

# RADIO TEST REPORT

Report No: STS2109031H01

Issued for

MEI ZHOU JOTENFE ELECTRONIC TECHNOLOGY CO .,LTD.

Room 3, first floor, Lao Chang office, Jiao Hua Industrial zone, Jiao ling Area, Meizhou City, GuangDong Province, China

Product Name:	Bluetooth+2.4G keyboard
Brand Name:	N/A
Model Name:	2610
Series Model:	2611, 2612, 2613, 2614, 2615, 2616, 2618, 2619, 2620
FCC ID:	2A25S-KB2610
Test Standard:	FCC 47CFR §2.1093

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# **Test Report Certification**

Applicant's Name: Address:	MEI ZHOU JOTENFE ELECTRONIC TECHNOLOGY CO .,LTD. Room 3, first floor, Lao Chang office, Jiao Hua Industrial zone,			
	Jiao ling Area, Meizhou City, GuangDong Province, China MEI ZHOU JOTENFE ELECTRONIC TECHNOLOGY CO.,LTD. Room 3, first floor, Lao Chang office, Jiao Hua Industrial zone,			
Address:	Jiao ling Area, Meizhou City, GuangDong Province, China			
<b>Product Description</b>				
Product Name:	Bluetooth+2.4G keyboard			
Brand Name:	N/A			
Model Name: :.	2610			
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Standards:	FCC 47CFR §2.1093			
	ed except in full, without the written approval of STS, this document, personal only, and shall be noted in the revision of the document.			
Date of receipt of test item				
Date (s) of performance of tests				
Date of Issue				
Test Result	•			
Test Nesult				
Testing Enginee	or: Chins cher			
	(Chris Chen)			
Toohning! Mana	CONSULTATION OF THE PARTY OF TH			
Technical Mana	ger: Sean She			

Authorized Signatory:

(Vita Li)

(Sean she)







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# **Revision History**

Rev.	Issue Date	Report No.	Effect Page	Contents
00	14 Sept. 2021	Sept. 2021 STS2109031H01		Initial Issue





## 1. GENERAL INFORMATION

#### 1.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Bluetooth+2.4G keyboard			
Brand Name	N/A			
Model Name	2610			
Series Model	2611, 2612, 2613, 2614, 2615, 2616, 2618, 2619, 2620			
Model Difference	Only the appearance and model name are different			
Product Description	The EUT is Blueto Operation Frequency: Modulation Type: Antenna gain: Antenna Designation:	oth+2.4G keyboard  BT/2.4G: 2402 – 2480 MHz  GFSK -0.55dBi  PCB		
Rating	DC 3V			
Hardware Version	1.0			
Software Version	1.0			

#### 1.2 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD

Add.: A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ,

Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration Number: 625569

IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01



# 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	
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	24B.T.
1500	12	24	37	49	61	SAR Test Exclusion
1900	11	22	33	44	54	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	CART
1500	73	86	98	110	122	SAR Test Exclusion
1900	65	76	87	98	109	Threshold (mW)
2450	57	67	77	86	96	(,
3600	47	55	63	71	79	
5200	39	46	53	59	66	
5400	39	45	52	58	65	
5800	37	44	50	56	62	



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)] • [ $\sqrt{f(GHz)}$ ]  $\leq 3.0$  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 < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.





#### 2.3 TEST RESULT

Maximum measured transmitter power.

#### The Worst Case

Mode	frequency	Maximum AV Output Power	Tune up tolerance	Max Tune up
	GHz	dBm	dBm	dBm
2.4G	2.402	-1.67	-1±1	0
ВТ	2.402	0.39	0±1	1

Remark: The worst case gain of the antenna is -0.55dBi.

-0.55dBi logarithmic terms convert to numeric result is nearly 0.88.

Maximum Tune up Power<sub>(2402)</sub>= 1.000mw Maximum Tune up Power<sub>(2402)</sub>= 1.259mw

[(2.4G power of channel, including tune-up tolerance, mW)/(min. test separation distance,mm)]  $\cdot$  [ $\sqrt{f(GHz)}$ ]= 1.000/5\* $\sqrt{2.402}$ =0.310≤3.0

[(BT power of channel, including tune-up tolerance, mW)/(min. test separation distance,mm)]  $\cdot$  [ $\sqrt{f(GHz)}$ ]= 0.631/5\* $\sqrt{2.402}$ =0.390≤3.0

Threshold at which no SAR required is 0.310≤ 3.0 for 1-g SAR, Separation distance ≤ 5mm.

Threshold at which no SAR required is 0.390≤ 3.0 for 1-g SAR, Separation distance ≤ 5mm.

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