

# RF EXPOSURE REPORT

The device described below is tested by Dongguan Nore Testing Center Co., Ltd. to determine the maximum emission levels emanating from the device, the severe levels which the device can endure and E.U.T.'s performance criterion. The test results, data evaluation, test procedures, and equipment of configurations shown in this report were made in accordance with the procedures in ANSI C63.10(2013).

Applicant : Foshan Sun Cupid Electronics FTY., Ltd.  
Address : Blk 7, No. 127, Zhangcha 1st Road, Chancheng District, Foshan City, Guangdong, China  
Manufacturer/Factory : Foshan Sun Cupid Electronics FTY., Ltd.  
Address : Blk 7, No. 127, Zhangcha 1st Road, Chancheng District, Foshan City, Guangdong, China  
E.U.T. : Game Zoom  
Brand Name : NUU  
Model No. : GZ1  
FCC ID : 2AREF-GZ1  
Measurement Standard : FCC PART 15 Subpart C  
Date of Receiver : September 18, 2018  
Date of Test : September 18, 2018 to October 24, 2018  
Date of Report : October 25, 2018

In the configuration tested, the EUT complied with the standards specified above.

This test report is for the customer shown above and their specific product only. This report applies to above tested sample only and shall not be reproduced in part without written approval of Dongguan Nore Testing Center Co., Ltd.

## 1. GENERAL INFORMATION

### 1.1 Product Description for Equipment under Test

Product name	: Game Zoom
Main model	: GZ1
Additional model	: N/A
Brand name	: NUU
Rating	: AC100-240V ~50/60Hz USB Output: 5V 2.1A
Test voltage	: AC 120V/60Hz, 240V/60Hz (Only the worst case was recorded in this report)
Adapter	: Manufacturer: DYS M/N: DYS650-120300W-K Input: AC100-240V ~50/60Hz 1.3A MAX Output: DC12V 3A
Cable	: DC Line:1.60m unshielded USB Line 0.60m unshielded
Software version	: ACBB 5896
Hardware version	: V1.0
Note	: This report is only applies to wireless charging function.

#### Technical Specification:

Frequency Range	: 110.5-205KHz
Wireless charger Output	: 5W/7.5W/10W
Test Channel	: 127.8KHz
Type of Modulation	: ASK
Type of Antenna	: induction coil
Antenna Gain	: 0 dBi

## 1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: **2AREF-GZ1** filing to comply with FCC Part 15 (2017), Subpart C Rule.

## 1.3 Test Facility and Location

### Site Description

#### EMC Lab

: Listed by CNAS, August 13, 2018  
The certificate is valid until August 13, 2024  
The Laboratory has been assessed and proved to be in compliance with CNAS/CL01  
The Certificate Registration Number is L5795.

Listed by A2LA, November 01, 2017  
The certificate is valid until December 31, 2019  
The Laboratory has been assessed and proved to be in compliance with ISO17025  
The Certificate Registration Number is 4429.01

Listed by FCC, November 06, 2017  
The Designation Number is CN1214  
Test Firm Registration Number: 907417

Listed by Industry Canada, June 08, 2017  
The Certificate Registration Number. Is 46405-9743

#### Name of Firm

: Dongguan Nore Testing Center Co., Ltd.  
(Dongguan NTC Co., Ltd.)

#### Site Location

: Building D, Gaosheng Science & Technology Park,  
Zhouxi Longxi Road, Nancheng District, Dongguan  
City, Guangdong Province, China

