



TEST REPORT

Applicant Name: M5Stack Technology Co., Ltd
Address: Block A10, Expo Bay South Coast, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Report Number: 2604P17074E-RF

Test Standard (s)

Japan Extremely Low Power Device

Sample Description

Product Name: M5Unit NFC
Model No.: Unit NFC
Trade Mark: 
M5STACK
Date Received: 2026-01-30
Report Date: 2026-03-05

Test Result:	The EUT complied with the standards above.
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Prepared and Checked By:

Jason Fan

Jason Fan
EMC Engineer

Approved By:

Bob.Liao
EMC Engineer

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
Rev.00	2604P17074E-RF	Original Report	2026-03-05

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product Name	M5Unit NFC
Tested Model	Unit NFC
Radio Type	NFC
Frequency Range	13.56 MHz
Nominal Power Supply [#]	DC 5V from Auxiliary device
Sample Serial Number	3GVQ-1 (Assigned by ATC, Shenzhen)
Sample/EUT Status	Good condition

Objective

The objective of the manufacturer is to demonstrate compliance with the requirement of Japan Extremely Low Power Device and there is no need for getting a license from the radio station.

Test Facility

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the Floor 1, KuMaKe Building, Dongzhou Community, Guangming Street, Guangming District, Shenzhen, Guangdong, China.

Accredited by American Association for Laboratory Accreditation (A2LA).The Certificate Number is 4297.01.

Measurement Uncertainty

Parameter		Uncertainty
RF Frequency		0.064*10 ⁻⁷
Emissions, Radiated	9kHz - 30MHz	2.1 dB
	30MHz - 1GHz	4.3 dB
Temperature		1 °C
Humidity		7 %
Supply voltages		0.4 %

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in a typical fashion (as normally used by a typical user).

EUT Exercise Software

No Exercise Software was used.

Equipment Modifications

No modification on the EUT.

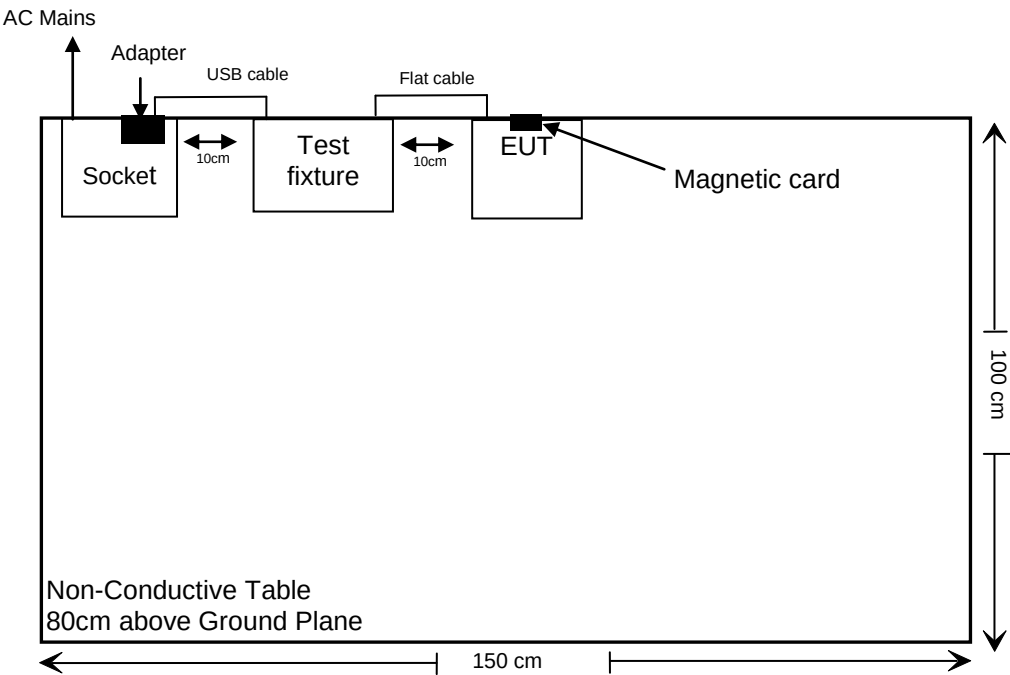
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Unknown	Magnetic card	Unknown	Unknown
ITEL	Adapter	U100IEA (Input:100-240V~50/60Hz,500mA Output:DC5V-2.0A)	Unknown
M5Stack	Test fixture	Unknown	Unknown

External I/O Cable

Cable Description	Shielding Type	Length (m)	From Port	To
Flat cable	No	0.2	EUT	Test fixture
USB cable	No	0.8	Adapter	Test fixture

Block Diagram of Test Setup
For Radiated Emission Below 30MHz:



SUMMARY OF TEST RESULTS

Item	Description of Test	Result
1	Radiated Emission Test	Compliance

TEST EQUIPMENT LIST

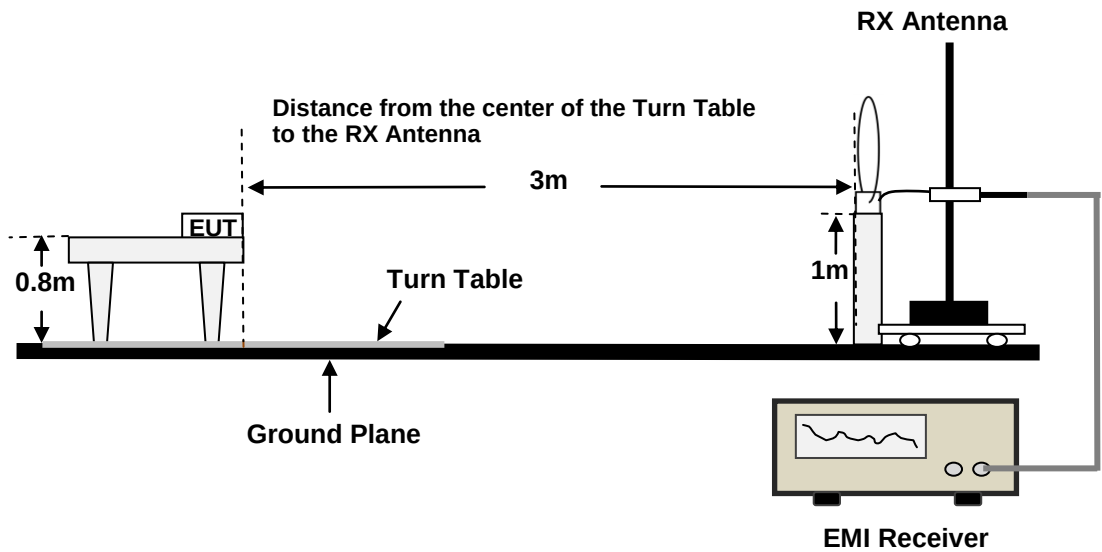
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Spurious Emission Test(Below 1GHz)					
Rohde & Schwarz	Test Receiver	ESR	102725	2025/09/18	2026/09/17
SONOMA INSTRUMENT	Amplifier	310 N	186131	2025/03/26	2026/03/25
Unknown	RF Coaxial Cable	No.12	N040	2025/05/30	2026/05/29
Unknown	RF Coaxial Cable	No.13	N300	2025/05/30	2026/05/29
Unknown	RF Coaxial Cable	No.14	N800	2025/05/30	2026/05/29
BACL	LOOP ANTENNA	1313-1A	3110711	2024/01/16	2027/01/15
Unknown	RF Coaxial Cable	No.40	/	2025/05/30	2026/05/29
UNI-T	DC Power Supply	UTP1306S	2109D0903324	2025/03/26	2026/03/25
Test Software: e3 191218 (V9)					

*** Statement of Traceability:** Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

RADIATED EMISSIONS TEST

EUT Setup

9kHz - 30MHz:



The radiated emission tests were performed in the 3-meter chamber a test site. The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

During the radiated emission test, the EMI test Receiver was set with the following configurations:

Frequency Range	Measurement	RBW	Video B/W	IF B/W	Detector
9kHz - 150kHz	PK	0.3kHz	1kHz	/	PK
	QP/AV	/	/	200Hz	QP/AV
150kHz - 30MHz	PK	10kHz	30kHz	/	PK
	QP/AV	/	/	9kHz	QP/AV

Calculation

The Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain. The basic equation is as follows:

Factor = Antenna Factor + Cable Loss - Amplifier Gain

The “Over Limit/Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an over limit/margin of -7dB means the emission is 7dB below the limit. The equation for calculation is as follows:

Over Limit/Margin = Level / Corrected Amplitude – Limit
Level / Corrected Amplitude = Read Level + Factor

Test Data

Environmental Conditions

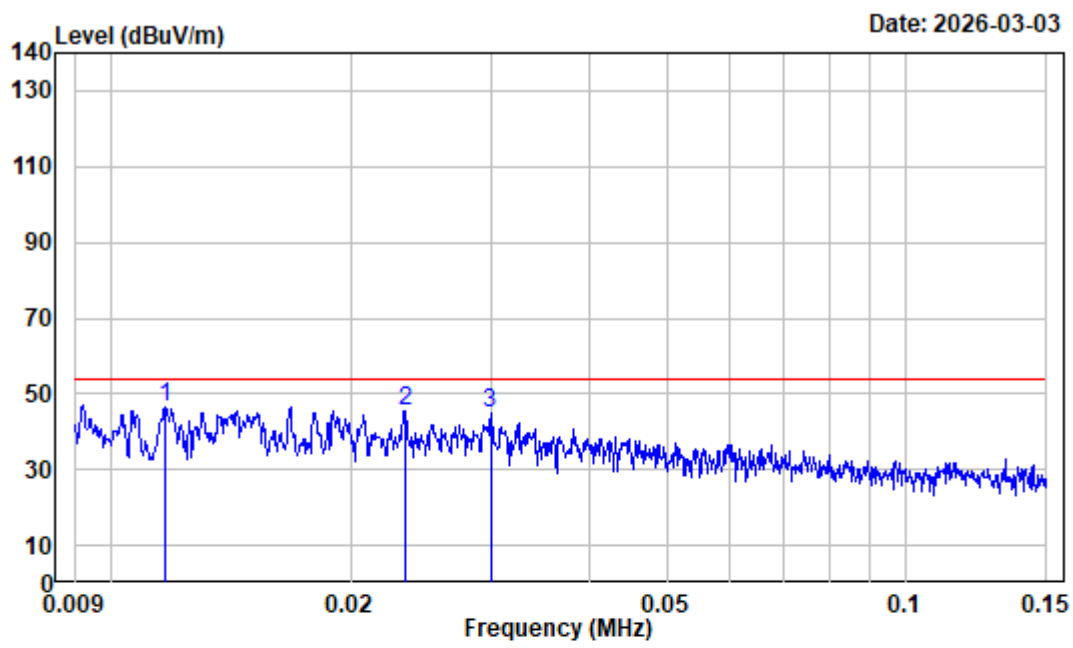
Temperature:	24.5 °C
Relative Humidity:	56 %
ATM Pressure:	100.4 kPa
Test Engineer:	Jayden Luo
Test Date:	2026-03-03
EUT Operation Mode:	Transmitting

