

***FCC Part 15 Subpart C***  
***EMI TEST REPORT***  
***(CLASS II PERMISSIVE CHANGE)***

*of*

E.U.T. : XS WIRELESS  
FCC ID. : DMOSKXSW  
Model No. : SK-XSW  
Working Frequency : 548 MHz ~ 572 MHz  
Working Frequency : 2433 MHz ~ 2473 MHz

*for*

APPLICANT : Sennheiser Electronic Corp  
ADDRESS : 1 Enterprise Drive, Old Lyme, CT 06371, USA

Test Performed by

**TAIWAN TESTING AND CERTIFICATION CENTER**

NO. 34, LIN 5, DINGFU VIL., LINKOU DIST.,  
NEW TAIPEI CITY, TAIWAN, 24442, R.O.C.

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Report Number : 22-12-RBF-009-04

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**1.Report Version History :**

The following revisions have been made to ETC report No.  
16-08-RBF-015-05/18-11-RBF-013-04

<u>Report No.</u>	<u>Date of issue</u>	<u>Description</u>
16-08-RBF-015-05	Sep. 22, 2016	First Version. 2433MHz~2473MHz
18-11-RBF-013-04	Dec.27, 2018	Second Version. Working Frequency : 548~572 MHz
22-12-RBF-009-04	Jul. 27, 2023	1. Reference Test Report (Data from ETC Report No.:( 16-08-RBF-015-05/18-11-RBF-013-04)  Class II Change Description: To change the PIN with the same VCO as following the KDB Publication 178919 D01 (C2PC) which describes general permissive change policies.

**2.TEST REPORT CERTIFICATION**

Applicant : Sennheiser Electronic Corp  
1 Enterprise Drive, Old Lyme, CT 06371, USA

Manufacturer : Sennheiser electronic GmbH & Co. KG  
Am Labor 1  
30900 Wedemark, Germany

Factory : MASCOT ELECTRIC CO., LTD  
NO. 85, CHANGXING 1ST ST., RENDE DIST., TAINAN CITY  
717, TAIWAN

Description of EUT :

a) Type of EUT : XS WIRELESS

b) Trade Name : SENNHEISER

c) Model No. : SK-XSW

d) FCC ID : DMOSKXSW

e) Working Frequency : 548 MHz ~ 572 MHz  
2433 MHz ~ 2473 MHz

f) Power Supply : 2x 1.5V AA batteries

Regulation Applied: FCC Rules and Regulations Part 15 Subpart C

I HEREBY CERTIFY THAT; The data shown in this report were made in accordance with the procedures given in ANSI C63.10-2013 and section 15.236 of Part 15 of CFR 47 and section 2.1046, 1049, and 2.1055 of Part 2 of CFR 47. The energy emitted by the device was founded to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these data.

**Summary of Tests**

Test	Results
Radiated Emission	Pass

Issued Date : Jul. 27, 2023

Test Engineer : Brian Huang  
(Brian Huang, Engineer )



Approve & Authorized : Kevin Lee  
Kevin Lee, Section Manager  
EMC Dept. II of TAIWAN  
TESTING AND CERTIFICATION  
CENTER

### 3. GENERAL INFORMATION

#### 3.1 Product Description

- a) Type of EUT : XS WIRELESS
- b) Trade Name : SENNHEISER
- c) Model No. : SK-XSW
- d) Power Supply : 2x 1.5V AA batteries
- e) Frequency Range : 2433 MHz ~ 2473 MHz  
548 MHz ~ 572 MHz

#### 3.2 Characteristics of Device

The EUT is a Wireless Microphone with 2.4GHz SYNC function.

#### 3.3 Test Methodology

Both conducted and radiated emissions were performed according to the procedures illustrated in ANSI C63.10-2013, FCC Rules Part 15.236, FCC Rules Part 15.249. Other required measurements were illustrated in separate sections of this test report for details.

Instead of 0.8m EUT height above 1GHz, 1.5m was allowed by FCC December 2014 TCB Conference call.

##### Measurement Software

Software	Version	Note
e3	Version 6.100618f	Radiated Emission Test
e3	Version 6.100421	Conducted Emission Test

#### 3.4 Test Facility

The open area test site and conducted measurement facility used to collect the radiated data is located on the roof top of Building at No.34, Lin 5, Dingfu Vil., Linkou Dist., New Taipei City, Taiwan 24442, R.O.C.

This site is FCC 2.948 listed and accepted in a letter dated Jan. 29, 2014.

Registration Number: 90589

## 4 PROVISIONS APPLICABLE

### 4.1 Definition

Wireless Microphone.

An intentional radiator that converts sound into electrical audio signals that are transmitted using radio signals to a receiver which converts the radio signals back into audio signals that are sent through a sound recording or amplifying system. Wireless microphones may be used for cue and control communications and synchronization of TV camera signals as defined in §74.801 of this chapter. Wireless microphones do not include auditory assistance devices as defined in §15.3(a) of this part.

