Test report no.: *Prüfbericht-Nr.:*	**CN23H8ZQ 001**	**Order No.:** *Auftragsnr.:*	170340167	**Page 1 of 20** *Seite 1 von 20*
Client reference no.: *Kunden-Referenz-Nr.:*	N/A	**Order date:** *Auftragsdatum:*	2023-02-07	
Client: *Auftraggeber:*	SOLITE WELLBEING USA INC. 815 BRAZOS ST, AUSTIN, TEXAS, USA			
Test item: *Prüfgegenstand:*	Smart Warm Oral Irrigator			
Identification / Type no.: *Bezeichnung / Typ-Nr.:*	M60			
Order content: *Auftrags-Inhalt*:	Test Report			
Test specification *Prüfgrundlage:*	47 CFR FCC Part15: Subpart C Section 15.231 47 CFR FCC Part15: Subpart C Section 15.207 47 CFR FCC Part15: Subpart C Section 15.209 47 CFR FCC Part2: Section 2.1093			
Date of sample receipt: *Wareneingangsdatum:*	2023-06-15	Please refer to Photo Document		
Test sample no: *Prüfmuster-Nr.:*	A003496334 001~004			
Testing period: *Prüfzeitraum:*	2023-07-05 to 2023-07-11			
Place of testing: *Ort der Prüfung:*	Refer to section 2.1			
Testing laboratory: *Prüflaboratorium:*	TÜV Rheinland (Guangdong) Ltd.			
Test result*: *Prüfergebnis*:*	Pass			

tested by: *geprüft von:*
Amy Wang
Date: 2023-11-17 *Datum:*
Position / *Stellung*: Expert/Sachverständige(r)

authorized by: *genehmigt von:*
Sean Shu
Issue date: 2023-11-17 *Ausstellungsdatum:*
Position / *Stellung*: Expert/Sachverständige(r)

Other: FCC ID: 2BBLQM60
Sonstiges:

Condition of the test item at delivery: *Zustand des Prüfgegenstandes bei Anlieferung:*
Test item complete and undamaged
Prüfmuster vollständig und unbeschädigt

* Legend:	P(ass) = passed a.m. test specification(s)	F(ail) = failed a.m. test specification(s)	N/A = not applicable	N/T = not tested
* Legende:	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet

Remarks
Anmerkungen

1	The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request. *Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben.* *Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.*
2	As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged. *Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben.*
3	Test clauses with remark of * are subcontracted to qualified subcontractors and descripted under the respective test clause in the report. Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report. *Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.*
4	The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the “Zero Guard Band Rule” and “Simple Acceptance” in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019. *Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnisen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezueglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.*

Test Summary

5.1.1 ANTENNA REQUIREMENT
RESULT: Pass

5.1.2 FUNDAMENTAL & HARMONICS RADIATED EMISSION
RESULT: Pass

5.1.3 20DB BANDWIDTH
RESULT: Pass

5.1.4 DWELL TIME
RESULT: Pass

5.1.5 CONDUCTED EMISSIONS
RESULT: Passed

6.1.1 ELECTROMAGNETIC FIELDS
RESULT: Pass

Contents

1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Photographs of the Test Set-up

Appendix B: Test Results

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Guangdong) Ltd.

No.102, 1F of Southwest and No.205, 2F No.767 Tianyuan Road, Tianhe District, Guangzhou 510663, Guangdong Province P.R. China

FCC Accreditation Designation No.: CN1207

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

For the measurement Equipment list, refer to the appendix B.

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally, all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table.

Item		Extended Uncertainty
Conducted Emission		± 2.68 dB
Radiated Emission (30-1000MHz)	Field strength (dBμV/m)	± 5.16 dB
Radiated Emission (above 1000MHz)	Field strength (dBμV/m)	± 2.22 dB
Radio Spectrum		± 4.51 dB

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Guangdong) Ltd. file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The **Error! Reference source not found.** Test facility located at No.102, 1F of Southwest and No.205, 2F No.767 Tianyuan Road, Tianhe District, Guangzhou 510663, Guangdong Province P.R. China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The EUT is Smart Warm Oral Irrigator operating in 433.92MHz. The Oral Irrigator is powered by AC 120V, the handle is power by DC 3V, and the 433MHz transmitter module is build-in the handle.

Therefore, full tests were performed on M60.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Technical Specification of EUT

General Information of EUT	Value	
Kind of Equipment	Smart Warm Oral Irrigator	
Type Designation	M60	
FCC ID	2BBLQM60	
Operating Voltage	AC 120V for Oral Irrigator	DC 3.0V for handle
Testing Voltage	AC 120V for Oral Irrigator	DC 3.0V for handle
Type of Modulation	FSK	
Channel Number	1 channel	
Channel Separation	N/A	
Antenna Type	Integral Antenna	
Antenna number	1	
Antenna Gain	0 dBi Max	

3.3 Independent Operation Modes

The basic operation modes are:

A. On, Normal operation with general 433MHz mode

B. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- Application Form
- Block Diagram
- FCC/IC Label and Location Info
- Operation Description
- Photo Document
- Schematics
- User Manual

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10: 2013.

According to clause 3.1, all tests were performed on model M60 in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 3: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N	Rating
N/A	N/A	N/A	N/A	N/A

