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Aerospace series - ECO efficiency of catering equipment - Part 01: General conditions

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

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**Aerospace series - ECO efficiency of catering equipment -  
Part 01: General conditions**Série aérospatiale - Écoefficacité du matériel de  
restauration - Partie 01 : Conditions généralesLuft- und Raumfahrt - ECO-Effizienz von  
Cateringgeräten - Teil 01: Allgemeine Bedingungen

This European Standard was approved by CEN on 12 August 2019.

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## **European foreword**

This document (EN 4855-01:2020) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2020, and conflicting national standards shall be withdrawn at the latest by August 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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**EN 4855-01:2020 (E)****Introduction**

Efficient and economic aircraft operation is one of the main objectives in the aviation industry. The main goals for a competitive and environmental friendly operation are to reduce weight, fuel consumptions and thus to lower the costs leading to a more sustainable aircraft.

Today's aviation industry standards do not provide a classification of catering equipment according to their power demand and weight. Since it is state of the art for household appliances to be rated with ECO-label categories, the purpose of this document is to standardise the test procedures and calculations to determine the ECO efficiency for catering equipment installed in the aircraft.

## 1 Scope

This document defines the test procedures and calculations to determine the ECO efficiency of the following catering equipment installed in an aircraft:

- Chilling equipment (with freeze function);
- Ovens (steam and convection ovens);
- Beverage makers (coffee maker, water heater).

Based on the results it will be possible to derive the energy consumption index and a performance index of the considered equipment type. The two index values represent the ECO efficiency.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 4855-02, *Aerospace series — ECO efficiency of catering equipment — Part 2: Oven equipment*<sup>1</sup>

EN 4855-03, *Aerospace series — ECO efficiency of catering equipment — Part 3: Chilling equipment*<sup>1</sup>

EN 4855-04, *Aerospace series — ECO efficiency of catering equipment — Part 4: Beverage makers*<sup>1</sup>

EN ISO 3744:2010, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering methods for an essentially free field over a reflecting plane (ISO 3744:2010)*

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