Maximum Permissible Exposure Evaluation
FCC ID: 2A8XQ-EW-N4D2J

1. Client Information

Applicant	:	Hangzhou Jiefeng Technology Co.,Ltd.
Address	:	No.1, Jiulong Avenue, Yinhu Street, Fuyang District, Hangzhou. China.
Manufacturer	:	Hangzhou Jiefeng Technology Co.,Ltd.
Address	:	No.1, Jiulong Avenue, Yinhu Street, Fuyang District, Hangzhou. China.

2. General Description of EUT

EUT Name	:	Dual Lens Security Camera	
Model(s) No.	:	EW-N4D2J, EW-N8D2J, EW-N12D2J, JF-EW-N4D2J, JF-EW-N8D2J, JF-EW-N12D2J, EWA-N4D2J, EWA-N8D2J, EWA-N12D2J, JF-EWA-N4D2J, JF-EWA-N8D2J, JF-EWA-N12D2J, EWB-N4D2J, EWB-N8D2J, EWB-N12D2J, JF-EWB-N4D2J, JF-EWB-N8D2J, JF-EWB-N12D2J, EWC-N4D2J, EWC-N8D2J, EWC-N12D2J, JF-EWC-N4D2J, JF-EWC-N8D2J, JF-EWC-N12D2J, WXR600S-F33-2, WXR800S-F33-2	
Model Difference	:	All PCB boards and circuit diagrams are the same, the only difference is that appearance and lens pixel.	
Product Description	:	Operation Frequency:	802.11b/g/n(HT20): 2412MHz~2462MHz 802.11n(HT40): 2422MHz~2452MHz
Power Supply	:	Input: DC 12V	
Software Version	:	20220916	
Hardware Version	:	BLK566-SM-64X54-WP1-V1_02/Sensor: CMOSM223A-SM-28X36-WP1-V1_02	
Remark: The antenna gain provided by the applicant, the adapter and verified for the RF conduction test and adapter provided by TOBY test lab.			

Note: More test information about the EUT please refer the RF Test Report.

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MPE Calculations for WIFI

1. **Antenna Gain:**

   2.4G WIFI FPC Antenna 1: 3.96dBi

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:

Worst Maximum MPE Result								
2.4G WiFi								
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]
802.11 b	1	2412	16.819	17±1	18	3.96	20	0.0312
		2437	16.528	17±1	18	3.96	20	0.0312
		2462	17.246	17±1	18	3.96	20	0.0312
802.11 g	1	2412	12.952	13±1	14	3.96	20	0.0124
		2437	12.846	13±1	14	3.96	20	0.0124
		2462	13.518	14±1	15	3.96	20	0.0157
802.11 n20	1	2412	11.459	11±1	12	3.96	20	0.0078
		2437	15.181	15±1	16	3.96	20	0.0197
		2462	12.013	12±1	13	3.96	20	0.0099
802.11 n40	1	2422	9.408	9±1	10	3.96	20	0.0050
		2437	12.409	12±1	13	3.96	20	0.0099
		2452	12.1	12±1	13	3.96	20	0.0099

Note:
(1) N_{TX}= Number of Transmit Antennas
(2) 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 2.4GWIFI

MPE limit S: $1mW/cm^2$

The MPE is calculated as **0.0312 *mW / cm²* < *limit 1mW / cm²***. 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.

6. Conclusion:

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

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