

Radio Frequency Exposure Evaluation

Standard Applicable

According to KDB 447498 Section: 4.3.1. Standalone SAR test exclusion considerations

a) For 100 MHz to 6 GHz and test separation distances \leq 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}]$

≤ 3.0 for 1-g SAR, and ≤ 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 before calculation
- The result is rounded to one decimal place for comparison
- The values 3.0 and 7.5 are referred to as numeric thresholds in step b) below

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.

SAR Exclusion Calculation Table

Frequency (MHz)	Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Tune-up Tolerance (dB)	Max Power (mW)	Min Distance (mm)	Result	Limit (3.0 @ 1g SAR)
2402	1.95	2.48	4.43	1	3.491403	5.00	1.082222	3.0

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