

Prüfbericht-Nr.: Auftrags-Nr.: Seite 1 von 25 50061773 001 164067052 Test Report No.: Order No.: Page 1 of 25

Kunden-Referenz-Nr.: Auftragsdatum: N/A 22.06.2016

Client Reference No.: Order date:

Auftraggeber: ARB Corporation Ltd.

Client: 42-44 Garden St, Kilsyth, Victoria 3137, Australia

Prüfgegenstand: ARB Fridge Freezer

Test item:

Bezeichnung / Typ-Nr.: 10800010, 10800020, 10800030, 10800040

Identification / Type No.:

Auftrags-Inhalt: FCC Certification and Verification

Order content:

CFR47 FCC Part 15: Subpart C Section 15.247 Prüfgrundlage: CFR47 FCC Part 15: Subpart C Section 15.207 Test specification:

CFR47 FCC Part 15: Subpart C Section 15.209

FCC KDB Publication 447498 v06

CFR47 FCC Part 15: Subpart B Section 15.107 CFR47 FCC Part 15: Subpart B Section 15.109

RSS-247 Issue 1 May 2015 RSS-102 Issue 5 March 2015 RSS-Gen Issue 4 November 2014

Wareneingangsdatum: 27.06.2017

Date of receipt:

Prüfmuster-Nr.: N/A Test sample No.:

Prüfzeitraum: 29.06.2016 - 21.09.2016

Testing period:

Ort der Prüfung: Shenzhen Accurate Place of testing: Technology Co., Ltd.

Prüflaboratorium: TÜV Rheinland (Shenzhen)

Testing laboratory: Co., Ltd.

Prüfergebnis*: **Pass** Test result*:

geprüft von / tested by:

11.09.2016 Owen Tian / Senior Project Manager

Name / Stellung Datum Unterschrift Date

kontrolliert von / reviewed by:

10.11.2016 Winnie Hou / Technical Čertifier

Datum Name / Stellung Unterschrift Name / Position Signature Date Name / Position Sianature

Sonstiges / Other.

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

as

Legende: 3 = befriedigend 1 = sehr gut 2 = gut 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 2 = good3 = satisfactory 4 = sufficient Legend: 1 = very good 5 = poorF(ail) = failed a.m. test specification(s) P(ass) = passed a.m. test specification(s) N/A = not applicable N/T = not tested

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.

This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.



 Prüfbericht - Nr.:
 50061773 001
 Seite 2 von 25

 Test Report No.
 Page 2 of 25

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



 Prüfbericht - Nr.:
 50061773 001
 Seite 3 von 25

 Test Report No.
 Page 3 of 25

Contents 1. GENERAL REMARKS4 1.1 COMPLEMENTARY MATERIALS4 2. Test Sites4 2.1 TEST FACILITIES4 2.2 2.3 Traceability......6 2.4 CALIBRATION6 2.5 2.6 LOCATION OF ORIGINAL DATA......6 2.7 STATUS OF FACILITY USED FOR TESTING......6 3. GENERAL PRODUCT INFORMATION7 3.1 FOR DETAILS REFER TO THE USER MANUAL AND CIRCUIT DIAGRAM. RATINGS AND SYSTEM 3.2 INDEPENDENT OPERATION MODES8 3.3 3.4 3.5 SUBMITTED DOCUMENTS8 4. TEST SET-UP AND OPERATION MODES9 4.1 4.2 TEST OPERATION AND TEST SOFTWARE9 4.3 4.4 4.5 5. 5.1 TRANSMITTER REQUIREMENT & TEST SUITES12 5.1.1 5.1.2 5.1.3 5.1.4 5.1.5 5.1.6 5.1.7 5.1.8 5.1.9 5.1.10 Conducted emissions 21 PHOTOGRAPHS OF THE TEST SET-UP22 6. 7. LIST OF TABLES25 8. LIST OF PHOTOGRAPHS25

 Prüfbericht - Nr.:
 50061773 001
 Seite 4 von 25

 Test Report No.
 Page 4 of 25

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.

Prüfbericht - Nr.: 50061773 001

Test Report No.

Seite 5 von 25 *Page 5 of 25*

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Kind of Equipment	Manufacturer	Туре	S/N	Calibrated until	
Spurious emission	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 Te	est				
Spectrum Analyzer	Rohde & Schwarz	ESPI3	100396/003	2017-01-09	
Spectrum Analyzer	Agilent	E7405A	MY45115511	2017-01-09	
Conducted Emissi	on				
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	



 Prüfbericht - Nr.:
 50061773 001
 Seite 6 von 25

 Test Report No.
 Page 6 of 25

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 ± 3 dB.

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.

 Prüfbericht - Nr.:
 50061773 001
 Seite 7 von 25

 Test Report No.
 Page 7 of 25

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

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



Prüfbericht - Nr.: 50061773 001

Test Report No.

Seite 8 von 25 Page 8 of 25

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	-20°C to +55°C
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



 Prüfbericht - Nr.:
 50061773 001
 Seite 9 von 25

 Test Report No.
 Page 9 of 25

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.



 Prüfbericht - Nr.:
 50061773 001
 Seite 10 von 25

 Test Report No.
 Page 10 of 25

4.5 Test Setup Diagram

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

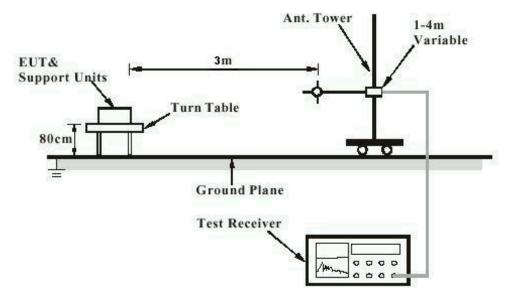
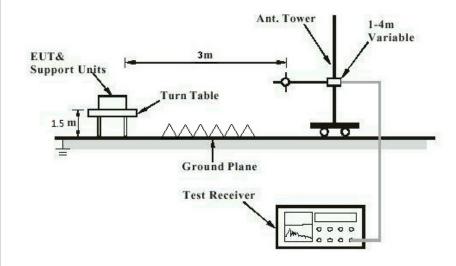


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)





Prüfbericht - Nr.:

Test Report No.

