

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 ≤ 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 (unit less),

E = electric field strength in V/m, $--10^{((dBuV/m)/20)}/10^6$

d = measurement distance in meters (m) ---3m

So pt = $(Exd)^2/30 \times gt$

Field strength = 94.12 dBuV/m @3m Ant gain =0dBi, so Ant numeric gain= 1.00

So pt={ $[10^{(94.12/20)}/10^6 \text{ x } 3]^2/30 \text{ x } 1.00 \} \text{ x } 1000 \text{ mW} = 0.775 \text{mW}$

So $(0.775 \text{mW} / 5 \text{mm}) \times \sqrt{2.475} = 0.244 < 3$

Then SAR evaluation is not required