



## **TITLE: ANALYSIS OF THE THERMAL PROPERTIES OF THREE DIFFERENT DUVETS**

**Performed by: TNO Technische Menskunde, Soesterberg-NL**

The report of the renowned Dutch institute for applied scientific research compares the heat penetration of three duvets: a traditional one without air-conditioning zones, a ClimaBalance® duvet with a thin air-conditioning strip and one with square air-conditioning zones spread across the entire surface. The tests are carried out in an air-conditioning chamber at 20°C and 65% humidity. Human body heat was simulated in a modified water boiler and the measurement results documented with the help of an infrared thermal imaging camera.

The “winner” of the test is clearly duvet no. 3: “This duvet was the most successful at releasing the boiler heat into the environment: This is not a surprise due to the amount of surface area being made from the new material. The boiler temperature increases only slightly and the inside surface stays very low.”

The Dutch institute also found in a different context that depending on the air-conditioning zones’ proportion of the overall surface of the duvet, up to three times more humidity is released.