

RF Exposure Evaluation

FCC ID: 2ABHA0002

1. Client Information

Applicant	:	NINGBO CSTAR IMP&EXP CO., LTD
Address	:	Floor 4, Building E, No. 655-90, Qiming Road, Yinzhou Investment & Innovation Center, Ningbo, China
Manufacturer	:	ShenZhen C-Star Electronic Tech. co., Ltd
Address	:	2, 3/F, Building B, No. 2 Bada Industrial Park, Yongfu Road, Heping Community, Fuyong Town, Baoan District, Shenzhen, China

2. General Description of EUT

EUT Name	:	Stretch Bluetooth Selfie Stick	
Models No.	:	SL009, 7140-51BK	
Model difference	:	All these models are identical in the same PCB, layout and electrical circuit, the only difference is model name for commercial.	
Product Description	:	Operation Frequency: Bluetooth:2402~2480MHz	
	:	Number of Channel:	Bluetooth:79 Channels
	:	Max Peak Output Power:	GFSK: 1.04 dBm
	:	Antenna Gain:	2.3 dBi PCB Antenna
	:	Modulation Type:	GFSK 1Mbps(1 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 55 mAh 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:

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

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

2.

Calculation:

Test separation: 5mm					
Bluetooth Mode (GFSK)					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	1.04	±0.5	1.426	0.442	3.0
2.441	1.03	±0.5	1.422	0.444	3.0
2.480	0.43	±0.5	1.239	0.390	3.0

So standalone SAR measurements are not required.