

FCC TEST REPORT FCC ID:2A9Q9-M2298Q

Report No.:DLE-250801015R

Applicant: ShenZhen Zhongyi Technology Co.,Ltd.

Address: Room 401, No.4 Road One, Shangxue Science and Technology City, Xinxue Community,

Bantian Street, Longgang District, Shenzhen, China

Manufacturer: ShenZhen Zhongyi Technology Co.,Ltd.

Address: Room 401, No.4 Road One, Shangxue Science and Technology City, Xinxue Community,

Bantian Street, Longgang District, Shenzhen, China

EUT: POWER BANK

Trade Mark: N/A

Model Number: M2298Q

Date of Receipt: May 13, 2025

Test Date: May 13, 2025 to Aug. 01, 2025

Date of Report: Aug. 01, 2025

Prepared By: Shenzhen DL Testing Technology Co., Ltd.

Address: 101-201, Building C, Shuanghuan, No.8, Baoging Roa Baolong Industrial Zone, Baolong

Street, Longgang Shenzhen, Guangdong, China

Applicable FCC CFR Title 47 Part 15 Subpart C Section 15.231

Standards: ANSI C63.10:2013

Test Result: Pass

Report Number: DLE-250801015R

Prepared (Test Engineer): Dimon Tan

Reviewer (Supervisor): Jack Bu

Approved (Manager): Jade Yang

This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen DL Testing Technology Co., Ltd.

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## 1. VERSION

Report No.         Version           DLE-250801015R         Rev.01		Description	Approved
		Initial issue of report	Aug. 01, 2025

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#### 2. TEST SUMMARY

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	Pass
AC Power Line Conducted Emission	15.207	Pass
Spurious Emission	15.209(a)(f)	Pass
20dB Bandwidth	15.215	Pass

#### NOTE:

(1)" N/A" denotes test is not applicable in this Test Report

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#### 2.1 TEST FACILITY

Shenzhen DL Testing Technology Co., Ltd.

Add.: 101-201, Building C, Shuanghuan, No.8, Baoqing Roa Baolong Industrial Zone, Baolong Stree

Longgang Shenzhen, Guangdong, China

FCC Test Firm Registration Number: 854456

Designation Number: CN1307 IC Registered No.: 27485 CAB identifier: CN0118

#### 2.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $y \pm U$ , where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	3m camber Radiated spurious emission(9KHz-30MHz)	U=4.5dB
2	3m camber Radiated spurious emission(30MHz-1GHz)	U=4.8dB
3	3m chamber Radiated spurious emission(1GHz-6GHz)	U=4.9dB
4	3m chamber Radiated spurious emission(6GHz-40GHz)	U=5.0dB
5	Conducted disturbance	U=3.2dB
6	RF conducted Spurious Emission	U=2.2dB
7	RF Occupied Bandwidth	U=1.8MHz
8	humidity uncertainty	U=5.3%
9	Temperature uncertainty	U=0.59℃

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### 3. GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT

Product Name:	POWER BANK
Model No.:	M2298Q
Serial No.:	N/A
Model Difference:	N/A
Hardware Version:	V 1.0
Software Version:	V 1.1
Operation Frequency:	115kHz-205kHz
Modulation Type:	ASK
Antenna Type:	Loop Coil Antenna
Antenna Gain:	0dBi
Ratings:	Type-C Input: 5V==3A, 9V==2A, 12V==1.5A 18W (Max)
	Type-C Output: 5V ===3A, 9V ===2.22A, 10V ===2.25A, 12V ===1.67A 22.5W(Max)
	Type-C Cable input: 5V === 3A, 9V === 2A, 12V === 1.5A, 18W (Max)
	Type-C Cable Output: 5V==3A, 9V==2.22A, 12V==1.5A, 20W(Max)
	Wireless Output: 5W 7.5W 10W 15W
Battery Capacity:	5000mAh/3.85V/19.25Wh
Transmitting Mode:	Keep the EUT in continuously wireless charging mode

