

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  $\le 7.5$  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 pc

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)<sup>2</sup>/30 x gt

## For BT 3.0 mode

Field strength = 93.34dBuV/m @3m Ant gain =2.0dBi, so Ant numeric gain=1.58

So pt={  $[10^{(93.34/20)}/10^6 \times 3]^2/30\times 1.58$ }x1000 mW =0.408mW So (0.408mW /5mm)x  $\sqrt{2.480}$  = 0.129<3

## For BT4.0 mode

Field strength = 89.22dBuV/m @3m Ant gain =2.0dBi, so Ant numeric gain=1.58

So pt={  $[10^{(89.22/20)}/10^6 \times 3]^2/30\times 1.58$ }x1000 mW = 0.158mW So (0.158mW /5mm)x  $\sqrt{2.480}$  = 0.050<3

Then SAR evaluation is not required