

TEST REPORT

Product Name : Exos Home Speaker
Model Number : AI6006, Please refer to the Model Number list
for more models
FCC ID : 2AYB76966006

Prepared for : SOLAR BRIGHT INDUSTRIAL LIMITED
Address : FLAT/RM 4, 7F SHING YIP INDUSTRIAL BUILDING, 19-21
SHING YIP STREET, KWUN TONG, KL., HONG KONG

Prepared by : EMTEK (DONGGUAN) CO., LTD.
Address : -1&2/F., Building 2, Zone A, Zhongda Marine Biotechnology
Research and Development Base, No.9, Xincheng Avenue,
Songshanhu High-technology Industrial Development Zone,
Dongguan, Guangdong, China

TEL: +86-0769-22807078
FAX: +86-0769-22807079

Report Number : EDG2211210004E00302R
Date(s) of Tests : November 21, 2022 to December 20, 2022
Date of issue : December 20, 2022

Table of Contents

1. TEST RESULT CERTIFICATION	3
2. EUT SPECIFICATION	5
3. TEST REQUIREMENT	6
4. MEASUREMENT RESULT	8



1. TEST RESULT CERTIFICATION

Applicant : SOLAR BRIGHT INDUSTRIAL LIMITED
 Address : FLAT/RM 4, 7F SHING YIP INDUSTRIAL BUILDING, 19-21 SHING YIP STREET, KWUN TONG, KL., HONG KONG
 Manufacturer : GuangXi BeiLiu JinBao Electronic Co., Ltd.
 Address : XinShan Industrial Zone, XiLiang Town, Beiliu City, Guangxi, China
 EUT : Exos Home Speaker
 Model Name : AI6006, Please refer to the Model Number list for more models
 Trademark : AIWA, REGENT, SAKAR, ALTEC LANSING, MODERN


Measurement Procedure Used:

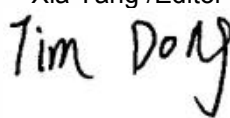
APPLICABLE STANDARDS	
STANDARD	TEST RESULT
§ 15.247(i), § 2.1093	PASS



The above equipment was tested by EMTEK(DONGGUAN) CO., LTD. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules FCC § 15.247(i), § 2.1093.

The test results of this report relate only to the tested sample identified in this report

Date of Test : November 21, 2022 to December 20, 2022

Prepared by : 
Xia Yang /Editor

Reviewer : 
Tim Dong/ Supervisor

Approve & Authorized Signer :  
Sam Lv / Manager

Modified History

Version	Report No.	Revision Date	Summary
	EDG2211210004E00302R	/	Original Report



2. EUT Specification

Characteristics	Description
Product:	Exos Home Speaker
Model Number:	AI6006, Please refer to the Model Number list for more models All products are the same, only the model number and color of appearance are different Here we selected AI6006 for all the test
Sample:	1#
Device Type:	Bluetooth V5.1
Data Rate:	1Mbps for GFSK modulation 2Mbps for $\pi/4$ -DQPSK modulation 3Mbps for 8DPSK modulation
Modulation:	GFSK, $\pi/4$ -DQPSK, 8DPSK
Operating Frequency Range(s) :	2402-2480MHz
Number of Channels:	79 channels
Transmit Power Max:	2.72 dBm(0.001871W)
Antenna Gain:	-0.68 dBi
Power supply:	Adaptor Input: AC 100-240V 50/60Hz, 1.25A Output: DC 12.0V 3.5A
Evaluation applied:	<input type="checkbox"/> MPE Evaluation <input checked="" type="checkbox"/> SAR Evaluation

Model Number list

Main models: AI6006

Multiple Models:

AI6006-BLK, AI6006-BLK-STK, AI6006-BLK-STK-2,
AI6006-SIL, AI6006-SIL-STK, AI6006-SIL-STK-2,
AI6006-TL, AI6006-TL-STK, AI6006-TL-STK-2,
AI6006-NVY, AI6006-NVY-STK, AI6006-NVY-STK-2,
AI6006-RG, AI6006-RG-STK, AI6006-RG-STK-2,
AI6006-GRY, AI6006-GRY-STK, AI6006-GRY-STK-2,
AI6006-BUR, AI6006-BUR-STK, AI6006-BUR-STK-2,
AI6006-RED, AI6006-RED-STK, AI6006-RED-STK-2,
AI6006-GLD, AI6006-GLD-STK, AI6006-GLD-STK-2,
AI6006-WHT, AI6006-WHT-STK, AI6006-WHT-STK-2,
B-28

Description:

Exos Home Speaker

BRAND NAME:

AIWA, REGENT, SAKAR, ALTEC LANSING, MODERN



3. Test Requirement

SAR Evaluation

According to §15.247(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances* ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot$

$[\sqrt{f_{\text{(GHz)}}}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,²⁴ where

- $f_{\text{(GHz)}}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation²⁵
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum *test separation distance* is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum *test separation distance* is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

Routine SAR evaluation refers to that specifically required by § 2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to qualify for TCB approval. One antenna is available for the EUT. The minimum separation distance is 5mm.

4. Measurement Result

Antenna gain:-0.68 dBi

Transmit Frequency(MHz)	Mode	Measured Power (dBm)	Tune upPower (dBm)	Max tune up power(dBm)	Calculation Result	1-g SAR
2402	GFSK	1.69	1±1	2	0.4912658	3
2441	GFSK	2.08	2±1	3	0.6234676	3
2480	GFSK	1.18	1±1	2	0.4991785	3
2402	Π/4-DQPSK	2.07	2±1	3	0.6184670	3
2441	Π/4-DQPSK	2.49	2±1	3	0.6234676	3
2480	Π/4-DQPSK	1.66	1±1	2	0.4991785	3
2402	8DPSK	2.30	2±1	3	0.6184670	3
2441	8DPSK	2.72	2±1	3	0.6234676	3
2480	8DPSK	1.81	1±1	2	0.4991785	3

According to KDB 447498, no stand-alone required for BT antenna, and no simultaneous SAR measurement is required.

*** End of Report ***