

UV- EXPOSURE BIORESIN LED-RESIN

1. Introduction

The life time of some colors LED's (blue, white) is negative influenced by the UV radiation of this LED type. The radiated UV makes the clear epoxy molding compound to become yellow. To find out if clear Bioresin is more proof against UV radiation this material is compared with epoxy molding compound.

Test method: : ASTM G154 (1998): Standard practice for operating fluorescent light apparatus for UV exposure of nonmetallic materials

Test conditions:

Test instrument : Atlas UVCON
Light source : UV-B 313 nm
Cycle : 4 hours light, 4 hours dark with condensation
Black Panel Temperature : Light : 60 ± 3 °C
: Dark : 50 ± 3 °C

2. Test results

The color change is measured according DIN 6174 (1979) L*a*b* color space method. In this color space L* indicates lightness (0=black, 100=white), a* indicates chromaticity green-red (-60= green, +60=red) and b* indicates chromaticity blue-yellow (-60=blue, +60= yellow).

Only the b* value is given because the L* and a* aren't hardly changed.

