

# Standalone SAR test exclusion considerations for 1Mbps

June 18, 2015

- Transmitting frequency = 2480 MHz
- Min. test separation distance = 5 mm
- Max. power with turn-up tolerance = 6.50 dBm = 5 mW
- Max Target Power : 6.50 dBm
- Measured Average Power: 5.59 dBm

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

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

=  $[ 5.00 / 5 ] \cdot [ \sqrt{ 2.48 } ]$

= **1.57**  $\leq 3$ , for 1g SAR

Thus SAR for this device is not required.

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

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

# Standalone SAR test exclusion considerations for 2,3Mbps

June 18, 2015

- Transmitting frequency = 2480 MHz
- Min. test separation distance = 5 mm
- Max. power with turn-up tolerance = 3.00 dBm = 2 mW
- Max Target Power : 3.00 dBm
- Measured Average Power: 2.01 dBm

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

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

=  $[ 2.00 / 5 ] \cdot [ \sqrt{ 2.48 } ]$

= **0.63**  $\leq$  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 separation distances  $>$  50 mm = **N/A****

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

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

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