

APPLICATION CERTIFICATION FCC Part 15B
On Behalf of
Shenzhen Sungworld Electronics Co., Ltd.

MID
Model No.: VX-S7001, M7XXXXXX, VX-SXXXX

FCC ID: W13-VX-S7001

Prepared for : Shenzhen Sungworld Electronics Co., Ltd.
Address : 4#, North District, Shangxue Industrial Park, Bantian, Long
Gang District, Shenzhen, China

Prepared by : ACCURATE TECHNOLOGY CO. LTD
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Report Number : ATE20130171
Date of Test : January 29-February 7, 2013
Date of Report : February 8, 2013

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Test Report Certification

Applicant : Shenzhen Sungworld Electronics Co., Ltd.

Manufacturer : Shenzhen Sungworld Electronics Co., Ltd.

EUT Description : MID

(A) MODEL NO.: VX-S7001, M7XXXXXX, VX-SXXXX

(B) SERIAL NO.: N/A

(C) POWER SUPPLY: DC 3.7V (Li-polymer battery) & DC 5V (Power by Adapter)

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart B 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 B 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 : January 29-February 7, 2013

Prepared by : Apple Lv
(Apple Lv, Engineer)

Approved & Authorized Signer : Sean Liu
(Sean Liu, Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT	:	MID
Model Number	:	VX-S7001, M7XXXXXX, VX-SXXXXX (Note: These samples are same except for the model number is difference. So we prepare the VX-S7001 for FCC test.)
Power Supply	:	DC 3.7V (Li-polymer battery) & DC 5V (Power by adapter)
Adapter	:	Model number: WYT-0520 Input: AC 100-240V; 50/60Hz 0.3A Output: DC 5V/2.0A
Highest operation frequency of the EUT:	:	1GHz
Applicant	:	Shenzhen Sungworld Electronics Co., Ltd.
Address	:	4#, North District, Shangxue Industrial Park, Bantian, Long Gang District, Shenzhen, China
Manufacturer	:	Shenzhen Sungworld Electronics Co., Ltd.
Address	:	4#, North District, Shangxue Industrial Park, Bantian, Long Gang District, Shenzhen, China
Date of sample received	:	January 29, 2013
Date of Test	:	January 29-February 7, 2013

1.2. Accessory and Auxiliary Equipment

Notebook PC	:	Manufacturer: SONY M/N: PCG-663P S/N: 28123170 7202526
Printer	:	Manufacturer: Canon Model No.: BJC-1000SP

1.3. 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

1.4. 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 dates	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. 6, 2013	Feb. 5, 2014
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Feb. 6, 2013	Feb. 5, 2014
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Feb. 6, 2013	Feb. 5, 2014
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Feb. 6, 2013	Feb. 5, 2014
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 12, 2013	Jan. 11, 2014
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 12, 2013	Jan. 11, 2014

3. OPERATION OF EUT DURING TESTING

3.1.Operating Mode

- The modes are used:
- 1) Running
 - 2) Transfer data
 - 3) Camera playing

3.2.Configuration and peripherals



(EUT: MID)

4. TEST PROCEDURES AND RESULTS

FCC Rules	Description of Test	Result
Section 15.107	Conducted Emission Test	Compliant
Section 15.109	Radiated Emission Test	Compliant

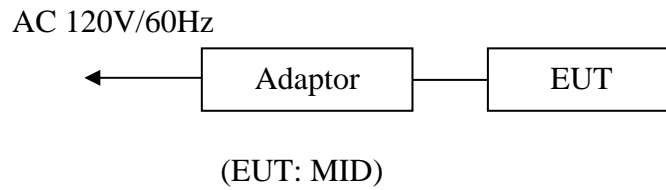
5. CONDUCTED EMISSION FOR FCC PART 15 SECTION

15.107(A)

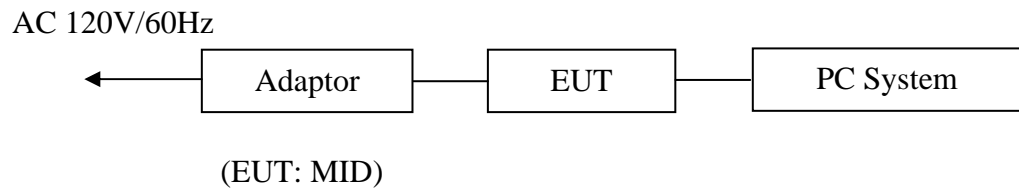
5.1. Block Diagram of Test Setup

5.1.1. Block diagram of connection between the EUT and simulators

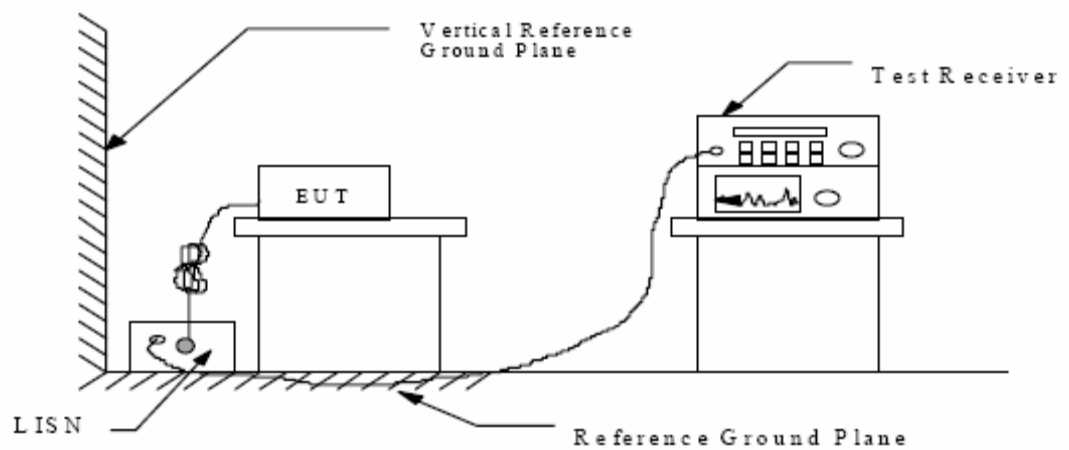
5.1.1.1. For Running & Camera playing



5.1.1.2. For Transfer data



5.1.2. Shielding Room Test Setup Diagram



(EUT: MID)

5.2.The Emission Limit

5.2.1.Conducted Emission Measurement Limits According to Section 15.107(a)

Frequency (MHz)	Limit dB(μ V)	
	Quasi-peak Level	Average Level
0.15 - 0.50	66.0 – 56.0 *	56.0 – 46.0 *
0.50 - 5.00	56.0	46.0
5.00 - 30.00	60.0	50.0

* Decreases with the logarithm of the frequency.

5.3.Configuration of EUT on Measurement

The following equipment are installed on the Conducted 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.MID (EUT)

Model Number : VX-S7001
 Serial Number : N/A
 Manufacturer : Shenzhen Sungworld Electronics 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 modes (Running, Transfer data, Camera playing) and measure it.

5.5.Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2009 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

5.6. Power Line Conducted Emission Measurement Results

PASS.

The frequency range from 150kHz to 30MHz is checked.

Date of Test:	January 30, 2013	Temperature:	25°C
EUT:	MID	Humidity:	50%
Model No.:	VX-S7001	Power Supply:	AC 120V/60Hz
Test Mode:	Running	Test Engineer:	PEI

Frequency MHz	Level dB μ V	Transd dB	Limit dB μ V	Margin dB	Detector	Line	PE
0.310189	49.50	11.6	60	10.5	QP	N	GND
0.361001	49.30	11.7	59	9.4	QP	N	GND
0.519130	46.30	12.0	56	9.7	QP	N	GND
Frequency MHz	Level dB μ V	Transd dB	Limit dB μ V	Margin dB	Detector	Line	PE
0.318980	37.30	11.6	50	12.4	AV	N	GND
0.355282	38.30	11.7	49	10.5	AV	N	GND
4.913107	34.00	11.4	46	12.0	AV	N	GND
Frequency MHz	Level dB μ V	Transd dB	Limit dB μ V	Margin dB	Detector	Line	PE
0.359562	50.50	11.7	59	8.2	QP	L1	GND
0.527486	46.80	12.0	56	9.2	QP	L1	GND
0.638894	48.80	11.9	56	7.2	QP	L1	GND
Frequency MHz	Level dB μ V	Transd dB	Limit dB μ V	Margin dB	Detector	Line	PE
0.359562	40.60	11.7	49	8.1	AV	L1	GND
0.475482	37.10	12.0	46	9.3	AV	L1	GND
4.972301	38.50	11.4	46	7.5	AV	L1	GND

Emissions attenuated more than 20 dB below the permissible value are not reported.
The spectral diagrams are attached as below.

Date of Test:	January 30, 2013	Temperature:	25°C
EUT:	MID	Humidity:	50%
Model No.:	VX-S7001	Power Supply:	AC 120V/60Hz
Test Mode:	Transfer data	Test Engineer:	PEI

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.362445	49.50	11.7	59	9.2	QP	L1	GND
0.437246	49.40	11.9	57	7.7	QP	L1	GND
0.517062	47.10	12.0	56	8.9	QP	L1	GND
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.362445	39.90	11.7	49	8.8	AV	L1	GND
0.477384	37.30	12.0	46	9.1	AV	L1	GND
4.992190	38.70	11.4	46	7.3	AV	L1	GND
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.311430	49.50	11.6	60	10.4	QP	N	GND
0.358130	49.90	11.7	59	8.9	QP	N	GND
0.515002	46.10	12.0	56	9.9	QP	N	GND
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.317709	37.90	11.6	50	11.9	AV	N	GND
0.358130	38.40	11.7	49	10.4	AV	N	GND
4.952491	34.20	11.4	46	11.8	AV	N	GND

Emissions attenuated more than 20 dB below the permissible value are not reported.
The spectral diagrams are attached as below.

