


THE NETHERLANDS
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- approval withdrawn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 ⁽⁵⁾: E4*117R02/15*12871*01
Suffix(es) ⁽⁶⁾: 02S2WR2

- | | | |
|--------|---|---|
| 1. | Manufacturer's name and address | : Wanli Tire Corporation Limited 3 Wanli Road Aotou Town, Conghua 510940 Guangzhou City, Guangdong Province China (PRC) |
| 2. | If applicable, name and address of manufacturer's representative | : Not applicable |
| 3. | "Tyre class" of the type of tyre | : Class C1 / Class C2 / Class C3 ⁽¹⁾ |
| 4. | "Category of use" of the type of tyre | : normal / snow / special ⁽¹⁾ |
| 4.1. | Tyre for use in severe snow conditions | : yes/no ⁽¹⁾ |
| 4.1.1. | Ice grip tyre | : yes/no ⁽¹⁾ |
| 4.2. | Traction tyre | : yes/no ⁽¹⁾ |
| 5. | Tyre structure | : diagonal / bias belted / radial / run-flat tyre ⁽¹⁾ |
| 6. | Type of tyre designation | : |
| 6.1. | Brand name(s)/trademark(s) of the type of tyre | : AUFINE; MAXELL |
| 6.2. | Trade description(s)/commercial name(s) of the type of tyre | : SMART AEL5; SUPER HA1; <u>MASTER MAS300</u> |
| 7. | 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 |
| 8. | Performance(s) approved | : sound level at (stage 1/stage 2) ⁽¹⁾ , wet adhesion level, rolling resistance level (stage 1/stage 2) ⁽¹⁾ |

- 8.1. Sound level of the representative tyre size, see paragraph 2.7. of this Regulation, as per item 7. of the test report in Appendix 1 to Annex 3: 71 dB(A) at reference speed of 70/80 km/h ⁽¹⁾.
- 8.2. Wet adhesion level of the representative tyre size, see paragraph 2.7. of this Regulation, as per the test report examples shown in the appendix to Annex 5: 1.33 (G) using the vehicle or trailer method ⁽¹⁾.
- 8.3. Rolling resistance level of the representative tyre size, see paragraph 2.7. of this Regulation, as per item 7. of the test report in Appendix 1 to Annex 6: 6.36 N/kN
- 8.4. Snow performance level of the representative tyre size, see paragraph 2.7. of Regulation No. 117, as per item 7. of the test report in the appendix ⁽⁵⁾ to Annex 7: N/A (Snow grip index) using the brake on snow method ⁽¹⁾, spin traction method ⁽¹⁾ or acceleration method ⁽¹⁾.
- 8.4.1. Ice performance level of the representative tyre size, see paragraph 2.7. of Regulation No. 117, as per item 7. of the test report in the appendix 2 to Annex 8: N/A (ice grip index) using the brake on ice method ⁽¹⁾.
9. Number of report issued by that service : CN24021077
10. Date of report issued by that service : 27/02/2024
11. Reason(s) of extension (if applicable) : Addition of trade description;
Upgrade of regulation supplement number;
Addition of tyre sizes unnecessary for repetition test.
12. Any remarks : ---
13. Place : Zoetermeer
14. Date : 08 March 2024
15. Signature :
- 

T. H. K. Spatz
16. Annexed to this communication are: SMART AEL5-S2WR2-01
- 16.1. 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 ⁽⁶⁾.
- 16.2. 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 and service descriptions, adding in case of class C1 tyres whether "reinforced" (or "extra load") or not.

⁽¹⁾ Strike out what does not apply.

⁽⁵⁾ Appendix 2 for C1 and C2 tyres.
Appendix 3 for C3 tyres.

⁽⁶⁾ In the case of tyre use in severe snow conditions a test report according to Appendix 2 or Appendix 3, as applicable, to Annex 7 shall be submitted. Additionally in the case of ice grip tyre a test report according to Appendix 2 to Annex 8 shall be submitted.

TECHNICAL DOCUMENTATION

RELATING TO ECE TYPE-APPROVAL FOR A TYPE OF TYRE WITH REGARD TO ROLLING SOUND EMISSIONS AND TO ADHESION PERFORMANCE ON WET SURFACES AND/OR TO ROLLING RESISTANCE (ECE Regulation No. 117. 02, Supplement 15)

1. GENERAL

- 1.1. The performance characteristics to be assessed for the tyre type : rolling sound emission level and adhesion performance level on wet surfaces and rolling resistance ~~and snow grip index~~
- 1.2. Manufacturer's name : Wanli Tire Corporation Limited
- 1.3. Name and address of applicant : Wanli Tire Corporation Limited
3 Wanli Road Aotou Town, Conghua 510940
Guangzhou City, Guangdong Province China (PRC)
- 1.4. Address(es) of manufacturing plant(s) : same with the applicant
- 1.5. Brand name(s), Trade description(s) or Trade mark(s) to be used for particular tyre type-approval requested : AUFINE; MAXELL (trade mark)
SMART AEL5; SUPER HA1; MASTER MAS300
(tyre tread pattern name)
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 / ~~run flat~~ tyre
- 2.4. For Class C1 tyres, state weather :
- 2.4.1. Reinforced (or extra load) in case of approval with regarding to rolling sound emission level : see attached "list of tyre size"
- 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. For Class C2 or C3 tyres, state weather "Traction tyre" : Yes / No
- 2.6. Category of use (normal, snow, special) : ~~normal / snow (snow tyre for use in severe snow conditions) /~~ special
- 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. : see attached "drawing of tread pattern"
- 2.9. In the case of "special use tyre", drawing of the tread pattern supplied in order to verify the void-to-fill ratio. : not applicable
- 2.10. Submitted for approval on (date) : Jan 29, 2024

MANUFACTURER'S STAMP

Signature:

.....

Name:

THIS APPLICATION IS ACCOMPANIED BY:

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

I. List of tyre size

Brand name(s) or Trade mark(s) : AUFINE; MAXELL
Tread pattern : SMART AEL5; SUPER HA1; MASTER MAS300

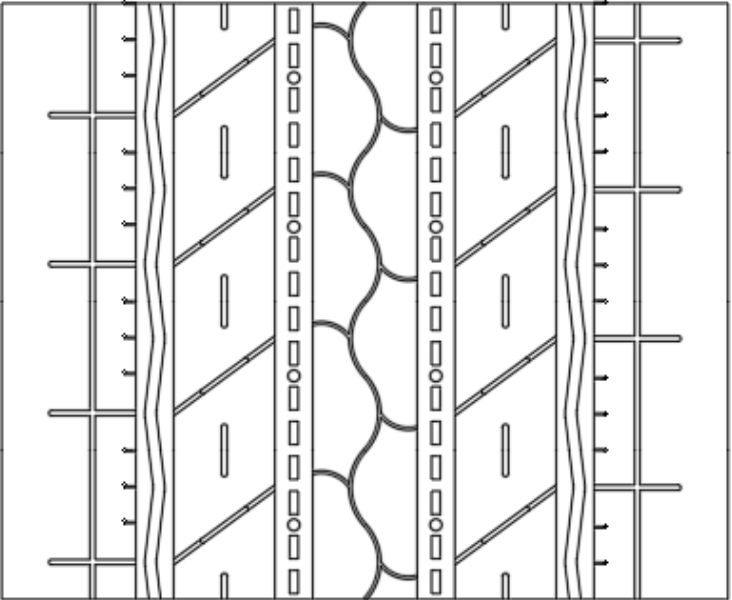
| Tyre size | Approval No | Limit for rolling sound dB(A) of Stage II | Limit for wet grip index | Limit for rolling resistance coefficient N/KN of Stage II |
|---------------------------|-------------------|---|--------------------------------|--|
| 295/80R22.5 | E4-0046010 | 73 | 0.65 | 6.5 |
| 154/150L(152/148M) | | | | |
| 315/80R22.5 | E4-0046011 | 73 | 0.65 | 6.5 |
| 156/150L(154/150M) | | | | |
| <u>315/80R22.5</u> | <u>E4-0052094</u> | <u>73</u> | <u>0.65</u> | <u>6.5</u> |
| <u>160/157J(157/154K)</u> | | | | |
| <u>315/70R22.5</u> | <u>E4-0051710</u> | <u>73</u> | <u>0.65</u> | <u>6.5</u> |
| <u>156/150L(154/150M)</u> | | | | |
| 385/65R22.5 | E4-0046012 | 73 | 0.65 | 6.5 |
| 164J(162K) | | | | |
| <u>325/95R24 162/160K</u> | <u>E4-0051712</u> | <u>73</u> | <u>0.65</u> | <u>6.5</u> |

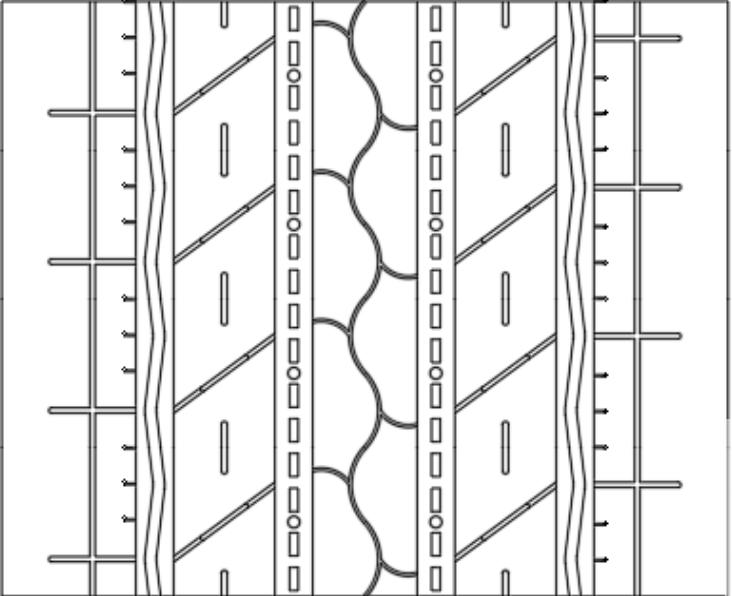
II. Worst Case Selection

Test size for rolling sound : 385/65R22.5 164J(162K)
Because of : Largest nominal section width

Test size for wet grip : 385/65R22.5 164J(162K)
Because of : The wet grip test result of 385/65R22.5 164J(162K) is $G=1.33$, which is 110% above the limit value of ECE-R117(for snow tyre for use in severe snow condition, the 110% limit value is $G=0.715$)

Test size for rolling resistance : 295/80R22.5 154/150L(152/148M)
Because of : Lowest load capacity index

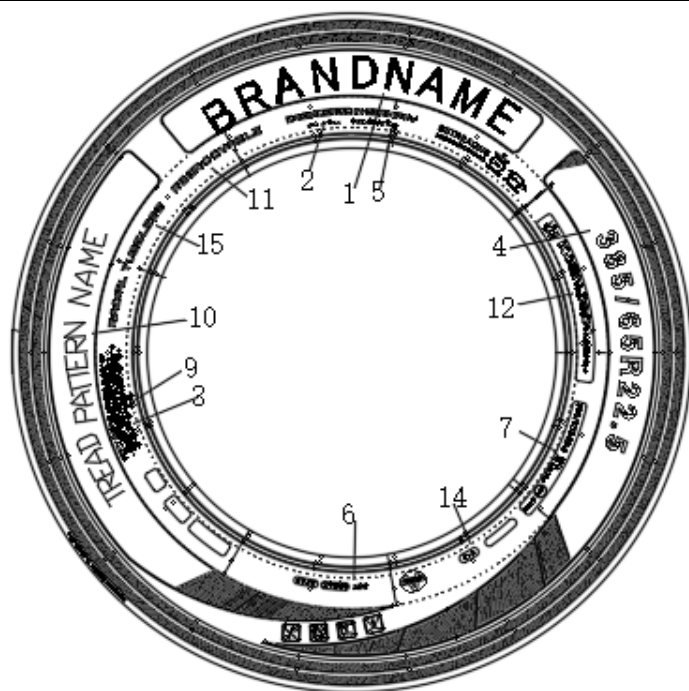
| III. Drawing of the tread pattern (for measured tyre using for tyre noise, wet grip performance) | | |
|---|---|--|
| Manufacturer name | : | Wanli Tire Corporation Limited |
| Pattern name | : | SMART AEL5 |
| Tyre Size | : | 385/65R22.5 164J(162K) |
| Market | : | EU/US |
| Pitch number | : | 56 |
| Pitch ratio | : | 1:1 |
| Void volume [%] | : | 20.7% |
| Width: main grooves [mm] | : | 16 |
| Depth: center groove [mm] | : | 16.5 |
| Depth: shoulder groove [mm] | : | 16.5 |
| Tyre tread pattern | : |  |

