ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT
INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 15 SUBPART C REQUIREMENT

OF

MagSafe 15W Wireless Charging Stand

Model No.: JUPW1107NP, JUPW1107CNP, JUPW1107RNP

Trademark: J5create

FCC ID: 2AD37JUPW1107NP

Report No.: E01A22060043F00201

Issue Date: August 02, 2022

Prepared for

Kaijet Technology International Cporporation.

8th Floor, 109 Zhongcheng Road, Tucheng District, New Taipei City, Taiwan

Prepared by

Dong Guan Anci Electronic Technology Co., Ltd.

1-2 Floor, Building A, No.11, Headquarters 2 Road, Songshan, Lake Hi-tech Industrial Development Zone, Dongguan City, Guangdong Pr., China.

VERIFICATION OF COMPLIANCE

Applicant:	Kaijet Technology International Cporporation. 8th Floor, 109 Zhongcheng Road, Tucheng District, New Taipei City, Taiwan
Manufacturer:	Kaijet Technology International Cporporation. 8th Floor, 109 Zhongcheng Road, Tucheng District, New Taipei City, Taiwan
Factory:	1.SuiChuan CE LINK LIMITED SuiChuan county industrial park east zone, ji'an city, Jiangxi province China. 2.CE LINK VIET NAM COMPANY LIMITED. Lot CNSG04&CNSG06 Van Trung Industrial Zone, Viet Yen district, Bac Giang Province, Vietnam
Product Description:	MagSafe 15W Wireless Charging Stand
Trade Mark:	J5create
Model Number:	JUPW1107NP, JUPW1107CNP, JUPW1107RNP (Note: All models are the same except for the shell color, we choose model: JUPW1107NP for all tests.)

We hereby certify that:

The above equipment was tested by Dong Guan Anci Electronic Technology Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10-2013 and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits of FCC Rules Part 15.209(2022).

Date of Test : July 20, 2022 to August 02, 2022

Prepared by : Tomas Yang/Editor

Reviewer & Authorized Signer : Tiger Xu/ Supervisor

Modified Information

Version	Summary	Revision Date	Report No.
Ver.1.0	Original Report	/	E01A22060043F00201

Table of Contents

1 General Information

1.1 Product Description

Characteristics	Description
Product Name	MagSafe 15W Wireless Charging Stand
Model number	JUPW1107NP
Operation Mode	Wireless Charging
Input Rating	DC 5V, 3A, DC 9V, 2.5A(22.5W Max)
Power Supply	AC120V/60Hz for adapter
Operating Frequency	127.7KHz
Wireless Charging Power	15W Max
Modulation Technique	ASK
Antenna Type	Induction coil
Sample receipt date	July 20, 2022

1.2 Related Submittal(s) / Grant(s)

This submittal(s) (test report) is intended for FCC ID: 2AD37JUPW1107NP filing to comply with the FCC Part 15, Subpart C Rules.

1.3 Test Methodology

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10 (2013). Radiated testing was performed at an antenna to EUT distance 3 meters.

1.4 Special Accessories

Not available for this EUT intended for grant.

1.5 Equipment Modifications

Not available for this EUT intended for grant.

1.6 Test Facility

Site Description

Name of Firm	:	Dong Guan Anci Electronic Technology Co., Ltd.
Site Location	:	1-2 Floor, Building A, No.11, Headquarters 2 Road, Songshan, Lake Hi-tech Industrial Development Zone, Dongguan City,evelopment Zone, Dongguan City, Guangdong Pr., China.

2 System Test Configuration

2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.2 EUT Exercise

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

2.3 Test Procedure

2.3.1 Conducted Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode.

2.3.2 Radiated Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the fixed in a particular direction according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013.

2.4 Configuration of Tested System

Fig. 2-1 Configuration of Tested System

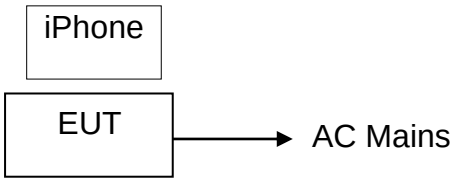


Table 2-1 Equipment Used in Tested System

Item	Equipment	Trade Mark	Model No.	FCC ID	Note
1.	MagSafe 15W Wireless Charging Stand	J5create	JUPW1107NP	2AD37JUPW1107NP	***EUT***
2.	iphone	Apple	A2176	N/A	***Support Equipment***

Note:

(1) Unless otherwise denoted as EUT in『Remark』column, device(s) used in tested system is a support equipment.

3 Summary of Test Results

FCC Rules	Description Of Test	Result
§15.207	AC Power Conducted Emission	Compliant
§15.209	Radiated Emission	Compliant
§2.1049	20dB Bandwidth	Compliant
§15.203	Antenna Requirement	Compliant

4 TEST SYSTEM UNCERTAINTY

The following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Parameter	Uncertainty
Conducted Emissions Test	±2.0dB
Radiated Emission Test	±2.0dB
Temperature	±0.5℃
Humidity	±3%

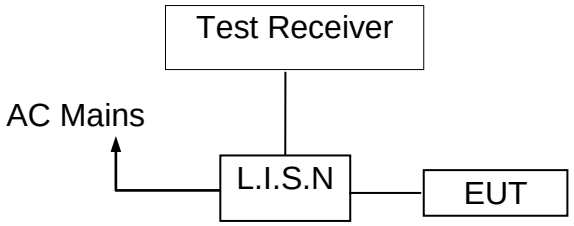
Remark: The coverage Factor (k=2), and measurement Uncertainty for a level of Confidence of 95%

5 Conducted Emissions Test

5.1 Measurement Procedure

1. The EUT was placed on a table which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured was complete.

5.2 Test SET-UP (Block Diagram of Configuration)



5.3 Measurement Equipment Used

EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	Calibrated until
L.I.S.N	SCHWARZBECK	NSLK 8127	8127-669	2023-05-12
10 db attenuator	JFW	50FP-010-H4	4360846-427-1	2023-05-12
RF Cable	N/A	N/A	2#	2023-05-12
EMI Test Receiver	ROHDE&SCHWARZ	ESCI	101358	2023-05-12
1# Shielded Room	chengyu	8m*4m*3.3m	N/A	2024-11-12
Test Software	Farad	EZ-EMC (Ver.ANCI-3A1)	N/A	N/A

5.4 Conducted Emission Limit

Conducted Emission

Frequency(MHz)	Quasi-peak	Average
0.15-0.5	66-56	56-46
0.5-5.0	56	46
5.0-30.0	60	50

Note: 1. The lower limit shall apply at the transition frequencies

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

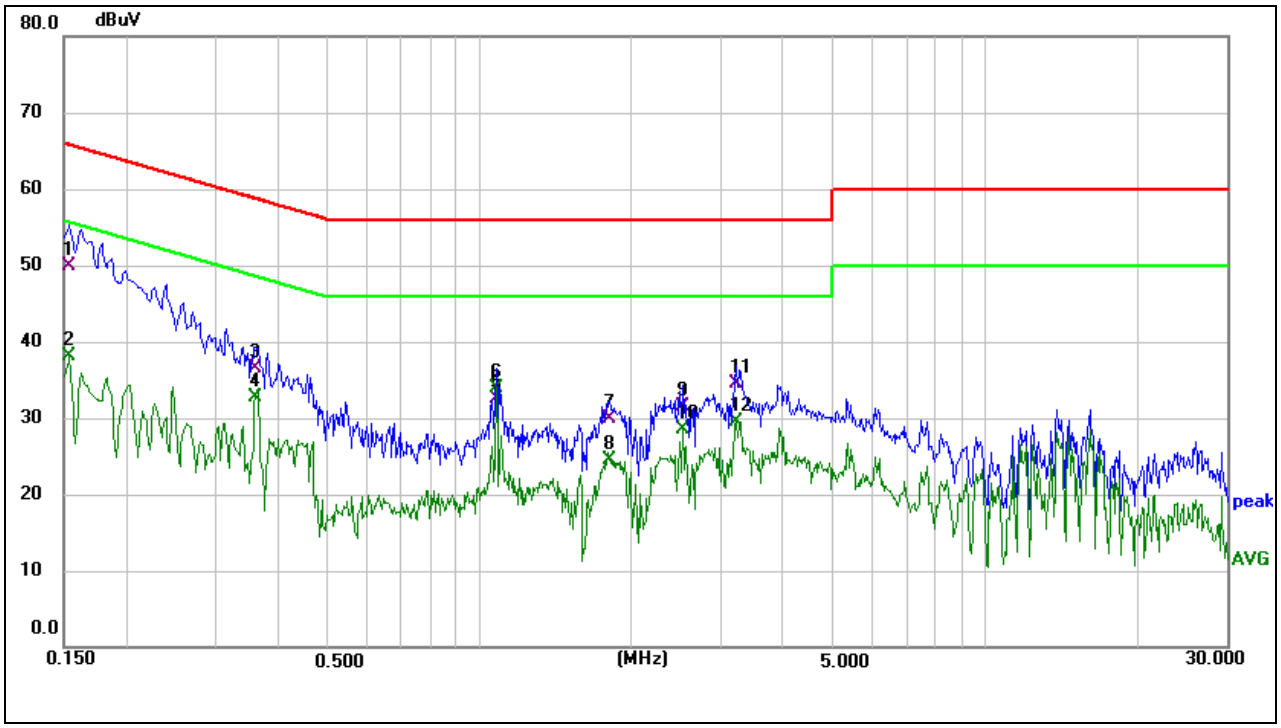
5.5 Measurement Result

Operation Mode:	TX	Test Date :	2022/07/22
Frequency Range:	0.15MHz~30MHz	Temperature :	28℃
Test Result:	PASS	Humidity :	65 %
Test By:	Best		

