MPE Calculation

FCC ID: 2AACFPS035

Typical use distance: d ≥ 20 cm

Power density limit for mobile devices at 2.4GHz: S ≤ 1 mW/cm^2

Remark: Average ≤ Peak, which means that calculating the power density applying Peak power is worst case.
The worst case operation mode generating the highest power in each frequency range is taken for calculation.

Frequency range: 2402-2480 MHz (BT30 and BT40 mode, but not simultaneously, but use same antenna)

Maximum measured conducted power (Peak): $P_{conducted}$ = 6.37 dBm = 4.34 mW

Antenna Gain: G = -0.61 dBi

Calculation: $P_{radiated}$ = $P_{conducted}$ + G_{linear} = 6.37 dBm + -0.61 dBi = 5.76 dBm = 3.77 mW

Power density S = $(P_{radiated})$ / $(4\pi \times d^2)$ = 3.77 / 5026 = 0.00075 mW/cm^2 is below the limit, so pass.