

Prüfbericht-Nr.: <i>Test report no.:</i>	CN24F7QN 001	Auftrags-Nr.: <i>Order no.:</i>	169820742	Seite 1 von 38 Page 1 of 38
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2024-01-25	
Auftraggeber: <i>Client:</i>	Jackery Technology GmbH Hahnstr.70,FRANKFURT,60528,Germany			
Prüfgegenstand: <i>Test item:</i>	Jackery Explorer 2000			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	JE-2000D			
Auftrags-Inhalt: <i>Order content:</i>	RED Test Report			
Prüfgrundlage: <i>Test specification:</i>	EN 300 328 V2.2.2 EN 301 489-1 V2.2.3 EN 301 489-17 V3.2.4 EN 55032:2015+A11:2020 EN 55035:2017+A11:2020 EN IEC 62040-2: 2018		EN IEC 62311: 2020 EN 62368-1:2014+A11:2017 EN IEC 62040-1:2019+A11:2021	
Wareneingangsdatum: <i>Date of sample receipt:</i>	2024-02-01			
Prüfmuster-Nr.: <i>Test sample no.:</i>	A003844222-001-003			
Prüfzeitraum: <i>Testing period:</i>	2024-10-21 - 2024-11-16			
Ort der Prüfung: <i>Place of testing:</i>	Refer to clause 2.1			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von: <i>tested by:</i>	<u>X Jonathan Li</u>	genehmigt von: <i>authorized by:</i>	<u>X Bell Hu</u>	
Datum: <i>Date:</i> 2025-01-02	Signed by: Jonathan Li	Ausstellungsdatum: <i>Issue date:</i> 2025-01-02	Signed by: Bell Hu	
Stellung / Position:	Sachverständige(r)/Expert	Stellung / Position:	Sachverständige(r)/Expert	
Sonstiges / <i>Other:</i>	This report is for article 3.2 Radio Spectrum, article 3.1a Health and 3.1b EMC requirements. Refer to report CN24YC67 001 for details of Article 3.1a Electrical Safety requirements.			
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>	Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>			
* Legende:	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
* Legend:	P(ass) = passed a.m. test specification(s)	F(ail) = failed a.m. test specification(s)	N/A = not applicable	N/T = not tested
<p>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. <i>This test report only relates to the above mentioned 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.</i></p>				

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Anmerkungen
Remarks

- | | |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</p> <p><i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i></p> |
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Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i></p> |
| 4 | <p>Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.</p> <p><i>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i></p> |

Test Summary

5.1.1 HARMONIC CURRENT EMISSIONS ON AC MAINS*RESULT: Pass***5.1.2 VOLTAGE FLUCTUATIONS AND FLICKER ON AC MAINS***RESULT: Pass***5.1.3 CONDUCTED EMISSION ON AC MAINS***RESULT: Pass***5.1.4 RADIATED EMISSION***RESULT: Pass***5.1.5 CONDUCTED EMISSION ON DC PORT***RESULT: Not applicable***5.2.1 RADIO FREQUENCY ELECTROMAGNETIC FIELDS (RS)***RESULT: Pass***5.2.2 RADIO FREQUENCY CONTINUOUS CONDUCTED (CS)***RESULT: Pass***5.2.3 ELECTROSTATIC DISCHARGE (ESD)***RESULT: Pass***5.2.4 ELECTRICAL FAST TRANSIENTS (EFT)***RESULT: Pass***5.2.5 SURGE***RESULT: Pass***5.2.6 LOW-FREQUENCY SIGNALS***RESULT: Pass***5.2.7 VOLTAGE DIPS AND INTERRUPTIONS***RESULT: Pass***5.2.8 POWER-FREQUENCY MAGNETIC FIELD***RESULT: Pass**RESULT: Pass***5.3.1 RADIATED SPURIOUS EMISSIONS (EN 300 328)***RESULT: Pass***5.4.1 ELECTROMAGNETIC FIELDS***RESULT: Pass***5.4.2 RF EXPOSURE REQUIREMENT (1999/519/EC)****5.4.3 TEST RESULT**

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1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:
Appendix A: Test Results of EMC requirement and Radiated Spurious Emission.

2 Test Sites

2.1 Test Facilities

Test location1: TÜV Rheinland (Shenzhen) Co., Ltd.

No.362, Huanguan Middle Road, Songyuansha Community, Guanhu Subdistrict, Longhua District, Shenzhen 518110, Guangdong, China

CNAS accreditation certification number: L3080

Test location2: EST Technology Co., Ltd.

Santun Management Zone (Guantai Road), Houjie District, Dongguan, Guangdong, P. R. China

CNAS Registered Number: L5288

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

Test location3: Shenzhen Nore Testing Center Co., Ltd.

South, No. 1, Building 10, Maqueling Industrial Zone, Nanshan, Shenzhen, Guangdong, 518057, China

CNAS Registered Number: L11038

The tests at the test sites 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

TÜV Rheinland (Shenzhen) Co., Ltd.-Radio test

Unwanted Emission Testing (TS8996)					
Equipment	Manufacturer	Model	Serial No.	Cal. Date	Cal. until
Signal Generator	R&S	SMB100A	180840	29.09.2024	28.09.2025
Wideband Radio Communication Tester	R&S	CMW500	165339	29.09.2024	28.09.2025
Signal Analyzer	R&S	FSV 40	101440	29.09.2024	28.09.2025
System Controller Interface	R&S	SCI-100	S10010036	N/A	N/A
Filterbank	R&S	GSM	100811	29.09.2024	28.09.2025
OSP	R&S	OSP 120	102041	N/A	N/A
OSP	R&S	OSP 150	101385	14.11.2023	13.11.2024
Pre-amplifier	R&S	SCU08F1	08320030	29.09.2024	28.09.2025
Amplifier	R&S	SCU-18F	180079	29.09.2024	28.09.2025
Amplifier	R&S	SCU40A	100450	29.09.2024	28.09.2025
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	192	07.10.2024	06.10.2026
Biconical Broadband Antenna (30 MHz - 1 GHz)	Schwarzbeck	VUBA 9117	357	2021-08-02	2024-08-02
Double Ridged Broadband Horn Antenna (1 – 18 GHz)	Schwarzbeck	BBHA 9120 D	01760	2021-07-30	2024-07-30
Test software	R&S	EMC32 (V10.50.40)	N/A	N/A	N/A

Control PC	Dell	OptiPlex 7050	36NW9P2	N/A	N/A
3m Fully Anechoic Chamber	Albatross	FAC-3m	APC17151-FAC	2021-06-22	2024-06-22

EST Technology Co., Ltd.-EMC Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Conducted emission at the mains terminals test					
EMI Test Receiver	Rohde & Schwarz	ESCI3	EST-E035	Jun. 11, 2024	Jun. 10, 2025
Artificial Mains Network	Rohde & Schwarz	ENV216	EST-E002	Jun. 11, 2024	Jun. 10, 2025
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	EST-E003	Jun. 11, 2024	Jun. 10, 2025
Test Software	Audix	e3-6.111221a	N/A	N/A	N/A
Radiated emission test (30MHz-1000MHz; 2# 966 radiation)					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESR7	EST-E105	Jun. 11, 2024	Jun. 10, 2025
Bilog Antenna	Teseq	CBL 6111D	EST-E104	Jun. 11, 2024	Jun. 10, 2025
Test Software	Audix	e3-6.111221a	N/A	N/A	N/A
Radiated emission test (above 1GHz)					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESR7	EST-E047	June 12,23	1 Year
Horn Antenna	SCHWARZBECK	BBHA 9120 D	EST-E031	June 12,23	1 Year
Test Software	Audix	e3-6.111221a	N/A	N/A	N/A
Harmonic current emissions and voltage fluctuations/flicker test					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power Analyzer	California Instruments	3001IX-208-CTS	EST-E011	Jun. 11, 2024	Jun. 10, 2025
Voltage Source	California Instruments	3001IX-208	EST-E012	Jun. 11, 2024	Jun. 10, 2025
Test Software	California Instruments	CTS	N/A	N/A	N/A
Electrostatic discharge immunity test					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
ESD Generator	Teseq	NSG 437	EST-E132	Jun. 11, 2024	Jun. 10, 2025
Radio Frequency Electromagnetic Field Immunity (R/S) Test					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Signal Generator	Agilent	N5181A	EST-E060	Jun. 11, 2024	Jun. 10, 2025
Power Amplifier	SKET	HAP801000M-250W	EST-E061	N/A	N/A
Power Amplifier	SKET	HAP0103G-75W	EST-E062	N/A	N/A
Power Amplifier	SKET	HAP0306G-50W	EST-E063	N/A	N/A
Power Meter	Agilent	E4419B	EST-E064	Jun. 11, 2024	Jun. 10, 2025
Power sensor	Agilent	E9301A	EST-E065	Jun. 11, 2024	Jun. 10, 2025
Power sensor	HP	E9301A	EST-E066	Jun. 11, 2024	Jun. 10, 2025
Antenna	Schwarzbeck	STLP 9129	EST-E059	N/A	Jun. 10, 2025
E-Field Probe	Narda	EP-601	EST-E067	Jun. 11, 2024	Jun. 10, 2025

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Test Software	SKET	EMC-S	V1.2.0.48	N/A	N/A
Electrical fast transient/burst immunity test					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EFT Generator	EMC PARTNER	TRANSIENT 2000	EST-E074	Jun. 11, 2024	Jun. 10, 2025
Compact Immunity Test System	3ctest	CCS 500	EST-E129	Jun. 11, 2024	Jun. 10, 2025
Capacitive Coupling Clamp	HAEFELY	IP4A	EST-E040	Jun. 11, 2024	Jun. 10, 2025
Surge immunity test					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Surge Controller	HAEFELY	PSURGE8000	EST-E015	Jun. 11, 2024	Jun. 10, 2025
Surge Impulse Module	HAEFELY	PIM100	EST-E016	Jun. 11, 2024	Jun. 10, 2025
Surge Coupling Network	HAEFELY	PCD100	EST-E017	Jun. 11, 2024	Jun. 10, 2025
Injected currents susceptibility test					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Signal Generator	Rohde & Schwarz	SMB100A	EST-E025	June 12,23	1 Year
Power Amplifier	FRANKONIA	CIT-10	EST-E021	N/A	N/A
Power Meter	Rohde & Schwarz	NRVS	EST-E027	June 12,23	1 Year
CDN	FRANKONIA	CDN-M2+M3	EST-E022	June 12,23	1 Year
EM-Clamp	FRANKONIA	EMCL-20	EST-E042	June 12,23	1 Year
Test Software	SKET	EMC-S	V1.2.0.80	N/A	N/A
Voltage dips and short interruptions immunity test					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power Fail Simulator	3ctest	PFS 2216SD	EST-E136	Jun. 11, 2024	Jun. 10, 2025

Shenzhen Nore Testing Center Co., Ltd.-EMC test

Low-Frequency Signals				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Low Frequency Signal Tester	Dongguan Sophpower Electronics Co., Ltd	HHF 5010	N/A	2025-03-21

2.3 Uncertainty of Measurement

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus.

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor of $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Table 2: Measurement Uncertainty

Test	Parameters	Expanded uncertainty (U_{lab})
Conducted Emission	Level accuracy (150kHz to 30MHz)	± 3.42 dB
Radiated Emission (3m SAC)	Level accuracy (30MHz to 1000MHz)	± 4.84 dB
	Level accuracy (above 1000MHz)	± 4.78 dB
Voltage Fluctuations & Flicker	Voltage	$\pm 0.64\%$

3 General Product Information

3.1 Product Function and Intended Use

The EUT is a portable power station which supports Bluetooth (BLE), 2.4GHz Wi-Fi functions.

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

3.2 Ratings and System Details

Table 3: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment:	Jackery Explorer 2000
Type Designation:	JE-2000D
Operating Voltage:	Battery Capacity: 45.6Ah/44.8V DC (2042Wh) DC Input: 2 x DC 8mm Ports: 11-16V=8A Max, Double to 8A Max; 16-60V=12A, Double to 21A/400W Max Charge Mode AC Input: 220-240V ~ 50Hz, 10A Max, L+N+PE Bypass Mode AC Input/output: 220-240V ~ 50Hz, 10A Max 2 x AC Output: 230V ~ 50Hz, 10A Max AC Total Output: 2200W/2200VA Rated, 4400W/4400VA Surge peak USB-C1 Output: 30W Max, 5V=3A, 9V=3A, 12V=2.5A, 15V=2A, 20V=1.5A USB-C2 Output: 100W Max, 5V=3A, 9V=3A, 12V=3A, 15V=3A, 20V=5A USB-A Output: 18W Max, 5-6V=3A, 6-9V=2A, 9-12V=1.5A Car Port : 12V=10A Max
Testing Voltage	AC 230V, 50Hz or DC11~16V
Operating Temperature Range:	-0 °C ~ 45 °C
UPS Equipment Classification:	Category C1
Technical Specification of Bluetooth LE	
Frequency Range	2402 MHz to 2480 MHz
Type of Modulation	GFSK
Channel Number	40 channels
Data Rate	1 Mbps
Channel Separation	2 MHz
Antenna Type	PCB antenna
Antenna Gain	3.96dBi
Technical Specification of Wi-Fi 802.11 b/g/n	
Characteristic	Description
Frequency Range:	2412 - 2472 MHz for 802.11b/g/n(HT20) 2422 - 2462 MHz for 802.11n(HT40)
Type of Modulation:	DSSS(DBPSK/DQPSK/CCK) OFDM(BPSK/QPSK/16QAM/64QAM)
Data Rate:	1/2/5.5/11 Mbps for 802.11b 6/9/12/18/24/36/48/54 Mbps for 802.11g

	MCS0 ~ MCS7 for 802.11n(HT20) MCS0 ~ MCS7 for 802.11n(HT40)
Channel Number:	13 channels for 802.11b/g/n(HT20) 9 channels for 802.11n(HT40)
Channel Separation:	5 MHz
Antenna Type:	PCB antenna
Antenna Gain:	3.96dBi

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Input AC 230V(Storage energy operating mode)+USB-A(18W)+USB-C1(30W)+USB-C2(100W) +Car Port full load(12V 10A) + AC Output (2200W) +2.4G WLAN+BLE
- B. On, Input DC 16V (Storage energy operating mode) +USB-A(18W) +USB-C1(30W) +USB-C2(100W) +Car Port full load (12V 10A) +AC Output (2200W) +2.4G WLAN+BLE
- C. On, DC 44.8V Inverter output+ USB-A(18W) +USB-C1(30W) +USB-C2(100W) +Car Port full load(12V 10A) +AC Output (2200W) +2.4G WLAN+BLE
- D. 2.4G WLAN or BLE
- E. Off

3.4 Noise Generating and Noise Suppressing Parts

For details refer to the Circuit Diagram.

3.5 Submitted Documents

- Application Form

- User Manual

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

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

Immunity: The equipment under test (EUT) was configured to have its highest possible susceptibility against the tested phenomena. 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 and chapter 6

According to clause 3.1, all tests were performed on model JE-2000D in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 4: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	Rating or S/N	Remark
Digital multimeter	Fluke	18B+	42274005WS	Provided by Lab
Resistor	--	--	120W	Provided by Lab
Resistor	--	--	2x18W	Provided by Lab
Resistor	--	--	30W	Provided by Lab
Resistor	--	--	100W	Provided by Lab
Lamp	--	--	2200W	Provided by Lab

4.4 Countermeasures to Achieve EMC Compliance

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

No additional measures were employed to achieve compliance.

5 Test Results of EMC Requirement

5.1 Test Results of EMISSION

5.1.1 Harmonic Current Emissions on AC Mains

RESULT:

Pass

Test Specification

Test standard	: EN 301 489-1 V2.2.3 EN 301 489-17 V3.2.4 EN IEC 62040-2: 2018
Basic standard	: EN IEC 61000-3-2:2019+A1:2021
Test requirement	: EN 301 489-1 V2.2.3, Clause 8.5
Measured harmonics	: 2 - 40
Classification	: Class A
Limit	: EN IEC 61000-3-2:2019+A1:2021, Clause 7.1 Table 1

Test Setup

Date of testing	: 2024-10-21 - 2024-11-16
Test voltage	: AC 230V, 50Hz
Operation mode	: A
Test ports	: AC mains
Earthing	: Connected
Test observation period	: 2.5 min
Test configuration	: Table-top
Ambient temperature	: 26 °C
Relative humidity	: 60 %
Atmospheric pressure	: 101 kPa

This testing was carried out on all operation modes, but only the worst case was presented in this report.

For the measurement records, refer to the appendix A.

5.1.2 Voltage Fluctuations and Flicker on AC Mains

RESULT:**Pass****Test Specification**

Test standard	: EN 301 489-1 V2.2.3 EN 301 489-17 V3.2.4
Basic standard	: EN 61000-3-3:2013+A1:2019+A2:2021
Test requirement	: EN 301 489-1 V2.2.3, Clause 8.6
Frequency range	: 0 – 2 KHz
Limit	: EN 61000-3-3:2013+A1:2019+A2:2021, Clause 5

Test Setup

Date of testing	: 2024-10-21 - 2024-11-16
Test voltage	: AC 230V, 50Hz
Operation mode	: A
Test ports	: AC mains
Earthing	: Connected
Test configuration	: Table-top
Ambient temperature	: 23.4 °C
Relative humidity	: 56 %
Atmospheric pressure	: 101 kPa

This testing was carried out on all operation modes, but only the worst case was presented in this report.

For the measurement records, refer to the appendix A.

