



RF Exposure Evaluation

For

Shenzhen DC Times Technology Co., Ltd

4G Battery Camera

Test Model: SP1-4G

Additional Model No.: Please Refer to Page 6

Prepared for : Shenzhen DC Times Technology Co., Ltd
Address : Floor3, Building J, Jinchangda Industrial Zone, Shangwei Village,
Zhangkengjing, Guanlan Town, Longhua New District, Shenzhen,
China

Prepared by : Shenzhen LCS Compliance Testing Laboratory Ltd.
Address : 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei,
Shajing Street, Baoan District, Shenzhen, 518000, China
Tel : (+86)755-82591330
Fax : (+86)755-82591332
Web : www.LCS-cert.com
Mail : webmaster@LCS-cert.com

Date of receipt of test sample : May 30, 2025
Number of tested samples : 2
Sample No. : A250527043-1, A250527043-2
Serial number : Prototype
Date of Test : May 30, 2025 ~ June 11, 2025
Date of Report : June 12, 2025





RF Exposure Evaluation	
Report Reference No.	LCSA05275121EB
Date of Issue.....	June 12, 2025
Testing Laboratory Name.....	Shenzhen LCS Compliance Testing Laboratory Ltd.
Address.....	101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Testing Location/ Procedure.....	Full application of Harmonised standards ■ Partial application of Harmonised standards □ Other standard testing method □
Applicant's Name.....	Shenzhen DC Times Technology Co., Ltd
Address.....	Floor3, Building J, Jinchangda Industrial Zone, Shangwei Village, Zhangkengjing, Guanlan Town, Longhua New District, Shenzhen, China
Test Specification	
Standard.....	FCC KDB publication 447498 D01 General 1 RF Exposure Guidance v06 FCC CFR 47 part1 1.1310 FCC CFR 47 part2 2.1091
Test Report Form No.....	TRF-4-E-214 A/0
TRF Originator.....	Shenzhen LCS Compliance Testing Laboratory Ltd.
Master TRF.....	Dated 2011-03
Shenzhen LCS Compliance Testing Laboratory Ltd. All rights reserved. This publication may be reproduced in whole or in part for non-commercial purposes as long as the Shenzhen LCS Compliance Testing Laboratory Ltd. is acknowledged as copyright owner and source of the material. Shenzhen LCS Compliance Testing Laboratory Ltd. takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.	
EUT Description.....	4G Battery Camera
Trade Mark.....	N/A
Test Model.....	SP1-4G
Ratings.....	Input: DC 5V DC 3.7V by Rechargeable Li-ion Battery, 9000mAh
Result	PASS

Compiled by:

Diamond Lu/ Administrator

Supervised by:

Jack Liu/ Technique principal

Approved by:

Gavin Liang/ Manager



Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity



RF Exposure Evaluation

Test Report No. : LCSA05275121EB	<u>June 12, 2025</u> Date of issue
---	---------------------------------------

Test Model.....	: SP1-4G
EUT.....	: 4G Battery Camera
Applicant	: Shenzhen DC Times Technology Co., Ltd
Address.....	: Floor3, Building J, Jinchangda Industrial Zone, Shangwei Village, Zhangkengjing, Guanlan Town, Longhua New District, Shenzhen, China
Telephone.....	: /
Fax.....	: /
Manufacturer	: Shenzhen DC Times Technology Co., Ltd
Address.....	: Floor3, Building J, Jinchangda Industrial Zone, Shangwei Village, Zhangkengjing, Guanlan Town, Longhua New District, Shenzhen, China
Telephone.....	: /
Fax.....	: /
Factory	: /
Address.....	: /
Telephone.....	: /
Fax.....	: /

Test Result	PASS
-------------	-------------

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.



Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity



Revision History

Report Version	Issue Date	Revision Content	Revised By
000	June 12, 2025	Initial Issue	---





TABLE OF CONTENTS

Description	Page
1. Product Information	6
2. Evaluation Method	7
3. Limit	7
4. MPE Calculation Method	8
5. Conducted Power	8
6. Measurement Results	9
7. Conclusion	9
8. Description of Test Facility	9
9. Measurement Uncertainty	9





1. Product Information

EUT	: 4G Battery Camera
Test Model	: SP1-4G
Additional Model No.	: SP2-4G, SP3-4G, SP5-4G, SP6-4G, SP7-4G, SP8-4G, SP9-4G, SP10-4G, SP11-4G, SP12-4G, SP13-4G, SP15-4G, SP16-4G, SP17-4G, SP18-4G, SP19-4G, SP20-4G, CX1-4G, CX2-4G, CX3-4G, CX4-4G, CX5-4G, LT1-4G, LT2-4G, LT3-4G, LT4-4G, LT5-4G, CY1-4G, CY2-4G, CY3-4G, CY4-4G, CY5-4G, HT1, HT2, HT3, HT5, HT6, HT7, HT8, HT9, HT10
Model Declaration	: PCB board, structure and internal of these model(s) are the same, So no additional models were tested
Ratings	: Input: DC 5V DC 3.7V by Rechargeable Li-ion Battery, 9000mAh
Hardware Version	: V515P1
Software Version	: V5.5.41.0
LTE	:
Support Band	: ☒ E-UTRA Band 2(U.S.-Band) ☒ E-UTRA Band 4(U.S.-Band) ☒ E-UTRA Band 5(U.S.-Band) ☒ E-UTRA Band 12(U.S.-Band) ☒ E-UTRA Band 13(U.S.-Band) ☒ E-UTRA Band 66(U.S.-Band)
LTE Release Version	: R15
Type Of Modulation	: QPSK/16QAM
Antenna Description	: External Antenna 3.06dBi(max.) For E-UTRA Band 2 2.64dBi(max.) For E-UTRA Band 4 2.22dBi(max.) For E-UTRA Band 5 4.57dBi(max.) For E-UTRA Band 12 2.90dBi(max.) For E-UTRA Band 13 2.85dBi(max.) For E-UTRA Band 66
Power Class	: Class 3
Exposure category	: General population/uncontrolled environment
EUT Type	: Production Unit
Device Type	: Mobile Device

Note: For a more detailed antenna description, please refer to the antenna specifications or the antenna report provided by the customer.





