

THE NETHERLANDS
(N E D E R L A N D)

COMMUNICATION

Concerning ⁽¹⁾:

- ~~approval granted~~
- approval extended
- ~~approval refused~~
- ~~approval withdrawn~~
- ~~production definitely discontinued~~

of a type of tyre with regard to 'rolling sound emission level' and/or 'adhesion performance on wet surfaces' and/or 'rolling resistance' pursuant to UN Regulation number 117.

Approval number ⁽²⁾: E4*117R02/10*10078*04**Suffix(es) ⁽³⁾: 02S2WR2**

1. Manufacturer's name and address : LLIT (THAILAND) CO., LTD.
911/9 Moo 5, Khaokhansong, Sriracha,
Chonburi 20110, Thailand
2. If applicable, name and address of
manufacturer's representative : N/A
3. 'Tyre class' and 'category of use' of
the type of tyre : ~~Class C1 / Class C2 / Class C3~~ ⁽¹⁾
~~normal / snow / special~~ ⁽¹⁾
- 3.1. Snow tyre for use in severe snow
conditions : ~~yes~~ / ~~no~~ ⁽¹⁾
- 3.2. Traction tyre : ~~yes~~ / ~~no~~ ⁽¹⁾
4. Tyre type designation :
- 4.1. Brand name(s)/trademark(s) of the
type of tyre : LINGLONG, SHANLING, LEAO, Infinity,
BARKLEY, BENCHMARK, CROSSWIND,
SUMO FIRENZA, GREEN MAX, HUBTRAC

Approval number: E4*117R02/10*10078*04

- 4.2. Trade description(s)/Commercial name(s) of the type of tyre : ETS100, BL221, CWS10E, DRIVUS-S, ECA700, GRS802, HIGHWAY S11
5. Technical service and, where applicable, test laboratory approved for purposes of approval or of verification of conformity tests : IDIADA Automotive Technology, S.A.
L'Albornar, P.O. Box 20
43710 Santa Oliva (Tarragona), SPAIN
6. Performance(s) approved : sound level at (~~stage 1~~/stage 2)⁽¹⁾, wet adhesion level, rolling resistance level (~~stage 1~~/stage 2)⁽¹⁾
- 6.1. Sound level of the representative tyre size, see Paragraph 2.5. of Regulation number 117, as per item 7. of the test report in the appendix 1 to Annex 3: 70 dB(A) at reference speed of 70/80 km/h⁽¹⁾.
- 6.2. Wet adhesion level of the representative tyre size, see Paragraph 2.5. of Regulation number 117, as per item 7. of the test report in the appendix to Annex 5: 1.09 (G) using the vehicle ~~or trailer~~ method⁽¹⁾.
- 6.3. Rolling resistance level of the representative tyre size, see paragraph 2.5. of Regulation number 117, as per item 7. of the test report in the appendix 3 to Annex 6: 6.43 N/kN.
- 6.4. Snow grip level of the representative tyre size, see paragraph 2.5. of Regulation No. 117, as per item 7. of the test report in the appendix⁽⁴⁾ to Annex 7: 1.56 (Snow grip index) using the ~~brake on snow method⁽⁴⁾, spin traction method⁽⁴⁾ or~~ acceleration method⁽¹⁾.
7. Number of report issued by that service : Technical report CV20090100, Noise test report CV18090195, Wet grip test report CT117-A0-180030, Rolling Resistance test report CT117-A0-180028, Snow Performance test report TW-TL18-LL115-E117SP C1
8. Date of report issued by that service : Technical report 03/09/2020, Noise test 28/09/2018, Wet grip test 28/03/2017, Rolling Resistance test 10/03/2017, Snow performance test 27/06/2018
9. Reason(s) of extension (if applicable) : Addition of new band names
Addition of new trade descriptions
10. Any remarks : Update from supplement 09 to supplement 10



11. Place : Zoetermeer
12. Date : 16 October 2020
13. Signature :


Uwe Löbig 

14. Annexed to this communication are:
- 14.1. A list of documents in the approval file deposited at the Type Approval Authorities having delivered the approval and which can be obtained upon request⁽⁵⁾.
- 14.2. A list of tyre size designations: Specify for each brand name/trademark and/or each trade description/Commercial name the list of tyre size designations, adding in case of Class C1 tyres the mark 'reinforced' (or 'extra load') or the speed symbol of snow tyres or in the case of tyres of Classes C2 and C3, the mark 'traction', if so required by paragraph 3.1. of this Regulation.

⁽¹⁾ Strike out what does not apply.

⁽²⁾ According to Schedule 4 to Revision 3 of the 1958 Agreement.

⁽³⁾ According to paragraphs 5.2.2. and 5.3.1.2. of this Regulation.

⁽⁴⁾ Appendix 2 for C1 and C2 tyres.

Appendix 3 for C3 tyres.

⁽⁵⁾ In the case of 'snow tyre for use in severe snow conditions' a test report according to Appendix 2 of Annex 7 shall be submitted.

Statement manufacturer and authorization regarding application

1 **EC & UNECE type-approval number** : E4*117R02/10*10078*04

2 **Manufacturer/** **Manufacturer's representative** ⁽¹⁾

3 Company name : LLIT (THAILAND) CO., LTD.
4 Name authorized person : Yue Peng
5 Job title : Certification Manager
6 E-mail address : yue_peng@linglong.cn
7 Address : 911/9 Moo 5, Khaokhansong, Sriracha, Chonburi 20110, Thailand
8 Country : Thailand

9 **Statement**

10 Hereby : Yue Peng ,
11 declares on behalf of ,
12 the manufacturer : LLIT (THAILAND) CO., LTD. ,
13 for the application with ,
14 type-approval number : E4*117R02/10*10078*04 ,
15 the following:
16 a) the manufacturer has not applied for an EC & UNECE type-approval for the same type to any other approval
17 authority, and no other approval authority granted the manufacturer such an approval;
18 b) no approval authority has refused to grant type-approval of that type;
19 c) no approval authority has withdrawn type-approval of that type;
20 d) the manufacturer has not revoked an application for a type-approval of that type.


