MPE Calculations

The device is not a portable device (i.e. intended to be worn on the body or be hand-held), and it is classified as being for use in mobile host devices. The user's manual specifies a minimum separation distance of at least 20cm between the host device and end users, consistent with this classification.

FCC part 1.1310, Table 1 limits the power density for uncontrolled exposure. The power density, P_d (mW/cm^2) calculated from the maximum EIRP, P_t (mW) and the distance, d (m), between the transmitting antenna and the closest person, can be calculated using:

$$P_d = P_t/(4\ \pi d^2)$$

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)
2412 to 2462 MHz	1.00	42.7	3.2	89.1	0.02	2.7

As shown in the calculations above, the power density 20cm from the device is below the maximum permitted level for uncontrolled exposure. The power of 42.7mW (16.3dBm) is the highest output power for all operating modes and all channels.