

## Silicone Rubber (ASR-A80MC) UV Durability Testing

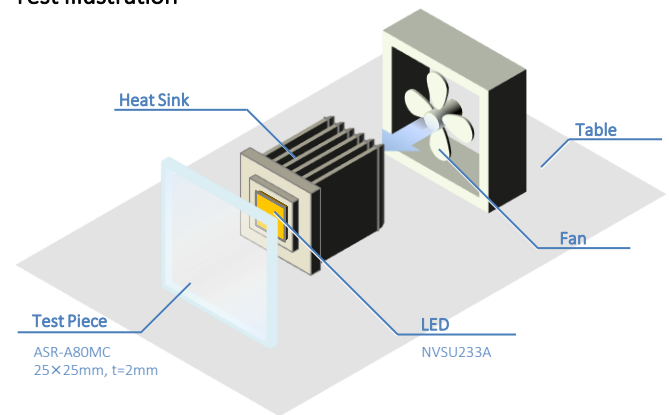
### Test Method

UV-LED lit for extended duration; collected pre- and post-test transmittance data compared.

### Test Description

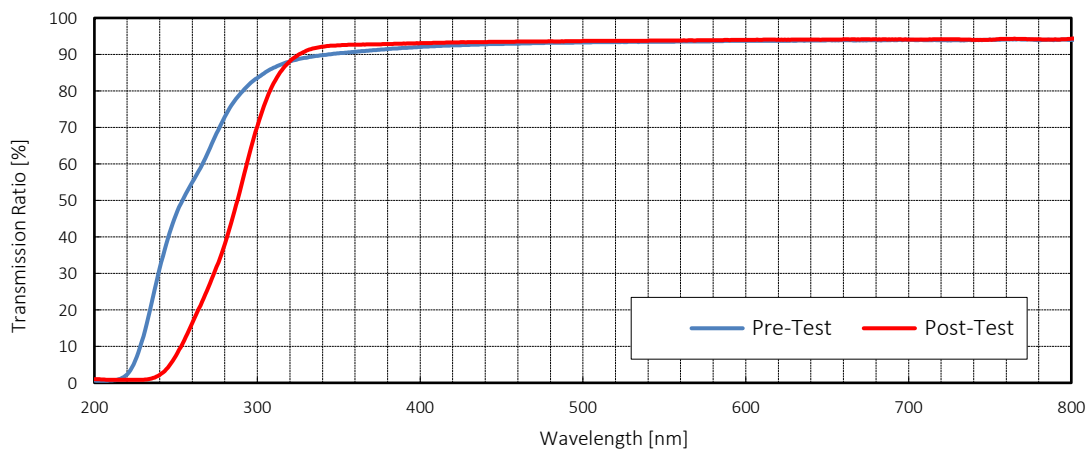
<b>LED Package</b>	Nichia NVSU233A (365nm)
<b>Drive Current</b>	1.4A (specification max)
<b>Radiant Flux</b>	1442mW (Nichia reference value)
<b>Cooling</b>	Heat sink with forced air
<b>Ambient Temp.</b>	25°C
<b>Duration</b>	6300 Hours
<b>Distance</b>	~2mm between LED and test piece

### Test Illustration



### Measured Results (Change in Transmittance)

Some loss in transmittance below 320nm was observed. Conversely, increase in transmittance observed in 320nm~460nm range.



### Summary

1. From ~320nm boundary, transmittance decreases in shorter wavelengths, yet increases in longer wavelengths.
2. UV irradiation clearly causes a change in the optical qualities of the material; whether this can be considered degradation or long-duration curing of a sort depends on one's viewpoint.
3. The material can be considered highly UV-durable at a reference wavelength of 365nm.