




TEST REPORT

FCC ID.	2BGPI-SNW009	
Test Report No.	TCT240522E020	
Date of issue	May 30, 2024	
Testing laboratory	SHENZHEN TONGCE TESTING LAB	
Testing location/ address:	2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China	
Applicant's name	Shenzhen ZOGI Technology Limited	
Address	A303, Donglian Building, Chuangye 2nd Road, Bao an District, Shenzhen, China	
Manufacturer's name ...	Shenzhen ZOGI Technology Limited	
Address	A303, Donglian Building, Chuangye 2nd Road, Bao an District, Shenzhen, China	
Standard(s)	FCC CFR Title 47 Part 15 Subpart C	
Product Name	Easy Charge 15 S	
Trade Mark	N/A	
Model/Type reference	SNW009	
Rating(s)	Input: DC 9V, 1.67A Output: 15W	
Date of receipt of test item	May 22, 2024	
Date (s) of performance of test	May 22, 2024 ~ May 30, 2024	
Tested by (+signature) ...	Yannie ZHONG	
Check by (+signature)	Beryl ZHAO	
Approved by (+signature):	Tomsin	



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1. General Product Information

1.1. EUT description

Product Name.....:	Easy Charge 15 S
Model/Type reference.....:	SNW009
Sample Number.....:	TCT240522E020-0101
Operation Frequency	108.65kHz ~ 165.38kHz
Output power	15W
Modulation Technology	Load modulation
Antenna Type.....:	Inductive loop coil Antenna
Rating(s).....:	Input: DC 9V, 1.67A Output: 15W

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

1.2. Model(s) list

None.

2. Test Result Summary

Requirement	CFR 47 Section	Result
Antenna requirement	§15.203	PASS
AC Power Line Conducted Emission	§15.207	PASS
Spurious Emission	§15.209(a)(f)	PASS

Note:

1. PASS: Test item meets the requirement.
2. Fail: Test item does not meet the requirement.
3. N/A: Test case does not apply to the test object.
4. The test result judgment is decided by the limit of test standard.

3. General Information

3.1. Test environment and mode

Operating Environment:		
Condition	Conducted Emission	Radiated Emission
Temperature:	24.4 °C	24.1 °C
Humidity:	51 % RH	54 % RH
Atmospheric Pressure:	1010 mbar	1010 mbar
Test Mode:		
	Mode 1	AC/DC adapter(DC 9V) + EUT + Mobile Phone (battery status>95%)
	Mode 2	AC/DC adapter(DC 9V) + EUT + Mobile Phone (battery status<50%)
	Mode 3	AC/DC adapter(DC 9V) + EUT + Mobile Phone (battery status<1%)
Remark	All modes have been tested. The worst mode (Mode 1) reported for Conducted emission test and The worst mode (Mode 1) reported for Radiated emission test	
<p>The sample was placed 0.8m for the measurement below above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case(Z axis) are shown in Test Results of the following pages.</p>		

3.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
Adapter	EP-TA200	R37R55T6KL2SE3	/	SAMSUNG
Load	/	/	/	/

Note:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4. Facilities and Accreditations

4.1. Facilities

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

- FCC - Registration No.: 645098

SHENZHEN TONGCE TESTING LAB

Designation Number: CN1205

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A-1

SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

4.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China

TEL: +86-755-27673339

4.3. Measurement Uncertainty

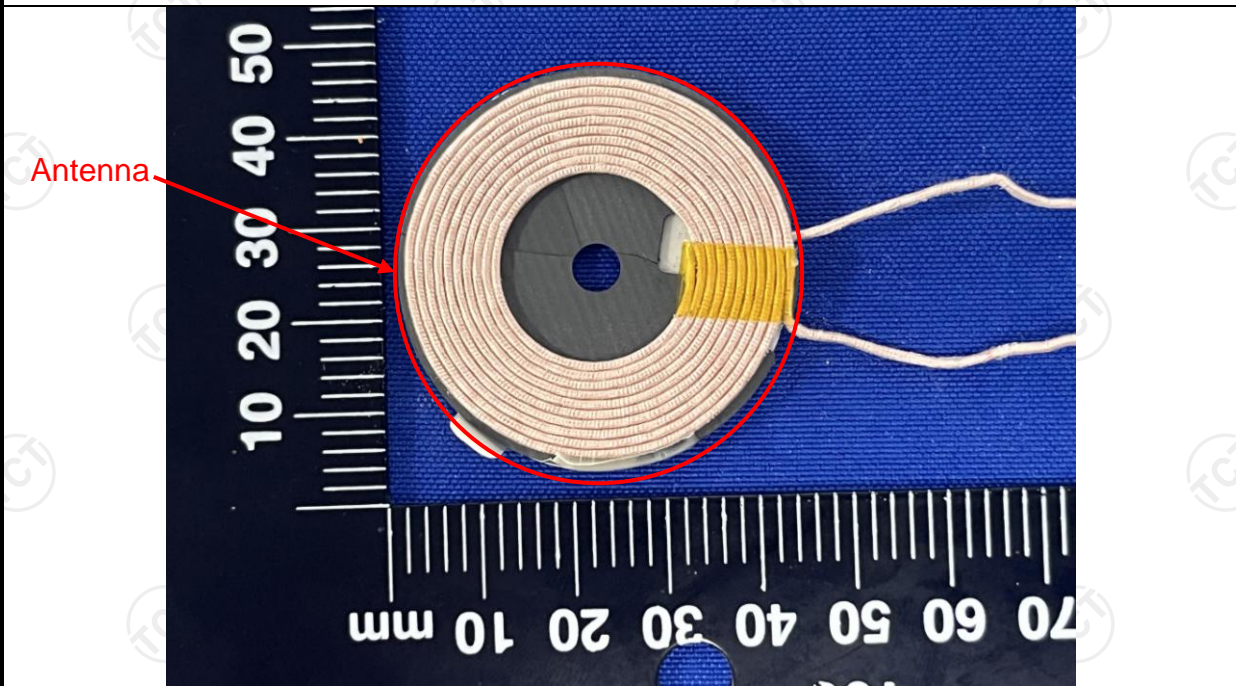
The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	MU
1	Conducted Emission	± 3.10 dB
2	RF power, conducted	± 0.12 dB
3	Spurious emissions, conducted	± 0.11 dB
4	All emissions, radiated(<1 GHz)	± 4.56 dB
5	All emissions, radiated(1 GHz - 18 GHz)	± 4.22 dB
6	All emissions, radiated(18 GHz- 40 GHz)	± 4.36 dB

5. Test Results and Measurement Data

5.1. Antenna requirement

Standard requirement:	FCC Part15 C Section 15.203
15.203 requirement: 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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.	
E.U.T Antenna:	
The antenna is inductive loop coil antenna which permanently attached.	



