



# RF Exposure Evaluation

## FCC ID: 2BLXK-PI8TY

### 1. Client Information

Applicant	:	DONGGUAN XIAOKE ELECTRONIC TECHNOLOGY CO.,LTD
Address	:	No.18 WUSONG ROAD, YUWU MANAGEMENT DONGCHEN DISTRICT, DONGGUAN CITY, GUANGDONG CHINA
Manufacturer	:	DONGGUAN XIAOKE ELECTRONIC TECHNOLOGY CO.,LTD
Address	:	No.18 WUSONG ROAD, YUWU MANAGEMENT DONGCHEN DISTRICT, DONGGUAN CITY, GUANGDONG CHINA

### 2. General Description of EUT

EUT Name	:	PORTABLE BLUETOOTH SPEAKER	
Model(s) No.	:	PI8ty	
Model Difference	:	----	
Product Description	:	Operation Frequency:	Bluetooth V5.2: 2402MHz~2480MHz
	:	Antenna Gain:	1.0dBi PCB Antenna
Power Supply	:	USB Input: DC 5V DC 3.6V 3400mAh Rechargeable Li-ion battery	
Software Version	:	1.0	
Hardware Version	:	1.0	
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.



## 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  $\leq 5$  mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{\text{(GHz)}}}] \leq 3.0 \text{ for 1-g SAR}$$

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{\text{(GHz)}}}] \leq 7.5.0 \text{ for 10-g SAR}$$

### 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	2.819	2±1	3	1.995	0.618	3.0
2.441	3.124	3±1	4	2.512	0.785	3.0
2.480	2.978	2±1	3	1.995	0.628	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	3.671	3±1	4	2.512	0.779	3.0
2.441	3.898	3±1	4	2.512	0.785	3.0
2.480	3.699	3±1	4	2.512	0.791	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	4.186	4±1	5	3.162	0.980	3.0
2.441	4.394	4±1	5	3.162	0.988	3.0
2.480	4.146	4±1	5	3.162	0.996	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-----

