Prüfbericht-Nr.: *Test Report No.:*	16067943 001	**Auftrags-Nr.:** *Order No.:*	174034321	Seite 1 von 30 *Page 1 of 30*
Kunden-Referenz-Nr.: *Client Reference No.:*	352690	**Auftragsdatum:** *Order date.:*	28 Apr.2015	
Auftraggeber: *Client:*	Sam Ash Music Corporation 262 Duffy Avenue Hicksville, NY 11801 United States			
Prüfgegenstand: *Test item:*	USB Digital Wireless System			
Bezeichnung / Typ-Nr.: *Identification / Type No.:*	Stage PXD1	**FCC ID:** *FCC ID*	CCRPXD1	
Auftrags-Inhalt: *Order content:*	TUV Rheinland - EMC service			
Prüfgrundlage: *Test specification:*	FCC Part 15: October 1, 2014 Subpart C section 15.207, 15.209 and 15.247 ANSI C63.10: 2013			
Wareneingangsdatum: *Date of receipt:*	30.Jun.2015			
Prüfmuster-Nr.: *Test sample No.:*	Engineering samples			
Prüfzeitraum: *Testing period:*	Refer to test report			
Ort der Prüfung: *Place of testing:*	TÜV Rheinland (Guangdong) Ltd.			
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Guangdong) Ltd.			
Prüfergebnis*: *Test result*:*	Pass			

geprüft von / *tested by:*

22 Jul 2015 Amy Wang

Amy Wang/ Senior Project Engineer

Datum *Date*	Name/Stellung *Name/Position*	Unterschrift *Signature*

kontrolliert von / *reviewed by:*

Max Y. C. Yao/ Department Manager

Datum *Date*	Name/Stellung *Name/Position*	Unterschrift *Signature*

Sonstiges / *Other:*

Zustand des Prüfgegenstandes bei Anlieferung:
Condition of the test item at delivery:

Prüfmuster vollständig und unbeschädigt
Test item complete and undamaged

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
Legend:	1 = very good	2 = good	3 = satisfactory	4 = sufficient	5 = poor
	P(ass) = passed a.m. test specifications(s)		F(ail) = failed a.m. test specifications(s)	N/A = not applicable	N/T = not tested

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.
This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.

Test Summary

FCC Rules		Test items	Result
Paragraph	Released Date		
Part 15 Per Section 15.207(a)	October 1, 2014	Conducted Emission	N/A
Part 15 Per Section 15.209(a)	October 1, 2014	Radiated Spurious Emission	Pass
Part 15 Per Section 15.203	October 1, 2013	Antenna requirement	Pass
Part 15 Per Section 15.247(b)(1)	October 1, 2014	Maximum Peak Output power	Pass
Part 15 Per Section 15.247(a)(1)	October 1, 2014	6dB Bandwidth	Pass
Part 15 Per Section 15.247(a)(1)	October 1, 2014	Hopping Channel Carrier Frequency Separation	N/A
Part 15 Per Section 15.247(a)(1)(iii)	October 1, 2014	Number of Hopping Frequency Used	N/A
Part 15 Per Section 15.247(a)(1)(iii)	October 1, 2014	Time of Occupancy (Dwell Time)	N/A
Part 15 Per Section 15.247(d)	October 1, 2014	Bandedge Emission	Pass
Part 15 Per Section 15.247(e)	October 1, 2014	Power spectral density	Pass
Part 15 Per Section 15.247(d)	October 1, 2014	Out-Of-Band Emission measurement	Pass
Safety Human exposure	FCC KDB Publication 447498	Electromagnetic Fields	Pass

Contents

1 GENERAL REMARKS 5
1.1 COMPLEMENTARY MATERIALS 5
2 TEST SITES 5
2.1 TEST FACILITIES 5
2.2 LIST OF TEST AND MEASUREMENT INSTRUMENTS 6
2.3 TRACEABILITY 7
2.4 CALIBRATION 7
2.5 MEASUREMENT UNCERTAINTY 7
2.6 LOCATION OF ORIGINAL DATA 7
2.7 STATUS OF FACILITY USED FOR TESTING 7
3 GENERAL PRODUCT INFORMATION 8
3.1 PRODUCT FUNCTION AND INTENDED USE 8
3.2 RATINGS AND SYSTEM DETAILS 8
3.3 INDEPENDENT OPERATION MODES 9
3.4 SUBMITTED DOCUMENTS 9
4 TEST SET-UP AND OPERATION MODE 10
4.1 PRINCIPLE OF CONFIGURATION SELECTION 10
4.2 TEST OPERATION AND TEST SOFTWARE 10
4.3 SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT 10
4.4 COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE 10
4.5 TEST SET-UP 11
5 TEST RESULTS E M I S S I O N 14
5.1 CONDUCTED EMISSION 14
5.2 RADIATED SPURIOUS EMISSION 15
5.3 ANTENNA REQUIREMENT 16
5.4 MAXIMUM PEAK OUTPUT POWER 17
5.5 6DB BANDWIDTH 18
5.6 HOPPING CHANNEL CARRIER FREQUENCY SEPARATION 19
5.7 NUMBER OF HOPPING FREQUENCY USED 20
5.8 TIME OF OCCUPANCY (DWELL TIME) 21
5.9 BANDEDGE EMISSION 22
5.10 POWER SPECTRAL DENSITY 24

5.11 OUT-OF-BAND EMISSION 25

6 Safety Human exposure 27

7 LIST OF PHOTOGRAPHS 28

1 General Remarks

1.1 Complementary Materials

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

Appendix 1: Test result

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Guangdong) Ltd. EMC Laboratory

No.102, 1F of Southwest and No.205, 2F of West Warehouse Building, No.767 Tianyuan Road, Tianhe District, Guangzhou, Guangdong, P.R.China

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Kind of Equipment	Type	Manufacturer	S/N	Calibrated until	Calibrated Interval
EMI Test Receiver	ESCI-3	Rohde & Schwarz	100216	16.Mar.2015	1 year
Spectrum Analyzer	FSP30	Rohde & Schwarz	100286	16.Mar.2015	1 year
Trilog-Broadband Antenna	VULB9168 (30MHz-1GHz)	SCHWARZBECK MESSELEKTRONIK	209	16.Mar.2015	2 years
Double-Ridged Waveguide Horn Antenna	HF906 (1-18GHz)	Rohde & Schwarz	100385	16.Mar.2015	2 years
Pre-amplifier	AFS42-00101800-25-S-42	MITEQ	1101599	16.Mar.2015	2 years
Band Reject Filter	BRM50702	Micro-Tronics	023	16.Mar.2015	2 years
Standard Gain Horn Antenna	3160-09 (18-26.5GHz)	EMCO	21642	16.Mar.2015	5 years
Pre-amplifier	AFS33-18002650-30-8P-44	MITEQ	1108282	16.Mar.2015	2 years
3m Anechoic Chamber	N/A	Albatross Project GmbH	N/A	16.Mar.2015	1 year
Loop Antenna	HFH2-Z2 (<30MHz)	Rohde & Schwarz	100111	16.Mar.2015	2 years
EMI Test Receiver	ESCS30	Rohde & Schwarz	100316	16.Mar.2015	1 year
Two-Line V-Network	ESH3-Z5	Rohde & Schwarz	100308	16.Mar.2015	1 year
Pulse Limiter	ESH3-Z2	Rohde & Schwarz	100701	16.Mar.2015	1 year

2.3 Traceability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications.

2.5 Measurement Uncertainty

Uncertainty for conducted emissions measurements is 2.68dB.
Uncertainty for radiated emissions measurements is 5.16dB (30M-1GHz) and 4.88dB (> 1GHz)

The reported expanded uncertainty is based on a standard uncertainty multiply by a coverage factor k=2, providing a level of confidence of approximately 95%.

2.6 Location of original data

The original copies of test data taken during actual testing were attached at Appendix 1 of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Guangdong) file for certification follow-up purposes.

2.7 Status of facility used for testing

TÜV Rheinland (Guangdong) Ltd. EMC Laboratory; No.102, 1F of Southwest and No.205, 2F of West Warehouse Building, No.767 Tianyuan Road, Tianhe District, Guangzhou, Guangdong, P.R.China is listed on the US Federal Communications Commission list of facilities approved to perform measurements, the register no. 833845.

3 General Product Information

The submitted sample Stage PXD1 is a wireless transmitter. It uses digital modulation technics and operates in 2400 frequency band.
Total CH:

2404MHz	2425MHz	2436MHz	2452MHz	2468MHz	2476MHz

For details refer to the User Manual and Circuit Diagram.

3.1 Product Function and Intended Use

Refer to the Technical Documentation and user manual.

3.2 Ratings and System Details

Type Designation	Stage PXD1
Frequency range	2404.0 MHz –2476.0MHz
Number of employed channels	6 channels
Modulation Type	GFSK
Type of antenna	Integral antenna
Power supply	DC3.0V (battery powered)
Equipment type	Portable Equipment
Antenna gain	0 dBi
Protection Class	III

Refer to the Technical Documentation for further information.

3.3 Independent Operation Modes

A. On, Transmitting.
   1. Transmitting on low channel
   2. Transmitting on middle channel
   3. Transmitting on high channel

B. Off

For further information refer to User Manual.

3.4 Submitted Documents

Block Diagram
Schematics
Operation Description
Components List
FCC label and location
User Manual
Internal Photos
External Photos
Application form

4 Test Set-up and Operation Mode

4.1 Principle of Configuration Selection

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

4.2 Test Operation and Test Software

Refer to test set-up in chapter 5.

4.3 Special Accessories and Auxiliary Equipment

None.

4.4 Countermeasures to achieve EMC Compliance

The test sample, which has been tested, contained the noise suppression parts as described in the technical document. No additional measures were employed to achieve compliance.

4.5 Test set-up

Diagram 1 of Configuration for Testing Radiated Emission 30MHz -1 GHz

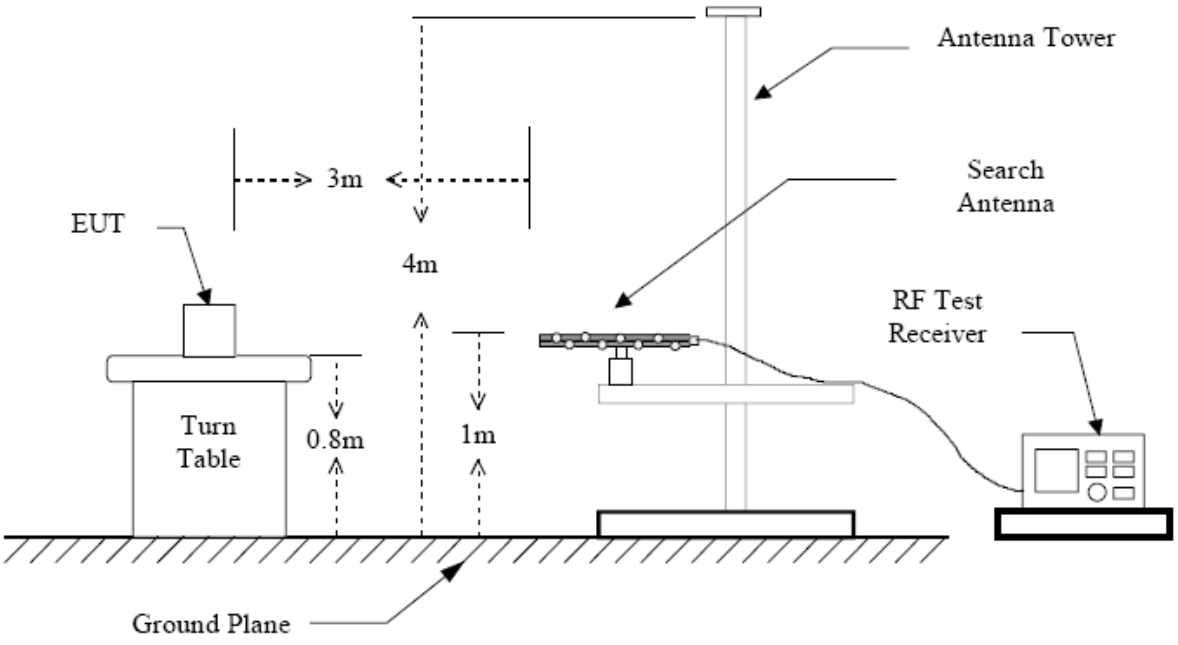


Diagram 2 of Configuration for Testing Radiated Emission above 1 GHz

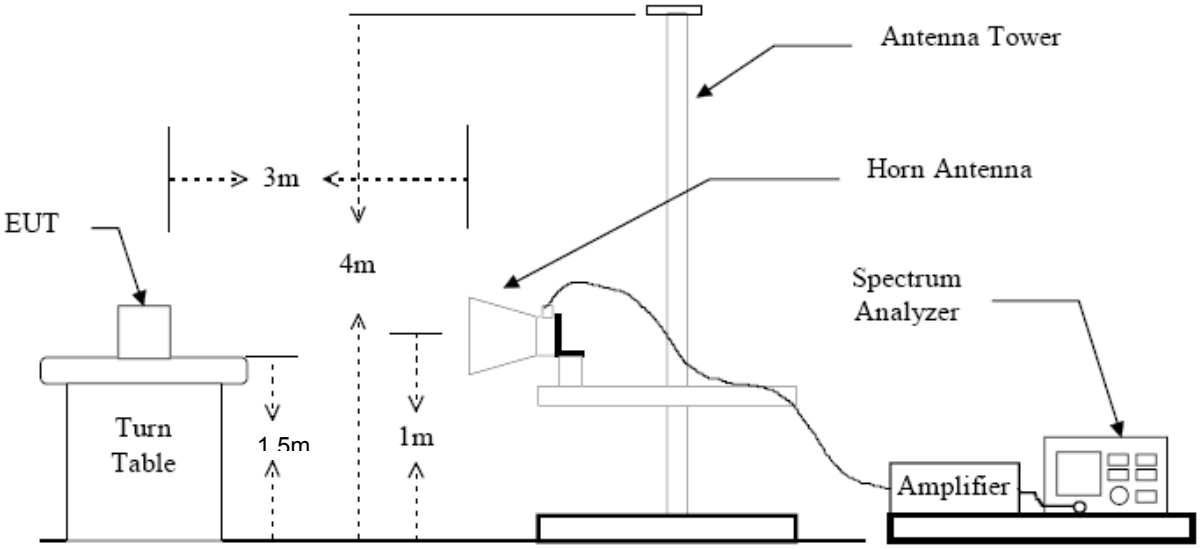


Diagram 3 of Configuration for Testing Conducted Emission

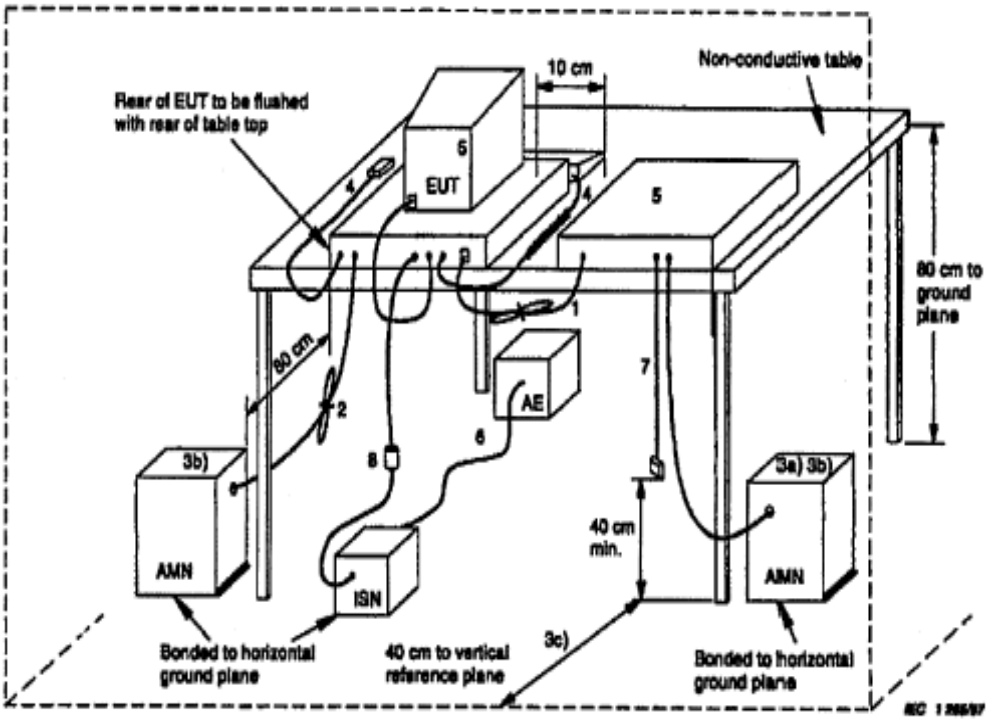


Diagram 4 of Configuration for Testing Radiated Emission below 30MHz

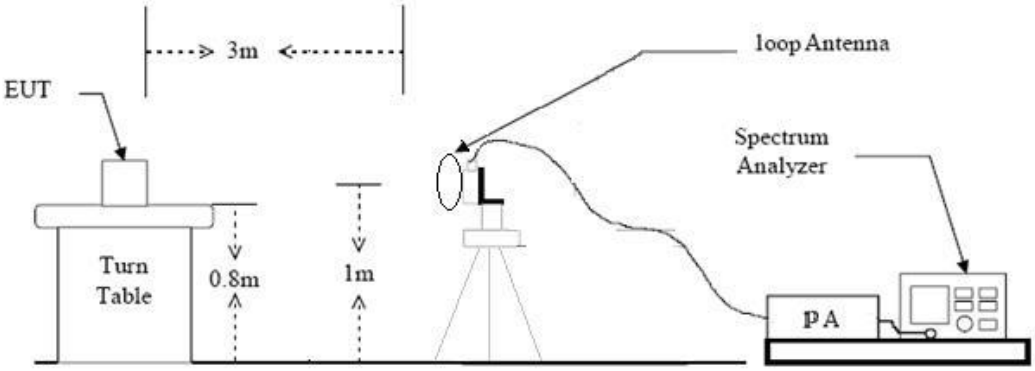
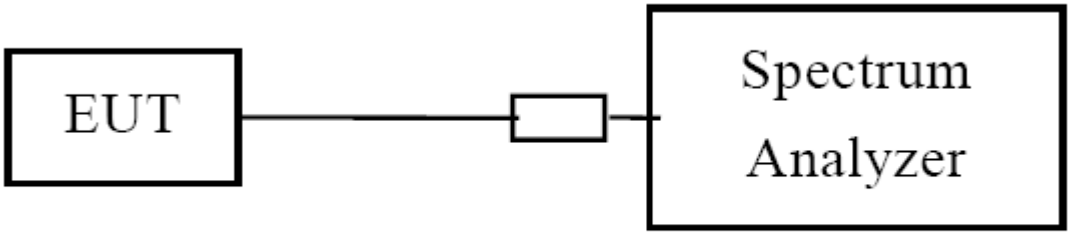


