

TEST REPORT

Application No.: SHCR2406001115AT
FCC ID: 2A4AE-SS-WXC02
Applicant: Pujiang Yuansheng Electronic Commerce Co., Ltd
Address of Applicant: No.388, Yidianhong Road Pujiang Country Zhejiang province, P.R China
Manufacturer: Pujiang Yuansheng Electronic Commerce Co., Ltd
Address of Manufacturer: No.388, Yidianhong Road Pujiang Country Zhejiang province, P.R China
Factory: Zhejiang Puzhao Optoelectronics Technology Co., Ltd.
Address of Factory: No.1200 Hongye Avenue, XianhuaStreet,Pujiang County,Jinhua City,Zhejiang Province. P.R.China

Equipment Under Test (EUT):

EUT Name: Wireless Charging Pad
Model No.: SS-WXC02
Trade Mark: SANSI
Standard(s) : 47 CFR Part 18
Date of Receipt: 2024-06-14
Date of Test: 2024-06-18 to 2024-06-25
Date of Issue: 2024-07-11

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.

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Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

SHEM-TRF-001 Rev. 02 Sep01, 2023

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Revision Record			
Version	Description	Date	Remark
00	Original	2024-07-11	/

Authorized for issue by:				
Tested By		Bill Wu		
		Bill Wu/Project Engineer		
Approved By		Parlam Zhan		
		Parlam Zhan / Reviewer		

2 Test Summary

Emission Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at Mains Terminals (9kHz-30MHz)	47 CFR Part 18	FCC/OST MP-5:1986	18.305(b)	Pass
Radiated Emissions (Magnetic field Strength)(9kHz-30MHz)		FCC/OST MP-5:1986	18.305(b)	Pass
Radiated Emissions (30MHz-1GHz)		FCC/OST MP-5:1986	18.305(b)	Pass

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4 General Information

4.1 Details of E.U.T.

Power supply:	DC 5V 1A
Test voltage:	AC 120V 60Hz by Adapter
Operation frequency:	148KHz
Wireless Output power:	5W Max
Antenna type:	Inductive Loop Coil Antenna
Modulation Type:	Load Modulation

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Resistance load	-	-	-
Adapter	MASS POWER	ED2-050100UE	-

4.3 Measurement Uncertainty & Decision Rule

No.	Item	Measurement Uncertainty (U_{Lab})	U_{CISPR}
1	Conducted Emission at mains port using AMN	3.4dB (9kHz to 150kHz)	3.8dB (9kHz to 150kHz)
		2.9dB (150kHz to 30MHz)	3.4dB (150kHz to 30MHz)
2	Conducted Emission at mains port using VP	2.2dB (9kHz to 30MHz)	2.9dB (9kHz to 30MHz)
3	Conducted Emission at telecommunication port using AAN	4.6dB (150kHz to 30MHz)	5.0dB (150kHz to 30MHz)
4	Radiated Power	3.4dB (30MHz to 300MHz)	4.5dB (30MHz to 300MHz)
5	Radiated emission	5.7dB (30MHz-1GHz)	6.3dB (30MHz-1GHz)
		4.8dB (1GHz-6GHz)	5.2dB (1GHz-6GHz)
		5.0dB (6GHz-18GHz)	5.5dB (6GHz-18GHz)
6	Radiated disturbance (disturbance current in a LLAS)	2.6dB (9kHz to 30MHz)	3.3dB (9kHz to 30MHz)

Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Decision Rule:

- CISPR 16-4-2 for emission measurements is as below described.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.

U_{LAB} less than U_{CISPR} , therefore:

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. E&E Lab
588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China

Tel: +86 21 6191 5666 Fax: +86 21 6191 5678

No tests were sub-contracted.

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g. max. clock frequency, highest internal frequency, antenna gain, cable loss, etc) is provided by the applicant. (if applicable).
2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (if applicable).
3. Sample source: sent by customer.

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **A2LA (Certificate No. 6332.01)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. is accredited by the American Association for Laboratory Accreditation(A2LA).

- **FCC (Designation Number: CN1301)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been recognized as an accredited testing laboratory.

