
**Optics and photonics — Test methods
for telescopic systems —**

**Part 3:
Test methods for telescopic sights**

*Optique et photonique — Méthodes d'essai pour systèmes
télescopiques —*

Partie 3: Méthodes d'essai pour viseurs de tir

iteh Standards
(<https://standards.iteh.ai>)
Document Preview

[ISO 14490-3:2021](https://standards.iteh.ai/catalog/standards/iso/26b3bbcf-0f8f-4181-babc-6e60c5b7a269/iso-14490-3-2021)

<https://standards.iteh.ai/catalog/standards/iso/26b3bbcf-0f8f-4181-babc-6e60c5b7a269/iso-14490-3-2021>



iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[ISO 14490-3:2021](https://standards.iteh.ai/catalog/standards/iso/26b3bbcf-0f8f-4181-babc-6e60c5b7a269/iso-14490-3-2021)

<https://standards.iteh.ai/catalog/standards/iso/26b3bbcf-0f8f-4181-babc-6e60c5b7a269/iso-14490-3-2021>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2021

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

	Page
Foreword	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Method of measurement of axial parallax	1
4.1 Principle.....	1
4.2 Test arrangement.....	2
4.2.1 General.....	2
4.2.2 Collimator.....	2
4.2.3 Telescopic sight.....	2
4.2.4 Dioptric tester.....	3
4.3 Measurement procedure.....	3
4.4 Test report.....	3
5 Method of measurement of parallax	3
5.1 Principle.....	3
5.2 Test arrangement.....	4
5.2.1 General.....	4
5.2.2 Collimator.....	4
5.2.3 Telescopic sight.....	4
5.2.4 Light stop.....	4
5.2.5 Auxiliary telescope.....	5
5.3 Measurement procedure.....	5
5.4 Test report.....	6
6 Method of measurement of eye relief range, eye relief and critical eye relief	6
6.1 Principle.....	6
6.2 Test arrangement.....	6
6.2.1 General.....	6
6.2.2 Collimator.....	6
6.2.3 Telescopic sight.....	6
6.2.4 Measuring magnifier.....	7
6.3 Measurement procedure.....	7
6.4 Test report.....	8
7 Method of measurement of reticle tracking	8
7.1 Principle.....	8
7.2 Test arrangement.....	8
7.2.1 General.....	8
7.2.2 Collimator.....	8
7.3 Test procedure.....	9
7.4 Test report.....	9
8 Method of measurement of line of sight shift due to zooming	9
8.1 Principle.....	9
8.2 Test arrangement.....	9
8.2.1 General.....	9
8.2.2 Test specimen mounting.....	11
8.2.3 Auxiliary telescope.....	11
8.3 Test procedure.....	11
8.3.1 Preparation of the test assembly.....	11
8.3.2 Determination of the measurement values.....	11
8.4 Precision of the measurement.....	12
8.5 Test report.....	12
9 Method of measurement of line of sight shift due to focusing	12

ISO 14490-3:2021(E)

9.1	Principle.....	12
9.2	Test arrangement.....	12
	9.2.1 General.....	12
	9.2.2 Collimator.....	13
	9.2.3 Telescopic sight.....	14
	9.2.4 Auxiliary telescope.....	14
9.3	Test procedure.....	14
	9.3.1 Preparation of the test assembly.....	14
	9.3.2 Determination of the measurement values.....	14
9.4	Precision of the measurement.....	14
9.5	Test report.....	14
10	General test report.....	15
	Bibliography.....	16

iTeh Standards (<https://standards.iteh.ai>) Document Preview

[ISO 14490-3:2021](https://standards.iteh.ai/catalog/standards/iso/26b3bbcf-0f8f-4181-babc-6e60c5b7a269/iso-14490-3-2021)

<https://standards.iteh.ai/catalog/standards/iso/26b3bbcf-0f8f-4181-babc-6e60c5b7a269/iso-14490-3-2021>