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#### 3.2 TEST MODE

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

#### a. EUT mode of AC/DC Adapter + wireless charge output:

Test Modes:	Description:
Mode 1	AC/DC Adapter (12V/1.5A) + EUT + Phone 15W (Battery Status: <1%)
Mode 2	AC/DC Adapter (12V/1.5A) + EUT + Phone 15W (Battery Status: 50%)
Mode 3	AC/DC Adapter (12V/1.5A) + EUT + Phone 15W (Battery Status: >98%)
Mode 4	AC/DC Adapter (9V/2A) + EUT + Phone 15W (Battery Status: <1%)
Mode 5	AC/DC Adapter (9V/2A) + EUT + Phone 15W (Battery Status: 50%)
Mode 6	AC/DC Adapter (9V/2A) + EUT + Phone 15W (Battery Status: >98%)
Mode 7	AC/DC Adapter (5V/3A) + EUT + Phone 15W (Battery Status: <1%)
Mode 8	AC/DC Adapter (5V/3A) + EUT + Phone 15W (Battery Status: 50%)
Mode 9	AC/DC Adapter (5V/3A) + EUT + Phone 15W (Battery Status: >98%)

Mode 10	AC/DC Adapter (12V/1.5A) + EUT + Phone 10W (Battery Status: <1%)
Mode 11	AC/DC Adapter (12V/1.5A) + EUT + Phone 10W (Battery Status: 50%)
Mode 12	AC/DC Adapter (12V/1.5A) + EUT + Phone 10W (Battery Status: >98%)
Mode 13	AC/DC Adapter (9V/2A) + EUT + Phone 10W (Battery Status: <1%)
Mode 14	AC/DC Adapter (9V/2A) + EUT + Phone 10W (Battery Status: 50%)
Mode 15	AC/DC Adapter (9V/2A) + EUT + Phone 10W (Battery Status: >98%)
Mode 16	AC/DC Adapter (5V/3A) + EUT + Phone 10W (Battery Status: <1%)
Mode 17	AC/DC Adapter (5V/3A) + EUT + Phone 10W (Battery Status: 50%)
Mode 18	AC/DC Adapter (5V/3A) + EUT + Phone 10W (Battery Status: >98%)

Mode 19	AC/DC Adapter (12V/1.5A) + EUT + Phone 7.5W (Battery Status: <1%)
Mode 20	AC/DC Adapter (12V/1.5A) + EUT + Phone 7.5W (Battery Status: 50%)
Mode 21	AC/DC Adapter (12V/1.5A) + EUT + Phone 7.5W (Battery Status: >98%)
Mode 22	AC/DC Adapter (9V/2A) + EUT + Phone 7.5W (Battery Status: <1%)
Mode 23	AC/DC Adapter (9V/2A) + EUT + Phone 7.5W (Battery Status: 50%)
Mode 24	AC/DC Adapter (9V/2A) + EUT + Phone 7.5W (Battery Status: >98%)
Mode 25	AC/DC Adapter (5V/3A) + EUT + Phone 7.5W (Battery Status: <1%)
Mode 26	AC/DC Adapter (5V/3A) + EUT + Phone 7.5W (Battery Status: 50%)
Mode 27	AC/DC Adapter (5V/3A) + EUT + Phone 7.5W (Battery Status: >98%)

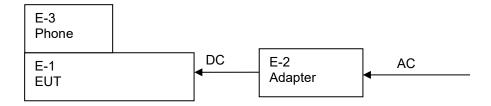
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Mode 28	AC/DC Adapter (12V/1.5A) + EUT + Phone 5W (Battery Status: <1%)
Mode 29	AC/DC Adapter (12V/1.5A) + EUT + Phone 5W (Battery Status: 50%)
Mode 30	AC/DC Adapter (12V/1.5A) + EUT + Phone 5W (Battery Status: >98%)
Mode 31	AC/DC Adapter (9V/2A) + EUT + Phone 5W (Battery Status: <1%)
Mode 32	AC/DC Adapter (9V/2A) + EUT + Phone 5W (Battery Status: 50%)
Mode 33	AC/DC Adapter (9V/2A) + EUT + Phone 5W (Battery Status: >98%)
Mode 34	AC/DC Adapter (5V/3A) + EUT + Phone 5W (Battery Status: <1%)
Mode 35	AC/DC Adapter (5V/3A) + EUT + Phone 5W (Battery Status: 50%)
Mode 36	AC/DC Adapter (5V/3A) + EUT + Phone 5W (Battery Status: >98%)

