## RF Exposure evaluation

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)]  $\cdot$  [ $\sqrt{f(GHz)}$ ]  $\leq$  3.0 for 1-g SAR and  $\leq$  7.5 for 10-g extremity SAR, where

 $\ensuremath{\text{f(GHz)}}$  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

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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 = 94.25dBuV/m @3m

Ant gain =-0.40dBi ;so Ant numeric gain= 0.91

So pt={ [10^{(94.25/20)}/10^6 x3]^2/30x0.91 }x1000 mW =0.88 mW

So (0.88 \text{ mW/5mm})x \sqrt{2.480}GHz = 0.28 <3
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Then SAR evaluation is not required