Standalone SAR test exclusion considerations

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- Device category = ☐ Portable device   ☑ Mobile device
- Transmitting mode =   ☑ Single Transmitting   ☐ Simultaneous Transmitting
- Max. transmitting frequency =   **2480**   MHz
- Min. test separation distance =   **200**   mm
- Max. Antenna Gain =   **3.9**   dBi
- Max. power with turn-up tolerance =   **4.50**   dBm =   **2.9**   mW   (Typical Power =   **Max.   4.50**   dBm   )

Note.   Zigbee
        Worst Case: Transceiver1

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

= [0.02 + (200mm - 50mm X 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

$$=\ 0.001416\ \ mW/cm^2$$

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

The limit for maximum permissible exposure =   1.000000   mW/cm^2