According to section. 15.236 of Part 15, the following frequencies are available for wireless microphones :

Frequencies (MHz)	
54.000-72.000	470.000-608.000
76.000-88.000	614.000-698.000
174.000-216.000	

#### **Unintentional radiator:**

A device that intentionally generates and radio frequency energy for use within the device, or that sends radio frequency signals by conduction to associated equipment via connecting wiring, but which is not intended to emit RF energy by radiation or induction.

#### Class A Digital Device:

A digital device which is marketed for use in commercial or business environment; exclusive of a device which is market for use by the general public, or which is intended to be used in the home.

#### Class B Digital Device :

A digital device which is marketed for use in a residential environment notwithstanding use in a commercial, business of industrial environment. Example of such devices that are marketed for the general public.

Note : A manufacturer may also qualify a device intended to be marketed in a commercial, business, or industrial environment as a Class B digital device, and in fact is encouraged to do so, provided the device complies with the technical specifications for a Class B Digital Device. In the event that a particular type of device has been found to repeatedly cause harmful interference to radio communications, the Commission may classify such a digital device as a Class B Digital Device, Regardless of its intended use.

#### **Intentional radiator:**

A device that intentionally generates and emits radio frequency energy by radiation or induction.

## 4.2 Requirement for Compliance

### (1) Conducted Emission Requirement

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50MH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the band edges.

Frequency MHz	Quasi Peak dB $\mu$ V	Average dB $\mu$ V
0.15 - 0.5	66-56	56-46
0.5 - 5.0	56	46
5.0 - 30.0	60	50

### (2) Radiated Emission Requirement

For unintentional device, according to §15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency MHz	Distance Meters	Radiated dB $\mu$ V/m	Radiated $\mu$ V/m
30 - 88	3	40.0	100
88 - 216	3	43.5	150
216 - 960	3	46.0	200
Above 960	3	54.0	500

For intentional device, according to §15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

For intentional radiator device, per §15.249(a), the field strength of emissions shall comply with the following :

Frequency MHz	Distance Meters	Fundamental		Harmonic	
		dB $\mu$ V/m	mV/m	dB $\mu$ V/m	$\mu$ V/m
902 - 928	3	94	50	54	500
2400 - 2483.5	3	94	50	54	500
5725 - 5875	3	94	50	54	500
24000 - 24250	3	108	250	68	2500

In accordance with §15.249(e), limits shown in above table are based on average limits for frequencies above 1000 MHz, and frequencies below 1000 MHz are based on quasi peak. However, the peak field strength of any emission shall not exceed the maximum permitted average limits by more than 20 dB.

#### FCC15.236 (g)

Emissions within the band from one megahertz below to one megahertz above the carrier frequency shall comply with the emission mask in §8.3 of ETSI EN 300 422-1 V1.4.2 (2011-08), Electromagnetic compatibility and Radio spectrum Matters (ERM); Wireless microphones in the 25 MHz to 3 GHz frequency range; Part 1: Technical characteristics and methods of measurement. Emissions outside of this band shall comply with the limits specified in section 8.4 of ETSI EN 300 422-1 V1.4.2 (2011-08).

### (3) Spurious in Out Band Requirement

For intentional device, according to §15.249 (d), emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of fundamental or to the general radiated emission limits in §15.209.

### (4) Antenna Requirement

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



### 4.3 Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below :

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42-16.423	399.9-410	4.5-5.25
0.495 - 0.505 **	16.69475 - 16.69525	608-614	5.35-5.46
2.1735 - 2.1905	16.80425 - 16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475 - 156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2655-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3360-4400	Above 38.6
13.36-13.41			

\*\* : Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

### 4.4 Labeling Requirement

The device shall bear the following statement in a conspicuous location on the device:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## 4.5 User Information

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual.

The Federal Communications Commission Radio Frequency Interference Statement includes the following paragraph.

This equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
  
- Increase the separation between the equipment and receiver.
  
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  
- Consult the dealer or an experienced radio / TV technician for help.

## 5. SYSTEM TEST CONFIGURATION

### 5.1 Justification

For both radiated and conducted emissions, the system was configured for testing in a typical fashion as a customer would normally use it. The peripherals other than EUT were connected in normally standing by situation.

All measurement were intentional to maximum the emissions from EUT by varying the connection cables(if applicable), therefore, the test result is sure to meet the applicable requirement.

For portable device, the EUT was pretested in three orthogonal plans: put on table horizontally, stands vertically and side up vertically. The worst case was chosen for final test.

### 5.2 Devices for Tested System

Device	Manufacturer	Model / FCC ID	Description
XS WIRELESS*	Sennheiser electronic GmbH & Co. KG	SK-XSW / DMOSKXSW	---

Remark “\*” means equipment under test.

