

17th March 2025

RF Exposure Analysis – Routine Evaluation Exemption

FCC ID: 2BFIVVS8601

Model number/name: VS8601 / iVAS Roam Portable Viable Air Sampler

The above device operates using a 13.56 MHz transmitter.

The following FCC Rule Parts are applicable:

Part 2.1093 – Radiofrequency radiation exposure evaluation: portable devices

Part 1.1307(b)(3)(i)(A) - Blanket RF exposure exemption (i)

Part 1.1307(b)(3)(i)(C) - MPE test exemption (ii)

Part 1.1307(b)(3)(i)(B) - SAR test exemption (iii)

For the above device:

Operating Frequency: 13.56 MHz

Tx Power_{max} (declared): 54.2 dBμV/m @3m = -41 dBm EIRP = -43.15 dBm ERP

Measured radiated power – Ref KDB447498 D04 Section 3.1.2 –

When an antenna port is not available on the device to support conducted power measurement, e.g.: with built-in integral antennas, the available maximum output power or ERP, whichever is larger, and tolerance allowed for production units shall be used to determine RF exposure test exemption and compliance.

Evaluation

From Part 1.1307, RF exposure exemption applies if the maximum transmitted power is less than the maximum of the following three criteria:

- i) Less than 1 mw Blanket exemption. $P_{TH} = 0.001 \text{ W}$ – §1.1307(b)(3)(i)(A)
- ii) determination of exemption under the MPE-based §1.1307(b)(3)(i)(C), if i) not met
- iii) determination of exemption under the SAR-based §1.1307(b)(3)(i)(B) if both i) and ii) are not met;

Conclusion:

The source-based, time-averaged power of -43.15 dBm is less than 1 mW (0 dBm) and therefore the above device is exempt from evaluation in accordance with §1.1307(b)(3)(i)(A).

Yours faithfully,



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