

Standalone SAR test exclusion considerations

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- Min. transmitting frequency = **2402** MHz
- Min. test separation distance = **5** mm
- Max. power with turn-up tolerance = **2.20** dBm = **2** mW
 Typical Power: **1.20** dBm ± **1.00** dB
 Measured Average Power: **1.86** dBm

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

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

$$= [2.00 / 5] * [\sqrt{2.402}]$$

$$= \mathbf{0.62} \leq 3, \text{ for 1g SAR}$$

[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**

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

Measured Average Power(dBm)		Modulation		
		<i>GFSK</i>	<i>π/4-DQPSK</i>	<i>8DPSK</i>
Frequency (MHz)	2402	1.86	0.80	0.81
	2441	1.73	0.64	0.66
	2480	1.41	0.45	0.46