Diagram 5 of Configuration for Testing other test items



5 Test Results EMISSION

5.1 Conducted Emission

RESULT: **N/A**

Date of testing	:	--.--.----
Test specification	:	FCC Part 15 Per Section 15.207(a)
Limits	:	FCC Part 15 Per Section 15.207(a)
Test procedure	:	Procedure specified in ANSI C63.4 were followed
Deviations from Standard Test Procedures	:	None
Kind of test site	:	Shielded room
Operation mode	:	--
Power supply	:	--
Temperature	:	--
Humidity	:	--

Test procedure:
For tabletop device, the EUT and its peripherals were placed on a wooden table, 0.8cm above the horizontal reference plane and 40cm away from vertical reference plane in a shielded room. For floor-standing device, the EUT shall be placed either directly on the reference ground plane or on insulating material as described in ANSI C63.4 Clause 6.3.2.1.
The EUT was connected to input power source through a line impedance stabilization network (LISN).The excess length of the power cord between the EUT and the LISN shall be folded back and forth at the center of the lead to form a bundle not exceeding 40cm in length.
The EUT was tested in a typical model of operation in accordance with ANSI C63.4:2009, Pre-test was performed in peak and average detection mode. final measurement was performed using quasi-peak and average detection on the live and neutral lines with the worst case.
The test software Rohde & Schwarz EMC32 was used during the test.
If the result of the measurement with the Quasi Peak detector is below the Average limit, the measurement with Average Detector may be omitted.

EUT is powered by battery, has no connection to Mains port, therefore this test is not applicable.

5.2 Radiated Spurious Emission

RESULT: **Pass**

Date of testing	:	Jul.02.2015
Test specification	:	FCC Part 15 Per Section 15.209(a)
Limits	:	FCC Part 15 Per Section 15.209(a)
Test procedure	:	Procedure specified in ANSI C63.10
Deviations from Standard Test procedures	:	None
Kind of test site	:	3m Semi-anechoic chamber
Operation mode	:	Transmitting at fix channel with max power (High, Low, Mid)
Power supply	:	DC3.0V(powered by battery)
Temperature	:	23°C
Humidity	:	53%

Test procedure:
For tabletop device, the and its peripherals were placed on a wooden table,150cm above ground plane in semi-anechoic chamber. For floor-standing equipment, the EUT and all cables shall be insulated, if required, from the ground plane by up to 12mm of insulating material in semi-anechoic chamber.
The EUT was set 3 meters away from the receiving antenna, which was mounted on a variable-height antenna tower. Test shall be made with the antenna positioned in both the horizontal and vertical planes of polarization. The antenna height shall be varied from 1m to 4m. The table was rotated 360 degrees to detect the suspected emission frequency points. The position of the worst radiation case with both horizontal and vertical receiving antenna polarization was recorded together with the suspected emission frequency points above-mentioned.

Note:
While testing, the EUT is connected with a serial port bridge board for test mode setup. The length of the communication cable between the EUT and the bridge board, which including Tx, Rx, GND serial pins, is minimized to reduce the unwanted influence to test result. The bridge board can be connected to a host computer with standard DB9 com port cable for running of the test setup software. After setup successfully, the EUT can keep the test mode with the host computer and the cable removed.

Refer to appendix 1 for test result.

5.3 Antenna requirement

RESULT: **Pass**

Date of testing	:	---
Test specification	:	FCC Part 15 Per Section 15.203 FCC Part 15 Per Section 15.247(b)

For intentional device, according to 15.203, and intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to 15.247(b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by amount in dB than the directional gain of the antenna exceeds of 6dBi.

As the antenna is permanently printed on RF Board, there is no consideration of replacement.

And the max gain of the antenna is 0dBi.

5.4 Maximum Peak Output Power

RESULT: **Pass**

Date of testing	:	Jul. 02, 2015
Test specification	:	FCC Part 15 Per Section 15.247(b)(3)
Limits	:	FCC Part 15 Per Section 15.247(b)(3) For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt.
Deviations from Standard Test procedures	:	None
Test procedure	:	Procedure specified in ANSI C63.10
Kind of test site	:	Shielded room
Operation mode	:	Transmitting on the measured channel.
Power supply	:	DC3.0V(powered by battery)
Temperature	:	23°C
Humidity	:	53%

Table 2: Peak Conducted Power

Channel	Frequency (MHz)	Power Reading(dBm)	Cable Loss(dB)	Output Power		Limit (mW)*
				(dBm)	(mW)	
Low	2403.8	0.10	0.40	0.54	1.13	1000
Mid	2436.1	-0.07	0.40	0.33	1.08	1000
High	2467.6	0.31	0.40	0.71	1.18	1000

Please refer to Appendix 1 for measurement data.

5.5 6dB Bandwidth

RESULT: **Pass**

Date of testing	:	Jul.02, 2015
Test specification	:	FCC Part 15 Per Section 15.247(a)(2)
Limits	:	FCC Part 15 Per Section 15.247(a)(2) Systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.
Deviations from Standard Test procedures	:	None
Test procedure	:	Procedure specified in ANSI C63.10
Operation mode	:	Transmitting on the measured channel.
Kind of test site	:	Shielded room
Power supply	:	DC3.0V(powered by battery)
Temperature	:	22°C
Humidity	:	52%

Test procedure:

1. Connect the antenna port of the EUT to the spectrum analyzer by a low lost cable.
2. Set the EUT to proper test mode with relative test software and hardware.
3. Spectrum analyzer setting: Centered Frequency= measured channel, RBW=100kHz,VBW=300kHz.
4. Mark the peak power frequency point and the -6dB upper and lower frequency points.
5. Read the frequency delta value between the -6dB upper and lower frequency points.
6. Repeat step 2 to 5 until all the channels required are finished.

Table 3: 6dB Bandwidth

Channel	Channel Frequency (MHz)	-6dB Bandwidth (kHz)	Limit (kHz)
Low Channel	2404	750	500
Mid Channel	2436	760	500
High Channel	2467	760	500

Please refer to Appendix 1 for measurement data.

5.6 Hopping Channel Carrier Frequency Separation

RESULT: **N/A**

Date of testing	:	---
Test specification	:	FCC Part 15 Per Section 15.247(a)(1)
Limits	:	FCC Part 15 Per Section 15.247(a)(1) Frequency hopping systems operating in the band 2400-2483.5 MHz may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 0.125W.
Deviations from Standard Test procedures	:	None
Test procedure	:	Procedure specified in ANSI C63.10
Kind of test site	:	Shielded room
Operation mode	:	---
Power supply	:	---
Temperature	:	---
Humidity	:	---

Test procedure:

1. Connect the antenna port of the EUT to the spectrum analyzer by a low lost cable.
2. Set the EUT to proper test mode with relative test software and hardware.
3. Spectrum analyzer setting: Centered Frequency = measured channel, RBW = 30 kHz, VBW = 100 kHz, Frequency Span = wide enough to cover the adjacent channel.
4. Mark the peak power frequency point of the measured channel and its adjacent channel(s)
5. Read the frequency delta value between the measured channel and its adjacent channel(s)
6. Repeat step 3 to 5 until all the channels measured are finished.

EUT does not use Frequency hopping technics, therefore this test is not applicable.

5.7 Number of Hopping Frequency Used

RESULT: **N/A**

Date of testing	:	---
Test specification	:	FCC Part 15 Per Section 15.247(a)(1)(iii)
Limits	:	FCC Part 15 Per Section 15.247(a)(1)(iii) Frequency hopping system in the 2400-2483.5 MHz band shall use at least 15 non-overlapping channels
Deviations from Standard Test procedures	:	None
Test procedure	:	Procedure specified in ANSI C63.10
Kind of test site	:	Shielded room
Operation mode	:	---
Power supply	:	---
Temperature	:	---
Humidity	:	---

Test procedure:

1. Connect the antenna port of the EUT to the spectrum analyzer by a low lost cable.
2. Set the EUT to proper test mode with relative test software and hardware.
3. Spectrum analyzer setting: RBW = 100 kHz, VBW≥RBW, Frequency Span = wide enough to cover the channels to be plotted.
4. Set the spectrum analyzer to Max-hold mode and plot the result(s) with record of all hopping channel.

EUT does not use Frequency hopping technics, therefore this test is not applicable.

5.8 Time of Occupancy (Dwell Time)

RESULT: **N/A**

Date of testing	:	---
Test specification	:	FCC Part 15 Per Section 15.247(a)(1)(iii)
Limits	:	FCC Part 15 Per Section 15.247(a)(1)(iii) For frequency hopping system operating in the 2400-2483.5MHz band, the average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.
Deviations from Standard Test procedures	:	None
Test Procedure	:	Procedure specified in ANSI C63.10
Kind of test site	:	Shielded room
Operation mode	:	---
Power supply	:	---
Temperature	:	---
Humidity	:	---

Test procedure:

1. Connect the antenna port of the EUT to the spectrum analyzer by a low lost cable.
2. Set the EUT to proper test mode with relative test software and hardware.
3. Spectrum analyzer setting: Centered Frequency = measured channel, RBW = 1MHz, VBW≥RBW, Frequency Span = 0 Hz.
4. Set sweep time properly to capture the entire dwell time per hopping channel.
5. Set detector type to Peak and trace mode to Max Hold and make the measurement.
6. Repeat step 3-5 until all channels measured were complete.

EUT does not use Frequency hopping technics; therefore this test is not applicable.

5.9 Bandedge Emission

RESULT: **Pass**

Date of testing	:	Jul.02.2015
Test specification	:	FCC Part 15 Per Section 15.247(d)
Limits	:	FCC Part 15 Per Section 15.247(d) In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. In addition: FCC Part 15 - radiated emission which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in section 15.209(a).
Deviations from Standard Test procedures	:	None
Test Procedure	:	Procedure specified in ANSI C63.10
Kind of test site	:	Shielded room
Operation mode	:	Transmitting at the highest and lowest channel (band edge)
Power supply	:	DC3.0V(powered by battery)
Temperature	:	22°C
Humidity	:	55%

Test procedure:

1. Connect the antenna port of the EUT to the spectrum analyzer by a low lost cable.
2. Set the EUT to proper test mode with relative test software and hardware.
3. Spectrum analyzer setting: RBW = 100 kHz, VBW≥RBW.
4. Set proper frequency span respectively for out-of-band emission measurement of the band edge and the whole range (up to 10 times of the carrier frequency.)
5. Set the trace mode to Max Hold and mark the peak reading of any spurious emission recorded.

Table 4: Band Edges Emission in the Restricted Bands by Marker Delta Method

Frequency [MHz]	dBc [dB]	PK [dBµV/m]	AV [dBµV/m]	Polarity (H/V)	PK limit [dBµV/m]	AV limit [dBµV/m]
2483.8	49.27	45.84	---	V	74	54
2387.9	47.08	48.78	---	V	74	54

NOTE:

1. The Peak carrier field strength of the highest/lowest channel is 95.11dBuV/m, 95.78dBuV/m.
   The above field strength levels were measured in vertical polarity which is the worst case.

2. The dBc value between the carrier maximum power and band edge emission power of the frequency listed in the table is calculated from the test record showed in Appendix 1.

3. Peak value of the high/low band edge emission listed in the table is calculated by the below formula: PK value of band edge emission = Peak carrier field strength – dBc value in item2

*Note: Please refer to Appendix 1 for measurement data. Disturbances other than those mentioned above are small or not detectable. Please refer to the Appendix 1 for the noise floor of the band edge emission.

5.10 Power spectral density

RESULT: **Pass**

Date of testing	:	Jul.02.2015
Test specification	:	FCC Part 15 Per Section 15.247(e)
Limits	:	FCC Part 15 Per Section 15.247(e) For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.
Deviations from Standard Test procedures	:	None
Test procedure	:	Procedure specified in ANSI C63.10
Kind of test site	:	Shielded room
Operation mode	:	Transmitting on the measured channel.
Power supply	:	DC3.0V(powered by battery)
Temperature	:	23°C
Humidity	:	50%

Table 5: power spectral density

Channel	Frequency (MHz)	Power Reading(dBm)	Limit dBm/3kHz
Low	2403.8	-9.14	8.0
Mid	2435.8	-10.9	8.0
High	2467.9	-8.93	8.0

Please refer to Appendix 1 for measurement data.

5.11 Out-of-Band Emission

RESULT: **Pass**

Date of testing	:	Jul.02, 2015
Test specification	:	FCC Part 15 Per Section 15.247(d)
Limits	:	FCC Part 15 Per Section 15.247(d) In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. In addition: FCC Part 15 - radiated emission which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in section 15.209(a).
Deviations from Standard Test procedures	:	None
Test Procedure	:	Procedure specified in ANSI C63.10
Kind of test site	:	Shielded room
Operation mode	:	Transmitting at the highest and lowest channel
Power supply	:	DC3.0V(powered by battery)
Temperature	:	22°C
Humidity	:	55%

Test procedure:

1. Connect the antenna port of the EUT to the spectrum analyzer by a low lost cable.
2. Set the EUT to proper test mode with relative test software and hardware.
3. Spectrum analyzer setting: RBW = 100 kHz, VBW≥RBW.
4. Set proper frequency span respectively for out-of-band emission measurement of the band edge and the whole range (up to 10 times of the carrier frequency.)
5. Set the trace mode to Max Hold and mark the peak reading of any spurious emission recorded.

Table 6: Out-Of-Band Emission measurement (conducted)

Emission (Carrier operating at Channel low, mid and high)	Attenuation	Limit (dB)
30MHz to 25GHz	All emission in this 100kHz bandwidth are attenuated more than 20dB from the carrier	△≥20

Note: Refer to Appendix 1 for measurement data.

