

**Rubber Manufacturers Association
Technical Review of Tire Fuel Efficiency Consumer
Information Program Proposed Rule (“NPRM”)
74 Fed. Reg. 29,542 (June 22, 2009), RIN 2127-AK45
August 21, 2009**

I. Technical Comments on Fuel Efficiency Ratings

**Rolling Resistance Coefficient is Accepted by the Tire Engineering
Community as the most Appropriate Method of Characterizing Tire
Rolling Efficiency**

There are many tire mechanical properties that exhibit a load dependency. In order to be able to compare these inherent properties over a variety of tire sizes, engineers normalize them by dividing by the tire's load. This results in a set of coefficients that are used to characterize specific properties regardless of tire load or size. Examples of these coefficients are: Traction Coefficient, Cornering Coefficient, Rolling Resistance Coefficient, etc. Engineers generally recognize that the most accurate and convenient means of characterizing these tire properties is by means of their respective coefficients. In fact, NHTSA itself utilizes this approach in its proposed wet traction rating system in this NPRM, by placing requirements on the wet traction coefficients on asphalt and concrete. It is noteworthy that in its proposal for wet traction, the agency does not adopt the concept of Traction Force or how this force governs vehicle-stopping distance. Instead, for wet traction, the agency follows the accepted engineering norm for characterizing traction forces of tires of various sizes and loads by using traction coefficients. However, in the tire rolling resistance section of the NPRM the agency departs from these accepted normal practices and proposes not to use rolling resistance coefficient, but rather rolling resistance force as a measure of a tire's inherent rolling efficiency. This contradicts standard engineering practices that have existed within the tire industry for more than a half-century. NHTSA also ignores the experience and body of knowledge developed by the international tire industry and prestigious organizations such as ISO. It is odd that the agency on the one hand would adopt the newly developed ISO 28580 standard for measuring tire rolling resistance but then reject their use of tire Rolling Resistance Coefficient to characterize tire energy consumption. Even the NAS Special Report 286, which the agency cites extensively as providing the justification for improving tire rolling resistance, presents its extensive tire data in terms of Rolling Resistance Coefficients rather than Rolling Resistance Force. It should also be noted that the Rolling Resistance Coefficient, which is the international norm in the tire industry, is being proposed for use the ECE Tire Fuel Efficiency regulations and most likely will be considered and an international standard or GTR in the future.

The Consumer Purchasing Scenario Used by NHTSA to Support its Selection of RRF Over RRC is Implausible

On Page 29560 NHTSA buttresses its decision to use rolling resistance force using a consumer purchasing scenario that is extremely improbable. In this scenario, NHTSA suggests that a consumer typically goes to a tire store desiring to purchase replacement tires for multiple vehicles of different sizes. The Rolling Resistance Force in the consumer information system that NHTSA proposes would allow this consumer to relate the fuel savings between these tires of different sizes available for these different vehicles. NHTSA believes that being able to do this would result in an intuitive understanding of the rating system. However, NHTSA's scenario for consumer tire purchasing is highly implausible. It is the experience of tire retailers that this scenario would rarely if ever occur in the real world of tire sales. By far the more likely scenario is for a consumer to visit a tire store seeking to replace the worn out tires on his current vehicle. He would therefore be interested in comparing the rolling efficiency of tires suitable for his particular vehicle. In this case the tire load becomes immaterial because it does not change. Hence, the most direct comparison of the rolling efficiency of different brand tires he might consider purchasing for his vehicle is the Rolling Resistance Coefficient. In summary, in arguing the advantages of using RRF for tire fuel efficiency ratings, the agency adopts the most improbable consumer purchasing scenario and ignores the most typical scenario that new tire purchasers usually employ. It is interesting, that the normal scenario for consumer tire purchases is ultimately cited and relied on in the NPRM's discussion of how a consumer might use the proposed fuel economy calculator on Page 29576, where only replacement tires appropriate to a single specific vehicle are compared.

The Use of RRF as Opposed to RRC Could Lead to an Erroneous Rank Ordering of Tires with regard to Their Fuel Efficiency

The RMA has commissioned EVIRON International Corporation, of Arlington, Virginia, to conduct an analysis of potential sources of uncertainty, and their consequences, in the proposed fuel efficiency rating system. EVIRON has also examined the consequences of adopting RRF over RRC as a means of providing consumers with valid ratings of replacement tires for their particular vehicle. This report, 'Review of the Tire Fuel Efficiency rating System described in NHTSA's Notice of Proposed Rulemaking', August 19, 2009, is being provided as Appendix 6 of the RMA comments on the NPRM.

The Proposed RRF Range that Forms the Basis of the Fuel Economy Rating Does Not Reflect the Range of RRF Values in the US Tire Market or the ISO 28580 Test Procedure

In the NPRM, NHTSA selects five to 25 pounds force (lbf) as the range of RRF values representing the proposed 0 to 100 tire fuel economy rating scale. NHTSA indicates that it set the range at these levels because “the high end of the rolling resistance scale range should be set at close to the level of the current worst performing tires” and the low end should “allow sufficient room” to demonstrate improvements in rolling resistance. Unfortunately, the proposed range of five to 25 pounds force does not capture the current diversity of RRF values in the tire marketplace, much less allow for room for improvement. RMA has collected rolling resistance data on nearly 1,000 tire SKUs, which shows an RRF range of 5.17 to 31.77 lbf using the SAE J1269 single point test method. Using the proposed rating formula, these tires would be rated from -34 to 99 on the 0 to 100 scale. To further exacerbate this problem, NHTSA’s proposed rating scale is based on data collected using the SAE J1269 single point test method but proposes compliance with the rating program using the ISO 28580 test procedure, which causes the RRF range represented by the proposed rating scale to further misalign with potential compliance data. NHTSA estimates that rolling resistance values for the same tire are about 12 percent higher using the ISO 28580 test procedure than when using the SAE J1269 single point test procedure. Therefore, SAE J1269-based data must be adjusted to be comparable to ISO 28580 test data. NHTSA recognizes this in the NPRM, and estimates the difference between the two tests at 12 percent, although some industry studies estimate this difference at 18 percent. Using the 12 percent estimate, the RRF range observed in the RMA data becomes 5.79 to 35.58 lbf, yielding ratings of -53 to 96 on the proposed rating scale. NHTSA should reevaluate its proposed rating scale based on the RMA data and adjusting to the ISO 28580 test conditions to assure that the rating scale would allow all subject tires to be rated. These points are further illustrated in Figures 1-6 in this Appendix.

The Aggressive Phase in of the Proposed Rule is Not Consistent With the Substantial Effort Required to Establish a Standard Reference Laboratory by the Agency and Aligned Candidate Laboratories by Industry

In NHTSA’s desire to make consumer information on tire fuel efficiency available as soon as possible, the agency has adopted an aggressive phase in schedule. NHTSA proposes to require “that within 12 months of the issuance of a Final Rule, tire manufacturers must submit required data to NHTSA on all existing and replacement tires, and all replacement tires sold by the manufacturer transferred to tire retailers must be labeled.” Since NHTSA intends to require the use of the recently developed ISO 28580 standard for measuring rolling resistance coefficient, the tire industry must

have early access to an ISO certified Reference Testing Laboratory and Alignment Rolling Resistance Reference Tire (ARRRT), so that it can begin the lengthy process of certifying its own candidate laboratories and conducting rolling resistance tests of its tire lines. The ISO standard does not designate a specific test facility to be the standard Reference Testing Laboratory. Instead, it only defines the requirements that a standard Reference Testing Laboratory must meet. The selection of a standard Reference Testing Laboratory is left to the individual interested parties to determine. Since the development of a standard Reference Laboratory is a complex and lengthy process, and since NHTSA has not stated its proposals on how this laboratory should be developed, the RMA is concerned that the aggressive phase in schedule proposed in this NPRM cannot realistically be met.

NHTSA's Proposed Fuel Savings Calculator Results Are Inconsistent in the NPRM

On Page 29563, the NPRM discusses how rolling resistance force could be used in a fuel saving calculator to show consumers the gallons of fuel saving per year that could be achieved by using lower rolling resistance tires. This allows the agency to develop a "rule of thumb" that 10 points on the Rolling Resistance Rating scale is equivalent to 6 gal/year in fuel savings. However, this is in disagreement with the values of fuel saving shown in Figure 14 of Page 29576 wherein a 10-point spread is equated to 12 gal/year of fuel savings.

II. Technical Comments on Wet Traction Ratings

The Numerical Constants Used to Adjust Peak Friction Coefficients on Wet Concrete and Asphalt Have Not Been Substantiated in the NPRM

NHTSA proposes to require that manufacturers employ the methods described in CFR 575.104(f) to measure peak traction coefficients on wet concrete and asphalt. The methodology described in this section of the CFR is specifically for measuring slide traction coefficients. NHTSA proposes to use numerical constants of 0.75 and .60 to adjust the measured average peak coefficients for wet concrete and asphalt respectively. These numbers are not contained in CFR 575.104(f) and NHTSA presents no data or test results in the NPRM to establish their validity. The NPRM states that the test course surfaces are likely to be altered due to repaving and that these numbers may change. The agency requests comments on the use and possible change of these adjustment numbers. However, the industry is hindered in commenting on this issue since NHTSA has not provided the technical data or basis for generating these constants.

The Derivation of the Complex Rating Formula for Wet Traction and the Associated Numerical Constants Have Not Been Provided in the NPRM

NHTSA proposes to use a complex formula, which is empirically based, to derive overall wet traction ratings utilizing adjusted peak friction coefficients for wet asphalt and concrete. The derivation of this empirical formula is not given in the NPRM and the only allusion to its origin is in a footnote that describes it as an adaptation of the Fahrenheit to Centigrade conversion formula. The temperature conversion formula however only involves two variables, F and C temperatures. The NHTSA formula has three variables, i.e., the two peak coefficients and the rating value. The formula also contains empirical constants whose significance and origin are not revealed. The RMA finds it difficult to comment on this formula since NHTSA does not explain the details of how it was developed. The RMA requests that NHTSA provide a complete description of how this formula was derived and the basis for the numerical constants it contains, so that the industry can provide meaningful comment on its feasibility for wet traction regulation.

NHTSA's Rating Formula for Wet Traction Does Not Result in a One to One Correspondence Between the Rating and Measured Coefficients of Friction

A problematic feature of this rating formula is that there is not a one-to-one correspondence between a specific rating and values of the peak coefficients on wet asphalt and concrete. In fact, each rating number has associated with it an infinite number of pairs of coefficient values. This is shown on the contour plots in Figure 7, where the peak coefficient of friction on wet concrete is plotted against the peak coefficient on wet asphalt for constant values of the calculated rating using the NHTSA formula. As one moves along any particular contour line, various values for the peak coefficients can be found to satisfy the rating formula. This generates questions as to exactly how NHTSA plans to enforce the rating system. Will it be based on the rating or will it be based on measured pairs of coefficients? If it is to be based on rating, how will NHTSA reconcile the fact that multiple values of the traction coefficients produce the same rating?

