

FCC ID: LSV-KOHSPEC
IC: 20894-KOHSPEC
Model: KOH Spectrophotometer

SAR test exclusion according to KDB447498 (General RF Exposure Guidance v05)

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

$$(\text{Threshold}_{1\text{-g};10\text{-g}}) \times d_{\text{separation}} / f^{0.5}$$

where

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

d_{separation} is the min. test separation distance; 5mm is used if the distance is less

f is the RF channel transmit frequency

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 If this is below the calculated value SAR testing is obsolete.

f in [MHz]	d _{separation} [mm]	Threshold _{1-g}	Powerlimit [mW]	P _{max-declared} [mW]	Exclusion
2450.00	50	7.5	239.58	79.00	yes

SAR test exclusion according to RSS-102 Issue 5 Section 2.5.1/Table 1

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 If this is below the calculated value SAR testing is obsolete.

f in [MHz]	d _{separation} [mm]	tissue volume	Powerlimit [mW]	P _{max-declared} [mW]	Exclusion
2450.00	50	10 g (factor 2.5)	772.50	79.00	yes

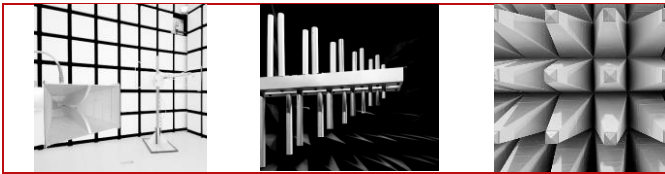
Justification for SAR test exclusion

The intended use of the device is hand-held. It is placed against a flat surface with the rear side, held by the hand from front side, with the thumb on the side button to activate operation.

Therefore the relevant SAR test position would be front side.

The antenna of the implemented WiFi module is placed close to rear side with a minimum distance of approximately 5 cm to the thumb position and more than 5 cm to the front side.

See attached photos for documentation.



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Worst case handheld position



Antenna to thumb button distance 50.34 mm

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