- **ISED (CAB Identifier: CN0020)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. EMC Laboratory has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.
Company Number: 8617A

- **VCCI (Member No.: 3061)**

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-13868, C-14336, T-12221, G-10830 respectively.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None

5 Equipment List

Conducted Emissions at Mains Terminals (9kHz-30MHz)					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
EMI test receiver	Rohde & Schwarz	ESR7	SHEM162-1	2023/12/19	2024/12/18
Line impedance stabilization network	SCHWARZBECK	NSLK8127	SHEM061-1	2023/12/19	2024/12/18
Line impedance stabilization network	EMCO	3816_2	SHEM019-1	2023/12/19	2024/12/18
Pulse limiter	Rohde & Schwarz	ESH3-Z2	SHEM029-1	2023/12/19	2024/12/18
Shielding Room	ZHONGYU	8*4*3M	SHEM079-2	2023/12/19	2024/12/18
CE test Cable	/	/	SHEM172-1	2023/12/19	2024/12/18
Test Software	ESE	e3	Version: 6.191211	N/A	N/A
3 Phase LISN	SCHWARZBECK	NNLK 8129 RC	SHME035-4	2023/09/19	2024/09/18
3 Phase LISN	Beijing Kehuan	KH3765-100	SHEM292-1	2024/03/12	2025/03/11

Radiated Emissions (Magnetic field Strength)(9kHz-30MHz)					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
EMI test receiver	Rohde & Schwarz	ESU40	SHEM051-1	2023/12/19	2024/12/18
EMI test receiver	Rohde & Schwarz	ESR7	SHEM201-1	2023/08/01	2024/07/31
CONTROLLER	INNCO	CO2000	SHEM047-1	N/A	N/A
ANTENNA MAST	INNCO	MA400-EP	SHEM047-2	N/A	N/A
TURN DEVICE	INNCO	DE 3600-RH	SHEM047-3	N/A	N/A
Broadband UHF-VHF ANTENNA	SCHWARZBECK	VULB9168	SHEM048-1	2023/09/03	2025/09/02
Broadband UHF-VHF ANTENNA	SCHWARZBECK	VULB9168	SHEM202-1	2023/04/17	2025/04/16
Loop antenna (9kHz-30MHz)	Schwarzbeck	FMZB1519	SHEM135-1	2023/12/19	2024/12/18
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2023/05/06	2026/05/05
RE test Cable	/	/	SHEM217-2	2023/12/19	2024/12/18
Test Software	ESE	e3	Version: 6.191211	N/A	N/A
Semi/Fully Anechoic	TIANDE	9*6*6M	SHEM198-1	2024/05/06	2027/05/05

Radiated Emissions (30MHz-1GHz)					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
EMI test receiver	Rohde & Schwarz	ESU40	SHEM051-1	2023/12/19	2024/12/18
EMI test receiver	Rohde & Schwarz	ESR7	SHEM201-1	2023/08/01	2024/07/31
CONTROLLER	INNCO	CO2000	SHEM047-1	N/A	N/A
ANTENNA MAST	INNCO	MA400-EP	SHEM047-2	N/A	N/A
TURN DEVICE	INNCO	DE 3600-RH	SHEM047-3	N/A	N/A
Broadband UHF-VHF ANTENNA	SCHWARZBECK	VULB9168	SHEM048-1	2023/09/03	2025/09/02
Broadband UHF-VHF	SCHWARZBECK	VULB9168	SHEM202-1	2023/04/17	2025/04/16



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ANTENNA					
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2023/05/06	2026/05/05
Pre-amplifier	HP	8447D	SHEM236-1	2023/12/19	2024/12/18
Pre-amplifier	HP	8447D	SHEM143-1	2023/12/19	2024/12/18
RE test Cable	/	/	SHEM217-2	2023/12/19	2024/12/18
Test Software	ESE	e3	Version: 6.191211	N/A	N/A
Semi/Fully Anechoic	TIANDE	9*6*6M	SHEM198-1	2024/05/06	2027/05/05