NHTSA's Rating Formula for Wet Traction Imposes an Unjustified Penalty in the Rating for Tires That Do Not Have Equal Performance On Concrete and Asphalt

The NPRM states that the rating formula is designed to penalize a tire's wet traction rating if there is a difference between its peak coefficients on wet concrete and wet asphalt. The greater this difference the greater the penalty (Figure 7). NHTSA does not provide a safety-based rationale, grounded on crash experience, for assessing this penalty. Such data exists within the Agency's extensive crash databases, and should be used to substantiate the basis for this penalty. Moreover, NHTSA applies this

penalty uniformly even though data from a national survey of roadway surfaces by the FHWA (Federal Highway Administration, Highway Statistics 2006, Section V: Roadway Characteristics and Performance, Table HM-12) shows that only 8% of the road surfaces in the US are concrete while 92 % are asphalt. It is reasonable to assume that the distribution of crashes on the nation's highways, for concrete and asphalt, would have similar values. Consequently, NHTSA should justify its proposed penalty by demonstrating that there is a disparity in crash frequency between wet concrete and asphalt. In the absence of such data, the RMA recommends that this penalty be eliminated or significantly reduced, particularly since the peak coefficient of traction is generally higher on wet asphalt than wet concrete.

NHTSA's Values for Maximum Coefficient of Friction as Measured at the San Angelo Facility Do Not Agree With Industry Experience

NHTSA determines the values of the empirical constants in its rating formula based on estimates of the minimum and maximum peak coefficients of traction at its San Angelo Test Facility. The agency states that the additive range of these coefficients is from 0.7 to 2.3 for the two surfaces. NHTSA then proposes to further expand this range to 0.6 to 2.6 and to adjust the numerical constants in the rating formula so that 0.6 represents a 0 score and 2.6 represents a 100 score. NHTSA provides no wet traction test data in the NPRM to support the proposed upper and lower ranges it has proposed. RMA has made several requests for this data from the Agency, but thus far it has not been provided. These range limits have a profound effect on the tire rating scale and the Agency is requested to provide the data cited in the NPRM so that manufacturers can adequately evaluate and comment on them.

The RMA is Providing Data on More Than 650 Tires to Support a More Accurate Determination of the Range of Coefficients of Wet Friction

The RMA further questions the specific values of the minimum and maximum values of the coefficients of traction obtained at the San Angelo facility based on test data from member companies, as well as NHTSA compliance data that are available to the RMA, and data cited in the Phase 2 Test Report. An examination of data provided by the RMA members on over 650 tires (Figure 8) shows that the minimum and maximum values of coefficients of friction on wet asphalt are approximately 0.657 and 1.06 respectively for commercial passenger tires. The corresponding values for wet concrete are 0.522 and 0.899. Thus the additive range based on RMA test data is 1.179 to 1.959 (Ref. Attached Data Table). To provide additional range to accommodate technological improvements in wet traction, the RMA recommends an expanded range of 0.2 to 2.2, where 0.2 would represent a 0 on the rating scale and 2.2 would represent a rating of 100. These

new limits will provide a more accurate and reasonable display of traction ratings for currently available commercial passenger tires.

The NPRM Contains Substantial Ambiguity on NHTSA's Approach To Enforcement

There is ambiguity in the NPRM as to what NHTSA's enforcement approach will actually be. At times the NPRM implies that enforcement will be based on the overall ratings. For example, in the introductory section on compliance tolerances on Page 29580, the NPRM states: "For this reason, NHTSA is proposing to require the ratings reported by a manufacturer under this proposed rule must be less than or equal to the rating determined by the agency using the procedures specified in this rule." However, in the section dealing with wet traction compliance tolerances, the NPRM states: "For compliance purposes, the agency is proposing that the adjusted peak coefficient of friction for asphalt, and the adjusted peak coefficient of friction for concrete must individually be between +/- 0.06 of the respective peak coefficients of friction revealed from agency testing." RMA believes that these two requirements are conflicting and need to be reconciled. In summary, the RMA is finds it difficult to provide meaningful comment on these different and conflicting requirements.

Applying the Compliance Tolerance to Friction Coefficients Could Lead to Inexplicable Results in Enforcement Actions

If the intent of the NPRM is to base enforcement on the actual measured values of the friction coefficients, then the proposal will produce a perplexing result. This can be demonstrated by examining a case that is illustrated in Figure 9. This shows the situation where NHTSA has conducted a compliance test to measure the peak coefficients on wet asphalt and concrete. These two values together determine a point on a contour line that represents a certain level of traction rating on the 0-100 scale. The figure also shows the +/- .06 tolerance band around both values that NHTSA has proposed. However, the values measured by the manufacturer, and upon which he based his rating, could very well lie outside the tolerance box, but still be on the rating curve determined by NHTSA compliance testing. The result would be that NHTSA would making a finding of a non-compliance when both its rating and the manufacturer rating are the same. An even stranger situation would occur if the manufacturer measured values were slightly outside of the tolerance box but on a higher rating contour curve. This could result in non-compliance finding even when the manufacturer rating was higher than the NHTSA rating. It is recommended that NHTSA discard the approach of conducting enforcement on the actual coefficient measurements, and instead base compliance on the assigned traction grade as is currently done in the

UTQG regulations. RMA would further recommend that instead of assigning traction scores to the nearest whole number, e.g., 63, which implies a level of precision that is not warranted in real world tests, that the ratings be assigned to discrete bins. Two possible approaches suggested by the RMA for defining these categorical ratings or bins are illustrated in Figures 10 and 11. This is again in accordance with the approach used in the UTQG system.

The Technical Basis for the Compliance Tolerance for Wet Traction Needs to be Established

The NPRM states that the “proposed tolerance band of +/- 0.06 is based on agency test data wherein peak coefficients of friction for asphalt and concrete were recorded, and the average and standard deviations calculated for each.” The RMA finds it difficult to evaluate or comment on the appropriateness of this tolerance since this data was not presented in the NPRM or Phase 2 Test Report.

The Agency’s Proposal for an Alternate Rating Formula is Ad Hoc and Not Science-Based

The agency requested comment on an alternate rating method it has considered. This method is based on measuring not only peak but also sliding coefficients of friction on both wet asphalt and concrete for candidate and controls tires. These values are then processed through a proposed weighting and averaging computation to arrive at a final rating on a 0 to 100 scale. The RMA finds it difficult to comment on this method because it appears to be totally ad hoc without any basis in science. It is no doubt possible to devise any number of schemes to provide a 0 to 100 rating for wet traction, but in the view of the RMA, unless there is some underlying scientific principle to support them, it is not a productive exercise.

The Rating Formula Proposed by NHTSA Will Mislead Consumers By Assigning Poor or Mediocre Ratings to Tires with Good or Exceptional Wet Traction Performance

The proposed rating formula will have an unwarranted and negative effect on the public’s perception of the traction performance of current passenger car tires. The formula contains an empirical numerical constant of 30. This constant is apparently arrived at by assuming that tires with a maximum additive coefficient for concrete and asphalt of 2.6 will be assigned a score of 100 in the formula. The effect of this assumption on the rating for current passenger car tires is extremely negative in that its effect is to assign poor or mediocre ratings to tires with recognized superior wet traction performance as was shown previously in (Figure 8). For example, a currently marketed passenger tire with a peak coefficient on asphalt of 1.0 and a peak coefficient on concrete of 0.80, that is rated as AA on

the existing UTQG system, is awarded a rating of just 59 on the proposed rating scale. This will have a very misleading effect on the public's perception of wet grip performance on some of the very best performing tires in the marketplace today. RMA recommends that the rating formula be revised to make it more equitable in its characterization of the wet traction performance of current production tires. One, means of accomplishing this would be to replace the numerical constant 30 with a value of 10. With this change the above-mentioned tire would be assigned a more reasonable and accurate rating of 80 (Figure 12).

The Compliance Requirements for Wet Traction Should be Based on the Traction Rating and Not on Individually Measured Coefficients of Friction

The RMA recommends that NHTSA reconsider its compliance methodology, which, as we understand it, is based on the measured values of the friction coefficients rather than the actual rating itself. Not only does the current proposal suffer from the paradox cited earlier, wherein a NHTSA finding of non-compliance might be for a tire that both NHTSA and the manufacturer rated the same, or that the manufacturer rated even higher, but it would result in the public disclosure of highly sensitive and proprietary data that is crucial for industry competitiveness. RMA recommends that only the summary ratings for wet traction be required to be submitted to the agency, as this will accomplish the fundamental objectives of EISA, without causing undue competitive harm to the industry.

III. Technical Comments on Tread Wear Ratings

The Upper Bound of 100 for Treadwear Grades May be Exceeded During the Effective Lifetime of This Regulation Due to Tire Technology Improvements

The upper bound of 100 in the proposed treadwear scale is likely will be exceeded in the future due to continued advances in tire design, construction, and materials technology. RMA suggests that NHTSA examine the growth of the top treadwear ratings over the past 5 years as a means of projecting a new upper bound for the ratings for future years.

IV. Technical Comments on NHTSA's Enforcement Approach

Imprecise Use of Technical Terms Results in Ambiguity in the NPRM as to What Constitutes Compliance

There is confusion and ambiguity in the NPRM as to the exact procedures that will be used for compliance determination and how tolerances will be applied in this process. The RMA believes that much of this confusion results from imprecise use of technical terms to describe the compliance approach in the proposal. For example it is not always clear if the NPRM language is referring to a measured test value that is inserted into a NHTSA formula to determine a rating or to the actual rating itself. An example of this is the description of the compliance tolerances in Section XI, Page 29580. The symbol RFE is used throughout the NPRM to denote the actual Fuel Efficiency Rating that will be conveyed to the consumer. The symbol RRF is used to indicate the Rolling Resistance Force measured in a test laboratory. The RRF measured value is converted into a RFE rating by means of a formula proposed in the NPRM. In addition NHTSA proposes that tolerances be applied to account for tire and test variability. Under subsection: **A. Fuel efficiency**, Page 29580; the NPRM states, "For the fuel efficiency rating, the agency is proposing a tolerance for compliance purposes of plus and minus (+/-) 5.5 percent of the rating set by the manufacturer. This would seem to indicate that this tolerance would be applied to the Fuel Efficiency Rating or RFE. However, two paragraphs below this statement, the NPRM states, "So for compliance purposes the RRF rating established by the manufacturer must be between +/- 5.5 percent of the RRF revealed from agency testing." This statement seems to indicate that the tolerance will be applied to the measured RRF value that is used to calculate the Fuel Efficiency Rating RFE. Moreover, it is unclear if NHTSA's intent is to use this tolerance either in its Fuel Efficiency Rating (RFE) determination, or its Measured Rolling Resistance Force (RRF) for compliance determination. Or does the agency intend that a Manufacturer be allowed to apply this tolerance to either the RFE rating or measured RRF value? This ambiguity makes it extremely difficult for the industry to understand the precise intent of the NPRM. As a result the RMA is faced with the dilemma of commenting on multiple interpretations of sections within the same proposed rule.

Conflicting Requirements in the NPRM Relating to Ratings and Tolerances Make NHTSA's Intentions Unclear on How Manufacturers Are to Achieve Compliance

On Page 29580 of the NPRM, the agency states "... NHTSA is proposing to require the ratings reported by a manufacturer under the proposed rule must be less than or equal to the rating determined by the agency using the procedures

specified in this rule.” This presumably applies to Fuel Efficiency, Safety, and Durability ratings. However, on Pages 29580-29581, the NPRM defines the various tolerance levels that it will apply to its test results that are used as input to the rating formulae. These tolerances on test values translate into tolerances on the computed ratings. To achieve compliance a manufacturer’s computed rating must lie within these tolerance limits. This latter requirement and the former requirement appear to be in conflict with one another. If industry ratings must be below NHTSA ratings then a manufacturer would be precluded from using the upper or plus portion of the tolerance band. If the industry ratings have to lie within the tolerance band of NHTSA ratings then a manufacturer could be found in non-compliance if his rating were in the upper or plus part of the tolerance band. For example, if NHTSA conducted a Fuel Efficiency test on a certain tire and measured a RRF value of 10 lbs, it would assign a Fuel Efficiency rating of 75 to this tire in accordance with the rating formula specified on Page 29563 of the NPRM (Figure 13). For compliance purposes a tolerance of 5.5% would be allowed around the test value of 10 lbs. The permissible measured RRF range for the manufacturer then would be from 9.45 lbs to 10.55 lbs according to the tolerance allowance. This RRF range would translate into a rating range of from 71 to 79. If a manufacturer’s Fuel Efficiency rating was within this tolerance limit, but greater than 75 he would still be in non-compliance according the requirement quoted above, because it is not “less than or equal the rating determined by the agency.” The same problem exists with other ratings.