50061773 001

Seite 11 von 25 *Page 11 of 25*

Diagram of Measurement Equipment Configuration for Mains Conduction Measurement

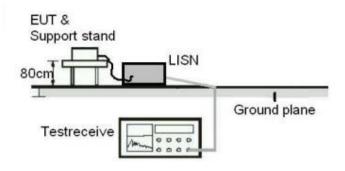
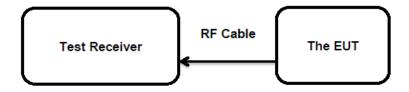


Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement





> 50061773 001 Seite 12 von 25 Prüfbericht - Nr.: Page 12 of 25

Test Report No.

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

RSS-Gen 6.7

the use of antennas with directional gains that do Limit

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.



Prüfbericht - Nr.: 50061773 001

Test Report No.

Seite 13 von 25 *Page 13 of 25*

5.1.2 Peak Output Power

RESULT: Passed

Test date : 2016-06-29

Test standard : FCC Part 15.247(b)(1)

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

Table 4: Test result of Peak Output Power

Channel	Channel Frequency	Peak Output Power L		Limit
	(MHz)	(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



50061773 001 Seite 14 von 25 Prüfbericht - Nr.: Page 14 of 25

Test Report No.

5.1.3 99% Bandwidth

RESULT: Passed

Date of testing 2016-06-29

Test standard RSS-Gen clause 6.6 Basic standard Kind of test site ANSI C63.10: 2013 Shielded room

Test setup

Test Channel Low/ Middle/ High

Operation Mode :
Ambient temperature :
Relative humidity :
Atmospheric pressure : **25**℃ 55% 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



Seite 15 von 25 50061773 001 Prüfbericht - Nr.: Page 15 of 25

Test Report No.

5.1.4 Conducted spurious emissions measured in 100kHz **Bandwidth**

RESULT: Passed

2016-06-29 Date of testing

Test standard FCC part 15.247(d)

RSS-247 Clause 5.5

Basic standard ANSI C63.10: 2013

20dB (below that in the 100kHz bandwidth within Limit

the band that contains the highest level of the

desired power);

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 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.



Prüfbericht - Nr.: 50061773 001 Seite 16 von 25

Test Report No.

Page 16 of 25

5.1.5 Spurious Emission

RESULT: Passed

Date of testing : 2016-09-21

Test standard : FCC part 15.247(d)

FCC Part 15.205 RSS-247 Clause 3.3

Basic standard : ANSI C63.10: 2013

Limits : Refer to 15.209(a) of FCC part 15.247(d)

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°C
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.



50061773 001 Seite 17 von 25 Prüfbericht - Nr.: Page 17 of 25

Test Report No.

5.1.6 20dB Bandwidth

RESULT: Passed

Date of testing 2016-06-29

Test standard FCC Part 15.247(a)(1)

RSS-247 Clause 5.1(1)

Basic standard Kind of test site ANSI C63.10: 2013 Shielded room

Test setup

Low/ Middle/ High

Test Channel :
Operation Mode :
Ambient temperature :
Relative humidity :
Atmospheric pressure : 25℃ 55% 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



Prüfbericht - Nr.: 50061773 001 Seite 18 von 25

Test Report No.

Page 18 of 25

5.1.7 Frequency Separation

RESULT: Passed

Date of testing : 2016-06-29

Test standard : FCC part 15.247(a)(1)

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

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	Pass
Adjacency Channel	2436	ı	20dB bandwidth	1 433
Mid Channel	2441	4	≥ 25kHz or 2/3 of	Pass
Adjacency Channel	2442	ľ	20dB bandwidth	F a 5 5
High Channel	2448	4	≥ 25kHz or 2/3 of	Pass
Adjacency Channel	2449	l l	20dB bandwidth	rass



Seite 19 von 25 Prüfbericht - Nr.: 50061773 001 Page 19 of 25

Test Report No.

5.1.8 Number of hopping frequency

RESULT: Passed

Date of testing 2016-06-29

Test standard FCC part 15.247(a)(1)(iii)

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 Ambient temperature : Relative humidity : Atmospheric pressure : **25**℃ 55% 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



50061773 001 Seite 20 von 25 Prüfbericht - Nr.: Page 20 of 25

Test Report No.

5.1.9 Time of Occupancy

RESULT: Passed

Date of testing 2016-06-29

Test standard FCC part 15.247(a)(1)(iii)

RSS-247 Clause5.1(4)

Basic standard ANSI C63.10: 2013

<0.4s Limits

Kind of test site Shield room

Test setup

Test Channel Low/ Middle/ High

Operation Mode Α 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



Prüfbericht - Nr.: 50061773 001

Test Report No.

Seite 21 von 25Page 21 of 25

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)

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)

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° C Relative humidity : 55% Atmospheric pressure : 101 kPa

For details refer to Appendix 1.



 Prüfbericht - Nr.:
 50061773 001
 Seite 22 von 25

 Test Report No.
 Page 22 of 25

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)

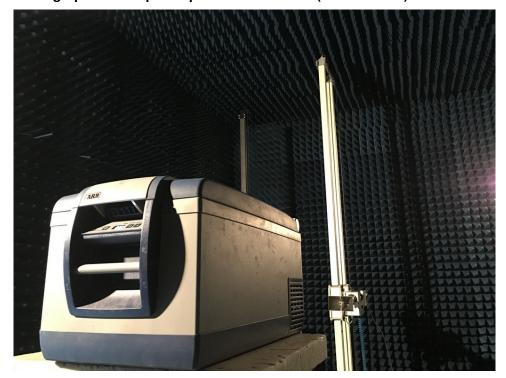


Prüfbericht - Nr.: 50061773 001

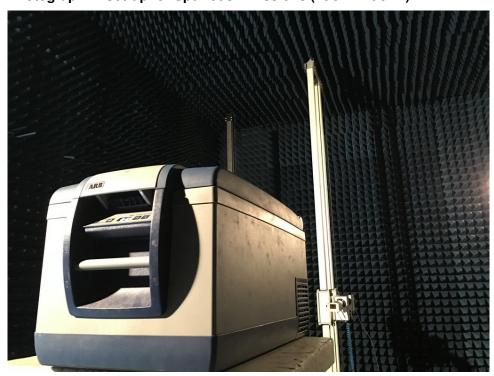
Test Report No.