Pass

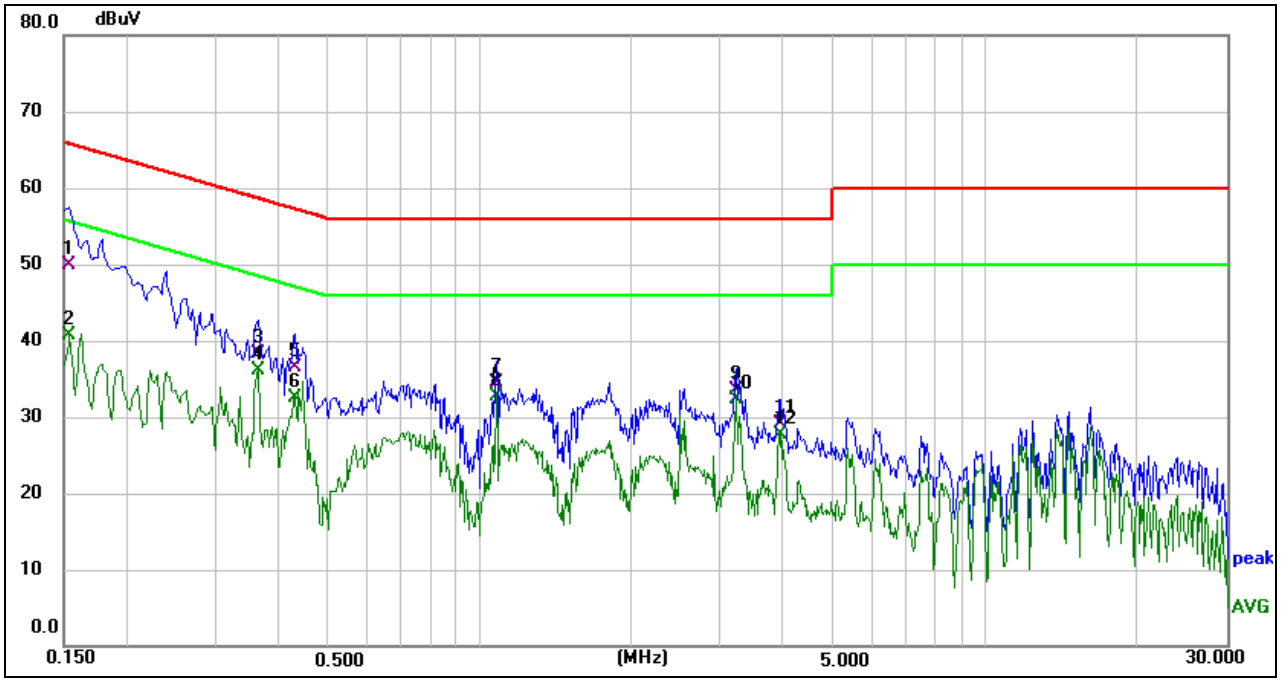
We pretested modes (Wireless Charging(15W), Wireless Charging(10W),Wireless Charging(7.5W)，Wireless Charging(5W)) for EUT. The worst test data see follow the table.

Test mode: Wireless Charging 15W



Site:	**843**	**Phase:L1**	**Temperature(C):26(C)**
Limit:	**FCC Part 18 C Conduction(QP)**		**Humidity(%):60%**
EUT:	**MagSafe 15W Wireless Charging Stand**	**Test Time:**	**2022/07/22**
M/N.:	**JUPW1107NP**	**Power Rating:**	**AC 120V/60Hz**
Mode:	**Wireless Charging 15W**	**Test Engineer:**	**Jack**
Note:			

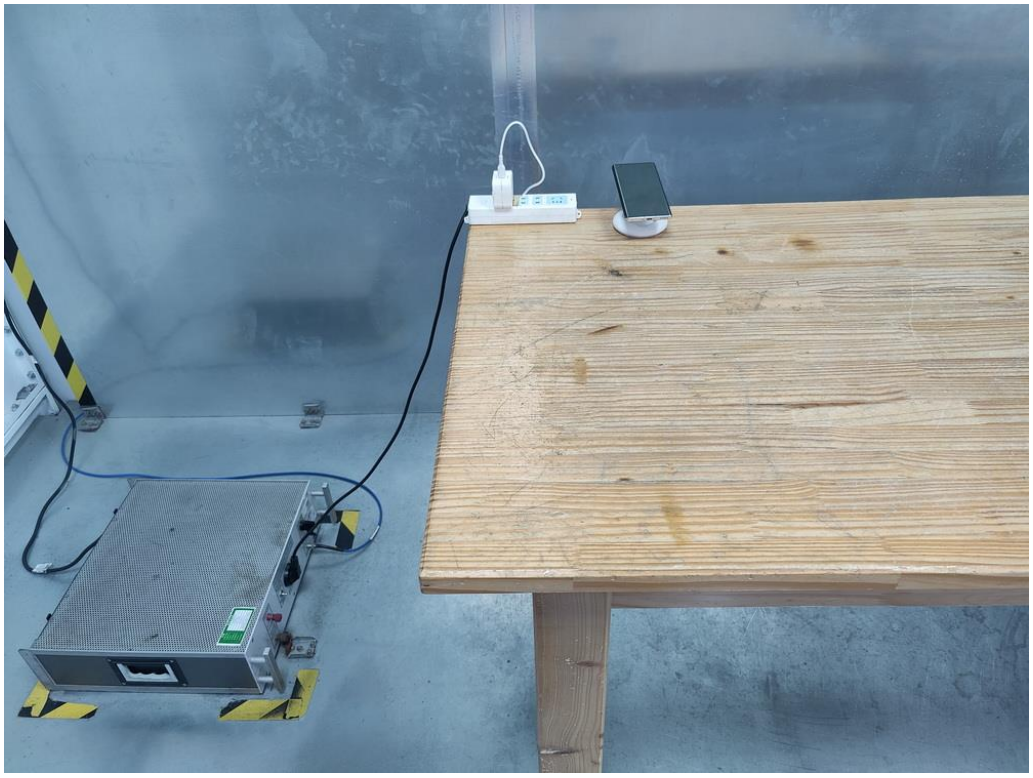
No.	Frequency (MHz)	Reading Level(dBuV)	Factor (dB)	Measure-ment(dBuV)	Limit (dBuV)	Over (dB)	Detector	Comment
1	0.1539	39.98	10.01	49.99	65.79	-15.80	QP	
2	0.1539	28.19	10.01	38.20	55.79	-17.59	AVG	
3	0.3580	26.63	9.82	36.45	58.77	-22.32	QP	
4	0.3580	22.92	9.82	32.74	48.77	-16.03	AVG	
5	1.0820	22.27	10.19	32.46	56.00	-23.54	QP	
6 *	1.0820	23.75	10.19	33.94	46.00	-12.06	AVG	
7	1.8020	19.65	10.21	29.86	56.00	-26.14	QP	
8	1.8020	14.32	10.21	24.53	46.00	-21.47	AVG	
9	2.5180	21.18	10.24	31.42	56.00	-24.58	QP	
10	2.5180	18.17	10.24	28.41	46.00	-17.59	AVG	
11	3.2180	24.33	10.27	34.60	56.00	-21.40	QP	
12	3.2180	19.15	10.27	29.42	46.00	-16.58	AVG	



Site:	**843**	**Phase:N**	**Temperature(C):26(C)**
Limit:	**FCC Part 18 C Conduction(QP)**		**Humidity(%):60%**
EUT:	**MagSafe 15W Wireless Charging Stand**	**Test Time:**	**2022/07/22**
M/N.:	**JUPW1107NP**	**Power Rating:**	**AC 120V/60Hz**
Mode:	**Wireless Charging 15W**	**Test Engineer:**	**Jack**
Note:			

No.	Frequency (MHz)	Reading Level(dBuV)	Factor (dB)	Measure-ment(dBuV)	Limit (dBuV)	Over (dB)	Detector	Comment
1	0.1539	39.96	9.97	49.93	65.79	-15.86	QP	
2	0.1539	30.68	9.97	40.65	55.79	-15.14	AVG	
3	0.3620	28.40	9.81	38.21	58.68	-20.47	QP	
4 *	0.3620	26.31	9.81	36.12	48.68	-12.56	AVG	
5	0.4300	26.80	9.74	36.54	57.25	-20.71	QP	
6	0.4300	22.86	9.74	32.60	47.25	-14.65	AVG	
7	1.0820	24.23	10.20	34.43	56.00	-21.57	QP	
8	1.0820	22.45	10.20	32.65	46.00	-13.35	AVG	
9	3.2180	23.34	10.25	33.59	56.00	-22.41	QP	
10	3.2180	22.14	10.25	32.39	46.00	-13.61	AVG	
11	3.9380	18.81	10.26	29.07	56.00	-26.93	QP	
12	3.9380	17.42	10.26	27.68	46.00	-18.32	AVG	

