



# RF EVALUATION TEST REPORT

Applicant.....: Leader Lao Co., Ltd

Address.....: Lot333, Savan Park, Nongdeun, Kaysone Phomvihane, Savannakhet Laos

Manufacturer.....: Leader Lao Co., Ltd

Address.....: Lot333, Savan Park, Nongdeun, Kaysone Phomvihane, Savannakhet Laos

Factory.....: Leader Lao Co., Ltd

Address......: Lot333, Savan Park, Nongdeun, Kaysone Phomvihane, Savannakhet Laos

Product Name.....: Ultra Thin Wireless Charging Pad

Brand Name.....: N/A

Model No. ..... : AB0198

FCC ID.....: : 2BAUN-AB0198-1

Measurement Standard......: 47 CFR PART 2, Section 2.1093

Receipt Date of Samples.... : January 17, 2024

Date of Report.....: February 27, 2024

This report shows that above equipment is technically compliant with the requirements of the standards above. All test results in this report apply only to the tested sample(s). Without prior written approval of Dongguan Nore Testing Center Co., Ltd, this report shall not be reproduced except in full.

Prepared by

Rose Hu / Project Engineer







### **Table of Contents**

1. General Description of EUT	4
2. Test Facility and Location	6
3. Test Modes Detail	7
4. Configuration of EUT	7
5. Modification of EUT	7
6. Description of Support Device	8
7. Deviations and Abnormalities from Standard Conditions	8
8. Applicable Standards and References	8
9. Measurement Uncertainty	9
10. Maximum Permissible Exposure	10
11. Test Equipment List	14
12 Test Photos	15





### **Revision History**

Report Number	Description	Issued Date
NTC2401280F-1	Initial Issue	2024-02-27





# 1. General Description of EUT

Product Information	
1 Toddot Information	
Product Name:	Ultra Thin Wireless Charging Pad
Main Model Name:	AB0198
Additional Model Name:	N/A
Model Difference:	N/A
S/N:	2401-0311
Brand Name:	N/A
Hardware Version:	wirelesscharging-AB0198
Software Version:	leader.2021.11
Rating:	Input: DC 5V 1.5A;
	Wireless Output: 5W;
Typical Arrangement:	Table-top
I/O Port:	Refer to user manual
Accessories Information	
Adapter:	N/A
Cable:	USB cable: 0.98m, unshielded, undetachable
Other:	N/A
Additional Information	
Note:	N/A
Remark:	All the information above are provided by the manufacturer. More detailed feature of the EUT please refers to the user manual.





Technical Specification	
Frequency Range:	110.5-205KHz
Modulation Type:	FSK
Antenna Type:	Coil antenna
Output power for each coil:	5W





# 2. Test Facility and Location

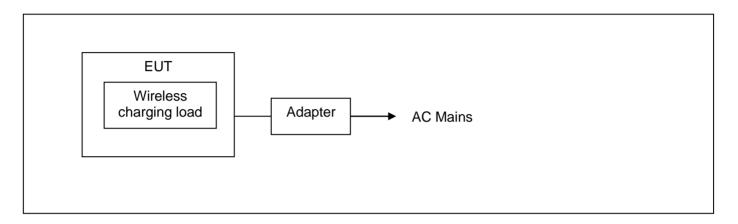
Test Site	:	Dongguan Nore Testing Center Co., Ltd. (Dongguan NTC Co., Ltd.)		
Accreditations and	:	The Laboratory has been assessed and proved to be in compliance with		
Authorizations		CNAS/CL01		
		Listed by CNAS, August 13, 2018		
		The Certificate Registration Number is L5795.		
		The Certificate is valid until August 13, 2024		
		The Laboratory has been assessed and proved to be in compliance with		
		ISO17025		
		Listed by A2LA, November 01, 2017		
		e Certificate Registration Number is 4429.01		
		ted by FCC, November 06, 2017		
		Test Firm Registration Number: 907417		
		Listed by Industry Canada, June 08, 2017		
		he Certificate Registration Number. Is 46405-9743A		
Test Site Location	:	Building D, Gaosheng Science and Technology Park, Hongtu Road, Nancheng		
		District, Dongguan City, Guangdong Province, China		



### 3. Test Modes Detail

Test N	est Mode Test Setup Configuration Remark		Remark
1.		Wireless Charging 5W	Full Load, Half Load, Empty Load

## 4. Configuration of EUT



### 5. Modification of EUT

No modifications are made to the EUT during all test items.



### 6. Description of Support Device

The EUT has tested as an independent unit together with other necessary accessories or support units. The following support units or accessories used to form a representative test configuration during the tests.

No.	Equipment	Brand	M/N	S/N	Cable Specification	Remarks
1.	Wireless Charging Load	Consumer Electronics	2S			Provided by the Lab.
2.	Adapter	HUAWEI	HW-20032 5CP0			Provided by the Lab.

### 7. Deviations and Abnormalities from Standard Conditions

No additions, deviations and exclusions from the standard.

### 8. Applicable Standards and References

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

#### **Test Standards:**

47 CFR Part 1, 1.1307(b) and 1.1310 KDB 680106 D01v04





### 9. Measurement Uncertainty

No.	Test Item	Uncertainty	Remarks
1.	Magnetic Field Emissions	±0.15 dB	
2.	Electric Field Emissions	±0.36 dB	

**Note:** This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.





### 10. Maximum Permissible Exposure

#### LIMIT

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 Gene	ral Population/Uncon	trolled Exposure				
0.3-1.34	614	1.63	*(100)	30			
1.34-30	824/f	2.19/f	*(180/f2)	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

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).

