TECHNICAL REPORT

RADIO TEST REPORT

Report No:	MK23080009-P01RF01
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 300 328 V2.2.2(2019-07)
Test result:	The EMC testing has been performed on the submitted samples and found in compliance with council RE Directive 2014/53/EU

Approved By:

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 Emai: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

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

1.6 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℃

1.7 Test Standards

ETSI EN 300 328 V2.2.2(2019-07)

Electromagnetic compatibility and Radio spectrum Matters(ERM);

Wideband Transmission systems;

Data transmission equipment operating in the 2.4GHz ISM band and using spread spectrum modulation techniques;

Harmonized EN covering essential requirements under article 3.2 of the RE Directive

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

1.8 Test Standards

All measurements contained in this report were conducted with ETSI EN 300 328 V2.2.2 (2019-07).

Measurement Uncertainty

Parameter	Flab	Maximum allow uncertainty
Occupied Channel Bandwidth	±5 %	±5 %
RF output power, conducted	±0.61dB	±1,5dB
Power Spectral Density, conducted	±3 dB	±3 dB
Unwanted Emissions, conducted	±2.47dB	±3dB
All emissions, radiated	±3.62dB	±6dB
Temperature	±1℃	±3℃
Supply voltages	±0.4%	±3%
Duty Cycle	1 %	±5%

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

1.9 Tests or Witness Test Engineering

Test By: Nina Wu

Printing Name: Nina Wu

2. Summary

2.1. Description of Test Configuration

The system was configured for testing in engineering mode, which was provided by manufacturer.
For 2.4GHz Bluetooth, 79 channels are provided to testing:
Test Mode
Mode1: Transmit by Bluetooth
Mode2: Receive by Bluetooth

Note:
(1) For portable device, radiated spurious emission was verified over X, Y, Z Axis, and shown the worst case on this report.
(2) Regard to the frequency band operation for systems using Wide Band modulation: the lowest, middle, highest frequency channel for conducted test, and the lowest, highest frequency channel for radiation spurious test.
(3) The extreme test condition for voltage and temperature were declared by the manufacturer.
(4) All test modes were tested, but we only recorded the worst case in this report.

The worst-case data rates are determined to be as follows for each mode based upon investigation by measuring the average power and PSD across all data rates bandwidths, and modulations.
The extreme temperature test conditions which were declared by the manufacturer and the normal conditions are as below:
NT: Normal Temperature 25℃
LT: Low Temperature -10℃
HT: High Temperature +40℃

Equipment Modifications

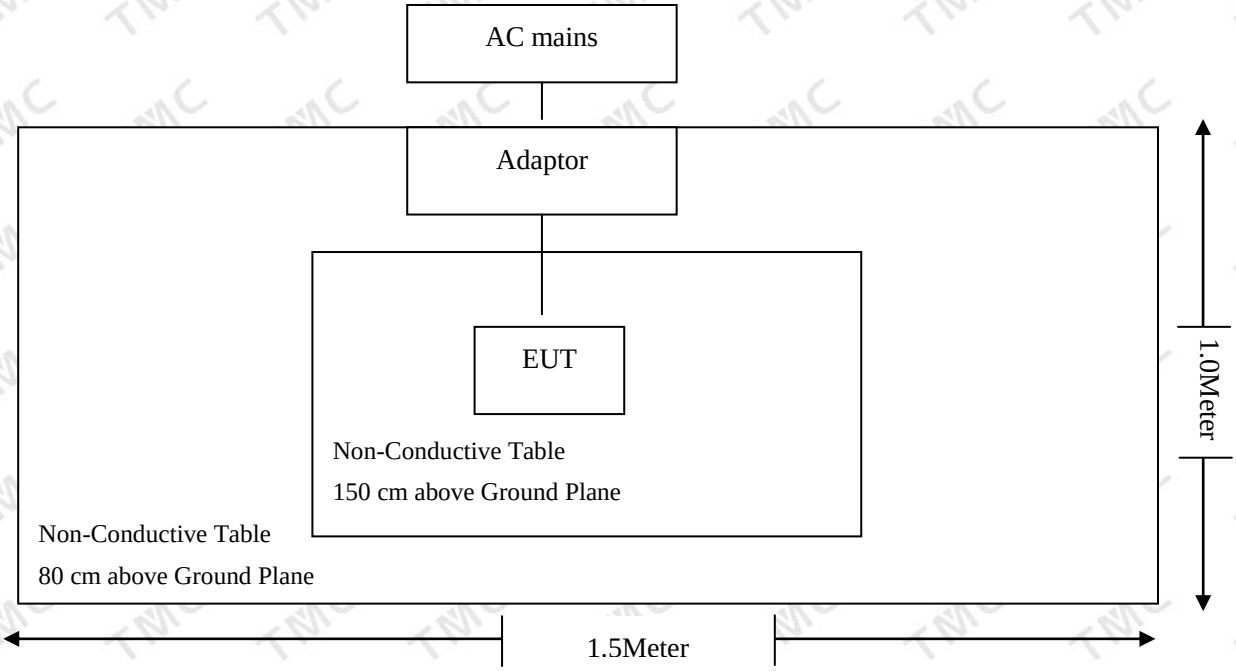
No modification was made to the EUT tested.

2.2. Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
USB Cable	/	/	/	/	/

The EUT has been tested under typical operating condition. A software used to control the EUT for staying in transmitting and receiving mode for testing.

2.3. Block Diagram of Test Setup



2.4. Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:
Temperature: 15-35 °C
Humidity: 30-60 %
Atmospheric pressure: 950-1050mbar

2.5. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:
o - supplied by the manufacturer
● - supplied by the lab

2.6. Performance level

The test results shall be classified in terms of the loss of function or degradation of performance of the equipment under test relative to a performance criteria defined by its manufacturer or the requestor of the test, or agreed between the manufacturer and the purchaser of the product. Examples of functions defined by the manufacturer to be evaluated during testing include, but are not limited to, the following:

— essential operational modes and states;
— tests of all peripheral access(hard disks, floppy disks, printers, keyboard, mouse, etc.);
— quality of software execution
— quality of data display and transmission
— quality of speech transmission

2.7. Summary of Test Results

No deviations from the test standards

For Frequency Hopping equipment:

List of Measurements		
Parameter to be measured	**Normative reference**	**Result**
Transmitter Parameters		
RF output power	ETSI EN 300 328 V2.2.2(2019-07)	Pass
Duty Cycle, Tx-sequence, Tx-gap	ETSI EN 300 328 V2.2.2(2019-07)	N/A
Power Spectral Density	ETSI EN 300 328 V2.2.2(2019-07)	Pass
Medium Utilisation (MU) factor	ETSI EN 300 328 V2.2.2(2019-07)	N/A
Adaptively	ETSI EN 300 328 V2.2.2(2019-07)	N/A
Occupied Channel Bandwidth	ETSI EN 300 328 V2.2.2(2019-07)	Pass
Transmitter unwanted emissions in the out-of-band domain	ETSI EN 300 328 V2.2.2(2019-07)	Pass
Transmitter unwanted emissions in the spurious domain	ETSI EN 300 328 V2.2.2(2019-07)	Pass
Receiver Parameters		
Receiver spurious emissions	ETSI EN 300 328 V2.2.2(2019-07)	Pass
Receiving Blocking	ETSI EN 300 328 V2.2.2(2019-07)	Pass
Geo-location capability	ETSI EN 300 328 V2.2.2(2019-07)	N/A*

Note: The clause numbers are referenced to ETSI EN 300 328 v2.2.2 (2019-07)

1.N/A= Not applicable.

2. N/A*: EUT without Geo-location capability

3. ETSI EN 300 328 REQUIREMENTS

3.1 RF Output Power

3.1.1Definition

The RF output power is defined as the mean equivalent isotropic radiated power (e.i.r.p.) of the equipment during a transmission burst.

