

Annex 1 to SSAC Paper 4/2024

HKCA 1084
ISSUE 1
JULY 2024

CONFORMANCE SPECIFICATION FOR RADIATION SAFETY OF WIRELESS DEVICES



FOREWORD

1. This specification is prescribed under section 32D of the Telecommunications Ordinance (Cap. 106) (“the Ordinance”) to set out the conformance requirements for radiation safety of wireless devices. Equipment falling into the scope of this specification shall meet the stipulated requirements.
2. Under the Ordinance, the possession or use of any radiocommunications apparatus or any apparatus emitting radio frequency energy must be covered by an appropriate licence issued by the Communications Authority (“CA”) with the exception of those specifically exempted from licensing under the Ordinance, such as those covered by the Telecommunications (Telecommunications Apparatus) (Exemption from Licensing) Order (Cap. 106Z).
3. At present, the Office of the Communications Authority (“OFCA”) operates a **Hong Kong Telecommunications Equipment Evaluation and Certification (“HKTEC”)** Scheme. Details of the HKTEC Scheme can be found in the information note OFCA I 421. Under the HKTEC Scheme, suppliers or manufacturers may apply for certification of their apparatus against this specification. The application procedures for certification of radiocommunications apparatus can be found in the information note OFCA I 401.
4. The CA may amend any part of this specification as and when it deems necessary.
5. In case of doubt about the interpretation of this specification, the methods of carrying out the test and the validity of statements made by the manufacturers or suppliers about the equipment, the decision of the CA shall be final.
6. The HKCA specifications and information notes issued by the CA can be downloaded from OFCA’s website at <http://www.ofca.gov.hk>. Enquiries about this specification may be directed to -

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1.	Issue 1 July 2024	All	First Release

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1. SCOPE

This specification sets out the conformity requirements for radiation safety of wireless devices operating in close proximity (up to 20 cm) to human (hereafter referred to as “the Devices”).

2. TECHNICAL REQUIREMENTS

The Devices shall meet the technical requirements specified in the following document –

“ICNIRP Guidelines for Limiting Exposure to Electromagnetic Fields (100 kHz to 300 GHz)” published by the International Commission on Non-Ionizing Radiation Protection

3. EVALUATION REQUIREMENTS

3.1 Specific Absorption Rate (“SAR”)

The Devices shall comply with the technical requirements on SAR as specified in clause 2. Compliance with the technical requirements shall be evaluated in accordance with the procedures specified in one of the standards as given below –

- (a) IEC/IEEE 62209-1528 “Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)” jointly published by the International Electrotechnical Commission (“IEC”) and the Institute of Electrical and Electronics Engineers (“IEEE”)
- (b) EN IEC/IEEE 62209-1528 “Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)” published by the European Committee for Electrotechnical Standardization (“CENELEC”)
- (c) Any other standard issued by a relevant organisation which is acceptable to the CA

3.2 Incident Power Density

The Devices shall comply with the technical requirements on incident power density as specified in clause 2. Compliance with the technical requirements shall be evaluated in accordance with the procedures specified in one of the standards as given below –

- (a) IEC/IEEE 63195-1 “Assessment of power density of human exposure to radio frequency fields from wireless devices in close proximity to the head and body (frequency range of 6 GHz to 300 GHz) – Part 1: Measurement procedure” jointly published by IEC and IEEE
- (b) IEC/IEEE 63195-2 “Assessment of power density of human exposure to radio frequency fields from wireless devices in close proximity to the head and body (frequency range of 6 GHz to 300 GHz) – Part 2: Computational procedure” jointly published by IEC and IEEE
- (c) EN IEC/IEEE 63195-1 “Assessment of power density of human exposure to radio frequency fields from wireless devices in close proximity to the head and body (frequency range of 6 GHz to 300 GHz) – Part 1: Measurement procedure” published by CENELEC
- (d) EN IEC/IEEE 63195-2 “Assessment of power density of human exposure to radio frequency fields from wireless devices in close proximity to the head and body (frequency range of 6 GHz to 300 GHz) – Part 2: Computational procedure” published by CENELEC
- (e) Any other standard issued by a relevant organisation which is acceptable to the CA

4. REFERENCE

- (a) ICNIRP Guidelines for Limiting Exposure to Electromagnetic Fields (100 kHz to 300 GHz)
- (b) IEC/IEEE 62209-1528 “Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)”
- (c) EN IEC/IEEE 62209-1528 “Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)”
- (d) IEC/IEEE 63195-1 “Assessment of power density of human exposure to radio frequency fields from wireless devices in close proximity to the head and body (frequency range of 6 GHz to 300 GHz) – Part 1: Measurement procedure”
- (e) IEC/IEEE 63195-2 “Assessment of power density of human exposure to radio frequency fields from wireless devices in close proximity to the head

and body (frequency range of 6 GHz to 300 GHz) – Part 2: Computational procedure”

- (f) EN IEC/IEEE 63195-1 “Assessment of power density of human exposure to radio frequency fields from wireless devices in close proximity to the head and body (frequency range of 6 GHz to 300 GHz) – Part 1: Measurement procedure”
- (g) EN IEC/IEEE 63195-2 “Assessment of power density of human exposure to radio frequency fields from wireless devices in close proximity to the head and body (frequency range of 6 GHz to 300 GHz) – Part 2: Computational procedure”

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