

Maximum Permissible Exposure Evaluation

FCC ID:2BFOX-C10

1. Client Information

Applicant	:	SHANDONG YUEQUN INTELLIGENCE TECHNOLOGY CO., LTD.
Address	:	INTERSECTION OF LUSHAN EAST ROAD AND JINXIU 1ST ROAD, TUANLIN TOWN, LINGANG ECONOMIC DEVELOPMENT ZONE, LINYI CITY, SHANDONG, CHINA
Manufacturer	:	SHANDONG YUEQUN INTELLIGENCE TECHNOLOGY CO., LTD.
Address	:	INTERSECTION OF LUSHAN EAST ROAD AND JINXIU 1ST ROAD, TUANLIN TOWN, LINGANG ECONOMIC DEVELOPMENT ZONE, LINYI CITY, SHANDONG, CHINA

2. General Description of EUT

EUT Name	:	YUEQUN DRONE						
Models No.	:	C10, C20, C30, C35, C50, C60, C70, C - CLEANING DRONE, YQ10, YQ16, YQ20, YQ30, YQ35, YQ50, YQ60, YQ70, YQ - AGRICULTURE DRONE SPRAYER, YQ AERIAL PHOTOGRAPHY DRONE, YQ FIREFIGHTING DRONE, YQ TRANSPORT DRONE, YQ PATROL DRONES, YQ - SOLAR PANEL CLEANING ROBOT, YQ-GRASS CUTTING ROBOT						
Model Different	:	All these models are identical in the same PCB, layout and electrical circuit, the only difference is that appearance.						
Product Description	:	<table border="1"><tr><td>Operation Frequency:</td><td>2.4GHz: 2420MHz~2480MHz</td></tr><tr><td>Number of Channel:</td><td>31Channels</td></tr><tr><td>Antenna Gain:</td><td>2dBi Probe Antenna1 2dBi Probe Antenna2</td></tr></table>	Operation Frequency:	2.4GHz: 2420MHz~2480MHz	Number of Channel:	31Channels	Antenna Gain:	2dBi Probe Antenna1 2dBi Probe Antenna2
Operation Frequency:	2.4GHz: 2420MHz~2480MHz							
Number of Channel:	31Channels							
Antenna Gain:	2dBi Probe Antenna1 2dBi Probe Antenna2							
Power Rating	:	22.2V by 32000mAh Rechargeable Li-ion battery						
Software Version	:	H12G 5.4						
Hardware Version	:	V3						
Connecting I/O Port(S)	:	Please refer to the User's Manual						
Remark	:	the evaluation report used the EUT(HC-C-202403-0396-02#).						

MPE Calculations

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. Test Result:

2.4GHz worst reported.

Frequency	Conducted Power(max) (dBm)	Turn-up Power (dB)	Max tune up power (dBm) [P]	ANT1 Gain (dBi) [G]	Distance (cm) [R]	Power Density (mW/ cm ²) [S]	Limit of Power Density (mW/ cm ²) (S)
2480MHz	2.651	3±1	4	2	20	0.0008	1

Frequency	Conducted Power(max) (dBm)	Turn-up Power (dB)	Max tune up power (dBm) [P]	ANT2 Gain (dBi) [G]	Distance (cm) [R]	Power Density (mW/ cm ²) [S]	Limit of Power Density (mW/ cm ²) (S)
2480MHz	2.468	2±1	3	2	20	0.0006	1

4. 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

Note

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

5. Summary simultaneous transmission results

support simultaneous transmit the

Ant 1 MPE (Ratio)	Ant 2 MPE (Ratio)	simultaneous MPE (Ratio)	MPE Limits (Ratio)
0.0008	0.0006	0.0014	1.0000

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.

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