



Maximum Permissible Exposure Evaluation

FCC ID: ERY266CAQ

1. Client Information

Applicant	:	Seco Larm USA Inc
Address	:	16842 Millikan Ave, Irvine, CA 92606
Manufacturer	:	SHENZHEN YIJIA ELECTRONICS CO., LTD
Address	:	Room 708-711, Tiancheng Building, Guanguang Road No.1221, Guanlan Subdistrict, Longhua district, Shenzhen, China.

2. General Description of EUT

EUT Name	:	Wireless video doorphone	
HVIN/Models No.	:	DP-266-CAQ	
Model Different	:	----	
Sample ID	:	RW-C-202205-0149-2-1# RW-C-202205-0149-2-2#	
Product Description	:	Operation Frequency:	2406MHz~2480MHz
Power Rating	:	Input: DC 5V DC 3.7V by 3400mAh Rechargeable Li-ion battery	
Software Version	:	ENFORCER V2.4.1	
Hardware Version	:	TP24G-624-OUT-VER3.0	
Remark	:	The adapter and antenna gain provided by the applicant, the verified for the RF conduction test provided by TOBY test lab.	

Method of Measurement for FCC

1. Max. Antenna Gain:

Copper tube Antenna: 0dBi.

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

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:

$$\sum \text{ of MPE ratios } \leq 1.0$$

4. Test Result:

2.4G Worst Maximum MPE 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]
user	1	2406	5.95	5±1	6	0	20	0.0008
		2440	4.83	4±1	5	0	20	0.0006
		2480	2.82	2±1	3	0	20	0.0003
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:2406~2480MHz

MPE limit S: 1mW/ cm²

The MPE is calculated as $0.0008\text{mW} / \text{cm}^2 < \text{limit } 1\text{mW} / \text{cm}^2$.

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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