Test Report of the Test U	J <b>nit</b> to	o specify the name	
who is a person carrying out	the test on the p	orototype of the length measu	ırer
Type of Length Measu	urer		
Name or Trademark	Model	Capacity Range	

Table 1 Result of Visual Inspection

Characteristics of the Prototype of		Result of Inspection  (to mark ✓ or 🗴 in the case of inaccuracy, please explain details)			
	the Length Measurer as Inspected	Accuracy	Inaccuracy	Details (please specify)	
1	It is made of good materials.				
2	It is made of metal, hardwood, fiber or other materials which have already been examined by the Central Bureau to be similarly qualified.				
3	The straight line length measurer shall be made to be flat, straight and unable to fold.				
4	The folding length measurer shall be made in such a way that every part shall stop at the joint fitly when it is unfolded.				
5	The principal scale marks shall have a value of $1 \times 10^k$ or $2 \times 10^k$ or $5 \times 10^k$ metres whereby k is a positive integer, a negative integer, or zero.				
6	Scale marks, numbers, alphabets or other symbols shall be legible, clear and indelible.				
7	The length of a big scale mark shall be clear to see, legible, permanent, and longer than a small scale mark.				
8	The scale mark shall be perpendicular to the edge of the length measurer.				
9	It shall indicate the following details on the instrument.  Such details shall be provided in a legible, clear and indelible manner.  - the name or trademark of a producer, an importer or a seller,  - the model that is specified the form of the instrument,  - a capacity range.				

		Result of Inspection (to mark $\checkmark$ or $*$ in the case of					
	Characteristics of the Prototype of		inaccuracy,				
No.	the Length Measurer as Inspected	р	lease explair	n details)			
				Details			
		Accuracy	Inaccuracy	(please specify)			
10	Each type of length measurer shall have the following capacity ranges:  as for the type of an automatic rolling metal tape, it shall have the capacity range of not exceeding 15 metres,  as for the type of a straight line, it shall have the capacity range of not exceeding 5 metres,  as for the folding type, it shall have the capacity range of not exceeding 5 metres,  as for the type of a tape made of fiberglass without a case and a winding device, it shall have the capacity range of not exceeding 5 metres,  as for the type of a tape made of fiberglass with a case and a winding device, it shall have the capacity range of not exceeding 100 metres,  as for the type of a metal tape and a chain, it shall have the capacity range starting at 5 metres and not exceeding 200 metres,  as for the type of a metal tape combined with a sinker, it shall have the capacity range starting						
11	at 5 metres and not exceeding 50 metres.  A capacity range shall be indicated in a clear sight and an indelible manner. It shall be indicated in Thai or Arabic numbers and Thai alphabets or alphabets						
	or symbols as stipulated by the Minister.						

Table 2 Result of Inspection of Width of Scale Mark

Type of Length	Measurer
Name or Trade	emarkModel
Capacity Range	e millimetres
Width of Scale Mark	Scale Marks

- 1. The width of the scale mark shall not be wider than half of the smallest scale interval.
- 2. The width of the scale mark shall not be greater than 0.75 millimetres.
- 3. If the scale interval is wider than 2 centimetres, the width of the scale mark shall not be greater than 2 millimeters.

Scale Mark	Width of	Width of Scale Mark	
as Tested	Scale Mark	as measured	Test Result
(metres)	as measured	not be greater than	
(medes)	(millimetres)	(millimetres)	
Distance between			☐ Pass ☐ Not Pass
0 and 50 centimetres			
Distance between			☐ Pass ☐ Not Pass
50 and 100 centimetres			
Distance between 50 centimetres			☐ Pass ☐ Not Pass
before half of capacity range			
Distance between 50 centimetres			☐ Pass ☐ Not Pass
before capacity range			

<u>Criteria for Consideration</u> The width of the scale mark shall not be wider than half of the smallest scale interval and not be greater than 0.75 millimetres. If the scale interval is wider than 2 centimetres, the width of the scale mark shall not be greater than 2 millimetres. It shall be deemed to pass the inspection.

