



FCC PART 15C TEST REPORT FOR CERTIFICATION On Behalf of

mophie LLC

mophie Roam 3-in-1 Travel Charger

Model Number: 3N1-TRVL-Qi2.2-A

FCC ID: 2ACWB-TRAV4

Applicant:	mophie LLC
Address:	6244 Technology Ave. Kalamazoo, MI 49009,
	United States of America.
Prepared By:	EST Technology Co., Ltd.
	Chilingxiang, Qishantou, Santun, Houjie, Dongguan, Guangdong, China
Tel: 86-769-83081888-808	

Report Number:	ESTE-R2604183
Date of Test:	Apr. 08, 2026 to Apr. 21, 2026
Date of Report:	Apr. 23, 2026

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Applicant: Address:	mophie LLC 6244 Technology Ave. Kalamazoo, MI 49009, United States of America.		
Manufacturer: Address:	mophie LLC 6244 Technology Ave. Kalamazoo, MI 49009, United States of America.		
E.U.T:	mophie Roam 3-in-1 Travel Charger		
Model Number:	3N1-TRVL-Qi2.2-A		
Power Supply:	Input: 5V---3A, 9V---3A, 15V---3A Max Output: Qi2.2 module 25W Max Airpods 5W Max Apple Watch Module 3.5W Max		
Trade Name:	mophie	Sample No.:	EST-260407009-001
Date of Receipt:	Apr. 08, 2026	Date of Test:	Apr. 08, 2026 to Apr. 21, 2026
Test Specification:	FCC Part 15 Subpart C ANSI C63.10:2020		
Test Result:	The device described above is tested by EST Technology Co., Ltd. The measurement results were contained in this test report and EST Technology Co., Ltd. was assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliance with the FCC Rules and Regulations Part 15 Subpart C requirements. This report applies to above tested sample only and shall not be reproduced in part without written approval of EST Technology Co., Ltd.		

Date: May 09, 2026

Prepared by:

Reviewed by:

Approved by:

Ring Yang / Assistant

Seven Wang / Engineer

Iceman Hu / Manager

Other Aspects:

None.

Abbreviations: OK/P=passed fail/F=failed n.a/N=not applicable E.U.T=equipment under tested

This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of EST Technology Co., Ltd. The statement of compliance in this report is based on the limit in the test standard, the measurement uncertainty is not considered.

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Product Name	:	mophie Roam 3-in-1 Travel Charger
Model Number	:	3N1-TRVL-Qi2.2-A
Software Version	:	V0.1
Hardware Version	:	V0.3
Operation Frequency	:	Watch: 326.5kHz & 1.778MHz; Airpods: 110.5kHz-205kHz; Mobile phones: 110.5kHz-205kHz & 360kHz
Max Wireless Charge Power	:	Watch: 3.5W Max Airpods: 5W Max Mobile phones: 25W Max
Max Field Strength of Fundamental	:	76.24dB μ V/m
Modulation Type	:	FSK
Antenna Type	:	Induction coil
Sample Type	:	Prototype production
Note: The product information is provided by the manufacturer. The laboratory is not responsible for this data.		

2. SUMMARY OF TEST

2.1. Summary of test result

No.	Description of Test Item	FCC Standard Section	Results
1	Radiated Emission	15.205 15.209	PASS
2	20dB Occupied Bandwidth	15.215	PASS
3	AC Power Line Conducted Emissions	15.207	PASS
4	Antenna Requirement	15.203	PASS

Note: "N/A" denotes test is not applicable in this test report.

2.2. Test Facilities

EMC Lab : Accredited by CNAS, CHINA
Registration No.: L5288
This Accreditation is valid until: November 12, 2029

Recognized by FCC, USA
Designation Number: CN1215
This Recognition is valid until: January 31, 2028

Accredited by A2LA, USA
Registration No.: 4366.01
This Accreditation is valid until: January 31, 2028

Recognized by Industry Canada
CAB identifier No.: CN0035
This Recognition is valid until: January 31, 2028

Recognized by VCCI, Japan
Registration No.: C-14103; T-20073; R-13663;
R-20103; G-20097
Date of registration: Apr. 20, 2026
This Recognition is valid until: Apr. 19, 2029

Recognized by TUV Rheinland, Germany
Registration No.: UA 50413872 0001
Date of registration: July 31, 2018

Recognized by Intertek
Registration No.: 2011-RTL-L2-64
Date of registration: November 08, 2018

Name of Firm : EST Technology Co., Ltd.

Site Location : Chilingxiang, Qishantou, Santun, Houjie, Dongguan,
Guangdong, China

2.3. Measurement uncertainty

Test Item	Uncertainty
Uncertainty for Conduction emission test	$\pm 3.48\text{dB}$
Uncertainty for spurious emissions test (Below 30MHz)	$\pm 1.62\text{dB}$
Uncertainty for spurious emissions test (30MHz-1GHz)	$\pm 4.60\text{ dB(Polarize: H)}$
	$\pm 4.68\text{ dB(Polarize: V)}$
Uncertainty for spurious emissions test (1GHz to 18GHz)	$\pm 4.96\text{dB}$
Uncertainty for radio frequency	7×10^{-8}
Uncertainty for conducted RF Power	1.08dB
Uncertainty for Power density test	0.26dB

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

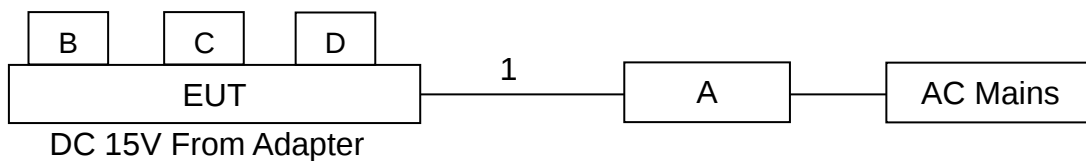
2.4. Assistant equipment used for test

Item	Equipment	Brand	Model Name/Type No.	FCC ID	Series No.
A	Adapter	-	CHG-WALL-PD-40W-A	-	-
B	Wireless load	-	YBZ	-	-
C	Wireless load	-	YBZ	-	-
D	Watch	Apple	MX1P3CH/B	-	-

Item	Shielded Type	Ferrite Core	Length	Model Name/Type No.	Note
1	NO	NO	1.6m	RCA248-1	DC Cable

2.5. Block Diagram

For radiated emissions test: EUT was placed on a turn table, which is 0.8 meter high above ground.



(EUT: mophie Roam 3-in-1 Travel Charger)

2.6. The test mode was selected for the final test as listed below.

Test Item	Test Mode
Radiated Emission	3.5W, 5W, 7.5W, 10W, 15W, 25W
AC Power Line Conducted Emissions	3.5W, 5W, 7.5W, 10W, 15W, 25W

Note: All modes have been tested. The report only reflects the worst case of 25W full load test data.

2.7. Test Equipment List

For AC Power Line Conducted Emissions Test						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESRP3	EST-E070	LISAI	June 11,25	June 10,26
Artificial Mains Network	Rohde & Schwarz	ENV216	EST-E002	LISAI	June 11,25	June 10,26
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	EST-E078	LISAI	June 11,25	June 10,26
Test Software	Audix	e3-6.111221a	N/A	N/A	N/A	N/A

For Radiated Emission Test(9kHz-30MHz)						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESR7	EST-E047	LISAI	June 11,25	June 10,26
Active Loop Antenna	SCHWABE BECK	FMZB 1519B	EST-E054	LISAI	June 11,25	June 10,26
Test Software	Audix	e3-6.111221a	N/A	N/A	N/A	N/A
9kHz-30MHz Cable	N/A	EST-001	N/A	N/A	N/A	N/A

For Radiated Emission Test (30MHz-1000MHz)						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESR7	EST-E047	LISAI	June 11,25	June 10,26
Bilog Antenna	Tesseq	CBL 6111D	EST-E034	LISAI	June 11,25	June 10,26
Test Software	Audix	e3-6.111221a	N/A	N/A	N/A	N/A
30-1000MHz Cable	N/A	EST-002	N/A	N/A	N/A	N/A

3. RADIATED EMISSION

3.1. Limit

15.209 Radiated emission limits

Frequency (MHz)	Field Strength($\mu\text{V/m}$)	Distance(m)
0.009-0.490	$2400/F(\text{kHz})$	300
0.490-1.705	$24000/F(\text{kHz})$	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

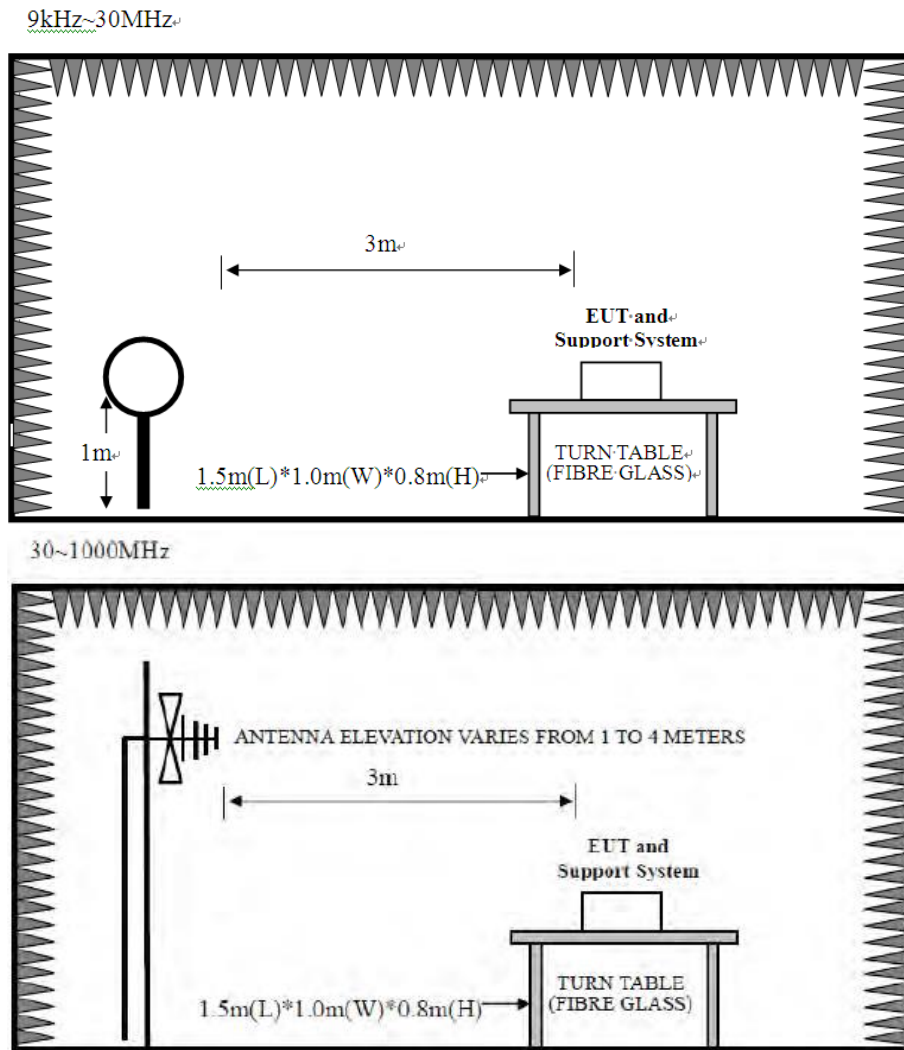
Note:

1. Emission level $\text{dB}\mu\text{V} = 20 \log \text{Emission level } \mu\text{V/m}$.
2. The smaller limit shall apply at the cross point between two frequency bands.
3. Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system

15.205 Restricted frequency band

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)

3.2. Test Setup



3.3. Spectrum Analyzer Setting

For 9KHz-150KHz

Spectrum Parameters	Setting
RBW	300Hz(for Peak&AVG)/CISPR 200Hz(for QP)
VBW	300Hz(for Peak&AVG)/CISPR 200Hz(for QP)
Start frequency	9KHz
Stop frequency	150KHz
Sweep Time	Auto
Detector	PEAK/QP/AVG
Trace Mode	Max Hold

For 150KHz-30MHz

Spectrum Parameters	Setting
RBW	9KHz
VBW	9KHz
Start frequency	150KHz
Stop frequency	30MHz
Sweep Time	Auto
Detector	QP
Trace Mode	Max Hold

For 30MHz-1000MHz

Spectrum Parameters	Setting
RBW	120KHz
VBW	300KHz
Start frequency	30MHz
Stop frequency	1000MHz
Sweep Time	Auto
Detector	QP
Trace Mode	Max Hold

3.4. Test Procedure

- EUT was placed on a turn table, which is 0.8 meter high above ground.
- EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower.
- Set the EUT transmit continuously with maximum output power.
- Spectrum analyzer setting parameters in accordance with section 3.3.
- The turn table can rotate 360 degrees to determine the position of the maximum emission level.
- For below 30MHz test, the center of the Loop Test Antenna is 1m above the ground. During the measurement the Loop Test Antenna rotates both coaxial and coplanar polarization to find out the maximum emission level.
- For above 30MHz test, the antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both coaxial and coplanar polarization of the antenna are set on test.
- Record the results in the test report.

