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IEC 62037-5

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# INTERNATIONAL STANDARD



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**Passive RF and microwave devices, intermodulation level measurement –  
Part 5: Measurement of passive intermodulation in filters**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

### PASSIVE RF AND MICROWAVE DEVICES, INTERMODULATION LEVEL MEASUREMENT –

#### Part 5: Measurement of passive intermodulation in filters

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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
46/837/FDIS	46/858/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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

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## PASSIVE RF AND MICROWAVE DEVICES, INTERMODULATION LEVEL MEASUREMENT –

### Part 5: Measurement of passive intermodulation in filters

#### 1 Scope

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

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-2-75:2014, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*

IEC 62037-1:~~2012~~, *Passive RF and microwave devices, intermodulation level measurement – Part 1: General requirements and measuring methods*

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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**Passive RF and microwave devices, intermodulation level measurement –  
Part 5: Measurement of passive intermodulation in filters**

**Dispositifs RF et à micro-ondes passifs, mesure du niveau d'intermodulation –  
Partie 5: Mesure de l'intermodulation passive dans les filtres**



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

### **PASSIVE RF AND MICROWAVE DEVICES, INTERMODULATION LEVEL MEASUREMENT –**

#### **Part 5: Measurement of passive intermodulation in filters**

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### **Part 5: Measurement of passive intermodulation in filters**

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IEC 62037-1, *Passive RF and microwave devices, intermodulation level measurement – Part 1: General requirements and measuring methods*

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## COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

### DISPOSITIFS RF ET À MICRO-ONDES PASSIFS, MESURE DU NIVEAU D'INTERMODULATION –

#### Partie 5: Mesure de l'intermodulation passive dans les filtres

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Cette seconde édition annule et remplace la première édition parue en 2013. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

- a) mise à jour des exigences d'essais dynamiques pour définir l'énergie de choc et les emplacements auxquels les chocs doivent être appliqués aux dispositifs en essai.

Le texte de cette Norme internationale est issu des documents suivants:

Projet	Rapport de vote
46/837/FDIS	46/858/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à son approbation.

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Ce document a été rédigé selon les Directives ISO/IEC, Partie 2, il a été développé selon les Directives ISO/IEC, Partie 1 et les Directives ISO/IEC, Supplément IEC, disponibles sous [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). Les principaux types de documents développés par l'IEC sont décrits plus en détail sous [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

Une liste de toutes les parties de la série IEC 62037, publiées sous le titre général *Dispositifs RF et à micro-ondes passifs, mesure du niveau d'intermodulation*, est disponible sur le site web de l'IEC.

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## **DISPOSITIFS RF ET À MICRO-ONDES PASSIFS, MESURE DU NIVEAU D'INTERMODULATION –**

### **Partie 5: Mesure de l'intermodulation passive dans les filtres**

#### **1 Domaine d'application**

La présente partie de l'IEC 62037 définit les dispositifs et les procédures d'essai recommandés pour mesurer des niveaux d'intermodulation passive générés par des filtres, généralement utilisés dans des systèmes de communication sans fil. L'objectif est de définir des méthodes d'essai de qualification et de réception pour des filtres destinés à être utilisés dans des applications de faible intermodulation (faible IM).

#### **2 Références normatives**

Les documents suivants sont cités dans le texte de sorte qu'ils constituent, pour tout ou partie de leur contenu, des exigences du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 60068-2-75:2014, *Essais d'environnement – Partie 2-75: Essais – Test Eh: Essais au marteau*

IEC 62037-1, *Dispositifs RF et à micro-ondes passifs, mesure du niveau d'intermodulation – Partie 1: Exigences générales et méthodes de mesure*