# RF exposure letter

**FCC-ID: 2AHRDEP-DB1607**

RF Exposure evaluation

According to 447498 D01 General RF Exposure Guidance v05

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:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] •[√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

• f(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

WIFI (5.2Gband) Tune Up

| Mode | WIFI(AVG) | | |
|---|---|---|---|
| | Low | Middle | High |
| IEEE 802.11a | 2.3±1dBm | 2.3±1dBm | 2.3±1dBm |
| IEEE 802.11n HT20 | 1±1dBm | 2±1dBm | 3±1dBm |
| IEEE 802.11n HT40 | -1±1dBm | / | -1±1dBm |
| IEEE 802.11ac HT20 | 1±1dBm | 1±1dBm | 1±1dBm |
| IEEE 802.11ac HT40 | -1±1dBm | / | -1±1dBm |
| IEEE 802.11ac HT80 | -1±1dBm | | |

WIFI (5.7Gband) Tune Up

| Mode | WIFI(AVG) | | |
|---|---|---|---|
| | Low | Middle | High |
| IEEE 802.11a | 1±1dBm | 2±1dBm | 1±1dBm |
| IEEE 802.11n HT20 | 3±1dBm | 2±1dBm | 1±1dBm |
| IEEE 802.11n HT40 | 0±1dBm | / | 0±1dBm |
| IEEE 802.11ac HT20 | 1±1dBm | 3±1dBm | 1±1dBm |
| IEEE 802.11ac HT40 | 0±1dBm | / | 0±1dBm |
| IEEE 802.11ac HT80 | -1±1dBm | | |

**WIFI 5180-5240MHz band:**

1、Worse case is as below: [5180 MHz 3.3dBm ( 2.13 mW ) output power]

(2.13mW /5mm) •[√5.180(GHz)]=1.00 <3.0 for 1-g SAR

2、Worse case is as below: [5200MHz 3.3dBm ( 2.13 mW ) output power]

(2.13mW /5mm) •[√5.200(GHz)]=0.97<3.0 for 1-g SAR

3、Worse case is as below: [5240MHz 4.0dBm ( 2.50 mW ) output power]

(2.50mW /5mm) •[√5.240(GHz)]=1.14 <3.0 for 1-g SAR

**WIFI 5745-5850MHz band:**

1、Worse case is as below: [5745 MHz 4.0dBm ( 2.50 mW ) output power]

(2.50mW /5mm) •[√5.745(GHz)]=1.20 <3.0 for 1-g SAR

2、Worse case is as below: [5785MHz 4.0dBm ( 2.50 mW ) output power]

(2.50mW /5mm) •[√5.785(GHz)]=1.20 <3.0 for 1-g SAR

3、Worse case is as below: [5825MHz 2.0dBm ( 1.58 mW ) output power]

(1.58mW /5mm) •[√5.825(GHz)]=0.76 <3.0 for 1-g SAR

Conclusion: 2.4G WIFI and 5G WIFI unable to transmit at the same time, then NII SAR evaluation is not required.