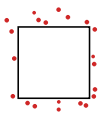
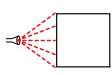
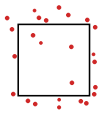


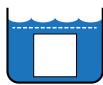

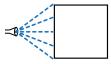

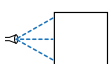

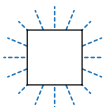
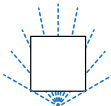
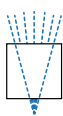
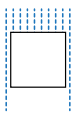


LIGHTING PROTECTION RATINGS RESOURCE CARD

Lighting IP Protection Ratings

IPXX

PROTECTION FROM SOLID OBJECTS/DUST & MOISTURE

IP_X	Solid Objects & Dust Protection	IPX_	Moisture Protection
6	Dust Tight No dust entry 	9	High Pressure & Temperature Jet 
5	Dust Proof 	8	Pressure Watertight >1m submersion tested at 1.3x Rating 
4	Solid Objects >1mm 	7	Watertight 1m submersion 
3	Solid Objects >2.5mm 	6	Powerful Jet Proof 100kN/m ² 
2	Accessibility Probe >12mm 	5	Jet Proof 30kN/m ² 
1	Solid Objects >50mm 	4	Splash Proof Water spray 360° 
0	Not Protected/Evaluated	3	Rain Proof Water Spray 60° from vertical 
		2	Drip Proof when tilted 15° from vertical 
		1	Drip Proof Vertical Drops 
		0	Not Protected/Evaluated

GLOBAL LIGHTING SOLUTIONS PARTNER

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Lighting IK Protection Ratings “IKXX”

Degrees of protection against external mechanical impacts










IK Code	IK00	IK01	IK02	IK03	IK04	IK05
Impact Energy, J	Not protected	0,14	0,2	0,35	0,5	0,7
IK Code	IK06	IK07	IK08	IK09	IK10	
Impact Energy, J	1	2	5	10	20	

IEC	COLOR CODING	NORTH AMERICA
BROWN	LINE	BLACK
BLUE	NEUTRAL	WHITE
GREEN&YELLOW	EARTH / GROUND 	GREEN

IEC	BRANCH WIRE	NORTH AMERICA
1.5mm ² -2.5mm ²	TYPICAL SIZE	14-12 AWG

IEC	CLASSIFICATIONS	NORTH AMERICA
CLASS I	EARTH / GROUND	GROUNDING
CLASS II 	DOUBLE INSULATION	
CLASS III 	LOW VOLTAGE SUPPLY	Class 2 Powered

COMMON IEC SYMBOLS AND RATINGS FOR LIGHTING

t_a	Ambient Temperature Rating
t_c	Maximum Case Temperature Rating
t_w	Maximum Winding Temperature Rating
U_{out}	Maximum Working Voltage (Used for Spacings and Dielectrics)
	Class II – Double Insulated (Not Earthed/Grounded)
	Class III – SELV powered (Not Earthed/Grounded)
	Lamp Control Gear with SELV Output
	Independent Lamp Control Gear
	Built-In LED Module
	Do Not Stare at Light Source (Required for certain Photobiological Classifications)
	Caution – Risk of Shock
	Temperature Declared Thermally Protected Lamp Control Gear (End product testing simplified if less than 130)
	Recessed – Not intended for Insulation Contact

Indispensable resource for worldwide voltages, frequencies and plug types: www.iec.ch/worldplugs/