5.2. Conducted Emission

5.2.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.207														
Test Method:	ANSI C63.10: 2013														
Frequency Range:	150 kHz to 30 MHz														
Receiver setup:	RBW=9 kHz, VBW=30 kHz, Sweep time=auto														
Limits:	<table border="1"> <thead> <tr> <th rowspan="2">Frequency range (MHz)</th> <th colspan="2">Limit (dBuV)</th> </tr> <tr> <th>Quasi-peak</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td>0.15-0.5</td> <td>66 to 56*</td> <td>56 to 46*</td> </tr> <tr> <td>0.5-5</td> <td>56</td> <td>46</td> </tr> <tr> <td>5-30</td> <td>60</td> <td>50</td> </tr> </tbody> </table>	Frequency range (MHz)	Limit (dBuV)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dBuV)														
	Quasi-peak	Average													
0.15-0.5	66 to 56*	56 to 46*													
0.5-5	56	46													
5-30	60	50													
Test Setup:	<p><i>Remark</i> E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m</p>														
Test Mode:	Refer to item 3.1														
Test Procedure:	<ol style="list-style-type: none"> 1. The E.U.T is connected to an adapter through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement. 														
Test Result:	PASS														

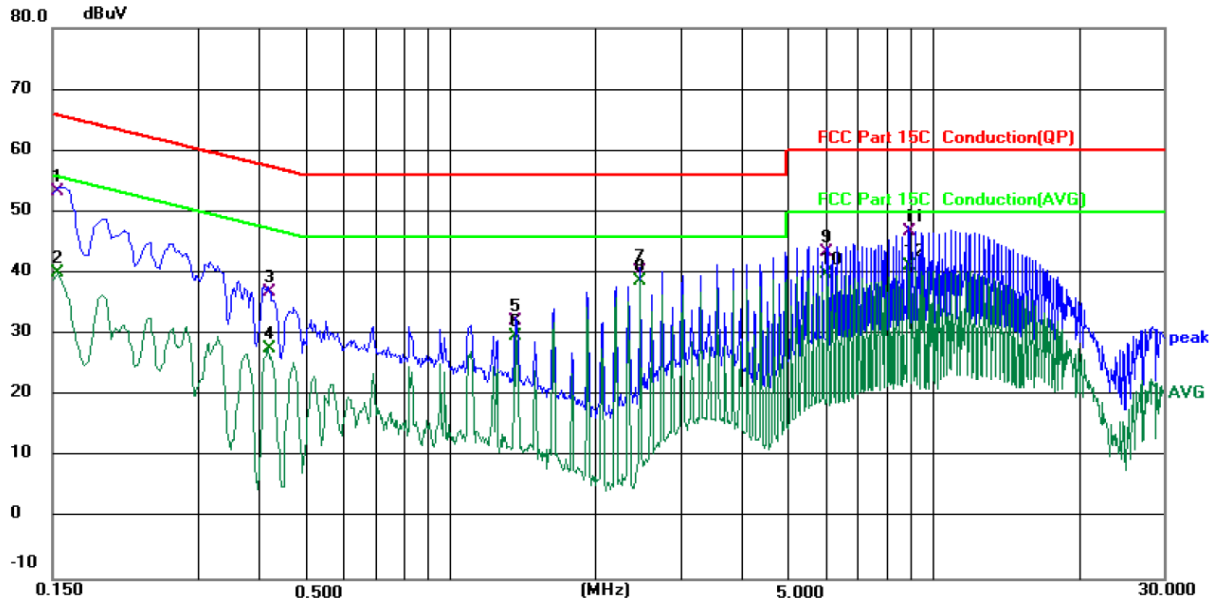
5.2.2. Test Instruments

Conducted Emission Shielding Room Test Site (843)				
Equipment	Manufacturer	Model	Serial Number	Calibration Due
EMI Test Receiver	R&S	ESCI3	100898	Jun. 29, 2024
Line Impedance Stabilisation Newtork(LISN)	Schwarzbeck	NSLK 8126	8126453	Jan. 31, 2025
Line-5	TCT	CE-05	/	Jul. 03, 2024
EMI Test Software	Shurple Technology	EZ-EMC	/	/

5.2.3. Test data

Please refer to following diagram for individual

Conducted Emission on Line Terminal of the power line (150 kHz to 30MHz)



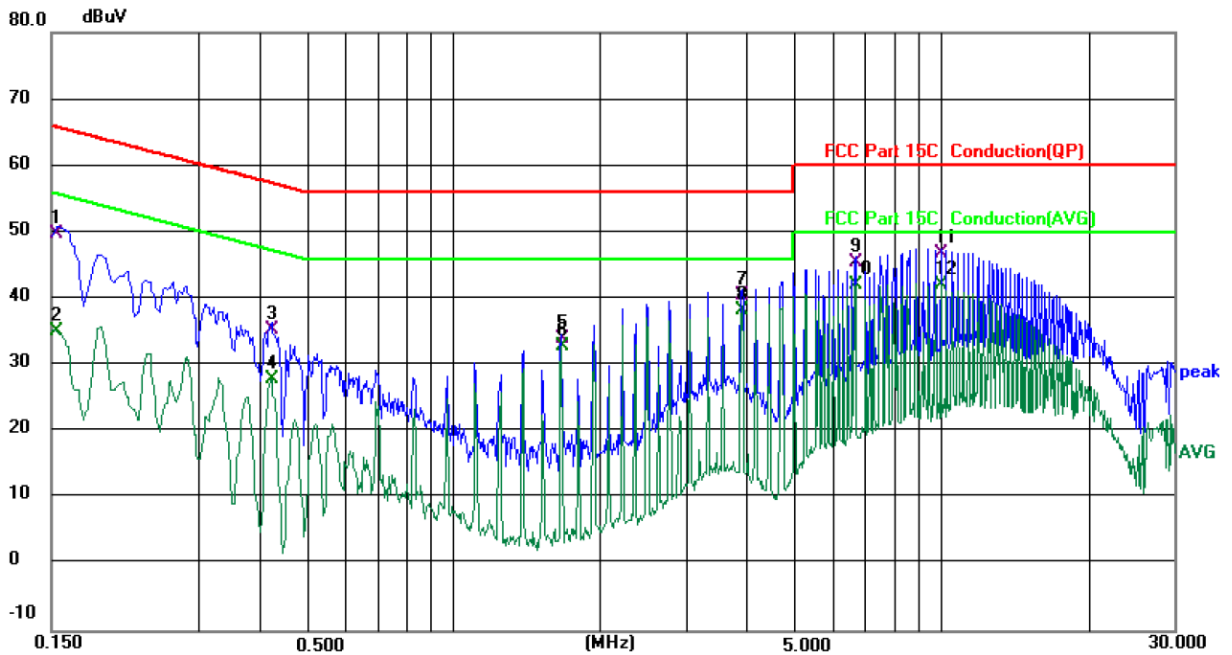
Site 844 Shielding Room Phase: L1 Temperature: 24.4 (°C) Humidity: 51 %
Limit: FCC Part 15C Conduction(QP) Power: DC 9 V(Adapter Input AC 120 V/ 60 Hz)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1539	43.22	10.02	53.24	65.79	-12.55	QP	
2		0.1539	30.02	10.02	40.04	55.79	-15.75	AVG	
3		0.4179	27.61	9.41	37.02	57.49	-20.47	QP	
4		0.4179	18.36	9.41	27.77	47.49	-19.72	AVG	
5		1.3660	22.20	9.95	32.15	56.00	-23.85	QP	
6		1.3660	19.71	9.95	29.66	46.00	-16.34	AVG	
7		2.4780	30.15	10.10	40.25	56.00	-15.75	QP	
8	*	2.4780	28.62	10.10	38.72	46.00	-7.28	AVG	
9		6.0540	33.01	10.47	43.48	60.00	-16.52	QP	
10		6.0540	29.34	10.47	39.81	50.00	-10.19	AVG	
11		8.8819	36.29	10.58	46.87	60.00	-13.13	QP	
12		8.8819	30.68	10.58	41.26	50.00	-8.74	AVG	