5.6 Conducted Measurement Photo



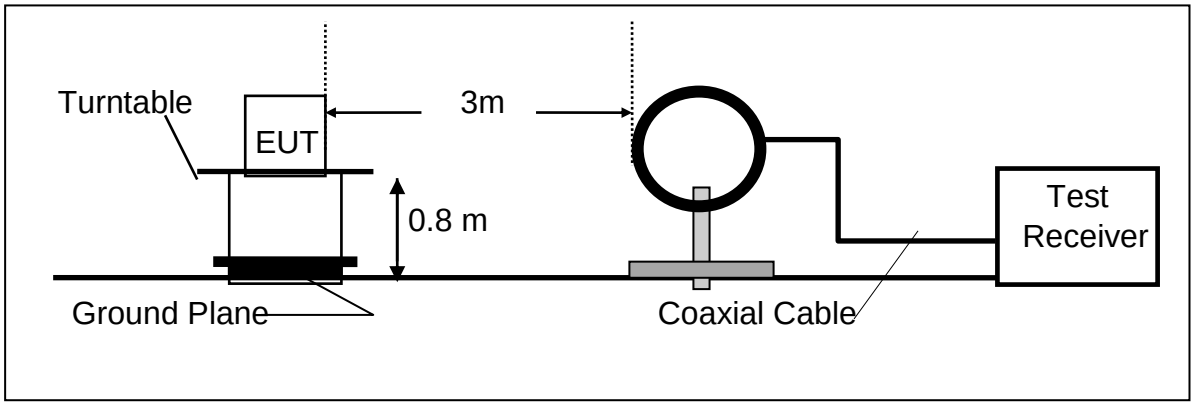
6 Radiated Emission Test

6.1 Measurement Procedure

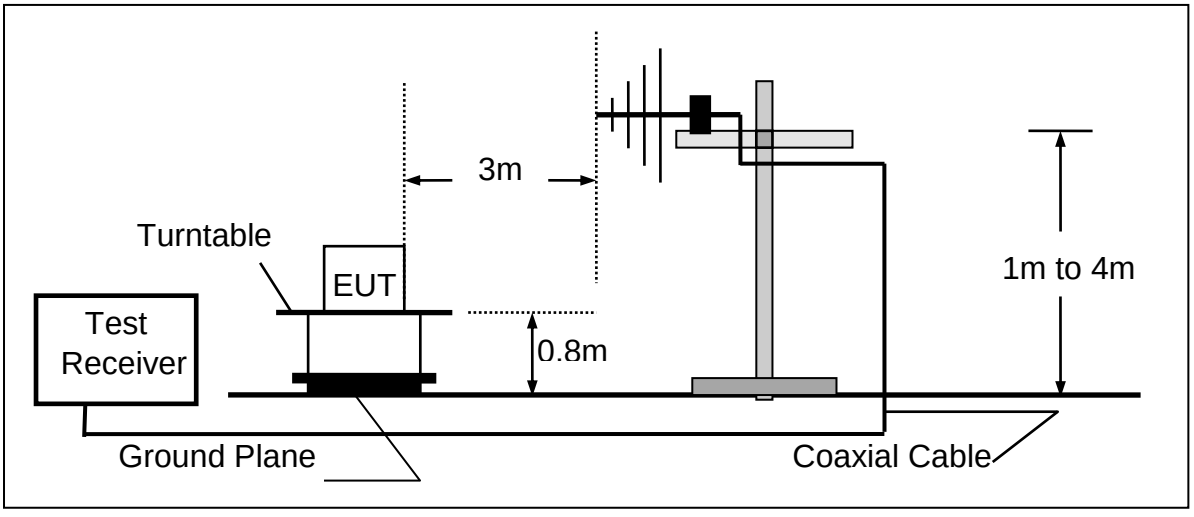
1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
4. Repeat above procedures until all frequency measured were complete.

6.2 Test SET-UP (Block Diagram of Configuration)

(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



(B) Radiated Emission Test Set-Up, Frequency Below 1000MHz



6.3 Measurement Equipment Used

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1.	EMI Test Receiver	Rohde & Schwarz	ESPI	100502	2022/11/12
2.	Pre-Amplifier	HP	8447D	2727A06172	2023-05-12
3.	Bilog Antenna	Schwarzbeck	VULB9163	VULB9163-588	2023-05-12
4.	Loop Antenna	Schwarzbeck	FMZB 1516	1516-141	2022/11/12
5.	RF Cable	Gigalink Microwave	ZT40-2.92J-2.92 J-2m	N/A	2022/11/12
6.	RF Cable	Gigalink Microwave	ZT40-2.92J-2.92 J-0.3m	N/A	2022/11/12
7.	RF Cable	N/A	N/A	6#	2023-05-12
8.	3m Semi-anechoic Chamber	chengyu	9m*6m*6m	N/A	2023-05-12
9.	Test Software	Farad	EZ-EMC Ver:ANCI-3A1	N/A	N/A

6.4 Radiated Emission Limit

The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table 15.209(a):

FCC Part 15.209				
Frequency (MHz)	Field Strength Limitation		Field Strength Limitation Frequency tion at 3m Measurement Dist	
	(uV/m)	Dist	(uV/m)	(dBuV/m)
0.009 – 0.490	2400 / F(KHz)	300m	10000 * 2400/F(KHz)	20log 2400/F(KHz) + 80
0.490 – 1.705	24000 / F(KHz)	30m	100 * 24000/F(KHz)	20log 24000/F(KHz) + 40
1.705 – 30.00	30	30m	100* 30	20log 30 + 40
30.0 – 88.0	100	3m	100	20log 100
88.0 – 216.0	150	3m	150	20log 150
216.0 – 960.0	200	3m	200	20log 200
Above 960.0	500	3m	500	20log 500

15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]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	2690 - 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	3600 - 4400	([2])

Remark: 1. Emission level in dBuV/m=20 log (uV/m)
2. Measurement was performed at an antenna to the closed point of EUT distance of meters.
3. Only spurious frequency is permitted to locate within the Restricted Bands specified in provision of ξ 15.205, and the emissions located in restricted bands also comply with 15.209 limit.

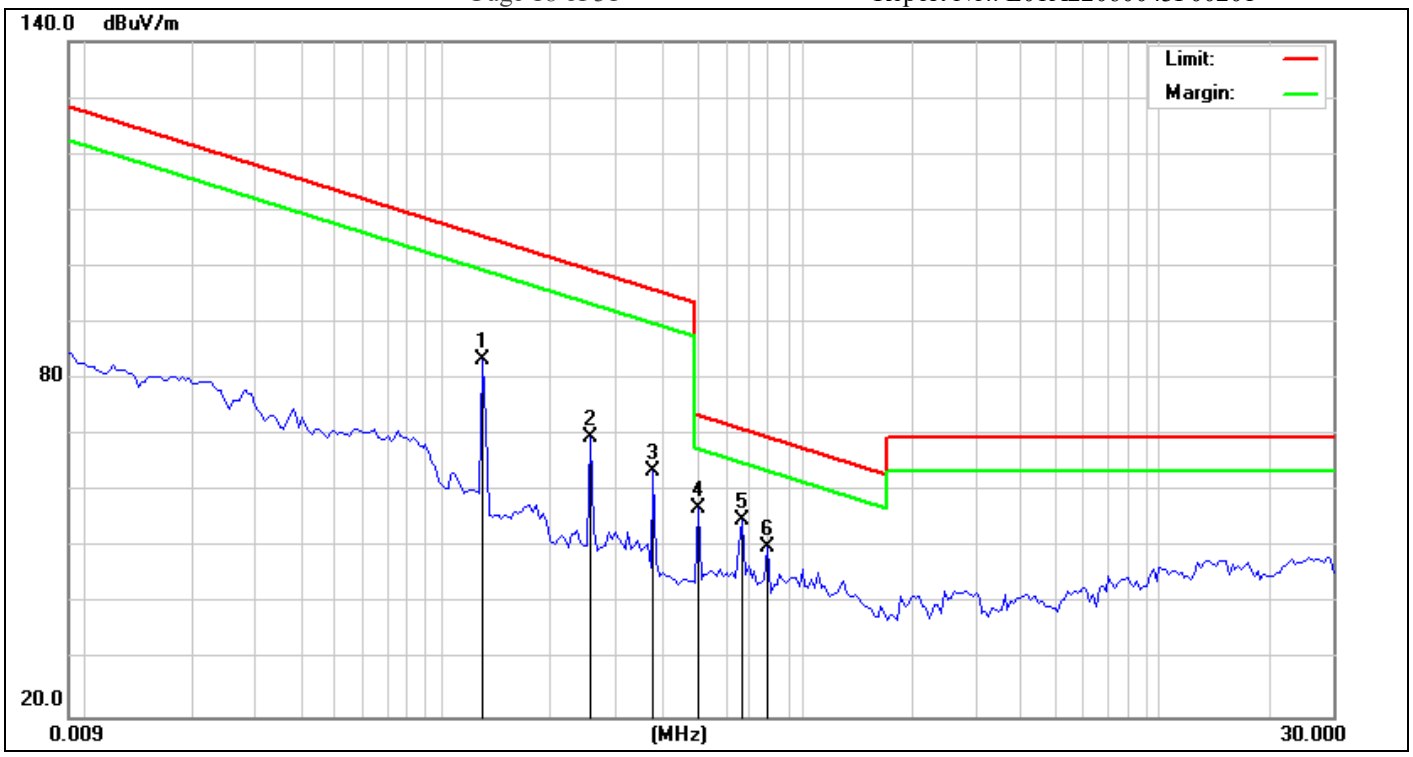
6.5 Measurement Result

We pretested modes (Wireless Charging(15W), Wireless Charging(10W),Wireless Charging(7.5W), Wireless Charging(5W)) for EUT. The worst mode (Wireless Charging(15W))test data see follow the table.

