RF EXPOSURE EVALUATION REPORT

APPLICANT	:	Anker Innovations Limited
PRODUCT NAME	:	eufyCam 2C
MODEL NAME	:	T8113V
BRAND NAME	:	eufy SECURITY
FCC ID	:	2AOKB-T8113V
STANDARD(S)	:	FCC 47 CFR Part 2(2.1091)
RECEIPT DATE	:	2022-09-19
TEST DATE	:	2022-09-20 to 2022-09-26
ISSUE DATE	:	2022-10-13

Edited by: Xie Yiyun

Xie Yiyun (Rapporteur)

Approved by: Shen Junsheng

Shen Junsheng (Supervisor)

MORLAB
Shenzhen Morlab Communications Technology Co., Ltd.
FL1-3, Building A, FeiYang Science Park, No.8 LongChang Road,
Block67, BaoAn District, ShenZhen , GuangDong Province, P. R. China
Tel: 86-755-36698555 Fax: 86-755-36698525
Http://www.morlab.cn E-mail: service@morlab.cn

DIRECTORY

Change History		
Version	**Date**	**Reason for Change**
1.0	2022-10-13	First edition

1. Technical Information

Note: Provide by applicant.

1.1 Applicant and Manufacturer Information

Applicant:	Anker Innovations Limited
Applicant Address:	Room 1318-19, Hollywood Plaza, 610 Nathan Road, Mongkok, Kowloon, Hong Kong
Manufacturer:	Anker Innovations Limited
Manufacturer Address:	Room 1318-19, Hollywood Plaza, 610 Nathan Road, Mongkok, Kowloon, Hong Kong

1.2 Equipment under Test (EUT) Description

Product Name:	eufyCam 2C
EUT No.:	9#
Hardware Version:	T8113-V-MAIN-V0.4
Software Version:	3.0.1.2
Frequency Bands:	WLAN 2.4GHz: 2412 MHz ~ 2462 MHz
Modulation Mode:	802.11b: DSSS 802.11a/g/n-HT20: OFDM
Antenna Type:	FPC Antenna
Antenna Gain:	WLAN 2.4GHz: 2.55dBi

Note: When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% confidence intervals.

1.3 Applied Reference Documents

Leading reference documents for testing:

Identity	Document Title	Method determination /Remark
FCC 47CFR Part 2(2.1091)	Radio Frequency Radiation Exposure Assessment: mobile devices	No deviation
KDB 447498 D04v01	General RF Exposure Guidance	No deviation
Note 1: The test item is not applicable. **Note 2:** Additions to, deviation, or exclusions from the method shall be judged in the "method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table.		

2. Device Category and RF Exposure Limit

Per user manual, Based on 47CFR 2.1091, this device belongs to mobile device category with General Population/Uncontrolled exposure.

Mobile Devices:

47CFR 2.1091(b)

For purposes of this section, a mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons. In this context, the term “fixed location” means that the device is physically secured at one location and is not able to be easily moved to another location. Transmitting devices designed to be used by consumers or workers that can be easily re-located, such as wireless devices associated with a personal computer, are considered to be mobile devices if they meet the 20 centimeter separation requirement.

General Population/Uncontrolled Exposure:

The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity. Warning labels placed on low-power consumer devices such as cellular telephones are not considered sufficient to allow the device to be considered under the occupational/controlled category, and the general population/uncontrolled exposure limits apply to these devices.

Table 1—Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*($180/f^2$)	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	f/1500	30
1500-100,000	-	-	1.0	30

f = frequency in MHz* = Plane-wave equivalent power density

3. RF Output Power

➢ **<WLAN 2.4GHz>**

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-up Power	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	CH 1	2412	18.38	19.0	87.60
		CH 6	2437	18.32	19.0	
		CH 11	2462	18.20	19.0	
	802.11g 6Mbps	CH 1	2412	15.10	16.0	100.00
		CH 6	2437	14.72	15.5	
		CH 11	2462	15.46	16.0	
	802.11n-HT20 MCS0	CH 1	2412	15.06	16.0	100.00
		CH 6	2437	15.01	16.0	
		CH 11	2462	15.28	16.0	

Note:

1. According to KDB 447498 Section 4.3, MPE assessment is based on source-based time-averaged maximum conducted output power of the RF channel requiring assessment, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.
2. The output power of WLAN is derived from the report SZ22090197W01.

4. RF Exposure Assessment

➢ **Standalone Transmission Assessment**

Bands	Frequency (MHz)	Tune-up Power (dBm)	Antenna Gain (dBi)	EIRP (mW)	PD (mW/cm²)	Limit (mW/cm²)
WLAN 2.4GHz	2412	19.0	2.55	142.89	0.028	1.0

Note:

1. According to KDB 447498, MPE assessment is based on source-based time-averaged maximum conducted output power of the RF channel requiring assessment, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.
2. MPE calculate method

$$S = PG/4\pi R^2$$

Where: S= Power density (in appropriate units, e.g. mW/cm^2)
P = Time-average maximum tune-up power (in appropriate units, e.g. dBm)
G = numeric gain of the antenna (in appropriate units, e.g. dBi)
R = Separation distance to the centre of radiation of the antenna (20cm)

➢ **Simultaneous Transmission Assessment**

This device only incorporates a WLAN transmitter, therefore simultaneous assessment is not required.

➢ **Conclusion**

According to FCC 47 CFR Part 2(2.1091), this device complies with human exposure basic restrictions.

Annex A General Information

1. Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Address:	FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

3. Facilities and Accreditations

The FCC designation number is CN1192, the test firm registration number is 226174.

END OF REPORT