Seite 23 von 25 *Page 23 of 25*

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



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





Prüfbericht - Nr.: 50061773 001
Test Report No.

1773 001 Seite 24 von 25 Page 24 of 25

Photograph 5: Set-up for Conducted Emissions





Prüfbericht - Nr.: 50061773 001
Test Report No.

Seite 25 von 25 *Page 25 of 25*

7. List of Tables

Table 1: List of Test and Measurement Equipment	5
Table 2: Rating of EUT	
Table 3: Technical Specification of EUT	
Table 4: Test result of Peak Output Power	13
Table 5: Test result of 99% Bandwidth	
Table 6: Test result of 20dB Bandwidth	
Table 7: Test result of Frequency Separation	18
Table 8: Test result of Number of hopping frequency	19
Table 9: Test result of Time of Occupancy	

8. List of Photographs

Photograph 1: Set-up for Spurious Emissions (9kHz-30MHz)	22
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	

TÜVRheinland®

Page 1 of 32

List of Figures

Figure 1: Test figure of spurious emissions, mode A.1, Horizontal polarity (9kHz – 30MHz),	2
Figure 2: Test figure of spurious emissions, mode A.1, Vertical polarity (9kHz - 30MHz)	2
Figure 3: Test figure of spurious emissions, mode A.1, Horizontal polarity (30MHz - 1GHz)	3
Figure 4: Test figure of spurious emissions, mode A.1, Vertical polarity (30MHz - 1GHz)	4
Figure 5: Test figure of spurious emissions, mode A.1, Horizontal polarity (1GHz -18GHz)	5
Figure 6: Test figure of spurious emissions, mode A.1, Vertical polarity (1GHz – 18GHz)	
Figure 7: Test figure of spurious emissions, mode A.1, Horizontal polarity (18GHz -25GHz)	
Figure 8: Test figure of spurious emissions, mode A.1, Vertical polarity (18GHz – 25GHz)	
Figure 9: Test figure of spurious emissions, mode A.2, Horizontal polarity (9kHz – 30MHz)	
Figure 10: Test figure of spurious emissions, mode A.2, Vertical polarity (9kHz - 30MHz)	
Figure 11: Test figure of spurious emissions, mode A.2, Horizontal polarity (30MHz – 1GHz)	
Figure 12: Test figure of spurious emissions, mode A.2, Vertical polarity (30MHz – 1GHz)	
Figure 13: Test figure of spurious emissions, mode A.2, Horizontal polarity (1GHz – 18GHz)	
Figure 14: Test figure of spurious emissions, mode A.2, Vertical polarity (1GHz – 18GHz)	
Figure 15: Test figure of spurious emissions, mode A.2, Horizontal polarity (18GHz – 25GHz)	
Figure 16: Test figure of spurious emissions, mode A.2, Vertical polarity (18GHz – 25GHz)	
Figure 17: Test figure of spurious emissions, mode A.3, Horizontal polarity (9kHz – 30MHz)	
Figure 18: Test figure of spurious emissions, mode A.3, Vertical polarity (9kHz – 30MHz)	
Figure 19: Test figure of spurious emissions, mode A.3, Horizontal polarity (30MHz – 1GHz)	
Figure 20: Test figure of spurious emissions, mode A.3, Vertical polarity (30MHz – 1GHz)	
Figure 21: Test figure of spurious emissions, mode A.3, Horizontal polarity (1GHz –18GHz)	
Figure 22: Test figure of spurious emissions, mode A.3, Vertical polarity (1GHz – 18GHz)	
Figure 23: Test figure of spurious emissions, mode A.3, Horizontal polarity (18GHz –25GHz)	
Figure 24: Test figure of spurious emissions, mode A.3, Vertical polarity (18GHz – 25GHz)	
Figure 25: Test figure of Radiated emissions in restricted bands, Mode A.1, Horizontal	
Figure 26: Test figure of Radiated emissions in restricted bands, Mode A.1, Vertical	
Figure 27: Test figure of Radiated emissions in restricted bands, Mode A.3, Horizontal	
Figure 28: Test figure of Radiated emissions in restricted bands, Mode A.3, Vertical	
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 36: Test figure of Conducted emissions, Mode C, line live	
Figure 37: Test figure of Conducted emissions, Mode C, line neutral	32

Page 2 of 32



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
 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

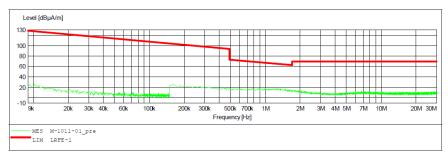
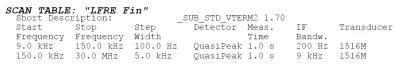


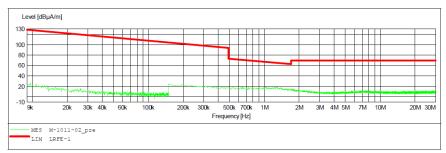
Figure 2: Test figure of spurious emissions, mode A.1, Vertical polarity (9kHz – 30MHz)

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





Page 3 of 32



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



ACCURATE TECHNOLOGY CO., LTD.

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

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

Site: 2# Chamber

Power Source: AC 120V/60Hz Date: 16/09/21/

Engineer Signature: LGWADE

Distance: 3m

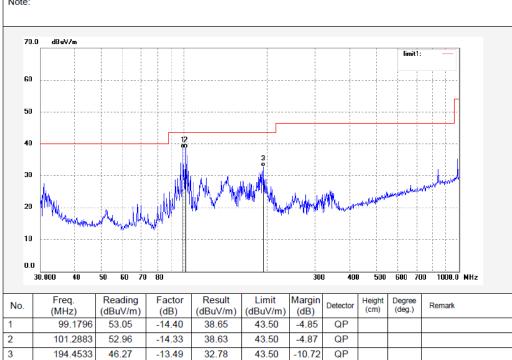
Test item: Radiation Test Temp.(C)/Hum.(%) 23 C / 48 % EUT: ARB Monitor

tuv2015 #3810

Standard: FCC Class B 3M Radiated

Mode: TX 2435MHz Model: 10900026 Manufacturer: Mobicool

Note:





Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Page 4 of 32

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



ACCURATE TECHNOLOGY CO., LTD.