Note:

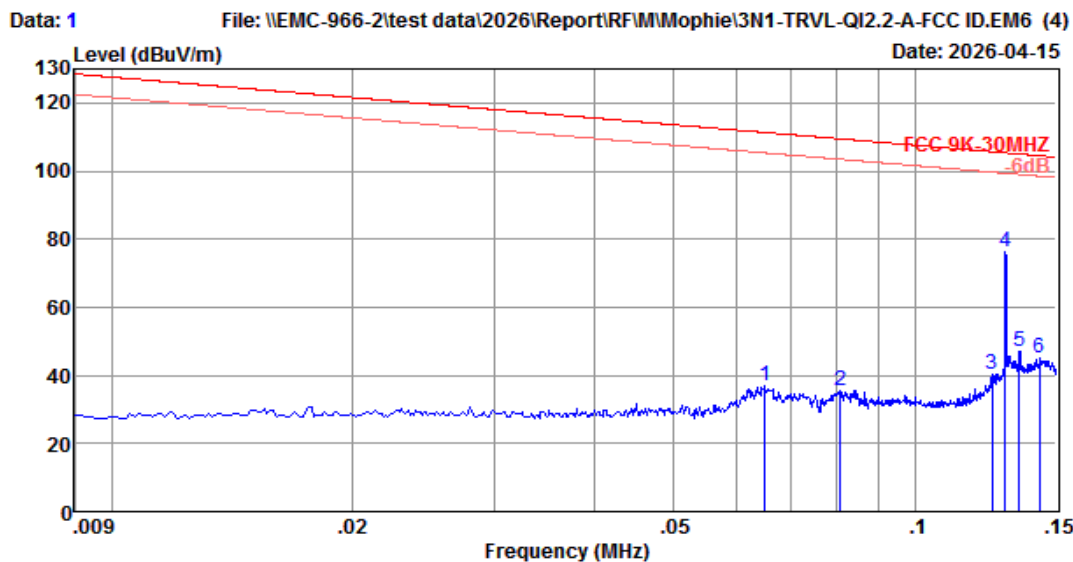
- For emissions below 30MHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.
- For emissions below 30MHz, if peak level comply with QP limit, then the QP level is deemed to comply with QP limit.

3.5. Test Result

Radiated Emission Below 30MHz

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Site no. : 2# 966 chamber Data no. : 1
Dis. / Ant. : 3m FMZB 1519B Ant. pol. : COAXIAL
Limit : FCC 9K-30MHZ
Env. / Ins. : Temp:22.3°C;Humi:52%;Press:101.5kPa
Engineer : Eric Lin
EUT : mophie Roam 3-in-1 Travel Charger
Power : DC 15V From Adapter Input AC 120V/60Hz
M/N : 3N1-TRVL-Qi2.2-A
Test Mode : TX Mode
Sample No. : EST-260407009-004
Watch+Airpods+Mobile phones 25W

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0651	19.70	0.03	17.07	36.80	111.33	74.53	Peak
2	0.0808	19.70	0.03	15.80	35.53	109.46	73.93	Peak
3	0.1248	20.00	0.03	20.47	40.50	105.68	65.18	Peak
4	0.1297	20.00	0.03	56.21	76.24	105.35	29.11	Peak
5	0.1349	20.00	0.03	27.03	47.06	105.00	57.94	Peak
6	0.1430	20.00	0.03	25.28	45.31	104.50	59.19	Peak

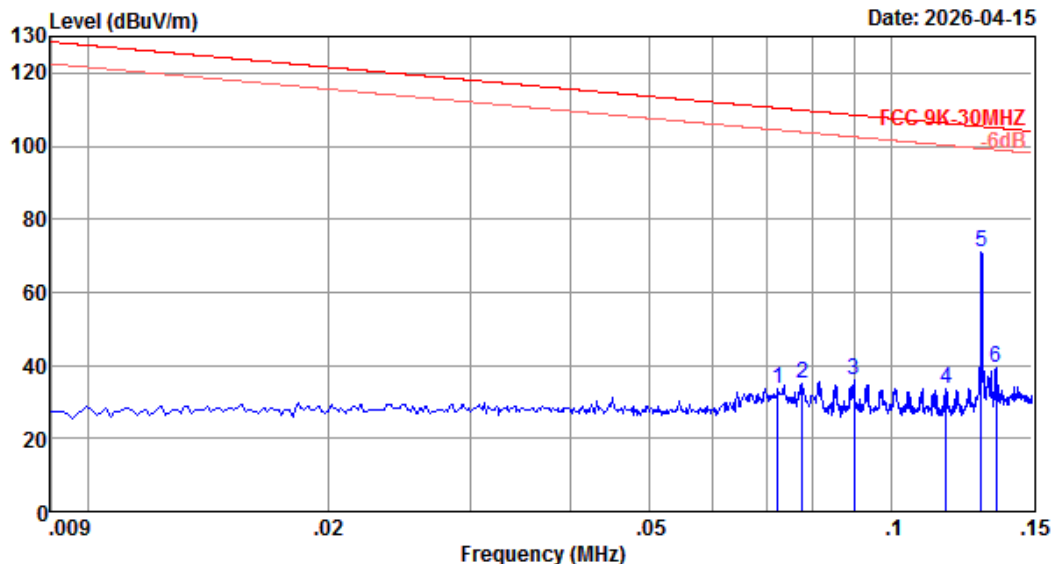
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

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Data: 2 File: \\EMC-966-2\test data\2026\Report\RF\MM\ophie\3N1-TRVL-Qi2.2-A-FCC ID.EM6 (4)

Date: 2026-04-15



Site no. : 2# 966 chamber Data no. : 2
Dis. / Ant. : 3m FM2B 1519B Ant. pol. : COPLANAR
Limit : FCC 9K-30MHz
Env. / Ins. : Temp:22.3°C;Humi:52%;Press:101.5kPa
Engineer : Eric Lin
EUT : mophie Roam 3-in-1 Travel Charger
Power : DC 15V From Adapter Input AC 120V/60Hz
M/N : 3N1-TRVL-Qi2.2-A
Test Mode : TX Mode
Sample No. : EST-260407009-004
Watch+Airpods+Mobile phones 25W

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0723	19.70	0.03	14.05	33.78	110.42	76.64	Peak
2	0.0777	19.70	0.03	15.53	35.26	109.80	74.54	Peak
3	0.0899	19.80	0.03	16.05	35.88	108.53	72.65	Peak
4	0.1173	20.00	0.03	13.69	33.72	106.22	72.50	Peak
5	0.1297	20.00	0.03	51.15	71.18	105.35	34.17	Peak
6	0.1351	20.00	0.03	19.21	39.24	104.99	65.75	Peak

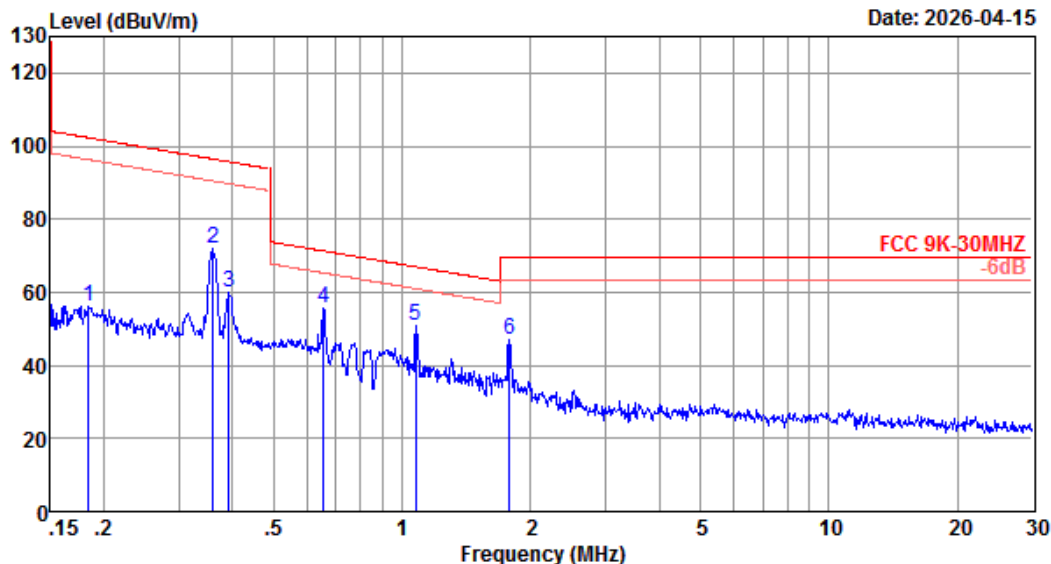
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

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Data: 3 File: \\EMC-966-2\\test data\\2026\\Report\\RF\\M\\Mophie\\3N1-TRVL-Qi2.2-A-FCC ID.EM6 (4)

Date: 2026-04-15



Site no. : 2# 966 chamber Data no. : 3
Dis. / Ant. : 3m FMZB 1519B Ant. pol. : COPLANAR
Limit : FCC 9K-30MHz
Env. / Ins. : Temp:22.3°C;Humi:52%;Press:101.5kPa
Engineer : Eric Lin
EUT : mophie Roam 3-in-1 Travel Charger
Power : DC 15V From Adapter Input AC 120V/60Hz
M/N : 3N1-TRVL-Qi2.2-A
Test Mode : TX Mode
Sample No. : EST-260407009-004
Watch+Airpods+Mobile phones 25W

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.1844	19.88	0.03	36.29	56.20	102.29	46.09	Peak
2	0.3615	19.77	0.03	52.00	71.80	96.44	24.64	Peak
3	0.3934	19.75	0.03	40.40	60.18	95.71	35.53	Peak
4	0.6543	19.74	0.02	35.67	55.43	71.29	15.86	Peak
5	1.0767	19.81	0.02	31.01	50.84	66.96	16.12	Peak
6	1.7810	19.88	0.05	26.89	46.82	69.54	22.72	Peak