Note:

- Freq. = Emission frequency in MHz
- Reading level (dBuV) = Receiver reading
- Corr. Factor (dB) = LISN factor + Cable loss
- Measurement (dBuV) = Reading level (dBuV) + Corr. Factor (dB)
- Limit (dBuV) = Limit stated in standard
- Margin (dB) = Measurement (dBuV) – Limits (dBuV)
- Q.P. =Quasi-Peak
- AVG =average
- * is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz

Conducted Emission on Neutral Terminal of the power line (150 kHz to 30MHz)



Site 844 Shielding Room

Phase: **N**

Temperature: 24.4 (°C)

Humidity: 51 %

Limit: FCC Part 15C Conduction(QP)

Power: DC 9 V(Adapter Input AC 120 V/ 60 Hz)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1532	39.68	10.00	49.68	65.82	-16.14	QP	
2		0.1532	25.19	10.00	35.19	55.82	-20.63	AVG	
3		0.4220	26.05	9.39	35.44	57.41	-21.97	QP	
4		0.4220	18.55	9.39	27.94	47.41	-19.47	AVG	
5		1.6660	24.08	9.93	34.01	56.00	-21.99	QP	
6		1.6660	22.84	9.93	32.77	46.00	-13.23	AVG	
7		3.9220	30.38	10.20	40.58	56.00	-15.42	QP	
8	*	3.9220	28.07	10.20	38.27	46.00	-7.73	AVG	
9		6.6660	35.02	10.45	45.47	60.00	-14.53	QP	
10		6.6660	31.64	10.45	42.09	50.00	-7.91	AVG	
11		9.9940	36.19	10.62	46.81	60.00	-13.19	QP	
12		9.9940	31.53	10.62	42.15	50.00	-7.85	AVG	

Note:

Freq. = Emission frequency in MHz

Reading level (dBuV) = Receiver reading

Corr. Factor (dB) = LISN factor + Cable loss

Measurement (dBuV) = Reading level (dBuV) + Corr. Factor (dB)

Limit (dBuV) = Limit stated in standard

Margin (dB) = Measurement (dBuV) – Limits (dBuV)

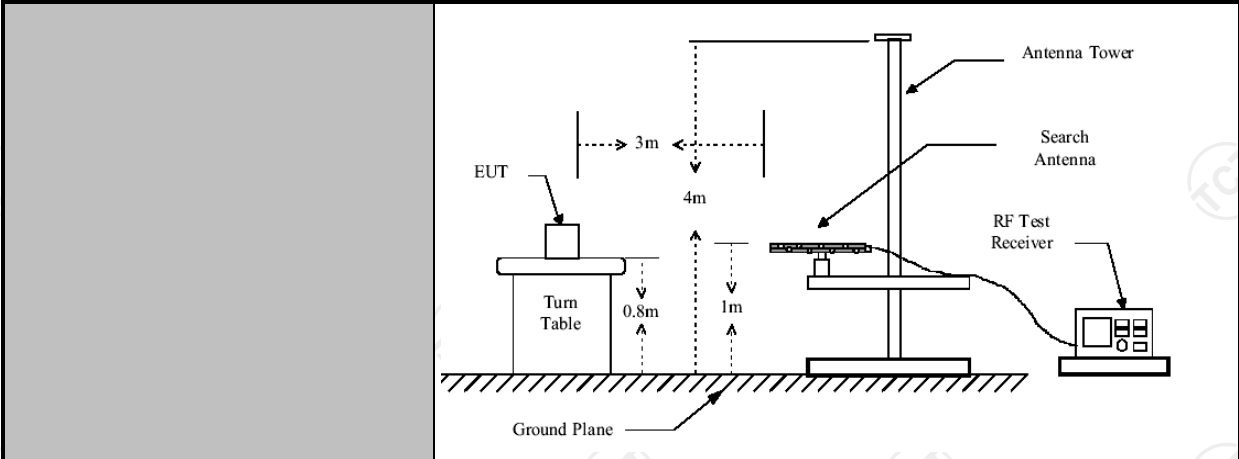
Q.P. =Quasi-Peak AVG =average

* is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz

5.3. Radiated Spurious Emission Measurement

5.3.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.209				
Test Method:	ANSI C63.10: 2013				
Frequency Range:	9 kHz to 25 GHz				
Measurement Distance:	3 m				
Antenna Polarization:	Horizontal & Vertical				
Operation mode:	Refer to item 3.1				
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	9kHz- 150kHz	Quasi-peak	200Hz	1kHz	Quasi-peak Value
	150kHz- 30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value
	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value
Limit:	Frequency	Field Strength (microvolts/meter)	Measurement Distance (meters)		
	0.009-0.490	2400/F(KHz)	300		
	0.490-1.705	24000/F(KHz)	30		
	1.705-30	30	30		
	30-88	100	3		
	88-216	150	3		
	216-960	200	3		
	Above 960	500	3		
Test setup:	For radiated emissions below 30MHz				
	<p>30MHz to 1GHz</p>				



Test Procedure:

1. For the radiated emission test below 1GHz:
The EUT was placed on a turntable with 0.8 meter above ground. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high PASS filter are used for the test in order to get better signal level.
2. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
3. For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
4. Use the following spectrum analyzer settings:
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Set RBW=120 kHz for $f < 1$ GHz; VBW \geq RBW; Sweep = auto; Detector function = peak; Trace = max hold;
 - (3) Set RBW = 1 MHz, VBW= 3MHz for $f \square 1$ GHz for peak measurement.

For average measurement: VBW = 10 Hz, when duty cycle is no less than 98 percent. VBW $\geq 1/T$, when duty cycle is less than 98 percent 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.

Test mode:

Refer to section 3.1 for details

Test results:

PASS

5.3.2. Test Instruments

Radiated Emission Test Site (966)				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
EMI Test Receiver	R&S	ESIB7	100197	Jun. 29, 2024
Spectrum Analyzer	R&S	FSQ40	200061	Jun. 29, 2024
Pre-amplifier	SKET	LNPA_0118G-45	SK2021012102	Jan. 31, 2025
Pre-amplifier	SKET	LNPA_1840G-50	SK202109203500	Jan. 31, 2025
Pre-amplifier	HP	8447D	2727A05017	Jun. 27, 2024
Loop antenna	Schwarzbeck	FMZB1519B	00191	Jul. 02, 2024
Broadband Antenna	Schwarzbeck	VULB9163	340	Jul. 01, 2024
Antenna Mast	Keleto	RE-AM	/	/
Coaxial cable	SKET	RC-18G-N-M	/	Jan. 31, 2025
Coaxial cable	SKET	RC_40G-K-M	/	Jan. 31, 2025
EMI Test Software	Shurple Technology	EZ-EMC	/	/

