



RF Exposure Evaluation Declaration

FCC ID: 2ACS5-SR24P

APPLICANT: Yuneec Technology Co., Limited

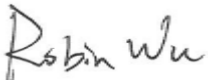
Application Type: Certification

Product: Radio Controller Receiver


Model No.: SR24+

Brand Name: YUNEEC

FCC Classification: Digital Transmission System (DTS)

Reviewed By : 
Manager

(Robin Wu)

Approved By : 
CEO

(Marlin Chen)



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

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Revision History




Report No.	Version	Description	Issue Date	Note
1607RSU00302	Rev. 01	Initial report	07-25-2016	Invalid
1607RSU00302	Rev. 02	Modify the model number	08-03-2016	Valid

1. PRODUCT INFORMATION

1.1. Equipment Description

Product Name	Radio Controller Receiver
Model No.	SR24+
Frequency Range	802.15.4: 2405 ~ 2475 MHz
Type of Modulation	802.15.4: O-QPSK
ZigBee Antenna Gain	1.5dBi

1.2. Description of Available Antennas

Antenna No.	Antenna Type	Manufacturer	Frequency Band (GHz)	Max Peak Gain (dBi)
1# 	Dipole Antenna	Yuneec Technology Co., Limited	2.4	1.5
2# 	Dipole Antenna		2.4	1.5
3# 	Dipole Antenna		2.4	1.5

2. RF Exposure Evaluation

2.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500	--	--	f/1500	6
1500-100,000	--	--	1	30

f= Frequency in MHz

Calculation Formula: $Pd = (Pout \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

Pd = power density in mW/cm²

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

r = distance between observation point and center of the radiator in cm

Pd is the limit of MPE, 1mW/cm². If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

2.2. Test Result of RF Exposure Evaluation

Product	Radio Controller Receiver
Test Item	RF Exposure Evaluation

Test Mode	Frequency Band (MHz)	Maximum Peak Output Power (dBm)	Power Density at R = 20 cm (mW/cm ²)	Limit (mW/cm ²)
802.15.4	2405 ~ 2475	19.56	0.0254	1

CONCLUSION:

The Max Power Density at R (20 cm) = $0.0254\text{mW/cm}^2 < 1\text{mW/cm}^2$.
So the EUT complies with the requirement.

_____ The End _____