Date of Test:	January 30, 2013	Temperature:	25°C
EUT:	MID	Humidity:	50%
Model No.:	VX-S7001	Power Supply:	AC 120V/60Hz
Test Mode:	Camera playing	Test Engineer:	PEI

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.305276	48.50	11.6	60	11.6	QP	N	GND
0.351053	48.70	11.7	59	10.2	QP	N	GND
0.517062	46.20	12.0	56	9.8	QP	N	GND
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.313927	37.90	11.6	50	12.0	AV	N	GND
0.356703	38.20	11.7	49	10.6	AV	N	GND
4.893533	33.70	11.4	46	12.3	AV	N	GND
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.477384	47.60	12.0	56	8.8	QP	L1	GND
0.611446	44.10	12.0	56	11.9	QP	L1	GND
4.893533	47.50	11.4	56	8.5	QP	L1	GND
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.359562	40.20	11.7	49	8.5	AV	L1	GND
0.475482	37.20	12.0	46	9.2	AV	L1	GND
4.932760	38.20	11.4	46	7.8	AV	L1	GND

Emissions attenuated more than 20 dB below the permissible value are not reported.
The spectral diagrams are attached as below.

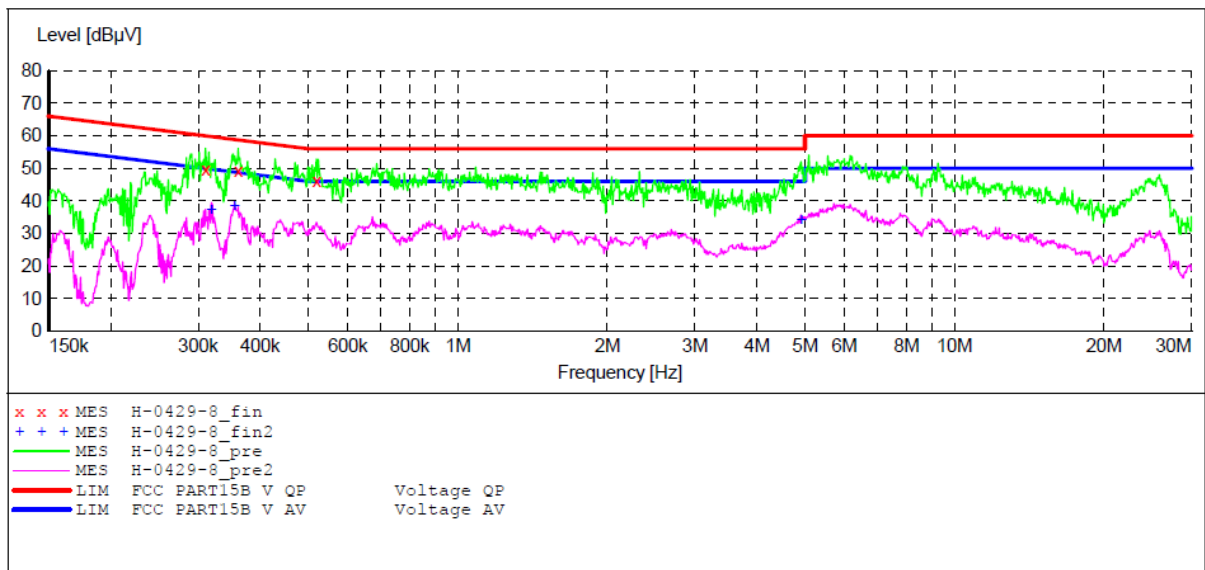
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART15B

EUT: MID M/N:VX-S7001
 Manufacturer: Sungworld
 Operating Condition: Running
 Test Site: 1#Shielding Room
 Operator: Bob
 Test Specification: N AC120V/60Hz
 Comment: Report NO.:ATE20130171
 Start of Test: 1/30/2013 / 2:07:34PM

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average



MEASUREMENT RESULT: "H-0429-8_fin"

1/30/2013 2:09PM

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.310189	49.50	11.6	60	10.5	QP	N	GND
0.361001	49.30	11.7	59	9.4	QP	N	GND
0.519130	46.30	12.0	56	9.7	QP	N	GND

MEASUREMENT RESULT: "H-0429-8_fin2"

1/30/2013 2:09PM

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.318980	37.30	11.6	50	12.4	AV	N	GND
0.355282	38.30	11.7	49	10.5	AV	N	GND
4.913107	34.00	11.4	46	12.0	AV	N	GND

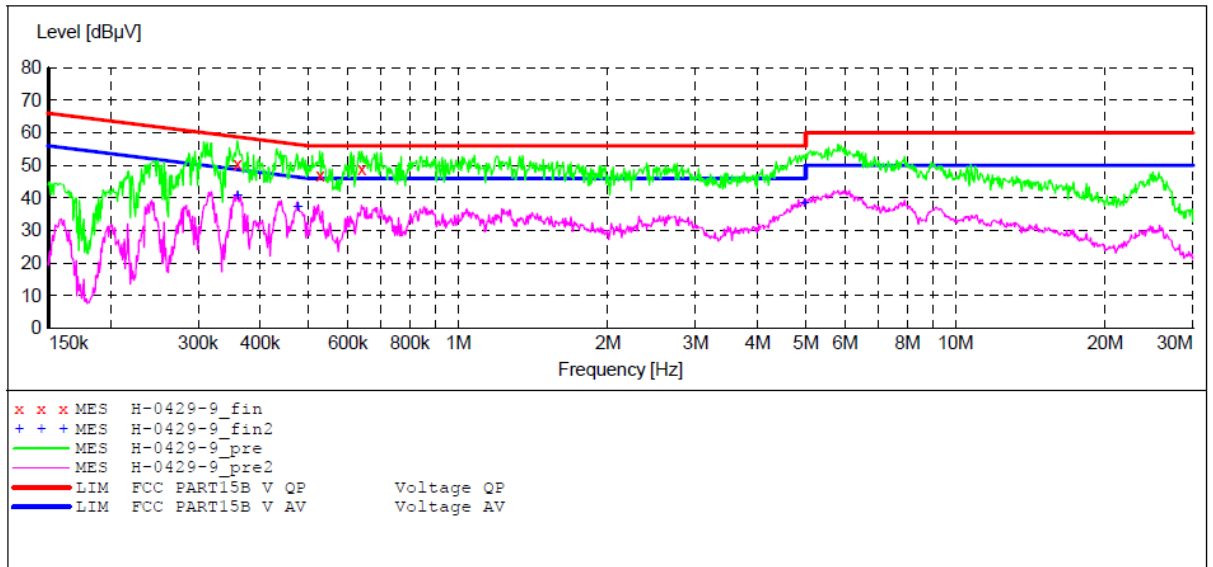
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART15B

EUT: MID M/N:VX-S7001
 Manufacturer: Sungworld
 Operating Condition: Running
 Test Site: 1#Shielding Room
 Operator: Bob
 Test Specification: L AC120V/60Hz
 Comment: Report NO.:ATE20130171
 Start of Test: 1/30/2013 / 2:10:16PM

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average



MEASUREMENT RESULT: "H-0429-9_fin"

1/30/2013 2:12PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.359562	50.50	11.7	59	8.2	QP	L1	GND
0.527486	46.80	12.0	56	9.2	QP	L1	GND
0.638894	48.80	11.9	56	7.2	QP	L1	GND

MEASUREMENT RESULT: "H-0429-9_fin2"

1/30/2013 2:12PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.359562	40.60	11.7	49	8.1	AV	L1	GND
0.475482	37.10	12.0	46	9.3	AV	L1	GND
4.972301	38.50	11.4	46	7.5	AV	L1	GND

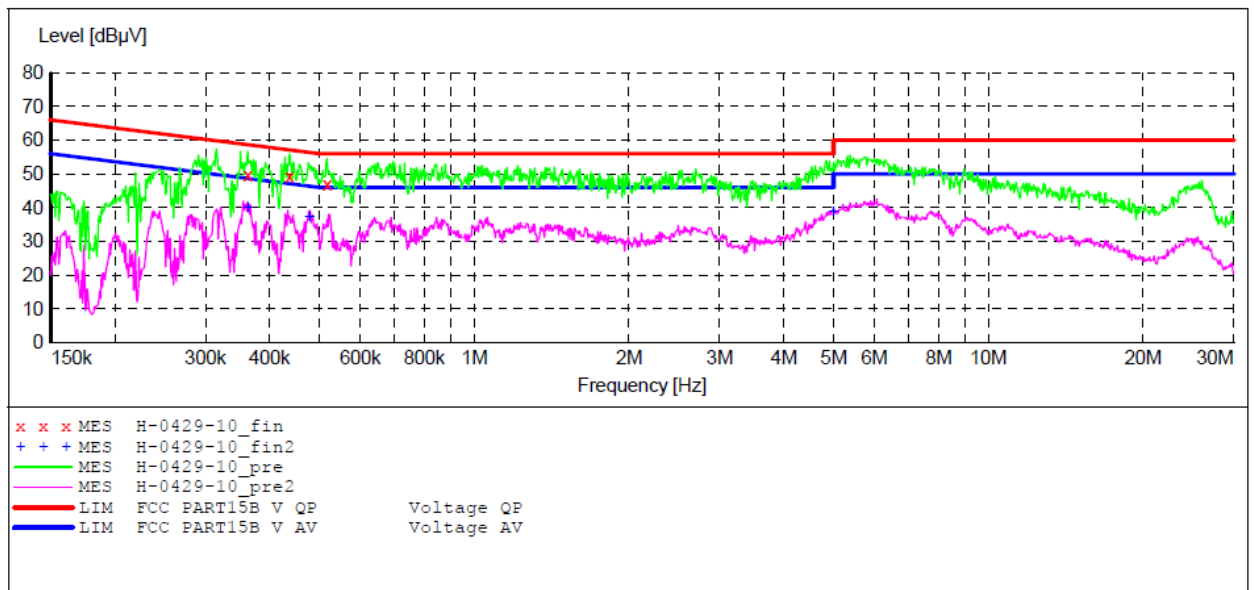
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART15B

