Maximum Permissible Exposure Evaluation

FCC ID: 2AK77-W1

1. Client Information

Applicant	:	Shenzhen Yuetu Network Technology Ltd.
Address	:	3/F, Yinjin Industrial Park, Liuxian 2 Road, Bao'an District, Shenzhen, Guangdong, China
Manufacturer	:	Shenzhen Yuetu Network Technology Ltd.
Address	:	3/F, Yinjin Industrial Park, Liuxian 2 Road, Bao'an District, Shenzhen, Guangdong, China

2. General Description of EUT

EUT Name	:	DashCam	
Models No.	:	W1	
Product Description	:	Operation Frequency:	**2.4G WIFI:** 802.11b/g/n(HT20): 2412MHz~2462MHz 802.11n(HT40): 2422MHz~2452MHz **5G WIFI:** U-NII-1: 5180MHz~5240MHz U-NII-3: 5745MHz~5825MHz
		Antenna Gain:	7dBi FPC Antenna
Power Supply	:	DC Voltage supplied by DC Adapter DC Voltage supplied by Li-ion battery	
Power Rating	:	DC Adapter (C001): Input: DC 12~24V Output: DC 5V, 2.1A/1.0A DC 3.7V by 120mAh Li-ion battery	
Connecting I/O Port(S)	:	Please refer to the User's Manual	
Note: More information about the RF function, please refer the RF test reports.			

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MPE Calculations for WIFI

1. **Antenna Gain:**

   FPC Antenna: 7dBi.

2. **EUT Operation Condition:**

   Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

3. **Exposure Evaluation:**

   Equation from page 18 of OET Bulletin 65, Edition 97-01

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

   Where

   S: power density

   P: power input to the antenna

   G: power gain of the antenna in the direction of interest relative to an isotropic radiator.

   R: distance to the center of radiation of the antenna

4. **Test Result:**

Mode	Conducted Power(max) (dBm)	Turn-up Power (dB)	Max tune up power (dBm) [P]	ANT Gain (dBi) [G]	Distance (cm) [R]	Power Density (mW/cm^2) [S]
802.11b	17.70	17±1	18	7	20	0.06291
802.11g	16.02	16±1	17	7	20	0.04997
802.11n (HT20)	15.75	15±1	16	7	20	0.03970
802.11n (HT40)	13.54	13±1	14	7	20	0.02505
U-NII-1 (5180~5240MHz)	12.59	12±1	13	7	20	0.01989
U-NII-3 (5745~5825MHz)	7.04	7±1	8	7	20	0.00629

Note: 2.4G WIFI and 5G WIFI can't work together.

5. Conclusion:

As specified in Table 1B of 47 CFR 1.1310- Limits for Maximum Permissible Exposure (MPE),

Limits for General Population/ Uncontrolled Exposure

Frequency Range (MHz)	Power density (mW/cm^2)
300-1,500	F/1500
1,500-100,000	1.0

For 802.11b/g/n:2412~2462 MHz
U-NII-1: 5180MHz~5240MHz
U-NII-3: 5745MHz~5825MHz
MPE limit S: $1mW/cm^2$
The MPE is calculated as ***$0.06291mW/cm^2 < limit\ 1mW/cm^2$***. So, RF exposure limit warning or SAR test are not required.

The EUT will only be used with a separation of 20cm or greater between the antenna and nearby persons and can therefore be considered a mobile transmitter per 47 CFR2.1091 (b).

The RF Exposure Information page from the manual is included here for reference.

Note

For a more detailed features description, please refer to the RF Test Report.

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