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 ≤ 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

Worse case is as below: [2462 MHz 9.54dBm（8.995mW）output power]

(8.995mW /5mm) •[√2.462(GHz)]= 2.84 <3.0 for 1-g SAR

Then SAR evaluation is not required

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before calculation

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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)/106
d = measurement distance in meters (m)---3m
So pt = (EXd)2/30 x gt

Ant gain 2dBi ;so Ant numeric gain=1.58

Field strength = 98.03 dBuV/m @3m
So Pt={ $[10^{(98.03\ /20)}/10^{6}$ x3$]^{2}$/30x1.58 }x1000 mW = 1.21 mW

So (1.21 mW/5mm)x √2.402 GHz = 0.374 < 3

Then SAR evaluation is not required