EUT: MID M/N:VX-S7001
 Manufacturer: Sungworld
 Operating Condition: Transfer data
 Test Site: 1#Shielding Room
 Operator: Bob
 Test Specification: L AC120V/60Hz
 Comment: Report NO.:ATE20130171
 Start of Test: 1/30/2013 / 2:12:45PM

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average



MEASUREMENT RESULT: "H-0429-10_fin"

1/30/2013 2:14PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.362445	49.50	11.7	59	9.2	QP	L1	GND
0.437246	49.40	11.9	57	7.7	QP	L1	GND
0.517062	47.10	12.0	56	8.9	QP	L1	GND

MEASUREMENT RESULT: "H-0429-10_fin2"

1/30/2013 2:14PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.362445	39.90	11.7	49	8.8	AV	L1	GND
0.477384	37.30	12.0	46	9.1	AV	L1	GND
4.992190	38.70	11.4	46	7.3	AV	L1	GND

ACCURATE TECHNOLOGY CO., LTD

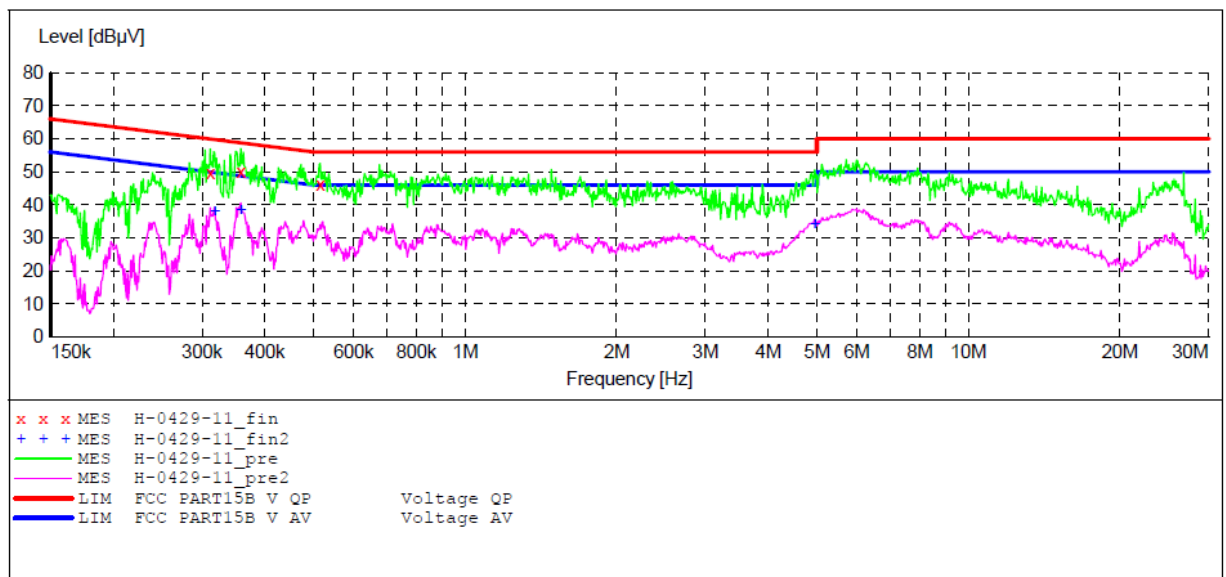
CONDUCTED EMISSION STANDARD FCC PART15B

EUT: MID M/N:VX-S7001
 Manufacturer: Sungworld
 Operating Condition: Transfer data
 Test Site: 1#Shielding Room
 Operator: Bob
 Test Specification: N AC120V/60Hz
 Comment: Report NO.:ATE20130171
 Start of Test: 1/30/2013 / 2:15:17PM

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	30.0 MHz	0.8 %	QuasiPeak	1.0 s	9 kHz	NSLK8126 2008
			Average			



MEASUREMENT RESULT: "H-0429-11_fin"

1/30/2013 2:17PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.311430	49.50	11.6	60	10.4	QP	N	GND
0.358130	49.90	11.7	59	8.9	QP	N	GND
0.515002	46.10	12.0	56	9.9	QP	N	GND

MEASUREMENT RESULT: "H-0429-11_fin2"

1/30/2013 2:17PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.317709	37.90	11.6	50	11.9	AV	N	GND
0.358130	38.40	11.7	49	10.4	AV	N	GND
4.952491	34.20	11.4	46	11.8	AV	N	GND

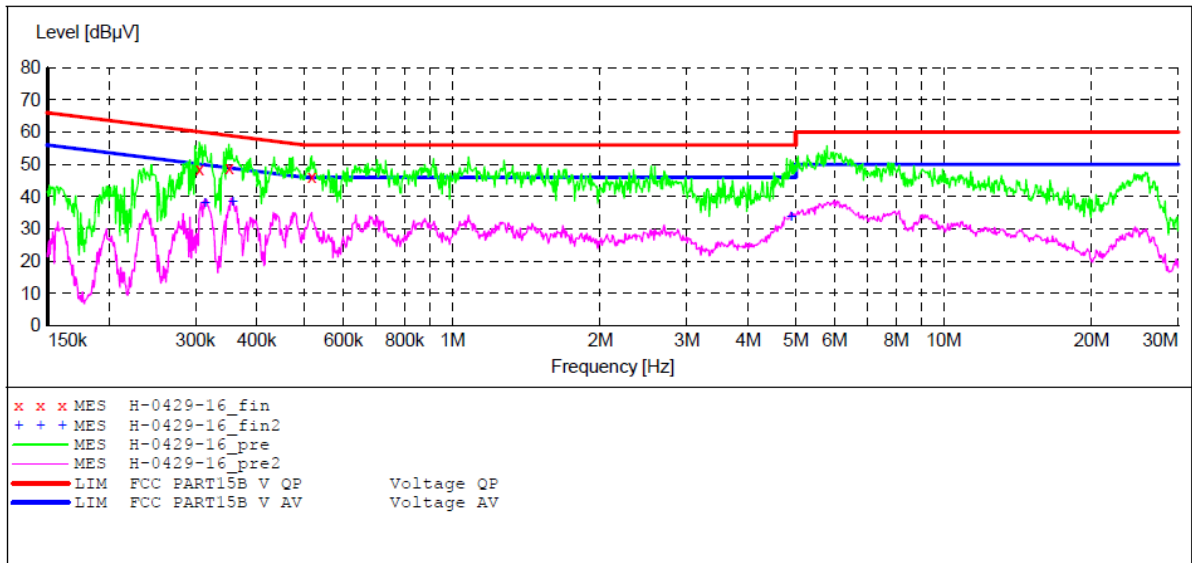
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART15B

EUT: MID M/N:VX-S7001
 Manufacturer: Sungworld
 Operating Condition: Camera
 Test Site: 1#Shielding Room
 Operator: Bob
 Test Specification: N AC120V/60Hz
 Comment: Report NO.:ATE20130171
 Start of Test: 1/30/2013 / 2:28:17PM

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average



MEASUREMENT RESULT: "H-0429-16_fin"

1/30/2013 2:30PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.305276	48.50	11.6	60	11.6	QP	N	GND
0.351053	48.70	11.7	59	10.2	QP	N	GND
0.517062	46.20	12.0	56	9.8	QP	N	GND

MEASUREMENT RESULT: "H-0429-16_fin2"

1/30/2013 2:30PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.313927	37.90	11.6	50	12.0	AV	N	GND
0.356703	38.20	11.7	49	10.6	AV	N	GND
4.893533	33.70	11.4	46	12.3	AV	N	GND

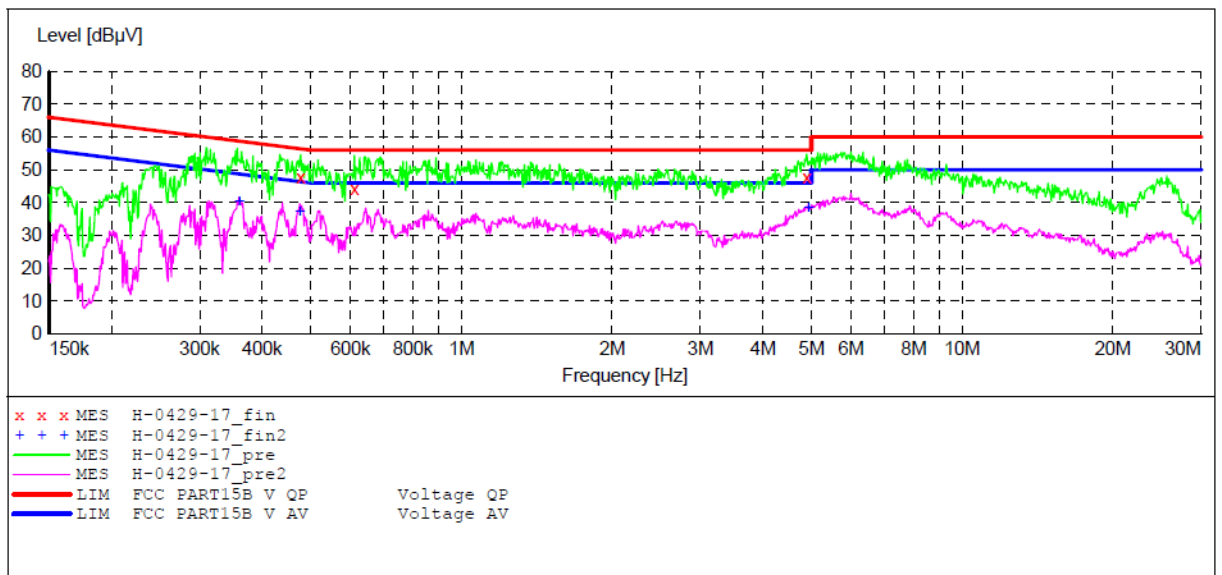
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART15B

