# INTERNATIONAL STANDARD

ISO 9022-2

Third edition 2015-03-01

AMENDMENT 1 2023-07

# Optics and photonics — Environmental test methods —

Part 2: **Cold, heat and humidity** 

**AMENDMENT 1** 

Optique et photonique — Méthodes d'essais d'environnement —

Partie 2: Froid, chaleur et humidité

AMENDEMENT 1

ISO 9022-2:2015/Amd 1:2023

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This document was prepared by Technical Committee ISO/TC 172, *Optics and Photonics*, Subcommittee SC 1, *Fundamental standards*.

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# Optics and photonics — Environmental test methods —

### Part 2:

# Cold, heat and humidity

### **AMENDMENT 1**

4.2.2:

Replace 4.2.2 by the following:

#### 4.2.2 Conditioning method 10: Cold

See Table 1.

Table 1 — Degrees of severity for conditioning method 10: Cold

Degree of severity	01	02	03	04	05	06	07	08	09/	10	11	12	13	14
Test chamber temperature [°C]	-0 ± 3	-10 ± 3	-15 ± 3	-20 ± 3	-25 ± 3		-35 ± 3			-65 ± 3	-65 ± 3	-65 ± 3	-145 ± 3	-45±3
Exposure time [h]		16 2 5 16												
State of operation	Orlor lor 2d											0 or 1 or 2ª		
When testing to degree of severity 09 or 14 is required, state of operation 2 should be justified in the relevant specification.														

#### 4.2.3:

Replace 4.2.3 by the following:

### 4.2.3 Conditioning method 11: Dry heat

See Table 2.

Table 2 — Degrees of severity for conditioning method 11: Dry heat

Degree of severity	01	02	03	04	05	06	07	08	09	10	11	
Test chamber temperature [°C]	10 ± 2	40 ± 2	55 ± 2	63 ± 2	70 ± 2	85 ± 2	70 ± 2	85 ± 2	70 ± 2	50 ± 2	35 ± 2	
Relative humidity [%]	<40											
Exposure time [h]		16			6	6	2	2	5	16	16	
State of operation		0	or 1 or 2			0 or 1	0 or 1 or 2	0 or 1	0 or 1	l or 2		

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4.2.4:

Replace 4.2.4 by the following:

#### 4.2.4 Conditioning method 12: Damp heat

See Table 3.

Table 3 — Degrees of severity for conditioning method 12: Damp heat

Degree of severity	01	02	03	04	05	06	07	08	09	10	11	12	13	14
Test chamber temperature [°C]	40 ± 2 55						± 2	50 ± 2	10 ± 2	30 ± 2	35 ± 2	35 ± 2	45 ± 2	50 ± 2
Relative humidity [%]	90 to 95								95 t	o 100	40 to 85	95 to 100		
Exposure time	24 h   4 d   10 d   21 d   56 d   6 h   16 h   24 h   16 h													
State of operation	0 or 1 or 2 <sup>a</sup>													
a State of operation 2 during the last 4 h of exposure only.														

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