3.1.2 Limits

For non-adaptive frequency hopping systems

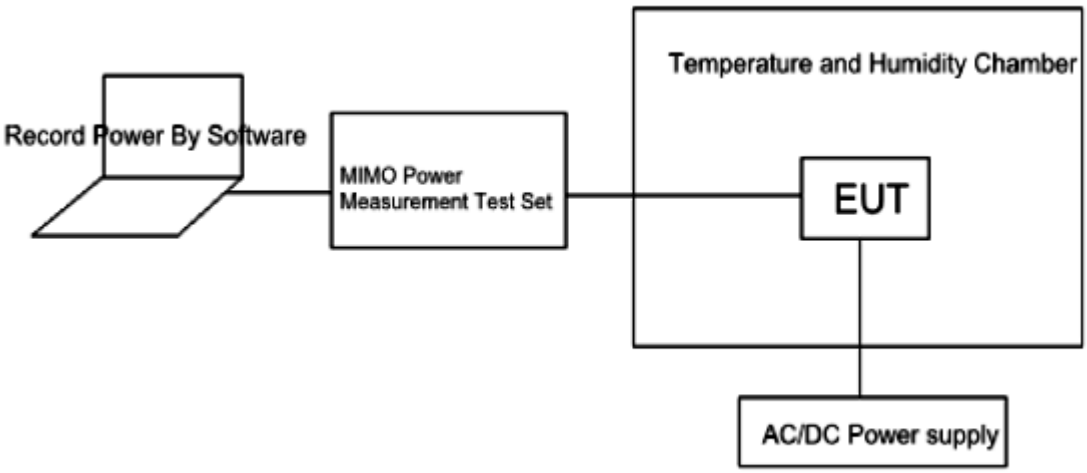
The maximum RF output power for non-adaptive Frequency Hopping equipment shall be declared by the supplier. The maximum RF output power for this equipment shall be equal to or less than the value declared by the supplier. This declared value shall be equal to or less than 20 dBm.

For adaptive frequency hopping systems

The maximum RF output power for adaptive Frequency Hopping equipment shall be equal to or less than 20 dBm

3.2. Test Setup

For Conducted Measurement



3.3. Test Procedure

Refer to ETSI EN 300 328 V2.2.2(2019-07) Clause 5.4.2

Step 1:

• The fast power sensor use the following setting: Sample speed 1 MS/s.

Step 2:

• Connect the power sensor to the transmit port, sample the transmit signal and store the raw data.Use these stored samples in all following steps.

Step 3:

• Find the start and stop times of each burst in the stored measurement samples.

Step 4:

• Between the start and stop times of each individual burst calculate the RMS power over the burst. Save these P_{burst} values, as well as the start and stop times for each burst.

Step 5:

• The highest of all Pburst values (value "A" in dBm) will be used for maximum e.i.r.p. calculations.

Step 6:

• Add the (stated) antenna assembly gain "G" in dBi of the individual antenna.

• If applicable, add the additional beamforming gain "Y" in dB.

The RF Output Power (P) shall be calculated using the formula below:

P = A + G + Y

3.4. Test Result

Pass

***Note: 20 bursts had been captured for power measurement.

Condition	Mode	Frequency (MHz)	Max EIRP (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	1.84	20	Pass
NVNT	BLE 1M	2441	1.74	20	Pass
NVNT	BLE 1M	2480	1.88	20	Pass
NVLT	BLE 1M	2402	1.97	20	Pass
NVLT	BLE 1M	2441	0.16	20	Pass
NVLT	BLE 1M	2480	0.14	20	Pass
NVHT	BLE 1M	2402	0.16	20	Pass
NVHT	BLE 1M	2441	0.58	20	Pass
NVHT	BLE 1M	2480	0.44	20	Pass

***Note: 20 bursts had been captured for power measurement.

3.5. Receiver Category

Receiver Category 1: Adaptive equipment with a maximum RF output power greater than 10 dBm e.i.r.p. shall be considered as receiver category 1 equipment.

Receiver Category 2:Non-adaptive equipment with a Medium Utilization (MU) factor greater than 1 % and less than or equal to 10 % or equipment (adaptive or non-adaptive) with a maximum RF output power greater than 0 dBm e.i.r.p. and less than or equal to 10 dBm e.i.r.p. shall be considered as receiver category 2 equipment.

Receiver Category 3: Non-adaptive equipment with a maximum Medium Utilization (MU) factor of 1 % or equipment (adaptive or non-adaptive) with a maximum RF output power of 0 dBm e.i.r.p. shall be considered as receiver category 3 equipment.

As this is an adaptivity device with a maximum power of 5.83dBm, it belongs to recevier category 2..

4. Duty Cycle, TX-Sequence, TX-Gap

4.1Applicability

These requirements apply to non-adaptive equipment or to adaptive equipment when operating in a non-adaptive mode. The equipment is using wide band modulations other than FHSS.

These requirements do not apply for equipment with a maximum declared RF Output power level of less than 10 dBm e.i.r.p. or for equipment when operating in a mode where the RF Output power is less than 10 dBm e.i.r.p.

Definition

Duty Cycle is defined as the ratio of the total transmitter 'on'-time to a 1 second observation period.

Tx-sequence is defined as a period in time during which a single or multiple transmissions may occur and which shall be followed by a Tx-gap.

Tx-gap is defined as a period in time during which no transmissions occur.

4.2Limits

Non-FHSS equipment shall comply with the following:

- The Duty Cycle shall be equal to or less than the maximum value declared by the supplier.
- The Tx-sequence time shall be equal to or less than 10 ms.
- The minimum Tx-gap time following a Tx-sequence shall be equal to the duration of that proceeding Tx-sequence with a minimum of 3,5 ms.

NOTE: For Non-adaptive FHSS equipment, the manufacturer may have declared a reduced RF Output Power (see clause 5.4.1 m)) and associated Duty Cycle (see clause 5.4.1 e)) that will ensure that the equipment meets the requirement for the Medium Utilization (MU) factor further described in clause 4.3.2.5. This is verified by the conformance test referred to in clause 4.3.2.5.4.

4.3Test condition and test procedures

Refer to ETSI EN 300 328 V2.2.2 (2019-07) Clause 5.4.2

4.4Result

These requirements apply to non-adaptive frequency hopping equipment or to adaptive frequency hopping equipment operating in a non-adaptive mode.

These requirements do not apply for equipment with a maximum declared RF Output power of less than 10dBm E.I.R.P. or for equipment when operating in a mode where the RF Output power is less than 10dBm E.I.R.P.

No applicable.

5. Accumulated Transmit Time, Frequency Occupation and Hopping Sequence

5.1 Limit

For non-adaptive frequency hopping systems

The Accumulated Transmit Time on any hopping frequency shall not be greater than 15 ms within any observation period of 15 ms multiplied by the minimum number of hopping frequencies (N) that have to be used.

In order for the equipment to comply with the Frequency Occupation requirement, it shall meet either of the following two options:

Option 1: Each hopping frequency of the hopping sequence shall be occupied at least once within a period not exceeding four times the product of the dwell time and the number of hopping frequencies in use.

Option 2: The occupation probability for each frequency shall be between ((1 / U) × 25 %) and 77 % where U is the number of hopping frequencies in use.

The hopping sequence(s) shall contain at least N hopping frequencies where N is 15 or 15 divided by the minimum Hopping Frequency Separation in MHz, whichever is the greater.

For adaptive frequency hopping systems

Adaptive Frequency Hopping systems shall be capable of operating over a minimum of 70 % of the band.

The Accumulated Transmit Time on any hopping frequency shall not be greater than 400 ms within any observation period of 400 ms multiplied by the minimum number of hopping frequencies (N) that have to be used.

In order for the equipment to comply with the Frequency Occupation requirement, it shall meet either of the following two options:

Option 1: Each hopping frequency of the hopping sequence shall be occupied at least once within a period not exceeding four times the product of the dwell time and the number of hopping frequencies in use.

Option 2: The occupation probability for each frequency shall be between ((1 / U) × 25 %) and 77 % where U is the number of hopping frequencies in use.