## 6 RADIATED EMISSION MEASUREMENT

### 6.1 Applicable Standard

For intentional radiators, according to §15.249 (a), the fundamental field strength shall not exceed 94 dB $\mu$ V/m and the harmonics shall not exceed 54 dB $\mu$ V/m. For out band emission except for harmonics shall be comply with §15.209 or at least attenuated by 50 dB below the level of the fundamental.

According to §15.236 (g) in radiated spurious emission, emission within the band from one megahertz below to one megahertz above the carrier frequency shall comply with the Spurious emissions of ETSI EN 300422-1. Emissions outside this band shall comply with the limit specified at the edges of the ETSI mask

### 6.2 Measurement Procedure

#### A. Preliminary Measurement For Portable Devices

For portable devices, the following procedure was performed to determine the maximum emission axis of EUT:

1. With the receiving antenna is H polarization, rotate the EUT in turns with three orthogonal axes to determine the axis of maximum emission.
2. With the receiving antenna is V polarization, rotate the EUT in turns with three orthogonal axes to determine the axis of maximum emission.
3. Compare the results derived from above two steps. So, the axis of maximum emission from EUT was determined and the configuration was used to perform the final measurement.

#### B. Final Measurement

1. Setup the configuration per figure 1 and 2 for frequencies measured below and above 1 GHz respectively. Turn on EUT and make sure that it is in normal function.
2. For emission frequencies measured below 1 GHz, a pre-scan is performed in a shielded chamber to determine the accurate frequencies of higher emissions will be checked on a open test site. As the same purpose, for emission frequencies measured above 1 GHz, a pre-scan also be performed with a 1 meter measuring distance before final test.
3. For emission frequencies measured below and above 1 GHz, set the spectrum analyzer on a 100 kHz and 1 MHz resolution bandwidth respectively for each frequency measured in step 2.
4. The search antenna is to be raised and lowered over a range from 1 to 4 meters in horizontally polarized orientation. Position the highness when the highest value is indicated on spectrum analyzer, then change the orientation of EUT on test table over a range from 0 ° to 360 ° with a speed as slow as possible, and keep the azimuth that highest emission is indicated on the spectrum analyzer. Vary the antenna position again

and record the highest value as a final reading. A RF test receiver is also used to confirm emissions measured.

5. Repeat step 4 until all frequencies need to be measured were complete.
6. Repeat step 5 with search antenna in vertical polarized orientations.
7. Check the three frequencies of highest emission with varying the placement of cables (if any) associated with EUT to obtain the worse case and record the result.

Figure 1 : Frequencies measured below 1 GHz configuration

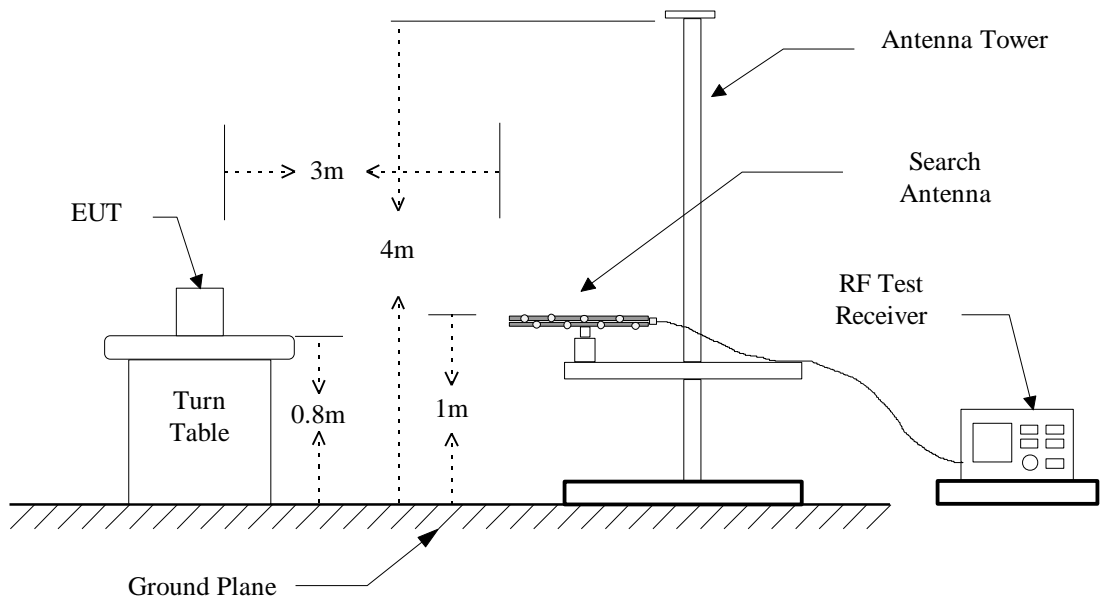
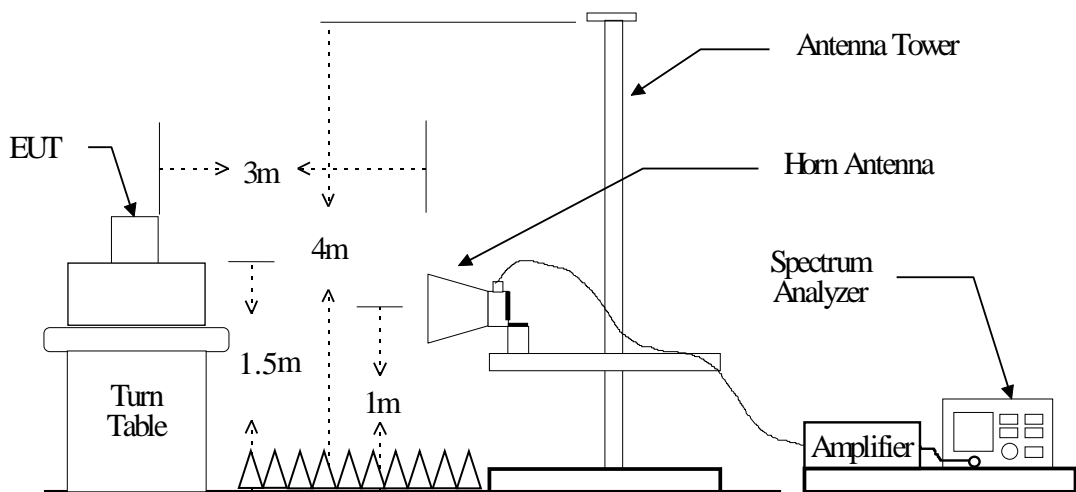


