

LIGHTING HOMOLOGATION

APPROVAL R65 Brightness and intensity

The R65 standard defines the level of the frequency, the intensity and the diffusion of light that a rotating or directional light must reach.

Standard R65 concerns the photometric part of the light.

<u>Lights concerned:</u>

Beacons, flashing lights, directional lights or turn signals, penetration lights.

Warning lights must be R65 approved to be used on the road.

CEM HOMOLOGATION Electromagnetic compatibility

CEM approval is mandatory on all equipment containing electronics on the vehicle.

It defines 2 factors:

The emission of parasites:

The limitation of the emission of disturbances electromagnetic level to a level guaranteeing a pest-free operation of other devices surrounding.

The interference resistance:

The guarantee of a sufficiently high resistance against electromagnetic disturbances acting from the outside.

Class 1 and 2

CLASS T1:

Minimum required on any type of construction site

Mandatory on roads with speed limit <90km / h (communal and departmental roads)

CLASS T2:

Mandatory on speed-restricted roads > 90km / h (highways / motorways)

Mandatory for the first AK sign indicating a construction site maintained at night (in activity or not)

IP protection according to DIN 40050

IP + 1st digit: protection against solid bodies

IPO Not protected

IP1 Protected against solid bodies greater than

50mm (eg the hand)

IP2 Protected against solid bodies greater than

12.5mm (eg the finger)

IP3 Protected against solid bodies greater than

2.5mm (eg tools, wires, ...)

IP4 Protected against solid bodies larger than 1mm

IP5 Protected against dust (penetrations harmful)

IP6 Fully dustproof

- + 2nd digit: protection against liquids
- 0 Not protected
- 1 Protected against water drops falling vertically
- 2 Protected against water falling from an angle maximum of 15 $^{\circ}$
- 3 Protected against water maximum rain 60 °
- 4 Protected against splashing water
- 5 Protected against water jets (power washer)
- 6 Protected against water jets and sea water
- 7 Protected against temporary immersion
- 8 Protected against sustainable immersion
- 9K Protected against high pressure cleaning and / or water jets