

Test Result of RF Exposure Evaluation

According to the KDB-447498 D01 V06, FCC 47CFR § 2.1091 the following RF exposure evaluation shall to demonstrate RF exposure compliance.

Friis transmission formula: $P_d = (P_{out} * G) / (4 * \pi * r^2)$

Where

P_d = power density in mW/cm², P_{out} = output power to antenna in mW;

G = gain of antenna in linear scale, $\pi = 3.1416$;

R = distance between observation point and center of the radiator in cm.

2.4G

ANT 1

| | Channel Frequency (MHz) | Target power W/ tolerance (dBm) | Max tune up power tolerance(dBm) | Max Output power to antenna (mW) | Power Density at R=20cm (mW/cm ²) | Limit (mW/cm ²) | Result |
|----------------|-------------------------|---------------------------------|----------------------------------|----------------------------------|---|-----------------------------|--------|
| 802.11b | 2412MHz | 16±1 | 17 | 50.12 | 0.01580 | 1.0 | Pass |
| 802.11g | 2412MHz | 13±1 | 14 | 25.12 | 0.00792 | 1.0 | Pass |
| 802.11n (HT20) | 2412MHz | 12±1 | 13 | 19.95 | 0.00629 | 1.0 | Pass |
| 802.11n(HT40) | 2422MHz | 11±1 | 12 | 15.85 | 0.00500 | 1.0 | Pass |

ANT 2

| | Channel Frequency (MHz) | Target power W/ tolerance (dBm) | Max tune up power tolerance(dBm) | Max Output power to antenna (mW) | Power Density at R=20cm (mW/cm ²) | Limit (mW/cm ²) | Result |
|----------------|-------------------------|---------------------------------|----------------------------------|----------------------------------|---|-----------------------------|--------|
| 802.11b | 2412MHz | 15±1 | 16 | 39.81 | 0.01255 | 1.0 | Pass |
| 802.11g | 2412MHz | 13±1 | 14 | 25.12 | 0.00792 | 1.0 | Pass |
| 802.11n (HT20) | 2412MHz | 11±1 | 12 | 15.85 | 0.00500 | 1.0 | Pass |
| 802.11n(HT40) | 2422MHz | 10±1 | 11 | 12.59 | 0.00397 | 1.0 | Pass |

Simultaneous transmission MPE According to KDB447498 for Transmitters used in mobile exposure conditions for simultaneous transmission operations; Σ of MPE ratios ≤ 1.0

ANT 1+ANT2 (The worst)

| Power Density at R=20cm (mW/cm2) ANT 1 | Power Density at R=20cm (mW/cm2) ANT 2 | Power Density at R=20cm (mW/cm2) ANT 1+ANT 2 | Limit (mW/cm2) | Result |
|--|--|--|----------------|--------|
| 0.01580 | 0.01255 | 0.02835 | 1.0 | Pass |