5.1.3 Conducted Emission on AC Mains

RESULT:**Pass****Test Specification**

Test standard	: EN 301 489-1 V2.2.3 EN 301 489-17 V3.2.4 EN IEC 62040-2: 2018 EN 55032: 2015+A11
Test requirement	: EN 301 489-1 V2.2.3, Clause 8.4 EN 55032: 2015+A11, A.3
Frequency range	: 150 KHz – 30 MHz
Kind of test site	: Shielded Room
Limit	: EN 301 489-1 V2.2.3, Clause 8.4.3.2 EN IEC 62040-2: 2018, Table 1 EN 55032: 2015+A11, Table A.10

Test Setup

Date of testing	: 2024-10-21 - 2024-11-16
Test voltage	: AC 230V, 50Hz
Operation mode	: A
Test ports	: AC mains terminals
Earthing	: Connected
Test configuration	: Table-top
Ambient temperature	: 23.9 °C
Relative humidity	: 50.7 %
Atmospheric pressure	: 101 kPa

This testing was carried out on all operation modes and variable output powers, but only the worst case was presented in this report.

The UPS output cable cannot exceed 10 m in length as declared by the manufacturer.

For the measurement records, refer to the appendix A.

5.1.4 Radiated Emission

RESULT:**Pass****Test Specification**

Test standard	: EN 301 489-1 V2.2.3 EN 301 489-17 V3.2.4 EN IEC 62040-2: 2018 EN 55032: 2015+A11
Test requirement	: EN 301 489-1 V2.2.3, Clause 8.2 EN 55032: 2015+A11, A.2
Classification	: Class B
Frequency range	: 30 MHz – 6000 MHz
Kind of test site	: 3m Semi-anechoic Chamber
Limit	: EN 301 489-1 V2.2.3, Clause 8.2.3 EN IEC 62040-2: 2018, Table 3 EN 55032: 2015+A11, Table A.4 and A.5

Test Setup

Date of testing	: 2024-10-21 - 2024-11-16
Test voltage	: AC 230V, 50Hz or DC 16V
Operation mode	: A, B, C
Test Ports	: Enclosure
Earthing	: Connected
Ambient temperature	: Refer to test result
Relative humidity	: Refer to test result
Atmospheric pressure	: 101 kPa

This testing was carried out on all operation modes, but only the worst case was presented in this report.

For the measurement records, refer to the appendix A.

5.1.5 Conducted Emission on DC Port

RESULT:**Not applicable****Test Specification**

Test standard	: EN 301 489-1 V2.2.3 EN 301 489-17 V3.2.4 EN IEC 62040-2: 2018
Test requirement	: EN 301 489-1 V2.2.3, Clause 8.3 EN IEC 62040-2: 2018, Clause 5.3.2.5
Frequency range	: 150 KHz – 30 MHz for EN 301 489-1
Kind of test site	: Shielded Room
Limit	: EN 301 489-1 V2.2.3

The EUT is Portable Power Station and no car charger input, Interface not directly connected to a network, DC input and output line length Less than 3m, so this test not applicable.

5.2 Test Results of IMMUNITY

5.2.1 Radio Frequency Electromagnetic Fields (RS)

RESULT:

Pass

Test Specification

Test standard	: EN 301 489-1 V2.2.3 EN 301 489-17 V3.2.4 EN IEC 62040-2: 2018 EN 55035:2017+A11
Basic standard	: EN IEC 61000-4-3: 2020
Test requirement	: EN 301 489-1 V2.2.3, Clause 9.2 EN IEC 62040-2: 2018, Table 5 EN 55035:2017+A11, Table 1
Frequency range	: 80MHz to 6000MHz for Swept test 1800MHz, 2600MHz, 3500MHz, 5000MHz for Spot test
Test level	: 3 V/m, (unmodulated, r.m.s)
Modulation	: 80% AM by a sinusoidal signal of 1KHz
Kind of test site	: 3m Full-anechoic Chamber
Performance criteria	: A

Test Setup

Date of testing	: 2024-10-21 - 2024-11-16
Test voltage	: AC 230V, 50Hz or DC 16V
Operation mode	: A, B, C
Test Ports	: Enclosure
Ambient temperature	: 23.7 °C
Relative humidity	: 49.8 %
Atmospheric pressure	: 101 kPa

Table 5: Test Result of Radio Frequency Electromagnetic Fields (RS), swept test

Test Frequency Band	Test port / Test Level	Polarity	Location	Result	Performance criterion
80MHz – 1000MHz	Enclosure / 3V/m	Vertical / Horizontal	Front	Pass	A*
			Rear	Pass	A*
			Left	Pass	A*
			Right	Pass	A*
1000MHz – 6000MHz	Enclosure / 3V/m	Vertical / Horizontal	Front	Pass	A*
			Rear	Pass	A*
			Left	Pass	A*
			Right	Pass	A*

Table 6: Test Result of Radio Frequency Electromagnetic Fields (RS), spot test

Test Frequency Band	Test port / Test Level	Polarity	Location	Result	Performance criterion
Spot Frequency 1800MHz, 2600MHz, 3500MHz, 5000MHz	Enclosure / 3V/m	Vertical / Horizontal	Front	Pass	A*
			Rear	Pass	A*
			Left	Pass	A*
			Right	Pass	A*

*Remark: No degradation was observed during and after the tests.

5.2.2 Radio Frequency Continuous Conducted (CS)

RESULT:
Pass
Test Specification

Test standard	: EN 301 489-1 V2.2.3 EN 301 489-17 V3.2.4 EN IEC 62040-2: 2018 EN 55035:2017+A11
Basic standard	: EN 61000-4-6: 2009
Test requirement	: EN 301 489-1 V2.2.3, Clause 9.5 EN IEC 62040-2: 2018, Table 5 EN 55035:2017+A11, Table 4
Frequency range	: 0.15 - 80 MHz
Source impedance	: 150 Ω
Test level	: 3V (unmodulated, r.m.s.) for EN 301 489-1 and EN IEC 62040-2: 2018 3V (unmodulated, r.m.s.) for 0.15 to 10MHz for EN 55035 3V to 1V (unmodulated, r.m.s.) for 10 to 30MHz for EN 55035 1V (unmodulated, r.m.s.) for 30 to 80MHz for EN 55035
Modulation	: AM 80%, 1 KHz sine-wave
Sweep mode	: Automatic
Sweep rate	: 1.5×10^{-3} decade / sec.
Performance criteria	: A

Test Setup

Date of testing	: 2024-10-21 - 2024-11-16
Test voltage	: AC 230V, 50Hz
Operation mode	: A, C
Test Ports	: AC mains power port & AC Output port
Earthing	: Not connected
Ambient temperature	: 22.9 °C
Relative humidity	: 49.5 %
Atmospheric pressure	: 101 kPa

Table 7: Test result of Radio Frequency Continuous Conducted (CS)

Test Frequency Band	Coupling Method	Test Port	Test Level	Actual Performance
150KHz – 80MHz	Direct Injection	AC mains power port & AC Output port	3.0 V	A*
150KHz – 10MHz	Direct Injection	AC mains power port & AC Output port	3.0 V	A*
10MHz – 30MHz	Direct Injection	AC mains power port & AC Output port	3.0 V to 1.0V	A*
30MHz – 80MHz	Direct Injection	AC mains power port & AC Output port	1.0 V	A*

*Remark: No degradation was observed during and after the tests.

5.2.3 Electrostatic Discharge (ESD)

RESULT:
Pass
Test Specification

Test standard	: EN 301 489-1 V2.2.3 EN 301 489-17 V3.2.4 EN IEC 62040-2: 2018 EN 55035:2017+A11
Basic standard	: EN 61000-4-2: 2009
Test requirement	: EN 301 489-1 V2.2.3, Clause 9.3 EN IEC 62040-2: 2018, Table 5 EN 55035:2017+A11, Table 1
Discharge impedance	: 330 Ω / 150 pF
Test level	: Air discharge: ± 2 kV, ± 4 kV, ± 8 kV Contact discharge: ± 4 kV HCP & VCP: ± 4 kV
Position	: All exposed surfaces
Performance criteria	: B

Test Setup

Date of testing	: 2024-10-21 - 2024-11-16
Test voltage	: AC 230V, 50Hz
Operation mode	: A, B, C
Test Ports	: Enclosure
Earthing	: Connected
Ambient temperature	: 23.3 °C
Relative humidity	: 49.9 %
Atmospheric pressure	: 101 kPa

Table 8: Test Result of Electrostatic Discharge (ESD)

Test Mode	Test Level	Location	Actual Performance
A, B, C mode	± 4.0kV / Contact	HCP	A*
		VCP	A*
		Conducted Enclosure	A*
	± 2.0kV, ± 4.0kV, ± 8.0kV / Air	Non-conducted Enclosure	A*
		Button	A*
		Slot	A*

*Remark: No degradation was observed during and after the tests.

5.2.4 Electrical Fast Transients (EFT)

RESULT:
Pass
Test Specification

Test standard	: EN 301 489-1 V2.2.3 EN 301 489-17 V3.2.4 EN IEC 62040-2: 2018 EN 55035:2017+A11
Basic standard	: EN 61000-4-4: 2012
Test requirement	: EN 301 489-1 V2.2.3, Clause 9.4 EN IEC 62040-2: 2018, Table 5 EN 55035:2017+A11, Table 4
Test level	: ± 1.0 kV on AC
Test duration	: 2 minute per level & polarity
Rise time	: 5/50ns
Repetition frequency	: 5 KHz
Performance criteria	: B

Test Setup

Date of testing	: 2024-10-21 - 2024-11-16
Test voltage	: AC 230V, 50Hz
Operation mode	: A, C
Test Ports	: AC mains power port & AC Output port
Earthing	: Connected
Ambient temperature	: 23.2 °C
Relative humidity	: 49.5 %
Atmospheric pressure	: 101 kPa

Table 9: Test Result of Electrical Fast Transients (EFT)

Test Mode	Coupling Method	Coupling Port	Test Level	Actual Performance
A, C mode	Live + Neutral + Ground	Live + Neutral + Ground	± 1.0 kV on AC	A*

*Remark: No degradation was observed during and after the tests.

5.2.5 Surge

RESULT:
Pass
Test Specification

Test standard	: EN 301 489-1 V2.2.3 EN 301 489-17 V3.2.4 EN IEC 62040-2: 2018 EN 55035:2017+A11
Basic standard	: EN 61000-4-5:2014+A1:2017
Test requirement	: EN 301 489-1 V2.2.3, Clause 9.8 EN IEC 62040-2: 2018, Table 5 EN 55035:2017+A11, Table 4
Test level	: ± 1.0 kV line to line
Repetition rate	: Max. 1/min
Number of surges	: 5 (for each combination of parameters)
Performance criteria	: B

Test Setup

Date of testing	: 2024-10-21 - 2024-11-16
Test voltage	: AC 230V, 50Hz
Operation mode	: A, C
Test Ports	: AC mains power port & AC Output port
T_r / T_h	: 1,2 / 50 μ s
Earthing	: Not connected
Ambient temperature	: 24.7 °C
Relative humidity	: 49.5 %
Atmospheric pressure	: 101 kPa

Table 10: Test Result of Surge

Test Mode	Coupling Port	Test Level (\pm kV)	Coupling Phase	Actual Performance
A, C mode	AC mains power port & AC Output port	± 2.0 kV line to ground & ± 1.0 kV line to line	0	A*
			$\pi/2$	A*
			π	A*
			$3\pi/2$	A*

*Remark: No degradation was observed during and after the tests.

5.2.6 Low-Frequency Signals

RESULT:
Pass
Test Specification

Test standard	: EN IEC 62040-2:2018
Basic standard	: EN IEC 62040-2:2018 IEC 61000-2-2:2002
Test requirement	: EN IEC 62040-2:2018, Table 5, Clause D.6
Frequency:	140-360Hz
Test level	: 10V
Performance criteria	: A

Test Setup

Date of testing	: 2024-10-21 - 2024-11-16
Test voltage	: AC 230V, 50Hz
Operation mode	: A
Test Ports	: AC mains power port
Earthing	: Connected
Ambient temperature	: 20.6 °C
Relative humidity	: 44 %
Atmospheric pressure	: 101 kPa

Table 11: Test Result of Low-Frequency Signals

Test Configuration&Mode	Test Item	Test Level	Performance Criterion	Description	Result
A	Power line harmonics & Inter-harmonics	10V, 140Hz-360Hz	Criterion A	No failure detected	Pass

5.2.7 Voltage Dips and Interruptions

RESULT:
Pass
Test Specification

Test standard	: EN 301 489-1 V2.2.3 EN 301 489-17 V3.2.4 EN IEC 62040-2: 2018 EN 55035:2017+A11
Basic standard	: EN 61000-4-11: 2004
Test requirement	: EN 301 489-1 V2.2.3, Clause 9.7 EN IEC 62040-2: 2018, clause 6.4 EN 55035:2017+A11, Table 4
Test level	: <input checked="" type="checkbox"/> voltage dip: 0% residual voltage for 0,5 cycle <input checked="" type="checkbox"/> voltage dip: 0% residual voltage for 1 cycle <input checked="" type="checkbox"/> voltage dip: 70% residual voltage for 25 cycles <input checked="" type="checkbox"/> voltage interruption: 0% residual voltage for 250 cycles
Performance criteria	: B & C

Test Setup

Date of testing	: 2024-10-21 - 2024-11-16
Test voltage	: AC 230V, 50Hz
Operation mode	: A, B
Test Ports	: AC mains power port
Earthing	: Not connected
Ambient temperature	: 27.7 °C
Relative humidity	: 48.0 %
Atmospheric pressure	: 101 kPa

Table 12: Test Result of Voltage Dips and Interruptions

Test Mode	Coupling Port	Test Level U _T (%)	Reduction Duration (in Period)	Actual Performance
A, B mode	AC mains power port	0%	0.5(50Hz)	A*
		0%	1.0(50Hz)	A*
		70%	25(50Hz)	A*
		0%	250(50Hz)	B**

*Remark: No degradation was observed during and after the tests.

**Remark: During the test, The EUT stop charging. However, it could automatically restart and recover to charging after test.

5.2.8 Power-Frequency Magnetic Field

RESULT:
Pass
Test Specification

Test standard	: EN 55035:2017+A11:2020 EN IEC 62040-2:2018
Basic standard	: EN IEC 62040-2:2018 IEC 61000-4-8: 2009
Test requirement	: EN 55035:2017+A11:2020, Table 1 EN IEC 62040-2:2018, Table 5
Test level	: 1A/m for EN 55035:2017+A11:2020 3A/m for EN IEC 62040-2
Performance criteria	: A for EN 55035 A for EN 62040-2

Test Setup

Date of testing	: 2024-10-21 - 2024-11-16
Test voltage	: AC 230V, 50Hz or DC 27V
Operation mode	: A, B, C
Test Ports	: Enclosure
Earthing	: Connected
Ambient temperature	: 24.6 °C
Relative humidity	: 53.6 %
Atmospheric pressure	: 101 kPa

Table 13: Test Result of Surge

Test Mode	Coupling Port	Coupling Phase	Actual Performance
A, B, C mode	enclosure ports	1A/m	A
		3A/m	A

*Remark: No degradation was observed during and after the tests.

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5.3 Essential requirements of harmonized standard covering article 3.2 radio spectrum requirement of the RED

RESULT:**Pass****Test Specification**

Test standard : EN 300 328 V2.2.2

The device includes a wireless module ESP32-C3-MINI-1 with same antenna, according to clause 6.1 of EG 203 367 V1.1.1, the conditions in which the radio product is used in the combined equipment does not deviate from the assessment conditions. Therefore, the device comply with EN 300 328 V 2.2.2 requirement with radiated spurious emission test and all other data refer to original module report R2103A0269-R1 issued by TA Technology(Shanghai) Co.,Ltd.

5.3.1 Radiated Spurious Emissions (EN 300 328)

RESULT:**Pass****Test Specification**

Test standard	: EN 300 328 V2.2.2
Test requirement	: EN 300 328 V2.2.2, Clause 4.3.2.9 & Clause 4.3.2.10
Limit	: EN 300 328 V2.2.2, Clause 4.3.2.9.3 & 4.3.2.10.3
Test suites	: EN 300 328 V2.2.2, Clause 5.4.9
Kind of test site	: 3m Fully Anechoic Room

Test Setup

Date of testing	: 2024-10-21 - 2024-11-16
Test voltage	: AC 230V, 50Hz
Operation mode	: D
Test channel	: Low / High
Ambient temperature	: Refer to test results
Relative humidity	: Refer to test results
Atmospheric pressure	: 101 kPa

Note: This testing was carried out on different modulations, but only the worst case was presented in this report.

For the measurement records, refer to the appendix A.

5.4 Human Exposure to Electromagnetic Fields 10MHz-300GHz

5.4.1 Electromagnetic Fields

RESULT:
Pass
Test Specification

 Test standard : EN 50566: 2017
 EN IEC 62311: 2020
 1999/519/EC

5.4.2 RF Exposure Requirement (1999/519/EC)

 Reference levels for electric, magnetic and electromagnetic fields
 (0Hz to 300GHz, unperturbed rms values)

Frequency range	E-field strength (V/m)	H-field strength (A/m)	B-field (µT)	Equivalent plane wave power density S_{eq} (W/m ²)
0-1 Hz	—	$3,2 \times 10^4$	4×10^4	—
1-8 Hz	10 000	$3,2 \times 10^4/f^2$	$4 \times 10^4/f^2$	—
8-25 Hz	10 000	$4\,000/f$	$5\,000/f$	—
0,025-0,8 kHz	$250/f$	$4/f$	$5/f$	—
0,8-3 kHz	$250/f$	5	6,25	—
3-150 kHz	87	5	6,25	—
0,15-1 MHz	87	$0,73/f$	$0,92/f$	—
1-10 MHz	$87/f^{1/2}$	$0,73/f$	$0,92/f$	—
10-400 MHz	28	0,073	0,092	2
400-2 000 MHz	$1,375 f^{1/2}$	$0,0037 f^{1/2}$	$0,0046 f^{1/2}$	$f/200$
2-300 GHz	61	0,16	0,20	10

5.4.3 Test Result

This device is mobile device, and the applicant declares that the minimum separation distance is greater than 20cm. Therefore, RF exposure evaluation or computational modeling should be used to determine compliance.

