

RF Exposure evaluation report

Applicant:	Aukey Technology Co., Ltd
Address of Applicant:	No.102, Bldg. P09, Electronics Trade Center Huanan City, Pinghu Town, Longgang, Shenzhen, Guangdong, 518111, China
Manufacturer:	Aukey Technology Co., Ltd
Address of Manufacturer:	No.102, Bldg. P09, Electronics Trade Center Huanan City, Pinghu Town, Longgang, Shenzhen, Guangdong, 518111, China
Product name:	Wireless Charging Phone Mount
Model:	HD-C52, HD-C58, HD-C59, HD-C60, HD-C61, HD-C62, HD-C63, HD-C64, HD-C65, HD-C66, HD-C67, HD-C68, HD-C69, HD-C70, HD-C71, HD-C72
Rating(s):	Input: 9Vdc, 2A /5Vdc, 2A Output: 9Vdc, 1.12A
Trademark:	AUKEY
Standards:	FCC Part 1(1.1310) and Part 2(2.1091), KDB 680106 D01 RF Exposure Wireless Charging
FCC ID:	2ATIH-HDC52
Data of Receipt:	2019-11-07
Date of Test:	2019-11-07~2019-11-14
Date of Issue:	2019-11-15
Test Result	Pass*

* In the configuration tested, the test item complied with the standards specified above.

Authorized for issue by:

Test by:

Reviewed by:

Nov.15, 2019 Eleven Liang

Project Engineer



Nov.15, 2019

Pauler Li

Project Manager



Pauler Li

Date

Name/Position

Signature

Date

Name/Position

Signature

Possible test case verdicts:

test case does not apply to the test object ...: N/A

test object does meet the requirement: P (Pass)

test object does not meet the requirement ...: F (Fail)

Testing Laboratory information:

Testing Laboratory Name: ITL Co., Ltd

Address.....: No. 8 Jinqianling Street 5, Huangjiang Town, Dongguan,
Guangdong, 523757 P.R.C.

Testing location : Same as above

Tel : 0086-769-39001678

Fax : 0086-20-62824387

E-mail : itl@i-testlab.com

General remarks:

The test results presented in this report relate only to the object tested.

The results contained in this report reflect the results for this particular model and serial number. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report.

This report would be invalid test report without all the signatures of testing technician and approver.

This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.

General product information:

All models are are similar to each other except for model designations

If no otherwise specified, tests were conducted on model HD-C52 to represent the others.

1 Contents

	Page
1 CONTENTS	3
2 GENERAL INFORMATION	4
2.1 CLIENT INFORMATION	4
2.2 GENERAL DESCRIPTION OF E.U.T.	4
2.3 DETAILS OF E.U.T.	4
2.4 DESCRIPTION OF SUPPORT UNITS	4
2.5 TEST LOCATION	5
2.6 DEVIATION FROM STANDARDS	5
2.7 ABNORMALITIES FROM STANDARD CONDITIONS	5
2.8 OTHER INFORMATION REQUESTED BY THE CUSTOMER	5
2.9 TEST FACILITY	5
3 SAR EVALUATION	6
3.1 RF EXPOSURE COMPLIANCE REQUIREMENT	6
3.1.1 STANDARD REQUIREMENT	6
3.1.2 EUT RF EXPOSURE	7

2 General Information

2.1 Client Information

Applicant: Aukey Technology Co., Ltd
Address of Applicant: No.102, Bldg. P09, Electronics Trade Center Huanan City, Pinghu Town, Longgang, Shenzhen, Guangdong, 518111, China

2.2 General Description of E.U.T.

Name: Wireless Charging Phone Mount
Model No.: HD-C52
Trade Mark: AUKEY
Operating Frequency: 110-205KHz
Type of Modulation: FM
Antenna Reference: Coil Antenna with 0dBi peak Gain
Function: Wireless Charging Phone Mount

2.3 Details of E.U.T.

EUT Power Supply: 9Vdc and 5Vdc
Test mode: Mode 1: base station in stand-by, idle mode
Mode 2: Communication and charging

2.4 Description of Support Units

The EUT has been tested as an independent unit for fixed frequency by testing lab.