Figure 2 : Frequencies measured above 1 GHz configuration



### 6.3 Measuring Instrument

The following instrument are used for radiated emissions measurement:

Equipment	Manufacturer	Model No.	Assets No.	Calibration Date	Next Cal. Date
EMI Test Receiver	Rohde & Schwarz	ESU 40	13054416-001	2023/03/03	2024/03/02
Amplifier	HP	8447D	13040711-001	2022/09/06	2023/09/05
Bilog Antenna with 6dB Pad	ETC & JYEBAO	MCTD 2786 & FAT-NM5NF5T3G2W6	13057618-002&RF-002 (BL13J03015&RF-002)	2022/09/20	2023/09/19

Measuring instrument setup in measured frequency band when specified detector function is used :

Frequency Band (MHz)	Instrument	Function	Resolution bandwidth	Video Bandwidth
25 to 30	Spectrum Analyzer	Peak	9kHz to 10kHz	9kHz to 10kHz
30 to 1000	RF Test Receiver	Quasi-Peak	120 kHz	N/A
	Spectrum Analyzer	Peak	100 kHz	100 kHz
Above 1000	Spectrum Analyzer	Peak	1 MHz	1 MHz
	Spectrum Analyzer	Average	1 MHz	10 Hz or $\geq 1/T$ (Note 1)

Note 1:

VBW = 10 Hz, when the duty cycle is no less than 98%.

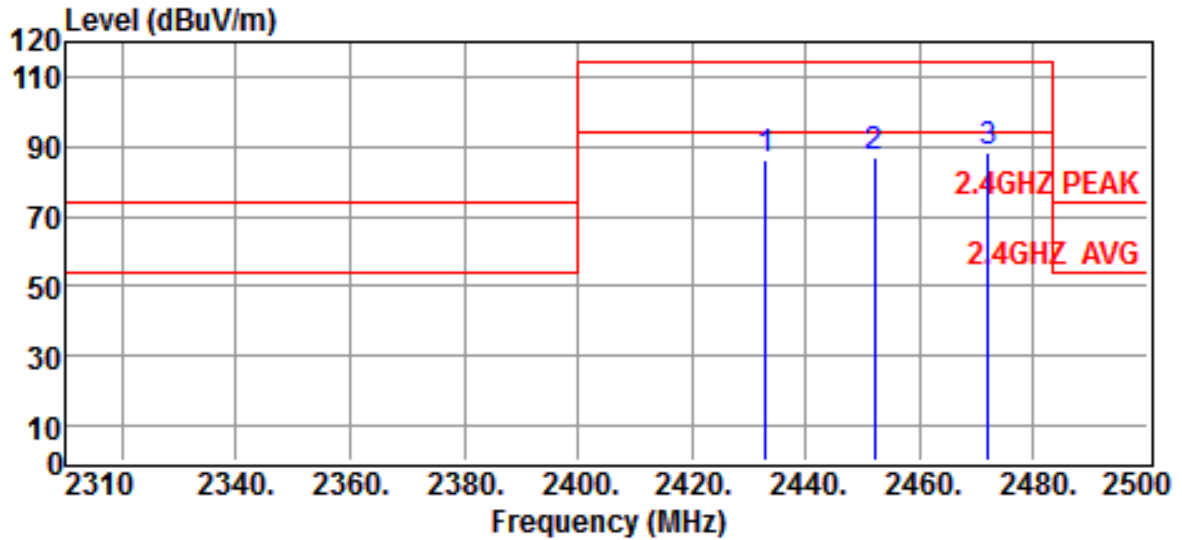
VBW  $\geq 1/T$ , when duty cycle is less than 98% where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