6 Safety Human exposure

6.1 Radio Frequency Exposure Compliance

6.1.1 Electromagnetic Fields

RESULT:
Passed

Test standard **:** FCC KDB Publication 447498

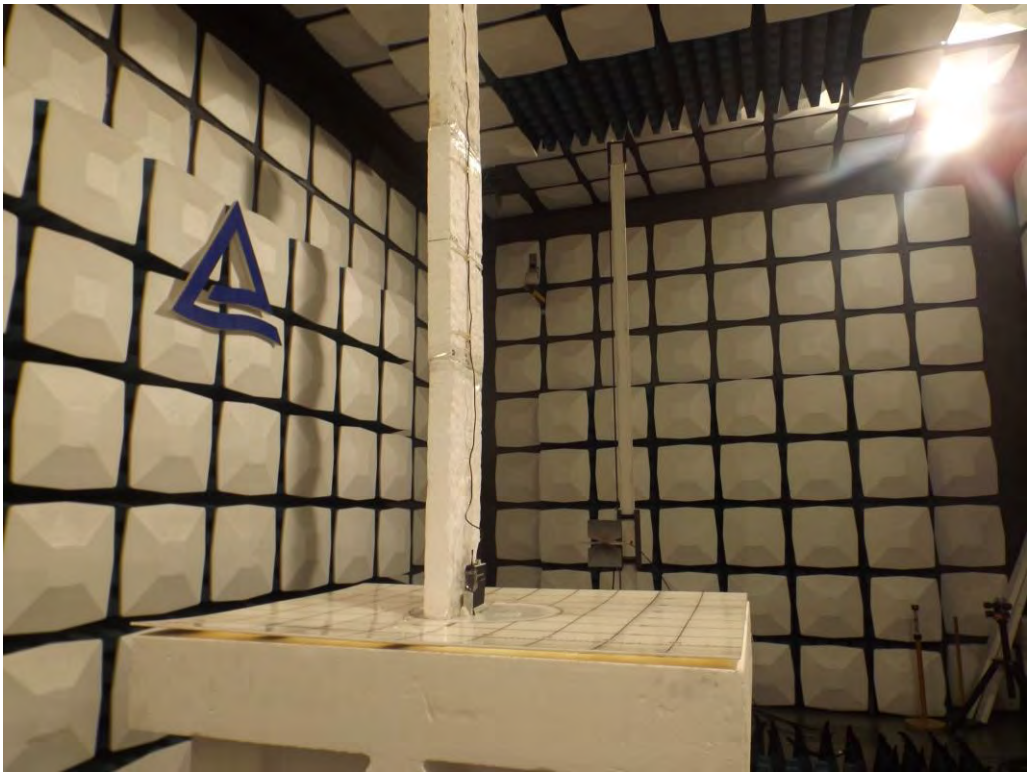
The maximum peak output power of the transmitter is 1.18mW only, which less than 20mW.

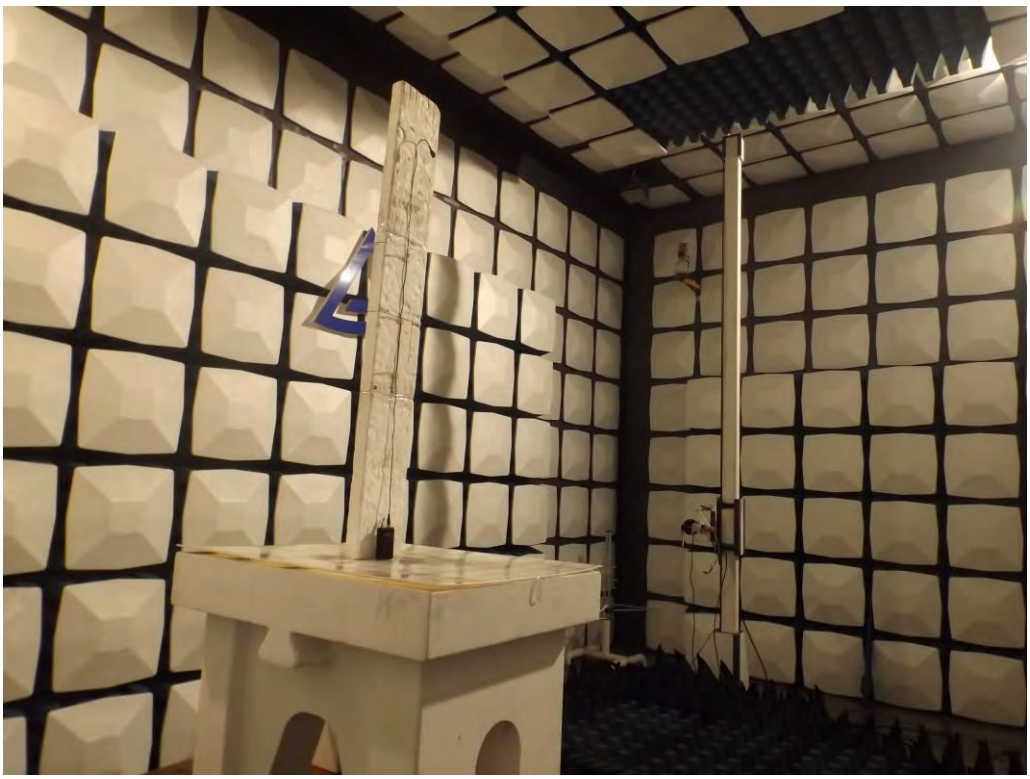
The minimum distance for the EUT is 5mm, since maximum peak output power of the transmitter is 1.18mW <10mW, hence the EUT is excluded from SAR evaluation according to FCC KDB publication 447498 D01 General RF Exposure Guidance v05r02.

7 Photographs of the Test Set-Up

Photograph 1: Set-up for Radiation Measurement below 1GHz

Photograph 2: Set-up for Radiation Measurement above 1GHz





8 List of Tables

Table 1: List of Test and Measurement Equipment 6
Table 2: Peak Conducted Power 17
Table 3: 6dB Bandwidth 18
Table 4: Band Edges Emission in the Restricted Bands by Marker Delta Method 23
Table 5: power spectral density 24

9 List of Photographs

Photograph 1: Set-up for Radiation Measurement below 1GHz 28
Photograph 2: Set-up for Radiation Measurement above 1GHz 29

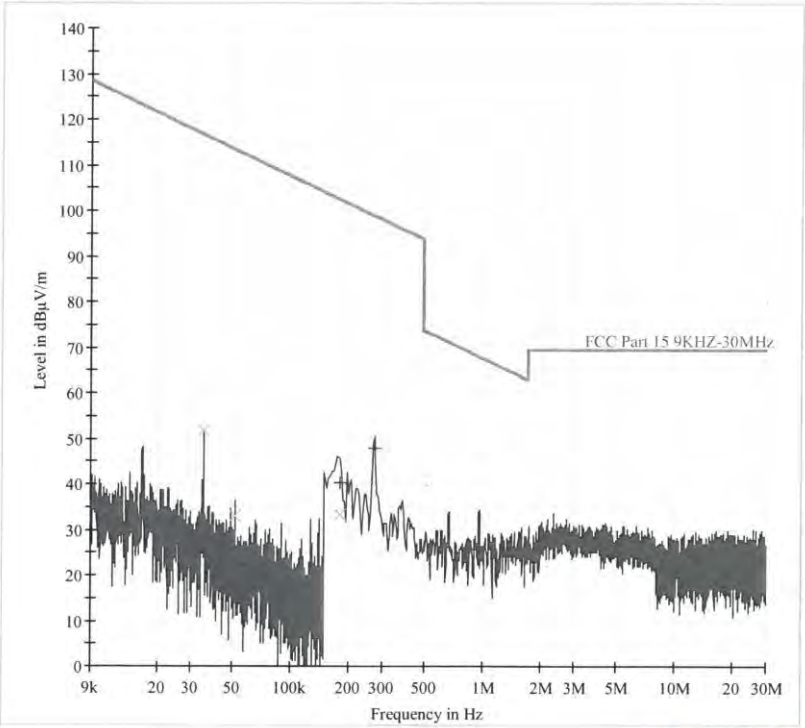
TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(Low)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m

Subrange 1	
Frequency Range:	9KHz-30MHz
Receiver:	TUV ESCI
Transducer:	TUV SAC FMZB1519



Specific Test Data

HCH 2015-07-15 Checked

YJX 2015-07-15 Checked

Date: 7/13/2015 - Time: 5:10:26 Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
0.955000	25.8	1000	9.000	18.6	42.2	68.0
0.960000	26.2	1000	9.000	18.6	41.8	68.0

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
0.034900	51.7	1000	0.200	17.0	65.0	116.7
0.051400	32.9	1000	0.200	17.6	80.5	113.4
0.180000	33.2	1000	9.000	18.2	69.3	102.5
0.275000	40.6	1000	9.000	18.3	58.2	98.8

Signed Test Data

Date: 7/13/2015 - Time: 5:10:26

Tested by: HCH 2015-07-15 Checked

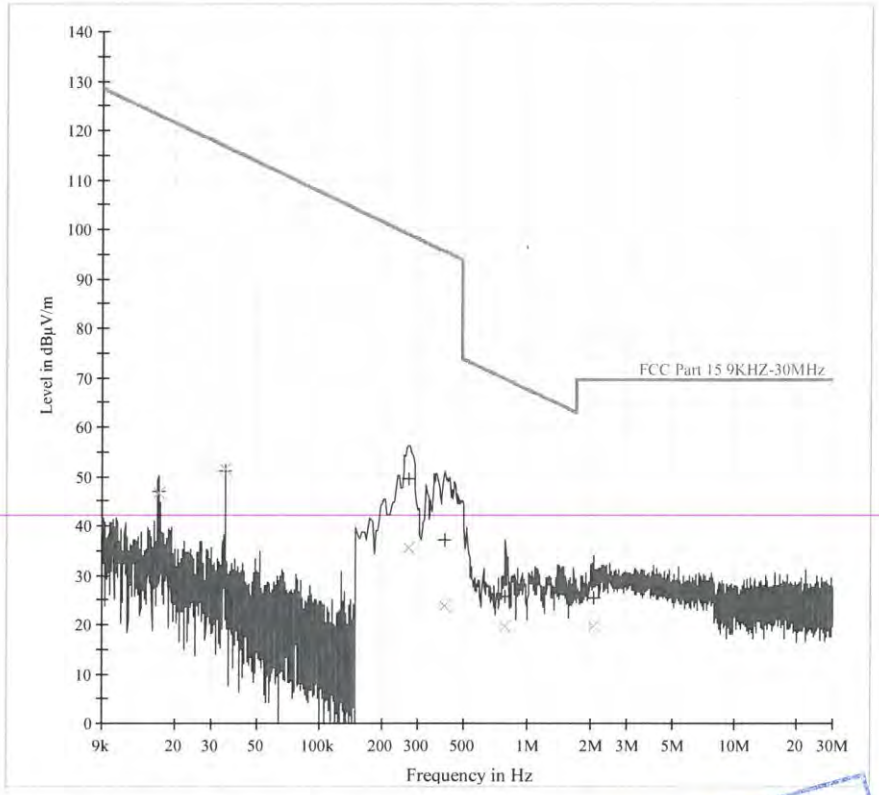
Reviewed by: 2015-07-15 Checked

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(Mid)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m
Subrange 1	
Frequency Range:	9KHz-30MHz
Receiver:	TUV ESCI
Transducer:	TUV SAC FMZB1519



Date: 7/13/2015 - Time: 5:15:56 Tested by: _____ Reviewed by: _____

Off Test Data

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
0.785000	25.8	1000	9.000	18.1	43.9	69.7
2.085000	25.3	1000	9.000	20.4	44.2	69.5

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
0.016800	46.6	1000	0.200	16.4	76.4	123.1
0.034900	51.5	1000	0.200	17.0	65.2	116.7
0.270000	35.4	1000	9.000	18.3	63.5	99.0
0.405000	23.9	1000	9.000	17.8	71.6	95.5

Signature Test Data

Date: 7/13/2015 - Time: 5:15:56

Tested by: HCH 2015-07-15 Checked

Reviewed by: 2015-07-15 Checked

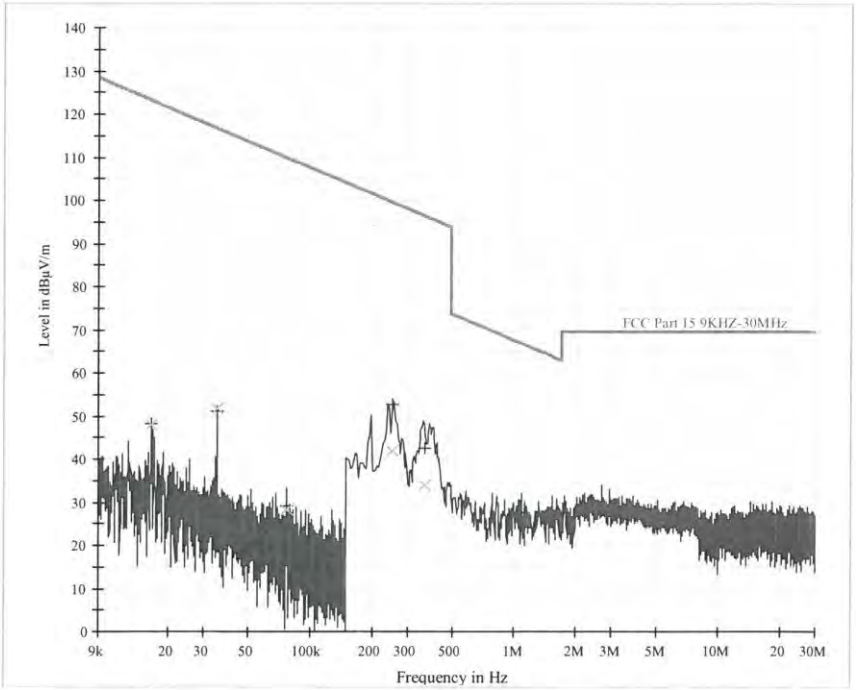
TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(High)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m

Subrange 1	
Frequency Range:	9KHz-30MHz
Receiver:	TUV ESCI
Transducer:	TUV SAC FMZB1519



Sign-off Test Data

HCH 2015-07-15 Checked

YJX 2015-07-15 Checked

Date: 7/13/2015 - Time: 5:19:39 Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
1.090000	27.6	1000	9.000	18.9	39.3	66.9

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
0.016700	47.9	1000	0.200	16.4	75.2	123.1
0.034900	51.7	1000	0.200	17.0	65.0	116.7
0.076600	28.1	1000	0.200	18.4	81.8	109.9
0.250000	42.0	1000	9.000	18.3	57.6	99.6
0.365000	33.9	1000	9.000	17.8	62.4	96.4

Sign-off Test Data

Date: 7/13/2015 - Time: 5:19:39

Tested by: HCH 2015-07-15 Checked

Reviewed by: YJX 2015-07-15 Checked

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

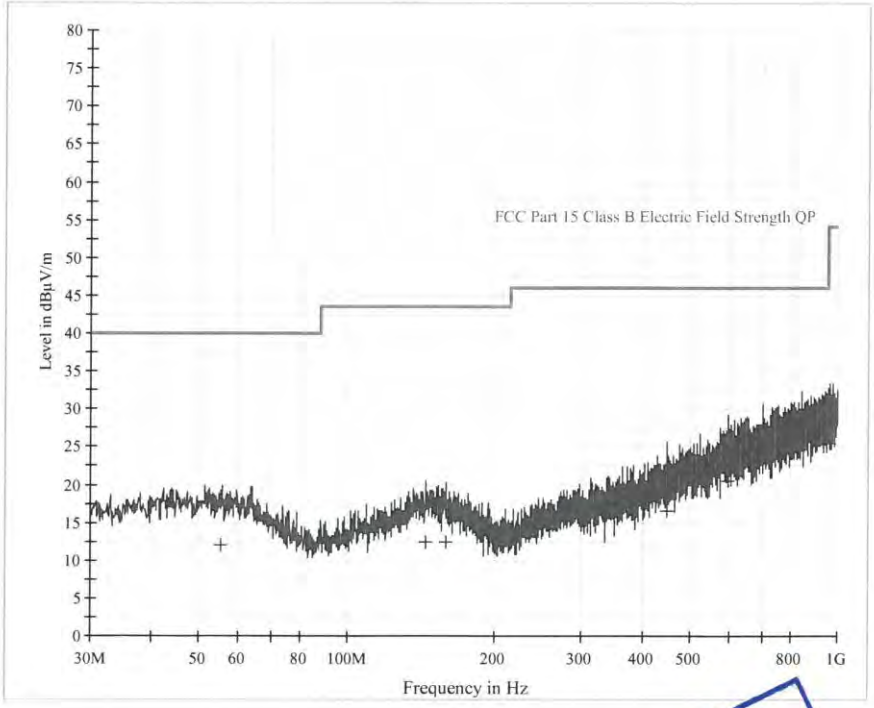
EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(low)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Horizontal

Subrange 1

Frequency range:	30-1000MHz
Receiver:	ESCI 3
Transducer:	VULB9168



Sign-off Test Data

H C H 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 7:14:44 Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)	Comment
55.360000	12.1	1000.0	120.000	H	15.1	28.0	40.0	
144.320000	12.5	1000.0	120.000	H	15.8	31.0	43.5	
158.640000	12.4	1000.0	120.000	H	15.8	31.1	43.5	
448.440000	16.6	1000.0	120.000	H	19.9	29.4	46.0	
595.160000	20.5	1000.0	120.000	H	23.1	25.5	46.0	
962.760000	25.6	1000.0	120.000	H	28.4	28.4	54.0	