EUT: MID M/N:VX-S7001
 Manufacturer: Sungworld
 Operating Condition: Camera
 Test Site: 1#Shielding Room
 Operator: Bob
 Test Specification: L AC120V/60Hz
 Comment: Report NO.:ATE20130171
 Start of Test: 1/30/2013 / 2:30:50PM

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average



MEASUREMENT RESULT: "H-0429-17_fin"

1/30/2013 2:33PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.477384	47.60	12.0	56	8.8	QP	L1	GND
0.611446	44.10	12.0	56	11.9	QP	L1	GND
4.893533	47.50	11.4	56	8.5	QP	L1	GND

MEASUREMENT RESULT: "H-0429-17_fin2"

1/30/2013 2:33PM

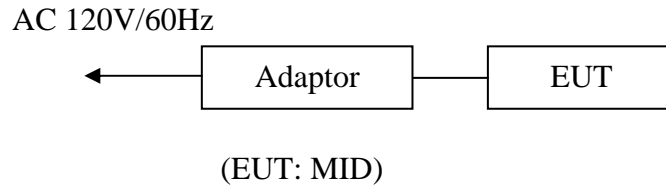
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.359562	40.20	11.7	49	8.5	AV	L1	GND
0.475482	37.20	12.0	46	9.2	AV	L1	GND
4.932760	38.20	11.4	46	7.8	AV	L1	GND

6. RADIATED EMISSION FOR FCC PART 15 SECTION 15.109(A)

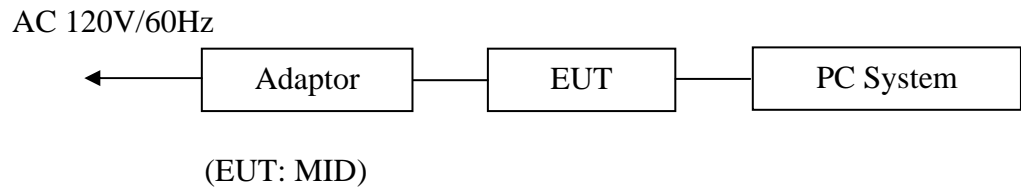
6.1. Block Diagram of Test Setup

6.1.1. Block diagram of connection between the EUT and simulators

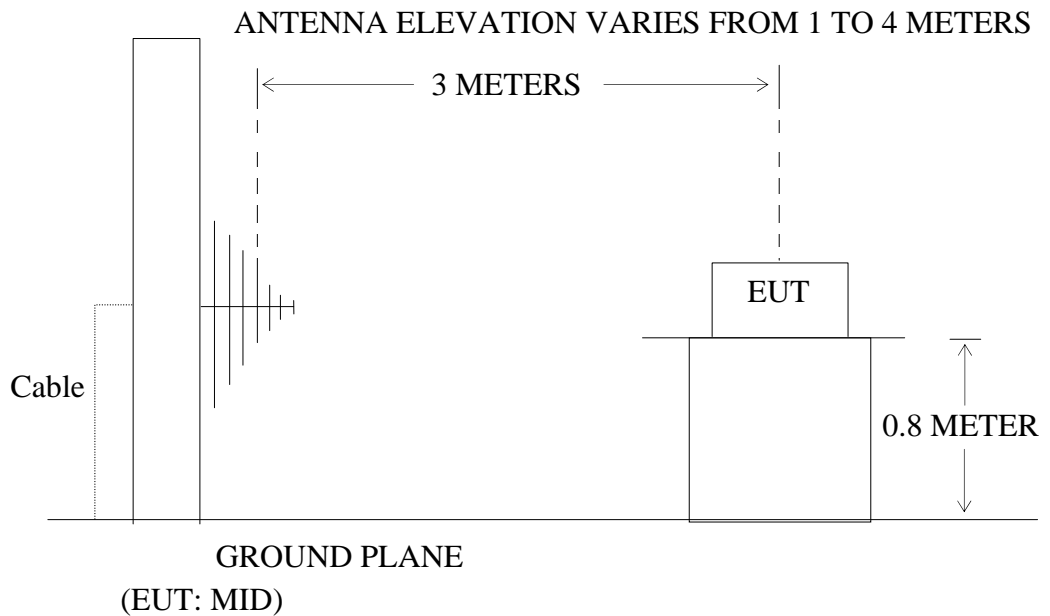
6.1.1.1. For Running & Camera playing



6.1.1.2. For Transfer data



6.1.2. Semi-Anechoic Chamber Test Setup Diagram



6.2.The Emission Limit For Section 15.109 (a)

6.2.1.Radiation Emission Measurement Limits According to Section 15.109 (a).

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

6.3.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.

6.3.1.MID (EUT)

Model Number : VX-S7001
 Serial Number : N/A
 Manufacturer : Shenzhen Sungworld Electronics Co., Ltd.

6.4.Operating Condition of EUT

6.4.1.Setup the EUT and simulator as shown as Section 6.1.

6.4.2.Turn on the power of all equipment.

6.4.3. Let the EUT work in (Running, Transfer data, Camera playing) mode measure it.

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

The frequency range from 30MHz to 5000MHz is checked.

6.6.The Emission Measurement Result

PASS.

Date of Test:	February 1, 2013	Temperature:	25°C
EUT:	MID	Humidity:	50%
Model No.:	VX-S7001	Power Supply:	AC 120V/60Hz
Test Mode:	Running	Test Engineer:	PEI

Frequency: 30-1000MHz								
Polarization								
Horizontal	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	32.4109	13.13	15.95	29.08	40.00	-10.92	QP
	2	55.6782	10.37	13.94	24.31	40.00	-15.69	QP
	3	142.2684	13.88	11.48	25.36	43.50	-18.14	QP
Vertical	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	32.2972	15.55	15.96	31.51	40.00	-8.49	QP
	2	58.0759	10.33	13.47	23.80	40.00	-16.20	QP
	3	143.2717	19.21	11.48	30.69	43.50	-12.81	QP
Frequency: 1000-5000MHz								
Polarization								
Horizontal	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	1169.790	52.81	-12.50	40.31	74.00	-33.69	peak
	2	1169.790	47.15	-12.50	34.65	54.00	-19.35	AVG
	3	3570.187	41.97	-2.89	39.08	74.00	-34.92	peak
	4	3570.187	36.32	-2.89	33.43	54.00	-20.57	AVG
Vertical	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	1169.790	53.39	-12.50	40.89	74.00	-33.11	peak
	2	1169.790	48.12	-12.50	35.62	54.00	-18.38	AVG
	3	2397.074	52.82	-7.48	45.34	74.00	-28.66	peak
4	2397.074	47.54	-7.48	40.06	54.00	-13.94	AVG	

Date of Test:	<u>February 1, 2013</u>	Temperature:	<u>25°C</u>
EUT:	<u>MID</u>	Humidity:	<u>50%</u>
Model No.:	<u>VX-S7001</u>	Power Supply:	<u>AC 120V/60Hz</u>
Test Mode:	<u>Transfer data</u>	Test Engineer:	<u>PEI</u>

Frequency: 30-1000MHz								
Polarization								
Horizontal	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	32.1840	16.11	15.98	32.09	40.00	-7.91	QP
	2	142.7692	15.49	11.49	26.98	43.50	-16.52	QP
	3	419.8509	13.78	20.09	33.87	46.00	-12.13	QP
Vertical	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	35.0156	18.21	15.69	33.90	40.00	-6.10	QP
	2	52.0826	13.47	14.29	27.76	40.00	-12.24	QP
	3	148.3951	25.55	11.51	37.06	43.50	-6.44	QP
Frequency: 1000-5000MHz								
Polarization								
Horizontal	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	1965.930	49.63	-9.21	40.42	74.00	-33.58	peak
	2	1965.930	44.46	-9.21	35.25	54.00	-18.75	AVG
	3	2397.074	52.35	-7.48	44.87	74.00	-29.13	peak
	4	2397.074	47.51	-7.48	40.03	54.00	-13.97	AVG
Vertical	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	1965.930	50.54	-9.21	41.33	74.00	-32.67	peak
	2	1965.930	45.51	-9.21	36.30	54.00	-17.70	AVG
	3	2749.020	46.16	-6.10	40.06	74.00	-33.94	peak
	4	2749.020	41.17	-6.10	35.07	54.00	-18.93	AVG

Date of Test:	<u>February 1, 2013</u>	Temperature:	<u>25°C</u>
EUT:	<u>MID</u>	Humidity:	<u>50%</u>
Model No.:	<u>VX-S7001</u>	Power Supply:	<u>AC 120V/60Hz</u>
Test Mode:	<u>Camera playing</u>	Test Engineer:	<u>PEI</u>

Frequency: 30-1000MHz								
Polarization								
Horizontal	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	82.5257	23.39	13.01	36.40	40.00	-3.60	QP
	2	265.9035	25.60	15.81	41.41	46.00	-4.59	QP
	3	315.8601	24.32	17.22	41.54	46.00	-4.46	QP
Vertical	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	82.5257	22.95	13.01	35.96	40.00	-4.04	QP
	2	133.5493	27.25	12.74	39.99	43.50	-3.51	QP
	3	315.8601	25.02	17.22	42.24	46.00	-3.76	QP
Frequency: 1000-5000MHz								
Polarization								
Horizontal	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	1110.210	56.02	-12.58	43.44	74.00	-30.56	peak
	2	1110.210	51.02	-12.58	38.44	54.00	-15.56	AVG
	3	2392.757	50.14	-7.51	42.63	74.00	-31.37	peak
	4	2392.757	45.55	-7.51	38.04	54.00	-15.96	AVG
Vertical	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	1110.210	55.53	-12.58	42.95	74.00	-31.05	peak
	2	1110.210	50.13	-12.58	37.55	54.00	-16.45	AVG
	3	2397.074	50.60	-7.48	43.12	74.00	-30.88	peak
4	2397.074	45.62	-7.48	38.14	54.00	-15.86	AVG	

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 are attached as below display the measurement of peak values.