#### §15.236 (g) Limits for radiated spurious emissions (Subclause 8.4.3)

State	Frequency		
	47 MHz to 74 MHz 87,5 MHz to 137 MHz 174 MHz to 230 MHz 470 MHz to 862 MHz	Other Frequencies below 1000 MHz	Frequencies above 1000 MHz
Operation	4 nW (-54dBm)	250 nW (-36dBm)	1 $\mu$ W (-30dBm)
Standby	2 nW (-57dBm)	2 nW (-57dBm)	20 nW(-47dBm)

### 6.4 Radiated Emission Data

Refer to the original report (No. 16-08-RBF-015-05) that the worst-case test case on the selected frequency and mode has been tested. The chosen worst-case depends on the maximum output power level in the testing.



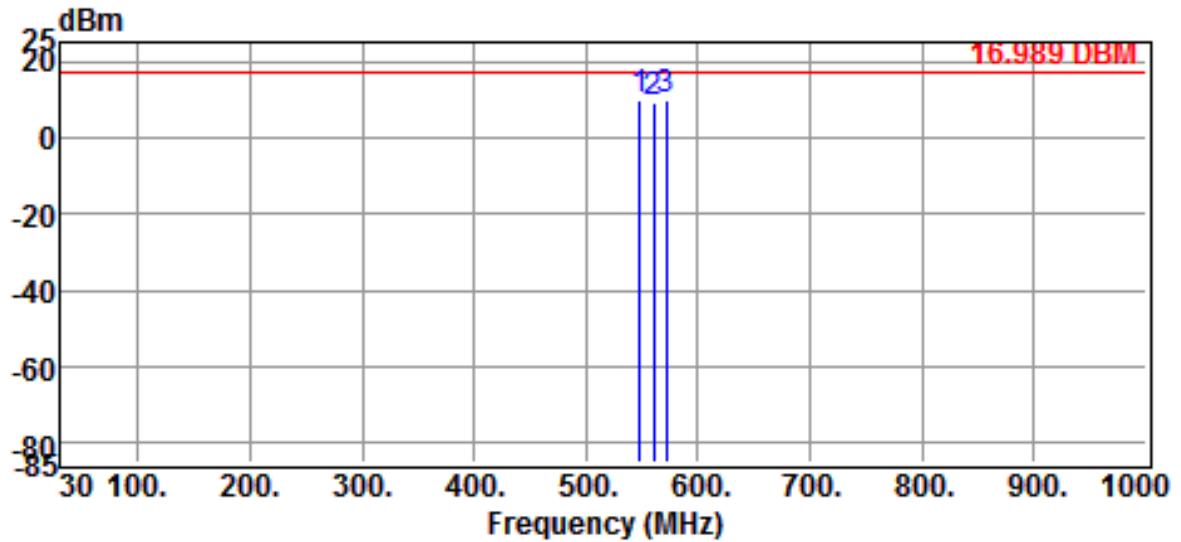
Site	:Chamber #2	Date	:2023-07-27
Limit	:2.4GHZ PEAK	Ant. Pol.	:VERTICAL
EUT	:SK-XSW	Model	:SK-XSW
Power Rating	:Battery 1.5V*2	Temp.	:22°C
Engineer	:Brian Huang	Humi.	:60 %
Test Mode	:TX Mode (2433MHz-2452MHz-2472MHz)		

	Freq MHz	Reading dBuV	Correction Factor dB/m	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
	2433.0000	85.92	0.01	85.93	114.00	-28.07	Peak
	2452.0000	87.25	-0.14	87.11	114.00	-26.89	Peak
*	2472.0000	88.62	-0.13	88.49	114.00	-25.51	Peak

Note :

1. Result = Reading + Correction Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Correction Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.
6. " \* " mean this data is the worst emission level.

Refer to the original report (No. 18-11-RBF-013-04) that the worst-case test case on the selected frequency and mode has been tested. The chosen worst-case depends on the maximum output power level in the testing.