Site:	**LAB**	**Antenna::Vertical**	**Temperature(C):23.4(C)**
Limit:	**FCC Part 15C 3m Radiation(QP)**		**Humidity(%):56.7%**
EUT:	**MagSafe 15W Wireless Charging Stand**	**Test Time:**	**2022/07/22**
M/N.:	**JUPW1107NP**	**Power Rating:**	**AC 120V/60Hz**
Mode:	**Wireless Charging 15W**	**Test Engineer:**	**sunshine**
Note:			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1	0.1280	79.33	6.20	85.53	105.39	-19.86	QP	100	236	
2	0.2555	61.03	5.60	66.63	99.42	-32.79	QP	100	254	
3	0.3830	53.09	5.97	59.06	95.92	-36.86	QP	100	120	
4	0.5090	50.34	6.31	56.65	73.47	-16.82	QP	100	103	
5 *	0.7638	50.82	6.50	57.32	69.95	-12.63	QP	100	271	
6	0.9743	44.53	6.09	50.62	67.85	-17.23	QP	100	152	

*:Maximum data x:Over limit !:over margin



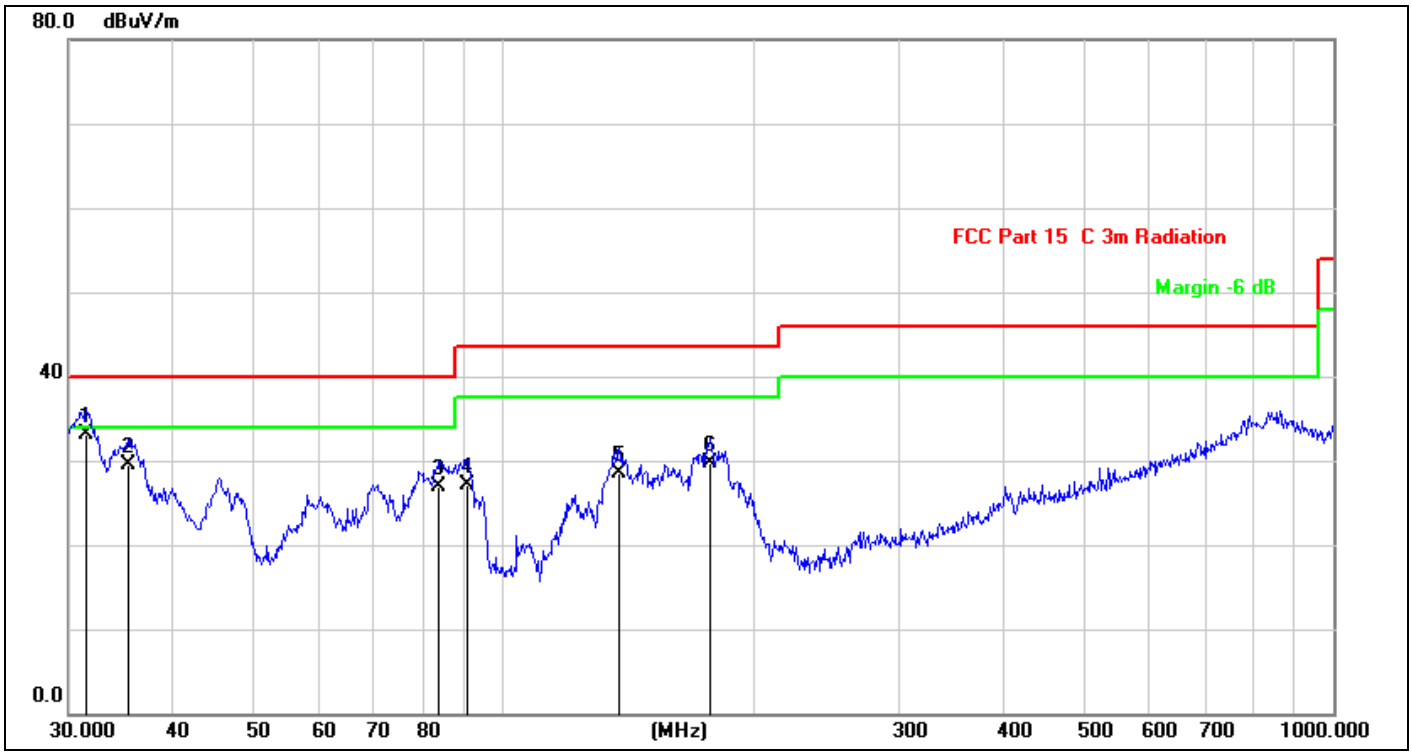
Site:	**LAB**	**Antenna::Horizontal**	**Temperature(C):23.4(C)**
Limit:	**FCC Part 15C 3m Radiation(QP)**		**Humidity(%):56.7%**
EUT:	**MagSafe 15W Wireless Charging Stand**	**Test Time:**	**2022/07/22**
M/N.:	**JUPW1107NP**	**Power Rating:**	**AC 120V/60Hz**
Mode:	**Wireless Charging 15W**	**Test Engineer:**	**sunshine**
Note:			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1	0.1282	77.33	6.20	83.53	105.37	-21.84	QP	100	236	
2	0.2555	64.03	5.60	69.63	99.42	-29.79	QP	100	254	
3	0.3830	57.59	5.97	63.56	95.92	-32.36	QP	100	120	
4	0.5090	50.84	6.31	57.15	73.47	-16.32	QP	100	103	
5 *	0.6764	48.60	6.46	55.06	71.01	-15.95	QP	100	271	
6	0.7953	43.74	6.44	50.18	69.60	-19.42	QP	100	152	

Note: (1) All Readings are Peak Value.
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.
(3) The average measurement was not performed when the peak measured data under the limit of average detection.
(4) EUT lying on the table position is the worst case result in the report.

We pretested modes (Wireless Charging(15W),Wireless Charging(10W),Wireless Charging(7.5W), Wireless Charging(5W)) for EUT. The worst test data see follow the table.

