| | | | | |
|---|---|---|---|---|
| **Prüfbericht-Nr.:** *Test Report No.*: | **50061773 001** | **Auftrags-Nr.:** *Order No.*: | 164067052 | Seite 1 von 25 *Page 1 of 25* |
| **Kunden-Referenz-Nr.:** *Client Reference No.*: | N/A | **Auftragsdatum:** *Order date*: | 22.06.2016 | |
| **Auftraggeber:** *Client*: | ARB Corporation Ltd.<br>42-44 Garden St, Kilsyth, Victoria 3137, Australia | | | |
| **Prüfgegenstand:** *Test item*: | ARB Fridge Freezer | | | |
| **Bezeichnung / Typ-Nr.:** *Identification / Type No.*: | 10800010, 10800020, 10800030, 10800040 | | | |
| **Auftrags-Inhalt:** *Order content*: | FCC Certification and Verification | | | |
| **Prüfgrundlage:** *Test specification*: | CFR47 FCC Part 15: Subpart C Section 15.247<br>CFR47 FCC Part 15: Subpart C Section 15.207<br>CFR47 FCC Part 15: Subpart C Section 15.209<br>FCC KDB Publication 447498 v06<br>CFR47 FCC Part 15: Subpart B Section 15.107<br>CFR47 FCC Part 15: Subpart B Section 15.109<br>RSS-247 Issue 1 May 2015<br>RSS-102 Issue 5 March 2015<br>RSS-Gen Issue 4 November 2014 | | | |
| **Wareneingangsdatum:** *Date of receipt*: | 27.06.2017 | | | |
| **Prüfmuster-Nr.:** *Test sample No.*: | N/A | | | |
| **Prüfzeitraum:** *Testing period*: | 29.06.2016 - 21.09.2016 | | | |
| **Ort der Prüfung:** *Place of testing*: | Shenzhen Accurate Technology Co., Ltd. | | | |
| **Prüflaboratorium:** *Testing laboratory*: | TÜV Rheinland (Shenzhen) Co., Ltd. | | | |
| **Prüfergebnis*:** *Test result**: | Pass | | | |

**geprüft von** / *tested by*:

| **Datum** *Date* | **Name / Stellung** *Name / Position* | **Unterschrift** *Signature* |
|---|---|---|
| 11.09.2016 | Owen Tian / Senior Project Manager | |

**kontrolliert von** / *reviewed by*:

| **Datum** *Date* | **Name / Stellung** *Name / Position* | **Unterschrift** *Signature* |
|---|---|---|
| 10.11.2016 | Winnie Hou / Technical Certifier | |

**Sonstiges** / *Other*:

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

| | | | | | |
|---|---|---|---|---|---|
| * Legende: | 1 = sehr gut | 2 = gut | 3 = befriedigend | 4 = ausreichend | 5 = mangelhaft |
| | P(ass) = entspricht o.g. Prüfgrundlage(n) | | F(ail) = entspricht nicht o.g. Prüfgrundlage(n) | N/A = nicht anwendbar | N/T = nicht getestet |
| *Legend:* | *1 = very good* | *2 = good* | *3 = satisfactory* | *4 = sufficient* | *5 = poor* |
| | *P(ass) = passed a.m. test specification(s)* | | *F(ail) = failed a.m. test specification(s)* | *N/A = not applicable* | *N/T = not tested* |



V04

# TEST SUMMARY

**5.1.1 ANTENNA REQUIREMENT**
*RESULT: Passed*

**5.1.2 PEAK OUTPUT POWER**
*RESULT: Passed*

**5.1.3 99% BANDWIDTH**
*RESULT: Passed*

**5.1.4 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100KHZ BANDWIDTH**
*RESULT: Passed*

**5.1.5 SPURIOUS EMISSION**
*RESULT: Passed*

**5.1.6 20DB BANDWIDTH**
*RESULT: Passed*

**5.1.7 FREQUENCY SEPARATION**
*RESULT: Passed*

**5.1.8 NUMBER OF HOPPING FREQUENCY**
*RESULT: Passed*

**5.1.9 TIME OF OCCUPANCY**
*RESULT: Passed*

**5.1.10 CONDUCTED EMISSIONS**
*RESULT: Passed*

# 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 1: Test Result

# 2. Test Sites

## 2.1 Test Facilities

Shenzhen Accurate Technology Co., Ltd.

F1, Bldg. A, Changyuan New Meterial Port, Keyuan Rd., Science & Industry Park Nanshan District, Shenzhen 518057, P.R. China

FCC Registration No.: 752051

Test site Industry Canada No.: 5077A-2

The tests at the test site have been conducted under the supervision of a TÜV engineer.

## 2.2 List of Test and Measurement Instruments

**Table 1: List of Test and Measurement Equipment**

| Kind of Equipment | Manufacturer | Type | S/N | Calibrated until |
|---|---|---|---|---|
| **Spurious emission** | | | | |
| Spectrum Analyzer | Rohde&Schwarz | FSV40 | 101495 | 2017-01-09 |
| Test Receiver | Rohde&Schwarz | ESCS30 | 100307 | 2017-01-09 |
| Bilog Antenna | Schwarzbeck | VULB9163 | 9163-323 | 2017-01-09 |
| Loop Antenna | Schwarzbeck | FMZB1516 | 1516131 | 2017-01-09 |
| Horn Antenna | Schwarzbeck | BBHA9120D | 9120D-655 | 2017-01-09 |
| Horn Antenna | Schwarzbeck | BBHA9170 | 9170-359 | 2017-01-09 |
| RF Switching Unit+PreAMP | Compliance Direction | RSU-M2 | 38322 | 2017-01-09 |
| Pre-Amplifier | Rohde&Schwarz | CBLU11835 40-01 | 3791 | 2017-01-09 |
| **Radio Spectrum Test** | | | | |
| Spectrum Analyzer | Rohde & Schwarz | ESPI3 | 100396/003 | 2017-01-09 |
| Spectrum Analyzer | Agilent | E7405A | MY45115511 | 2017-01-09 |
| **Conducted Emission** | | | | |
| Test Receiver | Rohde & Schwarz | ESCS30 | 100307 | 2017-01-09 |
| L.I.S.N. | Schwarzbeck | NLSK8126 | 8126431 | 2017-01-09 |
| Pulse Limiter | Rohde & Schwarz | ESH3-Z2 | 100815 | 2017-01-09 |
| 50Ω Coaxial Switch | Anritsu Corp | MP59B | 6200283933 | 2017-01-09 |

## 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 are ±3dB.

## 2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix1 of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

## 2.7 Status of Facility Used for Testing

The Shenzhen Accurate Technology Co., Ltd. test facility located at F1, Bldg. A, Changyuan New Meterial Port, Keyuan Rd., Science & Industry Park Nanshan District, Shenzhen 518057, 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 EUTs are fridge freezer with wireless communication module.
The EUTs have been specifically designed for tough off road conditions and its primary purpose is for cooling down food and beverages. It may also be used as a freezer if desired.
The EUTs can connect to remote display via wireless signal to report the temperature.
The EUTs are indentical in function, circuit design and electronic components employed, except different capacity and rating. Details as below:

| Model | Rating | Compressor | Capacitor |
|---|---|---|---|
| 10800010 | AC100-240V, 50/60Hz, 1,0-0,6A; DC12V, 5,1A or DC24V, 2,8A | BD35F with refrigerant R134a/47g | 47L |
| 10800020 | AC100-240V, 50/60Hz, 0,8-0,4A; DC12V, 5,0A or DC24V, 2,5A | BD35F with refrigerant R134a/44g | 35L |
| 10800030 | AC100-240V, 50/60Hz, 1,0-0,5A; DC12V, 5,3A or DC24V, 3,0A | BD35F with refrigerant R134a/56g | 60L |
| 10800040 | AC100-240V, 50/60Hz, 1,2-0,6A; DC12V, 7,3A or DC24V, 3,5A | BD50F with refrigerant R134a/63g | 78L |

## 3.2 For details refer to the User Manual and Circuit Diagram. Ratings and System Details

**Table 2: Rating of EUT**

| | |
|---|---|
| Kind of Equipment: | ARB Fridge Freezer |
| Type Designation: | 10800010, 10800020, 10800030, 10800040 |
| FCC ID | 2AA2H-ARB-MONITOR |
| IC | 11414A-ARBMONITOR |

**Table 3: Technical Specification of EUT**

| Technical Specification | Value |
|---|---|
| Operating Frequency band | 2435 – 2449 MHz |
| Channel separation | 1MHz |
| Channel | 2435MHz, 2436MHz, 2437MHz, 2438MHz, 2439MHz, 2440MHz, 2441MHz, 2442MHz, 2443MHz, 2444MHz, 2445MHz, 2446MHz, 2447MHz, 2448MHz, 2449MHz |
| Extreme Temperature Range | -20ºC to +55ºC |
| Operation Voltage | AC100-240V 50/60Hz or DC 12/24V |
| Modulation | GFSK |
| Antenna Type | Internal Antenna, Non-User Replaceable |
| Antenna Gain | 3dBi |
| RF Output Power | 0.0093W (9.68dBm) |

## 3.3 Independent Operation Modes

The basic operation modes are:

A. On, Transmitting
   1. Low channel
   2. Middle channel
   3. High channel
B. On, Receiving
C. On, Refrigeration
D. Off

## 3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

## 3.5 Submitted Documents

- Bill of Material
- PCB Layout
- Photo Document
- Technical Description
- Circuit Diagram
- Instruction Manual
- Rating Label

# 4. Test Set-up and Operation Modes

## 4.1 Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its maximum power 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 testing were performed according to the procedures in ANSI C63.4: 2014 and ANSI C63.10: 2013.

Due to models' differences indicated in clause 3.1, full test was applied on model 10800010 only. The EUT was named as 10900026 during test, the license holder changed model number to 10800010 finally.

## 4.3 Special Accessories and Auxiliary Equipment

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 Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

## 4.5 Test Setup Diagram

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

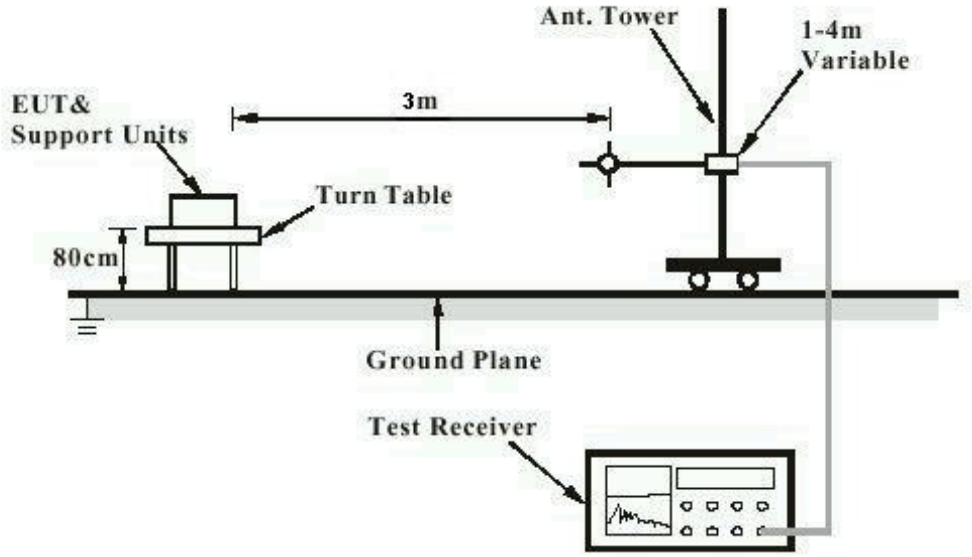



**Diagram of Measurement Configuration for Radiation Test (Above 1GHz)**

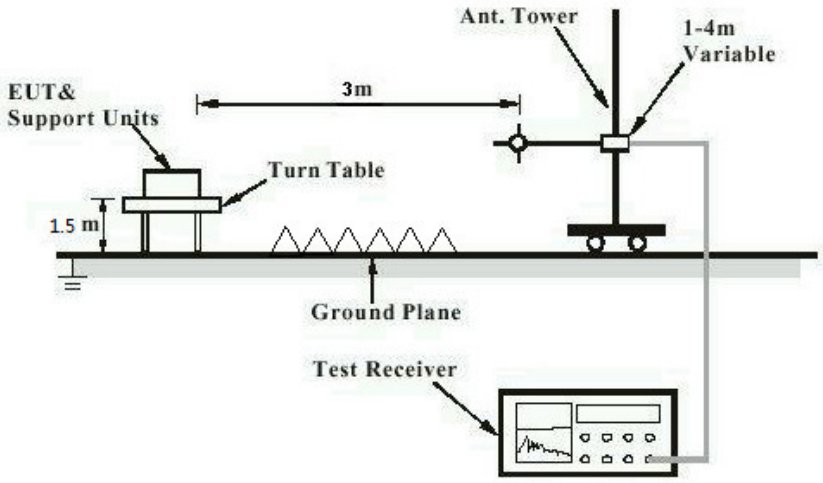


**Diagram of Measurement Equipment Configuration for Mains Conduction Measurement**

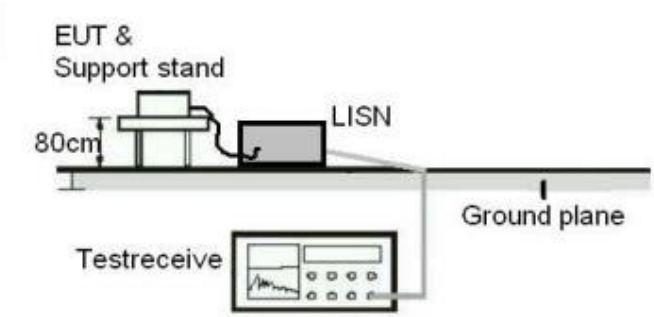
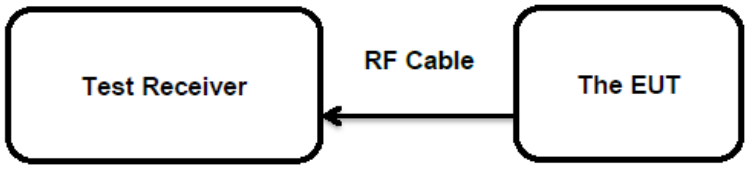



**Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement**



# 5. Test Results

## 5.1 Transmitter Requirement & Test Suites

### 5.1.1 Antenna Requirement

**RESULT:** **Passed**

| | | |
|---|---|---|
| Test standard | : | FCC Part 15.247(b)(4) and Part 15.203<br>RSS-Gen 6.7 |
| Limit | : | the use of antennas with directional gains that do not exceed 6 dBi |

According to the manufacturer declared, the EUT has an internal antenna, the directional gain of antenna is 2dBi, 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.

