

Standalone SAR test exclusion considerations

Date: October 8, 2020

| RF feature | Mode | Transmitting Frequency(MHz) | Test separation distance (mm) | ANT Gain (dBi) | Max. power with tune-up tolerance (dBm) ^{Note1} | Max. power with tune-up tolerance (mW) | Power thresholds | SAR test exclusion thresholds |
|------------|--------------|-----------------------------|-------------------------------|----------------|--|--|------------------|-------------------------------|
| BT | BDR(1Mbps) | 2480.00 | 5.0 | 1.69 | 8.00 | 6.3096 | 1.99 | 3.00 |
| BT | EDR(2,3Mbps) | 2480.00 | 5.0 | 1.69 | 6.00 | 3.9811 | 1.25 | 3.00 |
| BLE | BLE(1Mbps) | 2480.00 | 5.0 | 1.69 | 7.00 | 5.0119 | 1.58 | 3.00 |
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Note1. Please refer to the operation description.(Max tune-up power)

KDB 447498 D01 clause 4.3.1 Step 1) SAR test exclusion thresholds for 100MHz to 6GHz at test separation distances ≤ 50 mm

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1g SAR and } \leq 7.5 \text{ for 10g extremity SAR}$$
Sample Calculation

$$= [(6.3096\text{mW} / 5\text{mm})] \times [\sqrt{2.48\text{GHz}}] = 1.99$$

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

Conclusion : SAR evaluation for general population exposure conditions by measurement or numerical simulation is not required