FCC CERTIFICATION On Behalf of Hobbico Inc

Revell 2.4G 2 channel Radio System Model No.: TX24203

FCC ID: IYFTX24203

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

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Report Number : ATE20130974
Date of Test : May 20-30, 2013
Date of Report : May 31, 2013

Page

TABLE OF CONTENTS

Test Report Certification GENERAL INFORMATION4 Description of Device (EUT)......4 1.1. 1.2. Description of Test Facility4 1.3. Measurement Uncertainty......5 MEASURING DEVICE AND TEST EQUIPMENT......6 2. 3. SUMMARY OF TEST RESULTS......7 FUNDAMENTAL AND HARMONICS RADIATED EMISSION FOR SECTION 15,249(A) 8 4. 4.1. 4.2. The Emission Limit9 Configuration of EUT on Measurement9 4.3. 4.4. Operating Condition of EUT9 4.5. Test Procedure _______10 4.6. 5. SPURIOUS RADIATED EMISSION FOR SECTION 15.249(D)14

Test Procedure 16

The Requirement20

The Measurement Result 21

ANTENNA REQUIREMENT......25

APPENDIX I (TEST CURVES) (26 pages)

Description

5.1.

5.2.

5.3.

5.4. 5.5.

5.6.

6.1.

6.2. 6.3.

6.4.6.5.

7.1.

7.2.

6.

7.

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.: TX24203

(B) POWER SUPPLY: 6V DC ("AA" batteries $4\times$)

Measurement Procedure Used:

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

The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section15.249 limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY CO. LTD is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

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

Date of Test :	May 20-30, 2013	
Prepared by :	Kerry cheng	
	(Kelly Cheng, Engineer)	
Approved & Authorized Signer:	Lemb	
	(Sean Liu, Manager)	

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT : Revell 2.4G 2 channel Radio System

Model Number : TX24203

Power Supply : 6V DC ("AA" batteries $4 \times)$

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 20-30, 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 = 3.08dB, k=2

(9kHz-30MHz)

Radiated emission expanded uncertainty = 4.42dB, k=2

(30MHz-1000MHz)

Radiated emission expanded uncertainty = 4.06dB, k=2

(Above 1GHz)

2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated date	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 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

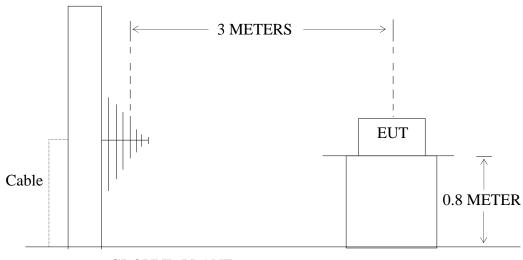
4.1.1.Block diagram of connection between the EUT and simulators

EUT

(EUT: Revell 2.4G 2 channel Radio System)

4.1.2.Semi-Anechoic Chamber Test Setup Diagram

ANTENNA ELEVATION VARIES FROM 1 TO 4 METERS



GROUND PLANE

(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	Field Strength of Fundamental	Field Strength of harmonics
Frequency	(millivolts/meter)	(microvolts/meter)
902-928MHz	50	500
2400-2483.5MHz	50	500
5725-5875MHz	50	500
24.0-24.25GHz	250	2500

4.2.2.According to section 15.249(e), as shown in section 15.35(b), the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

4.3. Configuration of EUT on Measurement

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

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

Model Number : TX24203 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: May 30, 2013 Temperature: 25°C
EUT: Revell 2.4G 2 channel Radio System Humidity: 50%

Model No.: TX24203 Power Supply: DC 6V

Test Mode: TX 2402.000MHz Test Engineer: Alen

Fundamental Radiated Emissions

Frequency	Reading(dBμV/m)	Factor(dB)	Result(c	lBμV/m)	Limit(d)	BμV/m)	Marg	in(dB)	Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2402.000	87.89	90.67	-7.54	80.35	83.13	94.00	114.00	-13.65	-30.87	Vertical
2402.000	85.87	87.94	-7.54	78.33	80.40	94.00	114.00	-15.67	-33.60	Horizontal

Harmonics Radiated Emissions

Frequency	Reading(dBμV/m)	Factor(dB)	B) Result(dBμV/m)		Limit(dBµV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
4804.000	48.68	50.90	-0.62	48.06	50.28	54.00	74.00	-5.94	-23.72	Vertical
4804.000	47.45	49.76	-0.71	46.74	49.05	54.00	74.00	-7.26	-24.95	Horizontal

Note:

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

Result = Reading + Corrected Factor

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

Date of Test:May 30, 2013Temperature:25°CEUT:Revell 2.4G 2 channel Radio SystemHumidity:50%Model No.:TX24203Power Supply:DC 6VTest Mode:TX 2441.000MHzTest Engineer:Alen

Fundamental Radiated Emissions

Frequency	Reading(dBμV/m)	Factor(dB)	Result(d	BμV/m)	Limit(dl	BμV/m)	Margi	n(dB)	Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2441.000	88.78	91.52	-7.42	81.36	84.10	94.00	114.00	-12.64	-29.90	Vertical
2441.000	82.65	85.34	-7.42	75.23	77.92	94.00	114.00	-18.77	-36.08	Horizontal

Harmonics Radiated Emissions

Frequency	Reading(dBμV/m)	Factor(dB)	Result(d	BμV/m)	Limit(d)	BμV/m)	Marg	in(dB)	Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
4876.000	46.01	48.38	-0.23	45.78	48.15	54.00	74.00	-8.22	-25.85	Vertical
4876.000	49.87	52.17	-0.23	49.64	51.94	54.00	74.00	-4.36	-22.06	Horizontal

Note:

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

Result = Reading + Corrected Factor

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

Date of Test:May 30, 2013Temperature:25°CEUT:Revell 2.4G 2 channel Radio SystemHumidity:50%Model No.:TX24203Power Supply:DC 6VTest Mode:TX 2480.000MHzTest Engineer:Alen

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m	Factor(dB) Corr.	Result(d	BμV/m)	Limit(dl	BμV/m)	Margi	in(dB)	Polarization
(WILL)	AV	PEAK	Con.	AV	PEAK	AV	PEAK	AV	PEAK	
2480.000	88.10	90.75	-7.33	80.77	83.42	94.00	114.00	-13.23	-30.58	Vertical
2480.000	86.78	89.57	-7.33	79.45	82.24	94.00	114.00	-14.55	-31.76	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m	Factor(dB) Corr.	Result(d	BμV/m)	Limit(d)	BμV/m)	Marg	in(dB)	Polarization
(WHIZ)	AV	PEAK	Con.	AV	PEAK	AV	PEAK	AV	PEAK	
4960.000	45.23	47.86	0.30	45.53	48.16	54.00	74.00	-8.47	-25.84	Vertical
4960.000	44.98	47.78	0.30	45.28	48.08	54.00	74.00	-8.72	-25.92	Horizontal

