

# ISO 17714:2007-07 (E)

## Meteorology - Air temperature measurements - Test methods for comparing the performance of thermometer shields/screens and defining important characteristics

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Terms and definitions .....</b>	<b>1</b>
<b>3</b>	<b>Field test conditions .....</b>	<b>2</b>
3.1	Field test site .....	2
3.2	Respective location of screens .....	2
3.3	Screens .....	3
3.4	Thermometers .....	3
3.5	Additional meteorological variables .....	3
3.6	Data sampling .....	4
3.7	Reference values .....	4
3.8	Quality control .....	4
3.9	Long-term intercomparison .....	5
3.10	Typical conditions .....	5
3.11	Documentation .....	6
<b>4</b>	<b>Field test methods .....</b>	<b>6</b>
4.1	Comparability analysis .....	6
4.2	Global analysis of air temperature .....	6
4.3	Analysis of extreme values .....	6
4.4	Statistical analysis of radiation error .....	7
4.5	Influence of surface albedo .....	7
4.6	Selection of typical conditions .....	7
<b>5</b>	<b>Measurement of screen characteristics .....</b>	<b>8</b>
5.1	Aspiration rate .....	8
5.2	Internal ventilation factor .....	8
5.3	Representative height and screen reference point .....	8
5.4	System response time .....	8
<b>Annex A (informative)</b>	<b>Influence factors .....</b>	<b>10</b>
<b>Annex B (informative)</b>	<b>Examples of useful test-report graphs .....</b>	<b>13</b>
<b>Bibliography .....</b>		<b>18</b>