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Coaxial communication cables –
Part 1-111: Electrical test methods – Stability of phase test methods

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CONTENTS

FOREWORD 4
1 Scope 6
2 Normative references 6
3 Terms and definitions 6
4 Phase variation with temperature 9
4.1 Purpose 9
4.2 Test equipment 9
4.3 Preparation of test sample (TS) 9
4.4 Test environment 10
4.5 Preconditioning 10
4.6 Test procedure 10
4.7 Test result 12
4.7.1 Calculation of temperature coefficient of phase 12
4.7.2 Graph of phase temperature change 13
4.7.3 Maximum variation value of phase variation with temperature 13
4.7.4 Ratio of the relative phase temperature coefficient 13
4.8 Test report 13
4.9 Requirement 13
5 Phase constant variation with temperature 13
5.1 Purpose 13
5.2 Test equipment 14
5.3 Test sample 14
5.4 Test environment 14
5.5 Preconditioning 14
5.6 Test procedure 14
5.7 Test result 14
5.8 Test report 15
5.9 Requirement 15
6 Phase stability with bending 15
6.1 Purpose 15
6.2 Test environment 15
6.3 Test sample 16
6.4 Test equipment 16
6.5 Test procedure 16
6.6 Test report 17
6.7 Requirement 18
7 Phase stability with twisting 18
7.1 Purpose 18
7.2 Test environment 18
7.3 Test sample 18
7.4 Test equipment 19
7.5 Test procedure 19
7.6 Test report 20
7.7 Requirement 20
Annex A (normative) Phase consistency test for two or more cables 21
A.1 Purpose 21

A.2 Test equipment 21
A.3 The preparation of test sample (TS) 21
A.4 Test environment 21
A.5 Test procedure 22
A.6 Test report 22
A.7 Requirement 22
Annex B (normative) Phase variation with temperature test between two cables 23
B.1 Purpose 23
B.2 Preparation of test sample 23
B.3 Test environment 23
B.4 Preconditioning 23
B.5 Test procedure 23
B.6 Test results 23
B.7 Test report 24
B.8 Requirement 24
Annex C (informative) Example for recording and calculating the phase variation with temperature 25
C.1 Purpose 25
C.2 Test sample 25
C.3 Test conditions 25
C.4 Test record and calculation 25
C.5 Test result calculation 26

Figure 1 – Test sample (TS) 9
Figure 2 – Preconditioning 10
Figure 3 – TS placement diagram 11
Figure 4 – Phase–Frequency graph schematic diagram 12
Figure 5 – Test sample (TS) 16
Figure 6 – Bending test 17
Figure 7 – Test graph schematic diagram 18
Figure 8 – Twist test 19
Figure 9 – Test graph schematic diagram 20
Figure A.1 – Cable 21
Figure A.2 – Cable assembly (TS) 21
Figure B.1 – $\eta_{t,f} - \boldsymbol{T}$ (°C) contrast graph 23
Figure C.1 – $\eta_{t,f} - T$ (°C) graph 26

Table C.1 – Test record and calculation 26

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COAXIAL COMMUNICATION CABLES –

Part 1-111: Electrical test methods – Stability of phase test methods

FOREWORD

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This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 61196-1-111:2014. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

IEC 61196-1-111 has been prepared by subcommittee 46A: Coaxial cables, of 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 2014. This edition constitutes a technical revision.

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

a) addition of the list of test methods in the Scope;
b) addition of "the number of scanning points" in every test method;
c) addition of Annex A, Phase consistency test for two or more cables;
d) addition of Annex B, Phase variation with temperature test between two cables.

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

Draft	Report on voting
46A/1666/CDV	46A/1680/RVC

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/publications.

A list of all parts in the IEC 61196 series, published under the general title *Coaxial communication cables*, can be found on the IEC website.