Figure 1 – Adjusted Distribution for RRF From SAE J1269 to ISO 28580

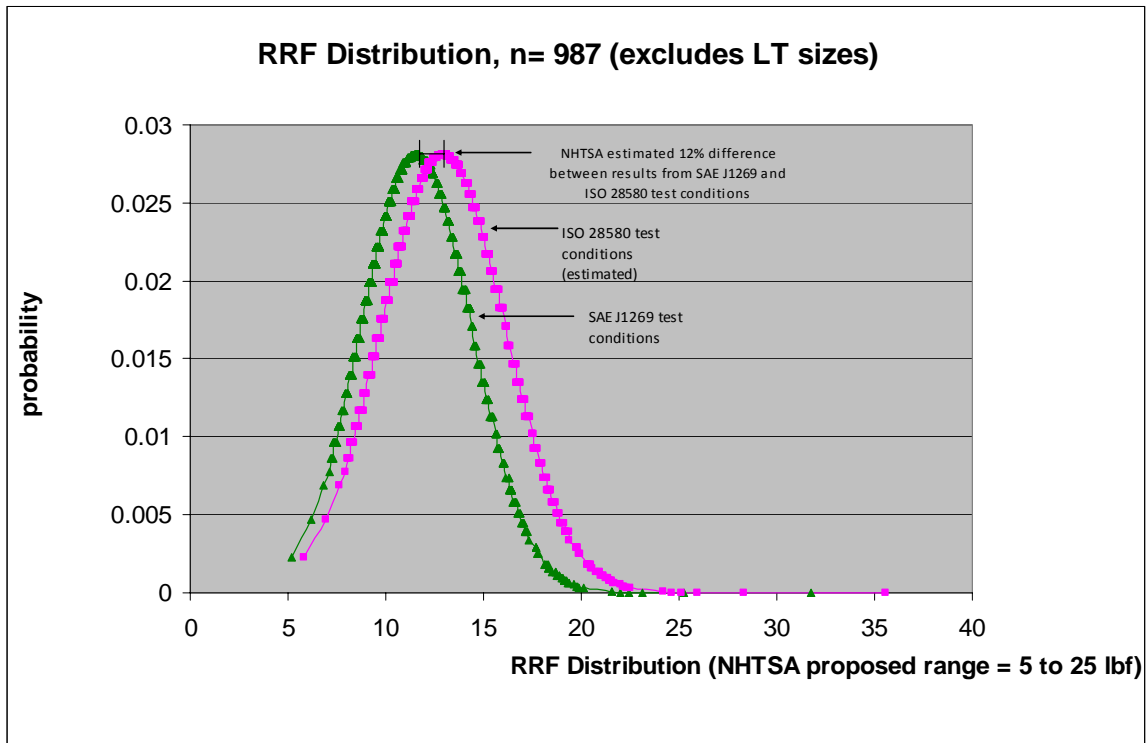


Figure 2 – Adjusted Distribution for R_{FE} from SAE J1269 to ISO 28580

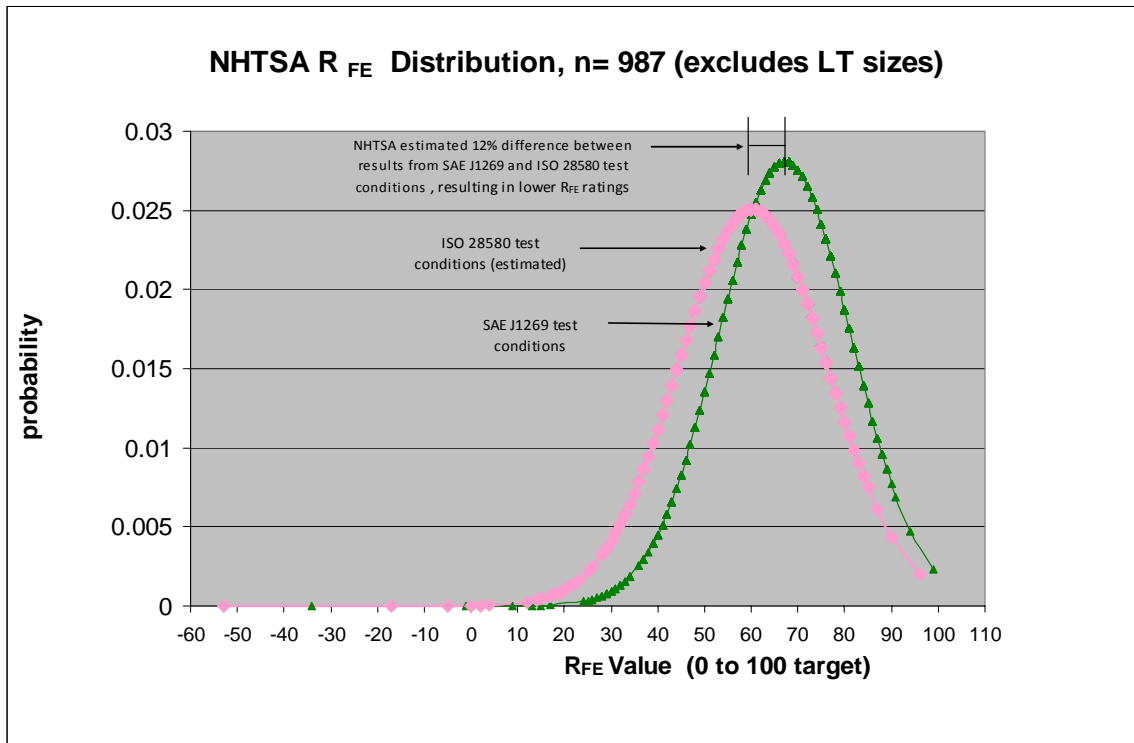


Figure 3 – RRF Data Measured Using SAE J1269 Test Method

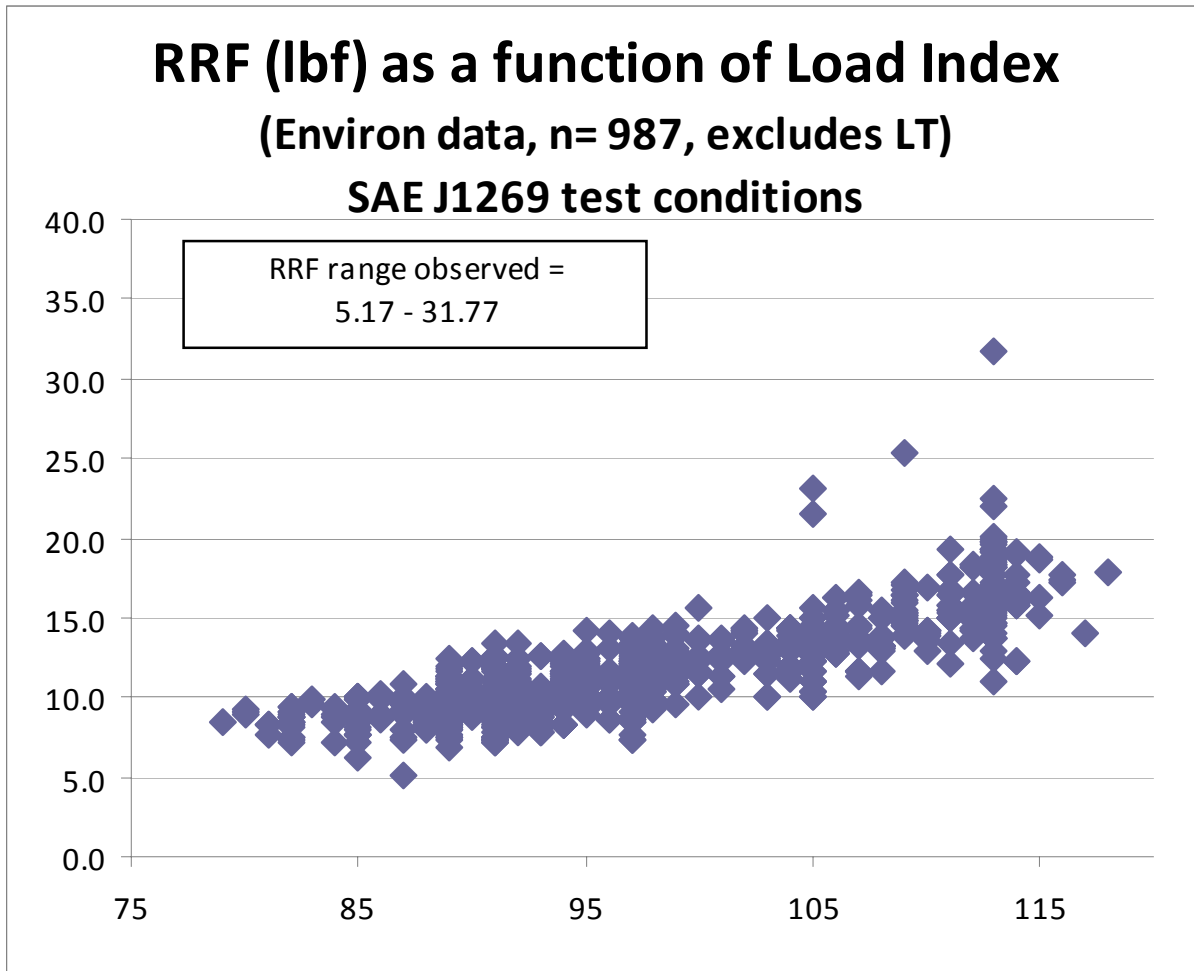


Figure 4 – RRF Data Adjusted To ISO 28580 Test Method

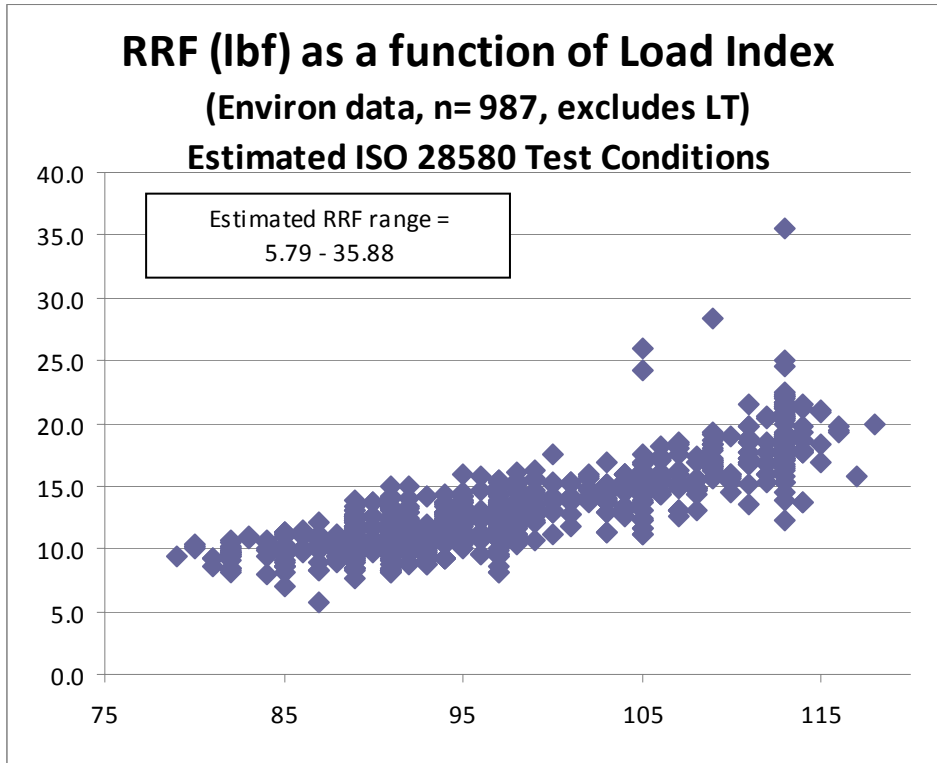