The hopping sequence(s) shall contain at least N hopping frequencies at all times, where N is 15 or 15 divided by the minimum Hopping Frequency Separation in MHz, whichever is the greater.

5.2 Test Procedure

Refer to ETSI EN 300 328 V2.2.2 (2019-07) Clause 5.4.4

Step 1:

• The output of the transmitter shall be connected to a spectrum analyzer or equivalent.

• The analyzer shall be set as follows:

- Centre Frequency: Equal to the hopping frequency being investigated
- Frequency Span: 0 Hz
- RBW: ~ 50 % of the Occupied Channel Bandwidth(we set RBW=510KHz)
- VBW: ≥ RBW(we set RBW=1500KHz)
- Detector Mode: RMS
- Sweep time: Equal to the applicable observation period (we set 400ms ×79=31600ms)
- Number of sweep points: 30 000
- Trace mode: Clear / Write
- Trigger: Free Run

Step 2:

• Save the trace data to a file for further analysis by a computing device using an appropriate software application or program.

Step 3:

• Indentify the data points related to the frequency being investigated by applying a threshold.

The data points resulting from transmissions on the hopping frequency being investigated are assumed to have much higher levels compared to data points resulting from transmissions on adjacent hopping frequencies. If a clear determination between these transmissions is not possible, the RBW in step 1 shall be further reduced. In addition, a channel filter may be used.

• Count the number of data points identified as resulting from transmissions on the frequency being investigated and multiply this number by the time difference between two consecutive data points.

Step 4:

• The result in step 3 is the Accumulated Transmit Time which shall comply with the limit provided in clause 4.3.1.4.3.1 or clause 4.3.1.4.3.2 and which shall be recorded in the test report.

Step 5:

• Make the following changes on the analyzer and repeat steps 2 and 3.

Sweep time: 4 × Dwell Time × Actual number of hopping frequencies in use

The hopping frequencies occupied by the equipment without having transmissions during the dwell time (blacklisted frequencies) should be taken into account in the actual number of hopping frequencies in use. If this number cannot be determined (number of blacklisted frequencies unknown) it shall be assumed that the equipment uses the maximum possible number of hopping frequencies.

• The result shall be compared to the limit for the Frequency Occupation defined in clause 4.3.1.4.3.1 or clause 4.3.1.4.3.2. The result of this comparison shall be recorded in the test report.

Step 6:

• Make the following changes on the analyzer:

- Start Frequency: 2 400 MHz
- Stop Frequency: 2 483,5 MHz
- RBW: ~ 50 % of the Occupied Channel Bandwidth (single hop) (we set RBW=510KHz)
- VBW: ≥ RBW (we set RBW=1500KHz)
- Detector Mode: RMS

- Sweep time: 1s
- Trace Mode: Max Hold
- Trigger: Free Run

• Wait for the trace to stabilize. Identify the number of hopping frequencies used by the hopping sequence.

• The result shall be compared to the limit (value N) defined in clause 4.3.1.4.3.1 or clause 4.3.1.4.3.2. This value shall be recorded in the test report. For equipment with blacklisted frequencies, it might not be possible to verify the number of hopping frequencies in use. However they shall comply with the requirement for Accumulated Transmit Time and Frequency Occupation assuming the minimum number of hopping frequencies (N) defined in clause 4.3.1.4.3.1 or clause 4.3.1.4.3.2 is used.

Step 7:

• For adaptive equipment, using the lowest and highest -20 dB points from the total spectrum envelope obtained in step 6, it shall be verified whether the equipment uses 70 % of the band specified in clause 1. The result shall be recorded in the test report.

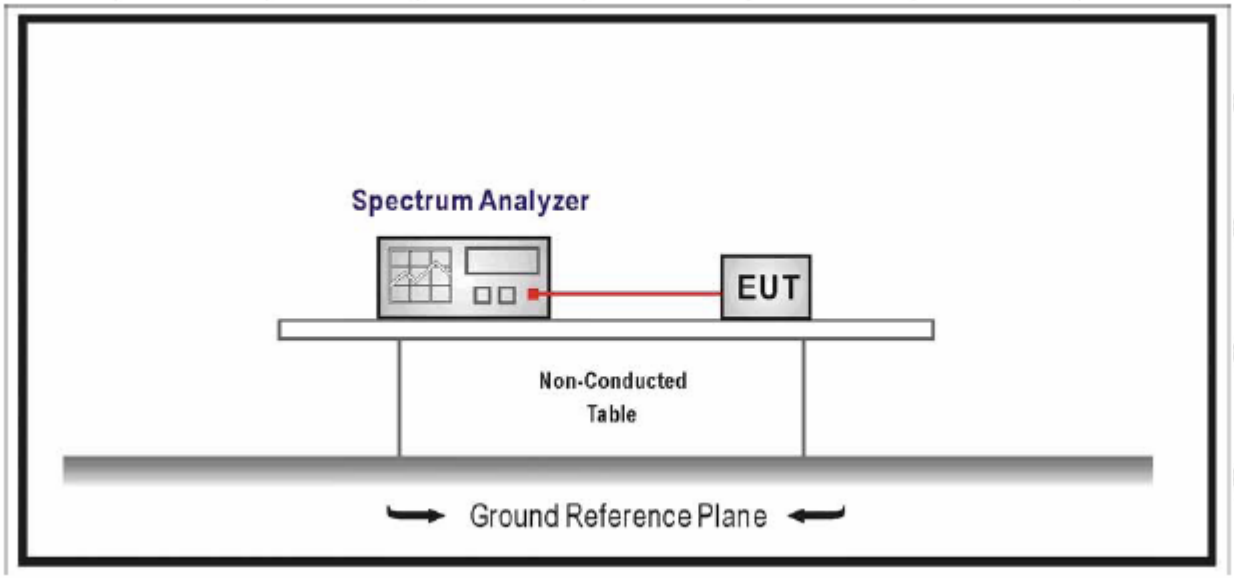
No applicable.

6. Power spectral density

6.1 Limit

For equipment using wide band modulations other than FHSS, the maximum Power Spectral Density is limited to 10dBm per MHz.

6.2 Test Procedure



Refer to ETSIETSI EN 300 328V2.2.0(2019-02) Clause 5.4.3

Step 1:

Connect the UUT to the spectrum analyser and use the following settings:

• Start Frequency: 2 400 MHz
• Stop Frequency: 2 483,5 MHz
• Resolution BW: 10 kHz
• Video BW: 30 kHz
• Sweep Points: > 8 350
• Detector: RMS
• Trace Mode: Max Hold
• Sweep time: Auto

For non-continuous signals, wait for the trace to be completed. Save the (trace) data set to a file.

Step 2:

For each frequency point, add up the amplitude (power) values for the different transmit chains and use this as the new data set.

Step 3:

Add up the values for amplitude (power) for all the samples in the file.

Step 4:

Normalize the individual values for amplitude so that the sum is equal to the RF Output Power (e.i.r.p.).

Step 5:

Starting from the first sample in the file (lowest frequency), add up the power of the following samples representing a 1 MHz segment and record the results for power and position (i.e. sample #1 to #100). This is the Power Spectral Density (e.i.r.p.) for the first 1 MHz segment which shall be recorded.

Step 6:

Shift the start point of the samples added up in step 5 by 1 sample and repeat the procedure in step 5 (i.e. sample #2 to #101).

Step 7:

Repeat step 6 until the end of the data set and record the radiated Power Spectral Density values for each of the 1 MHz segments. From all the recorded results, the highest value is the maximum Power Spectral Density for the UUT.

6.3. Test Result

Frequency (MHz)	Total Power Density (dBm/MHz)	Limit (dBm/MHz)
2402	6.19	10.00
2440	7.67	10.00
2480	6.15	10.00

7. Medium Utilisation (MU) Factor

7.1. Limit

For non-adaptive equipment
For non-adaptive equipment using wide band modulations other than FHSS, the maximum Medium Utilization factor shall be 10 %.

