# HEALTH TEST REPORT For

Wireless light up logo speaker

Test Model: XO-9561-1

Additional Model No.:/

Prepared for Address	:	
Prepared by Address	:	Shenzhen LCS Compliance Testing Laboratory Ltd.
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Mail	:	webmaster@LCS-cert.com
Date of receipt of test sample Number of tested samples	:	November 01, 2018
Serial number	•	Prototype
Date of Test	:	November 01, 2018~ November 09, 2018
	•	
Date of Report	:	November 20, 2018

# CE

Report No.: LCS181023019AED

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	HEALTH TEST REPORT		
Assessment of the compliance	EN 62479: 2010		
restrictions related to hum	e of low power electronic and electrical equipment with the basic nan exposure to electromagnetic fields (10 MHz to 300 GHz).		
Report Reference No			
Date of Issue	: November 20, 2018		
Testing Laboratory Name			
Address	: 1/F., Xingyuan Industrial Park, Tongda Road, Bao'an Avenue, Bao'an District, Shenzhen, Guangdong, China		
Testing Location/ Procedure			
	Partial application of Harmonised standards		
and the second second second	Other standard testing method $\Box$		
Applicant's Name	:		
Address	:		
Test Specification			
Standard	: EN 62479: 2010		
Test Report Form No.	: LCSEMC-1.0		
TRF Originator	: Shenzhen LCS Compliance Testing Laboratory Ltd.		
Master TRF	: Dated 2017-06		
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Report No.: LCS181023019AED

# **HEALTH -- TEST REPORT**

## Test Report No. : LCS181023019AED

November 20, 2018 Date of issue

Test Model	: XO-9561-1
EUT	: Wireless light up logo speaker
Applicant	•
Address	
Telephone	:/
Fax	: /
Manufacturer	:
Address	:
Telephone	:/
Fax	: /
Factory	:
Address	:
Telephone	
Fax	: /

Test Result Positive
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The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD.

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# **Revision History**

Revision	Issue Date	Revisions	Revised By
000	November 20, 2018	Initial Issue	Gavin Liang

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#### **1. GENERAL INFORMATION**

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#### **1.1. Product Description for Equipment Under Test (EUT)**

EUT Model No.	: Wireless light up logo speaker : XO-9561-1
Model Declaration	: /
Test Model	: XO-9561-1
Power Supply	: DC 3.7V by Rechargeable Li-ion Battery(400mAh) Recharge Voltage: DC5V/0.5A
Hardware Version	: V0.1
Software Version	: V0.1
Bluetooth	
Frequency Range	: 2.402-2.480GHz
Channel Number	<ul> <li>79 channels for Bluetooth (BDR/EDR)</li> <li>40 channels for Bluetooth (BT LE)</li> </ul>
Channel Spacing	: 1MHz for Bluetooth (BDR/EDR) 2MHz for Bluetooth (BT LE)
Modulation Type	: GFSK, π/4-DQPSK, 8-DPSK for Bluetooth (BDR/EDR) GFSK for Bluetooth (BT LE)
Bluetooth Version	: 5.0
Antenna Description	: Internal Antenna, -0.58dBi (Max.)

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#### 1.2. Objective

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

EN 62479: 2010 – Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)

#### 1.3. Test Methodology

All measurements contained in this report were conducted with EN 62479: 2010.

#### **1.4. Description of Test Facility**

FCC Registration Number. is 254912.
Industry Canada Registration Number. is 9642A-1.
ESMD Registration Number. is ARCB0108.
UL Registration Number. is 100571-492.
TUV SUD Registration Number. is SCN1081.
TUV RH Registration Number. is UA 50296516-001.
NVLAP Registration Code is 600167-0.

### 1.5. Support Equipment List

Manufacturer	Descriptio n	Model	Serial Number	Certificate

#### 1.6. External I/O

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I/O Port Description	Quantity	Cable
Micro USB	1	0.2m, unshielded

#### 1.7. Equipment

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, bi-conical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements. Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

#### 1.8. Measurement Uncertainty

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Parameter	Uncertainty
Occupied Channel Bandwidth	5 %
RF output power, conducted	1,5 dB
Power Spectral Density, conducted	3 dB
Unwanted Emissions, conducted	3 dB
All emissions, radiated	6 dB
Temperature	1 °C
Humidity	5 %
DC and low frequency voltages	3 %
Time	5 %
Duty Cycle	5 %

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# 2. HUMAN EXPOSURE TO THE ELECTROMAGNETIC FIELDS

#### 2.1 Test Methodology

2.1.1.General description of applied standards

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

EN 62479- Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz).

2.1.2.Description of test modes

The EUT has been tested under its typical operating condition. Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

#### 2.2 Test limit

If the average power emitted by apparatus operating in the frequency range 10 MHz - 300 GHz is less than or equal to 20 mW and the transmitting peak power is less than 20 W then the apparatus is deemed to comply with the basic restrictions without testing.

#### 2.3 Test Results

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Since Max. output power for Bluetooth is 1.58mW (1.99dBm According to radio test report LCS181023019AEB) less than 20mW specified in EN 62479. This unit will not generate the harmful EM emission above the reference level as specified in EC Council Recommendation (1999/519/EC).

The unit complies with the EN 62479 for RF exposure requirement.

No non-compliance noted.

-----THE END OF REPORT------

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