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Passive RF and microwave devices, intermodulation level measurement - Part 6: Measurement of passive intermodulation in antennas

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EUROPEAN STANDARD

EN IEC 62037-6

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2022

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Supersedes EN 62037-6:2013 and all of its amendments
and corrigenda (if any)

English Version

**Passive RF and microwave devices, intermodulation level
measurement - Part 6: Measurement of passive intermodulation
in antennas
(IEC 62037-6:2021)**

Dispositifs RF et à micro-ondes passifs, mesure du niveau
d'intermodulation - Partie 6: Mesure de l'intermodulation
passive dans les antennes
(IEC 62037-6:2021)

Passive HF- und Mikrowellenbauteile, Messung des
Intermodulationspegels - Teil 6: Messung der passiven
Intermodulation in Antennen
(IEC 62037-6:2021)

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Europäisches Komitee für Elektrotechnische Normung

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European foreword

The text of document 46/838/FDIS, future edition 2 of IEC 62037-6, prepared by IEC/TC 46 "Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62037-6:2022.

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IEC 60068-2-75 NOTE Harmonized as EN 60068-2-75

IEC 62037-1 NOTE Harmonized as EN 62037-1

IEC 62037-3 NOTE Harmonized as EN 62037-3

ISO 2039-2 NOTE Harmonized as EN ISO 2039-2

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Passive RF and microwave devices, intermodulation level measurement –
Part 6: Measurement of passive intermodulation in antennas**

**Dispositifs RF et à micro-ondes passifs, mesure du niveau d'intermodulation –
Partie 6: Mesure de l'intermodulation passive dans les antennes**



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INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Passive RF and microwave devices, intermodulation level measurement –
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**Dispositifs RF et à micro-ondes passifs, mesure du niveau d'intermodulation –
Partie 6: Mesure de l'intermodulation passive dans les antennes**

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**PASSIVE RF AND MICROWAVE DEVICES,
INTERMODULATION LEVEL MEASUREMENT –****Part 6: Measurement of passive intermodulation in antennas**

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IEC 62037-6 has been prepared by IEC technical committee 46: Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories. It is an International Standard.

This second edition cancels and replaces the first edition published in 2013. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) dynamic testing requirements updated to define impact energy and locations to apply impacts to devices under test;

The text of this International Standard is based on the following documents:

Draft	Report on voting
46/838/FDIS	46/859/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

A list of all the parts in the IEC 62037 series, published under the general title *Passive RF and microwave devices, intermodulation level measurement* can be found on the IEC website.

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PASSIVE RF AND MICROWAVE DEVICES, INTERMODULATION LEVEL MEASUREMENT –

Part 6: Measurement of passive intermodulation in antennas

1 Scope

This part of IEC 62037 defines the test fixtures and procedures recommended for measuring levels of passive intermodulation generated by antennas, typically used in wireless communication systems. The purpose is to define qualification and acceptance test methods for antennas for use in low intermodulation (low IM) applications.

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

AIM	Active intermodulation
AUT	Antenna under test
ESD	Electrostatic discharge
HPA	High power amplifier
IM	Intermodulation
LNA	Low noise amplifier
PIM	Passive intermodulation
RF	Radio frequency

4 Definitions of antenna as it pertains to PIM

4.1 Antenna

An antenna is that part of a radio transmitting or receiving system which is designed to provide the required coupling between a transmitter or a receiver and the medium in which the radio wave propagates.