Figure 5 – R_{FE} Data Measured Using SAE J1269 Test Method

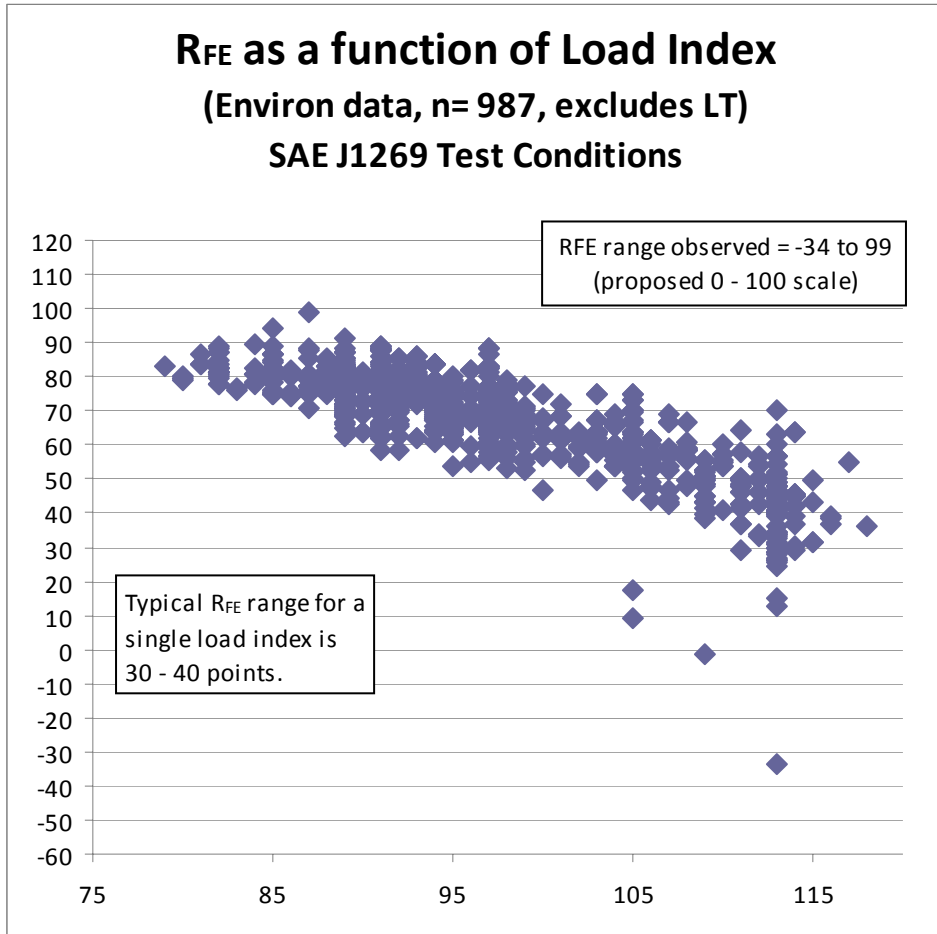


Figure 6 – R_{FE} Data Adjusted To ISO 28580 Test Method

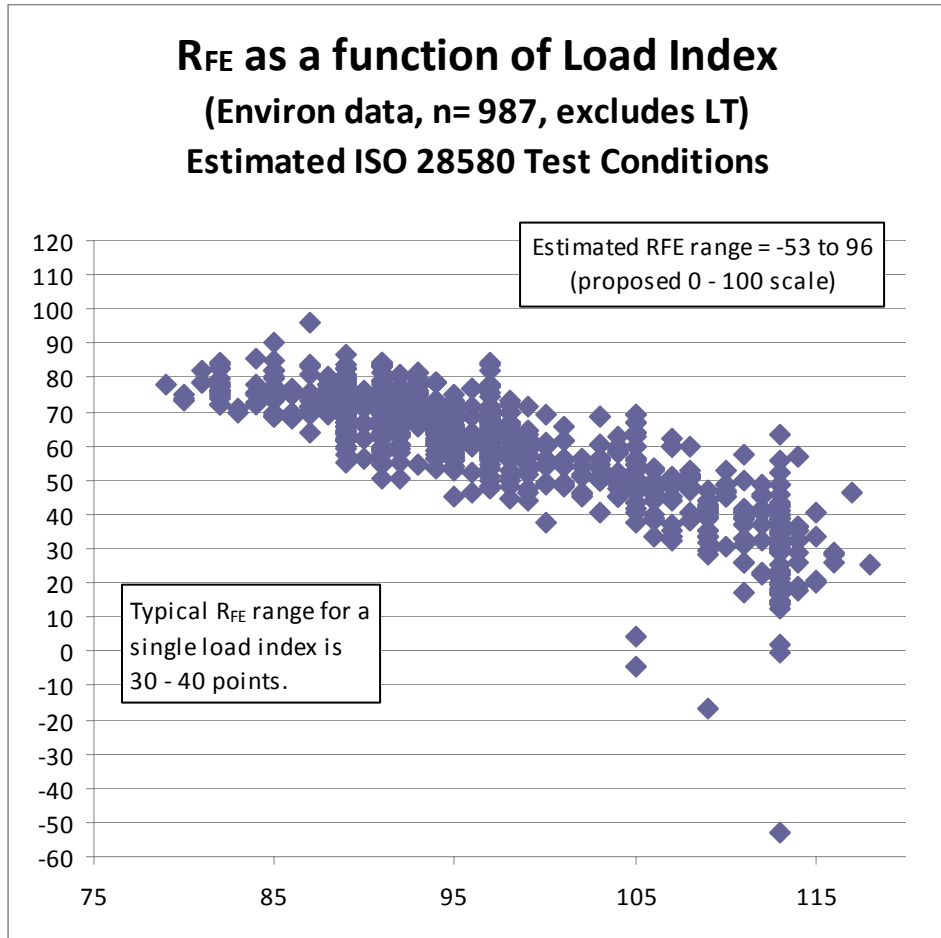


Figure 7 – NHTSA Wet Traction Rating Formula Penalizes Differences in Wet Traction on Concrete and Asphalt Pavements

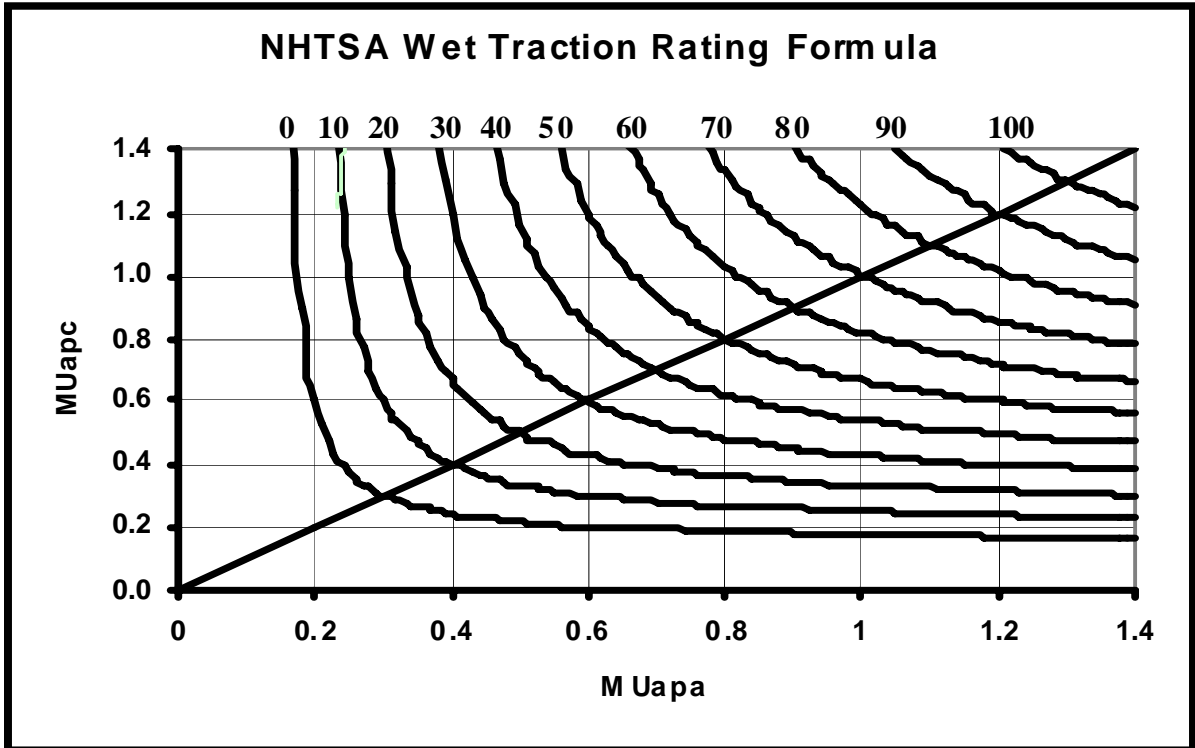


Figure 8 – RMA Wet Traction Data on Concrete and Pavements for 655 Current Production Tires