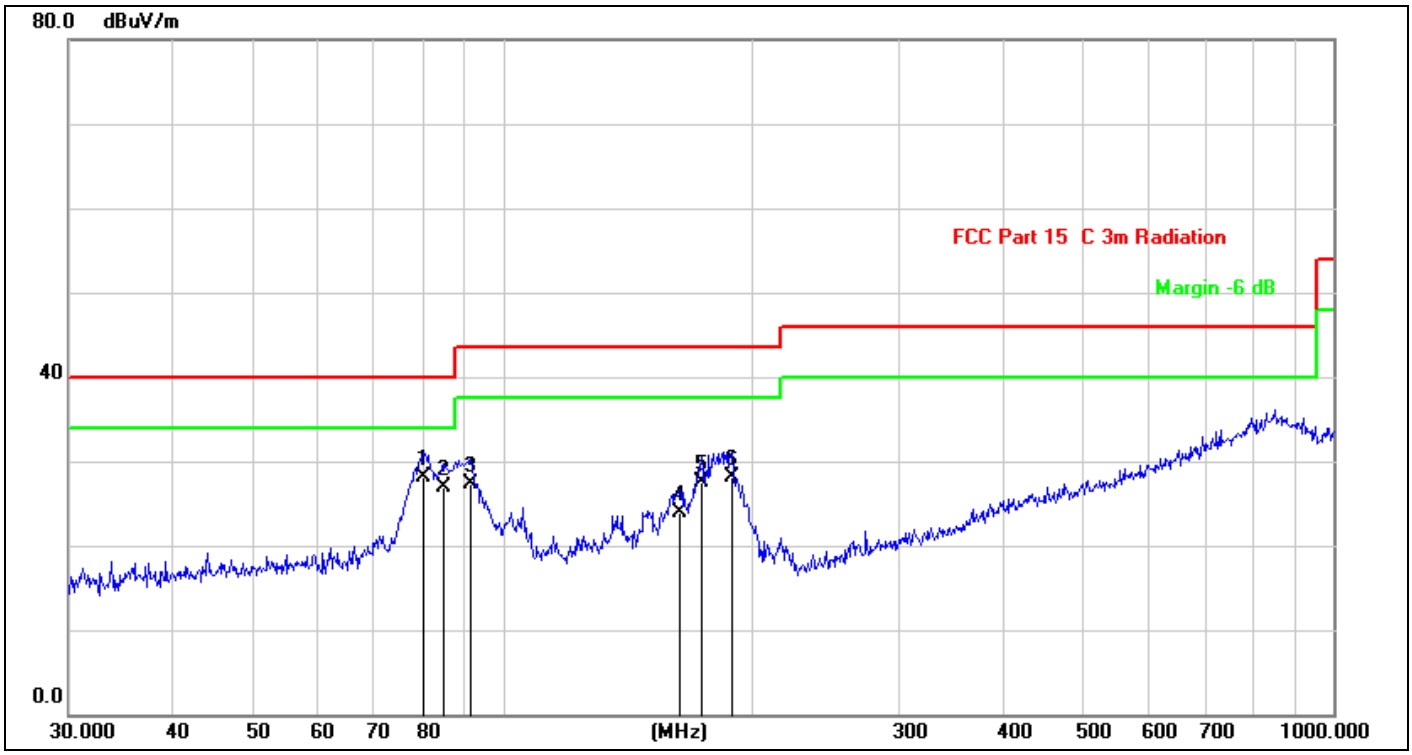
Test mode: Wireless Charging 15W



Site:	**LAB**	**Antenna::Vertical**	**Temperature(C):23.4(C)**
Limit:	**FCC Part 15 Class B 3m Radiation(QP)**		**Humidity(%):56.7%**
EUT:	**MagSafe 15W Wireless Charging Stand**	**Test Time:**	**2022/07/22**
M/N.:	**JUPW1107NP**	**Power Rating:**	**AC 120V/60Hz**
Mode:	**Wireless Charging 15W**	**Test Engineer:**	**sunshine**
Note:			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1 *	31.5095	44.98	-11.93	33.05	40.00	-6.95	QP	100	45	
2	35.3750	40.64	-11.06	29.58	40.00	-10.42	QP	100	45	
3	83.8156	39.43	-12.59	26.84	40.00	-13.16	QP	100	27	
4	90.5374	40.27	-13.13	27.14	43.50	-16.36	QP	100	27	
5	137.9028	40.50	-11.90	28.60	43.50	-14.90	QP	100	96	
6	177.5092	41.45	-11.72	29.73	43.50	-13.77	QP	100	96	

*:Maximum data x:Over limit !:over margin



Site:	**LAB**	**Antenna::Horizontal**	**Temperature(C):23.4(C)**
Limit:	**FCC Part 15 Class B 3m Radiation(QP)**		**Humidity(%):56.7%**
EUT:	**MagSafe 15W Wireless Charging Stand**	**Test Time:**	**2022/07/22**
M/N.:	**JUPW1107NP**	**Power Rating:**	**AC 120V/60Hz**
Mode:	**Wireless Charging 15W**	**Test Engineer:**	**sunshine**
Note:			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1 *	80.0806	40.41	-12.39	28.02	40.00	-11.98	QP	100	45	
2	84.7019	39.62	-12.81	26.81	40.00	-13.19	QP	100	45	
3	91.4949	40.25	-13.04	27.21	43.50	-16.29	QP	100	27	
4	163.1818	35.42	-11.54	23.88	43.50	-19.62	QP	100	27	
5	173.2051	38.78	-11.32	27.46	43.50	-16.04	QP	100	96	
6	188.4125	39.55	-11.39	28.16	43.50	-15.34	QP	100	96	

6.6 Radiated Measurement Photos

7 20db Bandwidth

7.1 20dB Bandwidth Limit

None: for reporting purposed only.

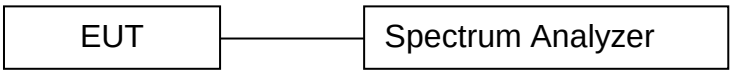
7.2 Test Instruments

Refer a test equipment and calibration data table in this test report.

7.3 Test Procedure

The bandwidth of the fundamental frequency was measured by spectrum analyzer with 1KHz RBW and 3KHz VBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

