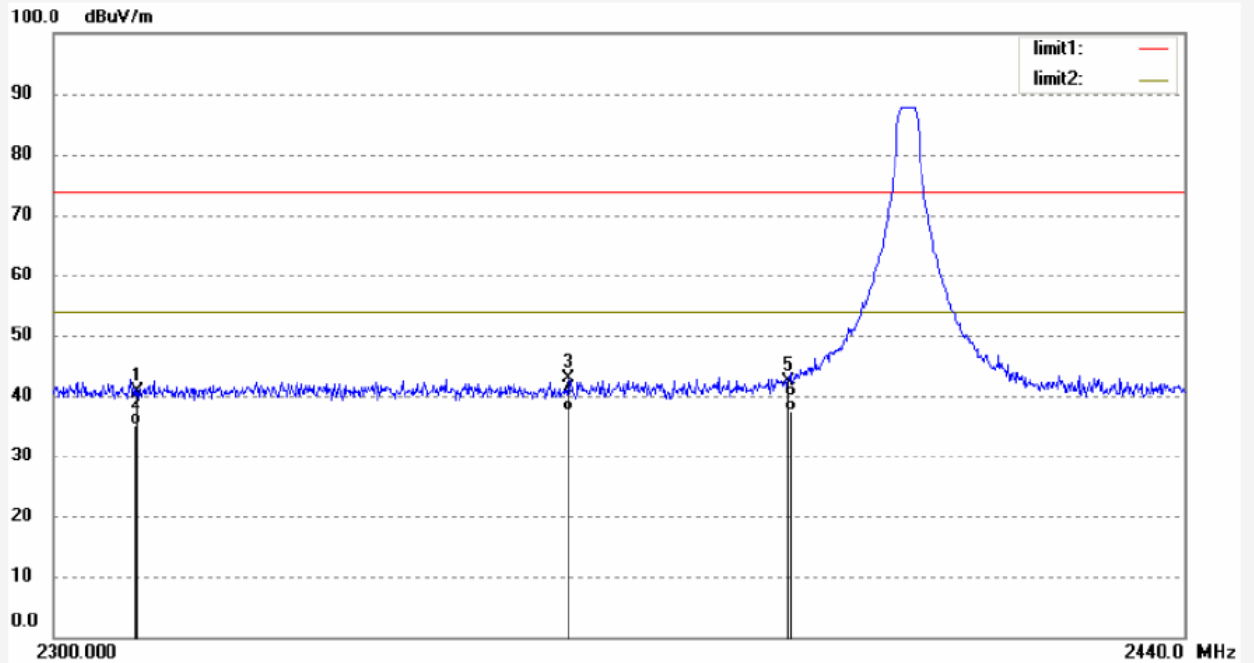
ACCURATE TECHNOLOGY CO., LTD.

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.: ALEN #1173	Polarization: Vertical
Standard: FCC PK	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/20/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 9/23/41
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2402MHz	Distance: 3m
Model: TX24202 (Hopping)	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	48.43	-7.81	40.62	74.00	-33.38	peak			
2	2310.000	43.00	-7.81	35.19	54.00	-18.81	AVG			
3	2362.802	50.67	-7.71	42.96	74.00	-31.04	peak			
4	2362.802	45.00	-7.71	37.29	54.00	-16.71	AVG			
5	2390.000	50.02	-7.53	42.49	74.00	-31.51	peak			
6	2390.000	45.02	-7.53	37.49	54.00	-16.51	AVG			



