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# **RF Exposure Evaluation Report**

**Report No.:** CQASZ20210100152E -02

**Applicant:** Dongguan Liesheng Electronic Co., Ltd.

Address of Applicant: Room 401-410, Building 1, No.86 Hongtu Road, Nancheng District, Dongguan

City, Guangdong, China.

**Equipment Under Test (EUT):** 

**EUT Name:** Haylou Wireless Earbuds

Model No.: Haylou GT6

Test Model No.: Haylou GT6

Brand Name: Haylou

FCC ID: 2AMQ6-GT6

**Standards:** 47 CFR Part 1.1307

47 CFR Part 2.1093

KDB447498D01 General RF Exposure Guidance v06

**Date of Receipt:** 2021-02-22

**Date of Test:** 2021-02-22 to 2021-03-10

**Date of Issue:** 2021-03-10

Test Result: PASS\*

\*In the configuration tested, the EUT complied with the standards specified above

Tested By:

(Tiny You)

Reviewed By:

(Sheek Luo

Approved By:

(Jack Ai)

TESTING TECHNOLOGY
WHITE TIME TECHNOLOGY
WH

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## 1 Version

## **Revision History Of Report**

Report No.	Version	Description	Issue Date
CQASZ20210100152E -02	Rev.01	Initial report	2021-03-10





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## 3 General Information

## 3.1 Client Information

Applicant:	Dongguan Liesheng Electronic Co., Ltd.		
Address of Applicant:	Room 401-410, Building 1, No.86 Hongtu Road, Nancheng District, Dongguan City, Guangdong, China.		
Manufacturer:	Dongguan Liesheng Electronic Co., Ltd.		
Address of Manufacturer:	Room 401-410, Building 1, No.86 Hongtu Road, Nancheng District, Dongguan City, Guangdong, China.		
Factory:	Dongguan Zhengrong Electronics co. Ltd		
Address of Factory:	Room 401-410, Building 1, No.86 Hongtu Road, Nancheng District, Dongguan City, Guangdong, China.		

## 3.2 General Description of EUT

Product Name:	Haylou Wireless Earbuds		
Model No.:	Haylou GT6		
Test Model No.:	Haylou GT6		
Trade Mark:	Haylou		
Hardware Version:	V1.0		
Software Version:	V1.0		
Operation Frequency:	2402MHz~2480MHz		
Bluetooth Version:	V5.2		
Modulation Technique:	Frequency Hopping Spread Spectrum(FHSS)		
Modulation Type:	GFSK, π/4DQPSK		
Number of Channel:	79		
Transfer Rate:	1Mbps/2Mbps		
Hopping Channel Type:	Adaptive Frequency Hopping systems		
Sample Type:	☐ Mobile ☐ Portable ☐ Fix Location		
Test Software of EUT:	FCC_assist (manufacturer declare)		
Antenna Type:	Internal Antenna		
Antenna Gain:	-4.15dBi		
Power Supply:	lithium battery:DC3.7V 310mAh, Charge by DC5.0V		

Note:

Model No.: DUDIOS T8, T16, M3, S5, S6, N6, D8, D16

Only the model DUDIOS T8 was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above models, with difference being color of appearance, pack and model name.



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#### 4 SAR Evaluation

#### 4.1 RF Exposure Compliance Requirement

#### 4.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. 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.

#### **4.1.2 Limits**

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:

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

f(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  $\leq$  5 mm, a distance of 5 mm is applied to determine SAR test exclusion





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## 4.1.3 EUT RF Exposure

#### **Measurement Data**

Weasurement Data				
	GFSK	mode		
Test channel	Peak Output Power	Tune up tolerance	Maximum tune-up Power	
	(dBm)	(dBm)	(dBm)	(mW)
Lowest(2402MHz)	4.850	5.0±1	5.5	3.55
Middle(2441MHz)	4.700	5.0±1	5.5	3.55
Highest(2480MHz)	5.260	5.0±1	5.5	3.55
	π/4DQPS	SK mode		
Test channel	Peak Output Power	Tune up tolerance	Maximum tu	ne-up Power
	(dBm)	(dBm)	(dBm)	(mW)
Lowest(2402MHz)	5.530	6.0±1	5.5	3.55
Middle(2441MHz)	5.470	5.5±1	5.5	3.55
Highest(2480MHz)	6.090	6.1±1	6.10	4.074
	8DPSK	mode		
Test channel	Peak Output Power	Tune up tolerance	Maximum tune-up Power	
	(dBm)	(dBm)	(dBm)	(mW)
Lowest(2402MHz)	5.440	5.5±1	5.5	3.55
Middle(2441MHz)	5.480	5.5±1	5.5	3.55
Highest(2480MHz)	6.100	6.5±1	6.5±1 6.10	

Worst case: 8DPSK mode						
Channel	Maximum Peak Conducted	cted tolerance (dBm)	Maximum tune- up Power		Calculated	Exclusion
	Output Power (dBm)		(dBm)	(mW)	value	threshold
Lowest (2402MHz)	5.440	5.5±1	5.5	3.55	0.078	
Middle (2441MHz)	5.480	5.5±1	5.5	3.55	0.099	3.0
Highest (2480MHz)	6.100	6.5±1	6.10	4.074	0.100	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Remark: The Max Conducted Peak Output Power data refer to report Report No.: CQASZ20210100152E-01