7.2. Test Procedure

Refer to ETSI EN 300 328 V2.2.2(2019-07)Clause 5.4.2

7.3. Test Result

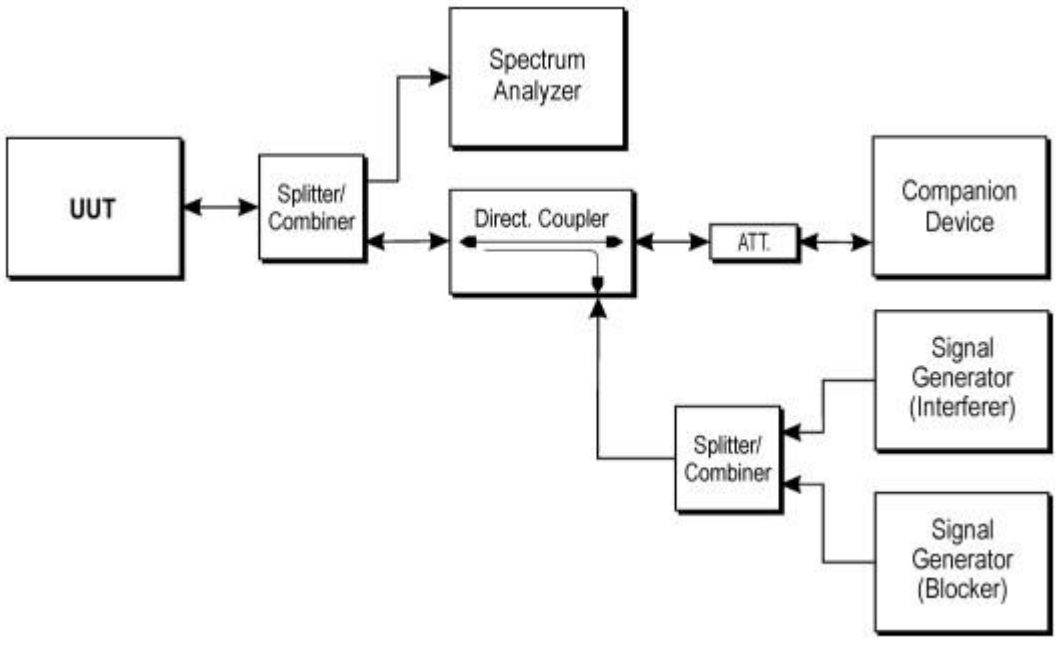
This requirement does not apply to adaptive equipment unless operating in a non-adaptive mode.
In addition, this requirement does not apply for equipment with a maximum declared RF Output power level of less than 10dBm E.I.R.P. or for equipment when operating in a mode where the RF Output power is less than 10dBm E.I.R.P.
No applicable.

8. Adaptivity (Adaptive Frequency Hopping)

8.1. Limit

Adaptivity Limit
☒ Non-LBT based Detect and Avoid --- The frequency shall remain unavailable for a minimum time equal to 1 second or 5 times the actual number of hopping frequencies in the current (adapted) channel map used by the equipment, multiplied with the Channel Occupancy Time whichever is the longest. --- COT ⩽ 40 ms; --- For equipment using a dwell time > 40 ms that want to have other transmissions during the same hop (dwell time) an Idle Period (no transmissions) of minimum 5 % of the Channel Occupancy Period with a minimum of 100 μs shall be implemented. --- Detection threshold level = -70 dBm/MHz + (20 dBm - Pout e.i.r.p.)/1 MHz (Pout in dBm)
☐ LBT based Detect and Avoid(Frame Based Equipment) --- The CCA observation time shall be not less than 0,2 % of the Channel Occupancy Time with a minimum of 18 μs.; --- COT ⩽ 60 ms; --- Idle Period = 5% of COT with a minimum of 100 μs; --- Detection threshold level = -70 dBm/MHz + (20 dBm - Pout e.i.r.p)/1 MHz (Pout in dBm)
☐ Short Control Signalling Transmissions: --- Short Control Signalling Transmissions shall have a maximum TxOn / (TxOn + TxOff) ratio of 10 % within any observation period of 50 ms or within an observation period equal to the dwell time, whichever is the shorter..

8.2. Test Setup



8.3 Test Procedure

Refer to ETSI EN 300 328 V2.2.2 (2019-07) Clause 5.4.6

8.4 Test Result

This requirement does not apply to non-adaptive equipment or adaptive equipment operating in a non-adaptive mode providing the equipment complies with the requirements and/or restrictions applicable to non-adaptive equipment.

In addition, this requirement does not apply for equipment with a maximum declared RF Output power level of less than 10dBm E.I.R.P. or for equipment when operating in a mode where the RF Output power is less than 10dBm E.I.R.P.

No applicable.

9. Occupied Channel Bandwidth

9.1. Limit

The Occupied Channel Bandwidth for each hopping frequency shall fall completely within the band 2.4GHz to 2.4835GHz.

For non-adaptive Frequency Hopping equipment with E.I.R.P greater than 10dBm, the Occupied Channel Bandwidth for every occupied hopping frequency shall be equal to or less than the value declared by the supplier. This declared value shall not be greater than 5 MHz.

9.2. Test Procedure

Refer to ETSI EN 300 328 V2.2.2(2019-07)Clause 5.4.7

Step 1:

Connect the UUT to the spectrum analyser and use the following settings:

• Centre Frequency: The centre frequency of the channel under test

• Resolution BW: ~ 1 % of the span without going below 1 % (We set RBW=20KHz)

• Video BW: 3 × RBW (We set VBW=60KHz)

• Frequency Span: 2 × Occupied Channel Bandwidth (We set Span=2MHz)

• Detector Mode: RMS

• Trace Mode: Max Hold

Step 2:

Wait until the trace is completed. Find the peak value of the trace and place the analyser marker on this peak.

Step 3:

Use the 99 % bandwidth function of the spectrum analyser to measure the Occupied Channel Bandwidth of the UUT. This value shall be recorded.

9.3. Test Result

Mode	Frequency (MHz)	OBW (MHz)	Lower Edge (MHz)	Upper Edge(MHz)	Limit OBW (MHz)	Verdict
BLE 1M	2402	0.909	2401.545	2402.5319	2400-2483.5	Pass
BLE 1M	2440	0.908	2439.4950	2440.5280	2400-2483.5	Pass
BLE 1M	2480	0.908	2479.5438	2480.4526	2400-2483.5	Pass

10. Transmitter Unwanted Emissions in the Out-of-band Domain

10.1. Limit

The transmitter unwanted emissions in the out-of-band domain but outside the allocated band, shall not exceed the values provided by the mask in figure1.