General used equipment					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Atmospheric Pressure Meter	Nanjing XiangRuiDe	DYM3	SHEM082-2	2024-01-18	2027-01-17
Temperature&humidity recorder	ShangHai weather meter work	ZJ 1-2B	SHEM042-9~10	2023-12-29	2024-12-28
Temperature&humidity recorder	ShangHai weather meter work	ZJ 1-2B	SHEM042-5	2023-07-23	2024-07-22
Digital Temperature& humidity recorder	Jianda Renke	RS-WS-N01-6J	SHEM247-1~8	2024-01-13	2025-01-12
Digital Multimeter	FLUKE	17B+	SHEM271-1	2023-07-19	2024-07-18
Autoformer regulator	Guangzhou bao de	TDGC2-5KVA	SHEM150-1	N/A	N/A
Multi-purpose tong tester	FLUKE	317	SHEM001-2	2023-11-08	2024-11-07

6 Emission Test Results

6.1 Conducted Emissions at Mains Terminals (9kHz-30MHz)

Test Requirement: 47 CFR Part 18

Test Method: FCC/OST MP-5:1986

6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C

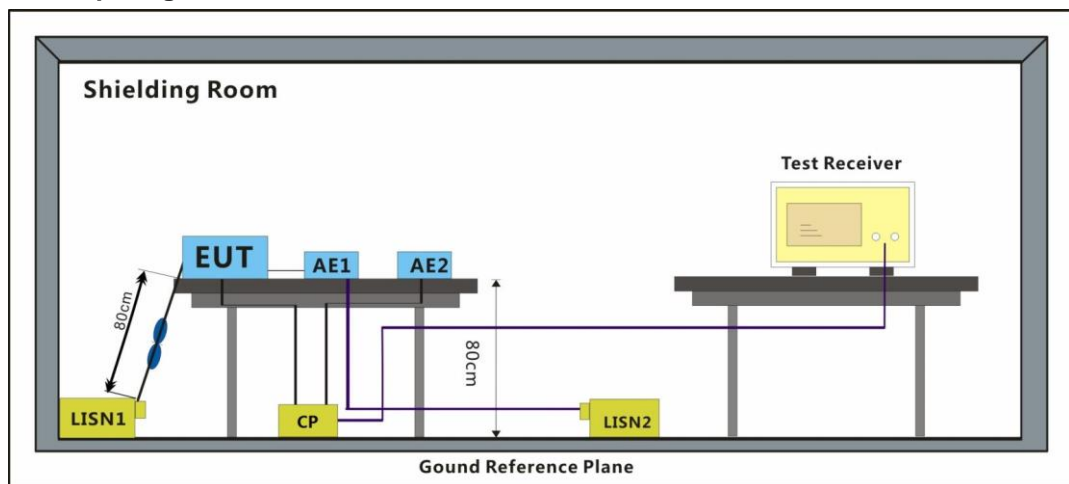
Humidity: 50 % RH

Atmospheric Pressure: 1010 mbar

6.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Wireless discharging mode_Keep the EUT discharging continuously,All power rate(5W;2.5W;0W) have been tested and found the worst case mode, Only the data of worst case power rate 5W is recorded in the report.

6.1.3 Test Setup Diagram



6.1.4 Measurement Procedure and Data

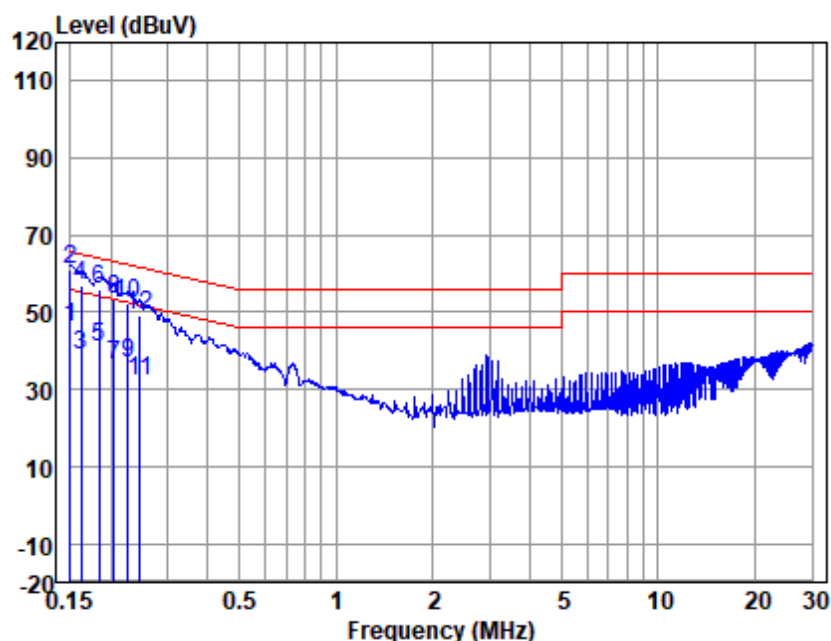
Frequency range: 9KHz-30MHz

An initial pre-scan was performed with peak detector. Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected.

