



FACT SHEET

Standards / Guidelines

The Radiation Health Committee retains the role of setting the allowable limit for microwave leakage from microwave ovens (50 W/m^2 at 0.05m) (5mW/cm^2 at 5 cm).

"Radiation Health Committee – Radiation Health Series Publication No 17– ARPANSA – Australian Government".

"The microwave leakage at any point 50mm or more from the external surface of the appliance shall not exceed 50W/m^2 (5mW/cm^2)."

TI: AS/NZ 60335.2.25 (AS/NZ 3350.2.25) - Australian and New Zealand Standard 2004
SO: Standards Australia / Standards New Zealand

"The power density of microwave radiation emerging from any microwave oven used in a restaurant, a canteen, a hospital, a self service heating unit, a home and the like shall not exceed 5 milliwatts per square centimetre at any point 5 centimetres or more from the external surface of the unit.

Compliance with the 5mW/cm^2 limit should be determined using a microwave survey instrument, having specifications outlined below, to measure microwave power density with the probe detector located at 5cm and further from the outer surface of the microwave oven."

TI: Procedures for Testing Microwave leakage From Microwave Ovens
SO: National Health & Medical Research Council, Seventy Third Session, 1985 *Recommendations on Microwave Ovens*. Australian Government Publishing Service, Canberra pp17-18

Radiation leakage from electronic equipment presents special problems because the energy source is not clearly defined...The location of the leakage source has to be found by trial and error.

TI: AS/NZ 2772.2. "Radiofrequency fields part 2: Principles and methods of Measurement
SO: Standards Australia / Standards New Zealand



“Measurements or evaluations to prove compliance with this Standard must be made by an appropriately qualified and experienced person or authority. Following such measurements or evaluations, and where exposure levels are not increased, the results will remain valid for a period set by the testing authority”.

TI: Radiation Protection Standard Maximum Exposure Levels to Radiofrequency Fields – 3 kHz to 300 GHz
SO: Australian Radiation Protection & Nuclear Safety Agency (Australian Commonwealth).

“Exposure to sufficiently high levels of microwaves will cause heating. In the case of human tissue, excessive heating could have serious health effects, such as deep tissue burns and hyperthermia. The purpose of the Australian Standards is to avoid all adverse health effects by limiting exposure levels to levels below those at which heating occurs.”

“This Standard applies to ovens designed for domestic applications, even if used in a workplace.”

SO: ARPANSA (Australian Radiation Protection and Nuclear Safety Agency – Australian Commonwealth), 2006.

“The owner of a microwave oven which is used other than domestic or scientific purposes shall not operate it, or permit it to be operated or used, unless the oven has within the previous 3 years passed a compliance test”

SO: WA Legislation – Radiation Safety Regulations, 1983

“Worksafe Victoria recommends that employers comply with the relevant standards, such as Australian / New Zealand Standard and the National Health & Medical Research Council Standards, in order to demonstrate that they have met their general duty of care under the Act.”

SO: Worksafe Victoria – State Government Victoria – “2002”

