

Standalone SAR test exclusion considerations

January 30, 2015

- Transmitting frequency = 2402 MHz
- Min. test separation distance = 5 mm
- Max. power with turn-up tolerance = 5.50 dBm = 4 mW
- Max Target Power : 3.50 dBm
- Measured Average Power: 3.31 dBm

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

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}]$

= $[4.00 / 5] \cdot [\sqrt{ 2.402 }]$

= 1.24 ≤ 3, for 1g SAR

Thus SAR for this device is not required.

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

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