Application for FCC Certification On behalf of

Mettler Toledo(Changzhou) Measurement Technology Ltd.

Product Name: Bluetooth Adaptor

Model No.: ACM360-B0

FCC ID: 2ALAI17MT1011

(MPE Calculation)

Prepared For : Mettler Toledo(Changzhou) Measurement Technology Ltd. 111 West Taihu Road, Changzhou, Jiang, China

Prepared By : Audix Technology (Shanghai) Co., Ltd. 3F and 4F, 34Bldg 680 Guiping Rd., Caohejing Hi-Tech Park, Shanghai 200233, China

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Report No.:ACI-F17100Date of Test:Apr. 22, 2017Date of Report:Apr. 27, 2017

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TEST REPORT FOR FCC CERTIFICATE

Applicant	:	Mettler Toledo(Changzhou) Measurement Technology Ltd.				
EUT Description	:	Bluetooth Adaptor				
		(A) Model No. :		ACM360-B0		
		(B) Power Supply :		DC 5V		

Test Procedure Used:

FCC Part 1 Subpart I and Part 2 Subpart J KDB 447498 D01 General RF Exposure Guidance v06

The device described above is tested by Audix Technology (Shanghai) Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part2.

The test results are contained in this test report and Audix Technology (Shanghai) Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. This report also shows that the EUT (M/N: Refer to Sec2.1), which was tested on Apr. 22, 2017 is technically compliance with the FCC limits.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shanghai) Co., Ltd.

This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test :	Mar. 10, 2016	Date of Report :	Mar. <u>16</u> , 2016
Producer :	Alen He		
	ALAN HE / Assistant		
Review :	Byron Nu		
	BYRON WU / Deputy Assistant M	Manager	
(B)			-
AUDIX For an	nd on behalf of		
Audix Technology (Shar	nghai) Co., Ltd.		
	trong a		
Signatory :	Mouras		
Authorized Signature(s)	BYRON KWO/Assistant General	Manager	

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test

Description	:	Bluetooth Adaptor					
Type of EUT		\square Production \square Pre-product \square Pro-type					
Model Number	:	ACM360-B0					
Radio Tech	:	Bluetooth v4.0 BLE					
Channel Freq.	:	2402MHz-2480MHz					
Tested Freq.	:	2402MHz, 2440MHz, 2480MHz					
Modulation	:	GFSK					
Antenna Gain	:	PCB antenna 3 dBi					
Applicant	:	Mettler Toledo(Changzhou) Measurement Technology Ltd. 111 West Taihu Road, Changzhou, Jiang, China					

1.2	Description of Test Facility	
	Site Description (Semi-Anechoic Chamber)	: Sept. 17, 1998 file on Jan. 15, 2015 Renewed Federal Communications Commission FCC Engineering Laboratory 7435 Oakland Mills Road Columbia, MD 21046, USA
	Name of Firm	: Audix Technology (Shanghai) Co., Ltd.
	Site Location	: 3F 34 Bldg 680 Guiping Rd., Caohejing Hi-Tech Park, Shanghai 200233, China
	FCC registration Number	: 91789
	Accredited by NVLAP, Lab Code	: 200371-0
1.3	Measurement Uncertainty	

Output Power Expanded Uncertainty $U = \pm 1.56 \text{ dB}$

2 SUMMARY OF STANDARDS AND RESULTS

2.1 Applicable Standard

FCC Part1 §1.1310

2.2 Specification Limits

Limits for General Population/Uncontrolled Exposure

Emility for General Fopulation, encontrolled Exposure								
Frequency	Electric Field	Magnetic Field	Power	Averaging Time				
Range	Strength (E)	Strength (H)	Density (S)	$ E ^{2}$, $ H ^{2}$ or S				
(MHz)	(V/m)	(A/m)	(mW/cm^2)	(minutes)				
0.3-1.34	614	1.63	(100)*	30				
1.34-30	824/f	2.19/f	(180/f2)*	30				
30-300	27.5	0.073	0.2	30				
300-1500			f/1500	30				
1500-100,000			1.0	30				
f for any second s								

f = frequency in MHz

*Plane-wave equivalent power density

NOTE: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

The limit value 1.0mW/cm^2 is available for this EUT.

2.3 MPE Calculation Method

 $S = PG/(4 \pi R^2)$

 $R = [PG/(4 \pi S)]^{0.5}$

where: S = power density (in appropriate units, e.g. mW/ cm²)

P = power input to the antenna (in appropriate units, e.g., mW)

(the measured power value see Report: F17099 Section 5.6)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna (appropriate units, e.g., cm)

2.4 Calculated Result

Frequency	Peak Power	Output Power to Antenna	Antenna Gain		Power Density	Limit
(MHz)	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm^2)	(mW/cm^2)
2402	7.853	6.10	3	2.56	0.00311	1.0
2440	7.656	5.82	3	2.56	0.00296	1.0
2480	7.268	5.33	3	2.56	0.00271	1.0

2.4.1 Radio Frequency Radiation Exposure Evaluation

Separation distance R= 20cm.

Frequency	Peak Power	Output Power to Antenna	Antenna Gain		Limit	Distance
(MHz)	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm^2)	(cm)
2402	7.853	6.10	3	2.56	1.0	1.26
2440	7.656	5.82	3	2.56	1.0	1.25
2480	7.268	5.33	3	2.56	1.0	1.04

The antenna used for this transmitter must be installed to provide a separation distance of at least 1.26 cm from all persons.