RF Exposure Evaluation Report

Applicant:	PAX Technology Limited
Address of Applicant:	Room 2416, 24/F., Sun Hung Kai Centre, 30 Harbour, Hong Kong
Equipment Under Test (EUT)	
Product Name:	Smart Kiosk
Model No.:	SK300
Trade mark:	PAX
FCC ID:	V5PSK300
Applicable standards:	FCC CFR Title 47 Part 2 Subpart J Section 2.1091
Date of sample receipt:	24 Jan., 2022
Date of Test:	25 Jan., to 03 Mar., 2022
Date of report issue:	04 Mar., 2022
Test Result:	PASS*

Authorized Signature:

Bruce Zhang
Laboratory Manager

2 Version

Version No.	Date	Description
00	*04 Mar., 2022*	*Original*

Tested by: Mike.ou ***Date:*** *04 Mar., 2022*

Test Engineer

Reviewed by: Winner Zhang ***Date:*** *04 Mar., 2022*

Project Engineer

3 Contents

Page

4 General Information

4.1 Client Information

Applicant:	PAX Technology Limited
Address:	Room 2416, 24/F., Sun Hung Kai Centre, 30 Harbour, Hong Kong
Manufacturer:	PAX Computer Technology (Shenzhen) Co., Ltd.
Address:	401 and 402, Building 3, Shenzhen Software Park, Nanshan District, Shenzhen City, Guangdong Province, P.R.C

4.2 General Description of E.U.T.

Product Name:	Smart Kiosk
Model No.:	SK300
Operation Frequency:	WCADM band II: Tx: 1852.4 MHz - 1907.6 MHz WCADM band IV: Tx: 1712.4 MHz - 1752.6 MHz WCADM band V: Tx:826.4 MHz - 846.6 MHz LTE band 2: Tx: 1850 MHz - 1910 MHz LTE band 4: Tx: 1710 MHz - 1755 MHz LTE band 5: Tx: 824 MHz - 849 MHz LTE band 12: Tx: 699 MHz - 716 MHz LTE band 13: Tx: 777 MHz – 787 MHz LTE band 17: Tx: 704 MHz - 716 MHz 2.4G Wi-Fi: 2412MHz~2462MHz 5.2G Wi-Fi Band 1: 5180MHz~5240MHz 5.8G Wi-Fi Band 4: 5725MHz~5875MHz Bluetooth/BLE: 2402MHz~2480MHz
Modulation technology:	802.11b: DSSS, 802.11a/g/n/ac: OFDM Bluetooth BDR /BLE: GFSK, Bluetooth EDR: π/4-DQPSK, 8DPSK
Antenna Type:	Internal Antenna
Antenna gain:	BT/BLE: 1.5 dBi; 2.4GWi-Fi: 1.5 dBi; 5GWi-Fi: 1.5 dBi WCADM band II: 1.5 dBi; WCADM band IV: 1.5 dBi; WCADM band V: 1.5 dBi LTE band 2&4&5&12&13&17: 1.5 dBi
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

4.3 Operating Modes

Operating mode	Detail description
BLE mode	Keep the EUT in continuously transmitting in BLE mode
BT mode	Keep the EUT in continuously transmitting in BT mode
2.4G WIFI mode	Keep the EUT in continuously transmitting in 2.4G WIFI mode
5G WIFI mode	Keep the EUT in continuously transmitting in 5G WIFI mode
WCDMA mode	Keep the EUT in continuously transmitting in WCDMA mode
LTE mode	Keep the EUT in continuously transmitting in LTE mode

4.4 Additions to, deviations, or exclusions from the method

No

4.5 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

- **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

- **CNAS - Registration No.: CNAS L15527**

JianYan Testing Group Shenzhen Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L15527.

- **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: https://portal.a2la.org/scopepdf/4346-01.pdf

4.6 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.
Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.
Tel: +86-755-23118282, Fax: +86-755-23116366
Email: info-JYTee@lets.com, Website: http://jyt.lets.com

5 Technical Requirements Specification in FCC CFR Title 47 Part 2.1091

5.1 Limits

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*($900/f^2$)	6
30–300	61.4	0.163	1.0	6
300–1500			f/300	6
1500–100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*($180/f^2$)	30
30–300	27.5	0.073	0.2	30
300–1500			f/1500	30
1500–100,000			1.0	30

5.2 Test Procedure

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

$$S = \frac{P \times G}{4 \times \pi \times R^2}$$

Where:

S = power density

P = power input to the antenna

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

R = distance to the centre of radiation of the antenna

5.3 Result

Frequency (MHz)	Maximum Output power (dBm)	Maximum Output power (mW)	Antenna Gain (dBi)	Antenna Gain (numeric)	Distance (cm)	Result (mW/cm^2)	Limits for General Population/ Uncontrolled Exposure (mW/cm^2)
2.4G Wi-Fi							
2412	16.7	46.77	1.5	1.41	20.00	0.0131	1.0
BLE							
2402	1.762	1.50	1.5	1.41	20.00	0.0004	1.0
BT							
2402	8.108	6.47	1.5	1.41	20.00	0.0018	1.0
5.2G Wi-Fi							
5180	17.44	55.46	1.5	1.41	20.00	0.0156	1.0
5.8G Wi-Fi							
5775	18.25	66.83	1.5	1.41	20.00	0.0188	1.0
WCDMA 850							
846.6	22.39	173.38	1.5	1.41	20.00	0.0487	0.56
WCDMA 1700							
1712.4	21.63	145.55	1.5	1.41	20.00	0.0409	1.0
WCDMA 1900							
1907.6	21.00	125.89	1.5	1.41	20.00	0.0345	1.0
LTE Band 2							
1851.5	21.17	130.92	1.5	1.41	20.00	0.0368	1.0
LTE Band 4							
1720	21.74	149.28	1.5	1.41	20.00	0.0419	1.0
LTE Band 5							
846.5	22.44	175.39	1.5	1.41	20.00	0.0493	0.56
LTE Band 12							
699.7	22.86	193.20	1.5	1.41	20.00	0.0543	0.47
LTE Band 13							
782	22.26	168.27	1.5	1.41	20.00	0.0473	0.52
LTE Band 17							
713.5	22.87	193.64	1.5	1.41	20.00	0.0544	0.48

Note: Just the worst case mode was shown in report.

5.4 Conclusion

The device is exempt from the test and satisfies RF exposure evaluation.

------End of report------