

Test Requirement

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b), Limits for Maximum Permissible Exposure (MPE),

| Frequency range (MHz) | Electric field strength(V/m) | Magnetic field strength (A/m) | Power density (mW/cm ²) | Averaging time (minutes) |
|---|------------------------------|-------------------------------|-------------------------------------|--------------------------|
| (A) Limits for Occupational/Controlled Exposures | | | | |
| 0.3–3.0 | 614 | 1.63 | *(100) | 6 |
| 3.0–30 | 1842/f | 4.89/f | *(900/f ²) | 6 |
| 30–300 | 61.4 | 0.163 | 1.0 | 6 |
| 300–1500 | - | - | f/300 | 6 |
| 1500–100,000 | - | - | 5 | 6 |
| (B) Limits for General Population/Uncontrolled Exposure | | | | |
| 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 |

Note: f = frequency in MHz

EVALUATION METHOD

Transmission formula: $Pd = (Pout \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

Pd = power density in mW/cm², **Pout** = output power to antenna in mW, **G** = gain of antenna in linear scale;

Pi = 3.1416, **R** = distance between observation point and center of the radiator in cm

Assessment Result

☒ **Passed**

☐ **Not Applicable**

| Frequency (MHz) | Type | Conducted Power (dBm) | Maximum Tune- | Power Density (mW/cm ²) | Limit (mW/cm ²) | Result |
|-----------------|-------------------------|-----------------------|---------------|-------------------------------------|-----------------------------|--------|
| 2437 | 2.4G WIFI | 13.53 | 14 | 0.012704 | 1.0000 | Pass |
| 2402 | BT | 4.05 | 5 | 0.001599 | 1.0000 | Pass |
| 5230 | U-NII Band 1 ANT 1 | 18.95 | 19 | 0.036978 | 1.0000 | Pass |
| 5755 | U-NII Band UNII_3 ANT 1 | 18.78 | 19 | 0.031185 | 1.0000 | Pass |
| 5180 | U-NII Band 1 ANT 2 | 16.74 | 17 | 0.023332 | 1.0000 | Pass |
| 5180 | U-NII Band UNII_3 ANT 2 | 18.58 | 19 | 0.031185 | 1.0000 | Pass |

Note(1): The exposure evaluation safety distance is 20cm.

Note(2): EUT has two antennas and cannot transmit at the same time

BT EIRP= Reading result -95.2=99.25-95.2=4.05dBm

2.4G WIFI Antenna Gain:4.05dBi, BT Antenna Gain:4.05dBi

5G WIFI Antenna Gain:B1:3.69dBi,B4:2.95dBi

ANT 2 Simultaneous emission=BT+2.4G WIFI+5G WIFI=0.012704

+0.001599+0.031185=0.045488

-----The End-----