2.5 Test Location

All tests were performed at:

ITL Co., Ltd

No. 8 Jinqianling Street 5, Huangjiang Town, Dongguan, Guangdong, 523757 P.R.C.

0086-769-39001678

itl@i-testlab.com

No tests were sub-contracted.

2.6 Deviation from Standards

Biconical and log periodic antennas were used instead of dipole antennas.

2.7 Abnormalities from Standard Conditions

None.

2.8 Other Information Requested by the Customer

None.

2.9 Test Facility

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

- **CNAS Lab code:L9342**
- **FCC Designation No.:CN5035**
- **IC Registration NO.: 12593A**
- **NVLAP LAB CODE: 600199-0**

3 SAR Evaluation

3.1 RF Exposure Compliance Requirement

3.1.1 Standard Requirement

FCC Part 1(1.1310) and Part 2(2.1091), KDB 680106 D01 RF Exposure Wireless Charging App v03

Test configuration

1, The field strength of both E-field and H-field was measured at 10cm using the equipment list above for determining compliance with the MPE requirements of FCC Part 1.1310.

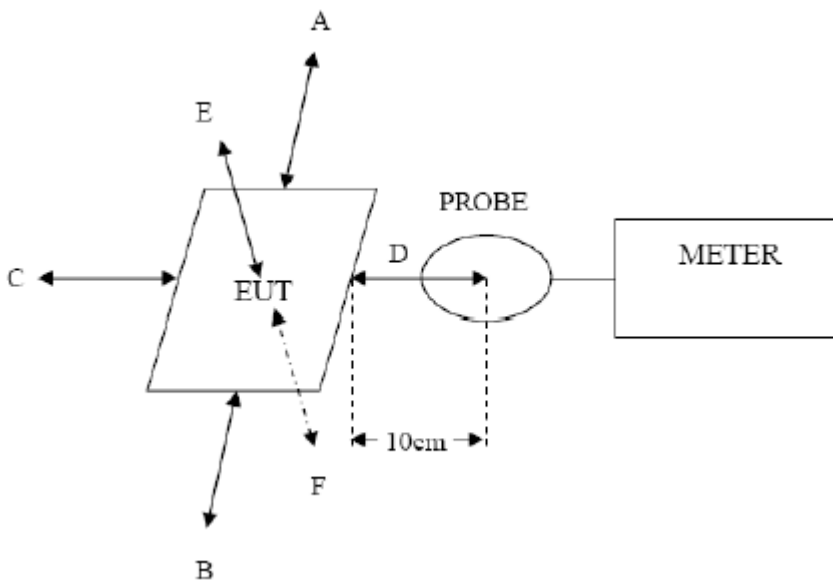
2, The RF power density was measured at Under maximum load test

3, Maximum E-field and H-field measurements were made 10cm from each side of the EUT.

Along the side of the EUT and still 10cm away from the edge of the EUT, the field probes were positioned at the location where there is maximum field strength. The maximum E-field and H-field is reported below.

4, This device uses a wireless charging circuit for power transfer operating at the frequency of 100 –205kHz. Thus, the 300kHz limits were used: E-field Limit = 614 (V/m); H-field limit = 1.63 (A/m).

Test Setup



Limits

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).				

3.1.2 EUT RF Exposure

This device has been tested the worst status of full load and the device has been tested with mobile phone at zero charge, intermediate charge, and full charge.

A pre-test at DC 5V and DC 9V to check the level of disturbance varies considerably with the supply voltage, compliance test at DC 9V as worse case was found.

E-Filed Strength at 10cm from the edges surrounding the EUT (V/m)

Frequency Range (MHz)	Test Position 1	Test Position 2	Test Position 3	Test Position 4	Test Position 5	Test Position 6	Limits Test (V/m)
0.11-0.205	0.98	1.24	1.43	0.91	1.21	0.77	614

H-Filed Strength at 10cm from the edges surrounding the EUT (A/m)

Frequency Range (MHz)	Test Position 1	Test Position 2	Test Position 3	Test Position 4	Test Position 5	Test Position 6	Limits Test (A/m)
0.11-0.205	0.53	0.61	0.56	0.48	0.51	0.57	1.63

Photographs of test set-up

