

TGN 35 on the benign character of Filament lamps.

1 The Issue

Whereas nr. 12 of Directive 2014/30/EU states:

This Directive should not regulate equipment which is inherently benign in terms of electromagnetic compatibility.

Based on this the current draft EMC Guide states in Clause 1.1.4:

Inherently benign equipment

Equipment which is inherently benign in terms of electromagnetic compatibility is excluded from the scope of the EMCD.

Equipment is considered inherently benign in terms of electromagnetic compatibility if its inherent physical characteristics are such that it:

- *is incapable of generating or contributing to electromagnetic emissions which exceed a level allowing radio and telecommunications equipment and other equipment to operate as intended; and,*
- *will operate without unacceptable degradation in the presence of the electromagnetic disturbance normally present in its intended environment.*

Both conditions need to be met in order to classify equipment as inherently benign.

The application of the above enables the exclusion of the following products (not exclusive) from the application of the EMCD, provided that they include no active electronic part(s):

- *Filament lamps (bulbs);*

However investigations have shown that not all types of Filament lamps can be considered benign.

2 Guidance

EMC Notified Bodies may be confronted with question related to the benign character of Filament lamps.

If so the Notified Body should make other parties aware of the fact that not all Filament lamps can be considered benign.

This is particular the case for:

Squirrel cage filament (which could be more than two meters in length) light bulbs that may cause radio interference. The interference caused is most disruptive to FM Radio.

However Spiral, loop, coil and zig-zag filaments do not in general cause radio interference as they behave like regular incandescent lamps.

Where appropriate the Notified Body may share with parties the background information given in EUANB (17)002J, which is available on CIRCABC Section EUANB 2017 Documents.

Disclaimer

This EUANB TGN does not replace the text of the EMC Directive 2014/30/EU and is for guidance only. In legal disputes the text of the Directive 2014/30/EU, or its implementation in National legislation, takes precedence.