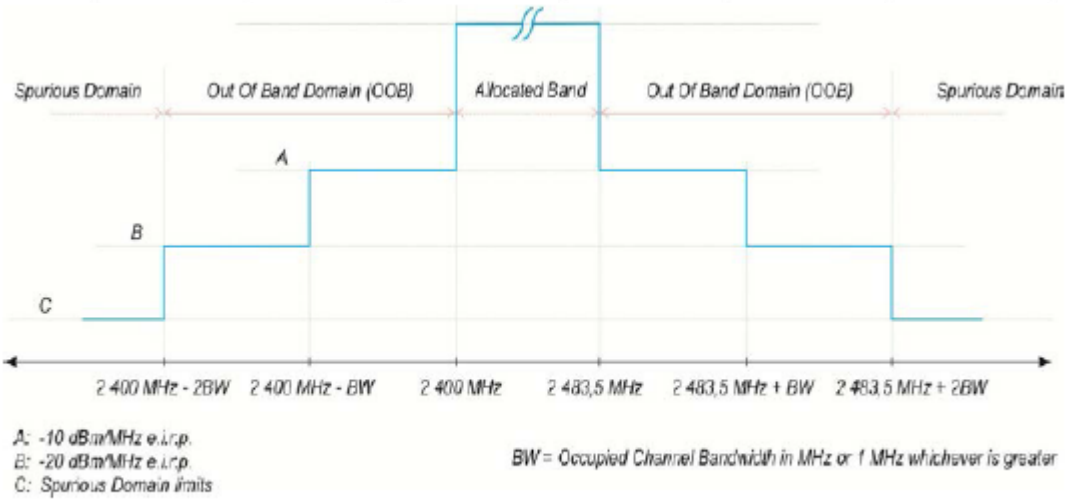


Figure 1: Transmit mask

10.2. Test Procedure

Refer to ETSI EN 300 328 V2.2.2(2019-07) Clause 5.4.8

10.3. Test Result

Mode	Antenna	Channel	Center Frequency (MHz)	Level (dBm/MHz)	Limit OBW(MHz)	Verdict
BLE 1M	Ant2	2402	2398.432	-32.28	-20	Pass
			2439.466	-32.79	-20	Pass
			2439.466	-27.49	-10	Pass
			2399.5	-26.13	-20	Pass
			2484	-33.07	-10	Pass
			2484.034	-32.45	-10	Pass
			2484.034	-37.69	-20	Pass
			2485.068	-36.48	-20	Pass
	Ant2	2480	2398.4366	-31.24	-20	Pass
			2439.4683	-32.56	-20	Pass
			2439.4683	-25.94	-10	Pass
			2399.5	-23.66	-10	Pass
			2484	-30.54	-10	Pass
			2484.0317	-31.47	-10	Pass
			2484.0317	-37.61	-20	Pass
			2485.0634	-36.30	-20	Pass

11. Transmitter Unwanted Emissions in the Spurious Domain

11.1. Limit

Frequency Range	Maximum Power e.i.r.p(≤1GHz); e.i.r.p(＞1GHz)	Bandwidth
30 MHz to 47 MHz	-36 dBm	100kHz
47 MHz to 74 MHz	-54 dBm	100kHz
74 MHz to 87,5 MHz	-36 dBm	100kHz
87,5 MHz to 118 MHz	-54 dBm	100kHz
118 MHz to 174 MHz	-36 dBm	100kHz
174 MHz to 230 MHz	-54 dBm	100kHz
230 MHz to 470 MHz	-36 dBm	100kHz
470 MHz to 694 MHz	-54 dBm	100kHz
694 MHz to 1 GHz	-36 dBm	100kHz
1 GHz to 12,75 GHz	-30 dBm	1MHz

11.2. Test Procedure

Refer to ETSI EN 300 328 V2.2.2(2019-07) Clause 5.4.9

11.3. Test Result

Test Mode	Antenna	Channel	Freq. [MHz]	Level[dBm]	Limit[dBm]	Verdict
BLE 1M	Ant2	2402	984.36	-60.48	-36	PASS
			5773.44	-44.84	-30	PASS
		2480	818.73	-59.15	-36	PASS
			5757.28	-44.36	-30	PASS

12. Receiver Spurious Emissions

12.1. Limit

Frequency range	Maximum power e.r.p. (≤ 1 GHz) e.i.r.p. (> 1 GHz)	Measurement bandwidth
30 MHz to 1 GHz	-57 dBm	100 kHz
1 GHz to 12,75 GHz	-47 dBm	1 MHz

NOTE: In case of equipment with antenna connectors, these limits apply to emissions at the antenna port (conducted) and to the emissions radiated by the cabinet. In case of integral antenna equipment (without temporary antenna connectors), these limits apply to emissions radiated by the equipment.

12.2. Test Procedure

Refer to ETSI EN 300 328 V2.2.2(2019-07) Clause 5.4.10

12.3. Test Result

Test Result-Pre-scan

Test Mode	Antenna	Channel	Freq. [MHz]	Level[dBm]	Limit[dBm]	Verdict
BLE 1M	Ant2	2402	980.96	-62.97	-57.00	PASS
			5702.94	-62.99	-47.00	PASS
		2480	993.45	-68.52	-57.00	PASS
			5771.97	-54.34	-47.00	PASS

13. Receiver Blocking

13.1. Limit

Adaptive Frequency Hopping equipment shall comply with the requirements defined in clause 4.3.1.12.4

The minimum performance criterion shall be a PER less than or equal to 10 %.

Table 6: Receiver Blocking parameters for Receiver Category 1 equipment

Wanted signal mean power from companion device (dBm) (see notes 1 and 4)	Blocking signal frequency (MHz)	Blocking signal power (dBm) (see note 4)	Type of blocking signal
(-133 dBm + 10 × $\log_{10}$(OCBW)) or -68 dBm whichever is less (see note 2)	2 380 2 504	-34	CW
(-139 dBm + 10 × $\log_{10}$(OCBW)) or -74 dBm whichever is less (see note 3)	2 300 2 330 2 360 2 524 2 584 2 674		

NOTE 1: OCBW is in Hz.

NOTE 2: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative test may be performed using a wanted signal up to P_{min} + 26 dB where P_{min} is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal.

NOTE 3: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative test may be performed using a wanted signal up to P_{min} + 20 dB where P_{min} is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal.

NOTE 4: The level specified is the level at the UUT receiver input assuming a 0 dBi antenna assembly gain. In case of conducted measurements, this level has to be corrected for the (in-band) antenna assembly gain (G). In case of radiated measurements, this level is equivalent to a power flux density (PFD) in front of the UUT antenna with the UUT being configured/positioned as recorded in clause 5.4.3.2.2.

Table 7: Receiver Blocking parameters receiver Category 2 equipment

Wanted signal mean power from companion device (dBm) (see notes 1 and 3)	Blocking signal frequency (MHz)	Blocking signal power (dBm) (see note 3)	Type of blocking signal
(-139 dBm + 10 × $\log_{10}$(OCBW) + 10 dB) or (-74 dBm + 10 dB) whichever is less (see note 2)	2 380 2 504 2 300 2 584	-34	CW

NOTE 1: OCBW is in Hz.
NOTE 2: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative test may be performed using a wanted signal up to P_{min} + 26 dB where P_{min} is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal.
NOTE 3: The level specified is the level at the UUT receiver input assuming a 0 dBi antenna assembly gain. In case of conducted measurements, this level has to be corrected for the (in-band) antenna assembly gain (G). In case of radiated measurements, this level is equivalent to a power flux density (PFD) in front of the UUT antenna with the UUT being configured/positioned as recorded in clause 5.4.3.2.2.

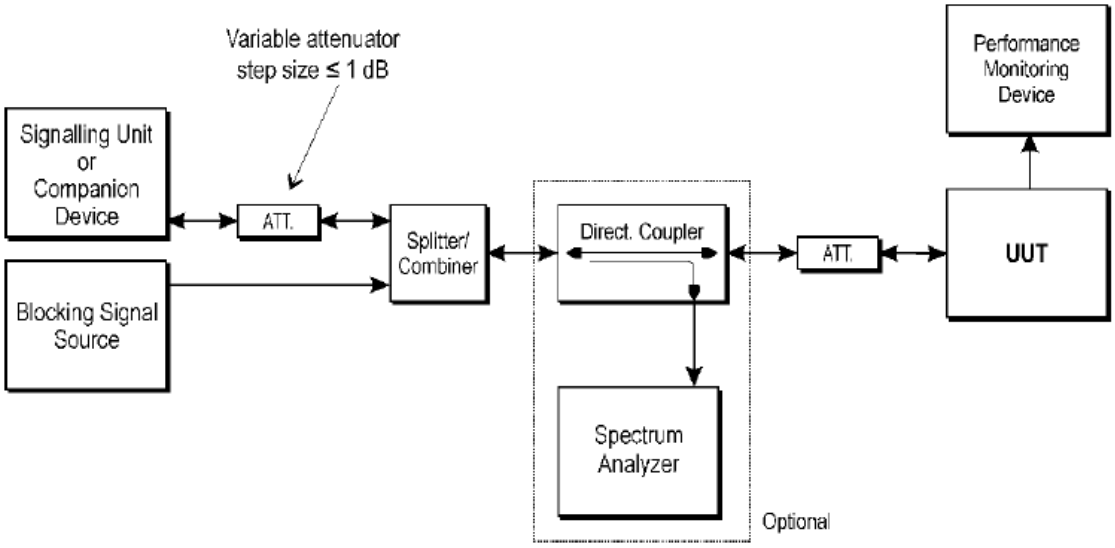
Table 8: Receiver Blocking parameters receiver Category 3 equipment

Wanted signal mean power from companion device (dBm) (see notes 1 and 3)	Blocking signal frequency (MHz)	Blocking signal power (dBm) (see note 3)	Type of blocking signal
(-139 dBm + 10 × $\log_{10}$(OCBW) + 20 dB) or (-74 dBm + 20 dB) whichever is less (see note 2)	2 380 2 504 2 300 2 584	-34	CW

NOTE 1: OCBW is in Hz.
NOTE 2: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative the test may be performed using a wanted signal up to P_{min} + 30 dB where P_{min} is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal.
NOTE 3: The level specified is the level at the UUT receiver input assuming a 0 dBi antenna assembly gain. In case of conducted measurements, this level has to be corrected for the (in-band) antenna assembly gain (G). In case of radiated measurements, this level is equivalent to a power flux density (PFD) in front of the UUT antenna with the UUT being configured/positioned as recorded in clause 5.4.3.2.2.