Refer to EUT photo for details.

## 5.1.2 Peak Output Power

**RESULT:** **Passed**

| | | |
|---|---|---|
| Test date | : | 2016-06-29 |
| Test standard | : | FCC Part 15.247(b)(1)<br>RSS-247 Clause 5.4(2) |
| Basic standard | : | ANSI C63.10: 2013 |
| Limit | : | 0.125 Watt |
| Kind of test site | : | Shielded room |

**Test setup**

| | | |
|---|---|---|
| Test Channel | : | Low/ Middle/ High |
| Operation Mode | : | A |
| Ambient temperature | : | 25℃ |
| Relative humidity | : | 55% |
| Atmospheric pressure | : | 101 kPa |

**Table 4: Test result of Peak Output Power**

| Channel | Channel Frequency (MHz) | Peak Output Power | | Limit |
|---|---|---|---|---|
| | | (dBm) | (W) | (W) |
| Low Channel | 2435 | 9.07 | 0.0081 | <0.125 |
| Middle Channel | 2442 | 9.38 | 0.0087 | <0.125 |
| High Channel | 2449 | 9.68 | 0.0093 | <0.125 |

## 5.1.3 99% Bandwidth

**RESULT:** **Passed**

| | | |
|---|---|---|
| Date of testing | : | 2016-06-29 |
| Test standard | : | RSS-Gen clause 6.6 |
| Basic standard | : | ANSI C63.10: 2013 |
| Kind of test site | : | Shielded room |

**Test setup**

| | | |
|---|---|---|
| Test Channel | : | Low/ Middle/ High |
| Operation Mode | : | A |
| Ambient temperature | : | 25℃ |
| Relative humidity | : | 55% |
| Atmospheric pressure | : | 101 kPa |

**Table 5: Test result of 99% Bandwidth**

| Channel | Channel Frequency (MHz) | 99% Bandwidth (kHz) | Limit (MHz) | Result |
|---|---|---|---|---|
| Low Channel | 2435 | 978 | / | Pass |
| Mid Channel | 2442 | 978 | / | Pass |
| High Channel | 2449 | 972 | / | Pass |

## 5.1.4 Conducted spurious emissions measured in 100kHz Bandwidth

**RESULT:** **Passed**

| | | |
|---|---|---|
| Date of testing | : | 2016-06-29 |
| Test standard | : | FCC part 15.247(d)<br>RSS-247 Clause 5.5 |
| Basic standard | : | ANSI C63.10: 2013 |
| Limit | : | 20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power);<br>In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a) |
| Kind of test site | : | Shield room |

**Test setup**

| | | |
|---|---|---|
| Test Channel | : | Low/ High |
| Operation mode | : | A |
| Ambient temperature | : | 25℃ |
| Relative humidity | : | 55% |
| Atmospheric pressure | : | 101 kPa |

All emissions are more than 20dB below fundamental, details refer to Appendix 1, and compliance is achived as well.

.

## 5.1.5 Spurious Emission

**RESULT:** **Passed**

| | | |
|---|---|---|
| Date of testing | : | 2016-09-21 |
| Test standard | : | FCC part 15.247(d)<br>FCC Part 15.205<br>RSS-247 Clause 3.3 |
| Basic standard | : | ANSI C63.10: 2013 |
| Limits | : | Refer to 15.209(a) of FCC part 15.247(d)<br>RSS-Gen Table 4 & Table 5 |
| Kind of test site | : | 3m Semi-Anechoic Chamber |

**Test setup**

| | | |
|---|---|---|
| Test Channel | : | Low/ Middle/ High |
| Operation mode | : | A |
| Ambient temperature | : | 23℃ |
| Relative humidity | : | 48% |
| Atmospheric pressure | : | 101 kPa |

Remark:
During the pretest the EUT was rotated through three orthogonal axes to determine the attitude that maximizes the emissions. After that the EUT was manually handled to find the orientation that has the maximum emission, which is the orientation shown in the test setup photos.
Testing was carried out within frequency range 9kHz to the tenth harmonics.

For details refer to Appendix 1.

## 5.1.6 20dB Bandwidth

**RESULT:** **Passed**

| | | |
|---|---|---|
| Date of testing | : | 2016-06-29 |
| Test standard | : | FCC Part 15.247(a)(1)<br>RSS-247 Clause 5.1(1) |
| Basic standard | : | ANSI C63.10: 2013 |
| Kind of test site | : | Shielded room |

**Test setup**

| | | |
|---|---|---|
| Test Channel | : | Low/ Middle/ High |
| Operation Mode | : | A |
| Ambient temperature | : | 25℃ |
| Relative humidity | : | 55% |
| Atmospheric pressure | : | 101 kPa |

**Table 6: Test result of 20dB Bandwidth**

| Channel | Channel Frequency (MHz) | 20dB Bandwidth (kHz) | Limit (MHz) | Result |
|---|---|---|---|---|
| Low Channel | 2435 | 702 | / | Pass |
| Mid Channel | 2442 | 630 | / | Pass |
| High Channel | 2449 | 658 | / | Pass |

## 5.1.7 Frequency Separation

**RESULT:** **Passed**

| | | |
|---|---|---|
| Date of testing | : | 2016-06-29 |
| Test standard | : | FCC part 15.247(a)(1)<br>RSS-210 A8.1 (b) |
| Basic standard | : | ANSI C63.4: 2003 |
| Limit | : | ≥ 25kHz or 2/3 of 20dB bandwidth, whichever is greater |

**Test setup**

| | | |
|---|---|---|
| Test Channel | : | Low/ Middle/ High |
| Operation Mode | : | A |
| Ambient temperature | : | 25℃ |
| Relative humidity | : | 55% |
| Atmospheric pressure | : | 101 kPa |

**Table 7: Test result of Frequency Separation**

| Channel | Channel Frequency (MHz) | Measured Channel Separation (MHz) | Limit (kHz) | Result |
|---|---|---|---|---|
| Low Channel | 2435 | 1 | ≥ 25kHz or 2/3 of 20dB bandwidth | Pass |
| Adjacency Channel | 2436 | | | |
| Mid Channel | 2441 | 1 | ≥ 25kHz or 2/3 of 20dB bandwidth | Pass |
| Adjacency Channel | 2442 | | | |
| High Channel | 2448 | 1 | ≥ 25kHz or 2/3 of 20dB bandwidth | Pass |
| Adjacency Channel | 2449 | | | |

## 5.1.8 Number of hopping frequency

**RESULT:** **Passed**

| | | |
|---|---|---|
| Date of testing | : | 2016-06-29 |
| Test standard | : | FCC part 15.247(a)(1)(iii)<br>RSS-247 Clause 5.1(4) |
| Basic standard | : | ANSI C63.10: 2013 |
| Limits | : | ≥ 15 non-overlapping channels |
| Kind of test site | : | Shield room |

**Test setup**

| | | |
|---|---|---|
| Test Channel | : | Low/ Middle/ High |
| Operation Mode | : | B |
| Ambient temperature | : | 25℃ |
| Relative humidity | : | 55% |
| Atmospheric pressure | : | 101 kPa |

**Table 8: Test result of Number of hopping frequency**

| Frequency Range | Measured Quantity of Hopping Channel | Limit | Result |
|---|---|---|---|
| 2400 to 2483.5 MHz | 15 | ≥15 | Pass |

## 5.1.9 Time of Occupancy

**RESULT:** **Passed**

| | | |
|---|---|---|
| Date of testing | : | 2016-06-29 |
| Test standard | : | FCC part 15.247(a)(1)(iii)<br>RSS-247 Clause5.1(4) |
| Basic standard | : | ANSI C63.10: 2013 |
| Limits | : | <0.4s |
| Kind of test site | : | Shield room |

**Test setup**

| | | |
|---|---|---|
| Test Channel | : | Low/ Middle/ High |
| Operation Mode | : | A |
| Ambient temperature | : | 25℃ |
| Relative humidity | : | 55% |
| Atmospheric pressure | : | 101 kPa |

**Table 9: Test result of Time of Occupancy**

| Channel | Pulse width (ms) | Dwell time (s) | Limit (s) | Result |
|---|---|---|---|---|
| Low Channel | 0.22 | 0.013 | 0.4 | Pass |
| Mid Channel | 0.22 | 0.013 | 0.4 | Pass |
| High Channel | 0.22 | 0.013 | 0.4 | Pass |

Note:

Dwell time = Pulse width x (Hopping rate / Number of channels) x Period

Period = 0.4 (seconds/ channel) x Number of channels

## 5.1.10 Conducted emissions

**RESULT:** **Passed**

| | | |
|---|---|---|
| Date of testing | : | 2016-06-30 |
| Test standard | : | FCC Part 15.107(a) & FCC Part 15.207(a)<br>RSS-Gen Clause 8.8 |
| Basic standard | : | ANSI C63.10: 2013 & ANSI C63.4: 2014 |
| Frequency range | : | 0.15 – 30MHz |
| Limits | : | FCC Part 15.207(a) & FCC Part 15.207(a)<br>RSS-Gen Table 3 |
| Kind of test site | : | Shield room |

**Test setup**

| | | |
|---|---|---|
| Input Voltage | : | AC 100-240V 50/60Hz |
| Operation Mode | : | C |
| Earthing | : | Not connected |
| Ambient temperature | : | 25℃ |
| Relative humidity | : | 55% |
| Atmospheric pressure | : | 101 kPa |

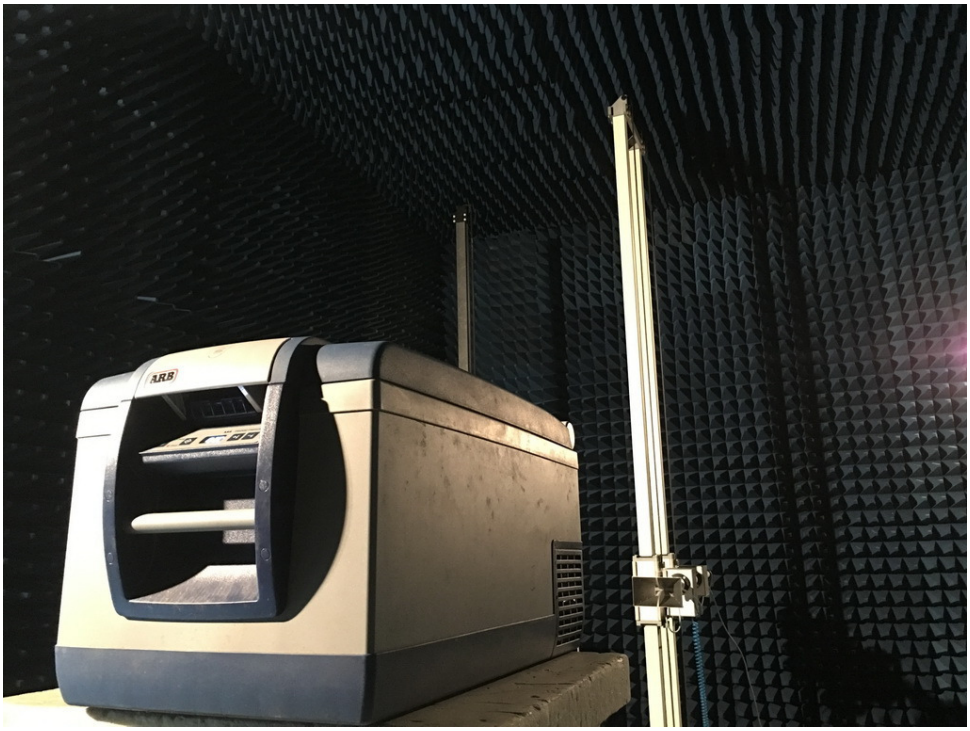
For details refer to Appendix 1.

