

Standalone SAR test exclusion considerations

February 6, 2013

- Min. transmitting frequency = 2480 MHz
- Min. test separation distance = 0 mm
- Max. power with turn-up tolerance = 10.05 dBm = 11 mW
 - Typical Power: 10.05 dBm ± dB
 - Measured Power: 10.05 dBm

Step 1) SAR test exclusion thresholds for 100MHz to 6GHz at test separation distances ≤ 50 mm = **Used**

$$\begin{aligned}
 & [(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \\
 & = [11.00 / 5] * [\sqrt{ 2.48 }] \\
 & = \mathbf{3.46} \leq 7.5, \text{ for } 10\text{g extrmity SAR}
 \end{aligned}$$

Step 2-1) SAR test exclusion thresholds for 100MHz to 1500MHz at test separation distances > 50 mm = **N/A**

$$[\text{Threshold at 50 mm in step 1}) + (\text{test separation distance} - 50 \text{ mm}) \cdot (f(\text{MHz})/150)] \text{ mW}$$

Step 2-2) SAR test exclusion thresholds for 1500MHz to 6GHz at test separation distances > 50 mm = **N/A**

$$[\text{Threshold at 50 mm in step 1}) + (\text{test separation distance} - 50 \text{ mm}) \cdot 10] \text{ mW}$$