## 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= 88dBuV/m (max described by client),
G=1.70 (Antenna gain=2.3dBi)

so P=mW

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:

| Output power (mW) | SAR Test Exclusion Threshold (mW) |
|---|---|
| 0.111 | 6.22 |
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