

Prüfbericht-Nr.: <i>Test report no.:</i>	CN21E38L 001	Auftrags-Nr.: <i>Order no.:</i>	168316688	Seite 1 von 17 <i>Page 1 of 17</i>	
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2021-03-07		
Auftraggeber: <i>Client:</i>	Hermès Sellier 24 rue du Faubourg Saint-Honoré, 75008 Paris, France				
Prüfgegenstand: <i>Test item:</i>	Powerbank Volt'H Maxi, Powerbank Volt'H Mini				
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	VOLTHMAXI, VOLTHMINI				
Auftrags-Inhalt: <i>Order content:</i>	Test report				
Prüfgrundlage: <i>Test specification:</i>	CFR47 FCC Part 15: Subpart C Section 15.207 CFR47 FCC Part 15: Subpart C Section 15.209	RSS-Gen Issue 5 March 2019 RSS-216 issue 2 January 2016			
Wareneingangsdatum: <i>Date of sample receipt:</i>	2021-04-16	Please refer to Photo Document			
Prüfmuster-Nr.: <i>Test sample no.:</i>	A003028112-007,008 A003034056-001~002 A003028942-001~005 A003032287-005~008				
Prüfzeitraum: <i>Testing period:</i>	2021-04-17 – 2021-05-07				
Ort der Prüfung: <i>Place of testing:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.				
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.				
Prüfergebnis*: <i>Test result*:</i>	Pass				
geprüft von: <i>tested by:</i>		genehmigt von: <i>authorized by:</i>			
Datum: <i>Date:</i>	2021-08-16	Ausstellungsdatum: <i>Issue date:</i>	2021-08-16		
Signed by: Alex Lan	Signed by: Lin Lin				
Stellung / Position: <i>Position:</i>	Senior Project Engineer	Stellung / Position: <i>Position:</i>	Reviewer		
Sonstiges / Other: <i>Other:</i>	FCC ID: 2AZI9-VOLTHPB IC: 27146-VOLTHPB HVIN: 0007421, 0007431				
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: <i>Legend:</i>	1 = sehr gut P(ass) = entspricht o.g. Prüfgrundlage(n)	2 = gut F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	3 = befriedigend 3 = satisfactory F(ail) = failed a.m. test specification(s)	4 = ausreichend 4 = sufficient N/A = nicht anwendbar N/A = not applicable	5 = mangelhaft 5 = poor N/T = nicht getestet N/T = not tested
<p><b>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.</b></p> <p><i>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.</i></p>					

**Prüfbericht - Nr.: CN21E38L 001**  
*Test Report No.*

Seite 2 von 17  
Page 2 of 17

## **Test Summary**

**5.1.1 ANTENNA REQUIREMENT**  
*RESULT:* Pass

**5.1.2 99% BANDWIDTH**  
*RESULT:* Pass

**5.1.3 20dB BANDWIDTH**  
*RESULT:* Pass

**5.1.4 RADIATED SPURIOUS EMISSION**  
*RESULT:* Pass

**5.1.5 CONDUCTED EMISSION ON AC MAINS**  
*RESULT:* Pass

**Prüfbericht - Nr.: CN21E38L 001**  
Test Report No.

Seite 3 von 17  
Page 3 of 17

## Table of Contents

<b>TEST SUMMARY.....</b>	<b>2</b>
<b>1 GENERAL REMARKS .....</b>	<b>4</b>
<b>1.1 COMPLEMENTARY MATERIALS .....</b>	<b>4</b>
<b>2 TEST SITES .....</b>	<b>5</b>
<b>2.1 TEST FACILITIES .....</b>	<b>5</b>
<b>2.2 LIST OF TEST AND MEASUREMENT INSTRUMENTS.....</b>	<b>5</b>
<b>2.3 TRACEABILITY .....</b>	<b>6</b>
<b>2.4 CALIBRATION .....</b>	<b>6</b>
<b>2.5 MEASUREMENT UNCERTAINTY.....</b>	<b>6</b>
<b>2.6 LOCATION OF ORIGINAL DATA.....</b>	<b>6</b>
<b>2.7 STATUS OF FACILITY USED FOR TESTING.....</b>	<b>6</b>
<b>3 GENERAL PRODUCT INFORMATION .....</b>	<b>7</b>
<b>3.1 PRODUCT FUNCTION AND INTENDED USE.....</b>	<b>7</b>
<b>3.2 RATINGS AND SYSTEM DETAILS .....</b>	<b>7</b>
<b>3.3 INDEPENDENT OPERATION MODES .....</b>	<b>8</b>
<b>3.4 NOISE GENERATING AND NOISE SUPPRESSING PARTS.....</b>	<b>8</b>
<b>3.5 SUBMITTED DOCUMENTS.....</b>	<b>8</b>
<b>4 TEST SET-UP AND OPERATION MODES .....</b>	<b>9</b>
<b>4.1 PRINCIPLE OF CONFIGURATION SELECTION .....</b>	<b>9</b>
<b>4.2 TEST OPERATION AND TEST SOFTWARE.....</b>	<b>9</b>
<b>4.3 SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT.....</b>	<b>9</b>
<b>4.4 COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE .....</b>	<b>9</b>
<b>4.5 TEST SETUP DIAGRAM .....</b>	<b>10</b>
<b>5 TEST RESULTS .....</b>	<b>12</b>
<b>5.1 TRANSMITTER REQUIREMENT &amp; TEST SUITES .....</b>	<b>12</b>
<b>5.1.1 Antenna Requirement .....</b>	<b>12</b>
<b>5.1.2 99% Bandwidth .....</b>	<b>13</b>
<b>5.1.3 20dB Bandwidth .....</b>	<b>14</b>
<b>5.1.4 Radiated Spurious Emission .....</b>	<b>15</b>
<b>5.1.5 Conducted Emission on AC Mains.....</b>	<b>16</b>
<b>6 PHOTOGRAPHS OF THE TEST SET-UP .....</b>	<b>17</b>
<b>7 LIST OF TABLES.....</b>	<b>17</b>

## 1 General Remarks

### 1.1 Complementary Materials

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

Appendix A: Photographs of the Test Set-up

Appendix B: Test Results of Maxi Powerbank.

Appendix C: Test Results of Mini Powerbank

## 2 Test Sites

### 2.1 Test Facilities

**TÜV Rheinland (Shenzhen) Co., Ltd.**

362 Huanguan Road Middle Longhua District, Shenzhen 518110 People's Republic of China

FCC Accreditation Designation No.: CN1260

ISED wireless device testing laboratory: 25069

### 2.2 List of Test and Measurement Instruments

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

Unwanted Emission Testing (TS9975)				
Equipment	Manufacturer	Model	Serial No.	Cal. until
EMI Test Receiver	R&S	ESR 7	102021	2021-08-11
Signal Analyzer	R&S	FSV 40	101439	2021-08-10
System Controller Interface	R&S	SCI-100	S10010038	N/A
Filterbank	R&S	Wlan	100759	2021-08-10
OSP	R&S	OSP 120	102040	N/A
Pre-amplifier	R&S	SCU08F1	08320031	2021-08-10
Amplifier	R&S	SCU-18F	180070	2021-08-10
Amplifier	R&S	SCU40A	100475	2021-09-10
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	2022-08-08
Double-Ridged Antenna (1 - 18 GHz)	ETS-LINDGREN	3117	00218717	2022-08-08
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	2022-08-08
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	2022-09-13
Wideband Ridged Horn Antenna (12-18 GHz)	Steatite	QMS-00208	18313	2021-09-02
Test software	R&S	EMC32 (V10.60.10)	N/A	N/A
Control PC	Dell	OptiPlex 7050	36NV9P2	N/A
3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC17151-SAC	2021-07-06

**Prüfbericht - Nr.: CN21E38L 001**
*Test Report No.*

 Seite 6 von 17  
 Page 6 of 17

<b>Conducted Emission</b>				
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Cal. Until</b>
EMI Test Receiver	R&S	ESR3	102680	2021-05-19
Artificial Mains Network	R&S	ENV216	101445	2021-05-19
Artificial Mains Network	R&S	ENV432	101546	2021-05-19
EMC32 test software	R&S	EMC32(Ver.10.50.0)	N/A	N/A

## 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 basis using in house standards or comparisons.

## 2.5 Measurement Uncertainty

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

<b>Parameter</b>	<b>Uncertainty</b>
Radiated Emission of Transmitter, valid up to 26.5 GHz	±6 dB
Radiated Emission of Receiver, valid up to 26.5 GHz	±6 dB
Conducted Emission, (9kHz to 150kHz)/(150kHz to 30MHz)	±3.70 dB / ±3.30 dB

## 2.6 Location of Original Data

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

## 2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at 362 Huanguan Road Middle Longhua District, Shenzhen 518110 People's Republic of China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

## 3 General Product Information

### 3.1 Product Function and Intended Use

The EUTs are a Powerbank which supports wireless charging (WPT) technology, and according to the size of enclosure and battery capacity, it have two models: Maxi Powerbank and Mini Powerbank:

The electrical circuit design, PCB layout and components used are identical for Maxi Powerbank and Mini Powerbank, only the size, color of enclosure and battery capacity are different.