The red line show in graphic is the limit in standard used in this section.

Measured Level = Read level + Cable Loss + LISN Factor

Test Mode: 00; Line: Live line

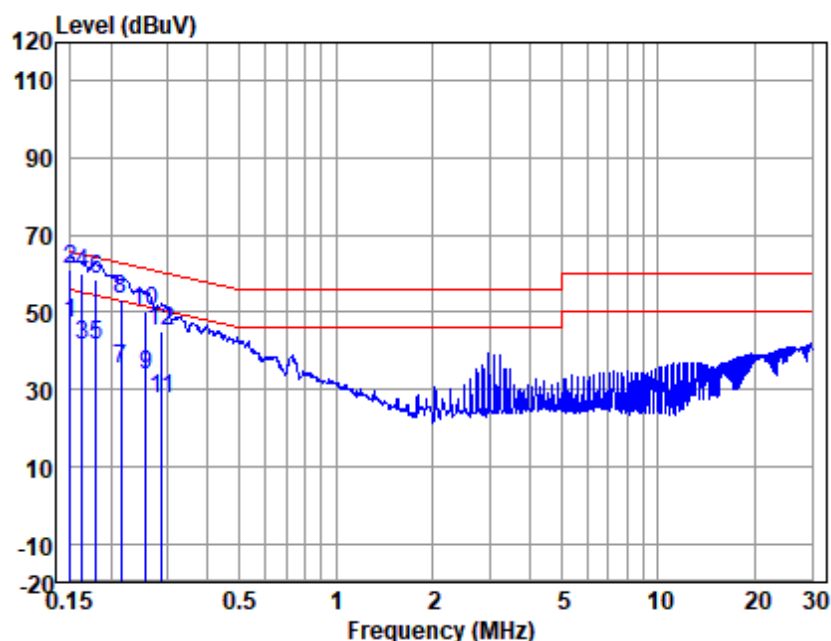


LISN : LINE
EUT/Project No : 1115AT
Test Mode : 00

	Freq (MHz)	Read level (dBuV)	LISN Factor (dB)	Cable Loss (dB)	Emission Level (dBuV)	Limit (dBuV)	Over Limit (dB)	Remark
1	0.15	35.89	0.50	9.90	46.29	56.00	-9.71	Average
2	0.15	50.46	0.50	9.90	60.86	66.00	-5.14	QP
3	0.16	28.30	0.50	9.90	38.70	55.38	-16.68	Average
4	0.16	46.48	0.50	9.90	56.88	65.38	-8.50	QP
5	0.18	30.40	0.50	9.90	40.80	54.33	-13.53	Average
6	0.18	45.56	0.50	9.90	55.96	64.33	-8.37	QP
7	0.20	26.07	0.49	9.90	36.46	53.45	-16.99	Average
8	0.20	42.84	0.49	9.90	53.23	63.45	-10.22	QP
9	0.23	26.30	0.46	9.90	36.66	52.57	-15.91	Average
10	0.23	42.19	0.46	9.90	52.55	62.57	-10.02	QP
11	0.25	21.64	0.43	9.90	31.97	51.86	-19.89	Average
12	0.25	38.72	0.43	9.90	49.05	61.86	-12.81	QP