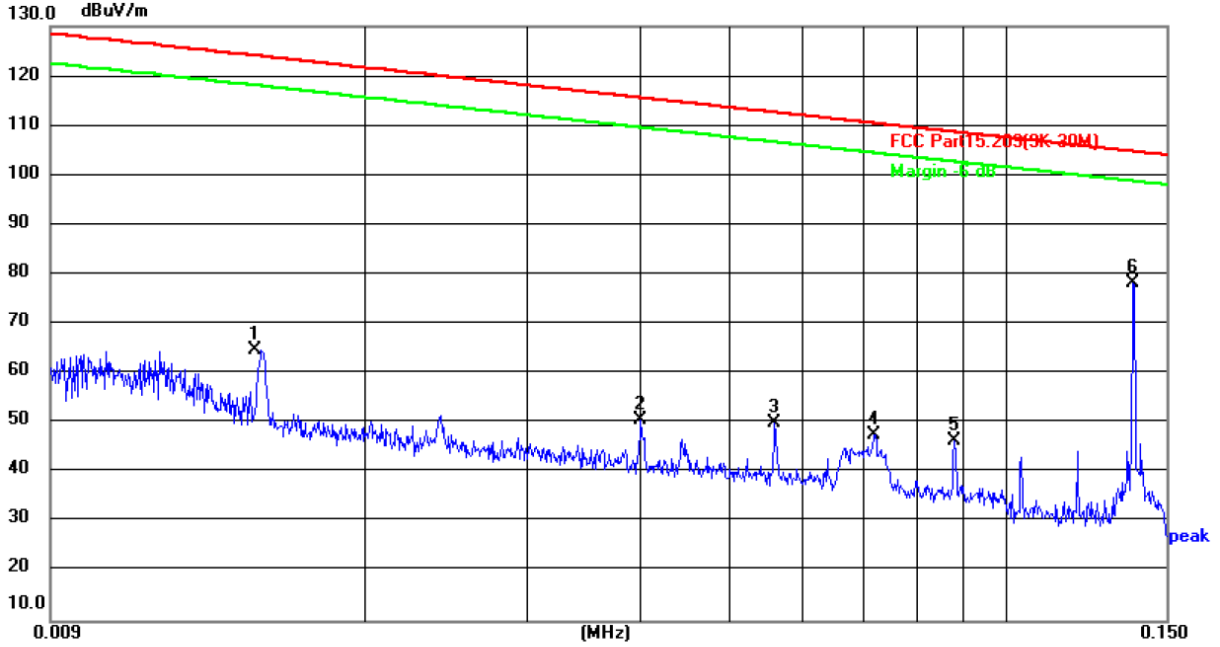
5.3.3. Test Data

Please refer to following diagram for individual

9KHz-30MHz

9KHz-150KHz:

Coaxial:



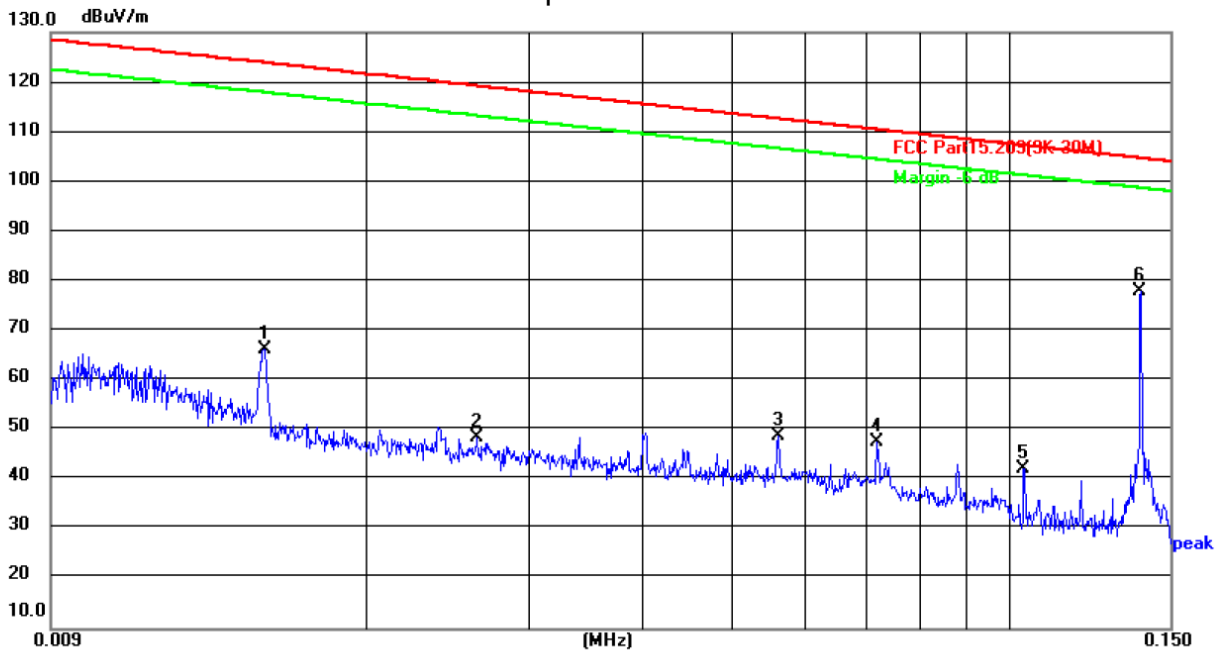
Site: 3m Anechoic Chamber Polarization: **Coaxial** Temperature: 23.3(°C) Humidity: 52 %

Limit: FCC Part15.209(9K-30M)

Power:DC 9 V(Adapter Input AC 120 V/60 Hz)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	0.0151	44.43	20.32	64.75	124.03	-59.28	peak	P	
2	0.0400	30.48	20.29	50.77	115.56	-64.79	peak	P	
3	0.0560	29.77	20.30	50.07	112.64	-62.57	peak	P	
4	0.0719	27.50	20.25	47.75	110.47	-62.72	peak	P	
5	0.0879	26.13	20.30	46.43	108.72	-62.29	peak	P	
6 *	0.1381	57.93	20.28	78.21	104.80	-26.59	peak	P	

Coplanar:



Site: 3m Anechoic Chamber

Polarization: **Coplanar**

Temperature: 23.3(°C)

Humidity: 52 %

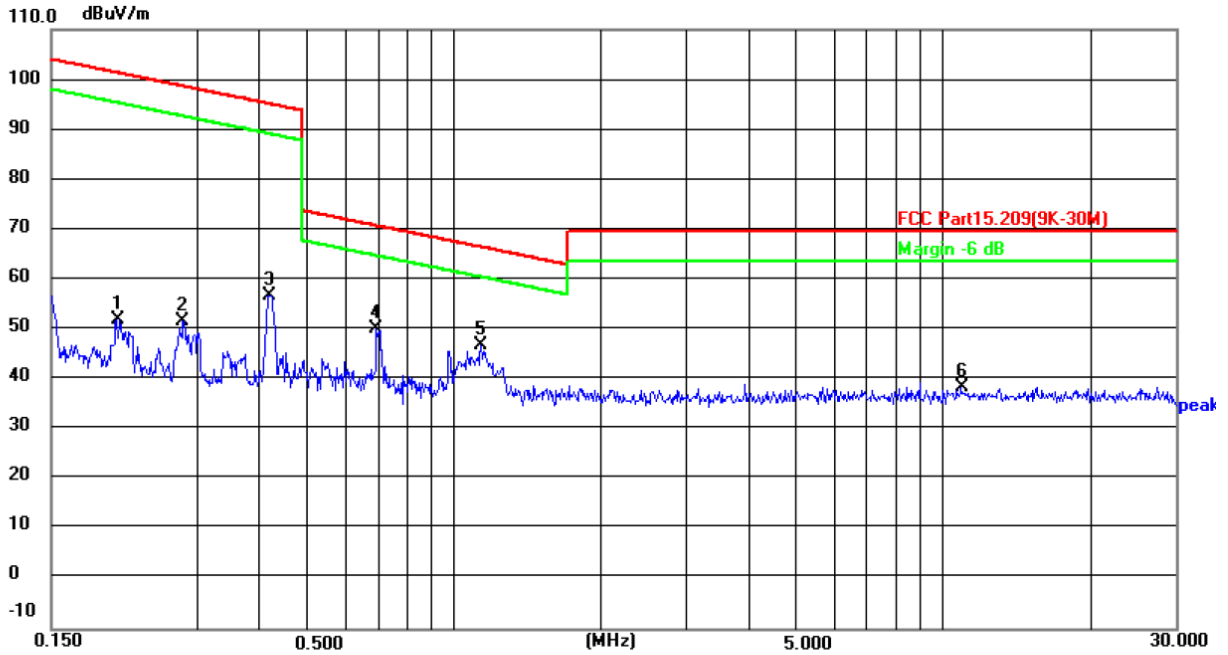
Limit: FCC Part15.209(9K-30M)