Sign-off Test Data

HCL 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 7:14:44

Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

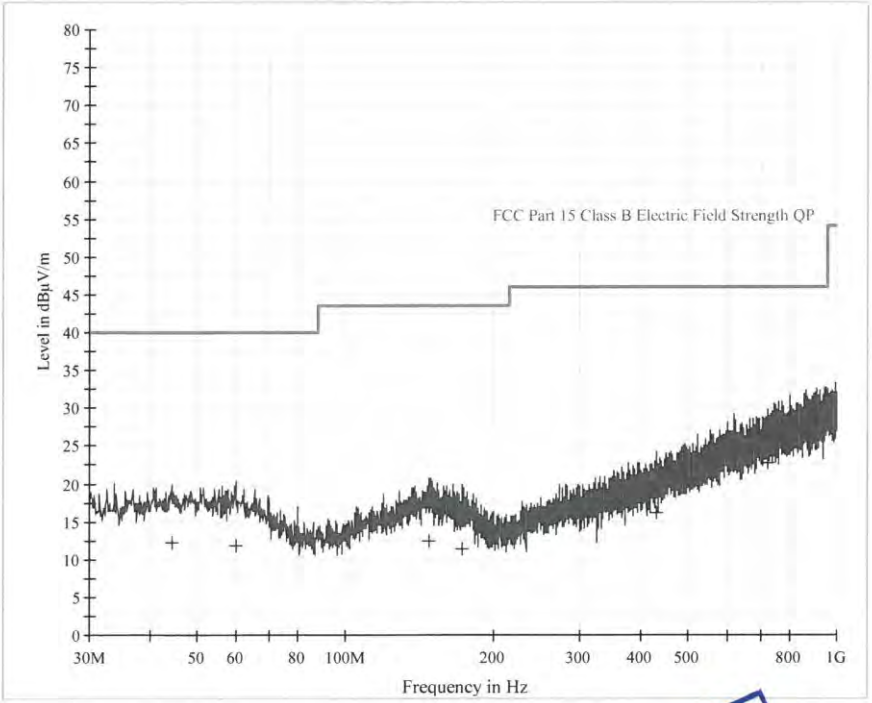
EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(low)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Vertical

Subrange 1

Frequency range:	30-1000MHz
Receiver:	ESCI 3
Transducer:	VULB9168



Sign-off Test Data

HCW 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 7:18:46 Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)	Comment
44.320000	12.3	1000.0	120.000	V	15.2	27.7	40.0	
59.840000	11.7	1000.0	120.000	V	14.8	28.3	40.0	
147.840000	12.5	1000.0	120.000	V	15.9	31.0	43.5	
172.960000	11.5	1000.0	120.000	V	14.9	32.0	43.5	
429.760000	16.1	1000.0	120.000	V	19.4	29.9	46.0	
724.520000	22.8	1000.0	120.000	V	25.4	23.2	46.0	

Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 7:18:46

Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

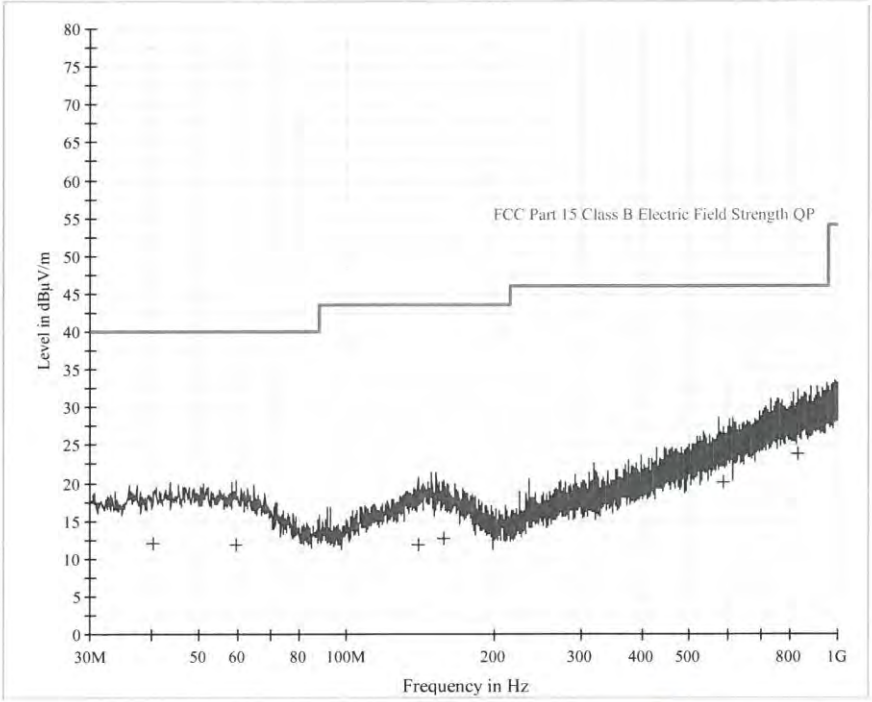
EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(mid)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Horizontal

Subrange 1

Frequency range:	30-1000MHz
Receiver:	ESCI 3
Transducer:	VULB9168



Sign-off Test Data

Date: 6/30/2015 - Time: 7:12:31 Tested by: HCH 2015-07-02 Checked Reviewed by: YJX 2015-07-02 Checked

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)	Comment
40.440000	12.1	1000.0	120.000	H	14.9	27.9	40.0	
59.600000	11.8	1000.0	120.000	H	14.8	28.2	40.0	
139.840000	11.8	1000.0	120.000	H	15.5	31.7	43.5	
158.040000	12.6	1000.0	120.000	H	15.9	30.9	43.5	
586.040000	20.1	1000.0	120.000	H	22.8	25.9	46.0	
832.440000	23.8	1000.0	120.000	H	26.5	22.2	46.0	

Sign-off Test Data

Date: 6/30/2015 - Time: 7:12:31 Tested by: HCH 2015-07-02 Checked Reviewed by: YJX 2015-07-02 Checked

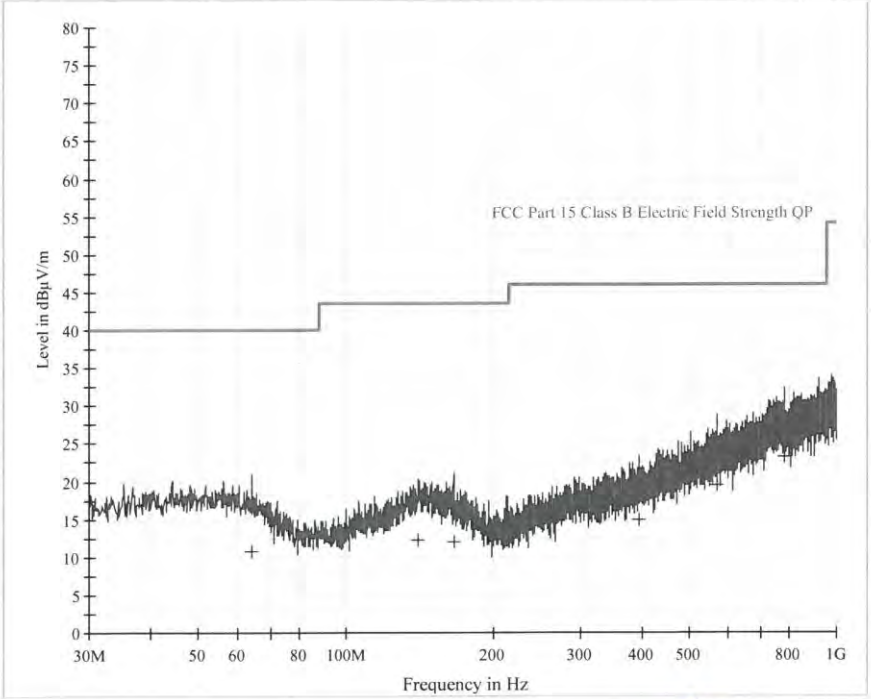
TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(mid)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Vertical

Subrange 1	
Frequency range:	30-1000MHz
Receiver:	ESCI 3
Transducer:	VULB9168



Sign-off Test Data

Date: 6/30/2015 - Time: 7:16:53 Tested by: HCH 2015-07-02 Checked Reviewed by: YJX 2015-07-02 Checked

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)	Comment
64.080000	10.9	1000.0	120.000	V	14.2	29.1	40.0	
140.600000	12.2	1000.0	120.000	V	15.5	31.3	43.5	
165.800000	12.1	1000.0	120.000	V	15.4	31.4	43.5	
393.640000	14.9	1000.0	120.000	V	18.3	31.1	46.0	
572.360000	19.5	1000.0	120.000	V	22.2	26.5	46.0	
783.800000	23.2	1000.0	120.000	V	26.0	22.8	46.0	

Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 7:16:53

Tested by: _____ Reviewed by: _____

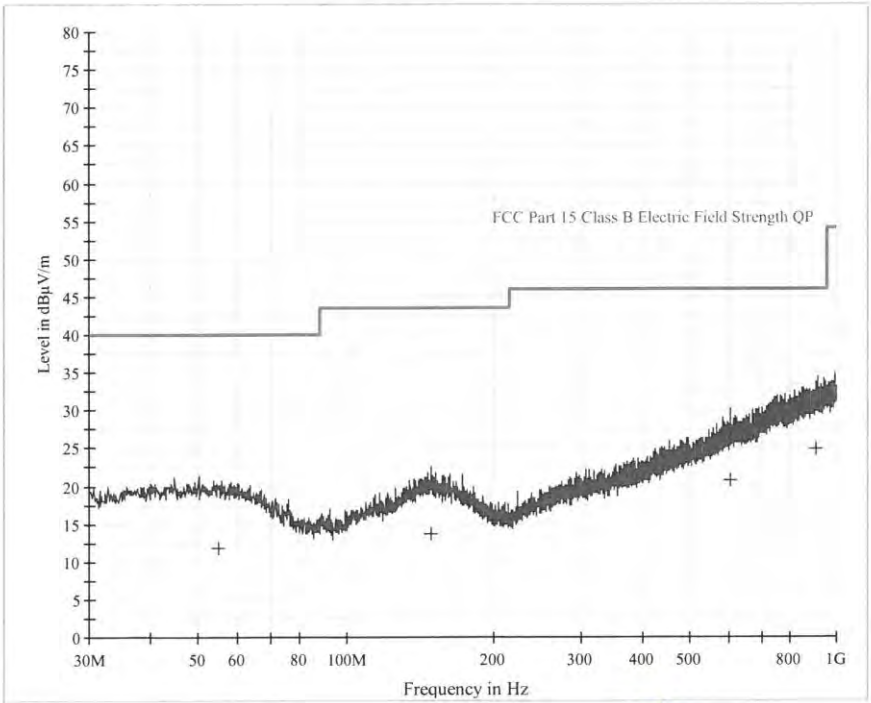
TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(high)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Horizontal

Subrange 1	
Frequency range:	30-1000MHz
Receiver:	ESCI 3
Transducer:	VULB9168



Sign-off Test Data

Date: 6/30/2015 - Time: 7:09:21 Tested by: HCH 2015-07-02 Checked Reviewed by: YJX 2015-07-02 Checked

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)	Comment
54.960000	11.9	1000.0	120.000	H	15.1	28.1	40.0	
148.960000	13.7	1000.0	120.000	H	15.9	29.8	43.5	
605.200000	20.8	1000.0	120.000	H	23.3	25.2	46.0	
905.680000	24.8	1000.0	120.000	H	27.7	21.2	46.0	

Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 7:09:21

Tested by: _____ Reviewed by: _____

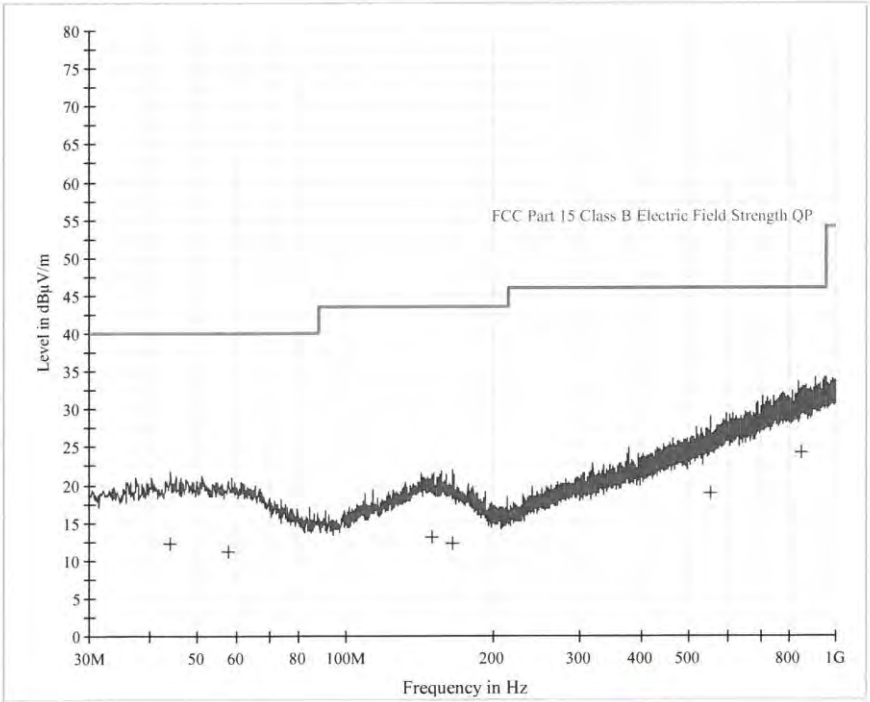
TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(high)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Vertical

Subrange 1	
Frequency range:	30-1000MHz
Receiver:	ESCI 3
Transducer:	VULB9168



Sign-off Test Data

Date: 6/30/2015 - Time: 7:04:59 Tested by: HCH 2015-07-02 Checked Reviewed by: YJX 2015-07-02 Checked

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)	Comment
44.200000	12.2	1000.0	120.000	V	15.2	27.8	40.0	
57.760000	11.2	1000.0	120.000	V	14.9	28.8	40.0	
150.040000	13.1	1000.0	120.000	V	15.9	30.4	43.5	
165.200000	12.3	1000.0	120.000	V	15.5	31.2	43.5	
553.320000	18.9	1000.0	120.000	V	21.7	27.1	46.0	
850.480000	24.3	1000.0	120.000	V	26.9	21.7	46.0	

Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 7:04:59

Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

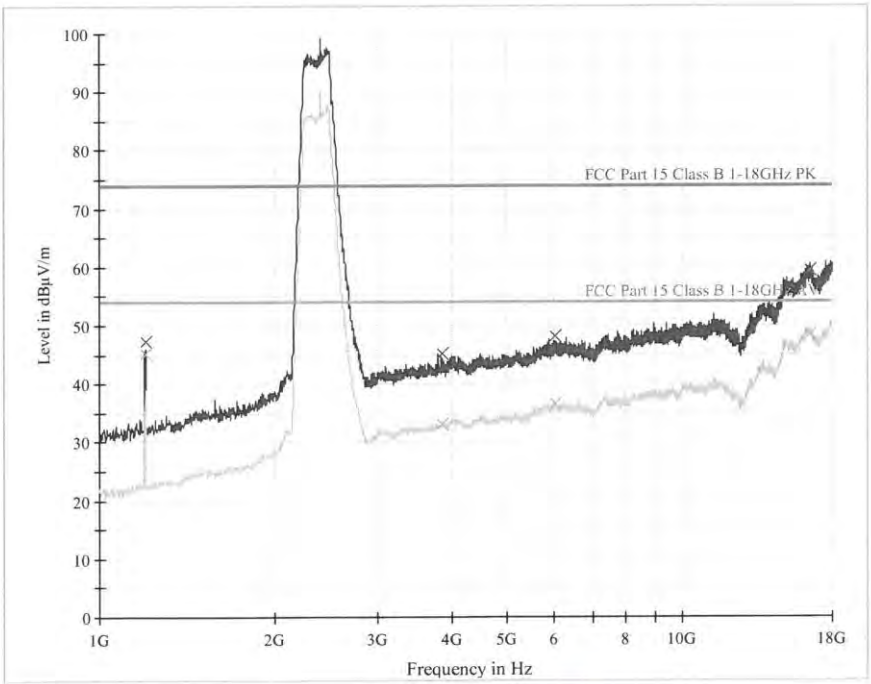
EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(low)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Horizontal

Subrange 1

Frequency Range:	1GHz-18GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF907/ TUV FSP30-TUV SAC HF907



Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 10:59:43 Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1202.000000	47.4	1000.0	1000.000	H	-19.1	26.6	74.0
3854.000000	45.1	1000.0	1000.000	H	-10.7	28.9	74.0
6034.000000	48.0	1000.0	1000.000	H	-7.1	26.0	74.0
16464.000000	59.3	1000.0	1000.000	H	6.6	14.7	74.0
16464.000000	63.9	1000.0	1000.000	H	6.6	10.1	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1202.000000	45.2	1000.0	1000.000	H	-19.1	8.8	54.0
3854.000000	33.2	1000.0	1000.000	H	-10.7	20.8	54.0
6034.000000	36.6	1000.0	1000.000	H	-7.1	17.4	54.0
16464.000000	48.4	1000.0	1000.000	H	6.6	5.6	54.0

