

# FCC ID : 2AJ55HOLYSTONEIT

## ➤ 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(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

$$P_{\text{max}} \leq 3.0 \cdot D_{\text{min}} / \sqrt{f} = 3.0 \cdot 5 / \sqrt{2.474} = 9.537 \text{mW}$$

## ➤ Measurement and Calculation

### 1. Maximum transmit power

2.4G SRD, Antenna Gain: 2.98 dBi

Operation Mode	Channel Number	Channel Frequency (MHz)	EIRP (dBm)
2.4G SRD	1	2440	-15.26
	20	2459	-16.63
	25	2478	-15.89
* EIRP[dBm] = E[dBμV/m] + 20 log(d[meters]) - 104.77			

### 2. MPE Calculation

According to the formula. calculate the EIRP test result:

$$\text{EIRP} = 0.03 \text{mW} < 9.525 \text{mW}$$

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

-End of the Report-