Site	:Chamber #2	Date	:2023-07-27
Limit	:16.989 DBM	Ant. Pol.	:VERTICAL
EUT	:SK-XSW	Model	:SK-XSW
Power Rating	:Battery 1.5V*2	Temp.	:22°C
Engineer	:Brian Huang	Humi.	:60 %
Test Mode	:TX Mode (548.25MHz-560.35MHz-571.65MHz)		

	Freq MHz	Reading dBuV	Correction Factor dB/m	Result dBm	Limits dBm	Over limit dB	Detector
	548.2500	111.04	-101.22	9.82	16.99	-7.17	Peak
	560.3500	110.34	-100.86	9.48	16.99	-7.51	Peak
*	571.6500	110.87	-100.81	10.06	16.99	-6.93	Peak

Note :

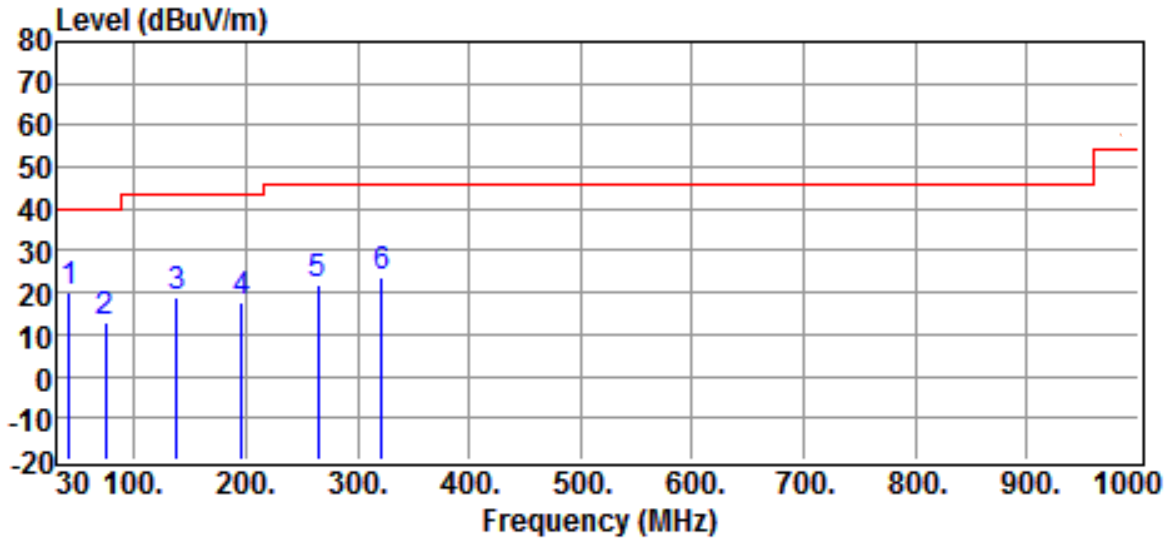
1. Result = Reading + Correction Factor
2. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)-EIRP Factor  
 {EIRP Factor = -101.2dB (9kHz-30MHz) or -99.9dB (30MHz-1GHz)  
 or -95.2dB (1GHz Above)}
3. The margin value=Limit - Result
4. " \* " mean this data is the worst emission level.



6.4.1 Other Emissions

a) Emission frequencies below 1 GHz (worst-case test case)

The report just states that the worst-case mode tested was taken from the original report (No. 16-08-RBF-015-05 / 18-11-RBF-013-04).