Notes: Emission Level = Read Level + LISN Factor + Cable loss

Test Mode: 00; Line: Neutral Line



LISN : NEUTRAL
EUT/Project No : 1115AT
Test Mode : 00

	Freq (MHz)	Read level (dBuV)	LISN Factor (dB)	Cable Loss (dB)	Emission Level (dBuV)	Limit (dBuV)	Over Limit (dB)	Remark
1	0.15	37.01	0.34	9.90	47.25	56.00	-8.75	Average
2	0.15	51.07	0.34	9.90	61.31	66.00	-4.69	QP
3	0.16	31.19	0.33	9.90	41.42	55.34	-13.92	Average
4	0.16	49.64	0.33	9.90	59.87	65.34	-5.47	QP
5	0.18	31.24	0.32	9.90	41.46	54.50	-13.04	Average
6	0.18	48.49	0.32	9.90	58.71	64.50	-5.79	QP
7	0.22	24.88	0.30	9.90	35.08	53.01	-17.93	Average
8	0.22	43.13	0.30	9.90	53.33	63.01	-9.68	QP
9	0.26	23.58	0.30	9.90	33.78	51.51	-17.73	Average
10	0.26	40.25	0.30	9.90	50.45	61.51	-11.06	QP
11	0.29	17.56	0.30	9.90	27.76	50.59	-22.83	Average
12	0.29	34.93	0.30	9.90	45.13	60.59	-15.46	QP

Notes: Emission Level = Read Level + LISN Factor + Cable loss

6.2 Radiated Emissions (Magnetic field Strength)(9kHz-30MHz)

Test Requirement: 47 CFR Part 18

Test Method: FCC/OST MP-5:1986

6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C

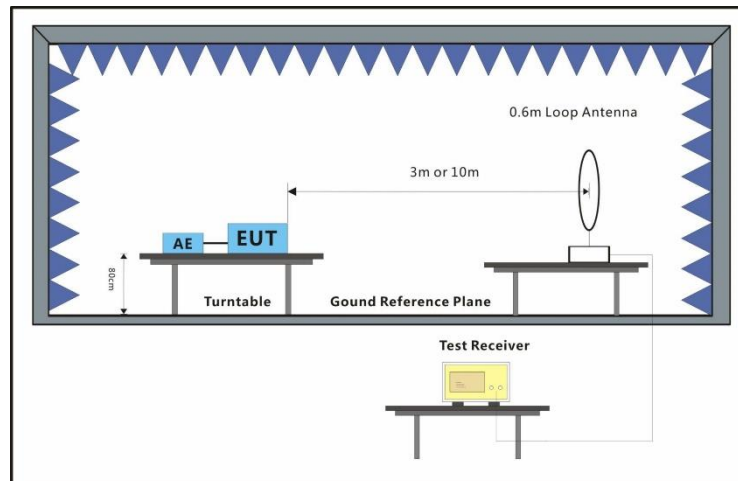
Humidity: 50 % RH

Atmospheric Pressure: 1010 mbar

6.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Wireless discharging mode_Keep the EUT discharging continuously,All power rate(5W;2.5W;0W) have been tested and found the worst case mode, Only the data of worst case power rate 5W is recorded in the report.

