



Human Exposure Report

Application No.: SZEM1907016152CR
Applicant: Shenzhen Itian Technology Co., LTD
Address of Applicant: 5F, Bld. C, Hongde Ind. Park, Shiguan, Lianrun Rd. Dalang St., Longhua District Shenzhen China
Manufacturer: Shenzhen Itian Technology Co., Ltd.
Address of Manufacturer: 5F, Building C, Hongde Industrial Park, Shiguan, Lianrun Road, Dalang Street, Longhua New District, Shenzhen, China
Factory: Shenzhen Itian Technology Co., Ltd.
Address of Factory: 5F, Building C, Hongde Industrial Park, Shiguan, Lianrun Road, Dalang Street, Longhua New District, Shenzhen, China
Equipment Under Test (EUT):
EUT Name: Automatic Fast Car Wireless Charger
Model No.: C19, C18, C13X, KAW-ITC19, RUBIE-C2 ♣
Please refer to section 3.1 of this report which indicates which model was actually tested and which were electrically identical.
Trade mark: itian
FCC ID: 2AUDIO-C19C18C13X
Standards: 47 CFR PART 1, Subpart I, Section 1.1310
Date of Receipt: 2019-07-10
Date of Test: 2019-07-16 to 2020-04-14
Date of Issue: 2020-04-14

Test Result :	Pass*
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* In the configuration tested, the EUT complied with the standards specified above

Keny Xu

Keny Xu
EMC Laboratory Manager



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Shenzhen Branch EMC Laboratory

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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2020-04-14		Original

Authorized for issue by:			
			
		Peter Geng /Project Engineer	
			
		Eric Fu /Reviewer	



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3 General Information

3.1 Details of E.U.T.

Power supply:	Input: DC 5V/2A, 9V/1.67A Output: DC 5V/1.0A, 5V/1.5A, 9V/1.2A
Cable:	USB charging line: 120cm, unshielded
Operation Frequency:	111.70-187.02 kHz
Modulation Type:	Load modulation
Antenna Type:	Loop Antenna
Remark:	1) Tests were conducted in all load modes and the worst case 10W (DC 9V/1.2A) is reported only. 2) All tests were conducted in both supply mode of DC 12V and DC 24V and the worst case (DC 12V) were reported only.

Declaration of EUT Family Grouping:

Model No.: C19, C18, C13X, KAW-ITC19, RUBIE-C2

Only the model C19 was tested, since the electrical circuit design, layout, components used, internal wiring and functions were identical for the above models, with only difference on Model name and appearance.

3.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
DC power	ZHAOXIN	RXN-305D	REF. No.SEA2700
Adapter (for RE)	LeTV	EQ-248CN	16041847014
iPhone 8	Apple	A1863	F4GVQ656JC6D
SAMSUNG Galaxy S8	SAMSUNG	SM-G9500	R28J9140LPB



3.3 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch E&E Lab,

No. 1 Workshop, M-10, Middle section, Science & Technology Park, Shenzhen, Guangdong, China 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

3.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 3816.01.

• **VCCI**

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

• **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

3.5 Deviation from Standards

None.

3.6 Abnormalities from Standard Conditions

None.



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4 Equipments Used during Test

Item	Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
1	Electric Field Probe (100KHz-3GHz)	WANDEL & GOLTERMAN N	EMR-20	EMC0907	2019-05-21	2020-05-20
2	EMF Tester	Narda	ELT-400	SZE039-4	2019-07-08	2020-07-07



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5 Test Results

5.1 RF Exposure test

Test Requirement: 47 CFR PART 1, Subpart I, Section 1.1310

Measurement Distance: 0cm/2cm/4cm/6cm/8cm/10cm

Limit:

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
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
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	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
RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).

5.1.1 E.U.T. Operation

Operating Environment:

Temperature: 24.0 °C Humidity: 52 % RH Atmospheric Pressure: 1015 mbar

EUT Operation:

This device has been tested with mobile phone at zero charge, intermediate charge, and full charge.





5.1.2 Measurement Data

Output Voltage=DC 9V; The max output power =10W

Operation frequency	Test Distance(cm)	Test Position	Probe Measure Result (A/m)	Limit (A/m)
133 kHz	0	Side 1	0.5408	1.63
		Side 2	0.3693	
		Side 3	0.5514	
		Side 4	0.3498	
		Top	0.2762	
	2	Side 1	0.4597	
		Side 2	0.3065	
		Side 3	0.4742	
		Side 4	0.2763	
		Top	0.2265	
	4	Side 1	0.3815	
		Side 2	0.2452	
		Side 3	0.4078	
		Side 4	0.2321	
		Top	0.1925	
	6	Side 1	0.3167	
		Side 2	0.2084	
		Side 3	0.3303	
		Side 4	0.1903	
		Top	0.1636	
	8	Side 1	0.2502	
		Side 2	0.1730	
		Side 3	0.2577	
		Side 4	0.1542	
		Top	0.1266	
	10	Side 1	0.1901	
		Side 2	0.1367	
		Side 3	0.1958	
		Side 4	0.1187	
		Top	0.0995	





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Mobile phone has been charge at zero charge, intermediate charge, and full charge.

Operation frequency	Test Distance(cm)	Test Position	Probe Measure Result(A/m)			Limit (A/m)
			zero charge	intermediate charge	full charge	
132.6 kHz	0	Side 1	0.5526	0.5367	0.5325	1.63
		Side 2	0.3796	0.3643	0.3599	
		Side 3	0.5611	0.5465	0.5426	
		Side 4	0.3606	0.3462	0.3411	
		Top	0.2899	0.2745	0.2688	
	2	Side 1	0.4712	0.4596	0.4555	
		Side 2	0.3173	0.3055	0.3021	
		Side 3	0.4837	0.4708	0.4662	
		Side 4	0.2869	0.2713	0.2678	
		Top	0.2374	0.2268	0.2233	
	4	Side 1	0.3939	0.3797	0.3752	
		Side 2	0.2581	0.2426	0.2392	
		Side 3	0.4197	0.4075	0.4033	
		Side 4	0.2447	0.2314	0.2268	
		Top	0.2025	0.1887	0.1837	
	6	Side 1	0.3258	0.3133	0.3098	
		Side 2	0.2184	0.2046	0.2004	
		Side 3	0.3412	0.3253	0.3217	
		Side 4	0.2007	0.1864	0.1839	
		Top	0.1767	0.1648	0.1613	
	8	Side 1	0.2613	0.2510	0.2475	
		Side 2	0.1844	0.1705	0.1658	
		Side 3	0.2678	0.2566	0.2523	
		Side 4	0.1658	0.1499	0.1451	
		Top	0.1387	0.1239	0.1193	
	10	Side 1	0.2008	0.1871	0.1827	
		Side 2	0.1463	0.1303	0.1264	
		Side 3	0.2069	0.1961	0.1921	
		Side 4	0.1307	0.1194	0.1146	
		Top	0.1110	0.0998	0.0951	

- End of the Report -



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