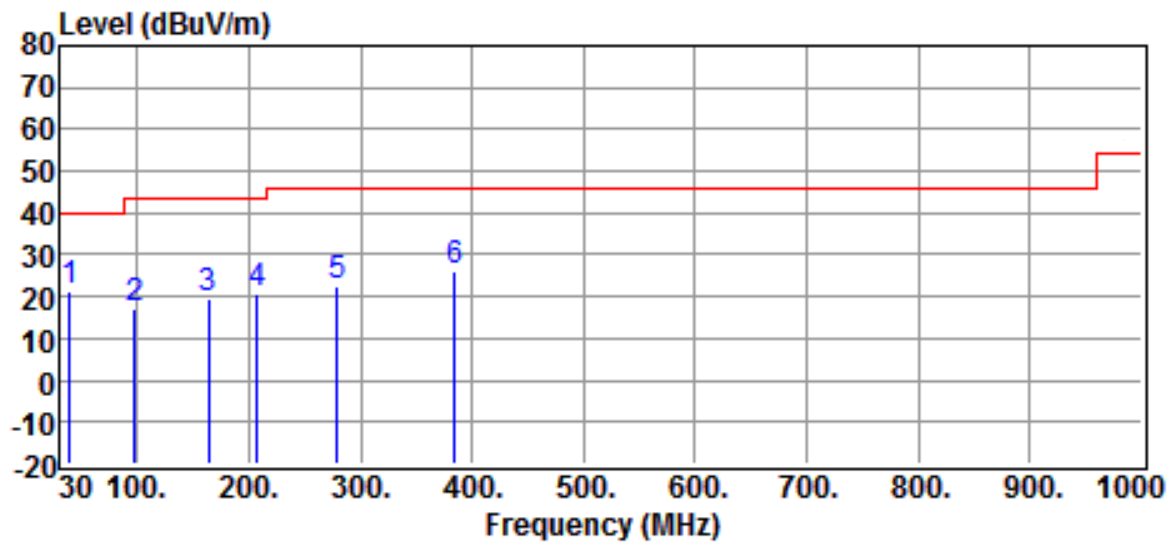


Site	:Chamber#2	Date	:2023-03-16
Limit	:FCC 15.209	Ant. Pol.	:HORIZONTAL
EUT	: XS WIRELESS	Model	:SK-XSW
Power Rating	:Battery 1.5V *2	Temp.	:22 °C
Engineer	:Brian Huang	Humi.	:60 %
Test Mode	:Operation Mode (2472MHz)		

	Freq MHz	Reading dBuV	Correction Factor dB/m	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
*	41.6400	30.46	-10.19	20.27	40.00	-19.73	QP
	74.6200	29.76	-16.63	13.13	40.00	-26.87	QP
	138.6400	30.03	-10.84	19.19	43.50	-24.31	QP
	196.8400	30.36	-12.68	17.68	43.50	-25.82	QP
	264.7400	29.91	-8.17	21.74	46.00	-24.26	QP
	321.9700	30.24	-6.37	23.87	46.00	-22.13	QP

Note :

1. Result = Reading + Correction Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Correction Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.
6. " \* " mean this data is the worst emission level.

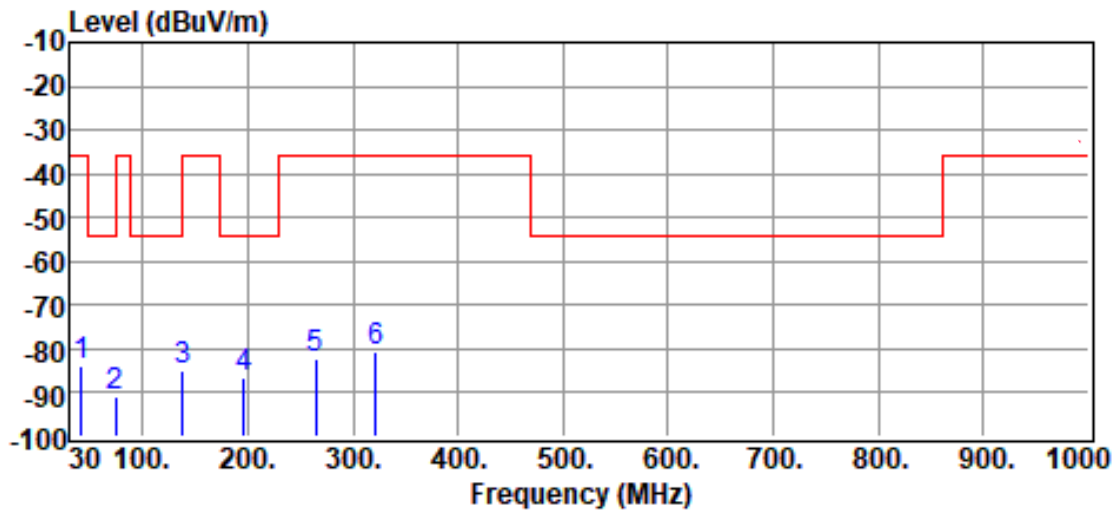


Site	:Chamber#2	Date	:2023-03-16
Limit	:FCC 15.209	Ant. Pol.	:VERTICAL
EUT	: XS WIRELESS	Model	:SK-XSW
Power Rating	:Battery 1.5V *2	Temp.	:22 °C
Engineer	:Brian Huang	Humi.	:60 %
Test Mode	:Operation Mode (2472MHz)		

	Freq MHz	Reading dBuV	Correction Factor dB/m	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
*	39.7000	30.08	-8.83	21.25	40.00	-18.75	QP
	97.9000	30.37	-13.46	16.91	43.50	-26.59	QP
	163.8600	30.74	-11.41	19.33	43.50	-24.17	QP
	207.5100	31.10	-10.09	21.01	43.50	-22.49	QP
	279.2900	30.34	-7.81	22.53	46.00	-23.47	QP
	384.0500	31.00	-4.90	26.10	46.00	-19.90	QP

Note :

1. Result = Reading + Correction Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Correction Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.
6. " \* " mean this data is the worst emission level.