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

Polarization: Vertical

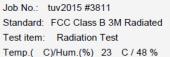
Power Source: AC 120V/60Hz

Date: 16/09/21/

Time:

Engineer Signature: LGWADE

Distance: 3m



EUT: ARB Monitor

Mode: TX 2435MHz Model: 10900026 Manufacturer: Mobicool

Note:

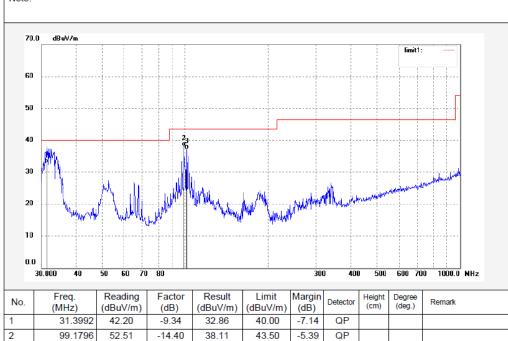
3

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

Polarization: Horizontal

Power Source: AC 120V/60Hz

Site: 2# Chamber

Tel:+86-0755-26503290

Date: 16/09/21/

Time:

Engineer Signature: LGWADE

Distance: 3m

Job No.: LGW2015 #2939 Standard: FCC Class B 3M Radiated Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: ARB Monitor Mode: TX 2435MHz

Model: 10900026 Manufacturer: Mobicool

Note:

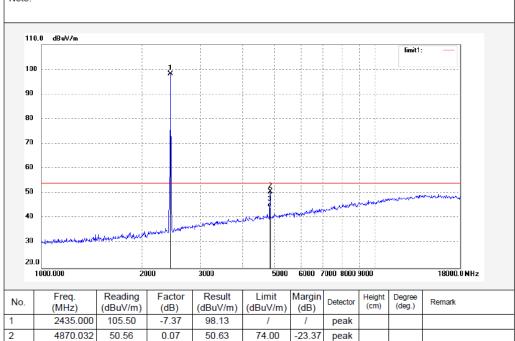
3

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)



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 #2938 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: ARB Monitor
Mode: TX 2435MHz

Model: 10900026 Manufacturer: Mobicool Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 16/09/21/ Time:

Engineer Signature: LGWADE

Distance: 3m

· 10900026

Note:

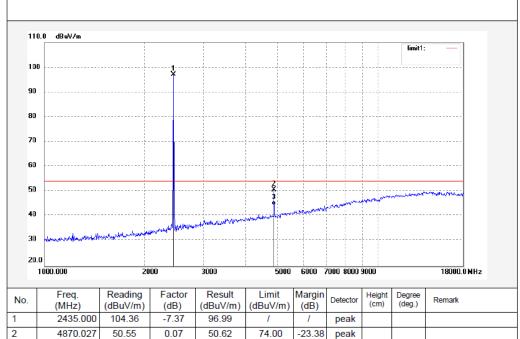
3

4870.027

44.27

0.07

44.34



54.00

-9.66

AVG

50061773 001 Page 7 of 32



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

ATC[®]

ACCURATE TECHNOLOGY CO., LTD.

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

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

Site: 2# Chamber

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 % EUT: ARB Monitor

Job No.: LGW2015 #2948

Mode: TX 2435MHz Model: 10900026 Manufacturer: Mobicool Polarization: Horizontal Power Source: AC 120V/60Hz

Date: 16/09/21/

Time:

Engineer Signature: LGWADE

Distance: 3m



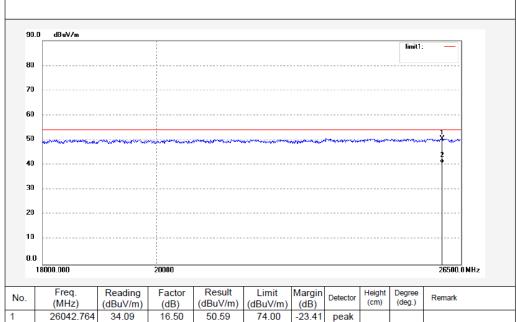
2

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)

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.: LGW2015 #2949 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 % EUT: ARB Monitor

Mode: TX 2435MHz

Model: 10900026 Manufacturer: Mobicool Polarization: Vertical

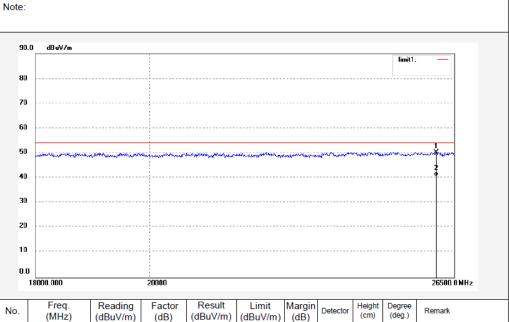
Power Source: AC 120V/60Hz

Date: 16/09/21/

Time:

Engineer Signature: LGWADE

Distance: 3m



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				

Page 9 of 32



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

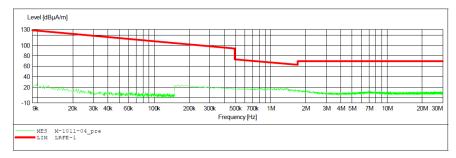
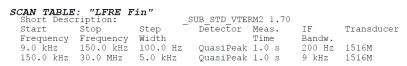


Figure 10: Test figure of spurious emissions, mode A.2, Vertical polarity (9kHz – 30MHz)

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



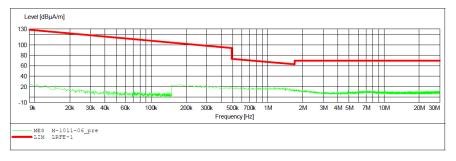




Figure 11: Test figure of spurious emissions, mode A.2, Horizontal polarity (30MHz – 1GHz)

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 #3813 Standard: FCC Class B 3M Radiated Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: ARB Monitor Mode: TX 2442MHz Model: 10900026 Date: 16/09/21/ Time:

Polarization: Horizontal

Engineer Signature: LGWADE

Power Source: AC 120V/60Hz

Distance: 3m

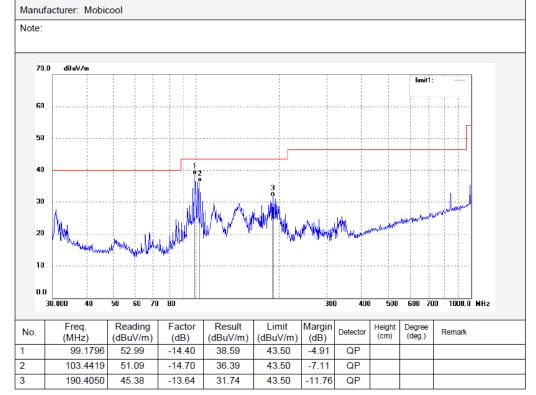




Figure 12: Test figure of spurious emissions, mode A.2, Vertical polarity (30MHz – 1GHz)

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 #3812 Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %

EUT: ARB Monitor Mode: TX 2442MHz

Model: 10900026 Manufacturer: Mobicool Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 16/09/21/ Time:

Engineer Signature: LGWADE

Distance: 3m



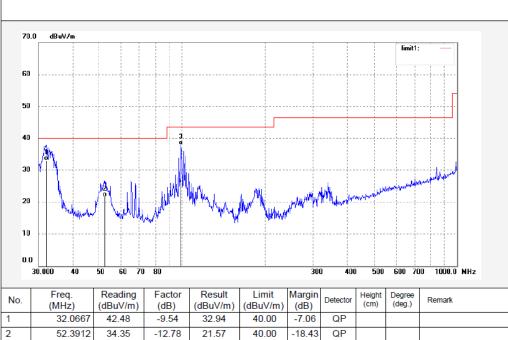
3

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)

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.: LGW2015 #2940 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 % EUT: ARB Monitor

Mode: TX 2442MHz
Model: 10900026

3

4884.034

45.23

0.15

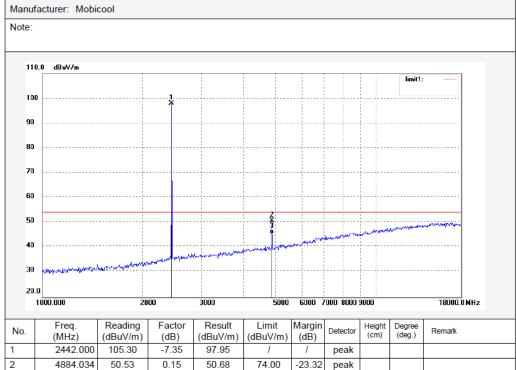
45.38

Polarization: Horizontal
Power Source: AC 120V/60Hz

Date: 16/09/21/ Time:

Engineer Signature: LGWADE

Distance: 3m



54.00

-8.62



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

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.: LGW2015 #2941 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: ARB Monitor Mode: TX 2442MHz Model: 10900026

2

3

4884.029

4884.029

50.03

45.22

0.15

0.15

50.18

45.37

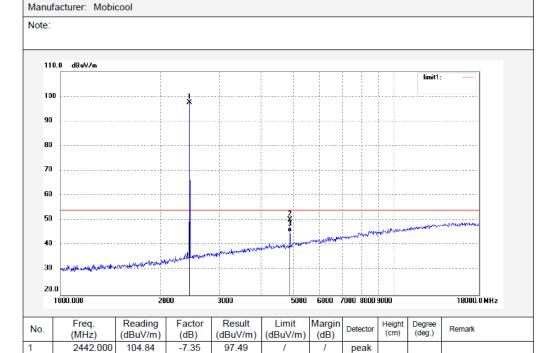
Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 16/09/21/ Time:

Engineer Signature: LGWADE

Distance: 3m



74.00

54.00

-23.82

-8.63

peak



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

ATC[®]

ACCURATE TECHNOLOGY CO., LTD.

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

eyuan Rd, Tel:+86-0755-26503290 n,P.R.China Fax:+86-0755-26503396 Polarization: Horizontal

Site: 2# Chamber

Job No.: LGW2015 #2951 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 % EUT: ARB Monitor

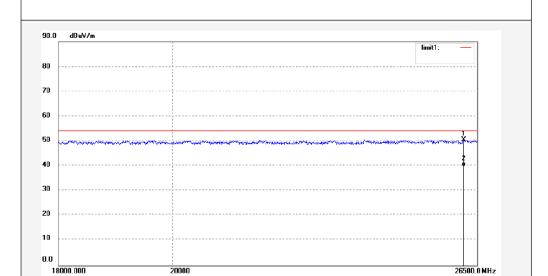
Mode: TX 2442MHz Model: 10900026 Time: Engineer Signature: LGWADE

Power Source: AC 120V/60Hz

Distance: 3m

Date: 16/09/21/

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			

Page 15 of 32



Site: 2# Chamber

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



ACCURATE TECHNOLOGY CO., LTD.

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

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

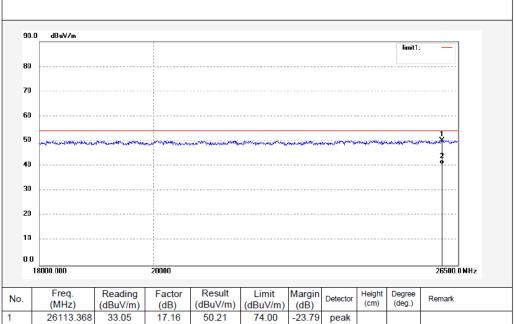
26113.368

23.56

17.16

40.72

Note:



54.00

-13.28

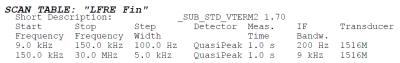


Figure 17: Test figure of spurious emissions, mode A.3, Horizontal polarity (9kHz – 30MHz)

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



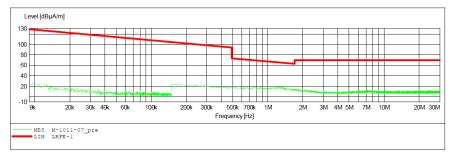
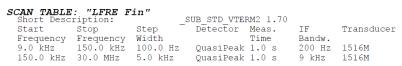