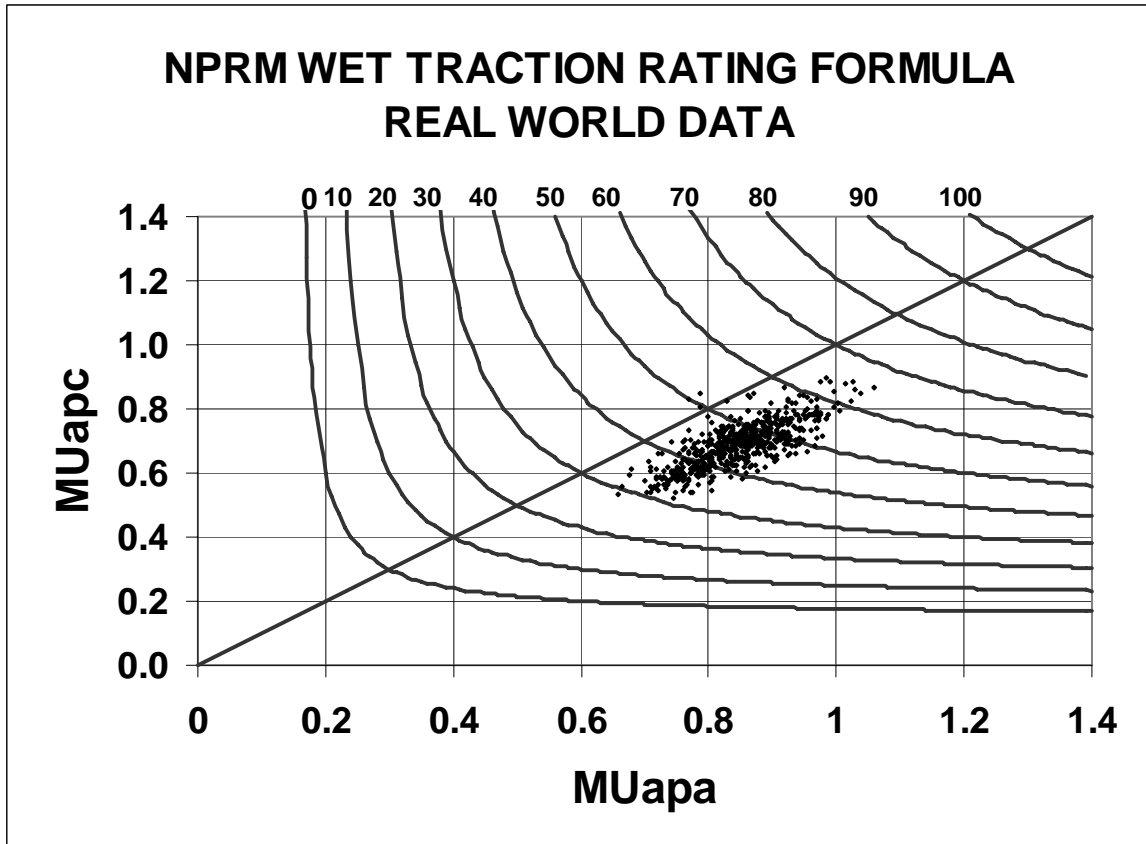


Figure 9 – Anomalies in Applying Wet Traction Tolerances

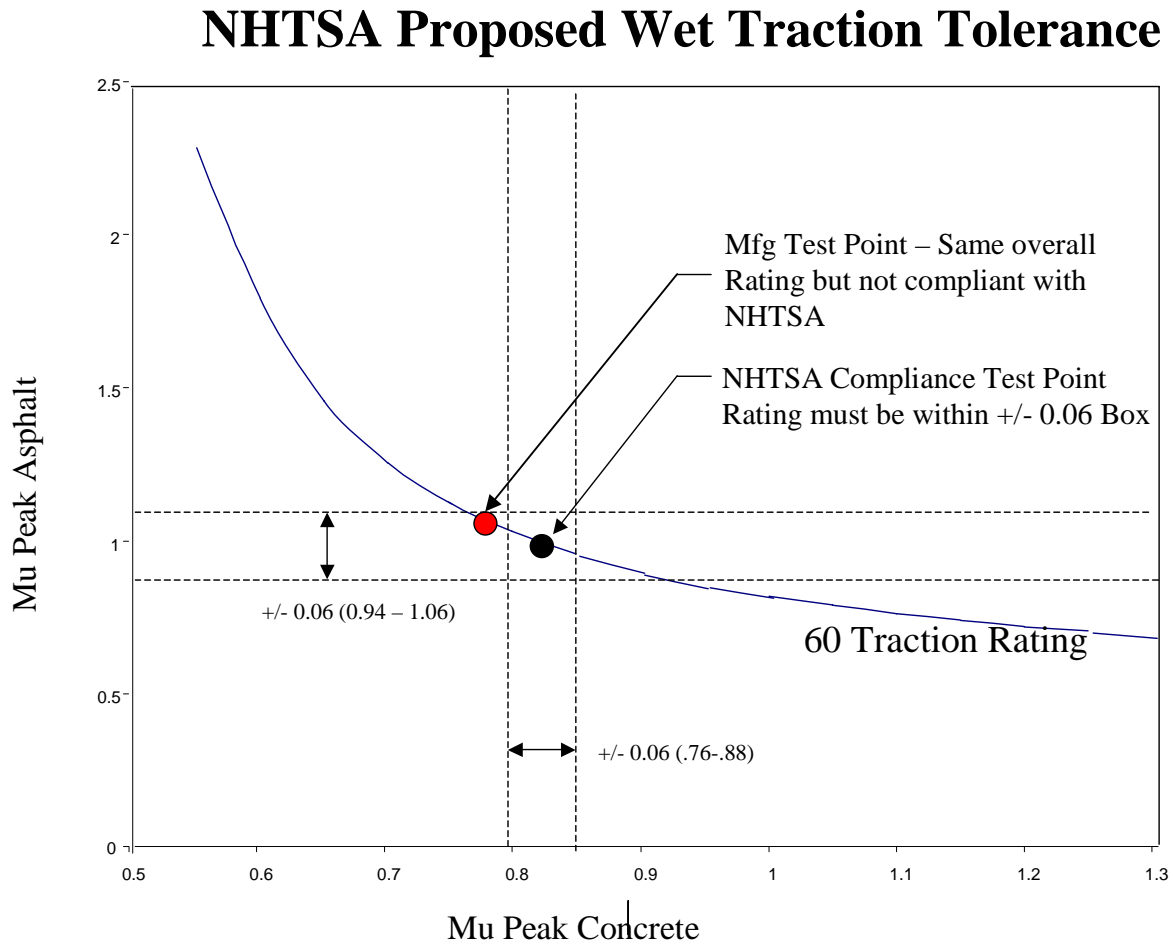


Figure 10 – Providing Wet Traction Ratings in Discreet Bins Involves Less Ambiguity Than NHTSA’s Continuous Rating Formula

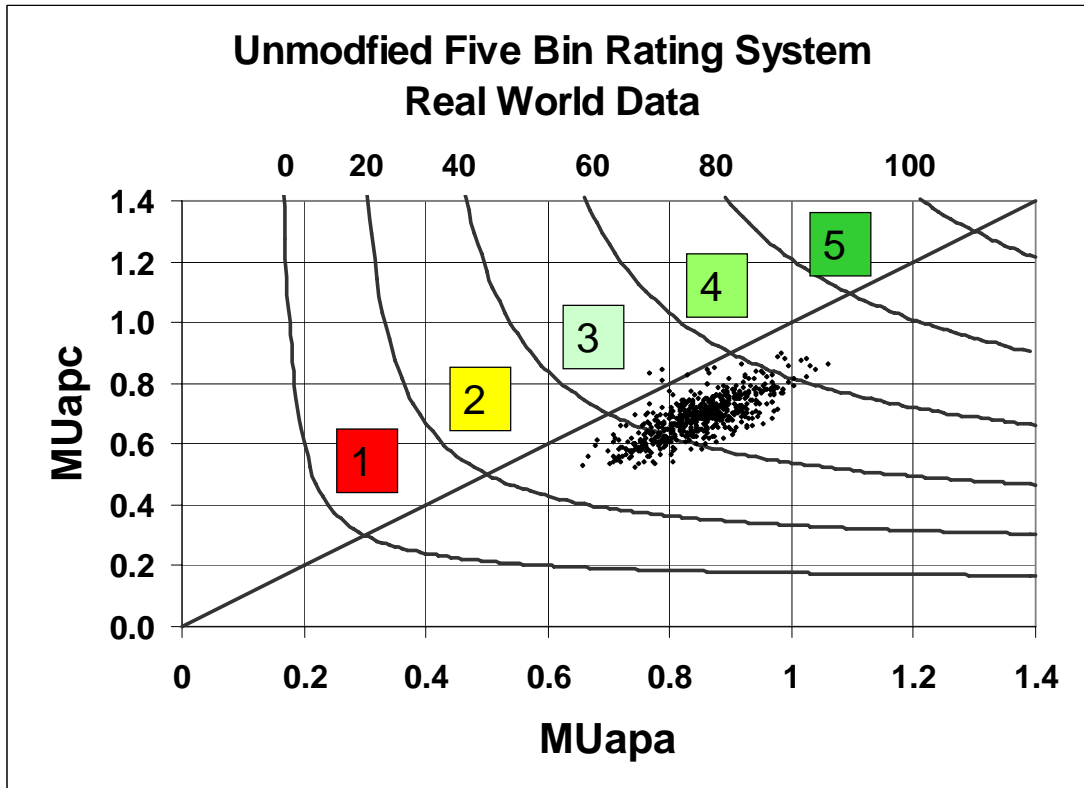


Figure 11 – An Alternative Categorical or Bin System for Rating Tire Wet Traction Performance

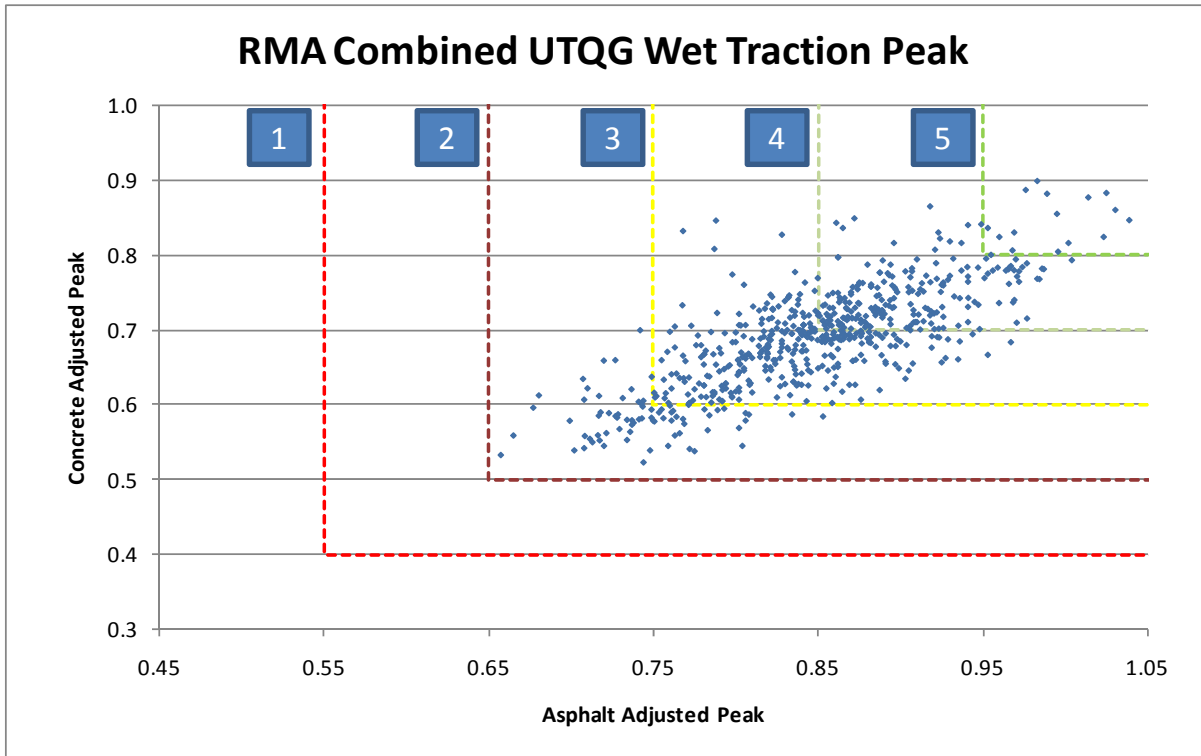


Figure 12 – Distribution of Wet Traction Ratings with Modified NHTSA Rating Formula

