RF Exposure Compliance Requirement

Calculation formula：

E (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)

Remark: $E(V/m)=10^{X\,(dBUV/m)\,/20} \times 10^{-6}$

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

  in the formula above, d=3m, field strength= 86dBuV/m(max. described by client), G=1.2

  so P=0.099mW

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*)] ·[√f(GHz)] ≤ 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 ERP and SAR Test Exclusion Threshold (mW) are listed below:

Transmit frequency (MHz)	Output power (mW)	SAR Test Exclusion Threshold (mW)
433.92	0.099	22.77

According to SAR Exclusion Threshold in KDB 447498 (D01) General RF Exposure Guidance v06, the SAR report is not required.