

FCC RF Exposure

Product Name: Quadcopter

FCC ID: 2BAIV-TX-50

Model(s): TX-50

1. Limits

According to KDB 447498 D01 General RF Exposure Guidance v06 The 1 - g and 10 - g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max power of channel, including tune - up tolerance, Mw})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1 - g SAR and ≤ 7.5 for 10 - g extremity SAR,

Where:

Result = $P/D \cdot \sqrt{F}$

F = the RF channel transmit frequency in GHz

P = Maximum turn - up power in mw

D = Min. test separation distance in mm

2. Test Result of RF Exposure Evaluation

2.4g tx: EIRP(dBm) = 95.51 (dBuV/m) - 95.2 = 0.31(dBm)

Frequency (MHz)	Output power (dBm)	Tune Up Power (dBm)	Max Tune Up power dBm/Mw	Min test separation distance mm	Result	Limit (Mw/cm ²)	SAR Test Exclusion
BLE: 2480	6.85	6 ± 1	7/5.01	5	1.5780	3.0	Pass
EDR: 2480	6.96	6 ± 1	7/5.01	5	1.5780	3.0	Pass
2.4g tx: 2480	0.31	0 ± 1	1/1.26	5	0.3969	3.0	Pass

Note:

PK Output power = conducted power.

Conducted power see the test report **HK2410226207**-1E/2E/3E, antenna gain = 0dBi(BT), 4.5dBi(2.4G TX) .

2.4G TX (max) = 0.3969 (mW/cm²)

BT (max) = 1.5780 (mW/cm²)

simultaneously MPE = 0.3969 + 1.5780 = 1.9749 (mW/cm²)

Per KDB 447498 D01, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine RF Exposure test exclusion. The test exclusion threshold is 1.9749 which is ≤ 3 , RF Exposure testing is not required.

Note: Exclusion Thresholds Results = $[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}]$

f(GHz) is the RF channel transmit frequency in GHz

Distance = 5mm