18 **Authorization regarding handling of this application (if applicable)** ⁽²⁾

19 Company name : IDIADA Automotive Technology, S.A.
20 E-mail address : QualityHomologations@idiada.com
21 Address : L'Albornar, P.O. Box 20, 43710 Santa Oliva (Tarragona) Spain
22 Country : Spain

23 **Authorization**

24 By means of this
25 declaration, I : Yue Peng ,
26 on behalf of : LLIT (THAILAND) CO., LTD. ,
27 authorizes : IDIADA Automotive Technology, S.A. ,
28 to respectively apply for a type-approval with type-approval number:
E4*117R02/10*10078*04 ,
29 handle all communication concerning this application and receive the type-approval certificate.

29 Date	Place	Name:
30 05/10/2020	Chonburi, Thailand	LLIT (THAILAND) CO., LTD.

31 On their behalf, signature : ... 
32 Name : Yue Peng

⁽¹⁾ Mark the specific checkbox.

⁽²⁾ This authorization only concerns the application procedure and all activities that are directly or indirectly related to this procedure. If and insofar as other procedures, including the lodging of objections, are deemed necessary, a new authorization must be submitted in respect of that specific procedure.

TECHNICAL DOCUMENTATION

SHANDONG LINGLONG TYRE CO., LTD.

Information folder No.: QG2020-023

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RELATING TO ECE TYPE-APPROVAL FOR A TYPE OF TYRE WITH REGARD TO ROLLING SOUND EMISSIONS AND TO ADHESION ON WET SURFACES (ECE Regulation No. 117. 02)

1. GENERAL

- 1.1. The performance characteristics to be assed for the tyre type : ~~rolling sound level and Rolling resistance level /~~ adhesion performance level on wet surfaces , rolling sound level and rolling resistance level
- 1.2. Manufacturer's name : LLIT(THAILAND)CO.,LTD.
- 1.3. Name and address of applicant : 911/9Moo5,Khaokhansong,Sriracha, Chonburi20110, Thailand
- 1.4. Address(es) of manufacturing plant(s) : the same as the applicant
- 1.5.Brand name(s), Trade description(s) or Trade mark(s) : LINGLONG; SHANLING; LEAO; Infinity; BARKLEY; BENCHMARK; CROSSWIND; SUMO FIRENZA; GREEN MAX; HUBTRAC
- to be used for particular tyre type-approval requested : ETS100; BL221; CWS10E; DRIVUS-S; ECA700; GRS802; HIGHWAY S11

2. TYRE

- 2.1 Tyre classification (class C1, C2, C3) : ~~Class C1 /Class C2/~~ Class C3
- 2.2 Section width range for class C1 tyres : see attached list of tyre size
- 2.3 Tyre structure : ~~diagonal /bias-belted/~~radial
- 2.4 For Class C1 tyres, state whether:
- 2.4.1 Reinforced (or extra load) in case of approval with regarding to rolling sound emission level : not applicable
- 2.4.2 Speed category symbol "Q" or below (not including "H") or "R" and above (including "H") in case of snow tyres for approval with regarding to adhesion on wet surfaces : not applicable
- 2.5 Category of use (normal, snow, special) : ~~normal /snow /special/~~ snow tyre for use in severe snow condition
- 2.6 Traction tyre :Yes/No
- 2.7 A list of tyre designations covered by this application : see attached list of tyre size
- 2.8 Details of major features, with respect to the effects on tyre performance (i.e. rolling emission level or adhesion on wet surfaces, respectively) of the tread pattern(s) to be used on the designated range of tyre sizes. This may be by drawing, photograph or description but must be sufficient to allow the type approval authority or technical service to determine whether any subsequent changes to the major features will adversely affect the tyre performance : see attached drawing of tread pattern

MANUFACTURER'S STAMP

Signature:

..........

Name: ...Ma Xiaogang...

THIS APPLICATION IS ACCOMPANIED BY:

- List of tyre size
- Drawing of tread pattern
- The test report

E4*117R02/09*10078*04

İİDİADA CV20090100

SHANDONG LINGLONG TYRE CO., LTD.

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List of tyre size

Brand name(s) or Trade mark(s): LINGLONG; SHANLING; LEAO; Infinity;
BARKLEY; BENCHMARK; CROSSWIND;
SUMO FIRENZA; GREEN MAX; HUBTRAC

Tread pattern

: ETS100; BL221; CWS10E; DRIVUS-S; ECA700;
GRS802; HIGHWAY S11

Tyre size	Approval No.	Limit dB(A)	Wet grip index(G)	Rolling Resistance Coefficient(RRC)
315/80R22.5 154/150M	E4-0041099	74	≥ 0.715	≤ 7.5
315/80R22.5 156/150L(154/150M)	E4-0041177	74	≥ 0.715	≤ 7.5
315/80R22.5 158/150L(154/150M)	E4-0041176	74	≥ 0.715	≤ 7.5
315/60R22.5 152/148L	E4-0041296	74	≥ 0.715	≤ 7.5
315/70R22.5 154/150L(152/148M)	E4-0041180	74	≥ 0.715	≤ 7.5
315/70R22.5 156/150L(154/150M)	E4-0041179	74	≥ 0.715	≤ 7.5
295/60R22.5 150/147L	E4-0041185	74	≥ 0.715	≤ 7.5
315/60R22.5 154/150L(152/148M)	E4-0041182	74	≥ 0.715	≤ 7.5
295/80R22.5 154/149M	E4-0041055	74	≥ 0.715	≤ 7.5
295/80R22.5 152/148M	E4-0034637	74	≥ 0.715	≤ 7.5
385/55R22.5 158L	E4-0041297	74	≥ 0.715	≤ 7.5
385/55R22.5 160K(158L)	E4-0041299	74	≥ 0.715	≤ 7.5

iDiADA CV20090100

SHANDONG LINGLONG TYRE CO., LTD.

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Rolling sound emission test size: 385/55R22.5 160K(158L)

Because of : **The largest nominal section width.**

In case of tyres with same nominal section width select the smallest aspect ratio.

In case of tyres with same nominal section width and aspect ratio select the largest rim diameter.

