

MPE TEST REPORT

Applicant Ningbo Seago Electric Co.,Ltd
FCC ID 2BC87-BD0060EBCOE
Product glister Multi-action Power Toothbrush
Model BD0060EBCOE
Report No. R2401A0067-M1V1
Issue Date July 25, 2024

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC Part 1 Subpart I / FCC Part 2 Subpart J**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

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Version	Revision Description	Issue Date
Rev.0	Initial issue of report.	June 3, 2024
Rev.1	Updated information.	July 25, 2024
Note: This revised report (Report No.: R2401A0067-M1V1) supersedes and replaces the previously issued report (Report No.: R2401A0067-M1). Please discard or destroy the previously issued report and dispose of it accordingly.		

1 Test Laboratory

1.1 Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **Eurofins TA Technology (Shanghai) Co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2 Test Facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform measurements.

1.3 Testing Location

Company: Eurofins TA Technology (Shanghai) Co., Ltd.
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1.4 Laboratory Environment

Temperature	Min. = 18°C, Max. = 25°C
Relative humidity	Min. = 20%, Max. = 80%
Ground system resistance	< 0.5 Ω
Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

2 Statement of Compliance

The Maximum Permissible Exposure (MPE) found during testing for the EUT is as follows:

Table 1: Maximum Permissible Exposure

FCC Limit	Maximum Permissible Exposure	Test Result
Magnetic Field (A/m)	Magnetic Field (A/m)	
90	4.35	Pass
Date of Testing: January 24, 2024 ~ January 25, 2024		
Date of Sample Received: January 22, 2024		
Note:		
1. All indications of Pass/Fail in this report are opinions expressed by Eurofins TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.		

3 Description of Equipment Under Test

Client Information

Applicant	Ningbo Seago Electric Co.,Ltd
Applicant address	No.239 Jianghu Road, Jiangbei District, Ningbo, China
Manufacturer	Ningbo Seago Electric Co.,Ltd
Manufacturer address	No.239 Jianghu Road, Jiangbei District, Ningbo, China

General Technologies

EUT Description	
Model	BD0060EBCOE
Lab internal SN	R2401A0067/S01
HW Version	/
SW Version	/
Operating Frequency	50 kHz ~ 90 kHz
EUT Accessory	
Cable	Manufacturer: / Model: / 100cm Cable, Shielded
Auxiliary Test Equipment	
Adapter	Manufacturer: MEIZU Model: UP0830S

4 Test Specification, Methods and Procedures

FCC Part 1 Subpart I (2023)

FCC Part 2 Subpart J (2023)

KDB 680106 D01 Wireless Power Transfer v04

5 Equipment Under Test

5.1 Description of EUT

The EUT is a wireless charging device which has a single inductive charging coil. The charging frequency is between 50 kHz to 90 kHz, and the maximum power consumption is 3.5W.

