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Luminaires -
Part 2-1: Particular requirements - Fixed general purpose luminaires

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CONTENTS

FOREWORD 11
INTRODUCTION 13
1 Scope 14
2 Normative references 14
3 Terms and definitions 17
4 General requirements 40
4.1 General 40
4.2 General test requirements and verification 41
4.3 Components of luminaires 42
4.4 Information for luminaire design in light sources and controlgear standards 43
4.101 General 43
4.102 Sequence of clauses 43
5 Classification of luminaires 44
5.1 General 44
5.2 Classification according to the type of protection against electric shock 44
5.3 Classification according to the degree of protection against ingress of dust, solid objects and moisture 44
5.4 Classification according to the material of the mounting surface for which the luminaire is designed 45
5.5 Classification according to the circumstances of use 45
6 Marking 45
6.1 General 45
6.2 Marking on luminaires 45
6.3 Information to be marked on luminaires 47
6.4 Additional information 56
6.5 Test of marking 61
7 Construction 62
7.1 General 62
7.2 Replaceable components 62
7.3 Wireways 62
7.4 Lampholders 62
7.5 Starterholders 64
7.6 Terminal blocks 64
7.7 Terminals and supply connections 65
7.8 Switches 67
7.9 Insulating linings and sleeves 68
7.10 Double and reinforced insulation 68
7.11 Electrical connections and current-carrying parts 70
7.12 Screws, connections (mechanical) and glands 72
7.13 Mechanical strength 75
7.14 Suspensions, fixings and means of adjustment 78
7.15 Flammable materials 81
7.16 Luminaires for mounting on normally flammable surfaces 83
7.17 Drain holes 85
7.18 Resistance to corrosion 85
7.19 Ignitors 85

7.20 Rough service luminaires 85
7.21 Protective shield 87
7.22 Attachments to lamps 88
7.23 Semi-luminaires 88
7.24 Photobiological hazards 88
7.24.1 Actinic UV hazards for skin and eye (200 nm to 400 nm) 88
7.24.2 UV-A hazard for the eye lens (315 nm to 400 nm) 89
7.24.3 Retinal blue light hazard 89
7.24.4 Retinal thermal hazard (380 nm to 1 400 nm) 90
7.24.5 Infrared hazard for the eye (780 nm to 3 000 nm) 91
7.24.6 Thermal hazard for the skin (380 nm to 3 000 nm) 91
7.25 Mechanical hazard 91
7.26 Short-circuit protection 91
7.27 Terminal blocks with integrated screwless protective earthing contacts 92
7.28 Fixing of thermal sensing controls 92
7.29 Luminaires with non-replaceable light sources 93
7.30 Luminaires with non-user replaceable light sources and non-user serviceable components 93
7.31 Insulation between circuits 93
7.31.1 General 93
7.31.2 SELV or PELV circuits 94
7.31.3 FELV circuits 95
7.31.4 Other circuits 95
7.31.5 Additional requirements for luminaires using controllable controlgear providing SELV output(s) 96
7.32 Overvoltage protective devices external to controlgear 96
7.32.1 General 96
7.32.2 Surge protective devices (SPDs) 97
7.32.3 Surge protective components (SPCs) 97
7.33 Luminaire powered via information technology communication cabling 99
7.34 Electromagnetic fields (EMF) 99
7.35 Protection against moving fan blades 100
7.36 Track-mounted luminaires 100
8 External and internal wiring 100
8.1 General 100
8.2 Supply connection and other external wiring 100
8.3 Internal wiring 109
8.4 Test to determine the suitability of conductors having a reduced cross-sectional area 111
9 Provision for earthing 112
9.1 General 112
9.2 Provision for earthing 112
10 Protection against electric shock 115
10.1 General 115
10.2 Protection against electric shock 115
11 Resistance to dust, solid objects and moisture 119
11.1 General 119
11.2 General conditions and tests for IP classification 119
11.2.1 General 119

