TECHNICAL REPORT

EMC TEST REPORT

Report No:	MK23080009-P01E01
Report Date:	2023-9-6
Applicant:	
Product:	mobilephone stabilizer
Brand Name:	N/A
Model No:	H5, H6, UPDOT, MO6622, WALK CAM, MO6622-03, KB-BT, ZX-G0, NZ-01
Test Standards:	ETSI EN 301 489-1 V2.2.3(2019-11) ETSI EN 301 489-17 V3.2.4(2020-09)
Test result:	The EMC testing has been performed on the submitted samples and found in compliance with council EMC Directive 2014/30/EU and RE Directive 2014/53/EU

Appr

Vivian Jiang

EMC Manager

Dated: September 6, 2023

Results appearing herein relate only to the sample tested

The technical reports is issued errors and omissions exempt and is subject to withdrawal at

TMC Testing Services (Shenzhen) Co., Ltd.

1st Floor, Block A1, Zone A, Xinshidai Gongrong Industrial Park, No. 2, Shihuan Road, Shiyan Street, Baoan District, Shenzhen, China

Tel:86-755-86642861 Email: cert@tmc-lab.com

1. General Information

1.1 Notes

The test results of this report relate exclusively to the test item specified in 1.5. The TMC Lab does not assume Responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of the TMC Lab.

1.2 Testing Laboratory

TMC Testing Services (Shenzhen) Co., Ltd.

1st Floor, Block A1, Zone A, Xinshidai Gongrong Industrial Park, No. 2, Shihuan Road, Shiyan Street, Baoan District, Shenzhen, China

Tel: 86-755-86642861 Email: cert@tmc-lab.com

Internet: www.tmc-lab.com

1.3 Details of Applicant

Name:

Addres

1. 4 Application Details

Date of Receipt of Application: August 30, 2023

Date of Receipt of Test Item: August 30, 2023

Date of Test: August 30, 2023- September 5, 2023

1.5 Test Item

Manufact

Address:

Brand Name: N/A

Model No.: H5

Additional Model No.: H6, UPDOT, MO6622, WALK CAM, MO6622-03, KB-BT, ZX-G0, NZ-01

Additional Brand Name: N/A

Description: mobilephone stabilizer

Additional Information

Antenna: PCB antenna
Ant Gain: 0dBi
Bluetooth Frequency: 2402-2480 MHz
Hardware Version:/
Software Version: /
Type of Modulation: GFSK
Extreme Temp. Tolerance:0℃ to 55℃

1.6 List of Ports

Port	Description	Classification[1]	Maximum cable Length	Cable Type
USB Port	-	-	-	-
Line in Port	-	-	-	-

Note [1]prots shall be classified as ac power, dc power or signal/control port.
[2]Maximum cable length corresponding to the appropriate ports shall be classified as ≤3m or ＞3m.

1. 7 Ancillary and Peripheral Devices

Description	Designation	Serial No.	Manufacturer
N/A	-	-	-

1.8 Test Standards

ETSI EN 301 489-1 V2.2.3(2019-11)
Electromagnetic compatibility and Radio spectrum Matters (ERM);
Electromagnetic Compatibility (EMC) standard for radio equipment and services;
Part 1: Common technical requirements
ETSI EN 301 489-17 V3.2.4(2020-09)
Electromagnetic compatibility and Radio spectrum Matters (ERM);
Electromagnetic Compatibility (EMC) standard for radio equipment and services;
Part 17: Specific conditions for 2.4GHz wideband transmission systems and 5GHz high performance RLAN equipment

Note: All radiated measurements were made in all three orthogonal planes. The values reported are the maximum values.

1.9. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

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

Item	Frequency	MU
Conducted Emissions Test	150kHz ~ 30MHz	±3.008dB
Radiation Emission test in 3m chamber	30MHz~1GHz	±2.731dB
Radiation Emission test in 3m chamber	1GHz ~ 18GHz	±2.731dB

1.10 Test or Witness Test Engineering

Test By: Nina Wu

Printing Name :Nina Wu

2. Technical Test

2. 1 Summary of Test Results

Rule	Description of Test Items	Result
§7.1	Reference to clauses EN 301 489-1 §8.4 AC mains power input/output ports	N/A*
§7.1	Reference to clauses EN 301 489-1 §8.3 DC power input/output ports	Compliant
§7.1	Reference to clauses EN 301 489-1 §8.2 Enclosure of ancillary equipment measured on a stand alone basis	N/A*
§7.1	Reference to clauses EN 301 489-1 §8.5 Harmonic current emissions (AC mains input port)	N/A*
§7.1	Reference to clauses EN 301 489-1 §8.6 Voltage fluctuations and flicker (AC mains input port)	N/A*
§7.1	Reference to clauses EN 301 489-1 §8.7 Telecommunication ports	N/A*
§7.2	Reference to clauses EN 301 489-1 §9.3 Electrostatic discharge (EN 61000-4-2:2009)	Compliant
§7.2	Reference to clauses EN 301 489-1 §9.2 Radio frequency electromagnetic field (80 MHz to 6 000 MHz)(EN 61000-4-3:2006+A1:2008+A2:2010)	Compliant
§7.2	Reference to clauses EN 301 489-1 §9.4 Fast transients, common mode (EN 61000-4-4)	N/A*
§7.2	Reference to clauses EN 301 489-1 §9.8 Surges (EN 61000-4-5)	N/A*
§7.2	Reference to clauses EN 301 489-1 §9.5 Radio frequency, common mode (EN 61000-4-6)	N/A*
§7.2	Reference to clauses EN 301 489-1 §9.6 Transients and surges in the vehicular environment (ISO 7637-2)	N/A*
§7.2	Reference to clauses EN 301 489-1 §9.7 Voltage dips and interruptions (EN 61000-4-11)	N/A*

NOTE：N/A=Not applicable

1. For EN 301 489-1 §9.6, only those devices used in vehicular environment applies.
2. The above EN basic standards are applied with latest version if customer has no special requirement.
3. The EUT is without AC input function and therefore the test items Conducted Emission, Harmonic, Flicker, EFT, Surge, CS and Dip were not tested.

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3. LINE CONDUCTED EMISSION

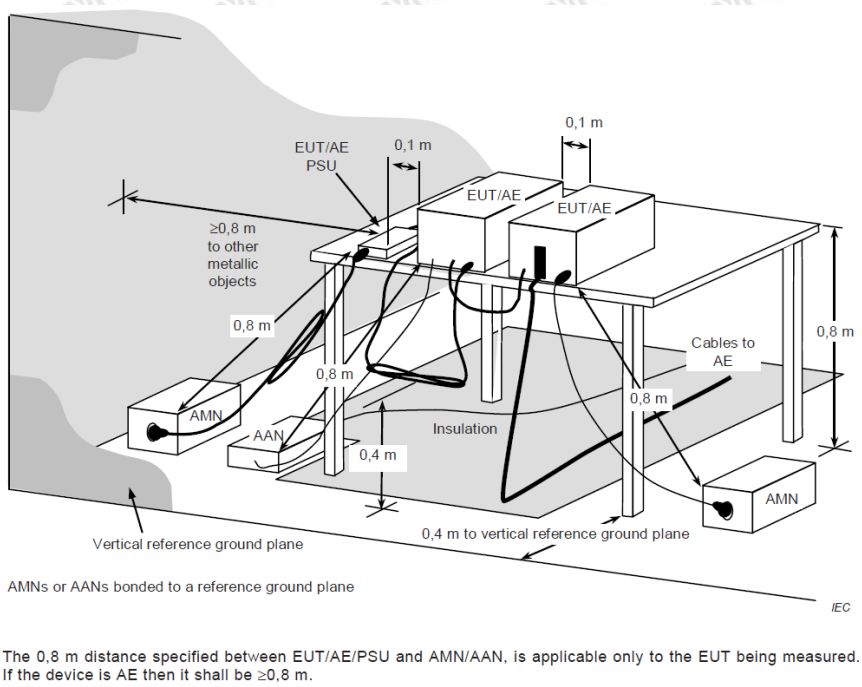
3.1. Conducted Emission Limit

ETSI EN 301 489-1 V2.2.3(2019-11)Clause 8.4.3/EN 55032 Class B

Limits for Line Conducted Emission

Frequency (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
150KHz-0.5MHz	79	66	66-56	56-46
0.5MHz-5MHz	73	60	56	46
5MHz-30MHz	73	60	60	50
NOTE1-The lower limit shall apply at the transition frequencies. NOTE2-The limit decreases linearly with the logarithm of the frequency in the range0.15MHz to 0.50MHz.				

3.2. Test Setup



The 0,8 m distance specified between EUT/AE/PSU and AMN/AAN, is applicable only to the EUT being measured. If the device is AE then it shall be ≥0,8 m.

Note: 1. Support units were connected to second LISN

2.Both of LISNs are 80cm from EUT and at least 80cm from other units and other metal support unites

3.3. Test Procedure

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were

connected to the power mains through another LISN. The two LISNs provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20dB) were not recorded.

3.4. Test operating conditions

a. Turned on the power of all equipment.

b. EUT was operated according to the type description in manufacturer's specifications or the User's Manual.

3.5 Test results

The EUT is without AC input function and therefore the test items unnecessary to test.

4. RADIATED DISTURBANCE

4.1. Radiated Emission Limit

ETSI EN 301 489-1 V2.2.3(2019-11)/EN 55032 Class B

Limits for radiated disturbance Blow 1GHz

Frequency Range (MHz)	Distance (m)	Quasi-Peak limits (dB μ V/m)
30-230	10/3	30.0/40.0
230-1000	10/3	37.0/47.0
Note**:** (1) The smaller limit shall apply at the combination point between two frequency bands. (2) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the EUT.		

Limits for radiated disturbance Above 1GHz

Frequency Range (MHz)	Distance (m)	Quasi-Peak limits (dB μ V/m)
1000-3000	3	50 （AV）/70（PK）
3000-6000	3	54 （AV）/74（PK）
Note**:** (1) The lower limit shall apply at the transition frequencies. (2) Emission level (dBuV/m) = 20 log Emission level (uV/m). (3) All emanation from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.		

4.2. Test Procedure

<Frequency Range below 1GHz>

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The height of antenna is varied from 1 meter to 4 meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1GHz.

NOTES:

1. The resolution bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
3. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) (if the raw value not

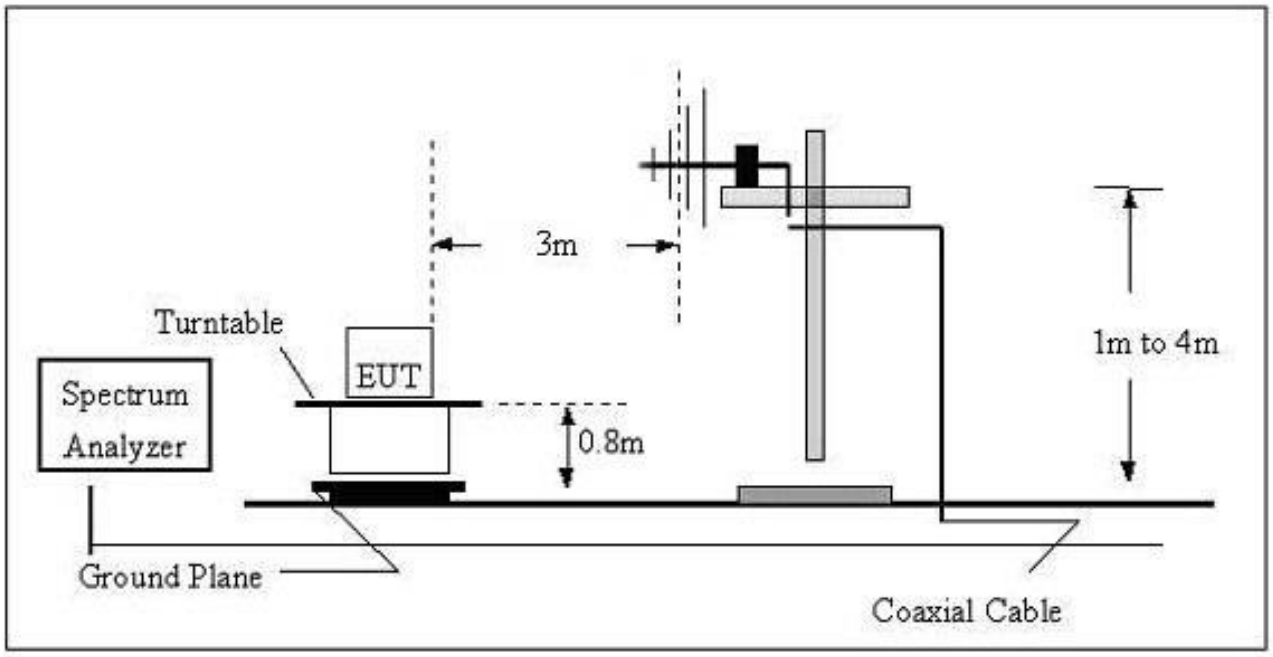
contains the amplifier);
4. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) – Amplifier Gain(dB) (if the raw value contains the amplifier).
5. Margin value = Emission level – Limit value.

