



RF Exposure report

Report No.: HQ191216JL07-FM Applicant name: Dongguan Shunlang Electronics Co., Ltd Floor 5, Building 2, Shenxiang Industrial Park, Dabandi Cuntou Applicant address: Community, Humen town, Dongguan City FCC ID: 2AVMZ-AC190DGSL Product name: ALARM CLOCK RADIO Brand Name: ANJANK Test model name: AC190 Additional model: N/A Test Date: Apr. 11, 2020~ June 01, 2020 Issued Date: Jun. 15, 2020 Issued By: Hwa-Hsing (Dongguan) Testing Co., Ltd. No.101, Bld N1, Yuyuan 2Rd, Yuyuan Industrial Park, HuangJiang Lab Address: Town, Dongguan, China No.101, Bld N1, Yuyuan 2Rd, Yuyuan Industrial Park, HuangJiang Test Location: Town, Dongguan, China

FCC Designation CN1255 Number:

Standards: 47 CFR PART 1, Subpart I, Section 1.1310; KDB 680106 D01

The above equipment has been tested by Hwa-Hsing (Dongguan) Testing Co., Ltd., and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by :	Tank	Date:	Jun. 15, 2020	
	Tank Tan//Engineer			
Approved by :	Damy Li	Date:	Jun. 15, 2020	
	Harry Li/ Supervisor			-

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Hwa-Hsing (Dongguan) Testing Co., Ltd.

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HWA-HSING Test Report No.: HQ191216JL07-FM

Release control record

Issue No.	Reason for change	Date issued
HQ191216JL07-FM	Original release	Jun. 15, 2020

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1 General Information

1.1 General Description of EUT

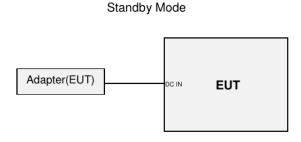
Product Name	ALARM CLOCK RADIO
Brand	ANJANK
FCC ID	2AVMZ-AC190DGSL
Test Model	AC190
Series Models	N/A
Power Supply Rating	DC 1.5V*2 (AAA) battery DC 9V2A from adapter, The adapter input: AC100-240V~50/60Hz 0.5A max.
Modulation type	ASK
Operating frequency	110KHz ~ 150KHz
Antenna type	Coil Antenna

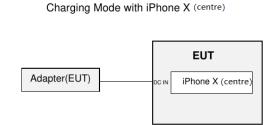
- 1. For a more detailed features description, please refer to the manufacturer's specification or the User's Manual.
- 2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
- 3. Please refer to the EUT photo document (Reference No.: HQ191216JL07) for detailed product photo.
- 4. Adapter informantion as below:

Model name	Input	Output	Cable support
HX18H-0902000-AU	AC100V-240V~50/60Hz 0.5A Max.	DC9V2A	1.5m DC cable no core



2 Configuration of system under test





2.1 Description of support units

The EUT has been tested with associated equipment below:

No.	Unis description	Brand name	Model name	S/N No.	FCC ID
1	iPhone X	Apple	MQA52CH/A	N/A	N/A

2.2 Equipments used during test

The antennas provided to the EUT, please refer to the following table:

item	Test Equipment	Manufacturer	Ianufacturer Model No.		Date of Calibration
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	7m*4m*3m	NSEMC003	2020-03-19
2	B-field Probe	Narda	Y2006	L-0017	2020-03-19
3	E-Field probe	Narda	NBM-520	2403/01B	2020-03-19

Note:

1. The test was performed in RS chamber.

2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

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3 **RF exposure limit**

§ 1.1310 The criteria listed in table 1 shall be used to evaluate the environmental impact of human exposure to radiofrequency(RF) radiation as specified in § 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of § 2.1093 of this chapter.

TABLE 1-LIMITS FOR	MAXIMUM	PERMISSIBLE	EXPOSURE	(MPE)
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Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m) Power density (mW/cm²)		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/f2)	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 1.34–30 30–300 300–1500	614 824/f 27.5	1.63 2.19/f 0.073	*(100) *(180/f²) 0.2 i/1500	30 30 30 30
1500-100,000			1.0	30

f = frequency in MHz

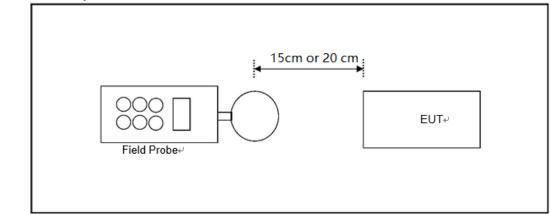
t = trequency in MHz
* = Plane-wave equivalent power density
NOTE 1 TO TABLE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.
Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.
NOTE 2 TO TABLE 1: General population/uncontrolled exposures apply in situations in which the general public may be exposure, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure.

exposure or can not exercise control over their exposure.

