

# */// Race Louvers*

Professional R&D - Wind Tunnel Tested - Track Proven

info@racelouvers.com - www.racelouvers.com

908-447-5788



Race Louvers Audi Track Testing 5/4/19

### Race Louvers Track Test Data

Driver David Pisoli Test date 5/4/19  
 Racing class APOE Test track Homestead Lightning  
 Car year/make/model Audi A4 Weather part cloudy 75°F  
 Thermostat rating 195° Splitter type/size 4" flat Front of radiator sealed to nose yes Back of radiator open to engine bay yes Wing type/size AZ Hestman  
 Other brand hood vent — Other aero aids Air dam Aero

Race Louver part(s) being tested: RX.14.24.C Center Louver  
 Primary objective (circle): more cooling / more front downforce / combination

~~Baseline session 1 or previous track data~~ (No Race Louvers or Grill Blockers)

Average coolant temps \_\_\_\_\_ Front grill opening size (sq in) \_\_\_\_\_  
 Best lap \_\_\_\_\_ 2nd best lap \_\_\_\_\_ 3rd best lap \_\_\_\_\_ Average lap \_\_\_\_\_

**Session 1**

Car setup changes (circle): Race Louvers Grill Blockers Other side race tape  
 Front grill opening size (sq in) 110 sq in Wing angle 0° Suspension adjustments \_\_\_\_\_ Average coolant temps 190°F Best lap \_\_\_\_\_  
 2nd best lap \_\_\_\_\_ 3rd best lap \_\_\_\_\_ Average lap \_\_\_\_\_  
 \* 65 deg

**Session 2**

Car setup changes (circle): Race Louvers Grill Blockers Other side race tape bottom tape  
 Front grill opening size (sq in) 90 sq in Wing angle 0° Suspension adjustments \_\_\_\_\_ Average coolant temps 190°F Best lap \_\_\_\_\_  
 2nd best lap \_\_\_\_\_ 3rd best lap \_\_\_\_\_ Average lap \_\_\_\_\_  
 \* 75 deg

**Session 3**

Car setup changes (circle): Race Louvers Grill Blockers Other same tape  
 Front grill opening size (sq in) 90 sq in Wing angle 0° Suspension adjustments \_\_\_\_\_ Average coolant temps 190°F Best lap \_\_\_\_\_  
 2nd best lap \_\_\_\_\_ 3rd best lap \_\_\_\_\_ Average lap \_\_\_\_\_  
 \* Sunny ~ 80°F

Conclusion/comments \_\_\_\_\_  
more front grill restriction could have been used but ran out of time.

### Race Louvers Track Test Post Event Download

Driver David Pisotti  
Racing class HPDE  
Car year/make/model Audi A4

Test date 5/4/19  
Test track North Lightnings  
Weather Part cloudy 28F

Interviewer/Date Al Watson 5/4/19

Session/comments \_\_\_\_\_

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Session/comments \_\_\_\_\_

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Session/comments \_\_\_\_\_

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Session/comments \_\_\_\_\_

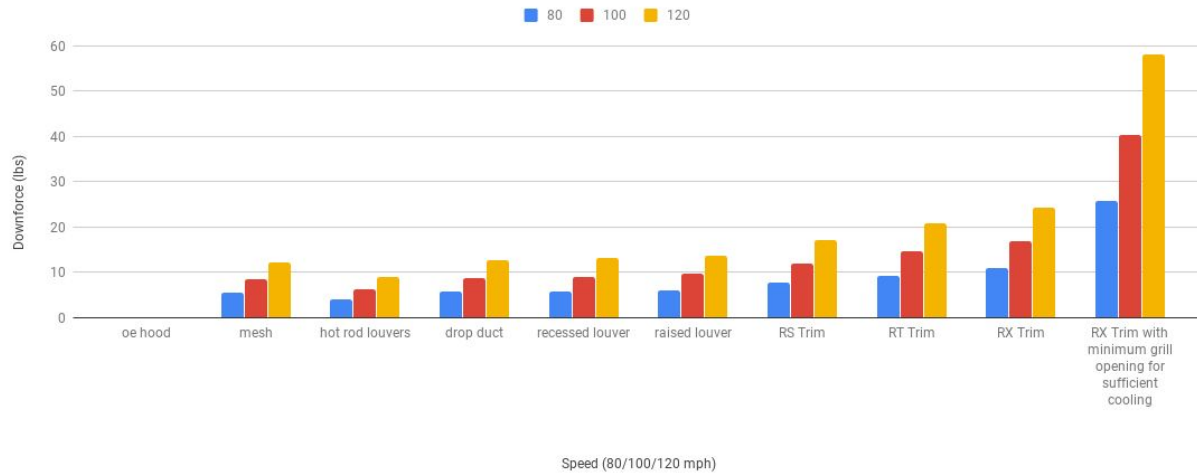
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Conclusions 1) The 40 lbs of front down force achieved in the wind tunnel with 110sqin grill opening was verified all while still running on the 195° thermostat. More front downforce was possible as we were able to further reduce the grill opening size and still not have temps exceed the 195° point. 40 lbs of front down force and sufficient cooling from a single set of Race Louvers.

**Wind Tunnel Front Downforce**

2004 Audi A4, 24"x14" Center Vent/Extractor Comparison. OE Grill Opening.

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Special thanks to David Pisotti for the use of his well build Audi A4 both at the track and wind tunnel.

During our wind tunnel testing we explored the option of sealing up the nose to only enough opening to provide sufficient cooling. Reducing the front grill opening to 110sqin yielded 40lbs of front downforce at 100 mph in the tunnel test when using a single set of RX Race Louvers. This was verified during track testing as we ran the car with the same grill opening size as the wind tunnel test and coolant temperatures never exceed the 195 deg thermostat rating in 80 degree ambient temperatures. We even reduced the grill opening to 90 sqin and still did not exceed 195 degree coolant temperatures likely increasing front downforce.

**Results:**

- 40 lbs of front downforce verified using Race Louvers and Grill Blockers.
- 195 degree coolant temperatures maintained during the event.