General SAR test reduction & exclusion guidance

KDB 447498

Section 4.3 General SAR test reduction and exclusion guidance

For Standalone SAR exclusion consideration, when SAR Exclusion Threshold requirement in KDB 447498 is satisfied, standalone SAR evaluation for general population exposure conditions by measurement or numerical simulation is not required.

The SAR Test Exclusion Threshold for frequencies below 100 MHz, and for test separation distance of ≤ 50 mm, is determined as follows.

$$SAR\ Exclusion\ Threshold\ (SARET) = [(NT \times TSD_A) / \sqrt{0.1}] \times [1 + Log (100 / F_{MHz})] \times 1/2$$

Where,

NT = Numeric Threshold (3.0 for 1-g SAR and 7.5 for 10-g SAR)
TSD_A = 50 mm
f_{MHz} = Transmit frequency in MHz

Frequency (MHz)	EIRP * (mW)	SAR Exclusion Threshold at 5 mm (mW)	SAR Evaluation
0.134	0.00000370	918.5	Not Required

* Antenna Gain is unknown, so EIRP was used instead of conducted power.

Therefore standalone SAR evaluation for general population exposure conditions by measurement or numerical simulation is not required.