

**New "SRTT" Standard Development
P225/60R16 97S
Standard Reference Test Tire
Status Update**

F09.20



**ASTM E-17 & F-9 Meeting
16 June 2004**

MICHELIN NORTH AMERICA, Inc.

Highlights - P225/60R16 97S SRTT

Existing E1136 - 93 SRTT

P195/75R14

All Season Tread Design

Steel Belted Radial

Existing Standard 15 March 1993

(Reapproved 1998)



New SRTT

P225/60R16 97S

Current Technology

All Season Tread Design

Steel Belted Radial

Ventless Tread Area



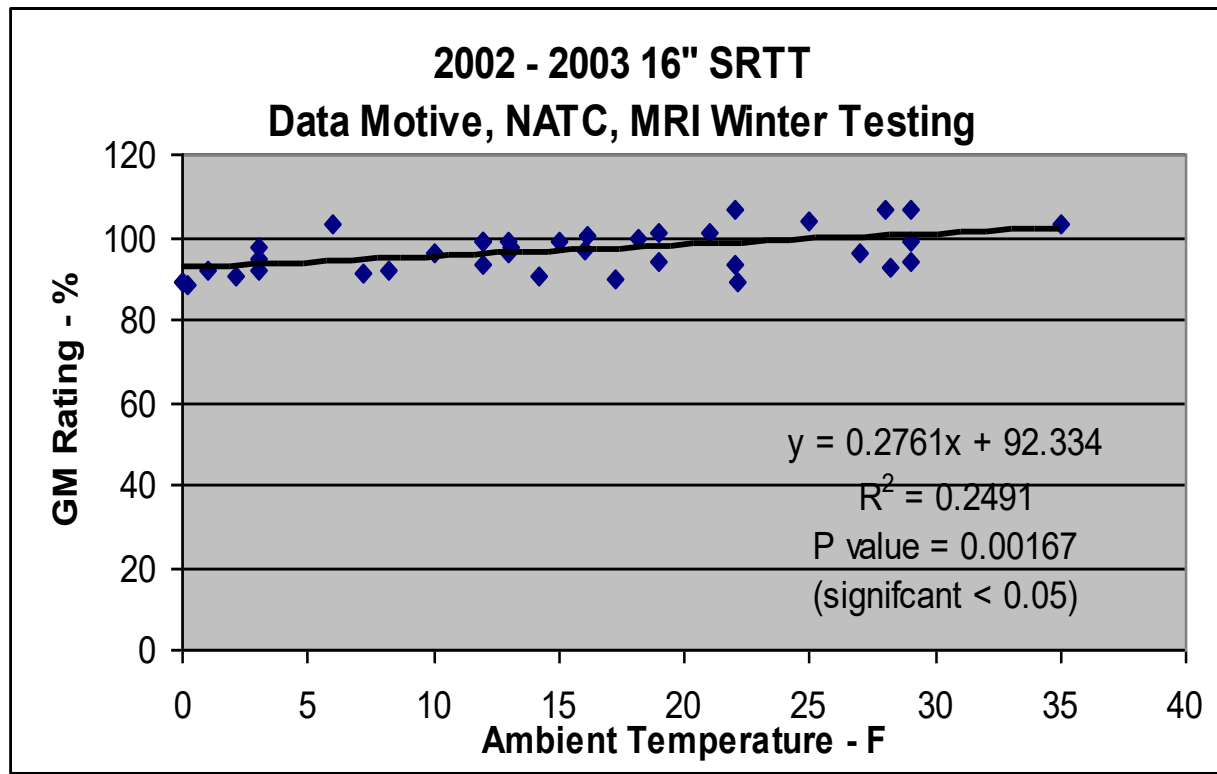
New ASTM SRTT Standard Expected in 2004

Highlights - P225/60R16 97S SRTT

- WIP on the ASTM adoption of the new SRTT
- Snow traction to temperature relationship
 - See 2002 – 2003 v. 2003 – 2004 data regression analysis.
 - P value < 0.05 indicates slope significant for 2002 – 2003.
 - P value > 0.05 indicates slope insignificant for 2003 – 2004.
 - Probably is related to snow testing variation
 - Not simply measurement error.
 - Already accounted for in the significance test.
 - More likely a real physical difference due to testing or something else.
- Recommendation on standard development.
 - Complete standard draft.
 - Snow traction testing suppliers
 - Accumulate experience with existing traction test method
 - Baseline data comparison with the 14" SRTT

