

8.3. SAR Exclusion Analysis

Per FCC KDB 447498 D01v06, the SAR exclusion threshold for distances<50mm is defined by the following equation:

a.
$$\frac{\text{Max Power of Channel(mW)}}{\text{Test Separation Distance(mm)}} \times \sqrt{\text{Frequency(GHz)}} \le 3.0$$
, for head and boy SAR;

b.
$$\frac{\text{Max Power of Channel(mW)}}{\text{Test Separation Distance(mm)}} \times \sqrt{\text{Frequency(GHz)}} \le 7.5$$
, for extremity SAR

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:

- 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
- 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

Required Configurations of SAR Test		
Exposure Condition	Test Band	Screen Side
Extremity	DTS	Yes ^{*1}
	U-NII-1	No ^{*2}
	U-NII-3	Yes ^{*1}
	Bluetooth	No ^{*2}

Note:1." *1", marked configuration SAR test is required, which is to get more conservative SAR values.

2. U-NII-1 : $(11dBm/5mm)^* \sqrt{5220MHz} = 5.8$, BT : $(8dBm/5mm)^* \sqrt{2480MHz} = 2$, So. The U-NII-1 & Bluetooth's Power ≤ 7.5 , So SAR evaluation is not required.

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