11.2.2 Tests for first characteristics IP numerals 2, 3 and 4 121
11.2.3 Tests for first characteristic IP numeral 5 and 6 121
11.2.4 Drip-proof luminaires – Tests for second characteristic IP numeral 1 122
11.2.5 Drip-proof luminaires – Tests for second characteristic IP numeral 2 123
11.2.6 Rain-proof luminaires – Tests for second characteristic IP numeral 3 123
11.2.7 Splash-proof luminaires – Tests for second characteristic IP numeral 4 124
11.2.8 Jet-proof luminaires – Tests for second characteristic IP numeral 5 124
11.2.9 Powerful jet-proof luminaires – Tests for second characteristic IP numeral 6 125
11.2.10 Watertight luminaires – Tests for second characteristic IP numeral 7 125
11.2.11 Pressure watertight luminaires – Tests for second characteristic IP numeral 8 126
11.2.12 High pressure and temperature water jet-proof luminaires – Tests for second characteristic IP numeral 9 (80 °C) 126
11.2.13 High pressure and cold water jet-proof luminaires – Tests for second characteristic IP numeral 9 (15 °C) 126
11.3 Humidity test 126
12 Insulation resistance and electric strength, touch current and protective conductor current 127
12.1 General 127
12.2 Insulation resistance and electric strength 127
12.2.1 General 127
12.2.2 Test – Insulation resistance 128
12.2.3 Test – Electric strength 129
12.3 Touch current, protective conductor current and electric burn 131
13 Creepage distances and clearances 132
13.1 General 132
13.2 Requirements 133
13.2.1 General 133
13.2.2 Creepage distances 134
13.2.3 Clearances 135
14 Endurance test and thermal test 137
14.1 General 137
14.2 Selection of lamps and controlgear 137
14.3 Endurance test 138
14.3.1 General 138
14.3.2 Test 138
14.3.3 Compliance 139
14.4 Thermal test (normal operation) 139
14.4.1 General 139
14.4.2 Test 140
14.4.3 Compliance 142
14.5 Thermal test (abnormal operation) 145
14.5.1 General 145
14.5.2 Test 146
14.5.3 Compliance 147
14.6 Thermal test (failed windings in controlgear) 149
14.6.1 General 149
14.6.2 Test for luminaires without thermal cut-outs 149

14.6.3 Test for luminaires with temperature sensing controls 150
14.7 Thermal test in regard to fault conditions in controlgear or electronic devices incorporated in thermoplastic luminaires 151
14.7.1 General 151
14.7.2 Test for luminaires without temperature sensing controls 151
14.7.3 Test for luminaires with temperature sensing controls internal or external to the controlgear or transformer 154
15 Resistance to heat, fire and tracking 155
15.1 General 155
15.2 Resistance to heat 155
15.3 Resistance to flame and ignition 156
15.4 Resistance to tracking 156
16 Screw terminals 157
16.1 General 157
16.2 General requirements and basic principles 163
16.3 Mechanical requirements and tests 165
17 Screwless terminals and electrical connections 169
17.1 General 169
17.2 General requirements 171
17.3 General instructions for tests 173
17.3.1 Preparation of samples 173
17.3.2 Test conductors 173
17.3.3 Multi-conductor terminals 173
17.3.4 Multi-way terminals 173
17.3.5 Test quantities 173
17.4 Terminal and connections for internal wiring 173
17.4.1 Mechanical tests 173
17.4.2 Electrical tests 174
17.5 Terminals and connections for external wiring 175
17.5.1 Conductors 175
17.5.2 Mechanical tests 176
17.5.3 Electrical tests 177
Annex A (normative) Test to establish whether a conductive part can cause an electric shock 179
A.1 General 179
A.2 Touch voltage limits 179
A.3 Touch current limits 179
A.4 Compliance 179
Annex B (normative) Test lamps 180
B.1 General 180
B.2 Filament lamps within the scope of IEC 60432-1 and IEC 60432-2 180
B.2.1 Principal modes of heat transfer and lamps used for testing 180
B.2.2 Filament test lamps 181
B.3 Halogen lamps within the scope of IEC 60432-3 182
B.4 Tubular fluorescent and other discharge lamps 182
B.5 LED modules within the scope of IEC 62031 182
Annex C (normative) Abnormal circuit conditions 183
Annex D (normative) Thermal testing 186