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

### 3.2 Ratings and System Details

Table 2: Technical Specification of EUT

General Information of EUT	Value
FCC ID:	2AZI9-VOLTHPB
IC:	27146-VOLTHPB
Operating Voltage:	Maxi Powerbank: Type-C Input: DC 5V, 3A or DC 9V, 2.22A Type-C Output: DC 5V, 3A or DC 9V, 2.22A DC 7.7V, 4200mAh via internal battery  Mini Powerbank: Type-C Input: DC 5V, 2A or DC 9V, 2.22A Type-C Output: DC 5V, 2A or DC 9V, 1.11A DC 7.7V, 650mAh via internal battery
Testing Voltage:	AC 120V, 60Hz
Technical Specification of WPT	
Frequency Range:	120~205KHz
Type of Modulation:	FSK
Wireless output:	Maxi Powerbank: 10W maximum Mini Powerbank: 7.5W maximum

### **3.3 Independent Operation Modes**

The basic operation modes are:

- A. On, Wireless discharging mode
- B. On, Charging mode
- C. Off

### **3.4 Noise Generating and Noise Suppressing Parts**

Refer to Circuit Diagram for further details.

### **3.5 Submitted Documents**

- Application Form
- ID Label and Location Info

## 4 Test Set-up and Operation Modes

### 4.1 Principle of Configuration Selection

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

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

### 4.2 Test Operation and Test Software

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

According to clause 3.2, all tests were performed on model *VOLTHMAXI* and *VOLTHMINI* in this report.

### 4.3 Special Accessories and Auxiliary Equipment

Table 3: Auxiliary Equipment Used during Test

Description	Manufacturer	Model	S/N	Rating
Mobile Phone	Xiaomi	Xiaomi 9	22012/29QZ02339	20W max wireless charging
Mobile Phone	Xiaomi	Redmi 9	21965/sond00137	N/A
GaN Fast Charger (3C1A) set	UGREEN	CD224	80766	Input: AC 100-240V, 50/60Hz, 1.8A max

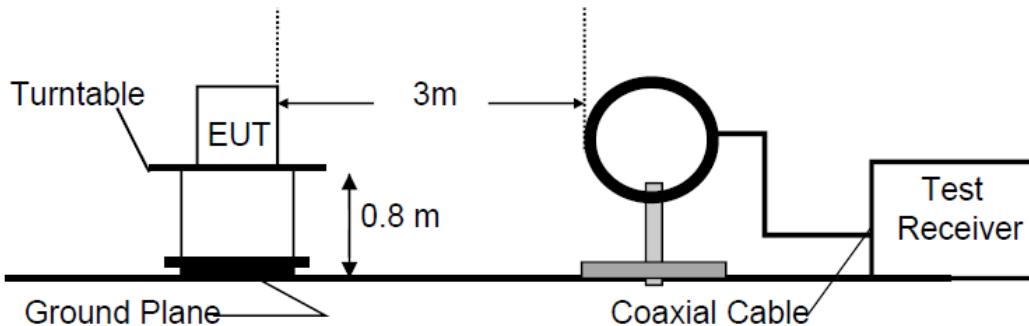
### 4.4 Countermeasures to Achieve EMC Compliance

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

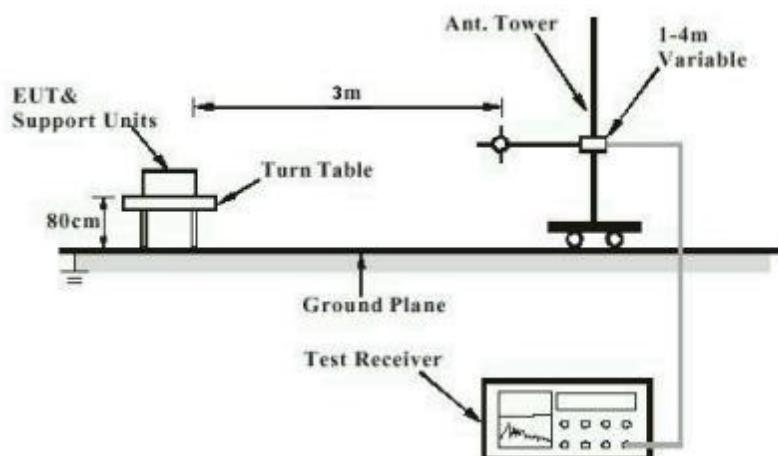
No additional measures were employed to achieve compliance.

## 4.5 Test Setup Diagram

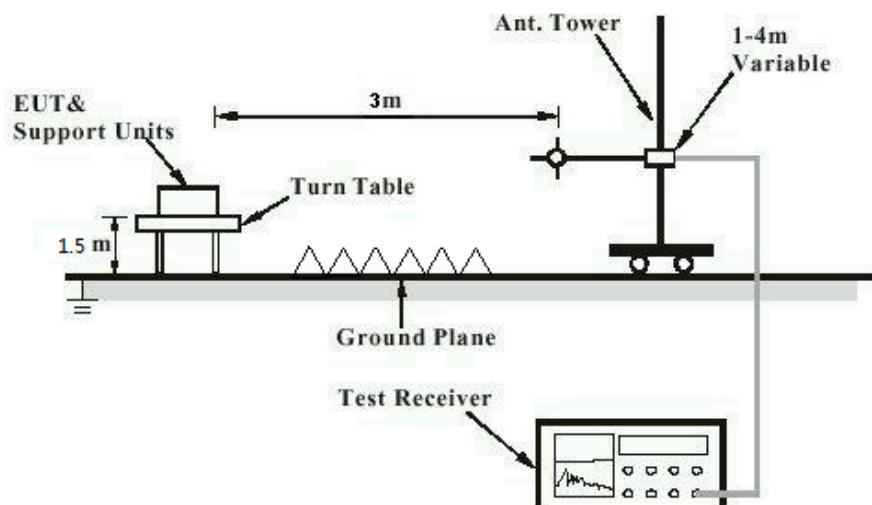
**Diagram of Measurement Configuration for Radiation Test (Below 30MHz)**



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



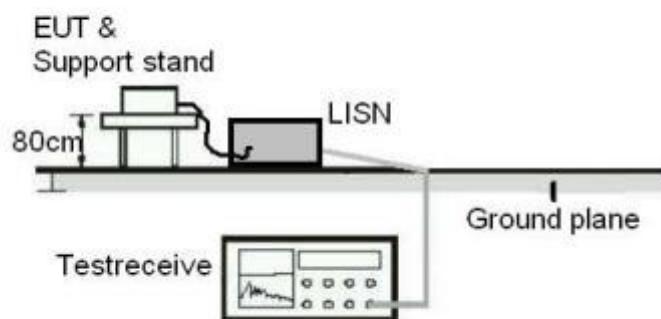
**Diagram of Measurement Configuration for Radiation Test (Above 1GHz)**



**Prüfbericht - Nr.: CN21E38L 001**  
Test Report No.

Seite 11 von 17  
Page 11 of 17

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



## 5 Test Results

### 5.1 Transmitter Requirement & Test Suites

#### 5.1.1 Antenna Requirement

**RESULT:** Pass

##### Test Specification

Test standard	:	FCC Part 15.203
	:	RSS-Gen Clause 6.8
Limit	:	the use of antennas with directional gains that do not exceed 6 dBi

According to the manufacturer declared, the EUT has an internal antenna, and the antenna is permanent attachment and no consideration of replacement.

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

Refer to EUT Photo for further details.

**Prüfbericht - Nr.: CN21E38L 001**  
*Test Report No.*

Seite 13 von 17  
Page 13 of 17

## 5.1.2 99% Bandwidth

### RESULT:

**Pass**

#### Test Specification

Test standard	:	RSS-Gen Clause 6.7
Basic standard	:	ANSI C63.10: 2013
Kind of test site	:	Shielded Room

#### Test Setup

Date of testing	:	2021-04-27
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	23 °C
Relative humidity	:	55 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix B & C.

**Prüfbericht - Nr.: CN21E38L 001**  
*Test Report No.*

Seite 14 von 17  
Page 14 of 17

### 5.1.3 20dB Bandwidth

**RESULT:**

**Pass**

**Test Specification**

Test standard	:	FCC Part 15.215(c)
Basic standard	:	ANSI C63.10: 2013
Kind of test site	:	Shielded Room

**Test Setup**

Date of testing	:	2021-04-27
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	23 °C
Relative humidity	:	55 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix B & C.

**Prüfbericht - Nr.: CN21E38L 001**  
Test Report No.

Seite 15 von 17  
Page 15 of 17

## 5.1.4 Radiated Spurious Emission

**RESULT:**

**Pass**

**Test Specification**

Test standard	:	FCC Part 15.209 & 15.205
		RSS-216 Clause 6.2.2.2
Basic standard	:	ANSI C63.10: 2013
Limits	:	Refer to 15.209(a)
		RSS-216 Clause 6.2.2.2 & 6.2.3
Kind of test site	:	3m Semi-anechoic Chamber

**Test Setup**

Date of testing	:	2021-04-27 ~ 2021-05-06
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	23 °C
Relative humidity	:	55 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix B & C.