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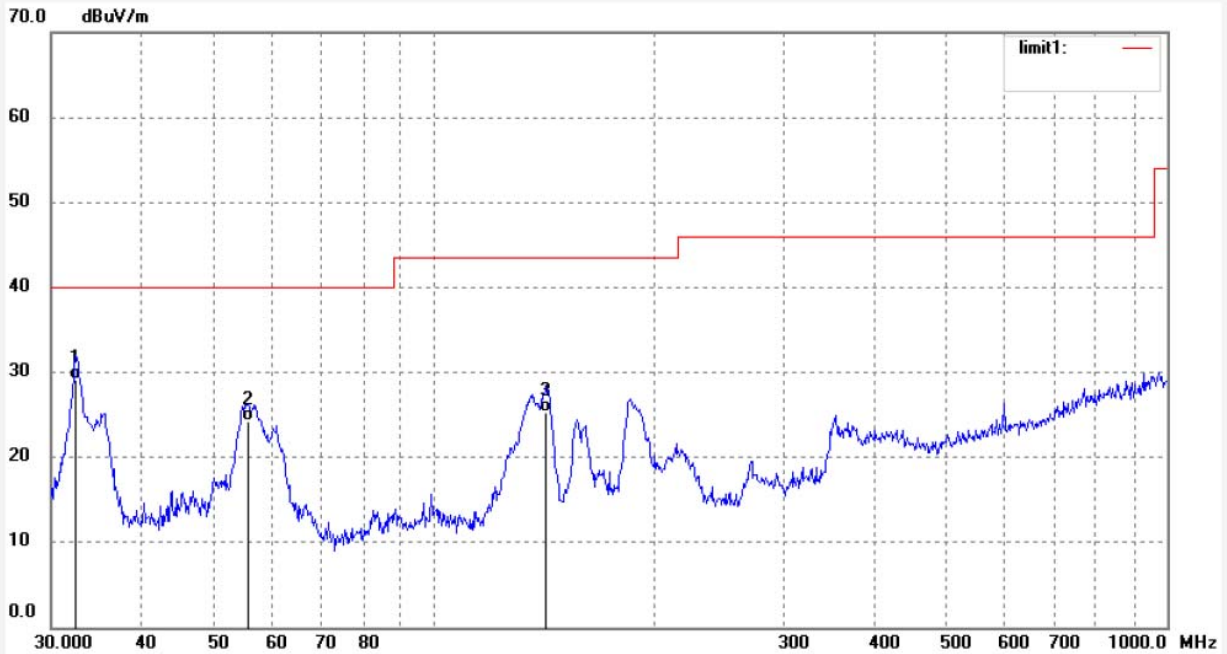
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: Bob #4788
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 26 C / 55 %
EUT: MID
Mode: Running
Model: VX-S7001
Manufacturer: Sungworld

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 2013/02/01
Time: 10:12:12
Engineer Signature: Bob
Distance: 3m

Note: Report NO.:ATE20130171



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.4109	13.13	15.95	29.08	40.00	-10.92	QP			
2	55.6782	10.37	13.94	24.31	40.00	-15.69	QP			
3	142.2684	13.88	11.48	25.36	43.50	-18.14	QP			



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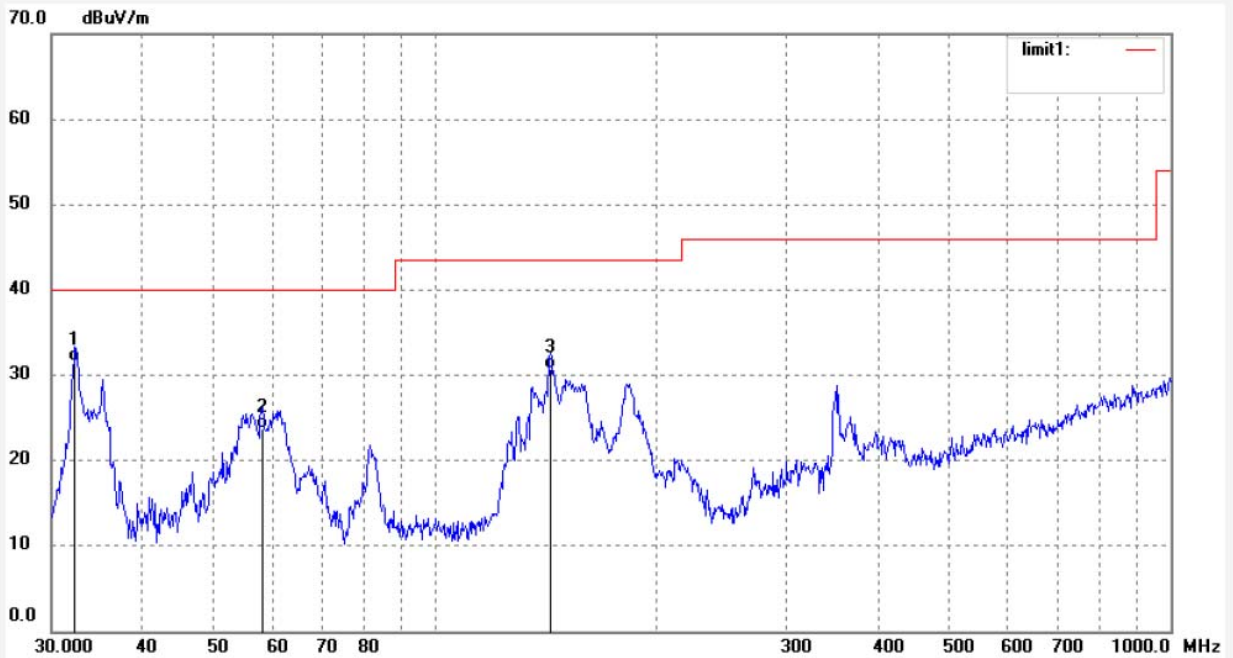
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: Bob #4789
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 26 C / 55 %
EUT: MID
Mode: Running
Model: VX-S7001
Manufacturer: Sungworld

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 2013/02/01
Time: 10:14:25
Engineer Signature: Bob
Distance: 3m

Note: Report NO.:ATE20130171



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.2972	15.55	15.96	31.51	40.00	-8.49	QP			
2	58.0759	10.33	13.47	23.80	40.00	-16.20	QP			
3	143.2717	19.21	11.48	30.69	43.50	-12.81	QP			



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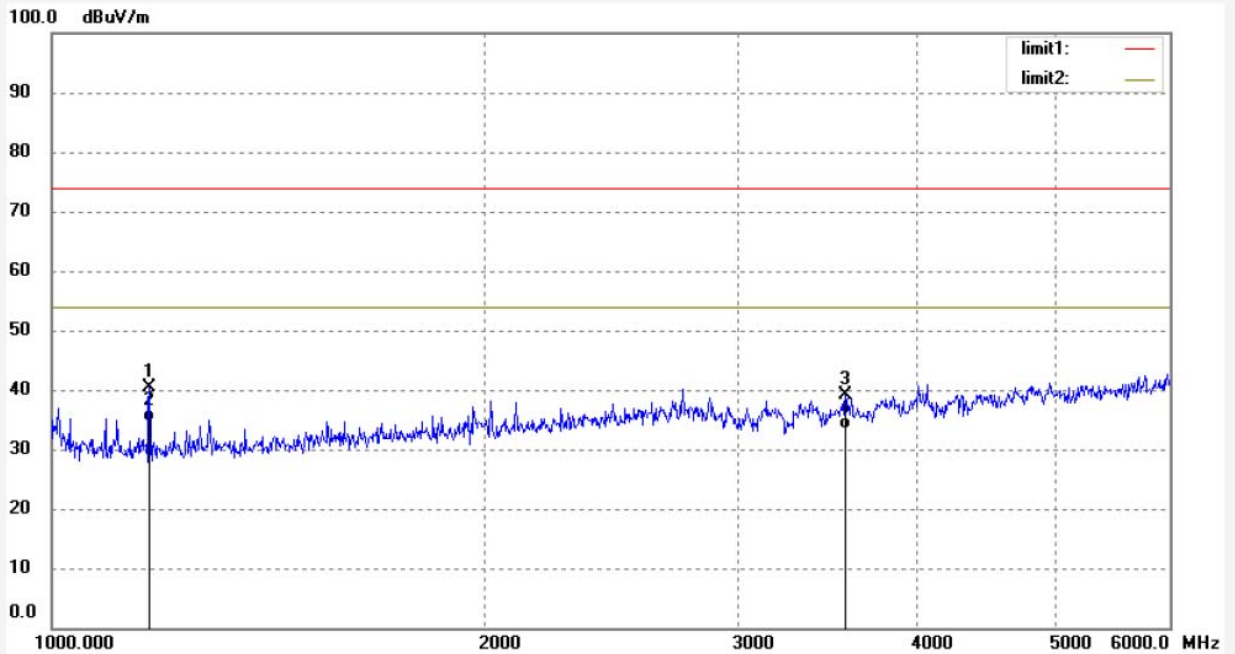
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: Bob #4802
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 26 C / 55 %
EUT: MID
Mode: Running
Model: VX-S7001
Manufacturer: Sungworld

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 2013/02/01
Time: 10:48:09
Engineer Signature: Bob
Distance: 3m

Note: Report NO.:ATE20130171



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1169.790	52.81	-12.50	40.31	74.00	-33.69	peak			
2	1169.790	47.15	-12.50	34.65	54.00	-19.35	AVG			
3	3570.187	41.97	-2.89	39.08	74.00	-34.92	peak			
4	3570.187	36.32	-2.89	33.43	54.00	-20.57	AVG			



