

# Standalone SAR test exclusion considerations

December 24, 2015

- Min. transmitting frequency = 2480 MHz
- Min. test separation distance = 5 mm
- Max. power with turn-up tolerance = 1.50 dBm = 1.41 mW
- Measured Average Power: 1.28 dBm

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

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

$$= [1.41 / 5] \cdot [\sqrt{2.48}]$$

$$= 0.44 \leq 3, \text{ for 1g SAR}$$

Thus SAR for this device is not required.

**Step 2-1) SAR test exclusion thresholds for 100MHz to 1500MHz at test 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**

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