

RF Exposure Calculations

The device is a portable device (i.e. intended to be worn on the body or be hand-held). The out put power (peak) is 4.7dBm (2.9mW) and the antenna gain is nominally -0.8dBi, which gives an effective isotropic radiated power of 2.4mW. Without taking into account the protocol limited duty cycle¹ of 12.15%, the eirp is well below the low threshold of 60/f(GHz), or 25mW, above which SAR evaluation would be required for a portable device.

Frequency	MPE Limit (mW/cm ²)	Output Power (mW)	Max. Antenna Gain (dBi)	EIRP (mW)	Pd at 20cm (mW/cm ²)	Distance where Pd = limit (cm)
2402 to 2482 MHz	1.00	2.9	-0.8	2.4	0.0005	0.4

As the output power and eirp are both below the low threshold no SAR evaluation is required and the device may be used in portable applications without further rf exposure assessment.

¹ The system in which this device is used allows the device a maximum transmit time of 972us in any 8ms period for the controller. The average output power, using a 10log(duty cycle) correction to the peak output power, would have an eirp of approximately 0.3mW.