13.2. Test Setup

Conducted measurements



Step 1:

• For non-frequency hopping equipment, the UUT shall be set to the lowest operating channel.

Step 2:

• The blocking signal generator is set to the first frequency as defined in the appropriate table corresponding to the receiver category and type of equipment.

Step 3:

• With the blocking signal generator switched off, a communication link is established between the UUT and the associated companion device using the test setup shown in figure 6. The attenuation of the variable attenuator shall be increased in 1 dB steps to a value at which the minimum performance criteria as specified in clause 4.3.1.12.3 or clause 4.3.2.11.3 is still met. The resulting level for the wanted signal at the input of the UUT is Pmin.

• This signal level (Pmin) is increased by the value provided in the table corresponding to the receiver category and type of equipment.

Step 4:

• The blocking signal at the UUT is set to the level provided in the table corresponding to the receiver category and type of equipment. It shall be verified and recorded in the test report that the performance criteria as specified in clause 4.3.1.12.3 or clause 4.3.2.11.3 is met.

Step 5:

• Repeat step 4 for each remaining combination of frequency and level for the blocking signal as provided in the table corresponding to the receiver category and type of equipment.

Step 6:

• For non-frequency hopping equipment, repeat step 2 to step 5 with the UUT operating at the highest operating channel.

13.3. Test Result

Test Mode	Test Channel (MHz)	Wanted Signal Mean Power From Companion Device (dBm)	Blocking Signal Frequency (MHz)	Blocking Signal Power (dBm)		Type of Blocking Signal	PER(%)		Test Result
				Test Value	Limit		Test Value	Limit	
BLE 1M	2402	-69	2380	-26	≥-34	CW	6.49	10	Pass
			2504	-22	≥-34	CW	5.20	10	Pass
			2300	-25	≥-34	CW	5.68	10	Pass
			2584	-24	≥-34	CW	6.51	10	Pass
	2480	-69	2380	-29	≥-34	CW	7.97	10	Pass
			2504	-25	≥-34	CW	8.85	10	Pass
			2300	-28	≥-34	CW	8.37	10	Pass
			2584	-22	≥-34	CW	8.56	10	Pass

EXHIBIT A - E.2 INFORMATION AS REQUIRED BY EN 300 328 V2.2.2, CLAUSE 5.4.1

In accordance with EN 300 328, clause 5.4.1, the following information is provided by the supplier.

a) The type of modulation used by the equipment:

☐FHSS

☒Other

☐**b) In case of FHSS modulation:**

In case of non-Adaptive Frequency Hopping equipment:

The number of Hopping Frequencies:_____.

In case of Adaptive Frequency Hopping Equipment:

The maximum number of Hopping Frequencies:_____.

The minimum number of Hopping Frequencies:_____.

The (average) Dwell Time:_____ ;

c) Adaptive / non-adaptive equipment:

☐non-adaptive Equipment

☒adaptive Equipment without the possibility to switch to a non-adaptive mode

☐adaptive Equipment which can also operate in a non-adaptive mode

d) In case of adaptive equipment:

The Channel Occupancy Time implemented by the equipment: 1.20 ms

☐The equipment has implemented an LBT based DAA mechanism

In case of equipment using modulation different from FHSS:

☐The equipment is Frame Based equipment

☐The equipment is Load Based equipment

☐The equipment can switch dynamically between Frame Based and Load Based equipment

The CCA time implemented by the equipment: 77.5 μs

☒The equipment has implemented an non-LBT based DAA mechanism

☐The equipment can operate in more than one adaptive mode

e) In case of non-adaptive Equipment:

The maximum RF Output Power (e.i.r.p.): 1.88 dBm

The maximum (corresponding) Duty Cycle:_____ %

Equipment with dynamic behaviour, that behaviour is described here. (e.g. the different combinations of duty cycle and corresponding power levels to be declared):

f) The worst case operational mode for each of the following tests:

RF Output Power: GFSK ;

Power Spectral Density_____;

Duty cycle, Tx-Sequence, Tx-gap ___ ;

Accumulated Transmit Time, Minimum Frequency Occupation & Hopping Sequence (only for FHSS equipment) GFSK ;

Hopping Frequency Separation (only for FHSS equipment) GFSK ;

Medium Utilisation_____;

Adaptivity_____;

Receiver Blocking_____;

Norminal Occupied Channel Bandwidth_____ ;

Transmitter unwanted emissions in the OOB domain_____;

Transmitter unwanted emissions in the spurious domain _____ ;

Receiver spurious emissions_____ ;

g) The different transmit operating modes (tick all that apply):

☒Operating mode 1: Single Antenna Equipment

☒Equipment with only 1 antenna

☐Equipment with 2 diversity antennas but only 1 antenna active at any moment in time

☐Smart Antenna Systems with 2 or more antennas, but operating in a (legacy) mode where only 1 antenna is used. (e.g. IEEE 802.11™ [i.3] legacy mode in smart antenna systems)

☐Operating mode 2: Smart Antenna Systems - Multiple Antennas without beam forming

☐Single spatial stream / Standard throughput / (e.g. IEEE 802.11™ [i.3] legacy mode)

☐High Throughput (> 1 spatial stream) using Occupied Channel Bandwidth 1

☐High Throughput (> 1 spatial stream) using Occupied Channel Bandwidth 2

Note: Add more lines if more channel bandwidths are supported.

☐Operating mode 3: Smart Antenna Systems - Multiple Antennas with beam forming

☐Single spatial stream / Standard throughput (e.g. IEEE 802.11™ [i.3] legacy mode)

☐High Throughput (> 1 spatial stream) using Occupied Channel Bandwidth 1

☐High Throughput (> 1 spatial stream) using Occupied Channel Bandwidth 2

Note: Add more lines if more channel bandwidths are supported.

h) In case of Smart Antenna Systems:

The number of Receive chains:_____ ;

The number of Transmit chains:_____ ;

☐symmetrical power distribution

☐asymmetrical power distribution

In case of beam forming, the maximum beam forming gain: ;

Note: Beam forming gain does not include the basic gain of a single antenna.

i) Operating Frequency Range(s) of the equipment:

Operating Frequency Range 1: 2402 MHz to 2480 MHz

Operating Frequency Range 2:_____MHz to_____ MHz

Operating Frequency Range 3: _____MHz to ____ MHz

Note: Add more lines if more Frequency Ranges are supported.

j) Nominal Channel Bandwidth(s):

Nominal Channel Bandwidth 1: 20 MHz

Nominal Channel Bandwidth 2:___ MHz

Note: Add more lines if more channel bandwidths are supported.

k) Type of Equipment (stand-alone, combined, plug-in radio device, etc.):

☒Stand-alone

☐Combined Equipment (Equipment where the radio part is fully integrated within another type of equipment)

☐Plug-in radio device (Equipment intended for a variety of host systems)

☐Other ;

l) The normal and the extreme operating conditions that apply to the equipment:

Normal operating conditions (if applicable):

Operating temperature range: 25 C

Other (please specify if applicable):_____

Extreme operating conditions:

Operating temperature range: Minimum: 0 ° C Maximum 50 ° C

Other (please specify if applicable): _____ Minimum: _____ Maximum _____

Details provided are for the:

☒stand-alone equipment

☐combined (or host) equipment

☐test jig

m) The intended combination(s) of the radio equipment power settings and one or more antenna assemblies and their corresponding e.i.r.p levels:

Antenna Type:

☒Integral Antenna (information to be provided in case of conducted measurements)

Antenna Gain: 2 dBi

If applicable, additional beamforming gain (excluding basic antenna gain):_____ dB

☐Temporary RF connector provided

☐No temporary RF connector provided

☐Dedicated Antennas (equipment with antenna connector)

☒Single power level with corresponding antenna(s)

☐Multiple power settings and corresponding antenna(s)

Number of different Power Levels:_____ ;

Power Level 1:_____ dBm

Power Level 2:_____ dBm

Power Level 3:_____.dBm

Note 1: Add more lines in case the equipment has more power levels.