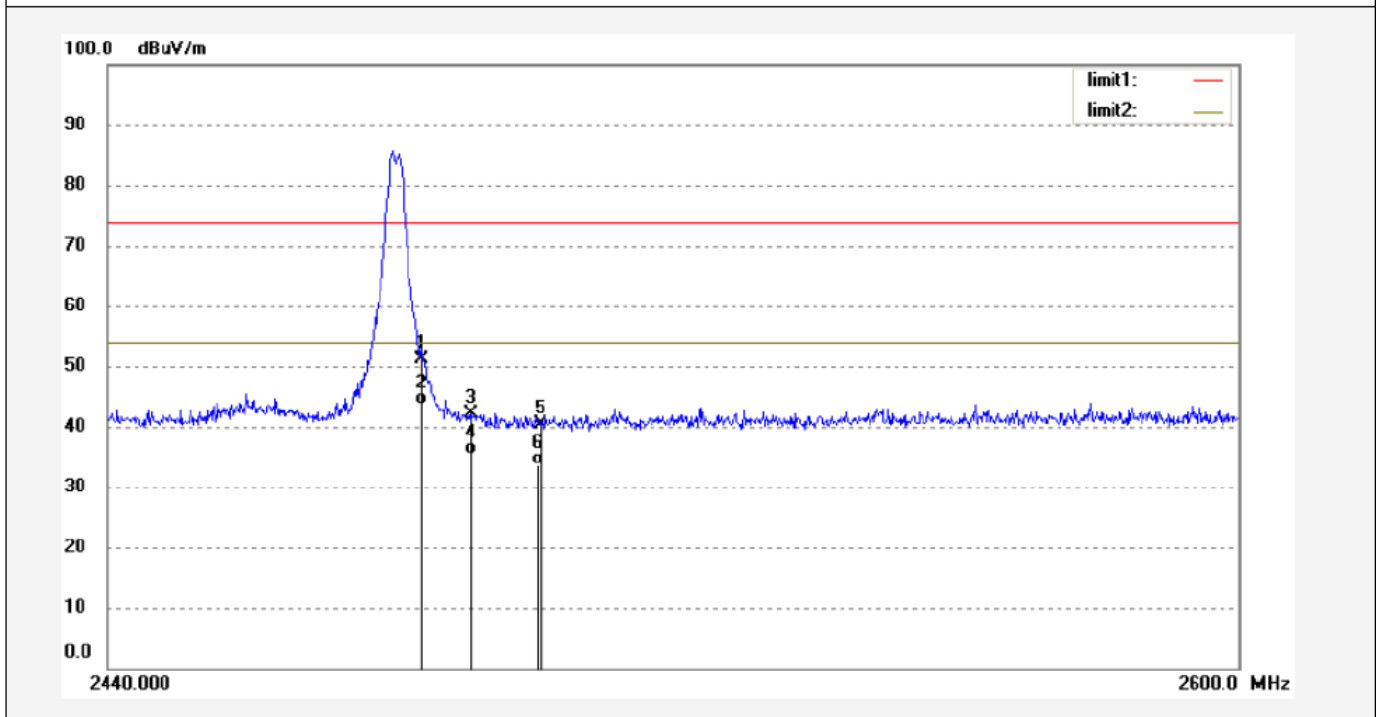
ACCURATE TECHNOLOGY CO., LTD.

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.: ALEN #1170	Polarization: Horizontal
Standard: FCC PK	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/20/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 9/18/51
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: TX24202 (Hopping)	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



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	58.38	-7.37	51.01	74.00	-22.99	peak			
2	2483.500	51.00	-7.37	43.63	54.00	-10.37	AVG			
3	2490.517	49.50	-7.38	42.12	74.00	-31.88	peak			
4	2490.517	42.69	-7.38	35.31	54.00	-18.69	AVG			
5	2500.000	47.69	-7.40	40.29	74.00	-33.71	peak			
6	2500.000	41.00	-7.40	33.60	54.00	-20.40	AVG			