<Frequency Range above 1GHz>

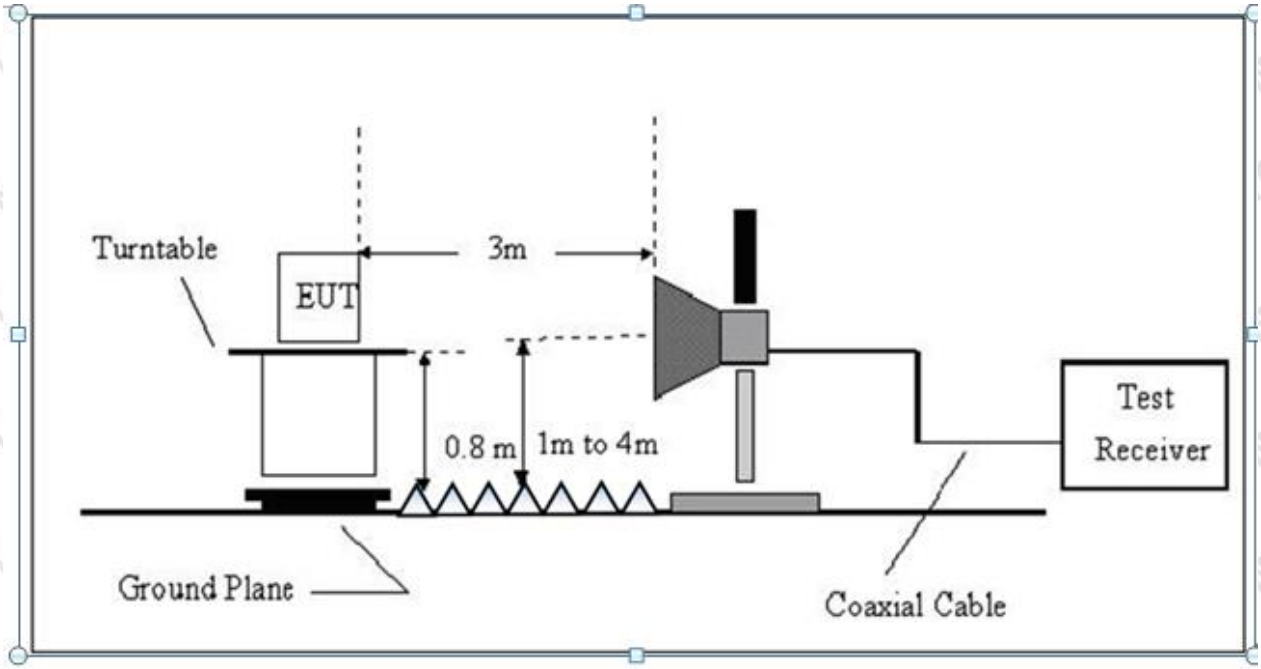
a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The height of antenna can be varied from one meter to four meters, the height of adjustment depends on the EUT height and the antenna 3dB beamwidth both, to detect the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. The bore sight should be used during the test above 1GHz. The bore sight should be used during the test above 1GHz.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test receiver/spectrum was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above
1 GHz.
NOTES:
1. The resolution bandwidth is 1MHz and video bandwidth of test receiver/spectrum analyzer is 3MHz for Peak detection at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz for Average detection (AV) at frequency above 1GHz.
2. For measurement of frequency above 1000 MHz, the EUT was set 3 meters away from the receiver antenna.
3. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
4. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) (if the raw value not contains the amplifier);
5. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) – Amplifier Gain(dB) (if the raw value contains the amplifier).
6. Margin value = Emission level – Limit value.

4.3. Test Configuration

A) Radiated Emission Test Set-Up Frequency Below 1 GHz



B) Radiated Emission Test Set-Up Frequency Above 1GHz

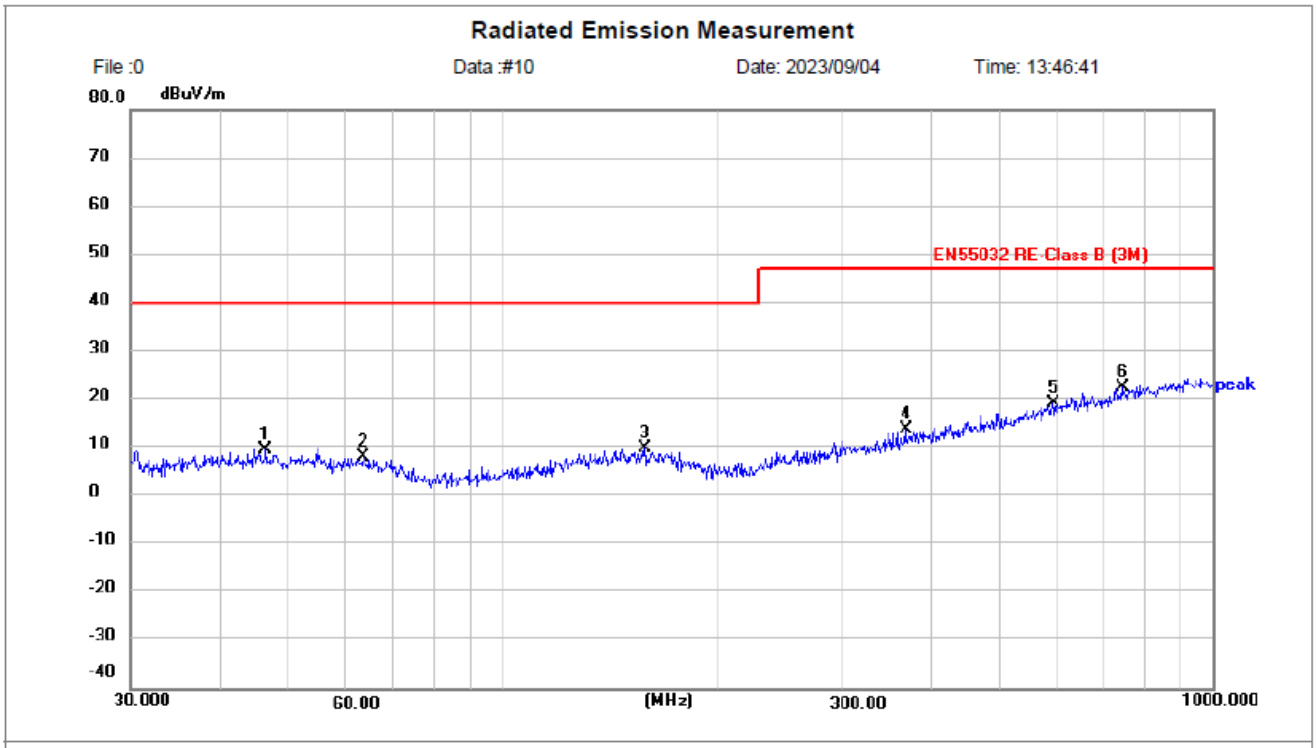


4.4. Test operating conditions

See items 3.4.

4.5. Test Data

Test data was showed as the follow:



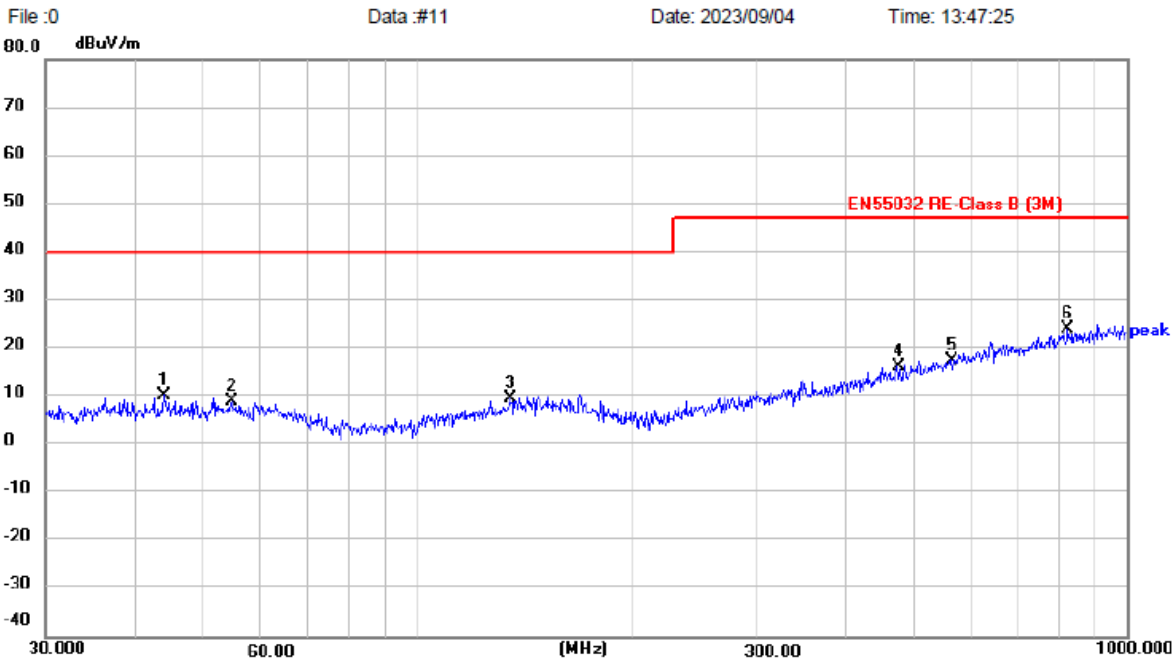
Site LAB
Limit: EN55032 RE-Class B (3M)
M/N: H5

Polarization: *Horizontal*
Power: DC3V

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	46.5030	26.26	-16.48	9.78	40.00	-30.22	peak	100	0	P	
2	63.7588	25.70	-17.65	8.05	40.00	-31.95	peak	100	0	P	
3	158.6677	26.03	-15.93	10.10	40.00	-29.90	peak	100	0	P	
4	369.4047	27.73	-13.85	13.88	47.00	-33.12	peak	100	0	P	
5	593.0497	27.20	-8.05	19.15	47.00	-27.85	peak	100	0	P	
6 *	744.8661	28.10	-5.44	22.66	47.00	-24.34	peak	100	0	P	

REMARK: 1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30MHz to 1000MHz.
4. Only emissions significantly above equipment noise floor are reported.



Site LAB
Limit: EN55032 RE-Class B (3M)
M/N: H5

Polarization: *Vertical*
Power: DC3V

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	44.1202	26.88	-16.48	10.40	40.00	-29.60	peak	100	0	P	
2	55.0274	25.82	-16.84	8.98	40.00	-31.02	peak	100	0	P	
3	135.0319	26.78	-16.99	9.79	40.00	-30.21	peak	100	0	P	
4	473.8347	27.30	-11.19	16.11	47.00	-30.89	peak	100	0	P	
5	564.6389	26.47	-8.87	17.60	47.00	-29.40	peak	100	0	P	
6 *	824.5968	28.58	-4.41	24.17	47.00	-22.83	peak	100	0	P	

REMARK:

1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30MHz to 1000MHz.
4. Only emissions significantly above equipment noise floor are reported.

