

RF Exposure Analysis

FCC ID: 2AKGY-BT41PMMA01

Analysis for FCC portable use

Standalone SAR test exclusion considerations are defined in KDB 447498 D01 clause 4.3.1 where the 1-g head or body and 10-g extremity SAR exclusion threshold is defined by the following formula:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR}$$

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

For the CML18 the maximum conducted output power is 4.0 dBm (2.5 mW) at 2.4 GHz

Applying the above data using the given KDB 447498 D01 formula, and minimum separation distance of 5 mm, the following results:

$$(2.5 \text{ mW} / 5 \text{ mm}) \times \sqrt{2.4 \text{ GHz}} = 0.8$$

(i.e.: ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR)

Conclusion

This demonstrates the CML18 meets the criteria for 1-g head / body and 10-g extremity SAR test exemption.