Power:DC 9 V(Adapter Input AC 120 V/60 Hz)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	0.0152	46.07	20.32	66.39	123.97	-57.58	peak	P	
2	0.0263	28.33	20.29	48.62	119.21	-70.59	peak	P	
3	0.0560	28.40	20.30	48.70	112.64	-63.94	peak	P	
4	0.0719	27.32	20.25	47.57	110.47	-62.90	peak	P	
5	0.1039	21.67	20.53	42.20	107.27	-65.07	peak	P	
6 *	0.1392	57.79	20.26	78.05	104.73	-26.68	peak	P	

150KHz-30MHz:

Coaxial:



Site: 3m Anechoic Chamber

Polarization: **Coaxial**

Temperature: 23.3(°C)

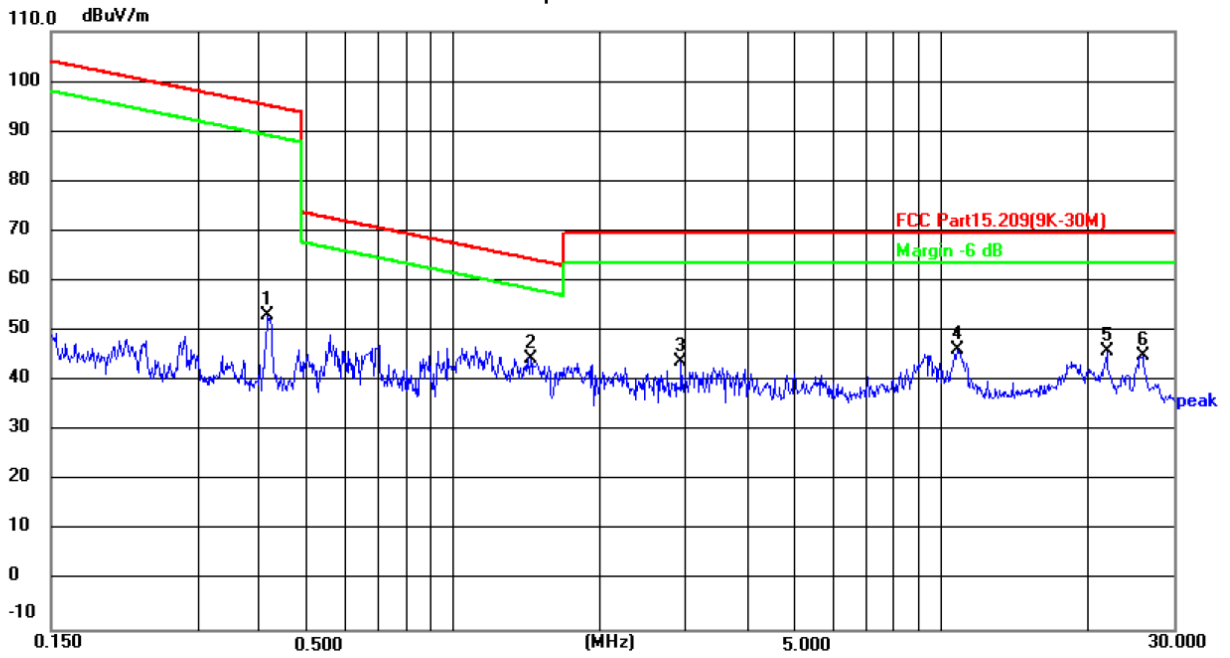
Humidity: 52 %

Limit: FCC Part15.209(9K-30M)

Power:DC 9 V(Adapter Input AC 120 V/60 Hz)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	0.2045	31.86	20.20	52.06	101.39	-49.33	peak	P	
2	0.2802	31.42	20.33	51.75	98.65	-46.90	peak	P	
3	0.4200	36.28	20.58	56.86	95.14	-38.28	peak	P	
4	0.6965	29.14	21.08	50.22	70.75	-20.53	peak	P	
5 *	1.1400	24.81	21.90	46.71	66.49	-19.78	peak	P	
6	10.9223	-2.68	41.23	38.55	69.50	-30.95	peak	P	

Coplanar:



Site: 3m Anechoic Chamber

Polarization: **Coplanar**

Temperature: 23.3(°C)

Humidity: 52 %

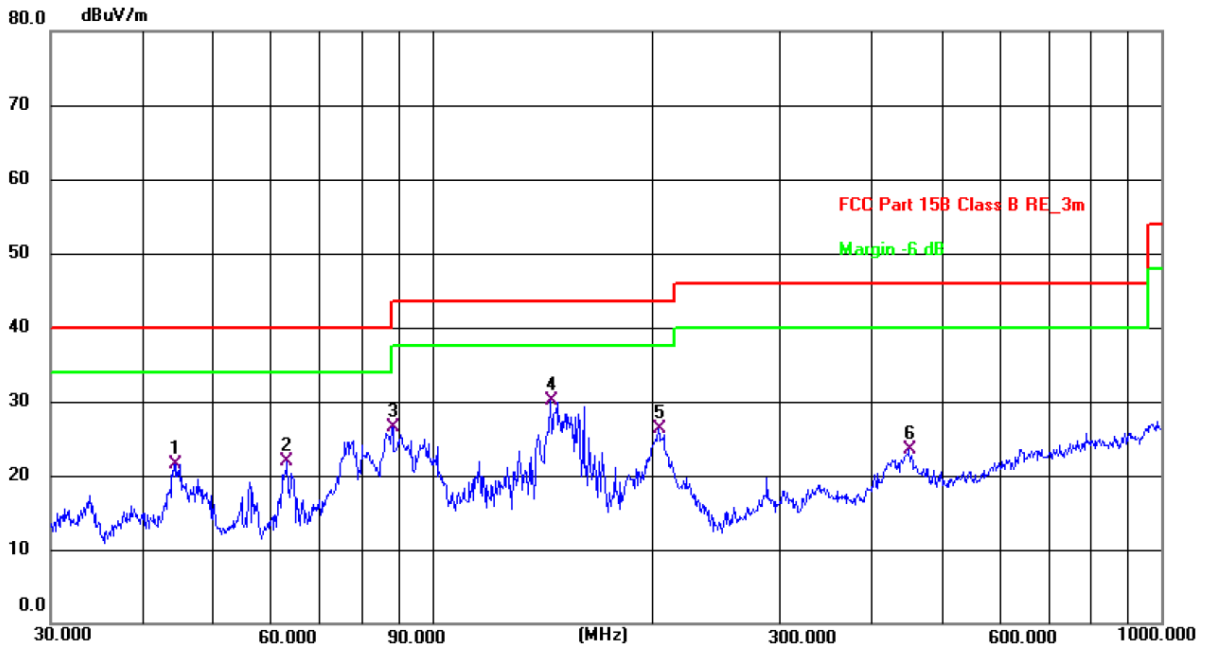
Limit: FCC Part15.209(9K-30M)