# 6. Photographs of the Test Set-Up

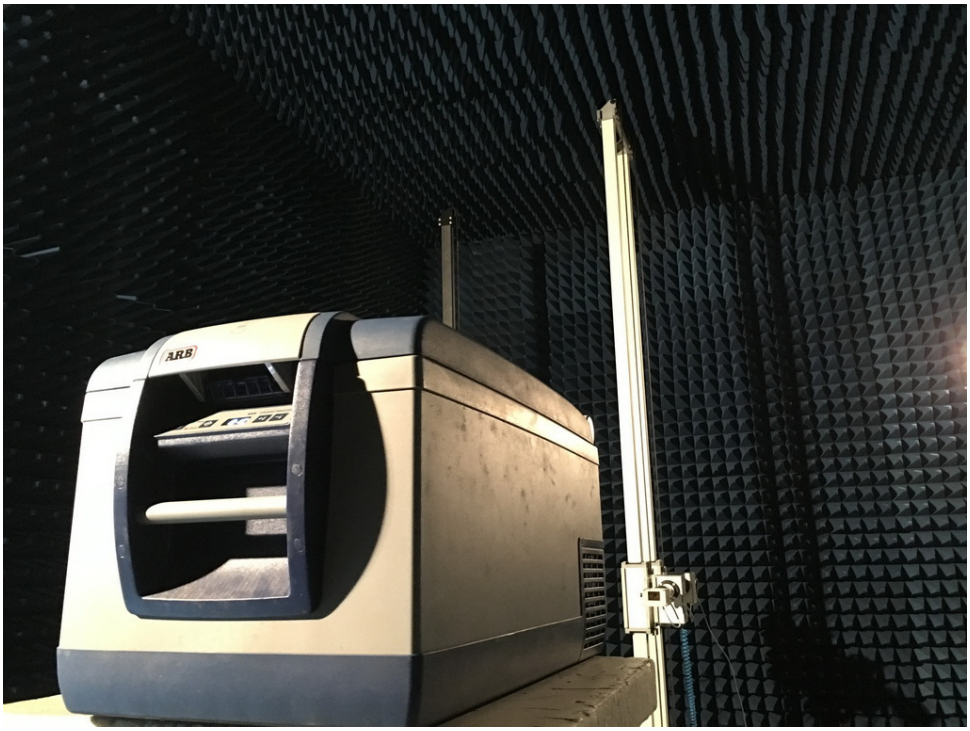
**Photograph 1: Set-up for Spurious Emissions (9kHz-30MHz)**


**Photograph 2: Set-up for Spurious Emissions (30MHz-1GHz)**

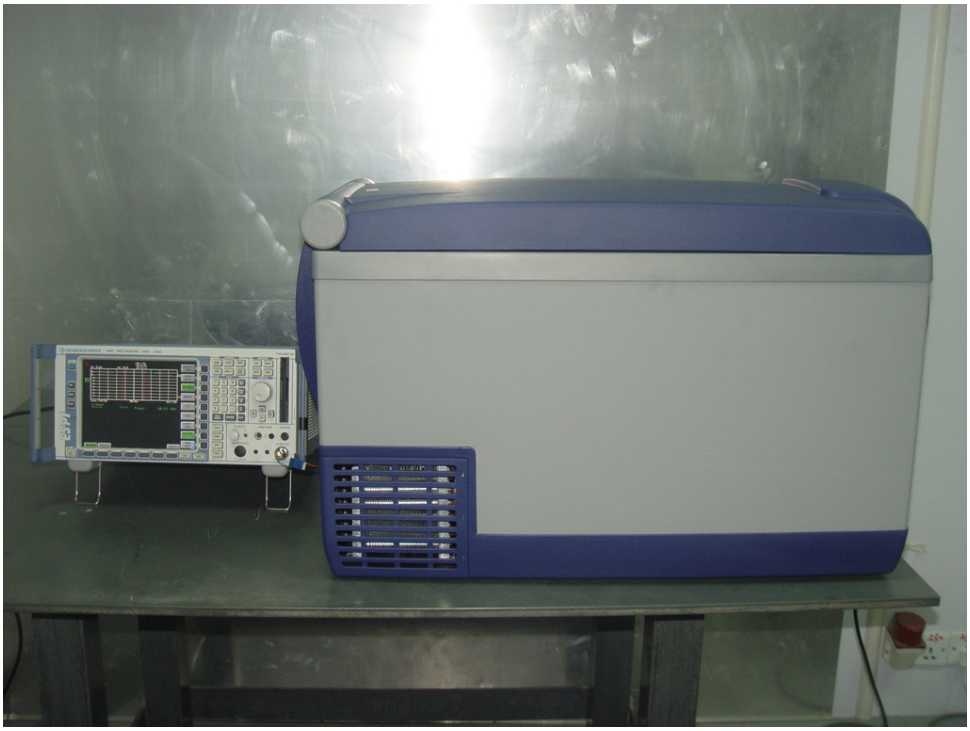
**Photograph 3: Set-up for Spurious Emissions (1GHz-18GHz)**




**Photograph 4: Set-up for Spurious Emissions (18GHz-26GHz)**



**Photograph 5: Set-up for Conducted Emissions**



# 7. List of Tables



# 8. List of Photographs

# List of Figures

## Figure 1: Test figure of spurious emissions, mode A.1, Horizontal polarity (9kHz – 30MHz),

***ACCURATE TECHNOLOGY CO.,LTD***

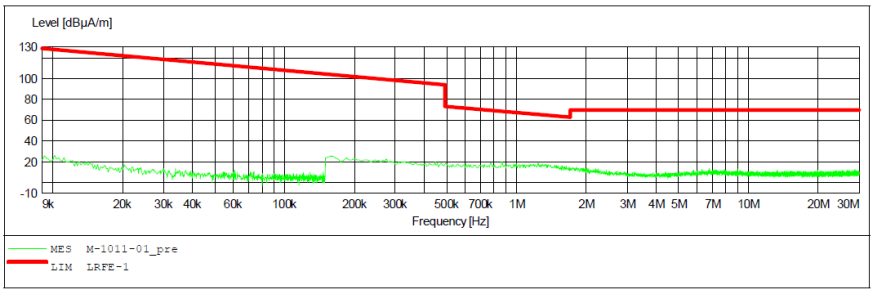
***FCC Class B 3m Radiated***

```
EUT:                 ARB Monitor M/N:10900026
Manufacturer:        Mobicool
Operating Condition: TX 2435MHz
Test Site:           2# Chamber
Operator:            LGWADE
Test Specification:  DC 3.7V
Comment:             X
```

***SCAN TABLE: "LFRE Fin"***

Short Description: _SUB_STD_VTERM2 1.70

| Start Frequency | Stop Frequency | Step Width | Detector | Meas. Time | IF Bandw. | Transducer |
|---|---|---|---|---|---|---|
| 9.0 kHz | 150.0 kHz | 100.0 Hz | QuasiPeak | 1.0 s | 200 Hz | 1516M |
| 150.0 kHz | 30.0 MHz | 5.0 kHz | QuasiPeak | 1.0 s | 9 kHz | 1516M |




## Figure 2: Test figure of spurious emissions, mode A.1, Vertical polarity (9kHz – 30MHz)

***ACCURATE TECHNOLOGY CO.,LTD***

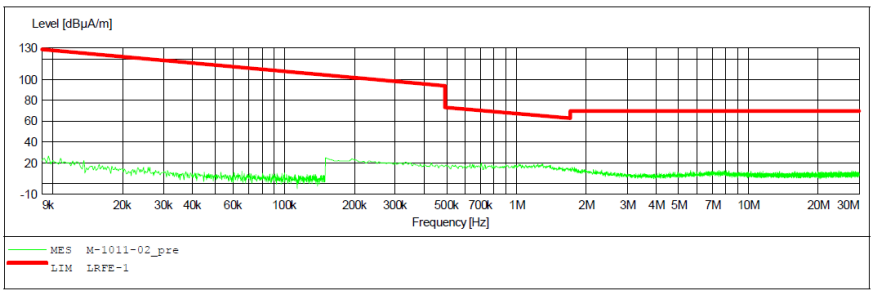
***FCC Class B 3m Radiated***

```
EUT:                 ARB Monitor M/N:10900026
Manufacturer:        Mobicool
Operating Condition: TX 2435MHz
Test Site:           2# Chamber
Operator:            LGWADE
Test Specification:  DC 3.7V
Comment:             Y
```

***SCAN TABLE: "LFRE Fin"***

Short Description: _SUB_STD_VTERM2 1.70

| Start Frequency | Stop Frequency | Step Width | Detector | Meas. Time | IF Bandw. | Transducer |
|---|---|---|---|---|---|---|
| 9.0 kHz | 150.0 kHz | 100.0 Hz | QuasiPeak | 1.0 s | 200 Hz | 1516M |
| 150.0 kHz | 30.0 MHz | 5.0 kHz | QuasiPeak | 1.0 s | 9 kHz | 1516M |

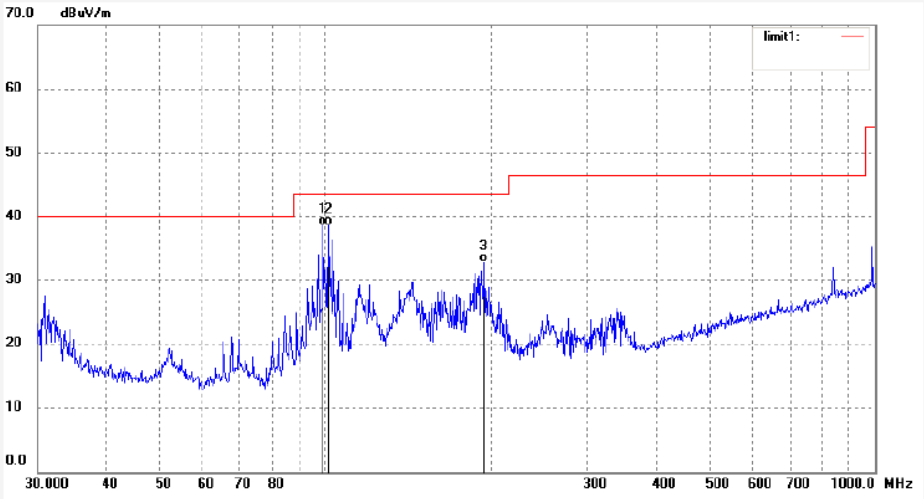


## Figure 3: Test figure of spurious emissions, mode A.1, Horizontal polarity (30MHz – 1GHz)

ATC®
**ACCURATE TECHNOLOGY CO., LTD.**
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: tuv2015 #3810 | Polarization: Horizontal |
| Standard: FCC Class B 3M Radiated | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2435MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 99.1796 | 53.05 | -14.40 | 38.65 | 43.50 | -4.85 | QP | | | |
| 2 | 101.2883 | 52.96 | -14.33 | 38.63 | 43.50 | -4.87 | QP | | | |
| 3 | 194.4533 | 46.27 | -13.49 | 32.78 | 43.50 | -10.72 | QP | | | |

## Figure 4: Test figure of spurious emissions, mode A.1, Vertical polarity (30MHz – 1GHz)

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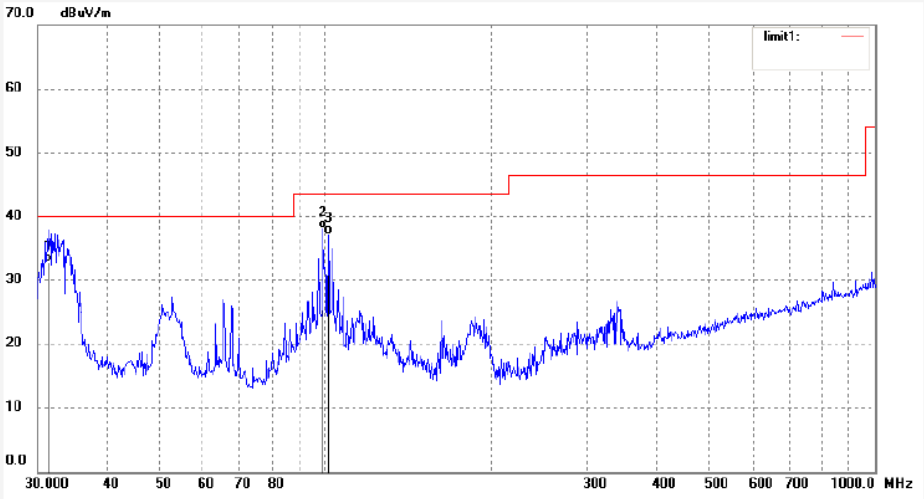
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: tuv2015 #3811 | Polarization: Vertical |
| Standard: FCC Class B 3M Radiated | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2435MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:



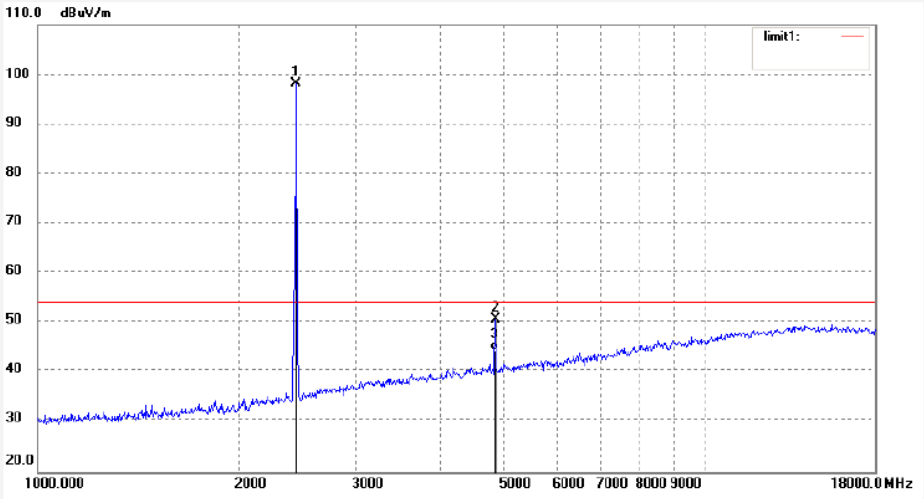

| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 31.3992 | 42.20 | -9.34 | 32.86 | 40.00 | -7.14 | QP | | | |
| 2 | 99.1796 | 52.51 | -14.40 | 38.11 | 43.50 | -5.39 | QP | | | |
| 3 | 101.2883 | 51.54 | -14.33 | 37.21 | 43.50 | -6.29 | QP | | | |

## Figure 5: Test figure of spurious emissions, mode A.1, Horizontal polarity (1GHz –18GHz)

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: LGW2015 #2939 | Polarization: Horizontal |
| Standard: FCC Class B 3M Radiated | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2435MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2435.000 | 105.50 | -7.37 | 98.13 | / | / | peak | | | |
| 2 | 4870.032 | 50.56 | 0.07 | 50.63 | 74.00 | -23.37 | peak | | | |
| 3 | 4870.032 | 44.27 | 0.07 | 44.34 | 54.00 | -9.66 | AVG | | | |

