

# 3M™ Comply™ Bowie-Dick Plus Test Pack 00135LF Interpretation Chart



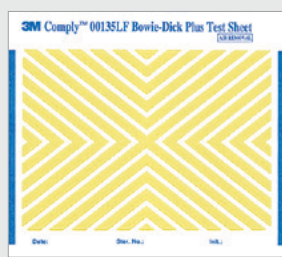
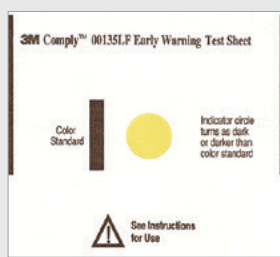
Lead Free

A test for incomplete air removal, 270–273°F (132–134°C) in vacuum-assisted sterilizers

## 3M Comply Early Warning Test Sheet

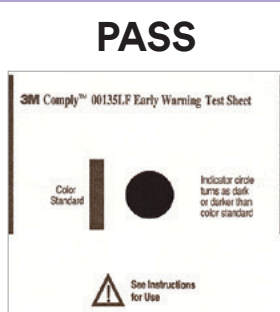
## 3M Comply Bowie-Dick Test Sheet

### Unprocessed

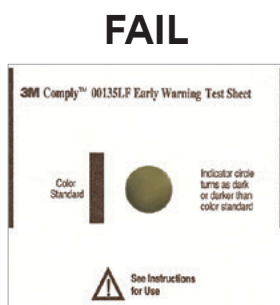


### PASS

Indicator ink circle on Early Warning Test Sheet is as dark as or darker than the color standard and Bowie-Dick Test Sheet shows a uniform color change to dark brown/black.

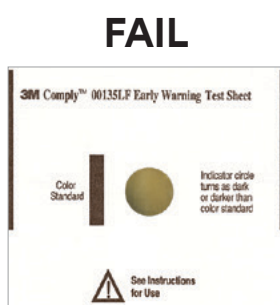


Indicator ink circle on Early Warning Test Sheet is lighter than the color standard but Bowie-Dick Test Sheet shows a uniform color change to dark brown/black. Sterilizer can be used but sterilizer maintenance should be scheduled.

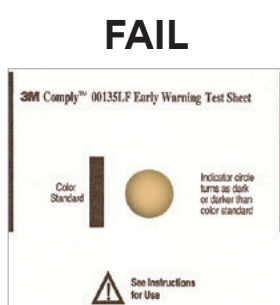


### FAIL

Indicator ink circle on Early Warning Test Sheet is lighter than the color standard and Bowie-Dick Test Sheet shows a non-uniform color change. Bowie-Dick Test Sheet result indicates a small amount of residual air in the chamber.



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## Instructions for use and helpful tips:

### Purpose

- The Bowie-Dick test is designed to evaluate the effectiveness of the air removal system in prevacuum steam sterilizers and to detect residual air in the chamber.
- The test is not applicable to gravity-displacement sterilizers.

### Test Frequency

- Run test every day sterilizer is used before the first processed load.
- Run test at same time every day in an otherwise empty chamber. The sensitivity of the test is decreased if multiple test packs are run together.

### Warm-up

- Run empty cycle to preheat chamber and purge air from steam lines (dry time may be omitted). This ensures accurate test results and helps to avoid false failures.

### Test Placement

- Place one test pack horizontally, label side up, on bottom shelf of sterilizer rack, over drain. Do not place test pack directly on drain or on sterilizer floor or on a basket over the drain.

### Test Cycle

- Run cycle for 3.5 minutes at 270–273°F (132–134°C). Do not run test longer than 4 minutes; results will be invalid. Dry time may be omitted.

### Test Results

- Remove test pack promptly after cycle is complete and allow it to cool. Remove test sheets and interpret results.
- A uniform color change to dark brown/black is a PASS. A non-uniform color change showing a lighter colored area in the center of the test sheet is a FAIL indicating residual air in the sterilizer chamber. (See chart on the left for examples.)
  - If test passes, sterilizer can be used.
  - If test fails, sterilizer should be removed from use and supervisor should be notified.

### Record Keeping

- Maintain all test sheets in records so they are available for comparison to aid in interpretation.

### Common Causes of Bowie-Dick Test Failures Include:

- Inadequate vacuum
- Clogged drain line, vent lines or water supply strainer
- Leak caused by a faulty door gasket or other defect
- Plugged, faulty or maladjusted control valves
- Low steam pressure or water pressure
- Water temperature too high
- Poor steam quality (i.e., non-condensable gases or superheating)
- Variations in steam supply due to increased demand or change of seasons