RF TEST REPORT

Report No.:SHATBL2412027W04

Applicant	:	Fujian Iselected E-commerce Co., Ltd.
Product Name	:	2.4GHz & Bluetooth Wireless Keyboard
Brand Name	:	N/A
Model Name	:	SPK6407
FCC ID	:	2BMNP-SPK6407
Test Standard	:	FCC CFR Title 47 Part 2.1093
Date of Receipt	:	2024.12.20
Date of Test	:	2024.12.20~2025.01.01
Issue Date	:	2025.01.02

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(Chris Xu)

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(Guozheng Li)

Authorized Signatory : Terry Yang

(Terry Yang)

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REVISION HISTORY

Rev.	Issue Date	Revisions	Revised by
00	2025.01.02	Initial Release	/

DECLARATION OF REPORT

1. The device has been tested by ATBL, and the test results show that the equipment under test (EUT) is in compliance with the requirements of 47 CFR Part 2.1093. And it is applicable only to the tested sample identified in the report.

2. This report shall not be reproduced except in full, without the written approval of ATBL, this document only be altered or revised by ATBL, personal only, and shall be noted in the revision of the document.

3. The general information of EUT in this report is provided by the customer or manufacture, ATBL is only responsible for the test data but not for the information provided by the customer or manufacture.

4. The results in this report is only apply to the sample as tested under conditions. The customer or manufacturer is responsible for ensuring that the additional production units of this model have the same electrical and mechanical components.

5. In this report, '☐' indicates that EUT does not support content after '☐', and '☑' indicates that it supports content after '☑'

1. GENERAL DESCRIPTION

1.1. Applicant

Name	:	Fujian Iselected E-commerce Co., Ltd.
Address	:	15th Floor, Building A, Aofeng Plaza, No. 2 Aofeng Road, Taijiang District, Fuzhou City, Fujian Province, China

1.2. Manufacturer

Name	:	MMD (Shanghai) Electronic Technology Co., Ltd.
Address	:	Room107, Building 17 , No. 525 Yuanjiang Road, Minhang District, Shanghai, China

1.3. Factory

Name	:	Dongguan Lingjie Electronics Technology Co.,Ltd
Address	:	No. 23, Tianyuan Revitalization North Road, Dongguan City, Guangdong Province

1.4. General Information of EUT

General Information	
Equipment Name	2.4GHz & Bluetooth Wireless Keyboard
Brand Name	N/A
Model Name	SPK6407
Series Model	N/A
Model Difference	N/A
Operation Frequency	2402MHz - 2480MHz for BR,BLE; 2403MHz - 2480MHz for 2.4GHz
Modulation Type	GFSK
Antenna gain	2.34dBi
Antenna Designation	PCB Antenna
Sample No:	202410090006089
Power Source	DC 1.5V For Battery
Battery	Rated Voltage：1.5V
Hardware Version	VER:1.0
Software Version	BK6.0

1.5. Laboratory Information

Company Name	:	Shanghai ATBL Technology Co., Ltd.
Address	:	Building 8,No.160 Basheng Road, Waigaoqiao Free Trade Zone, Pudong New Area, Shanghai
Telephone	:	+86(0)21-51298625

2. FCC 47CFR §2.1091 Requirement

2.1. Test Standards

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to §1.1310 and §2.1093 RF exposure requirement

KDB447498 v06: Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.

2.2. Requirement

According to KDB447498 D01 General RF Exposure Guidance v06 Section 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 Test Exclusion Threshold condition, listed below, is satisfied. These test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.22 The minimum test separation distance is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander (see 5) of section 4.1). To qualify for SAR test exclusion, the test separation distances applied must be fully explained and justified by the operating configurations and exposure conditions of the transmitter and applicable host platform requirements, typically in the SAR measurement or SAR analysis report, according to the required published RF exposure KDB procedures. When no other RF exposure testing or reporting is required, a statement of justification and compliance must be included in the equipment approval, in lieu of the SAR report, to qualify for the SAR test exclusion. When required, the device specific conditions described in the other published RF exposure KDB procedures must be satisfied before applying these SAR test exclusion provisions; for example, handheld PTT two-way radios, handsets, laptops & tablets etc.23 "

[(max. power of channel, including tune-up tolerance, mW)/ (min. test separation distance, mm)] · [√f (GHz)] ≤ 3.0 for 1-g SAR and ≤ 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
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum test separation distance is ≤ 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 according to 5) in section 4.1 is applied to determine SAR test exclusion.

2.3. MPE Calculation Method

Predication of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$S=PG/4\pi R^2$

Where: S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna

2.4. Antenna Information

EUT can only use antennas certificated as follows provided by manufacturer;

BR,BLE

Antenna	Model No. of antenna:	Type of antenna:	Gain of the antenna (Max.)	Frequency range:
0	/	PCB antenna	2.34dBi	2402MHz - 2480MHz

2.4GHz

Antenna	Model No. of antenna:	Type of antenna:	Gain of the antenna (Max.)	Frequency range:
0	/	PCB antenna	2.34dBi	2403MHz - 2480MHz

2.5. Manufacturing Tolerance

Frequency (MHz)	ANT0_2.4GHz (Max Peak)		
	2403	2441	2480
Target (dBm)	-6.32	-8.43	-3.85
Tolerance ± (dB)	1.0	1.0	1.0

Note:

Maximum power Calculation(dBm) :P=Field strength-95.2

Frequency (MHz)	ANT0_DH5(Peak)		
	2402	2441	2480
Target (dBm)	-1.24	-0.99	-0.92
Tolerance ± (dB)	1.0	1.0	1.0

Frequency (MHz)	ANT0_LE(Peak)		
	2402	2441	2480
Target (dBm)	-1.27	-1.06	-1.00
Tolerance ± (dB)	1.0	1.0	1.0

2.6. Test Result

Mode	f (GHz)	Antenna Distance (mm)	Max.RF output power (including tune-up tolerance)		SAR Test Exclusion Threshold	SAR Test Exclusion
			dBm	mW		
2.4GHz	2480	5	-2.85	0.52	0.08 <3	Yes
BR	2480	5	0.08	1.02	0.16 <3	Yes
BLE	2.5	5	0.00	1.000	0.16 <3	Yes

Note:

1.The Maxinum power is less than the limit, complies with the exemption requirements.

2.Output power (Peak) including turn-up tolerance;

3.The calculated distance is 5mm.

4.Simultaneous emission is not supported.

※※※※※END OF THE REPORT※※※※※