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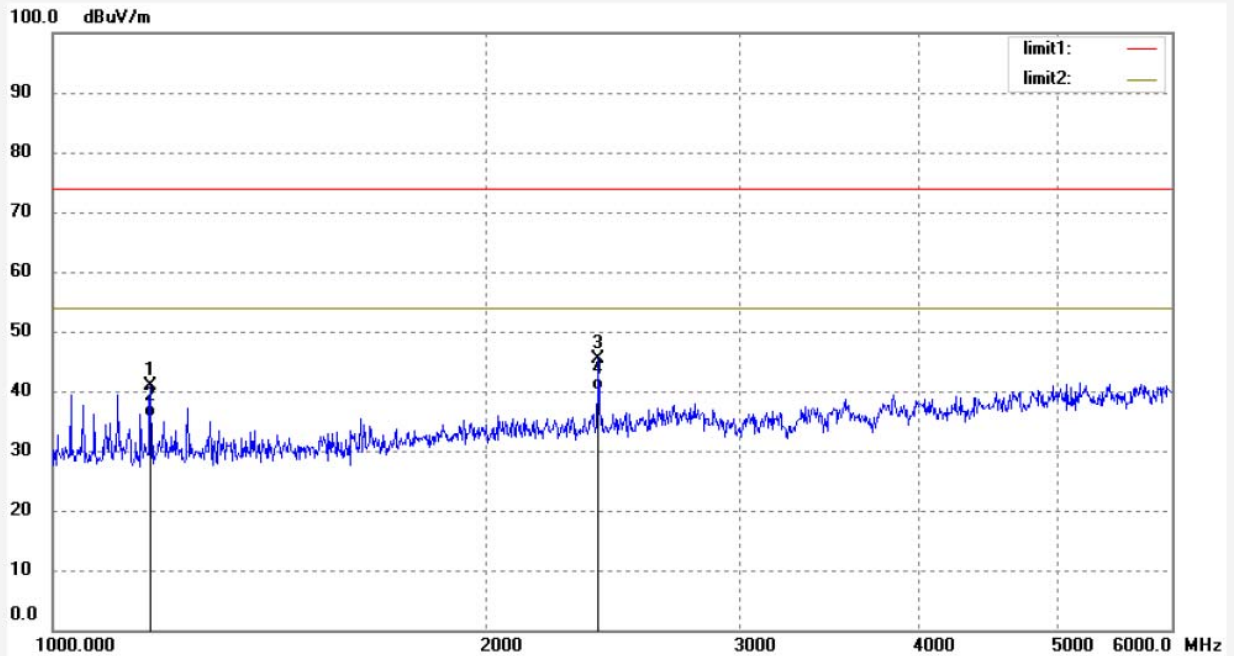
F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: Bob #4803
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 26 C / 55 %
EUT: MID
Mode: Running
Model: VX-S7001
Manufacturer: Sungworld

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 2013/02/01
Time: 10:51:53
Engineer Signature: Bob
Distance: 3m

Note: Report NO.:ATE20130171



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1169.790	53.39	-12.50	40.89	74.00	-33.11	peak			
2	1169.790	48.12	-12.50	35.62	54.00	-18.38	AVG			
3	2397.074	52.82	-7.48	45.34	74.00	-28.66	peak			
4	2397.074	47.54	-7.48	40.06	54.00	-13.94	AVG			



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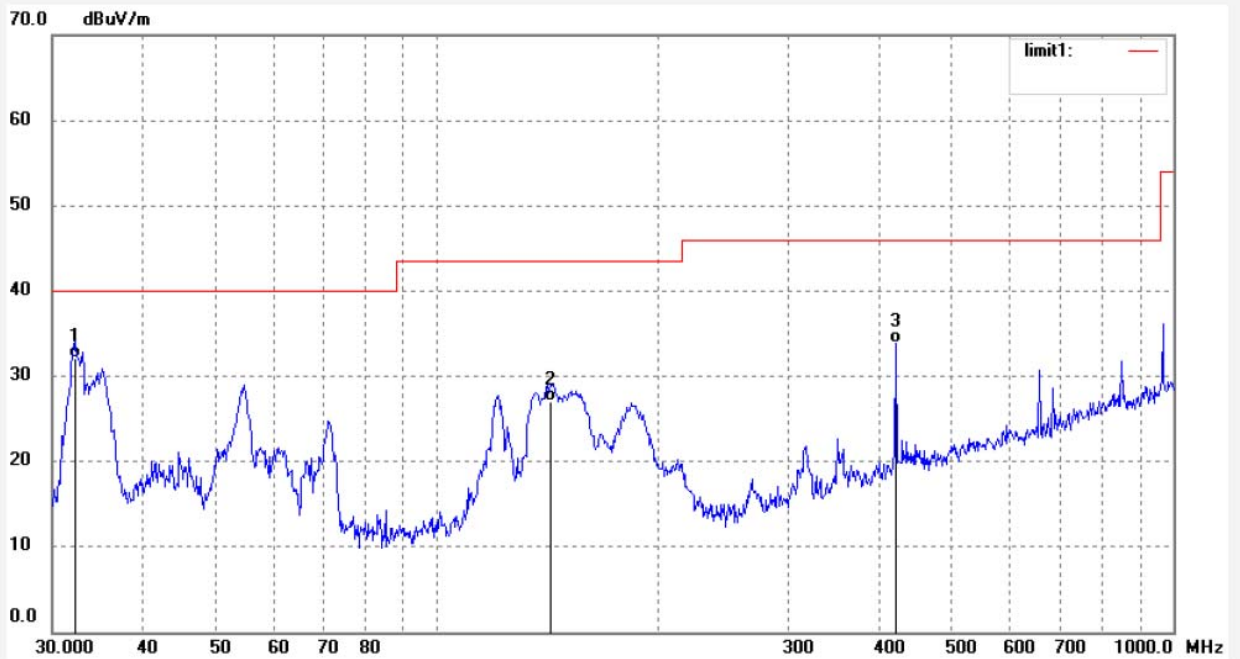
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: Bob #4794
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 26 C / 55 %
EUT: MID
Mode: Transfer data
Model: VX-S7001
Manufacturer: Sungworld

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 2013/02/01
Time: 10:26:31
Engineer Signature: Bob
Distance: 3m

Note: Report NO.:ATE20130171



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.1840	16.11	15.98	32.09	40.00	-7.91	QP			
2	142.7692	15.49	11.49	26.98	43.50	-16.52	QP			
3	419.8509	13.78	20.09	33.87	46.00	-12.13	QP			



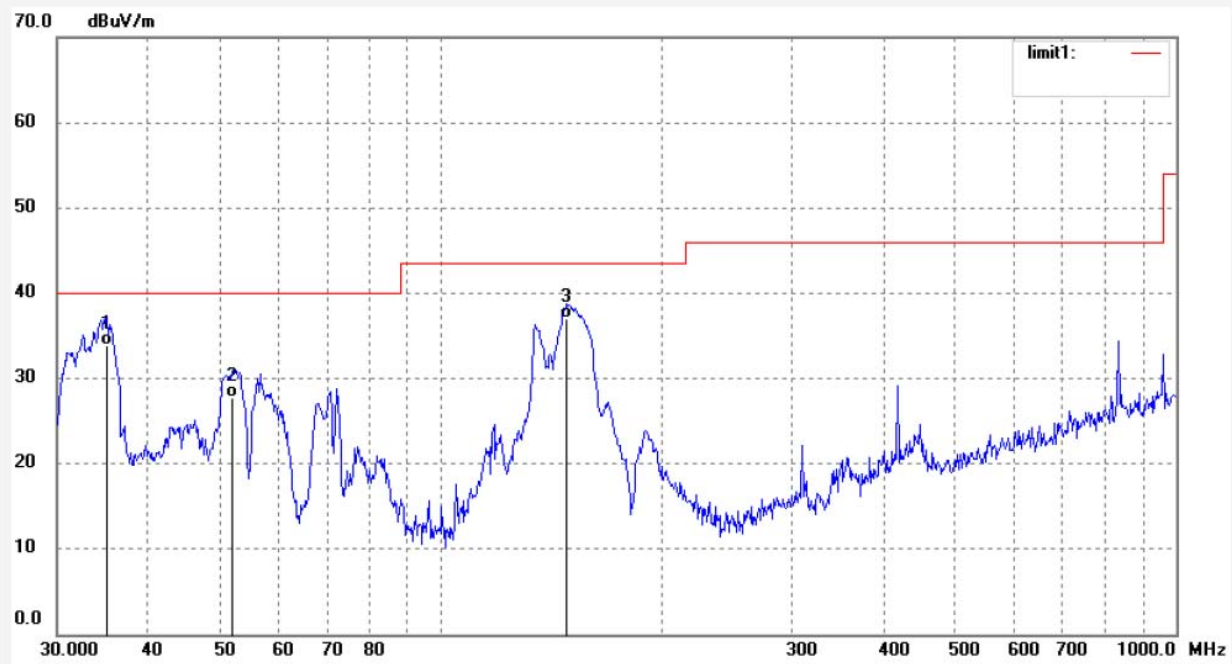
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Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: Bob #4795	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2013/02/01
Temp.(C)/Hum.(%) 26 C / 55 %	Time: 10:28:44
EUT: MID	Engineer Signature: Bob
Mode: Transfer data	Distance: 3m
Model: VX-S7001	
Manufacturer: Sungworld	

Note: Report NO.:ATE20130171



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	35.0156	18.21	15.69	33.90	40.00	-6.10	QP			
2	52.0826	13.47	14.29	27.76	40.00	-12.24	QP			
3	148.3951	25.55	11.51	37.06	43.50	-6.44	QP			



