

FCC RF Exposure

EUT Description: AI Voice Recorder

Model No.: PR1, PR1B, PR1C, PR1D

FCC ID: 2A6DB-PR1

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:
$$\left[\frac{\text{max power of channel, including tune - up tolerance, mW}}{(\text{min. test separation distance, mm})} \right] \cdot \sqrt{f(\text{GHz})} \leq 3.0$$
 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	SAR Test Exclusion
EDR	2480	-0.95	-1 ± 1	0/1.000	5	0.315	3.0	Pass
2.4G WiFi	2437	2.98	2 ± 1	3/1.995	5	0.623	3.0	Pass
5.2G WiFi	5200	-2.77	-3 ± 1	-2/0.631	5	0.288	3.0	Pass

Note:

PK Output power = conducted power.

Conducted power see the test report **HK2507163876-1E/2E/3E**, BT antenna gain = -0.40dBi, 2.4GWiFi antenna gain = -0.40dBi, 5.2GWiFi antenna gain = -0.36dBi.

BT and 2.4GWiFi Simultaneous evaluation:

$0.315 / 3 + 0.623 / 3 = 0.313 < 1$, SAR testing is not required

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 meets the requirements, SAR testing is not required.

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

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

Distance = 5mm