

FCC ID : 2ARUDS21BWSW

➤ 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:

$[(\text{max power of channel})/(\text{min test separation distance})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ 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.

➤ Measurement and Calculation

1. Maximum transmit power

2.4G SRD, Antenna Gain: -0.58dBi

Operation Mode	Channel Number	Channel Frequency (MHz)	EIRP (dBm)	Result calculation	1-g SAR
2.4G SRD	0	2402	-2.77	0.164	3
	39	2444	-2.32	0.183	3
	78	2480	-2.34	0.184	3
* $EIRP[\text{dBm}] = E[\text{dB}\mu\text{V}/\text{m}] + 20 \log(d[\text{meters}]) - 104.77$					

2. MPE Calculation

For the max result : $0.184 \leq 3.0$ for 1-g SAR extremity SAR, No SAR is required.

-End of the Report-