FCC RF Exposure Evaluation Report

Project Name: HUAWEI Bluetooth Headset

Model : AM04

FCC ID : QISAM04

Report No. : SYBH(Z-SAR)015122013-2

	APPROVED (Lab Manager)	PREPARED (Test Engineer)
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DATE	2014-01-09	2014-01-09

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※ ※ Modified History ※ ※

REV.	DESCRIPTION	ISSUED DATE	REMARK
Rev.1.0	Initial Test Report Release	2014-01-09	GongZhong

1 EUT Description

Device Information：			
DUT Name:	HUAWEI Bluetooth Headset		
Type Identification:	AM04		
FCC ID :	QISAM04		
Device Type :	portable device		
Device Phase:	Identical Prototype		
Exposure Category:	uncontrolled environment / general population		
Hardware Version :	AM04 V100R001 P1		
Software Version :	AM04 V100R001C01B110SP01		
Antenna Type :	internal antenna		
Others Accessories	Headset		
Device Operating Configurations:			
Supporting Mode(s)	BT		
Test Modulation	GFSK/π/4-DQPSK/8DPSK		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	BT	2400-2483.5	
	0-40-79 (BT)		

Table 1:Device information and operating configuration

1.1 General Description

HUAWEI AM04 is a mono Bluetooth headset.
The headset is built on Bluetooth v3.0 + 2.1 EDR and eSCO, HSP 1.2, HFP 1.6, Secure Simple Pairing (SSP), A2DP ,AVRCP.
Basic Feature: Call answer / end, Transmit mute, Receive volume setting, Redial, Multipoint Operation, Quick Pair Operation, Deep sleep

2 Test specification(s)

ANSI Std C95.1-1992	Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz – 300 GHz.(IEEE Std C95.1-1991)
RSS-102	Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands (Issue 4 of March 2010)
KDB447498 D01	General RF Exposure Guidance v05r01

3 Testing laboratory

Test Site	The Reliability Laboratory of Huawei Technologies Co., Ltd.
Test Location	Zone K3,Huawei Industrial Base, Bantian Industry Area, Longgang District, Shenzhen, Guangdong, China
Telephone	+86 755 28780808
Fax	+86 755 89652518
State of accreditation	The Test laboratory (area of testing) is accredited according to ISO/IEC 17025. CNAS Registration number: L0310 A2LA TESTING CERT #2174.01

4 Applicant and Manufacturer

Company Name	HUAWEI TECHNOLOGIES CO., LTD
Address	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

5 Application details

Start Date of test	2014-01-09
End Date of test	2014-01-09

6 Ambient Condition

Ambient temperature	20°C – 24°C
Relative Humidity	30% – 70%

7 RF exposure limits

Human Exposure	Uncontrolled Environment General Population	Controlled Environment Occupational
Spatial Peak SAR* (Brain/Body/Arms/Legs)	**1.60 mW/g**	8.00 mW/g
Spatial Average SAR** (Whole Body)	0.08 mW/g	0.40 mW/g
Spatial Peak SAR*** (Hands/Feet/Ankle/Wrist)	4.00 mW/g	20.00 mW/g

Table 2: RF exposure limits

The limit applied in this test report is shown in **bold** letters

Notes:

* The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time

** The Spatial Average value of the SAR averaged over the whole body.

*** The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation

8 RF exposure evaluation

Per KDB447498 D01, the 1-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)] ·[√f(GHz)] ≤ 3.0 for 1-g 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

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Mode	P_{max} (dBm)*	P_{max} (mW)	Distance (mm)	f (GHz)	Calculation Result	Exclusion threshold	SAR test exclusion
BT	**2.00**	1.58	**5**	2.450	0.50	3.00	Yes

Table 3: Standalone SAR test exclusion in head position

Note: * - Maximum possible output power declared by manufacturer

The device meets the SAR test exclusion thresholds requirement of KDB 447498 D01v05 and it is exempt from routine evaluation.

End