Shenzhen Toby Technology Co., Ltd.

Maximum Permissible Exposure Evaluation
FCC ID: 2AOQ6-FW101P

1. Client Information

Applicant	:	ChongQing Lavid Industrial Co., Ltd.
Address	:	No.2 Workshop, Electronic and Electrical Manufacturing Base, Union Community, Chenjiaba Street, Wanzhou District, Chongqing, China
Manufacturer	:	ChongQing Lavid Industrial Co., Ltd.
Address	:	No.2 Workshop, Electronic and Electrical Manufacturing Base, Union Community, Chenjiaba Street, Wanzhou District, Chongqing, China

2. General Description of EUT

EUT Name		WIFI Smart Camera	
Models No.		MW101P, A10, FW201T, RW104P, RW204Y, FW101P	
Model Different		All these models are identical in the same PCB, layout and electrical circuit, the only difference is appearance color.	
Product Description	:	Operation Frequency:	802.11b/g/n(HT20): 2412MHz~2462MHz
			802.11n(HT40): 2422MHz-2452MHz
		Antenna Gain:	2.0dBi PCB Antenna
Power Rating	:	USB Input: DC 5V/1A DC 3.7V Rechargeable Li-ion battery	
Software Version	:	V1.0	
Hardware Version	:	V1.0	
Connecting I/O Port(S)	:	Please refer to the User's Manual	
Remark	:	the evaluation report used the EUT(HC-C-202405-0242-04-01-2#).	

TB-RF-074-1.0

Method of Measurement for FCC

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

2. **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

3. **Simultaneous transmission MPE Considerations**
   According to KDB447498: All transmitters and antennas in the host must be either evaluated for MPE compliance, by measurement or computational modeling, or qualify for the standalone MPE test exclusion in section 7.1. Simultaneous transmission MPE test exclusion applies when the sum of the MPE ratios for all simultaneous transmitting antennas incorporated in a host device, based on the calculated/estimated, numerically modeled or measured field strengths or power density, is ≤ 1.0.
   This means that:
   $\sum$ of MPE ratios ≤ 1.0

4. Test Result:

Mode	N_{TX}	Freq. (MHz)	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	1	2412	11.3	11±1	12	2.0	20	0.00499
		2437	11.45	11±1	12	2.0	20	0.00499
		2462	11.19	11±1	12	2.0	20	0.00499
802.11g	1	2412	11.28	11±1	12	2.0	20	0.00499
		2437	12.15	12±1	13	2.0	20	0.00629
		2462	11.75	11±1	12	2.0	20	0.00499
802.11n (HT20)	1	2412	11.69	11±1	12	2.0	20	0.00499
		2437	11.89	11±1	12	2.0	20	0.00499
		2462	11.67	11±1	12	2.0	20	0.00499
802.11n (HT40)	1	2422	11.53	11±1	12	2.0	20	0.00499
		2437	11.54	11±1	12	2.0	20	0.00499
		2452	11.56	11±1	12	2.0	20	0.00499

Note:
N_{TX}= Number of Transmit Antennas
RF Output power specifies that Maximum Conducted Peak Output Power.

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 2.4G WIFI: 2412~2462MHz

MPE limit S: 1mW/ cm^2

The worst MPE is calculated as **0.00629mW/cm2 < 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.

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

The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure of mobile device.

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

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

-----END OF THE REPORT-----