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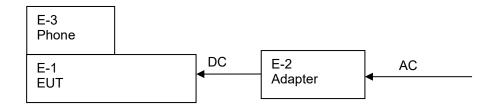
#### 3.3 BLOCK DIAGRAM OF EUT CONFIGURATION

#### Conducted Emission

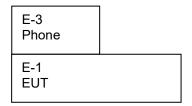


#### Radiated Emission

A:



B:



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#### 3.4 TEST CONDITIONS

Temperature: 23~26 °C

Relative Humidity: 54~63 %

#### 3.5 DESCRIPTION OF SUPPORT UNITS (CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	POWER BANK	N/A	M2298Q	N/A	EUT
E-2	AC/DC Adapter	Aohai	A895-200150C-CN1	N/A	Auxiliary
E-3	Phone	APPLE	iPhone 13 Pro	N/A	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note	
C1	NO	NO	0.8M	DC cable unshielded	

#### Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in <code>[Length]</code> column.
- (3) "YES" is means "shielded" "with core"; "NO" is means "unshielded" "without core".

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#### 3.6 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation test, Band-edge test and 6db bandwidth test equipment

	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	Spectrum Analyzer (9kHz-26.5GHz)	Agilent	E4408B	MY50140780	Nov. 01, 2024	Oct. 31, 2025
2	Test Receiver (9kHz-7GHz)	R&S	ESRP7	101393	Nov. 01, 2024	Oct. 31, 2025
3	Bilog Antenna (30MHz-1GHz)	R&S	VULB9162	00306	Nov. 01, 2024	Oct. 31, 2025
4	Horn Antenna (1GHz-18GHz)	Schwarzbeck	BBHA9120D	02139	Nov. 01, 2024	Oct. 31, 2025
5	Horn Antenna (18GHz-40GHz)	A.H. Systems	SAS-574	588	Nov. 01, 2024	Oct. 31, 2025
6	Amplifier (9KHz-6GHz)	Schwarzbeck	BBV9743B	00153	Nov. 01, 2024	Oct. 31, 2025
7	Amplifier (1GHz-18GHz)	ЕМЕС	EM01G8GA	00270	Nov. 01, 2024	Oct. 31, 2025
8	Amplifier (18GHz-40GHz)	Quanjuda	DLE-161	97	Nov. 01, 2024	Oct. 31, 2025
9	Loop Antenna (9KHz-30MHz)	Schwarzbeck	FMZB1519B	00014	Nov. 01, 2024	Oct. 31, 2025
10	RF cables1 (9kHz-1GHz)	ChengYu	966	004	Nov. 01, 2024	Oct. 31, 2025
11	RF cables2 (1GHz-40GHz)	ChengYu	966	003	Nov. 01, 2024	Oct. 31, 2025
12	Antenna connector	Florida RF Labs	N/A	RF 01#	Nov. 01, 2024	Oct. 31, 2025
13	Power probe	KEYSIGHT	U2021XA	MY55210018	Nov. 01, 2024	Oct. 31, 2025
14	Signal Analyzer 9kHz-26.5GHz	Agilent	N9020A	MY55370280	Nov. 01, 2024	Oct. 31, 2025
15	Test Receiver 20kHz-40GHz	R&S	ESU 40	100376	Nov. 01, 2024	Oct. 31, 2025
16	D.C. Power Supply	LongWei	PS-305D	010964729	Nov. 01, 2024	Oct. 31, 2025

Conduction Test equipment

Item	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	843 Shielded Room	YIHENG	843 Room	843	Nov. 05, 2023	Nov. 04, 2026
2	EMI Receiver	R&S	ESR	101421	Nov. 01, 2024	Oct. 31, 2025
3	LISN	R&S	ENV216	102417	Nov. 01, 2024	Oct. 31, 2025
4	843 Cable 1#	ChengYu	CE Cable	001	Nov. 01, 2024	Oct. 31, 2025

#### Other

Item	Name	Manufacturer	Model	Software version
1	EMC Conduction Test System	FALA	EZ_EMC	EMC-CON 3A1.1
2	EMC radiation test system	FALA	EZ_EMC	FA-03A2
3	RF test system	MAIWEI	MTS8310	2.0.0.0
4	RF communication test system	MAIWEI	MTS8200	2.0.0.0

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#### 4. CONDUCTED EMISSION TEST

#### 4.1 CONDUCTED EMISSION MEASUREMENT

Test Requirement:	FCC Part15 C Section 15.207
Test Method:	ANSI C63.10:2013
Test Frequency Range:	150KHz to 30MHz
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto

#### 4.1.1 POWER LINE CONDUCTED EMISSION Limits

FREQUENCY (MHz)	Limit (d	Standard	
FREQUENCY (MITZ)	Quas-peak	Average	Staridard
0.15 -0.5	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	56.00	46.00	FCC
5.0 -30.0	60.00	50.00	FCC

#### Note:

(1) \*Decreases with the logarithm of the frequency.