## Figure 6: Test figure of spurious emissions, mode A.1, Vertical polarity (1GHz – 18GHz)

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Science & Industry Park,Nanshan Shenzhen,P.R.China
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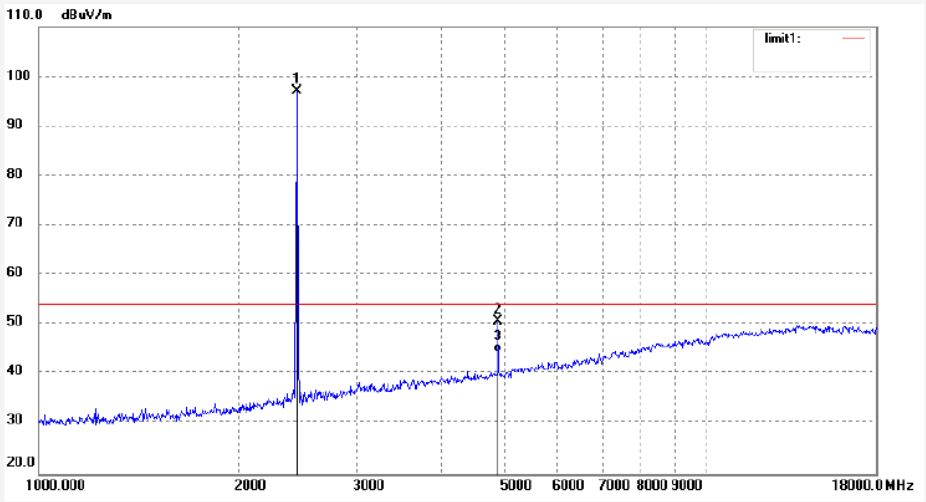
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: LGW2015 #2938 | Polarization: Vertical |
| Standard: FCC Class B 3M Radiated | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2435MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2435.000 | 104.36 | -7.37 | 96.99 | / | / | peak | | | |
| 2 | 4870.027 | 50.55 | 0.07 | 50.62 | 74.00 | -23.38 | peak | | | |
| 3 | 4870.027 | 44.27 | 0.07 | 44.34 | 54.00 | -9.66 | AVG | | | |

## Figure 7: Test figure of spurious emissions, mode A.1, Horizontal polarity (18GHz –25GHz)

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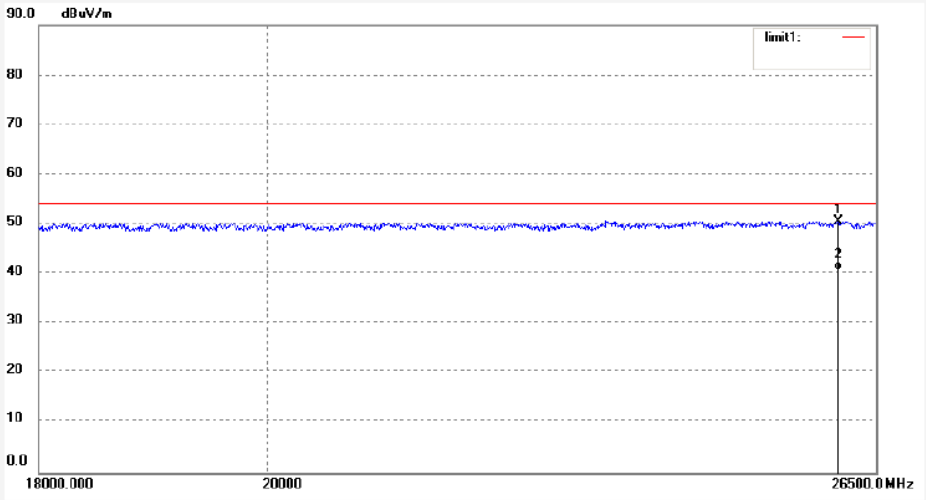
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: LGW2015 #2948 | Polarization: Horizontal |
| Standard: FCC Class B 3M Radiated | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2435MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 26042.764 | 34.09 | 16.50 | 50.59 | 74.00 | -23.41 | peak | | | |
| 2 | 26042.764 | 24.16 | 16.50 | 40.66 | 54.00 | -13.34 | AVG | | | |

## Figure 8: Test figure of spurious emissions, mode A.1, Vertical polarity (18GHz – 25GHz)

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Science & Industry Park,Nanshan Shenzhen,P.R.China
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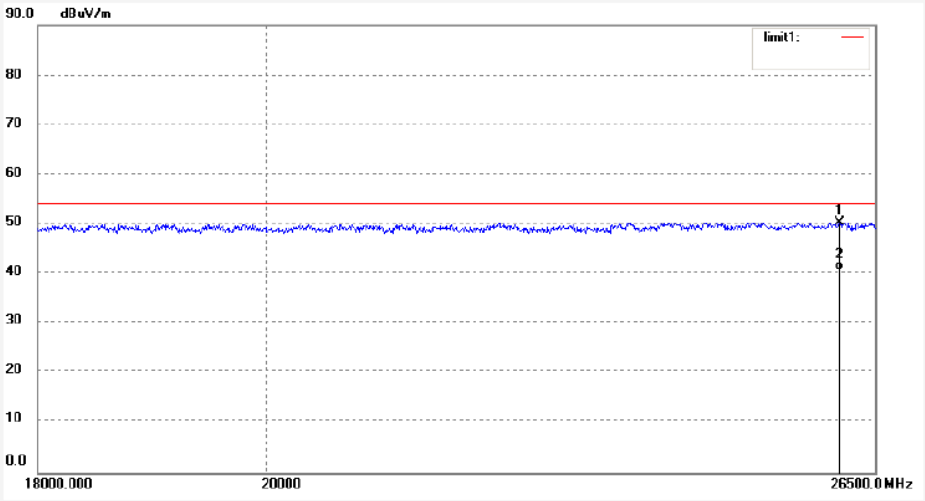
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: LGW2015 #2949 | Polarization: Vertical |
| Standard: FCC Class B 3M Radiated | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2435MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 26072.999 | 33.07 | 17.18 | 50.25 | 74.00 | -23.75 | peak | | | |
| 2 | 26072.999 | 23.45 | 17.18 | 40.63 | 54.00 | -13.37 | AVG | | | |

## Figure 9: Test figure of spurious emissions, mode A.2, Horizontal polarity (9kHz – 30MHz)

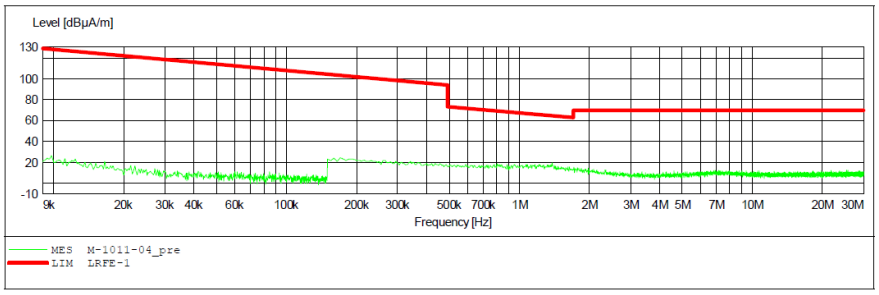
***ACCURATE TECHNOLOGY CO.,LTD***

***FCC Class B 3m Radiated***

```
EUT:                  ARB Monitor M/N:10900026
Manufacturer:         Mobicool
Operating Condition:  TX 2442MHz
Test Site:            2# Chamber
Operator:             LGWADE
Test Specification:   DC 3.7V
Comment:              X
```

***SCAN TABLE: "LFRE Fin"***

```
  Short Description:                 _SUB_STD_VTERM2 1.70
  Start      Stop       Step        Detector  Meas.     IF      Transducer
  Frequency  Frequency  Width                 Time      Bandw.
  9.0 kHz    150.0 kHz  100.0 Hz    QuasiPeak 1.0 s     200 Hz  1516M
  150.0 kHz  30.0 MHz   5.0 kHz     QuasiPeak 1.0 s     9 kHz   1516M
```




## Figure 10: Test figure of spurious emissions, mode A.2, Vertical polarity (9kHz – 30MHz)

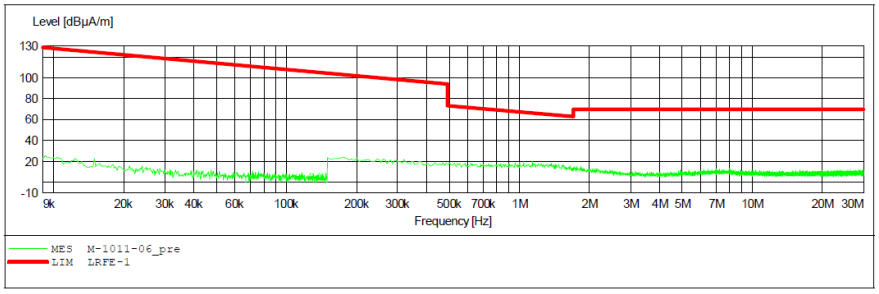
***ACCURATE TECHNOLOGY CO.,LTD***

***FCC Class B 3m Radiated***

```
EUT:                  ARB Monitor M/N:10900026
Manufacturer:         Mobicool
Operating Condition:  TX 2442MHz
Test Site:            2# Chamber
Operator:             LGWADE
Test Specification:   DC 3.7V
Comment:              Z
```

***SCAN TABLE: "LFRE Fin"***

```
  Short Description:                 _SUB_STD_VTERM2 1.70
  Start      Stop       Step        Detector  Meas.     IF      Transducer
  Frequency  Frequency  Width                 Time      Bandw.
  9.0 kHz    150.0 kHz  100.0 Hz    QuasiPeak 1.0 s     200 Hz  1516M
  150.0 kHz  30.0 MHz   5.0 kHz     QuasiPeak 1.0 s     9 kHz   1516M
```



## Figure 11: Test figure of spurious emissions, mode A.2, Horizontal polarity (30MHz – 1GHz)

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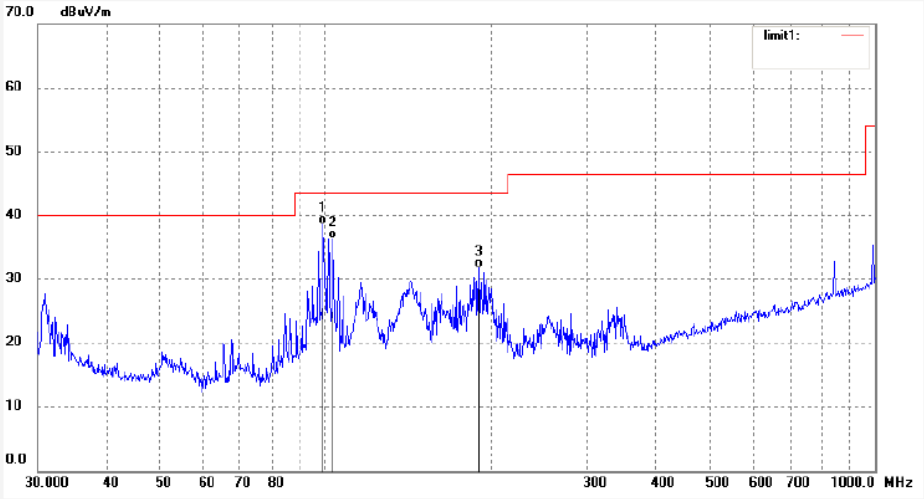
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: tuv2015 #3813 | Polarization: Horizontal |
| Standard: FCC Class B 3M Radiated | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2442MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 99.1796 | 52.99 | -14.40 | 38.59 | 43.50 | -4.91 | QP | | | |
| 2 | 103.4419 | 51.09 | -14.70 | 36.39 | 43.50 | -7.11 | QP | | | |
| 3 | 190.4050 | 45.38 | -13.64 | 31.74 | 43.50 | -11.76 | QP | | | |

## Figure 12: Test figure of spurious emissions, mode A.2, Vertical polarity (30MHz – 1GHz)

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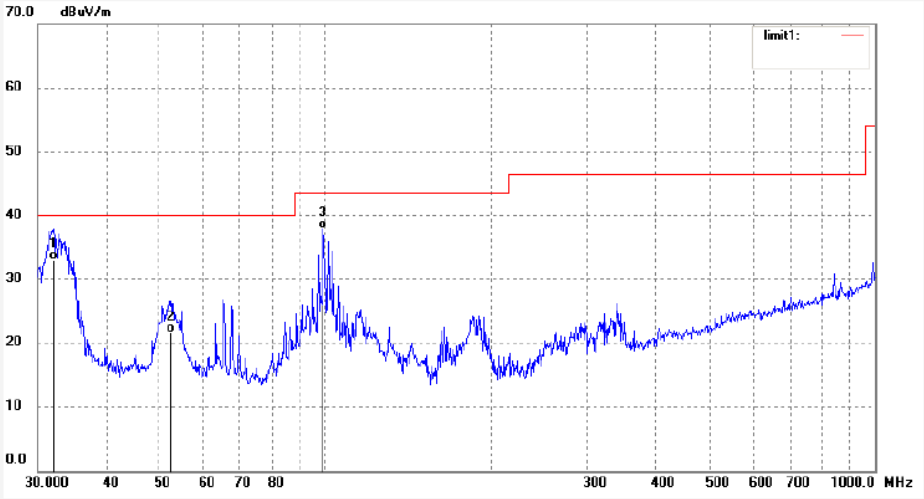
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: tuv2015 #3812 | Polarization: Vertical |
| Standard: FCC Class B 3M Radiated | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2442MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 32.0667 | 42.48 | -9.54 | 32.94 | 40.00 | -7.06 | QP | | | |
| 2 | 52.3912 | 34.35 | -12.78 | 21.57 | 40.00 | -18.43 | QP | | | |
| 3 | 99.1796 | 52.37 | -14.40 | 37.97 | 43.50 | -5.53 | QP | | | |