Measurements are to be taken in dBuV/m, corrected, and the end result shall be mathematically converted to the dBuA/m for RSS and presented against the correct limit.

E [dBuA/m] = AF [dBS/m] + V [dB $\mu$ V] + Cable loss [dB]

E [dBuA/m] is the magnetic field strength (Final Test results)

AF [dBS/m] is the magnetic antenna factor of the antenna (H-field)

V [dB $\mu$ V] is the reading level on the spectrum analyzer

Note that when using the AF [dBS/m] the 51.5 dB is already account for into the antenna factor.

**Prüfbericht - Nr.: CN21E38L 001**  
*Test Report No.*

Seite 16 von 17  
Page 16 of 17

## 5.1.5 Conducted Emission on AC Mains

### RESULT:

**Pass**

#### Test Specification

Test standard	:	FCC Part 15.207 RSS-216 Clause 6.2
Basic standard	:	ANSI C63.10: 2013
Frequency range	:	150KHz - 30MHz
Limits	:	FCC Part 15.207(a) RSS-216 Clause 6.2.2.1
Kind of test site	:	Shielded Room

#### Test Setup

Date of testing	:	2021-04-20
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A+ B
Earthing	:	Not connected
Ambient temperature	:	23.1 °C
Relative humidity	:	52 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix B & C.

## 6 Photographs of the Test Set-Up

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

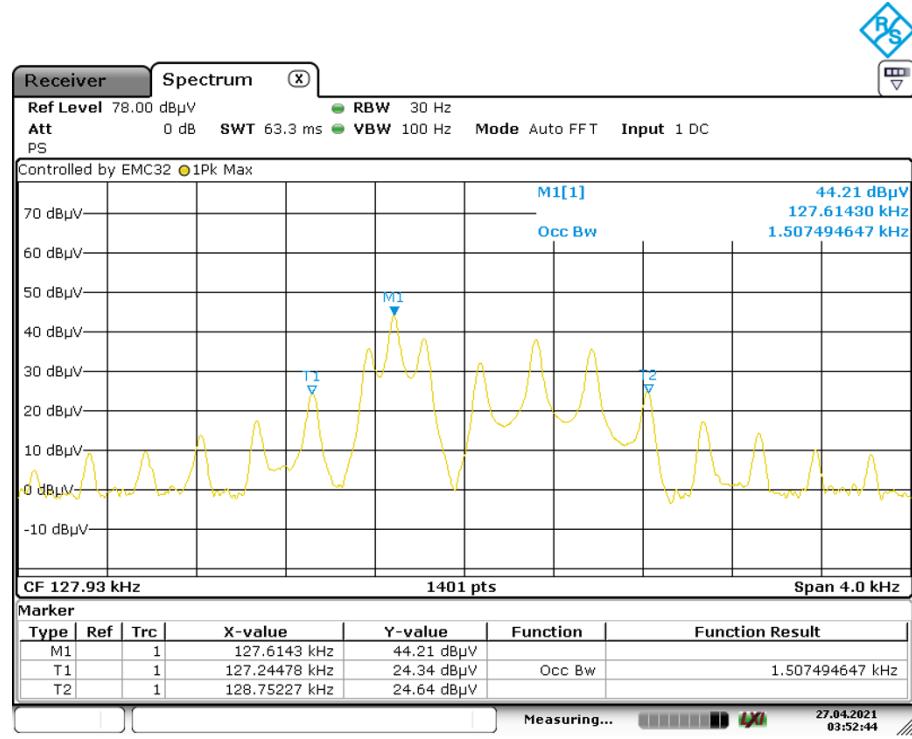
## 7 List of Tables

Table 1: List of Test and Measurement Equipment.....	5
Table 2: Technical Specification of EUT .....	7
Table 3: Auxiliary Equipment Used during Test .....	9

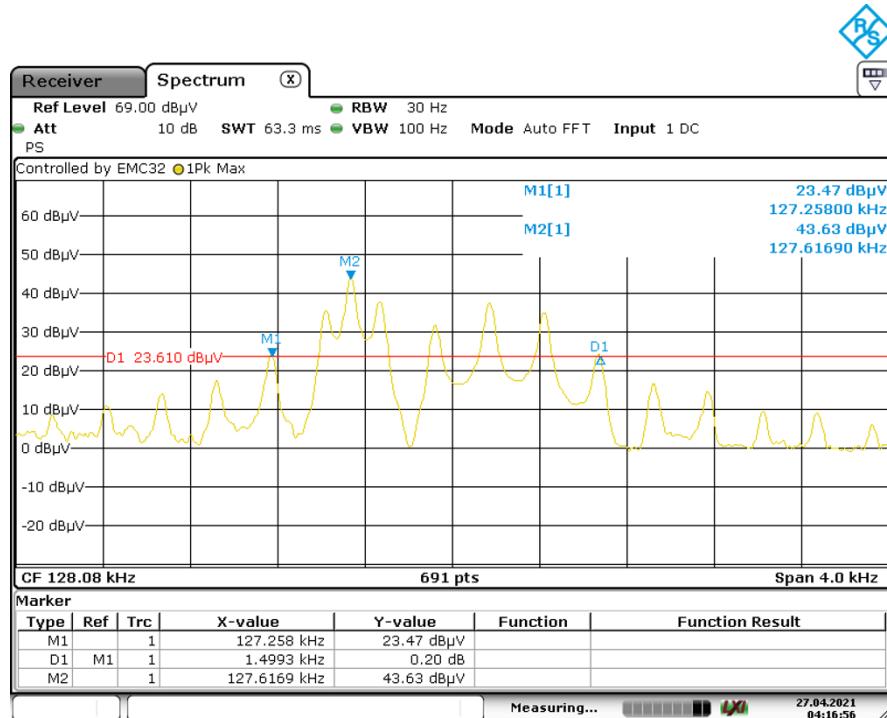
## **Appendix B: Test Results of Maxi Powerbank**

<b>APPENDIX B: TEST RESULTS OF MAXI POWERBANK .....</b>	<b>1</b>
<b>APPENDIX B.1: TEST PLOTS OF 99% BANDWIDTH .....</b>	<b>2</b>
<b>APPENDIX B.2: TEST PLOTS OF 20dB BANDWIDTH .....</b>	<b>3</b>
<b>APPENDIX B.3: TEST PLOTS OF RADIATED SPURIOUS EMISSION.....</b>	<b>4</b>
9kHz-90kHz .....	4
110kHz-490KHz .....	7
9kHz-30MHz .....	10
30MHz-1GHz (For FCC) .....	13
30MHz-1GHz (For IC) .....	15
<b>APPENDIX B.4: TEST PLOTS OF CONDUCTED EMISSION ON AC MAINS FOR FCC PART 15C.....</b>	<b>17</b>
<i>Charging mode+Wireless discharging mode.....</i>	<b>17</b>

## Appendix B.1: Test Plots of 99% Bandwidth



## Appendix B.2: Test Plots of 20dB Bandwidth

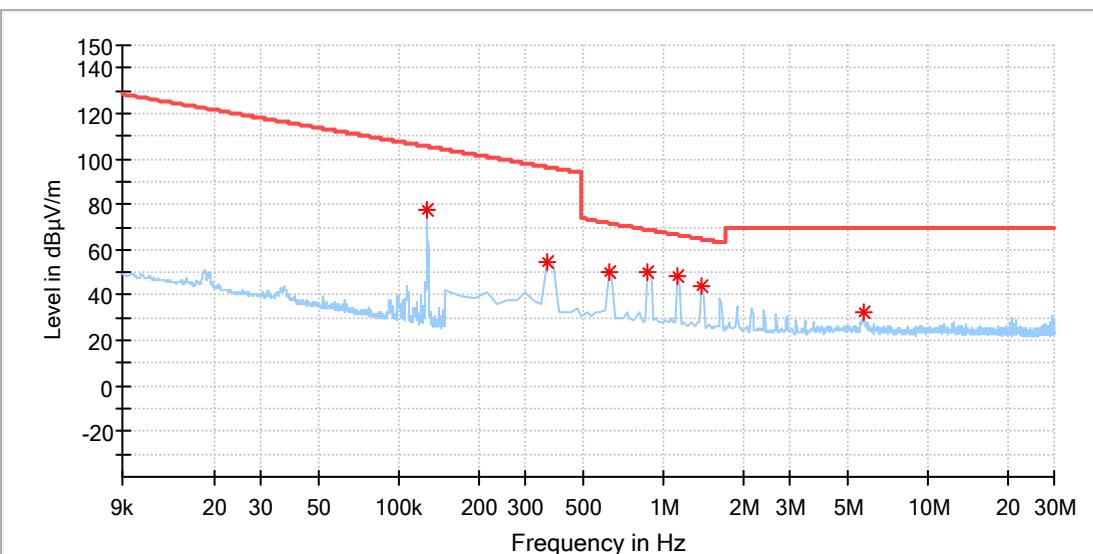


### Appendix B.3: Test Plots of Radiated Spurious Emission

9kHz-30MHz

#### EUT Information

EUT Name: Powerbank Volt'H Maxi  
Model: VOLTHMAXI  
Test Mode: Charging  
Test Voltage:: AC 120V/60Hz  
Remark: Temp 23 Humi:55%  
Test Standard: FCC Part 15C  
Tested By: Kei Zhang  
Reviewed By: Terry Yin

