RF Exposure evaluation

According to 447498 D01 General RF Exposure Guidance v05r01

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)] • [√f(GHz)] ≤ 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 =97.56dBuV/m @3m

Ant gain =0dBi ;so Ant numeric gain=1

So pt={ $[10^{(97.56/20)}/10^6 x3]^2/30x1$ }x1000 mW = 1.71mW

So (1.71mW/5mm)x √2.48GHz = 0.539 <3

Then SAR evaluation is not required