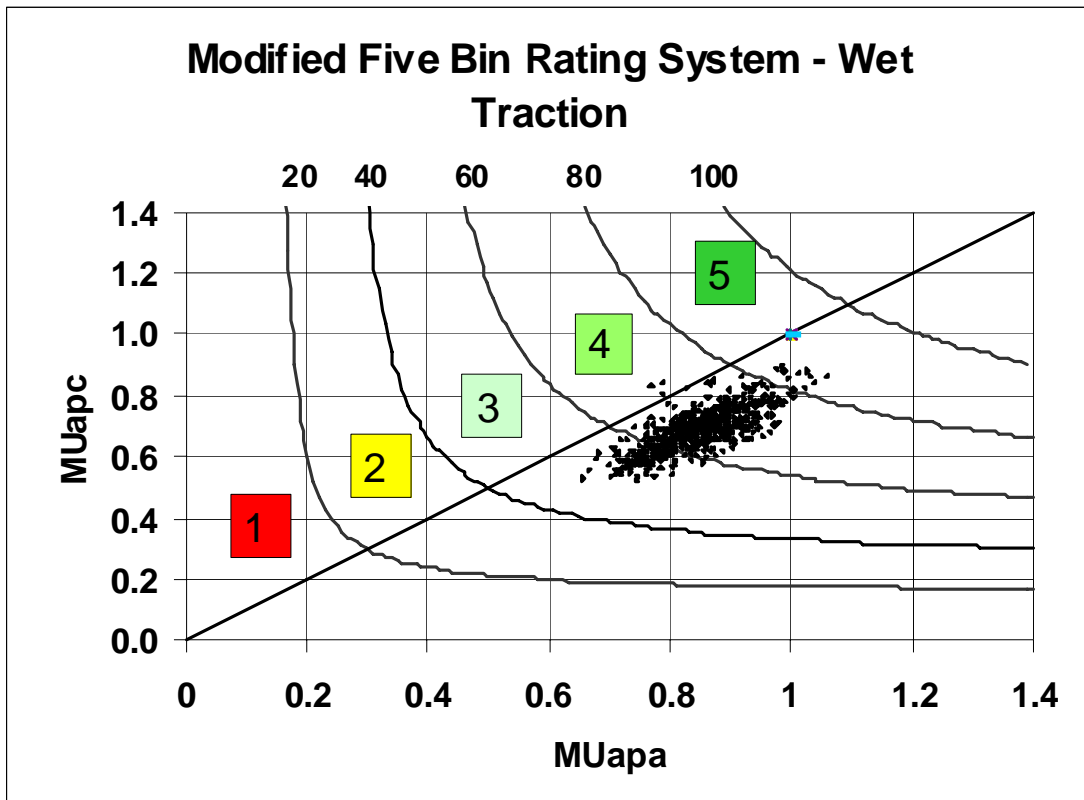
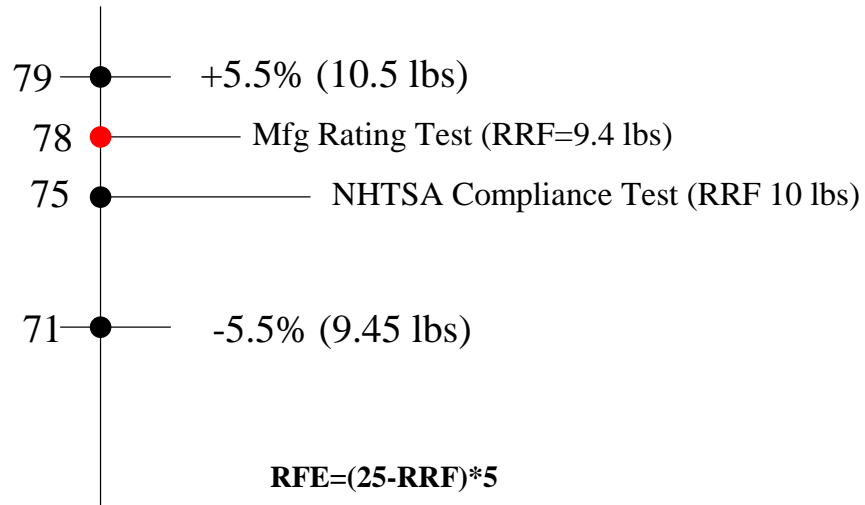


Figure 13 – Conflicting Requirements in NHTSA’s Enforcement Approach

NHTSA Proposed Rolling Resistance Tolerance



This is a non-compliance by NHTSA’s definition even though the manufacturer Rating is higher than the NHTSA compliance rating and both are within the tolerance band allowed by NHTSA. On Page 29580 NPRM NHTSA says that the Mfg Rating must be less than or equal to that determined by the agency.

Size	Date	Candidate Asphalt		Candidate Concrete		SRTT Asphalt		SRTT Concrete		Asphalt Adjusted Slide	Concrete Adjusted Slide	UTQG Traction Grade	Asphalt Adjusted Peak	Concrete Adjusted Peak	New Proposed Grade
		Avq. Slide	Avq. Peak	Avq. Slide	Avq. Peak	Avq. Slide	Avq. Peak	Avq. Slide	Avq. Peak						
185/65R15 T	Sept. 25-28, 2008	0.520	0.879	0.416	0.690	0.496	0.760	0.398	0.664	0.524	0.368	A	0.869	0.626	43
185/65R15 T	Sept. 25-28, 2008	0.517	0.854	0.420	0.689	0.496	0.760	0.398	0.664	0.521	0.372	A	0.844	0.625	42
185/65R15 T	Sept. 25-28, 2008	0.523	0.894	0.430	0.779	0.521	0.800	0.418	0.734	0.502	0.362	A	0.844	0.646	43
185/65R15 T	Sept. 25-28, 2008	0.527	0.903	0.432	0.717	0.521	0.800	0.418	0.734	0.506	0.364	A	0.853	0.584	39
185/65R15 T	Sept. 25-28, 2008	0.542	0.925	0.433	0.730	0.508	0.803	0.407	0.704	0.534	0.376	A	0.873	0.626	43
185/65R15 T	Sept. 25-28, 2008	0.548	0.889	0.436	0.744	0.508	0.803	0.407	0.704	0.540	0.379	A	0.837	0.640	43
185/65R15 T	Sept. 25-28, 2008	0.549	0.917	0.431	0.826	0.512	0.791	0.418	0.713	0.537	0.363	A	0.876	0.713	49
185/65R15 T	Sept. 25-28, 2008	0.544	0.897	0.440	0.758	0.512	0.791	0.418	0.713	0.532	0.372	A	0.856	0.645	44
185/65R15 T	Sept. 25-28, 2008	0.510	0.872	0.433	0.705	0.501	0.763	0.406	0.678	0.509	0.377	A	0.860	0.628	43
185/65R15 T	Sept. 25-28, 2008	0.514	0.871	0.431	0.679	0.501	0.763	0.406	0.678	0.513	0.375	A	0.859	0.602	41
215/70R16	Jan. 20 - Feb 6, 2008	0.559	0.927	0.403	0.751	0.506	0.834	0.385	0.698	0.553	0.367	A	0.844	0.653	44
215/70R16	Jan. 20 - Feb 6, 2008	0.570	0.905	0.389	0.747	0.506	0.834	0.385	0.698	0.564	0.354	A	0.821	0.649	43
245/60R18	Jan. 20 - Feb 6, 2008	0.567	0.906	0.384	0.743	0.500	0.815	0.375	0.672	0.567	0.359	A	0.841	0.671	45
245/60R18	Jan. 20 - Feb 6, 2008	0.570	0.884	0.383	0.734	0.500	0.815	0.375	0.672	0.570	0.358	A	0.819	0.661	43
245/65R17	Jan. 20 - Feb 6, 2008	0.554	0.831	0.366	0.706	0.510	0.904	0.381	0.711	0.544	0.335	B	0.677	0.595	33
245/65R17	Jan. 20 - Feb 6, 2008	0.553	0.835	0.370	0.722	0.510	0.904	0.381	0.711	0.543	0.339	B	0.681	0.612	34
275/55R20	Jan. 20 - Feb 6, 2008	0.555	0.845	0.416	0.744	0.501	0.846	0.385	0.707	0.554	0.381	AA	0.749	0.637	39
275/55R20	Jan. 20 - Feb 6, 2008	0.568	0.867	0.413	0.743	0.501	0.846	0.385	0.707	0.568	0.377	A	0.772	0.636	40
205/55R15	Sept. 28, 2007	0.635	0.964	0.397	0.826	0.555	0.835	0.364	0.723	0.580	0.383	AA	0.879	0.703	48
205/50R16	Sept. 28, 2007	0.628	1.014	0.400	0.890	0.555	0.835	0.364	0.723	0.574	0.386	AA	0.929	0.767	54
185/70R13	Sept. 28, 2007	0.557	1.026	0.362	0.907	0.555	0.835	0.364	0.723	0.502	0.348	B	0.941	0.784	56
P215/60R14	July 12,2007	0.519	0.823	0.376	0.699	0.508	0.837	0.360	0.680	0.511	0.367	A	0.737	0.620	37
P205/70R14	Dec. 21, 2007	0.538	0.923	0.387	0.754	0.506	0.782	0.380	0.697	0.532	0.357	A	0.891	0.657	46
P205/70R14	Dec. 21, 2007	0.550	0.866	0.386	0.683	0.506	0.782	0.380	0.697	0.543	0.356	A	0.834	0.586	39
P195/65R15	Dec. 21, 2007	0.560	0.954	0.392	0.787	0.506	0.782	0.380	0.697	0.554	0.362	A	0.922	0.690	49
P235/75R15	March 5, 2008	0.508	0.749	0.355	0.657	0.492	0.791	0.375	0.700	0.516	0.330	B	0.708	0.557	32
245/65R17	Feb. 19-22, 2008	0.567	0.864	0.401	0.737	0.475	0.846	0.375	0.702	0.591	0.376	A	0.768	0.635	40
245/65R17	Feb. 19-22, 2008	0.565	0.879	0.391	0.740	0.475	0.846	0.375	0.702	0.590	0.366	A	0.783	0.638	40
245/60R18	Feb. 19-22, 2008	0.553	0.879	0.385	0.744	0.463	0.843	0.372	0.677	0.590	0.363	A	0.786	0.667	42
245/60R18	Feb. 19-22, 2008	0.555	0.884	0.384	0.745	0.463	0.843	0.372	0.677	0.592	0.362	A	0.791	0.668	42
235/65R18	Feb. 19-22, 2008	0.532	0.832	0.392	0.741	0.460	0.823	0.371	0.671	0.572	0.372	A	0.759	0.670	41
235/65R18	Feb. 19-22, 2008	0.541	0.843	0.390	0.729	0.460	0.823	0.371	0.671	0.581	0.369	A	0.770	0.658	41
265/70R17	Feb. 19-22, 2008	0.539	0.817	0.415	0.733	0.460	0.860	0.378	0.699	0.579	0.388	AA	0.707	0.634	37
265/70R17	Feb. 19-22, 2008	0.538	0.820	0.399	0.721	0.460	0.860	0.378	0.699	0.578	0.371	A	0.710	0.621	36
225/60R16	June 30, 2008	0.529	0.826	0.409	0.673	0.490	0.790	0.392	0.662	0.539	0.367	A	0.786	0.611	39
225/60R16	June 30, 2008	0.526	0.864	0.406	0.721	0.490	0.790	0.392	0.662	0.536	0.364	A	0.824	0.659	43
205/65R15	June 30, 2008	0.541	0.884	0.412	0.778	0.491	0.839	0.387	0.728	0.550	0.375	A	0.796	0.651	42
205/65R15	June 30, 2008	0.546	0.880	0.403	0.752	0.491	0.839	0.387	0.728	0.555	0.366	A	0.792	0.625	40
P245/45R18	10/27/08	0.539	0.916	0.423	0.853	0.507	0.821	0.380	0.745	0.536	0.397	AA	0.845	0.708	47
P245/45R18	10/27/08	0.528	0.921	0.423	0.865	0.498	0.776	0.372	0.706	0.526	0.397	AA	0.895	0.759	52
P245/45R18	10/27/08	0.502	0.891	0.413	0.824	0.478	0.791	0.371	0.705	0.525	0.393	AA	0.850	0.719	48
P245/45R18	10/27/08	0.503	0.897	0.417	0.863	0.476	0.776	0.370	0.706	0.525	0.396	AA	0.871	0.757	51
225/45ZR17	1/20/09	0.544	0.926	0.450	0.951	0.456	0.755	0.381	0.744	0.589	0.420	AA	0.921	0.807	56
225/45ZR17	1/21/09	0.499	0.905	0.447	0.871	0.429	0.744	0.380	0.751	0.568	0.422	AA	0.911	0.720	50
225/45ZR17	1/20/09	0.523	0.917	0.433	0.988	0.455	0.749	0.380	0.723	0.567	0.403	AA	0.918	0.865	59
225/45ZR17	1/21/09	0.507	0.927	0.445	0.899	0.433	0.747	0.371	0.727	0.577	0.419	AA	0.930	0.772	54
P295/45ZR18	6/9/09	0.551	0.921	0.414	0.860	0.528	0.817	0.363	0.771	0.521	0.399	AA	0.854	0.689	46
P295/45ZR18	6/9/09	0.552	0.928	0.414	0.905	0.530	0.782	0.367	0.689	0.523	0.399	AA	0.896	0.816	55
P295/45ZR18	6/9/09	0.584	0.920	0.410	0.858	0.522	0.790	0.359	0.671	0.562	0.400	AA	0.880	0.787	53
P295/45ZR18	6/9/09	0.566	0.909	0.407	0.829	0.521	0.769	0.360	0.665	0.544	0.398	AA	0.890	0.764	52
P235/60R18	7/28/08	0.591	0.861	0.428	0.795	0.513	0.783	0.378	0.714	0.576	0.400	A	0.828	0.681	45
P235/60R18	7/29/08	0.599	0.887	0.440	0.806	0.520	0.773	0.362	0.699	0.582	0.427	A	0.864	0.707	48