Test Mode: TM1(above 1GHz)	**Test Distance:** 3m
Test voltage:5V	**Test Results:** Passed
Detector Function: Peak+AV	

Frequency MHz	Emission Level dBμV/m		Limits dBμV/m		Margin dBμV/m		Polarization
	Peak	AV	Peak	AV	Peak	AV	
1241.39	54.59	30.56	70.00	50.00	-13.41	-19.44	H
1915.69	54.26	36.23	70.00	50.00	-15.74	-13.77	H
2113.52	55.76	36.98	70.00	50.00	-14.24	-13.02	H
3299.34	52.82	36.28	74.00	54.00	-21.18	-17.72	H
4374.25	56.18	34.75	74.00	54.00	-17.82	-19.25	H
5721.57	48.39	37.47	74.00	54.00	-25.61	-16.53	H

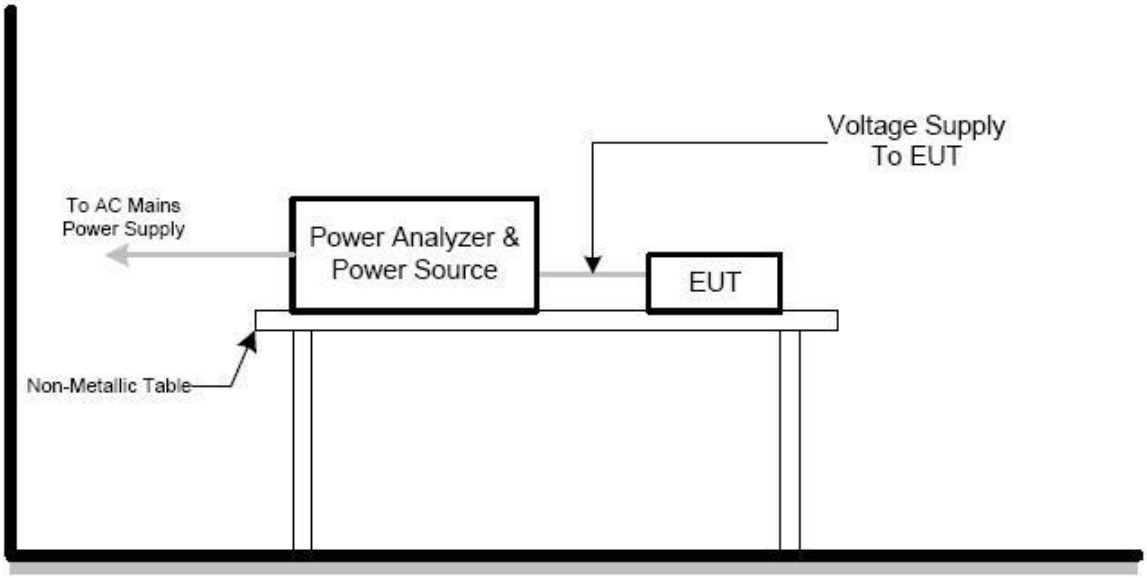
Frequency MHz	Emission Level dBμV/m		Limits dBμV/m		Margin dBμV/m		Polarization
	Peak	AV	Peak	AV	Peak	AV	
1242.33	55.78	32.67	70.00	50.00	-14.22	-17.33	V
1913.66	53.27	36.48	70.00	50.00	-16.73	-13.52	V
2113.52	56.26	36.75	70.00	50.00	-13.74	-13.25	V
3296.33	52.83	36.44	74.00	54.00	-21.17	-17.56	V
4377.25	55.45	33.83	74.00	54.00	-18.55	-20.17	V
5721.52	47.64	37.78	74.00	54.00	-26.36	-16.22	V

REMARKS:

1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 1GHz to 6GHz.
4. Only emissions significantly above equipment noise floor are reported.

5. HARMONIC CURRENT EMISSIONS

5.1. Test Configuration



5.2. Test Standard

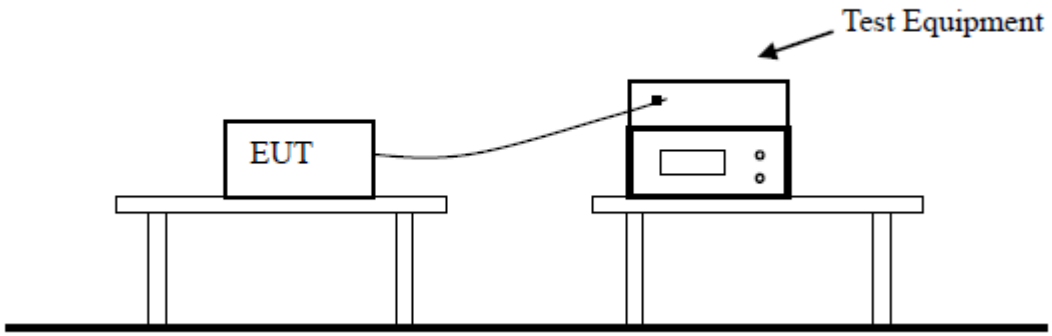
According to ETSI EN 301 489-1 V2.2.3(2019-11) & EN IEC 61000-3-2: 2019/A1:2021

5.3. Test Data

Because power of EUT less than 75W, According standard EN IEC 61000-3-2, Harmonic current unnecessary to test.

6. VOLTAGE FLUCTUATION AND FLICKER

6.1. Test Configuration



6.2. Test Limit

Test items	Limits	Descriptions
	IEC/EN 61000-3-3	
Pst	≤1.0.Tp=10 min.	Short Term Flicker Indicator
Plt	≤0.65.Tp=2hr.	Long Term Flicker Indicator
dx	≤3.3%	Relative Steady-State V-Change
dmx	≤4%	Maximum Relative V-Change
dt	≤3.3% for>500ms	Relative V-change characteristic

6.2. Test Standard

According to ETSI EN 301 489-1 V2.2.3(2019-11) & EN 61000-3-3: 2013/A2:2021

6.3. Test Data

The EUT is without AC input function and therefore the test items unnecessary to test.

7. GENERAL PERFORMANCE CRITERIA FOR IMMUNITY TEST

Performance criteria for ETSI EN 301 489-17 V3.2.4(2020-09)

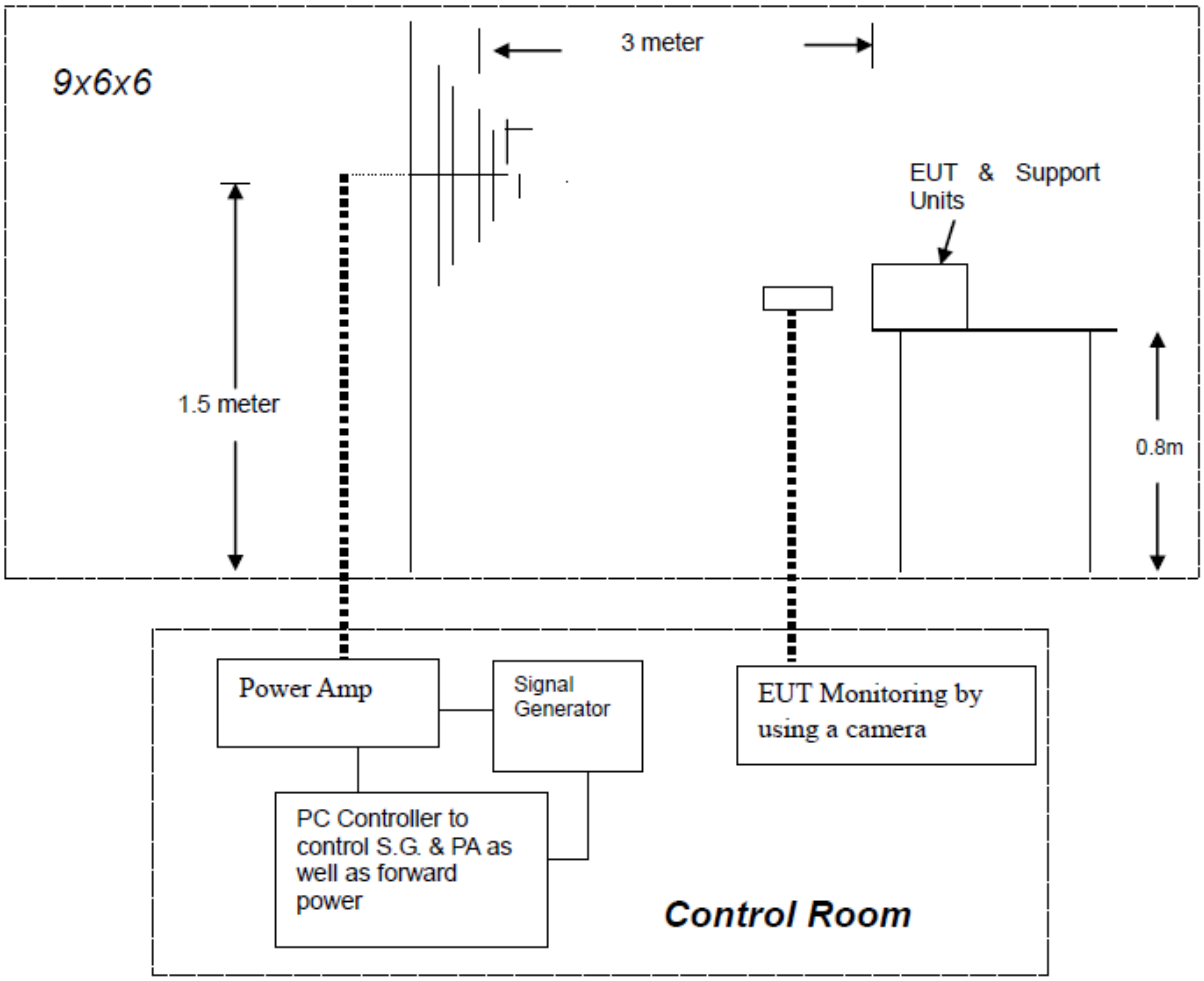
The performance criteria		
Performance criteria A for immunity tests with phenomena of a continuous nature	continuous phenomena	1. Where the EUT is a transmitter in standby mode, unintentional transmission shall not occur during the test. 2. Where the EUT is a transceiver in receive mode, unintentional transmission shall not occur during the test
Performance criteria B for immunity tests with phenomena of a transient nature	Transient phenomena	1. Where the EUT is a transmitter in standby mode, unintentional transmission shall not occur as a result of the application of the test 2. Where the EUT is a transceiver in receive mode, unintentional transmission shall not occur as a result of the application of the test
Performance criteria C for immunity tests with power interruptions exceeding a certain time	Transient phenomena	Voltage dips greater than or equal to 100 ms and voltage interruptions of 5 000 ms duration, for which performance criteria C shall apply

The phenomena allowed during and after test in each criterion are clearly stated in the following table.

Performance criteria		
A	Shall operate as intended. (see note). Shall be no loss of function. Shall be no unintentional transmissions.	Shall operate as intended. Shall be no degradation of performance. Shall be no loss of function. Shall be no loss of stored data.
B	May show loss of function	Functions shall be self-recoverable. Shall operate as intended after recovering. Shall be no loss of critical stored data.
C	May be loss of function.	Functions shall be recoverable by the operator. Shall operate as intended after recovering. Shall be no loss of critical stored data.
NOTES: Operate as intended during the test allows a level of degradation in accordance with a and b. (a) For equipment that supports a PER or FER, the minimum performance level shall be a PER or FER less than or equal to 10 %. (b) For equipment that does not support a PER or a FER, the minimum performance level shall be no loss of the wireless transmission function needed for the intended use of the equipment.		

8. RF ELECTROMAGNETIC FIELD (80 MHZ -6000 MHZ)

8.1. Test Configuration



8.2. Test Standard

ETSI 301 489-1, EN 301 489-17(EN 61000-4-3: 2006+A1: 2008+A2: 2010)
Test level 2 at 3V / m.