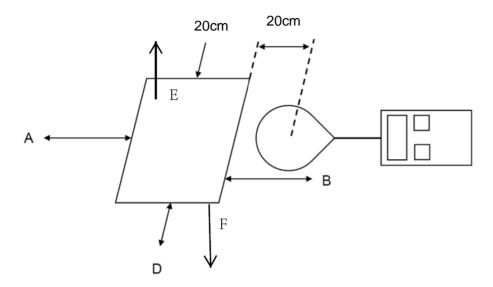
Per KDB 680106 D01v04, RF exposure evaluation at 15cm surrounding the device and 20cm above the top surface. Emission between 50 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 1.63/Am and aggregate H-field strengths from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

<sup>\*=</sup>Plane-wave equivalent power density



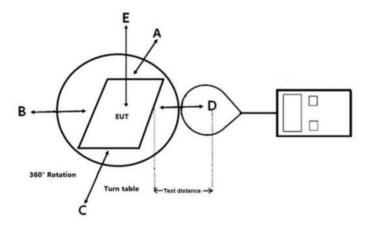
### **BLOCK DIAGRAM OF TEST SETUP**

### For Mobile:



Note: The distance of the points A/B/C/D/E and F(if necessary) is 20cm.

### For Portable:



Note: The distance of the points A/B/C/D/E is 2,4,6,8,10,12,14,16,18, 20cm.





#### **TEST PROCEDURES**

For mobile exposure conditions:

- a. The RF exposure test was performed in anechoic chamber;
- b. E and H-field measurements should be made with the center of the probe at a distance of 20cm surrounding the EUT of the primary/client pair.
- c. The highest emission level was recorded and compared with limit.
- d. The EUT was measured according to the dictates of KDB 680106 D01v04.

For portable exposure conditions:

- a. The RF exposure test was performed in anechoic chamber;
- b. E and H-field measurements should be made with the probe at 0cm for all sides of the EUT.
- c. The highest emission level was recorded and compared with limit.

For portable exposure conditions:

Perform H-field measurements for each edge/top surface of the host/client pair at every 2cm, starting from as close as possible out to 20cm.

#### **TEST RESULTS**

**PASS** 

Please refer to the following pages of the worst case.





5W, Test Mode 1, Full load							
Test Distance (cm)	Test Position	Mobile Measure Result (V/m)	Mobile Measure Result (A/m)	Limit (V/m)	Limit (A/m)		
	Side A	2.244	0.16	614	1.63		
	Side B	1.604	0.16	614	1.63		
20	Side C	2.751	0.16	614	1.63		
	Side D	2.029	0.16	614	1.63		
	Side E	5.607	0.20	614	1.63		





## 11. Test Equipment List

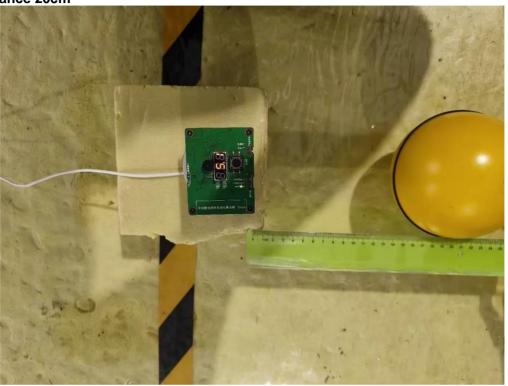
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Magnetic field probe 100cm2	Narda	ETL-400 Probe 1Hz-400KHz (r=6.2cm)	O-0167	June 28, 2023	1 Year
2.	E-Field Probe	Narda	EP-601	611WX70729	Mar. 23, 2023	1 Year



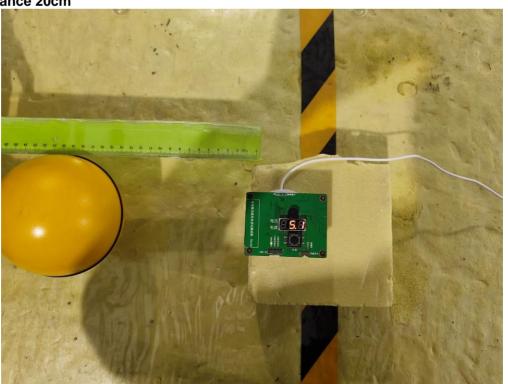


### 12. Test Photos

Side A: Test distance 20cm



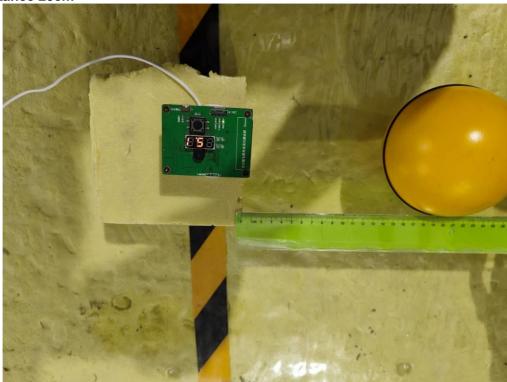
Side B: Test distance 20cm



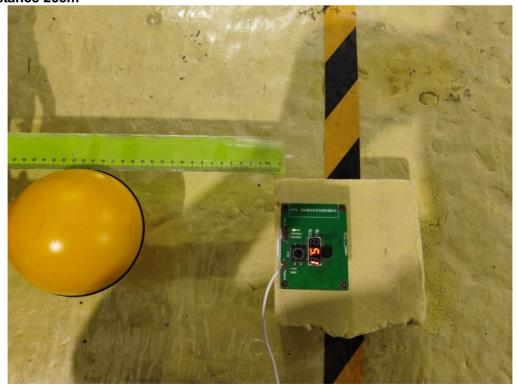




Side C: Test distance 20cm



Side D: Test distance 20cm





Side E: Test distance 20cm

