



FCC ID:2AHIS-VHOME

RF exposure information according to KDB 447498 D01 guidance

The EUT, vHome product, is used as a portable device operating in 6200 – 8400 MHz band. It is equipped with an internal printed antenna.

Maximum measured transmitter power obtained from test report VAYRAD_FCC.31088_rev3:

P _{out} EIRP		Maximum antenna gain, dBi	P _{out} conducted	
dBm	mW		dBm	mW
-10	0.1	5	-15	0.03

The SAR Test Exclusion Thresholds of the guidance is limited only up to 6 GHz. According to OET Bulletin 65 the portable device operating at frequencies above 6 GHz is evaluated in terms of MPE limits.

Since the EUT is an UWB device to cover the frequency range of the EUT above 6 GHz, the MPE will be used as per general guidance for Mobile devices.

Compliance shall be made at a minimum distance of 5 mm consistent with the SAR Exclusion Threshold.

Limit for power density for general population/uncontrolled exposure is 1 mW/cm² for 1500 -100000 MHz frequency range.

The power density $P \text{ (mW/cm}^2\text{)} = P_T / 4\pi r^2$, where

P_T is the transmitted power, which is equal to the peak transmitter output power (-15) dBm plus maximum antenna gain 5 dBi, the maximum equivalent isotropically radiated power EIRP is -10 dBm = 0.1 mW

The power density at 5 mm calculated as follows:

$$0.1 \text{ mW} / 4\pi (0.5 \text{ cm})^2 = 0.032 \text{ mW/cm}^2 < 1 \text{ mW/cm}^2$$

General public cannot be exposed to dangerous RF level.