8.3. Severity Level

Level	Field Strength V/m
1	1
2	2
3	10
X	Special

Performance criterion: **A**

8.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. EUT is set 3 meter away from the transmitting antenna which is mounted on an antenna tower. Both horizontal and vertical polarization of the antenna are set on test. Each of the four sides of EUT must be faced this transmitting antenna and measured individually. In order to judge the EUT performance, a CCD camera is used to monitor EUT screen. All the scanning conditions are as follows:

Condition of Test	Remarks
1. Fielded Strength	3 V/m, 80% AM @ 1kHz (Severity Level 2)
2. Radiated Signal	Unmodulated
3. Scanning Frequency	80 - 6000 MHz
4. Dwell time of radiated	0.0015 decade/s
5. Waiting Time	3 Sec.

8.5. Test Result

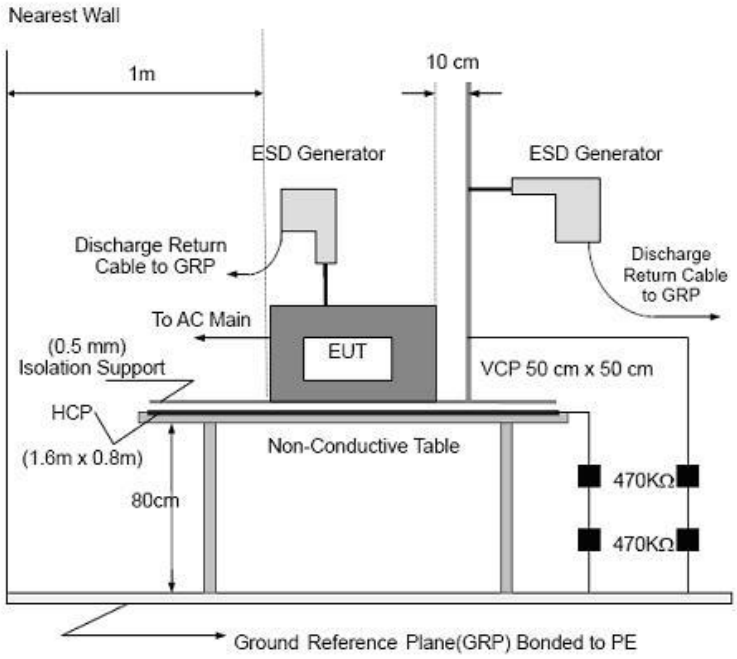
Test Result:

EUT Working Mode	Antenna Polarity	Frequency (MHz)	Field Strength (V/m)	Observation	Position	Conclusion
Operating Mode	Vertical	80-6000	3	CT,CR	Front, Right, Left, Back	Pass
	Horizontal	80-6000	3	CT,CR	Front, Right, Left, Back	Pass

9. ELECTROSTATIC DISCHARGE

Please refer to ETSI EN 301 489-1 V2.2.3(2019-11)and EN 61000-4-2.

9.1. Test Setup



EN 61000-4-2 specifies that a tabletop EUT shall be placed on a non-conducting table which is 80 centimeters above a ground reference plane and that floor mounted equipment shall be placed on a insulating support approximately 10 centimeters above a ground plane. During the tests, the EUT is positioned over a ground reference plane in conformance with this requirement.
For tabletop equipment, a 1.5 by 1.0-meter metal sheet (HCP) is placed on the table and connected to the ground plane via a metal strap with two 470 k Ohms resistors in series. The EUT and attached cables are isolated from this metal sheet by 0.5-millimeter thick insulating material. A Vertical Coupling Plane (VCP) grounded on the ground plane through the same configuration as in the HCP is used.

9.2. Test Procedure

a. Electrostatic discharges were applied only to those points and surfaces of the EUT that are accessible to users during normal operation.
b. The test was performed with at least ten single discharges on the pre-selected points in the most sensitive polarity.
c. The time interval between two successive single discharges was at least 1 second.
d. The discharge return cable of the generator shall be kept at a distance of at least
0.2 m from the EUT whilst the discharge is being applied and should not be held by the operator.
e. Contact discharges were applied to the non-insulating coating, with the pointed tip of the generator penetrating the coating and contacting the conducting substrate.
f. Air discharges were applied with the round discharge tip of the discharge electrode approaching the EUT as fast as possible (without causing mechanical damage) to touch the EUT. After each discharge, the ESD generator was removed from the EUT and re-triggered for a new single discharge. The test was repeated until all discharges were complete.
g. At least ten single discharges (in the most sensitive polarity) were applied to the Horizontal Coupling Plane at points on each side of the EUT. The ESD generator was positioned horizontally at a distance of 0.1 meters from the EUT with the discharge electrode touching the HCP.
h. At least ten single discharges (in the most sensitive polarity) were applied to the center of one vertical edge of the Vertical Coupling Plane in sufficiently different positions that the four faces of the EUT were completely illuminated. The VCP (dimensions 0.5m x 0.5m) was placed vertically to and 0.1 meters from the EUT.

9.3. Test Data

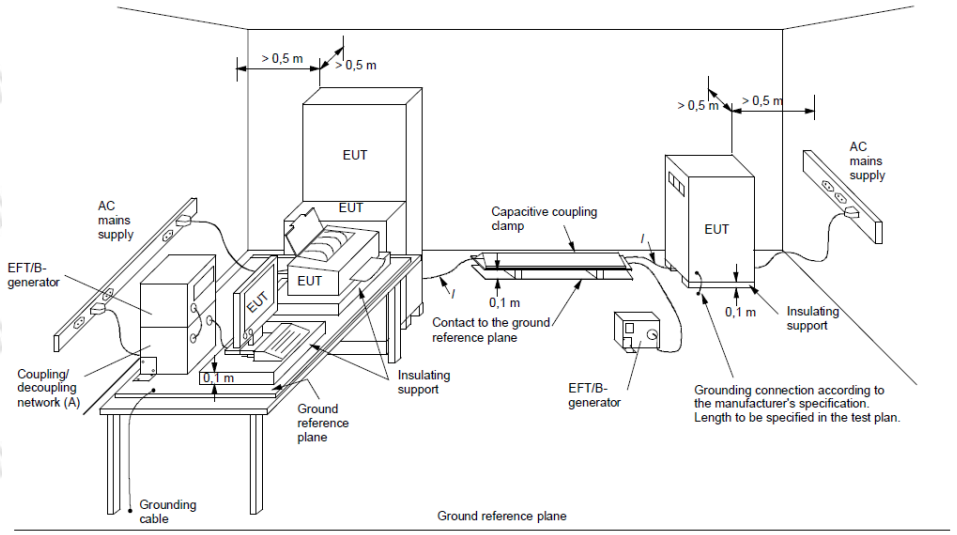
Direct Discharge Application				
Test Level (kV)	Polarity	Test Point	Test Result of Contact Discharge	Test Result of Air Discharge
4	+ / -	All metal parts	A	N/A
8	+ / -	All non-metal parts	N/A	A

Indirect Discharge Application				
Discharge Level (kV)	Polarity	Test Point	Test Result of HCP	Test Result of VCP
4	+ / -	All Sides	A	N/A
8	+ / -	All Sides	N/A	A

NOTE: A: There was no change compared with initial operation during the test.

10. ELECTRICAL FAST TRANSIENT IMMUNITY

10.1. Test Configuration



Key

l length between clamp and the EUT to be tested (should be 0,5 m ± 0,05 m)

(A) location for supply line coupling

(B) location for signal lines coupling

10.2. Test Standard

ETSI EN 301 489-1 V2.2.3(2019-11)/ EN61000-4-4: 2012

Test level 2 at 1 kV

Test level

Open Circuit Output Test Voltage ±10%		
Level	On Power Supply Lines	On I/O (Input/Output) Signal data and control lines
1	0.5 kV	0.25 kV
2	1 kV	0.5 kV
3	2 kV	1 kV
4	4 kV	2 kV
X	Special	Special

Performance criterion: B

10.3. Test Procedure

The EUT is put on the table, which is 0.8 meter high above the ground. This reference ground plane shall project beyond the EUT by at least 0.1m on all sides and the minimum distance between EUT and all other conductive structure, except the ground plane beneath the EUT, shall be more than 0.5m.

10.4.1. For input and output AC power ports:

The EUT is connected to the power mains by using a coupling device, which couples the EFT interference signal to AC power lines. Both polarities of the test voltage should be applied during compliance test and the

duration of the test is 2 minutes.

10.4.2. For signal lines and control lines ports: No I/O ports. It's unnecessary to test.

10.4.3. For DC output line ports: It's unnecessary to test.

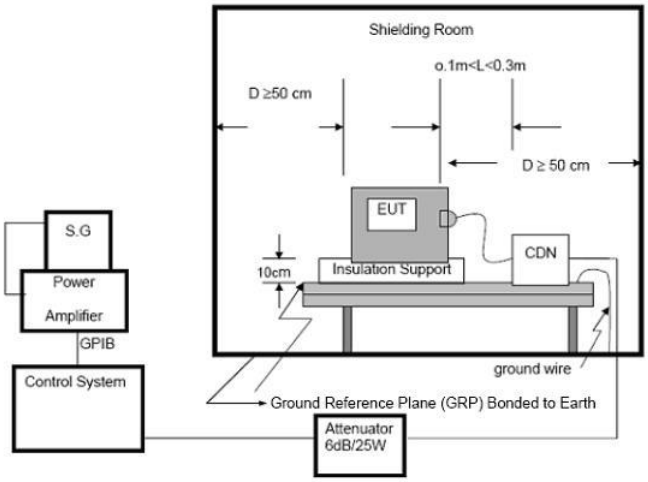
10.4. Test Data

TEST RESULT				
Line	**Test Voltage**	**Polarity**	**Observation**	**Result (Pass/Fail)**
L	1KV	+/-	TT, TR	N/A
N	1KV	+/-	TT, TR	N/A
L-N	1KV	+/-	TT, TR	N/A

NOTE:The EUT is without AC input function and therefore the test items unnecessary to test.

11. RF COMMON MODE

11.1. Test Configuration



11.2. Test Standard

ETSI EN 301 489-1 V2.2.3(2019-11)/ EN 61000-4-6: 2014
Test level 2 at 3 V (r.m.s.), 0.15 MHz ~ 80 MHz,
Modulation type: AM
Modulation depth: 80%
Modulation signal: 1 kHz

Test level

Level	Voltage Level (r.m.s..) (V)
1	1
2	3
3	10
X	Special

Performance criterion: A

11.3. Test Procedure

11.3.1. Let the EUT work in test mode and test it.

11.3.2. The EUT are placed on an insulating support 0.1 m high above a ground reference plane. CDN (coupling and decoupling device) is placed on the ground plane about 0.3 m from EUT. Cables between CDN and EUT are as short as possible, and their height above the ground reference plane shall be between 30 and 50 mm (where possible).

11.3.3. The disturbance signal described below is injected to EUT through CDN.

11.3.4. The EUT operates within its operational mode(s) under intended climatic conditions after power on.

11.3.5. The frequency range is swept from 150 kHz to 80 MHz using 3V signal level, and with the disturbance signal 80% amplitude modulated with a 1kHz sine wave.

11.3.6. The rate of sweep shall not exceed 1.5*10-3 decades/s. Where the frequency is swept incrementally, the step size shall not exceed 1% of the start and thereafter 1% of the preceding frequency value.

11.3.7. Recording the EUT operating situation during compliance testing and decide the EUT immunity criterion.

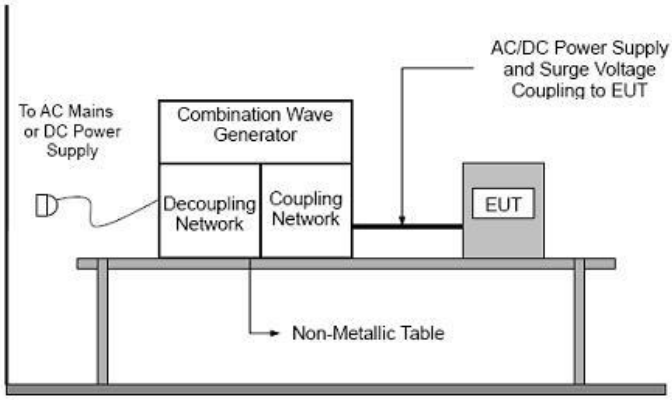
11.4. Test Data

TEST RESULT OF BT				
Frequency Range (MHz)	**Injected Position**	**Strength (Unmodulated)**	**Observation**	**Result (Pass/Fail)**
0.15 ~ 80	AC Mains	3V	CT, CR	N/A
Remark: Modulation Signal:1kHz 80% AM				

NOTE:The EUT is without AC input function and therefore the test items unnecessary to test.

