

RF Exposure Evaluation

FCC ID: 2AJOE7198-06

1. Client Information

Applicant : Shenzhen Suoba Electronics Limited
Address : 4th JianShe Industrial Park, 71 area, Baoan District, ShenZhen, China
Manufacturer : Shenzhen Suoba Electronics Limited
Address : 4th JianShe Industrial Park, 71 area, Baoan District, ShenZhen, China

2. General Description of EUT

EUT Name	:	True Wireless Earbud and Mic	
Models No.	:	7198-06	
Brand Name	:	N/A	
Model Difference	:	N/A	
Product Description	:	Operation Frequency:	Bluetooth 4.1: 2402~2480 MHz
	:	Number of Channel:	Bluetooth: 79 Channels
	:	Max Peak Output Power:	Bluetooth: 4.889 dBm(GFSK)
	:	Antenna Gain:	1.5 dBi PCB Antenna
	:	Modulation Type:	GFSK 1Mbps(1 Mbps) π /4-DQPSK(2 Mbps) 8-DPSK(3 Mbps)
Power Supply	:	DC Voltage Supplied by the Host System. DC Supply by the Battery.	
Power Rating	:	DC 5.0 V by Host System. DC 3.7 V by 40mAh Li-Lion Battery.	
Connecting I/O Port(S)	:	Please refer to the User's Manual	

Note:

More test information about the EUT please refer to 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 ≤ 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	4.273	4 ± 1	5	3.162	0.980	3.0
2.441	4.651	4 ± 1	5	3.162	0.988	3.0
2.480	4.889	4 ± 1	5	3.162	0.996	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	2.504	2 ± 1	3	1.995	0.618	3.0
2.441	3.031	3 ± 1	4	2.512	0.785	3.0
2.480	3.241	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	2.711	2 ± 1	3	1.995	0.618	3.0
2.441	2.471	2 ± 1	3	1.995	0.623	3.0
2.480	3.370	3 ± 1	4	2.512	0.791	3.0

So standalone SAR measurements are not required.

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