D.1 Draught-proof enclosure 186
D.2 Mounting surface 186
D.3 Alternative test procedure for adjustment of measured temperatures for luminaire t_a rating(s) 187
D.3.1 General 187
D.3.2 Thermal test of normal operation for luminaires without temperature sensing controls and where the rated ambient temperature t_a as marked on the luminaire is higher than the ambient temperature in the draught-proof enclosure 187
Annex E (normative) Determination of winding temperature rises by the increase-in-resistance method 188
Annex F (normative) Test for resistance to stress corrosion of copper and copper alloys 189
F.1 Test cabinet 189
F.2 Test solution 189
F.3 Test piece 189
F.4 Test procedure 190
Annex G (normative) Measurement of touch current and protective conductor current 191
G.1 General 191
G.2 Test conditions 191
G.3 Test procedures 191
G.4 Test measurements 191
G.5 Test sequence 193
Annex H (informative) Explanation of IP numbers for degrees of protection 195
Annex I (informative) Temperature measurements 197
I.1 Temperature measurements of the luminaire 197
I.2 Temperature measurement of the insulation parts of lampholders 198
Annex J (informative) Guidelines for good practice in luminaire design 200
J.1 General 200
J.2 Plastics in luminaires 200
J.3 Rust resistance 201
J.4 Corrosion resistance 201
J.5 Chemically corrosive atmospheres 202
J.6 Reflector design 202
J.7 Components in different kinds of luminaires 203
J.8 Recommendations for electromagnetic ballast protection for end of life phenomenon of HID lamps 203
J.9 Resistance against the effects of vibration 203
J.10 Flammability of components 204
J.11 Permanent magnets 204
Annex K (normative) Determination of creepage distances and clearances 206
Annex L (informative) Explanation of marking for luminaires that are not suitable for mounting on normally flammable surfaces and covering with insulation materials 207
L.1 General 207
L.2 Protection against flame 207
L.3 Protection against heat 208
L.3.1 General 208
L.3.2 Spacing 208

L.3.3 Temperature measurements of mounting surface under abnormal or failed ballast conditions 208
L.4 Thermal protectors 210
L.5 Deletion of the F mark requirements 211
Annex M (normative) Absorption requirements for the protective shield to be fitted to luminaires designed for metal halide lamps which emit a high level of UV radiation 212
M.1 General 212
M.2 Procedure A 212
M.3 Procedure B 213
Annex N (informative) Conformity testing during manufacture 214
N.1 General 214
N.2 Testing 214
Annex O (normative) Schedule of amended subclauses containing more serious or critical requirements which call for products to be retested 216
Annex P (normative) Requirements for the identification of a family or range of luminaires for type testing 217
P.1 General 217
P.2 Range or family of luminaires 217
Annex Q (informative) Additional requirements for luminaires where a higher degree of availability (overvoltage category III) may be requested 218
Q.1 General 218
Q.2 Requirements for overvoltage category III 218
Annex R (normative) Additional test requirements for terminal blocks with integrated screwless protective earthing contact for direct connection to the luminaire housing or to parts of the body 220
R.1 Additional requirements to 9.2.1 220
R.1.1 Requirements for mechanical strength 220
R.1.2 Test for terminal fixing 220
R.1.3 Test for supporting plate 220
R.2 Additional requirements to 9.2.3 220
Annex S (normative) Alternative thermal test for thermoplastic luminaires 222
S.1 General 222
S.2 Thermal test in regard to fault conditions in controlgear or electronic devices without temperature sensing controls in thermoplastic luminaires for fluorescent lamps ≤ 70 W 222
Annex T (normative) Requirements for insulation between live parts of circuits and accessible conductive parts 224
Annex U (informative) Information regarding power sourcing equipment powering class III luminaires via information technology communication cabling 226
U.1 General 226
U.2 Insulation of the mains supply 226
U.3 Electrical limits of a PSE 226
Annex V (informative) Cross-references to the previous edition of IEC 60598-1 228
Annex W (normative) Battery/EDLC-operated luminaires 231
W.1 General 231
W.2 General test requirements and verification 231
W.3 Marking 233
W.3.1 General 233
W.3.2 Luminaires with replaceable battery 233