Figure 18: Test figure of spurious emissions, mode A.3, Vertical polarity (9kHz – 30MHz)

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



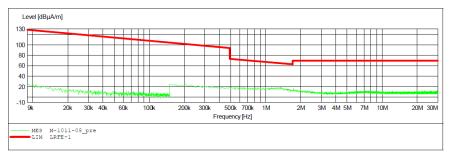




Figure 19: Test figure of spurious emissions, mode A.3, Horizontal polarity (30MHz - 1GHz)

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

tuv2015 #3814 Standard: FCC Class B 3M Radiated Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

ARB Monitor Mode: TX 2449MHz

10900026

Polarization: Horizontal Power Source: AC 120V/60Hz

Date: 16/09/21/ Time:

Engineer Signature: LGWADE

Distance: 3m

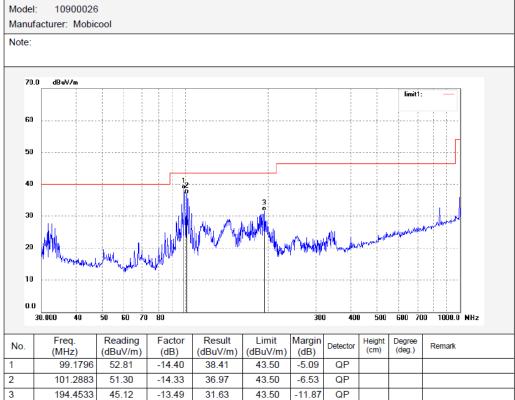




Figure 20: Test figure of spurious emissions, mode A.3, Vertical polarity (30MHz – 1GHz)

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 #3815 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: ARB Monitor
Mode: TX 2449MHz
Model: 10900026

Polarization: Vertical Power Source: AC 120V/60Hz

Date: 16/09/21/

Time:

Engineer Signature: LGWADE

Distance: 3m

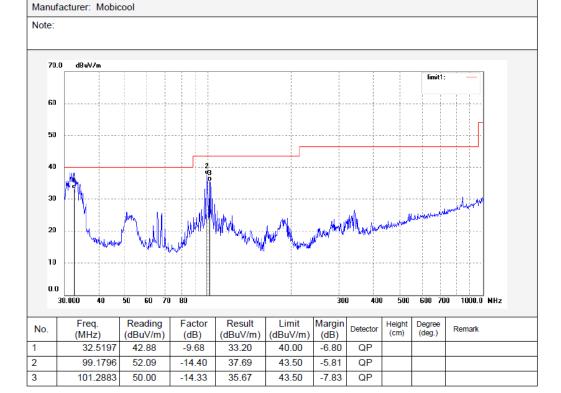




Figure 21: Test figure of spurious emissions, mode A.3, Horizontal polarity (1GHz –18GHz)

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.: LGW2015 #2943 Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %

EUT: ARB Monitor

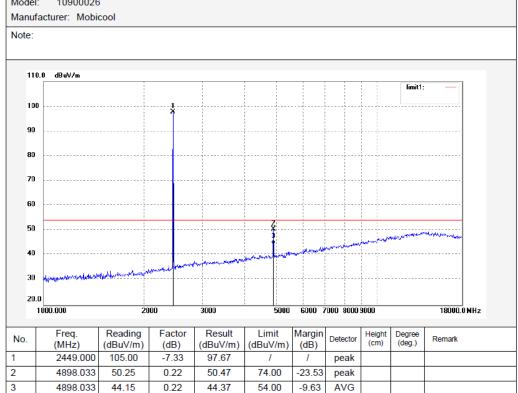
Mode: TX 2449MHz
Model: 10900026
Mapufacturer: Mobicool

Polarization: Horizontal
Power Source: AC 120V/60Hz

Date: 16/09/21/ Time:

Engineer Signature: LGWADE

Distance: 3m



50061773 001 Page 20 of 32



Figure 22: Test figure of spurious emissions, mode A.3, Vertical 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

LGW2015 #2942 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

ARB Monitor Mode: TX 2449MHz Model:

10900026

Power Source: AC 120V/60Hz Date: 16/09/21/

Polarization: Vertical

Engineer Signature: LGWADE

Distance: 3m

Time:

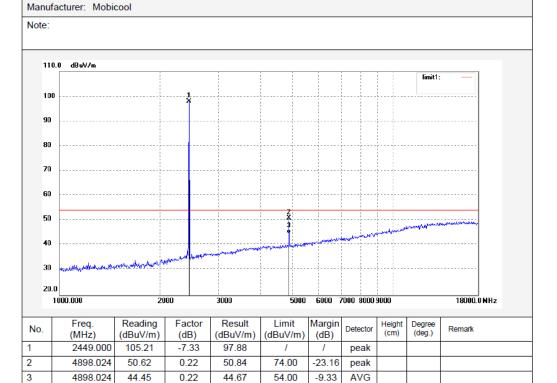




Figure 23: Test figure of spurious emissions, mode A.3, Horizontal polarity (18GHz –25GHz)

ATO

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 #2952 Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %

EUT: ARB Monitor Mode: TX 2449MHz

Model: 10900026 Manufacturer: Mobicool Polarization: Horizontal Power Source: AC 120V/60Hz

Date: 16/09/21/

Time:

Engineer Signature: LGWADE

Distance: 3m



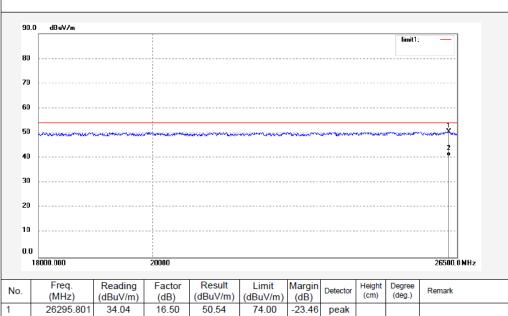
2

26295.801

24.06

16.50

40.56



54.00

-13.44

Page 22 of 32



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

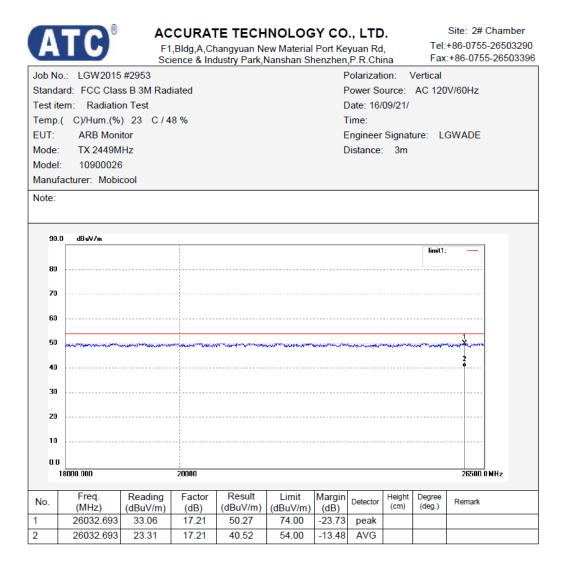


Figure 25: Test figure of Radiated emissions in restricted bands, Mode A.1, Horizontal

Produkte

Products



Page 23 of 32



ACCURATE TECHNOLOGY CO., LTD.

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

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

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

Job No.: LGW2015 #2944 Standard: FCC (Band Edge) Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: ARB Monitor

Mode: TX 2435MHz Model: 10900026 Manufacturer: Mobicool Polarization: Horizontal Power Source: AC 120V/60Hz

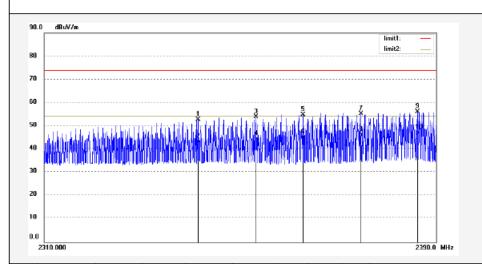
Date: 16/09/21/

Time:

Engineer Signature: LGWADE

Distance: 3m

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

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.: 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:

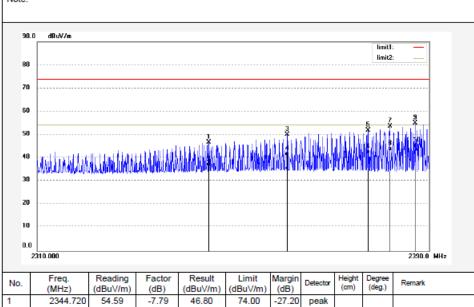
 EUT:
 ARB Monitor
 Engineer Signature:
 LGWADE

Mode: TX 2435MHz Distance: 3m

Model: 10900026

lote:

Manufacturer: Mobicool



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

ACCURATE TECHNOLOGY CO., LTD. F1,Bldg,A,Changyuan New Material Port Keyuan Rd,

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

Site: 2# Chamber

Polarization: Horizontal Job No.: LGW2015 #2947 Standard: FCC (Band Edge) Power Source: AC 120V/60Hz Test item: Radiation Test Temp.(C)/Hum.(%) 23 C / 48 % EUT: ARB Monitor Engineer Signature: LGWADE

Mode: TX 2449MHz Distance: 3m

Model: 10900026 Manufacturer: Mobicool

limit2: 80 70 20 10 2483.500 2500.0 MHz

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, Tel:+86-0755-26503290 Fax:+86-0755-26503396 Polarization: Vertical

Site: 2# Chamber

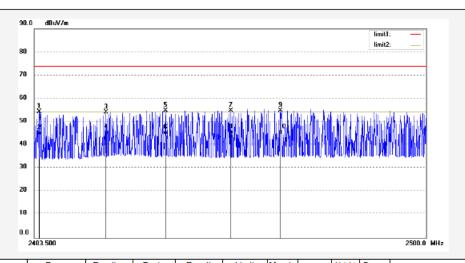
Power Source: AC 120V/60Hz

Distance: 3m

Job No.: LGW2015 #2946 Standard: FCC (Band Edge) Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 % EUT: ARB Monitor Engineer Signature: LGWADE

Mode: TX 2449MHz Model: 10900026 Manufacturer: Mobicool

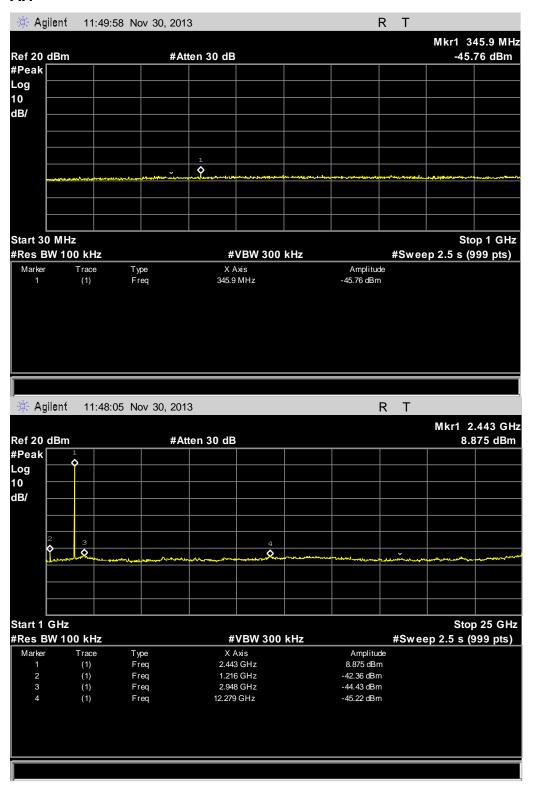


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.715	61.74	-7.37	54.37	74.00	-19.63	peak			
2	2483.715	51.54	-7.37	44.17	54.00	-9.83	AVG			
3	2486.519	61.40	-7.39	54.01	74.00	-19.99	peak			
4	2486.519	51.74	-7.39	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			

