RF Exposure Compliance Requirement

Calculation formula：

$E \text{ (V/m)} = (30 * P * G)^{0.5} / d$

E = Electric Field (V/m)

P = Peak RF output Power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between EUT and antenna (m)

$P = (E*d)^2 / 30G$

In the formula above, d=3m, field strength= 99dBuV/m(max. provided by client), antenna gain= 0dBi
so P=2.38298mW

In KDB 447498 D01 v06: 4.3.1 Standalone SAR test exclusion considerations:

The SAR Test Exclusion Threshold is calculated from:

[(*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.

The worst case test separation distance is **5mm.**

The product belongs to **standalone portable device** base the FCC rule part 2.1091&2.1093. The transmission frequencies of the device are between 100 MHz and 6 GHz.

The SAR Test Exclusion Threshold (mW) is listed below:

Transmit frequency (MHz)	Output power (mW)	SAR Test Exclusion Threshold (mW)
2420	2.38298	9.6
2450	1.61110	9.6
2470	0.68726	9.6