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

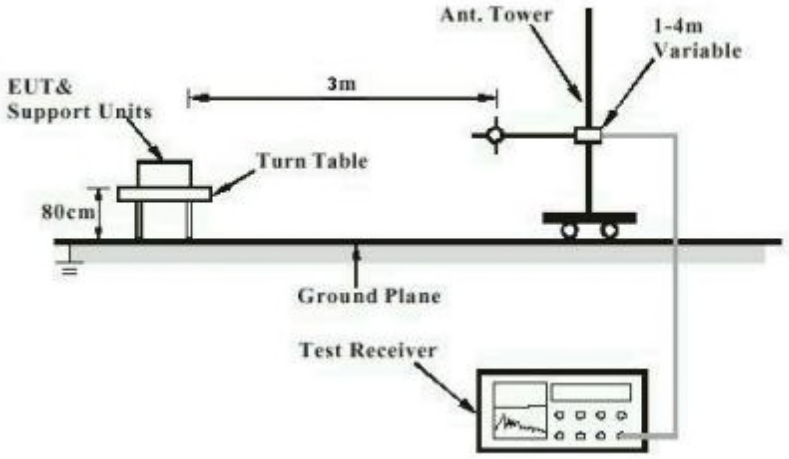


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

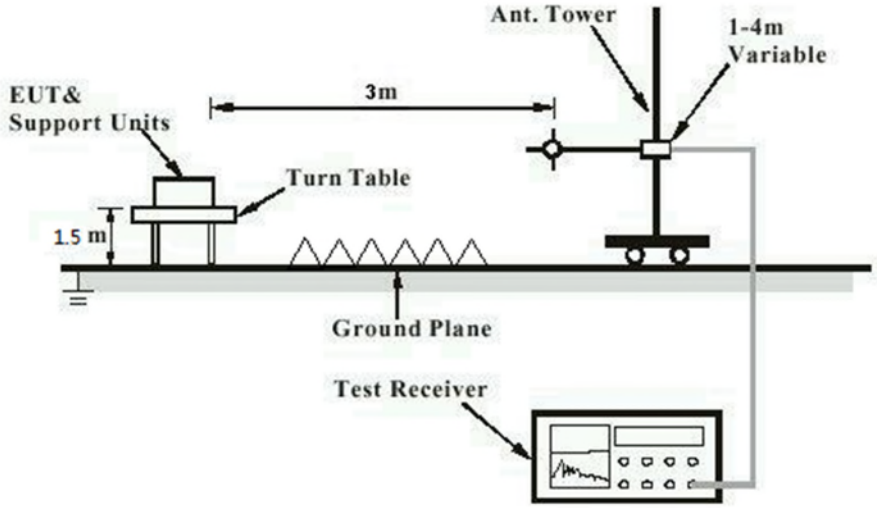


Diagram of Measurement Configuration for Mains Conduction Measurement

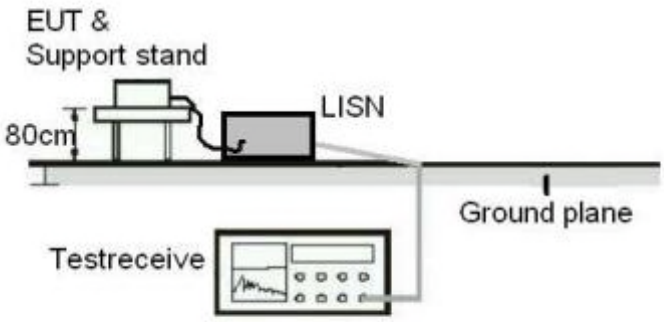
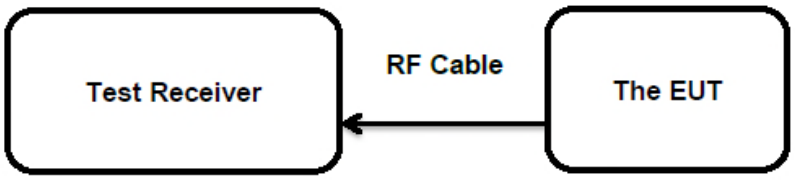


Diagram of Measurement Configuration for Conducted Transmitter Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT: **Pass**

Test Specification
Test standard : FCC Part 15.203

According to the manufacturer declared, the EUT has an internal antenna, the directional gain of antenna is 0 dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore, the EUT is considered sufficient to comply with the provision.

Therefore, the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

5.1.2 Fundamental & Harmonics Radiated Emission

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.231(b)
Basic standard	:	ANSI C63.10: 2013
Limits	:	Refer to FCC Part 15.231(b) *
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	06.07.2023
Input voltage	:	AC 120V for Oral Irrigator and DC 3V for handle
Operation mode	:	A
Test channel	:	433MHz
Ambient temperature	:	22 ℃
Relative humidity	:	56 %
Atmospheric pressure	:	100 kPa

* Remark:

Fundamental Frequency MHz	Field Strength of Fundamental (dBµV/m @ 3 m)	Field Strength of Harmonics and Spurious Emissions (dBµV/m @ 3 m)
40.66 to 40.70	67.04	47.04
70 to 130	61.94	41.94
130 to 174	61.94 to 71.48	41.94 to 51.48
174 to 260	71.48	51.48
260 to 470	71.48 to 81.94	51.48 to 61.94
Above 470	81.94	61.94
Detector:	Peak for pre-scan	
	QP for 30MHz to1000 MHz:120 kHz resolution bandwidth	
	Peak for Above 1 GHz: 1 MHz resolution bandwidth	

linear interpolations

[Where F is the frequency in MHz, the formulas for calculating the maximum permitted fundamental field strengths are as follows: for the band 130-174 MHz, uV/m at 3 meters = 56.81818(F) - 6136.3636; for the band 260-470 MHz, uV/m at 3 meters = 41.6667(F) - 7083.3333. The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level.

The fundamental frequency of the EUT is **433.92 MHz**

The limit for average or QP field strength dBuv/m for the fundamental emission= **80.8 dBµV/m**

No fundamental is allowed in the restricted bands.

The limit for average field strength dBuv/m for the spurious emission= **60.8 dBuV/m**. Spurious in the restricted bands must be less than 60.8 dBuV/m or 15.209, whichever limit permits a higher field strength.

5.1.3 20dB Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.231(c)
Basic standard	:	ANSI C63.10: 2013
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	06.07.2023
Input voltage	:	DC 3V for handle
Operation mode	:	A
Test channel	:	433MHz
Ambient temperature	:	22 ℃
Relative humidity	:	56 %
Atmospheric pressure	:	100 kPa

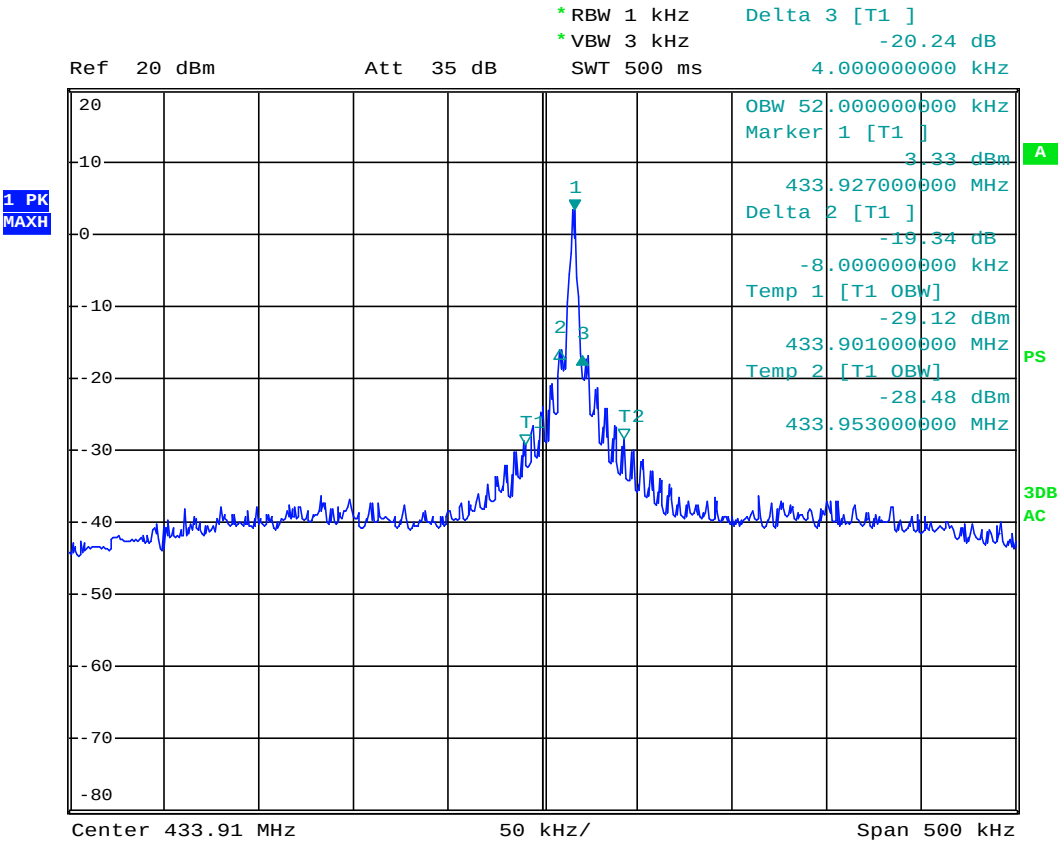
For details refer to following test result.