Sign-off Test Data

Date: 6/30/2015 - Time: 10:59:43

Tested by: _____ Reviewed by: YJX 2015-07-02 Checked

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

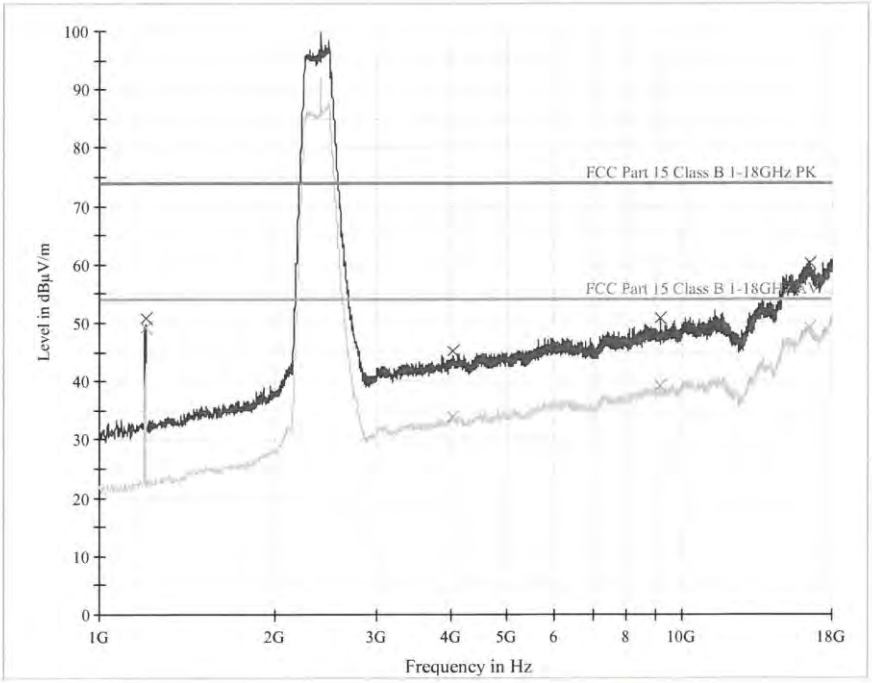
EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(low)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Vertical

Subrange 1

Frequency Range:	1GHz-18GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF907/ TUV FSP30-TUV SAC HF907



Sign-off Test Data

Date: 6/30/2015 - Time: 10:51:54

Tested by: HCH 2015-07-02 Checked Reviewed by: YJX 2015-07-02 Checked

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1202.000000	50.7	1000.0	1000.000	V	-19.1	23.3	74.0
4035.000000	45.2	1000.0	1000.000	V	-10.0	28.8	74.0
9173.000000	50.9	1000.0	1000.000	V	-2.4	23.1	74.0
16517.000000	60.1	1000.0	1000.000	V	6.7	13.9	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1202.000000	49.3	1000.0	1000.000	V	-19.1	4.7	54.0
4035.000000	33.8	1000.0	1000.000	V	-10.0	20.2	54.0
9173.000000	39.3	1000.0	1000.000	V	-2.4	14.7	54.0
16517.000000	49.2	1000.0	1000.000	V	6.7	4.8	54.0

Sign-off Test Data

Date: 6/30/2015 - Time: 10:51:54 Tested by: _____ Reviewed by: _____

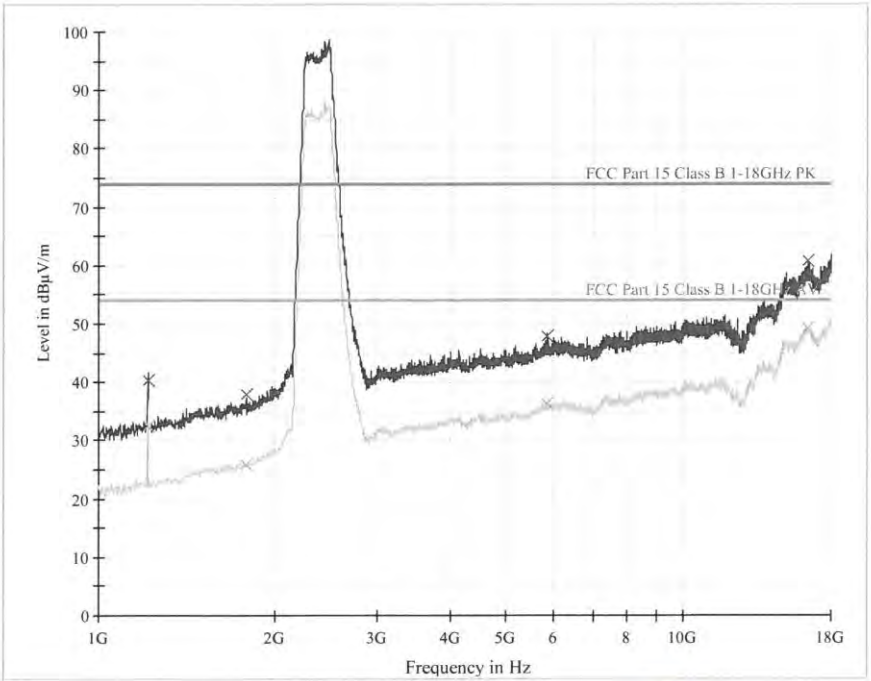
TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(mid)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Horizontal

Subrange 1	
Frequency Range:	1GHz-18GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF907/ TUV FSP30-TUV SAC HF907



Sign-off Test Data

Date: 6/30/2015 - Time: 11:14:23 Tested by: HCH 2015-07-02 Checked Reviewed by: YJX 2015-07-02 Checked

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1217.000000	40.3	1000.0	1000.000	H	-19.1	33.7	74.0
1786.000000	37.8	1000.0	1000.000	H	-16.3	36.2	74.0
5875.000000	47.9	1000.0	1000.000	H	-7.5	26.1	74.0
16404.000000	60.8	1000.0	1000.000	H	6.4	13.2	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1217.000000	32.5	1000.0	1000.000	H	-19.1	21.5	54.0
1786.000000	25.8	1000.0	1000.000	H	-16.3	28.2	54.0
5875.000000	36.4	1000.0	1000.000	H	-7.5	17.6	54.0
16404.000000	49.3	1000.0	1000.000	H	6.4	4.7	54.0

Sign-off Test Data

Date: 6/30/2015 - Time: 11:14:23 Tested by: _____ Reviewed by: _____

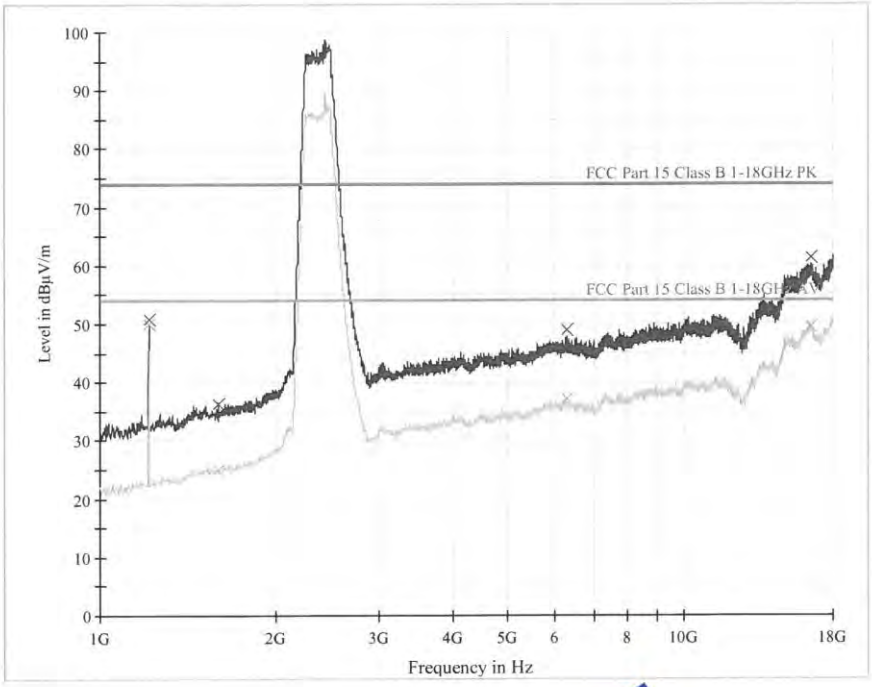
TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(mid)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Vertical

Subrange 1	
Frequency Range:	1GHz-18GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF907/ TUV FSP30-TUV SAC HF907



Sign-off Test Data

Date: 6/30/2015 - Time: 11:20:40

Tested by: HCH 2015-07-02 Checked Reviewed by: YJX 2015-07-02 Checked

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1217.000000	50.8	1000.0	1000.000	V	-19.1	23.2	74.0
1601.000000	36.4	1000.0	1000.000	V	-17.7	37.6	74.0
6298.000000	48.9	1000.0	1000.000	V	-6.8	25.1	74.0
16553.000000	61.2	1000.0	1000.000	V	6.6	12.8	74.0
16553.000000	65.0	1000.0	1000.000	V	6.6	9.0	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1217.000000	50.1	1000.0	1000.000	V	-19.1	3.9	54.0
1601.000000	25.0	1000.0	1000.000	V	-17.7	29.0	54.0
6298.000000	37.0	1000.0	1000.000	V	-6.8	17.0	54.0
16553.000000	49.4	1000.0	1000.000	V	6.6	4.6	54.0

Sign-off Test Data

HCH 2015-07-02 Checked

Date: 6/30/2015 - Time: 11:20:40

Tested by: _____ Reviewed by: _____

YJX 2015-07-02 Checked

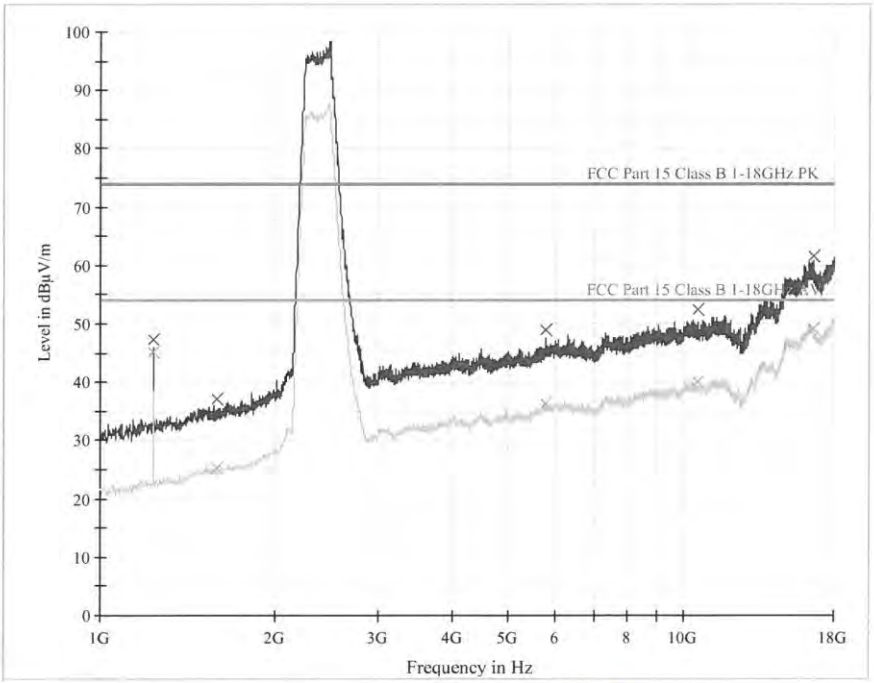
TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(high)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Horizontal

Subrange 1	
Frequency Range:	1GHz-18GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF907/ TUV FSP30-TUV SAC HF907



Sign-off Test Data

HCH 2015-07-02 Checked

Date: 6/30/2015 - Time: 10:38:34 Tested by: _____ Reviewed by: YJX 2015-07-02 Checked

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1236.000000	47.4	1000.0	1000.000	H	-19.1	26.6	74.0
1589.000000	37.2	1000.0	1000.000	H	-17.8	36.8	74.0
5781.000000	48.9	1000.0	1000.000	H	-7.7	25.1	74.0
10582.000000	52.4	1000.0	1000.000	H	-1.0	21.6	74.0
16572.000000	61.5	1000.0	1000.000	H	6.5	12.5	74.0
16572.000000	64.8	1000.0	1000.000	H	6.5	9.2	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1236.000000	45.1	1000.0	1000.000	H	-19.1	8.9	54.0
1589.000000	25.3	1000.0	1000.000	H	-17.8	28.7	54.0
5781.000000	36.4	1000.0	1000.000	H	-7.7	17.6	54.0
10582.000000	40.0	1000.0	1000.000	H	-1.0	14.0	54.0
16572.000000	49.3	1000.0	1000.000	H	6.5	4.7	54.0

Sign-off Test Data

YJX 2015-07-02

Date: 6/30/2015 - Time: 10:38:34 Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

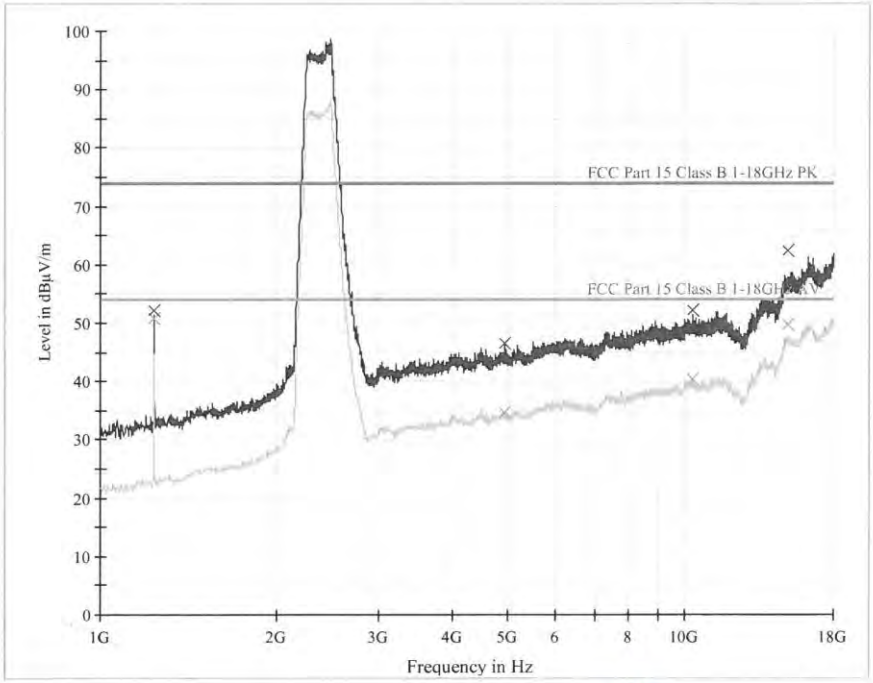
EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(high)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Vertical

Subrange 1

Frequency Range:	1GHz-18GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF907/ TUV FSP30-TUV SAC HF907



Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 10:26:25 Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1236.000000	52.3	1000.0	1000.000	H	-19.1	21.7	74.0
4927.000000	46.4	1000.0	1000.000	H	-8.8	27.6	74.0
10301.000000	52.1	1000.0	1000.000	H	-1.0	21.9	74.0
15004.000000	62.4	1000.0	1000.000	H	2.5	11.6	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1236.000000	50.8	1000.0	1000.000	H	-19.1	3.2	54.0
4927.000000	34.8	1000.0	1000.000	H	-8.8	19.2	54.0
10301.000000	40.2	1000.0	1000.000	H	-1.0	13.8	54.0
15004.000000	49.7	1000.0	1000.000	H	2.5	4.3	54.0

Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 10:26:25 Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

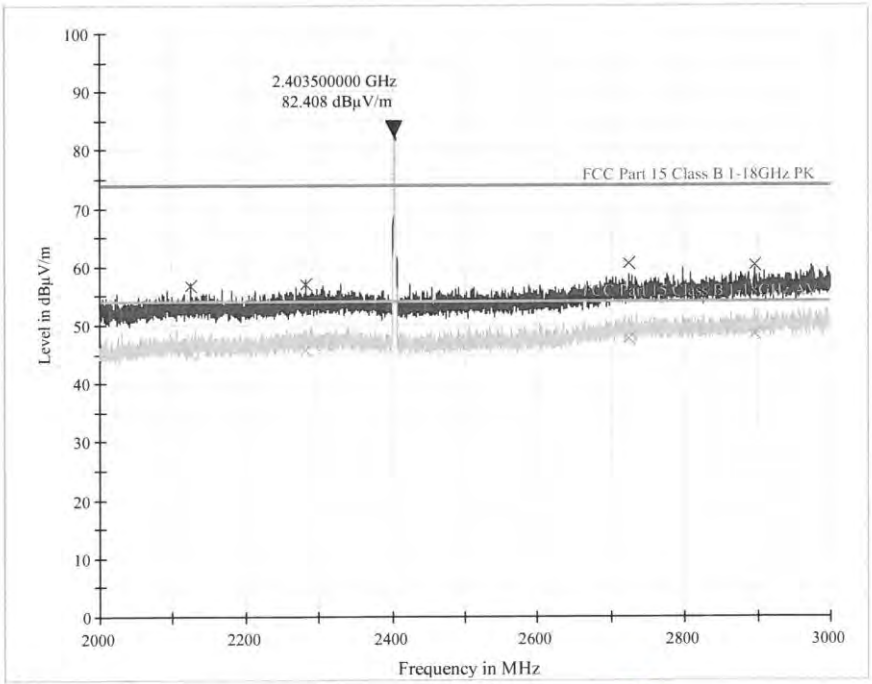
EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(low)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Horizontal

