

## RF Exposure Evaluation Report

**Report Reference No.**..... : **MTEB24100161-H**

**FCC ID**..... : **2BEUS-G2**

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Date of issue.....: **Oct. 22,2024**

**Representative Laboratory Name.:** **Shenzhen Most Technology Service Co., Ltd.**

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**Applicant's name**.....: **Shenzhen Fuyou Information Technology Co., Ltd.**

Address.....: 4th Floor, 435, Innovation Plaza, Zhihui Valley, Minzhi Street,  
Longhua District, Shenzhen, Guangdong Province, China.518000

**Test specification/ Standard**.....: **47 CFR Part 1.1307**

**47 CFR Part 2.1093**

TRF Originator.....: Shenzhen Most Technology Service Co., Ltd.

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**Test item description**.....: Helmet Intercom Headset

Trade Mark.....: GEARELEC

Model/Type reference.....: G2

Listed Models .....: G2 Pro、GX4、GX4 Pro

Modulation Type.....: GFSK,  $\pi/4$ DQPSK, 8DPSK

Operation Frequency.....: From 2402MHz to 2480MHz

Hardware Version.....: V1.5

Software Version.....: V2.0

Rating.....: DC 3.7V by Battery  
DC 5V by USB Port

Result.....: PASS

**TEST REPORT**

Equipment under Test : Helmet Intercom Headset

Model /Type : G2

Listed Models : G2 Pro、GX4、GX4 Pro

Remark : Only the model names and appearance color is different.

Applicant : Shenzhen Fuyou Information Technology Co., Ltd.

Address : 4th Floor, 435, Innovation Plaza, Zhihui Valley, Minzhi Street,  
Longhua District, Shenzhen, Guangdong Province, China.518000

Manufacturer : Shenzhen Houtonsen Electronics Co., Ltd.

Address : Room 4A402, Building 1, No. 309 Ping'an Avenue, Liangtiandian  
Community, Pinghu Subdistrict, Longgang District, Shenzhen City,  
Guangdong Province, China.

<b>Test Result:</b>	<b>PASS</b>
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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.

1. Revision History

Revision	Issue Date	Revisions	Revised By
00	2024.10.22	Initial Issue	Alisa Luo

## 2. SAR Evaluation

### 2.1 RF Exposure Compliance Requirement

#### 2.1.1 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.

#### 2.1.2 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:

$$\left[ \frac{\text{max. power of channel, including tune-up tolerance, mW}}{\text{min. test separation distance, mm}} \right] \cdot \left[ \sqrt{f(\text{GHz})} \right]$$
  
 $\leq 3.0$  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

## 2.1.3 EUT RF Exposure

## Measurement Data

## Antenna A BT classic

GFSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	-3.946	$-3.946 \pm 1$	-2.946
Middle(2441MHz)	-3.696	$-3.696 \pm 1$	-2.696
Highest(2480MHz)	-3.605	$-3.605 \pm 1$	-2.605

$\pi/4$ DQPSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	-3.097	$-3.097 \pm 1$	-2.097
Middle(2441MHz)	-2.815	$-2.815 \pm 1$	-1.815
Highest(2480MHz)	-2.701	$-2.701 \pm 1$	-1.701

8DPSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	-2.618	$-2.618 \pm 1$	-1.618
Middle(2441MHz)	-2.349	$-2.349 \pm 1$	-1.349
Highest(2480MHz)	-2.242	$-2.242 \pm 1$	-1.242

Worst case: 8DPSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold	SAR Test Exclusion
		(dBm)	(mW)			
Highest(2480MHz)	-2.242	-1.242	0.75	0.24	3.0	Yes

**Antenna B** BT classic

GFSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	-1.277	$-1.277 \pm 1$	-0.277
Middle(2441MHz)	-1.736	$-1.736 \pm 1$	-0.736
Highest(2480MHz)	-2.476	$-2.476 \pm 1$	-1.476

$\pi/4$ DQPSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	-0.405	$-0.405 \pm 1$	0.595
Middle(2441MHz)	-0.858	$-0.858 \pm 1$	0.142
Highest(2480MHz)	-1.552	$-1.552 \pm 1$	-0.552

8DPSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	-0.013	$-0.013 \pm 1$	0.987
Middle(2441MHz)	-0.429	$-0.429 \pm 1$	0.571
Highest(2480MHz)	-1.169	$-1.169 \pm 1$	-0.169

Worst case: 8DPSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold	SAR Test Exclusion
		(dBm)	(mW)			
Highest(2480MHz)	-0.013	0.987	1.26	0.39	3.0	Yes

.....THE END OF REPORT.....