Note 2: These power levels are conducted power levels (at antenna connector).

For each of the Power Levels, provide the intended antenna assemblies, their corresponding gains (G) and the resulting e.i.r.p. levels also taking into account the beamforming gain (Y) if applicable

Power Level 1:_____dBm

Number of antenna assemblies provided for this power level:

Assembly #	Gain (dBi)	e.i.r.p. (dBm)	Part number or model name
1			
2			
3			
4			

Note 3: Add more rows in case more antenna assemblies are supported for this power level.

Power Level 2: dBm

Number of antenna assemblies provided for this power level:

Assembly #	Gain (dBi)	e.i.r.p. (dBm)	Part number or model name
1			
2			
3			
4			

Note 4: Add more rows in case more antenna assemblies are supported for this power level.

Power Level 2:_____ dBm

Number of antenna assemblies provided for this power level:

Assembly #	Gain (dBi)	e.i.r.p. (dBm)	Part number or model name
1			
2			
3			
4			

Note 5: Add more rows in case more antenna assemblies are supported for this power level.

n) The nominal voltages of the stand-alone radio equipment or the nominal voltages of the combined (host) equipment or test jig in case of plug-in devices:

Details provided are for the:

☐stand-alone equipment

☐combined (or host) equipment

☐test jig

Supply Voltage ☐AC mains State AC voltage _____V

☒DC State DC voltage 5 V

In case of DC, indicate the type of power source

☐Internal Power Supply

☐External Power Supply or AC/DC adapter

☐Battery

☐Other: .

o) Describe the test modes available which can facilitate testing:

The measurements shall be performed during continuously transmitting .

p) The equipment type (e.g. Bluetooth®, IEEE 802.11™, IEEE 802.15.4™, proprietary, etc.):

Bluetooth® .

q) If applicable, the statistical analysis referred to in clause 5.4.1 q)

(to be provided as separate attachment)

r) If applicable, the statistical analysis referred to in clause 5.4.1 r)

(to be provided as separate attachment)

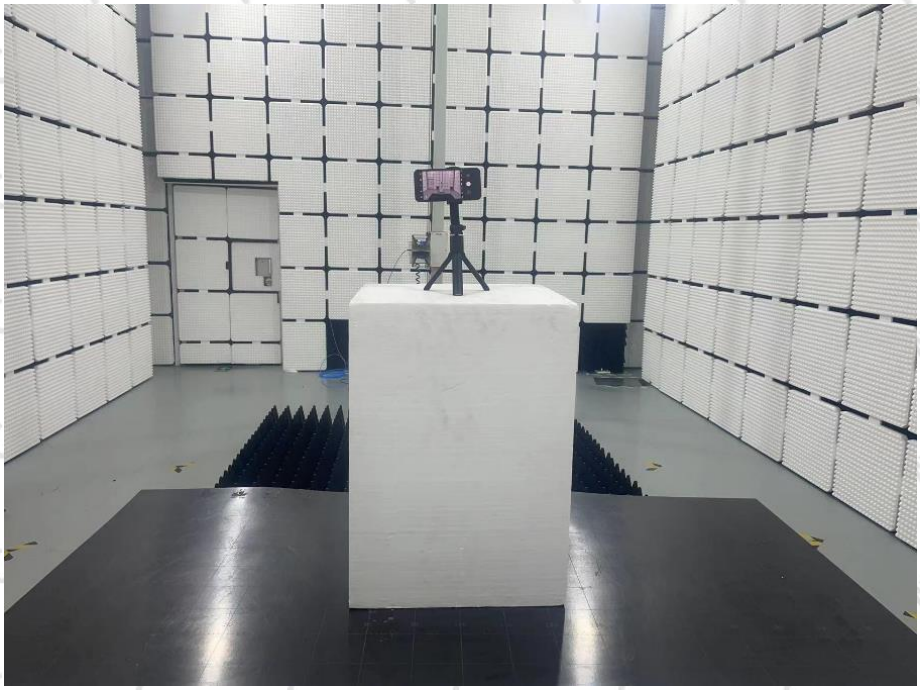
s) Geo-location capability supported by the equipment:

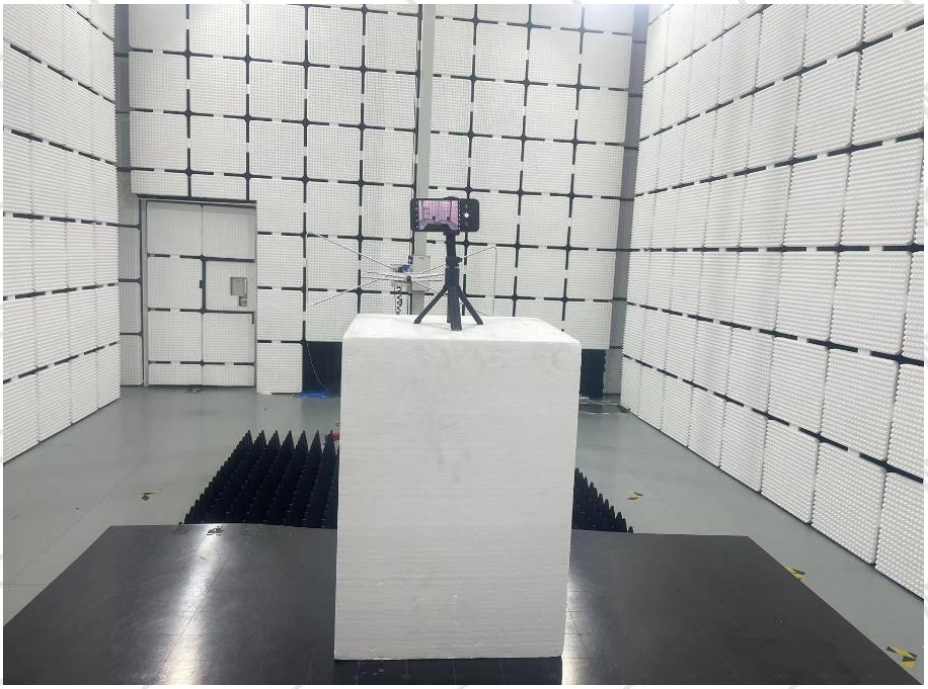
☐Yes

☐The geographical location determined by the equipment as defined in clause 4.3.1.13.2 or clause 4.3.2.12.2 is not accessible to the user.

