

# Appendix IV RF Exposure evaluation

## FCC ID: 2BR7S-M9

According to 447498 D01 General RF Exposure Guidance v06

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

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

Power and distance are rounded to the nearest mW and mm before calculation

The result is rounded to one decimal place for comparison.

### BLE:

Worse case output power is as below: [2480MHz: 3.90dBm]

Maximum output power is 3.90dBm (2.45 mW).

$(2.45\text{mW} / 5\text{mm}) \cdot [\sqrt{2.480(\text{GHz})}] = 0.77 < 3.0$  for 1-g SAR.

### EDR:

Worse case output power is as below: [2441MHz: 4.99dBm]

Maximum output power is 4.99dBm (3.16 mW).

$(3.16\text{mW} / 5\text{mm}) \cdot [\sqrt{2.441(\text{GHz})}] = 0.99 < 3.0$  for 1-g SAR.

**2.4G WIFI:**

Worse case output power is as below: [2462MHz: 6.42dBm]

Maximum output power is 6.42dBm (4.39 mW).

$(4.39\text{mW} / 5\text{mm}) \cdot [\sqrt{2.462(\text{GHz})}] = 1.38 < 3.0$  for 1-g SAR.

*Maximum RF Exposure evaluation for BT+WIFI:  $0.99 + 1.38 < 3.0$  for 1-g SAR.*

Then SAR evaluation is not required.