Table 4: Test Result of 20dB Bandwidth

Test Channel (MHz)	20dB Bandwidth (kHz)	Limit (MHz)
433.92	12.00	433.92 * 0.25% =1.0848

For the measurement records, refer to following test plot:

Test Plot of 20dB Bandwidth



5.1.4 Dwell Time

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.231(a)
Basic standard	:	ANSI C63.10: 2013
Limits	:	FCC Part 15.231(a)*
Kind of test site	:	3m Semi-anechoic Chamber

Test Setup

Date of testing	:	06.07.2023
Input voltage	:	DC 3V for handle
Operation mode	:	A
Test channel	:	433MHz
Ambient temperature	:	22 ℃
Relative humidity	:	56 %
Atmospheric pressure	:	100 kPa

*Remark:

1. Regulation 15.231 (a) The provisions of this Section are restricted to periodic operation within the band 40.66 40.70 MHz and above 70 MHz. Except as shown in paragraph (e) of this Section, the intentional radiator is restricted to the transmission of a control signal such as those used with alarm systems, door openers, remote switches, etc. Radio control of toys is not permitted. Continuous transmissions, such as voice or video, and data transmissions are not permitted. The prohibition against data transmissions does not preclude the use of recognition codes. Those codes are used to identify the sensor that is activated or to identify the particular component as being part of the system.

Result:

The EUT is a remote switch without audio or video transmitted.

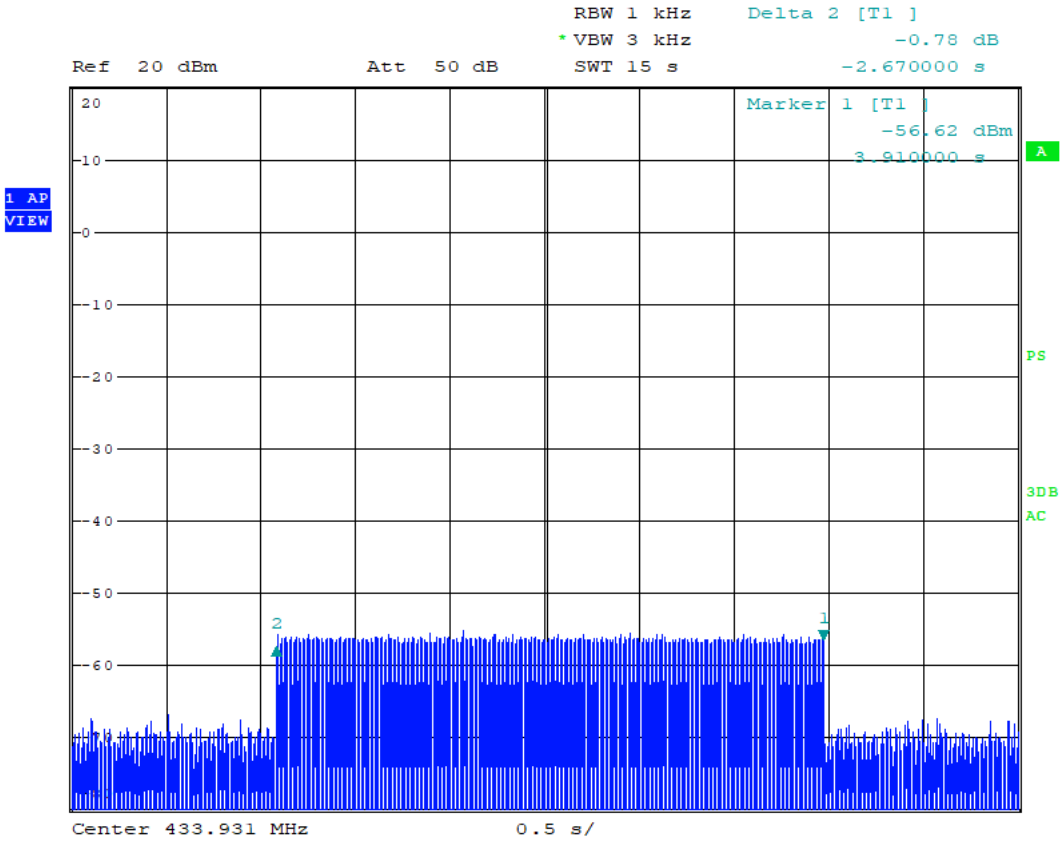
The EUT meets the requirements of this section.

2. Regulation 15.231 (a1) A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.

Result:

Carrier Frequency	Shutdown Time	Limit
433.92MHz	2.67s	≤5s

Result polt as follows:



3. Regulation 15.231 (a2) A transmitter activated automatically shall cease transmission within 5 seconds after activation.

Result:

The EUT does not have automatic transmission.

4. Regulation15.231 (a3) Periodic transmissions at regular predetermined intervals are not permitted. However, polling or supervision transmissions to determine system integrity of transmitters used in security or safety applications are allowed if the periodic rate of transmission does not exceed one transmission of not more than one second duration per hour for each transmitter.

Result:

The EUT does not employ periodic transmission.

5. Regulation 15.231 (a4) Intentional radiators which are employed for radio control purposes during emergencies involving fire, security, and safety of life, when activated to signal an alarm, may operate during the pendency of the alarm condition.

Result:

This section is not applicable to the EUT.

5.1.5 Conducted Emissions

RESULT: **Passed**

Test Specification

Test standard	:	FCC part 15.207
Basic standard	:	ANSI C63.4: 2014
Frequency range	:	0.15 – 30MHz
Limits	:	FCC Part 15.207(a)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	09.06.2023
Power supply	:	120Vac, 60Hz
Operation mode	:	A
Earthing	:	Not connected
Ambient temperature	:	18.0 °C
Relative Humidity	:	60 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix B.

6 Safety Human Exposure

6.1 Radio Frequency Exposure Compliance

6.1.1 Electromagnetic Fields

RESULT: **Pass**

Test Specification

Test standard : CFR47 FCC Part 2: Section 2.1093
CFR47 FCC Part 1: Section 1.1310
FCC KDB Publication 447498 D01 v06

➢ **FCC requirements**

FCC requirement: Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1093 this device has been defined as a portable device.

Measurement Record for CFR47 FCC Part 2.1093

The minimum distance for the EUT is less than 5mm.

The maximum specified e.i.r.p.: 80.2dBuv/m @3m = -15.03dBm=0.0102mW

Antenna Gain: 0dBi max

According to KDB 447498 D01 v06 4.3.1 a)

Exempted Power: 9.5mW, hence the EUT is compliance with the RF exposure.

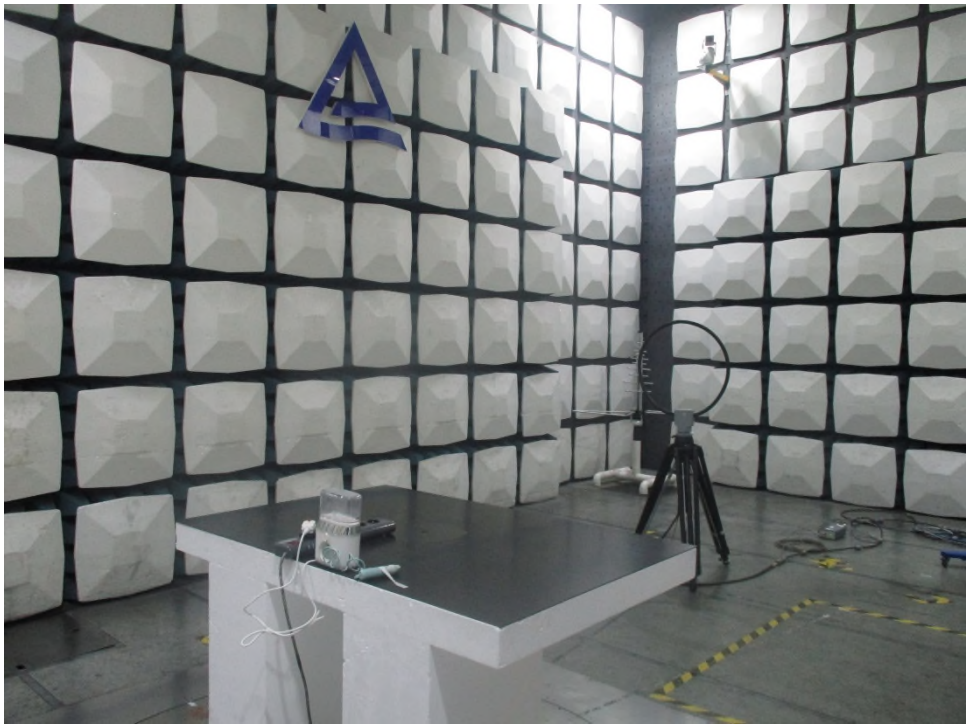
7 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix A.