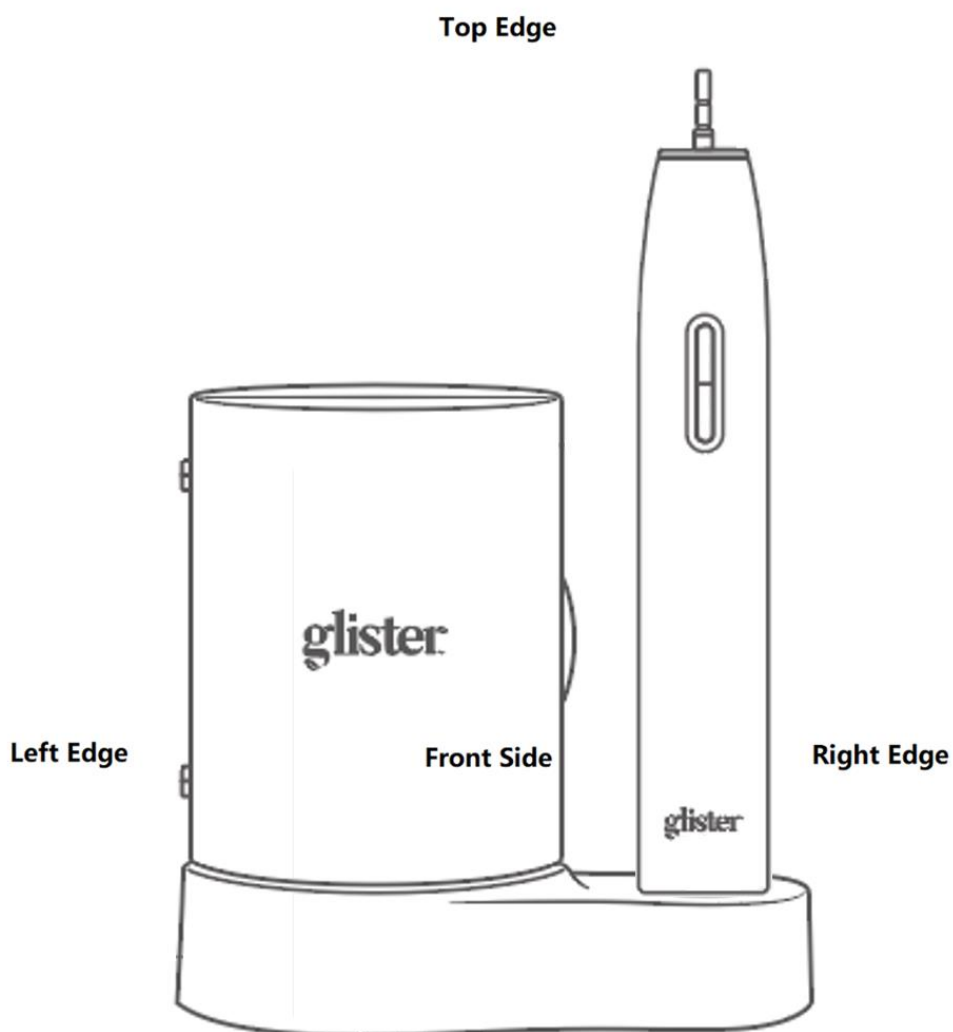
5.1 KDB 680106 D01 v04 Equipment Approval Considerations

Requirement	Device
(1) The power transfer frequency is below 1 MHz	Yes. Operating Frequency is between 50-90kHz.
(2) The output power from each transmitting element (e.g., coil) is less than or equal to 15 watts	Yes. Maximum power is 3.5 Watts.
(3) A client device providing the maximum permitted load is placed in physical contact with the transmitter	Yes.
(4) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).	Yes.
(5) The E-field and H-field strengths, at and beyond 20 cm surrounding the device surface, are demonstrated to be less than 50% of the applicable MPE limit, per KDB 447498, Table 1. These measurements shall be taken along the principal axes of the device, with one axis oriented along the direction of the estimated maximum field strength, and for three points per axis or until a 1/d (inverse distance from the emitter structure) field strength decay is observed. Symmetry considerations may be used for test reduction purposes. The device shall be operated in documented worst-case compliance scenarios (i.e., the ones that lead to the maximum field components), and while all the radiating structures (e.g., coils or antennas) that by design can simultaneously transmit are energized at their nominal maximum power.	Yes.
(6) For systems with more than one radiating structure, the conditions specified in (5) must be met when the system is fully loaded (i.e., clients absorbing maximum power available). and with all the radiating structures operating at maximum power at the same time, as per design conditions. If the design allows one or more radiating structures to be powered at a higher level while other radiating structures are not powered, then those cases must be tested as well. For instance, a device may use three RF coils powered at 5 W, or one coil powered at 15 W: in this case, both scenarios shall be tested.	Yes. The EUT includes only one radiating structure, and operating at maximum power

5.2 Description of Test Setup

Measurement Setup

A	B	C	D	E	F	Test Distance (cm)
Bottom Edge	Right Edge	Top Edge	Left Edge	Front Side	Back Side	
N/A	Test	Test	Test	Test	Test	20
N/A	Test	Test	Test	Test	Test	15
N/A	Test	Test	Test	Test	Test	0



6 Main Test Instruments

The following test and measurement equipment was used for the tests documented in this report.