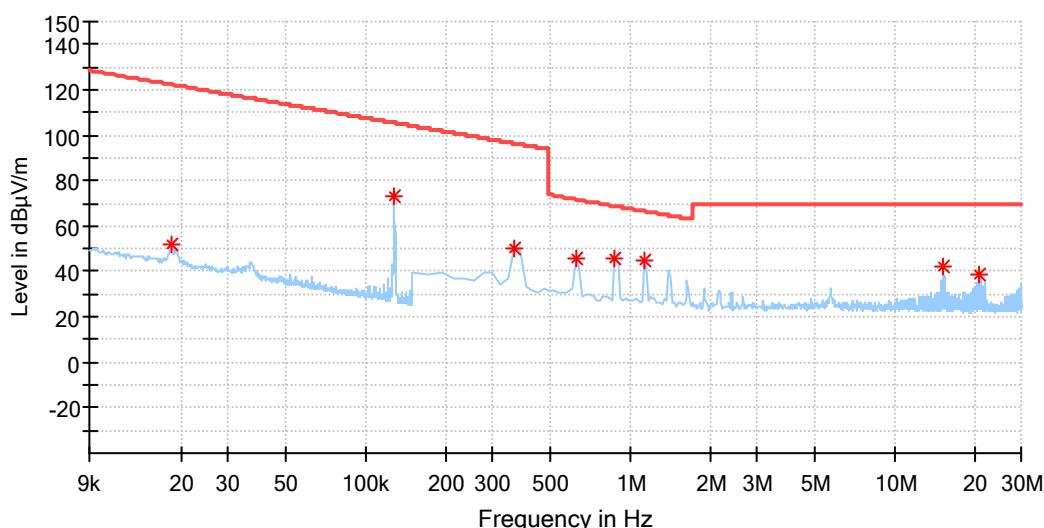


#### Critical\_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.127641	77.28	105.48	28.19	100.0	X	286.0	20.1
0.363214	54.45	96.40	41.95	100.0	X	287.0	20.1
0.619072	50.34	71.78	21.43	100.0	X	100.0	20.1
0.874929	50.53	68.78	18.25	100.0	X	287.0	20.1
1.130786	48.51	66.56	18.05	100.0	X	100.0	20.1
1.386643	44.23	64.79	20.56	100.0	X	287.0	20.1
5.693572	32.73	69.50	36.77	100.0	X	123.0	20.3

## EUT Information

EUT Name: Powerbank Volt'H Maxi  
Model: VOLTHMAXI  
Test Mode: Charging  
Test Voltage:: AC 120V/60Hz  
Remark: Temp 23 Humi:55%  
Test Standard: FCC Part 15C  
Tested By: Kei Zhang  
Reviewed By: Terry Yin

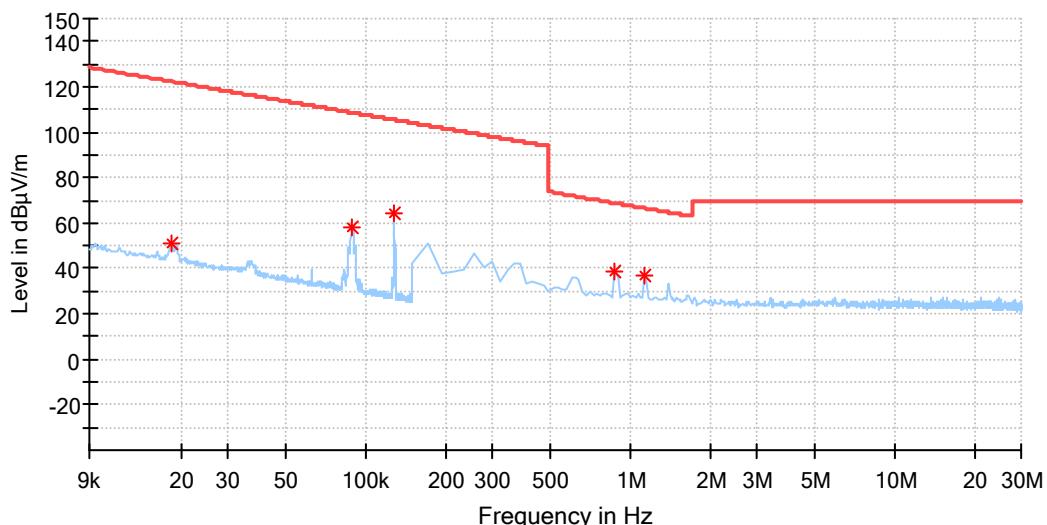


## Critical\_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.018366	51.66	122.31	70.65	100.0	Y	315.0	20.1
0.127641	73.38	105.48	32.10	100.0	Y	25.0	20.1
0.363214	49.88	96.40	46.52	100.0	Y	4.0	20.1
0.619072	45.38	71.78	26.40	100.0	Y	4.0	20.1
0.874929	45.73	68.78	23.05	100.0	Y	4.0	20.1
1.130786	44.64	66.56	21.92	100.0	Y	4.0	20.1
15.309536	42.36	69.50	27.14	100.0	Y	312.0	20.5
20.938393	38.98	69.50	30.52	100.0	Y	336.0	20.6

## EUT Information

EUT Name: Powerbank Volt'H Maxi  
Model: VOLTHMAXI  
Test Mode: Charging  
Test Voltage:: AC 120V/60Hz  
Remark: Temp 23 Humi:55%  
Test Standard: FCC Part 15C  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



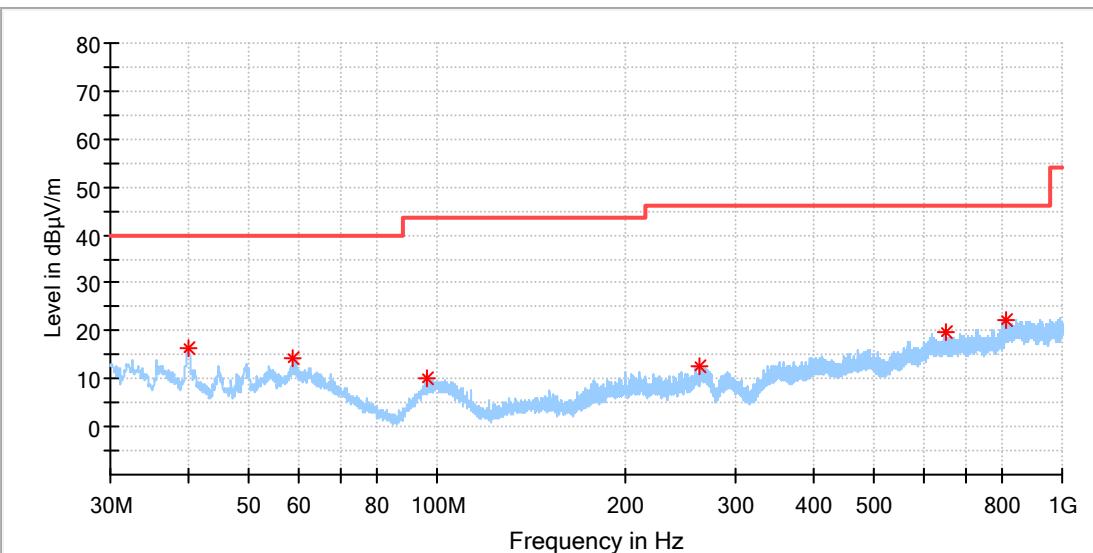
## Critical\_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.018366	51.17	122.31	71.14	100.0	Z	0.0	20.1
0.088262	58.09	108.68	50.59	100.0	Z	312.0	20.1
0.127641	64.45	105.48	41.03	100.0	Z	356.0	20.1
0.874929	38.55	68.78	30.22	100.0	Z	0.0	20.1
1.130786	37.16	66.56	29.40	100.0	Z	0.0	20.1

30MHz-1GHz

## EUT Information

EUT Name: Powerbank Volt'H Maxi  
Model: VOLTHMAXI  
Test Mode: Charging  
Test Voltage:: AC 120V/60Hz  
Remark: Temp 23 Humi:55%  
Test Standard: FCC Part 15C  
Tested By: Kei Zhang  
Reviewed By: Terry Yin

