RF EXPOSURE

KDB447498 was used as the guidance.

SAR test exclusion considerations

Step.1 **For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion threshold are determined by the following :**

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR

Step.2 For 100 MHz to 6 GHz and test separation distances > 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following

Step.2-1 {[Power allowed at numeric threshold for 50 mm in step a)] + [(test separation distance – 50 mm)· (f(MHz)/150)]} mW, for 100 MHz to 1500 MHz

Step.2-2 {[Power allowed at numeric threshold for 50 mm in step a)] + [(test separation distance – 50 mm)·10]} mW, for > 1500 MHz and ≤ 6 GHz

where
f(GHz) 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
The values 3.0 and 7.5 are referred to as numeric thresholds in step b) below

The test exclusions are applicable only when the minimum test separation distance is ≤ 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 4.1 f) is applied to determine SAR test exclusion.

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SAR test exclusion considerations : RKE

- Frequency Range : 433.92 MHz

- Worst case output power transmitter : 77.00 dBuV/m @ 3 m = -18.20 dBm

The EUT will only be used with a separation of 50 millimeters or lesser between the antenna and the body of the SAR Exclusion calculation for this exposure is shown below.

- P = -18.20 dBm = 0.0151 mW	- NOTE P : Output power transmitter (dBm)

Power Density at the specific separation

- S = [(P(mW) / R)] X [√f(GHz)] = [(0.0151 / 5.00)] X [√0.43392] = 0.001 99 NOTE : f(GHz) was used as worst case is highest frequency.	- NOTE S : Maximum Power Density P(mW) : Output power transmitter (mW) R : Distance to the center of the radiation of the antenna (5.00 mm) f(GHz) : the RF channel transmit frequency in GHz

RF Exposure Compliance Issue

Therefore, EUT is not required the SAR Evaluation.

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