



# RF Exposure Evaluation

## FCC ID: 2A8EE-INSKAM320

### 1. Client Information

<b>Applicant</b>	:	Shenzhen Sulang Technology Co., Ltd
<b>Address</b>	:	Room 2508, Building 11, Tianan Yungu Park Industrial, Gangtou Community, Bantian Street, Longgang District, Shenzhen, China
<b>Manufacturer</b>	:	Shenzhen Sulang Technology Co., Ltd
<b>Address</b>	:	Room 2508, Building 11, Tianan Yungu Park Industrial, Gangtou Community, Bantian Street, Longgang District, Shenzhen, China

### 2. General Description of EUT

<b>EUT Name</b>	:	WiFi Digital microscope
<b>Model(s) No.</b>	:	inskam320, inskam320-B, inskam315-W, inskam317, inskam322, inskam324, inskam326, inskam328, inskam330, inskam332, inskam336, inskam338, inskam352, inskam356, inskam358, inskam359, inskam362, inskam364, inskam368, inskam388
<b>Model Different</b>	:	All these models are identical in the same PCB, layout and electrical circuit, The only difference is appearance.
<b>Product Description</b>	:	Operation Frequency: 2412MHz~2462MHz
	:	Antenna Gain: 1.52dBi Copper tube antenna
<b>Power Supply</b>	:	USB Input: DC 5V DC 3.7V by 800mAh 2.96Wh Rechargeable Li-ion battery
<b>Software Version</b>	:	WH2405 V002
<b>Hardware Version</b>	:	YPC- 320-5/1
<b>Remark:</b> The antenna gain and adapter provided by the applicant, the adapter and verified for the RF conduction test 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:

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

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



**2. Calculation:**

Test separation: 5mm						
802.11b						
Frequency (MHz)	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
2412	6.23	6±1	7	5.012	1.557	3.0
2437	5.86	5±1	6	3.981	1.243	3.0
2462	5.94	5±1	6	3.981	1.249	3.0

Test separation: 5mm						
802.11g						
Frequency (MHz)	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
2412	4.80	4±1	5	3.162	0.982	3.0
2437	4.57	4±1	5	3.162	0.987	3.0
2462	4.67	4±1	5	3.162	0.992	3.0

Test separation: 5mm						
802.11n(HT20)						
Frequency (MHz)	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
2412	4.53	4±1	5	3.162	0.982	3.0
2437	4.35	4±1	5	3.162	0.987	3.0
2462	4.31	4±1	5	3.162	0.992	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-----