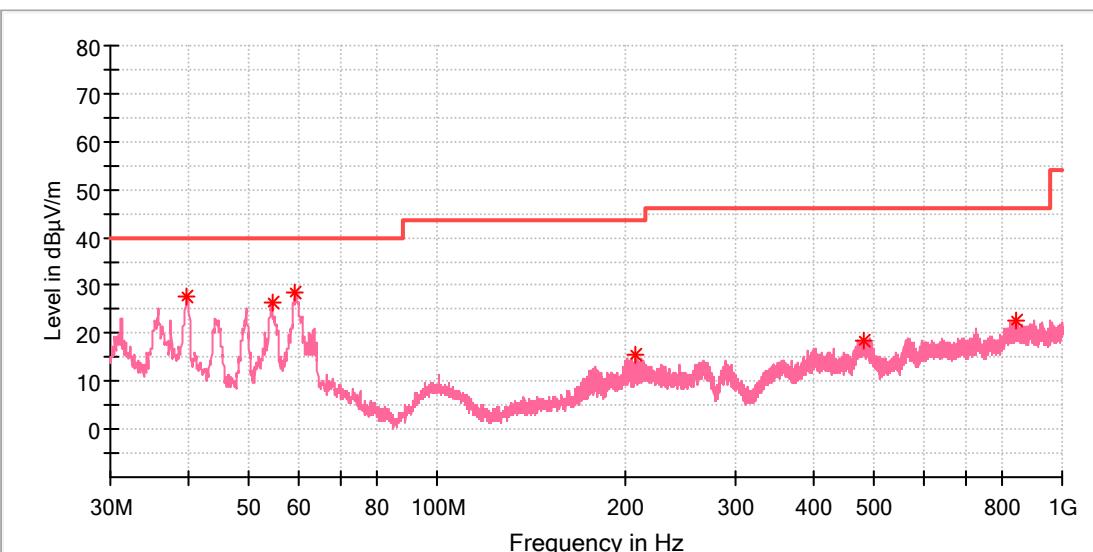


## Critical\_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
40.039500	16.52	40.00	23.48	100.0	H	319.0	-20.4
58.760500	14.17	40.00	25.83	100.0	H	25.0	-19.2
96.542000	9.88	43.50	33.62	100.0	H	0.0	-19.8
263.721500	12.56	46.00	33.44	100.0	H	226.0	-17.4
653.273500	19.60	46.00	26.40	100.0	H	167.0	-9.3
811.723000	22.25	46.00	23.75	100.0	H	147.0	-6.5

## EUT Information

EUT Name: Powerbank Volt'H Maxi  
Model: VOLTHMAXI  
Test Mode: Charging  
Test Voltage:: AC 120V/60Hz  
Remark: Temp 23 Humi:55%  
Test Standard: FCC Part 15C  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



## Critical\_Freqs

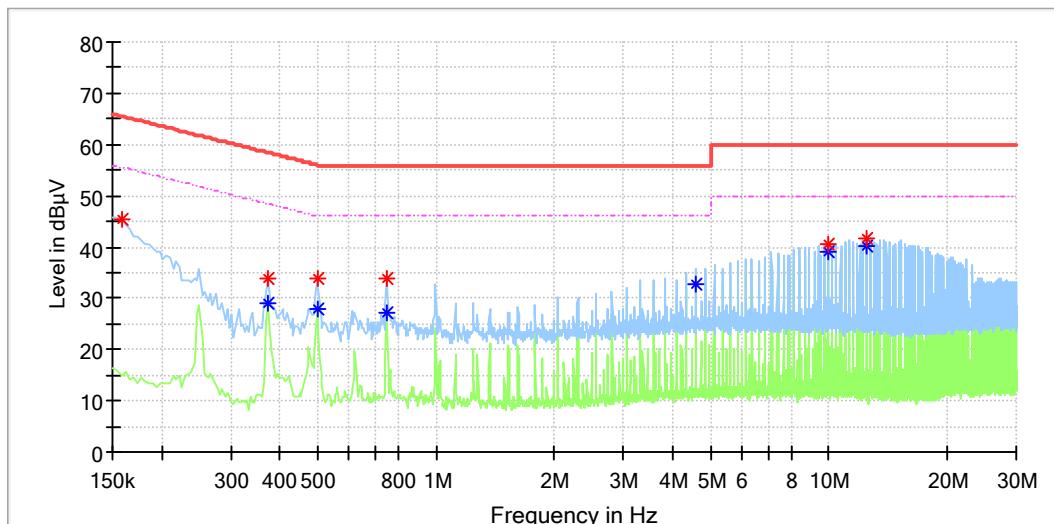
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
39.845500	27.81	40.00	12.19	100.0	V	31.0	-20.5
54.492500	26.61	40.00	13.39	100.0	V	146.0	-18.7
59.342500	28.60	40.00	11.40	100.0	V	63.0	-19.2
207.219000	15.38	43.50	28.12	100.0	V	250.0	-19.2
483.038500	18.58	46.00	27.42	100.0	V	0.0	-12.5
845.527500	22.73	46.00	23.27	100.0	V	355.0	-6.0

## Appendix B.4: Test Plots of Conducted Emission on AC Mains for FCC Part 15C

Charging mode+Wireless discharging mode

### EUT Information

EUT Name: Powerbank Volt'H Maxi  
Model: VOLTHMAXI  
Test Model: Charging mode+Wireless discharging mode  
Test Voltage: AC AC 120V/60Hz  
Test By: Shower Dai  
Review By: Gary Chen  
Remark: SR2

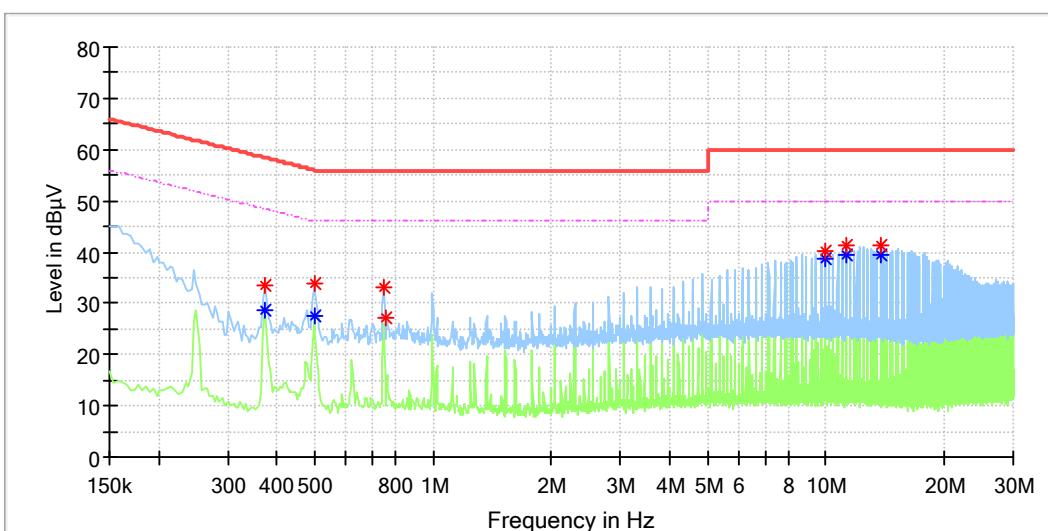


### Critical\_Freqs

Frequency (MHz)	MaxPeak (dB $\mu$ V)	Average (dB $\mu$ V)	Limit (dB $\mu$ V)	Margin (dB)	Line	Corr. (dB)
0.158000	45.50	---	65.57	20.07	L1	9.9
0.374000	33.79	---	58.41	24.62	L1	9.9
0.374000	---	29.11	48.41	19.30	L1	9.9
0.498000	---	27.95	46.03	18.08	L1	10.0
0.498000	33.83	---	56.03	22.21	L1	10.0
0.746000	---	27.06	46.00	18.94	L1	10.0
0.746000	33.74	---	56.00	22.26	L1	10.0
4.594000	---	32.76	46.00	13.24	L1	10.2
9.954000	---	39.24	50.00	10.76	L1	10.3
9.954000	40.62	---	60.00	19.38	L1	10.3
12.506000	---	40.18	50.00	9.82	L1	10.3
12.506000	41.59	---	60.00	18.41	L1	10.3

## EUT Information

EUT Name: Powerbank Volt'H Maxi  
Model: VOLTHMAXI  
Test Model: Charging mode+Wireless discharging mode  
Test Voltage: AC AC 120V/60Hz  
Test By: Shower Dai  
Review By: Gary Chen  
Remark: SR2



