

Suntest (Xenon - Atlas)



Principle

Ultraviolet radiation, temperature, and moisture contribute to material degradation of products exposed to the elements.

Accelerated weathering tests simulate these conditions using special environmental chambers and instruments in order to speed up the weathering process and to measure its effects on parts, components, products, and materials.

Method

The samples are exposed to XENON light, in dry or humid conditions. XENON light reproduces the complete sun spectrum and simulates the accelerated degradation by sun and weathering.

The test chamber is equipped with spray systems (rain simulation). The relative humidity of the test chamber can be modified.

After the exposure of the samples during a predefined period, the most relevant properties of the samples are evaluated (e.g. colour or mechanical properties).

Applications

- Exposure of plastics to indoor & outdoor weathering
- Evaluation of the impact of accelerated weathering on different material properties