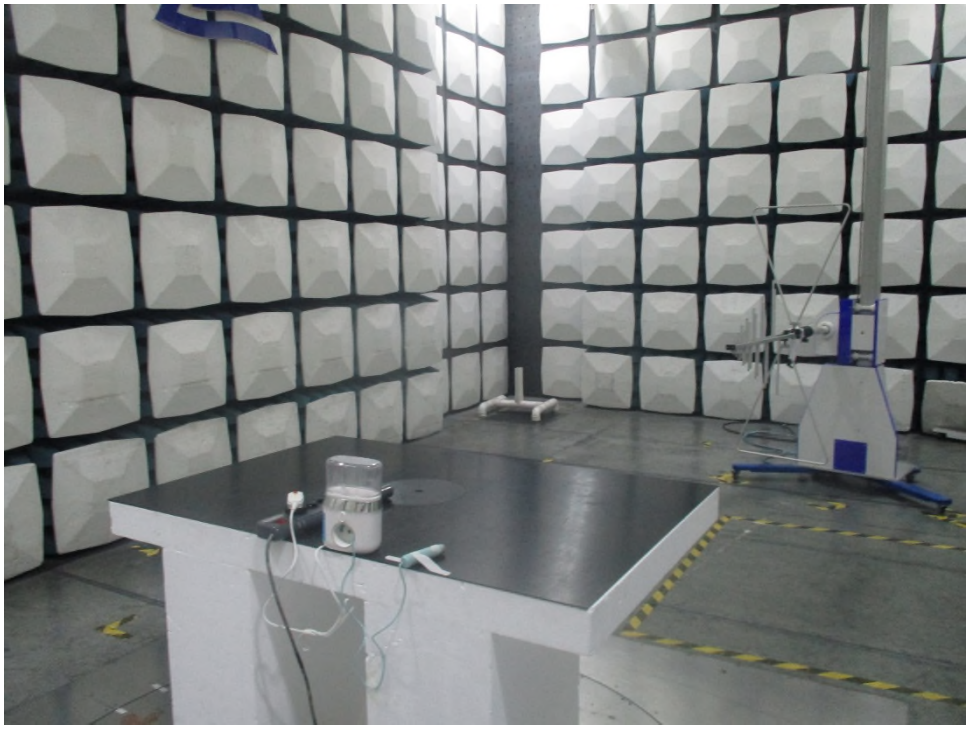
8 List of Tables

Appendix A: Photographs of the Test Set-Up

Photograph 1: Set-up for Radiated Spurious Emission, 9kHz - 30MHz

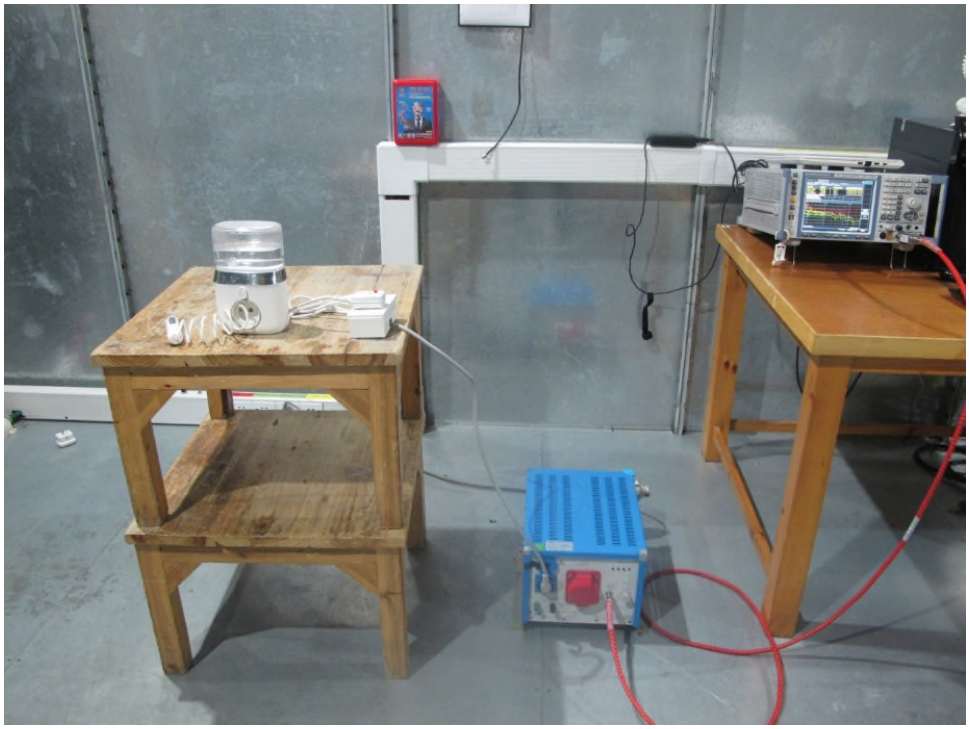


Photograph 2: Set-up for Radiated Spurious Emission, 30MHz - 1GHz



Photograph 3: Set-up for Radiated Spurious Emission, 1GHz - 5GHz

Photograph 4: Set-up for Conducted Emissions



Appendix B: Test Results

Appendix B.1: Measurement Equipment List

Equipment	Manufacturer	Model No.	Serial No.	Cal Until
Disturbance Voltage				
EMI Test Receiver	Rohde&Schwarz	ESCI 3	100314	2024-03-04
Artificial Mains Network	Rohde&Schwarz	ESH2-Z5	100114	2024-03-04
Impedance Stabilization Network	TESTQ	ISN T8	51991	2023-07-14
Radiated disturbances (30 MHz – 1000 MHz)				
EMI Test Receiver	Rohde&Schwarz	ESCI 3	100314	2024-03-04
Trilog-Broadband Antenna	Schwarzbeckmess-elektronik	VULB9168	684	2023-08-24
Radiated disturbances (1GHz – 18 GHz)				
Double-Ridged Horn Antenna	Rohde & Schwarz	HF907	100377	2024-03-22
Pre-Amplifier(1-18GHz)	MITEQ	AFS44-00101800-25-10P-44	1934457	2024-03-04
Band Reject Filter	Micro-Tronics	BRM50702	023	2023-07-14
Highpass Filter	Micro-Tronics	HPM50115-03	001	2024-03-04
Spectrum Analyzer	Rohde & Schwarz	FSP30	100286	2023-11-30

Note: Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz was greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 5GHz were reported.