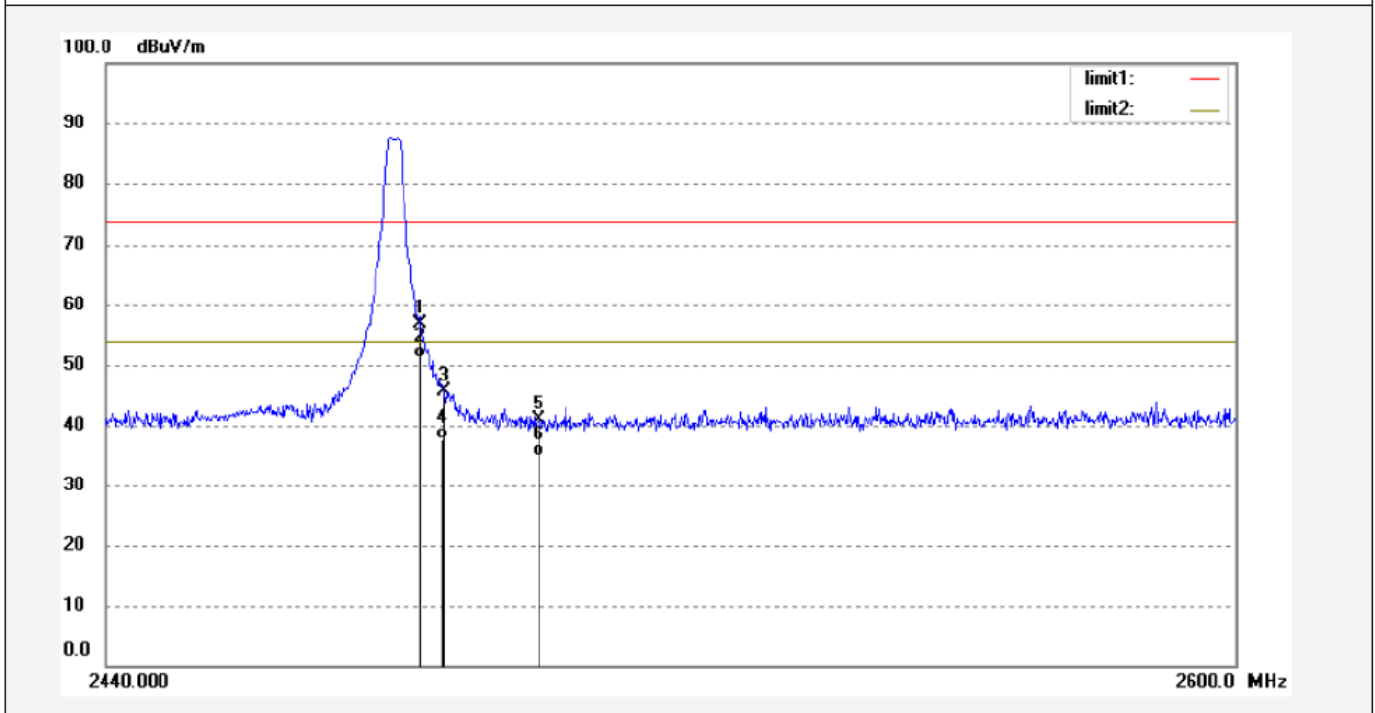
ACCURATE TECHNOLOGY CO., LTD.

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.: ALEN #1171	Polarization: Vertical
Standard: FCC PK	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/20/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 9/20/16
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: TX24202 (Hopping)	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



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	64.14	-7.37	56.77	74.00	-17.23	peak			
2	2483.500	58.39	-7.37	51.02	54.00	-2.98	AVG			
3	2486.874	52.98	-7.38	45.60	74.00	-28.40	peak			
4	2486.874	45.02	-7.38	37.64	54.00	-16.36	AVG			
5	2500.000	48.26	-7.40	40.86	74.00	-33.14	peak			
6	2500.000	42.39	-7.40	34.99	54.00	-19.01	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.: ALEN #1172

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Revell 2.4G 2 Channel Radio System

Mode: TX 2402MHz

Model: TX24202 (Non-hopping)

