

Maximal Permissible Exposure

FCC ID:

IC :

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy in excess limit for maximum permissible exposure.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 and RSS-102 this device has been defined as a mobile device whereby a distance of 0.2, normally can be maintained between the user and the device.

The following calculation presents the exposure value against the limits for occupational / controlled use.

Operating mode:

WLAN: 2,4 GHz

| name | | nature value | log value |
|--|--------------------------|--|------------------------|
| max conducted power | | 182,389570 mW | 22,61 dBm |
| max Antenna gain dBi | | 1,00 | 0,00 dBi |
| max Antenna gain dBd | | 0,61 | 0,00 dBd |
| calculated radiated power | EIRP | 182,3896 mW | 22,61 dBm |
| | ERP | 111,2132 mW | 22,61 dBm |
| measured radiated power | EIRP | mW | 0,00 dBm |
| | ERP | mW | dBm |
| duty cycle factor | | | |
| frequency | 2400 MHz | | |
| dwell time | | 100,00 ms | |
| Time of occupancy/puls-train time | | 100,00 ms | |
| duty cycle factor | 10log(dwell time/100 ms) | 100,00% | 0,00 dB |
| max source-based time-averaged power | | | |
| conducted power | | 182,39 mW | 22,61 dB |
| calculated radiated power | EIRP | 182,39 mW | 22,61 dB |
| measured radiated power | EIRP | 1,00 mW | 0,00 dB |
| MPE | | | |
| $S = \frac{PG}{4\pi R^2}$ | | calculated with max source-based time-averaged power measured conducted power | |
| | | r [cm] | 20 2,5 1,5 3,81 |
| | | S [mW/cm ²] | 0,0363 2,323 6,454 1,0 |
| Limit general population | [mW/cm ²] | 1,0 | |
| Limit occupational population | [mW/cm ²] | 5,0 | for f = 2400 MHz |
| $S = \frac{EIRP}{4\pi R^2} = \frac{1.64 \text{ ERP}}{4\pi R^2} = \frac{0.41 \text{ ERP}}{\pi R^2}$ | | calculated with max source-based time-averaged power measured radiated power | |
| | | r [cm] | 20 2,5 1,5 n.a. |
| | | S [mW/cm ²] | n.a. = \$ |

Test result: **complies**

WLAN: 5 GHz

| name | | | nature value | log value | | |
|--|--------------------------|--|--------------|-----------|----------|-------------|
| max conducted power | | | 24,490632 mW | 13,89 dBm | | |
| max Antenna gain dBi | | | 1,00 | 0,00 dBi | | |
| max Antenna gain dBd | | | 0,61 | 0,00 dBd | | |
| calculated radiated power | | EIRP | 24,4906 mW | 13,89 dBm | | |
| | | ERP | 14,9333 mW | 13,89 dBm | | |
| measured radiated power | | EIRP | mW | 0,00 dBm | | |
| | | ERP | mW | dBm | | |
| duty cycle factor | | | | | | |
| frequency | | 5000 MHz | | | | |
| dwell time | | | 100,00 ms | | | |
| Time of occupancy/puls-train time | | | 100,00 ms | | | |
| duty cycle factor | 10log(dwell time/100 ms) | | 100,00% | 0,00 dB | | |
| max source-based time-averaged power | | | | | | |
| conducted power | | | 24,49 mW | 13,89 dB | | |
| calculated radiated power | | EIRP | 24,49 mW | 13,89 dB | | |
| measured radiated power | | EIRP | 1,00 mW | 0,00 dB | | |
| MPE | | | | | | |
| $S = \frac{PG}{4\pi R^2}$ | | calculated with max source-based time-averaged power measured conducted power | | | | |
| | | r [cm] | 20 | 2,5 | 1,5 | 1,40 |
| | | S [mW/cm ²] | 0,0049 | 0,312 | 0,867 | 1,0 |
| Limit general population | | [mW/cm ²] | 1,0 | | | |
| Limit occupational population | | [mW/cm ²] | 5,0 | for f = | 5000 MHz | |
| $S = \frac{EIRP}{4\pi R^2} = \frac{1.64 \text{ ERP}}{4\pi R^2} = \frac{0.41 \text{ ERP}}{\pi R^2}$ | | calculated with max source-based time-averaged power measured radiated power | | | | |
| | | r [cm] | 20 | 2,5 | 1,5 | n.a. |
| | | S [mW/cm ²] | n.a. | =\$ | | 1,0 |

Test result: **complies**