Appendix B.2: Fundamental & Harmonics Radiated Emission

30MHz - 1GHz

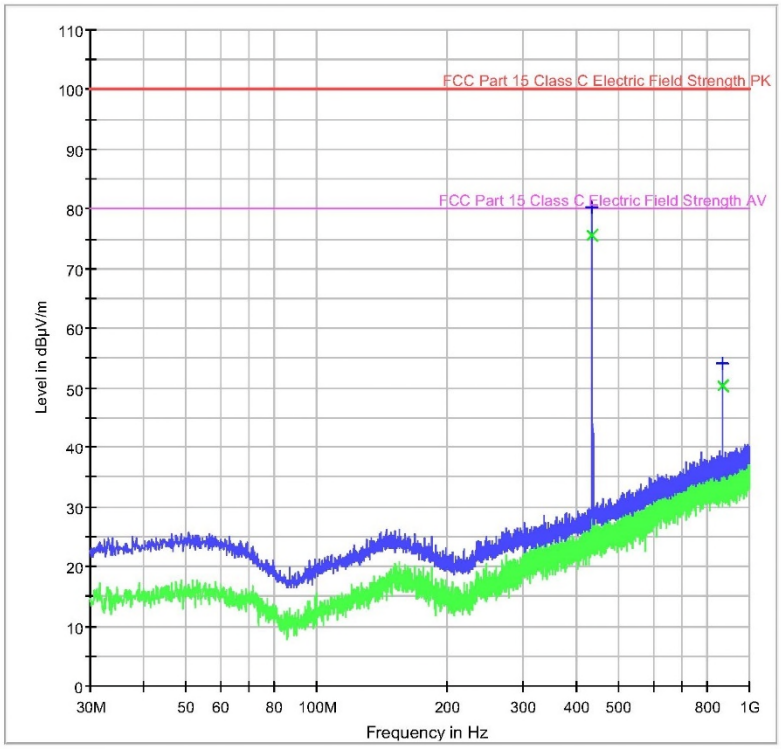
TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

EMC Test Record (Emission)

Common Information

Manufacturer:	
Test Item:	Smart warm Oral Irrigator
Identification:	M60
Test Standard:	FCC Part 15.231a
Test Detail:	Radiated Emission
Operation Mode:	TX
Climate Condition:	21 ℃, 52 %, 101 kPa
Test Voltage/ Freq:	AC 120 V / 60 Hz
Receipt No:	170334837
Report No:	/
Result:	Pass
Comment:	Test distance is 3m; Horizontal, Fundamental Frequency emissions

Subrange 1	
Frequency range:	30M-1000MHz
Receiver:	ESCI 3
Transducer:	VULB9168



Tested by: Jason Wu 20230707 Reviewed by: Jacky Chen 20230712

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBµV/
433.927000	80.2	1000.0	120.000	H	26.0	19.8	100.0
867.960000	54.2	1000.0	120.000	H	34.0	45.8	100.0

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBµV/
433.927000	75.7	1000.0	120.000	H	26.0	5.3	80.0
867.960000	50.5	1000.0	120.000	H	34.0	29.5	80.0

Tested by: Jason Wu 20230707 Reviewed by: Jacky chen 20230712

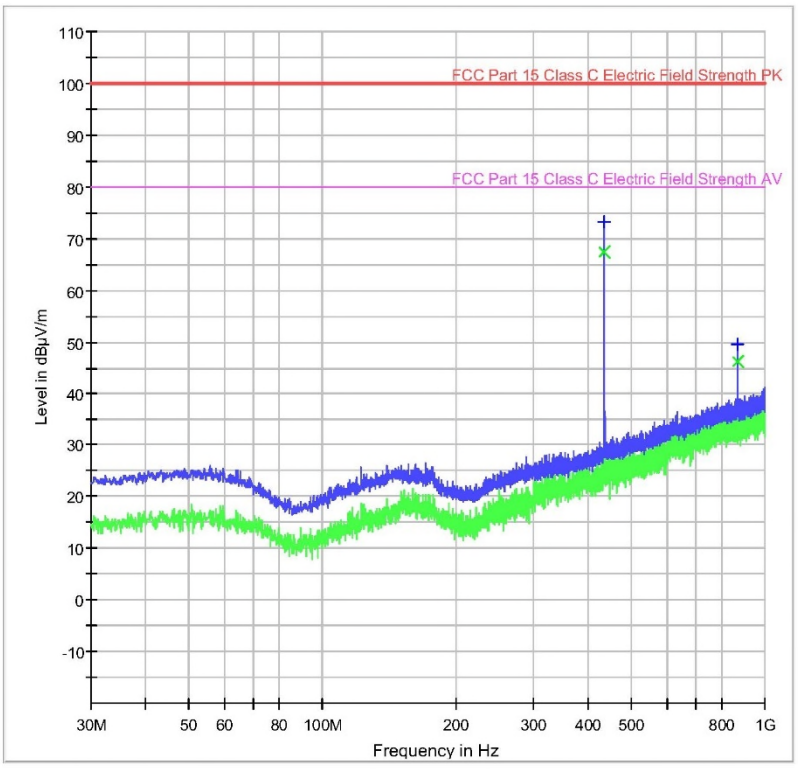
TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

EMC Test Record (Emission)

Common Information

Manufacturer:	
Test Item:	Smart warm Oral Irrigator
Identification:	M60
Test Standard:	FCC Part 15.231a
Test Detail:	Radiated Emission
Operation Mode:	TX
Climate Condition:	21 ℃, 52 %, 101 kPa
Test Voltage/ Freq:	AC 120 V / 60 Hz
Receipt No:	170334837
Report No:	/
Result:	Pass
Comment:	Test distance is 3m; Ver, Fundamental Frequency emissions

Subrange 1	
Frequency range:	30M-1000MHz
Receiver:	ESCI 3
Transducer:	VULB9168



Tested by: Jason Wu 20230707 Reviewed by: Jacky chen 20230712

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBµV/
433.927000	73.2	1000.0	120.000	V	26.0	26.8	100.0
867.958750	49.7	1000.0	120.000	V	34.0	50.3	100.0

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - AVG (dB)	Limit - PK+ (dBµV/
433.927000	67.3	1000.0	120.000	V	26.0	12.7	80.0
867.958750	46.2	1000.0	120.000	V	34.0	33.8	80.0

Tested by: Jason Wu 20230707 Reviewed by: Jacky chen 20230712

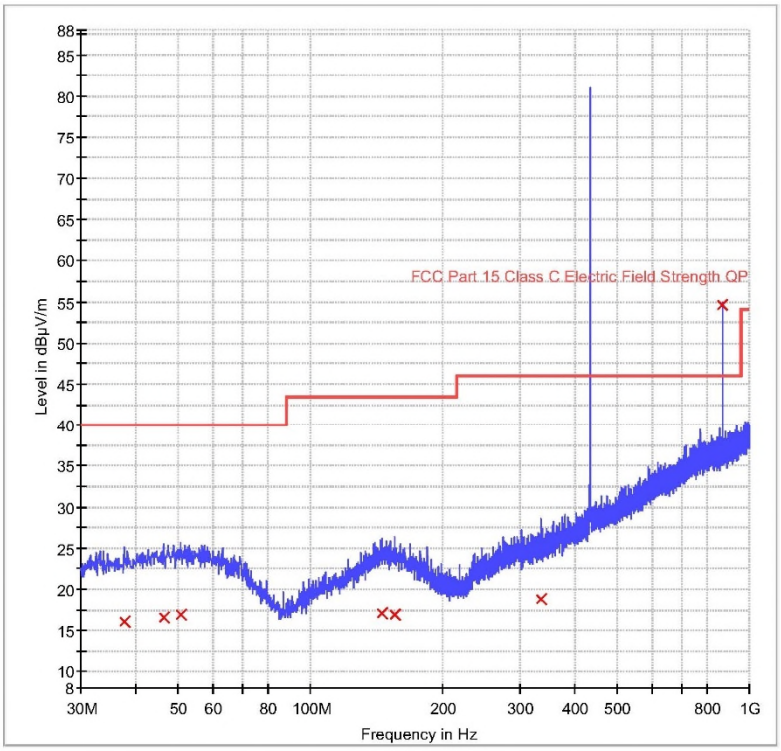
TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

