

One Flow RF Exposure:-

The One Flow is intended as a mobile device. A warning statement is included in the user manual advising users to maintain a minimum distance of 20cm.

Evaluation is therefore for exposure potential against the MPE limits given in Appendix A of OET Bulletin 65, Supplement C: 1500-100,000MHz; 1mW/cm²

Compliance requirements are based upon General population / Uncontrolled exposure.

Equation (3) of OET Bulletin 65:

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density (in appropriate units, e.g. mW/cm²)

P = power input to the antenna (in appropriate units, e.g. mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the centre of radiation of the antenna (appropriate units, e.g. cm)

Substituting known values for the One Flow:

WiFi RF worst case average power, P = 36.3mW.

WiFi antenna gain, G = 1.29.

n.b. although the specified gain for the chip antenna is 0dBi, this is the best gain from the antenna data sheet in linear terms.

Distance, R = 20cm (for mobile use).

$$S = 0.009 < 1\text{mW/cm}^2$$