

FCC ID: 2BCIBF6
Portable device

According to §15.247(e)(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to KDB447498 D01 General RF Exposure Guidance V06

The 1-g SAR 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
- The result is rounded to one decimal place for comparison

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

WIFI 2.4G

	Channel Freq. (GHz)	Max Conduct ed power (dBm)	Conducte d power (mW)	Tune-up power (dBm)	Max tune-up power (dBm)	Max tune-up power (mW)	Distance (mm)	Result calculation	SAR Exclusion threshold	SAR test exclusion
WIFI	2.412	8.85	7.67	8±1	9.00	7.94	<5	2.46626	3.00	YES
	2.437					7.94	<5	2.47901	3.00	YES
	2.462					7.94	<5	2.49169	3.00	YES

NFC

According to the calculation formula of power:

Below 30MHz: $\text{dBm} = \text{dBuV/m} - 95.2 + 6$

Modulation	Channel Freq. (MHz)	Output Power (dBuV/m)	Output Power (dBm)
ASK	13.56	40.62	-48.58

	Channel Freq. (GHz)	Max Conduct ed power (dBm)	Conducte d power (mW)	Tune-up power (dBm)	Max tune-up power (dBm)	Max tune-up power (mW)	Distance (mm)	Result calculation	SAR Exclusion threshold	SAR test exclusion
NFC	0.01356	-48.58	0.000014	-48±1	-47.00	0.000020	<5	0.00000047	3.00	YES

Simultaneous transmitting evaluation:

WIFI and NFC

Evaluation mode	Result calculation	Total Result calculation	Limit	Result
WIFI 2.4G	2.49169	$2.49169/3 + 0.00000047/3 = 0.83$	1	Pass
NFC	0.00000047			

Conclusion:

For the max result:

Max simultaneous transmission $0.83 \leq \text{FCC Limit } 1.0$,

Maximum transmission for a single function $2.49169 \leq \text{FCC Limit } 3.0$ for 1g SAR

Therefore, SAR test is not required.