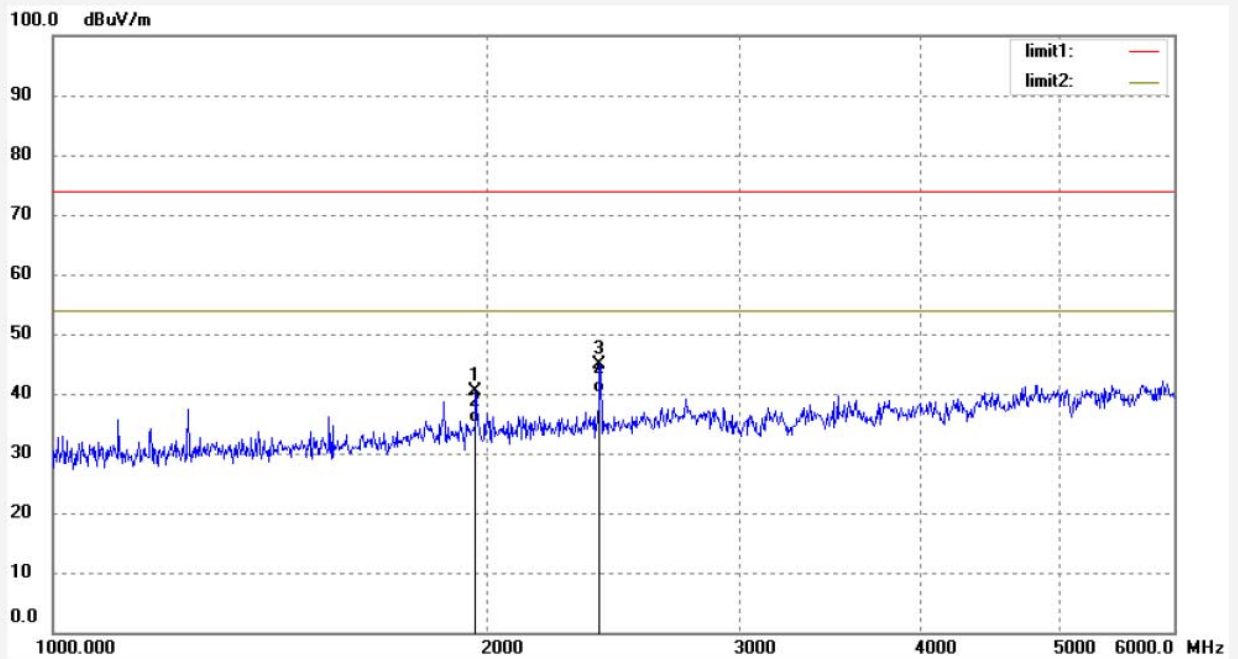
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Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: Bob #4797	Polarization: Horizontal
Standard: FCC PK	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2013/02/01
Temp.(C)/Hum.(%) 26 C / 55 %	Time: 10:35:27
EUT: MID	Engineer Signature: Bob
Mode: Transfer data	Distance: 3m
Model: VX-S7001	
Manufacturer: Sungworld	

Note: Report NO.:ATE20130171



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1965.930	49.63	-9.21	40.42	74.00	-33.58	peak			
2	1965.930	44.46	-9.21	35.25	54.00	-18.75	AVG			
3	2397.074	52.35	-7.48	44.87	74.00	-29.13	peak			
4	2397.074	47.51	-7.48	40.03	54.00	-13.97	AVG			



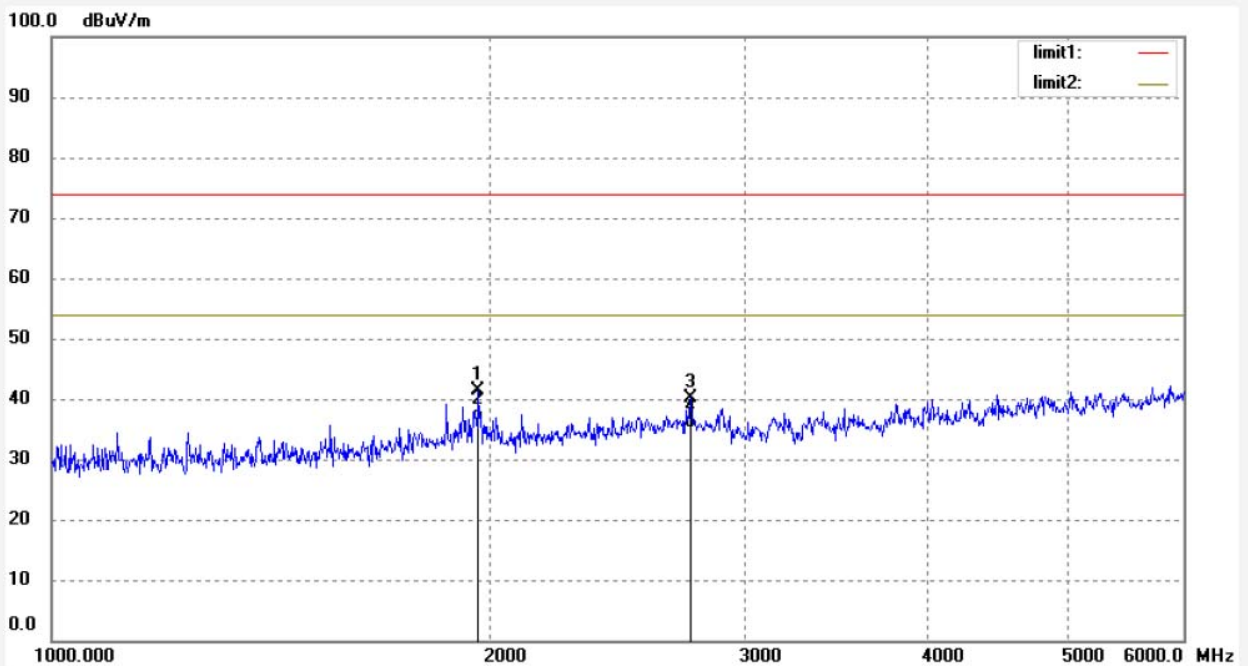
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Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: Bob #4796	Polarization: Vertical
Standard: FCC PK	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2013/02/01
Temp.(C)/Hum.(%) 26 C / 55 %	Time: 10:33:38
EUT: MID	Engineer Signature: Bob
Mode: Transfer data	Distance: 3m
Model: VX-S7001	
Manufacturer: Sungworld	

Note: Report NO.:ATE20130171



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1965.930	50.54	-9.21	41.33	74.00	-32.67	peak			
2	1965.930	45.51	-9.21	36.30	54.00	-17.70	AVG			
3	2749.020	46.16	-6.10	40.06	74.00	-33.94	peak			
4	2749.020	41.17	-6.10	35.07	54.00	-18.93	AVG			



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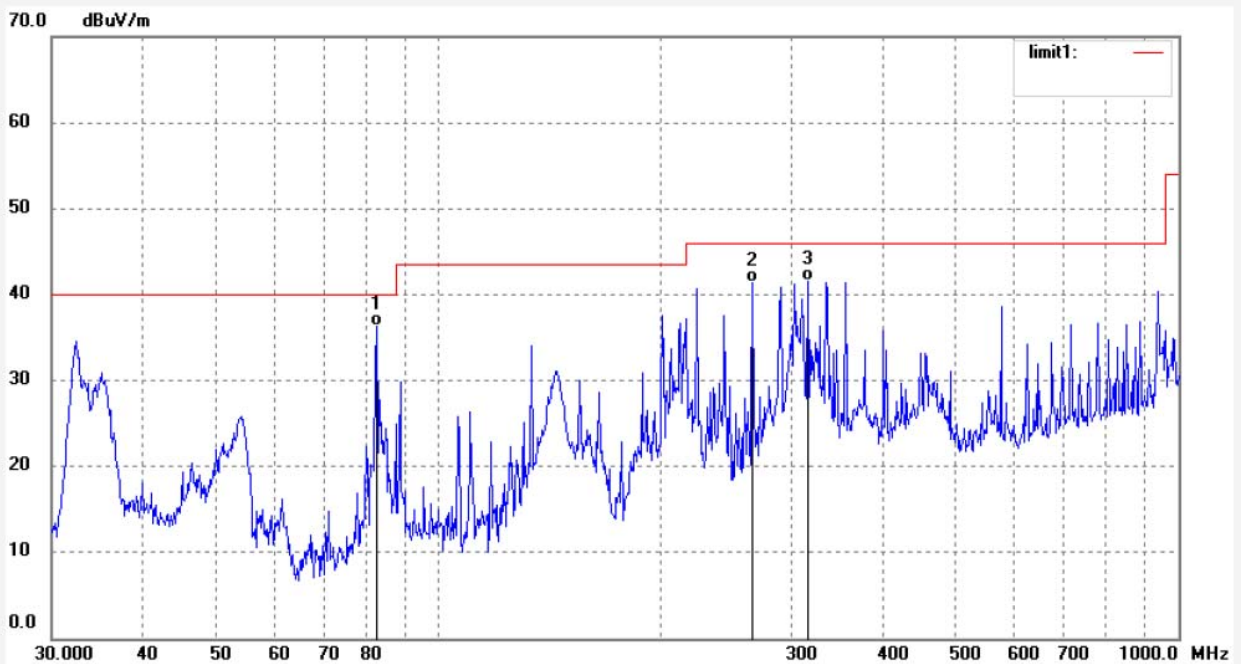
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Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: Bob #4790
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 26 C / 55 %
EUT: MID
Mode: Camera
Model: VX-S7001
Manufacturer: Sungworld

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 2013/02/01
Time: 10:17:11
Engineer Signature: Bob
Distance: 3m

Note: Report NO.:ATE20130171



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	82.5257	23.39	13.01	36.40	40.00	-3.60	QP			
2	265.9035	25.60	15.81	41.41	46.00	-4.59	QP			
3	315.8601	24.32	17.22	41.54	46.00	-4.46	QP			