12. SURGES

12.1. Test Configuration



12.2. Test Standard

ETSI EN 301 489-1 V2.2.3(2019-11)/ EN 61000-4-5: 2014

L-N: Test level 2 at 1 kV

L-PE, N-PE Test Level 3 at 2Kv

Test Level

Open Circuit Output Test Voltage ±10%		
Level	On Power Supply Lines	On I/O (Input/Output) Signal data and control lines
1	0.5 kV	0.25 kV
2	1 kV	0.5 kV
3	2 kV	1 kV
4	4 kV	2 kV
X	Special	Special

Performance criterion: B

12.3. Test Procedure

12.3.1. For line to line coupling mode, provide a 0.5 kV 1.2/50us voltage surge (at open-circuit condition).

12.3.2. At least 5 positive and 5 negative (polarity) tests with a maximum 1/min repetition rate are conducted during test.

12.3.3. Different phase angles are done individually.

12.3.4. Record the EUT operating situation during compliance test and decide the EUT immunity criterion for above each test.

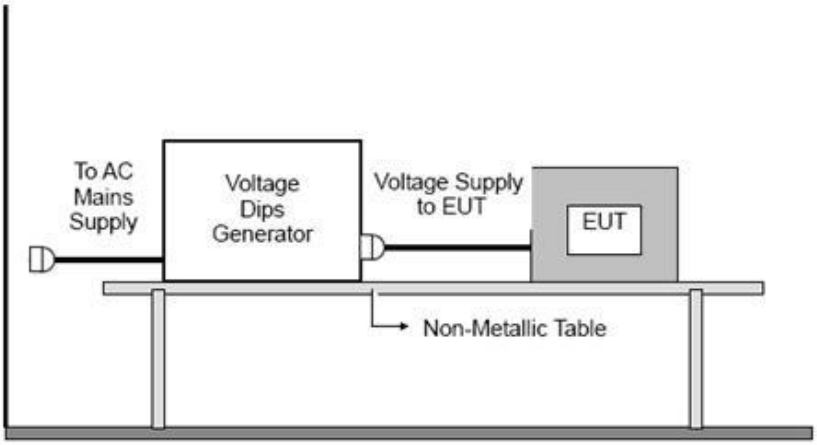
12.4. Test Data

TEST RESULT						
Location	**Polarity**	**Phase Angle**	**Number of Pulse**	**Pulse Voltage (KV)**	**Observation**	**Result (Pass/Fail)**
L-N	+	0°, 90°, 270°	5	0.5kV,1KV	TT, TR	N/A
	-	0°, 90°, 270°	5	0.5kV,1KV	TT, TR	N/A
L - PE	+	0°, 90°, 270°	5	0.5kV,1KV,2KV	TT, TR	N/A
	-	0°, 90°, 270°	5	0.5kV,1KV,2KV	TT, TR	N/A
N - PE	+	0°, 90°, 270°	5	0.5kV,1KV,2KV	TT, TR	N/A
	-	0°, 90°, 270°	5	0.5kV,1KV,2KV	TT, TR	N/A

NOTE:The EUT is without AC input function and therefore the test items unnecessary to test.

13. VOLTAGE DIPS/INTERRUPTIONS IMMUNITY TEST

13.1. Test Configuration



13.2. Test Standard

ETSI EN 301 489-1 V2.2.3(2019-11)/ EN 61000-4-11: 2004
Test levels and Performance Criterion

Test Level

Voltage Reduction %UT	Voltage dips %UT	Duration (in period)
100	0	0.5
100	0	1
30	70	5
Voltage Reduction %UT	Voltage Interruptions %UT	Duration (in period)
100	0	250

Performance criterion: B&C

13.3. Test Procedure

13.3.1. The interruption is introduced at selected phase angles with specified duration.
13.3.2. Record any degradation of performance.

13.4. Test Data

TEST RESULT				
Test Level % U_T	**Voltage Dips & Short Interruptions % U_T**	**Duration (in periods)**	**Observation**	**Result (Pass/Fail)**
0	>95	0.5P	TT, TR	N/A
0	>95	1P	TT, TR	N/A
70	>30	25P(50Hz) 30P(60Hz)	TT, TR	N/A
0	>95	250P(50Hz) 300P(60Hz)	TT, TR	N/A

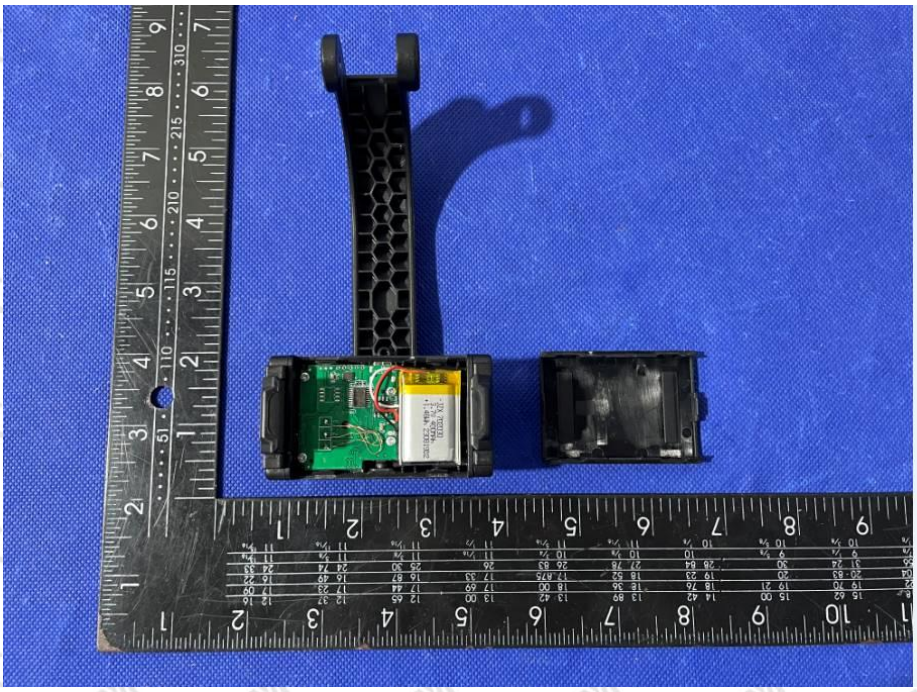
NOT : The EUT is without AC input function and therefore the test items unnecessary to test.

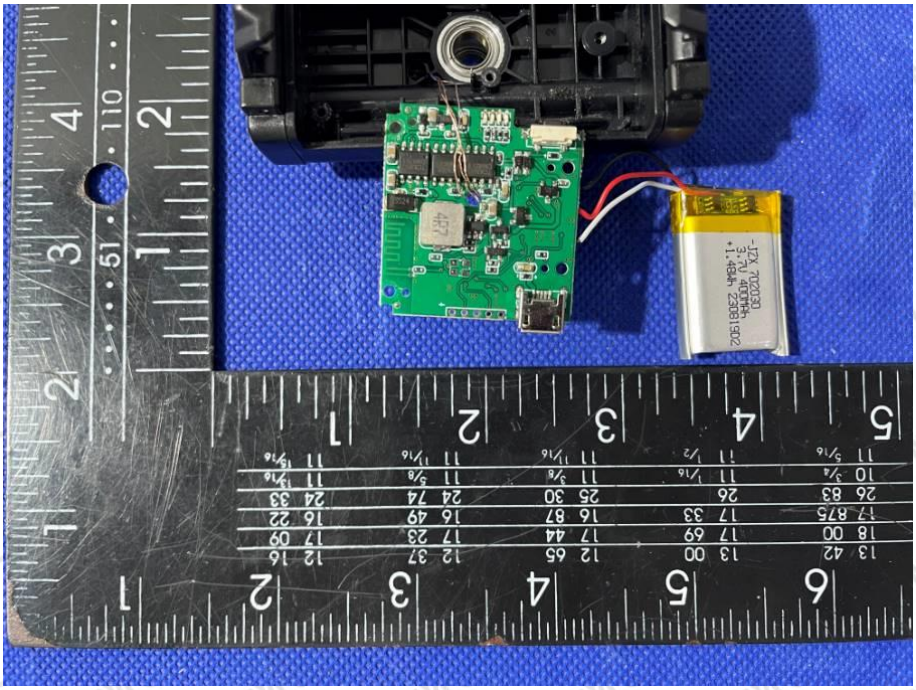
14. TEST SETUP PHOTOGRAPHS

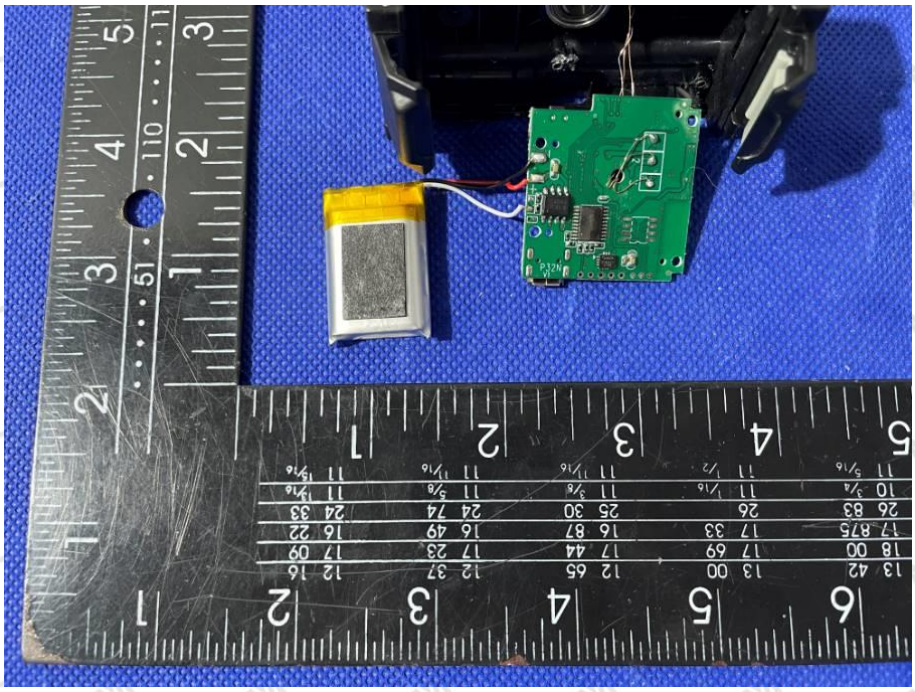
Radiated Emission test

Electrostatic discharge test

15. EUT EXTERIOR AND INTERIOR PHOTOGRAPHS







6.	Test Equipments				
Instrument Type	Manufacturer	Model	Serial No.	Date of Cal.	Due Date
ESPI Test Receiver	ROHDE&SCHWARZ	ESPI 3	100379	2022-10-28	2023-10-27
Absorbing Clamp	ROHDE&SCHWARZ	MDS-21	100126	2022-10-28	2023-10-27
TWO Line-V-NETW	ROHDE&SCHWARZ	EZH3-Z5	100294	2022-10-28	2023-10-27
TWO Line-V-NETW	ROHDE&SCHWARZ	EZH3-Z5	100253	2022-10-28	2023-10-27
Ultra Broadband ANT	ROHDE&SCHWARZ	HL562	100157	2022-10-28	2023-10-27
ESDV Test Receiver	ROHDE&SCHWARZ	ESDV	100008	2022-10-28	2023-10-27
4-WIRE ISN	ROHDE&SCHWARZ	ENY 41	830663/044	2022-10-28	2023-10-27
GG ENY22 Double 2-Wire ISN	ROHDE&SCHWARZ	ENY22	83066/016	2022-10-28	2023-10-27
Impuls-Begrenzer	ROHDE&SCHWARZ	ESH3-Z2	100281	2022-10-28	2023-10-27
System Controller	CT	SC100	-	2022-10-28	2023-10-27
Printer	EPSON	PHOTO EX3	CFNH234850	2022-10-28	2023-10-27
FM-AM Signal Generator	JUNG.JIN	SG-150M	389911177	2022-10-28	2023-10-27
Color TV Pattern Generator	PHILIPS	PM5418	LO621747	2022-10-28	2023-10-27
Computer	IBM	8434	1S8434KCE99BLXLO*	-	-
Oscillator	KENWOOD	AG-203D	3070002	2022-10-28	2023-10-27
Spectrum Analyzer	HAMEG	HM5012	-	-	-
Power Supply	LW	APS1502	-	-	-
5K VA AC Power Source	California Instruments	5001iX	56060	2022-10-28	2023-10-27
CDN	EM TEST	CDN M2/M3	-	2022-10-28	2023-10-27
Attenuation	EM TEST	ATT6/75	-	2022-10-28	2023-10-27
Resistance	EM TEST	R100	-	2022-10-28	2023-10-27
Electromagnetic Injection Clamp	LITTHI	EM101	35708	2022-10-28	2023-10-27
Inductive Components	EM TEST	MC2630	-	2022-10-28	2023-10-27
Antenna	EM TEST	MS100	-	2022-10-28	2023-10-27

