



RF Exposure Evaluation Report

APPLICANT : PAX Technology Limited
EQUIPMENT : mPOS
BRAND NAME : PAX
MODEL NAME : D180
MARKETING NAME : D180
FCC ID : V5PD180BT
STANDARD : 47 CFR Part 2.1093
FCC KDB 447498 D01 v05r02

We, SPORTON INTERNATIONAL (SHENZHEN) INC., would like to declare that the device has been evaluated in accordance with 47 CFR Part 2.1093, and pass the limit. Without written approval of SPORTON INTERNATIONAL (SHENZHEN) INC., the test report shall not be reproduced except in full.

Reviewed by: Eric Huang / Deputy Manager

Approved by: Jones Tsai / Manager

SPORTON INTERNATIONAL (SHENZHEN) INC.

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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA450402	Rev. 01	Initial issue of report	Jun. 11, 2014



1. Administration Data

Testing Laboratory	
Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.
Test Site Location	No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan warehouse, Nanshan District, Shenzhen, Guangdong, P.R.C. TEL: +86-755- 3320-2398

Applicant	
Company Name	PAX Technology Limited
Address	Room 2416, 24/F., Sun Hung Kai Centre, 30 Harbour Road, Wanchai, Hong Kong

Manufacturer	
Company Name	PAX Computer Technology (Shenzhen) Co., Ltd.
Address	4/F, No.3 Building, Software Park, Second Central Science-Tech Road, High-Tech industrial Park, Shenzhen, Guangdong, P.R.C.

2. General Information

2.1 Description of Device Under Test (DUT)

Product Feature & Specification	
DUT Type	mPOS
Brand Name	PAX
Model Name	D180
Marketing Name	D180
FCC ID	V5PD180BT
Wireless Technology and Frequency Range	Bluetooth: 2402 MHz ~ 2480 MHz
Mode	• Bluetooth v3.0+EDR
Antenna Type	Monopole Antenna
HW Version	D180-xxx-xx3-0xxx
SW Version	V1.04
DUT Stage	Identical Prototype

Remark: The above DUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

3. Maximum RF output power among production units

Mode / Band	Bluetooth		
	1Mbps	2Mbps	3Mbps
	(GFSK)	$\pi/4$ -DQPSK	(8-DPSK)
2.4GHz Bluetooth	-7.5	-8	-7.5

3.1 Applied Standard

- 47 CFR Part 2.1093
- FCC KDB 447498 D01 v05r02



4. RF Exposure Evaluation

Bluetooth Max Power (dBm)	mW	Separation Distance (mm)	Frequency (GHz)	Exclusion Thresholds
-7.5	0.20	0	2.48	0.06

Note:

Per KDB 447498 D01v05r02, 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:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR}$$

- 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

Conclusion: Per KDB 447498 D01v05r02, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion. The test exclusion threshold is 0.06 which is ≤ 3 , SAR testing is not required.