

RF Exposure Conditions

According to 447498 D01 General RF Exposure Guidance v06, Since the Dedicated Host Approach is applied, the standalone SAR test exclusion procedure in KDB 447498 is applied in conjunction with KDB 616217 § 4.3 to determine the minimum test separation distance:

- When the separation distance from the antenna to an adjacent edge is ≤ 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.
- When the separation distance from the antenna to an adjacent edge is > 5 mm, the actual antenna-to-edge separation distance is applied to determine SAR test exclusion.

WIFI 2.4G

a) For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

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

f(GHz)	2.462
max. tune up power (dBm)	10.5
max. power (mW)	11.22
min. test separation distance (mm)	5
Calculated Threshold Value	3.52
SAR test exclusion Limit (10-g SAR test exclusion thresholds)	≤ 7.5
Result	Pass

BLE

a) For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

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

f(GHz)	2.48
max. tune up power (dBm)	0.5
max. power (mW)	1.12
min. test separation distance (mm)	5
Calculated Threshold Value	0.35
SAR test exclusion Limit (10-g SAR test exclusion thresholds)	≤ 7.5
Result	Pass

NFC

b) 1)

{[Power allowed at numeric threshold for 50 mm in step a)] + [(test separation distance – 50 mm)·(f(MHz)/150)]} mW, for 100 MHz to 1500 MHz

f(GHz)	0.1
min. test separation distance (mm)	5
Threshold at 50 mm	474
b) 1. SAR test exclusion thresholds (mW)	444

c) 1.

the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by $[1 + \log(100/f(\text{MHz}))]$

f(GHz)	0.01356
b) 1. SAR test exclusion thresholds (mW)	444
c) 1. SAR test exclusion thresholds (mW)	830

c) 2.

For test separation distances ≤ 50 mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by $\frac{1}{2}$

f(GHz)	0.01356
max. Electric field strength (dBuV/m @3m)	58.34
max. EIRP power (dBm)	-36.89
max. EIRP Tune up power (dBm)	-36.5
max. EIRP power (mW)	0
min. test separation distance (mm)	5
c) 1. SAR test exclusion thresholds (mW)	830
c) 2. SAR test exclusion thresholds (mW)	415
Result	Pass

Note(s):

1. The WIFI 2.4G max tune up power referred the test report TMWK2506002274KR for SAR test exclusion purpose.
2. The BLE max tune up power referred the test report TMWK2506002275KR for SAR test exclusion purpose.
3. The NFC max tune up power referred the Field strength of the test report TMWK2506002283KR for RF Exposure assessment purpose.

-- End of Test Report --