

FCC ID : 2BABY6361442

➤ 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 ≤ 50 mm are determined by:

$[(\text{max power of channel})/(\text{min test separation distance})]^2 \cdot f(\text{GHz}) \leq 3.0$ for 1-g SAR and ≤ 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 ≤ 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: 0.39 dBi

Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]
DH5	Ant1	2402	-6.37
		2441	-6.42
		2480	-4.33
2DH5	Ant1	2402	-6.25
		2441	-6.01
		2480	-3.68
3DH5	Ant1	2402	-6.03
		2441	-5.71
		2480	-3.36

2. MPE Calculation

The Max Conducted Peak Output Power is -3.36 dBm.

The Max Antenna Gain is 0.39 dBi.

According to the formula. calculate the EIRP test result:

$$\text{EIRP} = P \times G = 0.46 \text{ mW} \times 1.09 = 0.5 \text{ mW} < 9.525 \text{ mW}$$

So the SAR report is not required.

-End of the Report-