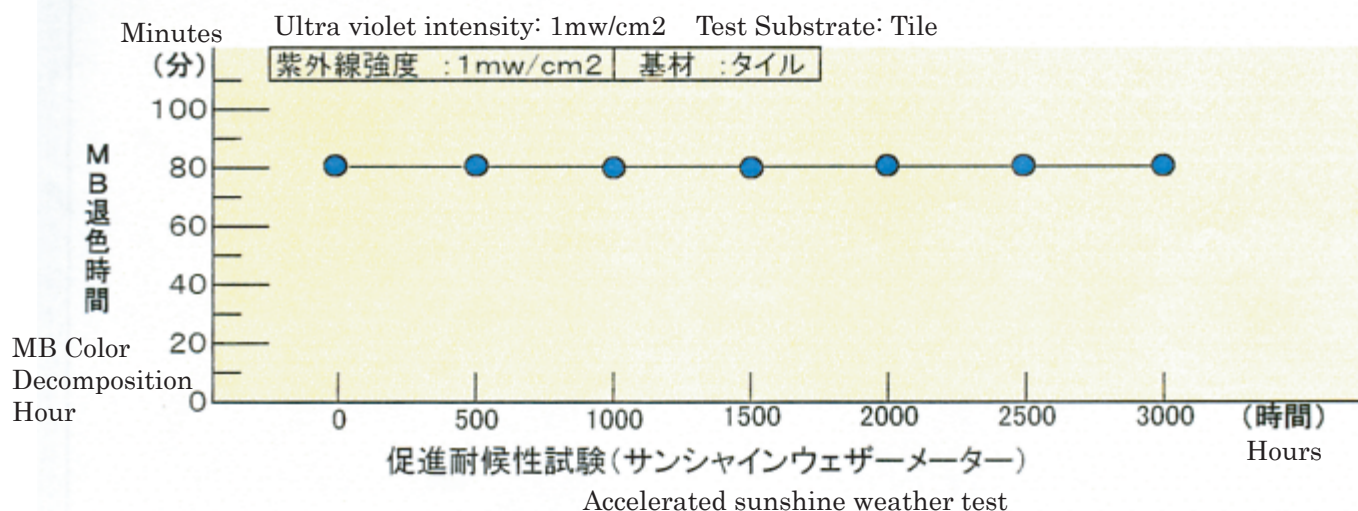


Accelerated sunshine weather test

<耐久性と光触媒効果の結果> TiO₂ film durability test and its result



※MB退色時間

- ・光触媒効果の簡易測定方法です。一定量の染料(メチレンブルー)の溶液を試料表面に塗布して紫外線を当てた時、染料が分解して色が消えるまでの時間の長さでその効果を比較します。
- ・図では3000時間以降も光触媒の効果が低下していないことを示しています。

※サンシャインウェザーメーターの耐候性試験

- ・自然の屋外よりもはるかに厳しい条件(強力な光と水シャワーを当てる方法)に材料を曝して劣化を早める試験です。短い時間で室外暴露での耐久性を予測することができます。(ここでは300~500時間を1年と考えます。)

MB Color decomposition hours

This is a simplified method to evaluate photocatalytic effect.

A certain amount of methylene blue ink is coated on a tile. Photocatalytic effect is evaluated by the degradation time of the methylene blue color. The test was conducted seven times at each hour.

This test shows that the photocatalytic tile exposed by UV light for more than 3000 hours still can degrade the methylene blue color. The tile still has effect of photocatalysis after passing three thousand hours.

Accelerated sunshine weathering test

A light with very high intensity and water with strong shower were used to accelerate the durability of the TiO₂ coated film on tile in a short period time. This test can predict the duration of TiO₂ coated film.

It is considered that three hundred to five hundred hours in this test is equivalent to one year.