

# TEST REPORT

**Product Name** : TWS Bluetooth earphones  
**Brand Mark** : N/A  
**Model No.** : BH21QT18B  
**FCC ID** : RDR-BH21QT18BL  
**Report Number** : BLA-EMC-202112-A3703  
**Date of Sample Receipt** : 2021/12/9  
**Date of Test** : 2021/12/9 to 2021/12/16  
**Date of Issue** : 2021/12/16  
**Test Standard** : 47 CFR Part 1.1307, Part 2.1093, KDB  
447498  
**Test Result** : Pass

Prepared for:

**Dongguan Hele Electronics Co.,Ltd**  
**No.325 Yuehui Rd. Daojiao Town Dongguan City Guangdong Province**  
**China**

Prepared by:

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Date:

2021/12/16



## REPORT REVISE RECORD

| Version No. | Date       | Description |
|-------------|------------|-------------|
| 00          | 2021/12/16 | Original    |

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## 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   |

## 2 GENERAL INFORMATION

|                       |                                                                       |
|-----------------------|-----------------------------------------------------------------------|
| <b>Applicant</b>      | Dongguan Hele Electronics Co.,Ltd                                     |
| <b>Address</b>        | No.325 Yuehui Rd. Daojiao Town Dongguan City Guangdong Province China |
| <b>Manufacturer</b>   | Dongguan Hele Electronics Co.,Ltd                                     |
| <b>Address</b>        | No.325 Yuehui Rd. Daojiao Town Dongguan City Guangdong Province China |
| <b>Factory</b>        | Dongguan Hele Electronics Co.,Ltd                                     |
| <b>Address</b>        | No.325 Yuehui Rd. Daojiao Town Dongguan City Guangdong Province China |
| <b>Product Name</b>   | TWS Bluetooth earphones                                               |
| <b>Test Model No.</b> | BH21QT18B                                                             |

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

|                             |                                   |
|-----------------------------|-----------------------------------|
| <b>Hardware Version</b>     | N/A                               |
| <b>Software Version</b>     | N/A                               |
| <b>Operation Frequency:</b> | 2402MHz-2480MHz                   |
| <b>Modulation Type:</b>     | GFSK, pi/4DQPSK, 8DPSK            |
| <b>Channel Spacing:</b>     | 1MHz                              |
| <b>Number of Channels:</b>  | 79                                |
| <b>Antenna Type:</b>        | internal Antenna                  |
| <b>Antenna Gain:</b>        | 1.6dBi(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,  
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Telephone: TEL: +86-755-28682673 FAX: +86-755-28682673  
No tests were sub-contracted.

## 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:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot \sqrt{f(\text{GHz})} \leq 3.0$  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: BT(pi/4DQPSK)                         |                                           |                        |                       |      |                  |                     |
|---------------------------------------------------------|-------------------------------------------|------------------------|-----------------------|------|------------------|---------------------|
| Channel                                                 | Maximum Peak Conducted Output Power (dBm) | Tune up tolerance (dB) | Maximum tune-up Power |      | Calculated value | Exclusion threshold |
|                                                         |                                           |                        | (dBm)                 | (mW) |                  |                     |
| 2402 MHz                                                | 1.868                                     | ±1                     | 2.868                 | 1.94 | 0.60             | 3.0                 |
| 2441 MHz                                                | 1.308                                     | ±1                     | 2.308                 | 1.70 | 0.53             |                     |
| 2480 MHz                                                | 1.086                                     | ±1                     | 2.086                 | 1.62 | 0.51             |                     |
| Conclusion: the calculated value ≤3.0, SAR is exempted. |                                           |                        |                       |      |                  |                     |

----END OF REPORT----

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