RF exposure from the product which meets the limits for public exposure will automatically meet the limits for workers without further testing. However, RF exposure from the product which meets the limits for workers will not necessarily meet the limits for the general public and, unless RF exposure conditions are restricted to workers' when at work, equipment shall also be tested against general public limits.

 Workers exposure:

Equipment intended only for use by workers when at work, and this condition is clearly identified in the user instructions.

 General public exposure:

Other conditions than workers.

Compliance Evaluation

The compliance is demonstrated based on the following calculation model assessment:
 The power density according to far-field model is:

$$S = \frac{P \times G_{(\theta, \phi)}}{4 \times \pi \times R^2}$$

Where:

P := input power of the antenna.

G := antenna gain relative to an isotropic antenna.

θ, ϕ := elevation and azimuth angles.

R := distance from the antenna to the point of investigation.

For single or multiple RF sources, the calculated power density should comply with following:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

Where:

S_i := the power density when the f is i .

$S_{Limit,i}$:= the reference level requirement for power density when f is i .

a) Stand-alone operation mode

Band	Frequency (MHz)	Average output power (dBm)	Gain (dBi)	EIRP (W)	Power density @ 20cm (W/m ²)	Limit (W/m ²)	Result
Bluetooth (LE)	2402 - 2480	3.86	3.96	0.006	0.01	10	Pass
Wi-Fi 2.4G	2412 - 2472	16.03	3.96	0.100	0.20	10	Pass

The device includes a wireless module ESP32-C3-MINI-1, all the output power data are conducted original module report R2103A0269-M1 issued by TA Technology (Shanghai) Co., Ltd.
 Bluetooth and Wi-Fi 2.4G cannot operate simultaneously.

6 Photographs of the Test Set-Up

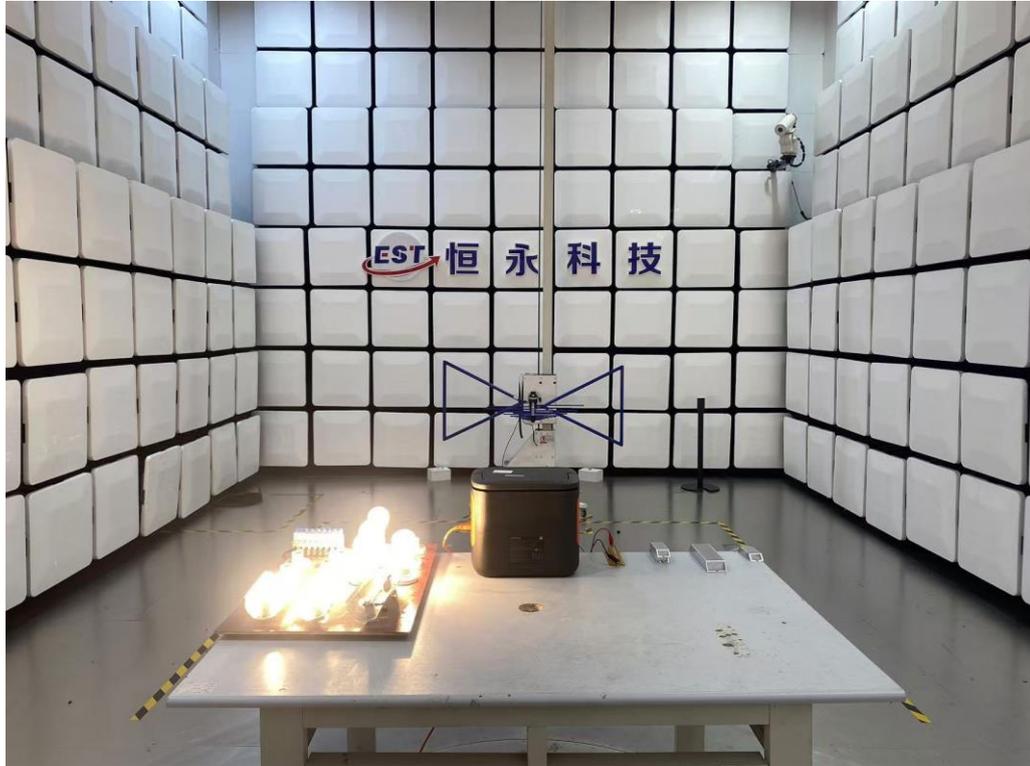
Photograph 1: Set-up for Voltage Fluctuations/Flicker



Photograph 2: Set-up for Conducted Emission on AC Mains



Photograph 3: Set-up for Radiated Emission, 30 MHz – 1 GHz



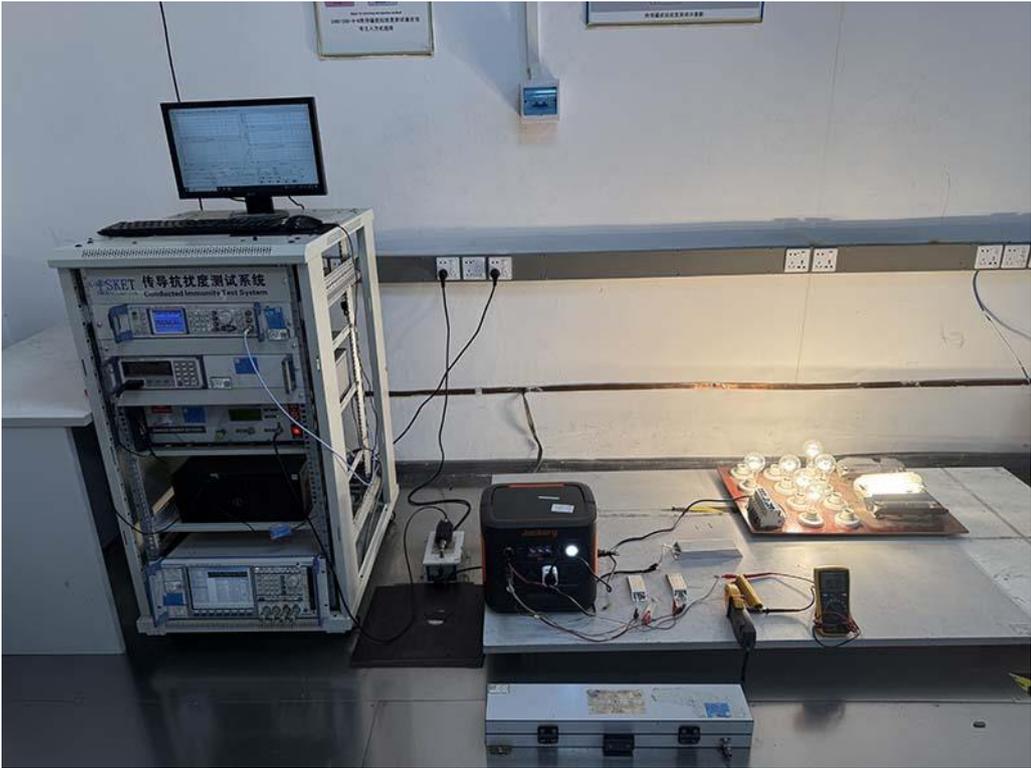
Photograph 4: Set-up for Radiated Emission, Above 1GHz



Photograph 5: Set-up for Radio Frequency Electromagnetic Fields (RS)



Photograph 6: Set-up for Radio Frequency Continuous Conducted (CS)- AC input



Photograph 7: Set-up for Electrostatic Discharges (ESD)



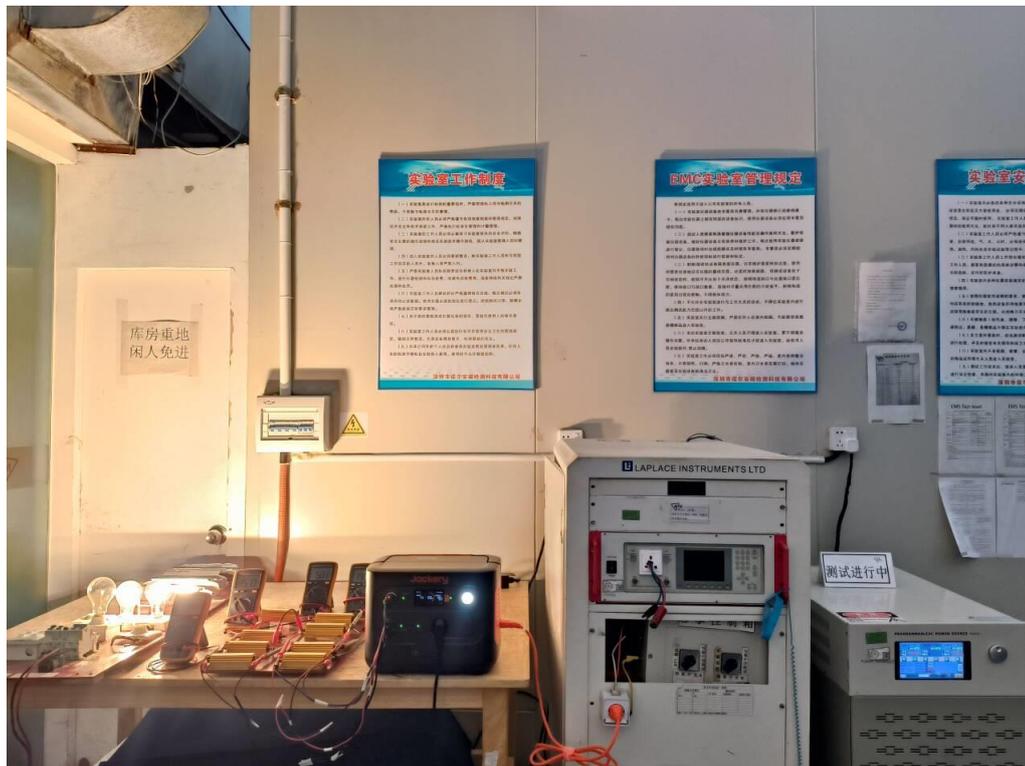
Photograph 8: Set-up for EFT-AC input



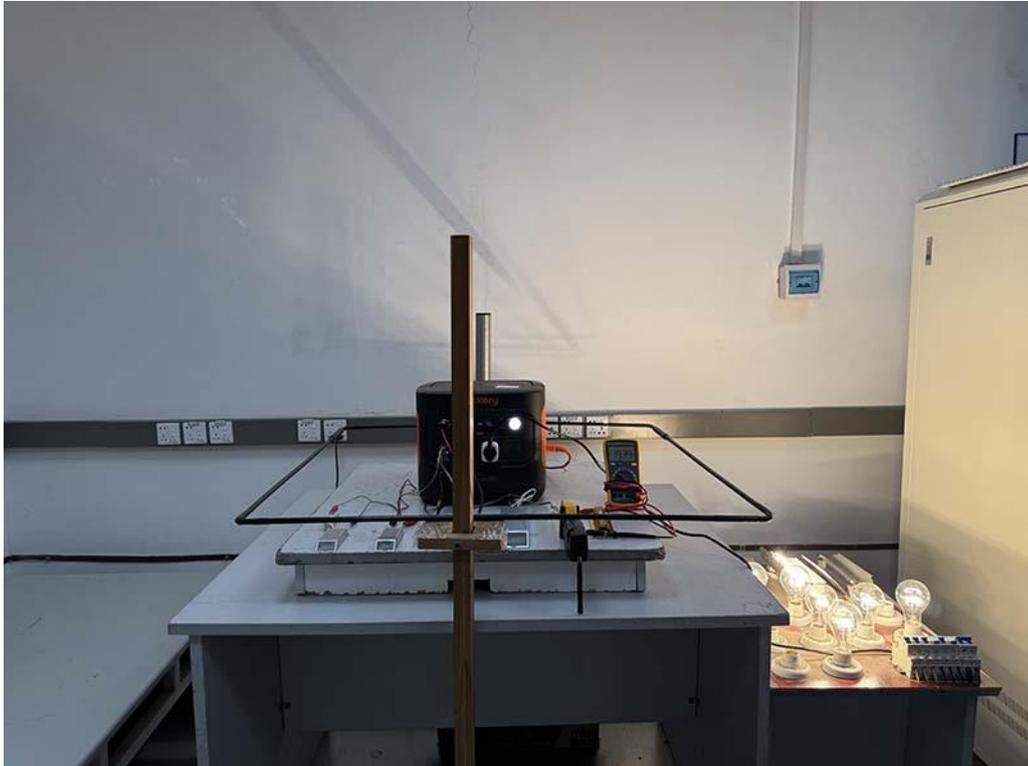
Photograph 9: Set-up for Dips



Photograph 10: Set-up for Low-Frequency Signals



Photograph 11: Set-up for Power-Frequency Magnetic Field



Photograph 12: Set-up for Radiated Spurious Emission



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Appendix A: Test Results of EMC requirement and Radiated Spurious Emission.

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Appendix A.1: Test Results of Harmonics

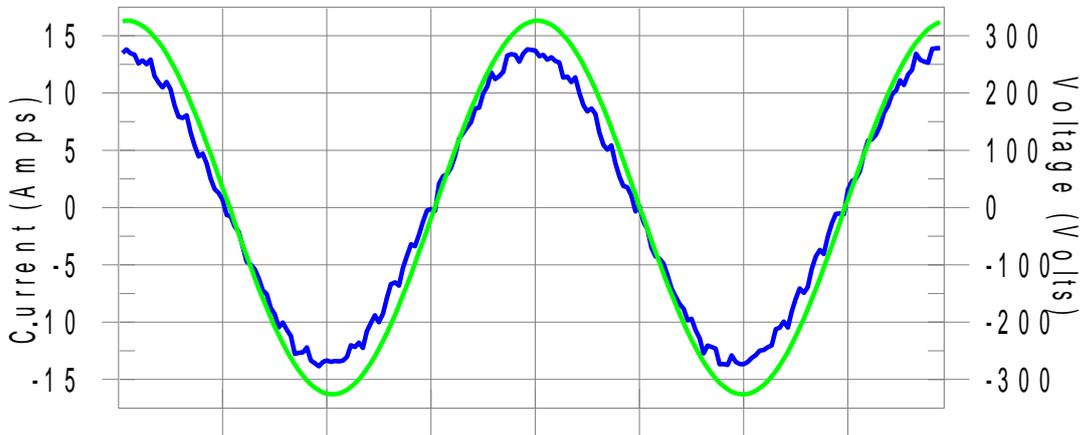
Harmonics – Class-A per IEC 61000-3-2:2018/AMD1:2020(Run time)

EUT: Jackery Explorer M/N: JE-2000D
Test category: Class-A (European limits)
Test date: 2024/11/12 Start time: 11:18:12
Test duration (min): 2.5 Data file name: H-000338.cts_data
Comment: Full Load
Customer:

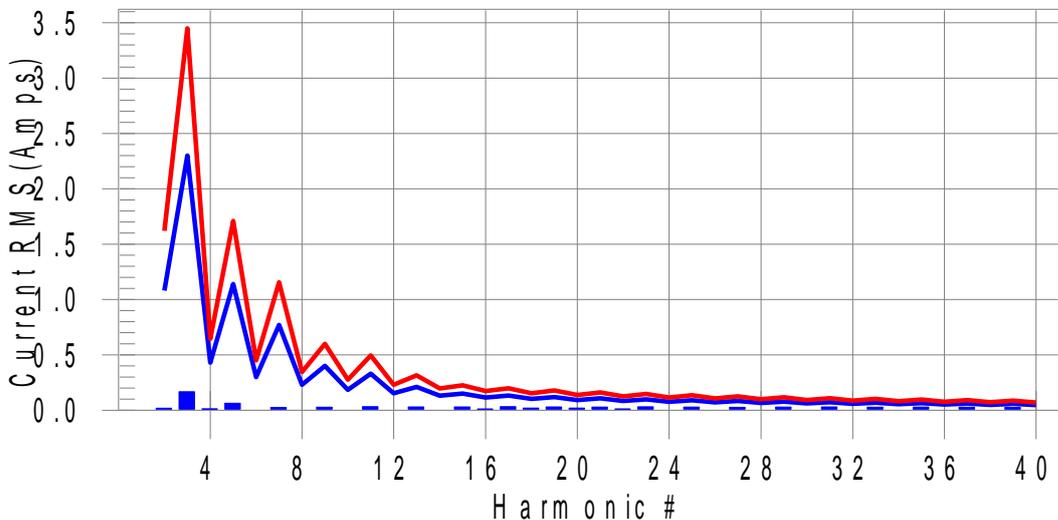
Tested by: wiley
Test Margin: 100
End time: 11:20:53

Test Result: Pass Source qualification: Normal

Current & voltage waveforms



Harmonics and Class A limit line European Limits



Test result: Pass Worst harmonics H3-5.0% of 150% limit, H3-7.2% of 100% limit

Voltage Source Verification Data (Run time)

EUT: Jackery Explorer M/N: JE-2000D
 Test category: Class-A (European limits)
 Test date: 2024/11/12
 Test duration (min): 2.5
 Comment: Full Load
 Customer:

Tested by: wiley
 Test Margin: 100
 Start time: 11:18:12
 End time: 11:20:53
 Data file name: H-000338.cts_data

Test Result: Pass Source qualification: Normal

Highest parameter values during test:

Voltage (Vrms):	230.75	Frequency(Hz):	50.00
I_Peak (Amps):	14.440	I_RMS (Amps):	9.519
I_Fund (Amps):	9.500	Crest Factor:	1.519
Power (Watts):	2186.9	Power Factor:	0.997