Subrange 1

Frequency Range:	2GHz-3GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF907/ TUV FSP30-TUV SAC HF907



Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 12:01:16 Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)	Comment
2124.400000	56.7	1000.0	1000.000	H	31.2	17.3	74.0	
2282.920000	57.0	1000.0	1000.000	H	31.6	17.0	74.0	
2724.640000	60.4	1000.0	1000.000	H	33.1	13.6	74.0	
2895.520000	60.2	1000.0	1000.000	H	33.8	13.8	74.0	

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)	Comment
2124.400000	45.1	1000.0	1000.000	H	31.2	8.9	54.0	
2282.920000	45.6	1000.0	1000.000	H	31.6	8.4	54.0	
2724.640000	47.6	1000.0	1000.000	H	33.1	6.4	54.0	
2895.520000	48.3	1000.0	1000.000	H	33.8	5.7	54.0	

Sign-off Test Data

Date: 6/30/2015 - Time: 12:01:16

Tested by: HCH 2015-07-02 Checked Reviewed by: YJX 2015-07-02 Checked

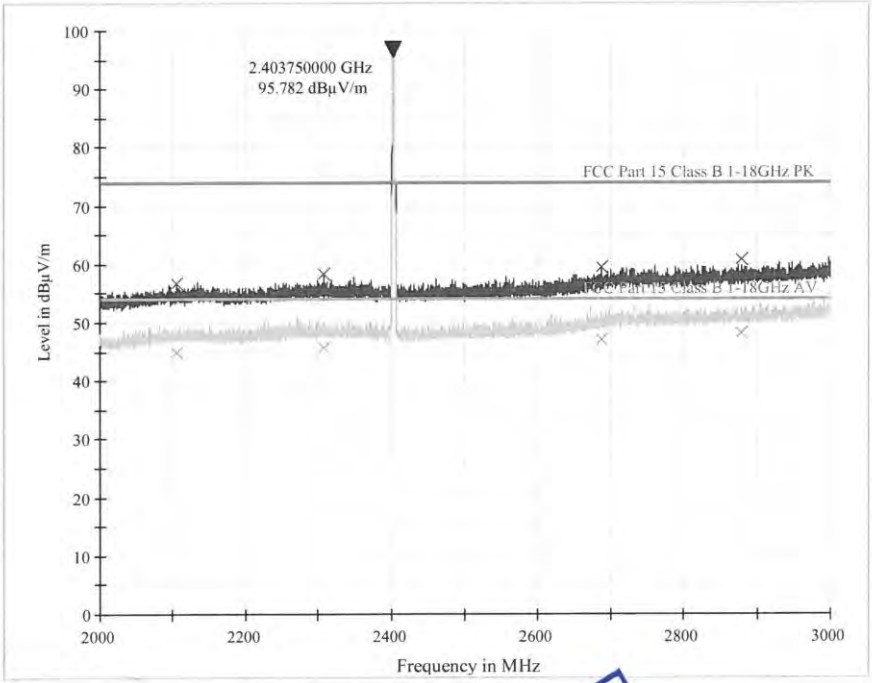
TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(low)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Vertical

Subrange 1	
Frequency Range:	2GHz-3GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF907/ TUV FSP30-TUV SAC HF907



Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 11:56:57 Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)	Comment
2105.800000	56.7	1000.0	1000.000	V	31.1	17.3	74.0	
2308.000000	58.3	1000.0	1000.000	V	31.6	15.7	74.0	
2686.480000	59.4	1000.0	1000.000	V	32.9	14.6	74.0	
2879.800000	60.8	1000.0	1000.000	V	33.7	13.2	74.0	

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)	Comment
2105.800000	45.0	1000.0	1000.000	V	31.1	9.0	54.0	
2308.000000	45.8	1000.0	1000.000	V	31.6	8.2	54.0	
2686.480000	47.1	1000.0	1000.000	V	32.9	6.9	54.0	
2879.800000	48.1	1000.0	1000.000	V	33.7	5.9	54.0	

Sign-off Test Data

Date: 6/30/2015 - Time: 11:56:57 Tested by: HCH 2015-07-02 Checked Reviewed by: YJX 2015-07-02 Checked

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

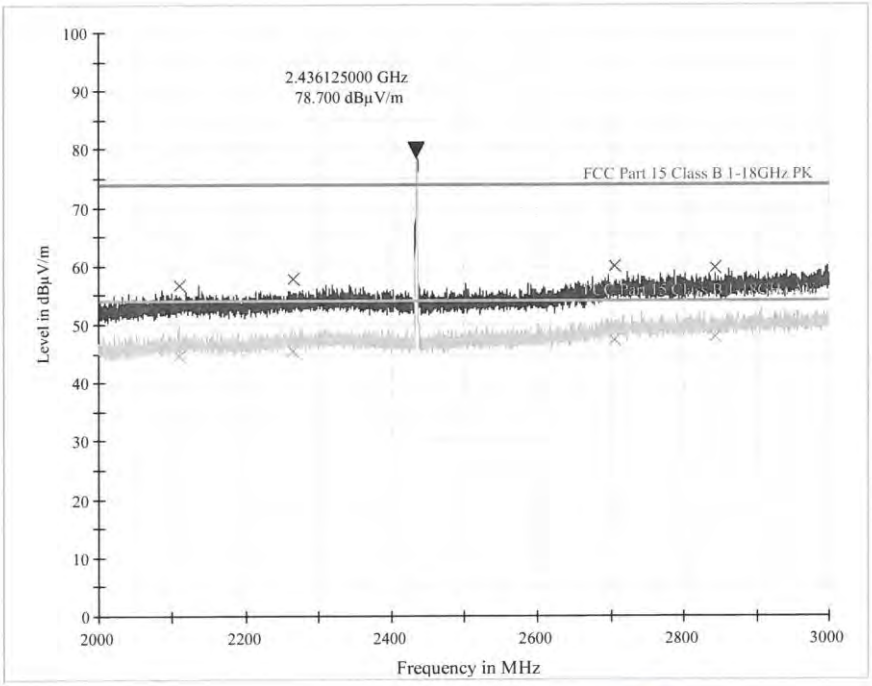
EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(mid)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Horizontal

Subrange 1

Frequency Range:	2GHz-3GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF907/ TUV FSP30-TUV SAC HF907



Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 11:40:54 Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)	Comment
2109.040000	56.7	1000.0	1000.000	H	31.1	17.3	74.0	
2264.800000	57.7	1000.0	1000.000	H	31.5	16.3	74.0	
2704.480000	59.8	1000.0	1000.000	H	33.0	14.2	74.0	
2842.960000	59.6	1000.0	1000.000	H	33.5	14.4	74.0	

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)	Comment
2109.040000	44.7	1000.0	1000.000	H	31.1	9.3	54.0	
2264.800000	45.4	1000.0	1000.000	H	31.5	8.6	54.0	
2704.480000	47.3	1000.0	1000.000	H	33.0	6.7	54.0	
2842.960000	47.8	1000.0	1000.000	H	33.5	6.2	54.0	

Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 11:40:54 Tested by: _____ Reviewed by: _____

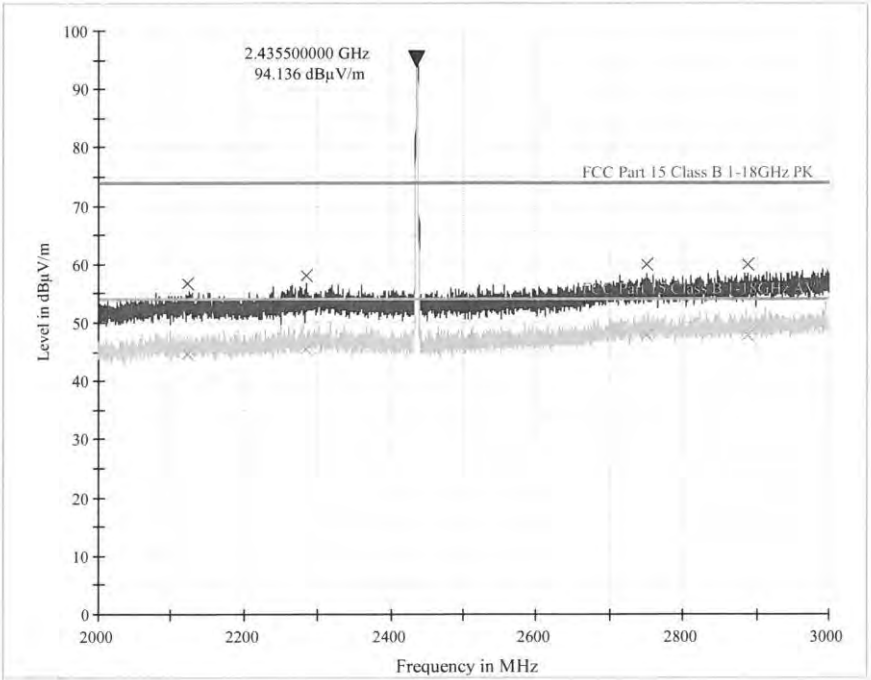
TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(mid)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Vertical

Subrange 1	
Frequency Range:	2GHz-3GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF907/ TUV FSP30-TUV SAC HF907



Sign-off Test Data

Date: 6/30/2015 - Time: 11:38:05 Tested by: HCH 2015-07-02 Checked Reviewed by: YJX 2015-07-02 Checked

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)	Comment
2123.560000	56.8	1000.0	1000.000	V	31.2	17.2	74.0	
2283.880000	58.2	1000.0	1000.000	V	31.6	15.8	74.0	
2750.800000	59.8	1000.0	1000.000	V	33.2	14.2	74.0	
2887.720000	60.0	1000.0	1000.000	V	33.8	14.0	74.0	

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)	Comment
2123.560000	44.7	1000.0	1000.000	V	31.2	9.3	54.0	
2283.880000	45.4	1000.0	1000.000	V	31.6	8.6	54.0	
2750.800000	47.8	1000.0	1000.000	V	33.2	6.2	54.0	
2887.720000	47.8	1000.0	1000.000	V	33.8	6.2	54.0	

Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 11:38:05 Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

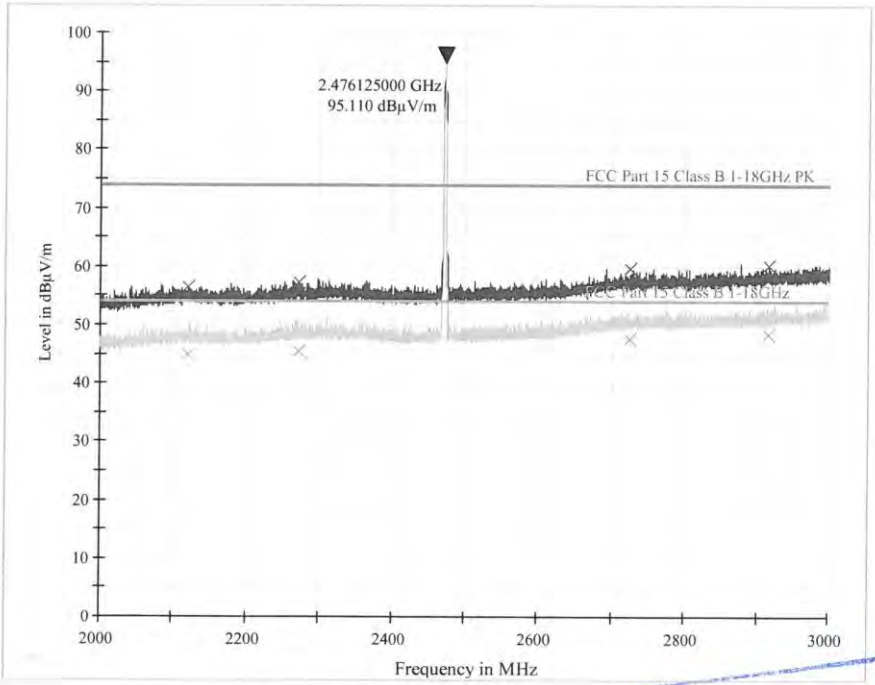
EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(high)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Vertical

Subrange 1

Frequency Range:	2GHz-3GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF907/ TUV FSP30-TUV SAC HF907



Date: 6/30/2015 - Time: 11:49:37

Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)	Comment
2121.520000	56.4	1000.0	1000.000	V	31.2	17.6	74.0	
2271.760000	57.2	1000.0	1000.000	V	31.6	16.8	74.0	
2724.640000	59.6	1000.0	1000.000	V	33.1	14.4	74.0	
2914.960000	60.3	1000.0	1000.000	V	33.8	13.7	74.0	

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)	Comment
2121.520000	44.8	1000.0	1000.000	V	31.2	9.2	54.0	
2271.760000	45.6	1000.0	1000.000	V	31.6	8.4	54.0	
2724.640000	47.7	1000.0	1000.000	V	33.1	6.3	54.0	
2914.960000	48.3	1000.0	1000.000	V	33.8	5.7	54.0	

Test Data

Date: 6/30/2015 - Time: 11:49:37

Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

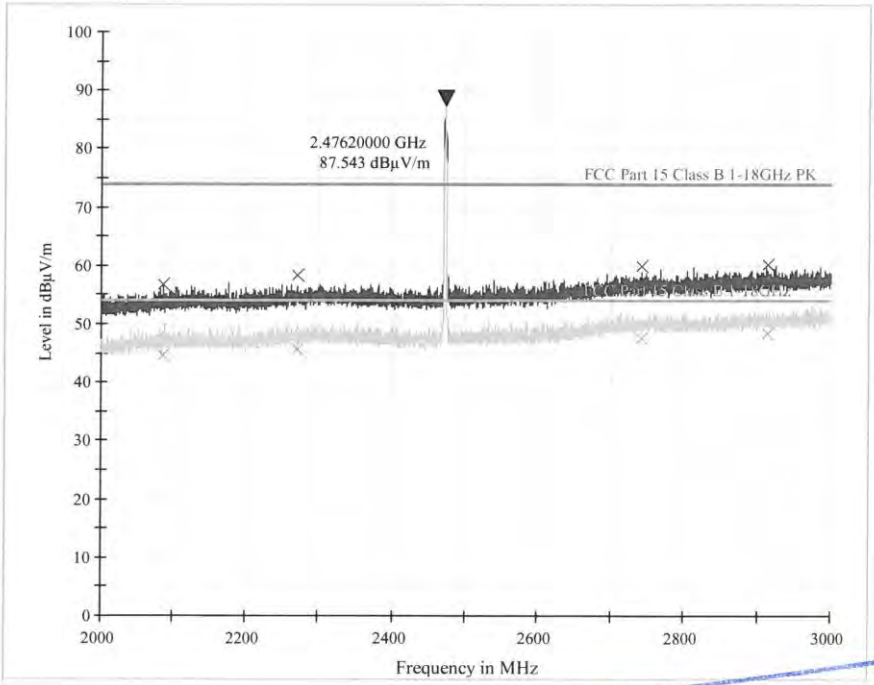
EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(high)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Horizontal

Subrange 1

Frequency Range:	2GHz-3GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF907/ TUV FSP30-TUV SAC HF907



Date: 6/30/2015 - Time: 11:54:33 Tested by: HCH 2015-07-04 Checked Reviewed by: YDX 2015-07-06 Checked

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)	Comment
2085.760000	56.6	1000.0	1000.000	H	31.1	17.4	74.0	
2271.520000	58.2	1000.0	1000.000	H	31.6	15.8	74.0	
2741.080000	59.8	1000.0	1000.000	H	33.1	14.2	74.0	
2913.040000	60.2	1000.0	1000.000	H	33.8	13.8	74.0	

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)	Comment
2085.760000	44.7	1000.0	1000.000	H	31.1	9.3	54.0	
2271.520000	45.7	1000.0	1000.000	H	31.6	8.3	54.0	
2741.080000	47.5	1000.0	1000.000	H	33.1	6.5	54.0	
2913.040000	48.3	1000.0	1000.000	H	33.8	5.7	54.0	