#### 4.1.2 TEST PROCEDURE

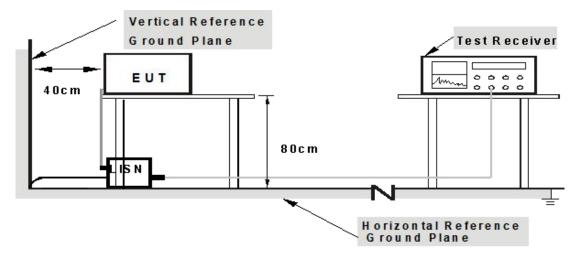
- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

#### 4.1.3 DEVIATION FROM TEST STANDARD

No deviation

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#### 4.1.4 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

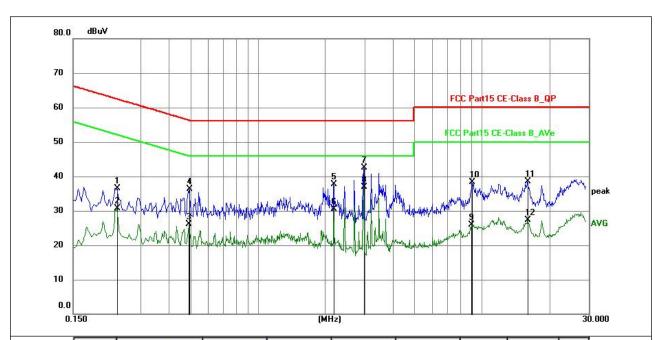
#### 4.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

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#### 4.1.6 TEST RESULT

Temperature :	26℃	Relative Humidity :	54%
Pressure:	101kPa	Phase :	L
Test Voltage :	AC 120V/60Hz	Test Mode :	Mode 1



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.2355	16.08	20.37	36.45	62.25	-25.80	QP	Р
2	0.2355	10.31	20.37	30.68	52.25	-21.57	AVG	Р
3	0.4920	5.87	20.30	26.17	46.13	-19.96	AVG	Р
4	0.4965	15.99	20.30	36.29	56.06	-19.77	QP	Р
5	2.1884	17.38	20.31	37.69	56.00	-18.31	QP	Р
6	2.1884	10.27	20.31	30.58	46.00	-15.42	AVG	Р
7	2.9625	22.17	20.33	42.50	56.00	-13.50	QP	Р
8	2.9625	16.55	20.33	36.88	46.00	-9.12	AVG	Р
9	8.9925	5.48	20.44	25.92	50.00	-24.08	AVG	Р
10	9.0150	17.93	20.44	38.37	60.00	-21.63	QP	Р
11	15.9990	17.95	20.49	38.44	60.00	-21.56	QP	Р
12	15.9990	6.84	20.49	27.33	50.00	-22.67	AVG	Р

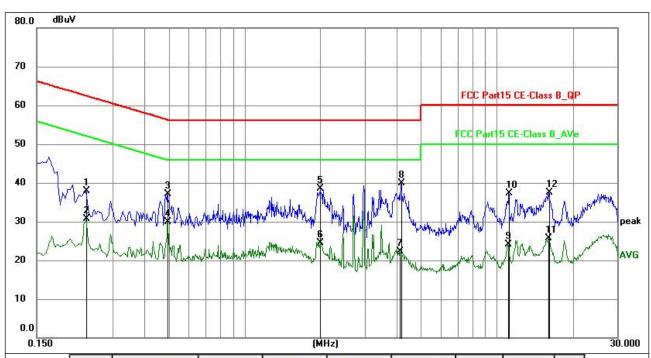
#### Notes:

- 1. An initial pre-scan was performed on the line and neutral lines with peak detector.
- 2. Quasi Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level = Reading level + Correct Factor.
- 4. Correct Factor = Lisn factor+ Cable loss factor + limiter factor.
- 5. Margin = Measurement Level-Limit.
- 6. All test modes were tested, with only the worst Mode 1 recorded.

