

RF EXPOSURE EVALUATION REPORT

APPLICANT

Beijing Beast Technology Co.,Ltd.

PRODUCT NAME

Speedforce

MODEL NAME

S603

TRADE NAME

SPEEDX

BRAND NAME

SPEEDX

FCC ID

2AHU3SPD-0000S603

47CFR 2.1093

STANDARD(S)

KDB 447498 D01 General RF Exposure

Guidance v06

ISSUE DATE

2016-12-26

SHENZHEN MORLAB COMMUNICATIONS TECHNOLOGY Co., Ltd.

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MORLAB GROUP

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	Change History					
Issue	Date	Reason for change				
1.0	2016-12-21	First edition				
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TEST REPORT DECLARATION

Applicant	Beijing Beast Technology Co.,Ltd.		
Applicant Address	Room 2508 Building B,Tower 2 Wangjing SOHO,Chaoyang District,Beijing,China		
Manufacturer	Beijing Beast Technology Co.,Ltd.		
Manufacturer Address	Room 2508 Building B,Tower 2 Wangjing SOHO,Chaoyang District,Beijing,China		
Product Name	Speedforce		
Model Name	S603		
Brand Name	SPEEDX		
HW Version	V11		
SW Version	N/A		
Test Standards	47CFR 2.1093; KDB 447498 D01 General RF Exposure Guidance v06		
Issue Date	2016-12-26		
SAR Evaluation	Not Required		

Peny Funei Peng Fuwei Tested by

Reviewed by

Approved by

Peng Huarui



1. TECHNICAL INFORMATION

Note: the following data is based on the information by the applicant.

1.1. Identification of Applicant

Company Name:	Beijing Be	east T	echnology	Co.,Ltd.		Z We	AB GRLAD
Address:	Room 2	2508	Building	B,Tower	2	Wangjing	SOHO,Chaoyang
IN MORE ME	District,B	eijing,	China				QLAD NORL

1.2. Identification of Manufacturer

Company Name:	Beijing Beast	Technology	Co.,Ltd.	and the same of th	Moke	E WE LAB
Address:	Room 2508	Building	B,Tower	2	Wangjing	SOHO,Chaoyang
AE OFLA MORE	District,Beijing,China			AB TRLA		

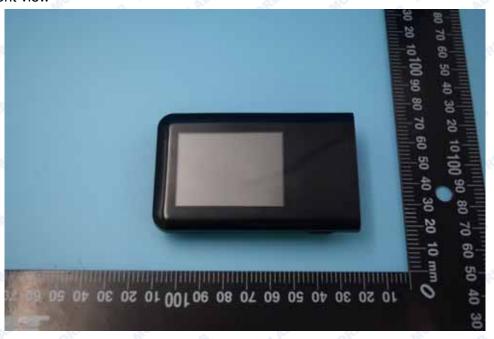
1.3. Equipment Under Test (EUT)

Model Name:	S603
Trade Name:	SPEEDX
Brand Name:	SPEEDX
Hardware Version:	V11
Software Version:	N/A
Frequency Bands:	Bluetooth 4.0:2402-2480MHz
Modulation Mode:	Bluetooth 4.0:GFSK;
Antenna type:	Ceramic Antenna
Development Stage:	Identical prototype



1.3.1. Photographs of the EUT

EUT front view



EUT rear view





1.3.2. Identification of all used EUT

The EUT identity consists of numerical and letter characters, the letter character indicates the test sample, and the following two numerical characters indicate the software version of the test sample.

EUT Identity	Hardware Version	Software Version
1#	V11	N/A

1.4. Applied Reference Documents

Leading reference documents for testing:

2	No.	Identity	Document Title
	1 OPLAS	47 CFR§2.1093	Radiofrequency Radiation Exposure Evaluation: portable devices
,	2	KDB 447498 D01v06	General RF Exposure Guidance

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2. DEVICE CATEGORY AND RF EXPOSURE LIMIT

Based on 47CFR 2.1093, this device belongs to portable device category with General Population/Uncontrolled exposure.

Portable Devices:

47CFR 2.1093(b)

For purposes of this section, a portable device is defined as a transmitting device designed to be used so that the radiating structure(s) of the device is/are within 20 centimeters of the body of the user.

GENERAL POPULATION / UNCONTROLLED EXPOSURE

47CFR 2.1093(d) (2)

Limits for General Population/Uncontrolled exposure: 0.08 W/kg as averaged over the whole-body and spatial peak SAR not exceeding 1.6 W/kg as averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the hands, wrists, feet and ankles where the spatial peak SAR shall not exceed 4 W/kg, as averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). General Population/Uncontrolled limits apply when the general public may be exposed, or when persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or do not exercise control over their exposure. Warning labels placed on consumer devices such as cellular telephones will not be sufficient reason to allow these devices to be evaluated subject to limits for occupational/controlled exposure in paragraph (d)(1) of this section.





3. MEASUREMENT OF CONDUCTED PEAK OUTPUT POWER

Bluetooth 4.0 Conducted Average Output Power

			Output	
Band	Channel	Frequency (MHz)	Power(dBm)	
			GFSK	
alab.	0	2402	-4.213	
ВТ	19	2440	-7.198	
LAP JOR	39	2480	-9.865	

4. RF EXPOSURE EVALUATION

The device only incorporates a Bluetooth transmitter, so standalone SAR evaluation is required for Bluetooth and simultaneous SAR is not required.

Standalone transmission SAR evaluation

According to KDB 447498 section 4.3.1, the 1-g SAR test exclusion thresholds at test separation Distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]·[$\sqrt{f(GHz)}$] ≤ 3.0

The maximum tune-up limit power is 0.38mW @ 2.402GHz

When Bluetooth Watch is worn on the hand, so use **5mm** as the most conservative minimum test separation distance,

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]·[$\sqrt{f(GHz)}$] =**0.12** \leq 3.0

So SAR evaluation is not required for this device.



ANNEX GENERAL INFORMATION

1. Identification of the Responsible Testing Laboratory

Company Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Department:	Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Responsible Test Lab Manager:	Mr. Su Feng
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2. Identification of the Responsible Testing Location

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