



# 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 <sup>2</sup> ) [S]	Limit of Power Density (mW/ cm <sup>2</sup> ) (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 <sup>2</sup> )
300-1,500	F/1500
1,500-100,000	1.0

For 2.4WIFI:2412~2462 MHz  
MPE limit S: 1mW/ cm<sup>2</sup>

The MPE is calculated as **0.00792mW / cm<sup>2</sup> < limit 1mW / cm<sup>2</sup>**. 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-----