

RF Exposure Evaluation

FCC ID: 2ADAH CST-02

1. Client Information

Applicant : ShenZhen Conson Technology CO.,Ltd.
Address : Room 1309, JunFeng Building GongLe Community, XiXiang Avenue, BaoAn, ShenZhen, GD, China.
Manufacturer : ShenZhen Conson Technology CO.,Ltd.
Address : Room 1309, JunFeng Building GongLe Community, XiXiang Avenue, BaoAn, ShenZhen, GD, China.

2. General Description of EUT

EUT Name	:	Stanley Cup Bluetooth Speaker	
Models No.	:	CST-02	
Model Difference	:	N/A	
Product Description	:	Operation Frequency: Bluetooth:2402~2480MHz	
	:	Number of Channel:	Bluetooth:79 Channels
	:	Max Peak Output Power:	8-DPSK: -2.039 dBm
	:	Antenna Gain:	0 dBi PCB Antenna
	:	Modulation Type:	GFSK 1Mbps(1 Mbps) π /4-DQPSK(2 Mbps) 8-DPSK(3 Mbps)
Power Supply	:	DC Voltage supplied from Host System by USB cable DC power by Li-ion Battery	
Power Rating	:	DC 5.0V by USB cable. DC 3.7V Li-ion Battery	
Connecting I/O Port(S)	:	Please refer to the User's Manual	

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 v05r02.
 - (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:
$$\frac{[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] \times [\sqrt{f_{\text{(GHz)}}}]}{\leq 3.0 \text{ for 1-g SAR}}$$

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

2.

Calculation:

Bluetooth Mode (GFSK)						
Frequency (GHz)	Conducted Power (dBm)	Ant Gain (dBi)	TX Power (mW)	Distance (mm)	Calculation Value	Threshold Value
2.402	-4.483	0	0.356	5	0.1104	3.0
2.441	-2.575	0	0.553	5	0.1727	3.0
2.480	-3.381	0	0.459	5	0.1446	3.0
Bluetooth Mode (8-DPSK)						
Frequency (GHz)	Conducted Power (dBm)	Ant Gain (dBi)	TX Power (mW)	Distance (mm)	Calculation Value	Threshold Value
2.402	-4.058	0	0.393	5	0.1218	3.0
2.441	-2.039	0	0.625	5	0.1954	3.0
2.480	-2.990	0	0.502	5	0.1582	3.0

So standalone SAR measurements are not required.