

December 10, 2015

RF Exposure Analysis

FCC ID: TUW-BIRH1

Product: Loc8tor Lite Handheld

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:

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

- $f(\text{GHz})$ 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 Loc8tor Lite Handheld the maximum conducted output power is +4.5 dBm (2.8mW).


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

$$\frac{2.8\text{mW}}{5\text{mm} \times \sqrt{2.445\text{ GHz}}} = 0.358$$

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

This demonstrates the Loc8tor Lite handheld meets the criteria for 1-g head/ body and 10-g extremity SAR test exemption.

Yours sincerely,



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