## Figure 13: Test figure of spurious emissions, mode A.2, Horizontal polarity (1GHz – 18GHz)

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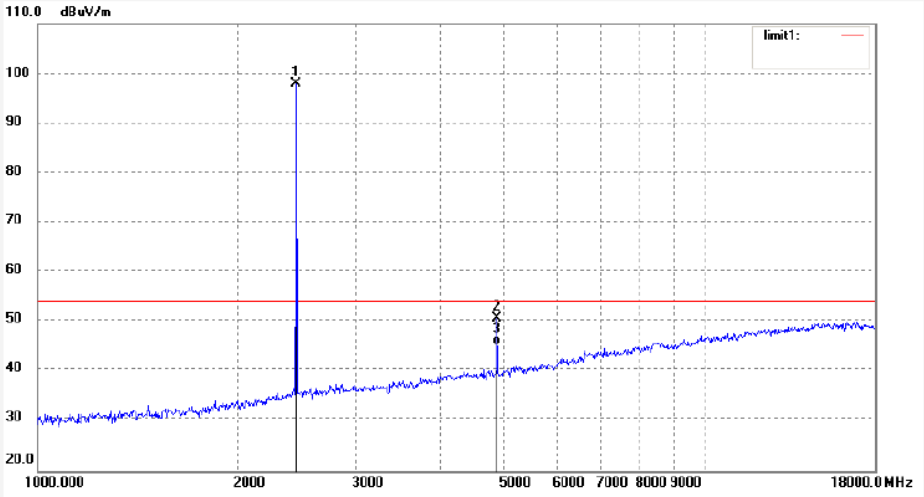
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: LGW2015 #2940 | Polarization: Horizontal |
| Standard: FCC Class B 3M Radiated | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2442MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2442.000 | 105.30 | -7.35 | 97.95 | / | / | peak | | | |
| 2 | 4884.034 | 50.53 | 0.15 | 50.68 | 74.00 | -23.32 | peak | | | |
| 3 | 4884.034 | 45.23 | 0.15 | 45.38 | 54.00 | -8.62 | AVG | | | |

## Figure 14: Test figure of spurious emissions, mode A.2, Vertical polarity (1GHz – 18GHz)

ATC®
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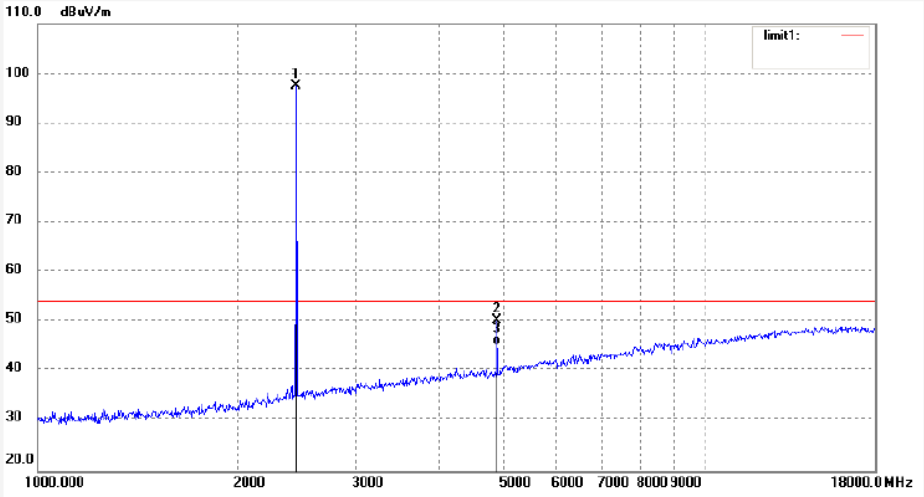
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: LGW2015 #2941 | Polarization: Vertical |
| Standard: FCC Class B 3M Radiated | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2442MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2442.000 | 104.84 | -7.35 | 97.49 | / | / | peak | | | |
| 2 | 4884.029 | 50.03 | 0.15 | 50.18 | 74.00 | -23.82 | peak | | | |
| 3 | 4884.029 | 45.22 | 0.15 | 45.37 | 54.00 | -8.63 | AVG | | | |

## Figure 15: Test figure of spurious emissions, mode A.2, Horizontal polarity (18GHz – 25GHz)

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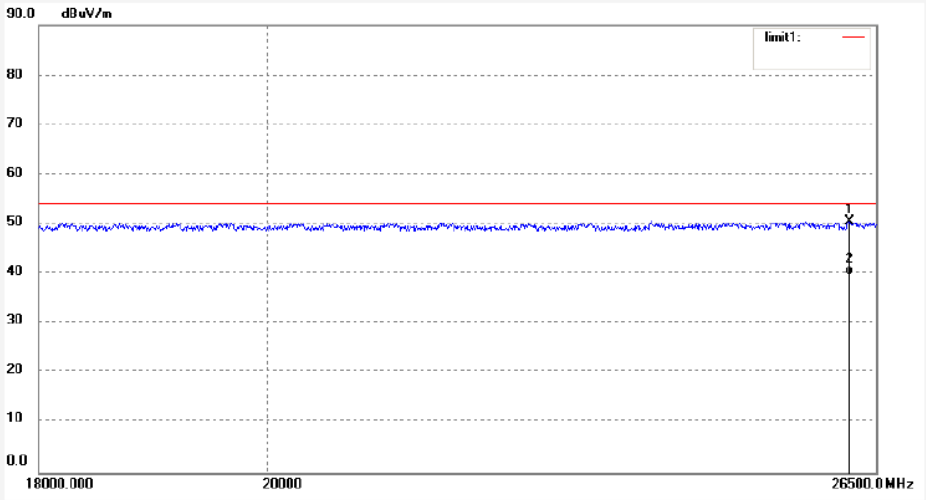
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: LGW2015 #2951 | Polarization: Horizontal |
| Standard: FCC Class B 3M Radiated | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2442MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 26174.038 | 33.97 | 16.50 | 50.47 | 74.00 | -23.53 | peak | | | |
| 2 | 26174.038 | 23.31 | 16.50 | 39.81 | 54.00 | -14.19 | AVG | | | |

## Figure 16: Test figure of spurious emissions, mode A.2, Vertical polarity (18GHz – 25GHz)

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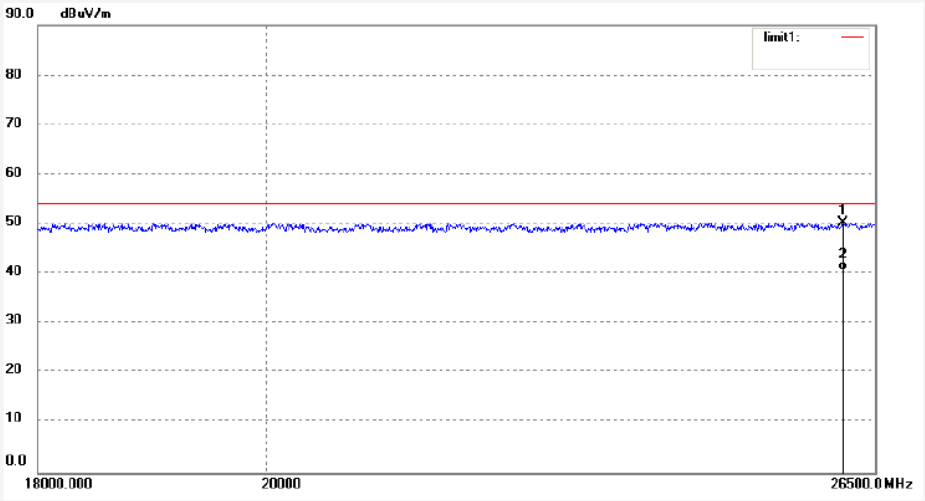
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: LGW2015 #2950 | Polarization: Vertical |
| Standard: FCC Class B 3M Radiated | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2442MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 26113.368 | 33.05 | 17.16 | 50.21 | 74.00 | -23.79 | peak | | | |
| 2 | 26113.368 | 23.56 | 17.16 | 40.72 | 54.00 | -13.28 | AVG | | | |

## Figure 17: Test figure of spurious emissions, mode A.3, Horizontal polarity (9kHz – 30MHz)

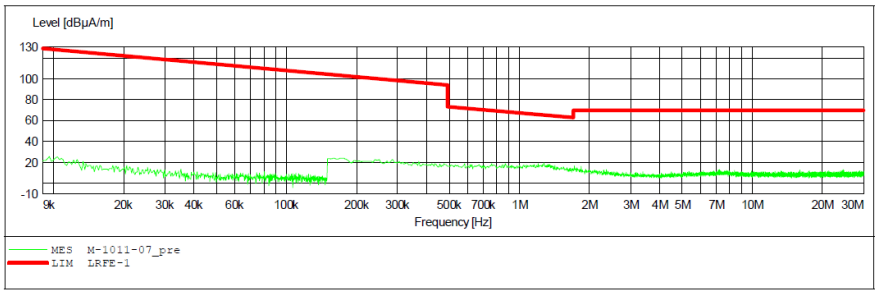
***ACCURATE TECHNOLOGY CO.,LTD***

***FCC Class B 3m Radiated***

```
EUT:                  ARB Monitor M/N:10900026
Manufacturer:         Mobicool
Operating Condition:  TX 2449MHz
Test Site:            2# Chamber
Operator:             LGWADE
Test Specification:   DC 3.7V
Comment:              X
```

***SCAN TABLE: "LFRE Fin"***

```
  Short Description:                _SUB_STD_VTERM2 1.70
  Start      Stop       Step       Detector  Meas.     IF      Transducer
  Frequency  Frequency  Width                Time      Bandw.
  9.0 kHz    150.0 kHz  100.0 Hz   QuasiPeak 1.0 s     200 Hz  1516M
  150.0 kHz  30.0 MHz   5.0 kHz    QuasiPeak 1.0 s     9 kHz   1516M
```




## Figure 18: Test figure of spurious emissions, mode A.3, Vertical polarity (9kHz – 30MHz)

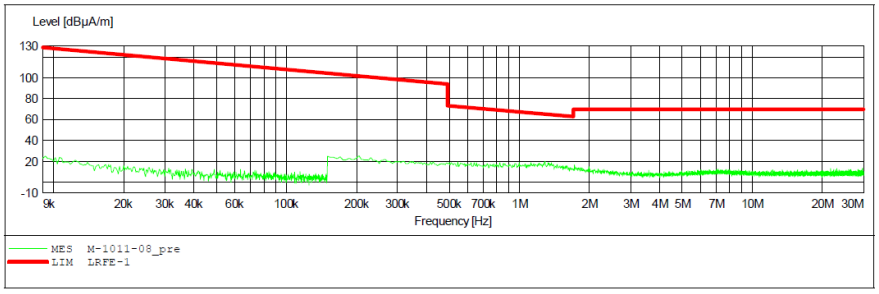
***ACCURATE TECHNOLOGY CO.,LTD***

***FCC Class B 3m Radiated***

```
EUT:                  ARB Monitor M/N:10900026
Manufacturer:         Mobicool
Operating Condition:  TX 2449MHz
Test Site:            2# Chamber
Operator:             LGWADE
Test Specification:   DC 3.7V
Comment:              Y
```

***SCAN TABLE: "LFRE Fin"***

```
  Short Description:                _SUB_STD_VTERM2 1.70
  Start      Stop       Step       Detector  Meas.     IF      Transducer
  Frequency  Frequency  Width                Time      Bandw.
  9.0 kHz    150.0 kHz  100.0 Hz   QuasiPeak 1.0 s     200 Hz  1516M
  150.0 kHz  30.0 MHz   5.0 kHz    QuasiPeak 1.0 s     9 kHz   1516M
```

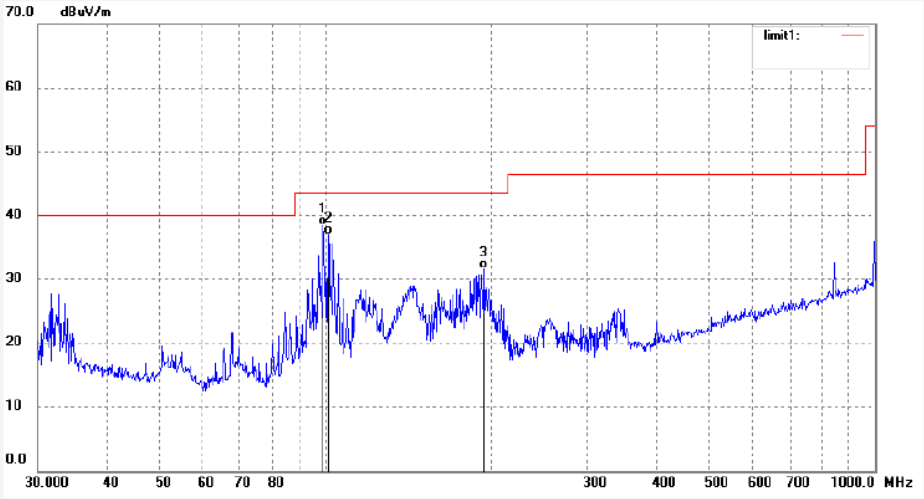


## Figure 19: Test figure of spurious emissions, mode A.3, Horizontal polarity (30MHz – 1GHz)

ATC®
**ACCURATE TECHNOLOGY CO., LTD.**
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: tuv2015 #3814 | Polarization: Horizontal |
| Standard: FCC Class B 3M Radiated | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2449MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 99.1796 | 52.81 | -14.40 | 38.41 | 43.50 | -5.09 | QP | | | |
| 2 | 101.2883 | 51.30 | -14.33 | 36.97 | 43.50 | -6.53 | QP | | | |
| 3 | 194.4533 | 45.12 | -13.49 | 31.63 | 43.50 | -11.87 | QP | | | |

