



Taking sustainability to the next level

Name | date



PHILIPS

EcoDesign DIM2 regulation



- New European directive coming into force in September 2013
- Sets the minimum performance requirements for our LED lamps giving us the opportunity to further innovate our LED lamps
- Ensure that product information details are more transparent and harmonized across suppliers
- Set packaging requirements

Why DIM2?

DIM2 legislation has been created to increase customer satisfaction with energy-saving lamps – in particular LED lamps – and to allow end-users to make informed choices when purchasing them.





Which lamp types are affected?

	LFL	CFLi	CFLni	Halogen non-directional	Halogen directional	LED	HID	SPG	Fixtures with lamps
DIM1 (HLD) stage 5		●		●					
DIM2					●	●			
Energy Label	●	●	●	●	●	●	●	●	●

Performance requirements



- Directional lamps, such as spots and reflectors, need to meet a certain lumen level to be able to claim a certain wattage replacement
- 90% of the lamps must survive and still have at least 80% of their initial lumen output after 6000 burning hours
- 95% of the lamps must survive for at least 1000 hours

- Color should always be represented in a vivid and natural way. color rendering $R_a > 80$



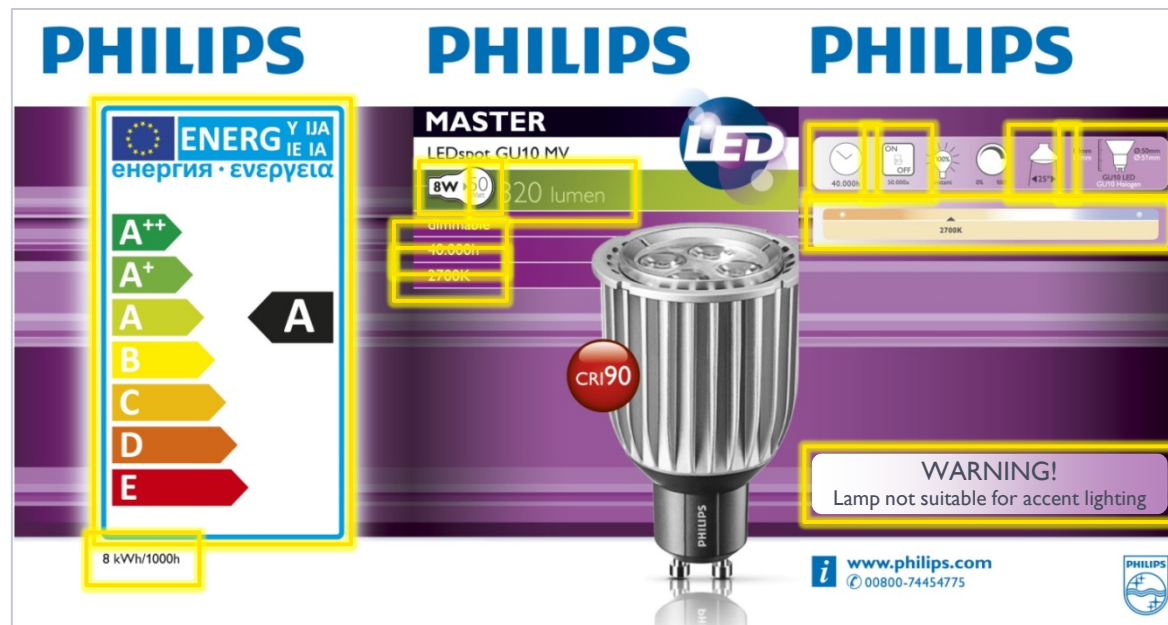
- Color variation should be hardly visible to the human eye. within 6 step MacAdam



Packaging requirements



- Energy Efficiency Labeling (EEL)
- Luminous flux
- Color temperature
- Lifetime in hours
- Number of switching cycles
- Lamp dimensions in millimeters
- Beam angle in degrees
- Energy consumption in kWh
- Directional lamp beam angle $\geq 90^\circ$
Warning! Lamp is not suitable for accent lighting



Gradual change in packaging color

Shelf February



Shelf May



Shelf September



DIM2 packaging can be recognized by the purple color



EcoDesign (DIM2) also stipulates that certain product information must be displayed on the directional lamp itself such as:

1. Luminous flux in lumen
2. Color temperature in Kelvin
3. Nominal beam angle in degrees



Minimum requirements for equivalence claims



For instance:

Today

143lm GUI10 40D = 35W Halogen

DIM2 requirements

143lm GUI10 40D = 25W Halogen

230lm GUI10 40D = 35W Halogen



Why Philips for LED lamps?



Best Product

- Quality
- Improved spot and reflector range which meet the new wattage propositions and requirements

Best Portfolio

- Portfolio is further upgraded and broadened
- A lamp for every socket within this regulation
- Product ranges for all types of applications

Best Partner

- Look & feel are maintained which minimizes the impact on our customers
- Helping our customers finding the right lamp with our extensive portfolio