6.2.3 Test Setup Diagram



6.2.4 Measurement Procedure and Data

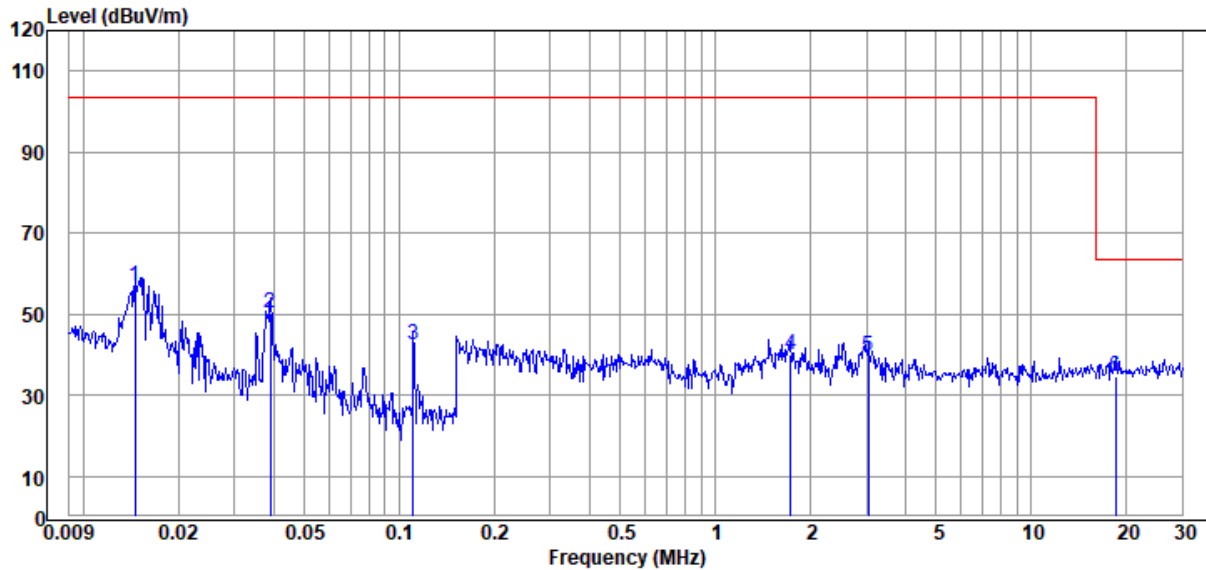
Frequency range: 9KHz-30MHz

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode.

Average measurements were conducted based on the peak sweep graph. The EUT was measured by loop antenna with 2 orthogonal polarities.

The red line show in graphic is the limit in standard used in this section.

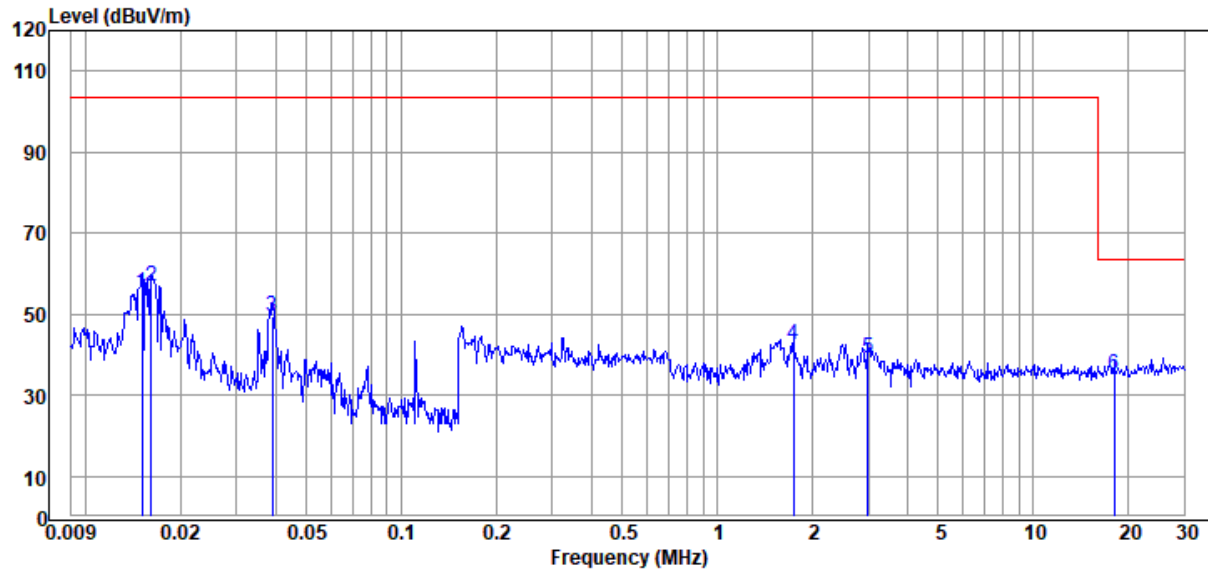
Level=Read Level + Antenna Factor + Cable Loss - Preamp Factor



Item	Freq.	Read Level	Antenna Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBμV)	(dBμA/μVm)	(dB)	(dBμA/m)	(dBμA/m)	(dB)		
1	0.015	39.09	17.73	0.20	57.02	103.50	-46.48	QP	HORIZONTAL
2	0.039	32.70	17.31	0.20	50.21	103.50	-53.29	QP	HORIZONTAL
3	0.110	25.17	17.20	0.20	42.57	103.50	-60.93	QP	HORIZONTAL
4	1.726	22.32	17.58	0.20	40.10	103.50	-63.40	QP	HORIZONTAL
5	3.046	21.84	17.71	0.20	39.75	103.50	-63.75	QP	HORIZONTAL
6	18.43 9	16.41	17.84	0.33	34.58	63.50	-28.92	QP	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - Preamplifier Factor

