

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

3. RESULTS

3-1. BT BAND

Max Average output Power at antenna input terminal (dBm)	4.6100
Max Average output Power at antenna input terminal (mW)	2.891
Prediction distance (cm)	20.00000
Prediction frequency (MHz)	2441.00000
Antenna Gain(Peak) (dBi)	2.10000
Antenna Gain(numeric)	1.62181
Power density at prediction frequency (mW/cm ²)	0.000933
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.00000

3-2. DTS(802.11b) BAND

Max Average output Power at antenna input terminal (dBm)	18.1000
Max Average output Power at antenna input terminal (mW)	64.565
Prediction distance (cm)	20.00000
Prediction frequency (MHz)	2437.00000
Antenna Gain(Peak) (dBi)	2.10000
Antenna Gain(numeric)	1.62181
Power density at prediction frequency (mW/cm ²)	0.020832
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.00000

3-3. DTS(802.11g) BAND

Max Average output Power at antenna input terminal (dBm)	24.1800
Max Average output Power at antenna input terminal (mW)	261.818
Prediction distance (cm)	20.00000
Prediction frequency (MHz)	2437.00000
Antenna Gain(Peak) (dBi)	2.10000
Antenna Gain(numeric)	1.62181
Power density at prediction frequency (mW/cm ²)	0.084475
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.00000

3-3. DTS(802.11n) BAND

Max Average output Power at antenna input terminal (dBm)	24.1500
Max Average output Power at antenna input terminal (mW)	260.016
Prediction distance (cm)	20.00000
Prediction frequency (MHz)	2437.00000
Antenna Gain(Peak) (dBi)	2.10000
Antenna Gain(numeric)	1.62181
Power density at prediction frequency (mW/cm ²)	0.083894
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.00000

3-4. UNII 1 (802.11a) BAND

Max Average output Power at antenna input terminal (dBm)	11.3500
Max Average output Power at antenna input terminal (mW)	13.646
Prediction distance (cm)	20.00000
Prediction frequency (MHz)	5240.00000
Antenna Gain(Peak) (dBi)	3.90000
Antenna Gain(numeric)	2.45471
Power density at prediction frequency (mW/cm ²)	0.006664
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.00000

3-5. UNII 1 (802.11n) BAND

Max Average output Power at antenna input terminal (dBm)	11.2000
Max Average output Power at antenna input terminal (mW)	13.183
Prediction distance (cm)	20.00000
Prediction frequency (MHz)	5200.00000
Antenna Gain(Peak) (dBi)	3.90000
Antenna Gain(numeric)	2.45471
Power density at prediction frequency (mW/cm ²)	0.006438
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.00000

3-6. UNII 3 (802.11a) BAND

Max Average output Power at antenna input terminal (dBm)	18.2700
Max Average output Power at antenna input terminal (mW)	67.143
Prediction distance (cm)	20.00000
Prediction frequency (MHz)	5745.00000
Antenna Gain(Peak) (dBi)	3.90000
Antenna Gain(numeric)	2.45471
Power density at prediction frequency (mW/cm ²)	0.032789
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.00000

3-7. UNII 3 (802.11n) BAND

Max Average output Power at antenna input terminal (dBm)	17.1200
Max Average output Power at antenna input terminal (mW)	51.523
Prediction distance (cm)	20.00000
Prediction frequency (MHz)	5745.00000
Antenna Gain(Peak) (dBi)	3.90000
Antenna Gain(numeric)	2.45471
Power density at prediction frequency (mW/cm ²)	0.025161
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.00000