

**Apparatus: POOL LAB 1.0**

**RF Exposure Considerations for FCC ID: 2ALRR-POOLLAB10**

Per FCC KDB 447498 D01 General RF Exposure Guidance v06

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 (Eq.1) below:

$$SAR = \frac{MaxPower(mW)}{d(mm)} \times \sqrt{f(GHz)} \quad (Eq. 1)$$

Where:

- SAR is the calculation for test exclusion threshold;
- MaxPower is the maximum power of channel, including tune-up tolerance, in mW;
- d is the minimum test separation distance, in mm;
- f 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.

If result of Eq.1 is less than or equal to the exemption limits below, then corresponding SAR test is not required.

SAR Test Configuration	Exemption limit
1-g SAR	Result of Eq.1 $\leq$ 3.0
10-g extremity SAR	Result of Eq.1 $\leq$ 7.5

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 is applied to determine SAR test exclusion.

**COORDONNEES**

SMEE  
Rue de Taille – ZI Des Blanchisseries  
38500 VOIRON - France

TEL : 04 76 65 76 50  
FAX : 04 76 66 18 30

SAS au capital de 50 000 € / RC Grenoble B534 796 453 / SIRET 534 796 453 00015 / code APE 7490B / n° TVA : FR 59 534 796 453



For the device, the parameters for consideration are as follows:

Frequency (MHz)	Maximum source-based time averaged conducted output power including tune-up tolerance	Minimum separation distance (mm)	Result of Eq. 1	Limit for 1-g SAR	Limit for 10-g extremity SAR	Verdict
2402	1.95mW	5	0.60	3.0	7.5	Exempt from SAR
2440	1.91mW	5	0.60	3.0	7.5	Exempt from SAR
2480	1.70mW	5	0.54	3.0	7.5	Exempt from SAR

Conclusion: Therefore the device complies with FCC's RF radiation exposure limits for general population without SAR evaluation.

Certified By

Laurent CHAPUS (Agent for this device)

SMEE – CE Mesures

Rue de Taille

ZI des Blanchisseries

38500 Voiron - France

[laurent.chapus@smee.fr](mailto:laurent.chapus@smee.fr)

FCC Registration Number: 0020356952 (FRN) / Test Firm Registration Number: 171131

Applicant for this device:

WATER ID GmbH

Andreas Hock

Daimlerstrasse 20

D-76344 Eggenstein – Germany

Ph : +49 (0) 721 - 78 20 29 - 0

[andreas.hock@water-id.com](mailto:andreas.hock@water-id.com)