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Temperature :	<b>26</b> ℃	Relative Humidity :	54%
Pressure:	101kPa	Phase :	N
Test Voltage :	AC 120V/60Hz	Test Mode :	Mode 1



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.2355	17.58	20.36	37.94	62.25	-24.31	QP	Р
2	0.2355	10.28	20.36	30.64	52.25	-21.61	AVG	Р
3	0.4965	16.76	20.30	37.06	56.06	-19.00	QP	Р
4	0.4965	9.65	20.30	29.95	46.06	-16.11	AVG	Р
5	1.9949	18.28	20.31	38.59	56.00	-17.41	QP	Р
6	1.9949	4.18	20.31	24.49	46.00	-21.51	AVG	Р
7	4.1235	2.06	20.34	22.40	46.00	-23.60	AVG	Р
8	4.1640	19.61	20.34	39.95	56.00	-16.05	QP	Р
9	11.0670	3.60	20.47	24.07	50.00	-25.93	AVG	Р
10	11.1795	16.83	20.47	37.30	60.00	-22.70	QP	Р
11	15.9990	5.25	20.50	25.75	50.00	-24.25	AVG	Р
12	16.0665	16.98	20.50	37.48	60.00	-22.52	QP	Р

#### Notes:

- 1. An initial pre-scan was performed on the line and neutral lines with peak detector.
- 2. Quasi Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level = Reading level + Correct Factor.
- 4. Correct Factor = Lisn factor+ Cable loss factor + limiter factor.
- 5. Margin = Measurement Level-Limit.
- 6. All test modes were tested, with only the worst Mode 1 recorded.

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#### 5. RADIATED EMISSION MEASUREMENT

Test Requirement:	FCC Part15 C Section 15.209					
Test Method:	ANSI C63.10:2013					
Test Frequency Range:	9kHz to 1GHz					
Test site:	Measurement Distance: 3m					
Receiver setup:	Frequency	Detector	RBW	VBW	Value	
	9KHz-150KHz	Quasi-peak	200Hz	600Hz	Quasi-peak	
	150KHz-30MHz	Quasi-peak	9KHz	30KHz	Quasi-peak	
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak	
	AL 4011	Peak	1MHz	3MHz	Peak	
	Above 1GHz	Peak	1MHz	10Hz	Average	

#### 5.1 RADIATED EMISSION LIMITS

Limits for frequency below 30MHz

Frequency	Limit (uV/m)	Measurement Distance(m)	Remark
0.009-0.490	2400/F(kHz)	300	Quasi-peak Value
0.490-1.705	24000/F(kHz)	30	Quasi-peak Value
1.705-30	30	30	Quasi-peak Value

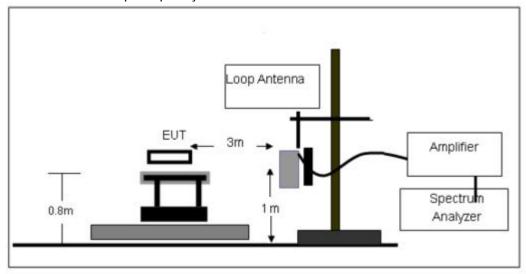
**Limits for frequency Above 30MHz** 

Frequency	Limit (dBuV/m @3m)	Remark				
30MHz-88MHz	40.00	Quasi-peak Value				
88MHz-216MHz	43.50	Quasi-peak Value				
216MHz-960MHz	46.00	Quasi-peak Value				
960MHz-1GHz	54.00	Quasi-peak Value				
Above 1GHz	54.00	Average Value				
Above IGHZ	74.00	Peak Value				

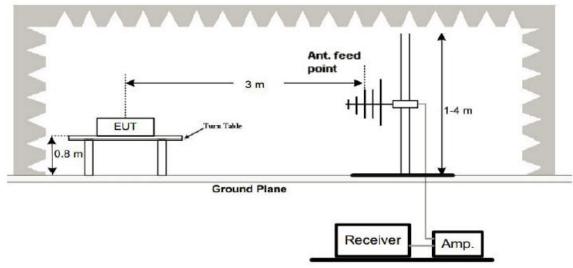
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#### 5.2 ANECHOIC CHAMBER TEST SETUP DIAGRAM

#### (A) Radiated Emission Test-Up Frequency Below 30MHz



#### (B) Radiated Emission Test-Up Frequency 30MHz~1GHz



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209 and FCC 15.205 limits.

