

# **FCC ID : XGB-STEALTHPT**

## ➤ **Test Standards and Limits**

### **1. According to KDB 447498 D01 v06, Section 4.3.1**

### **2. FCC Radiofrequency radiation exposure limits:**

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max power of channel})/(\text{min test separation distance})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, where

- $f(\text{GHz})$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation

distance is  $< 5$  mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

For 2.4G band device, the limit of worse case is

$$P_{\text{max}} \leq 3.0 \cdot D_{\text{min}} / f = 3.0 \cdot 5 / 2.480 = 9.525 \text{ mW}$$

## ➤ **Measurement and Calculation**

### **1. Maximum transmit power**

Antenna Gain:	1.8 dBi
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TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]
BLE_1M	Ant1	2402	-0.16
		2440	-0.37
		2480	-0.68
BLE_2M	Ant1	2402	-0.31
		2440	-0.58
		2480	-0.88

Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]
SRD	Ant1	2402	0.31
		2441	0.68
		2480	0.93

### **2. MPE Calculation**

The Max Conducted Peak Output Power is 0.93 dBm.

The Max Antenna Gain is 1.8 dBi.

According to the formula, calculate the EIRP test result:

$$\text{EIRP} = P \times G = 1.24 \text{ mW} \times 1.51 = 1.87 \text{ mW} < 9.525 \text{ mW}$$

**So the SAR report is not required.**

-End of the Report-