Harm#	Harmonics V-rms	Limit V-rms	% of Limit	Status
2	0.060	0.461	13.02	OK
3	0.402	2.076	19.34	OK
4	0.062	0.461	13.34	OK
5	0.048	0.923	5.16	OK
6	0.070	0.461	15.16	OK
7	0.038	0.692	5.55	OK
8	0.039	0.461	8.37	OK
9	0.031	0.461	6.82	OK
10	0.030	0.461	6.50	OK
11	0.026	0.231	11.48	OK
12	0.034	0.231	14.74	OK
13	0.022	0.231	9.33	OK
14	0.016	0.231	6.80	OK
15	0.024	0.231	10.57	OK
16	0.011	0.231	4.94	OK
17	0.036	0.231	15.45	OK
18	0.015	0.231	6.55	OK
19	0.028	0.231	12.01	OK
20	0.016	0.231	7.15	OK
21	0.025	0.231	10.95	OK
22	0.011	0.231	4.60	OK
23	0.039	0.231	16.76	OK
24	0.012	0.231	5.36	OK
25	0.042	0.231	18.08	OK
26	0.012	0.231	5.35	OK
27	0.030	0.231	12.90	OK
28	0.008	0.231	3.35	OK
29	0.038	0.231	16.54	OK
30	0.012	0.231	5.10	OK
31	0.047	0.231	20.39	OK
32	0.009	0.231	3.86	OK
33	0.049	0.231	21.13	OK
34	0.011	0.231	4.64	OK
35	0.050	0.231	21.66	OK
36	0.009	0.231	3.80	OK
37	0.040	0.231	17.17	OK
38	0.010	0.231	4.17	OK
39	0.044	0.231	19.17	OK
40	0.014	0.231	6.26	OK

Appendix A.2: Test Results of Voltage Fluctuations and Flicker on AC Mains

Flicker Test Summary per IEC61000-3-3:2013/AMD1:2017 (Run time)

EUT: Jackery Explorer M/N: JE-2000D
 Test category: All parameters (European limits)
 Test date: 2024/11/12
 Test duration (min): 10
 Comment: Full Load
 Customer:

Tested by: wiley
 Test Margin: 100
 End time: 11:33:11

Start time: 11:22:44
 Data file name: F-000339.cts_data

Test Result: Pass

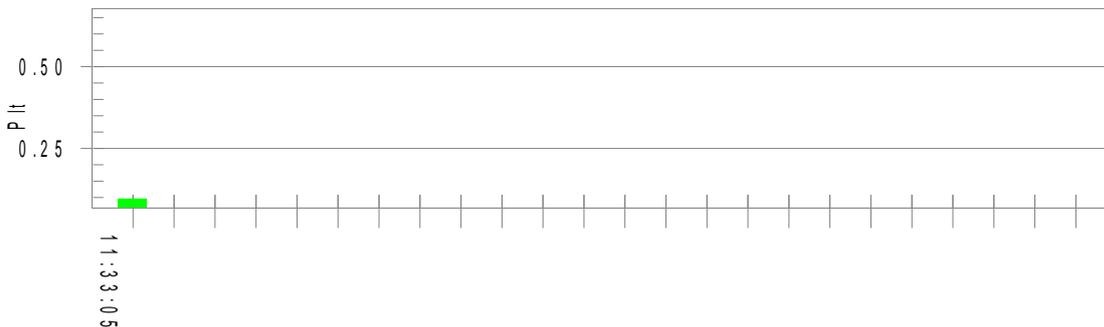
Status: Test Completed

Pst_t and limit line

European Limits



Plt and limit line

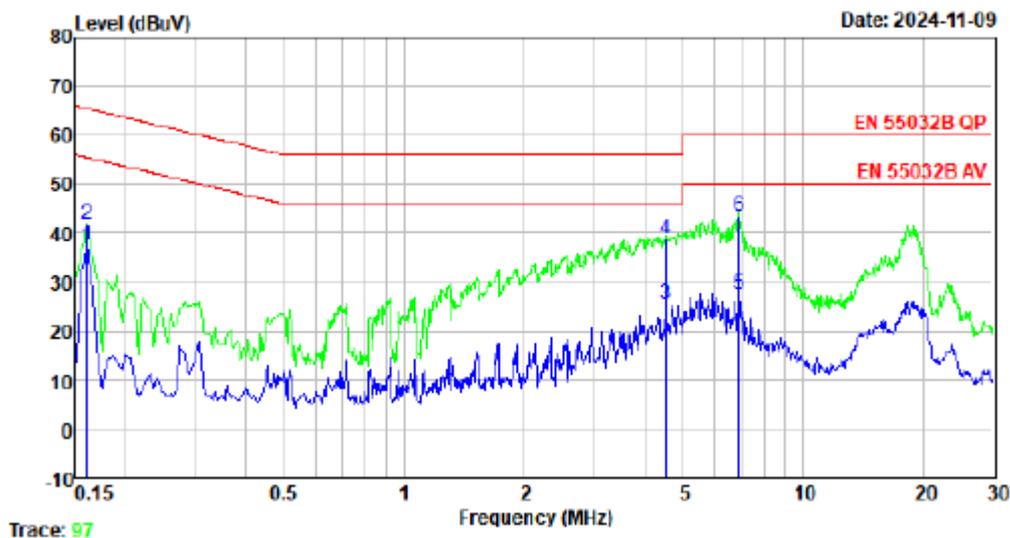


Parameter values recorded during the test:

Vrms at the end of test (Volt):	230.69		
Highest dt (%):		Test limit (%):	
T-max (mS):	0	Test limit (mS):	500.0 Pass
Highest dc (%):	0.00	Test limit (%):	3.30 Pass
Highest dmax (%):	0.00	Test limit (%):	4.00 Pass
Highest Pst (10 min. period):	0.219	Test limit:	1.000 Pass
Highest Plt (2 hr. period):	0.096	Test limit:	0.650 Pass

Appendix A.3: Test Results of Conducted Emission on AC Mains

EUT Name: Jackery Explorer 2000
 Model: JE-2000D
 Test Mode: On, Charging
 Test Voltage: AC 230V/50Hz
 Test Standard: EN 301 489-1
 Test By./Review By: Soloman Wu/Shower Dai
 Tem./Hum./Pressure: 23.7°C/50.3%/101kPa
 Remark: NEUTRAL

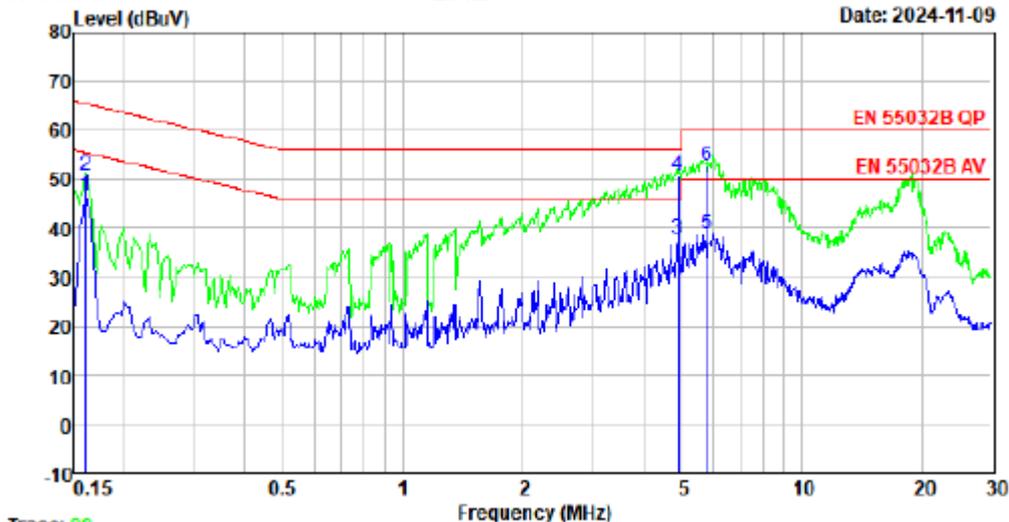


	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.16	10.10	9.87	17.44	37.41	55.47	18.06	Average
2	0.16	10.10	9.87	21.75	41.72	65.47	23.75	QP
3	4.53	10.17	9.91	5.41	25.49	46.00	20.51	Average
4	4.53	10.17	9.91	18.79	38.87	56.00	17.13	QP
5	6.91	10.20	9.92	7.56	27.68	50.00	22.32	Average
6	6.91	10.20	9.92	23.51	43.63	60.00	16.37	QP

Remarks: 1. Emission Level= LISN Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

EUT Name: Jackery Explorer 2000
 Model: JE-2000D
 Test Mode: On, Charging
 Test Voltage: AC 230V/50Hz
 Test Standard: EN 301 489-1
 Test By:/Review By: Soloman Wu/Shower Dai
 Tem./Hum./Pressure: 23.7°C/50.3%/101kPa
 Remark: LINE

Date: 2024-11-09

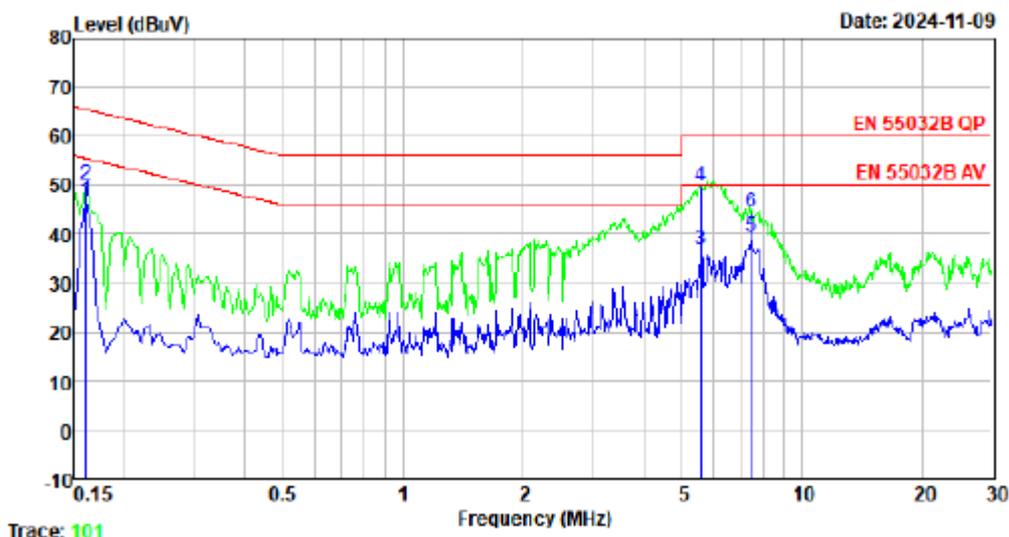


Trace: 99

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuv)	Limits (dBuv)	Margin (dB)	Remark
1	0.16	10.09	9.87	26.68	46.64	55.47	8.83	Average
2	0.16	10.09	9.87	30.67	50.63	65.47	14.84	QP
3	4.90	10.15	9.91	17.64	37.70	46.00	8.30	Average
4	4.90	10.15	9.91	30.68	50.74	56.00	5.26	QP
5	5.80	10.15	9.91	18.76	38.82	50.00	11.18	Average
6	5.80	10.15	9.91	32.79	52.85	60.00	7.15	QP

Remarks: 1. Emission Level= LISN Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

EUT Name: Jackery Explorer 2000
 Model: JE-2000D
 Test Mode: On, Full load (Output:C1:20/1.5A+C220V/5A+A:12V/1.5A+Car socket: 12V/10+AC: 2000W+light)
 Test Voltage: AC 230V/50Hz
 Test Standard: EN 301 489-1
 Test By:/Review By: Soloman Wu/Shower Dai
 Tem./Hum./Pressure: 23.7°C/50.3%/101kPa
 Remark: NEUTRAL

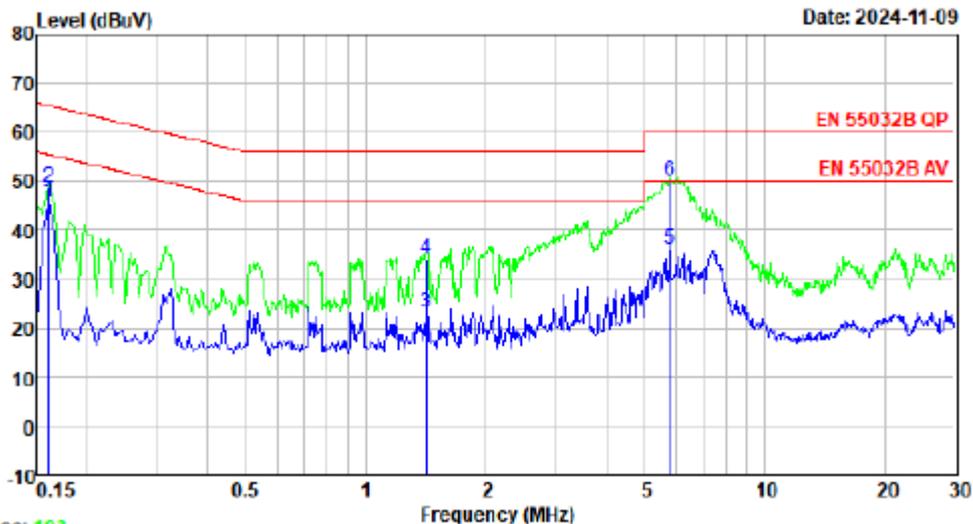


Trace: 101

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.16	10.09	9.87	26.96	46.92	55.47	8.55	Average
2	0.16	10.09	9.87	30.02	49.98	65.47	15.49	QP
3	5.59	10.15	9.91	16.70	36.76	50.00	13.24	Average
4	5.59	10.15	9.91	29.72	49.78	60.00	10.22	QP
5	7.45	10.14	9.92	19.36	39.42	50.00	10.58	Average
6	7.45	10.14	9.92	24.43	44.49	60.00	15.51	QP

Remarks: 1. Emission Level= LISN Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

EUT Name: Jackery Explorer 2000
 Model: JE-2000D
 Test Mode: On, Full load (Output:C1:20/1.5A+C220V/5A+A:12V/1.5A+Car socket: 12V/10+AC: 2000W+light)
 Test Voltage: AC 230V/50Hz
 Test Standard: EN 301 489-1
 Test By:/Review By: Soloman Wu/Shower Dai
 Tem./Hum./Pressure: 23.7°C/50.3%/101kPa
 Remark: LINE



Trace: 103

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.16	10.10	9.87	25.86	45.83	55.47	9.64	Average
2	0.16	10.10	9.87	28.89	48.86	65.47	16.61	QP
3	1.42	10.20	9.88	3.28	23.36	46.00	22.64	Average
4	1.42	10.20	9.88	14.23	34.31	56.00	21.69	QP
5	5.77	10.21	9.91	16.06	36.18	50.00	13.82	Average
6	5.77	10.21	9.91	30.02	50.14	60.00	9.86	QP

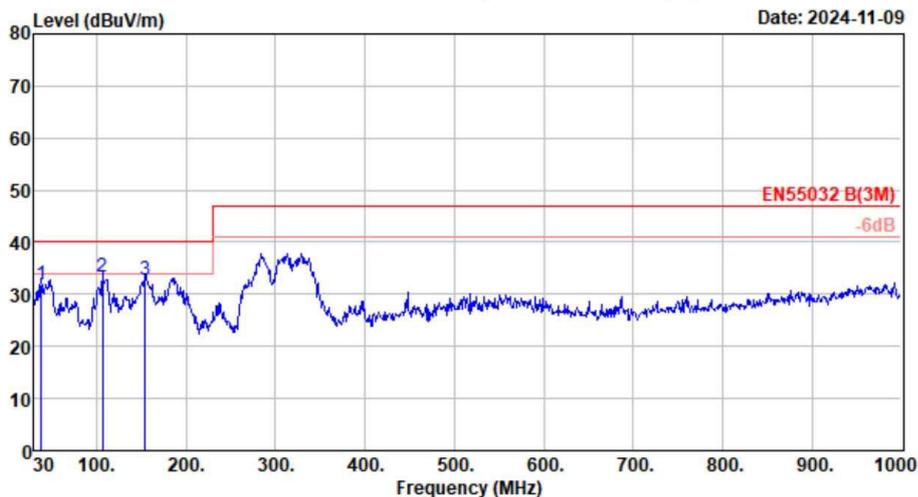
Remarks: 1. Emission Level= LISN Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Appendix A.4: Test Results of Radiated Emission, Below 1GHz

EST Technology

Chilingxiang, Qishantou, Santun,
 Houjie, Dongguan, Guangdong, China
 Tel:+86-769-83081888
 Fax:+86-769-83081878

Data: 1 File: \\EMC-966-5\test data\2024\T\T-repot\TUV Lai Yin.EM6 (12)



Site no. : 5# 966 Chamber Data no. : 1
 Dis. / Ant. : 3m 54681 Ant. pol. : VERTICAL
 Limit : EN55032 B(3M)
 Env. / Ins. : Temp:23°C;Humi:54%;Prwss:101.1kPa
 Engineer : Luke
 EUT : Jackery Explorer
 Power : AC 230V/50Hz
 M/N : JE-2000 pro2
 Test Mode : Charging

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	37.76	15.10	1.02	15.88	32.00	40.00	8.00	QP
2	106.63	10.80	1.26	21.43	33.49	40.00	6.51	QP
3	154.16	11.00	1.86	20.00	32.86	40.00	7.14	QP

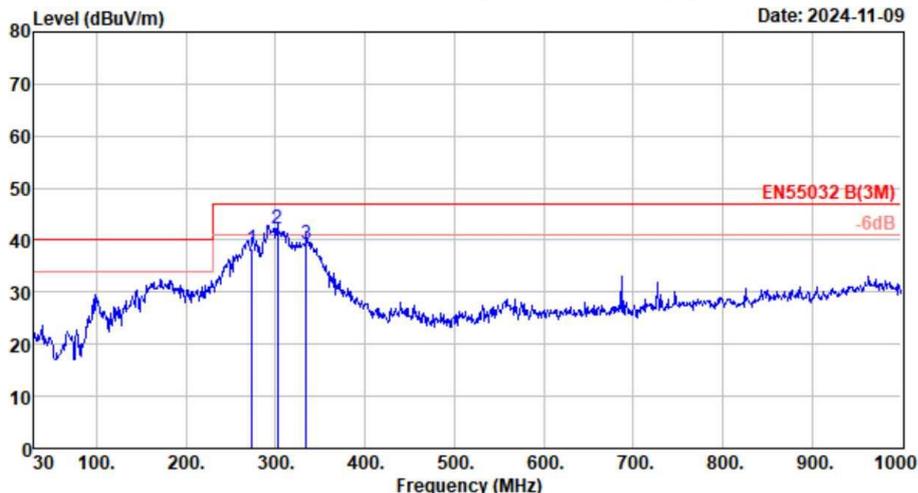
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. The emission levels that are 20dB below the official limit are not reported.

