

RF EXPOSURE ANALYSIS

Product

FCC ID

BGM13P22 BT5.0 Module

QOQBGM13P

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

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

For BGM13P22 the maximum peak TX power including tolerances is 15.8 mW and maximum TX frequency is 2.48 GHz. Using separation distance of 9 mm with the formula above results

(15.8mW/9mm)*SQRT(2.48)=2.76<3

Thus BGM13P22 meets the SAR exclusion criteria with 9 mm separation and SAR evaluation is not needed.

Analysis for FCC, mobile use

S=EIRP/4*PI*R^2=25.9mW/(4*PI*20^2)= 0.00515mW/cm²

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
25.9	20	0.00515	1	PASS