

RF EXPOSURE EVALUATION

1. PRODUCT INFORMATION

Product Description	USB WiFi Bluetooth Adapter
Model Name	EP-N8568, EP-N8567
FCC ID	2AZDM-WIFIBT

2. EVALUATION METHOD

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 ≤ 50 mm are determined by:

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

Where $f(\text{GHz})$ is the RF channel transmit frequency in GHz

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

3. CALCULATION

BT (BLE):

$P_t = 2.993 \text{ dBm} = 1.99 \text{ mW}$

The value of the Maximum output power P_t is referred to the test report of the CFR47

§15.247.

The result for RF exposure evaluation $\text{SAR} = (1.99 \text{ mW} / 5 \text{ mm}) \cdot [\sqrt{2.402(\text{GHz})}] = 0.62 < 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR.

2.4G WIFI:

$P_t = 8.79 \text{ dBm} = 7.57 \text{ mW}$

The value of the Maximum output power P_t is referred to the test report of the CFR47

§15.247.

The result for RF exposure evaluation $\text{SAR} = (7.57 \text{ mW} / 5 \text{ mm}) \cdot [\sqrt{2.412(\text{GHz})}] = 2.35 < 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR.

Note:

1. Only the worst case recorded.
2. The BT and 2.4GHz WIFI band can transmit simultaneously:
 $0.62 + 2.35 = 2.97 < 3.0$

4. CONCLUSION

The SAR evaluation is not required.