RF Exposure FCC



FCC ID: VO9MG10

Model: CoaguChek INRange

SAR test exclusion according to KDB447498 (General RF Exposure Guidance v05r02)

Equation from Chapter 4.3.1: Standalone SAR test exclusion considerations (page 11 and ff).

(1) Standalone SAR test exclusion for 100 MHz to 6 GHz at test separation distances ≤ 50mm

 $P \le (Threshold_{1-g;10-g}) * d_{separation} / f_{(GHz)}^{1/2}$

where

P max. Power of channel (incl. tune-up tolerance [mW])

Threshold_{1-g;10-g} is 3 for 1-g; 7.5 for 10-g

d_{separation} is the min. test separation distance in mm (5 mm is used if the distance is less)

f_(GHz) is the RF channel transmit frequency in GHz

The table below gives the calculated maximal power that could be used for source based time averaged conducted power, adjusted for tune up tolerance. If this is below the calculated value SAR testing is obsolete.

Bluetooth Low Energy:

| f in [MHz] | d _{separation} [mm] | Threshold _{1-g;10-g} | Powerlimit [mW] | P _{max-declared} [mW] | Exclusion |
|------------|------------------------------|-------------------------------|-----------------|--------------------------------|-----------|
| 2402,00 | 5 | 3 | 9,7 | 3,5 | yes |
| 2440,00 | 5 | 3 | 9,6 | 3,2 | yes |
| 2480,00 | 5 | 3 | 9,5 | 2,6 | yes |

Note: Pmax-declared = declared Average Power Conducted + Tune up tolerance

Tune up tolerance: +4dB

Bluetooth Classic:

| f in [MHz] | d _{separation} [mm] | Threshold _{1-g;10-g} | Powerlimit [mW] | P _{max-declared} [mW] | Exclusion |
|------------|------------------------------|-------------------------------|-----------------|--------------------------------|-----------|
| 2402,00 | 5 | 3 | 9,7 | 1,0 | yes |
| 2441,00 | 5 | 3 | 9,6 | 0,6 | yes |
| 2480,00 | 5 | 3 | 9,5 | 2,2 | yes |

Note: Pmax-declared = declared Average Power Conducted + Tune up tolerance

Tune up tolerance +4dB

Co-location: no
