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BSI Standards Publication

Transmitting equipment for radiocommunication - Radio-over-fibre technologies for spectrum measurement - 100-GHz spectrum measurement equipment

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National foreword

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A list of organizations represented on this committee can be obtained on request to its secretary.

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Transmitting equipment for radiocommunication – Radio-over-fibre technologies for spectrum measurement – 100-GHz spectrum measurement equipment

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TRANSMITTING EQUIPMENT FOR RADIOCOMMUNICATION – RADIO-OVER-FIBRE TECHNOLOGIES FOR SPECTRUM MEASUREMENT – 100-GHZ SPECTRUM MEASUREMENT EQUIPMENT

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IEC TR 63100, which is a Technical Report, has been prepared by IEC technical committee 103: Transmitting equipment for radiocommunication:

The text of this Technical Report is based on the following documents:

Enquiry draft	Report on voting
103/157/DTR	103/163/RVDTR

Full information on the voting for the approval of this Technical Report can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

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TRANSMITTING EQUIPMENT FOR RADIOCOMMUNICATION – RADIO-OVER-FIBRE TECHNOLOGIES FOR SPECTRUM MEASUREMENT – 100-GHZ SPECTRUM MEASUREMENT EQUIPMENT

1 Scope

This document describes 100-GHz spectrum measurement methods using RoF technologies. It covers the background to measurement over 100 GHz, the configuration of a spectrum analyser, the key technologies, such as mm-wave tunable filter, and RoF-technologies-based local oscillator, and provides some measured examples.

2 Normative references

There are no normative references in this document.

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.2 Abbreviated terms

mm-wave	millimeter-wave
ADAS	advanced driving assistant systems
FOD	foreign object and debris
ODU	outdoor unit
IDU	indoor unit
HDTV	high-definition television
MPEG	moving pictures experts group
DUT	device under test
UTC-PD	uni-travelling-carrier photodiode
SD	standard deviation
LSB	lower sideband
USB	upper sideband
DANL	displayed average noise level
TOI	third order intercept
ACLR	adjacent channel leakage power ratio
SNR	signal-to-noise ratio
IR	infra-red
SPA	spectrum analyser