



MPE TEST REPORT

Report No:STS1810028H01

Issued for

Dong Guan BlueFinger Electronics Co.,LTD

NO.2 Baotang Road, Jinglian Community, Qiaotou Town,
DongGuan, China

Product Name:	Wireless Charging smart holder
Brand Name:	Azolt Kulode
Model Name:	Z01
Series Model:	Z02, Z03, Z04, Z05, Z06, Z07, Z08, Z09, Z1, Z2, Z3, Z4, Z5, Z6, Z7, Z8, Z9, Z10
FCC ID:	2APR7Z01
Test Standard:	FCC CFR 47 part 1, 1.1310

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**TEST RESULT CERTIFICATION**

Applicant's name: Dong Guan BlueFinger Electronics Co.,LTD
Address.....: NO.2 Baotang Road, Jinglian Community, Qiaotou Town,
DongGuan, China
Manufacture's Name: Dong Guan BlueFinger Electronics Co.,LTD
Address.....: NO.2 Baotang Road, Jinglian Community, Qiaotou Town,
DongGuan, China

Product description

Product Name: Wireless Charging smart holder
Brand Name: Azolt Kulode
Model Name.....: Z01
Series Model: Z02, Z03, Z04, Z05, Z06, Z07, Z08, Z09, Z1, Z2, Z3, Z4, Z5, Z6, Z7,
Z8, Z9, Z10
Standards.....: FCC CFR 47 part 1, 1.1310
Test Procedure.....: 680106 D01 RF Exposure Wireless Charging Apps v03
This device described above has been tested by STS, the test results show that the equipment
under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested
sample identified in the report.
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may be altered or revised by STS, personal only, and shall be noted in the revision of the document.
Date of performance of tests: 11 Oct. 2018 ~ 23 Oct. 2018
Date of Issue.....: 24 Oct. 2018
Test Result.....: **Pass**

Testing Engineer :

(Chris chen)

Technical Manager :

(Sunday Hu)

Authorized Signatory :

(Vita Li)





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**Revision History**

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	24 Oct. 2018	STS1810028H01	ALL	Initial Issue





1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC KDB 680106 D01 RF Exposure Wireless Charging Apps v03

FCC CFR 47			
Standard Section	Test Item	Judgment	Remark
FCC CFR 47 part1, 1.1310 KDB680106 D01v03	Electric Field Strength (E) (V/m)	PASS	
	Magnetic Field Strength (H) (A/m)	PASS	

1.1 TEST FACTORY

Shenzhen STS Test Services Co., Ltd.

Add. : 1/F., Building B, Zhuoke Science Park, No.190, Chongqing Road,
Fuyong Street, Bao'an District, Shenzhen, Guangdong, China

CNAS Registration No.: L7649; FCC Registration No.: 625569

IC Registration No.: 12108A; A2LA Certificate No.: 4338.01;

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	All emissions,radiated(<30M)(9KHz-30MHz)	$\pm 2.45\text{dB}$
2	Temperature	$\pm 0.5^{\circ}\text{C}$
3	Humidity	$\pm 2\%$

1.3 GENERAL DESCRIPTION OF EUT

Product Name	Wireless Charging smart holder
Trade Name	Azolt Kulode
Model Name	Z01
Series Model	Z02, Z03, Z04, Z05, Z06, Z07, Z08, Z09, Z1, Z2, Z3, Z4, Z5, Z6, Z7, Z8, Z9, Z10
Model Difference	Only different in model name and appearance
Equipemnt Category	Non-ISM frequency
Operating frequency	110.5-205KHz
Modulation Type	ASK
Adapter	Input: DC12V-24V Output1:DC5V 1.2A Output2:DC3.6-6.5V 3A, DC6.5-9V 2A, DC9-12V 1.5A
Power Rating	Input:5V/2A, 9V/1.5A Output: 5V/1.5A , 9V/1.2A
Hardware version number	V1.0
Software version number	IR MCU 3119B V2.0

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	NOTE
1	Azolt Kulode	Z01	Coil	NA	Antenna

The EUT antenna is Coil Antenna. No antenna other than that furnished by the responsible party shall be used with the device.



1.4 EQUIPMENTS LIST FOR ALL TEST ITEMS

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
EMF Meter	NARDA	ELT-400	N-0342	2018.10.22	2019.10.21
EMF probe	NARDA	B-Field Probe	M-0779	2018.10.22	2019.10.21
Broadband field meter NARDA NBM	550	Broadband field meter NARDA NBM	E-1275	2018.10.22	2019.10.21
Broadband field probe NARDA EF	0391	Broadband field probe NARDA EF	D-0894	2018.10.22	2019.10.21



2. MAXIMUM PERMISSIBLE EXPOSURE

2.1 MAXIMUM PERMISSIBLE EXPOSURE

Limit of Maximum Permissible Exposure

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 Time 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
1500-100,000			5	6

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 Time 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
1500-100,000			1	30

Note 1: f = frequency in MHz ; *Plane-wave equivalent power density

Note 2: For the applicable limit, see FCC 1.1310, 680106 D01 RF Exposure Wireless Charging Apps v03

