



## Legal Metrology

ACCURATE MEASUREMENT, GOOD BUSINESS, FAIR TRADE AND SAFETY

### APLMF Survey on the test procedure for the verification of rice moisture meters with a digital indication

Economy Name: \_\_\_\_\_

Name of person completing the survey: \_\_\_\_\_

Organisation responsible for the tests procedures within your economy: \_\_\_\_\_

- Please complete this survey to indicate how your economies current test procedures align with the test procedures described below.
- Only tick (✓) one box per test.
- Send your completed survey to [Secretariat@aplmf.org](mailto:Secretariat@aplmf.org) by: \_\_\_\_\_

### Survey

Test Name	Procedures Description	Fully aligns	Partially aligns	Does not align
Environmental condition	<ul style="list-style-type: none"><li>• The room temperature is in a range from 20 °C to 30 °C (with stability within <math>\pm 1</math> °C).</li><li>• The relative humidity is in a range from 30 % to 70 % (with stability within <math>\pm 5</math> %).</li><li>• Place the moisture meter under test (MUT) and reference samples at the constant environmental condition at least <b>3 hours</b> before the test.</li></ul>			
Reference samples	<ul style="list-style-type: none"><li>• Prepare a set of reference samples of rice with different levels of moisture content (5 levels or more).</li><li>• The above levels shall include a range of moisture content from 10 % to 20 %.</li><li>• Each sample shall be homogenized.</li><li>• The reference values of moisture content of the reference samples have been measured in advance with a reference (dry oven) method or a primary standard moisture meter.</li></ul>			

<p><b>Visual and electrical inspections</b></p>	<ul style="list-style-type: none"> <li>• There are no damages in the housing, display and sample holder.</li> <li>• LCD (liquid crystal display) functions correctly.</li> <li>• Instrument temperature agrees with the room temperature within <math>\pm 3</math> °C.</li> <li>• Battery voltage is within a normal range (use a self-checking function).</li> <li>• Electrical performance of the meter is normal (use a checker-kit).</li> </ul>			
<p><b>Measurement of errors</b></p>	<ul style="list-style-type: none"> <li>• Measure moisture contents of the reference samples using the moisture meter under test (MUT) at different levels (5 levels or more).</li> <li>• Repeat at least 5 measurements at each level of moisture content.</li> <li>• Averages of the measurement results agree those of reference samples within MPE (maximum permissible error) specified by the national/regional authority.</li> </ul>			

Thank you for completing this Survey

Best Regards

APLMF SECRETARIAT

C/o Trading Standards

Ministry of Business, Innovation & Employment

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