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Chilingxiang, Qishantou, Santun,
 Houjie, Dongguan, Guangdong, China
 Tel:+86-769-83081888
 Fax:+86-769-83081878

Data: 2 File: \\EMC-966-5\test data\2024\T\T-repot\TUV Lai Yin.EM6 (12)

Date: 2024-11-09



Site no. : 5# 966 Chamber Data no. : 2
 Dis. / Ant. : 3m 54681 Ant. pol. : HORIZONTAL
 Limit : EN55032 B(3M)
 Env. / Ins. : Temp:23°C;Humi:54%;Prwss:101.1kPa
 Engineer : Luke
 EUT : Jackery Explorer
 Power : AC 230V/50Hz
 M/N : JE-2000 pro2
 Test Mode : Charging

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	273.47	12.83	2.87	22.63	38.33	47.00	8.67	QP
2	302.57	13.25	3.05	25.94	42.24	47.00	4.76	QP
3	334.58	13.90	3.20	22.20	39.30	47.00	7.70	QP

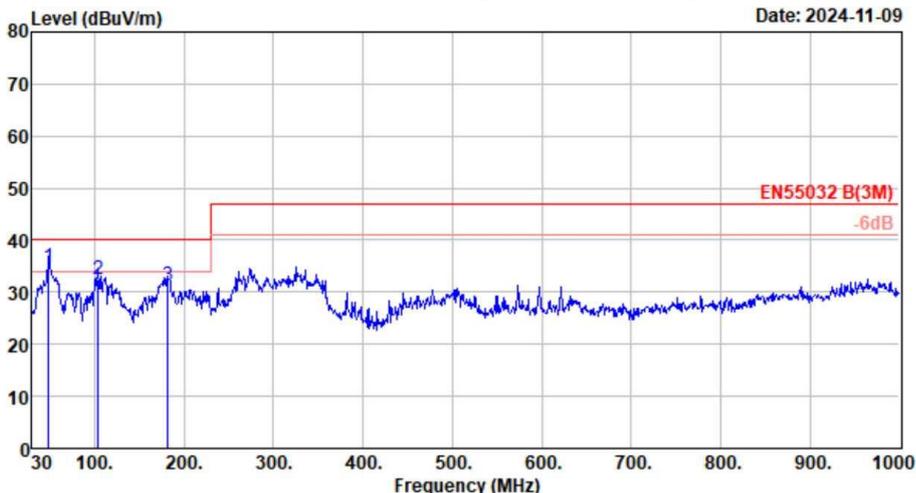
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. The emission levels that are 20dB below the official limit are not reported.

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Chilingxiang, Qishantou, Santun,
 Houjie, Dongguan, Guangdong, China
 Tel:+86-769-83081888
 Fax:+86-769-83081878

Data: 3 File: \\EMC-966-5\test data\2024\T\T-repot\TUV Lai Yin.EM6 (12)

Date: 2024-11-09



Site no. : 5# 966 Chamber Data no. : 3
 Dis. / Ant. : 3m 54681 Ant. pol. : VERTICAL
 Limit : EN55032 B(3M)
 Env. / Ins. : Temp:23°C;Humi:54%;Prwss:101.1kPa
 Engineer : Luke
 EUT : Jackery Explorer
 Power : AC 230V/50Hz
 M/N : JE-2000 pro2
 Test Mode : Full Load(Output:C1:20V/1.5A+C2:20V/5A
 +A:12V/1.5A+Car socket:12V/10A+AC:2000W
 +Light)

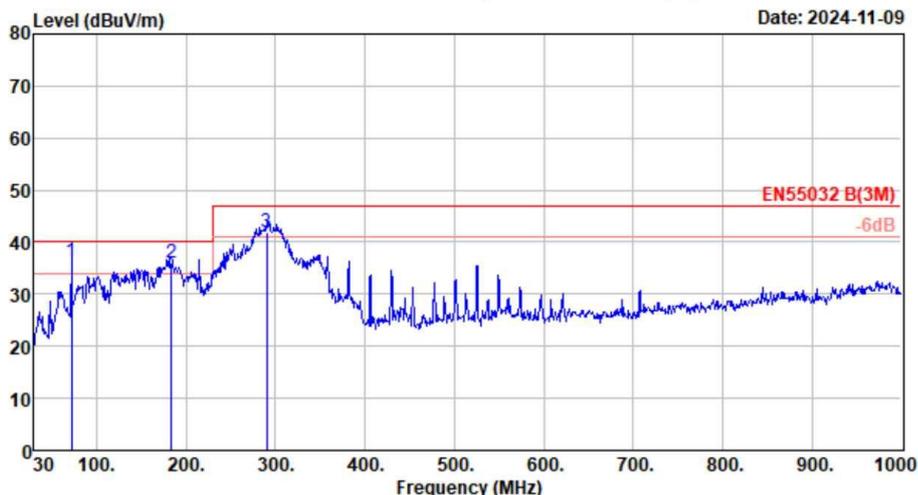
	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	48.43	9.90	1.16	23.77	34.83	40.00	5.17	QP
2	103.72	10.80	1.22	20.44	32.46	40.00	7.54	QP
3	182.29	9.20	2.22	19.74	31.16	40.00	8.84	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. The emission levels that are 20dB below the official limit are not reported.

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Chilingxiang, Qishantou, Santun,
Houjie, Dongguan, Guangdong, China
Tel:+86-769-83081888
Fax:+86-769-83081878

Data: 4 File: \\EMC-966-5\test data\2024\T\T-repot\TUV Lai Yin.EM6 (12)



Site no. : 5# 966 Chamber Data no. : 4
 Dis. / Ant. : 3m 54681 Ant. pol. : HORIZONTAL
 Limit : EN55032 B(3M)
 Env. / Ins. : Temp:23°C;Humi:54%;Prwss:101.1kPa
 Engineer : Luke
 EUT : Jackery Explorer
 Power : AC 230V/50Hz
 M/N : JE-2000 pro2
 Test Mode : Full Load(Output:C1:20V/1.5A+C2:20V/5A
 +A:12V/1.5A+Car socket:12V/10A+AC:2000W
 +Light)

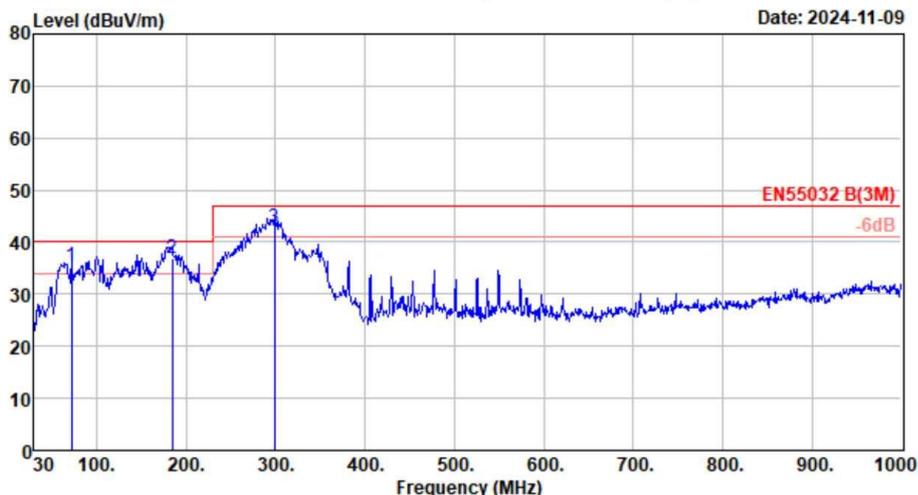
	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	71.71	6.20	1.18	28.95	36.33	40.00	3.67	QP
2	183.26	9.00	2.23	24.86	36.09	40.00	3.91	QP
3	289.96	13.20	2.97	25.89	42.06	47.00	4.94	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. The emission levels that are 20dB below the official limit are not reported.

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Chilingxiang, Qishantou, Santun,
 Houjie, Dongguan, Guangdong, China
 Tel:+86-769-83081888
 Fax:+86-769-83081878

Data: 5 File: \\EMC-966-5\test data\2024\T\repor\TUV Lai Yin.EM6 (12)



Site no. : 5# 966 Chamber Data no. : 5
 Dis. / Ant. : 3m 54681 Ant. pol. : HORIZONTAL
 Limit : EN55032 B(3M)
 Env. / Ins. : Temp:23°C;Humi:54%;Prwss:101.1kPa
 Engineer : Luke
 EUT : Jackery Explorer
 Power : DC 44.8V
 M/N : JE-2000 pro2
 Test Mode : Full Load(Output:C1:20V/1.5A+C2:20V/5A
 +A:12V/1.5A+Car socket:12V/10A+AC:2000W
 +Light)

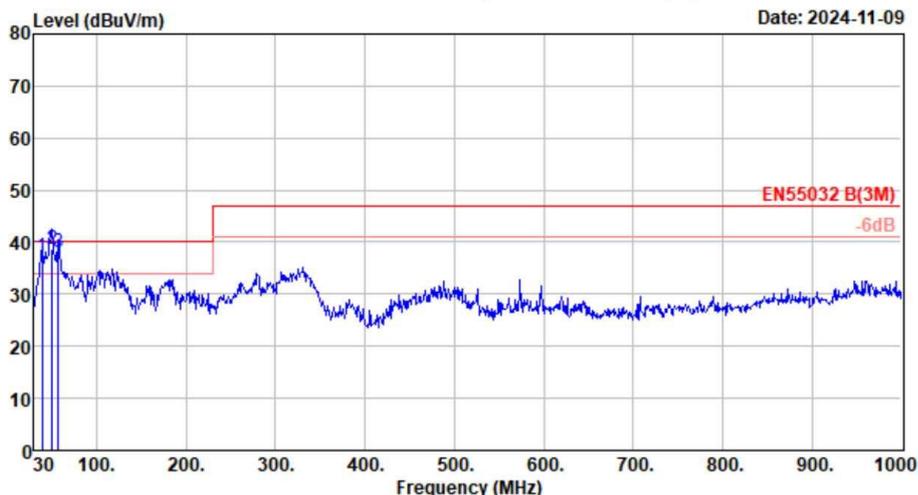
	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	71.71	6.20	1.18	28.14	35.52	40.00	4.48	QP
2	184.23	9.00	2.25	25.80	37.05	40.00	2.95	QP
3	298.69	13.32	3.02	26.53	42.87	47.00	4.13	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. The emission levels that are 20dB below the official limit are not reported.

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Chilingxiang, Qishantou, Santun,
Houjie, Dongguan, Guangdong, China
Tel:+86-769-83081888
Fax:+86-769-83081878

Data: 6 File: \\EMC-966-5\test data\2024\T\T-repot\TUV Lai Yin.EM6 (12)



Site no. : 5# 966 Chamber Data no. : 6
 Dis. / Ant. : 3m 54681 Ant. pol. : VERTICAL
 Limit : EN55032 B(3M)
 Env. / Ins. : Temp:23°C;Humi:54%;Prwss:101.1kPa
 Engineer : Luke
 EUT : Jackery Explorer
 Power : DC 44.8V
 M/N : JE-2000 pro2
 Test Mode : Full Load(Output:C1:20V/1.5A+C2:20V/5A
 +A:12V/1.5A+Car socket:12V/10A+AC:2000W
 +Light)

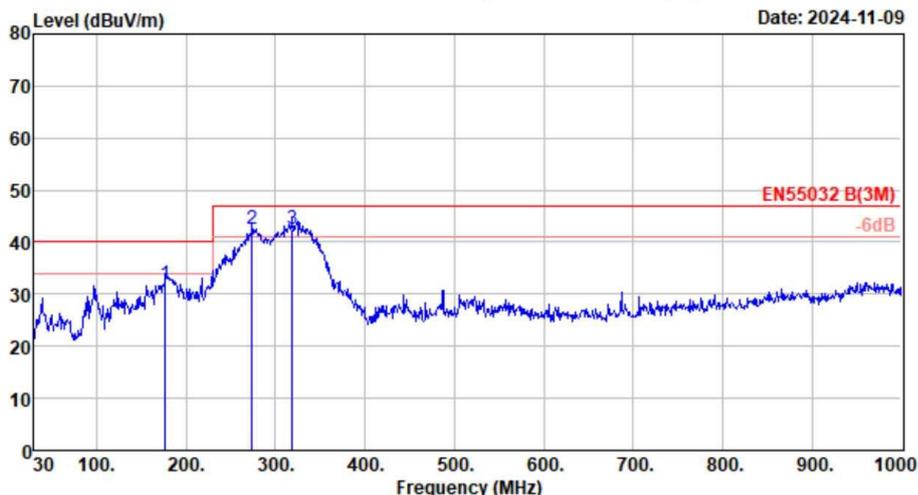
	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	38.73	14.50	1.04	21.53	37.07	40.00	2.93	QP
2	50.37	9.10	1.19	28.40	38.69	40.00	1.31	QP
3	57.16	6.60	1.19	30.42	38.21	40.00	1.79	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. The emission levels that are 20dB below the official limit are not reported.

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Chilingxiang, Qishantou, Santun,
 Houjie, Dongguan, Guangdong, China
 Tel:+86-769-83081888
 Fax:+86-769-83081878

Data: 7 File: \\EMC-966-5\test data\2024\T\T-repot\TUV Lai Yin.EM6 (12)



Site no. : 5# 966 Chamber Data no. : 7
 Dis. / Ant. : 3m 54681 Ant. pol. : HORIZONTAL
 Limit : EN55032 B(3M)
 Env. / Ins. : Temp:23°C;Humi:54%;Prwss:101.1kPa
 Engineer : Luke
 EUT : Jackery Explorer
 Power : DC 44.8V
 M/N : JE-2000 pro2
 Test Mode : Full Load(Output:AC:2000W)

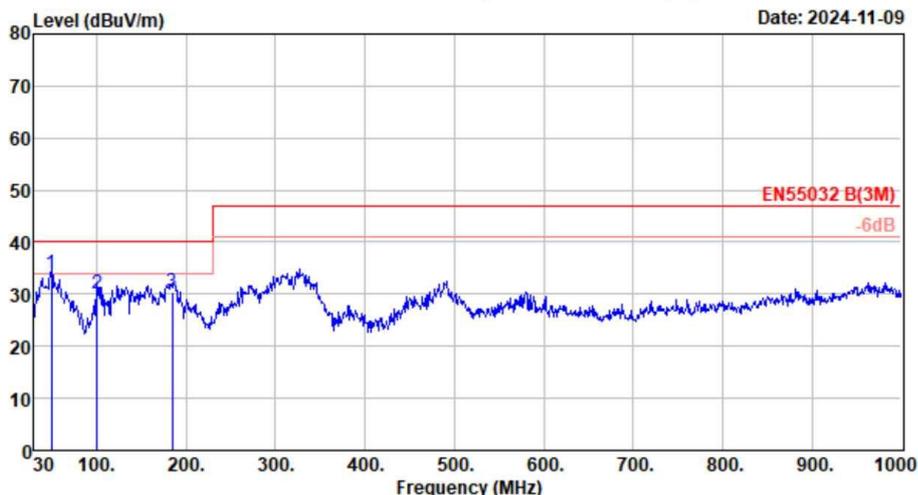
	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	176.47	9.50	2.14	20.17	31.81	40.00	8.19	QP
2	273.47	12.83	2.87	26.77	42.47	47.00	4.53	QP
3	319.06	13.65	3.12	25.75	42.52	47.00	4.48	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
 Houjie, Dongguan, Guangdong, China
 Tel:+86-769-83081888
 Fax:+86-769-83081878

Data: 8 File: \\EMC-966-5\test data\2024\T\T-repot\TUV Lai Yin.EM6 (12)



Site no. : 5# 966 Chamber Data no. : 8
 Dis. / Ant. : 3m 54681 Ant. pol. : VERTICAL
 Limit : EN55032 B(3M)
 Env. / Ins. : Temp:23°C;Humi:54%;Prwss:101.1kPa
 Engineer : Luke
 EUT : Jackery Explorer
 Power : DC 44.8V
 M/N : JE-2000 pro2
 Test Mode : Full Load(Output:AC:2000W)

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	49.40	9.60	1.18	23.12	33.90	40.00	6.10	QP
2	100.81	10.40	1.18	18.48	30.06	40.00	9.94	QP
3	184.23	9.00	2.25	19.01	30.26	40.00	9.74	QP

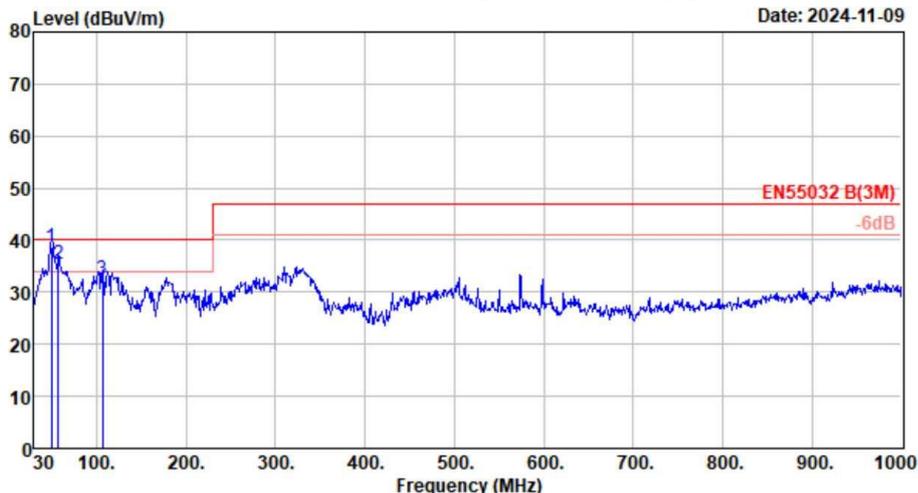
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
 Houjie, Dongguan, Guangdong, China
 Tel:+86-769-83081888
 Fax:+86-769-83081878

