

RF EXPOSURE EVALUATION

1. PRODUCT INFORMATION

Product Description	TABLET PC
Model Name	HM-PAN-110
FCC ID	2ARU9PAN001

2. EVALUATION METHOD

According to 447498 D01 General RF Exposure Guidance v05

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

5G WIFI

$$P_t = 7.14 \text{ dBm} = 5.18 \text{ mW}$$

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 $\text{SAR} = (5.18 \text{ mW} / 5 \text{ mm}) \cdot [\sqrt{5.200 \text{ GHz}}] = 2.36 < 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR.

2.4G WIFI

$$P_t = 9.67 \text{ dBm} = 9.27 \text{ mW}$$

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 $\text{SAR} = (9.27 \text{ mW} / 5 \text{ mm}) \cdot [\sqrt{2.437 \text{ GHz}}] = 2.89 < 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR.

BR/EDR

$$P_t = 8.620 \text{ dBm} = 7.28 \text{ mW}$$

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 $\text{SAR} = (7.28 \text{ mW} / 5 \text{ mm}) \cdot [\sqrt{2.441 \text{ GHz}}] = 2.27 < 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR.

BLE

$P_t=4.221\text{dBm}=2.64\text{mW}$

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 $\text{SAR}=(2.64\text{mW}/5\text{mm}) \cdot [\sqrt{2.48\text{GHz}}]=0.83<3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR.

Note: The WIFI and BT can not transmit simultaneously.

4. CONCLUSION

The SAR evaluation is not required.