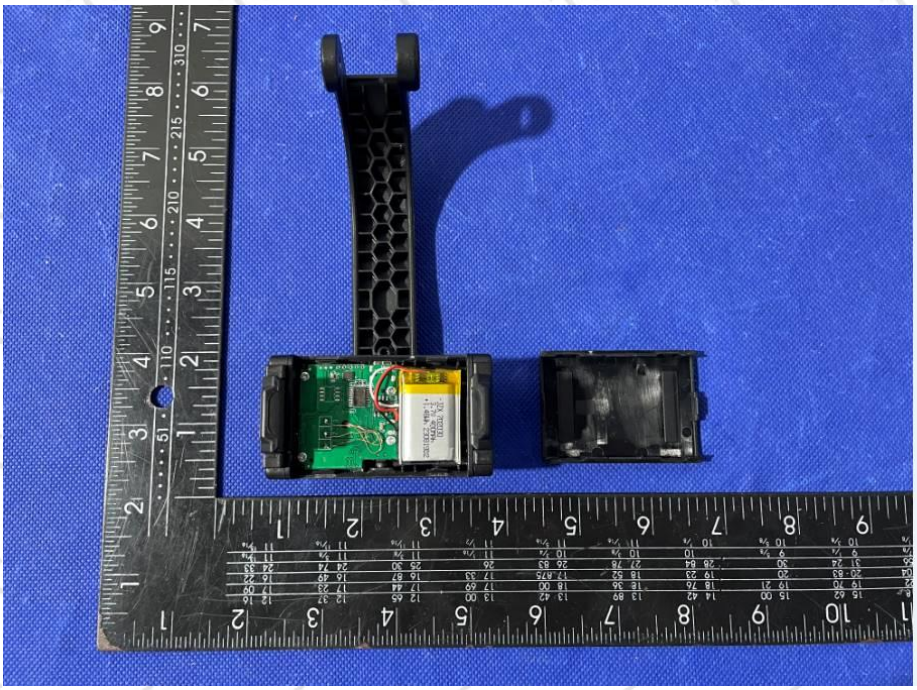
☐No

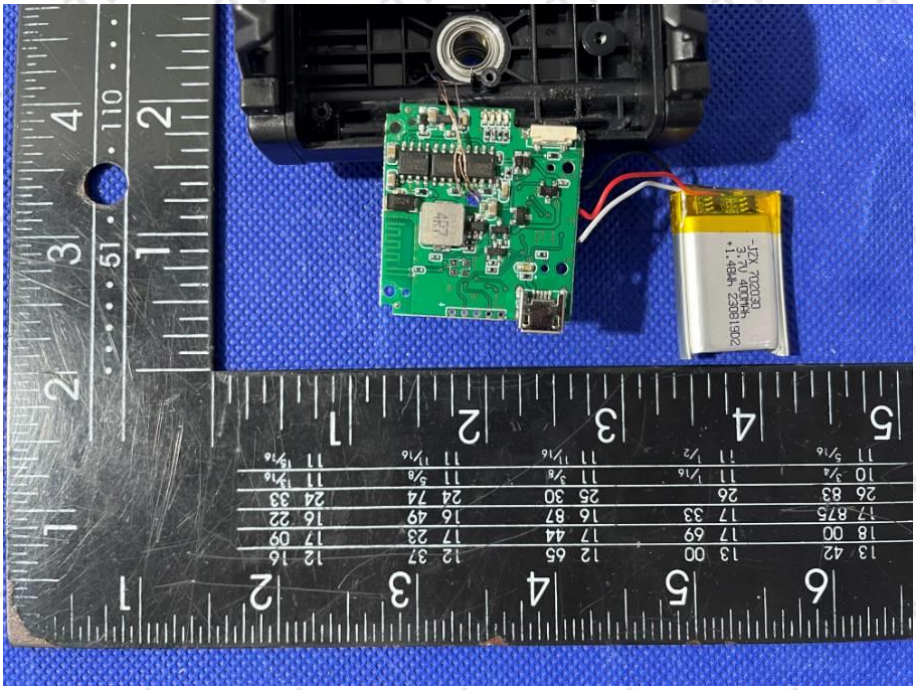
14. Photo for the setup

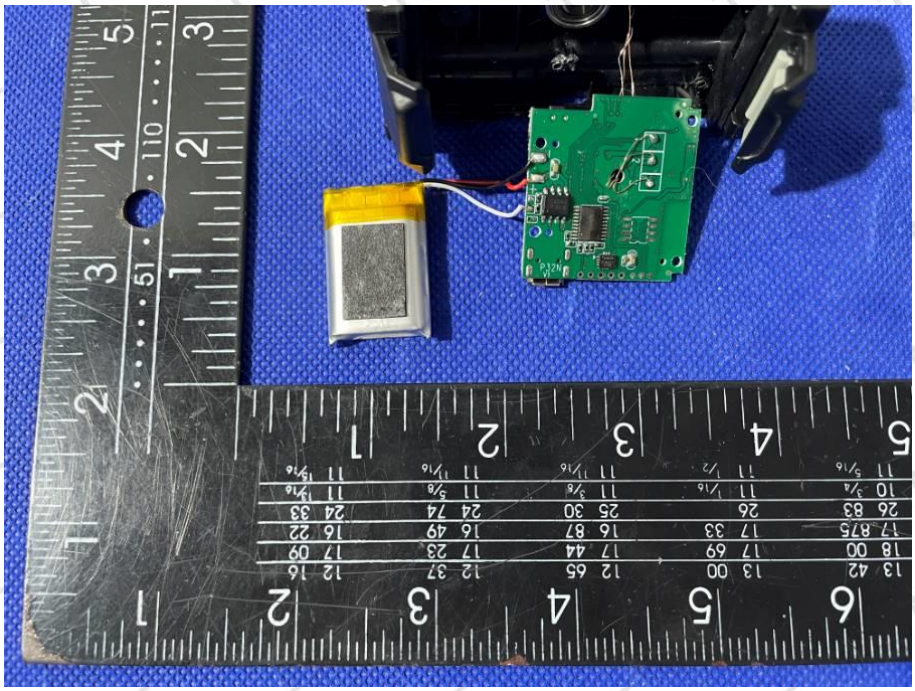




15. Photo for the EUT







16.	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

TECHNICAL REPORT

TEST REPORT

Report No:	MK23080009-P01H01
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:	EN 62479:2010 EN50663:2017
Test result:	The testing has been performed on the submitted samples and found in compliance with council RE Directive 2014/53/EU

Approved By

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 Emai: 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℃

1.6SUMMARY

EUT configuration
The following peripheral devices and interface cables were connected during the measurement:
o - supplied by the manufacturer
● - supplied by the lab

This test report is in accordance with EN 62479: 2010 Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz); The objective is to determine the compliance of EUT with EN 62479: 2010.

Test Methodology

All measurements contained in this report were conducted with EN 62479: 2010.

2 . Test environment

2.1. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:
Temperature: 15-35 °C
Humidity: 30-60 %
Atmospheric pressure: 950-1050mbar

2.2. Statement of the measurement uncertainty

Equipment

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, bi-conical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements. Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.
Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.
All receiving equipment conforms to CISPR Publication 16-1, “Radio Interference Measuring Apparatus and Measurement Methods.”

3.Measurement Uncertainty

Parameter	Uncertainty
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±1,5 dB
Power Spectral Density, conducted	±3 dB
Unwanted Emissions, conducted	±3 dB
All emissions, radiated	±6 dB
Temperature	±1 ℃
Humidity	±5 %
DC and low frequency voltages	±3 %
Time	±5 %
Duty Cycle	±5 %

4.HUMAN EXPOSURE TO THE ELECTROMAGNETIC FIELDS

4.1 Test Methodology

4.1.1.General description of applied standards

According to its specifications, the EUT must comply with the requirements of the following standards:

EN 62479- Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)

.

4.1.2.Description of test modes

The EUT has been tested under its typical operating condition. Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

4.2 Test limit

If the average power emitted by apparatus operating in the frequency range 10 MHz – 300GHz is less than or equal to 20 mW and the transmitting peak power is less than 20 W then the apparatus is deemed to comply with the basic restrictions without testing.

4.3 Test Results

Since Max. RF output power is 1.54mW, less than 20mW specified in EN 62479. This unit will not generate the harmful EM emission above the reference level as specified in EC Council Recommendation (2014/53/EU).

The unit complies with the EN 62479 for RF exposure requirement.

No non-compliance noted.

.....End of Report.....