2. Evaluation Method

Systems operating under the provisions of FCC 47 CFR section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with.

In accordance with KDB447498D01 for Simultaneous transmission MPE test exclusion applies when the sum of the MPE ratios for all simultaneous transmitting antennas incorporated in a host device, based on the calculated/estimated, numerically modelled or measured field strengths or power density, is ≤ 1.0 . The MPE ratio of each antenna is determined at the minimum test separation distance required by the operating configurations and exposure conditions of the host device, according to the ratio of field strengths or power density to MPE limit, at the test frequency. Either the maximum peak or spatially averaged results from measurements or numerical simulations may be used to determine the MPE ratios. Spatial averaging does not apply when MPE is estimated using simple calculations based on far-field plane-wave equivalent conditions. The antenna installation and operating requirements for the host device must meet the minimum test separation distances required by all antennas, in both standalone and simultaneous transmission operations, to satisfy compliance.

3. Limit

3.1 Refer Evaluation Method

[ANSI C95.1-2019](#): IEEE Standard for Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz

[FCC KDB publication 447498 D01 General 1 RF Exposure Guidance v06](#): Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.

[FCC CFR 47 part1 1.1310](#): Radiofrequency radiation exposure limits.

[FCC CFR 47 part2 2.1091](#): Radiofrequency radiation exposure evaluation: mobile devices.

3.2 Limit

Limits for Maximum Permissible Exposure (MPE)/Controlled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
Limits for Occupational/Controlled Exposure				
0.3 – 3.0	614	1.63	(100) *	6
3.0 – 30	1842/f	4.89/f	(900/f ²)*	6
30 – 300	61.4	0.163	1.0	6
300 – 1500	/	/	f/300	6
1500 – 100,000	/	/	5	6

Limits for Maximum Permissible Exposure (MPE)/Uncontrolled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
Limits for Occupational/Uncontrolled Exposure				
0.3 – 3.0	614	1.63	(100) *	30
3.0 – 30	824/f	2.19/f	(180/f ²)*	30
30 – 300	27.5	0.073	0.2	30
300 – 1500	/	/	f/1500	30
1500 – 100,000	/	/	1.0	30

F=frequency in MHz

*=Plane-wave equivalent power density





4. MPE Calculation Method

Predication of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = PG / 4\pi R^2$$

Where: S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna

5. Conducted Power

[LTE Max Average Power]

Test Mode		Channel	Max Average Power (dBm)	ANT Max. Tune Up Power (dBm)
LTE	Band 2	LCH	21.70	21.0±1.0
		MCH	21.83	21.0±1.0
		HCH	22.83	22.0±1.0
	Band 4	LCH	22.73	22.0±1.0
		MCH	22.53	22.0±1.0
		HCH	22.56	22.0±1.0
	Band 5	LCH	23.62	23.0±1.0
		MCH	23.30	23.0±1.0
		HCH	23.24	23.0±1.0
	Band 12	LCH	23.53	23.0±1.0
		MCH	23.43	23.0±1.0
		HCH	23.21	23.0±1.0
	Band 13	LCH	23.77	23.0±1.0
		MCH	23.48	23.0±1.0
		HCH	23.55	23.0±1.0
	Band 66	LCH	23.10	23.0±1.0
		MCH	22.77	22.0±1.0
		HCH	23.10	23.0±1.0





6. Measurement Results

6.1 Standalone MPE Evaluation

As declared by the Applicant, the EUT is a wireless device used in a fix application, at least 20 cm from any body part of the user or nearby persons; from the maximum EUT RF output power, the minimum separation distance, $r = 20\text{cm}$, as well as the gain of the used antenna refer to antenna information, the RF power density can be obtained.

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
LTE Band 2	23.0	199.5262	3.06	2.0230	0.0803	1.0000
LTE Band 4	23.0	199.5262	2.64	1.8365	0.0729	1.0000
LTE Band 5	24.0	251.1886	2.22	1.6672	0.0834	0.5493
LTE Band 12	24.0	251.1886	2.9	1.9498	0.0975	0.4660
LTE Band 13	24.0	251.1886	2.85	1.9275	0.0964	0.5180
LTE Band 66	24.0	251.1886	4.57	2.8642	0.1432	1.0000

Remark:

1. Output power including tune-up tolerance;
2. Output power was adjusted to duty cycle at 100% if measured duty cycle less than 98%;
3. MPE evaluate distance is 20cm from user manual provide by manufacturer.

6.2 Simultaneous Transmission MPE Evaluation

The EUT equipped with one antenna. So no need consider simultaneous transmission.

7. Conclusion

The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure of mobile device.

8. Description of Test Facility

NVLAP Accreditation Code is 600167-0.

FCC Designation Number is CN5024.

CAB identifier is CN0071.

CNAS Registration Number is L4595.

Test Firm Registration Number: 254912.

9. Measurement Uncertainty

Test Item		Frequency Range	Uncertainty	Note
Output power	:	1GHz-40GHz	±0.57dB	(1)

(1). This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

-----THE END OF REPORT-----



Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity