



# MPE TEST REPORT

Report No: STS2109065H01

Issued for

ASAP Technology(Jiangxi) Co., Ltd.

No.5, Shuguang Rd, West Zone, Ji'an County Industrial Park,  
Ji'an, Jiangxi 343100 China

<b>Product Name:</b>	Magnetic Wireless Charger
<b>Brand Name:</b>	INSIGNIA, MODAL, Bestbuy Essential, Platinum
<b>Model Name:</b>	LACA179, NS-MQM10W22W, BE-MQM10W22W, NS-MQM10W22WC, NS-MQM10Wxxxxxx, BE-MQM10Wxxxxxx, MD-MQM10Wxxxxxx("x"=0-9,A-Z,a-z,- or blank, for market purpose only).
<b>Series Model:</b>	N/A
<b>FCC ID:</b>	2APXNLACA179
<b>Test Standard:</b>	FCC CFR 47 part 1, 1.1310

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TEST RESULT CERTIFICATION

Applicant's Name.....: ASAP Technology(Jiangxi) Co., Ltd.
Address.....: No.5, Shuguang Rd, West Zone, Ji'an County Industrial Park, Ji'an, Jiangxi 343100 China
Manufacturer's Name.....: ASAP Technology(Jiangxi) Co., Ltd.
Address.....: No.5, Shuguang Rd, West Zone, Ji'an County Industrial Park, Ji'an, Jiangxi 343100 China

Product Description

Product Name .....: Magnetic Wireless Charger
Brand Name .....: INSIGNIA, MODAL, Bestbuy Essential, Platinum
Model Name.....: LACA179, NS-MQM10W22W, BE-MQM10W22W, NS-MQM10W22WC, NS-MQM10Wxxxxx, BE-MQM10Wxxxxx, MD-MQM10Wxxxxx("x"=0-9,A-Z,a-z, - or blank, for market purpose only).
Series Model .....: N/A
Standards.....: FCC CFR 47 part 1, 1.1310
Test Procedure .....: 680106 D01 RF Exposure Wireless Charging Apps v03r01

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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Date of Test.....:
Date of receipt of test item.....: 07 Sept. 2021
Date of performance of tests...: 07 Sept. 2021 ~ 28 Sept. 2021
Date of Issue.....: 28 Sept. 2021
Test Result.....: Pass

Testing Engineer : [Signature]
(Chris Chen)

Technical Manager : [Signature]
(Sean She)

Authorized Signatory : [Signature]
(Vita Li)





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**Revision History**

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	28 Sept. 2021	STS2109065H01	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. : A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ,  
 Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China  
 FCC test Firm Registration Number: 625569  
 IC test Firm Registration Number: 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	Uncertainly
1	H-filed	$\pm 1.2\mu T$
2	E-filed	$\pm 16\%$

1.3 GENERAL DESCRIPTION OF THE EUT

Product Name	Magnetic Wireless Charger
Trade Name	INSIGNIA, MODAL, Bestbuy Essential, Platinum
Model Name	LACA179, NS-MQM10W22W, BE-MQM10W22W, NS-MQM10W22WC, NS-MQM10Wxxxxx, BE-MQM10Wxxxxx, MD-MQM10Wxxxxx("x"=0-9,A-Z,a-z,- or blank, for market purpose only).
Series Model	N/A
Model Difference	Different shell materials.
Equipemnt Category	Non-ISM frequency
Antenna Type	Please refer to the Note 2.
Operating frequency	111-210KHz
Modulation Type	ASK
Adapter Rating:	Model: LACA162 Rating Input: AC 100-240V, 50/60Hz, 0.5A Rating Output: DC 5V, 3A or DC 9V, 2.22A
Wireless Charger output power	Max. 10W
Hardware version number	N/A
Software version number	N/A
Connecting I/O Port(s)	Please refer to the Note 1.
Sample Number	A003123454

Note:

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

Ant.	Brand	Model Name	Antenna Type	Connector	NOTE
1	N/A	N/A	Coil	N/A	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
Electric and Magnetic field Probe - Analyzer	Narda	EHP 200A	180ZX10220	2021.07.22	2022.07.21

Note: Frequency range of the EHP 200A is 9KHz to 30MHz.

## 1.5 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

## Necessary accessories

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
N/A	N/A	N/A	N/A	N/A	N/A

## Support units

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
/	Mobile Phone	Apple	iPhone 12	N/A	N/A

Note:

- (1) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (2) "YES" is means "with core"; "NO" is means "without core".

## 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 <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> 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 <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> 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.