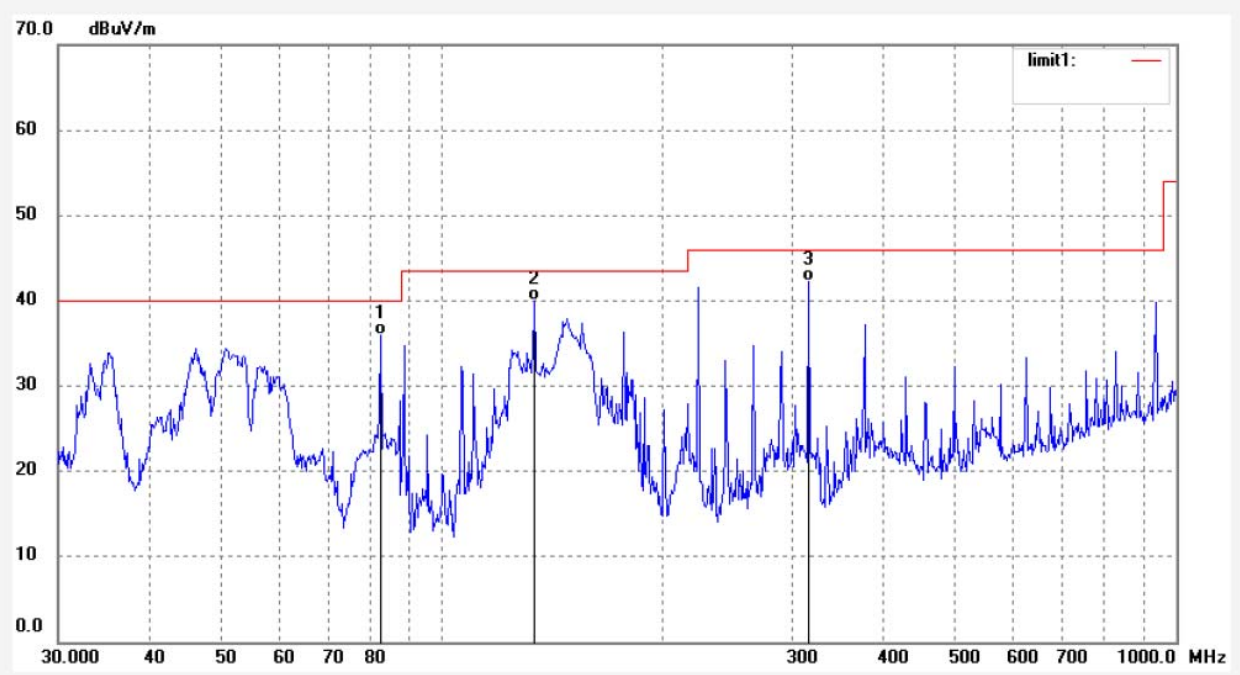
ACCURATE TECHNOLOGY CO., LTD.

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

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

Job No.: Bob #4791	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2013/02/01
Temp.(C)/Hum.(%) 26 C / 55 %	Time: 11:19:40
EUT: MID	Engineer Signature: Bob
Mode: Camera	Distance: 3m
Model: VX-S7001	
Manufacturer: Sungworld	

Note: Report NO.:ATE20130171



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	82.5257	22.95	13.01	35.96	40.00	-4.04	QP			
2	133.5493	27.25	12.74	39.99	43.50	-3.51	QP			
3	315.8601	25.02	17.22	42.24	46.00	-3.76	QP			



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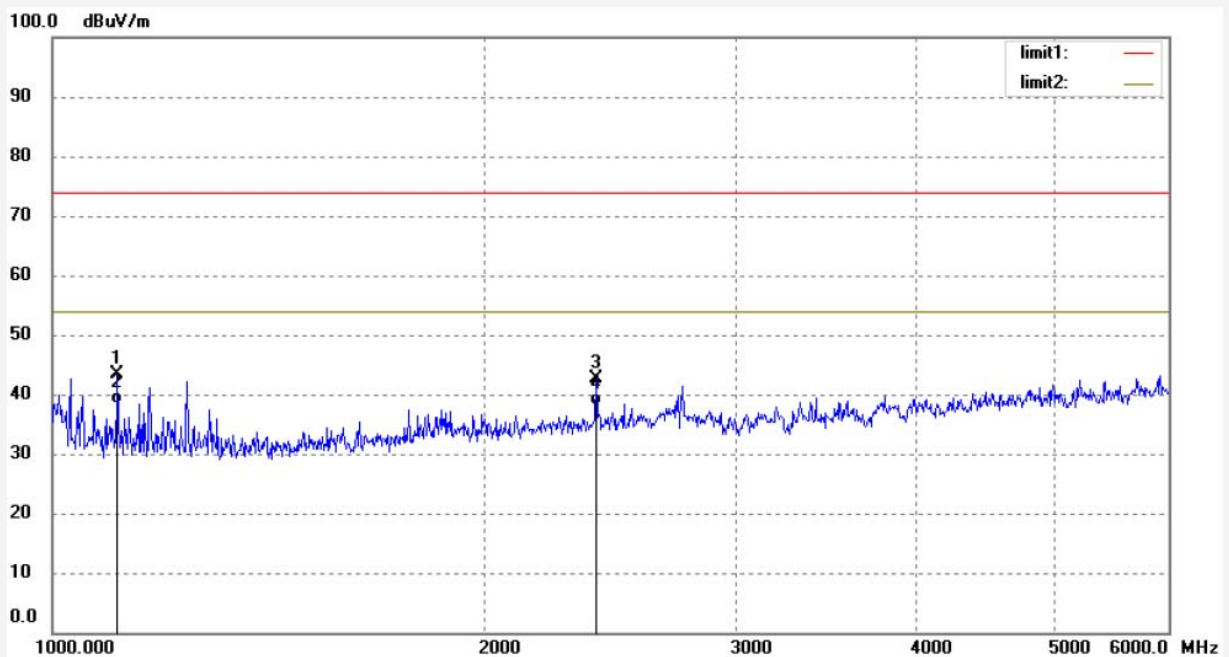
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: Bob #4801
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 26 C / 55 %
EUT: MID
Mode: Camera
Model: VX-S7001
Manufacturer: Sungworld

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 2013/02/01
Time: 10:46:36
Engineer Signature: Bob
Distance: 3m

Note: Report NO.:ATE20130171



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1110.210	56.02	-12.58	43.44	74.00	-30.56	peak			
2	1110.210	51.02	-12.58	38.44	54.00	-15.56	AVG			
3	2392.757	50.14	-7.51	42.63	74.00	-31.37	peak			
4	2392.757	45.55	-7.51	38.04	54.00	-15.96	AVG			



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

Site: 2# Chamber

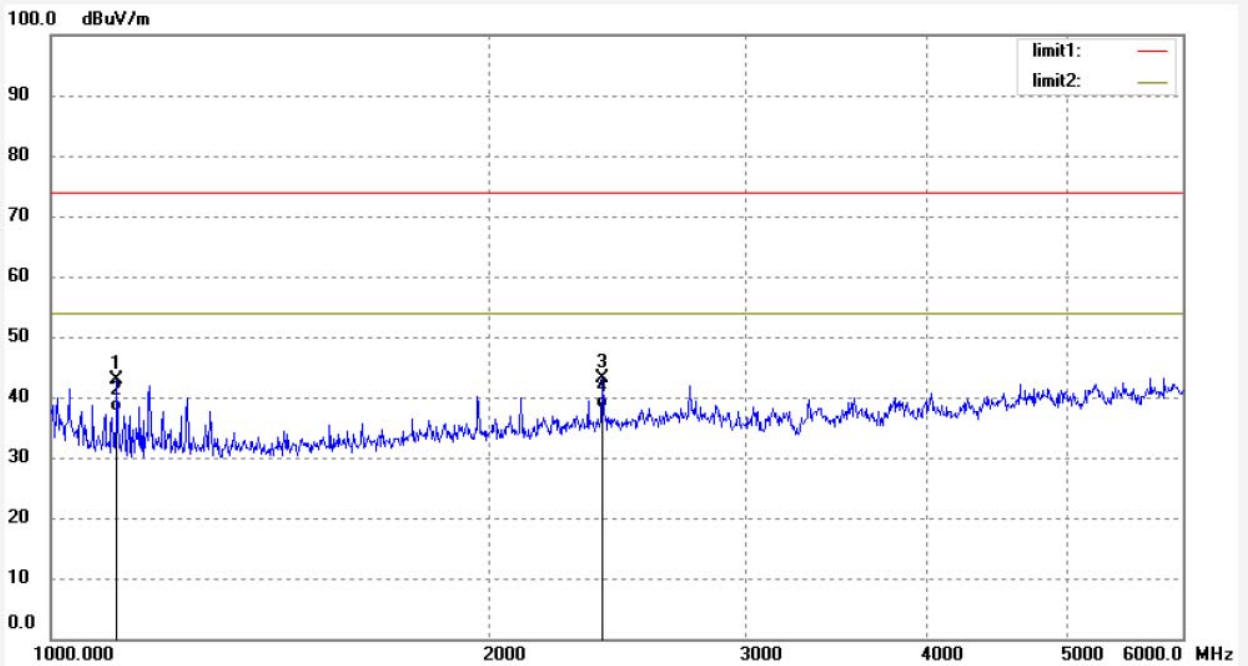
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: Bob #4800
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 26 C / 55 %
EUT: MID
Mode: Camera
Model: VX-S7001
Manufacturer: Sungworld

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 2013/02/01
Time: 10:43:06
Engineer Signature: Bob
Distance: 3m

Note: Report NO.:ATE20130171



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1110.210	55.53	-12.58	42.95	74.00	-31.05	peak			
2	1110.210	50.13	-12.58	37.55	54.00	-16.45	AVG			
3	2397.074	50.60	-7.48	43.12	74.00	-30.88	peak			
4	2397.074	45.62	-7.48	38.14	54.00	-15.86	AVG			