Description	Manufacturer	Model	Serial Number	Cal Date	Cal Due
Hygrothermograph	Anymetr	HTC - 1	TA2023A008	2023-05-13	2024-05-12
Electric and Magnetic Field Analyzer	Narda	EHP-200A	170WX91001	2023-10-16	2024-10-15

7 Maximum Permissible RF Exposure

7.1 FCC Limits and Summary

According to KDB 680106, consistent with FCC's equipment authorization RF exposure guidance, any device (both portable and mobile) operating at frequencies below 100 kHz is considered compliant for the purpose of equipment authorization when the external (unperturbed) temporal peak field strengths do not exceed the following reference levels:

83 V/m for the electric field strength (E)

and

90 A/m for the magnetic field strength (H).

These data may be provided through measurements and/or numerical simulations, and for all the positions in space relevant for any possible body exposure.

For all the cases mentioned above, E and H measurements should be made from all sides of the transmitter, along all the principal axes defined with respect to the orientation of the transmitting element (e.g., coil or antenna). When clearly demonstrated, symmetry considerations may be used to reduce the amount of testing. Furthermore, for "low-frequency" loop/coil emitting structures that lead to dominant H-field nearfield emissions (i.e., with E/H ratio less than 1/10 of the 377-ohm free space wave impedance, typically frequencies less than 1 MHz), only H-field measurements are sufficient for demonstrating MPE limit compliance.

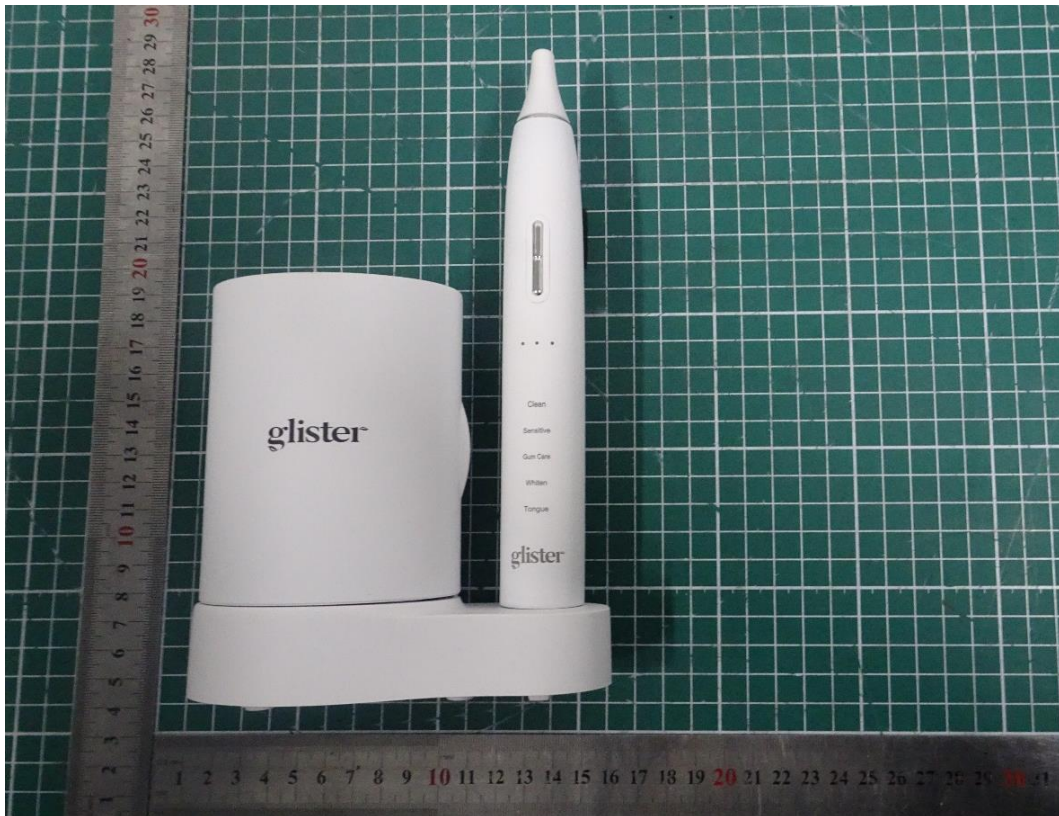
7.2 Maximum Permissible Exposure Test Results