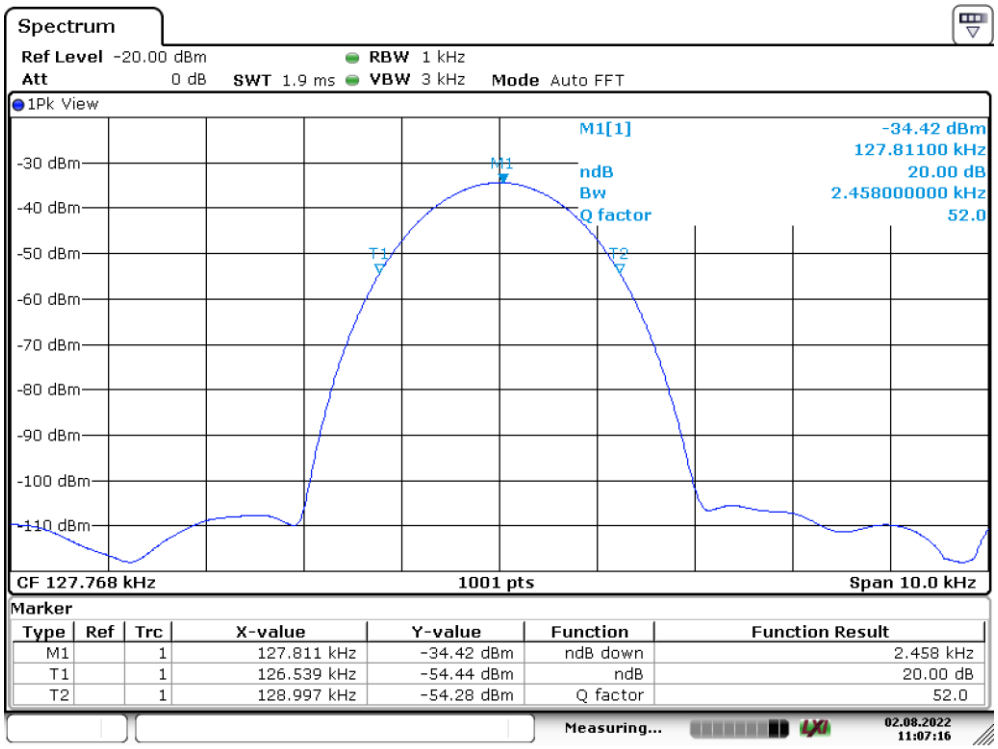
7.4 Test Setup



7.5 Test Result

Frequency (KHz)	20dB Bandwidth (KHz)	Results
127.77	2.458	PASS

20 dB Bandwidth Test plot



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8 Antenna Application

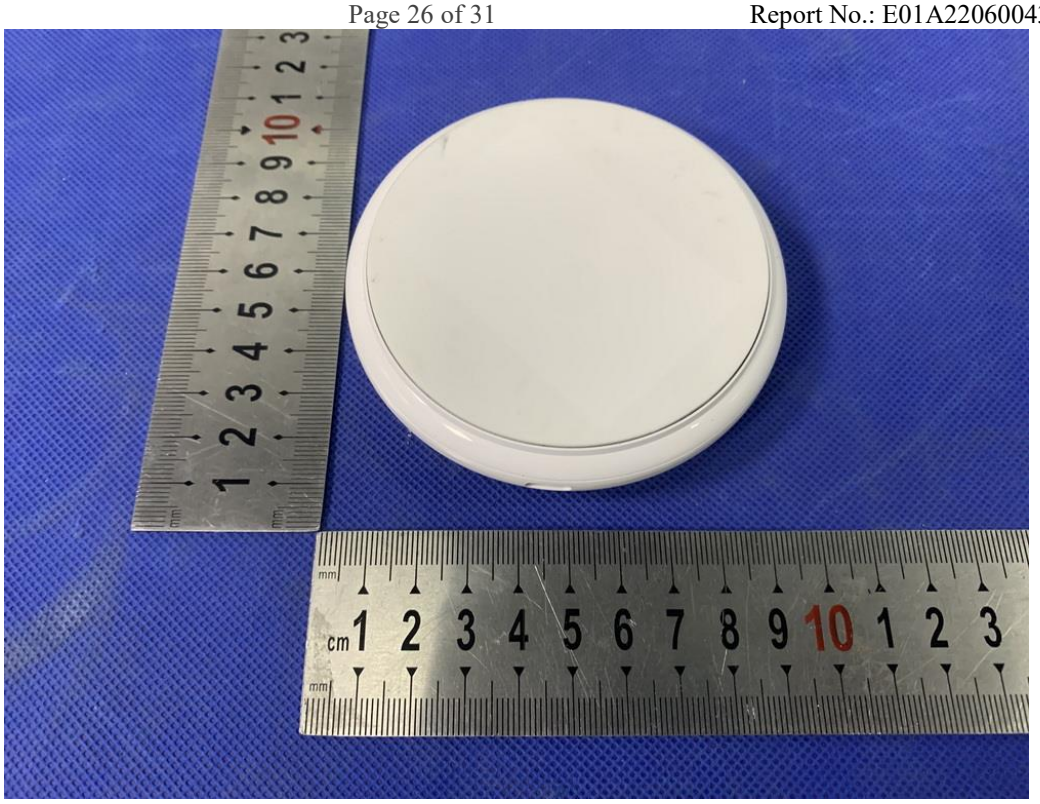
8.1 Antenna requirement

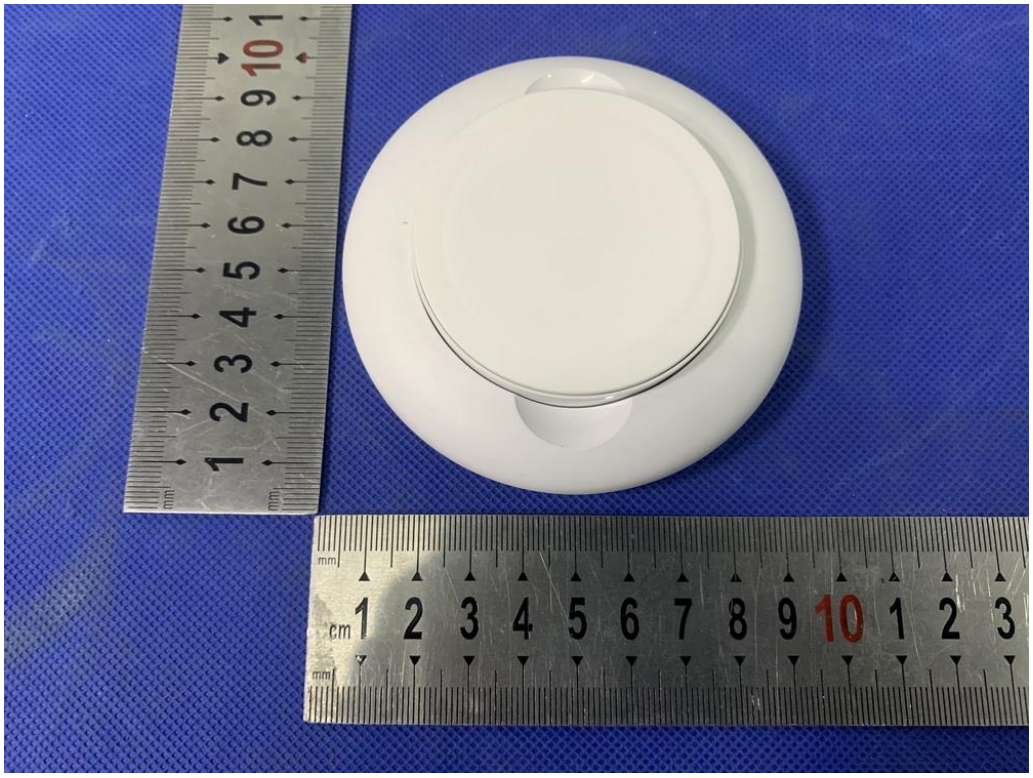
For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

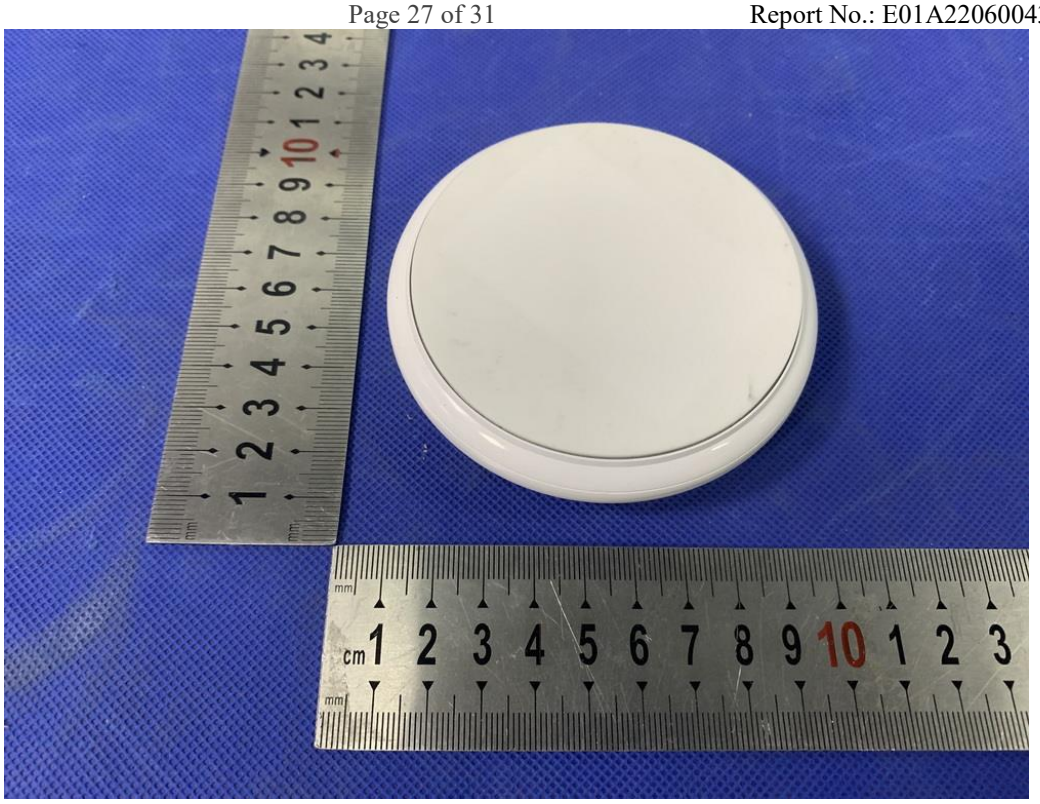
8.2 Result

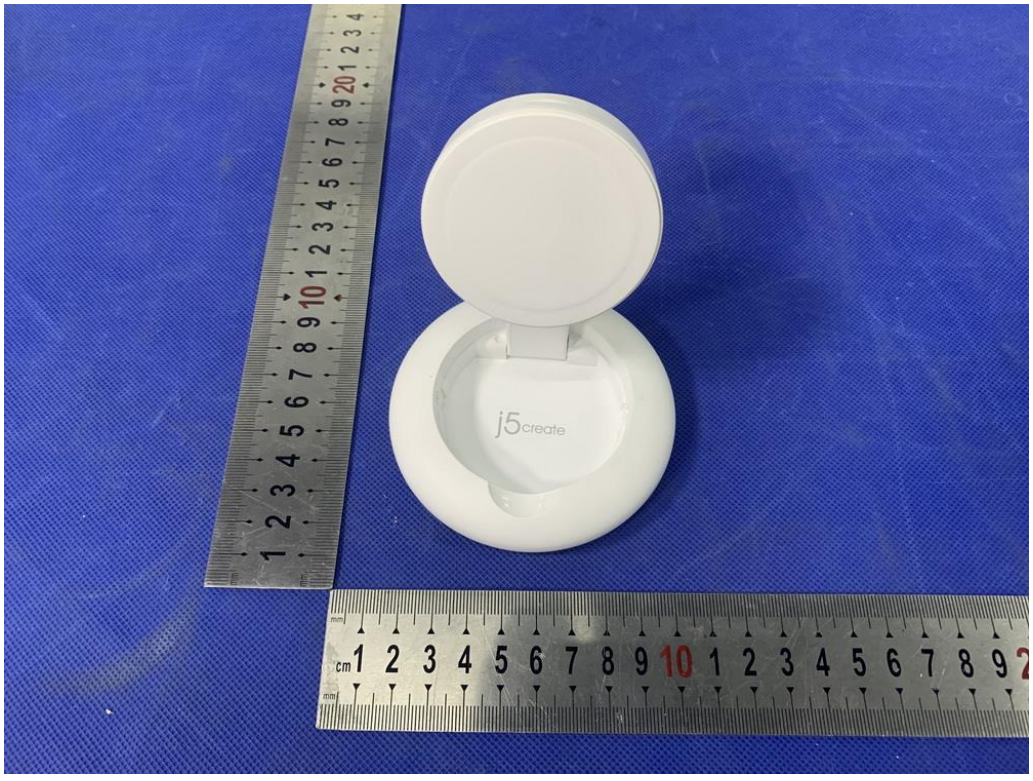
The EUT's antenna, permanent attached antenna, used an Induction coil and integrated on PCB, The antenna's gain meets the requirement.