| Drawing of the tread pattern (for measured tyre using for tyre rolling resistance test) | | |
|--|---|--|
| Manufacturer name | : | Wanli Tire Corporation Limited |
| Pattern name | : | SMART AEL5 |
| Tyre Size | : | 295/80R22.5 154/150L(152/148M) |
| Market | : | EU/US |
| Pitch number | : | 64 |
| Pitch ratio | : | 1:1 |
| Void volume [%] | : | 20.8% |
| Width: main grooves [mm] | : | 13 |
| Depth: center groove [mm] | : | 17 |
| Depth: shoulder groove [mm] | : | 17 |
| Tyre mass [kg] | : | 64.7 |
| Tread depth [mm] | : | 17 |
| Tread width [mm] | : | 250 |
| Curvature radius of tread crown [mm] | : | 1000 |
| Tyre outer diameter [mm] | : | 1044 |
| Tread plies | : | 5 STEEL |
| Tyre tread pattern | : |  |

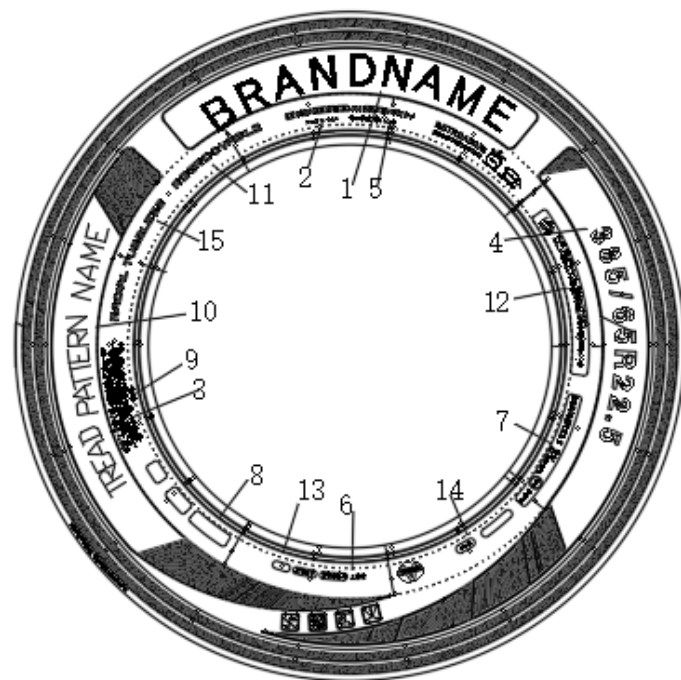
IV. Drawing of the tyre sidewall

Tyre Size

: 385/65R22.5 164J(162K)



Upper mold





Lower mold

| | |
|---|--|
| 1.AU FINE;MAXELL | 1.AU FINE;MAXELL |
| 2. MADE IN CHINA | 2.MADE IN CHINA |
| 3.SAFETY WARNING | 3.SAFETY WARNING |
| 4.385/65R22.5 | 4.385/65R22.5 |
| 5.STANDARD RIM 11.75 | 5.STANDARD RIM 11.75 |
| 6.DOT 026BK **** | 6.DOT 026BK **** |
| 7. 385/65R22.5 164J (162K) 24PR AT 950kPa | 7. 385/65R22.5 164J (162K) 24PR AT 950kPa |
| | 8. (E4) XXXXXXXX S2WR2 XXXXXX |
| 9.****(MOLD NUMBER) | 9.****(MOLD NUMBER) |
| 10.SMART AEL5; SUPER HA1;MASTER MAS300 | 10.SMART AEL5; SUPER HA1;MASTER MAS300 |
| 11.REGROOVABLE | 11.REGROOVABLE |
| 12. L.R.N PLIES:TREAD STEEL 5SIDEWALL STEEL 1 24PR MAX.LOAD SINGLE 5000kg(11000lbs) AT950kPa(138psi) COLD | 12.L.R.N PLIES:TREAD STEEL 5SIDEWALL STEEL 1 24PR MAX.LOAD SINGLE 5000kg(11000lbs) AT950kPa(138psi) COLD |
| | 13.****(DATE CODE) |
| 14.M+S | 14.M+S |
| 15.RADIAL TUBELESS | 15.RADIAL TUBELESS |

Drawing of the tyre sidewall

Tyre Size : 295/80R22.5 154/150L(152/148M)

| | |
|--|---|
|  <p>Upper mold</p> |  <p>Lower mold</p> |
| 1.AUFINE; MAXELL | 1.AUFINE; MAXELL |
| 2.MADE IN CHINA | 2.MADE IN CHINA |
| 3.SAFETY WARNING | 3.SAFETY WARNING |
| 4.295/80R22.5 | 4.295/80R22.5 |
| 5.STANDARD RIM 9.00 | 5.STANDARD RIM 9.00 |
| 6.DOT 026BF **** | 6.DOT 026BF **** |
| 7. 295/80R22.5 154/150L (152M) 20PR AT 850kPa 148 | 7. 295/80R22.5 154/150L (152M) 20PR AT 850kPa 148 |
| | 8. E4 XXXXXXXX S2WR2 XXXXXXX |
| 9.****(MOLD NUMBER) | 9.****(MOLD NUMBER) |
| 10.SMART AEL5; SUPER HA1; | 10.SMART AEL5; SUPER HA1; |
| 11.REGROOVABLE | 11.REGROOVABLE |
| 12.L.R.L PLIES:TREAD STEEL 5 SIDEWALL STEEL 1 20PR MAX.LOAD SINGLE 3750kg(8270lbs) AT 850kPa(123psi) COLD MAX.LOAD DUAL 3350kg(7390lbs) AT 850kPa(123psi) COLD | 12.L.R.LPLIES:TREAD STEEL 5 SIDEWALL STEEL 1 20PR MAX.LOAD SINGLE 3750kg(8270lbs) AT 850kPa(123psi) COLD MAX.LOAD DUAL 3350kg(7390lbs) AT 850kPa(123psi) COLD |
| | 13.****(DATE CODE) |
| 14.M+S | 14.M+S |
| 15.RADIAL TUBELESS | 15.RADIAL TUBELESS |

