RF Exposure Evaluation

FCC ID: 2BMBX-NE-108

1. Client Information

Applicant	:	Shenzhen Shenghua Technology Co., LTD
Address	:	8 building, 3 floor, Hongfa Jiatli High-tech Park, Langxin Community, Shiyan Street, Baoan District, Shenzhen, China
Manufacturer	:	Shenzhen Shenghua Technology Co., LTD
Address	:	8 building, 3 floor, Hongfa Jiatli High-tech Park, Langxin Community, Shiyan Street, Baoan District, Shenzhen, China

2. General Description of EUT

EUT Name	:	TWS(true wireless stereo)earphones EDR	
Model(s) No.	:	NE-108	
Model Difference	:	----	
Product Description	:	Operation Frequency:	Bluetooth V5.0: 2402MHz~2480MHz
		Antenna Gain:	2.5dBi Ceramic Chip Antenna
Power Supply	:	USB Input: DC 5V/1A DC 3.7V 35mAh Rechargeable Li-ion battery	
Software Version	:	V201	
Hardware Version	:	V1.0	

Remark:

(1) The antenna gain provided by the applicant, the verified for the RF conduction test provided by TOBY test lab.

(2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

(3) The above antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

(4) More test information about the EUT please refer the RF Test Report.

1/F., Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, Shenzhen, Guangdong, China
Tel: +86 75526509301 Fax: +86 75526509195

SAR Test Exclusion Calculations

1. FCC: According to KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v06.
   (1) Clause 4.3: General SAR test reduction and exclusion guidance
   Sub clause 4.31: Standalone SAR test exclusion considerations
   1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6GHz at test separation distance≤5 mm are determined by:
   [(max. power of channel, including tune-up tolerance, mW)/(min. test separation, mm)]*[$\sqrt{f_{(GHz)}}$] ≤3.0 for 1-g SAR
   [(max. power of channel, including tune-up tolerance, mW)/(min. test separation, mm)]*[$\sqrt{f_{(GHz)}}$] ≤7.5.0 for 10-g SAR

2. Calculation:

Test separation: 5mm						
Bluetooth Mode (GFSK)						
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (dBm)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	-3.043	-3±1	-2	0.631	0.196	**3.0**
2.441	-3.687	-3±1	-2	0.631	0.197	**3.0**
2.480	-4.317	-4±1	-3	0.501	0.158	**3.0**
Bluetooth Mode (Pi/4-DQPSK)						
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (dBm)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	-1.919	-1±1	0	1	0.310	**3.0**
2.441	-2.458	-2±1	-1	0.794	0.248	**3.0**
2.480	-3.489	-3±1	-2	0.631	0.199	**3.0**

Test separation: 5mm						
Bluetooth LE 1M						
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (dBm)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	-3.682	-3±1	-2	0.631	0.196	**3.0**
2.440	-4.292	-4±1	-3	0.501	0.157	**3.0**
2.480	-5.373	-5±1	-4	0.398	0.125	**3.0**
Bluetooth LE 2M						
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (dBm)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	-3.477	-3±1	-2	0.631	0.196	**3.0**
2.440	-3.958	-3±1	-2	0.631	0.197	**3.0**
2.480	-5.240	-5±1	-4	0.398	0.125	**3.0**

The measurement results comply with the FCC Limit per 47 CFR 2.1093 for the uncontrolled RF Exposure and SAR Exclusion Threshold per KDB 447498 v06.

-----END OF THE REPORT-----