

6. Radio Frequency Exposure Compliance

6.1.1 Electromagnetic Fields

RESULT:
Passed

Test standard : FCC CFR 47 Part 2 Subpart J Section 2.1091
 RSS-102 Issue 5, 2.5.2

Separation distance is more than 20 cm, thus mobile device exposure limits can be applied.

FCC Maximum Exposure:

Mode	Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Maximum Output Power (dBm)	Output Power (mW)	Power Density (S)(mW/cm²)	Test Result
802.11an HT40	5310	2.00	1.5849	20.1056	102.4625	0.032323	Pass

Limit FCC: 1500-100,000 MHz 1.0 mW/cm²

ISED:
Exemption Limits for Routine Evaluation – RF Exposure Evaluation

At or above 300MHz and below 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than $1.31 \times 10^{-2} f^{0.6834}$ W, where f is in MHz;

f= 5310MHz

$$1.31 \times 10^{-2} \times 5310^{0.6834} = 4.60W$$

After evaluation the 5310MHz e.i.r.p 22.11dBm calculated result is closer to its limit.

22.11dBm = 0.1626W, it is well below the limit of Exemption Limits for Routine Evaluation, so RF exposure assessment meets its standards.