



**RF Exposure Evaluation**

FCC ID: 2AQU7-REAL00S

The device is used portable RF exposure configuration – at a distance less than 20 cm from human’s body. For this configuration SAR evaluation is required.

The RF Power is low; therefore, the SAR test exclusion threshold is calculated.

SAR test exclusion threshold formula according to FCC KDB 447898 D01 v06 is

$$\left[ \frac{\text{(max. power of channel, including tune-up tolerance, mW)}}{\text{(min.test separation distance, mm)} \cdot \sqrt{f(\text{GHz})}} \right] \leq 3.0$$
 for 1-g SAR, and  $\leq 7.5$  for 10 -g extremity SAR, where  $f(\text{GHz})$  is the RF channel transmit frequency in GHz.

Where: P is maximum RF conducted power of a channel or EIRP, including tune-up tolerance, mW; f is operating frequency in GHz; d is the minimum test separation distance, mm; the minimum distance is 5 mm.

Peak Conducted power: 1.06dBm or 1.3mWatts

No duty cycle was considered

Conducted Power for RF Exposure calculation is same as peak conducted power

The EIRP calculated is  $1.3 \text{ (RF Conducted Power)} + 1.3 \text{ dBi (Antenna Gain)} = 2.60\text{dBm}$  or 1.819mW.

Higher of conducted power and EIPR is taken for calculation

As per KDB 447498 Section 4.3 SAR test exclusion threshold at 5mm distance is calculated as:

$$1.819 \times \sqrt{2.480} \div 5 = 0.572 < 3.$$

Therefore, SAR testing is not required as the SAR Test Exclusion Threshold condition is satisfied.