

RF Exposure Evaluation

According to KDB 447498 D01 General RF Exposure Guidance v06 and part 2.1093, Unless specifically required by the *published RF exposure KDB procedures*, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding *SAR Test Exclusion Threshold* condition(s), listed below, is (are) satisfied.

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:
[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] · [$\sqrt{f_{\text{(GHz)}}}$] ≤ 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 before calculation
The result is rounded to one decimal place for comparison

Here,

Max Power(dBm)	Max Power(mW)	Frequency(MHz)	Min. distance(mm)	Calc. Result	limit
4.58	2.871	2441	5	0.891	3.0

EIRP(dBm)=E(dBuV/m)-95.2=99.78-95.2=4.58dBm
Max Power=EIRP-ANT Gain=4.58-(0)=4.58dBm

So a SAR test is not required