

KDB 447498 D01 General RF Exposure Guidance v05r02 (February 7, 2014)

1. Declaration of RF exposure compliance for exemption from routine evaluation limits

FCC ID:	2AAXVLRNTMOD1
Model number:	LRTNTMOD1
Manufacturer:	ABG Tag and Traq, Inc.
	<p>During normal operation, user extremities can come within 20 cm of the internal antenna and therefore product is considered as "Portable".</p> <p>The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at Test separation distances \leq 50 mm are determined by:</p> $[(\text{max. power of channel, including tune-up tolerance, mW}) \div (\text{min. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$ <p>$f(\text{GHz})$ is the RF channel transmit frequency in GHz</p> <p>Power and distance are rounded to the nearest mW and mm before calculation</p> <p>The result is rounded to one decimal place for comparison</p> <p>4.3.1. Standalone SAR test exclusion considerations:</p> <p>The test exclusions are applicable only when the minimum test separation distance is \leq 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is $<$ 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion</p>
	<p>3.418 GHz – Operation: Calculation based on the above formula:</p> <p>Separation Distance = 5 mm</p> <p>Radiated Output Power = -4.89 dBm = 0.32 mW</p> <p>Frequency = 3.42GHz</p> $\text{Calculation} = (0.32 \div 5) \times \sqrt{3.42} = 0.12 < 3$ <p>The calculation is below the threshold, therefore the product exempt from the SAR test requirements</p> <p>4.35GHz – Operation: Calculation based on the above formula:</p> <p>Separation Distance = 5 mm</p> <p>Radiated Output Power = -1 dBm = 0.79 mW</p> <p>Frequency = 3.42GHz</p> $\text{Calculation} = (0.79 \div 5) \times \sqrt{3.42} = 0.54 < 3$ <p>The calculation is below the threshold, therefore the product exempt from the SAR test requirements</p>

NOTE: 3.418GHz operation: $71.9 \text{ dB}\mu\text{V/m} (\text{at .5m}) - 20 \log (3/.5) (\text{adjusted to 3m}) + 20 \log (50/1) (\text{adjust for total power output over 50MHz BW}) - 95.23 (\text{to convert to dBm})$: therefore EIRP = -4.89dBm for 3.5GHz operation

NOTE: 4.35 GHz operation: $69.8 \text{ dB}\mu\text{V/m} (\text{at .5m}) - 20 \log (3/.5) (\text{adjusted to 3m}) + 20 \log (100/1) (\text{adjust for total power output over 50MHz BW}) - 95.23 (\text{to convert to dBm})$: therefore EIRP = -1 dBm for 3.5GHz operation

2. Attestation

ATTESTATION: I attest that the testing was performed or supervised by me; that the test measurements were made in accordance with the above-mentioned departmental standard(s), and that the radio equipment identified in this application has been subject to all applicable test conditions specified in the departmental standards and all of the requirements of the standards have been met.

Signature:	
Date:	August 20, 2020
Name:	Chip Fleury