## 2. Method of measurement

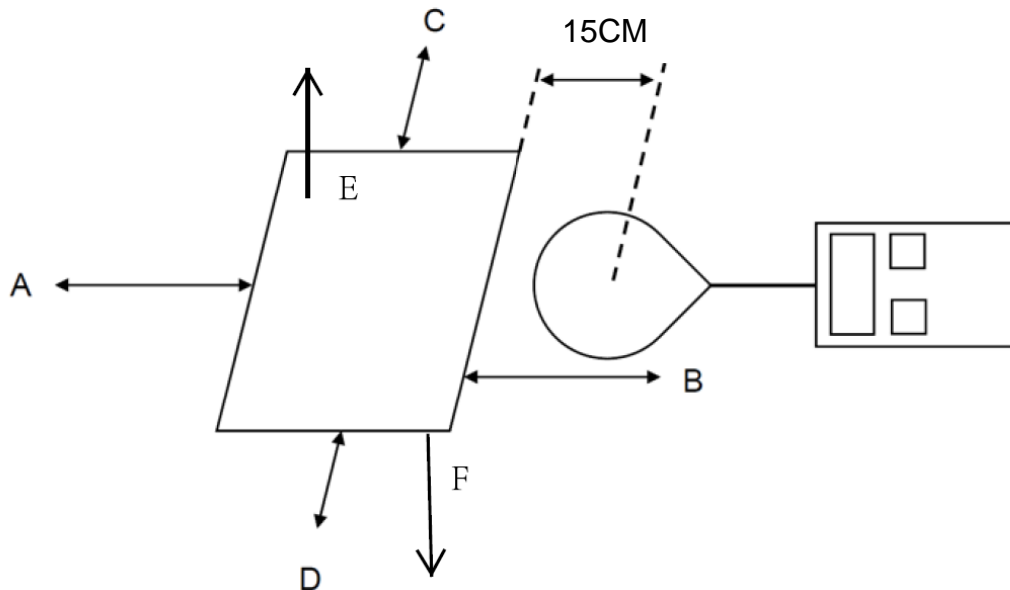
### 2.1 Applicable standard

According to 1.1307(b)(1), system operating under the provisions of this section shall be operated in amanner that ensures that the public is not exposed to radio frequency energy level in excess of the commission's guidelines.

According to 1.1310 and 2.1093 RF exposure is calculated.

According to KDB680106 D01V03: RF exposure wireless charging apps v03.

### 2.2 Test Setup



### 2.3 Test procedure

1. The RF exposure test was performed on 360 degree turn table in anechoic chamber;
2. The measurement probe was placed at test distance 15cm which is between the edge of the charger and 20cm between top of the charger and the geometric centre of probe.
3. The turn table was rotated 360d degree to search of highest strength.
4. The highest emission level was recorded and compared with limit as soon as measurement of each points (A,B,C,D,E) were completed.
5. The EUT were measured according to the dictates of KDB 680106D01V03

## 2.4 Equipment approval considerations

1. The EUT does comply with item 5.2 of KDB 680106D01V03
  - a, Power transfer frequency is less than 1MHz.  
YES; the device operated in the frequency range from 110.5-205KHz.
  - b, Output power from each primary coil is less than or equal to 15 watts  
YES; the maximum output power of the primary coil is 10W<15W.
  - c, The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that able to detect and allow coupling only between individual pair of coils.  
YES; the transfer system includes only single primary and secondary coils.
  - d, Client device is placed directly in contact with the transmitter.  
YES; Client device is placed directly in contact with the transmitter.
  - e, Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).  
YES;
  - f, The aggregate H-field strengths at 15cm surrounding the device and 20cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.  
YES; The EUT field strength levels are less than 50% x MPE limits.

## 2.5 E and H field strength Limit

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposures</b>				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	6
30-300	61.4	0.163	1.0	6
300-1500	/	/	f/300	6
1500-100,000	/	/	5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,00	/	/	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).				

## Test Result

Inductive charging load has been charge at zero charge, intermediate charge, and full charge.