REPORT No. CN24021077

UN REGULATION No. 117R02/15 RELATED TO ROLLING SOUND EMISSIONS, ADHESION ON WET SURFACES AND ROLLING RESISTANCE

Approval number : E4*117R02/15*12871*01
Approved performances : S2WR2

Applicant : Wanli Tire Corporation Limited
3 Wanli Road Aotou Town, Conghua
510940 Guangzhou City, Guangdong Province
China (PRC)

Manufacturer : Wanli Tire Corporation Limited
3 Wanli Road Aotou Town, Conghua
510940 Guangzhou City, Guangdong Province
China (PRC)

Tyre class : C3

Category of use : Snow

Snow tyre for use in severe snow conditions : No

Ice grip tyre : No

Traction tyre : No

Brand name / Trade mark : AUFINE; MAXELL

Trade description/ Commercial name : SMART AEL5; SUPER HA1; MASTER MAS300

Place and date of issue : L'Albornar, Santa Oliva (Tarragona), 27/02/2024

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. 117R02/15. According to point 12.11/12.12 of the Transitional Provisions, the snow performance test uses SRTT14 as reference tyre. the test procedure for measuring wet grip does not take into account the provisions of Supplement 13.

The characteristics of the tested samples are detailed in the annexes to the test report.

Performed by:



Chen(Jacky) Zhu
HOMOLOGATION ENGINEER

Revised by:



Josep Masip Gomez
DEPARTMENT MANAGER

REPORT No. CN24021077

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 : 385/65R22.5 164J(162K) (widest section width)
See Annex 1, Test report CN22030111, IDIADA Automotive Technology, S.A., 04/03/2022
 - 2.2. Tyre size tested for adhesion on wet surfaces: 385/65R22.5 164J(162K) (meets extra 10%)
See Annex 2, Test report CN22030112, IDIADA Automotive Technology, S.A., 07/03/2022
 - 2.3. Tyre tested for rolling resistance : 295/80R22.5 154/150L(152/148M) (lowest load index)
See Annex 3, Test report CN22030492, IDIADA Automotive Technology, S.A., 22/03/2022
 - 2.4. Tyre tested for snow performance : N/A
3. Reason(s) of extension (if applicable) :
 - Addition of trade description
 - Upgrade of regulation supplement number
 - Addition of tyre sizes unnecessary for repetition test
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 adhesion on wet surfaces.
 - 4.3. Annex 3: Test report according to rolling resistance.
 - 4.4. Annex: Manufacturer's technical documentation.

Place and date of issue: L'Albornar, Santa Oliva (Tarragona), 27/02/2024



Chen(Jacky) Zhu
HOMOLOGATION ENGINEER

ANNEX 1



REPORT N° CN22030111

UN REGULATION No. 117R02/12 RELATED TO ROLLING SOUND EMISSIONS

| | |
|---|--|
| Applicant | : Wanli Tire Corporation Limited. 3 Wanli Road Aotou Town, Conghua 510940 Guangzhou City, Guangdong Province China (PRC) |
| Manufacturer | : Wanli Tire Corporation Limited. 3 Wanli Road Aotou Town, Conghua 510940 Guangzhou City, Guangdong Province China (PRC) |
| Tyre class | : C3 |
| Category of use | : Snow |
| Tyre for use in severe snow conditions | : No |
| Traction tyre | : No |
| Brand name / Trade mark | : AUFINE |
| Trade description/ Commercial name | : SMART AEL5 |
| Tyre size | : 385/65R22.5 164J(162K) |
| Sound level according to paragraph 4.4. of Annex 3 [dB(A)] | : 71 |
| Place and date of issue | : L'Albornar, Santa Oliva (Tarragona), 04/03/2022 |

CONCLUSIONS: The samples of the family have been tested according to the technical prescriptions with regard to "rolling sound emissions level" pursuant to UN Regulation No. 117R02/12.
The characteristics of the tested samples are detailed in the annex to the test report.

Performed by:



Chen(Jacky) Zhu
HOMOLOGATION ENGINEER

Revised by:



Josep Masip Gomez
DEPARTMENT MANAGER

* THE TESTS HAVE BEEN CARRIED OUT BY IDIADA AUTOMOTIVE TECHNOLOGY, S.A. LABORATORY ACCREDITED BY ENAC WITH NUMBER OF ACCREDITATION 35/LE159
* THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.
* THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.
* MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.



ANNEX TO THE TEST REPORT

ROLLING SOUND EMISSIONS, REPORT N° CN22030111

1. TEST DATA

1.1. Test tyre details

| | | |
|--------|---|---|
| 1.1.1 | Applicant ⁽¹⁾ | : Wanli Tire Corporation Limited. 3 Wanli Road Aotou Town, Conghua 510940 Guangzhou City, Guangdong Province China (PRC) |
| 1.1.2 | Manufacturer ⁽¹⁾ | : Wanli Tire Corporation Limited. 3 Wanli Road Aotou Town, Conghua 510940 Guangzhou City, Guangdong Province China (PRC) |
| 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 | : AUFINE |
| 1.1.7 | Trade description / Commercial name | : SMART AEL5 |
| 1.1.8 | Tyre size | : 385/65R22.5 164J(162K) |
| 1.1.9 | Load index / Corresponding mass Q _r [kg] | : 164 / 5,000 |
| 1.1.10 | Tyre structure | : Radial |
| 1.1.11 | Date code, other manufacturer markings | : 0222, 026BKAFAP |
| 1.1.12 | Reference inflation pressure P _r [kPa] | : 950 |

⁽¹⁾ Information provided by the client. The laboratory is not responsible for such information

Validate this report with the security code «3pppMTBX» at: <https://extranet.idiada.com/home-cve>

CN24021077



1.1.13 Test inflation pressure P_t [kPa] :

| | P_t [kPa] admissible values |
|------------------------|----------------------------------|
| Front axle left wheel | $656.87 \leq 660.00 \leq 722.56$ |
| Front axle right wheel | $628.76 \leq 630.00 \leq 691.63$ |
| Rear axle left wheel | $679.90 \leq 680.00 \leq 747.89$ |
| Rear axle right wheel | $687.90 \leq 690.00 \leq 756.69$ |

FULFILS / ~~NOT FULFILS~~

1.1.14 Test tyre internal reference :

| | |
|------------------|------------------|
| Front left | Front right |
| CN-2202/05586-01 | CN-2202/05586-02 |
| Rear left | Rear right |
| CN-2202/05586-03 | CN-2202/05586-04 |