Page 27 of 32



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



50061773 001 Page 28 of 32



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

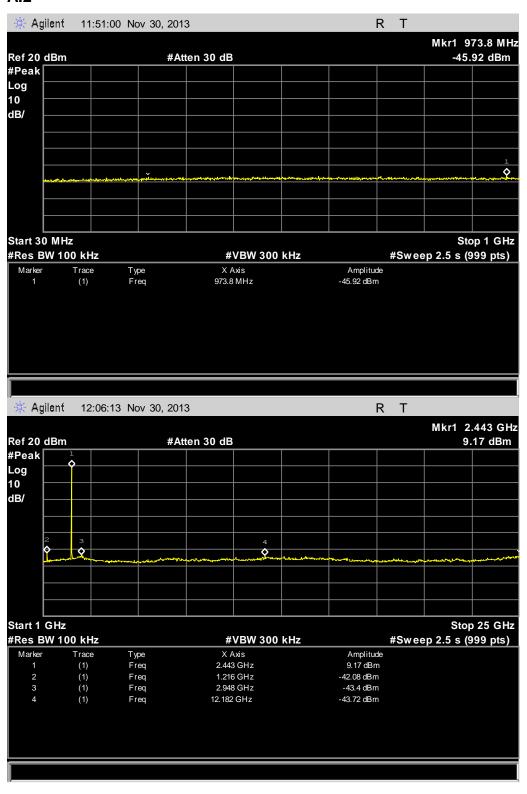
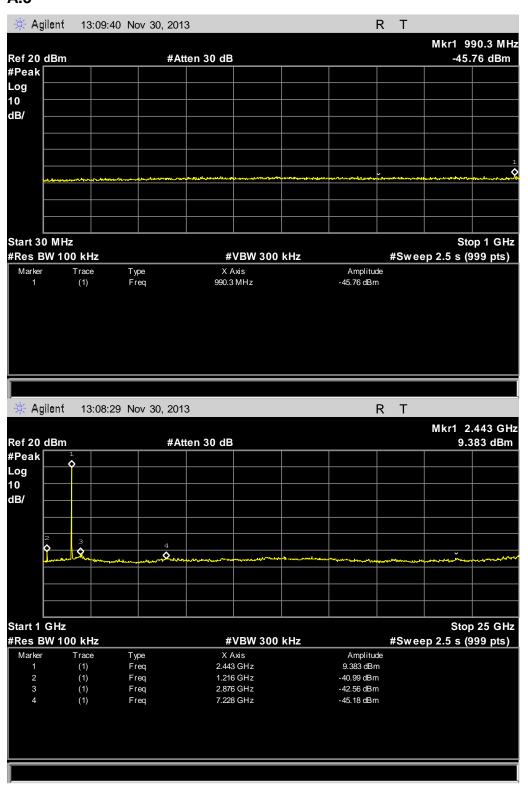




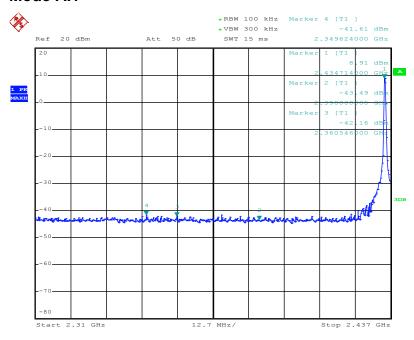
Figure 31: Test figure of conducted emissions in 100kHz Bandwidth, Mode A.3



50061773 001 Page 30 of 32

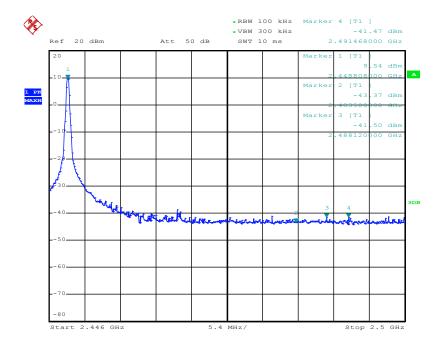


Figure 32: Test figure of Frequency Band Edge in 100kHz Bandwidth, Mode A.1



Date: 29.NOV.2013 08:46:01

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



Date: 29.NOV.2013 08:53:52

Page 31 of 32

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

ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

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

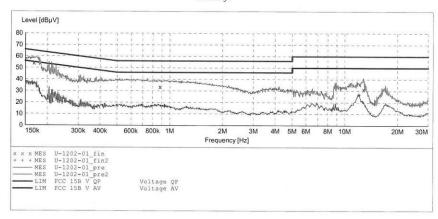
1#Shielding Room

SCAN TABLE: "V 150K-30MHz fin"
Short Description: Start Stop Step STD_VTERM2 1.70
Detector Meas. Start Stop Frequency Frequency 150.0 kHz 30.0 MHz Width 4.5 kHz

Detector Meas. Time TF Bandw. QuasiPeak 1.0 s 9 kHz

Transducer 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	OP	1.1	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



Page 32 of 32

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

ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

Manufacturer: Operating Condition: Transmitting

Mobicool

Test Site: 1#Snierung ...
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: Start Stop Step Step Detector Meas. Start Stop Frequency Frequency 150.0 kHz 30.0 MHz

Detector Meas. Time

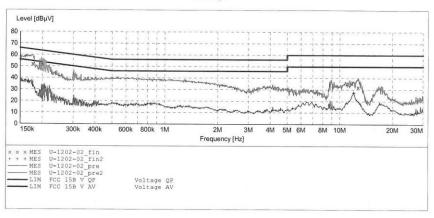
TE Transducer Bandw.

4.5 kHz

QuasiPeak 1.0 s 9 kHz

NSLK8126 2008

Average



MEASUREMENT RESULT: "U-1202-02_fin"

11:	52AM						
ncy MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
674	52.10	10.5	65	12.5	QP	N	GND
748	51.70	10.5	64	11.9	QP	N	GND
153	32.30	11.3	60	27.7	QP	N	GND
	ncy MHz 674 748	MHz dBμV 674 52.10 748 51.70	MHz dB _µ V dB 674 52.10 10.5 748 51.70 10.5	ncy Level Transd Limit MHz dBpV dB dBpV 674 52.10 10.5 65 748 51.70 10.5 64	ncy Level Transd Limit Margin dB	ncy Level Transd Limit Margin Detector MHz dBµV dB dBµV dB 674 52.10 10.5 65 12.5 QP 748 51.70 10.5 64 11.9 QP	ncy Level dBµV Transd Limit dBµV Margin dB Detector Line dBµV 674 52.10 10.5 65 12.5 QP N 748 51.70 10.5 64 11.9 QP N

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	5.0	22.7	AV	N	GND