W.3.3 Coin and button batteries 233
W.3.4 Other standardized batteries (e.g. AAA or AA) 234
W.3.5 Luminaires with non-standardized replaceable rechargeable battery 235
W.3.6 Luminaires with non-user replaceable battery/EDLC 235
W.3.7 Luminaires with non-replaceable battery/EDLC 236
W.3.8 Luminaires supplied by external dedicated power supply units 236
W.3.9 Rechargeable luminaires other than ordinary 236
W.3.10 Conditions for charging 236
W.4 Construction 237
W.4.1 General 237
W.4.2 Small batteries (coins, button and other non-standardized batteries) 237
W.4.3 Battery compartment fasteners for small batteries and other standardized batteries (e.g. AAA or AA) 238
W.4.4 Battery/EDLC chargers incorporated in luminaires 238
W.4.5 Short-circuit protection 238
W.4.6 Electrical parameters of the batteries operation 239
W.4.7 Protection against overpressure for Li-ion batteries used in luminaires 240
W.4.8 Protection against the consequence of failure of cells or EDLCs 240
W.5 Protection against electric shock 241
W.6 Endurance test and thermal test 241
W.6.1 Endurance test 241
W.6.2 Thermal test (normal operation) 241
W.6.3 Thermal test (abnormal operation) 242
W.6.4 Lithium-ion charging systems – Fault conditions 243
Annex AAA (informative) Schedule of amended subclauses containing more serious or critical requirements which call for products to be retested 245
Bibliography 246

Figure 1 – Example of "looping-in" (feed through) 27
Figure 2 – Examples of "through wiring" 28
Figure 3 – Example of electro-mechanical contact system with plug or socket connection 29
Figure 4 – AC supply 47
Figure 5 – DC supply 47
Figure 6 – DC and AC supply 47
Figure 7 – Class II 48
Figure 8 – Class III 48
Figure 9 – Luminaire not suitable for direct mounting on normally flammable surfaces 50
Figure 10 – High-pressure sodium lamps that require an external ignitor (to the lamp) 50
Figure 11 – High-pressure sodium lamps having an internal starting device 50
Figure 12 – Warning against the use of cool-beam lamps 50
Figure 13 – Functional earthing 51
Figure 14 – Protective earthing 51
Figure 15 – Minimum distance from lighted objects (metres) 52
Figure 16 – Rough service 52
Figure 17 – Bowl mirror lamp 52

Figure 18 – Replace any cracked protective shield 53
Figure 19 – Test circuit for safety during insertion 53
Figure 20 – Self-shielded lamp 53
Figure 21 – Luminaires with internal fuses 54
Figure 22 – Do not stare at the operating light source 54
Figure 23 – Caution, risk of electric shock 55
Figure 24 – Use of heat resistant supply cables, interconnecting cables or external wiring 56
Figure 25 – Pictogram for non-replaceable light source 58
Figure 26 – Pictogram for non-user replaceable light source 59
Figure 27 – Pictogram for replaceable light source 59
Figure 28 – Pictogram for non-replaceable controlgear 60
Figure 29 – Pictogram for non-user replaceable controlgear 61
Figure 30 – Pictogram for replaceable controlgear 61
Figure 31 – Terminal block arrangement for installation test for luminaires with connecting leads (tails) 65
Figure 32 – Examples of self-tapping, thread-cutting and thread-forming screws 71
Figure 33 – Illustration of the requirements of 7.15.1 82
Figure 34 – Apparatus for ball impact tests 86
Figure 35 – Test chain 92
Figure 36 – Example of permitted degree of soldering 107
Figure 37 – Circuit for checking electrical contact between socket-outlet and plug 108
Figure 38 – Test to determine the suitability of conductors having a reduced cross-sectional area 112
Figure 39 – Example of a thread-forming screw used in a groove of a metallic material 113
Figure 40 – Apparatus for proving protection against dust 122
Figure 41 – Apparatus for testing protection against rain and splashing 123
Figure 42 – Nozzle for spray test 125
Figure 43 – Illustration of creepage and clearance measurements at a supply terminal 134
Figure 44 – Test circuit for luminaires incorporating fluorescent lamp ≤ 70 W 152
Figure 45 – Ball-pressure apparatus 155
Figure 46 – Pillar terminals 158
Figure 47 – Screw terminals and stud terminals 160
Figure 48 – Saddle terminals 161
Figure 49 – Lug terminals 162
Figure 50 – Mantle terminals 163
Figure 51 – Construction of electrical connections 169
Figure 52 – Examples of spring-type screwless terminals 170
Figure 53 – Further examples of screwless terminals 171
Figure C.1 – Circuit for testing rectifying effect (some capacitive starterless ballasts only) 184
Figure C.2 – Circuit for testing rectifying effect (ballasts for single pin lamps) 184
Figure C.3 – Circuit for testing rectifying effect of some high-pressure sodium and some metal halide lamps 185