1.1.15 Test rim : 11.75 x 22.5

1.1.16 Test rim internal reference :

| | |
|------------------|------------------|
| Front left | Front right |
| CN-1912/02749-01 | CN-1912/02749-02 |
| Rear left | Rear right |
| CN-1912/02749-03 | CN-1912/02749-04 |

1.1.17 Test tyre load [kg] :

| | Load | Q_t [N] / % $\frac{Q_t}{Q_r}$ |
|------------------------|-------|---------------------------------|
| Front axle left wheel | 3,722 | $50 < 74.44 < 90$ |
| Front axle right wheel | 3,594 | $50 < 71.88 < 90$ |
| Rear axle left wheel | 3,826 | $50 < 76.52 < 90$ |
| Rear axle right wheel | 3,862 | $50 < 77.24 < 90$ |

FULFILS / ~~NOT FULFILS~~

| |
|---|
| $Q_{t,avr}$ [N] / % $\frac{Q_{t,avr}}{Q_r}$ |
| $70 \leq 75.02 \leq 80$ |

FULFILS / ~~NOT FULFILS~~

* THE TESTS HAVE BEEN CARRIED OUT BY IDIADA AUTOMOTIVE TECHNOLOGY, S.A. LABORATORY ACCREDITED BY ENAC WITH NUMBER OF ACCREDITATION 35/LE159
 * THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.
 * THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.
 * MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.



1.2. Test vehicle

| | | |
|-------|----------------|-----------|
| 1.2.1 | Trade name | : HYUNDAI |
| 1.2.2 | Model | : XCIENT |
| 1.2.3 | Year | : 2019 |
| 1.2.4 | Transmission | : Manual |
| 1.2.5 | Wheelbase [mm] | : 3,560 |

For Class C3 less than 5,000 mm.

FULFILS / ~~NOT FULFILS~~

| | | |
|-------|----------------------------|-----------------|
| 1.2.6 | Vehicle internal reference | : CN-2001/01800 |
|-------|----------------------------|-----------------|

1.3. Test equipment

| | | |
|-------|--|------------------|
| 1.3.1 | Sound level meter 1 | : 193663 |
| 1.3.2 | Sound level meter 2 | : 193664 |
| 1.3.3 | Manometer | : 27230 |
| 1.3.4 | Weight scale | : SCS-5 / SCS-10 |
| 1.3.5 | Track temperature measurement device | : 182330 |
| 1.3.6 | Wind speed measurement device | : 193666 |
| 1.3.7 | Speed measurement device | : 170358 |
| 1.3.8 | Ambient temperature measurement device | : 193659 |

* THE TESTS HAVE BEEN CARRIED OUT BY IDIADA AUTOMOTIVE TECHNOLOGY, S.A. LABORATORY ACCREDITED BY ENAC WITH NUMBER OF ACCREDITATION 35/LE159
 * THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.
 * THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.
 * MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.



2. TEST TRACK

2.1. Environment

2.1.1 Air temperature T_a [°C] : 13.0

$5.0 < T_a < 40.0$

FULFILS / ~~NOT FULFILS~~

2.1.2. Test surface temperature T_s [°C] : 15.1

$5.0 \leq T_s \leq 50.0$

FULFILS / ~~NOT FULFILS~~

2.1.3 Wind speed [m/s] : 3.9

Less than 5 m/s

FULFILS / ~~NOT FULFILS~~

2.1.4 Ambient noise [dB(A)] : 37.8

Test result – Ambient noise ≥ 10 dB(A)

FULFILS / ~~NOT FULFILS~~

2.1.5 Wind direction [°] : 43.0

2.2. Compliance with ISO 10844:2014:

- March 8th 2021
- Mean profile depth
- Issued by

: IDIADA

* THE TESTS HAVE BEEN CARRIED OUT BY IDIADA AUTOMOTIVE TECHNOLOGY, S.A. LABORATORY ACCREDITED BY ENAC WITH NUMBER OF ACCREDITATION 35/LE159

* THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.

* THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.

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



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 | 62.3 | N → S | 70.3 | 70.5 | 12.2 | 14.6 | 70.3 | 70.5 |
| 2 | 64.4 | N → S | 70.7 | 70.8 | 12.4 | 14.8 | 70.7 | 70.8 |
| 3 | 66.1 | N → S | 71.8 | 72.8 | 12.8 | 15.0 | 71.8 | 72.8 |
| 4 | 68.4 | S → N | 71.8 | 72.4 | 13.1 | 15.2 | 71.8 | 72.4 |
| 5 | 72.7 | S → N | 73.0 | 72.8 | 13.3 | 15.3 | 73.0 | 72.8 |
| 6 | 74.8 | S → N | 72.5 | 72.4 | 13.4 | 15.3 | 72.5 | 72.4 |
| 7 | 76.9 | N → S | 74.3 | 74.3 | 13.5 | 15.3 | 74.3 | 74.3 |
| 8 | 78.8 | S → N | 74.2 | 74.6 | 13.2 | 15.4 | 74.2 | 74.6 |

3.1. Regression line slope : 35.67

3.2. Sound level after temperature correction according to paragraph 4.3 of Annex 3 [dB(A)] : 72.4

3.3. Sound level according to paragraph 4.4. of Annex 3 [dB(A)] : 71

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 |

* THE TESTS HAVE BEEN CARRIED OUT BY IDIADA AUTOMOTIVE TECHNOLOGY, S.A. LABORATORY ACCREDITED BY ENAC WITH NUMBER OF ACCREDITATION 35/LE159
* THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.
* THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.
* MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.



4. TEST TYRE PICTURES



Picture 1. Sidewall



Picture 2. Tread pattern

Place of test: ICPG, Zhaoyuan, China

Date of test: 04/03/2022

朱晨

Chen(Jacky) Zhu
HOMOLOGATION ENGINEER

- * THE TESTS HAVE BEEN CARRIED OUT BY IDIADA AUTOMOTIVE TECHNOLOGY, S.A. LABORATORY ACCREDITED BY ENAC WITH NUMBER OF ACCREDITATION 35/LE159
- * THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.
- * THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.
- * MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.

