

**RF Exposure Analysis**

**FCC ID: 2AT9A-M0021NA**

Analysis for FCC portable use

Standalone SAR test exclusion considerations are defined in KDB 447498D01 (v06) Chapter 4.3.1 where the 1-g head or body and 10-g extremity SAR exclusion threshold is defined by the following formula:

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

- f(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 Mouthguard the maximum conducted output power is 9.7dBm +10% (10.3mW) at 920MHz. Transmit duty cycle is 42%.

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

$(10.3 \times 0.42 \text{mW} / 5 \text{ mm}) \times \sqrt{0.92 \text{ GHz}} = 0.83$  (i.e.:  $\leq 3.0$  for 1-g SAR)

**Conclusion**

This demonstrates the Mouthguard meets the criteria for 1-g head SAR test exemption.



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