Figure G.1 – Test configuration: single-phase equipment on star TN or TT system 193
Figure G.2 – Measuring network, touch current weighted for perception or reaction 194
Figure G.3 – Measuring network, touch current weighted for let-go (for portable class I luminaires) 194
Figure G.4 – Measuring network, weighted for high frequency 194
Figure I.1 – Placing of thermocouples on a typical lampholder 199
Figure L.1 – Relation between winding temperature and mounting surface temperature 209
Figure L.2 – Ignition temperatures of wood as a function of time 210
Figure R.1 – Arrangement for voltage drop test 221
Figure T.1 – Declaration of LV_{supply} and U_{out} and the insulation barriers between the light source and accessible parts 224

Table 1 – Marking 46
Table 2 – IP numbers for degree of protection against ingress of dust, solid objects and moisture 49
Table 3 – Identification of extra-low-voltage DC leads and terminations 51
Table 4 – Overview of required Y capacitors 70
Table 5 – Torque tests on screws 73
Table 6 – Torque tests on cable glands 75
Table 7 – Impact energy and spring compression 76
Table 8 – Test on semi-luminaires 80
Table 9 – Test on adjusting devices 81
Table 10 – Nominal discharge current (used in the combination wave test) 98
Table 11 – Supply cord 102
Table 12 – Wiring dimension 103
Table 13 – Tests for cord anchorage 106
Table 14 – Solid-object-proof luminaire test 121
Table 15 – Minimum insulation resistance 128
Table 16 – Electric strength 130
Table 17 – Limits of touch current or protective conductor current and electric burn 132
Table 18 – Minimum creepage distances for AC sinusoidal voltages up to 30 kHz (to be used in conjunction with Annex K) 135
Table 19 – Minimum clearances for working voltages (to be used in conjunction with Annex K) 136
Table 20 – Minimum distances for ignition pulse voltages or equivalent transformed peak voltage U_{p} 137
Table 21 – Maximum temperatures under the test conditions of 14.4.3, for principal parts 143
Table 22 – Maximum temperatures under the test conditions of 14.4.3, for common materials used in luminaires 144
Table 23 – Maximum temperatures under the test conditions of 14.5.2 147
Table 24 – Maximum temperature of windings under abnormal operating conditions and at 110 % of rated voltage for controlgear 148
Table 25 – Maximum temperature of windings under abnormal operating conditions and at 110 % of rated voltage for controlgear marked "D6" 149

Table 26 – Temperature overshoot time limitation 151
Table 27 – Nominal cross-sectional areas of conductors according to terminal sizes 164
Table 28 – Nominal cross-sectional areas of conductors according to maximum current 165
Table 29 – Composition of conductors 166
Table 30 – Torque to be applied to screws and nuts 167
Table 31 – Pull to be applied to conductor 168
Table 32 – Conductor rating 176
Table 33 – Conductor pull force 176
Table F.1 – pH value of the test solution 189
Table G.1 – Position of switches e, n and p for the measurements of the different classes of luminaires 193
Table H.1 – Degrees of protection indicated by the first characteristic numeral 195
Table H.2 – Degrees of protection indicated by the second characteristic numeral 196
Table J.1 – Damaging influences 200
Table K.1 – Determination of creepage distances and clearances (see Table 18, Table 19 and Table 20) 206
Table L.1 – Guidance on when to use the symbol and its explanation on the luminaire or in the manufacturer’s instructions provided with the luminaire 207
Table L.2 – Thermal protection operation 211
Table N.1 – Minimum values for electrical tests 215
Table Q.1 – Minimum clearance distances for AC sinusoidal working voltages overvoltage category III 218
Table Q.2 – Overview of required Y capacitors 219
Table Q.3 – Nominal discharge current (used in the combination wave test) 219
Table T.1 – Insulation requirements between live parts and accessible conductive parts 225
Table U.1 – Limits for the electrical parameters of a PSE 226
Table U.2 – Electrical parameters for communication cables or connectors 227
Table V.1 – Cross-references 228
Table W.1 – Artificial source characteristics 232
Table W.2 – Total area of openings for Li-ion cells 240
Table W.3 – Volume of air injected at 2 070 kPa 240

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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Luminaires -
Part 2-1: Particular requirements -
Fixed general purpose luminaires

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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This extended version (EXV) of the official IEC Standard provides the user with the full content of the Standard.