## Figure 20: Test figure of spurious emissions, mode A.3, Vertical polarity (30MHz – 1GHz)

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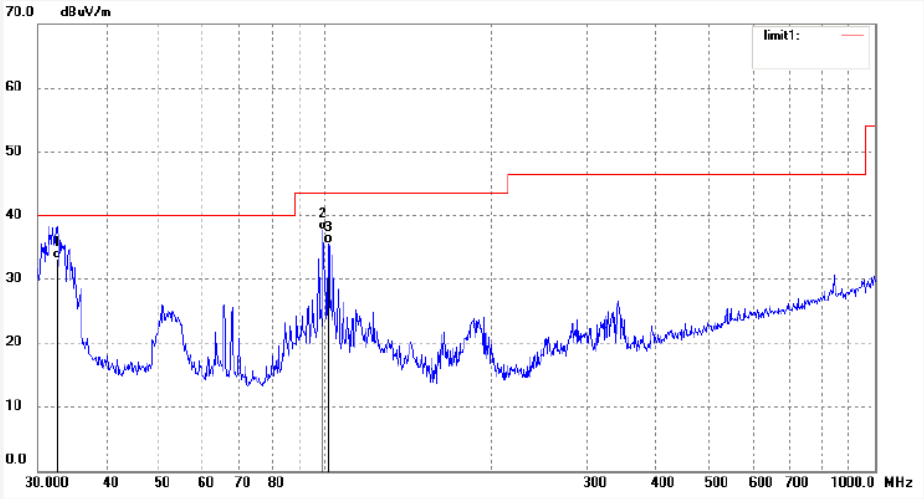
**ACCURATE TECHNOLOGY CO., LTD.**
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: tuv2015 #3815 | Polarization: Vertical |
| Standard: FCC Class B 3M Radiated | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2449MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:



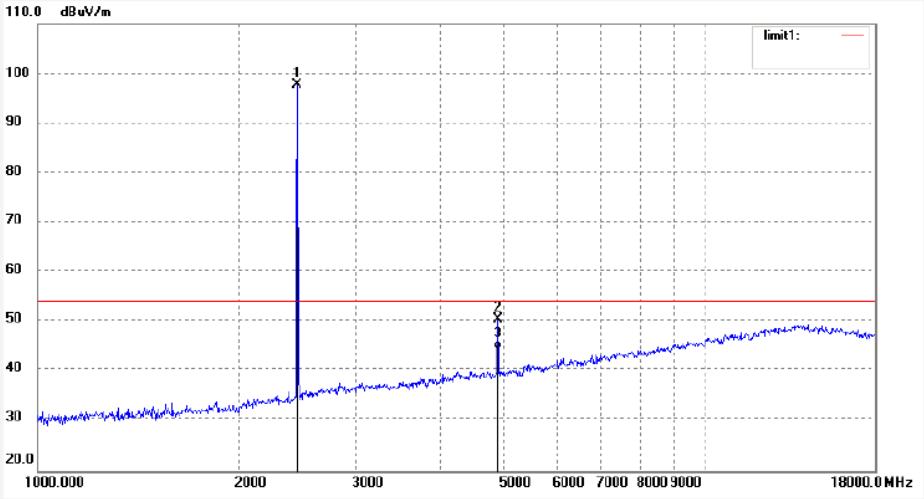

| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 32.5197 | 42.88 | -9.68 | 33.20 | 40.00 | -6.80 | QP | | | |
| 2 | 99.1796 | 52.09 | -14.40 | 37.69 | 43.50 | -5.81 | QP | | | |
| 3 | 101.2883 | 50.00 | -14.33 | 35.67 | 43.50 | -7.83 | QP | | | |

## Figure 21: Test figure of spurious emissions, mode A.3, Horizontal polarity (1GHz –18GHz)

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: LGW2015 #2943 | Polarization: Horizontal |
| Standard: FCC Class B 3M Radiated | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2449MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2449.000 | 105.00 | -7.33 | 97.67 | / | / | peak | | | |
| 2 | 4898.033 | 50.25 | 0.22 | 50.47 | 74.00 | -23.53 | peak | | | |
| 3 | 4898.033 | 44.15 | 0.22 | 44.37 | 54.00 | -9.63 | AVG | | | |

## Figure 22: Test figure of spurious emissions, mode A.3, Vertical polarity (1GHz – 18GHz)

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**ACCURATE TECHNOLOGY CO., LTD.**
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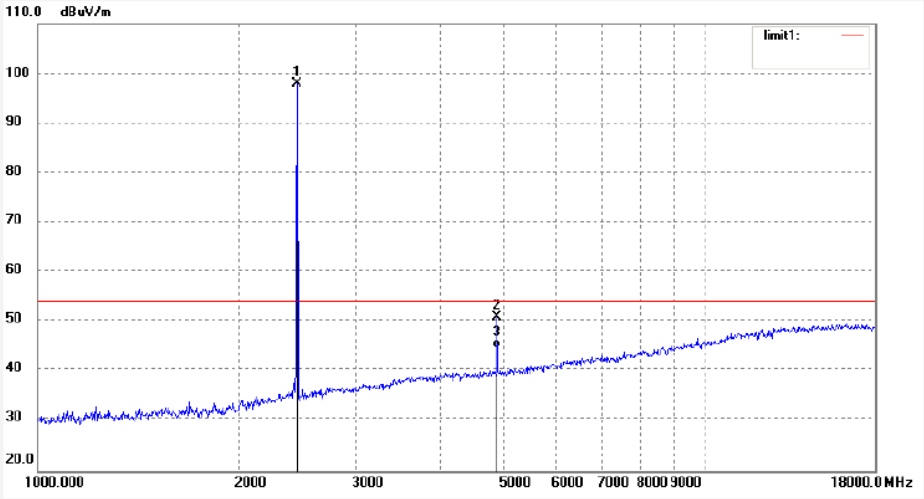
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: LGW2015 #2942 | Polarization: Vertical |
| Standard: FCC Class B 3M Radiated | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2449MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2449.000 | 105.21 | -7.33 | 97.88 | / | / | peak | | | |
| 2 | 4898.024 | 50.62 | 0.22 | 50.84 | 74.00 | -23.16 | peak | | | |
| 3 | 4898.024 | 44.45 | 0.22 | 44.67 | 54.00 | -9.33 | AVG | | | |

## Figure 23: Test figure of spurious emissions, mode A.3, Horizontal polarity (18GHz –25GHz)

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**ACCURATE TECHNOLOGY CO., LTD.**
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Science & Industry Park,Nanshan Shenzhen,P.R.China
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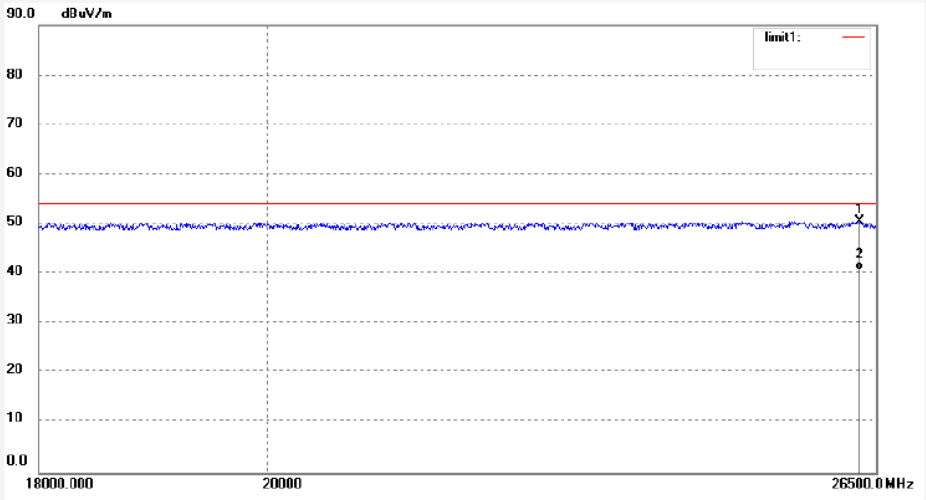
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: LGW2015 #2952 | Polarization: Horizontal |
| Standard: FCC Class B 3M Radiated | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2449MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 26295.801 | 34.04 | 16.50 | 50.54 | 74.00 | -23.46 | peak | | | |
| 2 | 26295.801 | 24.06 | 16.50 | 40.56 | 54.00 | -13.44 | AVG | | | |

**Figure 24: Test figure of spurious emissions, mode A.3, Vertical polarity (18GHz – 25GHz)**

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ACCURATE TECHNOLOGY CO., LTD.
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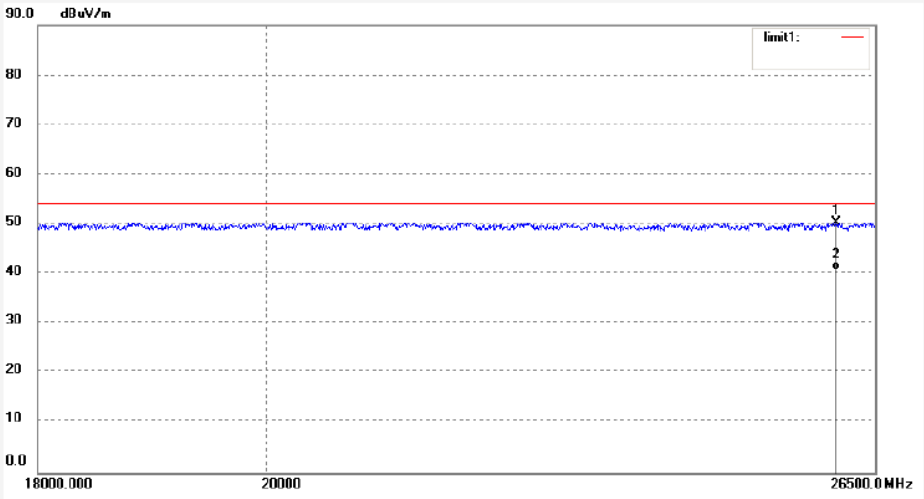
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: LGW2015 #2953 | Polarization: Vertical |
| Standard: FCC Class B 3M Radiated | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2449MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 26032.693 | 33.06 | 17.21 | 50.27 | 74.00 | -23.73 | peak | | | |
| 2 | 26032.693 | 23.31 | 17.21 | 40.52 | 54.00 | -13.48 | AVG | | | |

**Figure 25: Test figure of Radiated emissions in restricted bands, Mode A.1, Horizontal**

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**ACCURATE TECHNOLOGY CO., LTD.**
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Science & Industry Park,Nanshan Shenzhen,P.R.China
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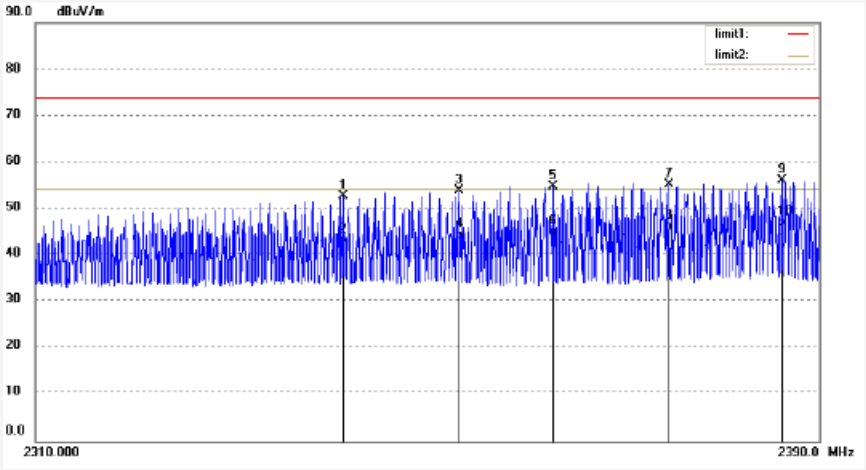
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: LGW2015 #2944 | Polarization: Horizontal |
| Standard: FCC (Band Edge) | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2435MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2341.040 | 60.58 | -7.79 | 52.79 | 74.00 | -21.21 | peak | | | |
| 2 | 2341.040 | 50.13 | -7.79 | 42.34 | 54.00 | -11.66 | AVG | | | |
| 3 | 2352.880 | 61.60 | -7.77 | 53.83 | 74.00 | -20.17 | peak | | | |
| 4 | 2352.880 | 51.34 | -7.77 | 43.57 | 54.00 | -10.43 | AVG | | | |
| 5 | 2362.640 | 62.49 | -7.71 | 54.78 | 74.00 | -19.22 | peak | | | |
| 6 | 2362.640 | 51.93 | -7.71 | 44.22 | 54.00 | -9.78 | AVG | | | |
| 7 | 2374.480 | 62.93 | -7.63 | 55.30 | 74.00 | -18.70 | peak | | | |
| 8 | 2374.480 | 52.96 | -7.63 | 45.33 | 54.00 | -8.67 | AVG | | | |
| 9 | 2386.240 | 63.62 | -7.55 | 56.07 | 74.00 | -17.93 | peak | | | |
| 10 | 2386.240 | 53.75 | -7.55 | 46.20 | 54.00 | -7.80 | AVG | | | |

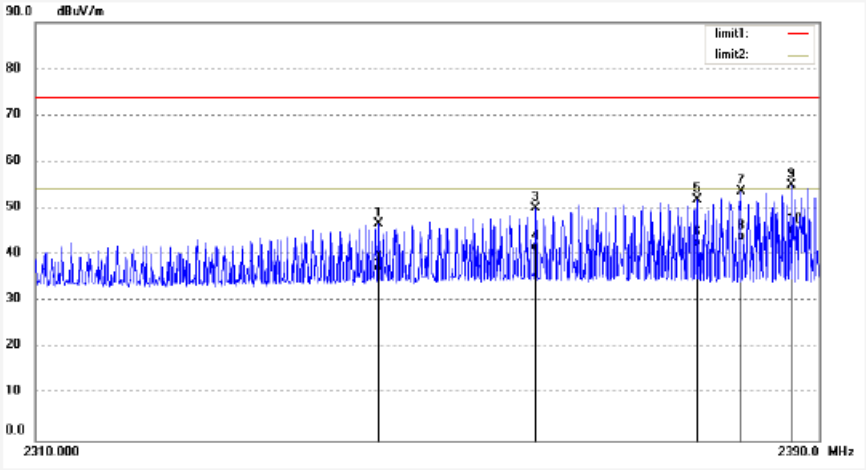
## Figure 26: Test figure of Radiated emissions in restricted bands, Mode A.1, Vertical

