

# TEST REPORT

**Product Name** : Wireless Earphones  
**Brand Mark** : HAYLOU  
**Model No.** : Haylou X1  
**FCC ID** : 2AMQ6-X1  
**Report Number** : BLA-EMC-202110-A6804  
**Date of Sample Receipt** : 2021/10/26  
**Date of Test** : 2021/10/12 to 2021/11/12  
**Date of Issue** : 2021/11/12  
**Test Standard** : 47 CFR Part 1.1307, Part 2.1093, KDB  
447498  
**Test Result** : Pass

Prepared for:

**Dongguan Liesheng Electronic Co., Ltd.**  
**Room 401-410, Building 1, No.86 Hongtu Road, Nancheng District,**  
**Dongguan City, Guangdong, China.**

Prepared by:

**BlueAsia of Technical Services(Shenzhen) Co.,Ltd.**  
**Building C, No. 107, Shihuan Road, Shiyuan Sub-District, Baoan District,**  
**Shenzhen, Guangdong Province, China**  
**TEL: +86-755-23059481**

Compiled by:

*Jozu*

Approved by:

*Bluezhong*

Review by:

*Sueels*

Date:

2021/11/12



**REPORT REVISE RECORD**

<b>Version No.</b>	<b>Date</b>	<b>Description</b>
00	2021/11/12	Original

BlueAsia

## TABLE OF CONTENTS

1	TEST SUMMARY.....	4
2	GENERAL INFORMATION.....	5
3	GENERAL DESCRIPTION OF E.U.T.....	5
4	TEST ENVIRONMENT.....	错误! 未定义书签。
5	TEST MODE.....	错误! 未定义书签。
6	MEASUREMENT UNCERTAINTY.....	错误! 未定义书签。
7	DESCRIPTION OF SUPPORT UNIT.....	错误! 未定义书签。
8	LABORATORY LOCATION.....	6
9	TEST INSTRUMENTS LIST.....	错误! 未定义书签。

## 1 TEST SUMMARY

Test item	Test Requirement	Test Method	Class/Severity	Result
RF Exposure	47 CFR Part 1.1307, Part 2.1093, KDB 447498	CFR 47 Part 2.1093	CFR 47 Part 2.1093	PASS

BlueAsia

## 2 GENERAL INFORMATION

<b>Applicant</b>	Dongguan Liesheng Electronic Co., Ltd.
<b>Address</b>	Room 401-410, Building 1, No.86 Hongtu Road, Nancheng District, Dongguan City, Guangdong, China.
<b>Manufacturer</b>	Dongguan Liesheng Electronic Co., Ltd.
<b>Address</b>	Room 401-410, Building 1, No.86 Hongtu Road, Nancheng District, Dongguan City, Guangdong, China.
<b>Factory</b>	Dongguan Zhengrong Electronic Co., Ltd.
<b>Address</b>	No.4, Shugang Avenue, Hongmei Town, Dongguan City, Guangdong
<b>Product Name</b>	Wireless Earphones
<b>Test Model No.</b>	Haylou X1

## 3 GENERAL DESCRIPTION OF E.U.T.

<b>Hardware Version</b>	N/A
<b>Software Version</b>	N/A
<b>BDR&amp;EDR</b>	
<b>Operation Frequency:</b>	2402MHz-2480MHz
<b>Modulation Type:</b>	GFSK, p/4DQPSK, 8DPSK
<b>Channel Spacing:</b>	1MHz
<b>Number of Channels:</b>	79
<b>Antenna Type:</b>	Internal Antenna
<b>Antenna Gain:</b>	-1.82dBi(Provided by the applicant)
<b>BLE</b>	
<b>Operation Frequency:</b>	2402MHz-2480MHz
<b>Modulation Type:</b>	GFSK
<b>Channel Spacing:</b>	2MHz
<b>Number of Channels:</b>	40
<b>Antenna Type:</b>	Internal Antenna
<b>Antenna Gain:</b>	-1.82dBi(Provided by the applicant)

#### 4 LABORATORY LOCATION

All tests were performed at:  
BlueAsia of Technical Services(Shenzhen) Co., Ltd.  
Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District, Shenzhen, Guangdong Province,  
China  
Telephone: TEL: +86-755-28682673 FAX: +86-755-28682673  
No tests were sub-contracted.

BlueAsia

## 5 RF EXPOSURE COMPLIANCE REQUIREMENT

### 5.1 STANDARD REQUIREMENT

According to KDB447498D01 General RF Exposure Guidance v06

Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

### 5.2 Limits

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

$$\left[ \frac{\text{(max. power of channel, including tune-up tolerance, mW)}}{\text{(min. test separation distance, mm)}} \cdot \sqrt{f(\text{GHz})} \right] \leq 3.0$$
 for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, where

$f(\text{GHz})$  is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation<sup>17</sup>

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  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 is applied to determine SAR test exclusion

### 5.3 EUT RF Exposure

Operational Mode: EDR (8-DPSK worst case)						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dB)	Maximum tune-up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
2402 MHz	4.326	$\pm 1$	5.326	3.41	1.06	3.0
2441 MHz	2.161	$\pm 1$	3.161	2.07	0.65	
2480 MHz	0.748	$\pm 1$	1.748	1.50	0.47	
Operational Mode: BLE						
2402 MHz	1.492	$\pm 1$	2.492	1.78	0.55	3.0
2442 MHz	-1.324	$\pm 1$	-0.324	0.93	0.29	
2480 MHz	-2.812	$\pm 1$	-1.812	0.66	0.20	
Conclusion: the calculated value $\leq 3.0$ , SAR is exempted.						

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

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of BlueAsia, this report can't be reproduced except in full.

BlueAsia