Rolling resistance test size: 295/60R22.5 150/147L

Because of : **The largest nominal section width.**

~~**In case of tyres with same nominal section width select the smallest aspect ratio.**~~

~~**In case of tyres with same nominal section width and aspect ratio select the largest rim diameter.**~~

Lowest load index

Wet grip test Size: 315/60R22.5 152/148L

Because of : **The representative tyre for rolling sound emission can be used for the wet grip test and approved, if the measured value is ten percent (10%) or more above the prescribed value of the regulation**

Peak snowflake test Size: 295/60R22.5 150/147L

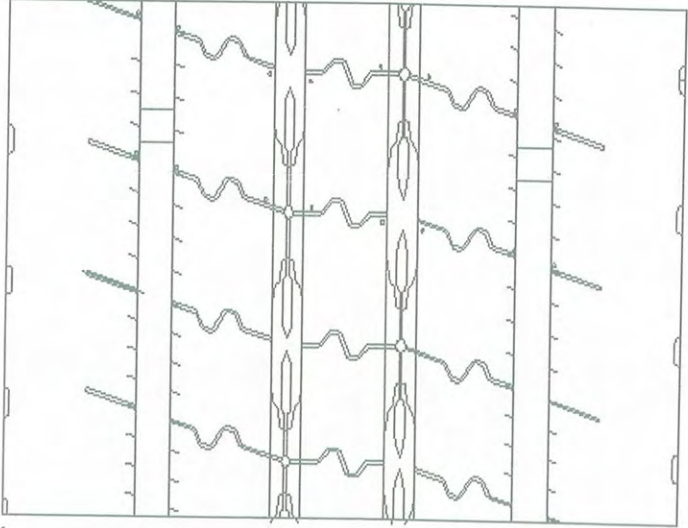
Because of : **The smallest nominal section width.**

SHANDONG LINGLONG TYRE CO., LTD.

Information folder No.: QG2020-023

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Drawing of the tread pattern (for measured tyre)

Manufacturer name	LLIT(THAILAND) CO.,LTD
Pattern name	LINGLONG:ETS100; ECA700 SHANLING:ETS100; ECA700 LEAO:ETS100; ECA700 Infinity:ETS100; ECA700 BENCHMARK:ETS100; ECA700 BARKLEY:BL221 CROSSWIND:CWS10E SUMO FIRENZA:DRIVUS-S GREEN MAX: GRS802 HUBTRAC:HIGHWAY S11
Tyre Size	315/60R22.5 152/148L
Market	EU/US
Pitch number	80
Pitch ratio	1.00/1.11/1.26
Void volume [%]	19.57
Width: main grooves [mm]	12/14
Depth: center groove [mm]	15
Depth: shoulder groove [mm]	15
Pattern	

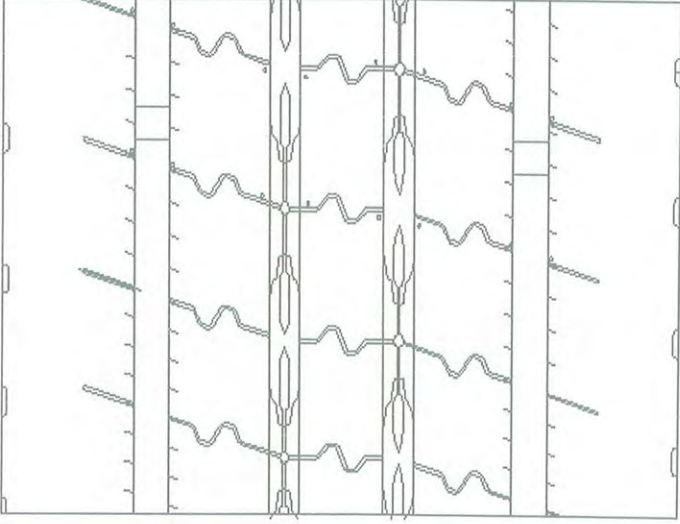
İİDİADA CV20090100

SHANDONG LINGLONG TYRE CO., LTD.

Information folder No.: QG2020-023

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Drawing of the tread pattern (for measured tyre)

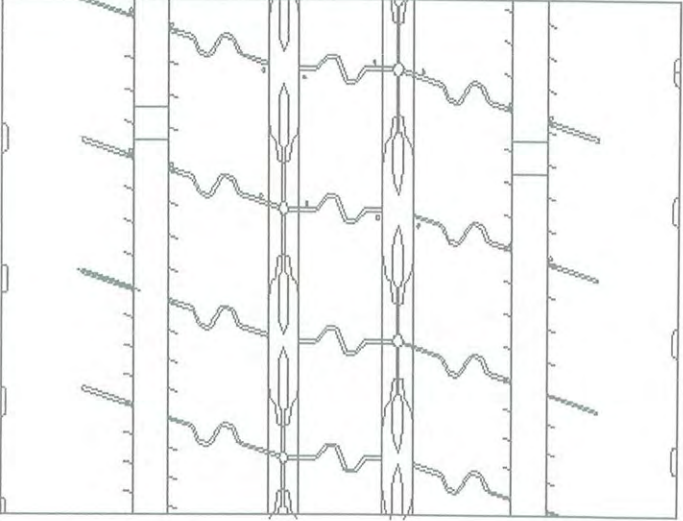
Manufacturer name	LLIT(THAILAND) CO.,LTD
Pattern name	LINGLONG:ETS100; ECA700 SHANLING: ETS100; ECA700 LEAO: ETS100; ECA700 Infinity: ETS100; ECA700 BENCHMARK: ETS100; ECA700 BARKLEY:BL221 CROSSWIND:CWS10E SUMO FIRENZA:DRIVUS-S GREEN MAX: GRS802 <u>HUBTRAC:HIGHWAY S11</u>
Tyre Size	295/60R22.5 150/147L
Market	EU/US
Pitch number	78
Pitch ratio	1.00/1.11/1.26
Void volume [%]	23.72
Width: main grooves [mm]	13/15
Depth: center groove [mm]	13.5
Depth: shoulder groove [mm]	13.5
Pattern	