Signal Generator	ROHDE&SCHWARZ	SMT03	100029	2022-10-28	2023-10-27
Power DJ MIXER	AR	150W1000	300999	2022-10-28	2023-10-27
Field probe	Holaday	HI-6005	105152	2022-10-28	2023-10-27
Bilog Antenna	Chase	CBL6111C	2576	2022-10-28	2023-10-27
Loop Antenna	EMCO	6502	00042960	2022-10-28	2023-10-27
ESPI Test Receiver	ROHDE&SCHWARZ	ESI26	838786/013	2022-10-28	2023-10-27
3m OATS	--	--	N/A	2022-10-28	2023-10-27
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170265	2022-10-28	2023-10-27
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-631	2022-10-28	2023-10-27
Power meter	Anritsu	ML2487A	6K00003613	2022-10-28	2023-10-27
Power sensor	Anritsu	MA2491A	32263	2022-10-28	2023-10-27
Bilog Antenna	Schwarebeck	VULB9163	9163/340	2022-10-28	2023-10-27
LISN	AFJ	LS16C	10010947251	2022-10-28	2023-10-27
LISN (Three Phase)	Schwarebeck	NSLK 8126	8126453	2022-10-28	2023-10-27
9*6*6 Anechoic	--	--	N/A	2021-08-21	2024-8-20

End of the report

APPLICATION FOR EMC DIRECTIVE

On Behalf of

mobilephone stabilizer

Trade Name: N/A

Model: H5, H6, UPDOT, MO6622, WALK CAM, MO6622-03, KB-BT, ZX-G0, NZ-01

Prepared For :

Prepared By : **TMC Testing Services (Shenzhen) Co., Ltd**

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Tel: +86-755- 86642861
Web: www.tmc-lab.com
E-mail：Cert@tmc-lab.com

Date of Test:	August 31, 2023- September 6, 2023
Date of Report:	September 7, 2023
Report Number:	MK23080009-P01E02

TABLE OF CONTENTS

TEST REPORT DECLARATION

Applicant	:	
Address	:	
EUT Description	:	mobilephone stabilizer
Model Number	:	H5, H6, UPDOT, MO6622, WALK CAM, MO6622-03, KB-BT, ZX-G0, NZ-01

Test Standards:

EN 55032:2015+A11:2020

EN 55035:2017 +A11:2020

The EUT described above is tested by TMC Testing Services (Shenzhen) Co., Ltd EMC Laboratory to determine the maximum emissions from the EUT and ensure the EUT to be compliance with the immunity requirements of the EUT. TMC Testing Services (Shenzhen) Co., Ltd EMC Laboratory is assumed full responsibility for the accuracy of the test results. Also, this report shows that the EUT technically complies with the 2014/30/EU directive and its amendment requirements.

The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.

Prepared by : Judy chen

Judy Chen/Assistant

Approved & Authorized Signer :

Vivian Li

1. TEST RESULTS SUMMARY

Table 1 Test Results Summary

Test Items	Test Results
Radiated Emission	PASS
Electrostatic Discharge Immunity	PASS
Radiated Electromagnetic Fields Immunity	PASS
Magnetic Field Immunity	PASS

2. GENERAL INFORMATION

2.1. Report information

2.1.1. This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that TMC approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that TMC in any way guarantees the later performance of the product/equipment.

2.1.2. The sample/s mentioned in this report is/are supplied by Applicant, TMC therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.

2.1.3. Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through TMC, unless the applicant has authorized TMC in writing to do so.

2.2. Measurement Uncertainty

Available upon request.

3. PRODUCT DESCRIPTION

3.1. EUT Description

Description	:	mobilephone stabilizer
Applicant	:	
Manufacturer	:	
Model Number	:	H5

3.2. Block Diagram of EUT Configuration

3.3. Operating Condition of EUT

Test mode : operating

3.4. Support Equipment List

N/A

3.5. Test Conditions

Temperature: 23-26℃
Relative Humidity: 55-68 %

3.6. Modifications

No modification was made.

3.7. Abbreviations

AC	Alternating Current
AMN	Artificial Mains Network
DC	Direct Current
EM	ElectroMagnetic
EMC	ElectroMagnetic Compatibility
EUT	Equipment Under Test
IF	Intermediate Frequency
RF	Radio Frequency
rms	root mean square
EMI	Electromagnetic Interference
EMS	Electromagnetic Susceptibility

3.8. Performance Criterion

Criterion A: The equipment shall continue to operate as intended without operator intervention. No degradation of performance of loss of function is allowed below a performance level specified by the manufacturer when the equipment is used as intended.

Criterion B: After the test, the equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacturer, when the equipment is used as intended.

Criterion C: Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions.

4. TEST EQUIPMENT USED

4.1. For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibration time	Recalibration time
1.	Test Receiver	Rohde&Schwarz	ESC17(9kHz-7GHz)	100336	Oct.28, 22	Oct.27, 23
2.	Broadband antenna	Schwarzbeck	VULB9168	01222	Oct.28, 22	Oct.27, 23
3.	Horn antenna	Schwarzbeck	BBHA9120D	02476	Oct.28, 22	Oct.27, 23
4.	Preamplifier	Schwarzbeck	BBV9745	00250	Oct.28, 22	Oct.27, 23
5.	Preamplifier	N/A	TRLA-01018G440B	21081001	Oct.28, 22	Oct.27, 23
6.	3M method semi anechoic chamber	SKET	9m*6m*6m	2021082304	Oct.14,21	Oct.13,24
7.	Pointer hygrometer	M&G	ARC92570	N/A	Oct.28, 22	Oct.27, 23

4.2. For Electrostatic Discharge Immunity Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Recalibration time
1.	Electrostatic analog generator	LIONCEL	ESD-203B	0210502	Oct.28, 22	Oct.27, 23

4.3. For RF Strength Susceptibility Test

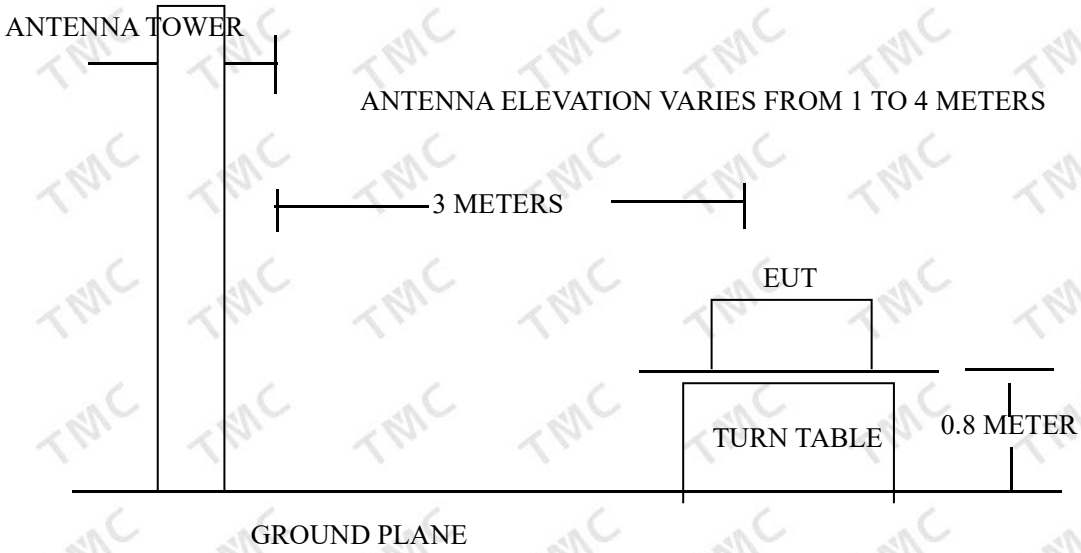
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Recalibration time
1.	Signal Generator	HP	8648A	3633A02081	Oct.28, 22	Oct.27, 23
2.	Amplifier	A&R	500A100	17034	NCR	NCR
3.	Amplifier	A&R	100W/1000M1	17028	NCR	NCR
4.	Isotropic Field Monitor	A&R	FM2000	16829	NCR	NCR
5.	Isotropic Field Probe	A&R	FLW220100	16755	Oct.28, 22	Oct.27, 23
6.	Biconic Antenna	EMCO	3108	9507-2534	NCR	NCR
7.	Log-periodic Antenna	A&R	AT1080	16812	NCR	NCR
8.	PC	N/A	486DX2	N/A	N/A	N/A

4.4. For Magnetic Field Immunity Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESPI3	101396	Oct.28, 22	Oct.27, 23
2.	loop antenna	ZHINAN	ZN30401	19036	Oct.28, 22	Oct.27, 23
3.	Shielding room	SKET	2021082301	N/A	Aug.23,21	Aug.22,24

5. RADIATED EMISSION TEST

5.1. Open Site Setup Diagram



5.2. Test Standard

EN 55032:2015+A11:2020

5.3. Radiated Emission Limit

All emanations from a Class B computing devices or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMITS (dBμV/m)
30 ~ 230	3	40
230 ~ 1000	3	47

Note:(1) The tighter limit shall apply at the edge between two frequency bands.
(2) Distance refers to the distance in meters between the measuring instruments antenna and the closed point of any part of the EUT.

FREQUENCY (GHz)	DISTANCE (Meters)	Average limit (dBμV/m)	Peak limit (dBμV/m)
1 ~ 3	3	50	70
3 ~ 6	3	54	74

Note :The lower limit applies at the transition frequency.

5.4. EUT Configuration on Test

The EN55032 Class B regulations test method must be used to find the maximum emission during radiated emission test.

