

RF Exposure Requirements

Product Description: Micro Video Drone

Model No.: BKST003

FCC ID: VLEST003T

According to the KDB 447498 D01 V06, the following RF exposure evaluation shall to demonstrate RF exposure compliance.

General 2.4GHz Technique

Tx frequency range: 2405 ~ 2476 MHz Type of Modulation: GFSK

Antenna Type: Integral antenna (Gain: 1.9 dBi)

The nominal conducted output power: 5 dBm (Tolerance: ± 3 dB)

The maximum radiated output power (e.i.r.p): 6.9 dBm (Tolerance: ± 3 dB)

The maximum radiated emission for the EUT is 81.31dB μ V/m at 3m

The maximum conducted output power specified is 8 dBm = 6.3096 mW

The source- based time-averaging conducted output power

= 6.3096 * Duty cycle mW = 0.9975 mW (Duty Cycle = 15.81%)

The SAR Exclusion Threshold Level:

= $3.0 * (\text{min. test separation distance, mm}) / \text{sqrt}(\text{freq. in GHz})$

= $3.0 * 5 / \text{sqrt}(2.480)$ mW

= 9.5 mW

Source-based time-averaged Conducted output power is 0.9975 mW < 9.5mW

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.