

INTERNATIONAL  
STANDARD

ISO/CIE  
11664-2

First edition  
2022-08

---

---

**Colorimetry —**  
**Part 2:**  
**CIE standard illuminants**

*Colorimétrie —*  
*Partie 2: Illuminants CIE normalisés*

---

---

Reference number  
ISO/CIE 11664-2:2022(E)



© ISO/CIE 2022



**COPYRIGHT PROTECTED DOCUMENT**

© ISO/CIE 2022

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](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland

CIE Central Bureau  
Babenbergerstraße 9/9A • A-1010 Vienna

Phone: +43 1 714 3187  
Fax: +41 22 749 09 47

Email: [ciecb@cie.co.at](mailto:ciecb@cie.co.at)  
Website: [www.cie.co.at](http://www.cie.co.at)

# Contents

	Page
Foreword.....	iv
Introduction.....	v
<b>1 Scope.....</b>	<b>1</b>
<b>2 Normative references.....</b>	<b>1</b>
<b>3 Terms and definitions.....</b>	<b>1</b>
<b>4 CIE standard illuminant A.....</b>	<b>2</b>
4.1 Definition.....	2
4.2 Theoretical basis.....	2
<b>5 CIE standard illuminant D65.....</b>	<b>3</b>
5.1 Definition.....	3
5.2 Experimental basis.....	3
5.3 Correlated colour temperature.....	3
<b>6 CIE standard illuminant D50.....</b>	<b>3</b>
6.1 Definition.....	3
6.2 Correlated colour temperature.....	3
<b>7 Sources for realizing CIE standard illuminants.....</b>	<b>4</b>
7.1 Source for CIE standard illuminant A.....	4
7.2 Sources for CIE standard illuminants D65 and D50.....	4
<b>Annex A (informative) Table of relative spectral power distribution of CIE standard illuminant A.....</b>	<b>5</b>
<b>Annex B (normative) Table of relative spectral power distributions of CIE standard illuminants D65 and D50.....</b>	<b>18</b>
<b>Annex C (informative) History of the definition of CIE standard illuminant A.....</b>	<b>31</b>
<b>Bibliography.....</b>	<b>32</b>