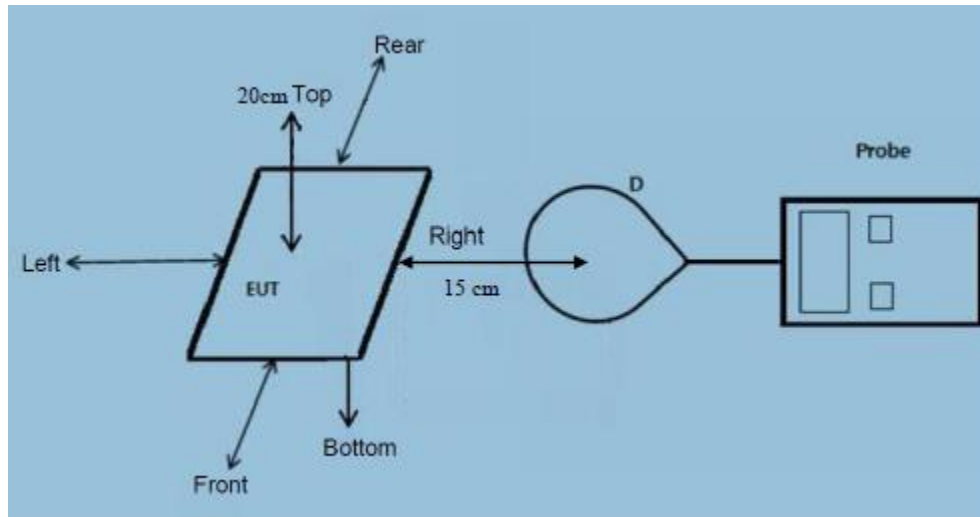
Note 3: Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m. A KDB inquiry is required to determine the applicable exposure limits below 100 kHz.

Note 4: 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 .

2.2 TEST PROCEDURE

- a. For devices designed for typical desktop applications, such as wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 20 cm(Top) and 15cm(Edge). E and H field strength measurements or numerical modeling may be used to demonstrate compliance. Measurements should be made from all sides and the top of the primary/client pair, with the 20 cm(Top) and 15cm(Edge) measured from the center of the probe(s) to the edge of the device.

2.3 TEST SETUP



2.4 Test results

The EUT does comply with item 5 KDB680106 D01 v03.

- (1) Power transfer frequency is less than 1 MHz.
(Conform)
- (2) Output power from each primary coil is less than or equal to 15 watts.
(Conform)
- (3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.
(Conform)
- (4) Client device is placed directly in contact with the transmitter.
(Conform)
- (5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).
(Conform)
- (6) 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.
(Conform)



2.5 MAXIMUM PERMISSIBLE EXPOSURE

Maximum Permissible Exposure				
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
< 1% Battery	15cm	Front	0.447	0.113
< 1% Battery	15cm	Rear	0.435	0.115
< 1% Battery	15cm	Left	0.440	0.106
< 1% Battery	15cm	Right	0.451	0.127
< 1% Battery	20cm	Top	0.457	0.131
Limit			614	1.63
Margin Limit (%)			0.07%	8.04%

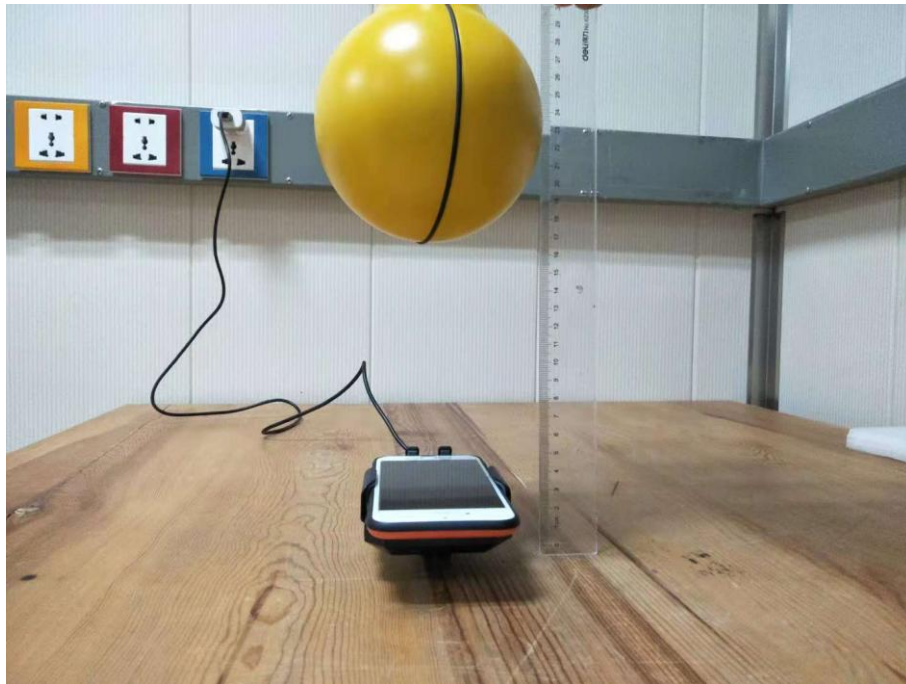
Maximum Permissible Exposure				
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
50% Battery	15cm	Front	0.439	0.120
50% Battery	15cm	Rear	0.432	0.118
50% Battery	15cm	Left	0.435	0.125
50% Battery	15cm	Right	0.448	0.116
50% Battery	20cm	Top	0.453	0.127
Limit			614	1.63
Margin Limit (%)			0.07%	7.79%

Maximum Permissible Exposure				
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
> 99% Battery	15cm	Front	0.440	0.111
> 99% Battery	15cm	Rear	0.438	0.110
> 99% Battery	15cm	Left	0.436	0.106
> 99% Battery	15cm	Right	0.442	0.115
> 99% Battery	20cm	Top	0.460	0.120
Limit			614	1.63
Margin Limit (%)			0.07%	7.36%

Note: The Input of 5V /2A, 9V/1.5A all have tested, the worst case is 9V/1.5A, only show the worst case.

MPE SETUP PHOTO

Note: See test photos in setup photo document for the actual connections between Product and support equipment.



※※※※※END OF THE REPORT※※※※※