

SA TR IEC 63170:2020  
IEC TR 63170:2018

STANDARDS  
Australia



Technical Report

# **Measurement procedure for the evaluation of power density related to human exposure to radio frequency fields from wireless communication devices operating between 6 GHz and 100 GHz**



## SA TR IEC 63170:2020

This Australian Technical Report was prepared by TE-007, Human Exposure to Electromagnetic Fields. It was approved on behalf of the Council of Standards Australia on 26 August 2020.

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The following are represented on Committee TE-007:

- Australian Centre for Radiofrequency Bioeffects Research
- Australian Communications and Media Authority
- Australian Industry Group
- Australian Mobile Telecommunications Association
- Australian Radiation Protection and Nuclear Safety Agency
- Commercial Radio Australia
- Communications, Electrical and Plumbing Union — Electrical Trades Division
- Department of Defence (Australian Government)
- National Measurement Institute

### Additional Interests

- Telstra Corporation

This Technical Report was issued in draft form for comment as DR SA TR IEC 63170:2020.

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## Preface

This Technical Report was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee TE-007, Human Exposure to Electromagnetic Fields.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Technical Report as an Australian Technical Report rather than an Australian/New Zealand Technical Report.

The objective of this document is to describe the state of the art measurement techniques and test approaches for evaluating the local and spatial-average incident power density of wireless devices operating in close proximity to the users between 6 GHz and 100 GHz.

In particular, this document provides guidance for testing portable devices in applicable operating position(s) near the human body, such as mobile phones, tablets, wearable devices, etc. The methods described in this document may also apply to exposures in close proximity to base stations.

This document also gives guidance on how to assess exposure from multiple simultaneous transmitters operating below and above 6 GHz (including combined exposure of SAR and power density).

This document is identical with, and has been reproduced from, IEC TR 63170:2018, *Measurement procedure for the evaluation of power density related to human exposure to radio frequency fields from wireless communication devices operating between 6 GHz and 100 GHz*.

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