ANNEX 2



REPORT Nº CN22030112

UN REGULATION No. 117R02/12 RELATED TO ADHESION ON WET SURFACES

| | |
|---|--|
| Applicant | : Wanli Tire Corporation Limited 3 Wanli Road Aotou Town, Conghua 510940 Guangzhou City, Guangdong Province China (PRC) |
| Manufacturer | : Wanli Tire Corporation Limited 3 Wanli Road Aotou Town, Conghua 510940 Guangzhou City, Guangdong Province China (PRC) |
| Tyre class | : C3 |
| Category of use | : Snow |
| Traction tyre | : No |
| Brand name / Trade mark | : AUFINE |
| Trade description/ Commercial name | : SMART AEL5 |
| Tyre size | : 385/65R22.5 164J(162K) |
| Wet grip index relative to SRTT according to paragraph 2.2.2.7.5. | : 1.33 |
| Place and date of issue | : L'Albornar, Santa Oliva (Tarragona), 07/03/2022 |

CONCLUSIONS: The samples of the family have been tested according to the technical prescriptions with regard to "adhesion performance on wet surfaces" pursuant to UN Regulation No. 117R02/12.
The characteristics of the tested samples are detailed in the annex to the test report.
Test configuration as per paragraph 2.2.2.2.: Configuration 1 (4 candidate tyres in test vehicle)

Performed by:

Revised by:



Chen(Jacky) Zhu
HOMOLOGATION ENGINEER



Josep Masip Gomez
DEPARTMENT MANAGER

- * THE TESTS HAVE BEEN CARRIED OUT BY IDIADA AUTOMOTIVE TECHNOLOGY, S.A. LABORATORY ACCREDITED BY ENAC WITH NUMBER OF ACCREDITATION 35/LE159.
- * THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.
- * THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.
- * MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.



ANNEX TO THE TEST REPORT

ADHESION ON WET SURFACES, REPORT N° CN22030112

1. TEST DATA

1.1. Test tyre details

| | | |
|--------|---|--|
| 1.1.1 | Applicant ⁽¹⁾ | : Wanli Tire Corporation Limited 3 Wanli Road Aotou Town, Conghua 510940 Guangzhou City, Guangdong Province China (PRC) |
| 1.1.2 | Manufacturer ⁽¹⁾ | : Wanli Tire Corporation Limited 3 Wanli Road Aotou Town, Conghua 510940 Guangzhou City, Guangdong Province China (PRC) |
| 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 | : AUFINE |
| 1.1.7 | Trade description / Commercial name | : SMART AEL5 |
| 1.1.8 | Tyre size | : 385/65R22.5 164J(162K) |
| 1.1.9 | Load index / Corresponding mass Q _r [kg] | : 164 / 5,000 |
| 1.1.10 | Tyre structure | : Radial |
| 1.1.11 | Date code, other manufacturer markings | : 0222, 026BKAFAP |
| 1.1.12 | Reference inflation pressure P _r [kPa] | : 950 |

⁽¹⁾ Information provided by the client. The laboratory is not responsible for such information

Validate this report with the security code «ZYQOM918» at: <https://extranet.idiada.com/hom-cve>

CN24021077

* THE TESTS HAVE BEEN CARRIED OUT BY IDIADA AUTOMOTIVE TECHNOLOGY, S.A. LABORATORY ACCREDITED BY ENAC WITH NUMBER OF ACCREDITATION 35/LE159.

* THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.

* THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.

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



1.1.13 Test tyre internal reference :

| | |
|------------------|------------------|
| Front left | Front right |
| CN-2202/05586-01 | CN-2202/05586-02 |
| Rear left | Rear right |
| CN-2202/05586-03 | CN-2202/05586-04 |

1.1.14 Test rim : 11.75 x 22.5

1.1.15 Test rim internal reference :

| | |
|------------------|------------------|
| Front left | Front right |
| CN-1912/02749-01 | CN-1912/02749-02 |
| Rear left | Rear right |
| CN-1912/02749-03 | CN-1912/02749-04 |

1.1.16 SRTT identification : MICHELIN 245/70 R19.5 - ASTM F 2871

1.1.17 SRTT internal reference :

| | |
|------------------|------------------|
| Front left | Front right |
| CN-2010/03720-01 | CN-2010/03720-02 |
| Rear left | Rear right |
| CN-2010/03720-03 | CN-2010/03720-04 |

1.1.18 Test SRTT rim : 9.0 x 22.5

1.1.19 Test SRTT rim internal reference :

| | |
|------------------|------------------|
| Front left | Front right |
| CN-1912/02743-01 | CN-1912/02743-02 |
| Rear left | Rear right |
| CN-1912/02743-03 | CN-1912/02743-04 |

1.1.20 Test tyre load [kg] :

| SRTT 1 | | | Candidate tyre | | | SRTT 2 | | |
|--------|-------|----------|----------------|-------|----------|--------|-------|----------|
| FL | 3,286 | 87.6% Qr | FL | 3,336 | 66.7% Qr | FL | 3,270 | 87.2% Qr |
| FR | 3,234 | 86.2% Qr | FR | 3,242 | 64.8% Qr | FR | 3,242 | 86.5% Qr |
| RL | 3,218 | 85.8% Qr | RL | 3,246 | 64.9% Qr | RL | 3,228 | 86.1% Qr |
| RR | 3,276 | 87.4% Qr | RR | 3,302 | 66.0% Qr | RR | 3,258 | 86.9% Qr |

Between 60 per cent and 100 per cent of the load value corresponding to the load index of the tyre.

FULFILS / NOT FULFILS

* THE TESTS HAVE BEEN CARRIED OUT BY IDIADA AUTOMOTIVE TECHNOLOGY, S.A. LABORATORY ACCREDITED BY ENAC WITH NUMBER OF ACCREDITATION 35/LE159.

* THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.

* THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.

