

IP Ratings

ingress protection

Under EN 60529, all light fittings are rated for their protection against ingress by water and dust particles or other foreign objects. The rating is expressed as a two-part IP number – for example IP67. The two numbers correspond to their protection level: the first number (between 1 and 6) refers to the level of protection from ingress by dust and other solid objects; the second number (1 to 8) refers to the level of protection from harmful water ingress. The protection levels are defined in the following tables.

First Number (protection level against solid objects)

IP	Defined Protection Level
IP0X	No protection
IP1X	Protects against foreign bodies down to 50mm diameter
IP2X	Protects against foreign bodies down to 12mm in diameter
IP3X	Protects against foreign bodies down to 2.5mm in diameter
IP4X	Protects against foreign bodies down to 1mm in diameter
 IP5X	Protects against harmful dust deposits – dust-proof
 IP6X	Protects against any entry of dust – dust-tight

Second Number (protection level against water)

IP	Defined Protection Level
IPX0	No protection
IPX1	Protects against drops of water falling vertically. Limited ingress permitted.
 IPX2	Protects from drops of water falling up to 15° from the vertical. Limited ingress permitted.
 IPX3	Protects against water sprayed from up to 60° from the vertical – rain proof. Limited ingress.
 IPX4	Protects from water splashed from all directions – splash-proof.
 IPX5	Protects from low-pressure jets of water from all directions – jet-proof.
IPX6	Protects against heavy seas or strong jets of water
 IPX7	Protects against temporary immersion down to 1 metre – water-tight. Not for permanent immersion.
 IPX8	Protects against permanent immersion at specified water depth – pressure water-tight.

Therefore an IP67 luminaire would be protected against the ingress of dust and the effects of temporary water immersion down to 1 metre.