

RF Exposure Evaluation Report

Product Name : Wireless Headphones

Model No. : ATH-M50xBT

FCC ID : JFZM50XBT

Applicant : Audio-Technica Corporation

Address : 2-46-1 Nishi-naruse, Machida, Tokyo, 194-8666

Date of Receipt : Aug. 15, 2018

Date of Declaration : Sep. 06, 2018

Report No. : 1880226R-SAUSP03V00

Report Version : V1.0

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.

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Issued Date: Sep. 06, 2018

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Product Name	Wireless Headphones
Applicant	Audio-Technica Corporation
Address	2-46-1 Nishi-naruse, Machida, Tokyo, 194-8666
Manufacturer	Audio-Technica Corporation
Model No.	ATH-M50xBT
FCC ID.	JFZM50XBT
Trade Name	Audio-Technica Corporation
Applicable Standard	FCC 47 CFR 1.1307 KDB 447498 D01 v06
Test Result	Complied

Documented By :



(Senior Adm. Specialist / Joanne Lin)

Tested By :



(Engineer / Wen Lee)

Approved By :



(Director / Vincent Lin)

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Wireless Headphones
Trade Name	Audio-Technica Corporation
Model No.	ATH-M50xBT
FCC ID.	JFZM50XBT
Frequency Range	2402 – 2480MHz
Channel Number	BT: 79CH BLE: 40CH
Type of Modulation	BT: FHSS: GFSK(1Mbps) / π / 4DQPSK(2Mbps) / 8DPSK(3Mbps) BLE: GFSK(2Mbps)
Antenna Type	Chip Antenna
Antenna Gain	Refer to the table “Antenna List”

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	MITSUBISHI	AM03DP-ST01	Chip Antenna	1.2dBi for 2.4 GHz

2. RF Exposure Evaluation

2.1. Standard Applicable

According to 1.1307 (b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

2.2. Measurement Result:

According to KDB Publication 447498 D01, section 4.3.1, per the calculations of item 1
 $(\text{Power(mW)}/\text{separation (mm)}) \cdot \sqrt{f(\text{GHz})} \leq 3.0$ for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR),
 SAR is required as shown in the table below where calculated values are greater than 3.0 for 1-g SAR,
 and ≤ 7.5 for 10-g extremity SAR:

- 1.) Operation frequency = 2450MHz and antenna separation distance = 10mm,
 Body SAR Test Exclusion Threshold = 19mW

Frequency Band (MHz)	Maximum peak output power Peak Gain: 1.2dBi			Body SAR Test Exclusion Threshold (mW)	Calculated Threshold Value (≤ 3.0 SAR is not required)
	conducted (dBm)	EIRP (dBm)	EIRP (mW)		
2402	7.15	8.35	6.84	19	1.060

- 2.) Operation frequency = 2450MHz and antenna separation distance = 5mm,
 Limb SAR Test Exclusion Threshold = 25mW

Frequency Band (MHz)	Maximum peak output power Peak Gain: 1.2dBi			Limb SAR Test Exclusion Threshold (mW)	Calculated Threshold Value (≤ 7.0 SAR is not required)
	conducted (dBm)	EIRP (dBm)	EIRP (mW)		
2402	7.15	8.35	6.84	25	1.060

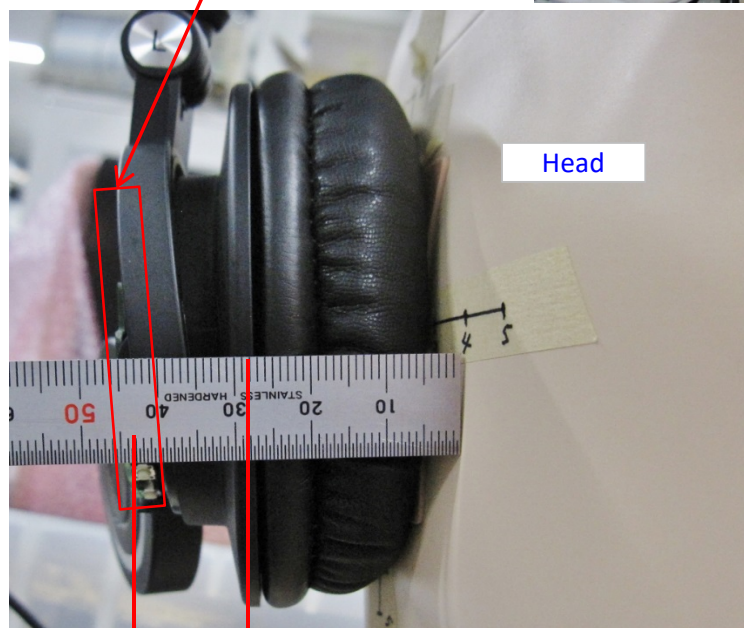
Note1: The SAR/MPE measurement is not necessary.

Note2: The conducted maximum peak output power is refer to report No.: 1880226R-RFUSP01V00 and 1880226R-RFUSP01V00-A from the DEKRA.

OATH-M50XBT PCBA Distance

1/1

◆Main PCBA Distance



Distance > 10mm

~Fin~