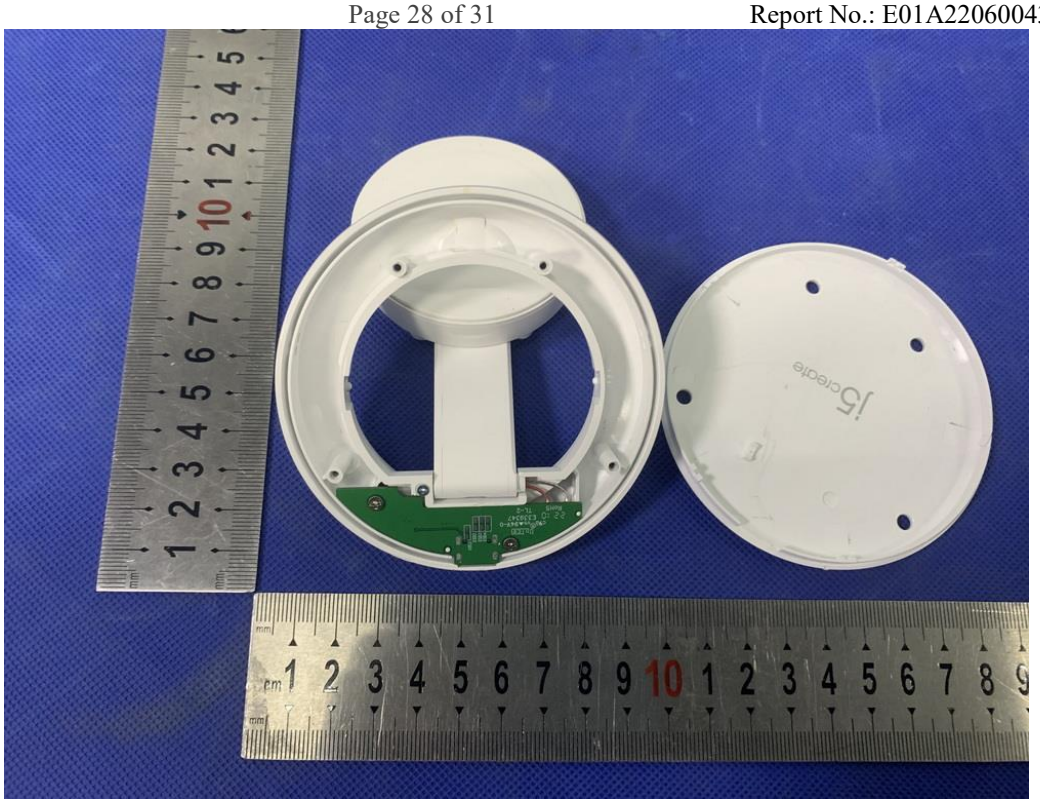
APPENDIX
(Photos of EUT)

