



RF Exposure Evaluation

FCC ID: 2A8OK-IA800

1. Client Information

Applicant	:	Accion Innovations LLC
Address	:	3599 ROWLEY DR San Jose, CA 95132-1347 US
Manufacturer	:	Accion Innovations LLC
Address	:	3599 ROWLEY DR San Jose, CA 95132-1347 US

2. General Description of EUT

EUT Name	:	Action Camera	
Model(s) No.	:	iA800, iA100, iA120, iA140, iA160, iA180, iA300, iA320, iA340, iA360, iA380, iA500, iA520, iA540, iA560, iA580, iA200, iA220, iA240, iA260, iA280, iA400, iA420, iA440, iA460, iA480, iA600, iA620, iA640, iA660, iA680, iA820, iA840, iA860, iA880, iA700, iA720, iA740, iA760, iA780, iA900, iA920, iA940, iA960, iA980, iAX10, iAX20, iAX30, iAX40, iAX50, iAX60, iAX70, iAX80, iAX90	
Model Different	:	All these models are identical in the same PCB, layout and electrical circuit, the only difference is different customers, different model name.	
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 802.11n(HT40): 7 channels
		Antenna Gain:	2.51dBi FPC Antenna
		Modulation Type:	802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g/n:OFDM(BPSK,QPSK,16QAM,64 QAM)
Power Supply	:	USB Input: DC 5V/2A DC 3.7V by 1350mAh Rechargeable Li-ion battery	
Software Version	:	V2.1.0.1-B	
Hardware Version	:	V1	
Remark: 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 ≤ 5 mm are determined by:

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

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



2. Calculation:

Test separation: 5mm						
802.11b						
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
2.412	7.37	7±1	8	6.31	1.960	3.0
2.437	7.19	7±1	8	6.31	1.970	3.0
2.462	7.18	7±1	8	6.31	1.980	3.0
802.11g						
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
2.412	6.55	6±1	7	5.012	1.557	3.0
2.437	7.16	7±1	8	6.31	1.970	3.0
2.462	6.85	6±1	7	5.012	1.573	3.0
802.11n(HT20)						
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
2.412	7.08	7±1	8	6.31	1.960	3.0
2.437	7.02	7±1	8	6.31	1.970	3.0
2.462	6.99	6±1	7	5.012	1.573	3.0
802.11n(HT40)						
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
2.422	7.39	7±1	8	6.31	1.964	3.0
2.437	7.29	7±1	8	6.31	1.970	3.0
2.452	7.09	7±1	8	6.31	1.976	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-----

