

FCC Part 2 section 2.1091

FCC ID: YCK-DR970XLTEP

| (ii) 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 |
| 300-1,500 | | | f/1500 | <30 |
| 1,500-100,000 | | | 1 | <30 |

f = frequency in MHz. * = Plane-wave equivalent power density.

The EUT will only be used with a separation of 20 centimeters or greater between the antenna and the body of the user.

$$S = \text{EIRP} / (4 R^2 \pi)$$

- Note

S= Maximum power density(mW/cm²)

EIRP= Equivalent Isotropic Radiated Power(mW)

R= Distance to the center of the radiation of the antenna(Over 20cm)

Maximum Permissible Exposure Calculation

| Operation Mode | Evaluation Frequency (MHz) | MAX Output Power (dBm) | Antenna Gain (dBi) | MAX. EIRP (dBm) | MAX. EIRP (mW) | Distance (cm) | Power Density (mW/cm ²) | Limit (mW/cm ²) | Result |
|----------------|----------------------------|------------------------|--------------------|-----------------|----------------|---------------|-------------------------------------|-----------------------------|--------|
| 2.4G WIFI | 2412 ~ 2462 | 16.80 | 3.46 | 20.26 | 106.17 | 20 | 0.021 | 1 | PASS |
| 5G WIFI NII 1 | 5180 ~ 5240 | 5.06 | 3.43 | 8.49 | 7.06 | 20 | 0.001 | 1 | PASS |
| 5G WIFI NII 3 | 5745 ~ 5825 | 3.00 | 1.74 | 4.74 | 2.98 | 20 | 0.001 | 1 | PASS |
| 2.4G BT | 2402 ~ 2480 | 7.32 | 3.46 | 10.78 | 11.97 | 20 | 0.002 | 1 | PASS |
| 2.4G LE | 2402 ~ 2480 | 7.28 | 3.46 | 10.74 | 11.86 | 20 | 0.002 | 1 | PASS |
| | | | | | | | | | |
| | | | | | | | | | |

Conclusion of Simultaneous Transmitter

2.4G/5G WIFI + BT

The formula of calculated the MPE is CPD1 / LPD 1 + CPD2 / LPD 2 + < 1

CPD = Calculation power density / LPD = Limit of power density

Result : 0.021 + 0.002 = 0.024 < 1

Conclusion

maximum calculations of above situations are less than the "1" limit.