EMC Test Record (Emission)

Common Information

Manufacturer:	
Test Item:	Smart warm Oral Irrigator
Identification:	M60
Test Standard:	FCC Part 15.231a
Test Detail:	Radiated Emission
Operation Mode:	TX
Climate Condition:	21 ℃, 52 %, 101 kPa
Test Voltage/ Freq:	AC 120 / 60Hz
Receipt No:	170334837
Report No:	/
Result:	Pass
Comment:	Test distance is 3m; Horizontal

Subrange 1	
Frequency range:	30M-1000MHz
Receiver:	ESCI 3
Transducer:	VULB9168



Tested by: Jason Wu 23030705 Reviewed by: Jacky chen 20230710

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
37.640000	16.1	1000.0	120.000	H	19.9	23.9	40.0
46.240000	16.5	1000.0	120.000	H	20.7	23.5	40.0
50.720000	16.9	1000.0	120.000	H	20.8	23.1	40.0
145.560000	17.1	1000.0	120.000	H	21.1	26.4	43.5
155.840000	17.0	1000.0	120.000	H	21.2	26.5	43.5
334.560000	18.8	1000.0	120.000	H	23.1	27.2	46.0
867.960000	54.2	1000.0	120.000	H	34.0	6.8	61.0

Tested by: Jason Wu 23030705 Reviewed by: Jacky chen 20230710

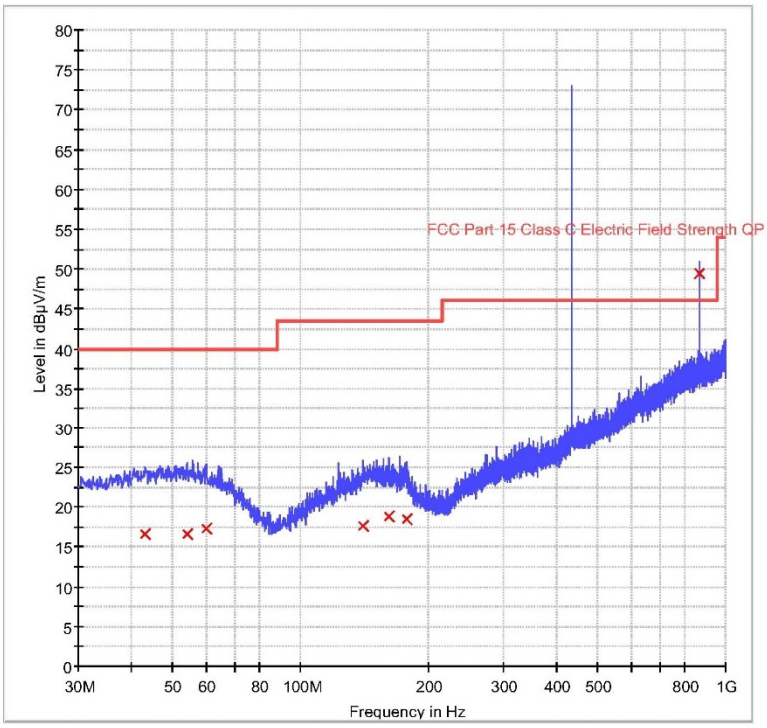
TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

EMC Test Record (Emission)

Common Information

Manufacturer:	
Test Item:	Smart warm Oral Irrigator
Identification:	M60
Test Standard:	FCC Part 15.231a
Test Detail:	Radiated Emission
Operation Mode:	TX
Climate Condition:	21 ℃, 52 %, 101 kPa
Test Voltage/ Freq:	AC 120 / 60Hz
Receipt No:	170334837
Report No:	/
Result:	Pass
Comment:	Test distance is 3m; Vertical

Subrange 1	
Frequency range:	30M-1000MHz
Receiver:	ESCI 3
Transducer:	VULB9168



Tested by: Jason Wu 23030705 Reviewed by: Jacky chen 20230710

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
43.080000	16.5	1000.0	120.000	V	20.4	23.5	40.0
54.000000	16.6	1000.0	120.000	V	20.6	23.4	40.0
59.840000	17.3	1000.0	120.000	V	20.3	22.7	40.0
140.320000	17.6	1000.0	120.000	V	20.6	25.9	43.5
162.040000	18.8	1000.0	120.000	V	21.1	24.7	43.5
177.680000	18.5	1000.0	120.000	V	19.9	25.0	43.5
867.958750	49.7	1000.0	120.000	V	34.0	11.3	61.0

Tested by: Jason Wu 23030705 Reviewed by: Jacky chen 20230710

1GHz - 5GHz

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

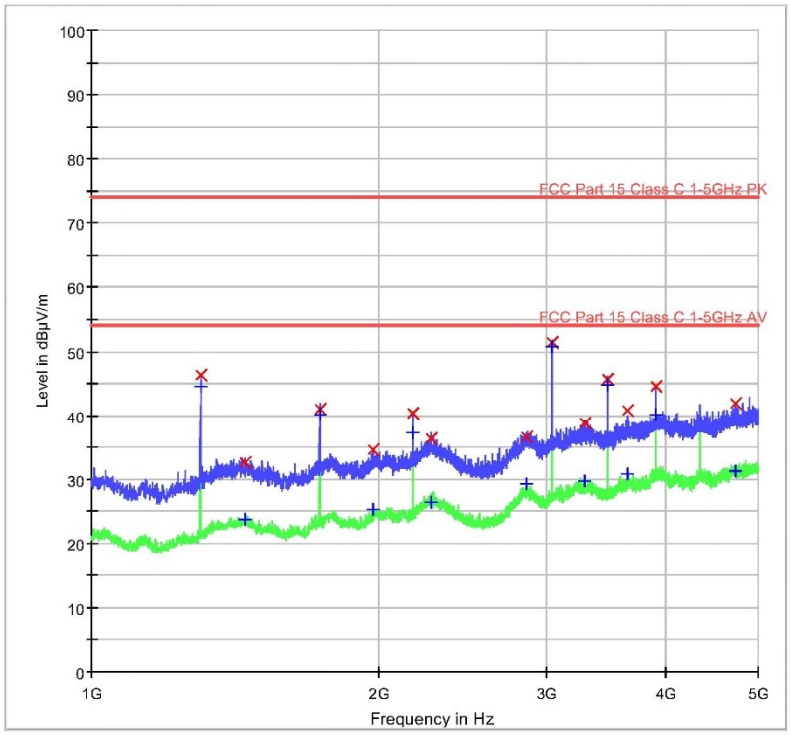
EMC Test Record (Emission)

Common Information

Manufacturer:	
Test Item:	Smart warm Oral Irrigator
Identification:	M60
Test Standard:	FCC Part 15.231a
Test Detail:	Radiated Emission
Operation Mode:	TX
Climate Condition:	23℃ ; 51 %RH; 101 kPa.
Test Voltage/ Freq:	AC 120 / 60Hz
Receipt No:	170334837
Report No:	/
Result:	Pass
Comment:	Test distance is 3m, Horizontal