Data: 9 File: \\EMC-966-5\test data\2024\T\T-repot\TUV Lai Yin.EM6 (12)

Date: 2024-11-09



Site no. : 5# 966 Chamber Data no. : 9
 Dis. / Ant. : 3m 54681 Ant. pol. : VERTICAL
 Limit : EN55032 B(3M)
 Env. / Ins. : Temp:23°C;Humi:54%;Prwss:101.1kPa
 Engineer : Luke
 EUT : Jackery Explorer
 Power : DC 44.8V
 M/N : JE-2000 pro2
 Test Mode : Half Load(Output:C1:20V/0.75A
 +C2:20V/2.5A+A:12V/0.75A
 +Car socket:12V/5A+AC:1000W+Light)

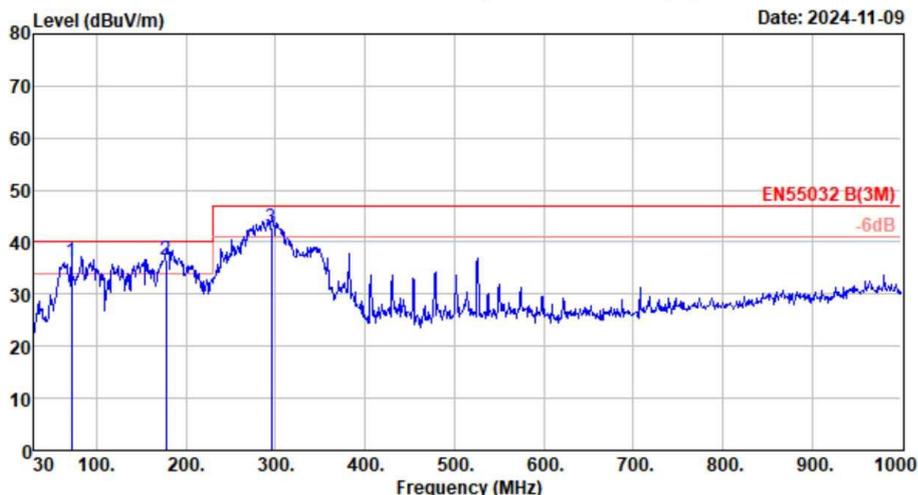
	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	49.40	9.60	1.18	27.90	38.68	40.00	1.32	QP
2	57.16	6.60	1.19	27.50	35.29	40.00	4.71	QP
3	106.63	10.80	1.26	20.31	32.37	40.00	7.63	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. The emission levels that are 20dB below the official limit are not reported.

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Chilingxiang, Qishantou, Santun,
 Houjie, Dongguan, Guangdong, China
 Tel:+86-769-83081888
 Fax:+86-769-83081878

Data: 10 File: \\EMC-966-5\test data\2024\T\T-repot\TUV Lai Yin.EM6 (12)



Site no. : 5# 966 Chamber Data no. : 10
 Dis. / Ant. : 3m 54681 Ant. pol. : HORIZONTAL
 Limit : EN55032 B(3M)
 Env. / Ins. : Temp:23°C;Humi:54%;Prwss:101.1kPa
 Engineer : Luke
 EUT : Jackery Explorer
 Power : DC 44.8V
 M/N : JE-2000 pro2
 Test Mode : Half Load(Output:C1:20V/0.75A
 +C2:20V/2.5A+A:12V/0.75A
 +Car socket:12V/5A+AC:1000W+Light)

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	71.71	6.20	1.18	28.93	36.31	40.00	3.69	QP
2	177.44	9.30	2.16	25.20	36.66	40.00	3.34	QP
3	295.78	13.38	3.01	26.49	42.88	47.00	4.12	QP

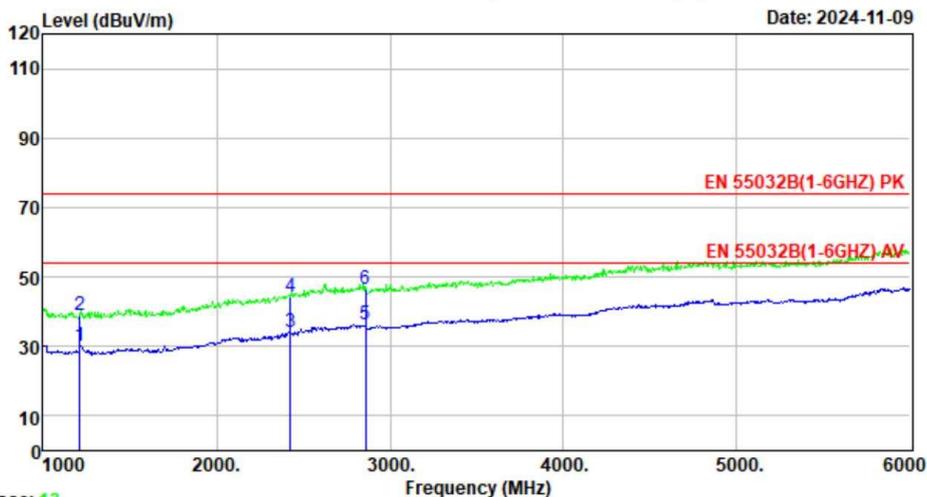
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. The emission levels that are 20dB below the official limit are not reported.

Appendix A.5: Test Results of Radiated Emission, Above 1GHz

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Chilingxiang, Qishantou, Santun,
 Houjie, Dongguan, Guangdong, China
 Tel:+86-769-83081888
 Fax:+86-769-83081878

Data: 14 File: \\EMC-966-5\test data\2024\T\repor\TUV Lai Yin.EM6 (36)



Trace: 13
 Site no. : 5# 966 Chamber Data no. : 14
 Dis. / Ant. : 3m 9120D 1-18G Ant. pol. : HORIZONTAL
 Limit : EN 55032B(1-6GHZ) PK
 Env. / Ins. : Temp:23°C;Humi:54%;Press:101.1kPa
 Engineer : Luke
 EUT : Jackery Explorer
 Power : AC 230V/50Hz
 M/N : JE-2000 pro2
 Test Mode : Charging

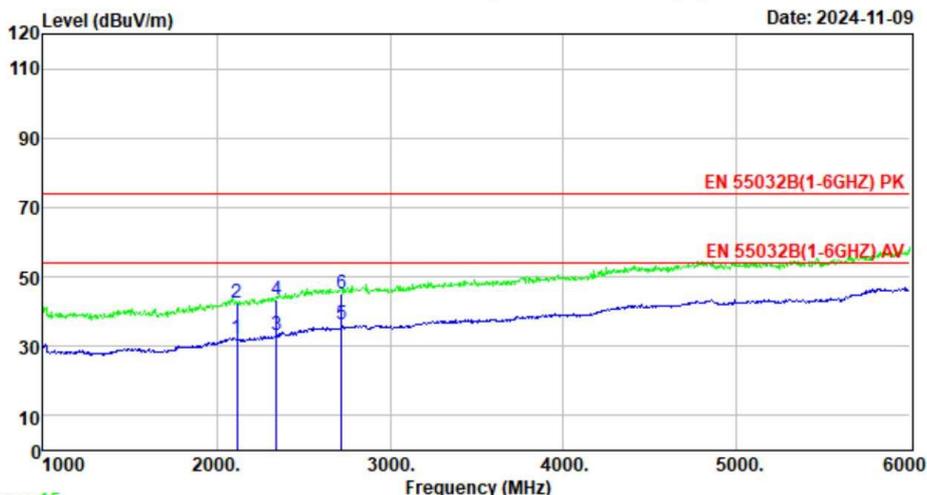
	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1210.00	25.20	3.37	1.46	30.03	54.00	23.97	Average
2	1210.00	25.20	3.37	10.47	39.04	74.00	34.96	Peak
3	2425.00	27.81	4.93	1.42	34.16	54.00	19.84	Average
4	2425.00	27.81	4.93	11.45	44.19	74.00	29.81	Peak
5	2860.00	29.00	5.48	1.85	36.33	54.00	17.67	Average
6	2860.00	29.00	5.48	12.07	46.55	74.00	27.45	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan, Guangdong, China
Tel:+86-769-83081888
Fax:+86-769-83081878

Data: 16 File: \\EMC-966-5\test data\2024\T\T-repot\TUV Lai Yin.EM6 (36)



Trace: 15

Site no. : 5# 966 Chamber Data no. : 16
Dis. / Ant. : 3m 9120D 1-18G Ant. pol. : VERTICAL
Limit : EN 55032B(1-6GHZ) PK
Env. / Ins. : Temp:23°C;Humi:54%;Press:101.1kPa
Engineer : Luke
EUT : Jackery Explorer
Power : AC 230V/50Hz
M/N : JE-2000 pro2
Test Mode : Charging

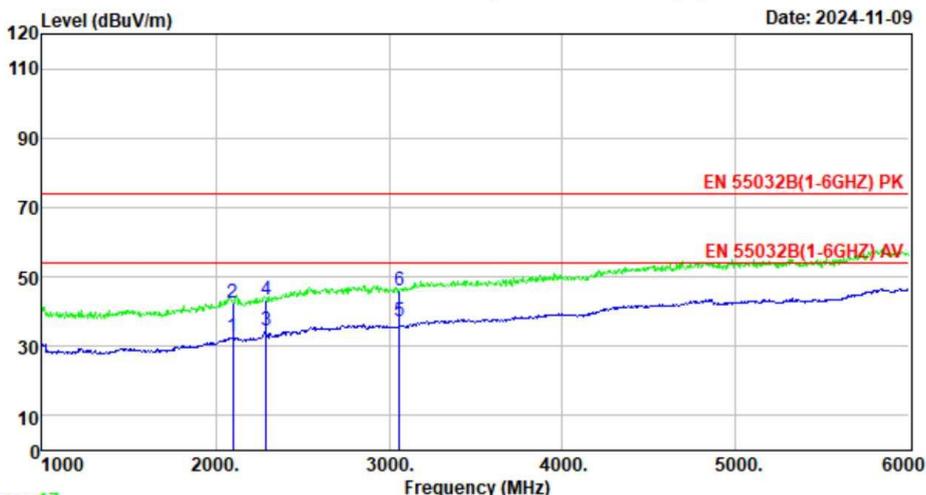
	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2120.00	27.50	4.53	0.40	32.43	54.00	21.57	Average
2	2120.00	27.50	4.53	10.48	42.51	74.00	31.49	Peak
3	2345.00	27.53	4.81	0.85	33.19	54.00	20.81	Average
4	2345.00	27.53	4.81	10.83	43.17	74.00	30.83	Peak
5	2720.00	28.37	5.30	2.51	36.18	54.00	17.82	Average
6	2720.00	28.37	5.30	11.59	45.26	74.00	28.74	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
 Houjie, Dongguan, Guangdong, China
 Tel:+86-769-83081888
 Fax:+86-769-83081878

Data: 18 File: \\EMC-966-5\test data\2024\T\repor\TUV Lai Yin.EM6 (36)



Trace: 17

Site no. : 5# 966 Chamber Data no. : 18
 Dis. / Ant. : 3m 9120D 1-18G Ant. pol. : HORIZONTAL
 Limit : EN 55032B(1-6GHZ) PK
 Env. / Ins. : Temp:23°C;Humi:54%;Press:101.1kPa
 Engineer : Luke
 EUT : Jackery Explorer
 Power : AC 230V/50Hz
 M/N : JE-2000 pro2
 Test Mode : Full Load(Output:C1:20V/1.5A+C2:20V/5A
 +A:12V/1.5A+Car socket:12V/10A+AC:2000W
 +Light)

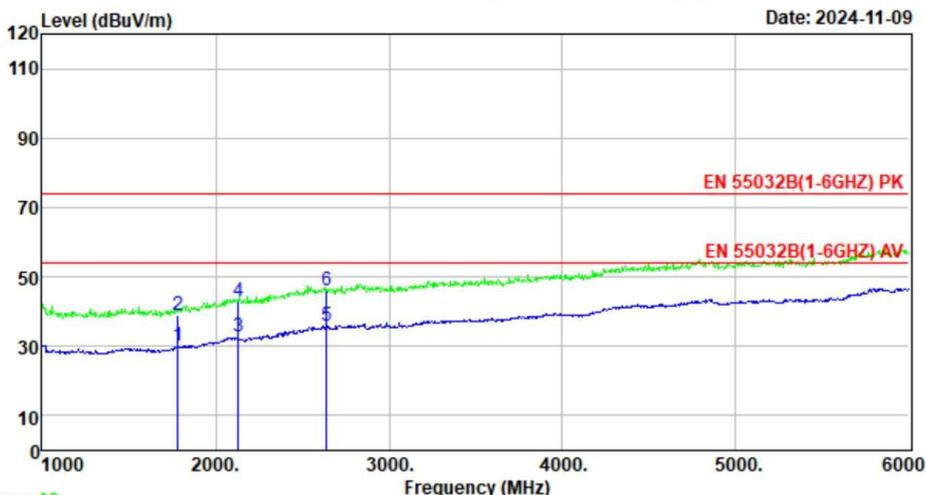
	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2100.00	27.60	4.50	0.57	32.67	54.00	21.33	Average
2	2100.00	27.60	4.50	10.52	42.62	74.00	31.38	Peak
3	2290.00	27.27	4.75	2.34	34.36	54.00	19.64	Average
4	2290.00	27.27	4.75	11.38	43.40	74.00	30.60	Peak
5	3060.00	29.07	5.70	2.40	37.17	54.00	16.83	Average
6	3060.00	29.07	5.70	11.49	46.26	74.00	27.74	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
 Houjie, Dongguan, Guangdong, China
 Tel:+86-769-83081888
 Fax:+86-769-83081878

Data: 20 File: \\EMC-966-5\test data\2024\T\T-repot\TUV Lai Yin.EM6 (36)



Trace: 19

Site no. : 5# 966 Chamber Data no. : 20
 Dis. / Ant. : 3m 9120D 1-18G Ant. pol. : VERTICAL
 Limit : EN 55032B(1-6GHZ) PK
 Env. / Ins. : Temp:23°C;Humi:54%;Press:101.1kPa
 Engineer : Luke
 EUT : Jackery Explorer
 Power : AC 230V/50Hz
 M/N : JE-2000 pro2
 Test Mode : Full Load(Output:C1:20V/1.5A+C2:20V/5A
 +A:12V/1.5A+Car socket:12V/10A+AC:2000W
 +Light)

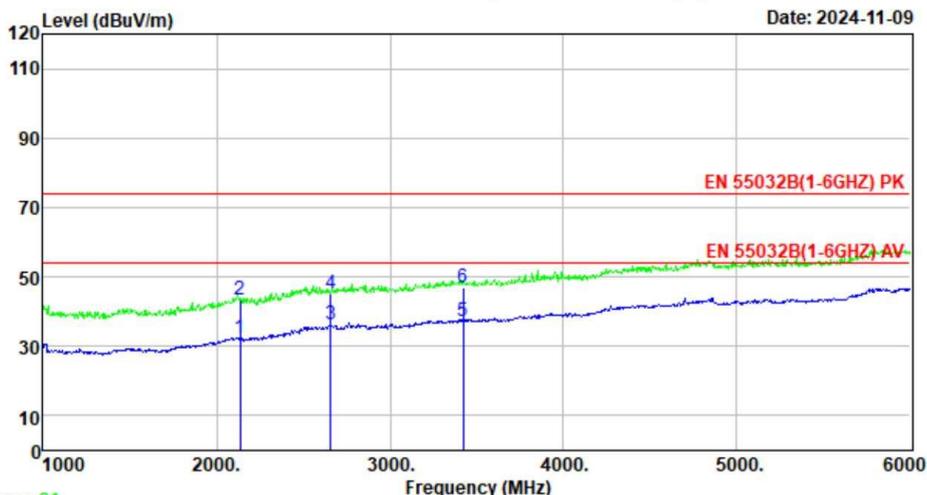
	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1785.00	25.40	4.09	0.64	30.13	54.00	23.87	Average
2	1785.00	25.40	4.09	9.69	39.18	74.00	34.82	Peak
3	2130.00	27.40	4.53	0.82	32.75	54.00	21.25	Average
4	2130.00	27.40	4.53	10.82	42.75	74.00	31.25	Peak
5	2640.00	28.30	5.19	2.52	36.01	54.00	17.99	Average
6	2640.00	28.30	5.19	12.57	46.06	74.00	27.94	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
 Houjie, Dongguan, Guangdong, China
 Tel:+86-769-83081888
 Fax:+86-769-83081878

Data: 22 File: \\EMC-966-5\test data\2024\T\T-repot\TUV Lai Yin.EM6 (36)



Trace: 21

Site no. : 5# 966 Chamber Data no. : 22
 Dis. / Ant. : 3m 9120D 1-18G Ant. pol. : VERTICAL
 Limit : EN 55032B(1-6GHZ) PK
 Env. / Ins. : Temp:23°C;Humi:54%;Press:101.1kPa
 Engineer : Luke
 EUT : Jackery Explorer
 Power : DC 44.8V
 M/N : JE-2000 pro2
 Test Mode : Full Load(Output:C1:20V/1.5A+C2:20V/5A
 +A:12V/1.5A+Car socket:12V/10A+AC:2000W
 +Light)