Test Result		Pass		l	J٨	١+	P	2	cc
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Table 3 Result of Inspection of Width of Scale Interval

Type of Length Me	asurer	
Name or Tradema	ırk Model	
Capacity Range	metres Scale Interval	millimetres
		Scale Marks
Method 1		Method 3
To measure		To measure
the width between	<b>→ ←</b>	the width between
the right edges of		the left edges of
adjacent	' ' <b>→</b>	adjacent
scale marks		scale marks
	Method 2	
	To measure the width between the centers of	
	adiacent scale marks	
To choose: ☐ Meth	nod 1 To measure the width between the right edges (	of adjacent scale marks

$\square$ Method 3 To measure the width between the left edges of adjacent scale marks					
Distance	Scale Interval	Error of	Maximum		
as Tested	as measured	Scale Interval	Permissible Error	Test Result	
(metres)	(millimetres)	(millimetres)	(millimetres)		
Distance between				☐ Pass ☐ Not Pass	
0 and 50 centimetres				1 1 433 11 1100 1 433	
Distance between				☐ Pass ☐ Not Pass	
50 and 100 centimetres				1 1 d33 1 1 1 0 C 1 d33	
Distance between 50					
centimetres before				☐ Pass ☐ Not Pass	
half of capacity range					
Distance between 50					
centimetres before				☐ Pass ☐ Not Pass	
capacity range					

 $\hfill\square$  Method 2 To measure the width between the centers of adjacent scale marks

### Criteria for Consideration

(1) As for an automatic rolling metal tape length measurer, a straight line length measurer, a metal tape length measurer and a chain and a metal tape length measurer combined with a sinker

Scale Interval	Maximum Permissible Error
not exceeding 1 millimetre	0.2 millimetres
greater than 1 millimetre but not exceeding 1 centimetre	0.4 millimetres
greater than 1 centimetre	0.5 millimetres

(2) As for a folding length measurer and a tape length measurer made of fiberglass

Scale Interval	Maximum Permissible Error
not exceeding 1 millimetre	0.3 millimetres
greater than 1 millimetre but not exceeding 1 centimetre	0.6 millimetres
greater than 1 centimetre	1.0 millimetre

Test Result	Pass	☐ Not Pass

Table 4 Result of Inspection of Width of Two Adjacent Scale Intervals

Type of Length Measurer.		
Name or Trademark	Model	
Capacity Range	metres Scale Interval	millimetres
		Scale Marks
Method 1		Method 3
To measure the width		To measure the width
between the right	between	between the left
edges of two adjacent		edges of two adjacent
scale marks		scale marks
	<b>→</b>	
	Method 2	
	To measure the width between	
	the centers of two adjacent scale marks	
To choose:   Method	1 To measure the width between the right edge	es of two adjacent scale marks
☐ Method	2 To measure the width between the centers	s of two adjacent scale marks
□ Method	3 To measure the width between the left edge	s of two adjacent scale marks

Distance as Tested (metres)	At distance (interval 1)/ Scale Interval as measured (millimetres)	At distance (interval 2)/ Scale Interval as measured (millimetres)	Difference of Scale Interval (millimetres)	Maximum Permissible Error (millimetres)	Test Result
Distance between 0 and 50 centimetres					□ Pass □ Not Pass
Distance between 50 and 100 centimetres					□ Pass □ Not Pass
Distance between 50 centimetres before half of capacity range					□ Pass □ Not Pass

Distance as Tested (metres)	At distance (interval 1)/ Scale Interval as measured (millimetres)	At distance (interval 2)/ Scale Interval as measured (millimetres)	Difference of Scale Interval (millimetres)	Maximum Permissible Error (millimetres)	Test Result
Distance between 50 centimetres before capacity range					☐ Pass ☐ Not Pass

#### Criteria for Consideration

(1) As for an automatic rolling metal tape length measurer, a straight line length measurer, a metal tape length measurer and a chain and a metal tape length measurer combined with a sinker

Scale Interval	Maximum Permissible Error
not exceeding 1 millimetre	0.2 millimetres
greater than 1 millimetre but not exceeding 1 centimetre	0.4 millimetres
greater than 1 centimetre	0.5 millimetres

(2) As for a folding length measurer and a tape length measurer made of fiberglass

Scale Interval	Maximum Permissible
	Error
not exceeding 1 millimetre	0.3 millimetres
greater than 1 millimetre but not exceeding 1 centimetre	0.6 millimetres
greater than 1 centimetre	1.0 millimetre

Test Result	Pass		Not Pass
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# Table 5 Result of Accuracy Test

