

Standalone SAR test exclusion considerations

April 7, 2016

- Device category = 🗌 Portable device 🔄 Mobile device
- Transmitting mode = 🛛 🗹 Single Transmitting 👘 🗌 Simultaneous Transmitting
- Max. transmitting frequency = 2441 MHz
- Min. test separation distance = 200 mm
- Max. Antenna Gain = 3.34 dBi
- Max. power with turn-up tolerance = 0.00 dBm = 1.0 mW (Typical Power = Max. 0.00 dBm)
Note. Bluetooth(1Mbps/2Mbps/3Mbps)

KDB 447498 D01 clasue 4.3.1 Step 2-2) SAR test exclusion thresholds for 1500MHz to 6GHz at test separationn distances > 50 mm

[Threshold at 50 mm + (test separation distance - 50 mm) X 10] mW

 $= [0.01 + (200 \text{mm} - 50 \text{mm} \times 10)] = 1500$

Note. The calculation result was rounded to one decimal place for comparison.

→ SAR evaluation for general population exposure conditions by measurement or numerical simulation is not required.

Maximum Permissible Exposure(MPE) evaluation for mobile device

- $S = P G / (4 R^2 \pi) , mW/cm^2$
- S = Maximum power density

P = Maximum power with turn-up tolerance

- G = Numeric power gain of the antenna
- R = Distance from transmitting antenna

= 0.000429 mW/cm²

Conclusion: The exposure condition of this device is compliant with FCC rules.

The limit for maximum permissible exposure = 1.000000 mW/cm²