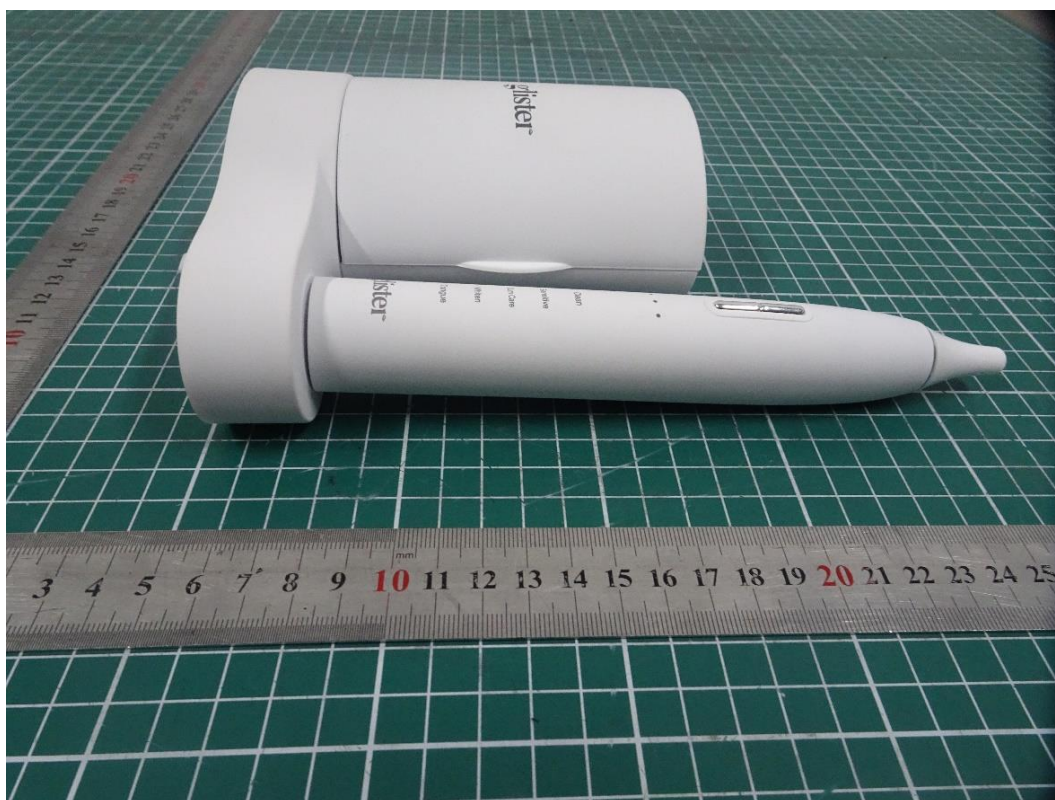
H-Fiend Measurements

Measuring Distance (cm)	Position	Maximum Permissible Exposure	MPE Limit (A/m)
		Magnetic Field (A/m)	
20	Back Side	0.0864	45
20	Front Side	0.0816	45
20	Left Edge	0.0879	45
20	Right Edge	0.0830	45
20	Top Edge	0.0825	45
20	Bottom Edge	N/A	45
15	Back Side	0.0864	45
15	Front Side	0.0915	45
15	Left Edge	0.0815	45
15	Right Edge	0.0800	45
15	Top Edge	0.0835	45
15	Bottom Edge	N/A	45
0	Back Side	1.0942	90
0	Front Side	0.9245	90
0	Left Edge	1.2688	90
0	Right Edge	4.3522	90
0	Top Edge	0.0825	90
0	Bottom Edge	N/A	90