Type of Length Measurer	Capacity Range metres
Name or Trademark	Model

Distance as Tested	Distance as Tested	Length as measured	Error	Maximum Permissible Error	Test Result
	(metres)	(millimetres)	(millimetres)	(millimetres)	
10% of maximum capacity range					☐ Pass ☐ Not Pass
20% of maximum capacity range					☐ Pass ☐ Not Pass
30% of maximum capacity range					☐ Pass ☐ Not Pass
40% of maximum capacity range					☐ Pass ☐ Not Pass
50% of maximum capacity range					☐ Pass ☐ Not Pass
60% of maximum capacity range					☐ Pass ☐ Not Pass
70% of maximum capacity range					☐ Pass ☐ Not Pass
80% of maximum capacity range					☐ Pass ☐ Not Pass
90% of maximum capacity range					□ Pass □ Not Pass
maximum capacity range					☐ Pass ☐ Not Pass

Criteria for Consideration					
Type of Length Measurer	Maximum Permissible Error calculated by				
Type of Length Measurer	formula				
an automatic rolling metal tape					
a straight line	0.2 . 0.2 !				
a metal tape and a chain	0.3 + 0.2 L				
a metal tape combined with a sinker					
a folding type	0.6 + 0.4 L				
a tape made of fiberglass	0.0 + 0.4 L				
- When L equals the value of the length between sc	ale marks, by being the value of the integer				
of the unit of metre; in the case where it is not the ir	nteger, it is to be rounded up to the integer.				
- In the case of the metal tape length measure	- In the case of the metal tape length measurer combined with a sinker, the maximum				
permissible error between the scale marks on the sinker combined with the metal tape					
and the scale marks on the metal tape at the distance not exceeding 1 metre shall have					
both positive and negative sides not exceeding 0.0	5 millimeter.				

<u>Test Result</u> □ Pass □ Not Pass

**Criteria for Consideration** Error ≤ Maximum Permissible Error (MPE)

## Table 6 Result of Tension Test

(In particular a tape made of fiberglass type,	a metal tape and a chain type and a metal tape
combined with a sinker type)	

Type of Length Measurer	Model	Capacity Range	metres
Tension as Tested $\square$ the tape	made of fiberglass type to b	pe resistant to a tension up to	o 2 kilograms
☐ the metal	l tape and a chain type to b	pe resistant to a tension up to	5 kilograms
☐ the meta	al tape combined with a si	inker type to be resistant to	o a tension
at least e	equal to the weight of the	e sinker	

Distance as Tested	Distance as Tested (metres)	Length as measured (millimetres)	Error (millimetres)	Maximum Permissible Error (millimetres)	Test Result
10% of maximum capacity range					□ Pass □ Not Pass
20% of maximum capacity range					□ Pass □ Not Pass
30% of maximum capacity range					□ Pass □ Not Pass
40% of maximum capacity range					□ Pass □ Not Pass
50% of maximum capacity range					□ Pass □ Not Pass
60% of maximum capacity range					□ Pass □ Not Pass
70% of maximum capacity range					□ Pass □ Not Pass
80% of maximum capacity range					□ Pass □ Not Pass

90% of maximum capacity range			□ Pass □ Not Pass
maximum capacity range			☐ Pass ☐ Not Pass

Type of Length Manguror	Maximum Permissible Error calculated by formula	
Type of Length Measurer		
an automatic rolling metal tape	0.3 + 0.2 L	
a straight line		
a metal tape and a chain		
a metal tape combined with a sinker		
a folding type	06.041	
a tape made of fiberglass	0.6 + 0.4 L	
When L equals the value of the length betw	ween scale marks, by being the value of	
he integer of the unit of metre; in the case who	ere it is not the integer, it is to be rounded	
up to the integer.		
In the case of the metal tape length measur	rer combined with a sinker, the maximum	
permissible error between the scale marks on	the sinker combined with the metal tape	
and the scale marks on the metal tape at the	distance not exceeding 1 metre shall have	
ooth positive and negative sides not exceeding (	).6 millimeter.	

**Criteria for Consideration** Error ≤ Maximum Permissible Error (MPE)

### Table 7 Summary of Test Result

No.	Checklist of Testing	Test Result	
	Checklist of Testing	Pass	Not Pass
1	Visual Inspection		
2	Inspection of Width of Scale Mark		
3	Inspection of Width of Scale Interval		
4	Inspection of Width of Two Adjacent Scale Intervals)		
5	Accuracy Test		
6	Tension Test		

(Signed)Tester
()
Position
Date B.E
(Signed)Authorized person to bind a juristic person

Position.....

Date ...... B.E......

(a juristic person's seal to be stamped (if any)) (......)

I hereby certify that the aforementioned test results are correct and true in all respects.