Subrange 1	
Frequency Range:	1GHz-5GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF907/ TUV FSP30-TUV SAC HF907

RTTETT_RREF001-A02-05_Above 1GHz_With PreAMP EXT



Tested by: Jason Wu 20230705 Reviewed by: Jacky chen 20230710

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1447.00000	32.6	1000.0	1000.000	H	-16.6	41.4	74.0
1974.00000	34.7	1000.0	1000.000	H	-13.6	39.3	74.0
2274.00000	36.4	1000.0	1000.000	H	-12.7	37.6	74.0
2857.00000	36.6	1000.0	1000.000	H	-10.4	37.4	74.0
3286.00000	38.7	1000.0	1000.000	H	-8.6	35.3	74.0
3652.00000	40.8	1000.0	1000.000	H	-7.1	33.2	74.0

Harmonic

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1302.00000	46.3	1000.0	1000.000	H	-17.2	34.7	81.0
1736.00000	41.1	1000.0	1000.000	H	-14.9	39.9	81.0
2169.00000	40.3	1000.0	1000.000	H	-13.0	40.7	81.0
3037.00000	51.4	1000.0	1000.000	H	-9.4	29.6	81.0
3471.00000	45.6	1000.0	1000.000	H	-7.9	35.4	81.0
3905.00000	44.6	1000.0	1000.000	H	-6.2	36.4	81.0
4725.00000	41.9	1000.0	1000.000	H	-4.6	39.1	81.0

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1447.00000	23.6	1000.0	1000.000	H	-16.6	30.4	54.0
1974.00000	25.3	1000.0	1000.000	H	-13.6	28.7	54.0
2274.00000	26.4	1000.0	1000.000	H	-12.7	27.6	54.0
2857.00000	29.2	1000.0	1000.000	H	-10.4	24.8	54.0
3286.00000	29.8	1000.0	1000.000	H	-8.6	24.2	54.0
3652.00000	30.8	1000.0	1000.000	H	-7.1	23.2	54.0

Harmonic

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1302.00000	44.6	1000.0	1000.000	H	-17.2	16.4	61.0
1736.00000	40.1	1000.0	1000.000	H	-14.9	20.9	61.0
2169.00000	37.4	1000.0	1000.000	H	-13.0	23.6	61.0
3037.00000	50.7	1000.0	1000.000	H	-9.4	10.3	61.0
3471.00000	44.7	1000.0	1000.000	H	-7.9	16.3	61.0
3905.00000	40.1	1000.0	1000.000	H	-6.2	20.9	61.0
4725.00000	31.2	1000.0	1000.000	H	-4.6	29.8	61.0

Tested by: Jason Wu 20230705 Reviewed by: Jacky chen 20230710

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

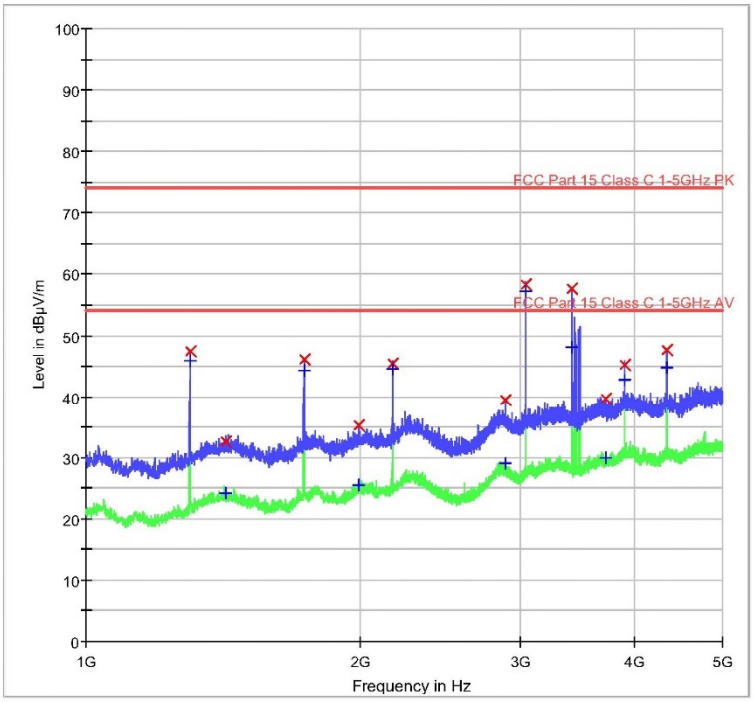
EMC Test Record (Emission)

Common Information

Manufacturer:	
Test Item:	Smart warm Oral Irrigator
Identification:	M60
Test Standard:	FCC Part 15.231a
Test Detail:	Radiated Emission
Operation Mode:	TX
Climate Condition:	23℃ ; 51 %RH; 101 kPa.
Test Voltage/ Freq:	AC 120 / 60Hz
Receipt No:	170334837
Report No:	/
Result:	Pass
Comment:	Test distance is 3m, Horizontal

Subrange 1	
Frequency Range:	1GHz-5GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF907/ TUV FSP30-TUV SAC HF907

RTTETT_RREF001-A02-05_Above 1GHz_With PreAMP EXT



Tested by: Jason Wu Reviewed by:
20230705

TUV Rheinland (Guangdong) Ltd. EMC Test Service Hotline: +86-20-28391188

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1422.00000	32.6	1000.0	1000.000	V	-16.7	41.5	74.0
1994.00000	35.2	1000.0	1000.000	V	-13.5	38.9	74.0
2886.00000	39.5	1000.0	1000.000	V	-10.3	34.6	74.0
3413.00000	57.6	1000.0	1000.000	V	-8.2	16.4	74.0
3720.00000	39.8	1000.0	1000.000	V	-7.0	34.2	74.0

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1302.00000	47.5	1000.0	1000.000	V	-17.2	33.5	81.0
1736.00000	46.2	1000.0	1000.000	V	-14.9	34.8	81.0
2170.00000	45.4	1000.0	1000.000	V	-13	35.6	81.0
3037.00000	58.3	1000.0	1000.000	V	-9.4	22.7	81.0
3906.00000	45.3	1000.0	1000.000	V	-6.2	35.7	81.0
4340.00000	47.7	1000.0	1000.000	V	-5.0	33.3	81.0

Limit and Margin AV

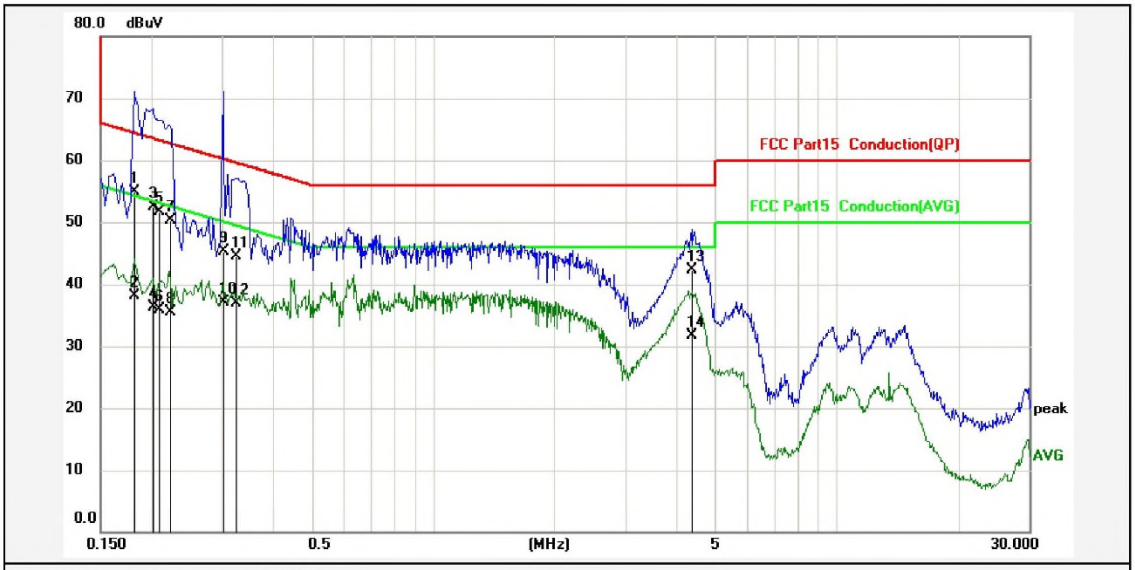
Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1422.00000	24.1	1000.0	1000.000	V	-16.7	29.9	54
1994.00000	25.6	1000.0	1000.000	V	-13.5	28.4	54
2886.00000	29.1	1000.0	1000.000	V	-10.3	24.9	54
3413.00000	48.2	1000.0	1000.000	V	-8.2	5.8	54
3720.00000	30	1000.0	1000.000	V	-7.0	24.0	54