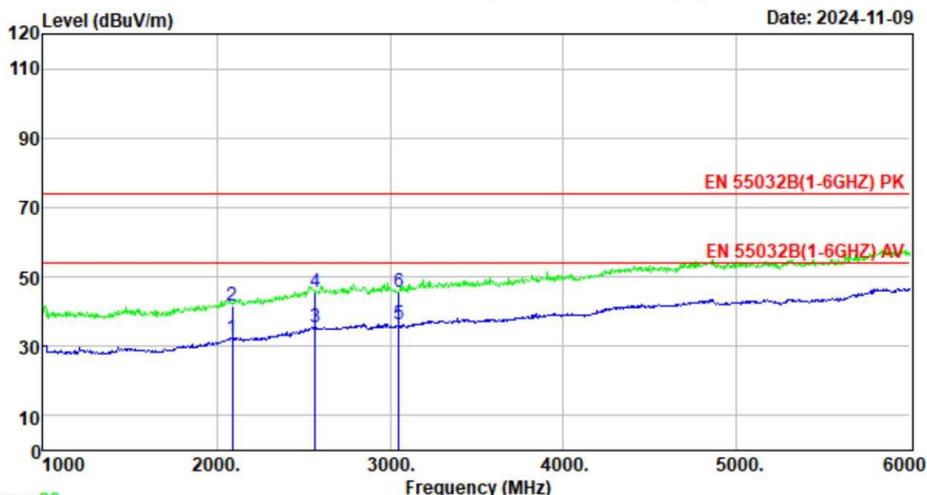
	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2135.00	27.40	4.55	0.52	32.47	54.00	21.53	Average
2	2135.00	27.40	4.55	11.57	43.52	74.00	30.48	Peak
3	2660.00	28.30	5.24	2.65	36.19	54.00	17.81	Average
4	2660.00	28.30	5.24	11.63	45.17	74.00	28.83	Peak
5	3420.00	30.00	5.88	1.22	37.10	54.00	16.90	Average
6	3420.00	30.00	5.88	11.26	47.14	74.00	26.86	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan, Guangdong, China
Tel:+86-769-83081888
Fax:+86-769-83081878

Data: 24 File: \\EMC-966-5\test data\2024\T\T-repot\TUV Lai Yin.EM6 (36)



Trace: 23

Site no. : 5# 966 Chamber Data no. : 24
 Dis. / Ant. : 3m 9120D 1-18G Ant. pol. : HORIZONTAL
 Limit : EN 55032B(1-6GHZ) PK
 Env. / Ins. : Temp:23°C;Humi:54%;Press:101.1kPa
 Engineer : Luke
 EUT : Jackery Explorer
 Power : DC 44.8V
 M/N : JE-2000 pro2
 Test Mode : Full Load(Output:C1:20V/1.5A+C2:20V/5A
 +A:12V/1.5A+Car socket:12V/10A+AC:2000W
 +Light)

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2090.00	27.47	4.48	0.55	32.50	54.00	21.50	Average
2	2090.00	27.47	4.48	9.59	41.54	74.00	32.46	Peak
3	2570.00	28.17	5.10	2.26	35.53	54.00	18.47	Average
4	2570.00	28.17	5.10	12.28	45.55	74.00	28.45	Peak
5	3050.00	29.00	5.70	1.73	36.43	54.00	17.57	Average
6	3050.00	29.00	5.70	10.78	45.48	74.00	28.52	Peak

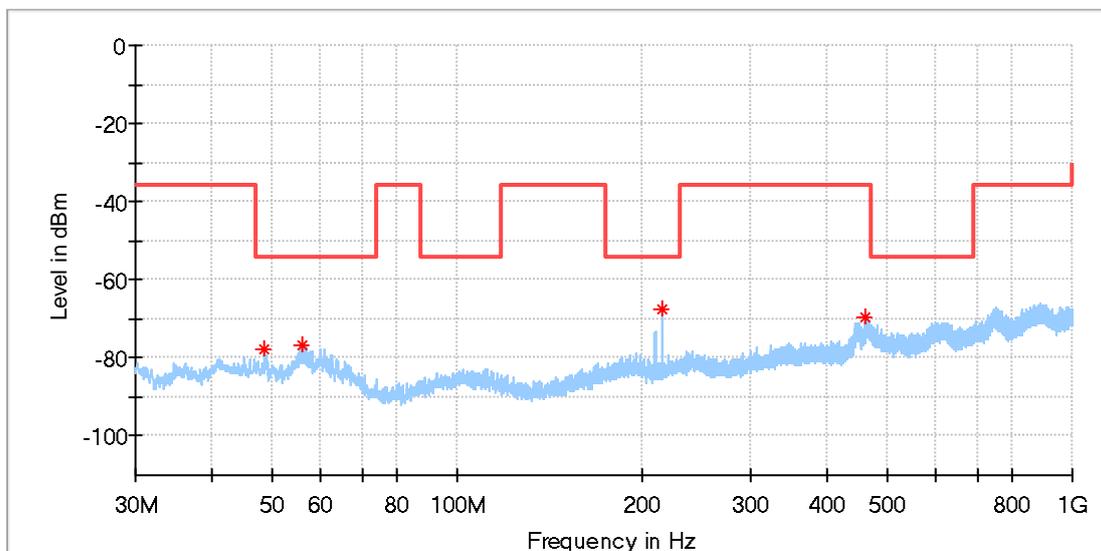
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. The emission levels that are 20dB below the official limit are not reported.

Appendix A.6: Test Results of Radiated Spurious Emission For 2.4G WLAN

Test Report

EUT Information

EUT Name:	Jackery Explorer 2000
Model:	JE-2000D
Sample No:	A003844222-001
Test Mode:	TX_11B H CH
Test Voltage:	Battery
Remark:	Temp:23.6;Humi:52%
Test standard:	EN 300328
Tested By:	Lich Chen
Reviewed by:	Terry Yin



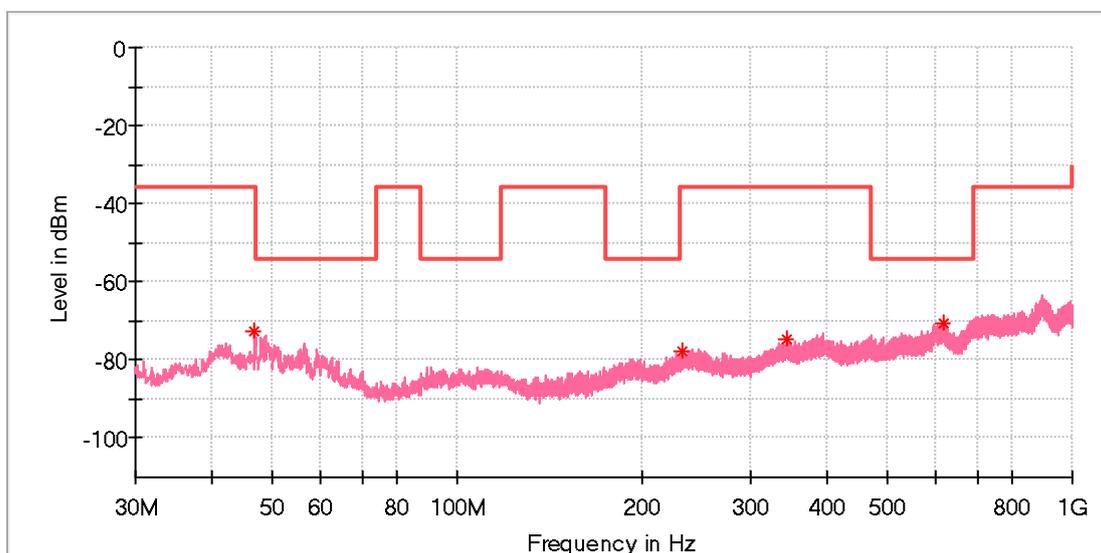
Critical Freqs

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
48.721000	-78.01	-54.00	24.01	150.0	H	42.0	-118.8
56.190000	-76.86	-54.00	22.86	150.0	H	0.0	-117.5
215.658000	-67.31	-54.00	13.31	150.0	H	35.0	-118.1
461.941000	-69.64	-36.00	33.64	150.0	H	201.0	-109.8

Test Report

EUT Information

EUT Name: Jackery Explorer 2000
 Model: JE-2000D
 Sample No: A003844222-001
 Test Mode: TX_11B H CH
 Test Voltage: Battery
 Remark: Temp:23.6;Humi:52%
 Test standard: EN 300328
 Tested By: Lich Chen
 Reviewed by: Terry Yin



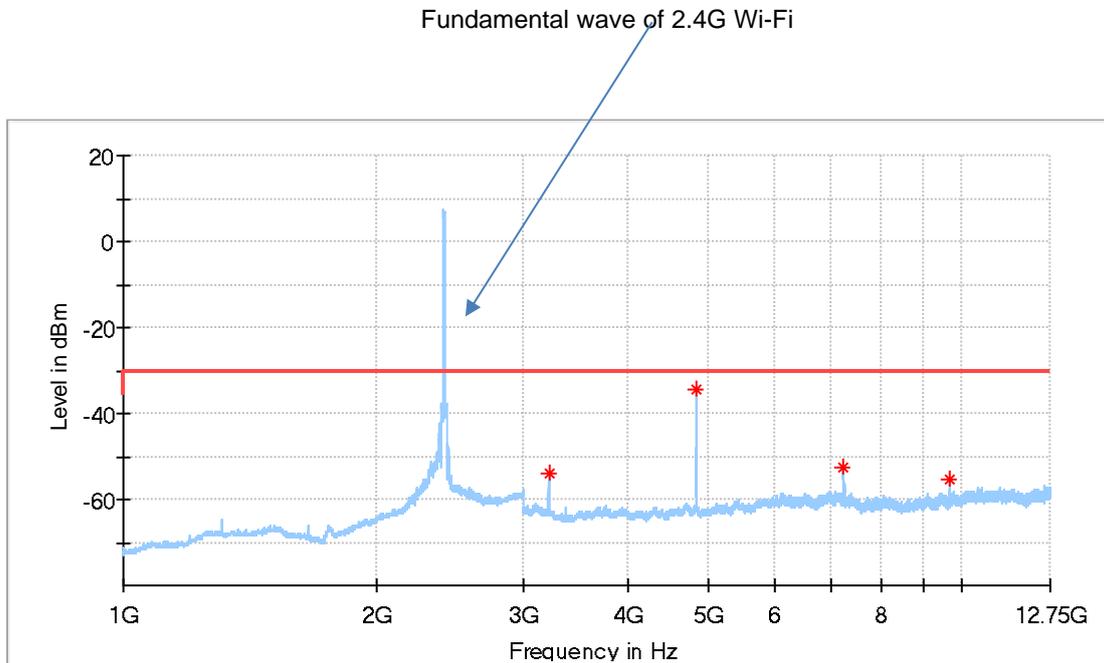
Critical Freqs

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
46.878000	-72.64	-36.00	36.64	150.0	V	340.0	-116.0
231.954000	-77.80	-36.00	41.80	150.0	V	121.0	-116.8
343.407000	-74.50	-36.00	38.50	150.0	V	45.0	-112.9
619.760000	-70.43	-54.00	16.43	150.0	V	0.0	-109.0

Test Report

EUT Information

EUT Name:	Jackery Explorer 2000
Model:	JE-2000D
Sample No:	A003844222-001
Test Mode:	TX_11B H CH
Test Voltage:	Battery
Remark:	Temp:23.6;Humi:52%
Test standard:	EN 300328
Tested By:	Lich Chen
Reviewed by	Terry Yin



Critical Freqs

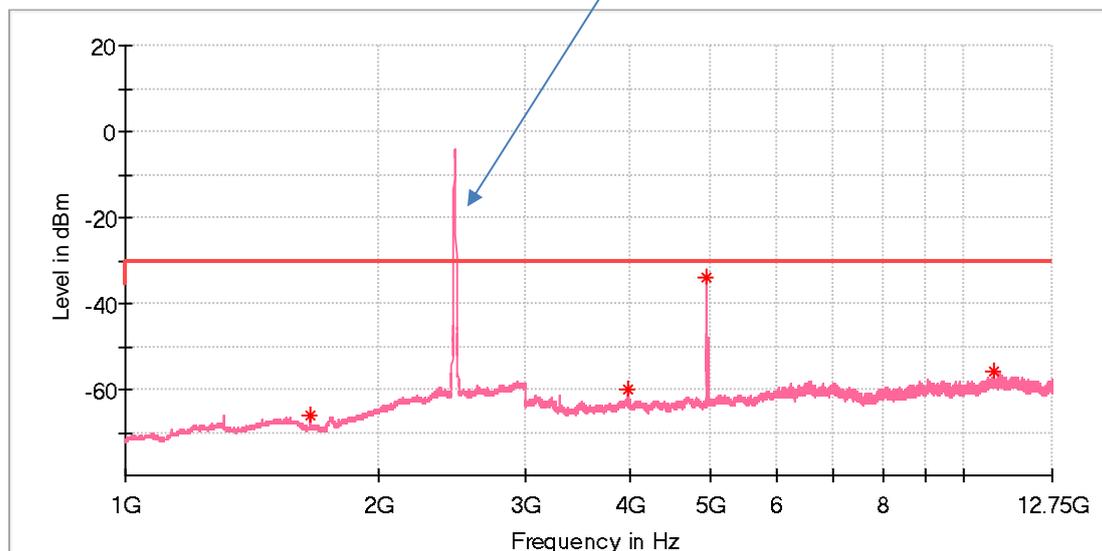
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
3216.000000	-53.94	-30.00	23.94	150.0	H	196.0	-96.6
4824.000000	-34.29	-30.00	4.29	150.0	H	202.0	-94.8
7236.696429	-52.59	-30.00	22.59	150.0	H	186.0	-91.7
9647.892857	-55.38	-30.00	25.38	150.0	H	301.0	-91.8

Test Report

EUT Information

EUT Name:	Jackery Explorer 2000
Model:	JE-2000D
Sample No:	A003844222-001
Test Mode:	TX_11B H CH
Test Voltage:	Battery
Remark:	Temp:23.6;Humi:52%
Test standard:	EN 300328
Tested By:	Lich Chen
Reviewed by:	Terry Yin

Fundamental wave of 2.4G Wi-Fi



Critical Freqs

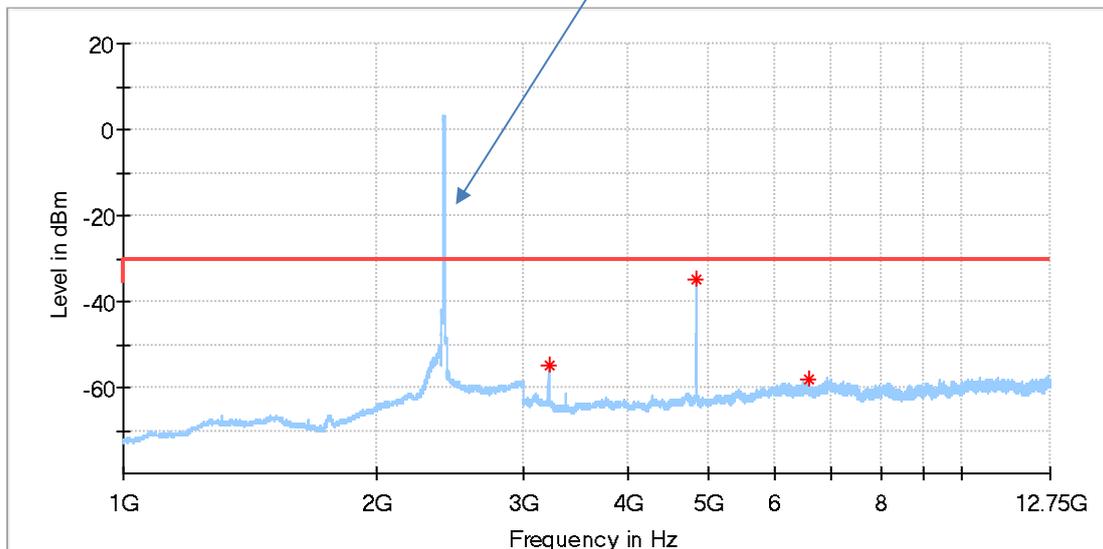
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1665.000000	-66.07	-30.00	36.07	150.0	V	188.0	-99.0
3986.000000	-59.92	-30.00	29.92	150.0	V	180.0	-96.3
4944.000000	-34.05	-30.00	4.05	150.0	V	90.0	-95.1
10886.035714	-56.02	-30.00	26.02	150.0	V	7.0	-89.6

Test Report

EUT Information

EUT Name:	Jackery Explorer 2000
Model:	JE-2000D
Sample No:	A003844222-001
Test Mode:	TX_11B L CH
Test Voltage:	Battery
Remark:	Temp:23.6;Humi:52%
Test standard:	EN 300328
Tested By:	Lich Chen
Reviewed by:	Terry Yin

Fundamental wave of 2.4G Wi-Fi



Critical Freqs

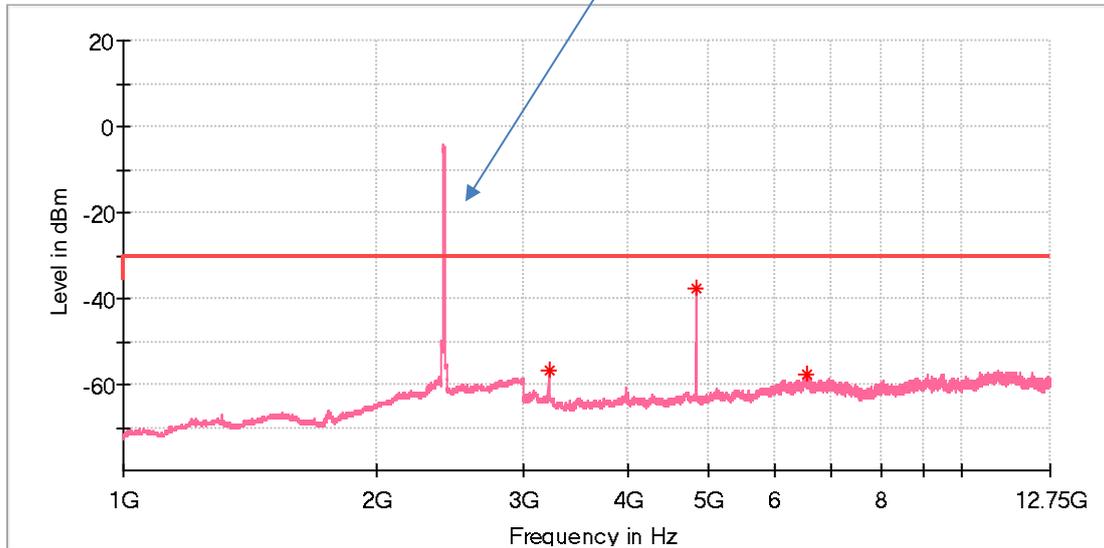
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
3215.500000	-54.89	-30.00	24.89	150.0	H	228.0	-96.6
4824.000000	-34.75	-30.00	4.75	150.0	H	174.0	-94.8
6560.732143	-58.06	-30.00	28.06	150.0	H	3.0	-91.6

