

RF Exposure evaluation

According to KDB 447498 D01 General RF Exposure
Guidance v05

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:

[(max. power of channel, including tune-up tolerance,
mW) / (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

Worse case is as below: [2441 MHz 5.12dBm (3.251 mW)
output power]

(3.251 mW / 5mm) \cdot [$\sqrt{2.441(\text{GHz})}$] = 1.02 < 3.0 for 1-g
SAR

Then SAR evaluation is not required