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1302.00000	45.9	1000.0	1000.000	V	-17.2	15.1	61.0
1736.00000	44.4	1000.0	1000.000	V	-14.9	16.6	61.0
2170.00000	44.6	1000.0	1000.000	V	-13.0	16.4	61.0
3037.00000	57.3	1000.0	1000.000	V	-9.4	3.7	61.0
3906.00000	42.8	1000.0	1000.000	V	-6.2	18.2	61.0
4340.00000	44.7	1000.0	1000.000	V	-5.0	16.3	61.0

Tested by: Jason Wu Reviewed by:
20230705

Appendix B.3: Conducted Emission

2023-6-9 14:02:21



Report No.:	01082300003747 冲牙器		
Test Standard:	FCC Part15 Conduction(QP)	**Phase:**	N
Test item:	Conducted Emission	**Temp.(C)/Hum.(%):**	18(C) / 60 %
Applicant:	Scan:Step:4kHz/RBW:9kHz/Meas Time:10ms	**Atm.press.:**	1001 hpa
Product:	冲牙器	**Power Rating:**	AC120V/60Hz
Model No.:	M60	**Test Engineer:**	

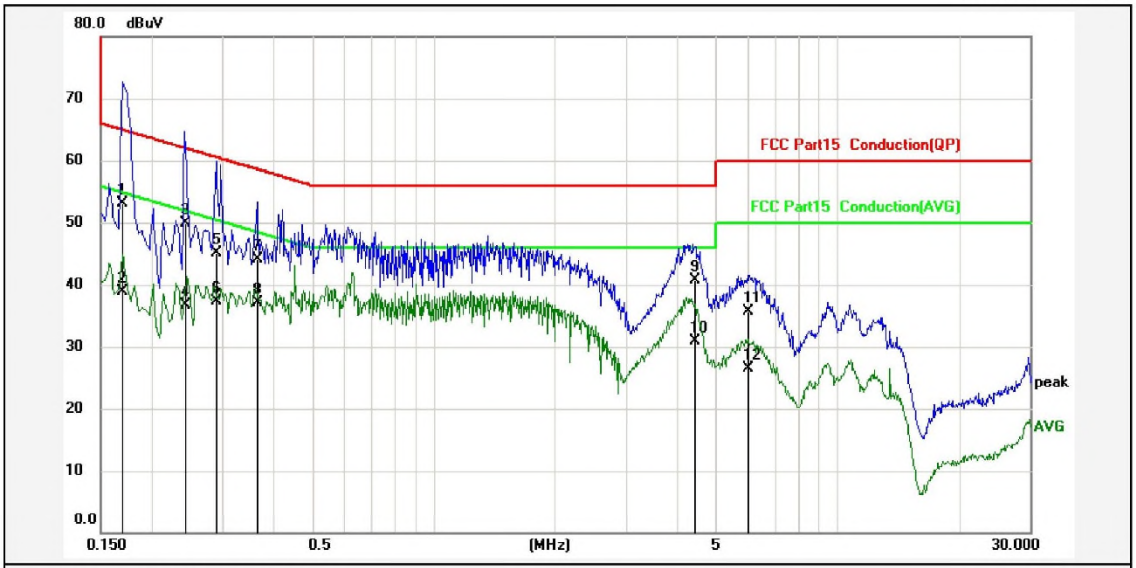
Test Mode: warm water with maximum speed

Remark:

No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1818	10.01	44.92	54.93	64.40	-9.47	QP	P	
2	0.1818	10.01	28.03	38.04	54.40	-16.36	AVG	P	
3	0.2016	10.02	42.51	52.53	63.54	-11.01	QP	P	
4	0.2016	10.02	26.23	36.25	53.54	-17.29	AVG	P	
5	0.2084	10.02	41.70	51.72	63.27	-11.55	QP	P	
6	0.2084	10.02	25.81	35.83	53.27	-17.44	AVG	P	
7	0.2222	10.02	40.24	50.26	62.74	-12.48	QP	P	
8	0.2222	10.02	25.46	35.48	52.74	-17.26	AVG	P	
9	0.3034	10.02	35.26	45.28	60.15	-14.87	QP	P	
10	0.3034	10.02	27.03	37.05	50.15	-13.10	AVG	P	
11	0.3249	10.02	34.54	44.56	59.58	-15.02	QP	P	
12	0.3249	10.02	26.88	36.90	49.58	-12.68	AVG	P	
13	4.3400	10.20	32.17	42.37	56.00	-13.63	QP	P	
14	4.3400	10.20	21.54	31.74	46.00	-14.26	AVG	P	

Note: Level=Reading+Factor.
Margin=Level-Limit.

2023-6-9 14:07:30



Report No.:	01082300003747 冲牙器		
Test Standard:	FCC Part15 Conduction(QP)	**Phase:**	L1
Test item:	Conducted Emission	**Temp.(C)/Hum.(%):**	18(C) / 60 %
Applicant:	Scan:Step:4kHz/RBW:9kHz/Meas Time:10ms	**Atm.press.:**	1001 hpa
Product:	冲牙器	**Power Rating:**	AC120V/60Hz
Model No.:	M60	**Test Engineer:**	

Test Mode: warm water with maximum speed

Remark:

No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1692	10.04	43.03	53.07	65.00	-11.93	QP	P	
2	0.1692	10.04	28.88	38.92	55.00	-16.08	AVG	P	
3	0.2419	10.04	39.94	49.98	62.03	-12.05	QP	P	
4	0.2419	10.04	26.63	36.67	52.03	-15.36	AVG	P	
5	0.2908	10.04	35.01	45.05	60.50	-15.45	QP	P	
6	0.2908	10.04	27.31	37.35	50.50	-13.15	AVG	P	
7	0.3667	10.04	33.97	44.01	58.58	-14.57	QP	P	
8	0.3667	10.04	27.13	37.17	48.58	-11.41	AVG	P	
9	4.4206	10.22	30.54	40.76	56.00	-15.24	QP	P	
10	4.4206	10.22	20.68	30.90	46.00	-15.10	AVG	P	
11	6.0053	10.29	25.33	35.62	60.00	-24.38	QP	P	
12	6.0053	10.29	16.13	26.42	50.00	-23.58	AVG	P	

Note: Level=Reading+Factor.
Margin=Level-Limit.