

SAR test exclusion evaluation compliance requirement

Model no.: 25211, 25314, 25311, 25312, 25313, 25319, 25316, 25318, 25317, XXXXX.

XXXXX (Series model XXXXX are identical except for model number Only the remote control panel and buttons are different in quantity).

1. KDB 447498 D01 v06 requirement

Standalone SAR test exclusion considerations:

Calculation formula:

$E (V/m) = (30 \cdot P \cdot G)^{0.5} / d$, 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: $E(V/m) = 10^{(dB_{UV}/m)/20} \times 10^{-6}$, $P = (E \cdot d)^2 / 30G$

Or $ERP = PG = (E \cdot d)^2 / 30$, $EIRP = ERP + 2.15 \text{ dB}$

in the formula above, d=3m, field strength=81.1dBuV/m (max described by client),

So P=0.04 mW

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.

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

The SAR Test Exclusion Threshold is calculated from:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [f(\text{GHz})] \leq 3.0$ for 1-g SAR

- 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

The Max Output Power and SAR Test Exclusion Threshold (mW) are listed below:

Transmit Frequency (MHz)	Output power (mW)	SAR Test Exclusion Threshold (mW)
2420	0.04	9.5

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

Test Location:

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

All tests were performed at:

Room102/104, No 203, KeZhu Road, Science City, GETDD Guangzhou, China