# RF Exposure Evaluation Report

Report No.: FA5N1110

APPLICANT : PAX Technology Limited

**EQUIPMENT**: mPOS

BRAND NAME : PAX

MODEL NAME : D180

MARKETING NAME : D180

FCC ID : V5PD180SRF

STANDARD : 47 CFR Part 2.1093

FCC KDB 447498 D01 v06

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.

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Approved by: Jones Tsai / Manager

#### SPORTON INTERNATIONAL (SHENZHEN) INC.

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: Rev. 01

Report Issued Date: Dec. 08, 2015

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## **Revision History**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA5N1110 Rev. 01		Initial issue of report	Dec. 08, 2015

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## 1. Administration Data

Testing Laboratory			
Test Site	SPORTON International (SHENZHEN) Inc.		
Test Site Location	1F & 2F, Building A, Morning Business Center, No. 4003 ShiGu Rd., Xili Town, Nanshan District, Shenzhen, Guangdong, P. R. China TEL: 86-755-8637-9589 FAX: 86-755-8637-9595		

<b>Applicant</b>			
Company Name PAX Technology Limited			
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Manufacturer			
Company Name PAX Computer Technology (Shenzhen) Co., Ltd.			
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### 2. General Information

#### 2.1 <u>Description of Device Under Test (DUT)</u>

Product Feature & Specification			
DUT Type mPOS			
Brand Name	PAX		
Model Name	D180		
Marketing Name	D180		
FCC ID	V5PD180SRF		
Wireless Technology and	Bluetooth: 2402 MHz ~ 2480 MHz		
Frequency Range	NFC:13.56 MHz		
Mode	Bluetooth v2.1 + EDR, Bluetooth v4.0 LE		
	NFC: ASK		
Antenna Type	PCB Antenna		
Antenna Gain	-5.00dBi		
HW Version	D180-xxx-xx3-1xxx		
SW Version 3.02.xx			
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

		Bluetooth (Unit: dBm)		
Mode / Band	1Mbps	2Mbps	3Mbps	BT4.0-LE
	(GFSK)	π/4-DQPSK	(8-DPSK)	(GFSK)
2.4GHz Bluetooth	6.00	5.00	5.00	4.50

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#### 4. RF Exposure Evaluation

Bluetooth	mW	Separation	Frequency	Exclusion
Max Power (dBm)	IIIVV	Distance (mm)	(GHz)	Thresholds
6.0	4	5	2.48	1.3

#### Note:

 Per KDB 447498 D01v06 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)]  $\cdot [\sqrt{f(GHz)}] \le 3.0$  for 1-g SAR and  $\le 7.5$  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 D01v06, 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 1.3 which is <= 3, SAR testing is not required.

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