Attachment

Toyoda Gosei Co., Ltd.

24-Sep-20

UV light exposure test using novel coronavirus (SARS-CoV-2)

■ Date conducted: 15-Sep-20

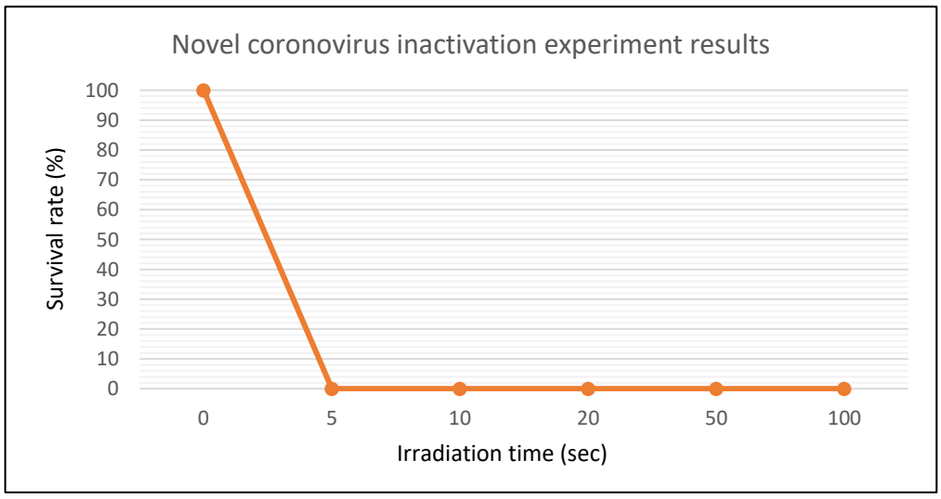
■ Conducted by: Biomedical Science Association (certified NPO in Japan)

■ Light source: 276 nm/350 mA/55 mW deep UV LED

■ Virus used: SARS-CoV-2

■ Method: Diluted virus solution is put in petri dish and irradiated with deep UV LED light for a fixed time. After irradiation, the virus titer was measured with the plaque technique.

■ Results: **Inactivation of 99.999% within 5 sec was confirmed**



Standard	Time (sec)	Virus titer (pfu/ml)	Survival rate （%）
276nm@350mA Center illuminance: 2.6 mW/cm^2 (Distance 50 mm)	0	128000	100.00000%
	5	≦1	0.00078%
	10	≦1	0.00078%
	20	≦1	0.00078%
	50	≦1	0.00078%
	100	≦1	0.00078%

■ Novel coronavirus inactivation by deep UV irradiation

(Blue shows inactivation of viruses and loss of infectivity)