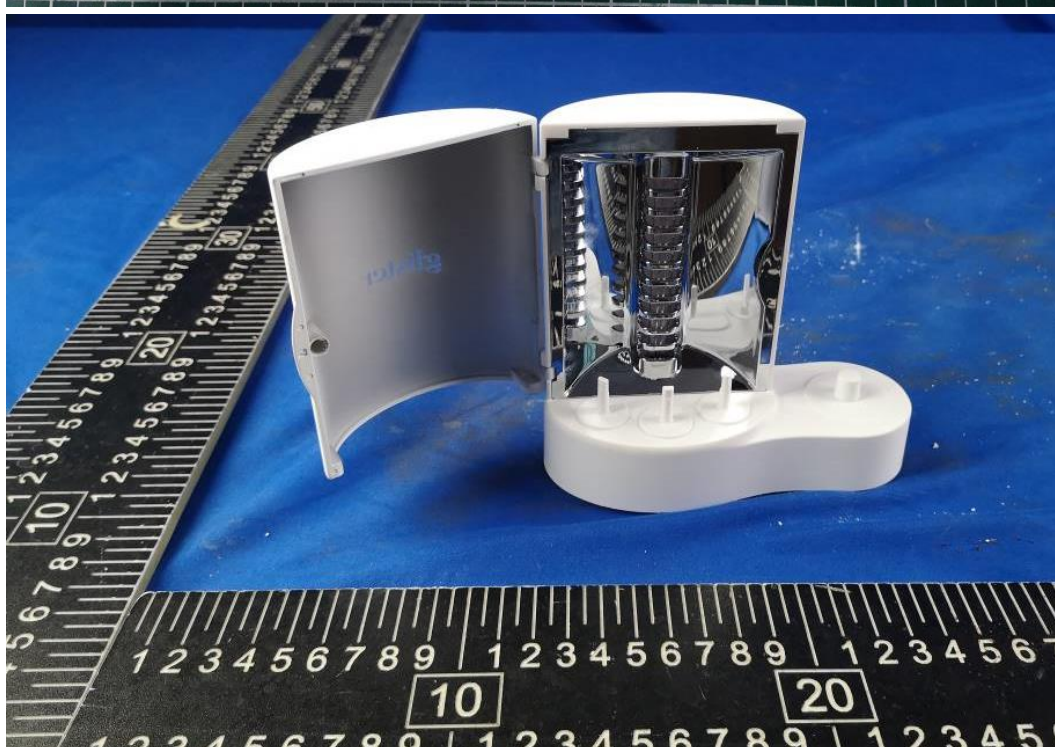
Note: The H-field strengths, at 15 cm and 20 cm surrounding the device surface, are demonstrated to be less than 50% of the MPE limit (45 A/m), and the other distance less than the MPE limit (90 A/m).