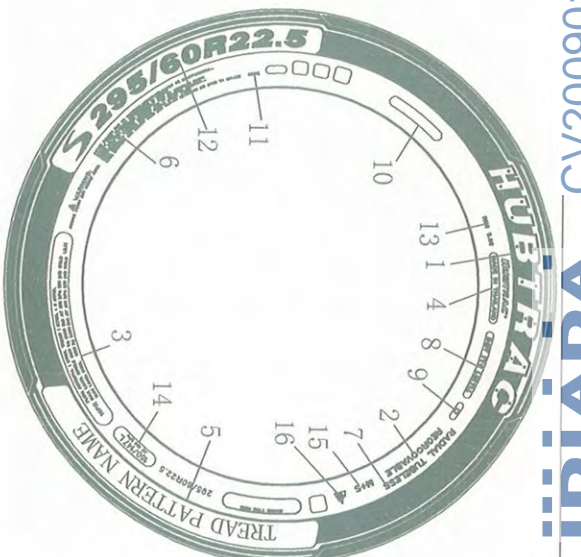
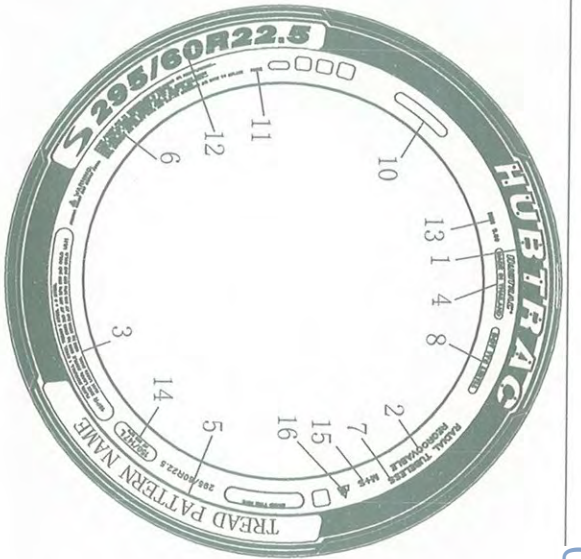
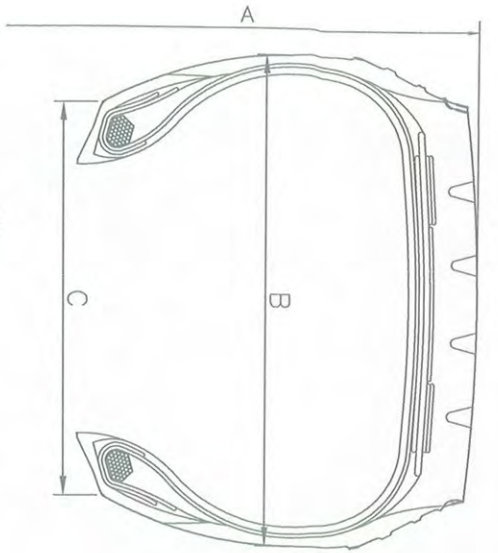
SHANDONG LINGLONG TYRE CO., LTD.

Information folder No.: QG2020-023

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Drawing of the tread pattern (for measured tyre)

Manufacturer name	LLIT(THAILAND) CO.,LTD
Pattern name	LINGLONG:ETS100; ECA700 SHANLING: ETS100; ECA700 LEAO: ETS100; ECA700 Infinity: ETS100; ECA700 BENCHMARK: ETS100; ECA700 BARKLEY:BL221 CROSSWIND:CWS10E SUMO FIRENZA:DRIVUS-S GREEN MAX: GRS802 <u>HUBTRAC:HIGHWAY S11</u>
Tyre Size	<u>385/55R22.5 160K(158L)</u>
Market	EU/US
Pitch number	68
Pitch ratio	1.00/1.11/1.26
Void volume [%]	20.15
Width: main grooves [mm]	14/15
Depth: center groove [mm]	12.5
Depth: shoulder groove [mm]	12.5
Pattern	



TREAD PATTERNS
REFER TO ATTACHMENT NO. QG2020-023

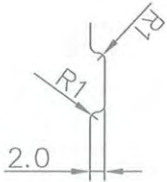
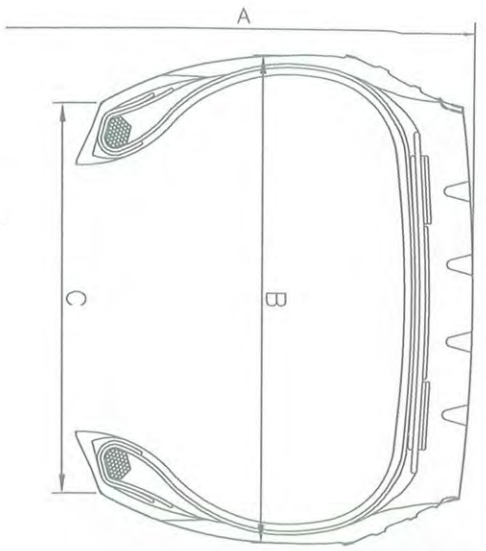
16	▲					
15	M+S					
14	150/147 L AT 900 kPa					
13	RIM 9.00					
12	295/60R22.5					
11	**** (MOLD NUMBER)					
10	(E4) 0041185					
9						**** (PRODUCTION DATE)
8	DOT ...					
7	RADIAL TUBELESS					
6	WARNING.....					
5	REFER TO ATTACHMENT NO. QG2020-023					
4	MADE IN THAILAND					
3	PLIES: SIDEWALL 1 STEEL TREAD 1 STEEL+3 STEEL MAX LOAD: SINGLE 3350 kg (7385 lbs) AT 900 kPa (130 psi) COLD L.R. H MAX LOAD: DUAL 3075 kg (6780 lbs) AT 900 kPa (130 psi) COLD					
2	REGROOVABLE					
1	REFER TO ATTACHMENT NO. QG2020-023					
	UPPER MOLD					LOWER MOLD

295/60R22.5	150/147	L	TL	926	292	228.6
TYRE SIZE	LOAD INDEX	SPEED SYMBOL	TYPE	A (mm)	B (mm)	C (mm)