2. If Peak Result comply with QP limit, QP Result is deemed to comply with QP limit



Item	Freq.	Read Level	Antenna Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBμV)	(dBμA/μV/m)	(dB)	(dBμA/m)	(dBμA/m)	(dB)		
1	0.015	37.50	17.70	0.20	55.40	103.50	-48.10	QP	VERTICAL
2	0.016	38.88	17.65	0.20	56.73	103.50	-46.77	QP	VERTICAL
3	0.039	32.08	17.31	0.20	49.59	103.50	-53.91	QP	VERTICAL
4	1.740	24.56	17.58	0.20	42.34	103.50	-61.16	QP	VERTICAL
5	2.997	21.41	17.70	0.20	39.31	103.50	-64.19	QP	VERTICAL
6	17.996	17.04	17.83	0.33	35.20	63.50	-28.30	QP	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - Preamp Factor

2. If Peak Result comply with QP limit, QP Result is deemed to comply with QP limit

6.3 Radiated Emissions (30MHz-1GHz)

Test Requirement: 47 CFR Part 18
Test Method: FCC/OST MP-5:1986

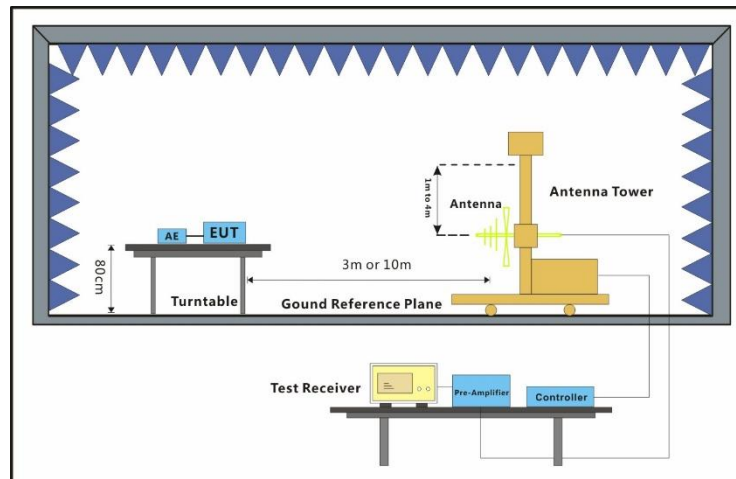
6.3.1 E.U.T. Operation

Operating Environment:
Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1010 mbar

6.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Wireless discharging mode_Keep the EUT discharging continuously,All power rate(5W;2.5W;0W) have been tested and found the worst case mode, Only the data of worst case power rate 5W is recorded in the report.

6.3.3 Test Setup Diagram



6.3.4 Measurement Procedure and Data

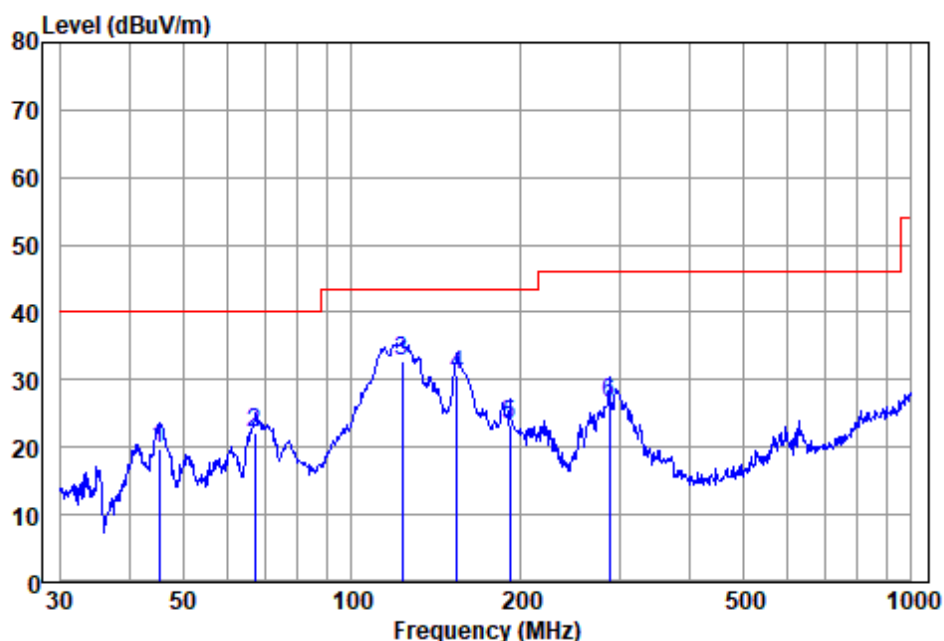
Frequency range: 30MHz-1GHz

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Average measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.