Manufacturer: C.C.LEE

Polarization: Horizontal

Power Source: DC 9V

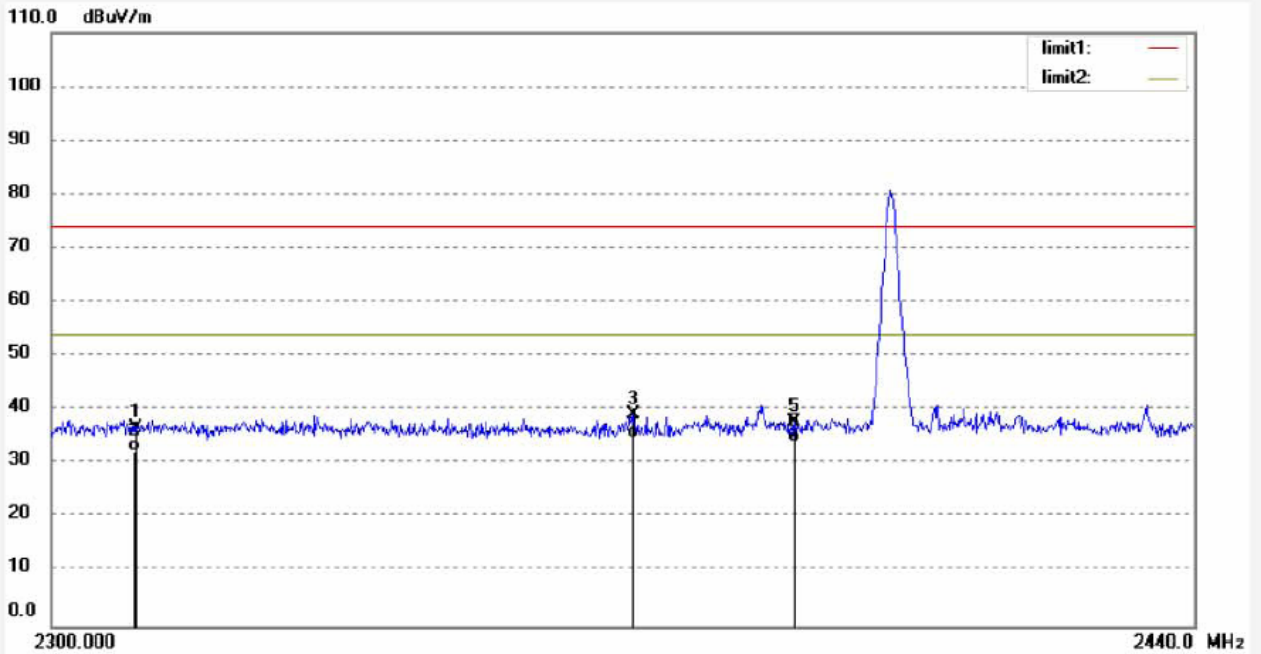
Date: 13/05/20/

Time: 9/22/17

Engineer Signature:

Distance: 3m

Note: Report No:ATE20130973



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	44.57	-7.81	36.76	74.00	-37.24	peak			
2	2310.000	40.02	-7.81	32.21	54.00	-21.79	AVG			
3	2370.088	46.75	-7.66	39.09	74.00	-34.91	peak			
4	2370.088	42.39	-7.66	34.73	54.00	-19.27	AVG			
5	2390.000	45.27	-7.53	37.74	74.00	-36.26	peak			
6	2390.000	41.39	-7.53	33.86	54.00	-20.14	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.: ALEN #1173

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Revell 2.4G 2 Channel Radio System

Mode: TX 2402MHz

Model: TX24202(Non-hopping)

Manufacturer: C.C.LEE

Polarization: Vertical

Power Source: DC 9V

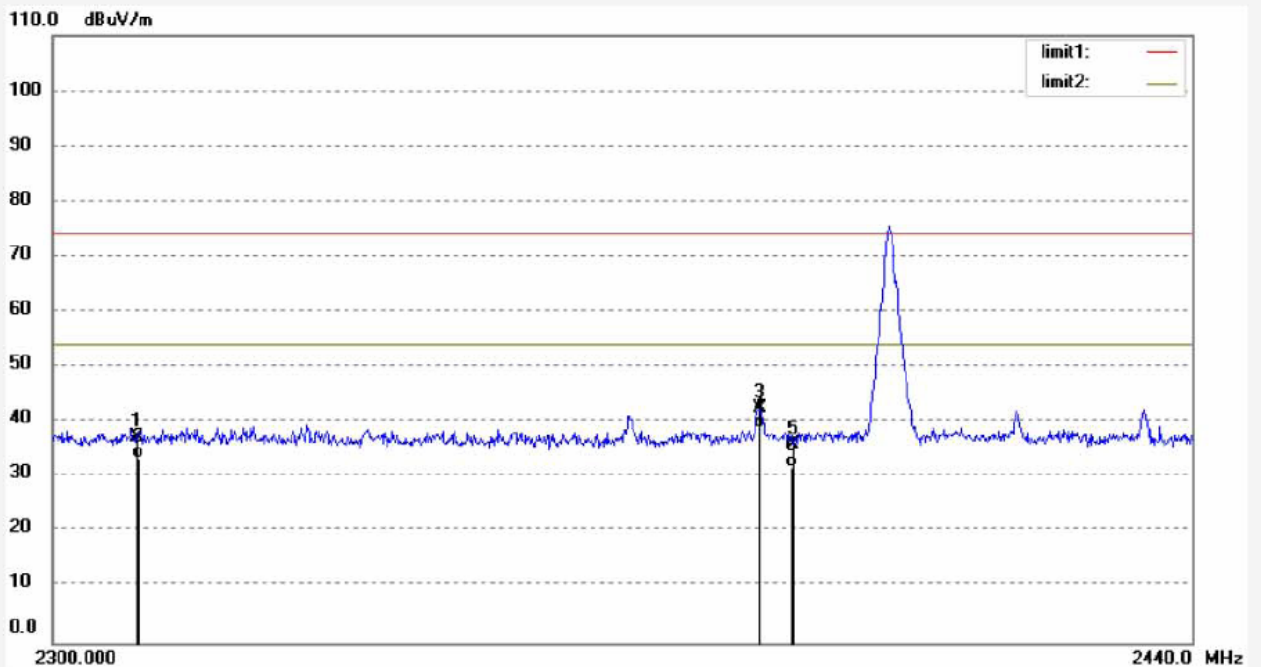
Date: 13/05/20/

Time: 9/23/41

Engineer Signature:

