

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

Equation from page 18 of OET Bulletin 65, Edition 97-01

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

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. BT BAND

| | |
|---|----------|
| Max Peak output Power at antenna input terminal (dBm) | 7.702 |
| Max Peak output Power at antenna input terminal (mW) | 5.891 |
| Prediction distance (cm) | 20.000 |
| Prediction frequency (MHz) | 2480.000 |
| Antenna Gain(typical) (dBi) | -2.0600 |
| Antenna Gain(numeric) | 0.62230 |
| Power density at prediction frequency (mW/cm ²) | 0.00729 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3-1 WLAN DTS Ant0 (802.11b) BAND

| | |
|---|-----------|
| Max Peak output Power at antenna input terminal (dBm) | 14.970 |
| Max Peak output Power at antenna input terminal (mW) | 31.405 |
| Prediction distance (cm) | 20.0000 |
| Prediction frequency (MHz) | 2462.0000 |
| Antenna Gain(typical) (dBi) | -0.85000 |
| Antenna Gain(numeric) | 0.82224 |
| Power density at prediction frequency (mW/cm ²) | 0.005137 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3-2 WLAN DTS Ant0 (802.11g) BAND

| | |
|---|------------|
| Max Peak output Power at antenna input terminal (dBm) | 22.650 |
| Max Peak output Power at antenna input terminal (mW) | 184.077 |
| Prediction distance (cm) | 20.00000 |
| Prediction frequency (MHz) | 2437.00000 |
| Antenna Gain(typical) (dBi) | -0.85000 |
| Antenna Gain(numeric) | 0.82224 |
| Power density at prediction frequency (mW/cm ²) | 0.030111 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3-3 WLAN DTS Ant0 (802.11n) BAND

| | |
|---|------------|
| Max Peak output Power at antenna input terminal (dBm) | 22.760 |
| Max Peak output Power at antenna input terminal (mW) | 188.799 |
| Prediction distance (cm) | 20.00000 |
| Prediction frequency (MHz) | 2437.00000 |
| Antenna Gain(typical) (dBi) | -0.85000 |
| Antenna Gain(numeric) | 0.82224 |
| Power density at prediction frequency (mW/cm ²) | 0.030884 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3-4 WLAN DTS Ant0 (802.11a 5745MHz ~ 5825MHz) BAND

| | |
|---|------------|
| Max Peak output Power at antenna input terminal (dBm) | 20.580 |
| Max Peak output Power at antenna input terminal (mW) | 114.288 |
| Prediction distance (cm) | 20.00000 |
| Prediction frequency (MHz) | 5825.00000 |
| Antenna Gain(typical) (dBi) | 2.34000 |
| Antenna Gain(numeric) | 1.71396 |
| Power density at prediction frequency (mW/cm ²) | 0.038970 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3-5 WLAN DTS Ant0 (802.11n 20MHz 5745MHz ~ 5825MHz) BAND

| | |
|---|------------|
| Max Peak output Power at antenna input terminal (dBm) | 19.950 |
| Max Peak output Power at antenna input terminal (mW) | 98.855 |
| Prediction distance (cm) | 20.00000 |
| Prediction frequency (MHz) | 5785.00000 |
| Antenna Gain(typical) (dBi) | 2.34000 |
| Antenna Gain(numeric) | 1.71396 |
| Power density at prediction frequency (mW/cm ²) | 0.033708 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3-6 WLAN DTS Ant0 (802.11n 40MHz 5755MHz ~ 5795MHz) BAND

| | |
|---|------------|
| Max Peak output Power at antenna input terminal (dBm) | 22.000 |
| Max Peak output Power at antenna input terminal (mW) | 158.489 |
| Prediction distance (cm) | 20.00000 |
| Prediction frequency (MHz) | 5755.00000 |
| Antenna Gain(typical) (dBi) | 2.34000 |
| Antenna Gain(numeric) | 1.71396 |
| Power density at prediction frequency (mW/cm ²) | 0.054042 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3-7 WLAN DTS Ant1 (802.11b) BAND

| | |
|---|------------|
| Max Peak output Power at antenna input terminal (dBm) | 15.300 |
| Max Peak output Power at antenna input terminal (mW) | 33.884 |
| Prediction distance (cm) | 20.00000 |
| Prediction frequency (MHz) | 2437.00000 |
| Antenna Gain(typical) (dBi) | 2.48000 |
| Antenna Gain(numeric) | 1.77011 |
| Power density at prediction frequency (mW/cm ²) | 0.011932 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3-8 WLAN DTS Ant1 (802.11g) BAND

