



RF EXPOSURE ANALYSIS

<u>Product</u>	<u>FCC ID</u>
WT11u Bluetooth Module	QOQWT11U

Analysis for FCC, portable use

Standalone SAR test exclusion considerations are defined in the KDB 447498 Chapter 4.3.1. 1-g head or body SAR exclusion threshold is defined with formula

$$[(\text{max. power of channel, including tun-up tolerance, mW}) / (\text{min. separation distance, mm.})]^* (\sqrt{f(\text{GHz})}) \leq 3$$

For WT11U the maximum TX power including tolerances is 80 mW and maximum TX frequency is 2.48 GHz. Using separation distance of 42 mm with the formula above results

$$\left(\frac{80mW}{42mm} \right) * \sqrt{2.48} = 2.9997 < 3$$

Thus WT41U meets the SAR exclusion criteria with 42 mm separation and SAR evaluation is not needed if the minimum separation distance to human body is more than 42mm.

Analysis for FCC, mobile use

$$S = \frac{E.I.R.P}{4\pi R^2} = \frac{135mW}{4\pi * (20cm)^2} = 0.026857mW / cm^2$$

E.I.R.P (mW)	Evaluation distance R (cm)	Power density S at prediction frequency (mW/cm ²)	MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	Verdict
135	20	0.026857	1	PASS