



RF EXPOSURE TEST

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 KDB 447498 (2)(a)(i)

For portable device, the power limit is $60/f$ (in GHz) mW

For limit $60/f$ is equal:

$$60/2.412=24.87\text{mW}$$

$$60/2.437=24.62\text{ mW}$$

$$60/2.462=24.37\text{mW}$$

Maximum measured transmitter power

TX 802.11b Mode					
Test Channel	Frequency	Peak output power.	Antenna Gain	EIRP	LIMIT
	(MHz)	(dBm)	dBi	dBm	mW
CH01	2412	8.74	2.0	10.74	11.85
CH06	2437	9.10	2.0	11.10	12.88
CH11	2462	8.46	2.0	10.46	11.12
TX 802.11g Mode					
CH01	2412	8.59	2.0	10.59	11.45
CH06	2437	8.28	2.0	10.28	10.66
CH11	2462	8.81	2.0	10.81	12.05
TX 802.11n/20M Mode					
CH01	2412	8.79	2.0	10.79	11.99
CH06	2437	8.64	2.0	10.64	11.58
CH11	2462	9.27	2.0	11.27	13.39
TX 802.11n/40M Mode					
CH03	2422	9.04	2.0	11.04	12.70
CH06	2437	7.93	2.0	9.93	9.84
CH11	2452	8.57	2.0	10.57	11.40

To Tune Up information

max possible output power (PK) : 10 ± 1 dbm

MAX possible Conducted Power (dBm)	Max Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	limit(mW)
11	2	13	19.95	24.37

The max.output power E.I.R.P is $19.95\text{mW} < 24.19\text{mW}$

Conclusion: No SAR is required.