

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)	3.5100
Max Peak output Power at antenna input terminal (mW)	2.244
Prediction distance (cm)	20.0000
Prediction frequency (MHz)	2402.0
Antenna Gain(typical) (dBi)	3.04
Antenna Gain(numeric)	2.01372
Power density at prediction frequency (mW/cm ²)	0.000899
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)	21.58
Max Peak output Power at antenna input terminal (mW)	143.880
Prediction distance (cm)	20.0000
Prediction frequency (MHz)	2412.000
Antenna Gain(typical) (dBi)	3.04
Antenna Gain(numeric)	2.01372
Power density at prediction frequency (mW/cm ²)	0.057641
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)	25.42
Max Peak output Power at antenna input terminal (mW)	348.337
Prediction distance (cm)	20.0000
Prediction frequency (MHz)	2412.0000
Antenna Gain(typical) (dBi)	3.04
Antenna Gain(numeric)	2.01372
Power density at prediction frequency (mW/cm ²)	0.139550
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)	25.08
Max Peak output Power at antenna input terminal (mW)	322.107
Prediction distance (cm)	20.000
Prediction frequency (MHz)	2412.00
Antenna Gain(typical) (dBi)	3.04
Antenna Gain(numeric)	2.01372
Power density at prediction frequency (mW/cm ²)	0.129042
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)	15.21
Max Peak output Power at antenna input terminal (mW)	33.189
Prediction distance (cm)	20.0000
Prediction frequency (MHz)	2412.00
Antenna Gain(typical) (dBi)	3.92
Antenna Gain(numeric)	2.46604
Power density at prediction frequency (mW/cm ²)	0.016283
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)	15.22
Max Peak output Power at antenna input terminal (mW)	33.266
Prediction distance (cm)	20.0000
Prediction frequency (MHz)	2412.00
Antenna Gain(typical) (dBi)	3.92
Antenna Gain(numeric)	2.46604
Power density at prediction frequency (mW/cm ²)	0.016320
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)	19.29
Max Peak output Power at antenna input terminal (mW)	84.918
Prediction distance (cm)	20.0000
Prediction frequency (MHz)	2412.00
Antenna Gain(typical) (dBi)	5.5
Antenna Gain(numeric)	3.54813
Power density at prediction frequency (mW/cm ²)	0.059942
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)	18.11
Max Peak output Power at antenna input terminal (mW)	64.714
Prediction distance (cm)	20.000
Prediction frequency (MHz)	2412.00
Antenna Gain(typical) (dBi)	5.50
Antenna Gain(numeric)	3.54813
Power density at prediction frequency (mW/cm ²)	0.045680
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.00000