Camelion Battery Co., Ltd.

TEST REPORT

SCOPE OF WORK
EMC TESTING– SH908WC

REPORT NUMBER
200708178GZU-009

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Applicant Name & Address	:	Camelion Battery Co., Ltd. Unit 705, Cyber Times Tower A, Tian'an Cyber Park, Shenzhen, China. 518041
Manufacturing Site	:	Cametronics Industrial Co., Ltd. 201, Bldg. 8, Shiguan Industrial Zone, Shangcun Community, Gongming Street, Guangming District, Shenzhen
Intertek Report No:		200708178GZU-009
FCC ID:		2AQNC-SH908WC

Test standards

47 CFR PART 1, Subpart I, Section 1.1310
KDB 680106 D01 RF Exposure Wireless Charging Apps v03

Sample Description

Product	:	Jump Starter & Portable Power Bank
Model No.	:	SH908WC
Electrical Rating	:	Input: Micro USB: 5Vdc, 2A; Type-C: 5Vdc, 3A; 9Vdc, 2A; 12Vdc, 1.5A Output: Type-C: 5Vdc, 3A; 9Vdc, 2A; 12Vdc, 1.5A; USB-A 1: 5Vdc, 2.4A; USB-A 2: 5Vdc, 2.4A; Wireless charger: 10W
Serial No.		Not Labeled
Date Received	:	29 May 2020
Date Test Conducted	:	29 May 2020 to 22 October 2020

Prepared and Checked By

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1.0 TEST RESULT SUMMARY

Classification of EUT: Class B

Test Item	Standard	Result
EMF	47 CFR PART 1, Subpart I, Section 1.1310	PASS

Remark:
When determining the test results, measurement uncertainty of tests has been considered.

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2.0 General Description

2.1 Product Description

Operating Frequency	112-146KHz
Type of Modulation:	ASK
Antenna Type	Inductive loop coil antenna
Antenna gain:	0 dBi
Power Supply:	Internal battery
Power cord:	N/A

2.2 Test Facility

Room102/104, No 203, KeZhu Road, Science City, GETDD Guangzhou, China

A2LA Certificate Number 0078.10
Intertek Testing Services Shenzhen Ltd. Guangzhou Branch is accredited by A2LA and Listed in FCC website. FCC accredited test labs may perform both Certification testing under Parts 15 and 18 and Declaration of Conformity testing.

2.3 EUT Exercising Software

N/A

2.4 Special Accessories

N/A

2.5 Equipment Modification

Any modifications installed previous to testing by Camelion Battery Co., Ltd. will be incorporated in each production model sold / leased in the United States.
No modifications were installed by Intertek Testing Services Shenzhen Ltd. Guangzhou Branch.

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2.6 Support Equipment List and Description

This product was tested with corresponding support equipment as below:

Support Equipment:

Equipment	Model No.	Rating	Supplier
Mobile phone	IPhone 8	--	Intertek

Remark: the iphone 8 was one of typical client devices, it's selected such that the EUT was fully exercised at maximum power from its transmitter. It will not be sold together.

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested based 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 evaluated respectively

Pretest mode	Description	
Standby Mode	kept transmitting continuously	
Charging Mode	CH: Low	Mobile phone is charging at 1% battery power, 50% and 99% battery power respectively, keep transmitting continuously
	CH: Middle	
	CH: High	

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3.0 EMF TEST

3.1 Standard Requirement

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.1m normally can be maintained between the user and the device.

(a) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S)(mW/cm^2)	Averaging Times $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	F/300	6
1500-100000	--	--	5	6

(b) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S)(mW/cm^2)	Averaging Times $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	F/1500	30
1500-100000	--	--	1.0	30

Note: f=frequency in MHz; *Plane-wave equivalent power density

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3.2 Test Data

Input Voltage: Internal battery
Ambient Condition: 24℃, 50%RH

Test distance: 0, 2,4,6,8,10,15,20 cm surrounding the device and above the top surface from all simultaneous transmitting coils, the worst data was tested at Mobile in 1% battery power(the worst case) and shown as below.

H-Filed Strength:

Test Position	Test distance									Limit (A/m)
	0cm	2cm	4cm	6cm	8cm	10cm	15cm	20cm	Background	1.63
Side1	0.465	0.351	0.242	0.202	0.181	0.176	0.175	0.175	0.175	1.63
Sied2	0.191	0.186	0.180	0.178	0.178	0.178	0.175	0.175	0.175	1.63
Side3	0.634	0.352	0.226	0.192	0.178	0.175	0.175	0.175	0.175	1.63
Side4	0.186	0.184	0.182	0.179	0.177	0.176	0.175	0.175	0.175	1.63
Top	0.291	0.236	0.206	0.180	0.186	0.181	0.175	0.175	0.175	1.63

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4.0 Test Equipment List

Equip. No.	Equipment	Model	Manufacturer	Cal. date	Due date
EM007-03	Exposure Level Tester	ELT-400	NARDA	2019/12/11	2020/12/11

**********End of the test report**********