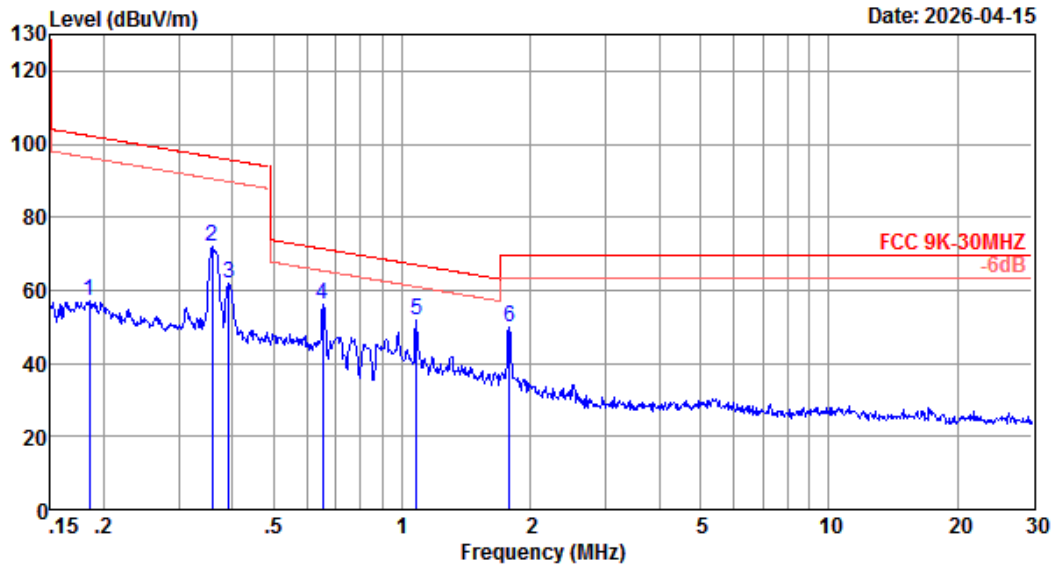
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

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Data: 4 File: \\EMC-966-2\test data\2026\Report\RF\MMophie\3N1-TRVL-Qi2.2-A-FCC ID.EM6 (4)

Date: 2026-04-15



Site no. : 2# 966 chamber Data no. : 4
Dis. / Ant. : 3m FMZB 1519B Ant. pol. : COAXIAL
Limit : FCC 9K-30MHZ
Env. / Ins. : Temp:22.3°C;Humi:52%;Press:101.5kPa
Engineer : Eric Lin
EUT : mophie Roam 3-in-1 Travel Charger
Power : DC 15V From Adapter Input AC 120V/60Hz
M/N : 3N1-TRVL-Qi2.2-A
Test Mode : TX Mode
Sample No. : EST-260407009-004
Watch+Airpods+Mobile phones 25W

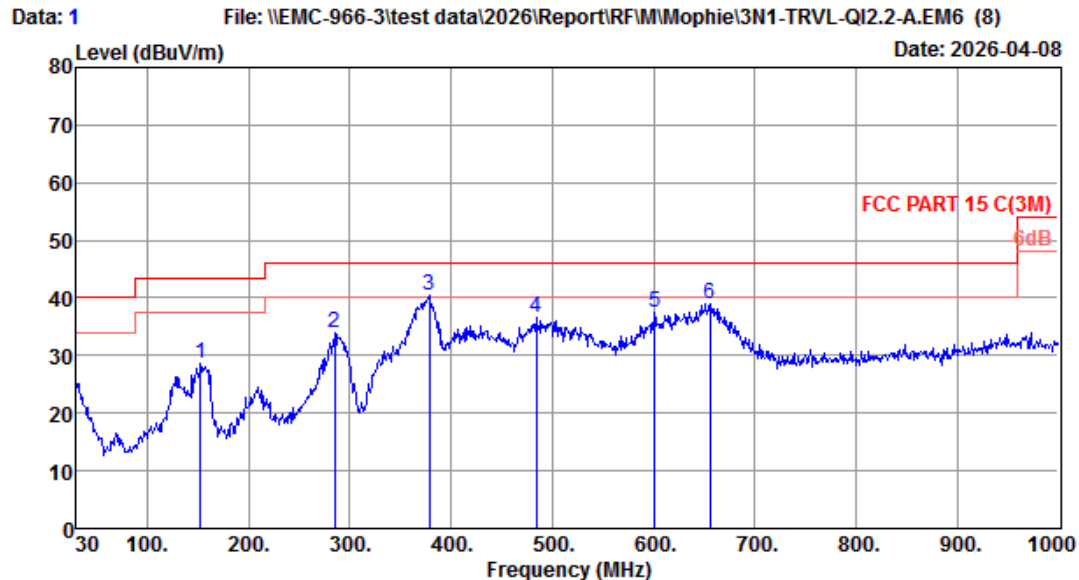
	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.1854	19.88	0.03	37.23	57.14	102.24	45.10	Peak
2	0.3596	19.77	0.03	52.09	71.89	96.49	24.60	Peak
3	0.3934	19.75	0.03	42.05	61.83	95.71	33.88	Peak
4	0.6508	19.73	0.02	36.53	56.28	71.33	15.05	Peak
5	1.0824	19.81	0.02	31.90	51.73	66.92	15.19	Peak
6	1.7810	19.88	0.05	29.85	49.78	69.54	19.76	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

Radiated Emission Above 30MHz

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Site no. : 3# 966 Chamber Data no. : 1
Dis. / Ant. : 3m 31218 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 C(3M)
Env. / Ins. : Temp:22.2°C;Humi:56%;Press:101.52kPa
Engineer : Turbo Pan
EUT : Mophie Roam 3-in-1 Travel Charger
Power : DC 15V From Adapter Input AC 120V/60Hz
M/N : 3N1-TRVL-Qi2.2-A
Test Mode : TX Mode
Sample No. : EST-260407009-001
Watch+Airpods+Mobile phones 25W

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	152.22	11.68	1.22	15.86	28.76	43.50	14.74	QP
2	285.11	13.00	1.75	19.16	33.91	46.00	12.09	QP
3	378.23	15.04	2.07	23.29	40.40	46.00	5.60	QP
4	483.96	17.44	2.38	16.81	36.63	46.00	9.37	QP
5	601.33	19.60	2.70	15.24	37.54	46.00	8.46	QP
6	655.65	19.90	2.84	16.23	38.97	46.00	7.03	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

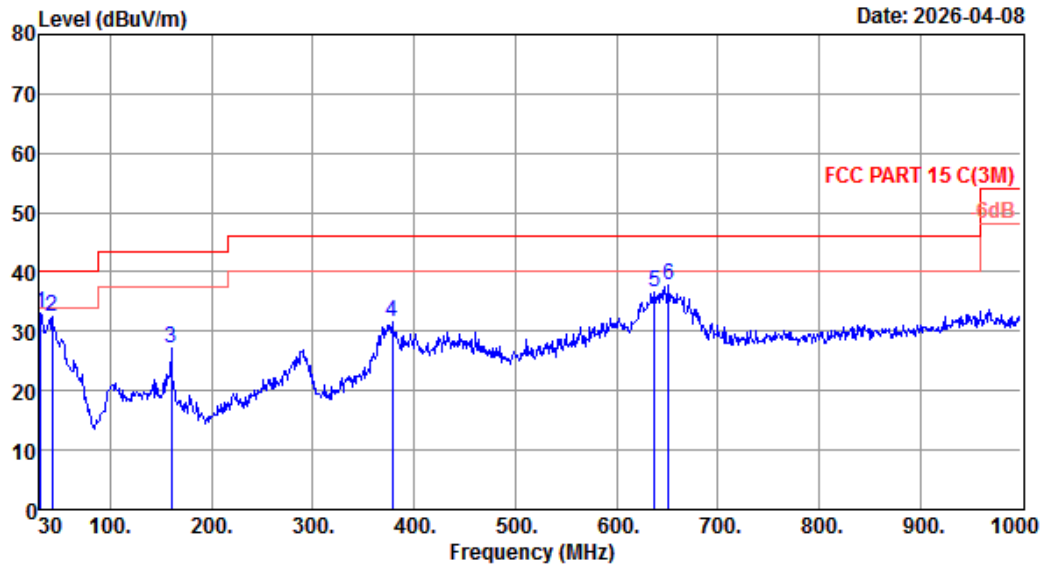
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Data: 2

File: \\EMC-966-3\\test data\\2026\\Report\\RF\\M\\Mophie\\3N1-TRVL-Qi2.2-A.EM6 (8)

Date: 2026-04-08



Site no. : 3# 966 Chamber Data no. : 2
Dis. / Ant. : 3m 31218 Ant. pol. : VERTICAL
Limit : FCC PART 15 C(3M)
Env. / Ins. : Temp:22.2°C;Humi:56%;Press:101.52kPa
Engineer : Turbo Pan
EUT : mophie Roam 3-in-1 Travel Charger
Power : DC 15V From Adapter Input AC 120V/60Hz
M/N : 3N1-TRVL-Qi2.2-A
Test Mode : TX Mode
Sample No. : EST-260407009-001
Watch+Airpods+Mobile phones 25W

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	30.97	18.70	0.51	13.97	33.18	40.00	6.82	QP
2	42.61	12.40	0.61	19.45	32.46	40.00	7.54	QP
3	159.98	11.30	1.25	14.55	27.10	43.50	16.40	QP
4	378.23	15.04	2.07	14.35	31.46	46.00	14.54	QP
5	637.22	20.03	2.79	13.77	36.59	46.00	9.41	QP
6	651.77	19.90	2.83	14.97	37.70	46.00	8.30	QP

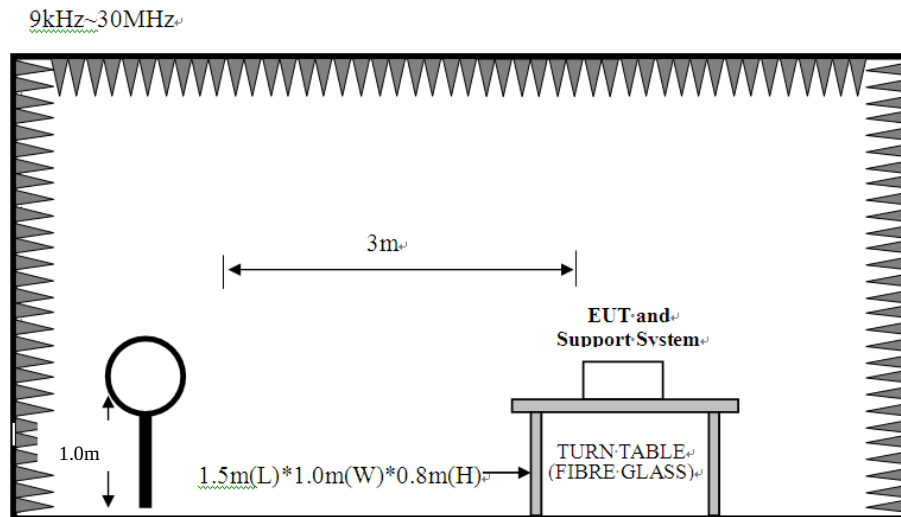
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

4. 20DB OCCUPIED BANDWIDTH

4.1. Limit

N/A

4.2. Test Setup



4.3. Spectrum Analyzer Setting

Spectrum Parameters	Setting
RBW	100Hz
VBW	3×RBW
Span	100Hz
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

Note: Because the measured signal is CW-like, adjusting the RBW per C63.10 would not be practical since measurement bandwidth will always follow the RBW. The RBW is set to 100 Hz to perform the occupied bandwidth test.

4.4. Test Procedure

- EUT was placed on a turn table, which is 0.8 meter high above ground.
- EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower.
- Set the EUT transmit continuously with maximum output power.
- The turn table can rotate 360 degrees to determine the position of the maximum emission level.
- Spectrum analyzer setting parameters in accordance with section 4.3.
- Allow the trace to stabilize, Set the spectrum analyzer marker to the highest level of the displayed trace, use the ndB power bandwidth function to measure 20dB occupied bandwidth
- Record the the value of 20dB cupied bandwidth

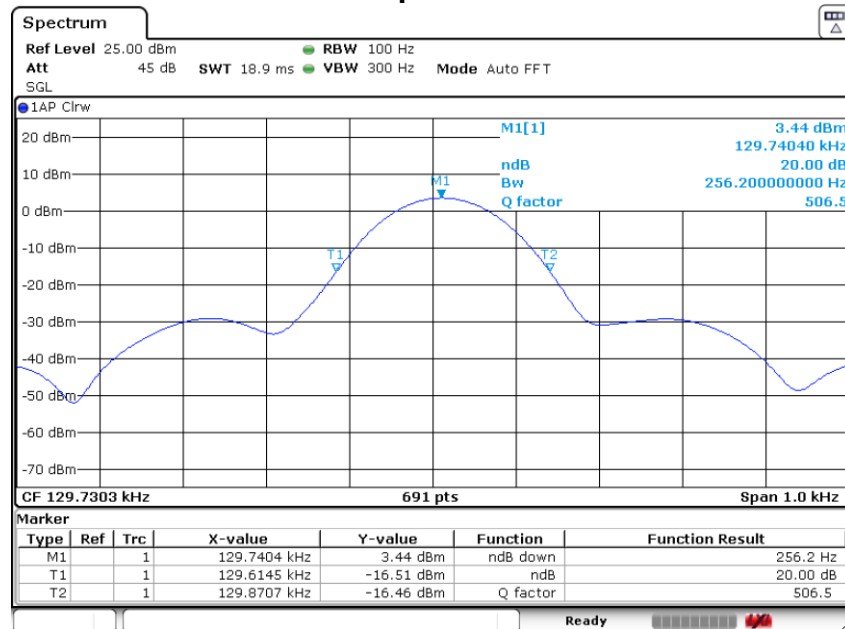
4.5. Test Condition

Temperature	25.3℃	Relative Humidity	55%	Test Voltage	DC 15V
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4.6. Test Result

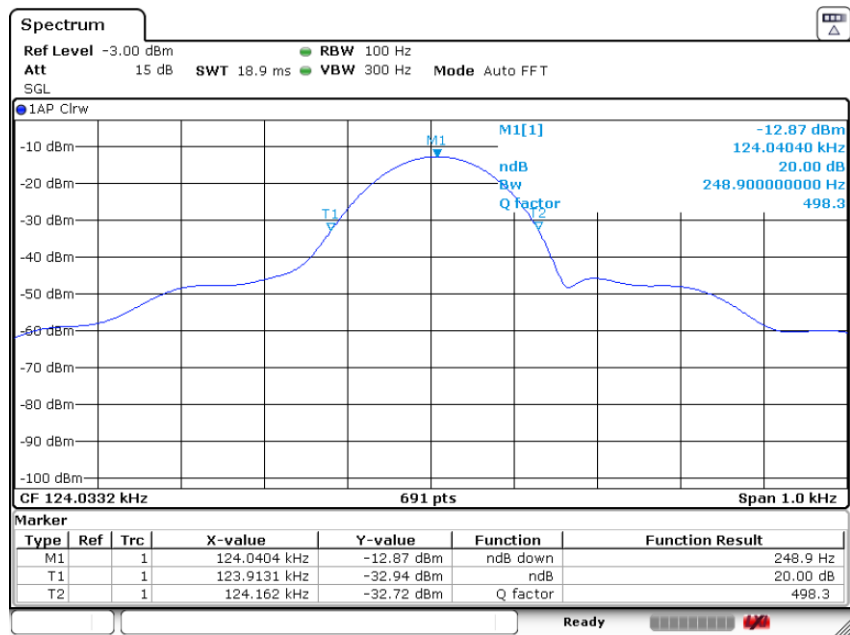
Output Power (W)	Test Frequency (KHz)	20dB Occupied Bandwidth (KHz)	Result
5W(Airpods)	129.7	0.256	Pass
5W(Mobile phone)	124	0.249	Pass
7.5W(Mobile phone)	128	0.249	Pass
10W(Mobile phone)	115	0.248	Pass
15W(Mobile phone)	360	0.249	Pass
25W(Mobile phone)	360	0.248	Pass
3.5W(watch)	1778	0.248	Pass
3.5W(watch)	326.5	0.250	Pass

20dB Occupied Bandwidth



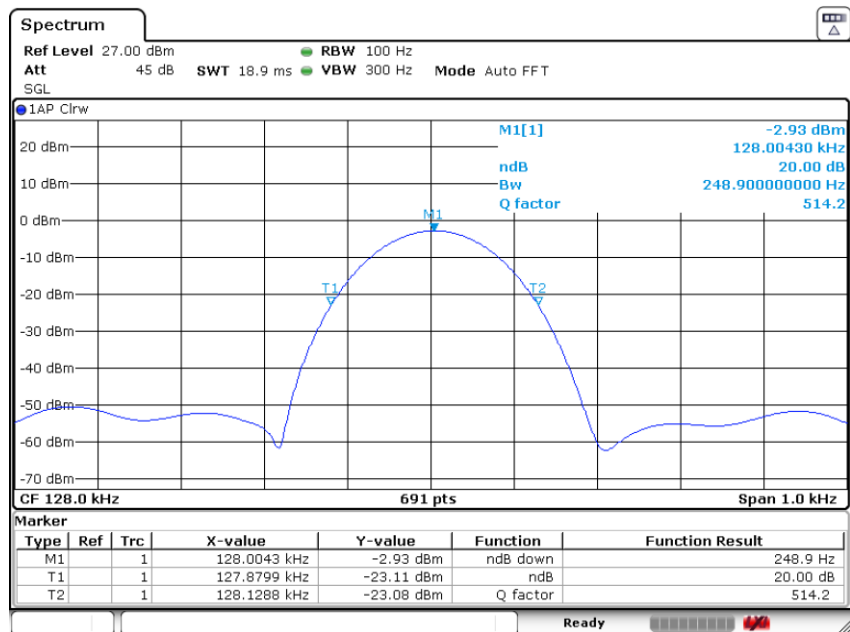
Date: 15.APR.2026 06:03:42

5W(Airpods)



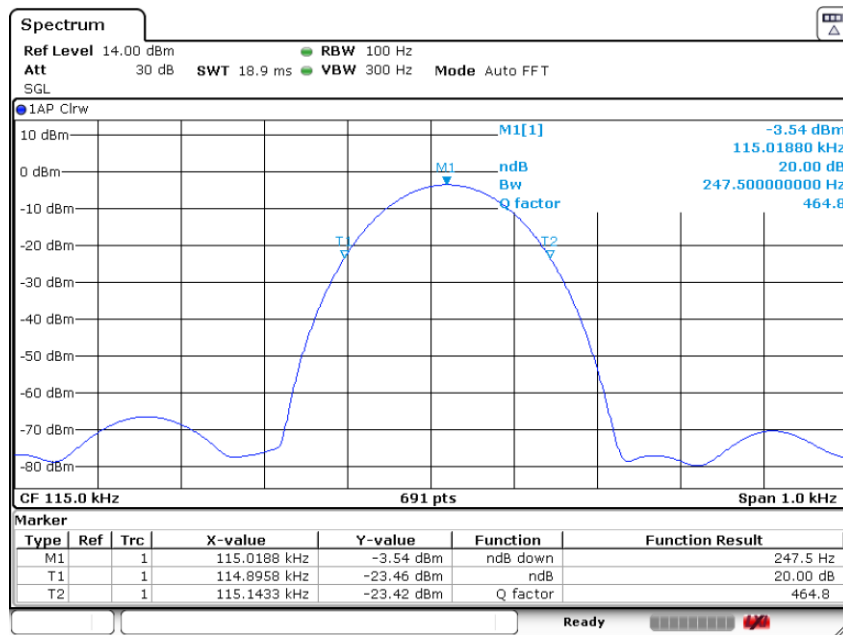
Date: 9.APR.2026 08:33:27

5W(Mobile phone)



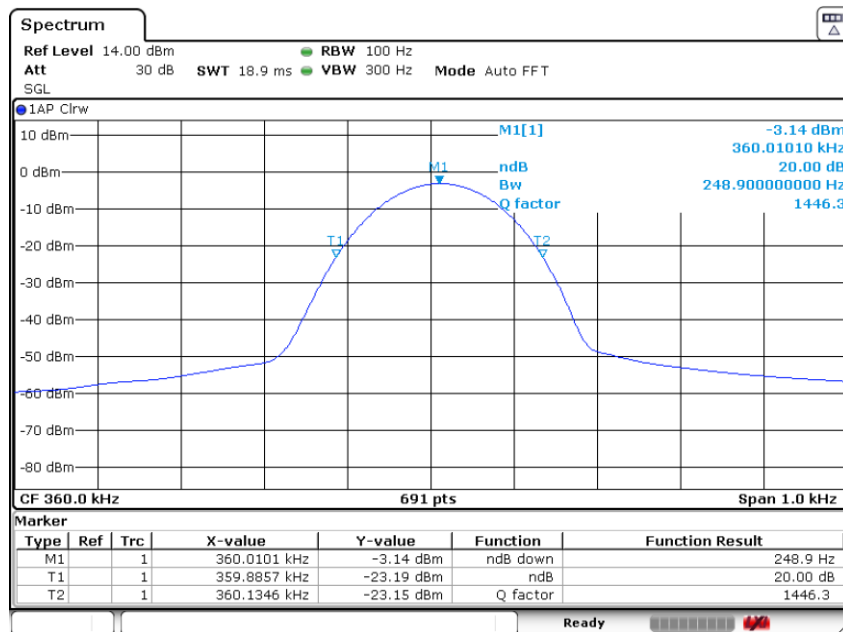
Date: 8.APR.2026 12:09:32

7.5W(Mobile phone)



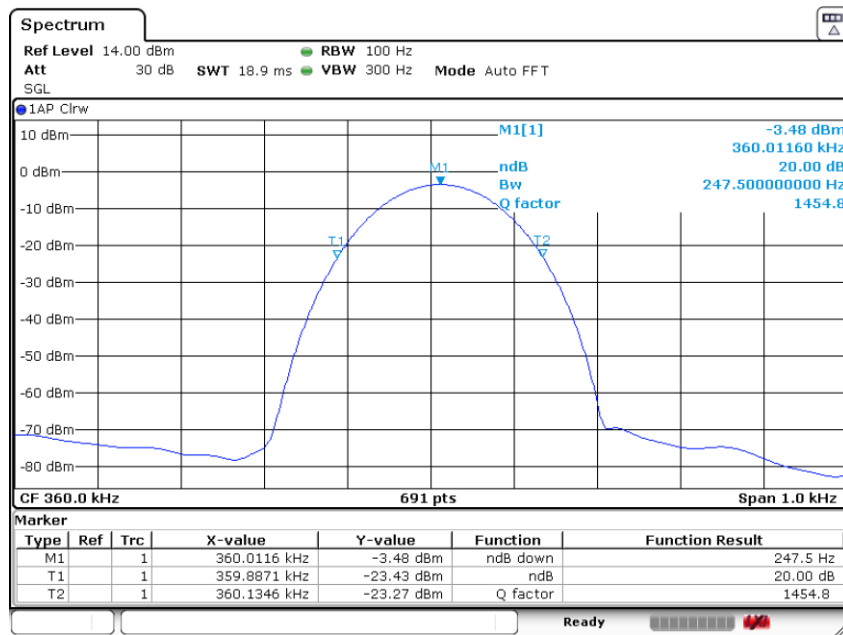
Date: 9.APR.2026 08:49:23

10W(Mobile phone)



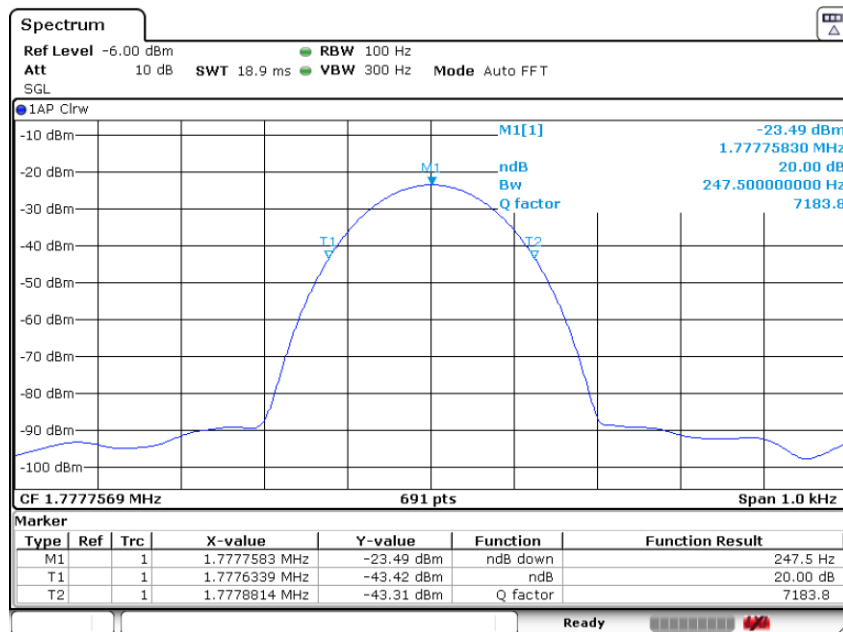
Date: 9.APR.2026 08:50:19

15W(Mobile phone)



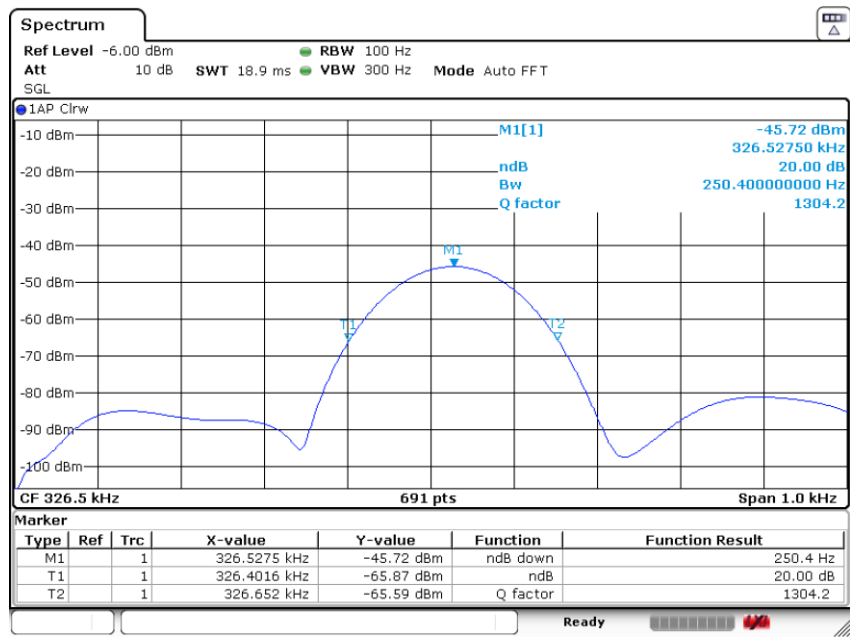
Date: 9.APR.2026 08:50:32

25W(Mobile phone)



Date: 8.APR.2026 11:55:06

3.5W(watch)



Date: 8.APR.2026 11:52:10

3.5W(watch)

5. AC POWER LINE CONDUCTED EMISSIONS

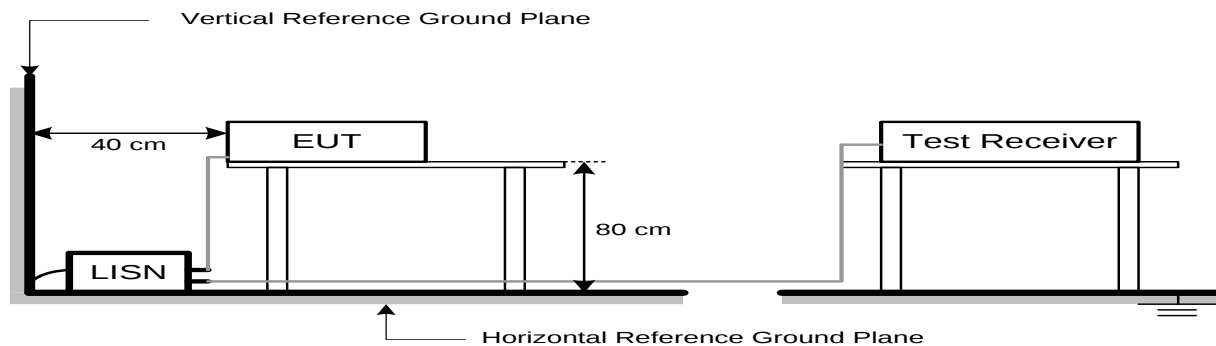
5.1. Limit

Frequency			Maximum RF Line Voltage	
			Quasi-Peak Level dB(μ V)	Average Level dB(μ V)
150kHz	~	500kHz	66 ~ 56*	56 ~ 46*
500kHz	~	5MHz	56	46
5MHz	~	30MHz	60	50

Note:

- * Decreasing linearly with logarithm of frequency.
- The lower limit shall apply at the transition frequencies.

5.2. Test Setup



5.3. Spectrum Analyzer Setting

Spectrum Parameters	Setting
RBW	9KHz
VBW	9KHz
Start frequency	150KHz
Stop frequency	30MHz
Sweep Time	Auto
Detector	QP/AVG
Trace Mode	Max Hold

5.4. Test Procedure

- The EUT was placed on a non-metallic table, 80cm above the ground plane.
- The EUT Power connected to the power mains through a line impedance stabilization network.
- Provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs).
- Set the EUT transmit continuously with maximum output power.
- Spectrum analyzer setting parameters in accordance with section 4.3.
- The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2020 on Conducted Emission Test.
- Record the results in the test report.

5.5. Test Result

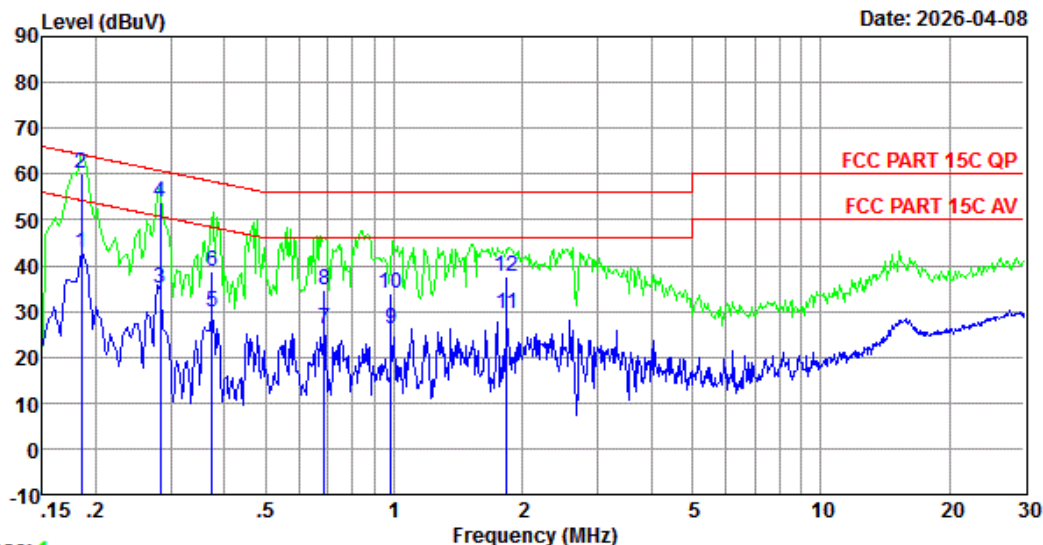
EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan, Guangdong, China
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Fax: +86-769-83081878

Data: 2

File: \\EMC-CE-3\Test Data2\2026\Report\RF\MMophie\3N1-TRVL-Qi2.2-A.EM6 (12)

Date: 2026-04-08



Trace: 1

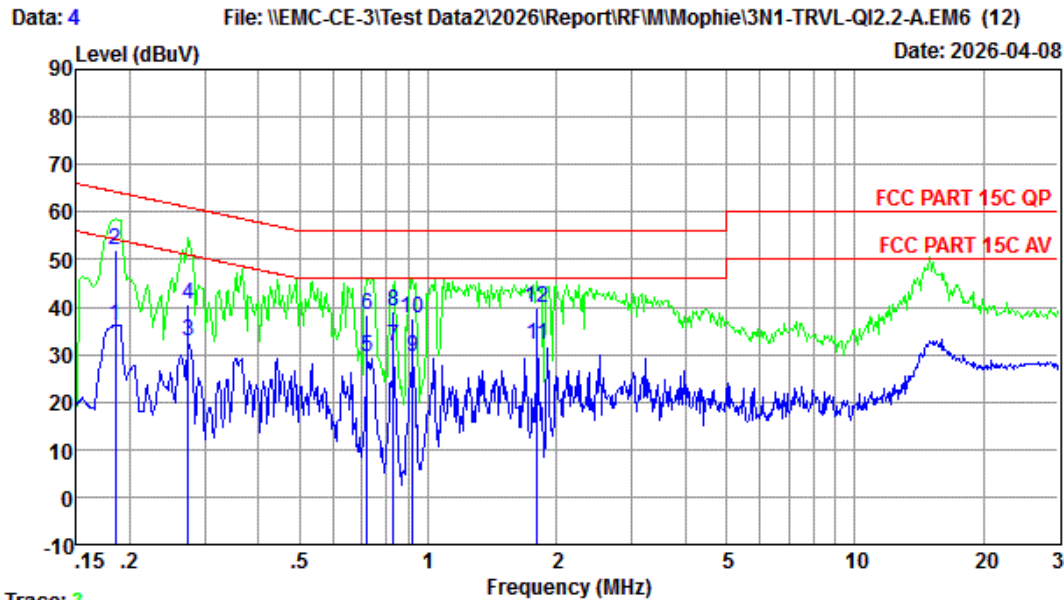
Site no : 3#CE Shield Room Data no. : 2
Env. / Ins. : Temp:24.2℃;Humi:62%;Press:101.1kPa LINE Phase : LINE
Limit : FCC PART 15C QP
Engineer : Edison Chen
EUT : mophie Roam 3-in-1 Travel Charger
Power : DC 15V From Adapter Input AC 120V/60Hz
M/N : 3N1-TRVL-Qi2.2-A
Test Mode : TX Mode
Sample No. : EST-260407009-004
Watch+Airpods+Mobile phones 25W

	Freq. (MHz)	LISN Factor (db)	Cable Loss (db)	Reading dBuV	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.19	9.91	9.84	23.06	42.81	54.24	11.43	Average
2	0.19	9.91	9.84	40.40	60.15	64.24	4.09	QP
3	0.28	9.86	9.84	15.28	34.98	50.72	15.74	Average
4	0.28	9.86	9.84	34.21	53.91	60.72	6.81	QP
5	0.38	9.83	9.84	10.27	29.94	48.39	18.45	Average
6	0.38	9.83	9.84	19.13	38.80	58.39	19.59	QP
7	0.69	9.79	9.84	6.65	26.28	46.00	19.72	Average
8	0.69	9.79	9.84	15.16	34.79	56.00	21.21	QP
9	0.98	9.74	9.84	6.53	26.11	46.00	19.89	Average
10	0.98	9.74	9.84	14.19	33.77	56.00	22.23	QP
11	1.84	9.68	9.84	10.14	29.66	46.00	16.34	Average
12	1.84	9.68	9.84	17.93	37.45	56.00	18.55	QP

