

FCC RF Exposure Calculation

FCC ID: G3OG-20X

Frequency: 2402-2480 MHz (79 channels)

Modulation: FHSS (GFSK, $\pi/4$ -DQPSK, 8DPSK)

Mid-Channel: 2.441 GHz (channel 39)

Mid-Channel Peak Power, Conducted: -1.02 dBm == 0.79 mW

Antenna Gain: G = 0 dBi

Calculation:

Limit = $60/2.441 = \underline{24.58 \text{ mW}}$

$P_{\text{radiated, max}} = P_{\text{conducted, dBm}} + G_{\text{dBi}} = -1.02 \text{ dBm} + 0 \text{ dBi} == -2.10 \text{ dBm} = \underline{0.79 \text{ mW}}$

Conclusion:

The emitted power appears to be (far) below the required limit, so PASS.

Note 1: f shall be the mid-band frequency expressed in GHz; the limit calculated with this mid-band frequency applies to all channels. For PTT with body-worn or face-held modes, d is the distance from the device case to a person's body; for modules with antennas inside laptops, d is the distance from the antenna to the person's body.

Note 2: Average Power levels are always equal or below the measured Peak Power levels, which means that calculating the EIRP using the Peak power can be considered as worst case.)