| | |
|---|------------|
| Max Peak output Power at antenna input terminal (dBm) | 22.200 |
| Max Peak output Power at antenna input terminal (mW) | 165.959 |
| Prediction distance (cm) | 20.00000 |
| Prediction frequency (MHz) | 2437.00000 |
| Antenna Gain(typical) (dBi) | 2.48000 |
| Antenna Gain(numeric) | 1.77011 |
| Power density at prediction frequency (mW/cm ²) | 0.058443 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3-9 WLAN DTS Ant1 (802.11n) BAND

| | |
|---|------------|
| Max Peak output Power at antenna input terminal (dBm) | 22.780 |
| Max Peak output Power at antenna input terminal (mW) | 189.671 |
| Prediction distance (cm) | 20.00000 |
| Prediction frequency (MHz) | 2437.00000 |
| Antenna Gain(typical) (dBi) | 2.48000 |
| Antenna Gain(numeric) | 1.77011 |
| Power density at prediction frequency (mW/cm ²) | 0.066793 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3-10 WLAN DTS Ant1 (802.11a 5745 MHz ~ 5825MHz) BAND

| | |
|---|------------|
| Max Peak output Power at antenna input terminal (dBm) | 20.030 |
| Max Peak output Power at antenna input terminal (mW) | 100.693 |
| Prediction distance (cm) | 20.00000 |
| Prediction frequency (MHz) | 5825.00000 |
| Antenna Gain(typical) (dBi) | 2.50000 |
| Antenna Gain(numeric) | 1.77828 |
| Power density at prediction frequency (mW/cm ²) | 0.035623 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3-11 WLAN DTS Ant1 (802.11n 20 MHz 5745 MHz ~ 5825MHz) BAND

| | |
|---|------------|
| Max Peak output Power at antenna input terminal (dBm) | 19.600 |
| Max Peak output Power at antenna input terminal (mW) | 91.201 |
| Prediction distance (cm) | 20.00000 |
| Prediction frequency (MHz) | 5825.00000 |
| Antenna Gain(typical) (dBi) | 2.50000 |
| Antenna Gain(numeric) | 1.77828 |
| Power density at prediction frequency (mW/cm ²) | 0.032265 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3-12 WLAN DTS Ant1 (802.11n 40 MHz 5755 MHz ~ 5795MHz) BAND

| | |
|---|------------|
| Max Peak output Power at antenna input terminal (dBm) | 23.670 |
| Max Peak output Power at antenna input terminal (mW) | 232.809 |
| Prediction distance (cm) | 20.00000 |
| Prediction frequency (MHz) | 5755.00000 |
| Antenna Gain(typical) (dBi) | 2.50000 |
| Antenna Gain(numeric) | 1.77828 |
| Power density at prediction frequency (mW/cm ²) | 0.082363 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3-13 WLAN UNII Ant0 (802.11a 5180 MHz ~ 5240MHz) BAND

| | |
|---|------------|
| Max Peak output Power at antenna input terminal (dBm) | 12.340 |
| Max Peak output Power at antenna input terminal (mW) | 17.140 |
| Prediction distance (cm) | 20.00000 |
| Prediction frequency (MHz) | 5200.00000 |
| Antenna Gain(typical) (dBi) | 2.50000 |
| Antenna Gain(numeric) | 1.77828 |
| Power density at prediction frequency (mW/cm ²) | 0.006064 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3-14 WLAN UNII Ant0 (802.11n 20MHz 5180 MHz ~ 5240MHz) BAND

| | |
|---|------------|
| Max Peak output Power at antenna input terminal (dBm) | 13.140 |
| Max Peak output Power at antenna input terminal (mW) | 20.606 |
| Prediction distance (cm) | 20.00000 |
| Prediction frequency (MHz) | 5200.00000 |
| Antenna Gain(typical) (dBi) | 2.50000 |
| Antenna Gain(numeric) | 1.77828 |
| Power density at prediction frequency (mW/cm ²) | 0.007290 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3-15 WLAN UNII Ant0 (802.11n 40MHz 5190 MHz ~ 5230MHz) BAND

| | |
|---|------------|
| Max Peak output Power at antenna input terminal (dBm) | 10.910 |
| Max Peak output Power at antenna input terminal (mW) | 12.331 |
| Prediction distance (cm) | 20.00000 |
| Prediction frequency (MHz) | 5180.00000 |
| Antenna Gain(typical) (dBi) | 2.50000 |
| Antenna Gain(numeric) | 1.77828 |
| Power density at prediction frequency (mW/cm ²) | 0.004362 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3-16 WLAN UNII Ant1 (802.11n 5180 MHz ~ 5240MHz) BAND