Non-Test Data

Date: 6/30/2015 - Time: 11:54:33

Tested by: HCH 2015-07-04 Checked Reviewed by: YIX 2015-07-06 Checked

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

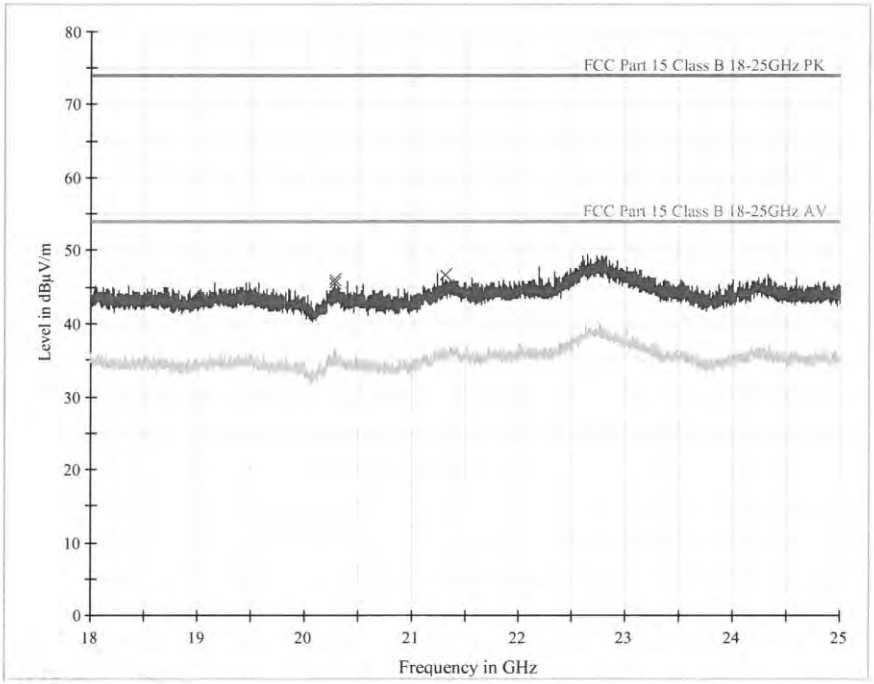
EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(low)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Horizontal

Subrange 1

Frequency Range:	18GHz-25GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC 3160-03 TUV FSP30-TUV SAC 3160-09



Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 4:27:30 Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
20284.000000	46.0	1000.0	1000.000	H	-2.8	28.0	74.0
21313.000000	46.8	1000.0	1000.000	H	-1.7	27.2	74.0
22745.000000	49.9	1000.0	1000.000	H	1.0	24.1	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
20284.000000	35.1	1000.0	1000.000	H	-2.8	18.9	54.0
21313.000000	35.5	1000.0	1000.000	H	-1.7	18.5	54.0
22745.000000	38.2	1000.0	1000.000	H	1.0	17.8	54.0

Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 4:27:30 Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

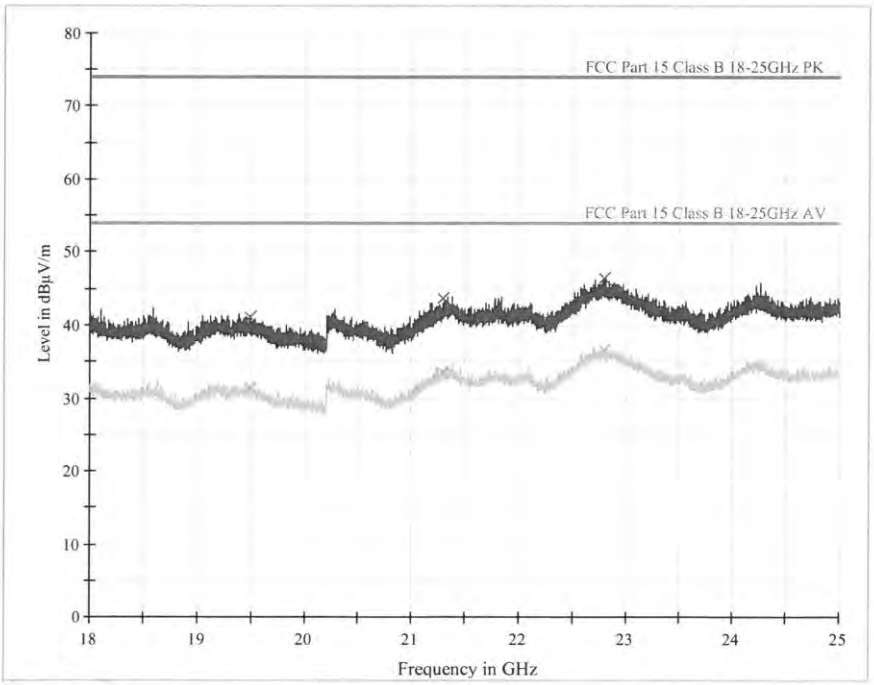
EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(low)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Vertical

Subrange 1

Frequency Range:	18GHz-25GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC 3160-03 TUV FSP30-TUV SAC 3160-09



Sign-off Test Data

Date: 6/30/2015 - Time: 4:19:58 Tested by: HCH 2015-07-02 Checked Reviewed by: YJX 2015-07-02 Checked

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
19483.000000	41.1	1000.0	1000.000	V	-2.4	32.9	74.0
21292.000000	43.7	1000.0	1000.000	V	-1.7	30.3	74.0
22800.000000	46.4	1000.0	1000.000	V	0.9	27.6	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
19483.000000	31.4	1000.0	1000.000	V	-2.4	22.6	54.0
21292.000000	33.5	1000.0	1000.000	V	-1.7	20.5	54.0
22800.000000	36.5	1000.0	1000.000	V	0.9	17.5	54.0

Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 4:19:58

Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

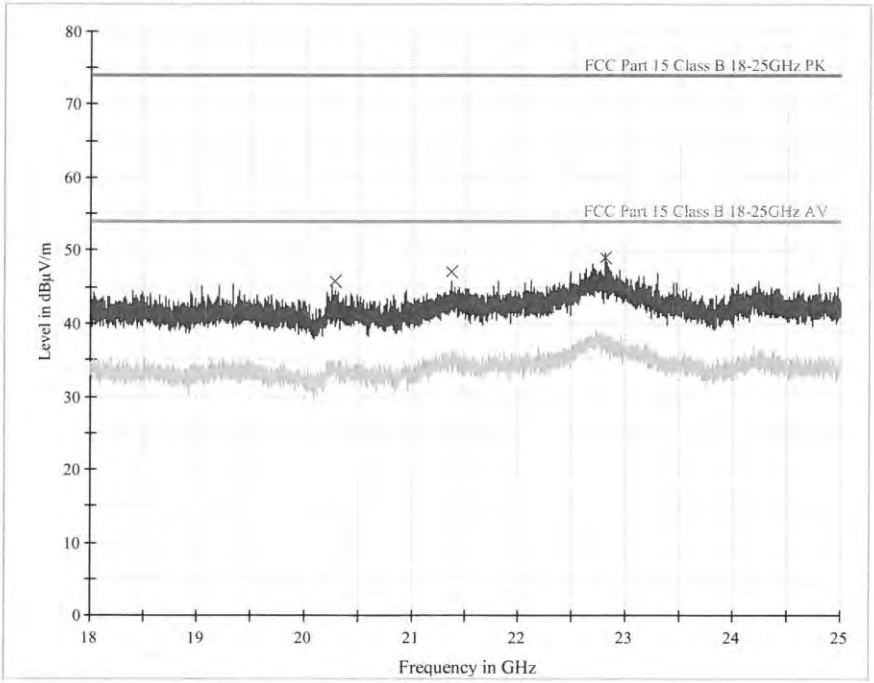
EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(mid)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Horizontal

Subrange 1

Frequency Range:	18GHz-25GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC 3160-03 TUV FSP30-TUV SAC 3160-09



Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 4:30:49 Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
20280.000000	45.8	1000.0	1000.000	H	-2.8	28.2	74.0
21362.000000	47.0	1000.0	1000.000	H	-1.6	27.0	74.0
22815.000000	49.0	1000.0	1000.000	H	0.8	25.0	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
20280.000000	34.2	1000.0	1000.000	H	-2.8	19.8	54.0
21362.000000	35.6	1000.0	1000.000	H	-1.6	18.4	54.0
22815.000000	37.8	1000.0	1000.000	H	0.8	16.2	54.0

Sign-off Test Data

Date: 6/30/2015 - Time: 4:30:49

Tested by: HCH 2015-07-02 Checked

Reviewed by: YJX 2015-07-02 Checked

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

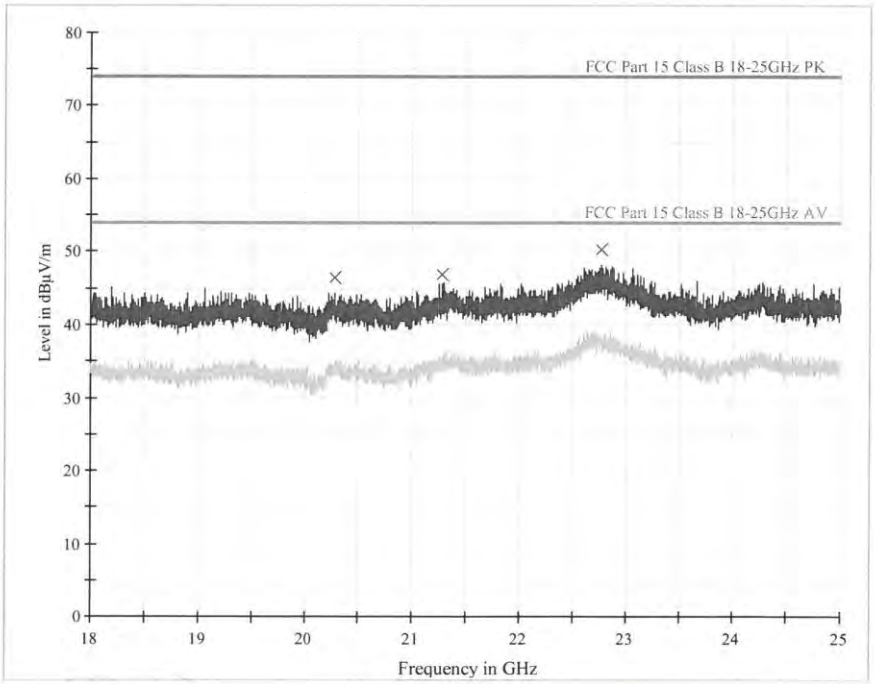
EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(mid)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Vertical

Subrange 1

Frequency Range:	18GHz-25GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC 3160-03 TUV FSP30-TUV SAC 3160-09



Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 4:32:42 Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
20273.000000	46.4	1000.0	1000.000	V	-2.8	27.6	74.0
21276.000000	46.9	1000.0	1000.000	V	-1.8	27.1	74.0
22758.000000	50.3	1000.0	1000.000	V	1.0	23.7	74.0
22758.000000	49.8	1000.0	1000.000	V	1.0	24.2	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
20273.000000	34.1	1000.0	1000.000	V	-2.8	19.9	54.0
21276.000000	35.2	1000.0	1000.000	V	-1.8	18.8	54.0
22758.000000	37.5	1000.0	1000.000	V	1.0	16.5	54.0

Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 4:32:42

Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

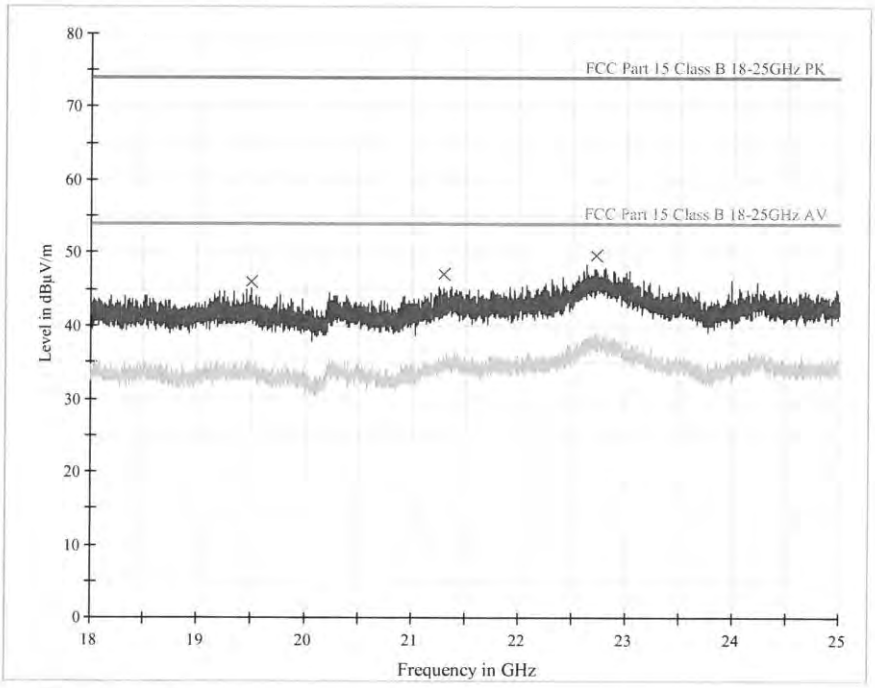
EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(high)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; Horizontal

Subrange 1

Frequency Range:	18GHz-25GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC 3160-03 TUV FSP30-TUV SAC 3160-09



Sign-off Test Data

Date: 6/30/2015 - Time: 4:37:24

Tested by: HCH 2015-07-02 Checked Reviewed by: YJX 2015-07-02 Checked

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
19504.000000	46.0	1000.0	1000.000	H	-2.4	28.0	74.0
21296.000000	47.0	1000.0	1000.000	H	-1.7	27.0	74.0
22722.000000	49.7	1000.0	1000.000	H	1.1	24.3	74.0
22722.000000	49.7	1000.0	1000.000	H	1.1	24.3	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
19504.000000	35.1	1000.0	1000.000	H	-2.4	18.9	54.0
21296.000000	35.5	1000.0	1000.000	H	-1.7	18.5	54.0
22722.000000	38.2	1000.0	1000.000	H	1.1	15.8	54.0

Sign-off Test Data

Date: 6/30/2015 - Time: 4:37:24

Tested by: _____ Reviewed by: _____

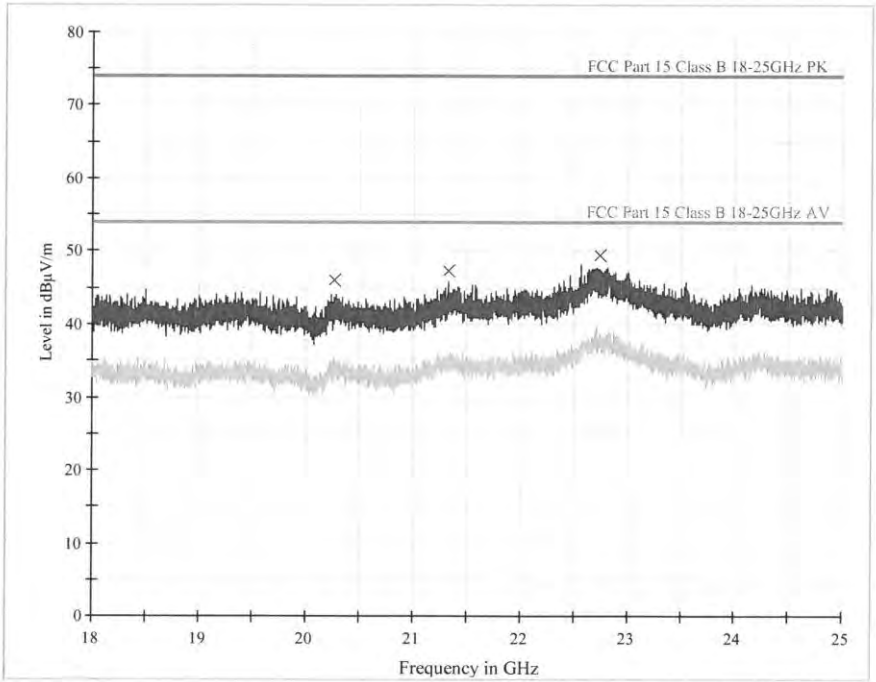
TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

EMC Test Record (Emission)

Common Information

Manufacturer:	Samson(SEIKAKU)
Test Item:	USB Digital Wireless System
Identification:	Stage PXD1
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	Tx(high)
Climate Condition:	23 ℃, 53 %, 100 kPa
Test Voltage/ Freq:	/
Receipt No:	174034321
Report No:	16067943 001
Result:	Pass
Comment:	Test distance is 3m; ~~Horizontal~~ Vertical
Subrange 1	
Frequency Range:	18GHz-25GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC 3160-03 TUV FSP30-TUV SAC 3160-09

HCH 2015-07-02 Checked



Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Date: 6/30/2015 - Time: 4:34:51 Tested by: _____ Reviewed by: _____

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
20259.000000	46.1	1000.0	1000.000	V	-2.8	27.9	74.0
21328.000000	47.2	1000.0	1000.000	V	-1.7	26.8	74.0
22741.000000	49.4	1000.0	1000.000	V	1.0	24.6	74.0