Reference KDB 680106 D01 RF Exposure Wireless Charging App v03

The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit

3.1 Test setup for WPC



Note: Measurements should be made from all sides and the top of the primary/client pair, with the 15cm or 20 cm measured from the center of the probe(s) to the edge of the device.

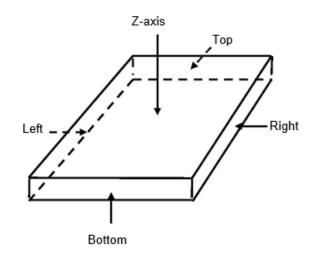
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3.2 Test point description



3.3 Test results

Standby mode:

E-Field Measurement								
Distance	15cm	15cm	15cm	15cm	15cm	20cm		
EUT Side	Left	Right	Front	Back	Bottom	Тор		
Max E-field (V/m)	1.24	1.42	1.14	1.09	0.56	0.75		
Limit (V/m)	614	614	614	614	614	614		
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass		
50% E-field (V/m)	0.62	0.71	0.57	0.545	0.28	0.375		
Limit (V/m)	307	307	307	307	307	307		
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass		

H-Field Measurement								
Distance	15cm	15cm	15cm	15cm	15cm	20cm		
EUT Side	Left	Right	Front	Back	Bottom	Тор		
Max H-field (uT)	0.184	0.193	0.168	0.179	0.129	0.166		
Max H-field (A/m)	0.177	0.179	0.173	0.169	0.132	0.162		
Limit (A/m)	1.63	1.63	1.63	1.63	1.63	1.63		
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass		
50% H-field (A/m)	0.0885	0.0895	0.0865	0.0845	0.066	0.081		
Limit (A/m)	0.815	0.815	0.815	0.815	0.815	0.815		
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass		

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Report Version: V1.1.1



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E-Field Measurement									
Distance	15cm	15cm	15cm	15cm	15cm	20cm			
EUT Side	Left	Right	Front	Back	Bottom	Тор			
Max E-field (V/m)	1.84	1.79	1.74	1.81	1.31	1.62			
Limit (V/m)	614	614	614	614	614	614			
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass			
50%E-field (V/m)	0.92	0.895	0.87	0.905	0.655	0.81			
Limit (V/m)	307	307	307	307	307	307			
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass			

Charging mode:

H-Field Measurement										
Distance	15cm	15cm	15cm	15cm	15cm	20cm				
EUT Side	Left	Right	Front	Back	Bottom	Тор				
Max H-field (uT)	0.194	0.204	0.192	0.188	0.161	0.184				
Max H-field (A/m)	0.164	0.182	0.172	0.164	0.133	0.154				
Limit (A/m)	1.63	1.63	1.63	1.63	1.63	1.63				
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass				
50% H-field (A/m)	0.082	0.091	0.086	0.082	0.0665	0.077				
Limit (A/m)	0.815	0.815	0.815	0.815	0.815	0.815				
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass				

Note: Measurements was made from all sides and the top of the primary/client pair, with the 15 cm or 20 cm measured from the center of the probe(s) to the edge of the device. The highest emission level was recorded.

3.4 Photographs of the test configuration

Please refer to the attached file (Test Setup Photo).

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4 Appendix – Information on the Testing Laboratories

We, <u>Hwa-Hsing (Dongguan) Co., Ltd.</u>, A global provider of TESTING and CERTIFICATION services for consumer products, electronic products and wireless information technology products. Adhering to the core values "HONEST and TRUSTWORTHY, OBJECTIVE and IMPARTIALITY, RIGOROUS and AFFICIENT", commitment to provide professional, perfect and efficient comprehensive ONE-STOP solution of TESTING and CERTIFICATION services for Manufacturers, Buyers, Traders, Brands, Retailers. Assist client to better manage risk, protect their brands, reduce costs and cut time to over 150 markets in global. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Lab Address: <u>No.101</u>, <u>Bld N1</u>, <u>Yuyuan 2Rd</u>, <u>Yuyuan Industrial Park</u>, <u>HuangJiang Town</u>, <u>Dongguan</u>, <u>China</u> Contact Tel: <u>0769-83078199</u> Email:<u>customerservice.dg@hwa-hsing.com</u> Web Site:<u>www.hwa-hsing.com</u>

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