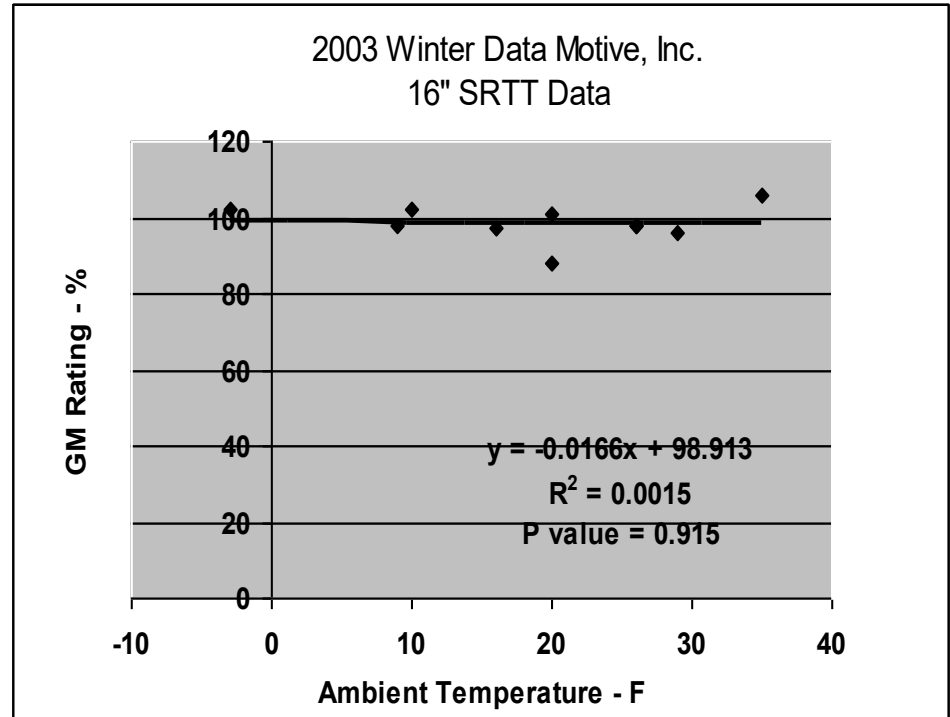
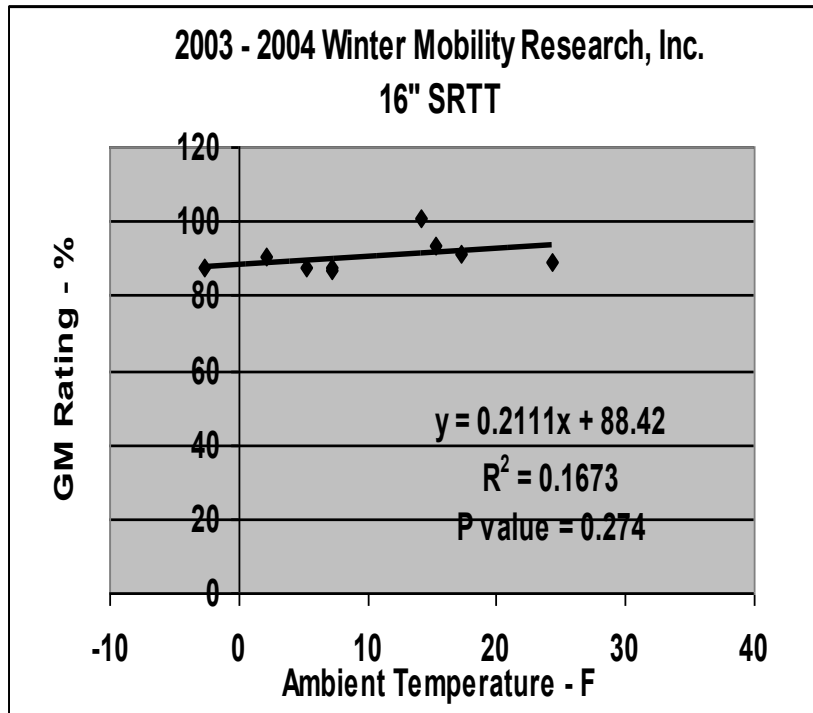
Highlights - P225/60R16 97S SRTT