The red line show in graphic is the limit in standard used in this section.

Level=Read Level + Antenna Factor + Cable Loss - Preamp Factor

Test Mode: 00; Polarity: Horizontal



Antenna Polarity :HORIZONTAL

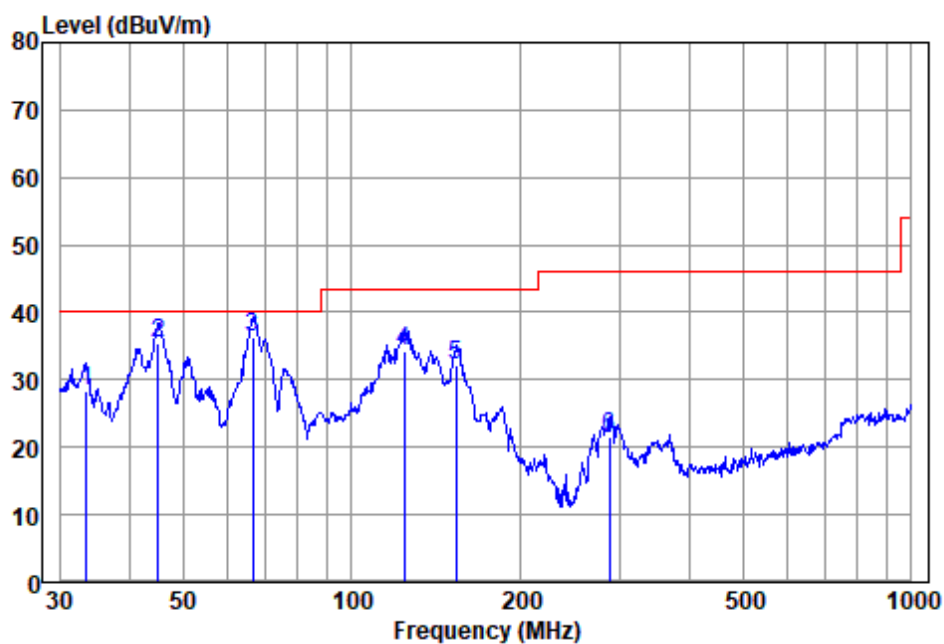
EUT/Project :1115AT

Test mode :00

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	45.217	37.88	13.72	1.34	33.20	19.74	40.00	-20.26	QP
2	67.202	41.69	12.03	1.63	33.20	22.15	40.00	-17.85	QP
3	122.834	51.97	11.30	2.46	33.10	32.63	43.50	-10.87	QP
4	154.279	47.39	13.80	2.62	33.00	30.81	43.50	-12.69	QP
5	191.745	42.82	10.48	2.91	33.00	23.21	43.50	-20.29	QP
6	287.990	42.46	13.04	3.73	32.80	26.43	46.00	-19.57	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 00; Polarity: Vertical



Antenna Polarity :VERTICAL

EUT/Project :1115AT

Test mode :00

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	33.562	48.02	12.36	1.21	33.20	28.39	40.00	-11.61	QP
2	45.058	53.57	13.70	1.33	33.20	35.40	40.00	-4.60	QP
3	66.499	55.64	12.15	1.62	33.20	36.21	40.00	-3.79	QP
4	124.133	53.47	11.40	2.46	33.09	34.24	43.50	-9.26	QP
5	153.739	48.85	13.80	2.61	33.00	32.26	43.50	-11.24	QP
6	287.990	37.49	13.04	3.73	32.80	21.46	46.00	-24.54	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

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7 Test Setup Photo

Refer to Appendix - Test Setup Photo for SHCR2406001115AT

8 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for SHCR2406001115AT

- End of the Report -