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: LGW2015 #2945 | Polarization: Vertical |
| Standard: FCC (Band Edge) | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2435MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2344.720 | 54.59 | -7.79 | 46.80 | 74.00 | -27.20 | peak | | | |
| 2 | 2344.720 | 44.04 | -7.79 | 36.25 | 54.00 | -17.75 | AVG | | | |
| 3 | 2360.800 | 57.74 | -7.72 | 50.02 | 74.00 | -23.98 | peak | | | |
| 4 | 2360.800 | 48.50 | -7.72 | 40.78 | 54.00 | -13.22 | AVG | | | |
| 5 | 2377.440 | 59.41 | -7.61 | 51.80 | 74.00 | -22.20 | peak | | | |
| 6 | 2377.440 | 49.39 | -7.61 | 41.78 | 54.00 | -12.22 | AVG | | | |
| 7 | 2381.920 | 61.26 | -7.58 | 53.68 | 74.00 | -20.32 | peak | | | |
| 8 | 2381.920 | 50.68 | -7.58 | 43.10 | 54.00 | -10.90 | AVG | | | |
| 9 | 2387.200 | 62.45 | -7.54 | 54.91 | 74.00 | -19.09 | peak | | | |
| 10 | 2387.200 | 51.91 | -7.54 | 44.37 | 54.00 | -9.63 | AVG | | | |

## Figure 27: Test figure of Radiated emissions in restricted bands, Mode A.3, Horizontal

ATC®
ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
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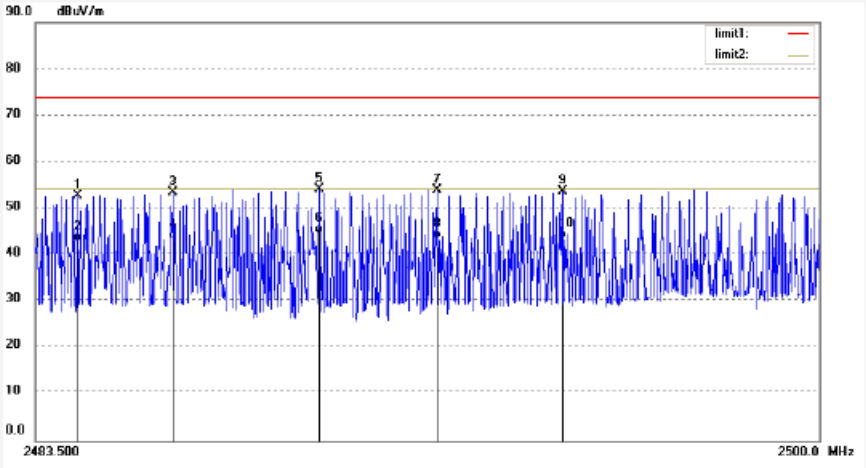
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

| | |
|---|---|
| Job No.: LGW2015 #2947 | Polarization: Horizontal |
| Standard: FCC (Band Edge) | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2449MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:




| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2484.391 | 60.24 | -7.38 | 52.86 | 74.00 | -21.14 | peak | | | |
| 2 | 2484.391 | 50.17 | -7.38 | 42.79 | 54.00 | -11.21 | AVG | | | |
| 3 | 2486.387 | 60.77 | -7.39 | 53.38 | 74.00 | -20.62 | peak | | | |
| 4 | 2486.387 | 50.74 | -7.39 | 43.35 | 54.00 | -10.65 | AVG | | | |
| 5 | 2489.473 | 61.47 | -7.39 | 54.08 | 74.00 | -19.92 | peak | | | |
| 6 | 2489.473 | 52.06 | -7.39 | 44.67 | 54.00 | -9.33 | AVG | | | |
| 7 | 2491.965 | 61.31 | -7.39 | 53.92 | 74.00 | -20.08 | peak | | | |
| 8 | 2491.965 | 50.94 | -7.39 | 43.55 | 54.00 | -10.45 | AVG | | | |
| 9 | 2494.604 | 61.03 | -7.39 | 53.64 | 74.00 | -20.36 | peak | | | |
| 10 | 2494.604 | 51.04 | -7.39 | 43.65 | 54.00 | -10.35 | AVG | | | |

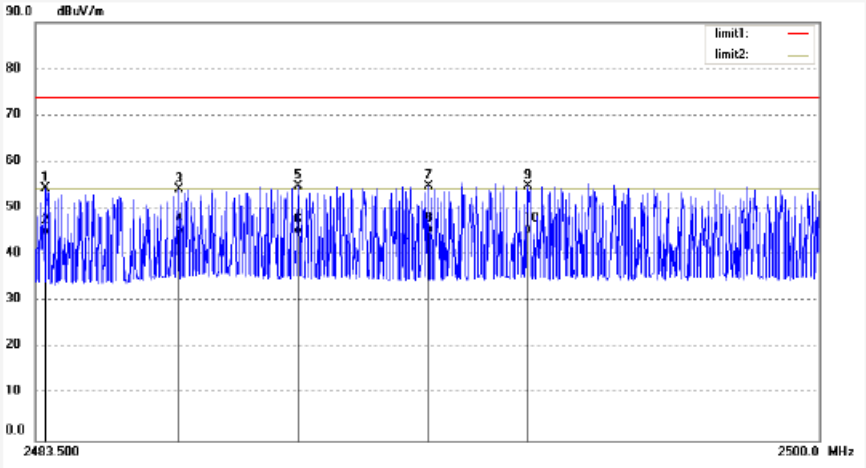
## Figure 28: Test figure of Radiated emissions in restricted bands, Mode A.3, Vertical

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

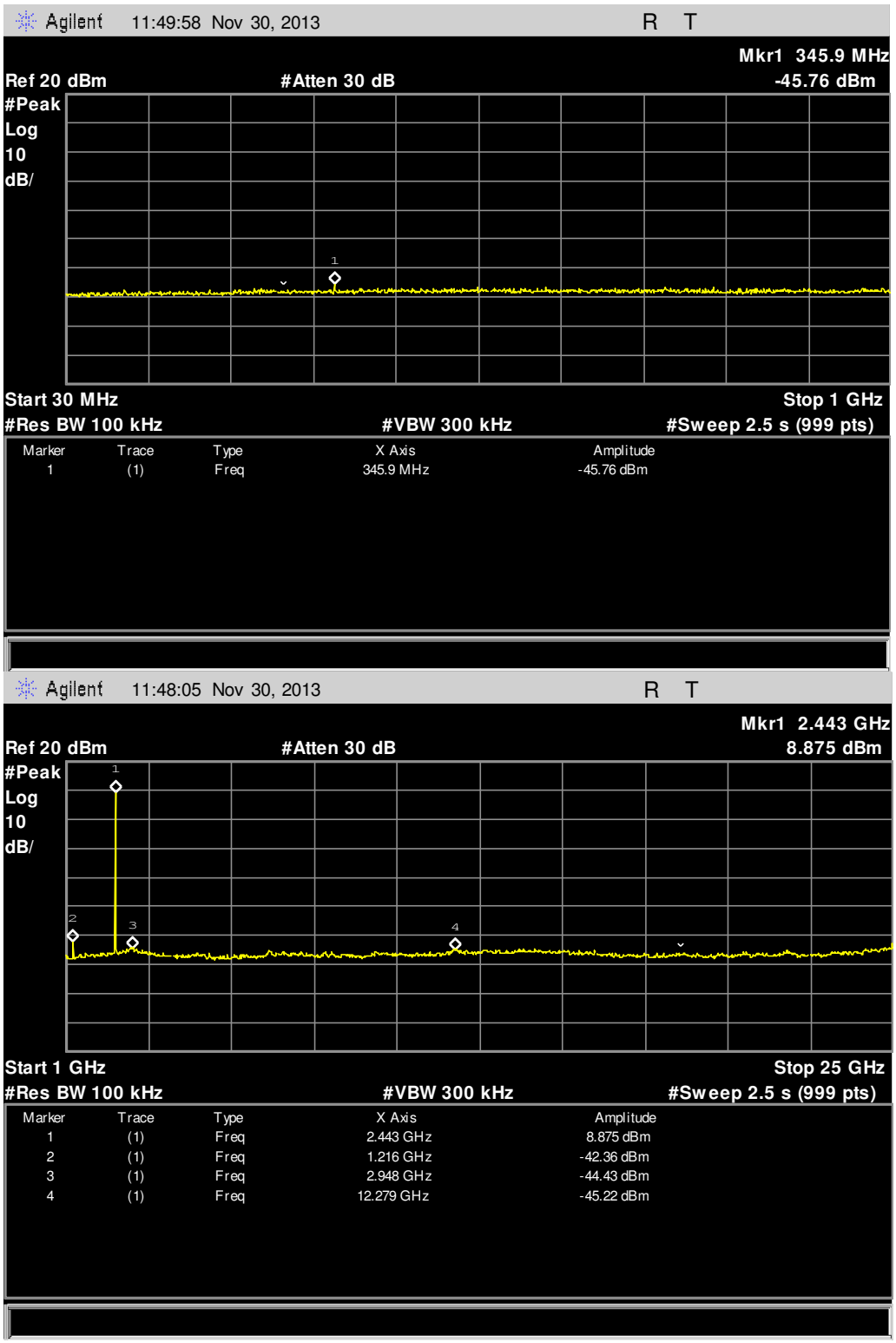
| | |
|---|---|
| Job No.: LGW2015 #2946 | Polarization: Vertical |
| Standard: FCC (Band Edge) | Power Source: AC 120V/60Hz |
| Test item: Radiation Test | Date: 16/09/21/ |
| Temp.( C)/Hum.(%) 23 C / 48 % | Time: |
| EUT: ARB Monitor | Engineer Signature: LGWADE |
| Mode: TX 2449MHz | Distance: 3m |
| Model: 10900026 | |
| Manufacturer: Mobicool | |

Note:

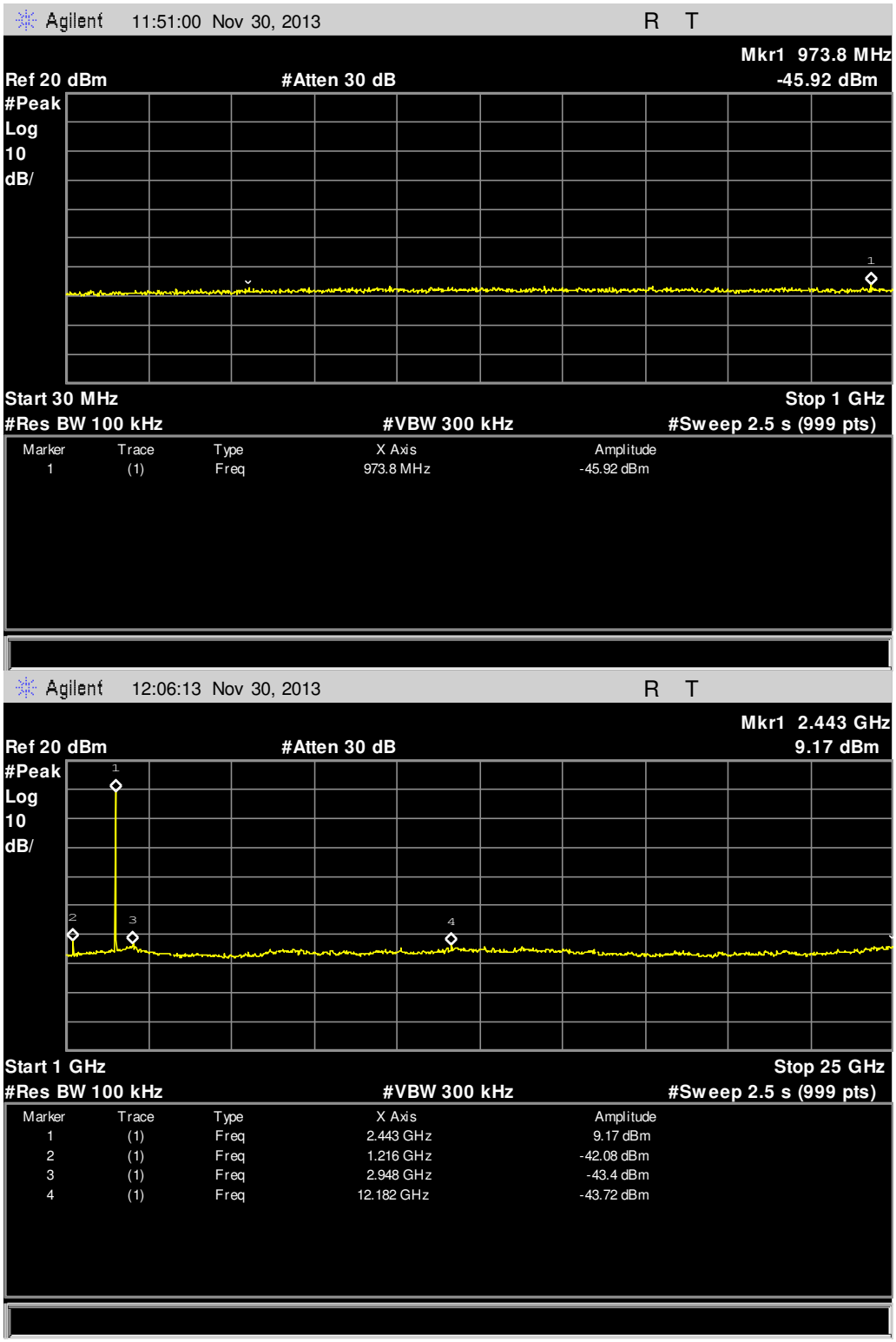



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2483.715 | 61.74 | -7.37 | 54.37 | 74.00 | -19.63 | peak | | | |
| 2 | 2483.715 | 51.54 | -7.37 | 44.17 | 54.00 | -9.83 | AVG | | | |
| 3 | 2486.519 | 61.40 | -7.39 | 54.01 | 74.00 | -19.99 | peak | | | |
| 4 | 2486.519 | 51.74 | -7.39 | 44.35 | 54.00 | -9.65 | AVG | | | |
| 5 | 2489.028 | 62.12 | -7.39 | 54.73 | 74.00 | -19.27 | peak | | | |
| 6 | 2489.028 | 51.74 | -7.39 | 44.35 | 54.00 | -9.65 | AVG | | | |
| 7 | 2491.783 | 62.18 | -7.39 | 54.79 | 74.00 | -19.21 | peak | | | |
| 8 | 2491.783 | 52.06 | -7.39 | 44.67 | 54.00 | -9.33 | AVG | | | |
| 9 | 2493.862 | 62.27 | -7.40 | 54.87 | 74.00 | -19.13 | peak | | | |
| 10 | 2493.862 | 52.10 | -7.40 | 44.70 | 54.00 | -9.30 | AVG | | | |