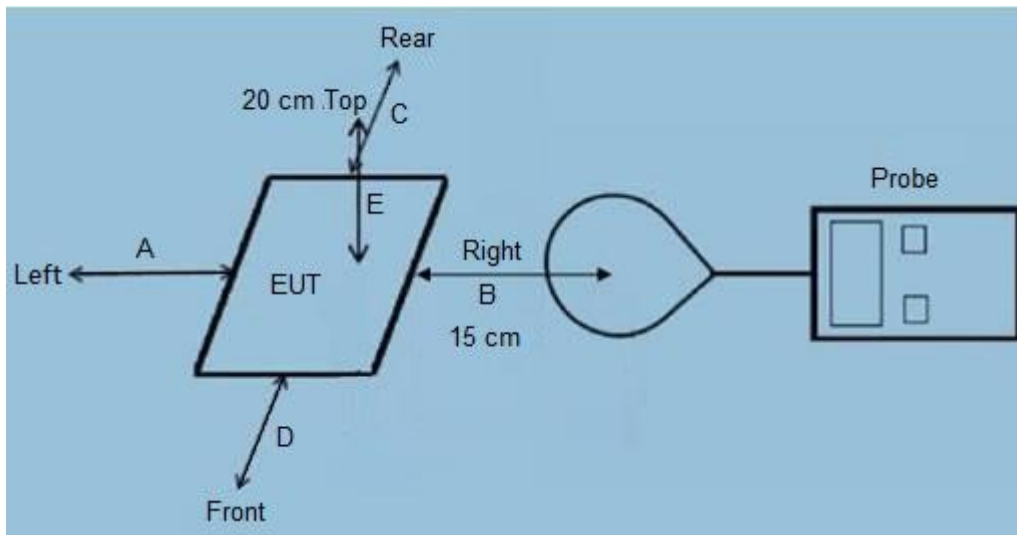


## 2.2 TEST PROCEDURE

- 1) The RF exposure test was performed in an echoic chamber;
- 2) The measurement probe was placed at test distance (15 cm from edges, 20 cm from top) Which is between the edge of the charger and the geometric center of probe
- 3) The highest emission levels recorded and compared with limit as soon as measurement of each points (A,B, C,D, E) were completed;
- 4) The EUT was measured according to the dictates of KDB680106D01v03; And KDB Tracking Number 671578 ; TCB Workshop, October 2018, 5.2 RF Exposure Procedures

Remark: The EUT test position A, B, C, D and E is valid for the E and H field measurements.

## 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.  
(No)
- (3) The system may consist of more than one source primary coils, charging one or more clients. If more than one primary coil is present, the coil pairs may be powered on at the same time.  
(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).  
(No)
- (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)
- (7) According to April 2018 TCB Workshop, for inductive applications where the primary does not physically attach (clip, lock on) to the client, and it is intended for desktop use, the desktop guidance in KDB 680106 D01 may be applied.

2.5 MAXIMUM PERMISSIBLE EXPOSURE

Test Model: NS-MQM10W22W, metal enclosure

Test Result for Test setup A:

E-Filed Strength at (15 cm from edges A,B,C,D, 20 cm from top E) surrounding the EUT (V/m)

Charging Load Worse case	Test Position A(V/m)	Test Position B(V/m)	Test Position C(V/m)	Test Position D(V/m)	Test Position E(V/m)	Limits (V/m)	Result
<5%	0.524	0.544	0.601	0.613	0.588	614	Pass
50%	0.497	0.534	0.547	0.515	0.526	614	Pass
>90 %	0.482	0.306	0.534	0.449	0.283	614	Pass

H-Filed Strength at (15 cm from edges A,B,C,D, 20 cm from top E) surrounding the EUT (A/m)

Charging Load Worse case	Test Position A(A/m)	Test Position B(A/m)	Test Position C(A/m)	Test Position D(A/m)	Test Position E(A/m)	Limits (A/m)	Result
<5%	0.065	0.065	0.063	0.063	0.060	1.63	Pass
50%	0.059	0.061	0.054	0.049	0.052	1.63	Pass
>90 %	0.052	0.055	0.049	0.037	0.049	1.63	Pass

Note: All output have been tested. The worst case is 9V~2.22A, only report the worst case.

A broadband probe used for testing which encompassed all required frequency ranges.



NS-MQM10W22W, plastic enclosure

Test Result for Test setup A:

E-Filed Strength at (15 cm from edges A,B,C,D, 20 cm from top E) surrounding the EUT (V/m)

Charging Load Worse case	Test Position A(V/m)	Test Position B(V/m)	Test Position C(V/m)	Test Position D(V/m)	Test Position E(V/m)	Limits (V/m)	Result
<5%	0.675	0.699	0.761	0.639	0.644	614	Pass
50%	0.619	0.558	0.571	0.548	0.475	614	Pass
>90 %	0.526	0.556	0.521	0.461	0.437	614	Pass

H-Filed Strength at (15 cm from edges A,B,C,D, 20 cm from top E) surrounding the EUT (A/m)

Charging Load Worse case	Test Position A(A/m)	Test Position B(A/m)	Test Position C(A/m)	Test Position D(A/m)	Test Position E(A/m)	Limits (A/m)	Result
<5%	0.222	0.073	0.088	0.222	0.245	1.63	Pass
50%	0.064	0.067	0.058	0.060	0.063	1.63	Pass
>90 %	0.057	0.033	0.046	0.050	0.053	1.63	Pass

Note: All output have been tested. The worst case is 9V~2.22A, only report the worst case.

A broadband probe used for testing which encompassed all required frequency ranges.



## MPE SETUP PHOTO

Refer to photos documents

XXXXXXXXXXEND OF THE REPORTXXXXXXXXXX

