RF EXPOSURE
Test Report

Report No.:	MTi220210009-01E2
Date of issue:	Mar. 03, 2022
Applicant:	SHENZHEN AUDIO TECHNOLOGY CO LIMITED
Product name:	Bluetooth Audio Receiver
Model(s):	BLT-2
FCC ID:	2A5CM-BLT-2

Shenzhen Microtest Co., Ltd.

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TEST RESULT CERTIFICATION	
Applicant:	**SHENZHEN AUDIO TECHNOLOGY CO LIMITED**
Address:	Room A28, 3rd Floor, Business Central Building, No. 3003-2 Zhen Xing Road, Futian District, Shenzhen City, Guangdong Province, China
Manufacturer:	**SHENZHEN AUDIO TECHNOLOGY CO LIMITED**
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Factory:	**SHENZHEN AUDIO TECHNOLOGY CO LIMITED**
Address:	Room A28, 3rd Floor, Business Central Building, No. 3003-2 Zhen Xing Road, Futian District, Shenzhen City, Guangdong Province, China
Product description	
Product name ..... :	Bluetooth Audio Receiver
Trademark .....:	BluDento
Model Name .....:	BLT-2
Serial Model	N/A
Standards.....:	N/A
Test procedure.....:	KDB 447498 D01 v06
Date of Test	
Date (s) of performance of tests ..... :	2022-02-18 ~ 2022-03-03
Test Result..... :	Pass

Testing Engineer : Yanice Xie

(Yanice Xie)

Technical Manager : Leon Chen

(Leon Chen)

Authorized Signatory : Tom Xue

(Tom Xue)

RF EXPOSURE EVALUATION

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) Radiation as specified in §1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	$*900/f^2$	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	$*180/f^2$	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

MPE Calculation Method

Friis transmission formula: $Pd= (Pout*G)\ (4*pi*R^2)$

Where

Pd= Power density in mW/cm2

Pout=output power to antenna in mW

G= Numeric gain of the antenna relative to isotropic antenna

Pi=3.1415926

R= distance between observation point and center of the radiator in cm(20cm)

Pd the limit of MPE, 1mW/cm2. If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

Measurement Result

BT:

Operation Frequency: 2402-2480MHz,

Power density limited: 1mW/ cm^2

Antenna Type: External Antenna;
BT antenna gain: 3dBi

R=20cm

mW=10^(dBm/10)

antenna gain Numeric=10^(dBi/10)= 10^(3/10)=2

BR+EDR:

Channel Freq. (MHz)	modulation	conducted power (dBm)	Tune-up power (dBm)	Max		Antenna		Evaluation result (mW/cm2)	Power density Limits (mW/cm2)
				tune-up power		Gain			
				(dBm)	(mW)	(dBi)	Numeric		
2402	GFSK	5.577	6±1	7	5.012	3	2.00	0.0020	1
2441		6.228	6±1	7	5.012	3	2.00	0.0020	1
2480		5.362	6±1	7	5.012	3	2.00	0.0020	1
2402	π/4-DQPSK	2.964	2±1	3	1.995	3	2.00	0.0008	1
2441		4.631	4±1	5	3.162	3	2.00	0.0013	1
2480		3.644	4±1	5	3.162	3	2.00	0.0013	1
2402	8DPSK	3.976	4±1	5	3.162	3	2.00	0.0013	1
2441		6.275	6±1	7	5.012	3	2.00	0.0020	1
2480		5.546	6±1	7	5.012	3	2.00	0.0020	1

Conclusion:

For the max result: 0.0020≤ 1.0 for 1g SAR, No SAR is required.

----END OF REPORT----