

Health Test Report				
Applicant:				
Product Description:	TWS Earbuds			
Tested Model:	<u>HHE-T07</u>			
Test Standards:	<u>EN 62479:2010</u>			
Report No.:	<u>JQL190916801-3E</u>			
Date of Test:	2019-09-18 to 2019-09-21			
Date of Issue:	2019-09-21			
Tested By:	(Andy Yang / Test Engineer)			
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The test results in this report apply exclusively to the tested model / sample. Without written approval of Shenzhen Jialian Testing Consulting Co., Ltd., the test report shall not be reproduced except in full.				
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#### Report No.: JQL190916801-3E

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# **1. GENERAL INFORMATION**

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

#### **Client Information**

Applicant: Address of applicant:

Manufacturer: Address of manufacturer:

General Description of EUT			
Product Name:	TWS Earbuds		
Trade Name:			
Model No.:	HHE-T07		
Adding Model(s):			
Rated Voltage:	Headphone: Battery 3.7V, 40mAh;		
Adapter Model:			
	1		

Note: The test data is gathered from a production sample, provided by the manufacturer.

Technical Characteristics of EUT			
Bluetooth Version:	Bluetooth V5.0		
Frequency Range:	2402-2480MHz		
Max.RF Output Power:	4.90dBm (EIRP)		
Type of Modulation:	GFSK, Pi/4 DQPSK, 8DPSK		
Data Rate:	1Mbps, 2Mbps, 3Mbps		
Quantity of Channels	79/40		
Channel Separation:	1MHz/2MHz		
Type of Antenna:	Integral Antenna		
Antenna Gain:	0.5dBi		



# **1.2 Compliance Standards**

The tests were performed according to 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).

*Maintenance of compliance* is the responsibility of the manufacturer. Any modification of the product maybe which result in lowering the emission/immunity should be checked to ensure compliance has been maintained

### **1.3 Test Methodology**

All measurements contained in this report were conducted with EN 62479,

The equipment under test (EUT) was configured to measure its highest possible emission level. For more detail refer to the Operating Instructions.

# **1.4 Test Facility**

#### FCC – Registration No.: 125990

Shenzhen SEM Test Technology Co., Ltd. Laboratory has been recognized to perform compliance testing on equipment subject to the Commissions Declaration Of Conformity (DOC). The Designation Number is CN5010, and Test Firm Registration Number is 125990.

#### Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Shenzhen SEM Test Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.



# 2. RF EXPOSURE BASIC RESTRICTIONS

#### 2.1 Standard Applicable

According to 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).

#### Low-power exclusion level *P*max based on considerations of SAR

When SAR is the basic restriction, a conservative minimum value for  $P_{max}$  can be derived, equal to the localized SAR limit (SAR<sub>max</sub>) multiplied by the averaging mass (m):

$$P_{\max} = SAR_{\max} m \tag{A.1}$$

Example values of  $P_{\text{max}}$  according to Equation (A.1) are provided in Table A.1 for cases described by the ICNIRP guidelines [1], IEEE Std C95.1-1999 [2] and IEEE Std C95.1-2005 [3] where SAR limits are defined. Other exposure guidelines or standards may be applicable depending on national regulations.

Table A.1 – Example values of SAR-based P <sub>max</sub> for some cases described by ICNI	RP,
IEEE Std C95.1-1999 and IEEE Std C95.1-2005	

Guideline / Standard	SAR limit, SAR <sub>max</sub>	Averaging mass, m	P <sub>max</sub>	Exposure tier <sup>a</sup>	Region of body <sup>a</sup>
	W/kg	g	mW		
ICNIRP [1]	2	10	20	General public	Head and trunk
	4	10	40	General public	Limbs
	10	10	100	Occupational	Head and trunk
	20	10	Pmax Exposure tier <sup>a</sup> mW 20 General public   40 General public   100 Occupational   200 Occupational   100 Occupational   1,6 Uncontrolled environment   40 Uncontrolled environment   200 Controlled environment   200 Controlled environment   200 Action level   40 Action level   100 Controlled environment   200 Controlled environment	Limbs	
IEEE Std C95.1-1999 [2]	1,6	1	1,6	Uncontrolled environment	Head, trunk, arms, legs
	4	10	40	Uncontrolled environment	Hands, wrists, feet and ankles
	8	1	8	Controlled environment	Head, trunk, arms, legs
	20	ി0	200 Controlled Han environment feet	Hands, wrists, feet and ankles	
IEEE Std C95.1-2005 [3]	2	10	20	Action level	Body except extremities and pinnae
	4	10	40	Action level	Extremities and pinnae
	10	10	100	Controlled environment	Body except extremities and pinnae
	20 10 200	200	Controlled environment	Extremities and pinnae	



## 2.2 Evaluation Methods

Based on the above standard limit, the basic restriction at frequency between 10MHz to 300GHz is on localized SAR in the head. Any device with output power below 20mW cannot produce an exposure exceeding this restriction under the most pessimistic exposure conditions.

The basic restriction is 2W/Kg for general public device, so any unit which supplies less than 20mW from it's antenna port, averaged over 6 minutes, will meet the basic restriction.

#### 2.3 Evaluation Results

		U 1		
Modulation/	EIRP	EIRP	Limit	Result
Frequency (MHz)	dBm	mW	mW	Pass/Fail
2402(Hopping)	4.28	2.68	20	Pass
2402(BLE)	4.90	3.09	20	Pass

Maximum Average Output Power

Since average output power at worse case is: 3.09 mW which cannot exceed the exempt condition, 20mW specified in EN 62479. It is deemed to full fit the requirement of RF exposure basic restriction specified in EC Council Recommendation (1999/519/EC).

# **EXHIBIT A - LABEL**

#### **Label Information**

# CE

<u>Remark</u>: Text is Black in color and is justified. Labels are printed in indelible ink on permanent adhesive backing or silk-screened onto the EUT or shall be affixed at a conspicuous location on the EUT. The 'CE' marking must be affixed to the EUT or to its data plate. Where this is not possible or not warranted on account of the nature of the apparatus, it must be affixed to the packaging, if any, and to the accompanying documents. The 'CE' marking must have a height of at least 5 mm. If the 'CE' marking is reduced or enlarged the proportions given in the above graduated drawing must be respected.

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# **EXHIBIT B - EUT PHOTOS**





EUT View 2



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#### EUT View 3



#### EUT View 4













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