



Maximum Permissible Exposure Evaluation

FCC ID: SJ8-CA824P

1. Client Information

Applicant	:	RDI Technology (Shenzhen) Co., Ltd
Address	:	BUILDING 1#,YONGYUE ROAD 7#,XINTANG INDUSTRIAL, PARK, EAST BAISHIXIA, FUYONG, BAOAN, SHENZHEN, PRC, China
Manufacturer	:	RDI Technology (Shenzhen) Co., Ltd
Address	:	BUILDING 1#,YONGYUE ROAD 7#,XINTANG INDUSTRIAL, PARK, EAST BAISHIXIA, FUYONG, BAOAN, SHENZHEN, PRC, China

2. General Description of EUT

EUT Name	:	Digital Wireless Camera
Models No.	:	CA824P, VC800, 57989
Model Different	:	All these models are identical in the same PCB, layout and electrical circuit, the only difference is different customers, different model name.
Product Description	Operation Frequency:	2408MHz~2468MHz
	Number of Channel:	16 Channels
	Antenna Gain:	2dBi External Antenna
Power Rating	:	Adapter:CS60D090060FUF Input:100~240V50/60Hz, 200Ma Output:9V600mA
Software Version	:	----
Hardware Version	:	----
Connecting I/O Port(S)	:	Please refer to the User's Manual
Remark	:	the evaluation report used the EUT(202207-0275-1-2#).

MPE Calculations for WIFI

1. Antenna Gain:

External 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:

2.4GHz

Channel	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]	Limit of Power Density (mW/ cm ²) (S)
Channel 00	13.47	13±1	14	2	20	0.00792	1
Channel 08	12.424	12±1	13	2	20	0.00629	1
Channel 15	12.549	12±1	13	2	20	0.00629	1

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 2.4WIFI:2412~2462 MHz

MPE limit S: 1mW/ cm²

The MPE is calculated as $0.00792\text{mW} / \text{cm}^2 < \text{limit } 1\text{mW} / \text{cm}^2$. 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.

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-----