- **New SRTT Standard Development - P225/60R16**
2002 – 2003 Winter Testing



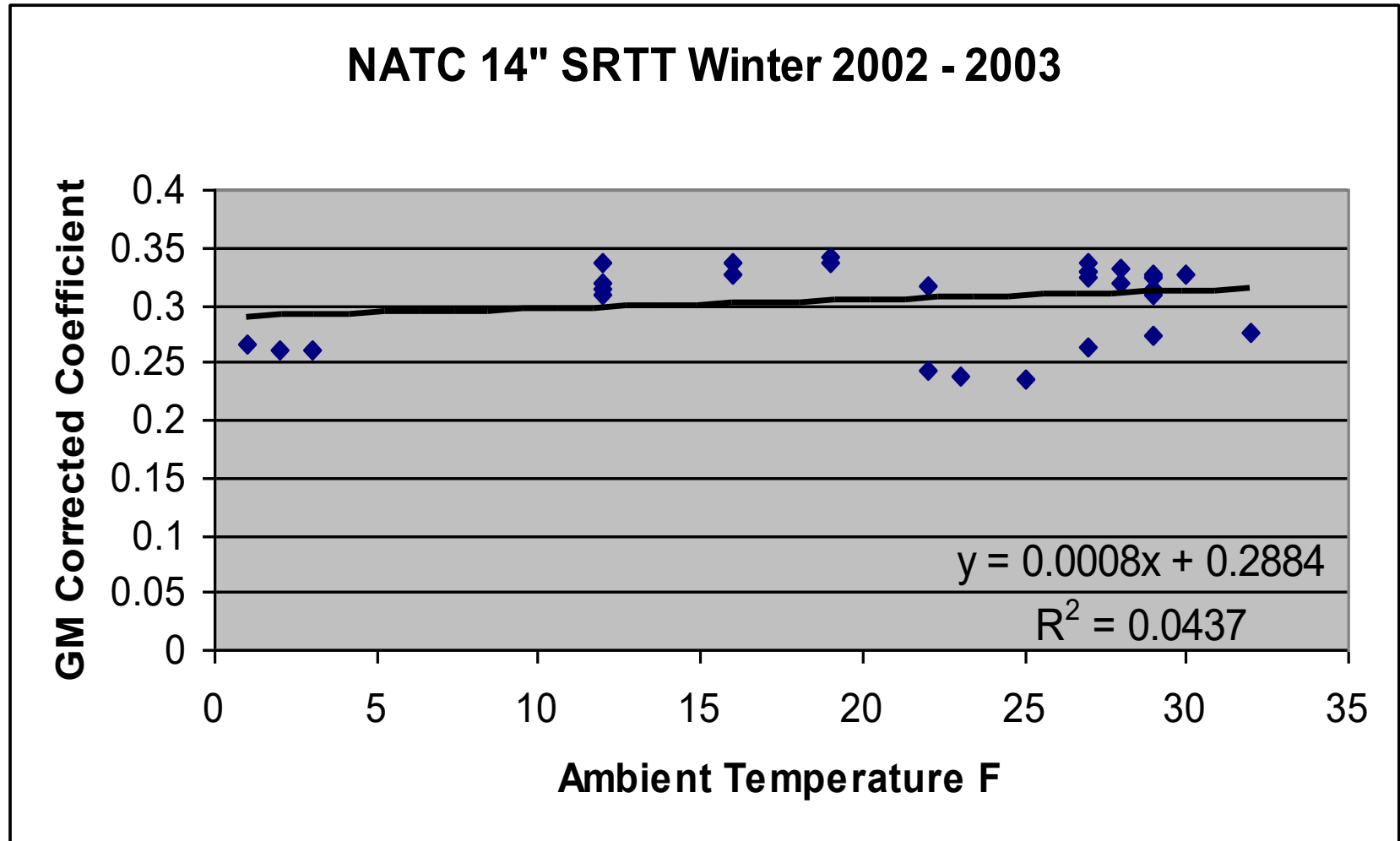
Highlights - P225/60R16 97S SRTT

- **New SRTT Standard Development - P225/60R16**
2003 – 2004 Winter testing



(P value of the regression output for temperature is $> .05$ = no relationship)