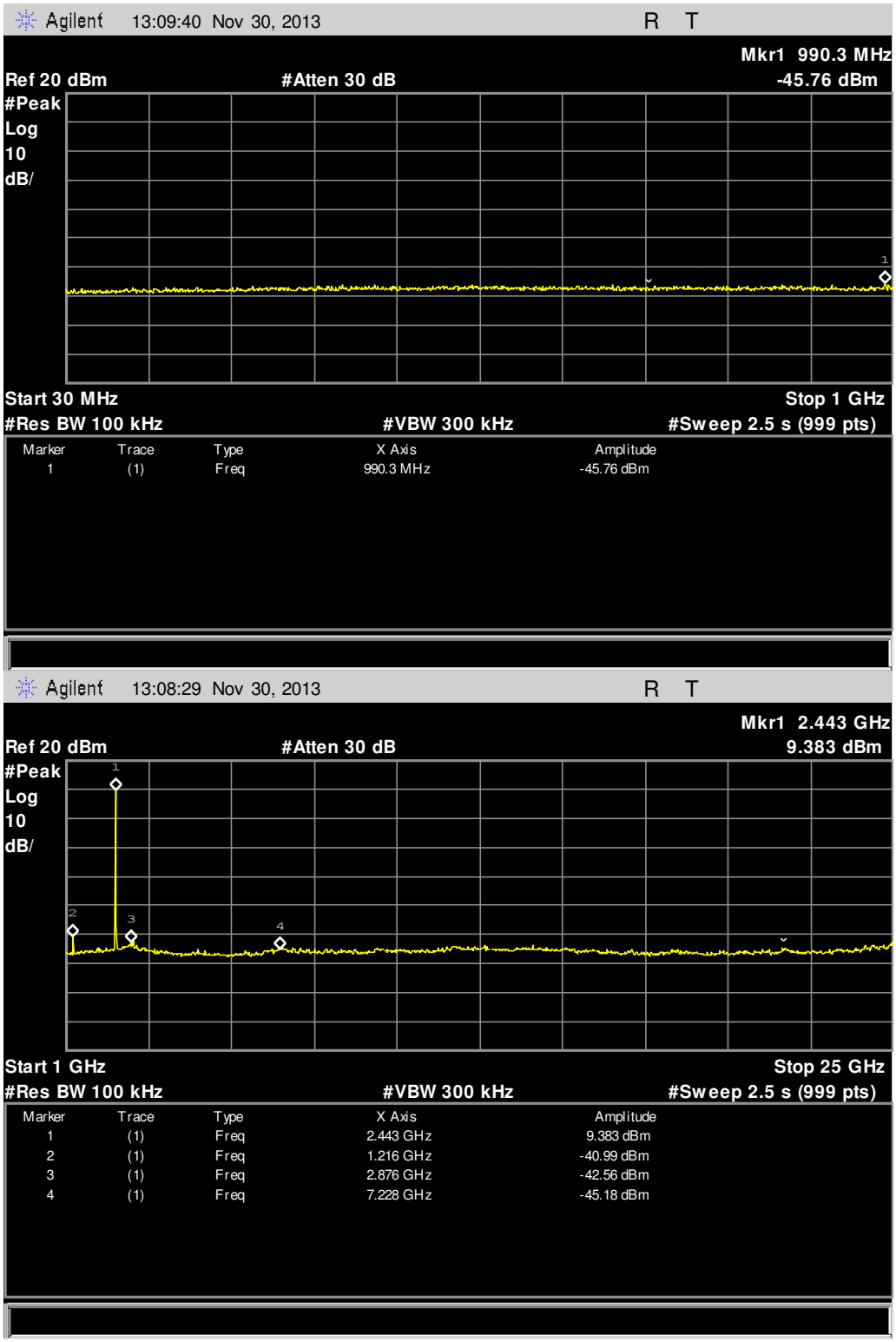
## Figure 29: Test figure of conducted emissions in 100kHz Bandwidth, Mode A.1



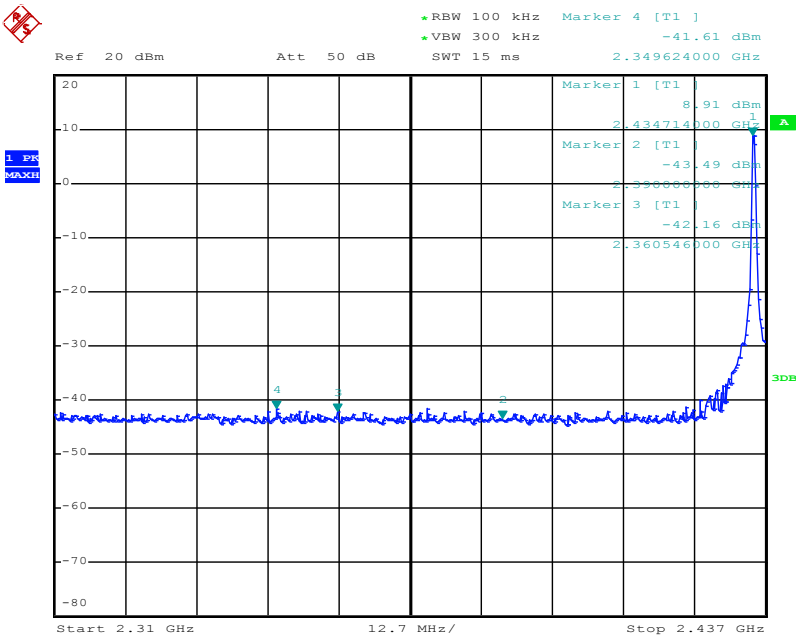
## Figure 30: Test figure of conducted emissions in 100kHz Bandwidth, Mode A.2



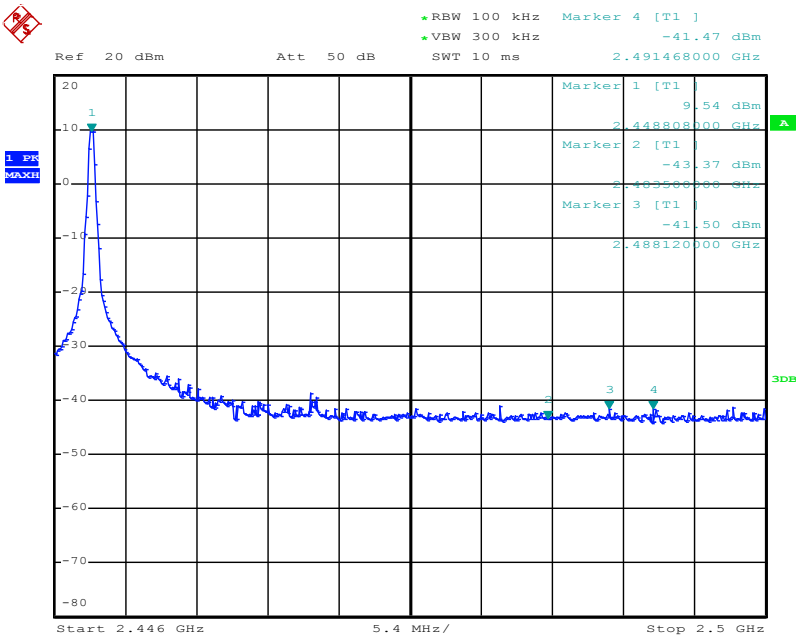
## Figure 31: Test figure of conducted emissions in 100kHz Bandwidth, Mode A.3



## Figure 32: Test figure of Frequency Band Edge in 100kHz Bandwidth, Mode A.1




## Figure 33: Test figure of Frequency Band Edge in 100kHz Bandwidth, Mode A.3



## Figure 34: Test figure of Conducted emissions, Mode C, line live

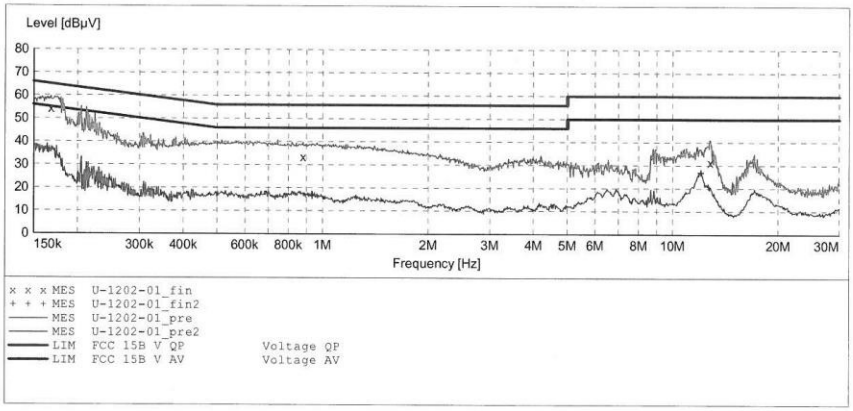
***ACCURATE TECHNOLOGY CO.,LTD***

***CONDUCTED EMISSION STANDARD FCC PART 15 B***

```
EUT:
Manufacturer:          Mobicool
Operating Condition:   Transmitting
Test Site:             1#Shielding Room
Operator:              LAN
Test Specification:    L 120V/60Hz
Comment:               Mains Port
Start of Test:         30/6/2016 / 11:47:18AM
```

***SCAN TABLE: "V 150K-30MHz fin"***

```
Short Description:                 _SUB_STD_VTERM2 1.70
Start      Stop       Step       Detector   Meas.     IF       Transducer
Frequency  Frequency  Width                 Time      Bandw.
150.0 kHz  30.0 MHz   4.5 kHz    QuasiPeak  1.0 s     9 kHz    NSLK8126 2008
                                 Average
```




***MEASUREMENT RESULT: "U-1202-01_fin"***

30/6/2016 11:49AM

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE |
|---|---|---|---|---|---|---|---|
| 0.167739 | 54.30 | 10.5 | 65 | 10.8 | QP | L1 | GND |
| 0.879278 | 33.40 | 10.8 | 56 | 22.6 | QP | L1 | GND |
| 12.806998 | 31.40 | 11.3 | 60 | 28.6 | QP | L1 | GND |

***MEASUREMENT RESULT: "U-1202-01_fin2"***

30/6/2016 11:49AM

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE |
|---|---|---|---|---|---|---|---|
| 0.163769 | 36.50 | 10.5 | 55 | 18.8 | AV | L1 | GND |
| 0.933537 | 16.40 | 10.8 | 46 | 29.6 | AV | L1 | GND |
| 12.014561 | 26.80 | 11.3 | 50 | 23.2 | AV | L1 | GND |

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## Figure 35: Test figure of Conducted emissions, Mode C, line neutral

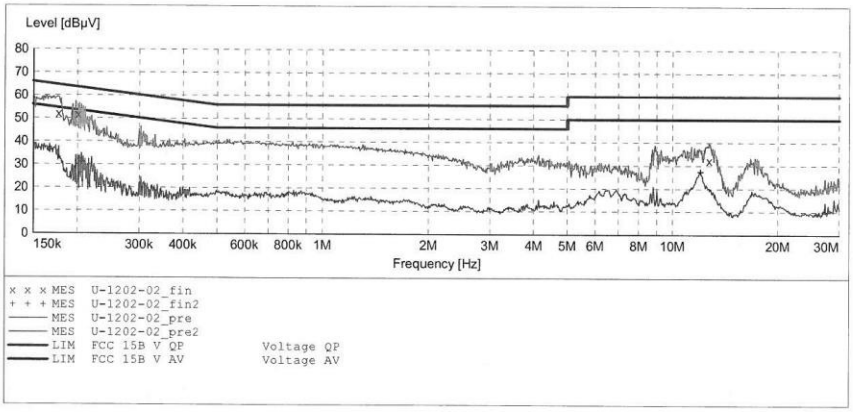
***ACCURATE TECHNOLOGY CO.,LTD***

***CONDUCTED EMISSION STANDARD FCC PART 15 B***

```
EUT:
Manufacturer:         Mobicool
Operating Condition:  Transmitting
Test Site:            1#Shielding Room
Operator:             LAN
Test Specification:   N 120V/60Hz
Comment:              Mains Port
Start of Test:        30/6/2016 / 11:50:31AM
```

***SCAN TABLE: "V 150K-30MHz fin"***

```
Short Description:                    _SUB_STD_VTERM2 1.70
Start      Stop       Step       Detector   Meas.     IF       Transducer
Frequency  Frequency  Width                 Time      Bandw.
150.0 kHz  30.0 MHz   4.5 kHz    QuasiPeak  1.0 s     9 kHz    NSLK8126 2008
                                 Average
```




***MEASUREMENT RESULT: "U-1202-02_fin"***

30/6/2016 11:52AM

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE |
|---|---|---|---|---|---|---|---|
| 0.176674 | 52.10 | 10.5 | 65 | 12.5 | QP | N | GND |
| 0.200748 | 51.70 | 10.5 | 64 | 11.9 | QP | N | GND |
| 12.705153 | 32.30 | 11.3 | 60 | 27.7 | QP | N | GND |

***MEASUREMENT RESULT: "U-1202-02_fin2"***

30/6/2016 11:52AM

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE |
|---|---|---|---|---|---|---|---|
| 0.166406 | 36.20 | 10.5 | 55 | 18.9 | AV | N | GND |
| 0.204796 | 31.00 | 10.5 | 53 | 22.4 | AV | N | GND |
| 12.014561 | 27.30 | 11.3 | 50 | 22.7 | AV | N | GND |