

RF EXPOSURE STATEMENT

1. LIMITS

According to §1.1310 and §2.1091 RF exposure is calculated.

(B) Limits for General Population/Uncontrolled Exposures

Frequency range (MHz)	Electric field Strength (V/m)	Magnetic field Strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
0.3 - 1.34.....	614	1.63	*(100)	30
1.34 - 30.....	824/f	2.19/f	*(180/ f ²)	30
30 - 300.....	27.5	0.073	0.2	30
300 - 1500.....	f/1500	30
1500 - 100.000.....	1.0	30

F = frequency in MHz

* = Plane-wave equivalent power density

2. MAXIMUM PERMISSIBLE EXPOSURE Prediction

Prediction of MPE limit at a given distance

$$S = PG/4\pi R^2$$

S = Power density

P = power input to antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

2-1 Limit (WLAN DTS 802.11b)

Max Peak output Power at antenna input terminal	17.5600	dBm
Max Peak output Power at antenna input terminal	57.016	mW
Prediction distance	20.000	cm
Prediction frequency	2412.00	MHz
Antenna Gain(typical)	1.7200	dBi
Antenna Gain(numeric)	1.48594	-
Power density at prediction frequency(S)	0.016855	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.00000	mW/cm ²

2-2 Limit (WLAN DTS 802.11g)

Max Peak output Power at antenna input terminal	25.5300	dBm
Max Peak output Power at antenna input terminal	357.273	mW
Prediction distance	20.000	cm
Prediction frequency	2412.00	MHz
Antenna Gain(typical)	1.72000	dBi
Antenna Gain(numeric)	1.48594	-
Power density at prediction frequency(S)	0.105616	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.00000	mW/cm ²

2-3 Limit (WLAN DTS 802.11n)

Max Peak output Power at antenna input terminal	25.2900	dBm
Max Peak output Power at antenna input terminal	338.065	mW
Prediction distance	20.0000	cm
Prediction frequency	2412.000	MHz
Antenna Gain(typical)	1.72000	dBi
Antenna Gain(numeric)	1.48594	-
Power density at prediction frequency(S)	0.099938	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.00000	mW/cm ²