ABSTRACT

of measurements from the **TÜV SÜD** calibration protocol

Measuring instrument: Speed indicator **Air Chrony MK3**
Range: 1000 m/s; calibrated for the range (100 ÷ 800) m/s
Calibration date: **2016-06-01**

Measured and calculated values:

A_{CP} [m/s]	**AP** [m/s]	**e** [m/s]	**U(k=2)** [m/s]
100.00	100.02	0.02	0.05
200.02	199.98	-0.04	0.14
300.03	300.06	0.04	0.04
400.85	400.78	-0.07	0.10
499.78	499.85	0.07	0.09
600.13	600.50	0.37	1.4
699.62	700.48	0.85	2.8
800.63	800.12	-0.51	3.9

Legend to the above values:

A_{CP} – arithmetic average of six measurements taken by a certified measuring instrument
A_P – arithmetic average of six measurements taken by a calibrated **Air Chrony MK3** measuring instrument
e – deviation ($e = A_P - A_{CP}$)
U – extended (k = 2) uncertainty

Uncertainty:

The measurement uncertainty stated above is defined by the product of standard measurement uncertainty and the extension coefficient k=2, which corresponds to the probability of coverage of approx. 95% (under normal distribution). Standard measurement uncertainty was defined in line with EA-4/02 and TPM 0051/93 documents.

Calibration method and handling of results:

Calibration was performed by a direct comparison of the measuring instrument with a calibrated certified measuring instrument as per the guideline: “Speed indicator calibration by means of beam reflection”.

AIR-CHRONY
ACCURATE SHOOTING

The statements above are taken from the official **TÜV SÜD** assessment of calibration.