

FCC RF Exposure

EUT Description: Portable Music Player
Company: IRIVER LIMITED.
Model: AK100
FCC ID: QDMAK100

Frequency: 2402-2480 MHz (79 channels)
Modulation: FHSS (GFSK, 8DPSK, Pi/4 DQPSK)
Mid-Channel: 2.441 GHz (channel 39)
Mid-Channel Peak Power, Conducted: 3.63 dBm == 2.31 mW
Antenna Gain: G = 2.4 dBi

Calculation:

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

$$P_{\text{radiated, max}} = P_{\text{conducted, dBm}} + G_{\text{dBi}} = 3.63 \text{ dBm} + 2.4 \text{ dBi} == 6.03 \text{ dBm} = \underline{4.01 \text{ mW}}$$

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.)