Remarks: 1. Emission Level= LISN Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. If the average limit is met when using a quasi-peak detector,
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

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Fax: +86-769-83081878



Trace: 3
Site no : 3#CE Shield Room Data no. : 4
Env. / Ins. : Temp:24.2°C;Humi:62%;Press:101.1kPa LINE Phase : NEUTRAL
Limit : FCC PART 15C QP
Engineer : Edison Chen
EUT : mophie Roam 3-in-1 Travel Charger
Power : DC 15V From Adapter Input AC 120V/60Hz
M/N : 3N1-TRVL-Qi2.2-A
Test Mode : TX Mode
Sample No. : EST-260407009-004
Watch+Airpods+Mobile phones 25W

	Freq. (MHz)	LISN Factor (db)	Cable Loss (db)	Reading dBuV	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.19	9.92	9.84	16.44	36.20	54.24	18.04	Average
2	0.19	9.92	9.84	32.15	51.91	64.24	12.33	QP
3	0.27	9.96	9.84	13.02	32.82	50.98	18.16	Average
4	0.27	9.96	9.84	20.74	40.54	60.98	20.44	QP
5	0.72	9.53	9.84	10.26	29.63	46.00	16.37	Average
6	0.72	9.53	9.84	19.13	38.50	56.00	17.50	QP
7	0.83	9.63	9.84	12.06	31.53	46.00	14.47	Average
8	0.83	9.63	9.84	19.71	39.18	56.00	16.82	QP
9	0.92	9.73	9.84	9.84	29.41	46.00	16.59	Average
10	0.92	9.73	9.84	18.20	37.77	56.00	18.23	QP
11	1.80	9.87	9.84	12.25	31.96	46.00	14.04	Average
12	1.80	9.87	9.84	20.13	39.84	56.00	16.16	QP

Remarks: 1. Emission Level= LISN Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

6. ANTENNA REQUIREMENTS

6.1. Limit

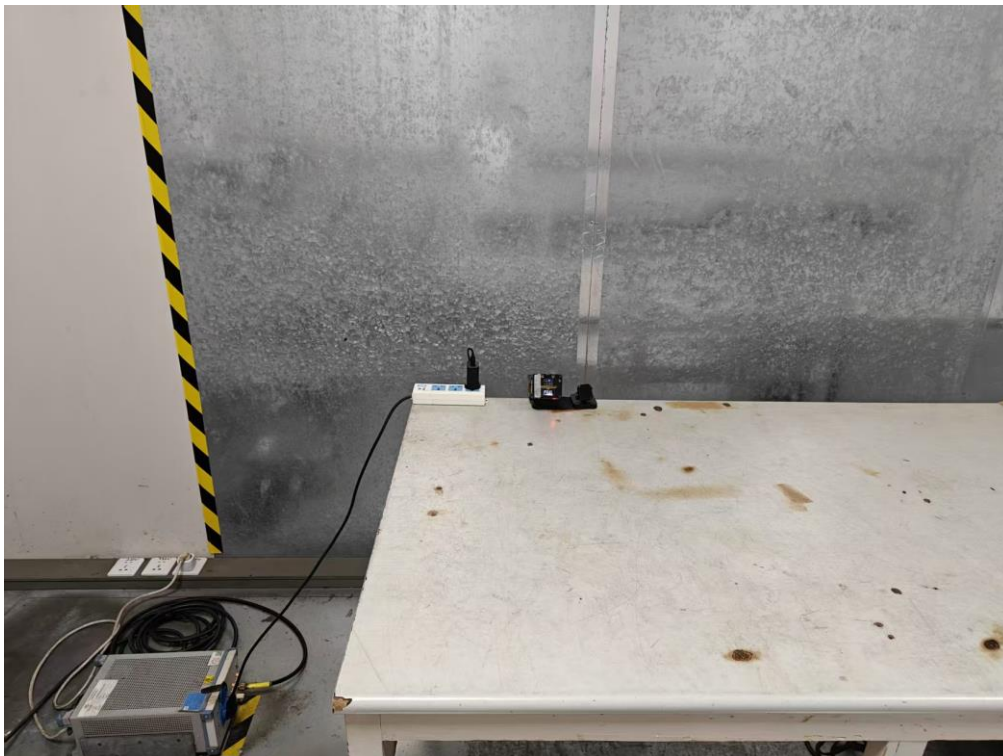
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. 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. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§15.211, 15.213, 15.217, 15.219, 15.221, or 15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

6.2. Test Result

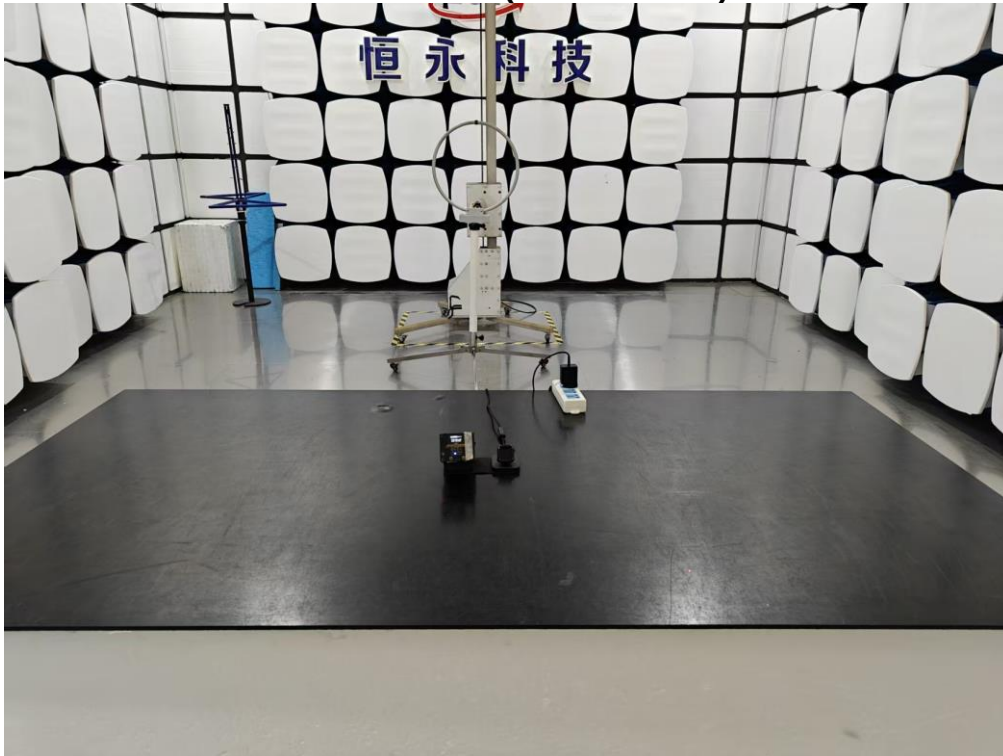
The antennas used for this product is coil antenna, so compliance with antenna requirements. (Please refer to the EUT photo for details)

7. TEST SETUP PHOTO

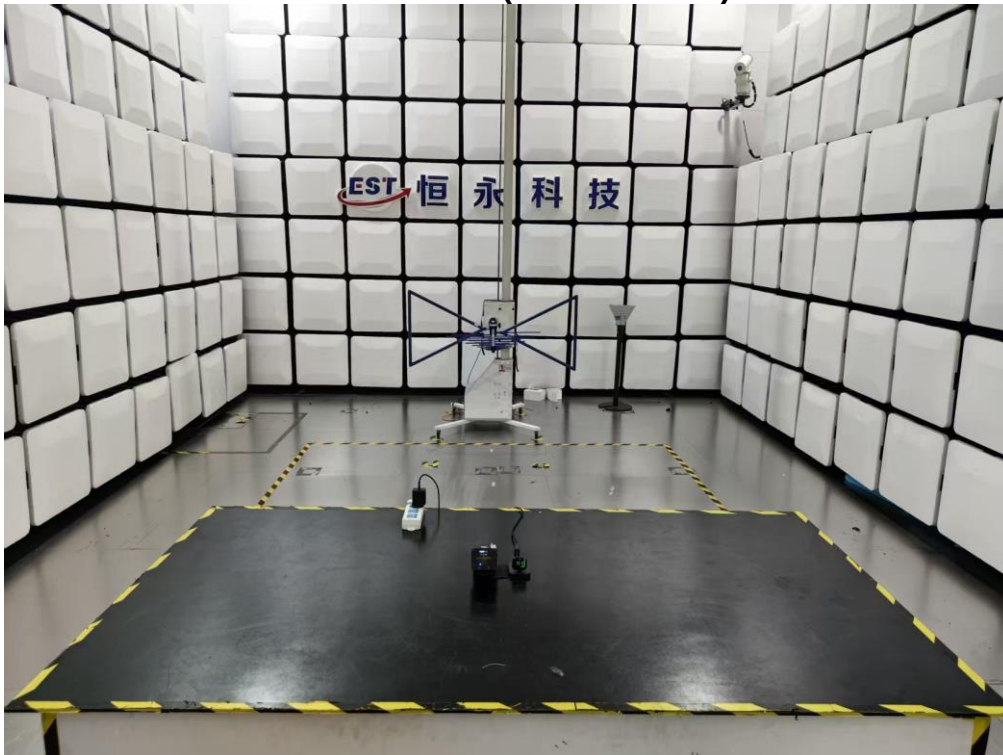
Conducted Emissions Test



Radiated Test (Below 30MHz)



Radiated Test (Above 30MHz)