### Electric Field Emissions

Operation frequency	Test Position	Test Distance (cm)	Probe Measure Result(V/m)			Limit (V/m)	50% Limit (V/m)
			zero charge	intermediate charge	full charge		
127.8KHz	Side A	15	3.12	3.52	3.50	614	307
	Side B	15	3.42	3.43	3.59	614	307
	Side C	15	3.38	3.51	3.43	614	307
	Side D	15	3.57	3.67	3.52	614	307
	Side E	20	2.63	2.57	2.55	614	307

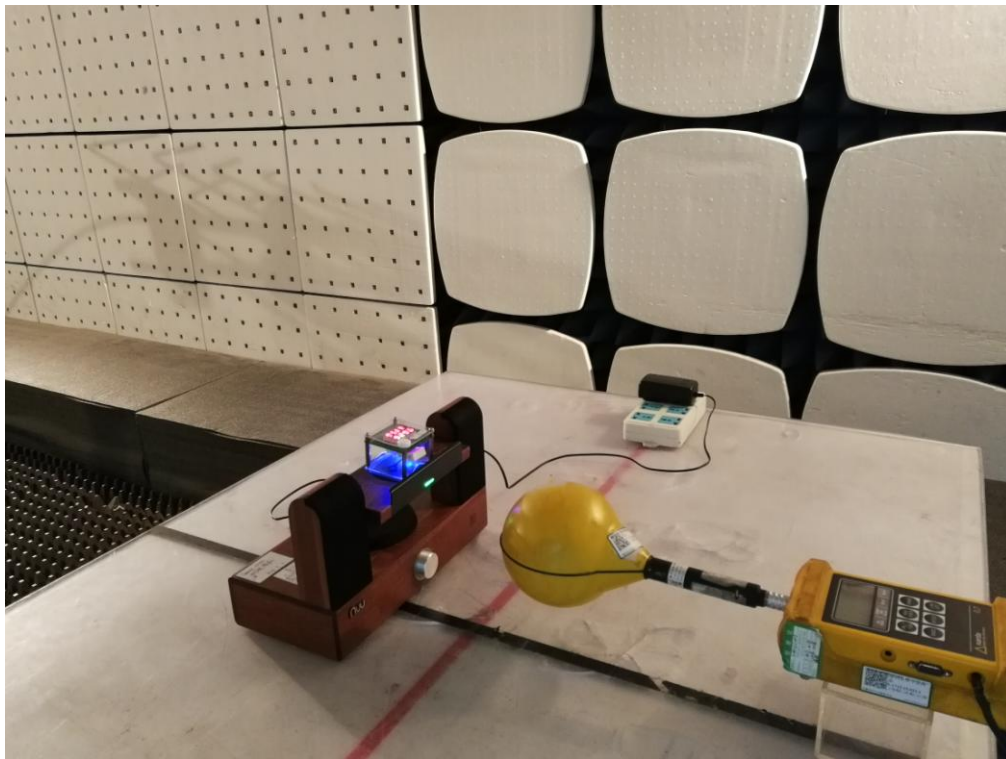
### Magnetic Field Emissions

Operation frequency	Test Position	Test Distance (cm)	Probe Measure Result(A/m)			Limit (A/m)	50% Limit (A/m)
			zero charge	intermediate charge	full charge		
127.8KHz	Side A	15	0.0761	0.0753	0.0741	1.63	0.815
	Side B	15	0.0752	0.0735	0.0743	1.63	0.815
	Side C	15	0.0753	0.0741	0.0737	1.63	0.815
	Side D	15	0.0757	0.0742	0.0754	1.63	0.815
	Side E	20	0.0461	0.0452	0.0522	1.63	0.815

### 2.7 Test equipment list

Description	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due Date
3m semi-anechoic chamber	Zhongyu electron	9.2*6.2*63.4	N/A	July 03,2015	July 02, 2020
Exposure lever tester	Narda	ELT-400	N-0231	June 29,2018	June 28, 2019
Magnetic field probe 100cm <sup>2</sup>	Narda	ELT Probe 100cm <sup>2</sup>	M0675	June 29,2018	June 28, 2019

### 2.6 Test Photo



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