

Standalone SAR test exclusion considerations

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- Min. transmitting frequency = 2402 MHz
- Min. test separation distance = 5 mm Antenna Gain = 2.13 dBi
- Max. power with turn-up tolerance = 3.80 dBm = 2.40 mW
- Typical Power: 2.80 dBm ± 1.00 dB
- Measured Output Power: 3.76 dBm
- Max. E.I.R.P = 3.80 dBm + 2.13 dBm = 5.93 dBm 3.92 mW

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

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

$$= [2.40 / 5] * [\sqrt{2.402}]$$

$$= \textcolor{red}{0.74} \leq 3, \text{ for 1g SAR} \quad \text{Thus SAR for this device is not required.}$$

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

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