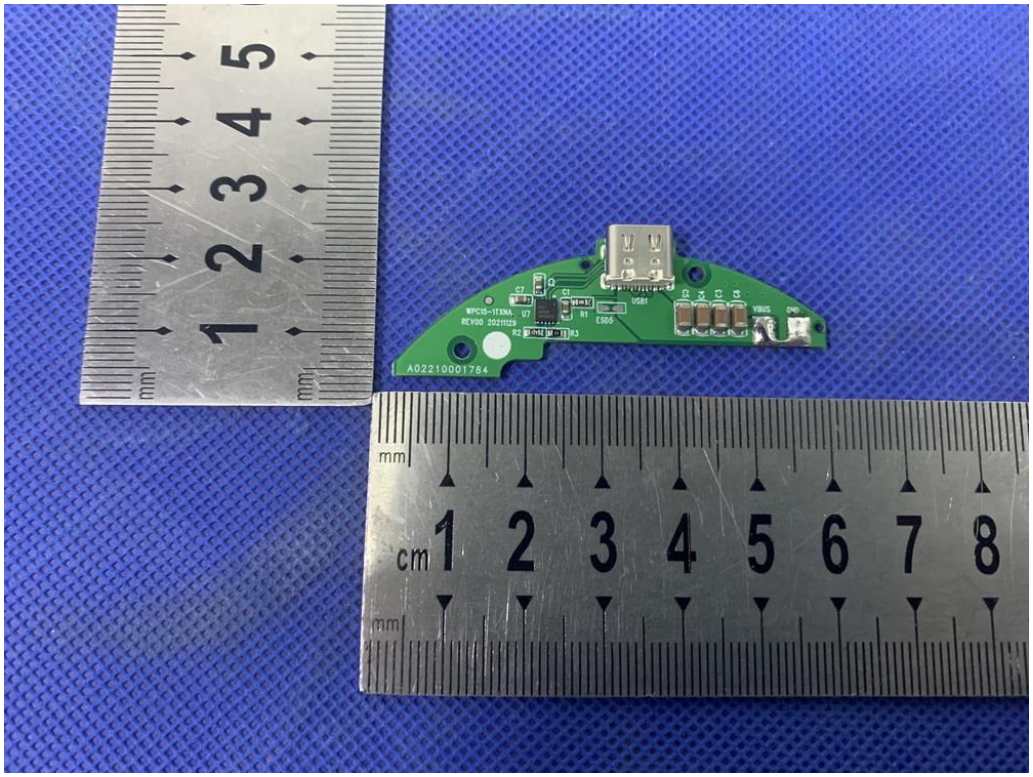


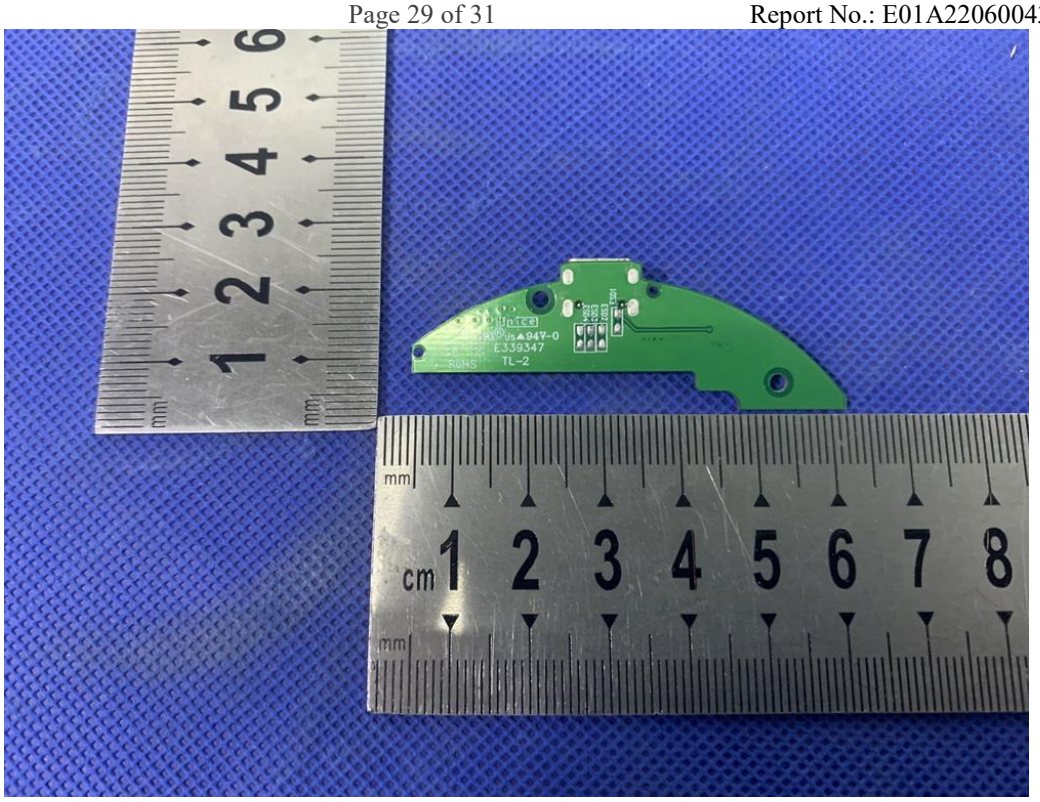


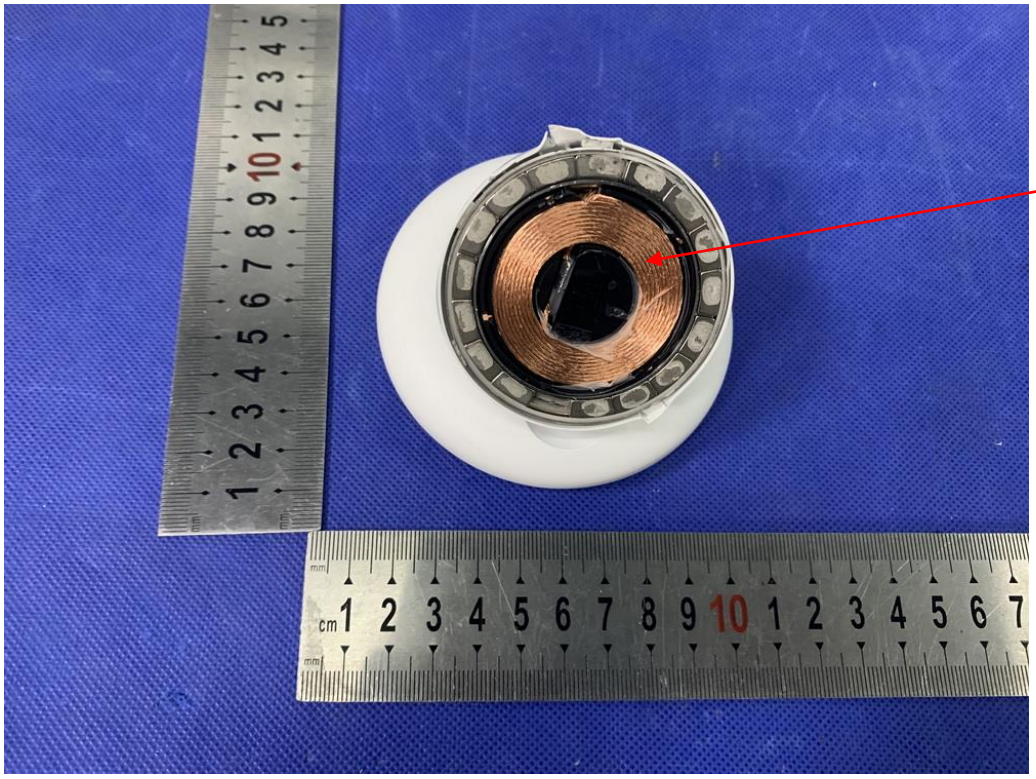



j5create





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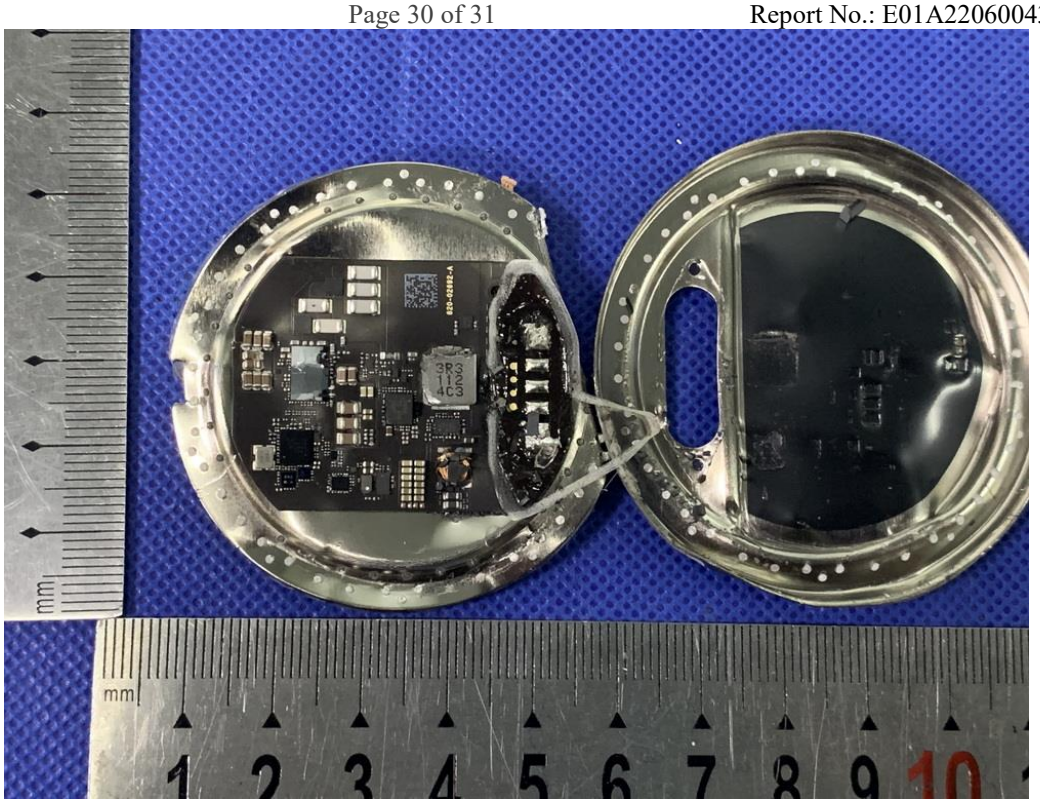

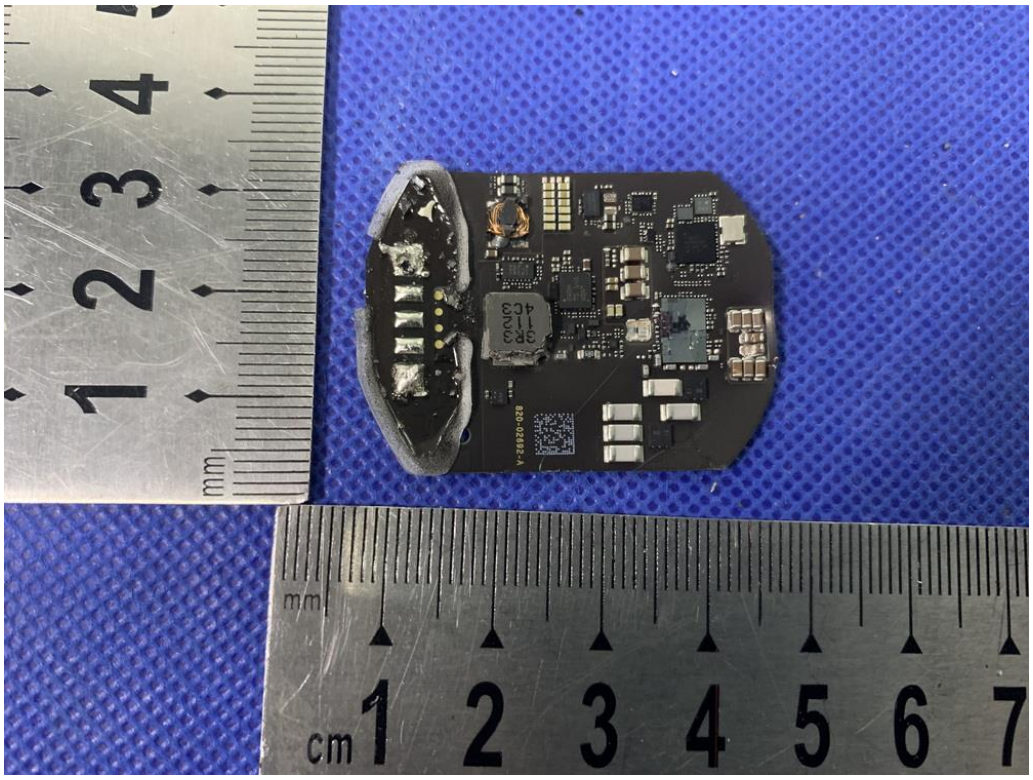

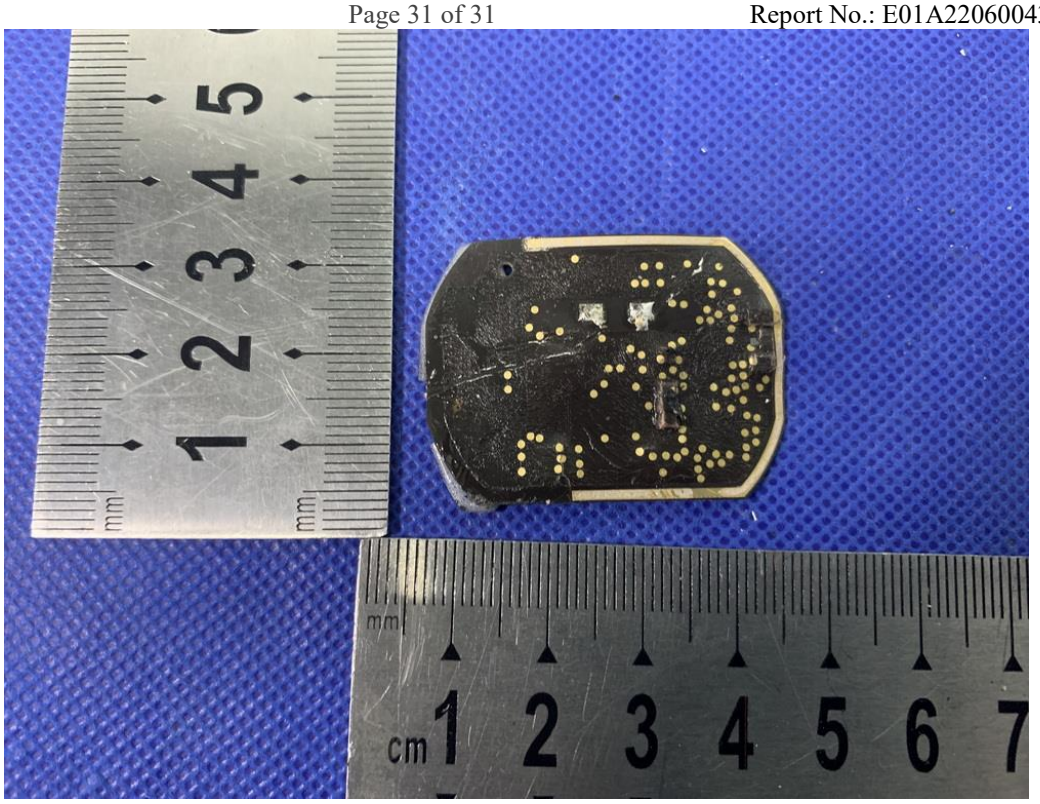

----------The end----------