P235/60R18	7/30/08	0.597	0.895	0.441	0.822	0.514	0.787	0.357	0.741	0.587	0.435	A	0.858	0.681	46
P235/60R18	7/28/08	0.604	0.904	0.432	0.831	0.516	0.760	0.378	0.644	0.589	0.404	A	0.894	0.787	54
P235/60R18	7/29/08	0.609	0.886	0.439	0.783	0.515	0.774	0.364	0.709	0.592	0.426	A	0.862	0.674	46
P235/60R18	7/30/08	0.594	0.900	0.434	0.817	0.507	0.771	0.356	0.699	0.584	0.428	A	0.879	0.718	49
175/65R15	10/8/08	0.524	0.881	0.419	0.755	0.502	0.755	0.383	0.689	0.521	0.386	A	0.876	0.666	46
175/65R15	10/8/08	0.537	0.863	0.420	0.781	0.504	0.759	0.383	0.675	0.534	0.387	A	0.854	0.706	47
255/45R20	8/8/08	0.517	0.864	0.415	0.815	0.492	0.756	0.361	0.729	0.527	0.410	A	0.858	0.686	46
255/45R20	8/8/08	0.521	0.895	0.409	0.807	0.489	0.751	0.349	0.729	0.530	0.404	A	0.894	0.678	47
245/70R16	7/31/08	0.506	0.808	0.388	0.728	0.510	0.768	0.367	0.684	0.498	0.370	A	0.790	0.644	41
245/70R16	7/31/08	0.513	0.815	0.403	0.728	0.504	0.771	0.369	0.707	0.506	0.385	A	0.794	0.621	40
P265/70R17	5/19/09	0.493	0.860	0.385	0.839	0.521	0.776	0.355	0.713	0.471	0.375	A	0.834	0.726	48
P265/70R17	5/29/09	0.515	0.796	0.386	0.721	0.535	0.818	0.369	0.739	0.482	0.367	A	0.728	0.582	35
P265/70R17	5/19/09	0.494	0.823	0.389	0.767	0.523	0.767	0.366	0.706	0.472	0.379	A	0.806	0.661	43
P265/70R17	5/29/09	0.523	0.842	0.394	0.766	0.532	0.790	0.368	0.760	0.490	0.375	A	0.802	0.606	39
P265/70R17	5/29/09	0.527	0.820	0.386	0.755	0.524	0.765	0.356	0.710	0.505	0.379	A	0.805	0.645	42
P265/70R17	5/29/09	0.524	0.822	0.388	0.789	0.519	0.722	0.357	0.667	0.502	0.381	A	0.850	0.722	48
P235/60R18	1/7/09	0.529	0.758	0.403	0.704	0.502	0.725	0.388	0.739	0.524	0.363	A	0.783	0.565	36
P235/60R18	1/8/09	0.522	0.750	0.403	0.692	0.501	0.762	0.381	0.717	0.521	0.371	A	0.738	0.575	35
P235/60R18	1/7/09	0.524	0.769	0.403	0.735	0.507	0.733	0.393	0.719	0.520	0.362	A	0.786	0.616	39
P235/60R18	1/8/09	0.519	0.732	0.404	0.670	0.500	0.769	0.383	0.721	0.519	0.372	A	0.713	0.549	32
P235/60R18	1/8/09	0.507	0.820	0.400	0.755	0.491	0.765	0.376	0.707	0.515	0.371	A	0.805	0.648	42
P235/60R18	1/8/09	0.506	0.804	0.398	0.753	0.494	0.752	0.383	0.710	0.513	0.368	A	0.802	0.643	41
P235/65R17	2/26/09	0.570	0.856	0.398	0.695	0.567	0.834	0.376	0.755	0.507	0.373	A	0.772	0.540	34
P235/65R17	2/27/09	0.563	0.874	0.385	0.671	0.563	0.850	0.376	0.666	0.499	0.359	A	0.774	0.605	38
P235/65R17	2/26/09	0.562	0.853	0.386	0.688	0.559	0.835	0.374	0.708	0.499	0.361	A	0.768	0.580	36
P235/65R17	2/27/09	0.558	0.858	0.387	0.674	0.566	0.847	0.376	0.685	0.494	0.362	A	0.761	0.589	36
P235/45R18	7/31/08	0.437	0.702	0.355	0.622	0.496	0.750	0.368	0.684	0.442	0.340	A	0.702	0.538	31
P235/45R18	7/31/08	0.438	0.697	0.366	0.637	0.495	0.739	0.362	0.631	0.443	0.351	A	0.708	0.606	35
P235/45R18	8/12/08	0.453	0.775	0.364	0.673	0.505	0.817	0.357	0.732	0.452	0.359	A	0.708	0.541	31
P235/45R18	8/12/08	0.457	0.782	0.369	0.677	0.496	0.809	0.353	0.689	0.456	0.364	A	0.723	0.588	35
P235/45R18	8/5/08	0.464	0.797	0.380	0.725	0.491	0.755	0.358	0.706	0.477	0.375	A	0.792	0.619	39
P235/45R18	8/5/08	0.456	0.780	0.375	0.712	0.484	0.741	0.353	0.720	0.469	0.369	A	0.789	0.592	38
235/60R16	10/9/08	0.493	0.779	0.402	0.676	0.499	0.768	0.380	0.698	0.494	0.370	A	0.761	0.578	36
235/60R16	10/14/08	0.495	0.807	0.390	0.723	0.498	0.823	0.371	0.744	0.497	0.367	A	0.734	0.579	35
235/60R16	10/9/08	0.487	0.794	0.390	0.711	0.499	0.778	0.383	0.676	0.489	0.358	A	0.766	0.635	39
235/60R16	10/14/08	0.499	0.813	0.395	0.696	0.499	0.803	0.374	0.698	0.501	0.373	A	0.760	0.598	37
P225/60R18	12/17/08	0.533	0.779	0.455	0.771	0.509	0.693	0.396	0.725	0.527	0.412	A	0.836	0.646	43
P225/60R18	12/18/08	0.487	0.737	0.409	0.714	0.475	0.732	0.386	0.721	0.513	0.372	A	0.755	0.593	36
P225/60R18	12/17/08	0.531	0.786	0.439	0.758	0.502	0.698	0.391	0.731	0.525	0.396	A	0.838	0.627	42
P225/60R18	12/18/08	0.496	0.770	0.415	0.718	0.472	0.723	0.386	0.703	0.522	0.379	A	0.797	0.615	39
P225/60R18	12/17/08	0.514	0.797	0.427	0.744	0.481	0.720	0.384	0.682	0.532	0.388	A	0.827	0.662	44
P225/60R18	12/17/08	0.524	0.803	0.444	0.738	0.482	0.744	0.393	0.710	0.543	0.405	A	0.809	0.628	41
215/55R17	11/7/08	0.512	0.916	0.414	0.800	0.492	0.779	0.377	0.707	0.519	0.387	A	0.887	0.693	48
215/55R17	11/7/08	0.512	0.919	0.411	0.838	0.493	0.784	0.376	0.716	0.519	0.385	A	0.885	0.722	50
215/55R17	11/7/08	0.511	0.919	0.402	0.801	0.492	0.793	0.370	0.710	0.519	0.384	A	0.876	0.691	47
215/55R17	11/7/08	0.514	0.916	0.408	0.814	0.492	0.780	0.367	0.658	0.522	0.390	A	0.886	0.756	52
215/60R16	10/31/08	0.597	0.872	0.422	0.737	0.543	0.835	0.385	0.723	0.557	0.392	A	0.787	0.614	39
215/60R16	10/31/08	0.595	0.896	0.412	0.762	0.538	0.844	0.379	0.745	0.555	0.381	A	0.802	0.617	40
P215/60R16	4/3/09	0.566	0.863	0.411	0.674	0.568	0.847	0.375	0.713	0.497	0.382	A	0.766	0.561	35
P215/60R16	4/6/09	0.534	0.855	0.384	0.719	0.562	0.841	0.385	0.736	0.478	0.350	A	0.764	0.583	36
P215/60R16	4/3/09	0.569	0.872	0.403	0.717	0.569	0.818	0.383	0.773	0.501	0.374	A	0.804	0.544	35
P215/60R16	4/6/09	0.542	0.832	0.390	0.779	0.551	0.803	0.383	0.716	0.486	0.357	A	0.779	0.663	42
P215/60R16	4/3/09	0.559	0.858	0.406	0.722	0.533	0.800	0.382	0.736	0.528	0.374	A	0.808	0.586	38
P215/60R16	4/6/09	0.522	0.823	0.395	0.704	0.534	0.794	0.380	0.694	0.490	0.368	A	0.779	0.610	38
P215/60R16	4/3/09	0.557	0.891	0.390	0.805	0.528	0.805	0.380	0.732	0.526	0.359	A	0.836	0.673	45
P215/60R16	4/6/09	0.515	0.819	0.382	0.746	0.531	0.779	0.374	0.671	0.482	0.355	A	0.790	0.675	43
P275/60R17	6/1/09	0.534	0.834	0.403	0.826	0.556	0.824	0.369	0.729	0.478	0.380	A	0.760	0.697	43