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



1.2. Test vehicle

- 1.2.1 Trade name : HYUNDAI
- 1.2.2 Model : XCIENT
- 1.2.3 Year : 2018
- 1.2.4 Transmission : Manual
- 1.2.5 Wheelbase [mm] : 3,560
- 1.2.6 Vehicle internal reference : CN-2001/01800
- 1.2.7 Vehicle configuration (ISO 15222) : Configuration 1 (4 candidate tyres in test vehicle)

1.3. Test inflation pressure

- 1.3.1 SRTT inflation pressure [kPa] :

| | FL | FR | RL | RR |
|--------|-----|-----|-----|-----|
| SRTT 1 | 763 | 748 | 743 | 760 |
| SRTT 2 | 758 | 750 | 748 | 755 |

- 1.3.2 Candidate inflation pressure :

| Candidate | Q _t [kg] | Q _r [kg] | Conditions | Cond. Used | Inflation pressure P _t [kPa] |
|-----------|---------------------|---------------------|--|------------|---|
| FL | 3,336 | 5,000 | 1- If Q _t < 75% Q _r then: $P_t = (0.7) \times P_r$ | 1 | 665 |
| FR | 3,242 | 5,000 | | 1 | 665 |
| RL | 3,246 | 5,000 | 2- If Q _t ≥ 75% Q _r then: $P_t = P_r \times (Q_t / Q_r)^{1.25}$ | 1 | 665 |
| RR | 3,302 | 5,000 | | 1 | 665 |

1.4. Test equipment

- 1.4.1 Manometer : 27230
- 1.4.2 Weight scale : SCS-5/ SCS-10
- 1.4.3 Thermometer : 182330
- 1.4.4 Track temperature measurement device : 182329
- 1.4.5 Speed measurement device : VBOX Sport 07013178

* THE TESTS HAVE BEEN CARRIED OUT BY IDIADA AUTOMOTIVE TECHNOLOGY, S.A. LABORATORY ACCREDITED BY ENAC WITH NUMBER OF ACCREDITATION 35/LE159.

* THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.

* THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.

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



2. TEST TRACK

2.1. Location : Straight line braking B, ICPG

2.2. Date of check on compliance of the test surface : April 1st 2021

2.3. Test track characteristics:

2.3.1 Texture depth [mm] : 0.84

2.3.2 BPN : 57

2.3.3 Water depth [mm] : Average of 1.06

2.4. Test method : Vehicle

2.5. Air temperature T_a [°C] : 16.3

2.6. Wet surface temperature T_w [°C] :

$$5.0 \leq T_w \leq 35.0$$

| SRTT 1 | Candidate tyre | SRTT 2 |
|--------|----------------|--------|
| 8.2 | 12.2 | 12.7 |

FULFILS / ~~NOT FULFILS~~

Variation during the test less than 10 °C

FULFILS / ~~NOT FULFILS~~

* THE TESTS HAVE BEEN CARRIED OUT BY IDIADA AUTOMOTIVE TECHNOLOGY, S.A. LABORATORY ACCREDITED BY ENAC WITH NUMBER OF ACCREDITATION 35/LE159.

* THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.

* THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.

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



3. TEST RESULTS

| Test run | SRTT 1 | | Candidate tyre | | SRTT 2 | |
|----------|----------------------|--|----------------------|--|----------------------|--|
| | Braking distance [m] | Average deceleration [m/s ²] | Braking distance [m] | Average deceleration [m/s ²] | Braking distance [m] | Average deceleration [m/s ²] |
| 1 | 25.58 | 4.83 | 19.78 | 6.24 | 25.90 | 4.77 |
| 2 | 25.87 | 4.77 | 19.33 | 6.39 | 26.49 | 4.66 |
| 3 | 25.24 | 4.89 | 19.10 | 6.46 | 26.43 | 4.67 |
| 4 | - | - | 19.43 | 6.35 | - | - |
| 5 | - | - | 19.49 | 6.33 | - | - |
| 6 | - | - | 19.38 | 6.37 | - | - |

Coefficient of variation

| SRTT 1 | Candidate tyre | SRTT 2 |
|--------------|----------------|--------------|
| 1.23 | 1.14 | 1.24 |
| < 3 per cent | < 3 per cent | < 3 per cent |

FULFILS / ~~NOT FULFILS~~

| Test run | Test Speed [km/h] | Direction of run | SRTT | Candidate tyre | Mean fully developed deceleration (mfdd) | Wet Grip Index | Pedal force [N] |
|----------|-------------------|------------------|-------------|----------------|--|----------------|-----------------|
| 1 | 60 - 20 | S - N | 315/70R22.5 | --- | 4.83 m/s ² | --- | > 600 |
| 2 | 60 - 20 | S - N | --- | 385/65R22.5 | 6.36 m/s ² | 1.33 | > 600 |
| 3 | 60 - 20 | S - N | 315/70R22.5 | --- | 4.70 m/s ² | --- | > 600 |

Wet grip index G = 1.33

3.1. Limit value

:

| Category of use | Wet Grip Index (+10% Wet Grip Index) (G) | | | | |
|---------------------------|--|-----------------|-----------------|-----------------|--|
| | C2 | | C3 | | |
| | Other | Traction | Other | Traction | |
| Normal | ≥ 0.95 (≥ 1.05) | ≥ 0.85 (≥ 0.94) | ≥ 0.80 (≥ 0.88) | ≥ 0.65 (≥ 0.72) | |
| Snow | | | ≥ 0.65 (≥ 0.72) | | |
| Snow in severe conditions | ≥ 0.85 (≥ 0.94) | | | | |
| Special | ≥ 0.85 (≥ 0.94) | | | | |

* THE TESTS HAVE BEEN CARRIED OUT BY IDIADA AUTOMOTIVE TECHNOLOGY, S.A. LABORATORY ACCREDITED BY ENAC WITH NUMBER OF ACCREDITATION 35/LE159.

* THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.

* THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.

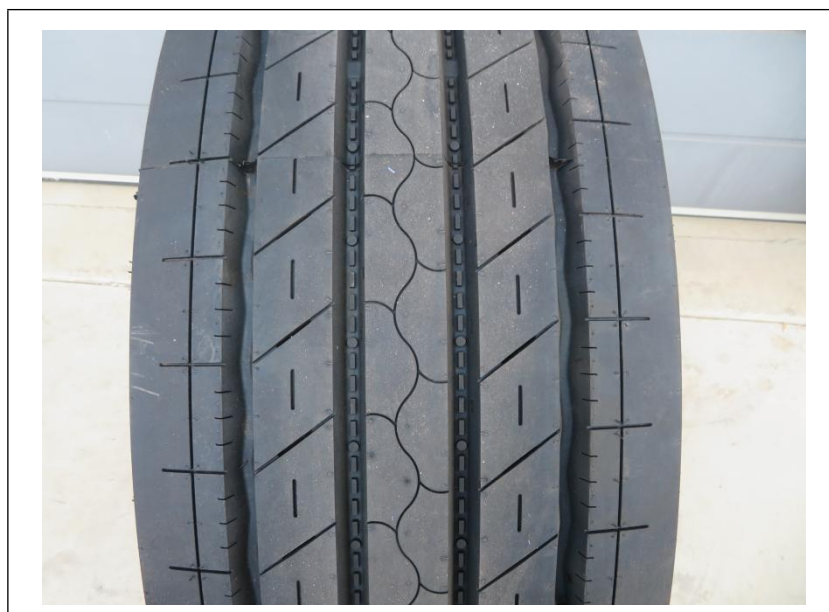
* MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.



