

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 \leq 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] $\left[\sqrt{f(GHz)}\right] \le 3.0$ 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

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 = 89.74dBuV/m @3m Ant gain =3dBi, so Ant numeric gain= 2.0

So pt={ $[10^{(89.74/20)}/10^6 \times 3]^2/30x2.0$ }x1000 mW = 0.142mW So (0.142mW /5mm)x $\sqrt{2.402}$ = 0.044<3

Then SAR evaluation is not required