

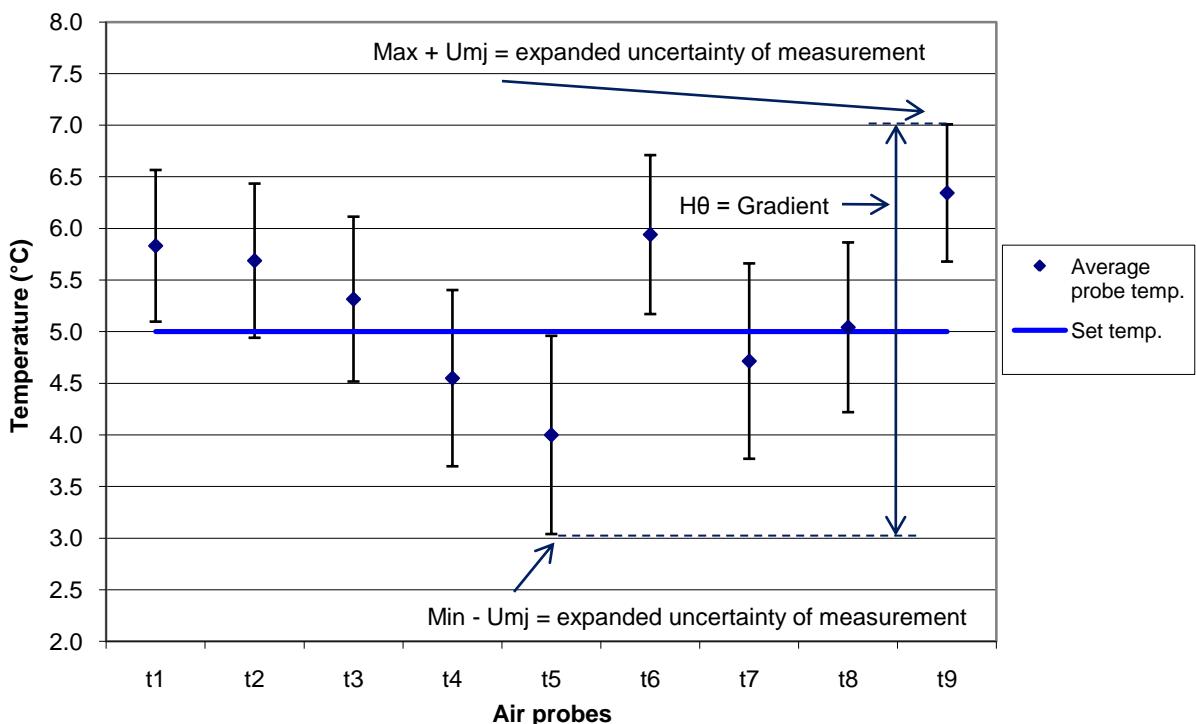
## Liebherr laboratory refrigerator LKUv 1612

Test procedure NF X15-140:  
Evaluation of air temperatures (light off)

**Gradient H<sub>0</sub>: 4.0K (+2.0K / -2.0K from set temperature)**  
**Max. fluctuation: 3.3K**



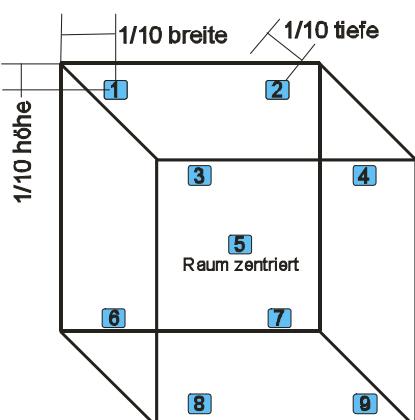
Average temperature with expanded uncertainty of measurement per probe



- **Gradient (Homogeneity)** distribution of temperatures within the chamber

$$H_0 = \max(\theta_{mj} + U_{mj}) - \min(\theta_{mj} + U_{mj})$$

- max = (mean value warmest probe + standard deviation + measurement uncertainty)
- min = (mean value coldest probe - standard deviation - measurement uncertainty)



Positions of probes  
according to NF X15-140

- 9 measurements with air-temperature PT100 probes
- 8 probes in the corners of the “working space”, 1/10 of the internal dimension away from the chamber walls & 1 in the centre of the working space