Note:

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

 $Result = Reading + Corrected \ Factor$

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

5. SPURIOUS RADIATED EMISSION FOR SECTION 15.249(D)

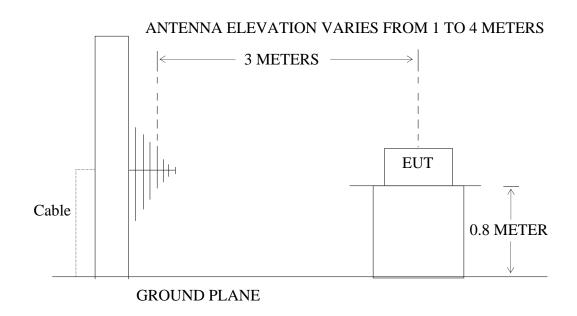
5.1.Block Diagram of Test Setup

5.1.1.Block diagram of connection between the EUT and simulators

EUT

(EUT: 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

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

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

5.3.EUT Configuration on Measurement

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

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

Model Number : TX24203 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:	May 27-29, 2013	Temperature:	25°C
EUT:	Revell 2.4G 2 channel Radio System	Humidity:	50%
Model No.:	TX24203	Power Supply:	DC 6V
Test Mode:	TX 2402.000MHz	Test Engineer:	Alen

Below 30MHz

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

30MHz-25GHz

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

Note:

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

 $Result = Reading + Corrected \ Factor$

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

Date of Test:	May 27-29, 2013	Temperature:	25°C
EUT:	Revell 2.4G 2 channel Radio System	Humidity:	50%
Model No.:	TX24203	Power Supply:	DC 6V
Test Mode:	TX 2441.000MHz	Test Engineer:	Alen

Below 30MHz

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

30MHz-25GH

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

Note:

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

 $Result = Reading + Corrected \ Factor$

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

Date of Test:	May 27-29, 2013	Temperature:	25°C
EUT:	Revell 2.4G 2 channel Radio System	Humidity:	50%
Model No.:	TX24203	Power Supply:	DC 6V
Test Mode:	TX 2480.000MHz	Test Engineer:	Alen

Below 30MHz

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

30MHz-25GH

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

Note:

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

 $Result = Reading + Corrected \ Factor$

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

6. BAND EDGES

6.1.The Requirement

6.1.1.Band Edge from 2400MHz to 2483.5MHz. Emission radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

6.2.EUT Configuration on Measurement

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

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

Model Number : TX24203 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:May 30, 2013Temperature:25°CEUT:Revell 2.4G 2 channel Radio SystemHumidity:50%Model No.:TX24203Power Supply:DC 6VTest Mode:TX 2402.000MHz(Hopping)Test Engineer:Alen

Frequency	Reading(dBμV/m)	Factor(dB)	Result(dBµV/m)		Limit(dBµV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2394.623	45.68	49.87	-7.49	38.19	42.38	54.00	74.00	-15.81	-31.62	Vertical
2400.000	51.32	55.83	-7.46	43.86	48.37	54.00	74.00	-10.14	-25.63	Vertical
2399.124	48.32	52.79	-7.46	40.86	45.33	54.00	74.00	-13.14	-28.67	Horizontal
2400.000	48.86	53.85	-7.46	41.40	46.39	54.00	74.00	-12.60	-27.61	Horizontal

Note:

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

Result = Reading + Corrected Factor

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

Date of Test: May 30, 2013

EUT: Revell 2.4G 2 channel Radio System

Model No.: TX24203

Test Mode: TX 2480.000MHz(Hopping)

Test Engineer: Alen

Frequency	Reading(dBµV/m) Factor(dB)		Result(dBµV/m)		Limit(dBµV/m)		Margin(dB)		Polarization	
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2483.500	54.03	58.92	-7.37	46.66	51.55	54.00	74.00	-7.34	-22.45	Vertical
2485.175	54.10	58.97	-7.38	46.72	51.59	54.00	74.00	-7.28	-22.41	Vertical
2483.500	50.14	55.77	-7.37	42.77	48.40	54.00	74.00	-11.23	-25.60	Horizontal
2484.613	50.01	54.53	-7.38	42.63	47.15	54.00	74.00	-11.37	-26.85	Horizontal

Note:

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

 $Result = Reading + Corrected \ Factor$

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

Date of Test: May 30, 2013

EUT: Revell 2.4G 2 channel Radio System

Model No.: TX24203

Test Mode: TX 2402.000MHz(Non-hopping)

Test Engineer: Alen

Frequency	Reading(dBµV/m)		Factor(dB)	Result(dBµV/m)		Limit(dBµV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2397.480	54.78	60.69	-6.76	48.02	53.93	54.00	74.00	-5.98	-20.07	Vertical
2400.000	59.01	65.88	-6.76	52.25	59.12	54.00	74.00	-1.75	-14.88	Vertical
2376.720	43.69	48.85	-6.82	36.87	42.03	54.00	74.00	-17.13	-31.97	Horizontal
2400.000	59.32	64.90	-6.76	52.56	58.14	54.00	74.00	-1.44	-15.86	Horizontal

Note:

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

 $Result = Reading + Corrected \ Factor$

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

Date of Test: May 30, 2013

EUT: Revell 2.4G 2 channel Radio System

Model No.: TX24203

Test Mode: TX 2480.000MHz(Non-hopping)

Temperature: 25°C

Humidity: 50%

Power Supply: DC 6V

Test Engineer: Alen

Frequency	Reading(dBµV/m)		Factor(dB)	Result(dBµV/m)		Limit(dBµV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2483.500	58.78	63.40	-6.54	52.24	56.86	54.00	74.00	-1.76	-17.14	Vertical
2484.240	57.36	61.18	-6.54	50.82	54.64	54.00	74.00	-3.18	-19.36	Vertical
2483.500	58.69	62.91	-6.54	52.15	56.37	54.00	74.00	-1.85	-17.63	Horizontal
2484.240	57.36	61.07	-6.54	50.82	54.53	54.00	74.00	-3.18	-19.47	Horizontal

Note:

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

 $Result = Reading + Corrected \ Factor$

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

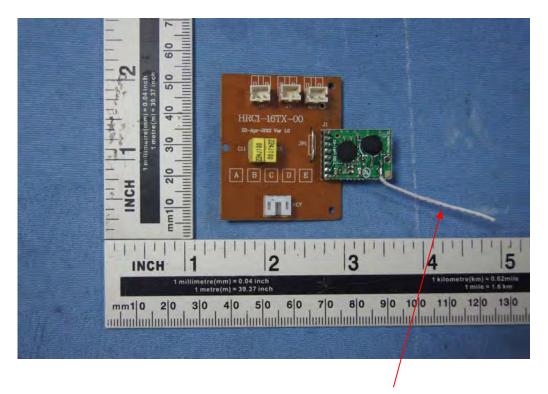
7. ANTENNA REQUIREMENT

7.1.The Requirement

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

7.2. Antenna Construction

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



Antenna

APPENDIX I (Test Curves)



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: alen #665

Standard: FCC Class B 3M Radiated

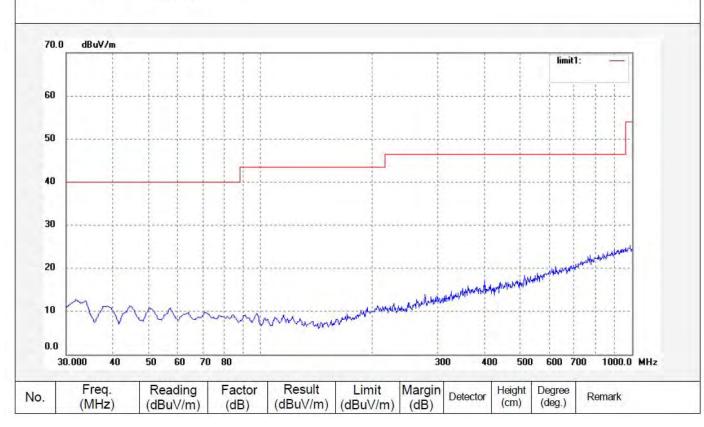
Test item: Radiation Test

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

EUT: Revell 2.4G 2 Channel Radio System

Mode: TX 2402MHz Model: TX24203 Manufacturer: C.C.LEE Polarization: Horizontal Power Source: DC 6V

Date: 13/05/27/
Time: 10/24/02
Engineer Signature:
Distance: 3m





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 #666

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

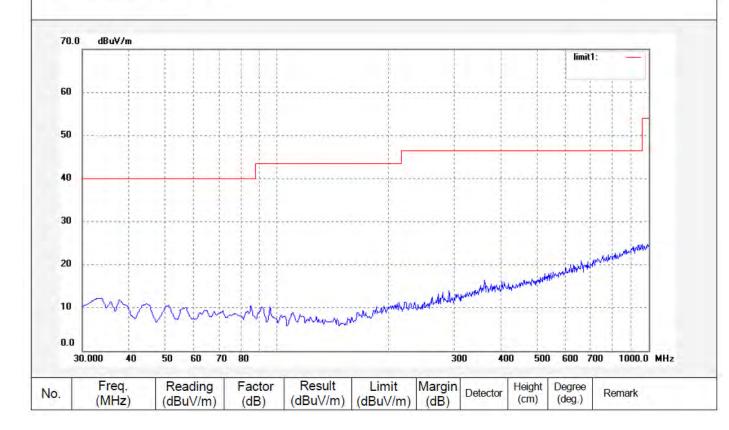
Model: TX24203

Manufacturer: C.C.LEE

Note: Report No:ATE20130974

Polarization: Vertical Power Source: DC 6V

Date: 13/05/27/
Time: 10/25/13
Engineer Signature:
Distance: 3m





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 #1193

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Revell 2.4G 2 Channel Radio System

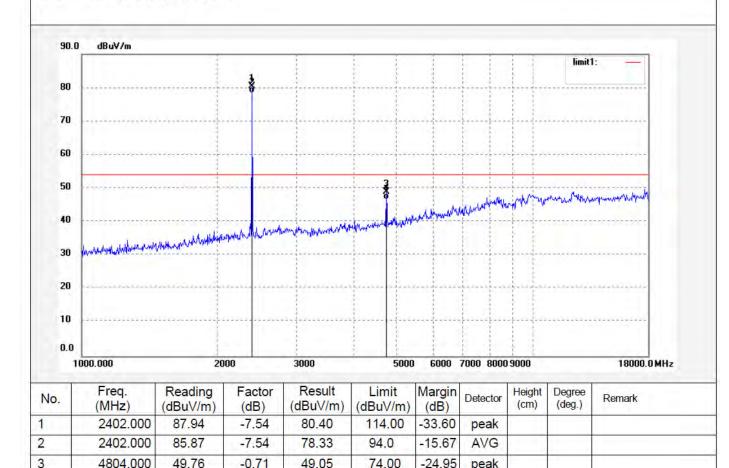
Mode: TX 2402MHz Model: TX24203

Manufacturer: C.C.LEE

Report No:ATE20130974

Polarization: Horizontal Power Source: DC 6V

Date: 13/05/30/ Time: 9/44/29 **Engineer Signature:** Distance: 3m



-24.95

-7.26

54.00

peak

AVG

4

4804.000

47.45

-0.71

46.74



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 #1194

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Revell 2.4G 2 Channel Radio System

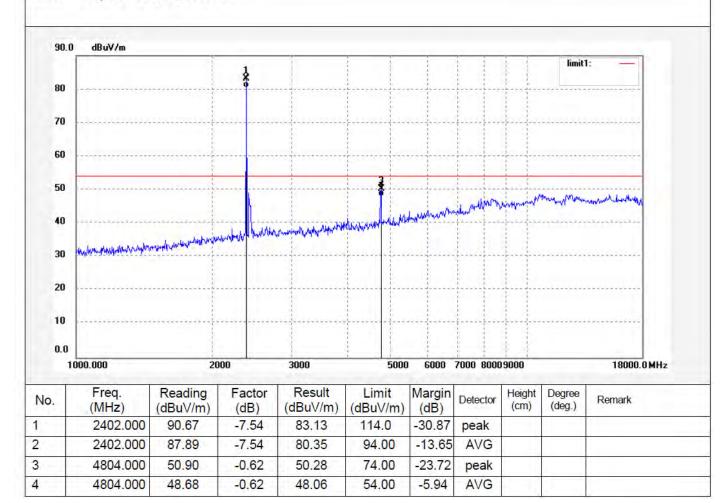
Mode: TX 2402MHz

Model: TX24203 Manufacturer: C.C.LEE

Note: Report No:ATE20130974

Polarization: Vertical Power Source: DC 6V

Date: 13/05/30/ Time: 9/46/24 Engineer Signature: Distance: 3m





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

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

Job No.: Alen #687 Standard: FCC 15C

Test item: Radiation Test

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

EUT:

Mode: TX 2402MHz Model: TX24203 Manufacturer: C.C.LEE

Revell 2.4G 2 Channel Radio System

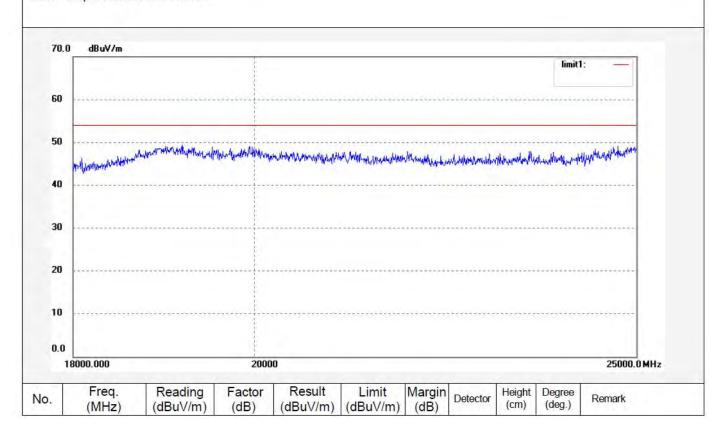
Note: Report No:ATE20130974

Polarization: Horizontal Power Source: DC 6V

Date: 13/05/29/ Time: 12:52:35

Engineer Signature: Alen

Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Alen #686 Standard: FCC 15C

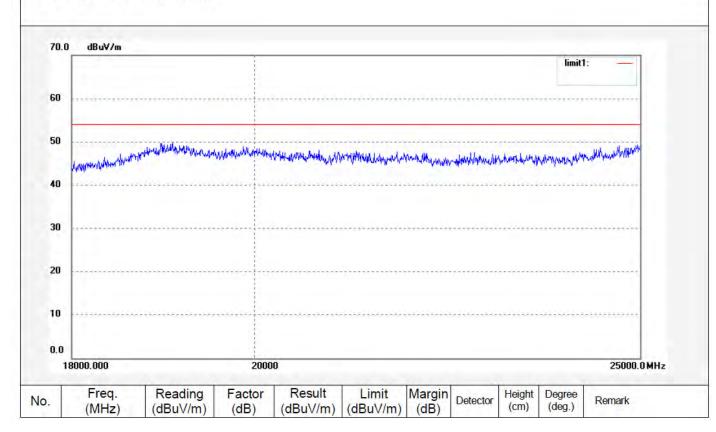
Test item: Radiation Test

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

EUT: Revell 2.4G 2 Channel Radio System Mode: TX 2402MHz

Model: TX24203 Manufacturer: C.C.LEE Polarization: Vertical Power Source: DC 6V

Date: 13/05/29/ Time: 12:48:59 Engineer Signature: Distance: 3m





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 #668

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

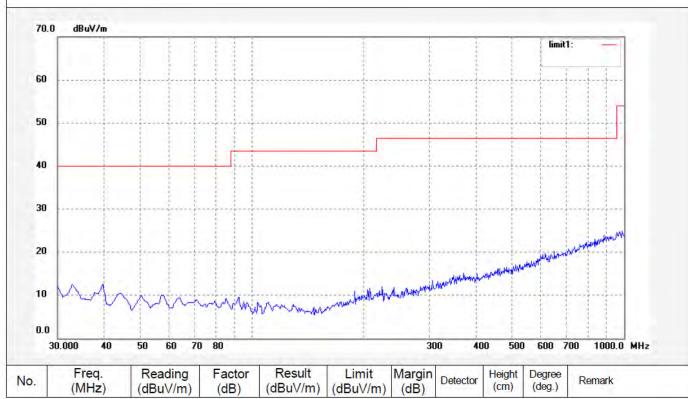
EUT: Revell 2.4G 2 Channel Radio System

Mode: TX 2441MHz Model: TX24203

Manufacturer: C.C.LEE

Polarization: Horizontal Power Source: DC 6V

Date: 13/05/27/ Time: 10/26/21 Engineer Signature: Distance: 3m





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 #667

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

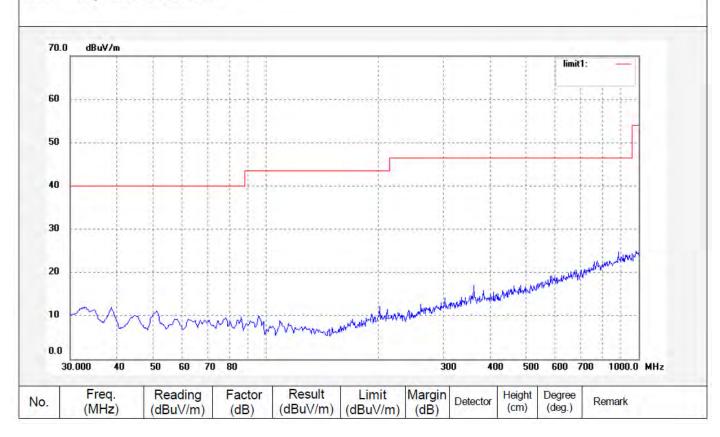
Temp.(C)/Hum.(%) 26 C / 55 %

EUT: Revell 2.4G 2 Channel Radio System

Mode: TX 2441MHz
Model: TX24203
Manufacturer: C.C.LEE

Polarization: Vertical Power Source: DC 6V

Date: 13/05/27/
Time: 10/25/43
Engineer Signature:
Distance: 3m





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 #1185

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Revell 2.4G 2 Channel Radio System

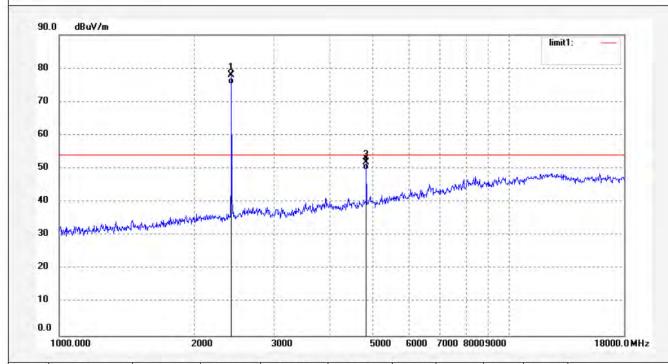
Mode: TX 2441MHz Model: TX24203 Manufacturer: C.C.LEE

Note:

Report No:ATE20130974

Polarization: Horizontal Power Source: DC 6V

Date: 13/05/30/ Time: 9/25/23 Engineer Signature: Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	2438.000	85.34	-7.42	77.92	114.00	-36.08	peak		1		
2	2438.000	82.65	-7.42	75.23	94.00	-18.77	AVG	1	7		
3	4876.000	52.17	-0.23	51.94	74.00	-22.06	peak				
4	4876.000	49.87	-0.23	49.64	54.00	-4.36	AVG				



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 #1186

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

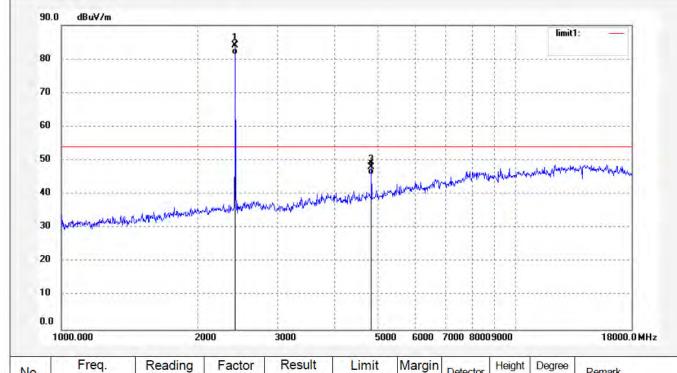
EUT: Revell 2.4G 2 Channel Radio System

Mode: TX 2441MHz Model: TX24203

Manufacturer: C.C.LEE

Polarization: Vertical Power Source: DC 6V

Date: 13/05/30/ Time: 9/27/10 Engineer Signature: Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	2438.000	91.52	-7.42	84.10	114.00	-29.90	peak				
2	2438.000	88.78	-7.42	81.36	94.00	-12.64	AVG				
3	4876.000	48.38	-0.23	48.15	74.00	-25.85	peak				
4	4876.000	46.01	-0.23	45.78	54.00	-8.22	AVG				



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

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

Job No.: Alen #684 Standard: FCC 15C Test item: Radiation Test

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

EUT:

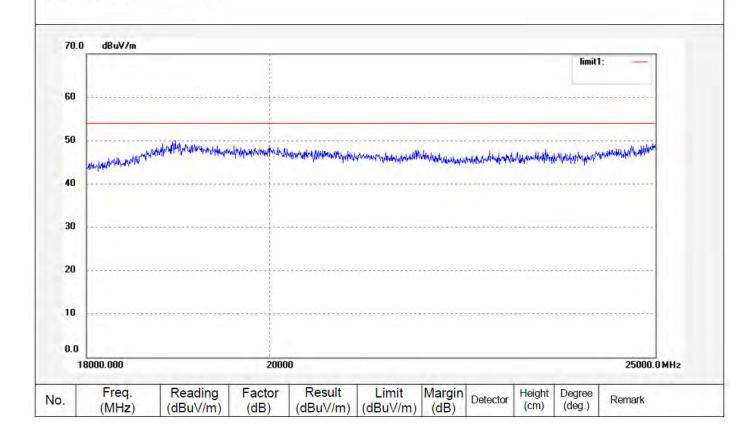
Mode: TX 2441MHz Model: TX24203 Manufacturer: C.C.LEE

Revell 2.4G 2 Channel Radio System

Note: Report No:ATE20130974

Horizontal Polarization: Power Source: DC 6V

Date: 13/05/29/ Time: 12:44:38 Engineer Signature: Distance: 3m





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

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

Job No.: Alen #685 Standard: FCC 15C

Test item: Radiation Test

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

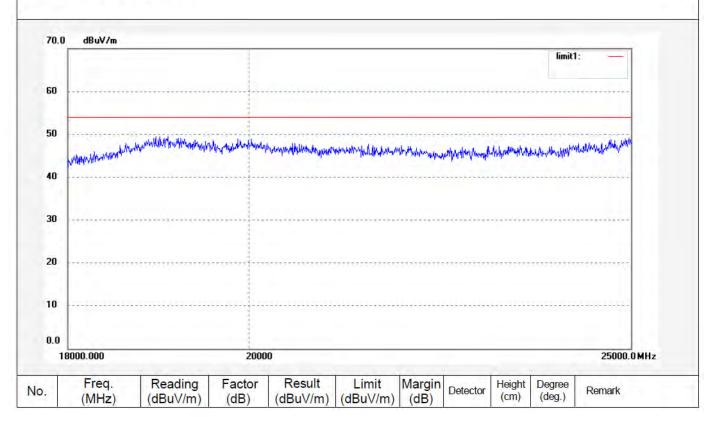
EUT: Revell 2.4G 2 Channel Radio System

Mode: Model: TX24203 Manufacturer: C.C.LEE

TX 2441MHz

Polarization: Vertical Power Source: DC 6V

Date: 13/05/29/ Time: 12:45:42 **Engineer Signature:** Distance: 3m





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 #669

Test item: Radiation Test

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

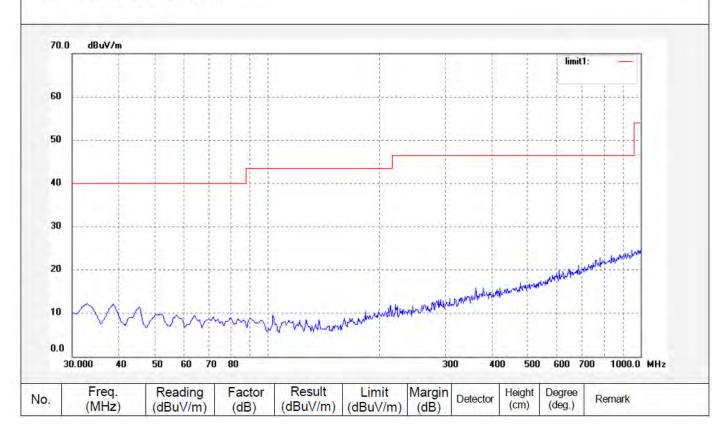
EUT: Revell 2.4G 2 Channel Radio System

Mode: TX 2480MHz Model: TX24203 Manufacturer: C.C.LEE

Standard: FCC Class B 3M Radiated Power Source: DC 6V Date: 13/05/27/

Time: 10/26/57 Engineer Signature: Distance: 3m

Polarization: Horizontal





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

Polarization:

Date: 13/05/27/

Time: 10/27/49

Distance: 3m

Engineer Signature:

Power Source: DC 6V

Vertical

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

Job No.: alen #670

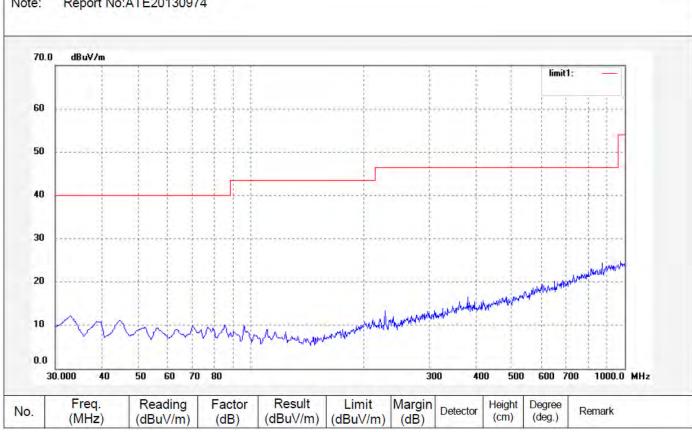
Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Revell 2.4G 2 Channel Radio System

Mode: TX 2480MHz Model: TX24203 Manufacturer: C.C.LEE





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 #1188

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

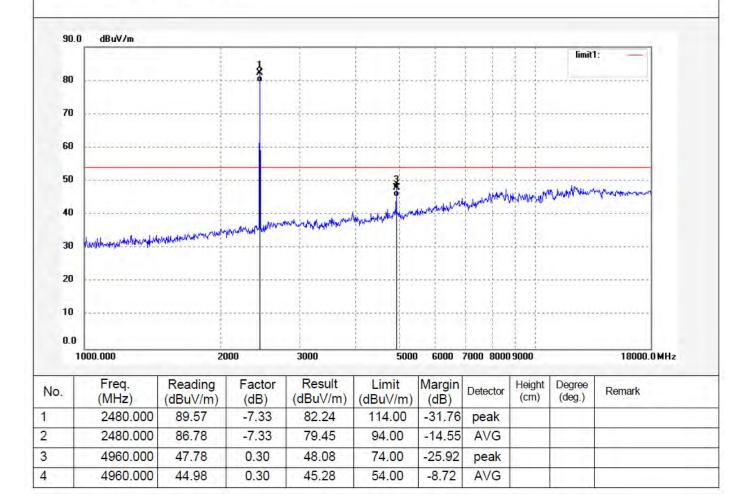
EUT: Revell 2.4G 2 Channel Radio System

Mode: TX 2480MHz
Model: TX24203
Manufacturer: C.C.LEE

Note: Report No:ATE20130974

Polarization: Horizontal Power Source: DC 6V

Date: 13/05/30/ Time: 9/30/00 Engineer Signature: Distance: 3m





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 #1187

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

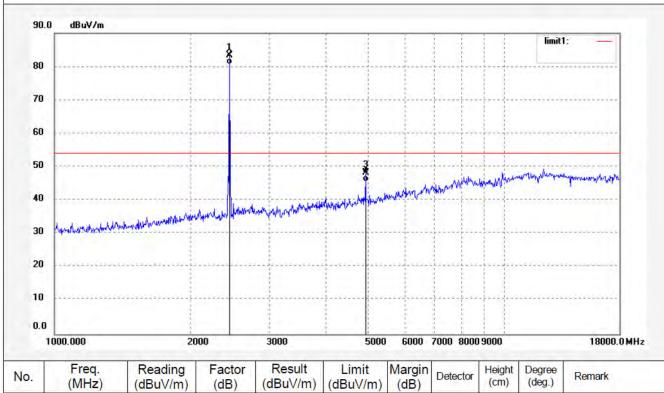
EUT: Revell 2.4G 2 Channel Radio System

Mode: TX 2480MHz Model: TX24203 Manufacturer: C.C.LEE

Note: Report No:ATE20130974 Polarization: Vertical Power Source: DC 6V

Date: 13/05/30/ Time: 9/28/42

Engineer Signature: Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	2480.000	90.75	-7.33	83.42	114.00	-30.58	peak				
2	2480.000	88.10	-7.33	80.77	94.00	-13.23	AVG				
3	4960.000	47.86	0.30	48.16	74.00	-25.84	peak				
4	4960.000	45.23	0.30	45.53	54.00	-8.47	AVG				



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Alen #683 Standard: FCC 15C

Test item: Radiation Test

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

EUT: Revell 2.4G 2 Channel Radio System

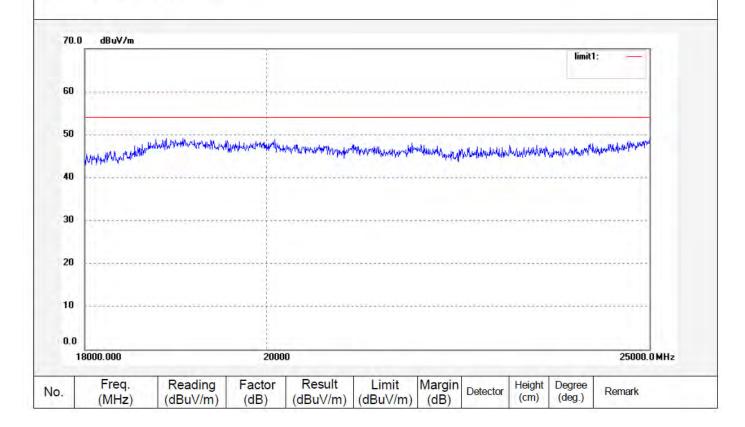
Mode: TX 2480MHz

Model: TX24203 Manufacturer: C.C.LEE

Note: Report No:ATE20130974

Polarization: Horizontal Power Source: DC 6V

Date: 13/05/29/ Time: 12:42:56 Engineer Signature: Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Alen #682 Standard: FCC 15C

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

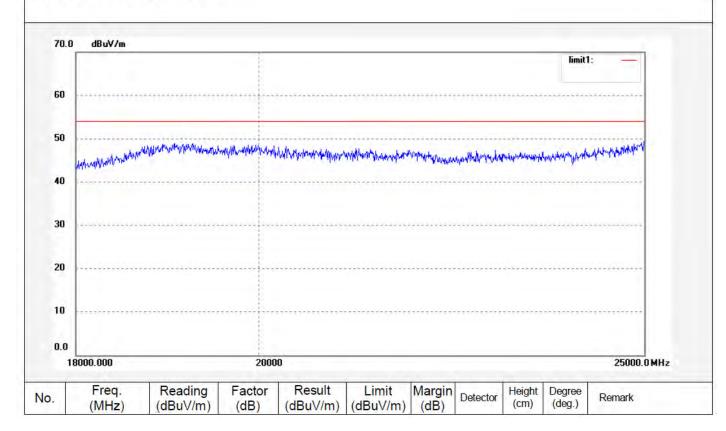
EUT: Revell 2.4G 2 Channel Radio System

Mode: TX 2480MHz
Model: TX24203
Manufacturer: C.C.LEE

Polarization: Vertical Power Source: DC 6V

Date: 13/05/29/ Time: 12:41:05 Engineer Signature:

Distance: 3m





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 #1192 Standard: FCC PK

Test item: Radiation Test Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Revell 2.4G 2 Channel Radio System

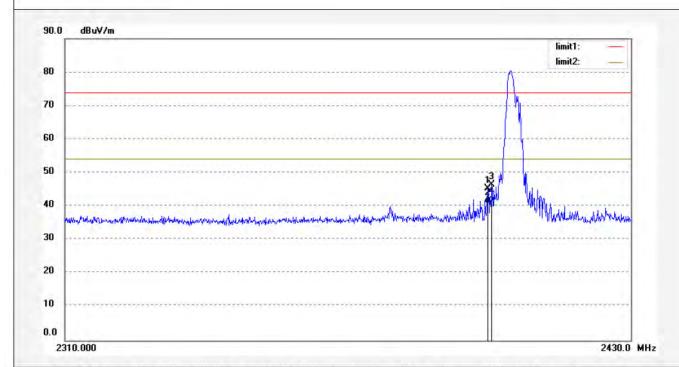
Mode: TX 2402MHz (Hopping)

Model: TX24203 Manufacturer: C.C.LEE

Polarization: Horizontal Power Source: DC 6V

Date: 13/05/30/ Time: 9/42/56 Engineer Signature: Distance: 3m

Report No:ATE20130974 Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	2399.124	52.79	-7.46	45.33	74.00	-28.67	peak	4 11			
2	2399.124	48.32	-7.46	40.86	54.00	-13.14	AVG	-			
3	2400.000	53.85	-7.46	46.39	74.00	-27.61	peak				
4	2400.000	48.86	-7.46	41.40	54.00	-12.60	AVG	1			



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 #1191 Standard: FCC PK

Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %

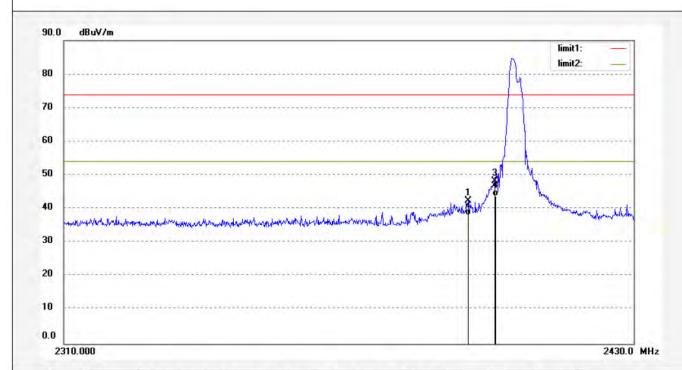
EUT: Revell 2.4G 2 Channel Radio System

Mode: TX 2402MHz (Hopping)

Model: TX24203 Manufacturer: C.C.LEE Polarization: Vertical Power Source: DC 6V

Date: 13/05/30/ Time: 9/40/07 Engineer Signature:

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2394.623	49.87	-7.49	42.38	74.00	-31.62	peak	-		
2	2394.623	45.68	-7.49	38.19	54.00	-15.81	AVG			
3	2400.000	55.83	-7.46	48.37	74.00	-25.63	peak			
4	2400.000	51.32	-7.46	43.86	54.00	-10.14	AVG			



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 #1189 Standard: FCC PK

Test item: Radiation Test

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

EUT: Revell 2.4G 2 Channel Radio System

Mode: TX 2480MHz (Hopping)

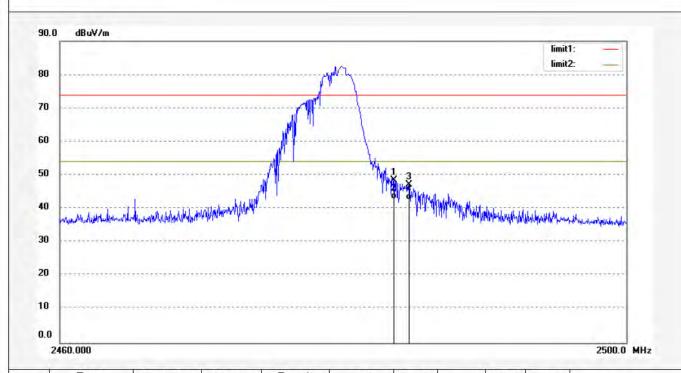
Model: TX24203 Manufacturer: C.C.LEE

Note: Report No:ATE20130974

Polarization: Horizontal Power Source: DC 6V

Date: 13/05/30/ Time: 9/33/59 Engineer Signature:

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	2483.500	55.77	-7.37	48.40	74.00	-25.60	peak				
2	2483.500	50.14	-7.37	42.77	54.00	-11.23	AVG				
3	2484.613	54.53	-7.38	47.15	74.00	-26,85	peak				
4	2484.613	50.01	-7.38	42.63	54.00	-11.37	AVG				



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

2500.0 MHz

Job No.: ALEN #1190 Standard: FCC PK

Test item: Radiation Test

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

EUT: Revell 2.4G 2 Channel Radio System

Mode: TX 2480MHz (Hopping)

Model: TX24203 Manufacturer: C.C.LEE

Polarization: Vertical Power Source: DC 6V

Date: 13/05/30/ Time: 9/36/22 Engineer Signature:

Distance: 3m

Factor Result Limit Freq. Reading Margin Height Degree Detector Remark No. (MHz) (dBuV/m) (dB) (dBuV/m) (dBuV/m) (dB) (cm) (deg.) 1 2483.500 58.92 -7.3751.55 74.00 -22.45peak 2 -7.37 2483,500 54.03 46.66 54.00 -7.34AVG 3 58.97 -7.3851.59 74.00 -22.41 2485.175 peak 4 2485.175 54.10 -7.3846.72 54.00 -7.28AVG

20

10

0.0

2460.000



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 #613 Standard: FCC PK

Test item: Radiation Test

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

EUT: Revell 2.4G 2 Channel Radio System

Mode: TX 2402MHz (Non-hopping)