Power:DC 9 V(Adapter Input AC 120 V/60 Hz)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	0.4183	32.56	20.58	53.14	95.17	-42.03	peak	P	
2 *	1.4415	22.08	22.50	44.58	64.45	-19.87	peak	P	
3	2.9415	18.48	25.51	43.99	69.50	-25.51	peak	P	
4	10.8300	5.08	41.07	46.15	69.50	-23.35	peak	P	
5	21.8765	27.15	18.75	45.90	69.50	-23.60	peak	P	
6	25.8775	26.46	18.63	45.09	69.50	-24.41	peak	P	

30MHz-1GHz

Horizontal:



Site 3m Anechoic Chamber Polarization: **Horizontal** Temperature: 24.1(C) Humidity: 54 %

Limit: FCC Part 15B Class B RE_3m Power: DC 9 V(Adapter Input AC 120 V/ 60 Hz)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	44.2752	39.92	-18.34	21.58	40.00	-18.42	QP	P	
2	63.3132	40.81	-18.95	21.86	40.00	-18.14	QP	P	
3	88.0329	48.58	-22.03	26.55	43.50	-16.95	QP	P	
4 *	145.3506	47.40	-17.37	30.03	43.50	-13.47	QP	P	
5	204.2377	47.00	-20.66	26.34	43.50	-17.16	QP	P	
6	451.1350	36.85	-13.28	23.57	46.00	-22.43	QP	P	

Vertical:



Site 3m Anechoic Chamber Polarization: **Vertical** Temperature: 24.1(C) Humidity: 54 %

Limit: FCC Part 15B Class B RE_3m

Power: DC 9 V(Adapter Input AC 120 V/ 60 Hz)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	45.3755	49.54	-18.35	31.19	40.00	-8.81	QP	P	
2	63.7588	47.53	-19.05	28.48	40.00	-11.52	QP	P	
3 *	97.7983	60.80	-21.25	39.55	43.50	-3.95	QP	P	
4 !	163.7550	55.66	-17.01	38.65	43.50	-4.85	QP	P	
5	200.6881	50.38	-20.74	29.64	43.50	-13.86	QP	P	
6	294.1137	39.27	-17.04	22.23	46.00	-23.77	QP	P	

Note:

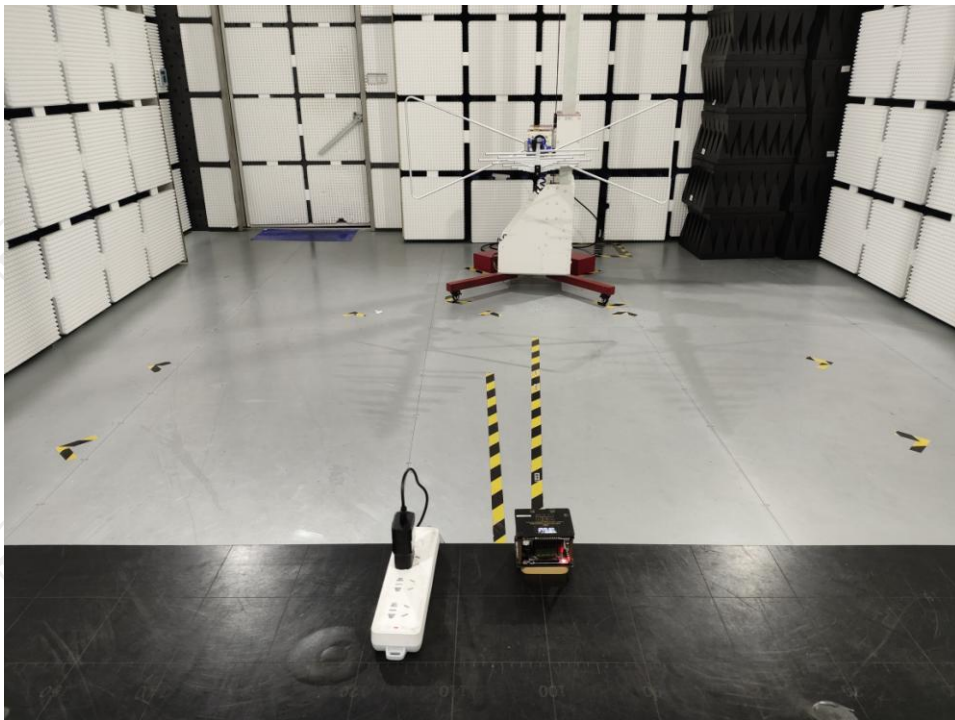
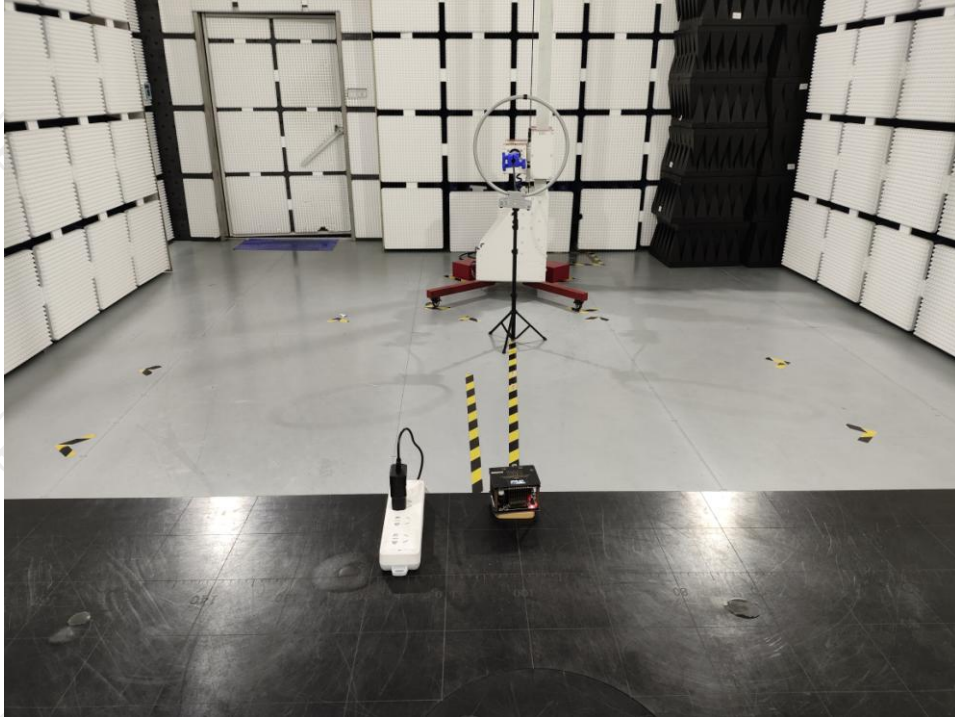
Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier

Appendix A: Photographs of Test Setup

Product: Easy Charge 15 S

Model: SNW009

Radiated Emission

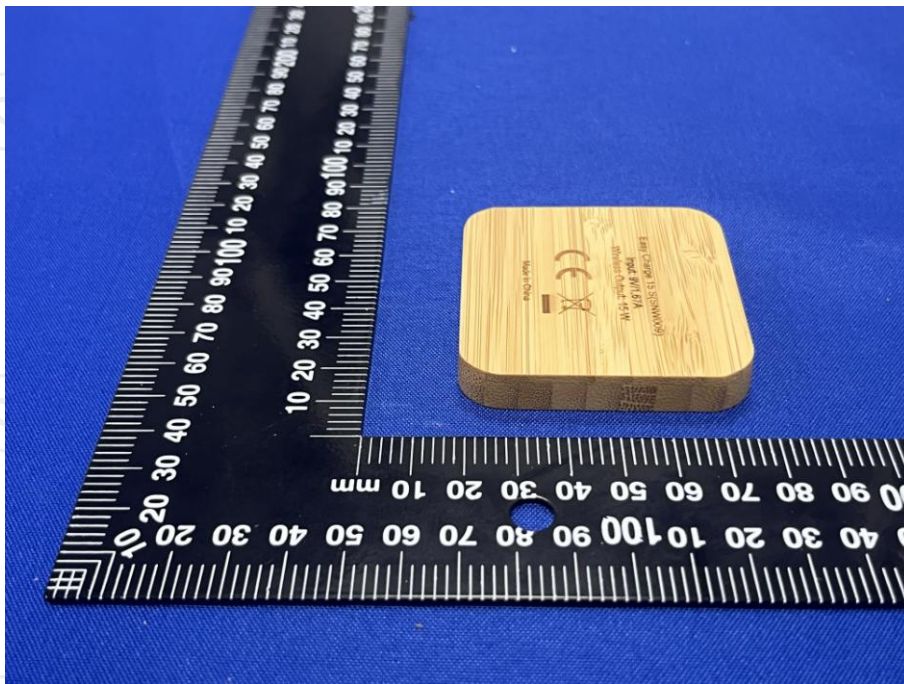
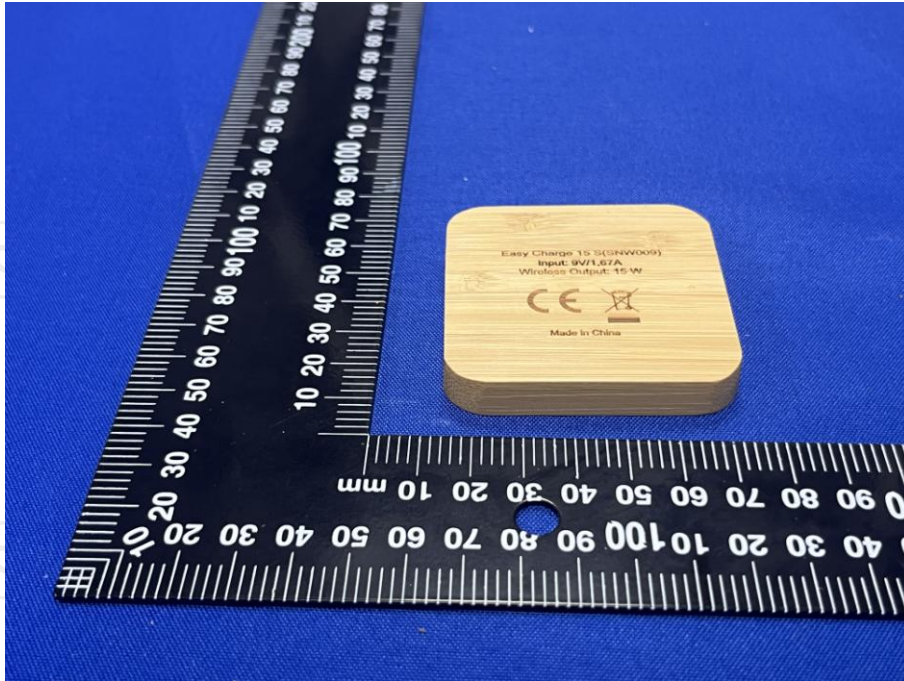