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#### 5.3 TEST PROCEDURE

#### Below 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meterssemi-anechoic chamber. The table was rotated 360 degrees to determine the position of thehighest radiation.
- b. The EUT was set 3 meters away from the interference-receiving loop antenna and in thecenter of a loop antenna, which was mounted on the top of a variable-height antenna tower.
- c. For each suspected emission, the EUT was arranged to its worst case, the height ofinterference-receiving loop antenna centre is 1 meter above the ground, and the rotatable tablewas turned from 0 degrees to 360 degrees to find the maximum reading.
- d. Both coaxial (loop plane perpendicular to the ground plane and to the measurement axis) and coplanar (loop plane perpendicular to the ground plane and coplanar with the measurement axis) polarizations of the antenna are set to make the measurement.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth withmaximum hold mode when the test frequency is below 1 GHz.

#### 30MHz-1GHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meterssemi-anechoic chamber. The table was rotated 360 degrees to determine the position of thehighest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mountedon the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four metersabove the ground to determine the maximum value of the field strength. Both horizontal andvertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antennawas tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth withmaximum hold mode when the test frequency is below 1 GHz.

#### 5.4 DEVIATION FROM TEST STANDARD

No deviation

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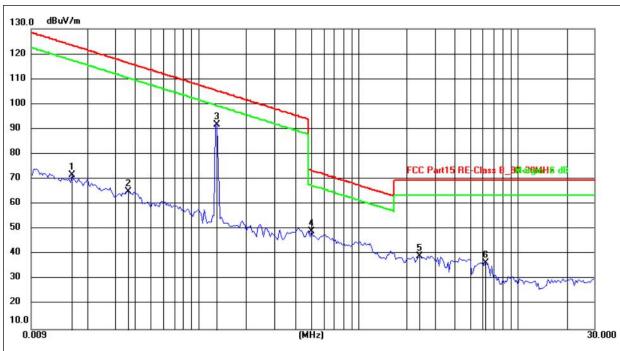
#### 5.5 TEST RESULT

#### Measurement data:

Note: Limit dBuV/m @3m = Limit dBuV/m @300m+ 80 Limit dBuV/m @3m = Limit dBuV/m @30m + 40

#### A: 9 kHz~30 MHz

Temperature :	26℃	Relative Humidity :	54%
Pressure :	101 kPa	Polarization :	coaxial
Test Voltage :	DC 9V	Test Mode :	Mode 1



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	0.0160	51.07	20.49	71.56	123.52	-51.96	peak
2	0.0364	45.01	20.07	65.08	116.38	-51.30	peak
3	0.1305	71.73	19.94	91.67	105.29	-13.62	peak
4	0.5090	28.85	20.21	49.06	73.47	-24.41	peak
5	2.4266	19.52	19.73	39.25	69.54	-30.29	peak
6	6.2945	17.20	19.35	36.55	69.54	-32.99	peak

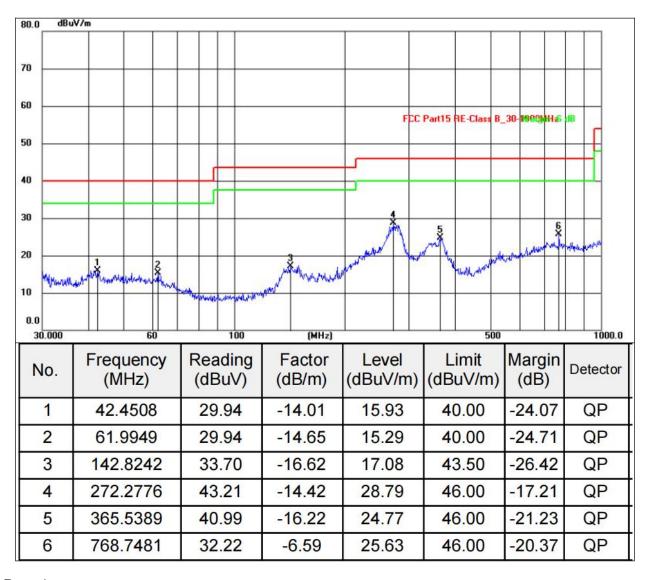
#### Remarks:

- 1.An initial pre-scan was performed on the peak detector.
- 2. Quasi-Peak measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level = Reading level + Correct Factor.
- 4. Correct Factor = Antenna factor+ Cable loss factor Amplifier factor.
- 5.Margin= Measurement Level-Limit.