IEC 60598-2-1:2025 EXV includes the content of IEC 60598-2-1:2025, and the references made to IEC 60598-1:2024.

The specific content of IEC 60598-2-1:2025 is displayed on a blue background.

IEC 60598-2-1 has been prepared by subcommittee 34D: Luminaires, of IEC technical committee 34: Lighting. It is an International Standard.

This third edition cancels and replaces the second edition published in 2020. This edition constitutes a technical revision.

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

a) The clause numbers and structure have been aligned with those of IEC 60598-1.

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

Draft	Report on voting
34D/1743/CDV	34D/1762/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 is to be used in conjunction with the latest edition of IEC 60598-1 and its amendment(s).

It was established on the basis of the tenth edition (2024) of that standard.

NOTE When "Part 1" is mentioned in this document, it refers to IEC 60598-1.

Where this document states "*addition*", "*modification*" or "*replacement*", the relevant text of Part 1 is to be adapted accordingly.

Subclauses additional to those in Part 1 are numbered starting from 101; supplementary annexes are entitled AAA, AAB, etc.

A list of all parts in the IEC 60598 series, published under the general title *Luminaires* can be found on the IEC website.

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.

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

– reconfirmed,
– withdrawn, or
– revised.

INTRODUCTION

In general, this document covers safety requirements for luminaires. The object of this document is to provide a set of requirements and tests which are considered to be generally applicable to most types of luminaires and which can be called up as required by the detail specifications of the IEC 60598-2 series. This document is thus not regarded as a specification in itself for any type of luminaire, and its provisions apply only to particular types of luminaires to the extent determined by the appropriate part of the IEC 60598-2 series.

Each part of the IEC 60598-2 series details the requirements for a particular type of luminaire or group of luminaires. These parts of the IEC 60598-2 series are published separately for ease of revision and additional documents will be added as and when a need for them is recognized.

The IEC 60598-2 series comprises the following parts:

IEC 60598-2-1:	Fixed general purpose luminaires
IEC 60598-2-2:	Recessed luminaires and recessed air-handling luminaires
IEC 60598-2-3:	Luminaires for road and street lighting
IEC 60598-2-4:	Portable general purpose luminaires
IEC 60598-2-5:	Floodlights
IEC 60598-2-6:	Luminaires with built-in transformer for filament lamps (withdrawn)
IEC 60598-2-7:	Portable luminaires for garden use (withdrawn)
IEC 60598-2-8:	Handlamps
IEC 60598-2-9:	Photo and film luminaires (non-professional) (withdrawn)
IEC 60598-2-10:	Portable luminaires for children
IEC 60598-2-11:	Aquarium luminaires
IEC 60598-2-12:	Mains socket-outlet mounted nightlights
IEC 60598-2-13	Ground recessed luminaires
IEC 60598-2-14:	Luminaires for cold cathode tubular discharge lamps (neon tubes) and similar equipment
IEC 60598-2-15:	Not used at present
IEC 60598-2-16:	Not used at present
IEC 60598-2-17:	Luminaires for stage lighting, television and film studios (outdoor and indoor)
IEC 60598-2-18:	Luminaires for swimming pools and similar applications
IEC 60598-2-19	Air-handling luminaires (safety requirements) (withdrawn)
IEC 60598-2-20:	Lighting chains
IEC 60598-2-21:	Rope lights
IEC 60598-2-22	Luminaires for emergency lighting
IEC 60598-2-23:	Extra-low-voltage lighting systems for filament lamps
IEC 60598-2-24:	Luminaires with limited surface temperatures
IEC 60598-2-25:	Luminaires for use in clinical areas of hospitals and health care buildings

1 Scope

This part of IEC 60598 specifies requirements for fixed general purpose luminaires for use with electric light sources on supply voltages not exceeding 1 000 V.

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 60061-2, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 2: Lampholders*, available at http://std.iec.ch/iec60061

IEC 60061-3, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 3: Gauges*, available at http://std.iec.ch/iec60061

IEC 60068-2-6, *Environmental testing – Part 2-6: Tests – Test Fc: Vibration (sinusoidal)*

IEC 60068-2-14:2023, *Environmental testing – Part 2-14: Tests – Test N: Change of temperature*

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