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

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COAXIAL COMMUNICATION CABLES –

Part 1-111: Electrical test methods – Stability of phase test methods

1 Scope

~~This part of IEC 61196 applies to coaxial communication cables. It specifies methods for determining the stability of phase of coaxial communication cables.~~

This part of IEC 61196 provides test methods to determine the stability of phase of coaxial communication cables.

This document is applicable to RF coaxial cables. RF coaxial cable assemblies can also use this document for reference.

This part of IEC 61196 comprises following test methods:

a) phase variation with temperature (Clause 4);
b) phase constant variation with temperature (Clause 5);
c) phase stability with bending (Clause 6);
d) phase stability with twisting (Clause 7);
e) phase consistency test for two or more cables (Annex A);
f) phase variation with temperature test between two cables (Annex B).

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 61196-1, *Coaxial communication cables – Part 1: Generic specification – General, definitions and requirements*

IEC 61196-1-108:2011, *Coaxial communication cables – Part 1-108: Electrical test methods – Test for characteristic impedance, phase and group delay, electrical length and propagation velocity*

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IEC 61196-1-111:2024-09(en)

CONTENTS

FOREWORD 4
1 Scope 6
2 Normative references 6
3 Terms and definitions 6
4 Phase variation with temperature 9
4.1 Purpose 9
4.2 Test equipment 9
4.3 Preparation of test sample (TS) 9
4.4 Test environment 9
4.5 Preconditioning 10
4.6 Test procedure 10
4.7 Test result 12
4.7.1 Calculation of temperature coefficient of phase 12
4.7.2 Graph of phase temperature change 13
4.7.3 Maximum variation value of phase variation with temperature 13
4.7.4 Ratio of the relative phase temperature coefficient 13
4.8 Test report 13
4.9 Requirement 13
5 Phase constant variation with temperature 13
5.1 Purpose 13
5.2 Test equipment 14
5.3 Test sample 14
5.4 Test environment 14
5.5 Preconditioning 14
5.6 Test procedure 14
5.7 Test result 14
5.8 Test report 15
5.9 Requirement 15
6 Phase stability with bending 15
6.1 Purpose 15
6.2 Test environment 15
6.3 Test sample 16
6.4 Test equipment 16
6.5 Test procedure 16
6.6 Test report 17
6.7 Requirement 18
7 Phase stability with twisting 18
7.1 Purpose 18
7.2 Test environment 18
7.3 Test sample 18
7.4 Test equipment 19
7.5 Test procedure 19
7.6 Test report 20
7.7 Requirement 20
Annex A (normative) Phase consistency test for two or more cables 21
A.1 Purpose 21

A.2 Test equipment 21
A.3 The preparation of test sample (TS) 21
A.4 Test environment 21
A.5 Test procedure 22
A.6 Test report 22
A.7 Requirement 22
Annex B (normative) Phase variation with temperature test between two cables 23
B.1 Purpose 23
B.2 Preparation of test sample 23
B.3 Test environment 23
B.4 Preconditioning 23
B.5 Test procedure 23
B.6 Test results 23
B.7 Test report 24
B.8 Requirement 24
Annex C (informative) Example for recording and calculating the phase variation with temperature 25
C.1 Purpose 25
C.2 Test sample 25
C.3 Test conditions 25
C.4 Test record and calculation 25
C.5 Test result calculation 27

Figure 1 – Test sample (TS) 9
Figure 2 – Preconditioning 10
Figure 3 – TS placement diagram 11
Figure 4 – Phase–Frequency graph schematic diagram 12
Figure 5 – Test sample (TS) 16
Figure 6 – Bending test 17
Figure 7 – Test graph schematic diagram 18
Figure 8 – Twist test 19
Figure 9 – Test graph schematic diagram 20
Figure A.1 – Cable 21
Figure A.2 – Cable assembly (TS) 21
Figure B.1 – $\eta_{t,f} - \boldsymbol{T}$ (°C) contrast graph 23
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