

Maximum Permissible Exposure Evaluation

FCC ID: 2AQ7C-L100

1. Client Information

Applicant	:	SHENZHEN TOVISION TECHNOLOGY CO., LTD
Address	:	5B1, Building 4, Fuhong industrial park, Fuhai street, Bao'an District, SHENZHEN City, CHINA.
Manufacturer	:	SHENZHEN TOVISION TECHNOLOGY CO., LTD
Address	:	5B1, Building 4, Fuhong industrial park, Fuhai street, Bao'an District, SHENZHEN City, CHINA.

2. General Description of EUT

EUT Name	:	trail camera	
Models No.	:	L100	
Model Different	:	N/A	
Product Description	:	Operation Frequency:	GFSK: 2478MHz
		RF Output Power:	GFSK:
		Antenna Gain:	2dBi Dipole Antenna
		Modulation Type:	GFSK
Power Supply	:	DC Voltage by AC/DC Adapter	
Power Rating	:	DC 12*1.5V AA Battery. DC 6V from USB Port.	
Software Version	:	L100_V010	
Hardware Version	:	L100_M_V02	

MPE Calculations for WIFI

1. Antenna Gain:

Dipole Antenna: 2dBi.

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]
GFSK	22.355	22±1	23	2	20	0.0629

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 GFSK:2478MHz

MPE limit S: 1mW/ cm²

The MPE is calculated as $0.0629\text{mW} / \text{cm}^2 < \text{limit } 1\text{mW} / \text{cm}^2$. 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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