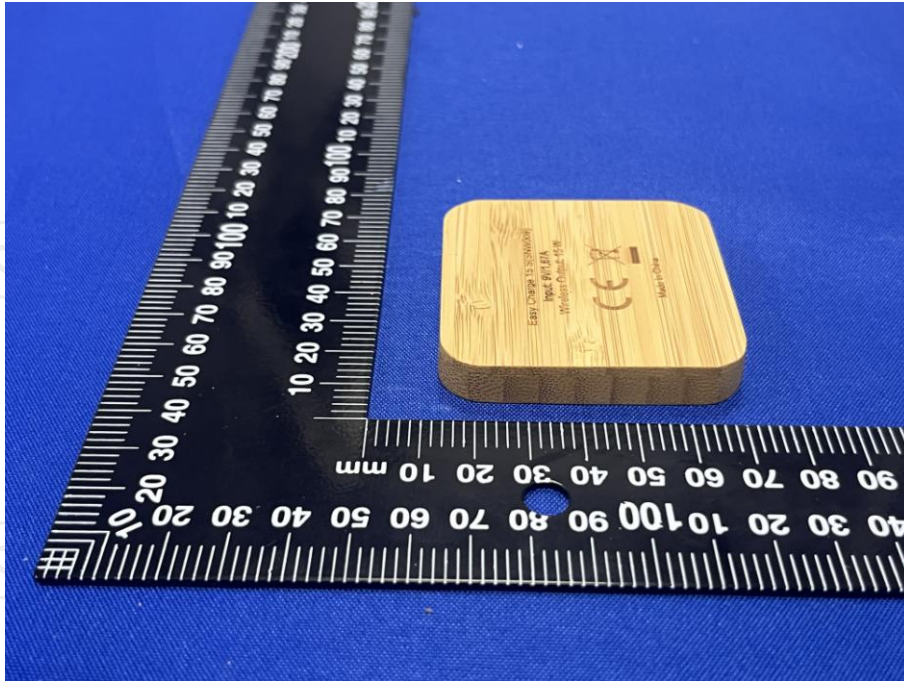
Conducted Emission



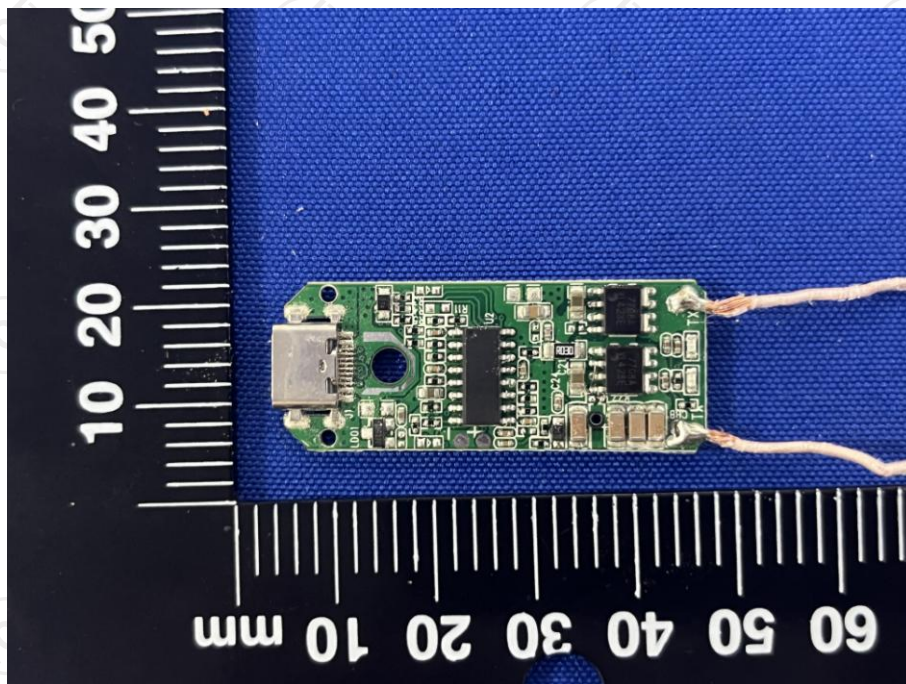
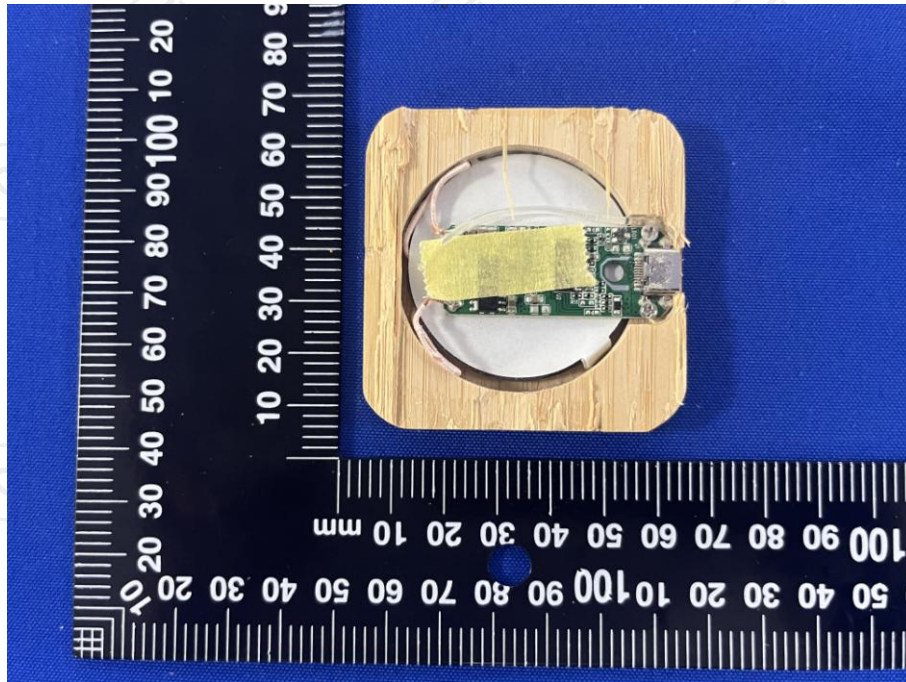
Appendix B: Photographs of EUT
Product: Easy Charge 15 S
Model: SNW009
External Photos

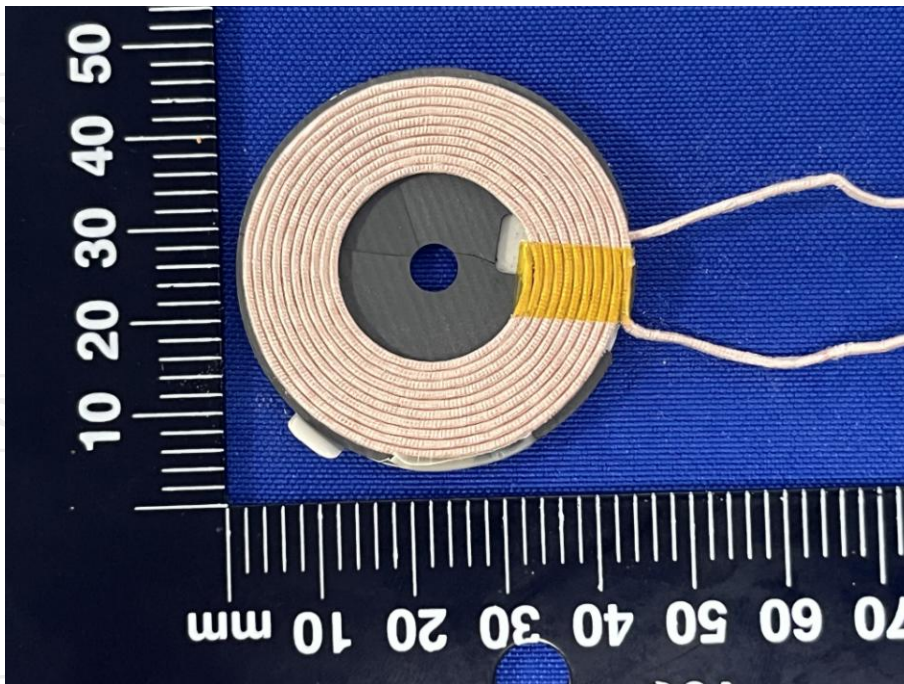
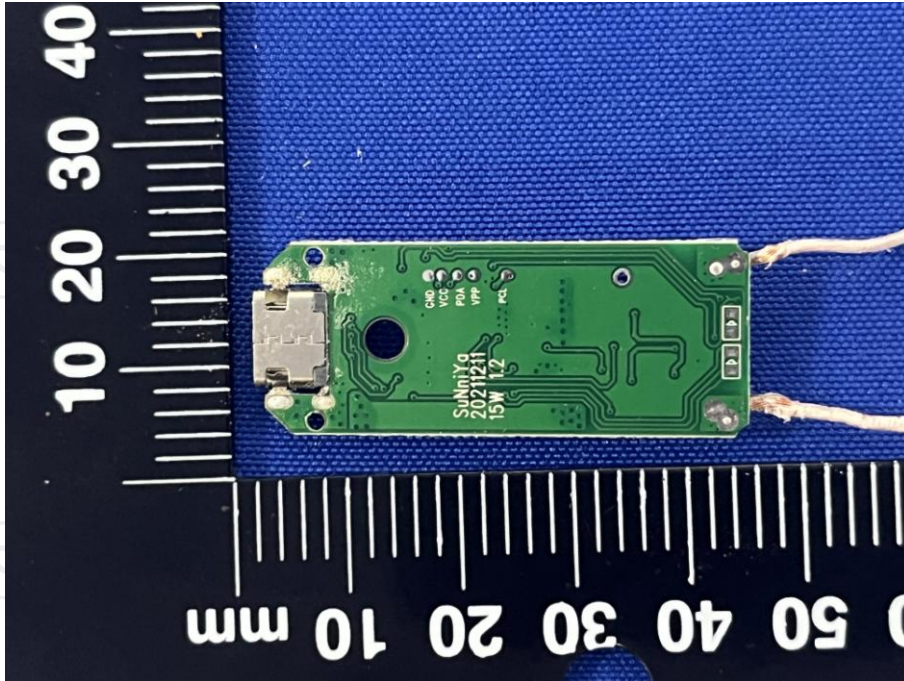






Product: Easy Charge 15 S
Model: SNW009
Internal Photos





*****END OF REPORT*****