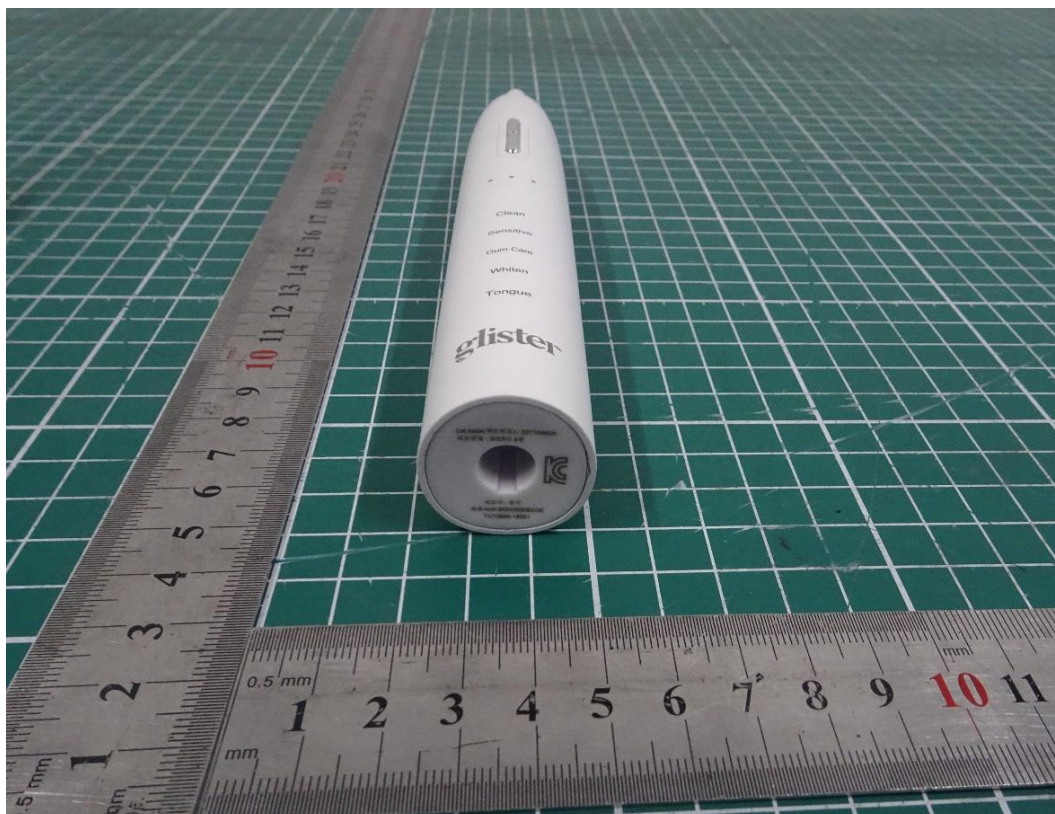
ANNEX A: The EUT Appearance











a: EUT



b: USB Cable

Picture 1: Constituents of EUT

ANNEX B: Test Setup Photos



Picture 2: Back Side, the distance from EUT to the bottom of the Phantom is 20cm



Picture 3: Front Side, the distance from EUT to the bottom of the Phantom is 20cm



Picture 4: Left Edge, the distance from EUT to the bottom of the Phantom is 20cm



Picture 5: Right Edge, the distance from EUT to the bottom of the Phantom is 20cm



Picture 6: Top Edge, the distance from EUT to the bottom of the Phantom is 20cm

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Picture 7: Back Side, the distance from EUT to the bottom of the Phantom is 15cm



Picture 8: Front Side, the distance from EUT to the bottom of the Phantom is 15cm



Picture 9: Left Edge, the distance from EUT to the bottom of the Phantom is 15cm



Picture 10: Right Edge, the distance from EUT to the bottom of the Phantom is 15cm



Picture 11: Top Edge, the distance from EUT to the bottom of the Phantom is 15cm

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Picture 12: Back Side, the distance from EUT to the bottom of the Phantom is 0cm



Picture 13: Front Side, the distance from EUT to the bottom of the Phantom is 0cm



Picture 14: Left Edge, the distance from EUT to the bottom of the Phantom is 0cm



Picture 15: Right Edge, the distance from EUT to the bottom of the Phantom is 0cm



Picture 16: Top Edge, the distance from EUT to the bottom of the Phantom is 0cm

*****END OF REPORT *****