

RADIO FREQUENCY RADIATION EXPOSURE

MPE calculation:

The solo desktop has integral diversity antennas. These were replaced with temporary antenna connectors and the output power was measured conducted. The solo desktop was set to work using one of the antennas only, the other was terminated in a 50Ω load. The output power results for the solo desktop can be found on page 11 of TRL Compliance test report RU12967191. The highest output power measured is 12.12dBm (0.0163W). The antennas have a gain of 0dBi as stated by the manufacturer (see manufacturers declaration).

Test setup 1:



Formula:

$$S = \text{EIRP} / 4\pi R^2$$

S = Power Density (W/cm²)
EIRP = Radiated power (W)
R = distance for body (m)

Calculation:

$$S = 0.0163 / 4 \pi 0.2^2 \text{ W/m}^2$$

$$S = 0.0032 \text{ W/m}^2$$

Notes:

1. The unit will be mounted at least 0.2m away from the body.
2. The carrier power EIRP of 0.0163 W was the worst case peak level measured

Limit

The limit of Power density for the General Population/ Uncontrolled Exposure is 1 W/m².

Result

The EUT complies with the 1 W/m² limit.