TEST REPORT

Maximum Permissive Exposure

for

Products Name:	**bluetooth headset**
Model No.:	**Refer to section 2.2**
FCC ID:	**2BRQY-TWS**
Report No.:	**SST2609E313**
Issued Date:	**2026-9-23**

Issued for

Shenzhen Saier Acoustic Technology Co., Ltd.

Room 201, Qingshui Lane Comprehensive Factory, Longxi Community, Longgang Street, Longgang District, Shenzhen, China

Issued by

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1. Basic Introduction

Applicant's name..... :	Shenzhen Saier Acoustic Technology Co., Ltd.	
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Factory's name ..... :	Shenzhen Saier Acoustic Technology Co., Ltd.	
Address ..... :	Room 201, Qingshui Lane Comprehensive Factory, Longxi Community, Longgang Street, Longgang District, Shenzhen, China	
Products Name..... :	bluetooth headset	
Model No..... :	TWS, Y20, Y80, Y60, Y19	
Trade Mark ..... :	/	
Rating(s)..... :	Charging case: 3.7VDC 180mAh battery Earphone: 3.7VDC 30mAh battery	
Software version..... :	/	
Hardware version ..... :	/	
Operation frequency..... :	2402MHz ~ 2480MHz	
Channel numbers ..... :	79	
Channel separation ..... :	1MHz	
Modulation technology .... :	GFSK, pi/4 DQPSK	
Antenna type ..... :	Chip Antenna	
Antenna gain ..... :	2.7 dBi	
Date of sample receipt..... :	2026-9-15	
Date of Test..... :	2026-9-15~2026-9-22	
Standard(s) ..... :	FCC 47 CFR PART 1.1310 FCC 47 CFR PART 1.1307 KDB 447498 D04	
Tested by (+signature)..... :	Connor Ma	Connor Ma
Check by (+signature)..... :	Davis Zhou	Davis Zhou
Approved by (+signature).... :	Tiger Chen	Tiger Chen

DONGGUAN QIYANG TESTING TECHNOLOGY CO.,LTD.

2. RF EXPOSURE EVALUATION MAXIMUM PERMISSIBLE EXPOSURE (MPE)

2.1 Introduction

This document is prepared to show compliance with the RF Exposure requirements as required in §1.1310 of the FCC Rules and Regulations and RSS-102 of Industry Canada.

The limit for maximum permissible exposure(MPE), specific in §1.1307of the FCC Rules and KDB 447498 D04 were list in below

The available maximum time-averaged power is no more than 1 mW, regardless of separation distance.

The available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula.

$$P_{\text{th}}\ (\text{mW}) = ERP_{20\ \text{cm}}\ (\text{mW}) = \begin{cases} 2040f & 0.3\ \text{GHz} \le f < 1.5\ \text{GHz} \\ 3060 & 1.5\ \text{GHz} \le f \le 6\ \text{GHz} \end{cases} \quad \text{(B. 1)}$$

$$P_{\text{th}}\ (\text{mW}) = \begin{cases} ERP_{20\ \text{cm}}(d/20\ \text{cm})^x & d \le 20\ \text{cm} \\ ERP_{20\ \text{cm}} & 20\ \text{cm} < d \le 40\ \text{cm} \end{cases} \quad \text{(B. 2)}$$

where

$$x = -\log_{10}\left(\frac{60}{ERP_{20\ \text{cm}}\sqrt{f}}\right)$$

and f is in GHz, d is the separation distance (cm), and $ERP_{20\text{cm}}$ is per Formula (B.1).
The example values shown in Table B.2 are for illustration only.

Table B.2—Example Power Thresholds (mW)

Frequency (MHz)	Distance (mm)									
	5	10	15	20	25	30	35	40	45	50
300	39	65	88	110	129	148	166	184	201	217
450	22	44	67	89	112	135	158	180	203	226
835	9	25	44	66	90	116	145	175	207	240
1900	3	12	26	44	66	92	122	157	195	236
2450	3	10	22	38	59	83	111	143	179	219
3600	2	8	18	32	49	71	96	125	158	195
5800	1	6	14	25	40	58	80	106	136	169

For multiple RF sources

$$\sum_{i=1}^{a}\frac{P_i}{P_{th,i}} + \sum_{j=1}^{b}\frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^{c}\frac{Evaluated_k}{Exposure\ Limit_k} \le 1$$

2.2 MPE Calculation

Type	Frequency (MHz)	Antenna Gain (dBi)	Output power (dBm)	Output power (mW)	ERP (dBm)	ERP (mW)	Limit (mW, d=0.5cm)	Ratio (%)	Result
BT	2480	2.7	-2.96	0.506	-2.41	0.574	2.7	21.26	PASS

Note: The available RF source will be Maximum time-averaged power or ERP, whichever is greater.
Pth= 3060 * $(d/20)^x$, where x is $-\log_{10}(60/3060 * \text{sqrt}(F, \text{in GHz}))$;
eg: $3060*(0.5/20)^{(-\log_{10}(60/3060*\text{sqrt}(2.48))}=2.7$

3 Conclusion

The device meets the portable RF exposure limit at a minimum separation distance as specified in §2.1093 of the FCC Rules and Regulations. An appropriate RF exposure compliance statement will be placed in the user's manual.

*******End of report*******