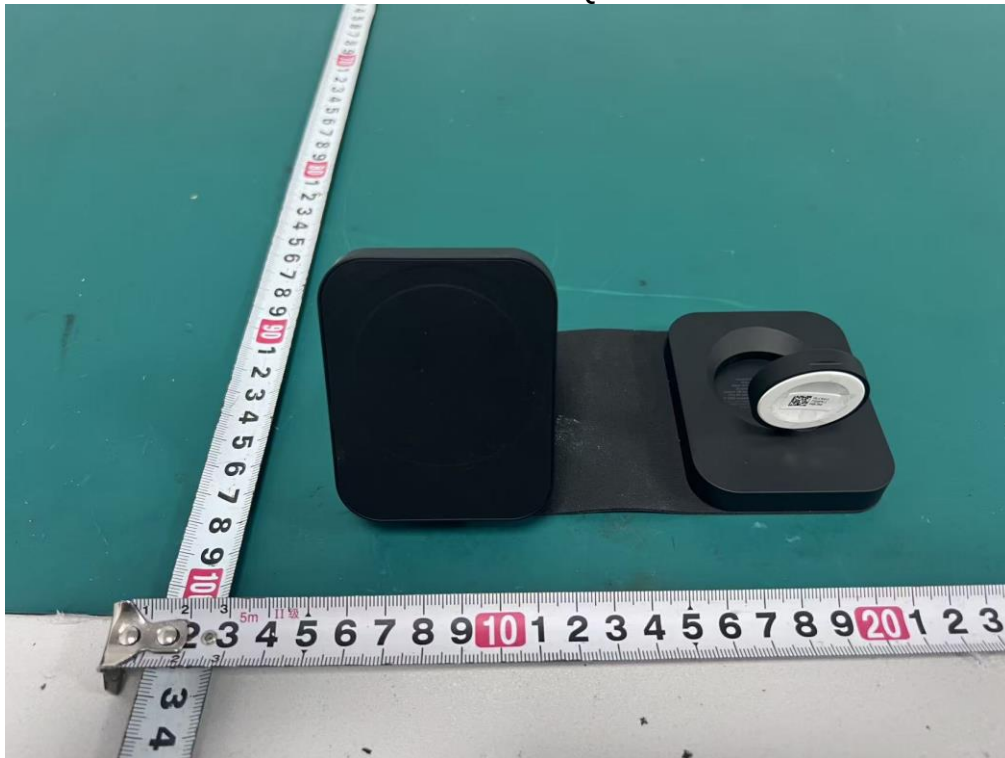


8. EUT PHOTO

External Photos
M/N: 3N1-TRVL-Qi2.2-A



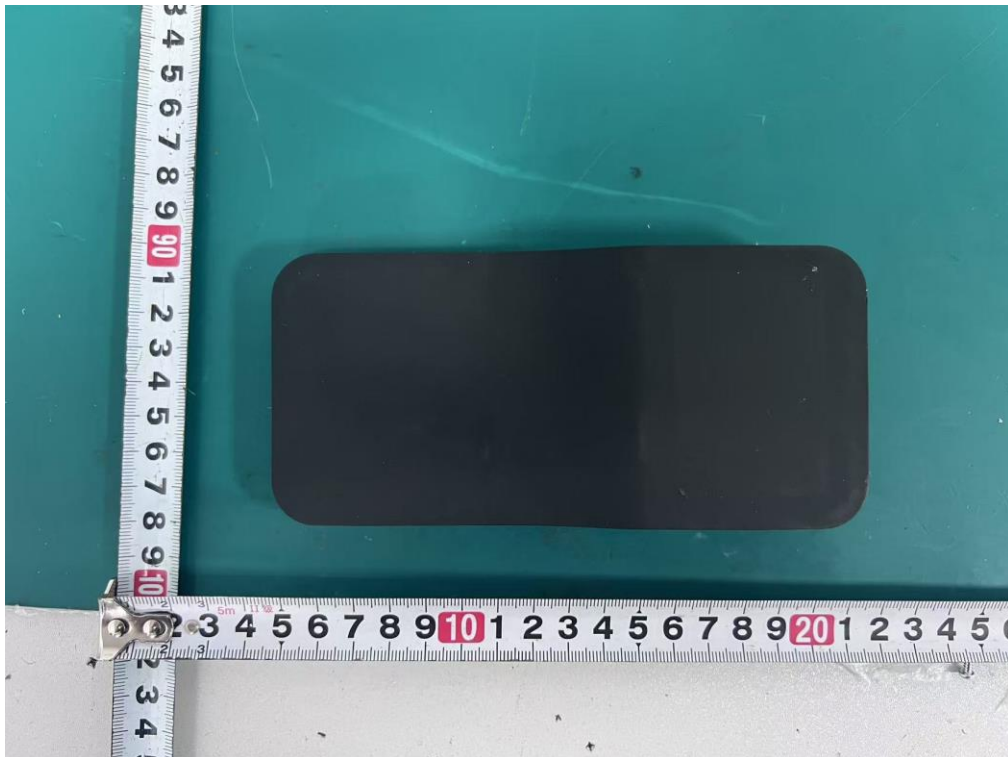
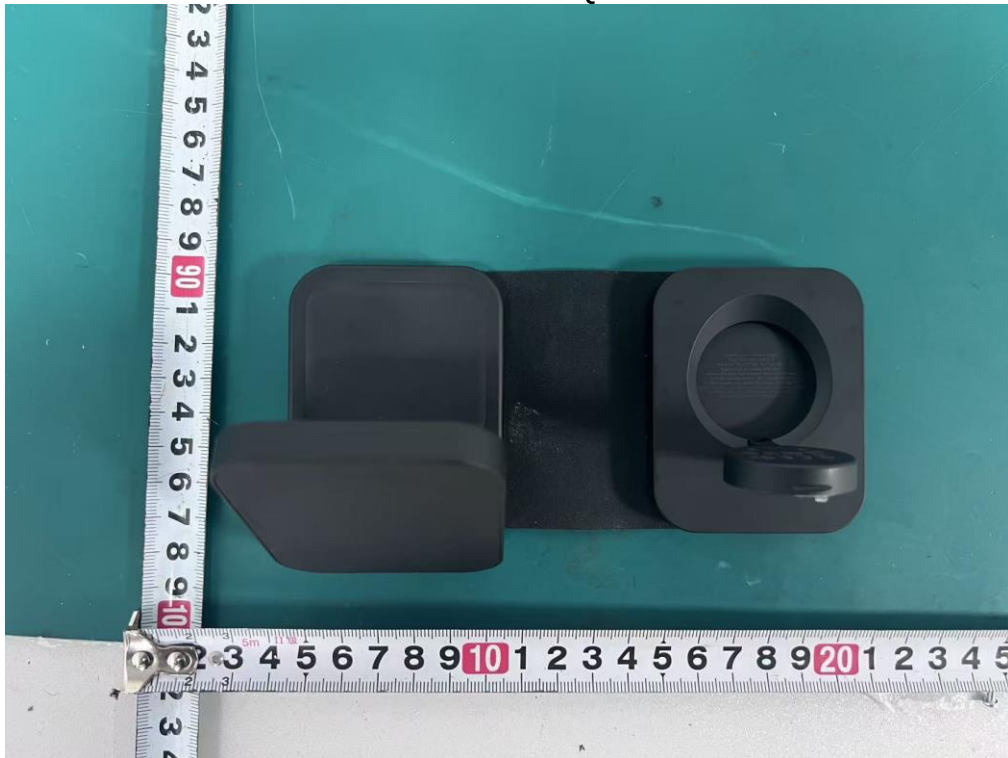
External Photos
M/N: 3N1-TRVL-Qi2.2-A



External Photos
M/N: 3N1-TRVL-Qi2.2-A



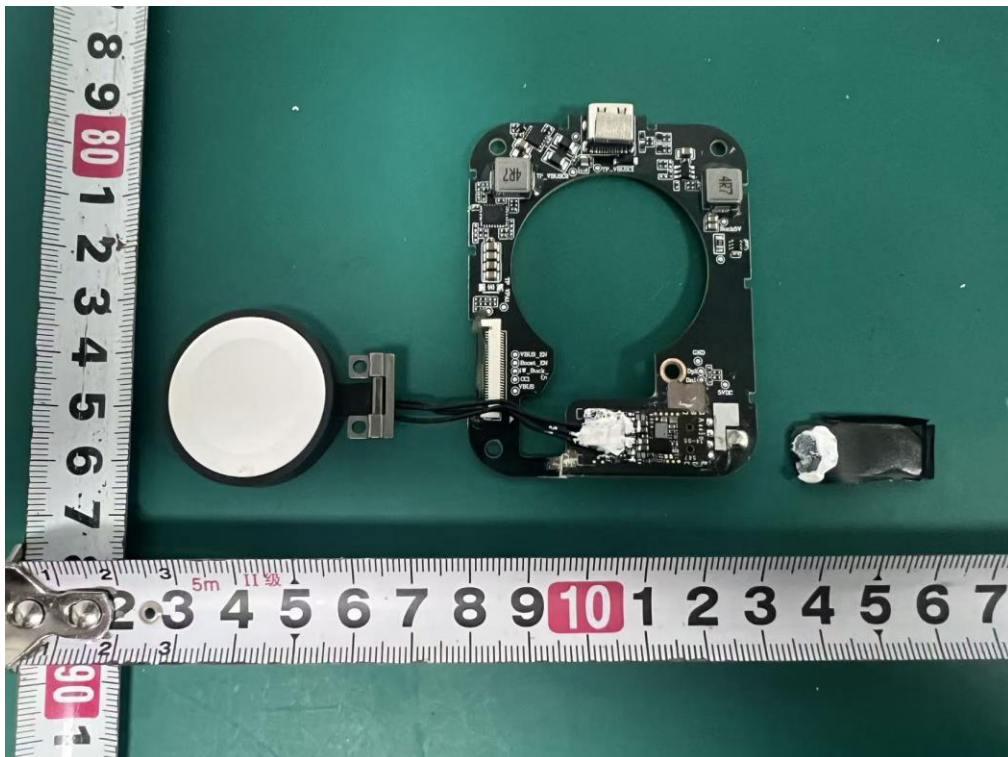
External Photos
M/N: 3N1-TRVL-Qi2.2-A



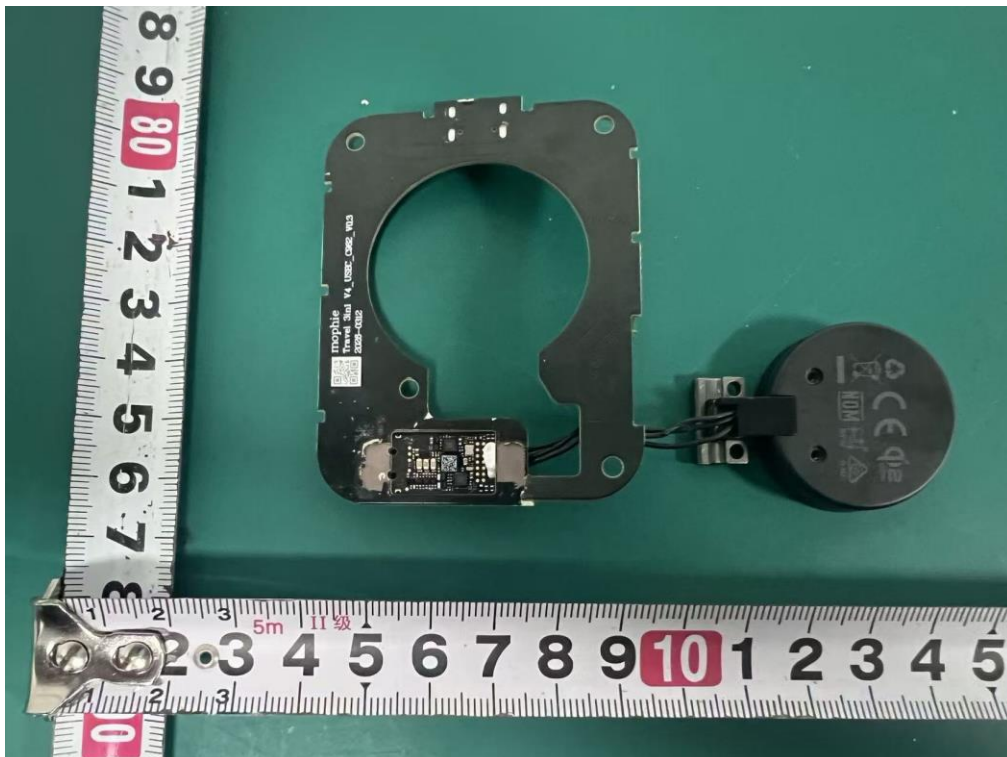
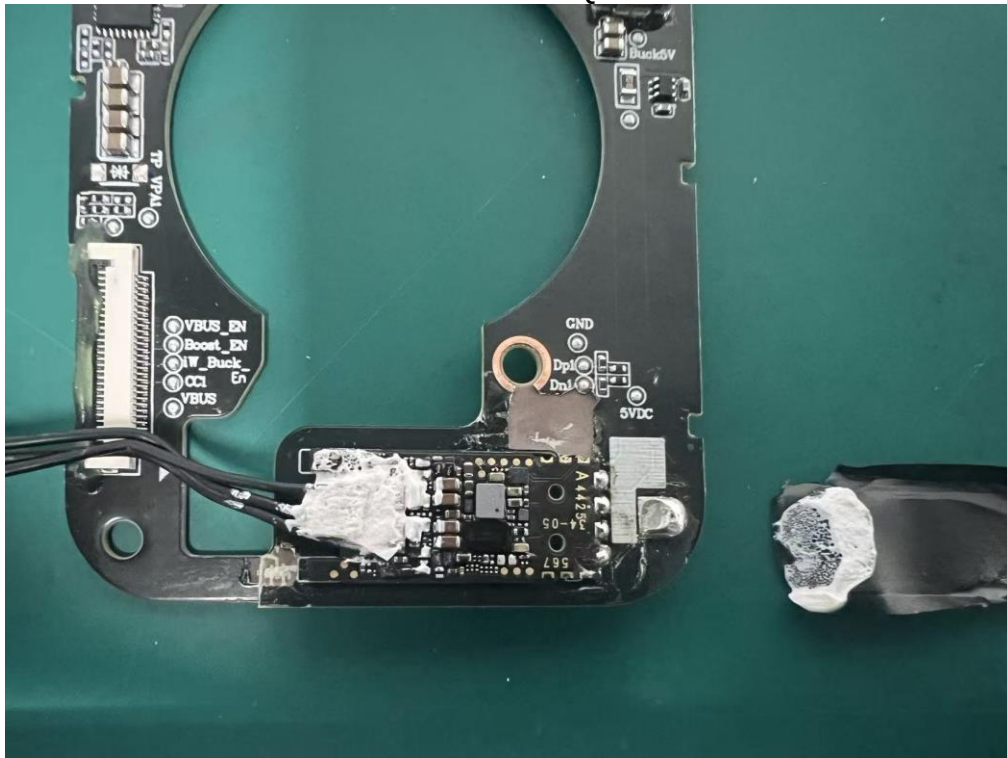
Internal Photos M/N: 3N1-TRVL-Qi2.2-A