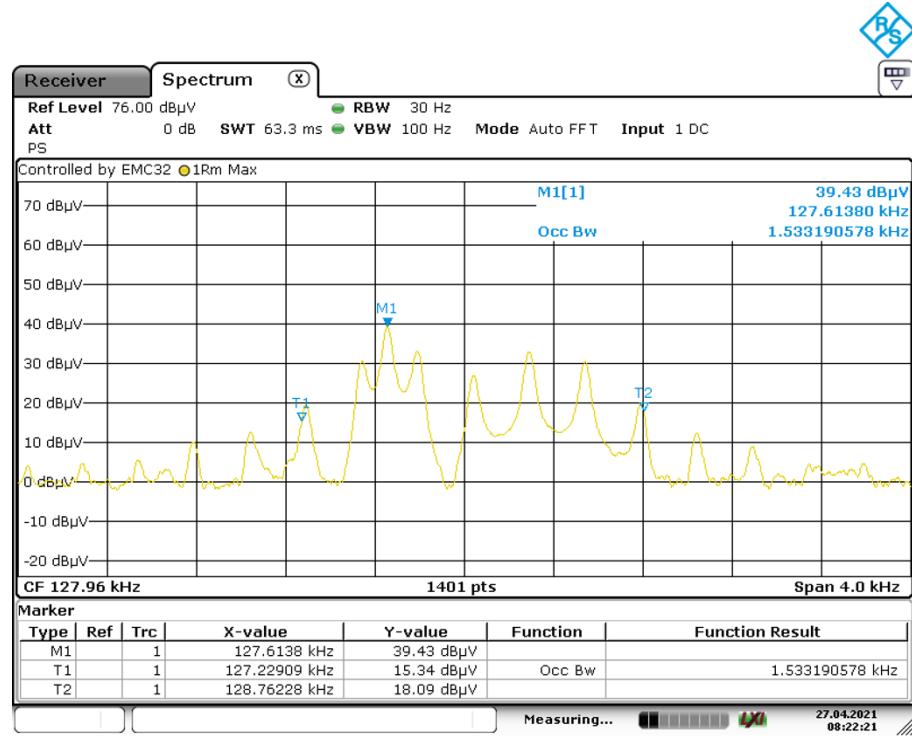
## Critical\_Freqs

Frequency (MHz)	MaxPeak (dB $\mu$ V)	Average (dB $\mu$ V)	Limit (dB $\mu$ V)	Margin (dB)	Line	Corr. (dB)
0.374000	33.33	---	58.41	25.08	N	9.8
0.374000	---	28.76	48.41	19.65	N	9.8
0.498000	---	27.47	46.03	18.57	N	9.8
0.498000	33.69	---	56.03	22.34	N	9.8
0.746000	33.14	---	56.00	22.86	N	9.8
0.754000	27.27	---	56.00	28.73	N	9.8
9.954000	---	38.66	50.00	11.34	N	10.0
9.954000	40.35	---	60.00	19.65	N	10.0
11.230000	41.29	---	60.00	18.71	N	10.0
11.230000	---	39.26	50.00	10.74	N	10.0
13.782000	---	39.55	50.00	10.45	N	10.1
13.782000	41.12	---	60.00	18.88	N	10.1

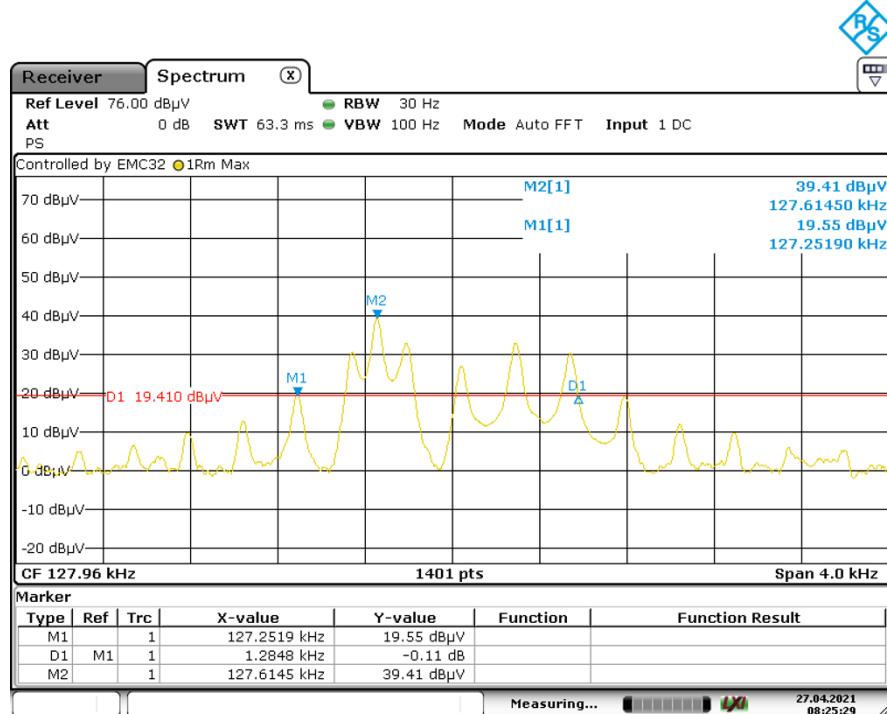
## **Appendix C: Test Results of Maxi Powerbank**

<b>APPENDIX C: TEST RESULTS OF MAXI POWERBANK.....</b>	<b>1</b>
<b>APPENDIX C.1: TEST PLOTS OF 99% BANDWIDTH.....</b>	<b>2</b>
<b>APPENDIX C.2: TEST PLOTS OF 20dB BANDWIDTH .....</b>	<b>3</b>
<b>APPENDIX C.3: TEST PLOTS OF RADIATED SPURIOUS EMISSION.....</b>	<b>4</b>
9kHz-30MHz .....	4
30MHz-1GHz .....	7
<b>APPENDIX C.4: TEST PLOTS OF CONDUCTED EMISSION ON AC MAINS FOR FCC PART 15C.....</b>	<b>9</b>
<i>Charging mode+Wireless discharging mode .....</i>	<i>9</i>

### Appendix C.1: Test Plots of 99% Bandwidth



## Appendix C.2: Test Plots of 20dB Bandwidth

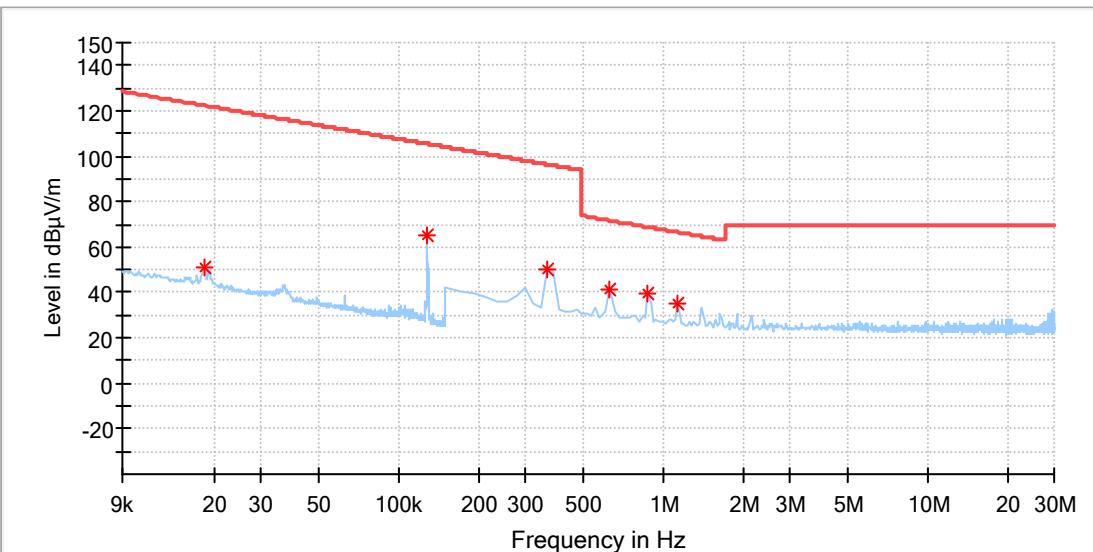


### Appendix C.3: Test Plots of Radiated Spurious Emission

9kHz-30MHz

#### EUT Information

EUT Name: Powerbank Volt'H Mini  
Model: VOLTHMINI  
Test Mode: Charging  
Test Voltage:: AC 120V/60Hz  
Remark: Temp 23 Humi:55%  
Test Standard: FCC Part 15C  
Tested By: Kei Zhang  
Reviewed By: Terry Yin

