

# **RF EXPOSURE EVALUATION REPORT**

APPLICANT	: Anker Innovations Limited
PRODUCT NAME	: eufyCam 2C
MODEL NAME	: T8113
BRAND NAME	: eufy SECURITY
FCC ID	: 2AOKB-T8113
STANDARD(S)	47CFR 2.1091 KDB 447498
RECEIPT DATE	: 2019-08-12
TEST DATE	: 2019-09-16
ISSUE DATE	: 2019-09-16

Edited by:

Gan Yueming Gan yueming (Rapporteur)

Peng Huarui (Supervisor)

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Approved by:



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Change history					
Version	Date	Reason of changed			
1.0 2019-09-16		Original			



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**D** 



Note: Provide by manufacturer.

## **1.1 Applicant and Manufacturer Information**

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

## **1.2 Equipment under Test (EUT) Description**

EUT Name:	eufyCam 2C	
Hardware Version:	V3	
Software Version:	V1.1.3	
Frequency Bands:	WLAN 2.4GHz: 2412 MHz ~2462 MHz	
Modulation Mode:	802.11b: DSSS 802.11g/n-HT20: OFDM	
Antenna Type: FPC antenna		
Antenna Gain: 0 dBi		



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## 1.3 Identification of all used EUT

The EUT identity consists of numerical and letter characters, the letter character indicates the test sample, and the following two numerical characters indicate the software version of the test sample.

EUT Identity	Hardware Version	Software Version
1#	V3	V1.1.3

## **1.4 Applied Reference Documents**

Leading reference documents for testing:

No.	Identity	Document Title	Method determination /Remark
1	47 CFR§2.1091	Radio Frequency Radiation Exposure Evaluation: mobile devices	No deviation
2	KDB 447498 D01v06	General RF Exposure Guidance	No deviation



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## REPORT No.: SZ19070443S01 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.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	Averaging time (minutes)
(1	B) Limits for General	Population/Uncontro	lled Exposure	
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	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



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#### <WLAN 2.4GHz>

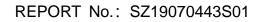
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-up Power	Duty Cycle %
	902 11h	CH 1	2412	17.65	18.0	
	802.11b 1Mbps	CH 6	2437	17.78	18.0	99.28
2.4GHz WLAN		CH 11	2462	17.92	18.0	
2.4GHZ WLAN	902 11 a	CH 1	2412	16.35	17.0	
	802.11g 6Mbps	CH 6	2437	16.42	17.0	95.49
	olviops	CH 11	2462	16.51	17.0	
	802.11n-HT20	CH 1	2412	16.47	17.0	
	MCS0	CH 6	2437	16.38	17.0	95.13
	MCGO	CH 11	2462	16.52	17.0	



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# **4. RF Exposure Evaluation**

#### > Standalone transmission evaluation:

	Frequency	Maximum	Antenna	EIRP	Power	Limit for
Bands	Frequency (MHz)	Tune-up Power	Gain		density	MPE
	(IVI⊓∠)	(dBm)	(dBi)	(mW)	(mW/cm²)	(mW/cm²)
WLAN 2.4GHz	2462	18.0	0	63.1	0.012	1.0

#### Note:

1. According to KDB 447498, SAR test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.

2. MPE calculate method

Power Density = EIRP/ $4\pi R^2$ 

Where: EIRP = P+G

P = Output Power (dBm)

G = Antenna Gain (dBi)

R = Separation Distance (20cm)

#### > Simultaneous transmission evaluation:

This device only incorporates a WLAN 2.4G transmitter, Therefore simultaneous SAR evaluation is not required.



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# **Annex A General Information**

#### 1. Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.		
	Morlab Laboratory		
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Laboratory Address:	Block 67, BaoAn District, ShenZhen, GuangDong Province, P.		
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#### 2. Identification of the Responsible Testing Location

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	Morlab Laboratory
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