



FCC RF Exposure

EUT Description: Portable internet Radio with FM

Model No.: WR-23F, MA-23F, MA-23KF, MA-23K

FCC ID: 2ABD3MS-WR23F

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:

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

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
BLE	2440	-1.19	-1 $\pm$ 1	0/1	5	0.312	3.0	Pass
EDR	2480	-6.60	-6 $\pm$ 1	-5/0.316	5	0.100	3.0	Pass
2.4G WiFi	2437	8.89	8 $\pm$ 1	9/7.943	5	2.480	3.0	Pass

Note:

PK Output power = conducted power.

Conducted power see the test report **HK26083100903-1E/2E/3E**,

BT antenna gain = 2.81dBi, 2.4GWiFi antenna gain = 1.5dBi

BT and 2.4GWiFi Simultaneous evaluation:

$0.312/3 + 2.480/3 = 0.931 < 1$, 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