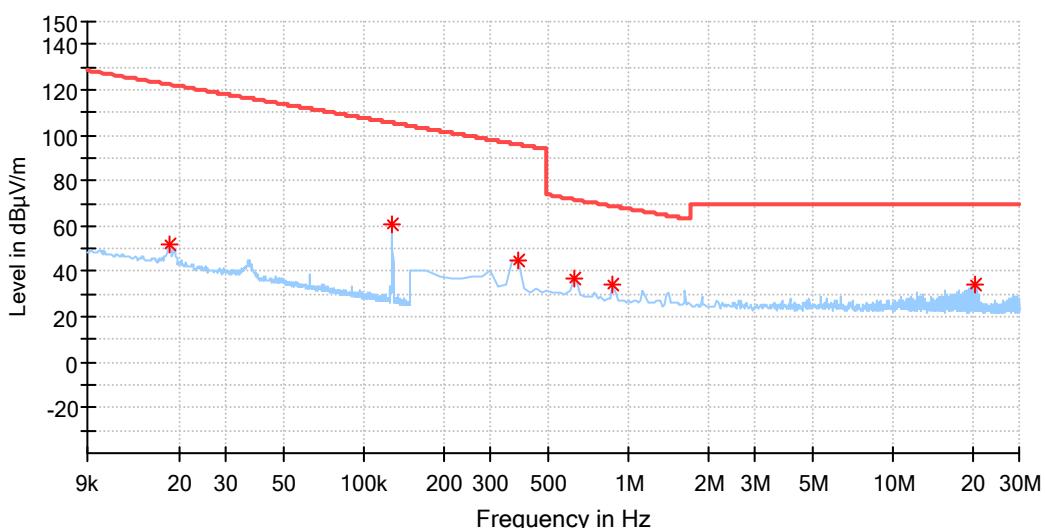


#### Critical\_Freqs

Frequency (MHz)	MaxPeak (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.018366	50.63	122.31	71.68	100.0	X	0.0	20.1
0.127641	65.28	105.48	40.20	100.0	X	144.0	20.1
0.363214	50.30	96.40	46.10	100.0	X	94.0	20.1
0.619072	41.06	71.78	30.71	100.0	X	306.0	20.1
0.874929	39.69	68.78	29.08	100.0	X	283.0	20.1
1.130786	35.14	66.56	31.42	100.0	X	260.0	20.1

## EUT Information

EUT Name: Powerbank Volt'H Mini  
Model: VOLTHMINI  
Test Mode: Charging  
Test Voltage:: AC 120V/60Hz  
Remark: Temp 23 Humi:55%  
Test Standard: FCC Part 15C  
Tested By: Kei Zhang  
Reviewed By: Terry Yin

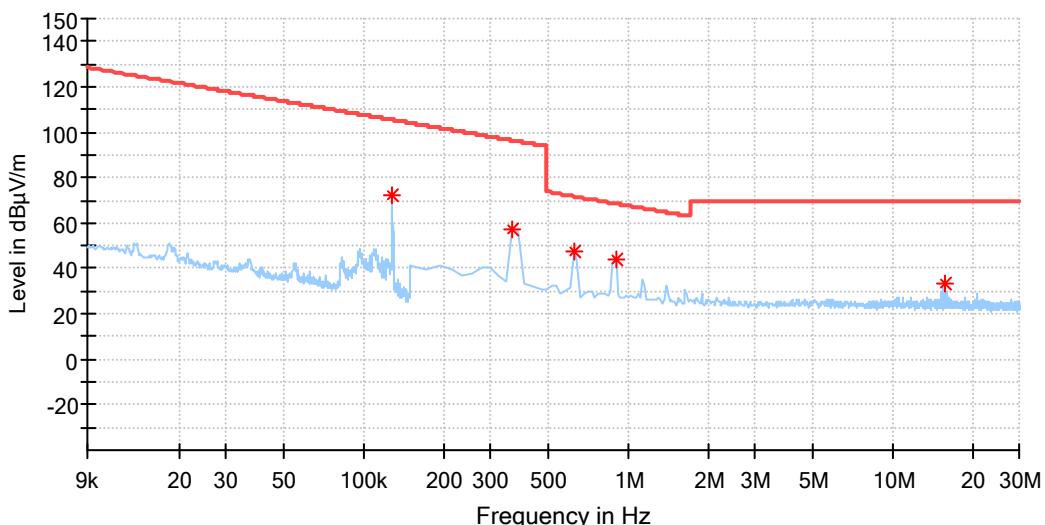


## Critical\_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.018366	51.57	122.31	70.73	100.0	Y	336.0	20.1
0.127641	60.95	105.48	44.52	100.0	Y	238.0	20.1
0.384536	44.94	95.90	50.96	100.0	Y	214.0	20.1
0.619072	36.47	71.78	35.30	100.0	Y	191.0	20.1
0.874929	34.52	68.78	34.26	100.0	Y	237.0	20.1
20.426679	34.37	69.50	35.13	100.0	Y	285.0	20.6

## EUT Information

EUT Name: Powerbank Volt'H Mini  
Model: VOLTHMINI  
Test Mode: Charging  
Test Voltage:: AC 120V/60Hz  
Remark: Temp 23 Humi:55%  
Test Standard: FCC Part 15C  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



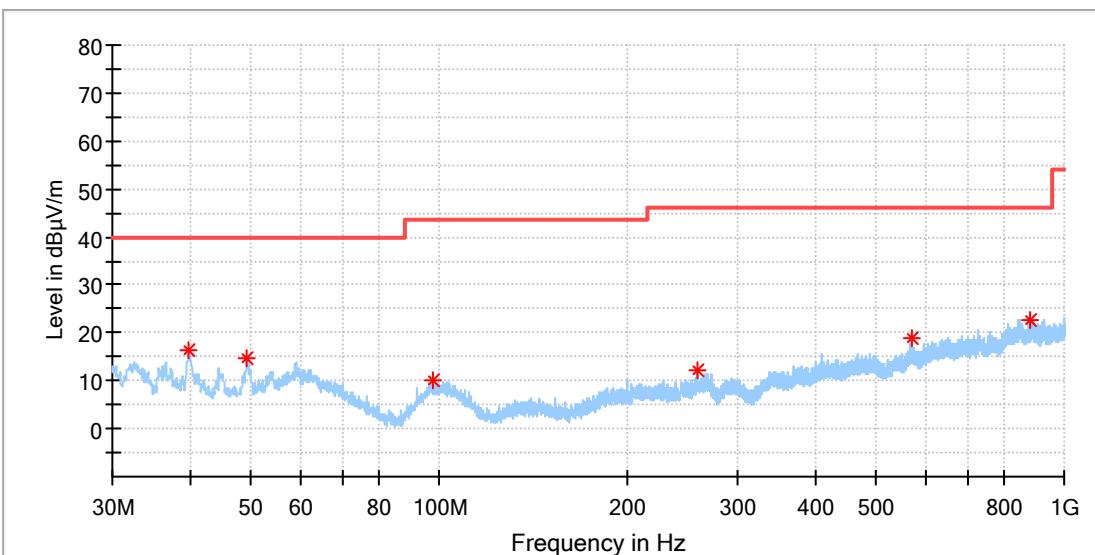
## Critical\_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.127641	72.35	105.48	33.13	100.0	Z	310.0	20.1
0.363214	57.20	96.40	39.20	100.0	Z	311.0	20.1
0.619072	47.15	71.78	24.63	100.0	Z	311.0	20.1
0.896250	43.59	68.57	24.98	100.0	Z	287.0	20.1
15.821250	33.75	69.50	35.75	100.0	Z	48.0	20.5

30MHz-1GHz

## EUT Information

EUT Name: Powerbank Volt'H Mini  
Model: VOLTHMINI  
Test Mode: Charging  
Test Voltage:: AC 120V/60Hz  
Remark: Temp 23 Humi:55%  
Test Standard: FCC Part 15C  
Tested By: Kei Zhang  
Reviewed By: Terry Yin

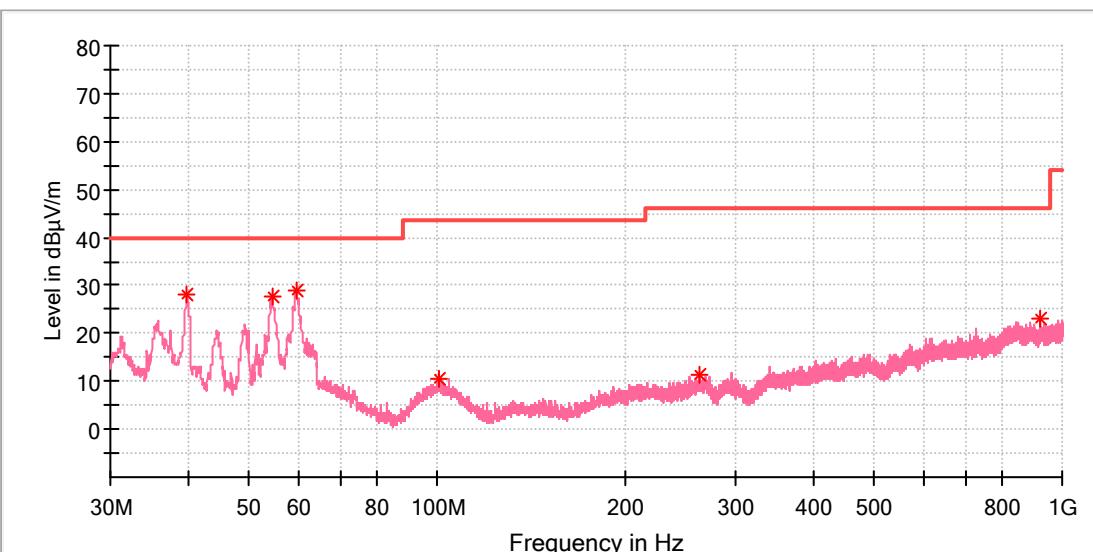


## Critical\_Freqs

Frequency (MHz)	MaxPeak (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
39.845500	16.25	40.00	23.75	100.0	H	24.0	-20.5
49.303000	14.57	40.00	25.43	100.0	H	200.0	-18.6
97.997000	10.25	43.50	33.25	100.0	H	6.0	-19.6
259.356500	11.98	46.00	34.02	100.0	H	320.0	-17.5
568.932000	18.89	46.00	27.11	100.0	H	54.0	-10.8
879.332000	22.85	46.00	23.15	100.0	H	347.0	-5.6