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#### 30MHz-1GHz

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	Horizontal
Test Voltage:	DC 9V	Test Mode:	Mode 1



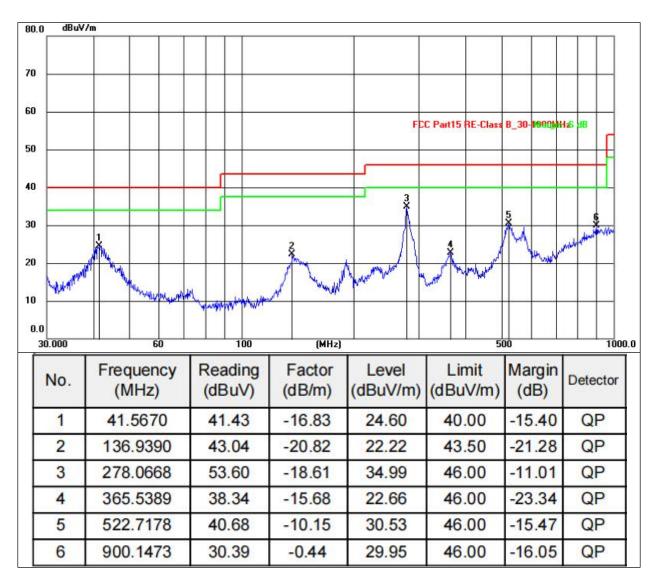
#### Remarks:

- 1.An initial pre-scan was performed on the peak detector.
- 2. Quasi-Peak measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level = Reading level + Correct Factor.
- 4.Correct Factor = Antenna factor+ Cable loss factor Amplifier factor.
- 5.Margin= Measurement Level-Limit.
- 6.All test modes were tested, with only the worst Mode 1 recorded.

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Temperature:	<b>26</b> ℃	Relative Humidity:	54%
Pressure:	101kPa	Polarization:	Vertical
Test Voltage:	DC 9V	Test Mode:	Mode 1



#### Remarks:

- 1.An initial pre-scan was performed on the peak detector.
- 2. Quasi-Peak measurement were performed at the frequencies with maximized peak emission.
- 3.Final Level = Reading level + Correct Factor.
- 4. Correct Factor = Antenna factor+ Cable loss factor Amplifier factor.
- 5.Margin= Measurement Level-Limit.
- 6.All test modes were tested, with only the worst Mode 1 recorded.

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#### B: 9 kHz~30 MHz

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	coaxial
Test Voltage:	DC 3.85V	Test Mode:	Mode 1a



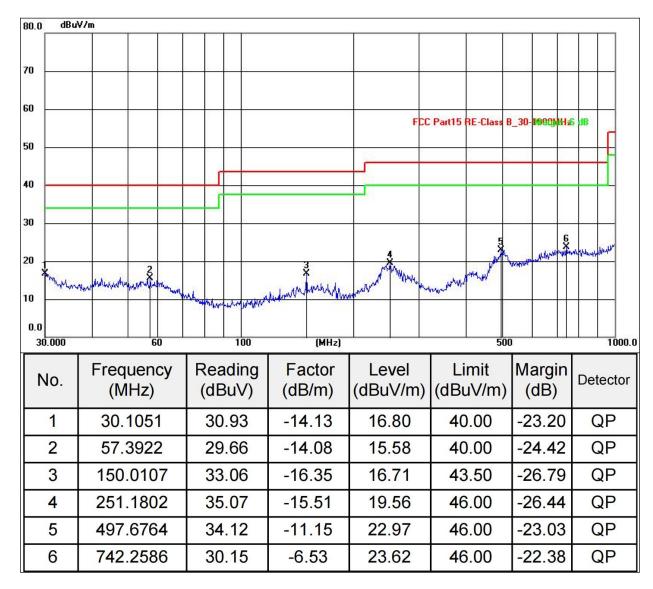
#### Remarks:

- 1.An initial pre-scan was performed on the peak detector.
- 2.Quasi-Peak measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level = Reading level + Correct Factor.
- 4. Correct Factor = Antenna factor+ Cable loss factor Amplifier factor.
- 5.Margin= Measurement Level-Limit.