5.5. Operating Condition of EUT

5.5.1. Setup the EUT as shown on Section 5.1.

5.5.2. Turn on the power of all equipments.

5.5.3. Let the EUT work in test mode and measure it.

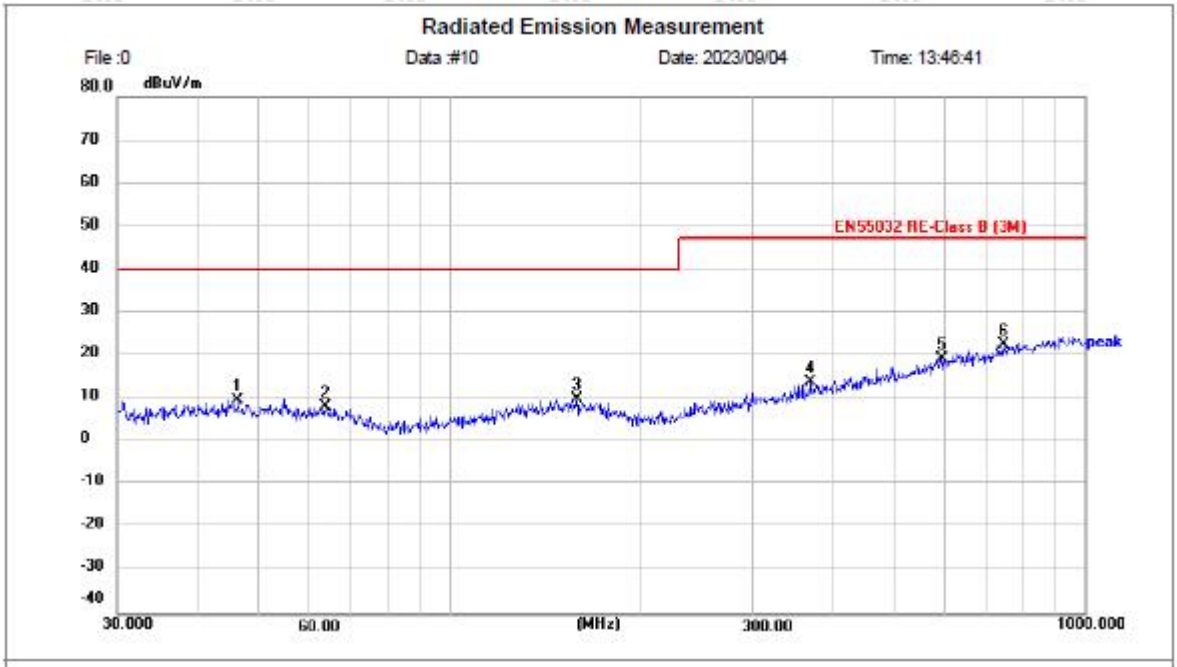
5.6. Test Procedure

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can move up and down between 1 to 4 meters to find out the maximum emission level. Broadband antenna (calibrated by dipole antenna) are used as a receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.
The bandwidth setting on the test receiver (R&S TEST RECEIVER ESCS20) is 120 KHz.
The EUT is tested in Anechoic Chamber

5.7. Test Results

PASS.

Test Mode: operating

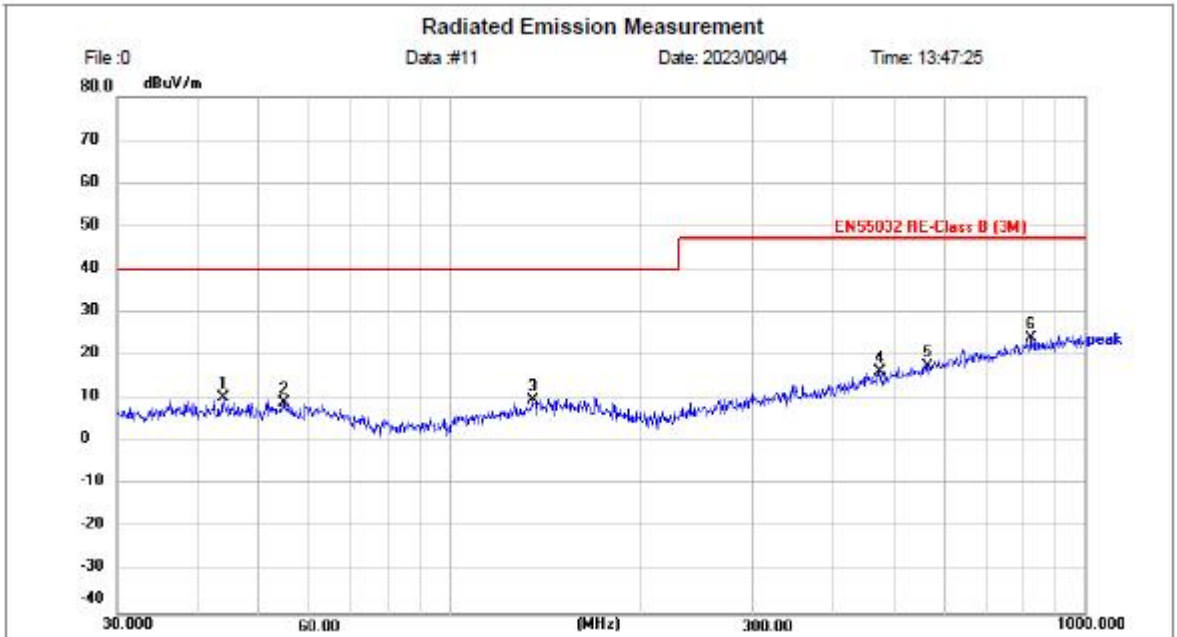


Site LAB
Limit: EN55032 RE-Class B (3M)

Polarization: *Horizontal*

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	46.5030	26.26	-16.48	9.78	40.00	-30.22	peak	100	0	P	
2	63.7588	25.70	-17.65	8.05	40.00	-31.95	peak	100	0	P	
3	158.6677	26.03	-15.93	10.10	40.00	-29.90	peak	100	0	P	
4	369.4047	27.73	-13.85	13.88	47.00	-33.12	peak	100	0	P	
5	593.0497	27.20	-8.05	19.15	47.00	-27.85	peak	100	0	P	
6 *	744.8661	28.10	-5.44	22.66	47.00	-24.34	peak	100	0	P	

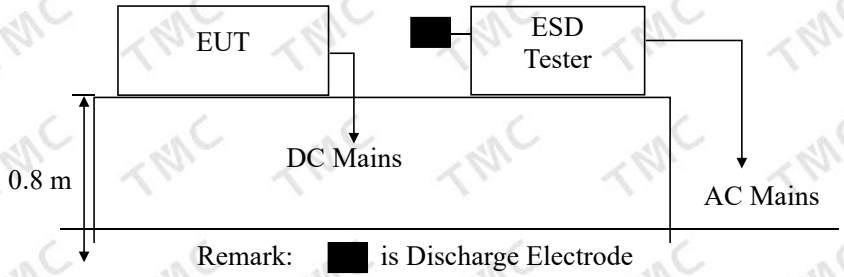


Site LAB
Polarization: *Vertical*
Temperature: 26(C)
Limit: EN55032 RE-Class B (3M)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	44.1202	26.88	-16.48	10.40	40.00	-29.60	peak	100	0	P	
2	55.0274	25.82	-16.84	8.98	40.00	-31.02	peak	100	0	P	
3	135.0319	26.78	-16.99	9.79	40.00	-30.21	peak	100	0	P	
4	473.8347	27.30	-11.19	16.11	47.00	-30.89	peak	100	0	P	
5	564.6389	26.47	-8.87	17.60	47.00	-29.40	peak	100	0	P	
6 *	824.5968	28.58	-4.41	24.17	47.00	-22.83	peak	100	0	P	

6. ELECTROSTATIC DISCHARGE TEST

6.1. Block Diagram of ESD Test Setup



6.2. Test Standard

EN 55035:2017 +A11:2020
Severity Level 3 for Air Discharge at 8KV
Severity Level 2 for Contact Discharge at 4KV

6.3. Severity Levels and Performance Criterion

6.3.1. Severity level

Level	Test Voltage Contact Discharge (KV)	Test Voltage Air Discharge (KV)
1.	2	2
2.	4	4
3.	6	8
4.	8	15
X.	Special	Special

6.3.2. Performance criterion: B

6.4. EUT Configuration on Test

The configuration of EUT are listed in Section 3.2.

6.5. Operating Condition of EUT

6.5.1. Setup the EUT as shown in Section 9.1.

6.5.2. Turn on the power of all equipments.

6.5.3. Let the EUT work in test mode (full load) and test it.

6.6. Test Procedure

6.6.1. Air Discharge:

This test is done on a non-conductive surfaces. The round discharge tip of the discharge

electrode shall be approached as fast as possible to touch the EUT.
After each discharge, the discharge electrode shall be removed from the EUT.
The generator is then re-triggered for a new single discharge and repeated 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

6.6.2. Contact Discharge:

All the procedure shall be same as Section 9.6.1. except that the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.

6.6.3. Indirect discharge for horizontal coupling plane

At least 20 single discharges shall be applied to the horizontal coupling plane, at points on each side of the EUT. The discharge electrode positions vertically at a distance of 0.1m from the EUT and with the discharge electrode touching the coupling plane.

6.6.4. Indirect discharge for vertical coupling plane

At least 20 single discharge shall be applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m X 0.5m, is placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges shall be applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.

6.7. Test Results

PASS.

Please refer to the following page.

Electrostatic Discharge Test Results

TMC Testing Services (Shenzhen) Co., Ltd

Date: September 7, 2023

Applicant :		Test Date :	September 4, 2023
EUT :	mobilephone stabilizer	Temperature :	22℃
M/N :	H5	Humidity :	50%
Power Supply :	DC5V	Test Mode :	Operating
Test Engineer :	Simon		

Air Discharge: ±8KV For each point positive 10 times and negative 10 times discharge.

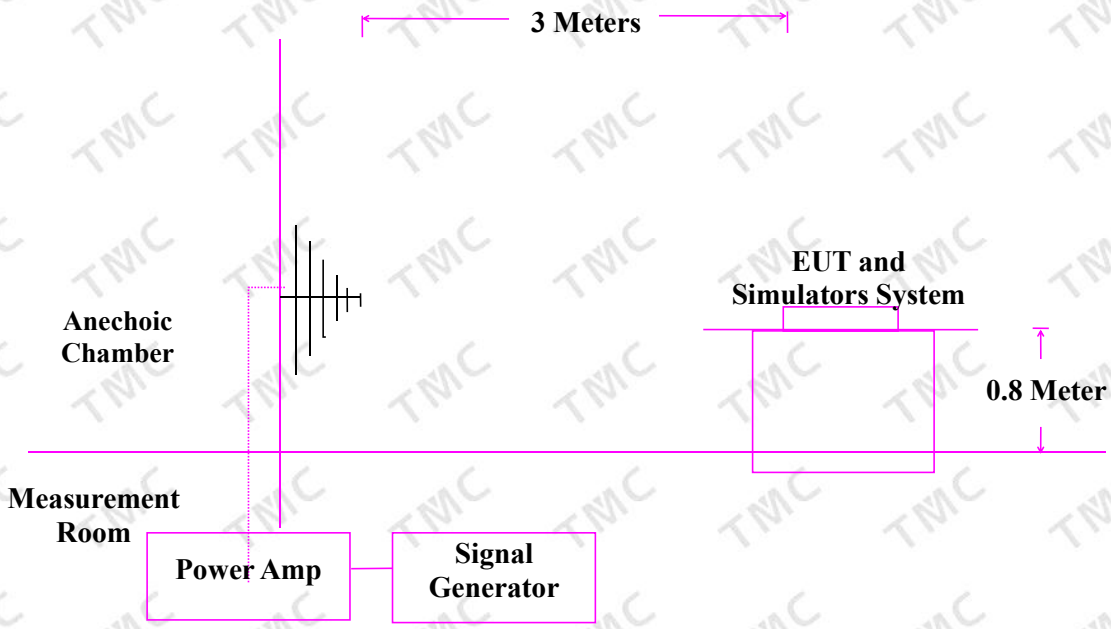
Contact Discharge: ±4KV

Location		**Kind** (A-Air Discharge C-Contact Discharge)	**Result** (PASS)
surface Slots	15 points	Air Discharge	A
interface Slots	6 points	Air Discharge	A
surface	10 points	Air Discharge	A
HCP	8 points	Contact Discharge	A
VCP	8 points	Contact Discharge	A

Discharge should be considered on Contact and Air and Horizontal Coupling Plane (HCP) and Vertical Coupling Plane (VCP).

7. RF FIELD STRENGTH SUSCEPTIBILITY TEST

7.1. R/S Test Setup



7.2. Test Standard

EN 55035:2017 +A11:2020
Severity Level 2 at 3V / m

7.3. Severity Levels and Performance Criterion

7.3.1. Severity level

Level	Field Strength V/m
1.	1
2.	3
3.	10
X.	Special

7.3.2. Performance criterion : A

7.4. EUT Configuration on Test

The configuration of EUT are listed in Section 3.2

7.5. Operating Condition of EUT

Setup the EUT as shown in Section 10.1.. The operating condition of EUT are listed in section 3.3.

7.6. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above the ground. The EUT is set 3 meters away from the transmitting antenna which is mounted on an antenna tower. Both horizontal and vertical polarization of the antenna are set on test. Each of the four sides of EUT must be faced this transmitting antenna and measured individually.
In order to judge the EUT performance, a CCD camera is used to monitor the EUT.
All the scanning conditions are as follows **:**

Condition of Test	Remarks
1.Fielded Strength	3 V/m (Severity Level 2)
2.Radiated Signal	Modulated
3.Scanning Frequency	80 - 1000 MHz
4.Sweeping time of radiated	0.0015 decade/s
5.Dwell Time	1 Sec.

