



UL ECVP 3140

Comparing Environmental Impacts of Sterilization Equipment

Environmental Claim Validation Procedure (ECVP) for Comparing Environmental Impacts of Sterilization Equipment, UL ECVP 3140

First Edition, Dated August 10, 2016

Summary of Topics

The first edition of the Environmental Claim Validation Procedure (ECVP) for Comparing Environmental Impacts of Sterilization Equipment, UL ECVP 3140, has been issued.

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INTRODUCTION

1 General

1.1 This document defines the procedure for measuring and calculating the environmental performance of sterilization equipment either individually or against reference sterilization equipment. The environmental impacts assessed are limited to the use phase, and include energy and water use, carbon intensity, and waste generated by sterilization equipment.

1.2 This procedure is divided into two sections: the first is focused on measuring the environmental performance of sterilizers that are the subject of the research (i.e., Unit Under Test “UUT”) and competing sterilization units that will serve as the comparative baseline (i.e., Reference “R”); the second calculates energy and water use, greenhouse gas (GHG) emissions, and waste generation during the use phase.

2 Scope

2.1 Products covered under this procedure may include stand-alone or built-in sterilizers, including autoclaves, Ethylene Oxide (EtO), hydrogen peroxide gas plasma, or other similar equipment for sterilization of devices.

2.2 The operational conditions verified for the sterilizer are used to calculate the environmental impact reduction based on R sterilizer(s) and the usage pattern specified in this procedure. The carbon intensity is estimated based on direct GHG emissions and energy-related GHG emissions.

3 Units of Measurement

3.1 For the purpose of this procedure, values shall be reported in accordance with the requirements of the individual criterion. If the manufacturer’s choice of units deviates, that change shall be documented and justified as to the reason and relevance for that change.

4 Undated References

4.1 Any undated reference to a code or standard appearing in the requirements of this procedure shall be interpreted as referring to the last latest edition of that code or standard. The exception shall be in the case where the criterion explicitly states a certain version or date to be used.