

FCC RF Exposure

Product Name: Tablet PC

FCCID: 2BB67-TABS9

Model(s): Tab S9, Tab A9, Tab S9+ ,Tab A10, Tab S10, Tab S10+,Tab A11, Tab S11, Tab S11+,Tab A12 ,Tab S12, Tab S12+,Tab A13, Tab S13, Tab S13+,Tab A15, Tab S15, Tab S15+,Tab A16, Tab S16, Tab S16+,Tab A17, Tab S17, Tab S17+,Tab A18, Tab S18, Tab S18+,Tab A19, Tab S19, Tab S19+,Tab A20, Tab S20, Tab S20+

1. Limits

According to KDB 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:

Result= $P/D \cdot \sqrt{F}$

F= the RF channel transmit frequency in GHz

P=Maximum turn - up power in mw

D=Min. test separation distance in mm

2. Test Result of RF Exposure Evaluation

Frequency (MHz)	Output power (dBm)	Tune Up Power (dBm)	Max Tune Up power dBm/mW	Min test separation distance mm	Result	Limit (mW/cm ²)	SAR Test Exclusion
2.4G WIFI:2437	7.64	7 ± 1	8/6.31	5	1.97	3.0	Pass
BT: 2440	4.21	4 ± 1	5/3.16	5	0.98	3.0	Pass
5.2G WIFI:5240	6.81	6 ± 1	7/5.01	5	2.29	3.0	Pass
5.8G WIFI:5825	5.39	5 ± 1	6/3.98	5	1.92	3.0	Pass
Note: PK Output power= conducted power. Conducted power see the test report HK2307122985-1E/2E/3E/4E, antenna gain=BT/2.4g wifi: 0.42dBi 5.2g wifi/5.8g wifi: 0.17dBi BT and wifi do not support simultaneous transmission							

Per KDB 447498 D01, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine RF Exposure test exclusion. The test exclusion threshold is 2.29 which is ≤ 3 , RF Exposure testing is not required.

Note: Exclusion Thresholds Results= $\frac{(\text{max. power of channel, including tune-up tolerance, mW})}{(\text{min. test separation distance, mm})} \cdot \sqrt{f_{\text{(GHz)}}}$

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

Distance=5mm