| | |
|---|------------|
| Max Peak output Power at antenna input terminal (dBm) | 12.190 |
| Max Peak output Power at antenna input terminal (mW) | 16.558 |
| Prediction distance (cm) | 20.00000 |
| Prediction frequency (MHz) | 5200.00000 |
| Antenna Gain(typical) (dBi) | 2.05000 |
| Antenna Gain(numeric) | 1.60325 |
| Power density at prediction frequency (mW/cm ²) | 0.005281 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3-17 WLAN UNII Ant1 (802.11n 20MHz 5180 MHz ~ 5240MHz) BAND

| | |
|---|------------|
| Max Peak output Power at antenna input terminal (dBm) | 13.130 |
| Max Peak output Power at antenna input terminal (mW) | 20.559 |
| Prediction distance (cm) | 20.00000 |
| Prediction frequency (MHz) | 5240.00000 |
| Antenna Gain(typical) (dBi) | 2.05000 |
| Antenna Gain(numeric) | 1.60325 |
| Power density at prediction frequency (mW/cm ²) | 0.006557 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3-18 WLAN UNII Ant1 (802.11n 40MHz 5190 MHz ~ 5230MHz) BAND

| | |
|---|------------|
| Max Peak output Power at antenna input terminal (dBm) | 10.740 |
| Max Peak output Power at antenna input terminal (mW) | 11.858 |
| Prediction distance (cm) | 20.00000 |
| Prediction frequency (MHz) | 5230.00000 |
| Antenna Gain(typical) (dBi) | 2.05000 |
| Antenna Gain(numeric) | 1.60325 |
| Power density at prediction frequency (mW/cm ²) | 0.003782 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3. RESULTS

1. The power density level at 20 cm is **0.00729 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm² at BT BAND**
2. The power density level at 20 cm is **0.005137 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm² at WLAN DTS Ant0(802.11b) BAND**
3. The power density level at 20 cm is **0.030111 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm² at at WLAN DTS Ant0(802.11g) BAND**
4. The power density level at 20 cm is **0.030884 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm² at at WLAN DTS Ant0(802.11n) BAND**
5. The power density level at 20 cm is **0.038970 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm² at at WLAN DTS Ant0(802.11a 5745MHz ~ 5825MHz) BAND**
6. The power density level at 20 cm is **0.03708 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm² at at WLAN DTS Ant0(802.11n_20MHz 5745MHz ~ 5825MHz) BAND**
7. The power density level at 20 cm is **0.054042 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm² at at WLAN DTS Ant0(802.11n_40MHz 5755MHz ~ 5795MHz) BAND**
8. The power density level at 20 cm is **0.011932 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm² at at WLAN DTS Ant1(802.11b) BAND**
9. The power density level at 20 cm is **0.058443 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm² at at WLAN DTS Ant1(802.11g) BAND**
10. The power density level at 20 cm is **0.066793 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm² at at WLAN DTS Ant1(802.11n) BAND**
11. The power density level at 20 cm is **0.035623 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm² at at WLAN DTS Ant1(802.11a 5745 MHz ~ 5825MHz) BAND**
12. The power density level at 20 cm is **0.032265 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm² at at WLAN DTS Ant1(802.11n_20MHz 5745 MHz ~ 5825MHz) BAND**

13. The power density level at 20 cm is **0.082363 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm²** at **at WLAN DTS Ant1(802.11n_40MHz 5755 MHz ~ 5795MHz) BAND**
14. The power density level at 20 cm is **0.006064 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm²** at **at WLAN UNII Ant0(802.11a 5180 MHz ~ 5240MHz) BAND**
15. The power density level at 20 cm is **0.007290 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm²** at **at WLAN UNII Ant0(802.11n _20MHz 5180 MHz ~ 5240MHz) BAND**
16. The power density level at 20 cm is **0.004362 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm²** at **at WLAN UNII Ant0(802.11n _40MHz 5190 MHz ~ 5230MHz) BAND**
17. The power density level at 20 cm is **0.005281 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm²** at **at WLAN UNII Ant1(802.11n 5180 MHz ~ 5240MHz) BAND**
18. The power density level at 20 cm is **0.006557 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm²** at **at WLAN UNII Ant1(802.11n_20MHz 5180 MHz ~ 5240MHz) BAND**
19. The power density level at 20 cm is **0.003782 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm²** at **at WLAN UNII Ant1(802.11n_40MHz 5190 MHz ~ 5230MHz) BAND**