

# RF TEST REPORT

Product Name: Bluetooth Earphones

Model Name: AR 10, H01, H02, H03, H05, H06, AR01, AR02, AR03, AR03Pro, AR09, AR10, BluS3, Blus3pro, openBlus, BluSE, BlusEPro, openBus2, Blus6

FCC ID: 2BF2LAR10

Issued For : Shenzhen MiGueR Technology Co.LTD

1501A, Liantai Building, No.3, Zizhu Sixth Road, Zhulin Community, Xiangmihu Street, Futian District, Shenzhen

Issued By : Shenzhen LGT Test Service Co., Ltd.

Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China

LGT24E104HA02

Sample Received Date: May 24, 2024

Report Number:

Date of Test: May 24, 2024 – Jun. 20, 2024

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### **TEST REPORT CERTIFICATION**

**Applicant:** Shenzhen MiGueR Technology Co.LTD

Address: 1501A, Liantai Building, No.3, Zizhu Sixth Road, Zhulin Community,

Xiangmihu Street, Futian District, Shenzhen

Manufacture: Shenzhen MiGueR Technology Co.LTD

Address: 1501A, Liantai Building, No.3, Zizhu Sixth Road, Zhulin Community,

Xiangmihu Street, Futian District, Shenzhen

Product Name: Bluetooth Earphones

Trademark: mbule

AR 10, H01, H02, H03, H05, H06, AR01, AR02, AR03, AR03Pro,

Model Name: AR09, AR10, BluS3, Blus3pro, openBlus, BluSE, BlusEPro,

openBus2, Blus6

Sample Status: Normal

APPLICABLE STANDARDS						
STANDARD	TEST RESULTS					
FCC 47CFR §2.1093 KDB 447498 D01 General RF Exposure Guidance v06	PASS					

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# **Revision History**

Rev.	Issue Date	Revisions				
00	Jun. 20, 2024	Initial Issue				

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# 1. GENERAL INFORMATION

# 1.1 GENERAL DESCRIPTION OF THE EUT

Product Name:	Bluetooth Earphones				
Trademark:	mbule				
Model Name:	AR 10				
Series Model:	H01, H02, H03, H05, H06, AR01, AR02, AR03, AR03Pro, AR09, AR10, BluS3, Blus3pro, openBlus, BluSE, BlusEPro, openBus2, Blus6				
Model Difference:	Only the model is different.				
Frequency Bands:	Bluetooth: 2402-2480MHz				
Rating:	Input: DC 5V				
Battery:	Capacity: 200mAh Rated Voltage: 3.7V				
Hardware Version:	N/A				
Software Version:	N/A				

### **1.2 TEST LABORATORY**

Company Name:	Shenzhen LGT Test Service Co., Ltd.			
Address:	Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China			
	A2LA Certificate No.: 6727.01			
Accreditation Certificate	FCC Registration No.: 746540			
	CAB ID: CN0136			

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### 2. FCC 47CFR §2.1093 REQUIREMENT

#### 2.1 TEST STANDARDS

The limit for Maximum Permissible Exposure (MPE) specified in KDB 447498 D01 General RF Exposure Guidance v06 is followed. The gain of the antennas used in the product is extracted from the Antenna data sheets provided and also the maximum total power input to the antenna is measured. Through the Friis transmission formula and the maximum gain of the antenna, we can calculate the distance, away from the product, where the limit of MPE is reached. Although the Friis Transmission formula is far field assumption, the calculated result of that is an over-prediction for near field power density. It is taken as worst case to specify the safety range.

#### **2.2 LIMIT**

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table.

MHz	5	10	15	20	25	mm		
150	39	77	116	155	194	mm		
	27	55	82	110	137			
300	22	45	67	89	112			
450	16	33	49	66	82			
835	16	32	49	63	79			
900			37	49	61	SAR Test		
1500	12	24 22	33	49	54	Exclusion		
1900	11					Threshold (mW)		
2450	10	19	29	38	48			
3600	8	16	24	32	40			
5200	7	13	20	26	33			
5400	6	13	19	26	32			
5800	6	12	19	25	31			
MHz	30	35	40	45	50	mm		
150	232	271	310	349	387			
300	164	192	219	246	274			
450	134	157	179	201	224			
835	98	115	131	148	164			
900	95	111	126	142	158	24D.T.		
1500	73	86	98	110	122	SAR Test Exclusion Threshold (mW)		
1900	65	76	87	98	109			
2450	57	67	77	86	96	The check (MIT)		
3600	47	55	63	71	79			
5200	39	46	53	59	66			
5400	39	45	52	58	65			
5800	37	44	50	56	62			

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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:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] • [ $\sqrt{f(GHz)}$ ]  $\leq 3.0$  for 1-g SAR and  $\leq 7.5$  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. 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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### 2.3 TEST RESULT

### **Turn up Result**

Mode	Turn up Power		
BLE 1M-GFSK	-3±1dBm		
BLE 2M-GFSK	-3±1dBm		

### The MPE result of worst mode:

RF Function	Frequency (MHz)	Max Turn up Power (dBm)	Max Turn up Power (mW)	Estimated SAR	Limit	Ratio	Result
ВТ	2402	-2.00	0.63	0.196	3	0.065	Pass

### Note:

1. The estimated SAR≤ 3.0 for 1-g SAR, Separation distance ≤ 5mm, complies with the exemption requirements.

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# **APPENDIX I - PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS**

Note: Please see the attached AR 10\_EUT Photos.

\* \* \* \* \* END OF THE REPORT \* \* \* \*

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