RF Exposure Evaluation
FCC ID: 2A365-D1

1. Client Information

Applicant	:	Guangzhou Qiangle Electronics Co., Ltd.
Address	:	1512, Zhongjiaohuitong Center (Building C2), No.4 Huitong 2nd Street, Hengli Town, Nansha District, Guangzhou City, Guangdong, China
Manufacturer	:	Guangzhou Qiangle Electronics Co., Ltd.
Address	:	1512, Zhongjiaohuitong Center (Building C2), No.4 Huitong 2nd Street, Hengli Town, Nansha District, Guangzhou City, Guangdong, China

2. General Description of EUT

EUT Name	:	Bluetooth Speaker	
Model(s) No.	:	D1, D2, D3, D5, D6, D7, D8, D9, D10, U1, U2, U3, U5, U6, U7	
Model Different	:	All PCB boards and circuit diagrams are the same, the only difference is that names and appearance.	
Product Description	:	Operation Frequency:	Bluetooth V5.2: 2402MHz~2480MHz
		Number of Channel:	Bluetooth 5.2(BDR+EDR): 79 channels
		RF Output Power:	-1.56dBm (Max)
		Antenna Gain:	0 dBi PIFA Antenna
		Modulation Type:	GFSK, π/4-DQPSK, 8-DPSK
		Bit Rate of Transmitter:	1/2/3Mbps
Power Supply	:	Input: DC 5V/2A DC 3.7V by 1500mAh Li-ion battery	
Software Version	:	Major force 2833	
Hardware Version	:	Major force 2833	
Sample ID	:	20211125-05_01-02	
Remark: The antenna gain provided by the applicant, the adapter and verified for the RF conduction test and adapter provided by TOBY test lab.			

Note: 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	-2.41	-2±1	-1.0	0.794	0.246	**3.0**
2.441	-1.99	-2±1	-1.0	0.794	0.248	**3.0**
2.480	-1.76	-1±1	0	1.000	0.315	**3.0**
Bluetooth Mode (π /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	-2.39	-2±1	-1.0	0.794	0.246	**3.0**
2.441	-2.01	-2±1	-1.0	0.794	0.248	**3.0**
2.480	-1.82	-1±1	0	1.000	0.315	**3.0**
Bluetooth Mode (8-DPSK)						
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	-2.11	-2±1	-1.0	0.794	0.246	**3.0**
2.441	-1.71	-1±1	0	1.000	0.315	**3.0**
2.480	-1.56	-1±1	0	1.000	0.315	**3.0**

Conclusion:

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 REPORT-----