Test Report

EUT Information

EUT Name:	Jackery Explorer 2000
Model:	JE-2000D
Sample No:	A003844222-001
Test Mode:	TX_11B L CH
Test Voltage:	Battery
Remark:	Temp:23.6;Humi:52%
Test standard:	EN 300328
Tested By:	Lich Chen
Reviewed by	Terry Yin

Fundamental wave of 2.4G Wi-Fi



Critical Freqs

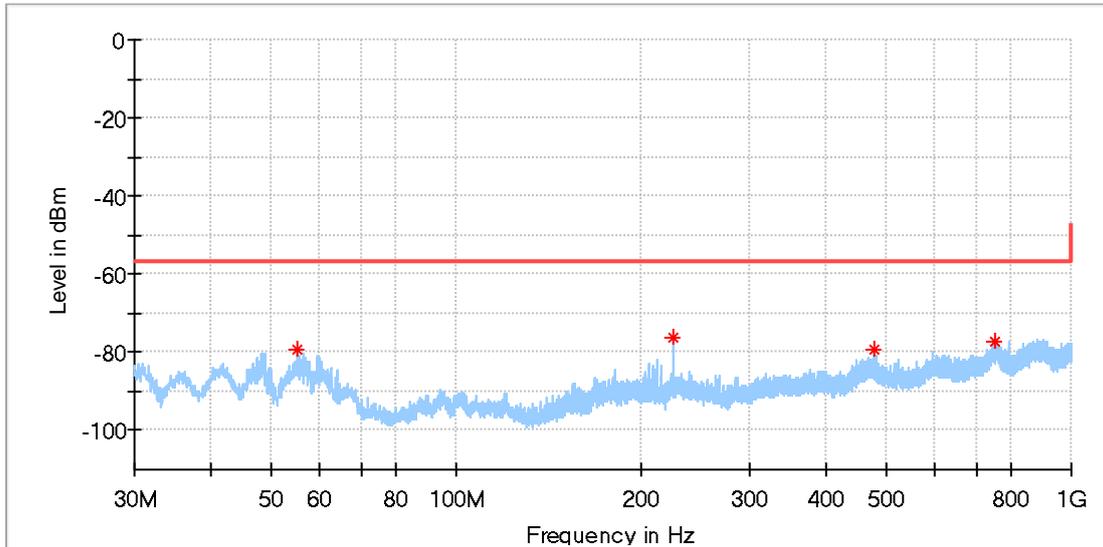
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
3216.000000	-56.77	-30.00	26.77	150.0	V	84.0	-96.3
4824.000000	-37.53	-30.00	7.53	150.0	V	95.0	-95.1
6547.232143	-57.67	-30.00	27.67	150.0	V	0.0	-91.1

For BLE

Test Report

EUT Information

EUT Name:	Jackery Explorer 2000
Model:	JE-2000D
Sample No:	A003844222-001
Test Mode:	TX_BLE H CH
Test Voltage:	Battery
Remark:	Temp:23.6;Humi:52%
Test standard:	EN 300328
Tested By:	Lich Chen
Reviewed by:	Terry Yin



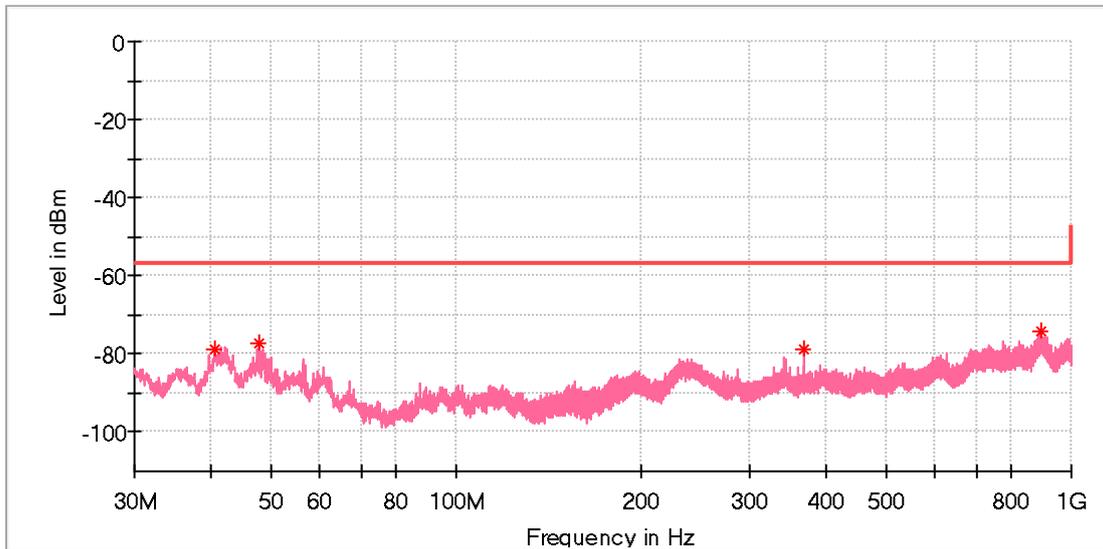
Critical Freqs

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
55.171500	-79.18	-57.00	22.18	150.0	H	326.0	-117.8
225.552000	-76.08	-57.00	19.08	150.0	H	50.0	-116.8
478.819000	-79.35	-57.00	22.35	150.0	H	181.0	-110.1
750.710000	-77.08	-57.00	20.08	150.0	H	0.0	-105.1

Test Report

EUT Information

EUT Name: Jackery Explorer 2000
 Model: JE-2000D
 Sample No: A003844222-001
 Test Mode: TX_BLE H CH
 Test Voltage: Battery
 Remark: Temp:23.6;Humi:52%
 Test standard: EN 300328
 Tested By: Lich Chen
 Reviewed by: Terry Yin



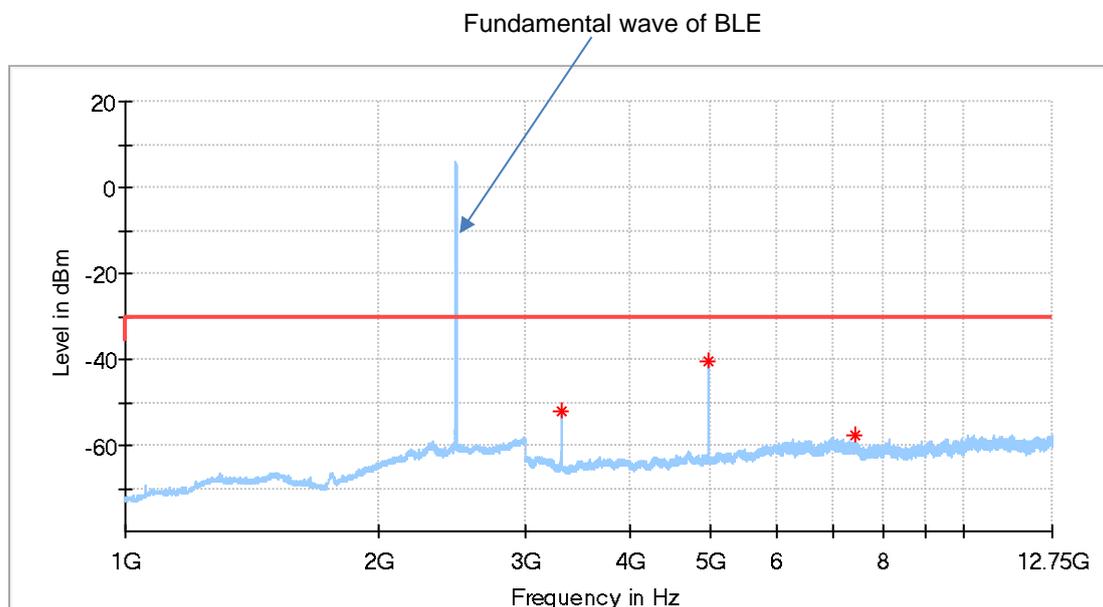
Critical Freqs

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
40.427500	-78.70	-57.00	21.70	150.0	V	311.0	-114.3
47.945000	-77.40	-57.00	20.40	150.0	V	268.0	-116.9
367.075000	-78.62	-57.00	21.62	150.0	V	335.0	-113.3
892.572500	-74.20	-57.00	17.20	150.0	V	319.0	-102.4

Test Report

EUT Information

EUT Name:	Jackery Explorer 2000
Model:	JE-2000D
Sample No:	A003844222-001
Test Mode:	TX_BLE H CH
Test Voltage:	Battery
Remark:	Temp:23.6;Humi:52%
Test standard:	EN 300328
Tested By:	Lich Chen
Reviewed by:	Terry Yin



Critical Freqs

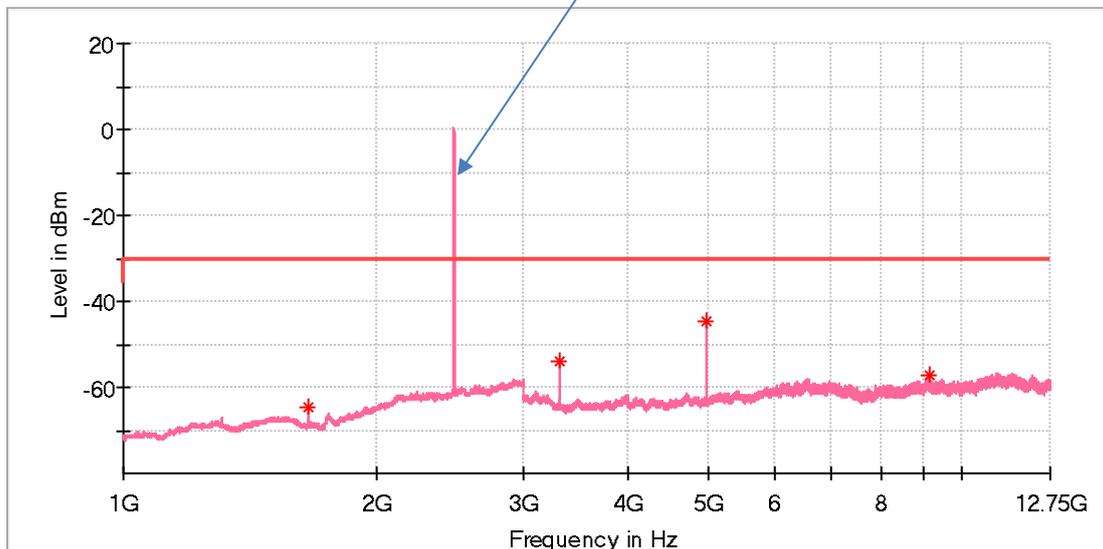
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
3306.500000	-52.11	-30.00	22.11	150.0	H	212.0	-97.5
4960.000000	-40.34	-30.00	10.34	150.0	H	154.0	-94.8
7440.642857	-57.68	-30.00	27.68	150.0	H	199.0	-91.3

Test Report

EUT Information

EUT Name:	Jackery Explorer 2000
Model:	JE-2000D
Sample No:	A003844222-001
Test Mode:	TX_BLE H CH
Test Voltage:	Battery
Remark:	Temp:23.6;Humi:52%
Test standard:	EN 300328
Tested By:	Lich Chen
Reviewed by:	Terry Yin

Fundamental wave of BLE



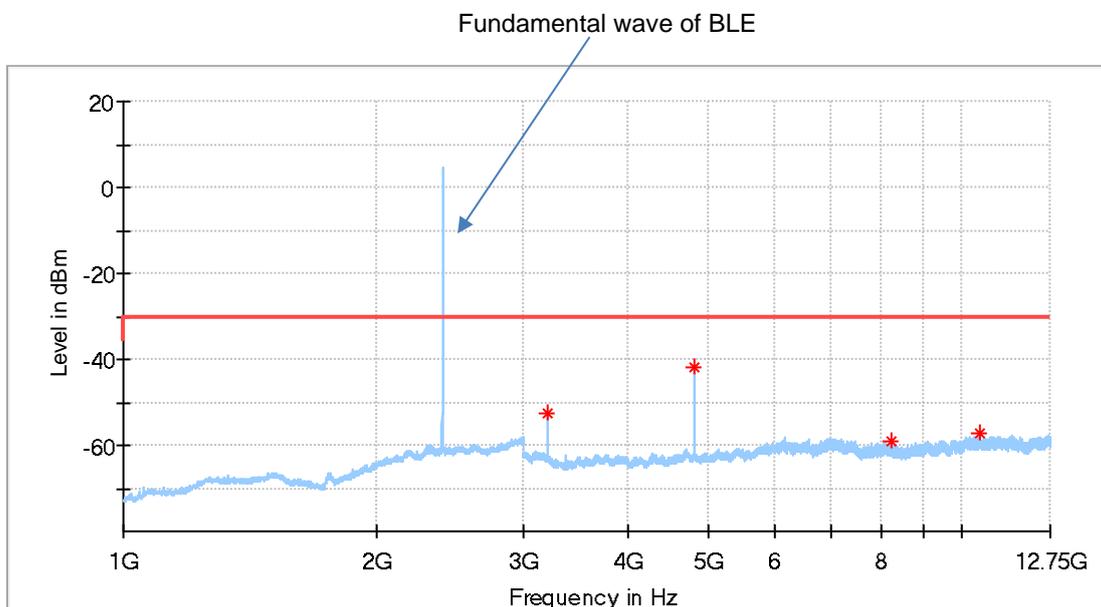
Critical Freqs

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1665.500000	-64.71	-30.00	34.71	150.0	V	200.0	-99.0
3306.500000	-53.87	-30.00	23.87	150.0	V	112.0	-97.5
4960.000000	-44.60	-30.00	14.60	150.0	V	80.0	-95.0
9135.857143	-57.41	-30.00	27.41	150.0	V	23.0	-90.8

Test Report

EUT Information

EUT Name: Jackery Explorer 2000
 Model: JE-2000D
 Sample No: A003844222-001
 Test Mode: TX_BLE L CH
 Test Voltage: Battery
 Remark: Temp:23.6;Humi:52%
 Test standard: EN 300328
 Tested By: Lich Chen
 Reviewed by: Terry Yin



Critical Freqs

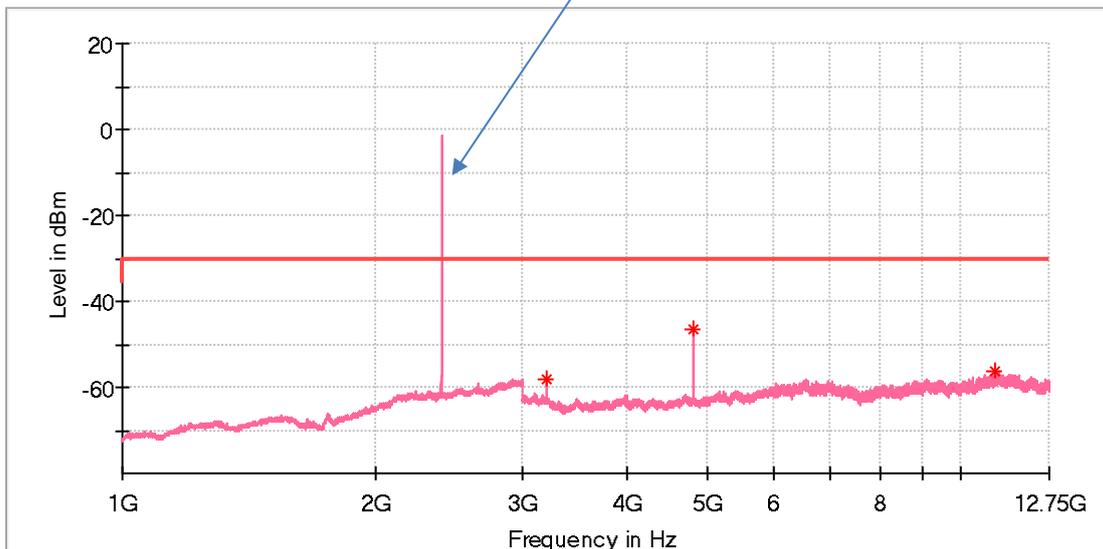
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
3202.500000	-52.75	-30.00	22.75	150.0	H	295.0	-96.3
4804.000000	-42.03	-30.00	12.03	150.0	H	234.0	-94.8
8232.803572	-59.12	-30.00	29.12	150.0	H	0.0	-91.9
10487.785714	-57.34	-30.00	27.34	150.0	H	68.0	-90.7

Test Report

EUT Information

EUT Name: Jackery Explorer 2000
 Model: JE-2000D
 Sample No: A003844222-001
 Test Mode: TX_BLE L CH
 Test Voltage: Battery
 Remark: Temp:23.6;Humi:52%
 Test standard: EN 300328
 Tested By: Lich Chen
 Reviewed by: Terry Yin

Fundamental wave of BLE



Critical Freqs

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
3202.500000	-58.29	-30.00	28.29	150.0	V	202.0	-96.0
4804.000000	-46.40	-30.00	16.40	150.0	V	87.0	-95.1
11003.196429	-56.27	-30.00	26.27	150.0	V	183.0	-89.4

--End of Appendix--