Distance: 3m

Note: Report No:ATE20130973



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	45.09	-7.81	37.28	74.00	-36.72	peak			
2	2310.000	41.32	-7.81	33.51	54.00	-20.49	AVG			
3	2385.857	50.07	-7.56	42.51	74.00	-31.49	peak			
4	2385.857	46.58	-7.56	39.02	54.00	-14.98	AVG			
5	2390.000	43.52	-7.53	35.99	74.00	-38.01	peak			
6	2390.000	39.30	-7.53	31.77	54.00	-22.23	AVG			



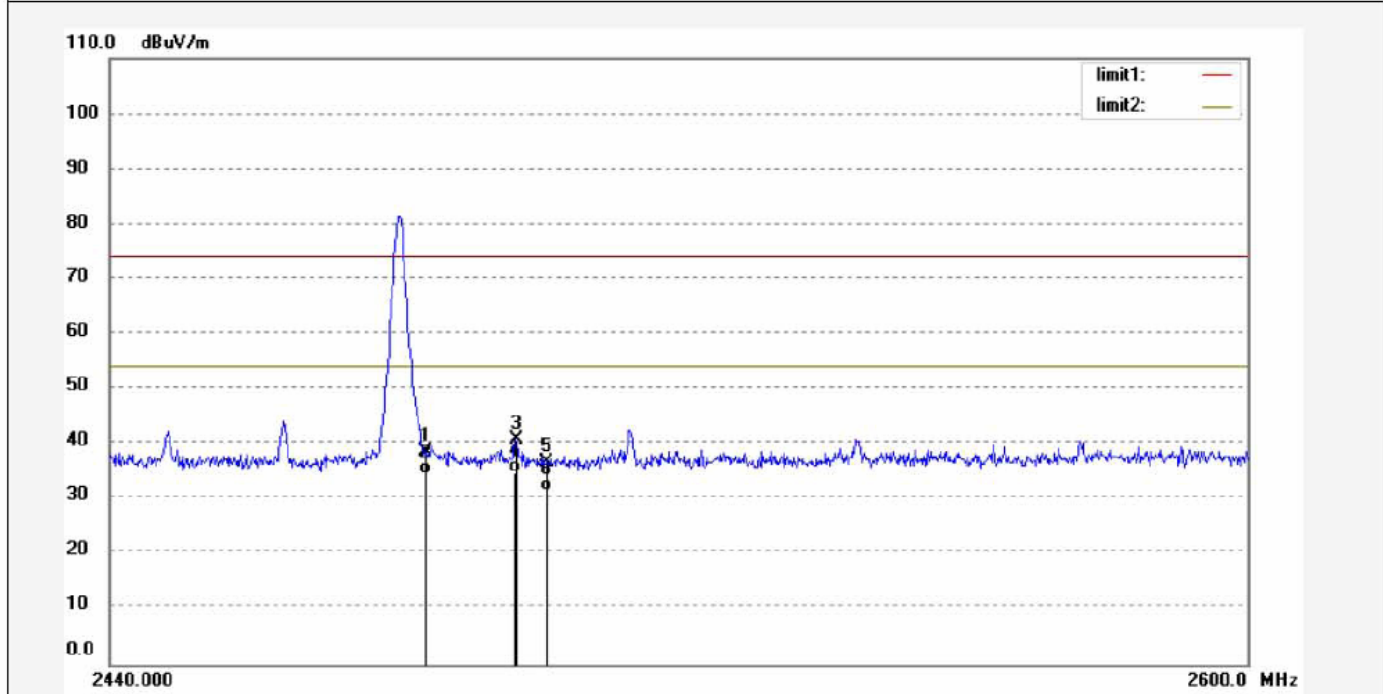
ACCURATE TECHNOLOGY CO., LTD.

