RF Exposure Evaluation

FCC ID: 2AEUS-A04C

1. Client Information

Applicant	:	Shenzhen Sunshine Technology Development Co.,Ltd
Address	:	4/F, block 4, HongHuaLing Industrial Park(zone 2), Taoyuan street, Xili, Nanshan District, Shenzhen, China
Manufacturer	:	Shenzhen Sunshine Technology Development Co.,Ltd
Address	:	4/F, block 4, HongHuaLing Industrial Park(zone 2), Taoyuan street, Xili, Nanshan District, Shenzhen, China

2. General Description of EUT

EUT Name	:	Action camera	
Models No.	:	A04C, A04A, A04B	
Model Difference	:	All models are identical in the same PCB layout, interior structure and electrical circuits, the only difference is model name for commercial purpose.	
Product Description	:	Operation Frequency: 802.11b/g/n(HT20): 2412MHz~2462MHz 802.11n(HT40): 2422MHz~2452MHz	
		Number of Channel:	802.11b/g/n(HT20):11 channels **see note(3)** 802.11n(HT40): 7 channels **see note(3)**
		Max Peak Output Power:	802.11b: 9.18 dBm 802.11g: 9.11 dBm 802.11n (HT20): 9.06dBm 802.11n (HT40): 9.07dBm
		Antenna Gain:	2 dBi (Integral Antenna)
		Modulation Type:	802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g: OFDM 802.11n: OFDM
Power Supply	:	DC power supplied by AC/DC Adapter DC power by Li-ion Battery	
Power Rating	:	Input: AC 120V~240V 50/60Hz 0.5A. Output: 5V, 1000mA. DC 3.7V 900mAh 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.

1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, Shenzhen, China
Tel: +86 75526509301 Fax: +86 75526509195

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:
   [(max. power of channel, including tune-up tolerance, mW)/(min. test separation, mm)]*[$\sqrt{f_{(GHz)}}$] ≤3.0 for 1-g SAR
   [(max. power of channel, including tune-up tolerance, mW)/(min. test separation, mm)]*[$\sqrt{f_{(GHz)}}$] ≤7.5.0 for 10-g SAR

2. Calculation:

Test separation: 5mm						
WiFi Mode(802.11b)						
Frequency (GHz)	Conducted Power (dBm)	Ant Gain (dBi)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.412	9.13	2	±0.5	9.18	2.85	**3.0**
2.437	9.18	2	±0.5	9.29	2.90	**3.0**
2.462	9.15	2	±0.5	9.23	2.90	**3.0**
WiFi Mode(802.11g)						
Frequency (GHz)	Conducted Power (dBm)	Ant Gain (dBi)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.412	9.08	2	±0.5	9.08	2.82	**3.0**
2.437	9.06	2	±0.5	9.04	2.82	**3.0**
2.462	9.11	2	±0.5	9.14	2.87	**3.0**
WiFi Mode(802.11n(HT20))						
Frequency (GHz)	Conducted Power (dBm)	Ant Gain (dBi)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.412	9.06	2	±0.5	9.36	2.81	**3.0**
2.437	9.02	2	±0.5	8.95	2.80	**3.0**
2.462	9.03	2	±0.5	8.97	2.82	**3.0**
WiFi Mode(802.11n(HT40))						
Frequency (GHz)	Conducted Power (dBm)	Ant Gain (dBi)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.422	9.01	2	±0.5	8.93	2.78	**3.0**
2.437	9.07	2	±0.5	9.06	2.83	**3.0**
2.452	9.05	2	±0.5	9.02	2.82	**3.0**

So standalone SAR measurements are not required.