

RF EXPOSURE ANALYSIS

<u>Product</u>	<u>FCC ID</u>
WGM110 WiFi Module	QOQ-WGM110

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

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

For WGM110 the maximum TX power is 40 mW and maximum TX frequency is 2.48 GHz. Using separation distance of 21 mm with the formula above results

$$\left(\frac{40mW}{21mm} \right) * \sqrt{2.48} = 2.9996 < 3$$

Thus for portable use the SAR exclusion condition is fulfilled and SAR evaluation is not required for separation distance of 21 mm or more.

Analysis for FCC, mobile use

$$S = \frac{E.I.R.P}{4\pi R^2} = \frac{65mW}{4\pi * (20cm)^2} = 0.01294mW / cm^2$$

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
65	20	0.01294	1	PASS