# RF Exposure Evaluation Declaration

Product Name: Oova bluetooth speaker

Model No. : P326.60

FCC ID : 2AEWEXINDAO

Applicant: Xindao B.V.

Address: P.O. Box 3082, 2280 GB, Rijswijk, The Netherlands

Date of Receipt: May. 20, 2015

Test Date : May. 20, 2015~ Jun. 03, 2015

Issued Date : Jun. 08, 2015

Report No. : 1550479R-RF-US-P20V01

Report Version: V 1.0

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement any agency of the government.

The test report shall not be reproduced without the written approval of QuieTek Corporation.



## Test Report Certification

Issued Date: Jun. 08, 2015

Report No.: 1550479R-RF-US-P20V01



a DEKRA company

**Product Name** 

Oova bluetooth speaker

**Applicant** 

: Xindao B.V.

Address

P.O. Box 3082, 2280 GB, Rijswijk, The Netherlands

Model No.

: P326.60

FCC ID

2AEWEXINDAO

**EUT Voltage** 

: DC 5V

Applicable Standard

: KDB 447498 D01V05V02

FCC Part1.1310(b)

RSS-102: Issue 5, March, 2015

Test Result

Complied

Performed Location

Suzhou EMC Laboratory

No.99 Hongye Rd., Suzhou Industrial Park Loufeng

Hi-Tech Development Zone., Suzhou, China

TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098

FCC Registration Number: 800392; IC Lab Code: 4075B

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## **Laboratory Information**

We, QuieTek Corporation, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

Taiwan R.O.C. : BSMI, NCC

Germany **TUV Rheinland** 

Nemko, DNV Norway

**USA FCC** : VCCI Japan China : CNAS

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site :http://www.quietek.com/tw/ctg/cts/accreditations.htm The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site: http://www.quietek.com/

If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

#### **HsinChu Testing Laboratory:**

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#### **Suzhou Testing Laboratory:**

No.99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech Development Zone., SuZhou, China



**History of This Test Report** 

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
1550479R-RF-US-P20V01	V1.0	Initial Issued Report	Jun. 08, 2015



## 1. RF Exposure Evaluation

#### 1.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

## LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm2)	Average Time (Minutes)	
(A) Limits for Occupational/ Control Exposures					
300-1500	-		F/300	6	
1500-100,000	-		5	6	
(B) Limits for General Population/ Uncontrolled Exposures					
300-1500			F/1500	6	
1500-100,000			1	30	

F= Frequency in MHz

Friis Formula

Friis transmission formula: Pd = (Pout\*G)/(4\*pi\*r2)

Where

Pd = power density in mW/cm2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

Pd id the limit of MPE, 1 mW/cm2. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.



### 1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18°C and 78% RH.

## 1.3. Test Result of RF Exposure Evaluation

Product		Oova bluetooth speaker
Test Item	:	RF Exposure Evaluation
Test Site	:	AC-6

#### Antenna Gain:

Antenna Gain: The maximum Gain measured in fully anechoic chamber is 2dBi.

#### Output Power into Antenna & RF Exposure Evaluation Distance:

Frequency Band (MHz)	Maximum Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm2)	
2402- 2480 MHz	0.450	0.0000895	

Note:

The power density Pd (4th column) at a distance of 20 cm calculated from the Friis transmission formula is far below the limit of 1 mW/cm2.