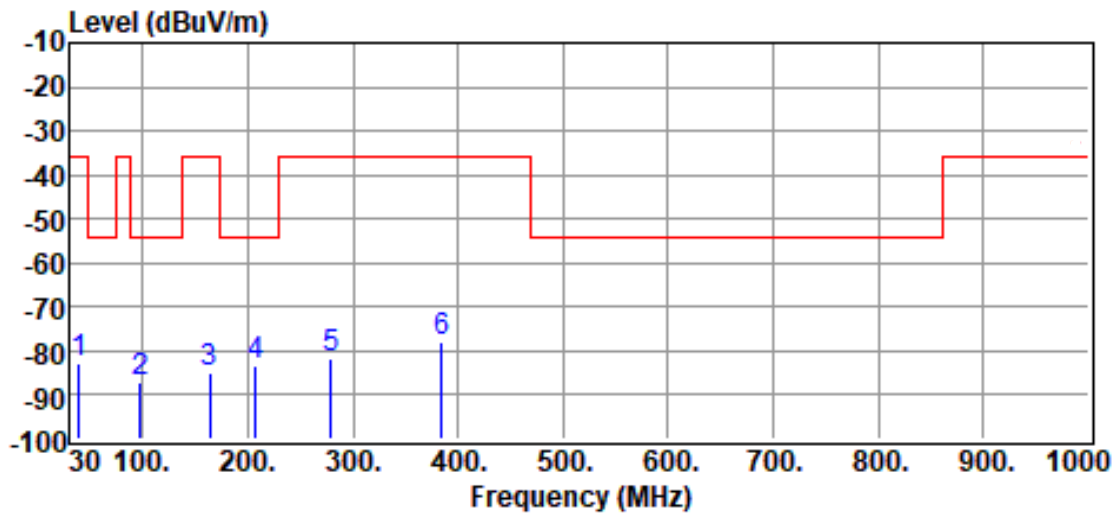


Site	:Chamber#2	Date	:2023-03-16
Limit	: FCC 15.236(g)	Ant. Pol.	:HORIZONTAL
EUT	: XS WIRELESS	Model	:SK-XSW
Power Rating	:Battery 1.5V*2	Temp.	:22 °C
Engineer	:Brian Huang	Humi.	:60 %
Test Mode	:Operation Mode (571.65MHz)		

	Freq MHz	Reading dBuV	Correction Factor dB/m	Result dBm	Limits dBm	Over limit dB	Detector
	41.6400	30.46	-114.39	-83.93	-36.00	-47.93	Peak
	74.6200	29.77	-120.83	-91.06	-36.00	-55.06	Peak
	138.6400	30.04	-115.04	-85.00	-36.00	-49.00	Peak
*	196.8400	30.37	-116.88	-86.51	-54.00	-32.51	Peak
	264.7400	29.91	-112.37	-82.46	-36.00	-46.46	Peak
	321.9700	30.24	-110.57	-80.33	-36.00	-44.33	Peak

Note :

1. Result = Reading + Correction Factor
2. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)-EIRP Factor  
{ EIRP Factor = -101.2dB (9kHz-30MHz) or -99.9dB (30MHz-1GHz)  
or -95.2dB (1GHz Above)}
3. The margin value=Limit - Result
4. " \* " mean this data is the worst emission level.



Site	:Chamber#2	Date	:2023-03-16
Limit	: FCC 15.236(g)	Ant. Pol.	:VERTICAL
EUT	: XS WIRELESS	Model	:SK-XSW
Power Rating	:Battery 1.5V*2	Temp.	:22 °C
Engineer	:Brian Huang	Humi.	:60 %
Test Mode	:Operation Mode (571.65MHz)		

	Freq MHz	Reading dBuV	Correction Factor dB/m	Result dBm	Limits dBm	Over limit dB	Detector
	39.7000	30.08	-113.03	-82.95	-36.00	-46.95	Peak
	97.9000	30.38	-117.66	-87.25	-54.00	-33.25	Peak
	163.8600	30.74	-115.61	-84.87	-36.00	-48.87	Peak
*	207.5100	31.10	-114.29	-83.19	-54.00	-29.19	Peak
	279.2900	30.34	-112.01	-81.67	-36.00	-45.67	Peak
	384.0500	31.00	-109.10	-78.10	-36.00	-42.10	Peak

Note :

1. Result = Reading + Correction Factor
2. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)-EIRP Factor  
{ EIRP Factor = -101.2dB (9kHz-30MHz) or -99.9dB (30MHz-1GHz)  
or -95.2dB (1GHz Above)}
3. The margin value=Limit - Result
4. ” \* ” mean this data is the worst emission level.

b) Emission frequencies above 1 GHz

Radiated emission frequencies above 1 GHz to 26.5 GHz were too low to be measured with a pre-amplifier of 35 dB and only the worst case has been presented in this report.

c) Emission frequencies below 30MHz (9kHz - 30MHz)

According to 15.31, (o) The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators that are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.

## 6.5 Field Strength Calculation

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:

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

where Corrected Factor

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

## 6.6 Photos of Radiation Measuring Setup

