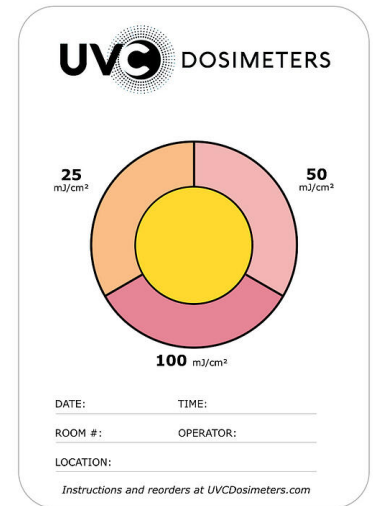




## Healthcare UV-C Dosimeter Usage Protocol

The dosimeters can be used for every UV-C disinfection cycle to get the best and most comprehensive results which is also in line with CDC<sup>1,2</sup> and FDA<sup>3</sup> recommendations to quality assure disinfection processes.

The UV-C Dosimeter card is intended to provide a visual indication of applied UV-C energy during a disinfection cycle and is not intended to be used as a substitute for viral or microbiological verification of disinfection. If a card has been pre-exposed to light before use, the card should be disposed of.



## Instructions For Use

1. Prior to disinfection, fill in information on the front of the card as directed by site requirements.
2. Peel the backing off the adhesive strip and place one card at each high touch location you identify or as otherwise directed by site requirements. The cards can be placed in a horizontal or vertical position.

Note: Always make sure the inner circle (yellow) area faces toward the UV-C device.

3. Exit the room and run the disinfection cycle.
4. Verify exposure of the card and make any additional notations on the card or elsewhere to document the color change. Evaluate the inner circle color versus the outer ring colors to visually establish the accumulated UV-C dose obtained (see chart on page 3).  
Note: For best results, take readings immediately. Always take exposure reading within 24 hours after disinfection cycle.

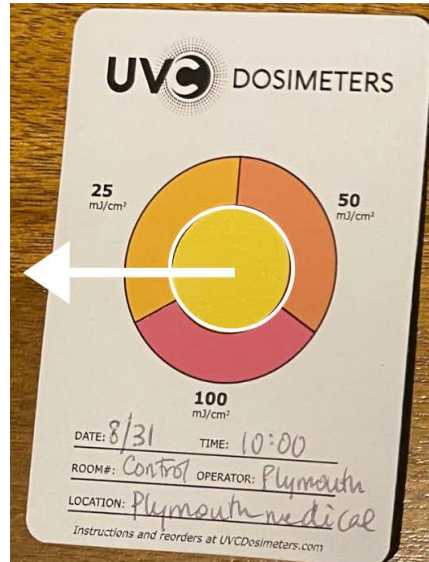
5. Retain or discard the card in accord with site requirements.

Note: The UV-C dosimeter card is one-time use only and should not be reused for several disinfection cycles.

