

According to 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)]  $\cdot [\sqrt{f(GHz)}] \le 3.0$  for 1-g SAR and  $\le 7.5$  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

eirp = pt x gt =  $(EXd)^2/30$ where: pt = transmitter output power in watts, gt = numeric gain of the transmitting antenna (unitless), E = electric field strength in V/m, ---  $10^{((dBuV/m)/20)}/10^6$ d = measurement distance in meters (m) ---3m So pt =  $(EXd)^2/30$  x gt

Field strength = 96.54dBuV/m @3m Ant gain =0dBi, so Ant numeric gain= 1

So pt={  $[10^{(96.54/20)}/10^6 \text{ x } 3]^2/30\text{x}1 \}\text{x}1000 \text{ mW} = 1.35\text{mW}$ So  $(1.35\text{mW}/5\text{mm})\text{x} \sqrt{2.441} = 0.422<3$ 

Then SAR evaluation is not required