4. TEST TYRE PICTURES



Picture 1. Sidewall



Picture 2. Tread pattern

Place of test: ICPG, Zhaoyuan, China

Date of test: 04/03/2022

朱晨

Chen(Jacky) Zhu
HOMOLOGATION ENGINEER

- * THE TESTS HAVE BEEN CARRIED OUT BY IDIADA AUTOMOTIVE TECHNOLOGY, S.A. LABORATORY ACCREDITED BY ENAC WITH NUMBER OF ACCREDITATION 35/LE159.
- * THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.
- * THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.
- * MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.

ANNEX 3


REPORT N° CN22030492
UN/ECE REGULATION 117R02/12 RELATED TO ROLLING RESISTANCE

| | |
|------------------------------------|--|
| Applicant | : Wanli Tire Corporation Limited 3 Wanli Road Aotou Town, Conghua 510940 Guangzhou City, Guangdong Province China (PRC) |
| Manufacturer | : Wanli Tire Corporation Limited 3 Wanli Road Aotou Town, Conghua 510940 Guangzhou City, Guangdong Province China (PRC) |
| Tyre class | : C3 |
| Category of use | : Snow |
| Traction tyre | : No |
| Brand name / Trade mark | : AUFINE |
| Trade description/ Commercial name | : SMART AEL5 |
| Tyre size | : 295/80R22.5 154/150L(152/148M) |
| Place and date of issue | : L'Albornar, Santa Oliva (Tarragona), 22/03/2022 |

CONCLUSIONS: The tested samples presented by the manufacturer have been tested pursuant to the technical prescriptions with regard to “rolling resistance” according to ECE R117.02/12.
The characteristics of the tested samples are detailed in the annex to the test report.

Performed by:

Revised by:



Zhu Yuan
HOMOLOGATION ENGINEER



Josep Masip Gomez
DEPARTMENT MANAGER



ANNEX TO THE TEST REPORT

ROLLING RESISTANCE, REPORT N° CN22030492

1. TEST DATA

1.1. Test tyre details

| | | |
|--------|--|--|
| 1.1.1 | Applicant | : Wanli Tire Corporation Limited 3 Wanli Road Aotou Town, Conghua 510940 Guangzhou City, Guangdong Province China (PRC) |
| 1.1.2 | Manufacturer | : Wanli Tire Corporation Limited 3 Wanli Road Aotou Town, Conghua 510940 Guangzhou City, Guangdong Province China (PRC) |
| 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 | : AUFINE |
| 1.1.7 | Trade description / Commercial name | : SMART AEL5 |
| 1.1.8 | Tyre size | : 295/80R22.5 |
| 1.1.9 | Load index / Corresponding mass Q_r [kg] | : 154 / 3,750 |
| 1.1.10 | Tyre structure | : Radial |
| 1.1.11 | Date code, other manufacturer markings | : 5021, 026BF AFAF |
| 1.1.12 | Reference inflation pressure P_r [kPa] | : 850 |
| 1.1.13 | Test tyre internal reference | : CN22030492 |
| 1.1.14 | Test rim | : 9.00 x 22.5 |
| 1.1.15 | Test rim internal reference | : RIM9.00 x 22.5 |
| 1.1.16 | Test rim material | : Aluminum |



1.2. Test machine data

1.2.1 Identification : JD-029, 04-807

1.2.2 Drum diameter [mm] : 2,000

FULFILS/NOT FULFILS

1.2.3 Surface : Smooth steel

1.2.4 Roughness [μm] : ≤ 6.3

FULFILS/NOT FULFILS

1.3. Test data

1.3.1 Measurement method : Force

1.3.2 Test speed [km/h] : 80

C3: 80 km/h (L: 120 km/h and higher and load symbol > to 121)

FULFILS/NOT FULFILS

1.3.3 Load Index (LI) / Load [kg] : 154 / 3,750

1.3.4 Test load [kg / N] : 3,188 / 31,259

C2/C3 (% of single load): 85 (*)

(*) as a percentage of single load per cent of maximum load capacity for single application specified in applicable tyre standards manuals if not marked on tyre

FULFILS/NOT FULFILS

1.3.5 Test inflation pressure, initial [kPa] : 850

C2/C3: corresponding to maximum load capacity for single application (*)

(*): inflation pressure marked on sidewall, or if not market on sidewall, as specified in applicable tyre standards manuals.

FULFILS/NOT FULFILS

1.3.6 Distance from the tyre axis to the drum outer surface under steady state conditions during test (r_L)[m] : 0.495

1.3.7 Distance from the tyre axis to the drum outer surface under steady state conditions during skim test (r_L)[m] : 0.525

1.3.8 Ambient temperature T_{am} [$^{\circ}\text{C}$] : 25.11

$20.0 \leq T_{am} \leq 30.0$

FULFILS/NOT FULFILS

* THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.

* THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.

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



1.3.9 Skim test load [N] : 399.96

$C3 \leq 500 \text{ N}$

FULFILS/NOT FULFILS

1.3.10 Spindle force (Ft) [N] : 144.65

1.3.11 Spindle force during skim test (Ft) [N] : 11.59

1.3.12 Parasitic loss (Fpl) [N] : 17.67

1.3.13 Rolling resistance (Fr) [N] : 198.63

2. TEST RESULTS

2.1. Rolling resistance coefficient

2.1.1 Initial value (or average in the case of more than 1) [N/kN] : 6.35

2.1.2 Temperature corrected value [N/kN] : 6.36

2.1.3 Temperature and drum diameter corrected value [N/kN] : 6.36

Rolling resistance coefficient C_r [N/kN] = 6.36

2.2. Limit value [N/kN]

| | Stage 1 | Stage 2 |
|----|---------|---------|
| C1 | 12.0 | 10.5 |
| C2 | 10.5 | 9.0 |
| C3 | 8.0 | 6.5 |

For "snow tyre for use in severe snow conditions", the limits shall be increased by 1 N/kN.



3. TEST TYRE PICTURES



Picture 1. Sidewall



Picture 2. Tread pattern

Place of test: Qingdao, China

Date of test: 03/03/2022

袁柱

Zhu Yuan
HOMOLOGATION ENGINEER