NATC 14" SRTT Winter 2002 - 2003



Highlights - P225/60R16 97S SRTT

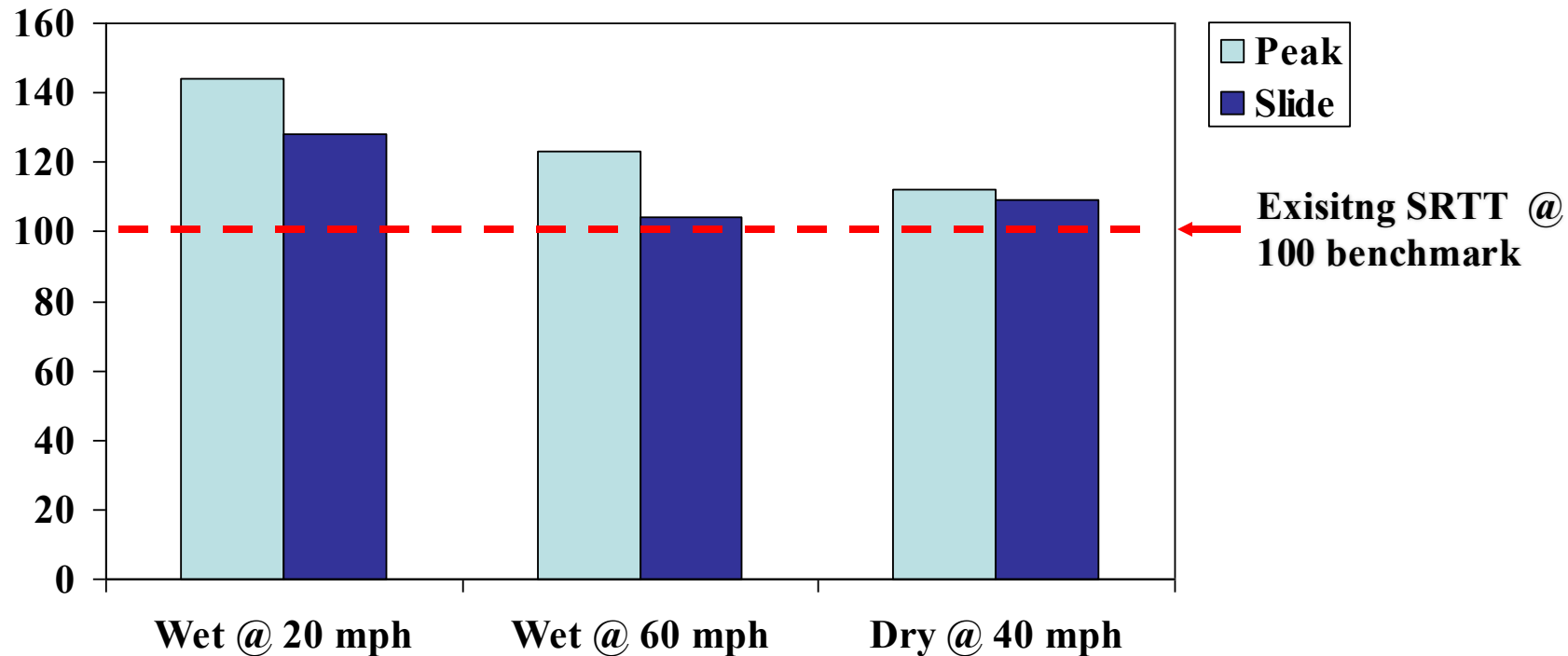
- Tire featuring a ventless tread area
- “Standard Reference Test Tire” marking
- Durometer hardness of tread to be updated
 - 59 ± 2 (tolerance to be validated)
- Stress at 300% elongation psi (MPa)
 - 705 psi (4.86 MPa)
- Tread design
 - Solid to void – 63% : 37%
 - Design pitches – 81
 - Footprint – 203 mm long x 177 mm wide
 - 7.99” long x 6.97” wide
 - At 625 kg, 1.8 bar

Highlights - P225/60R16 97S SRTT

<u>Dimensions</u>	<u>P225/60R16 97S</u>	<u>P195/75R14</u>
Outside Dia.	26.76 in.	25.51 in.
Section Width	9.09 in.	7.72 in.
Tread Radius	24.2 ± 2.0 in.	13.00 ± 2.0 in.
Tread Width	7.22 in.	5.40 in.
Min. Skid Depth	0.314 in.	0.365 in.
Rim Width	6.50J in.	5.50 in.
UTQG	540, A, B (Treadwear, Traction, Temperature)	N/A

Highlights - P225/60R16 97S SRTT

- Wet & Dry Traction – GM Peak Rating
- New SRTT Versus E1136-93 SRTT



- Snow Traction → 100% (Yellowstone)

Work - In Progress

- WTBD for New SRTT
 - SRMT braking data was to be collected
 - Round robin testing – wet & dry
 - June 2003 – 2004 (9 - 12 months @ supplier sites)
 - No ice traction data planned
 - Complete revisions to proposed new P225/60R16 SRTT Standard
 - Distinguishing new from E1136 SRTT
 - Target balloting in Fall 2004
 - 12 November 2003 draft burst e-mail
 - 6 comments received out of 57 F09.20 members

Work - In Progress

- WTBD for Current P195/75R14 SRTT
 - F-9 Proposed Revisions to E1136 Standard
 - E17 meeting Dec. 7 – 11, 2003
 - Moved and passed to transfer responsibility for E1136 SRTT from E17 to F9.
 - No change in standard designation or volume location will be made.
 - Work in ISO TC31 SC3 WG18
 - ISO standard proposal in wet grip testing using the 14” SRTT as the reference tire
 - Recent acknowledgement of ISO precedence re reference to an ASTM standard in an ISO standard

Discussion