Test Result: Compliance, please refer to the below data.

Frequency (MHz)	Level (dBuV/m)	Level (uV/m)	Limit (uV/m)	Margin (uV/m)
0.012	46.73	217.02	500	-282.98
0.023	45.52	188.80	500	-311.2
0.030	45.12	180.30	500	-319.7
1.197	47.21	229.35	500	-270.65
2.978	47.85	246.89	500	-253.11
13.551	43.18	144.21	500	-355.79

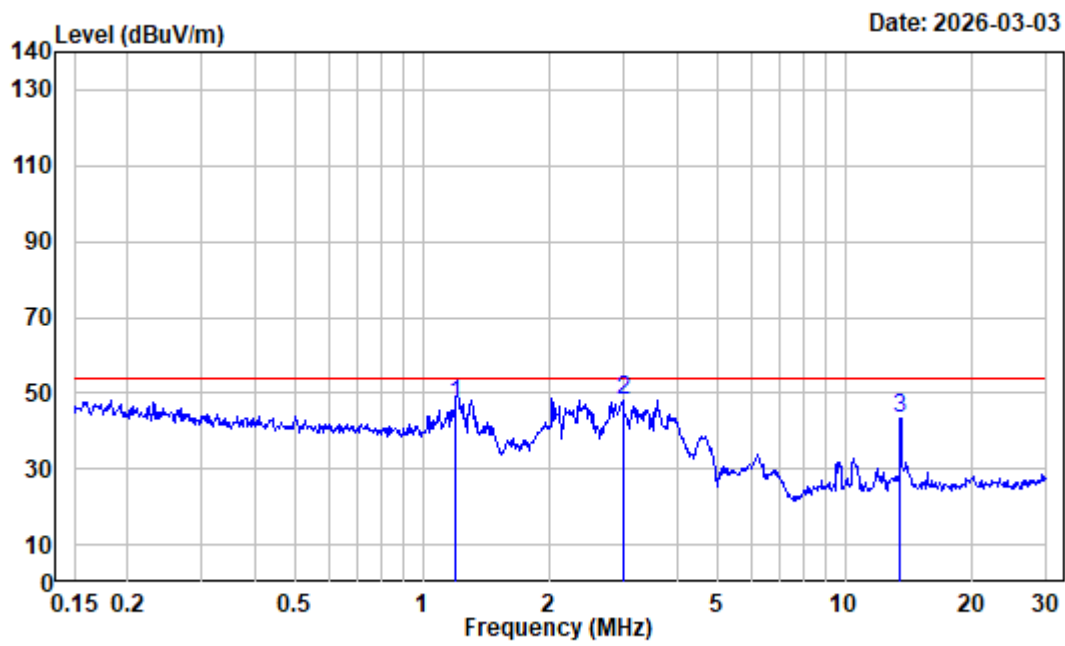
Note: $20\log(uV)=dBuV/m$

9kHz~30MHz:



Site : chamber
Condition: 3m
Job No. : 2604P17074E-RF
Tester : Jayden Luo
Test Mode: Transmitting

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.012	35.06	11.67	46.73	54.00	-7.27	Peak
2	0.023	29.87	15.65	45.52	54.00	-8.48	Peak
3	0.030	26.95	18.17	45.12	54.00	-8.88	Peak



Site : chamber
Condition: 3m
Job No. : 2604P17074E-RF
Tester : Jayden Luo
Test Mode: Transmitting

Freq		Factor	Read Level	Level	Limit Line	Over Limit	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	1.197	-2.53	49.74	47.21	54.00	-6.79	QP
2	2.978	-5.82	53.67	47.85	54.00	-6.15	Peak
3	13.551	-4.41	47.59	43.18	54.00	-10.82	Peak

EXHIBIT A-EUT PHOTOGRAPHS

Please refer to the Attachment No.1 2604P17074E-RF EUT External Photos and Attachment No.2 2604P17074E-RF EUT Internal Photos.

EXHIBIT B-TEST SETUP PHOTOGRAPHS

Please refer to the Attachment No.3 2604P17074E-RF Test Photos.

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