7.7. Test Results

PASS.

Please refer to the following page.

RF Field Strength Susceptibility Test Results

TMC Testing Services (Shenzhen) Co., Ltd

Date: September 7, 2023

Applicant :		Test Date :	September 4, 2023
EUT :	mobilephone stabilizer	Temperature :	22℃
M/N :	H5	Humidity :	50％
Power Supply :	DC5V	Test Mode :	Operating
Test Engineer :	Simon	Frequency Range :	80 MHz to 1000 MHz

Modulation: ☑AM ☐Pulse ☐none 1 KHz 80%

Criterion : A

	Frequency Rang : 80-1000	
Steps	1%	1%
	Horizontal	Vertical
Front	A(pass)	A(pass)
Right	A(pass)	A(pass)
Rear	A(pass)	A(pass)
Left	A(pass)	A(pass)

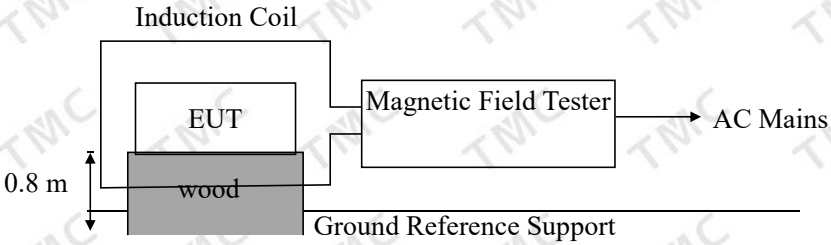
8. MAGNETIC FIELD IMMUNITY TEST

8.1. Block Diagram of Test Setup

8.1.1. Block Diagram of the EUT

(EUT: mobilephone stabilizer)

8.1.2. Block Diagram of Test Setup



8.2. Test Standard

EN 55035:2017 +A11:2020
Severity Level 2 at 3V / m

8.3. Severity Levels and Performance Criterion

8.3.1. Severity level

Level	Magnetic Field Strength A/m
1.	1
9.	3
10.	10
11.	30
12.	100
X.	Special

8.3.2 Performance criterion : A

8.4 EUT Configuration on Test

The configuration of EUT are listed in Section 3.2.

8.5 Operating Condition of EUT

8.5.1 Setup the EUT as shown in Section 14.1

8.5.2 Turn on the power of all equipments.

8.5.3 Let the EUT work in test mode (ON) and test it.

8.6. Test Procedure

The EUT shall be subjected to the test magnetic field by using the induction coil of standard dimensions (1m*1m) and shown in Section 14.1. The induction coil shall then be rotated by 90° in order to expose the EUT to the test field with different orientations.

1.7. Test Results

PASS.

Please refer to the following page.

Magnetic Field Immunity Test Results

TMC Testing Services (Shenzhen) Co., Ltd

Applicant:	Test Date :September 4, 2023
EUT : mobilephone stabilizer	Temperature :26℃
M/N : H5	Humidity : 60%
Power Supply : DC5V	Test Engineer :Davis

Test Model: ON

Test Level	Testing Duration	Coil Orientation	Criterion	Result
3A/M	5 mins	Horizontal	A	PASS
3A/M	5 mins	Vertical	A	PASS

Remark:	Test Equipment : Magnetic Field Tester MAG100

APPENDIX I

(TEST SETUP PHOTOGRAPHS)

RADIATED EMISSION MEASUREMENT

ELECTROSTATIC DISCHARGE IMMUNITY

APPENDIX Ⅱ

(Photos of the EUT)

Photo 1 General Appearance of the EUT

Photo 2 General Appearance of the EUT

Photo 3 General Appearance of the EUT

Photo 4 General Appearance of the EUT

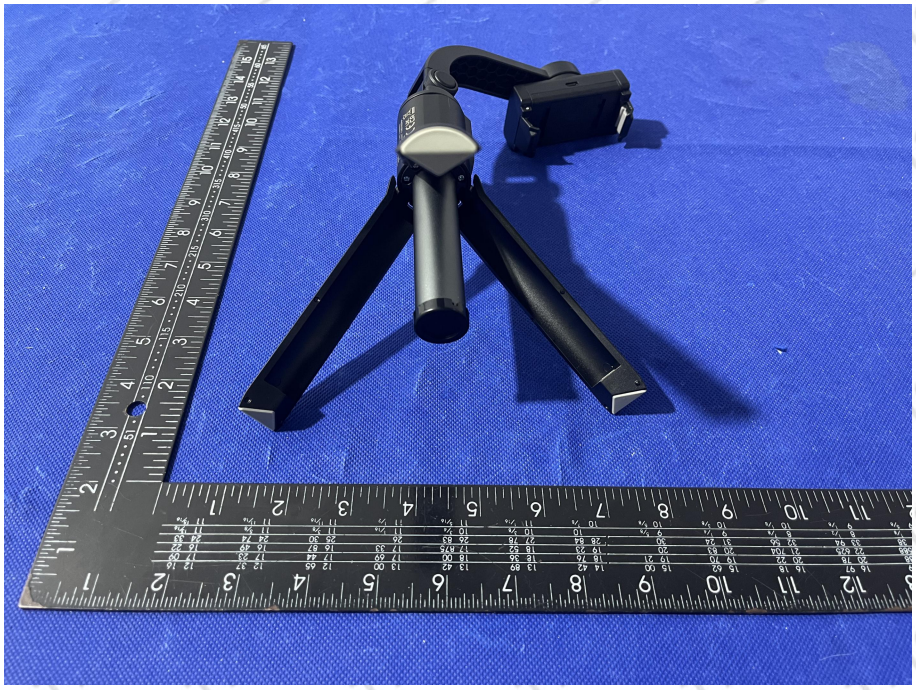


Photo 5 General Appearance of the EUT

Photo 6 General Appearance of the EUT

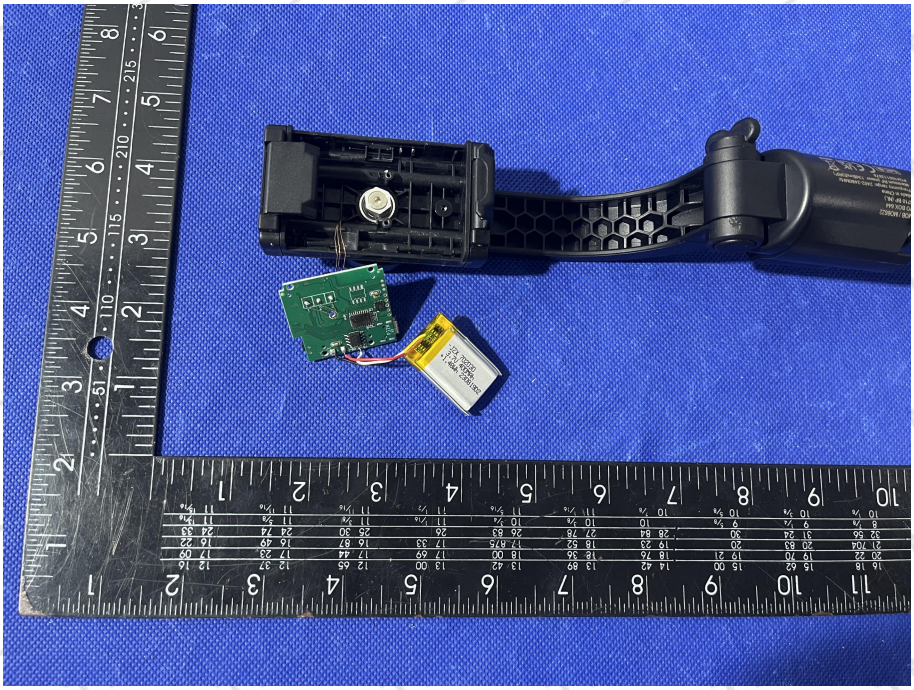


Photo 7 General Appearance of the EUT

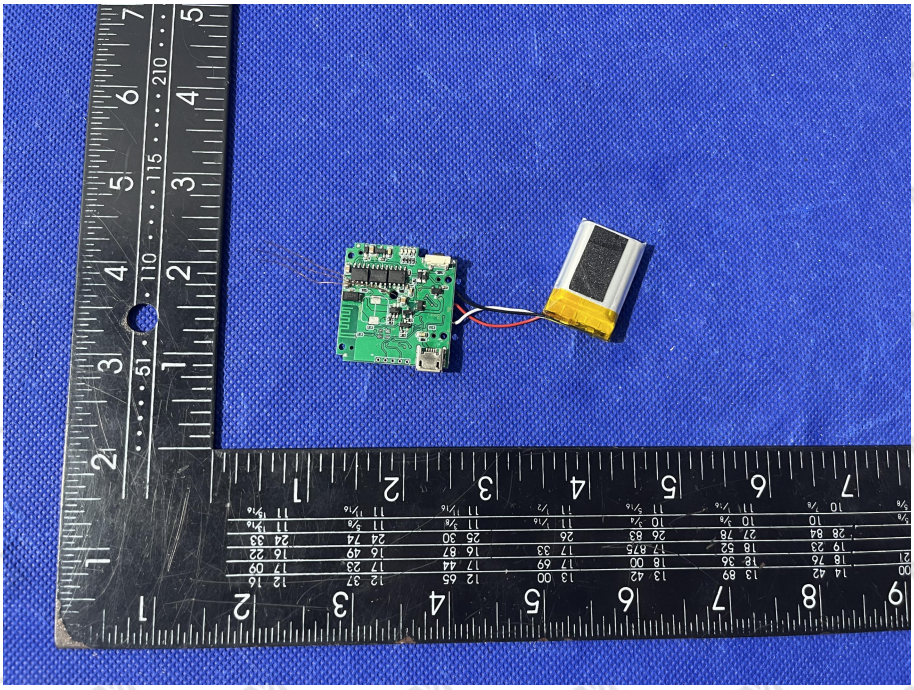
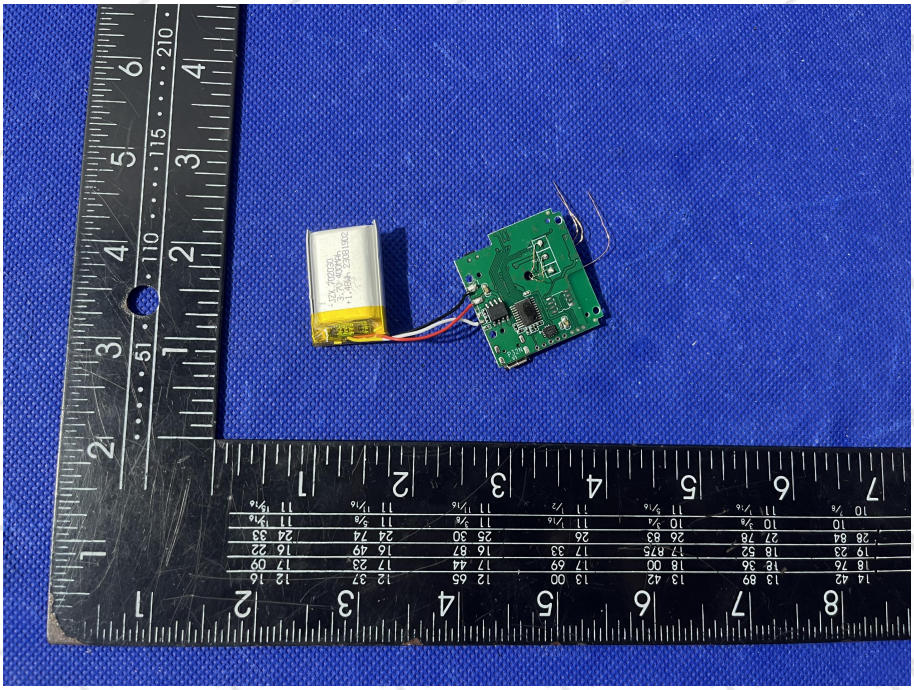


Photo 8 General Appearance of the EUT



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