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#### 30MHz-1GHz

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	Horizontal
Test Voltage:	DC 3.85V	Test Mode:	Mode 1a



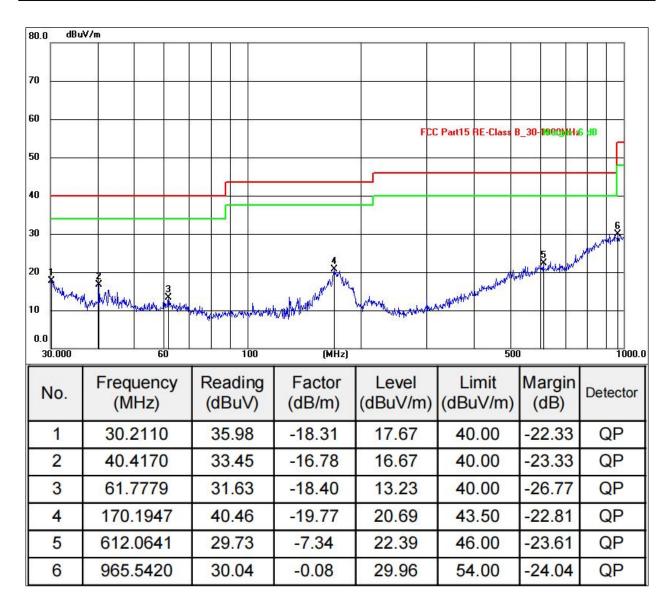
#### Remarks:

- 1.An initial pre-scan was performed on the peak detector.
- 2.Quasi-Peak measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level = Reading level + Correct Factor.
- 4. Correct Factor = Antenna factor+ Cable loss factor Amplifier factor.
- 5.Margin= Measurement Level-Limit.
- 6.All test modes were tested, with only the worst Mode 1a recorded.

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Temperature:	<b>26</b> ℃	Relative Humidity:	54%
Pressure:	101kPa	Polarization:	Vertical
Test Voltage:	DC 3.85V	Test Mode:	Mode 1a



#### Remarks:

- 1.An initial pre-scan was performed on the peak detector.
- 2. Quasi-Peak measurement were performed at the frequencies with maximized peak emission.
- 3.Final Level = Reading level + Correct Factor.
- 4.Correct Factor = Antenna factor+ Cable loss factor Amplifier factor.
- 5.Margin= Measurement Level-Limit.
- 6.All test modes were tested, with only the worst Mode 1a recorded.

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#### 6. 20DB BANDWIDTH TEST

#### **6.1 TEST PROCEDURE**

- 1. Se span =  $1.5 \sim 5$  times OBW.
- 2. Set RBW = 1kHz.
- 3. Set the video bandwidth (VBW)  $\geq$  3 x RBW.
- 4. Detector = peak.
- 5. Trace mode = max hold.
- 6. Sweep = auto couple.
- 7. Allow the trace to stabilize.
- 8. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20 dB relative to the maximum level measured in the fundamental emission.

#### 6.2 LIMIT

N/A

#### 6.3 TEST SETUP



#### 6.4 DEVIATION FROM STANDARD

No deviation.

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#### 6.5 TEST RESULT

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 3.85V

Test Coil	Frequency (kHz)	20dB Bandwidth (kHz)	Result
ANT 1	130.50	2.706	Pass



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#### 7. ANTENNA REQUIREMENT

Standard requirement: FCC Part15 C Section 15.203

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The antenna is Loop Coil antenna, the best case gain of the antennas is 0dBi, reference to the appendix II for details

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#### 8. TEST SETUP PHOTO

Reference to the appendix I for details.

#### 9. EUT CONSTRUCTIONAL DETAILS

Reference to the appendix II for details.

\*\*\*\* END OF REPORT \*\*\*\*

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