

# RF Exposure Evaluation

## FCC ID: 2AFRF-CF101

### 1. Client Information

**Applicant** : CamFi Limited  
**Address** : Room A1002-1, Venture Building, TsingHua Science Park, No.101 College Road, Tangjiawan, Zhuhai, PRC.  
**Manufacturer** : CamFi Limited  
**Address** : Room A1002-1, Venture Building, TsingHua Science Park, No.101 College Road, Tangjiawan, Zhuhai, PRC.

### 2. General Description of EUT

<b>EUT Name</b>	:	CamFi Remote Camera Controller
<b>Models No.</b>	:	CF101
<b>Models Difference</b>	:	N/A
<b>Product Description</b>	:	Operation Frequency: WiFi 802.11b/g/n(HT20): 2412MHz~2462MHz 802.11n(HT40): 2422MHz~2452MHz
	:	Number of Channel: WiFi 802.11b/g/n(HT20):11 channels 802.11n(HT40): 7 channels
	:	Max Peak Output Power: 802.11b: 9.18 dBm 802.11g: 9.13 dBm 802.11n (HT20): 9.04 dBm 802.11n (HT40): 9.06 dBm
	:	Antenna Gain: 0.9 dBi PIFA Antenna
	:	Modulation Type: 802.11b: CCK, QPSK, BPSK 802.11g: OFDM 802.11n: OFDM
<b>Power Supply</b>	:	DC power by USB cable form Host System. DC power by Li-ion battery.
<b>Power Rating</b>	:	DC 5V by USB Cable from PC system. DC 3.7V by Li-ion Battery.
<b>Connecting I/O Port(S)</b>	:	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  $\leq 5$  mm are determined by:

- [(max. power of channel, including tune-up tolerance, mW)/(min. test separation, mm)] \*  $\sqrt{f_{\text{(GHz)}}} \leq 3.0$  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						
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	9.18	0.9	±0.5	9.290	2.885	3.0
2.437	9.15	0.9	±0.5	9.226	2.880	3.0
2.462	9.17	0.9	±0.5	9.268	2.909	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	0.9	±0.5	9.078	2.820	3.0
2.437	9.13	0.9	±0.5	9.183	2.867	3.0
2.462	9.09	0.9	±0.5	9.099	2.855	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	9.02	0.9	±0.5	8.954	2.781	3.0
2.437	8.98	0.9	±0.5	8.872	2.770	3.0
2.462	9.04	0.9	±0.5	8.995	2.823	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	9.06	0.9	±0.5	9.036	2.813	3.0
2.437	8.99	0.9	±0.5	8.892	2.776	3.0
2.452	9.05	0.9	±0.5	9.016	2.824	3.0

**So standalone SAR measurements are not required.**