## EUT Information

EUT Name: Powerbank Volt'H Mini  
Model: VOLTHMINI  
Test Mode: Charging  
Test Voltage:: AC 120V/60Hz  
Remark: Temp 23 Humi:55%  
Test Standard: FCC Part 15C  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



## Critical\_Freqs

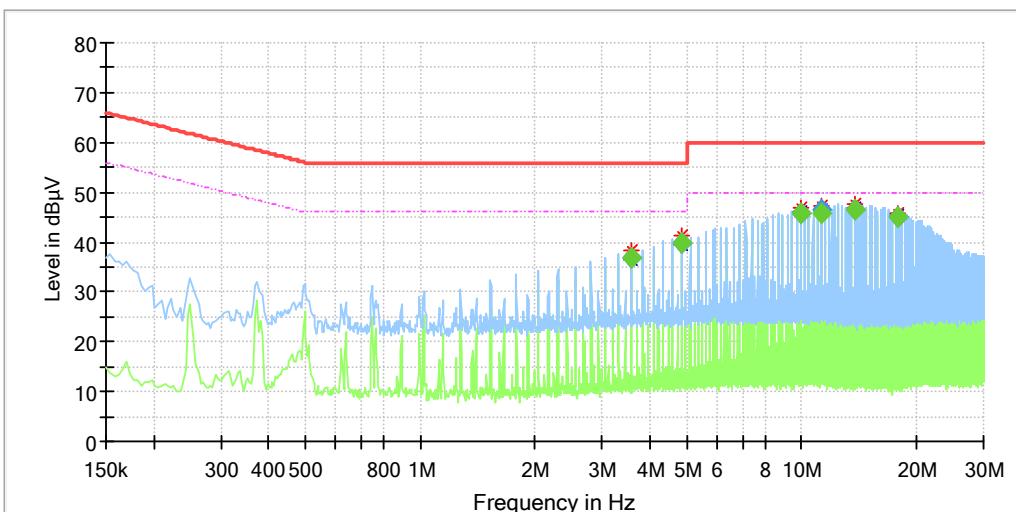
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
39.748500	27.93	40.00	12.07	100.0	V	236.0	-20.5
54.492500	27.51	40.00	12.49	100.0	V	60.0	-18.7
59.439500	28.84	40.00	11.16	100.0	V	328.0	-19.2
100.761500	10.52	43.50	32.98	100.0	V	178.0	-19.3
262.460500	11.28	46.00	34.72	100.0	V	355.0	-17.4
922.933500	23.22	46.00	22.78	100.0	V	226.0	-5.2

## Appendix C.4: Test Plots of Conducted Emission on AC Mains for FCC Part 15C

Charging mode+Wireless discharging mode

### EUT Information

EUT Name: Powerbank Volt'H Mini  
 Model: VOLTHMINI  
 Test Model: Charging + wireless discharging  
 Test Voltage: AC 120V/60Hz  
 Test By: Shower Dai  
 Review By: Gary Chen  
 Remark: SR2



### Critical\_Freqs

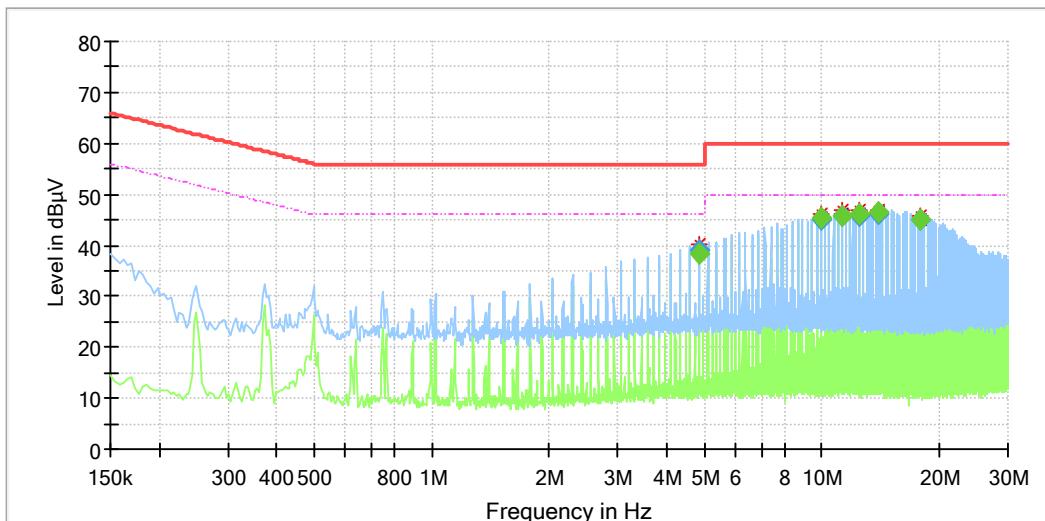
Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
3.573500	38.48	---	56.00	17.52	L1	10.2
3.573500	---	36.49	46.00	9.51	L1	10.2
4.849500	---	39.62	46.00	6.38	L1	10.2
4.849500	41.15	---	56.00	14.85	L1	10.2
9.953500	46.72	---	60.00	13.28	L1	10.3
9.953500	---	46.04	50.00	3.96	L1	10.3
11.229500	47.37	---	60.00	12.63	L1	10.3
11.229500	---	46.61	50.00	3.39	L1	10.3
13.781500	47.49	---	60.00	12.51	L1	10.4
13.781500	---	46.93	50.00	3.07	L1	10.4
17.865500	---	45.24	50.00	4.76	L1	10.4
17.865500	45.89	---	60.00	14.11	L1	10.4

### Final\_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
3.573500	---	36.73	46.00	9.27	200.0	9.000	L1	10.2
3.573500	36.81	---	56.00	19.19	200.0	9.000	L1	10.2
4.849500	---	39.63	46.00	6.37	200.0	9.000	L1	10.2
4.849500	39.66	---	56.00	16.34	200.0	9.000	L1	10.2
9.953500	---	45.89	50.00	4.11	200.0	9.000	L1	10.3
9.953500	45.82	---	60.00	14.18	200.0	9.000	L1	10.3
11.229500	46.39	---	60.00	13.61	200.0	9.000	L1	10.3
11.229500	---	45.74	50.00	4.26	200.0	9.000	L1	10.3
13.781500	46.58	---	60.00	13.42	200.0	9.000	L1	10.4
13.781500	---	46.65	50.00	3.35	200.0	9.000	L1	10.4
17.865500	---	45.10	50.00	4.90	200.0	9.000	L1	10.4
17.865500	45.03	---	60.00	14.97	200.0	9.000	L1	10.4

## EUT Information

EUT Name: Powerbank Volt'H Mini  
 Model: VOLTHMINI  
 Test Model: Charging + wireless discharging  
 Test Voltage: AC 120V/60Hz  
 Test By: Shower Dai  
 Review By: Gary Chen  
 Remark: SR2



## Critical\_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
4.849500	---	38.88	46.00	7.12	N	9.9
4.849500	40.21	---	56.00	15.79	N	9.9
9.953500	46.07	---	60.00	13.93	N	10.0
9.953500	---	45.34	50.00	4.66	N	10.0
11.229500	46.71	---	60.00	13.29	N	10.0
11.229500	---	45.98	50.00	4.02	N	10.0
12.505500	46.77	---	60.00	13.23	N	10.1
12.505500	---	46.20	50.00	3.80	N	10.1
14.037500	46.87	---	60.00	13.13	N	10.1
14.037500	---	46.34	50.00	3.66	N	10.1
17.865500	---	45.12	50.00	4.88	N	10.2
17.865500	45.85	---	60.00	14.15	N	10.2

## Final\_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
4.849500	---	38.22	46.00	7.78	200.0	9.000	N	9.9
4.849500	39.00	---	56.00	17.00	200.0	9.000	N	9.9
9.953500	---	45.23	50.00	4.77	200.0	9.000	N	10.0
9.953500	45.17	---	60.00	14.83	200.0	9.000	N	10.0
11.229500	---	45.82	50.00	4.18	200.0	9.000	N	10.0
11.229500	45.72	---	60.00	14.28	200.0	9.000	N	10.0
12.505500	45.90	---	60.00	14.10	200.0	9.000	N	10.1
12.505500	---	45.98	50.00	4.02	200.0	9.000	N	10.1
14.037500	46.25	---	60.00	13.75	200.0	9.000	N	10.1
14.037500	---	46.33	50.00	3.67	200.0	9.000	N	10.1
17.865500	---	45.00	50.00	5.00	200.0	9.000	N	10.2
17.865500	44.91	---	60.00	15.09	200.0	9.000	N	10.2