MPE Calculation

FCC ID: Y2EAPM-J4035-WS EUT Description: IP Camera

Typical use distance: d ≥ 20 cm

Power density limit for mobile devices at 2.4GHz: S ≤ 1 mW/cm²

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: 2412-2462MHz, 2422-2452

Maximum measured conducted power (Peak): P_{conducted} = 21.94 dBm = 157 mW

Antenna Gain: G = 0 dBi

Calculation: P_{radiated} = P_{conducted} + G_{linear} = 21.94 dBm + 0 dBi = 21.94 dBm = 157 mW

Power density S = $(P_{radiated}) / (4\pi \times d^2) = 157 / 5026 = 0.0312 \text{ mW/cm}^2$ is below the limit, so pass.