Lessons Learnt through Testing Lamps - the Devil is in the Detail

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In the beginning.....





CFL Benchmarking Tests





CFL Tests





Results so far





Low Voltage Halogen Issues

- Test Standard was not reliable for reflector/directional light sources
- Round Robin between major suppliers and two independent labs
- We now have a cost effective method we can use for compliance
- And we have learnt a lot about testing directional light sources which will help us with LEDs



Mains Voltage Halogen Tests



- EU no tolerance (i.e. class C)
- —— Australia Current MEPS
- ----- EU less 10% tolerance (on power, as per EU reg) ----- Aust MEPS less 5% tolerance
- o GLS Nominal
- GLS Test
- Halogen Nominal (Osram)
- Halogen Test by DCCEE (UK 240V, 3 samples)
- Halogen Test by LCA Members (Australia 240V, 1-3 samples)
- Halogen Test by DCCEE (Australia 240V, 10 samples)
- Halogen Test by DCCEE (Sweden 230V, 3 samples)



LED Quality

- CALIPER tests in US show a significant variation between product performance claimed by manufacturers and test results – especially light output and efficacy.
- In these cases consumers who choose LED lighting may find they achieve increased efficacy at the cost of light levels, light quality and higher costs.



LED Tests





What has the Phase-out taught us?

- Policy makers need to be involved in Standards Development – test methods as well as performance levels
- Standards need to be clear and unambiguous sounds obvious but many aren't
- Test methods should be suitable for cost effective compliance monitoring
- Information requirements and equivalency need to be included in regulations