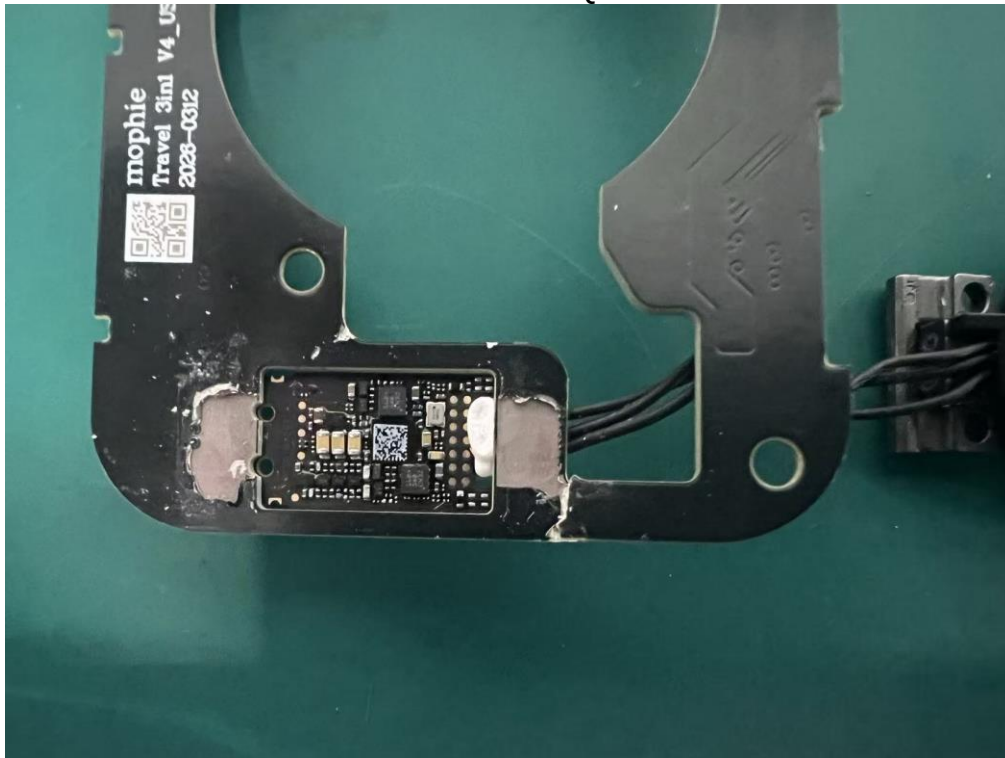
Internal Photos
M/N: 3N1-TRVL-Qi2.2-A



Internal Photos M/N: 3N1-TRVL-Qi2.2-A



Internal Photos
M/N: 3N1-TRVL-Qi2.2-A



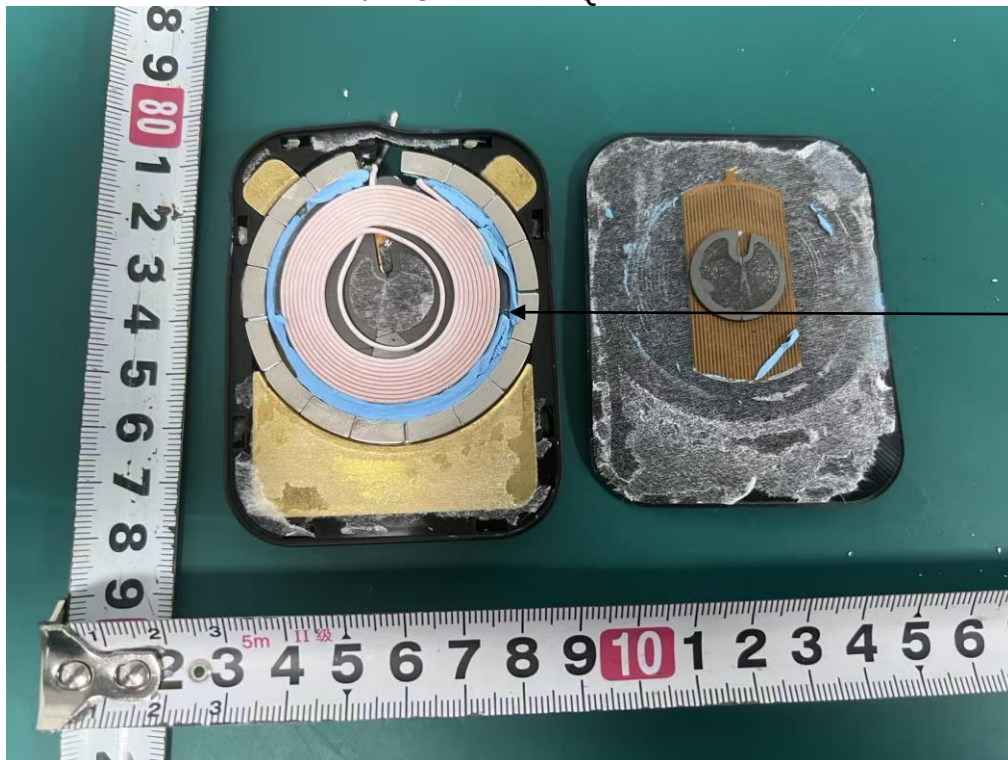
Internal Photos
M/N: 3N1-TRVL-Qi2.2-A



Coil
Antenna



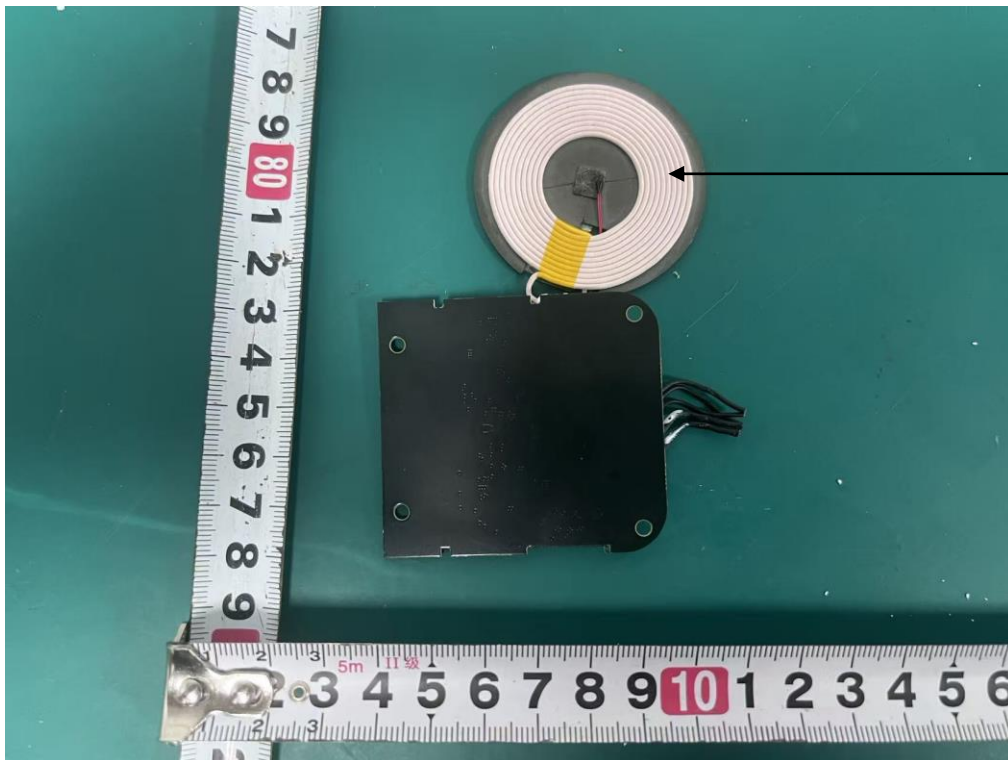
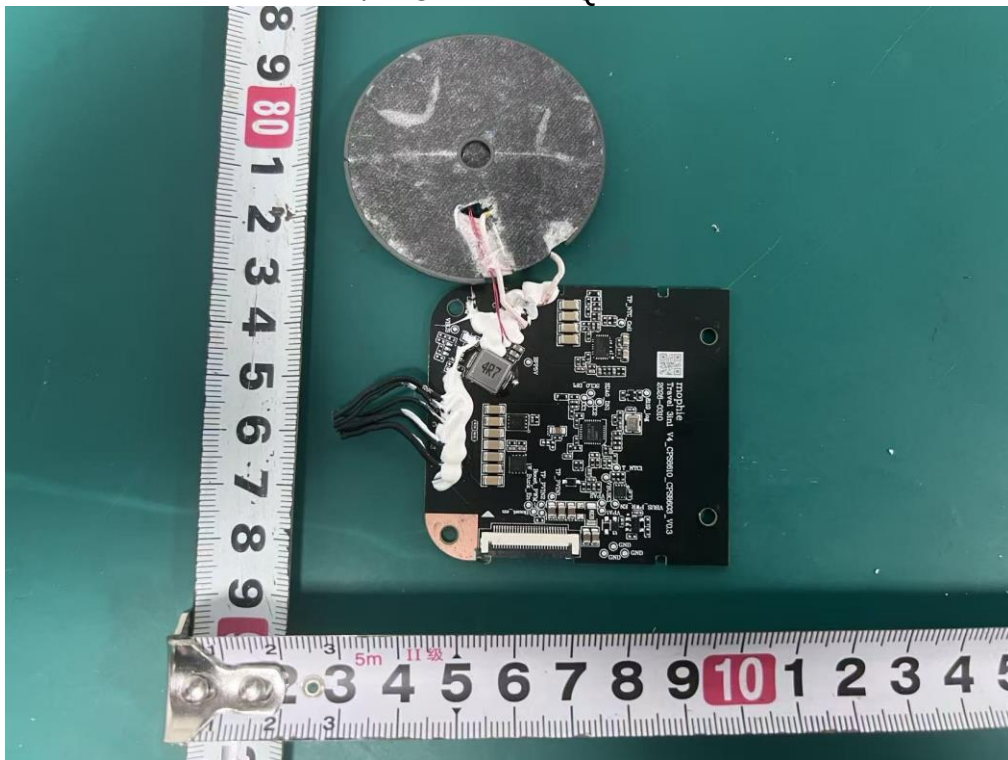
Internal Photos
M/N: 3N1-TRVL-Qi2.2-A



Coil
Antenna



Internal Photos
M/N: 3N1-TRVL-Qi2.2-A



Coil
Antenna

End of Test Report