

MPE

FCC ID: 2AFZC-BX6000

Applicant: Tronxyz Technology Co., Ltd

Exposure category: General population/uncontrolled environment

EUT Type: Production Unit

Device Type: Mobile Device

Refer Standard: FCC Part 2.1091: Radio Frequency (RF) Exposure Compliance of Radio communication Apparatus (All Frequency Bands)

FCC MPE Limited:

| Limits for General Population/Uncontrolled Exposure | | | | |
|---|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| 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 |

Test Data

Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

Where: S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

Max Conducted Output Power Results

| Test mode | Channel | Frequency (MHz) | RF Power(dBm) |
|---------------|---------|-----------------|---------------|
| WIFI(802.11g) | 1 | 2412 | 17.41 |
| | 6 | 2437 | 18.10 |
| | 11 | 2462 | 18.17 |
| BT | 0 | 2402 | 5.75 |
| | 39 | 2441 | 6.11 |
| | 78 | 2480 | 6.03 |

Manufacturing tolerance (MAX)

| Test mode | Channel | Frequency (MHz) | Tolerance ±(dBm) |
|---------------|---------|-----------------|------------------|
| WIFI(802.11g) | 1 | 2412 | 17.5±1 |
| | 6 | 2437 | 17.5±1 |
| | 11 | 2462 | 17.5±1 |
| BT | 0 | 2402 | 6.0±1 |
| | 39 | 2441 | 6.0±1 |
| | 78 | 2480 | 6.0±1 |

Calculation results (for FCC): pass

| Test mode | Channel | Frequency (MHz) | Maximum tune up power(dBm) | RF distance(cm) | Result (mW/cm2) | Limit (mW/cm2) |
|---------------|---------|-----------------|----------------------------|-----------------|-----------------|----------------|
| WIFI(802.11g) | 1 | 2412 | 18.5 | 20 | 0.022 | 1.0 |
| | 6 | 2437 | 18.5 | 20 | 0.022 | |
| | 11 | 2462 | 18.5 | 20 | 0.022 | |
| BT | 0 | 2402 | 7.0 | 20 | 0.0016 | |
| | 39 | 2441 | 7.0 | 20 | 0.0016 | |
| | 78 | 2480 | 7.0 | 20 | 0.0016 | |

NOTE:

Antenna Gain 2dBi=1.58