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.: ALEN #1170	Polarization: Horizontal
Standard: FCC PK	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/20/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 9/18/51
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: TX24202 (Non-hopping)	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



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	45.96	-7.37	38.59	74.00	-35.41	peak			
2	2483.500	41.88	-7.37	34.51	54.00	-19.49	AVG			
3	2495.912	48.11	-7.39	40.72	74.00	-33.28	peak			
4	2495.912	42.28	-7.39	34.89	54.00	-19.11	AVG			
5	2500.000	44.22	-7.40	36.82	74.00	-37.18	peak			
6	2500.000	38.92	-7.40	31.52	54.00	-22.48	AVG			



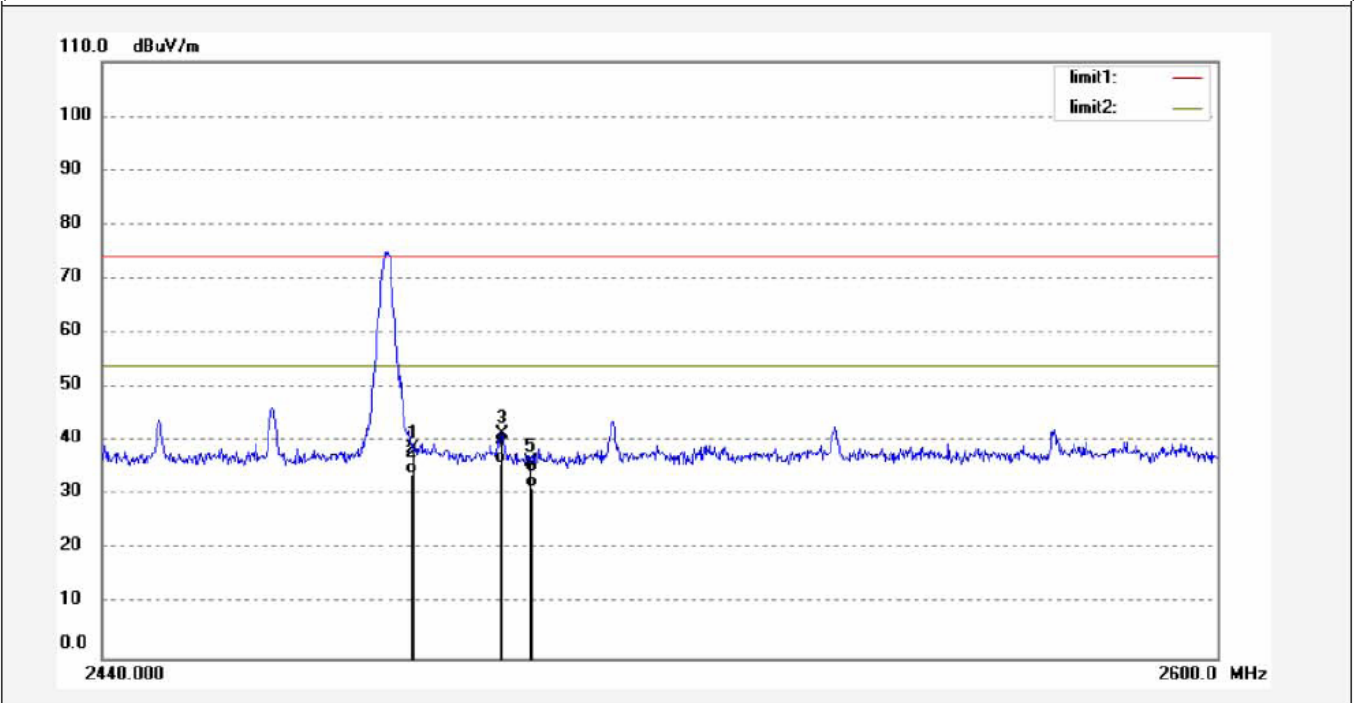
ACCURATE TECHNOLOGY CO., LTD.

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.: ALEN #1171	Polarization: Vertical
Standard: FCC PK	Power Source: DC 9V
Test item: Radiation Test	Date: 13/05/20/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 9/20/16
EUT: Revell 2.4G 2 Channel Radio System	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: TX24202 (Non-hopping)	
Manufacturer: C.C.LEE	

Note: Report No:ATE20130973



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	45.90	-7.37	38.53	74.00	-35.47	peak			
2	2483.500	41.28	-7.37	33.91	54.00	-20.09	AVG			
3	2495.912	48.71	-7.39	41.32	74.00	-32.68	peak			
4	2495.912	43.28	-7.39	35.89	54.00	-18.11	AVG			
5	2500.000	43.64	-7.40	36.24	74.00	-37.76	peak			
6	2500.000	38.93	-7.40	31.53	54.00	-22.47	AVG			