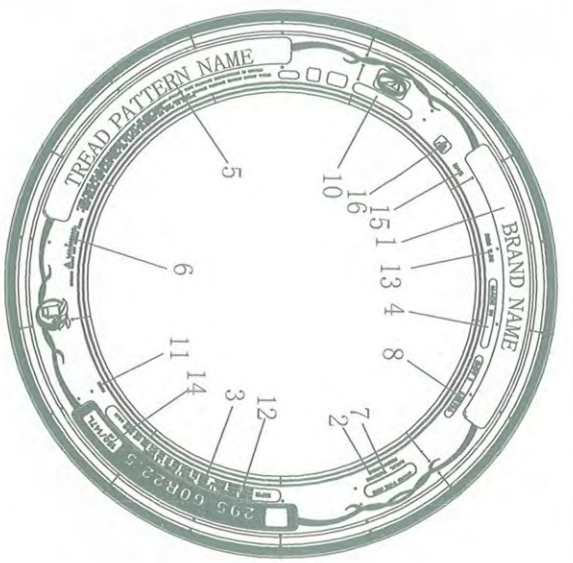
Approve by:

Check by:

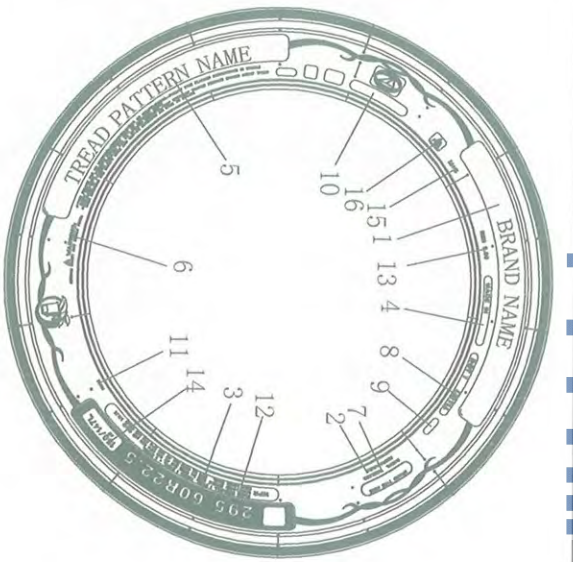
Draft by:



A-A



UPPER MOLD



LOWER MOLD

TREAD PATTERNS
REFER TO ATTACHMENT NO. QG2020-023

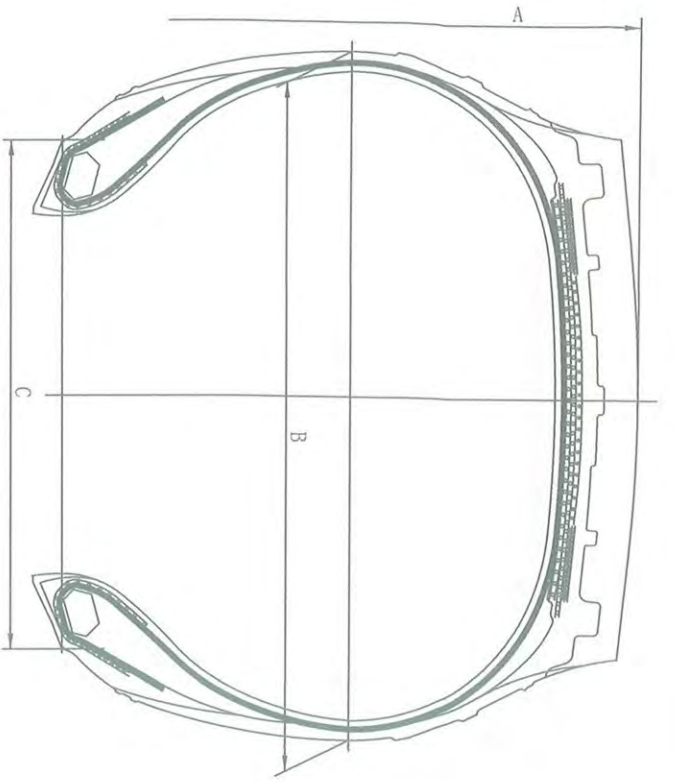
16		M+S				
15		150/147 L AT 900 kPa				
14		RIM 9.00				
13		295/60R22.5				
12		**** (MOLD NUMBER)				
11		(E4) 0041185				
10						
9						**** (PRODUCTION DATE)
8		DOT ...				
7		RADIAL TUBELESS				
6		WARNING.....				
5		REFER TO ATTACHMENT NO. QG2020-023				
4		MADE IN THAILAND				
3		16PR PILES: SIDEWALL 1 STEEL TREAD 1 STEEL+3 STEEL MAX LOAD: SINGLE 3350 kg (7385 lbs) AT 900 kPa (130 psi) MAX LOAD: DUAL 3075 kg (6780 lbs) AT 900 kPa (130 psi) COLD				
2		REGROOVABLE				
1		REFER TO ATTACHMENT NO. QG2020-023				
		UPPER MOLD				LOWER MOLD

295/60R22.5	150/147	L	TL	926	292	228.6
TYRE SIZE	LOAD INDEX	SPEED SYMBOL	TYPE	A (mm)	B (mm)	C (mm)

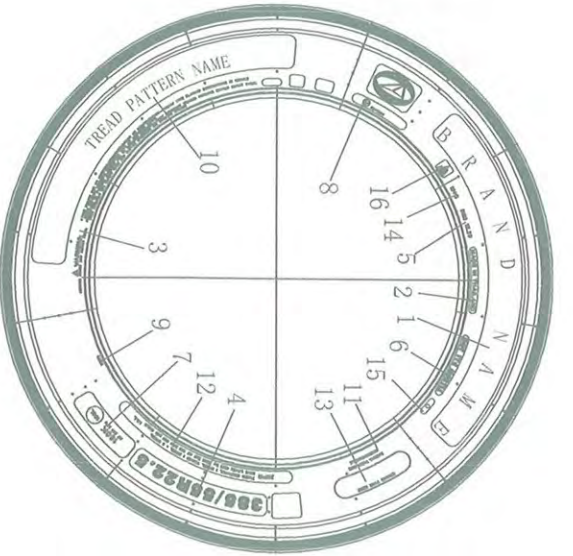
Approve by:

Check by:

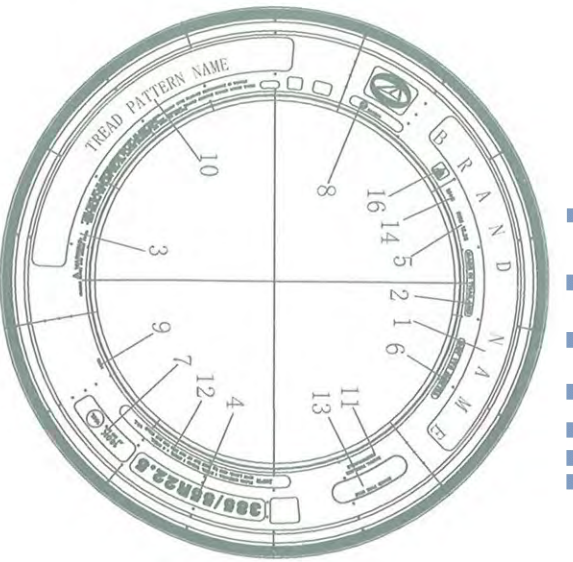
Draft by:



TREAD PATTERNS
REFER TO ATTACHMENT NO. QG2020-023



LOWER MOLD



UPPER MOLD

16	A	
15	**** (PRODUCTION DATE)	
14	M+S	
13	BRAND TYRE HERE	
12	20PR PLYES: SIDEWALL 1 STEEL TREAD 1 STEEL + 3 STEEL MAX LOAD: SINGLE 4500 kg (9915 lbs) AT 900 kPa (130 psi) COLD L.R.L	
11	REGROOVABLE RADIAL TUBELESS	
10	REFER TO ATTACHMENT NO. QG2020-023	
9	**** (MOLD NUMBER)	
8	E4 0041299	
7	160 K AT 900 kPa (158L)	
6	DOT...	
5	RIM 12.25	
4	385/55R22.5	
3	WARNING:...	
2	MADE IN THAILAND	
1	REFER TO ATTACHMENT NO. QG2020-023	
LOWER MOLD		UPPER MOLD

385/55R22.5	160 (158)	K(L)	TL	996	386	311
TYRE SIZE	LOAD INDEX	SPEED SYMBOL	TYPE	A (mm)	B (mm)	C (mm)

Approve by:

Check by:

Draft by:

REPORT No. CV20090100**UN REGULATION No. 117R02/10 RELATED TO ROLLING SOUND EMISSIONS, ADHESION ON WET SURFACES AND ROLLING RESISTANCE**

Approval number : E4*117R02/10*10078*04
Approved performances : S2WR2

Applicant : LLIT (THAILAND) CO., LTD.
911/9 Moo 5, Khaokhansong, Sriracha,
Chonburi 20110, Thailand

Manufacturer : LLIT (THAILAND) CO., LTD.
911/9 Moo 5, Khaokhansong, Sriracha,
Chonburi 20110, Thailand

Tyre class : C3

Category of use : Snow (for use in severe snow conditions)

Traction tyre : No

Brand name / Trade mark : LINGLONG, SHANLING, LEO, Infinity, BARKLEY,
BENCHMARK, CROSSWIND, SUMO FIRENZA,
GREEN MAX, HUBTRAC

Trade description/ Commercial name : ETS100, BL221, CWS10E, DRIVUS-S, ECA700,
GRS802, HIGHWAY S11

Place and date of issue : L'Albornar, Santa Oliva (Tarragona), 03/09/2020

CONCLUSIONS: The tested samples of the family FULFIL the technical prescriptions with regard to “rolling sound emissions level” and/or “adhesion performance on wet surfaces” and/or “rolling resistance” and/or “snow performance” pursuant to UN REGULATION No. 117R02/10. The modifications introduced in this family, as detailed in page 2 of this report, are considered reason for extension of the type approval CV18110813. The characteristics of the tested samples are detailed in the annexes to the test report.

Performed by:

Nuria Vendrell Ravetllat
HOMOLOGATION ENGINEER

Revised by:

Ignacio Lafuente Buil
DEPARTMENT MANAGER

REPORT No. CV20090100**SUMMARY**

1. Dimensions included in the type of tyre : See Manufacturer's technical documentation attached
2. Tyre sizes selected for testing
 - 2.1. Tyre size tested for rolling sound emissions : 385/55R22.5 160K (widest section width)
See Annex 1, Test report CV18090195, IDIADA, 28/09/2018
 - 2.2. Tyre size tested for adhesion on wet surfaces: 315/60R22.5 152/148L (meets extra 10%)
See first type approval report, Test report CT117-A0-180030, TÜV NORD Mobilität, 28/03/2017
 - 2.3. Tyre tested for rolling resistance : 295/60R22.5 150/147L (lowest load index)
See first type approval report, Test report CT-117-A0-180028, TÜV NORD Mobilität, 10/03/2017
 - 2.4. Tyre tested for snow performance : 295/60R22.5 150/147L (narrowest section width)
See Annex 2, Test report TW-TL18-LL115-E117SP C1, TEST WORLD, 27/06/2018
3. Reason(s) of extension (if applicable) :
 - Addition of new brand names
 - Addition of new trade descriptions
 - Update from supplement 09 to supplement 10
4. List of Annexes to this report
 - 4.1. Annex 1: Test report according to rolling sound emission level.
 - 4.2. Annex 2: Test report according to snow performance.
 - 4.3. Annex: Manufacturer's technical documentation.

Place and date of issue: L'Albornar, Santa Oliva (Tarragona), 03/09/2020



Nuria Vendrell Ravetllat
HOMOLOGATION ENGINEER

ANNEX 1

REPORT N° CV18090195

UN/ECE REGULATION 117R02 RELATED TO ROLLING SOUND EMISSIONS

Applicant : LLIT(THAILAND)CO.,LTD.
911/9 Moo 5, Khaokhansong Sriracha,
Chonburi 20110 Thailand

Manufacturer : LLIT(THAILAND)CO.,LTD.
911/9 Moo 5, Khaokhansong Sriracha,
Chonburi 20110 Thailand

Tyre class : C3

Category of use : Snow

Traction tyre : No

Brand name / Trade mark : LINGLONG

Trade description/ Commercial name : ETS100

Tyre size : 385/55R22.5 160K

Place and date of issue : L'Albornar, Santa Oliva (Tarragona), 02/10/2018

CONCLUSIONS: The samples of the family have been tested according to the technical prescriptions with regard to "rolling sound emissions level" pursuant to UN/ECE REGULATION 117R02.
The characteristics of the tested samples are detailed in the annex to the test report.

