

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 (BT BAND)

3-1. BT BAND

Max Peak output Power at antenna input terminal (dBm)	3.9400
Max Peak output Power at antenna input terminal (mW)	2.477
Prediction distance (cm)	20.0000
Prediction frequency (MHz)	2402.0
Antenna Gain(typical) (dBi)	3.46
Antenna Gain(numeric)	2.21820
Power density at prediction frequency (mW/cm ²)	0.001093
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.00000

4.RESULTS (DTS BAND)

4-1. DTS (802.11b BAND)

Max Peak output Power at antenna input terminal (dBm)	23.18
Max Peak output Power at antenna input terminal (mW)	207.970
Prediction distance (cm)	20.0000
Prediction frequency (MHz)	2412.000
Antenna Gain(typical) (dBi)	3.46
Antenna Gain(numeric)	2.21820
Power density at prediction frequency (mW/cm ²)	0.091776
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.00000

4-2. DTS (802.11g BAND)

Max Peak output Power at antenna input terminal (dBm)	23.33
Max Peak output Power at antenna input terminal (mW)	215.278
Prediction distance (cm)	20.0000
Prediction frequency (MHz)	2412.0000
Antenna Gain(typical) (dBi)	3.46
Antenna Gain(numeric)	2.21820
Power density at prediction frequency (mW/cm ²)	0.095001
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.00000

4-3. DTS (802.11n 20MHz BAND)

Max Peak output Power at antenna input terminal (dBm)	23.19
Max Peak output Power at antenna input terminal (mW)	208.449
Prediction distance (cm)	20.000
Prediction frequency (MHz)	2412.00
Antenna Gain(typical) (dBi)	3.46
Antenna Gain(numeric)	2.21820
Power density at prediction frequency (mW/cm ²)	0.091988
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.00000

5.RESULTS (UNII 1 BAND)

5-1.802.11a BW(5180 MHz ~ 5240 MHz)

Max Peak output Power at antenna input terminal (dBm)	16.66
Max Peak output Power at antenna input terminal (mW)	46.345
Prediction distance (cm)	20.0000
Prediction frequency (MHz)	2412.00
Antenna Gain(typical) (dBi)	3.2
Antenna Gain(numeric)	2.08930
Power density at prediction frequency (mW/cm ²)	0.019263
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.00000

5-2 802.11n 20MHz BW (5180 MHz ~ 5240 MHz)

Max Peak output Power at antenna input terminal (dBm)	16.59
Max Peak output Power at antenna input terminal (mW)	45.604
Prediction distance (cm)	20.0000
Prediction frequency (MHz)	2412.00
Antenna Gain(typical) (dBi)	3.2
Antenna Gain(numeric)	2.08930
Power density at prediction frequency (mW/cm ²)	0.0018955
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.00000

6.RESULTS (UNII 3 BAND)

6-1.802.11a BW(5765 MHz ~ 5825 MHz)

Max Peak output Power at antenna input terminal (dBm)	18.53
Max Peak output Power at antenna input terminal (mW)	71.285
Prediction distance (cm)	20.0000
Prediction frequency (MHz)	2412.00
Antenna Gain(typical) (dBi)	4.08
Antenna Gain(numeric)	2.55859
Power density at prediction frequency (mW/cm ²)	0.036285
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.00000

6-2 802.11n 20MHz BW (5765 MHz ~ 5825 MHz)

Max Peak output Power at antenna input terminal (dBm)	18.37
Max Peak output Power at antenna input terminal (mW)	68.707
Prediction distance (cm)	20.000
Prediction frequency (MHz)	2412.00
Antenna Gain(typical) (dBi)	4.08
Antenna Gain(numeric)	2.55859
Power density at prediction frequency (mW/cm ²)	0.034973
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.00000