Limit and Margin AV

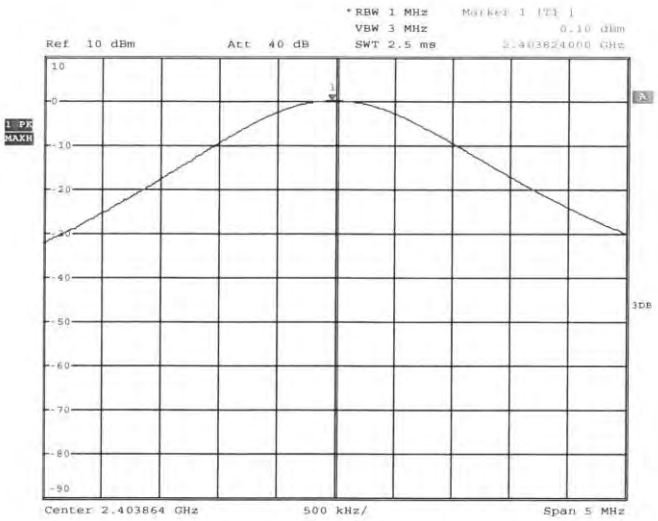
Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
20259.000000	34.8	1000.0	1000.000	V	-2.8	19.2	54.0
21328.000000	35.2	1000.0	1000.000	V	-1.7	18.8	54.0
22741.000000	37.8	1000.0	1000.000	V	1.0	16.2	54.0

Sign-off Test Data

Date: 6/30/2015 - Time: 4:34:51

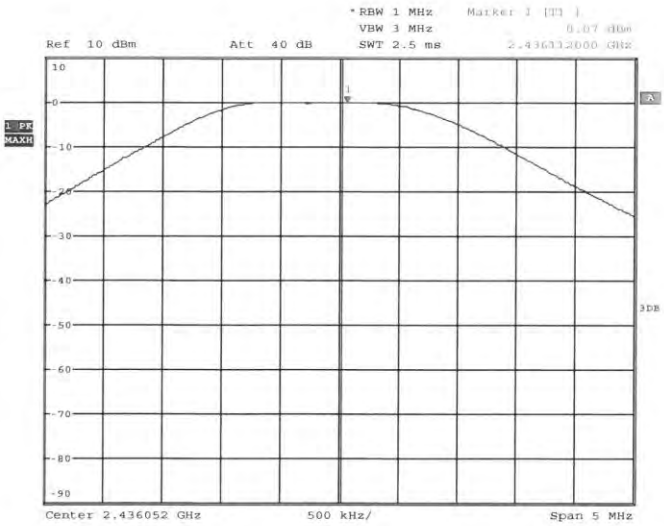
Tested by: _____ Reviewed by: _____

Peak power:



Low

Date: 1.JUL.2015 03:44:57



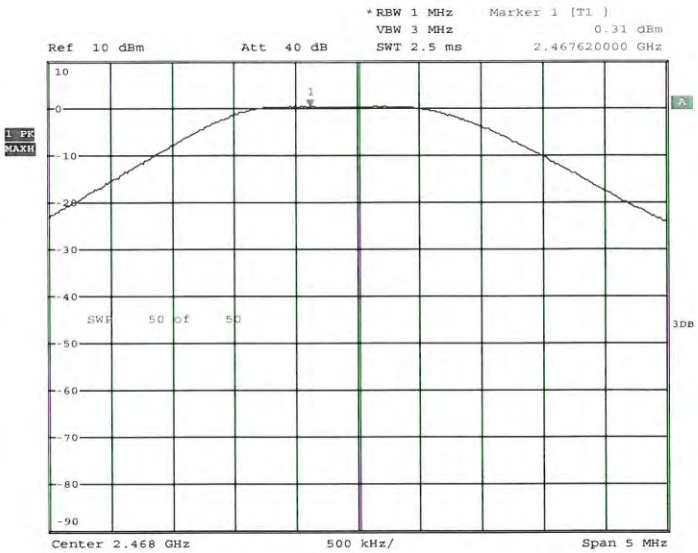
Mid

Date: 1.JUL.2015 03:56:13

Sign-off Test Data

HCH 2015 Checked

YJX 2015-07-02 Checked



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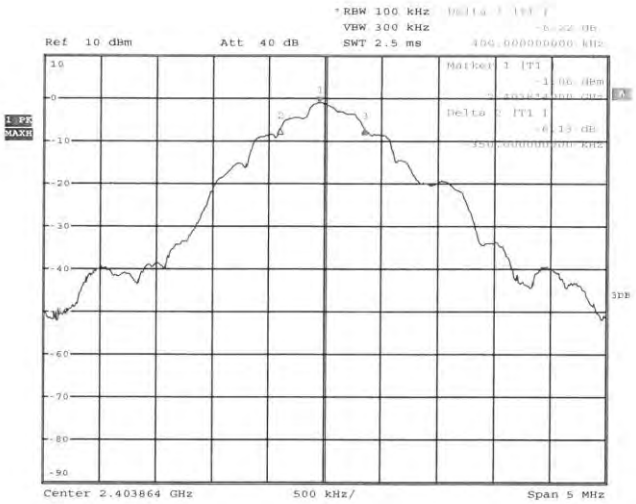
Date: 24.JUN.2015 23:30:22

Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

6 dB bandwidth



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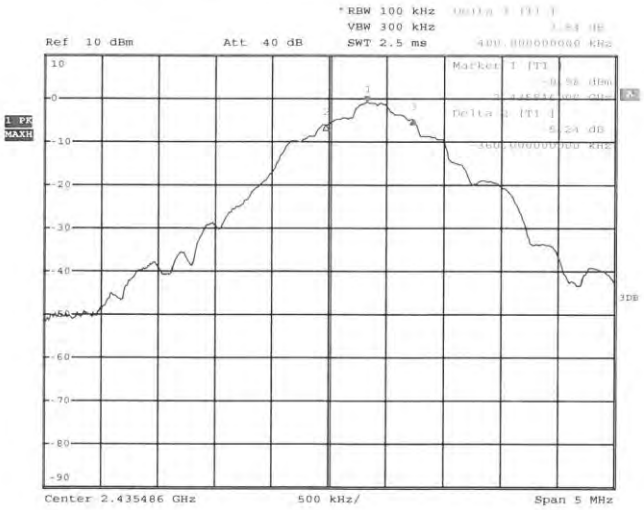
Date: 1.JUL.2015 03:48:36



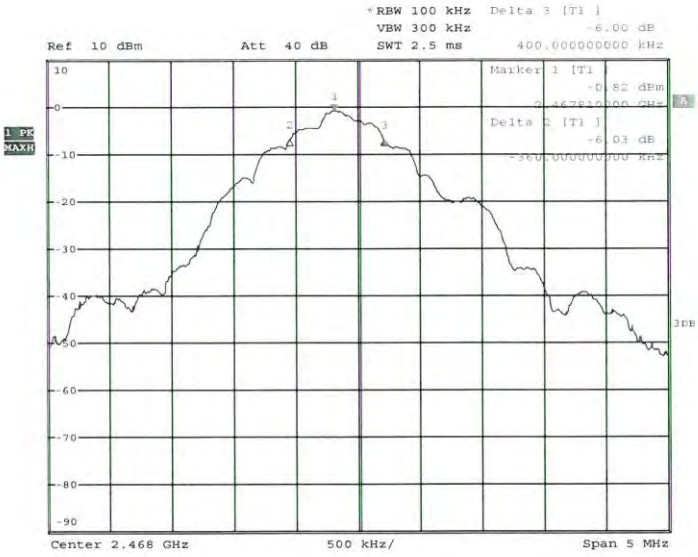
Mid

Date: 1.JUL.2015 03:23:37

Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked



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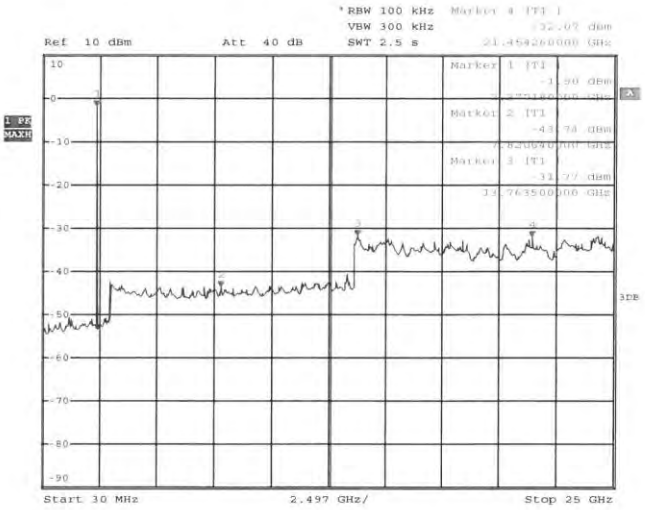
Date: 1.JUL.2015 05:51:32

Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Conducted spurious:



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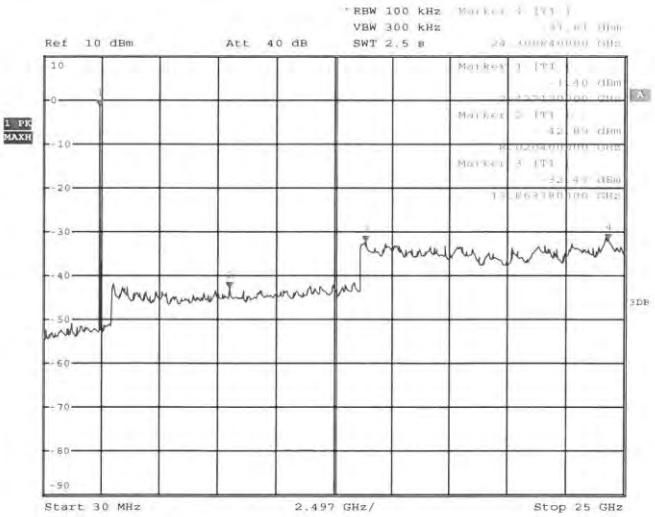
Date: 1.JUL.2015 03:50:57



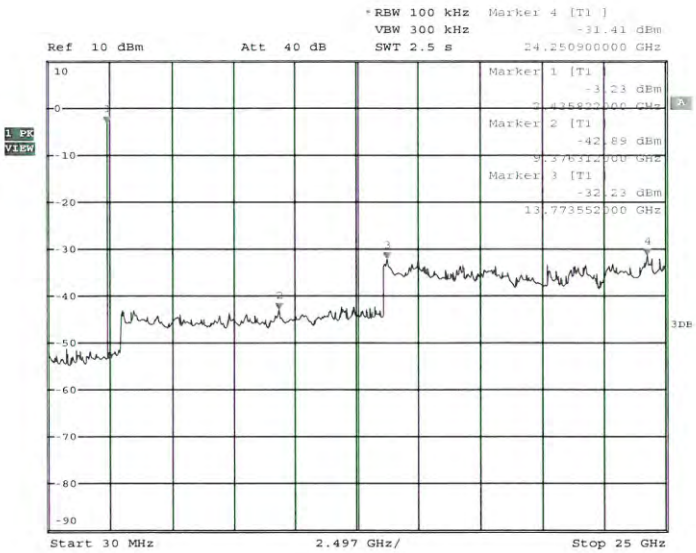
Mid

Date: 1.JUL.2015 05:53:06

Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked



high

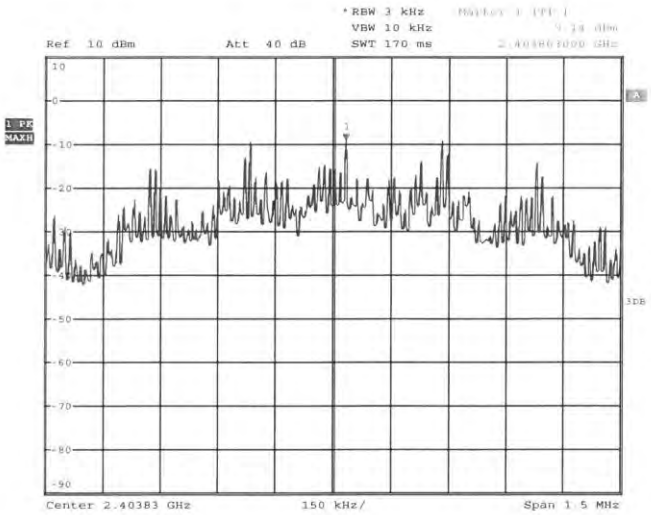
Date: 1.JUL.2015 04:00:10

Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked

Power spectral density:



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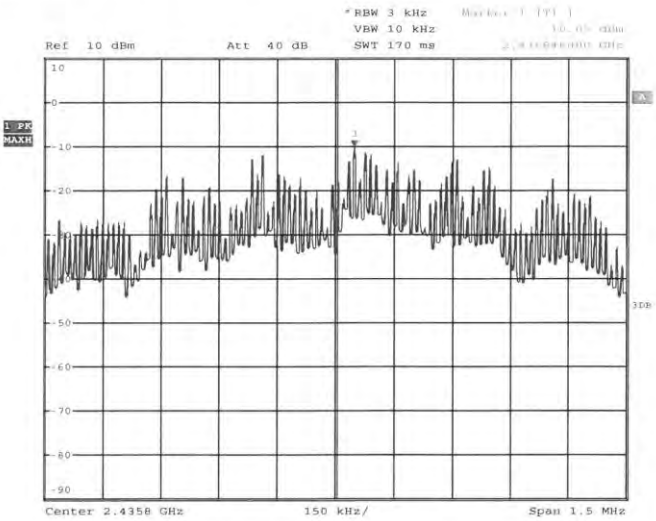
Date: 1.JUL.2015 03:52:37



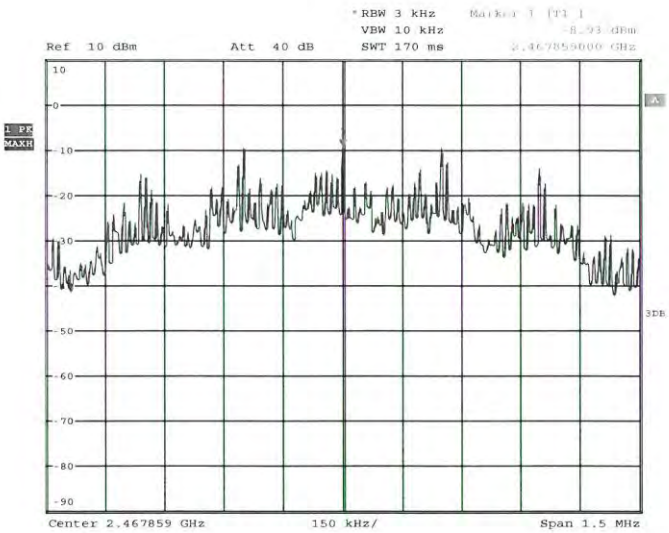
Mid.

Date: 1.JUL.2015 03:30:07

HCH 2015-07-02 Checked

Sign-off Test Data

YJX 2015-07-02 Checked



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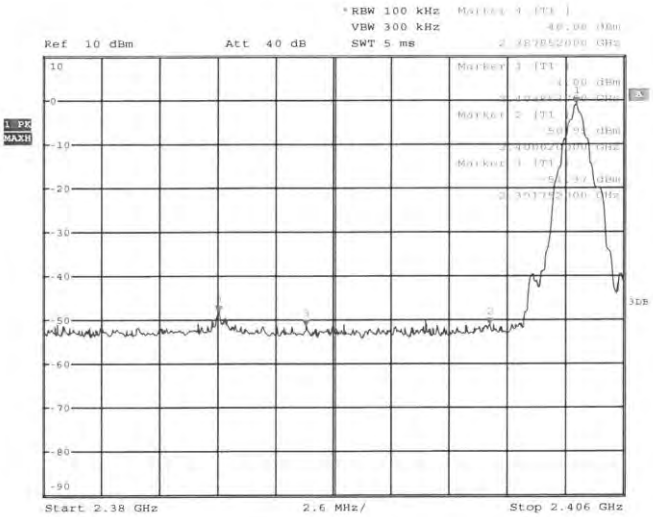
Date: 1.JUL.2015 05:53:59

Sign-off Test Data

HCH 2015-07-02 Checked

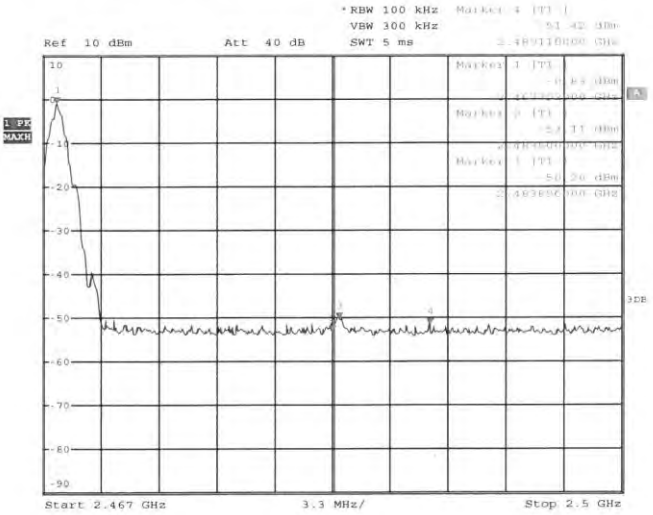
YJX 2015-07-02 Checked

Bandedge emission:



Low

Date: 1.JUL.2015 03:54:43



High

Date: 1.JUL.2015 05:55:50

Sign-off Test Data

HCH 2015-07-02 Checked

YJX 2015-07-02 Checked