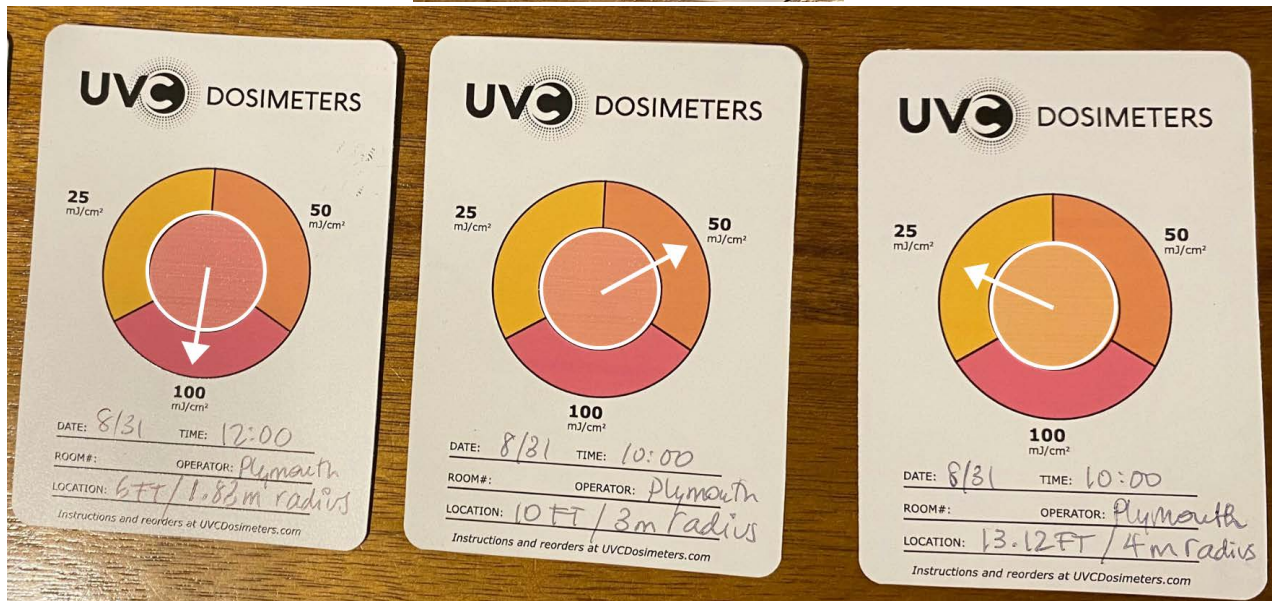


**Dosimeter Card Test Results with The Plymouth Medical UV-C Disinfection Lamp**

Control Dosimeter Card  
No UV-C Light Exposure



**Timer Setting: -**  
**Radius: -**  
**Inner Circle: Yellow**  
**Indicated UV-C Energy:**  
**0mJ/cm<sup>2</sup>**



**Timer Setting: 60min**  
**Radius: 1.82m (6ft)**  
**Inner Circle: Dark pink**  
**Indicated UV-C Energy:**  
**100mJ/cm<sup>2</sup>**

**Timer Setting: 60min**  
**Radius: 3m (10ft)**  
**Inner Circle: Light pink**  
**Indicated UV-C Energy:**  
**50mJ/cm<sup>2</sup>**

**Timer Setting: 60min**  
**Radius: 4m (13ft)**  
**Inner Circle: Light orange**  
**Indicated UV-C Energy:**  
**25mJ/cm<sup>2</sup>**

*Note: Disinfection times are based on room size and setting (temperature, humidity, room setup). A room with a radius smaller than 4m (13ft) may reach the UV-C energy of 25mJ/cm<sup>2</sup> in less than 60 minutes. To determine which timer setting (15/30/45/60 min) is sufficient for your room to reach 25mJ/cm<sup>2</sup> for 99.9% viral disinfection, we recommend completing a test disinfection cycle using dosimeter cards. You can order dosimeter cards [here](#).*

# Instructions For Use UV-C Dosimeter Cards



PLYMOUTH  
MEDICAL

## Dosimeter Card Reading

Inner Circle	Color	Accumulated UV-C Dose	Lethal Dose for
 <p>UV-C DOSIMETERS 25 mJ/cm² 50 mJ/cm² 100 mJ/cm² DATE: 8/31 TIME: 10:00 ROOM#: OPERATOR: Plymouth LOCATION: 13.12 FT / 4m radius Instructions and manuals at UVCDosimeters.com</p>	Light Orange	25mJ/cm <sup>2</sup>	Human Coronavirus
 <p>UV-C DOSIMETERS 25 mJ/cm² 50 mJ/cm² 100 mJ/cm² DATE: 8/31 TIME: 10:00 ROOM#: OPERATOR: Plymouth LOCATION: 10 FT / 3m radius Instructions and manuals at UVCDosimeters.com</p>	Dark Orange	50mJ/cm <sup>2</sup>	Escherichia coli Salmonella typhimurium Listeria monocytogenes Pseudomonas aeruginosa Acinetobacter baumannii Staphylococcus aureus Bacillus subtilis Penicillium Bewer's/Baker's Yeast Serratia marcescens
 <p>UV-C DOSIMETERS 25 mJ/cm² 50 mJ/cm² 100 mJ/cm² DATE: 8/31 TIME: 12:00 ROOM#: OPERATOR: Plymouth LOCATION: 5 FT / 1.5m radius Instructions and manuals at UVCDosimeters.com</p>	Red	100mJ/cm <sup>2</sup>	C.Diff Aspergillus flavis

Preliminary research has shown that SARS-CoV2, the virus that causes COVID-19, may be inactivated by UV-C (254nm) at a dose of 22mJ/cm<sup>2</sup>.<sup>3,4</sup>

<sup>1</sup><https://www.cdc.gov/infectioncontrol/guidelines/disinfection/sterilization/sterilizing-practices.html>

<sup>2</sup><https://www.cdc.gov/oralhealth/infectioncontrol/faqs/monitoring.html>

<sup>3</sup><https://www.fda.gov/sterilization-process-controls>

<sup>4</sup>Press Release - June 16, 2020: Signify and Boston University validate effectiveness of UV-C light sources on inactivating the virus that causes COVID-19

<sup>5</sup>BCS Laboratories, Inc. - July 27, 2020: The Plymouth Medical UV-C Lamp Human Coronavirus Reduction Efficacy Testing