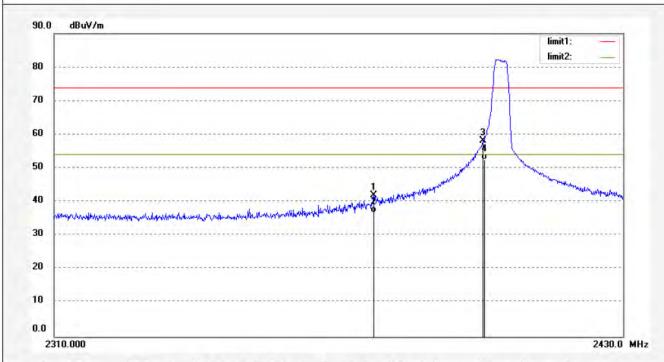
Model: TX24203 Manufacturer: C.C.LEE

Note: Report No:ATE20130974

Polarization: Horizontal Power Source: DC 6V

Date: 13/05/30/ Time: 9/39/54 Engineer Signature:

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	2376.720	48.85	-6.82	42.03	74.00	-31.97	peak		1		
2	2376.720	43.69	-6.82	36.87	54.00	-17.13	AVG				
3	2400.000	64.90	-6.76	58.14	74.00	-15.86	peak				
4	2400.000	59.32	-6.76	52.56	54.00	-1.44	AVG				



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Job No.: alen #612 Standard: FCC PK

Test item: Radiation Test

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

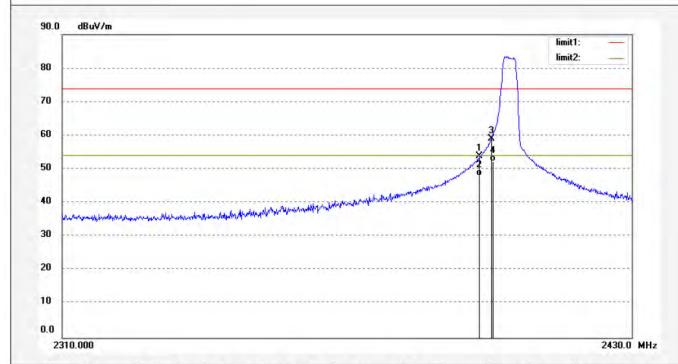
EUT: Revell 2.4G 2 Channel Radio System

Mode: TX 2402MHz(Non-hopping)

Model: TX24203 Manufacturer: C.C.LEE Polarization: Vertical Power Source: DC 6V

Date: 13/05/30/ Time: 9/38/37 Engineer Signature:

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2397.480	60.69	-6.76	53.93	74.00	-20.07	peak			
2	2397.480	54.78	-6.76	48.02	54.00	-5.98	AVG			
3	2400.000	65.88	-6.76	59.12	74.00	-14.88	peak			
4	2400.000	59.01	-6.76	52.25	54.00	-1.75	AVG			



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2500.0 MHz

Job No.: alen #622 Standard: FCC PK

Test item: Radiation Test

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

EUT: Revell 2.4G 2 Channel Radio System

Mode: TX 2480MHz (Non-hopping)

Model: TX24203 Manufacturer: C.C.LEE

Note: Report No:ATE20130974

Polarization: Horizontal Power Source: DC 6V

Date: 13/05/30/ Time: 10/06/26 Engineer Signature: Distance: 3m

(MHZ)	(dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
2483.500	62.91	-6.54	56.37	74.00	-17.63	peak				
2483.500	58.69	-6.54	52.15	54.00	-1.85	AVG				
2484.240	61.07	-6.54	54.53	74.00	-19.47	peak				
2484.240	57.36	-6.54	50.82	54.00	-3.18	AVG				
	2483.500 2484.240	2483.500 62.91 2483.500 58.69 2484.240 61.07	2483.500 62.91 -6.54 2483.500 58.69 -6.54 2484.240 61.07 -6.54	2483.500 62.91 -6.54 56.37 2483.500 58.69 -6.54 52.15 2484.240 61.07 -6.54 54.53	2483.500 62.91 -6.54 56.37 74.00 2483.500 58.69 -6.54 52.15 54.00 2484.240 61.07 -6.54 54.53 74.00	2483.500 62.91 -6.54 56.37 74.00 -17.63 2483.500 58.69 -6.54 52.15 54.00 -1.85 2484.240 61.07 -6.54 54.53 74.00 -19.47	(MHz) (dBuV/m) (dB) (dBuV/m) (dB) 2483.500 62.91 -6.54 56.37 74.00 -17.63 peak 2483.500 58.69 -6.54 52.15 54.00 -1.85 AVG 2484.240 61.07 -6.54 54.53 74.00 -19.47 peak	(MHz) (dBuV/m) (dB) (dBuV/m) (dB) (cm) 2483.500 62.91 -6.54 56.37 74.00 -17.63 peak 2483.500 58.69 -6.54 52.15 54.00 -1.85 AVG 2484.240 61.07 -6.54 54.53 74.00 -19.47 peak	(MHz) (dBuV/m) (dB) (dBuV/m) (dB) (dBuV/m) (dB) (dB)	(MHz) (dBuV/m) (dB) (dBuV/m) (dB) (dBuV/m) (dB) (dB)

10

2460.000



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Job No.: alen #621 Standard: FCC PK

Test item: Radiation Test

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

EUT: Revell 2.4G 2 Channel Radio System

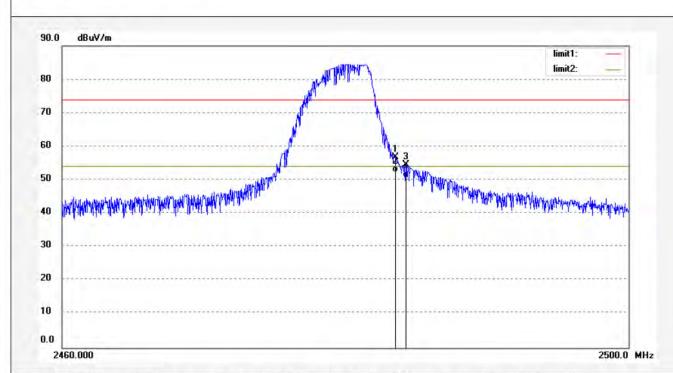
Mode: TX 2480MHz (Non-hopping)

Model: TX24203 Manufacturer: C.C.LEE

Note: Report No:ATE20130974

Polarization: Vertical Power Source: DC 6V

Date: 13/05/30/ Time: 10/17/43 Engineer Signature: Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	2483.500	63.40	-6.54	56.86	74.00	-17.14	peak				
2	2483.500	58.78	-6.54	52.24	54.00	-1.76	AVG				
3	2484.240	61.18	-6.54	54.64	74.00	-19.36	peak		1 = 7		
4	2484.240	57.36	-6.54	50.82	54.00	-3.18	AVG				