Performed by:



Nuria Vendrell Ravetllat
HOMOLOGATION ENGINEER

Revised by:



Ignacio Lafuente Buil
DEPARTMENT MANAGER

ANNEX TO THE TEST REPORT
ROLLING SOUND EMISSIONS, REPORT N° CV18090195

1. TEST DATA**1.1. Test tyre details**

1.1.1	Applicant	: LLIT(THAILAND)CO.,LTD. 911/9 Moo 5, Khaokhansong Sriracha, Chonburi 20110 Thailand
1.1.2	Manufacturer	: LLIT(THAILAND)CO.,LTD. 911/9 Moo 5, Khaokhansong Sriracha, Chonburi 20110 Thailand
1.1.3	Tyre class	: C3
1.1.4	Category of use	: Snow
1.1.5	Traction tyre	: No
1.1.6	Brand name / Trade mark	: LINGLONG
1.1.7	Trade description / Commercial name	: ETS100
1.1.8	Candidate tyre size (rear)	: 385/55R22.5 160K
1.1.9	Front tyre size	: 385/65R22.5 160K
1.1.10	Tyre structure	: Radial
1.1.11	Date code, other manufacturer markings	: 3318
1.1.12	Rear load index / Corresponding mass Q _r [kg]	: 160 / 4,500
1.1.13	Front load index / Corresponding mass Q _r [kg]	: 160 / 4,500
1.1.14	Rear reference inflation pressure P _r [kPa]	: 900
1.1.15	Front reference inflation pressure P _r [kPa]	: 900

* THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.

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* MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.

1.1.16 Test inflation pressure P_t [kPa] :

	P_t [kPa] admissible values
Front axle left wheel	$635.85 \leq 640.00 \leq 699.43$
Front axle right wheel	$625.37 \leq 630.00 \leq 687.90$
Rear axle left wheel	$597.83 \leq 600.00 \leq 657.61$
Rear axle right wheel	$641.91 \leq 643.00 \leq 706.11$

FULFILS / NOT FULFILS

1.1.17 Test tyre internal reference :

Front left	Front right
HVI-1606/115-1	HVI-1606/115-2

Rear left	Rear right
HVI-1807/67-1	HVI-1807/67-2

1.1.18 Rear Test rim : 11.75 x 22.5

1.1.19 Front Test rim : 11.75 x 22.5

1.1.20 Test rim internal reference :

Front left	Front right
HVI-1205/385	HVI-1205/386

Rear left	Rear right
HVI-1604/770	HVI-1604/771

1.1.21 Test tyre load [kg] :

	Load	Q_t [N] / % $\frac{Q_t}{Q_r}$
Front axle left wheel	3,408	$50 < 75.73 < 90$
Front axle right wheel	3,363	$50 < 74.73 < 90$
Rear axle left wheel	3,244	$50 < 72.09 < 90$
Rear axle right wheel	3,434	$50 < 76.31 < 90$

FULFILS / NOT FULFILS

$Q_{t,avr}$ [N] / % $\frac{Q_{t,avr}}{Q_r}$
$70 \leq 74.72 \leq 80$

FULFILS / NOT FULFILS

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1.2. Test vehicle

1.2.1	Trade name	: RENAULT
1.2.2	Model	: PREMIUM
1.2.3	Year	: 2005
1.2.4	Transmission	: Manual
1.2.5	Wheelbase [mm]	: 3,650

For Class C3 less than 5,000 mm.

FULFILS / NOT FULFILS

1.2.6	Vehicle internal reference	: HVI-1205/350
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1.3. Test equipment

1.3.1	Sound level meter 1	: 121738
1.3.2	Sound level meter 2	: 121739
1.3.3	Manometer	: 12701
1.3.4	Weight scale	: 01199
1.3.5	Track temperature measurement device	: 141537, 141537-5
1.3.6	Wind speed measurement device	: 163105
1.3.7	Speed measurement device	: 12626
1.3.8	Ambient temperature measurement device	: 10004, 141537-4

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2. TEST TRACK

2.1. Environment

2.1.1 Air temperature T_a [°C] : 23.3
 $5.0 < T_a < 40.0$

FULFILS / ~~NOT FULFILS~~

2.1.2. Test surface temperature T_s [°C] : 35.0
 $5.0 \leq T_s \leq 50.0$

FULFILS / ~~NOT FULFILS~~

2.1.3 Wind speed [m/s] : < 1.5
 Less than 5 m/s

FULFILS / ~~NOT FULFILS~~

2.1.4 Ambient noise [dB(A)] : 42.6
 Test result – Ambient noise ≥ 10 dB(A)

FULFILS / ~~NOT FULFILS~~

2.1.5 Wind direction [°] : 347.5

2.2. Date and method of check on compliance of the test surface with ISO 10844:2014:

- April 30th 2018
- 3.0 m straight edge
- Sound absorption coefficient
- Sand patch
- Issued by : IDIADA

3. TEST RESULTS

Reference Speed: v_{ref} [km/h] : 70
 Range Speed [km/h] : 60.0 - 80.0

Run No.	Test speed [km/h]	Direction of run	Sound level left measured [dB(A)]	Sound level right measured [dB(A)]	Air temp. [°C]	Surface temp. [°C]	Sound level left temp. corrected [dB(A)]	Sound level right temp. corrected [dB(A)]
1	62.8	W → E	68.2	70.1	22.5	34.0	68.2	70.1
2	64.3	W → E	69.0	70.1	23.9	34.6	69.0	70.1
3	66.8	W → E	70.0	70.5	22.9	34.6	70.0	70.5
4	68.6	W → E	70.1	70.7	22.9	35.0	70.1	70.7
5	72.7	W → E	71.3	71.7	23.5	35.4	71.3	71.7
6	74.5	W → E	71.8	72.3	24.0	35.3	71.8	72.3
7	75.8	W → E	72.4	72.5	23.9	35.6	72.4	72.5
8	78.5	W → E	74.4	72.9	22.9	35.8	74.4	72.9

- 3.1. Regression line slope : 43.35
- 3.2. Sound level after temperature correction according to paragraph 4.3 of Annex 3 [dB(A)] : 71.0
- 3.3. Sound level according to paragraph 4.4. and 4.5. of Annex 3 [dB(A)] : 70
- 3.4. Limit value [dB(A)] :

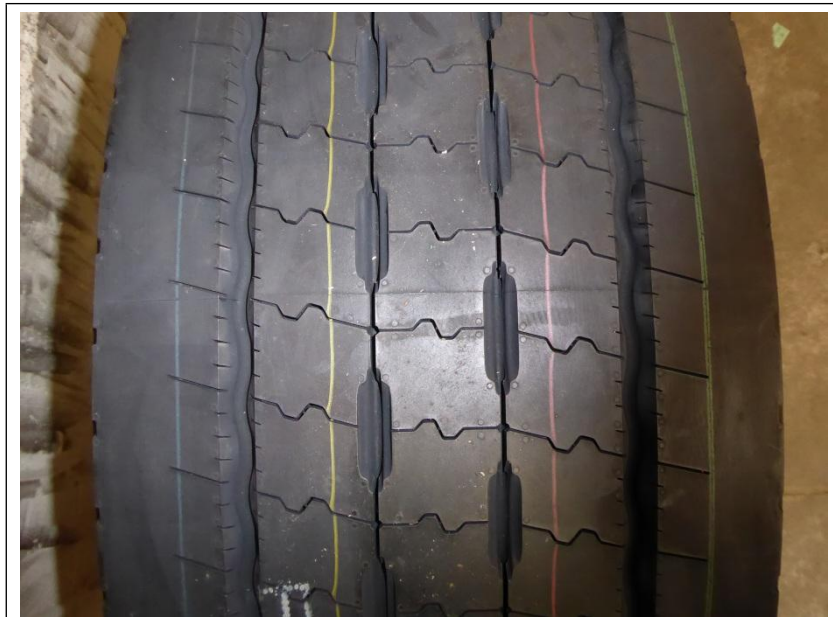
Category of use	C3		
	Stage 1	Stage 2	
		Other	Traction
Normal	76	73	75
Snow	78	73	75
Snow (for use in severe Snow conditions)		74	76
Special	79	75	77

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4. TEST TYRE PICTURES



Picture 1. Sidewall



Picture 2. Tread pattern

Place of test: L'Albornar (Santa Oliva)

Date of test: 28/09/2018

Nuria Vendrell Ravetllat
HOMOLOGATION ENGINEER

ANNEX 2

Measurements concerning:

Tyre snow performance according to acceleration method of UN / ECE Regulation No. 117

Candidate tyre

Make (trade name of manufacturer): LINGLONG
Trade description(s): GREEN-VAN ETS100
Size description(s): 295/60R22.5 150/147L
Load Index: 150
DOT: 1YC L1RTLL 1018
Tyre classification: C3

Standard reference tyre

Description: ASTM-F2870
Size: 315/70R22.5 154/150L
Load Index: 154
DOT: HAKP 00T X 4315

Customer: Shandong Linglong Tire Co, Ltd
No. 777, Jinlong Road
Zhaoyuan City
Shandong
China

Measured snow index value relative to SRTT:	1.56
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Statement of compliance

The measurements HAVE SHOWN the compliance of the candidate described in this Test Report with the requirements according to the UN / ECE Regulation No.117 including supplement 9 to the 02 series of amendments.

The measurements were carried out in accordance with the SFS-EN ISO/IEC 17025.

Ivalo, September 23rd 2020



Jukka Antila
Technical Director



Markus Hilli
Manager - Type Approval Services

Index of Test Report

Measurements pages 1-2
Annex A: Pictures of candidate..... 1 page

Internet link for checking valid scopes for Test World Oy: <http://www.testworld.fi/scopes>

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TEST REPORT

TW-TL18-LL115-E117SP C1

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Measurements

1. Date of test: 27.6.2018
2. Test track: Test World Ltd., Mellatracks
Indoor1

2.1 Test track conditions

	At the start of test	At the end of test
Weather		
Ambient temperature	-7.4 °C	-7.3 °C
Snow temperature	-7.8 °C	-7.7 °C
CTI index	84.2	

Requirements: Ambient -2 .. -15 °C, Snow -4..-15 °C, CTI 80..90

3. Test vehicle: Ford F250 Regularcab 5.4L 6-speed Manual 2009
VIN: 1FTNF20599EB16406

4.3 Test tyre data:

		Test SRTT - Candidate			
		SRTT		Candidate	
Tyre dimensions		315/70R22.5 154/150L		295/60R22.5 150/147L	
Test rim size		9.00H22.5		9.0x22.5	
Tyre loads rear	kg %	L: 902 kg 24 %	R: 889 kg 24 %	L: 902 kg 27 %	R: 889 kg 27 %
Tyre pressure	nominal actual	9.0 bar 6.3 bar	9.0 bar 6.3 bar	9.0 bar 6.3 bar	9.0 bar 6.3 bar

Requirements: load 20-55%, pressure 70% of nominal

5. Test results, average acceleration [m/s^2] (AA):

Initial speed: 10 km/h
End speed: 25 km/h

Test sequence: R1-T1-R2
Candidate: T1

	R1		Candidate		R2	
	AA	slip %	AA	slip %	AA	slip %
1st	0.80	27 %	1.20	22 %	0.77	30 %
2nd	0.80	25 %	1.20	19 %	0.76	28 %
3rd	0.79	23 %	1.19	25 %	0.76	30 %
4th	0.78	27 %	1.19	17 %	0.75	31 %
5th	0.74	30 %	1.18	21 %	0.75	30 %
6th	0.72	29 %	1.18	21 %	0.74	33 %

Mean	0.77	1.19	0.75
Std-deviation	0.03	0.01	0.01
CV [%]	3.9 %	0.6 %	1.0 %

wa(SRTT) 0.76
SRTT validation -2.3 %

Snow Index = 1.56

Requirements: CV less than 6%, SRTT validation less than 6%, slip 10-40%



Tread pattern of candidate

Used Instruments:

Temperature:	Fluke 52-II	ser: 31550028WS
Speed:	VBox 3i	ser: 055004
Weight:	Dini Arego	ser: 0100140252B1...B4
Pressure:	Wika DG10	ser: TW-IPM024
CTI:	CTI Penetrometer	ser: TW-PM003