P275/60R17	6/2/09	0.513	0.814	0.386	0.742	0.553	0.800	0.368	0.701	0.470	0.371	A	0.764	0.641	40
P275/60R17	6/1/09	0.533	0.845	0.399	0.798	0.556	0.795	0.376	0.781	0.477	0.376	A	0.800	0.617	40
P275/60R17	6/2/09	0.505	0.809	0.385	0.754	0.533	0.775	0.363	0.717	0.461	0.370	A	0.784	0.637	40
P275/60R17	6/2/09	0.498	0.795	0.389	0.735	0.526	0.777	0.363	0.670	0.476	0.377	A	0.768	0.665	41
P275/60R17	6/2/09	0.488	0.781	0.383	0.733	0.517	0.743	0.361	0.680	0.467	0.371	A	0.788	0.653	41
P225/60R16	5/7/09	0.495	0.866	0.379	0.695	0.505	0.814	0.374	0.673	0.488	0.356	A	0.802	0.622	40
P225/60R16	5/8/09	0.485	0.850	0.385	0.702	0.507	0.794	0.379	0.714	0.478	0.361	A	0.806	0.588	38
P225/60R16	5/7/09	0.491	0.847	0.381	0.697	0.508	0.813	0.371	0.712	0.484	0.358	A	0.784	0.585	37
P225/60R16	5/8/09	0.484	0.837	0.389	0.701	0.507	0.763	0.371	0.647	0.477	0.364	A	0.824	0.654	43
245/65R17	5/4/09	0.590	0.961	0.411	0.775	0.531	0.835	0.378	0.769	0.557	0.385	A	0.876	0.606	42
245/65R17	5/4/09	0.562	0.921	0.405	0.783	0.536	0.841	0.374	0.756	0.529	0.379	A	0.830	0.627	41
245/65R17	5/4/09	0.542	0.866	0.390	0.804	0.509	0.855	0.369	0.783	0.537	0.375	A	0.761	0.621	38
245/65R17	5/4/09	0.542	0.862	0.399	0.810	0.501	0.835	0.361	0.718	0.537	0.384	A	0.777	0.692	43
215/55R17	6/15/09	0.516	0.909	0.388	0.783	0.506	0.819	0.367	0.742	0.515	0.373	A	0.840	0.641	43
215/55R17	6/16/09	0.505	0.892	0.399	0.811	0.478	0.768	0.357	0.657	0.518	0.386	A	0.874	0.754	51
215/55R17	6/17/09	0.549	0.852	0.404	0.783	0.487	0.774	0.355	0.707	0.564	0.398	A	0.828	0.676	44
215/55R17	6/19/09	0.543	0.853	0.397	0.755	0.487	0.739	0.358	0.669	0.552	0.391	A	0.864	0.686	46
215/55R17	6/15/09	0.512	0.889	0.396	0.794	0.495	0.792	0.364	0.696	0.512	0.380	A	0.847	0.698	47
215/55R17	6/16/09	0.509	0.894	0.412	0.819	0.496	0.791	0.368	0.687	0.522	0.400	A	0.853	0.732	49
215/55R17	6/17/09	0.556	0.862	0.400	0.774	0.484	0.766	0.357	0.671	0.571	0.394	A	0.846	0.703	47
215/55R17	6/19/09	0.548	0.817	0.388	0.745	0.494	0.757	0.354	0.658	0.557	0.382	A	0.810	0.687	44
P215/60R16	6/23/09	0.540	0.855	0.402	0.750	0.499	0.787	0.352	0.705	0.536	0.400	A	0.818	0.645	42
P215/60R16	6/24/09	0.523	0.836	0.400	0.707	0.499	0.758	0.353	0.671	0.529	0.400	A	0.828	0.636	42
P215/60R16	6/25/09	0.496	0.827	0.382	0.708	0.507	0.737	0.365	0.682	0.502	0.374	A	0.840	0.626	42
P215/60R16	6/26/09	0.476	0.782	0.382	0.647	0.508	0.707	0.355	0.638	0.476	0.377	A	0.825	0.609	40
P215/60R16	6/23/09	0.532	0.834	0.395	0.776	0.509	0.768	0.352	0.662	0.528	0.394	A	0.816	0.714	46
P215/60R16	6/24/09	0.521	0.846	0.404	0.715	0.489	0.753	0.348	0.655	0.527	0.404	A	0.843	0.660	44
P215/60R16	6/25/09	0.494	0.818	0.395	0.726	0.481	0.730	0.352	0.639	0.500	0.386	A	0.838	0.687	46
P215/60R16	6/26/09	0.475	0.730	0.383	0.642	0.493	0.709	0.354	0.629	0.475	0.378	A	0.771	0.613	38
P245/70R16	2/19/09	0.550	0.842	0.390	0.664	0.586	0.872	0.384	0.720	0.467	0.357	B	0.720	0.544	32
P245/70R16	2/19/09	0.553	0.864	0.388	0.673	0.578	0.866	0.381	0.735	0.470	0.355	B	0.748	0.538	33
P245/70R16	3/3/09	0.527	0.822	0.393	0.740	0.571	0.855	0.383	0.729	0.461	0.358	B	0.717	0.611	36
P245/70R16	3/3/09	0.530	0.839	0.390	0.679	0.560	0.845	0.387	0.757	0.464	0.355	B	0.744	0.522	31
P245/70R16	4/7/09	0.498	0.847	0.385	0.728	0.535	0.822	0.383	0.791	0.467	0.351	B	0.775	0.537	33
P245/70R16	4/7/09	0.494	0.842	0.389	0.746	0.527	0.799	0.384	0.752	0.463	0.356	B	0.793	0.594	38
P245/70R16	4/7/09	0.514	0.829	0.392	0.758	0.527	0.786	0.383	0.711	0.492	0.359	B	0.793	0.647	41
P245/70R16	4/7/09	0.509	0.839	0.385	0.749	0.517	0.769	0.383	0.716	0.487	0.352	B	0.820	0.633	41
P245/70R16	4/22/09	0.547	0.838	0.396	0.801	0.564	0.815	0.375	0.696	0.488	0.371	B	0.773	0.705	44
P245/70R16	4/22/09	0.552	0.858	0.401	0.783	0.556	0.806	0.374	0.677	0.492	0.376	B	0.802	0.706	45
P245/70R16	4/21/09	0.535	0.861	0.385	0.737	0.565	0.830	0.368	0.744	0.467	0.365	B	0.781	0.593	37
P245/70R16	4/21/09	0.535	0.878	0.386	0.721	0.571	0.826	0.371	0.753	0.467	0.367	B	0.802	0.568	37
P225/60R16	10/21/08	0.538	0.850	0.389	0.701	0.565	0.841	0.373	0.757	0.471	0.360	B	0.759	0.544	33
P225/60R16	10/21/08	0.543	0.870	0.380	0.736	0.570	0.833	0.386	0.720	0.475	0.351	B	0.787	0.616	39
195/65R14 82T	2009	0.53	0.86	0.395	0.708	0.492	0.756	0.372	0.595	0.540	0.373	A	0.857	0.712	48
195/65R14 82T	2009	0.53	0.87	0.394	0.692	0.492	0.756	0.372	0.595	0.539	0.372	A	0.860	0.697	47
195/65R14 82T	2009	0.54	0.85	0.392	0.677	0.491	0.735	0.372	0.569	0.546	0.369	A	0.863	0.707	48
195/65R14 82T	2009	0.54	0.87	0.391	0.690	0.491	0.735	0.372	0.569	0.553	0.368	A	0.889	0.720	50
P265/70R17 11	2009	0.61	0.96	0.399	0.770	0.522	0.847	0.395	0.663	0.586	0.354	A	0.864	0.707	48
P265/70R17 11	2009	0.59	0.95	0.407	0.753	0.522	0.847	0.395	0.663	0.566	0.362	A	0.853	0.690	46
P265/70R17 11	2009	0.58	0.94	0.403	0.745	0.498	0.828	0.394	0.653	0.584	0.359	A	0.866	0.692	47
P265/70R17 11	2009	0.57	0.94	0.407	0.746	0.498	0.828	0.394	0.653	0.572	0.363	A	0.865	0.693	47
P265/60R18 1C	2009	0.56	0.94	0.405	0.789	0.500	0.850	0.400	0.682	0.564	0.355	A	0.841	0.706	47
P265/60R18 1C	2009	0.58	0.94	0.418	0.775	0.500	0.850	0.400	0.682	0.577	0.368	A	0.840	0.693	46
P265/60R18 1C	2009	0.56	0.91	0.409	0.746	0.492	0.817	0.397	0.651	0.571	0.362	A	0.840	0.695	46
P265/60R18 1C	2009	0.56	0.90	0.413	0.746	0.492	0.817	0.397	0.651	0.573	0.366	A	0.834	0.694	46
P235/70R16 1C	2009	0.56	0.94	0.401	0.768	0.497	0.844	0.402	0.670	0.562	0.349	B	0.847	0.698	47
P235/70R16 1C	2009	0.56	0.93	0.420	0.738	0.497	0.844	0.402	0.670	0.563	0.368	A	0.835	0.668	44

P235/70R16 1C	2009	0.55	0.91	0.405	0.738	0.489	0.833	0.397	0.640	0.562	0.358	A	0.828	0.698	46
P235/70R16 1C	2009	0.55	0.93	0.401	0.741	0.489	0.833	0.397	0.640	0.562	0.355	A	0.848	0.701	47
225/60R18 100	2009	0.59	1.00	0.430	0.857	0.478	0.780	0.401	0.674	0.616	0.379	A	0.974	0.784	57
225/60R18 100	2009	0.58	1.01	0.436	0.862	0.478	0.780	0.401	0.674	0.602	0.386	AA	0.977	0.789	57
225/60R18 100	2009	0.57	0.99	0.431	0.821	0.453	0.768	0.393	0.641	0.614	0.388	AA	0.969	0.780	56
225/60R18 100	2009	0.55	0.98	0.417	0.822	0.453	0.768	0.393	0.641	0.600	0.374	A	0.966	0.781	56
P215/70R16 9E	2009	0.46	0.73	0.355	0.622	0.514	0.742	0.367	0.659	0.444	0.338	B	0.736	0.563	34
P215/70R16 9E	2009	0.45	0.71	0.349	0.610	0.514	0.742	0.367	0.659	0.436	0.332	B	0.717	0.551	32
P215/70R16 9E	2009	0.44	0.70	0.348	0.588	0.516	0.725	0.365	0.627	0.428	0.333	B	0.721	0.561	33
P215/70R16 9E	2009	0.45	0.69	0.340	0.586	0.516	0.725	0.365	0.627	0.429	0.325	B	0.716	0.558	33
P215/70R16 9E	2009	0.45	0.71	0.347	0.599	0.508	0.717	0.369	0.602	0.440	0.328	B	0.744	0.597	36
P215/70R16 9E	2009	0.46	0.73	0.352	0.604	0.508	0.717	0.369	0.602	0.448	0.333	B	0.759	0.602	37
P215/70R16 9E	2009	0.45	0.69	0.344	0.566	0.510	0.711	0.368	0.582	0.441	0.327	B	0.727	0.584	35
P215/70R16 9E	2009	0.46	0.70	0.346	0.585	0.510	0.711	0.368	0.582	0.450	0.328	B	0.741	0.603	37
P195/55R16 8E	2009	0.52	0.88	0.382	0.753	0.534	0.766	0.376	0.655	0.490	0.356	A	0.864	0.699	47
P195/55R16 8E	2009	0.52	0.88	0.387	0.748	0.534	0.766	0.376	0.655	0.487	0.361	A	0.859	0.694	47
P195/55R16 8E	2009	0.51	0.85	0.381	0.715	0.515	0.738	0.372	0.612	0.493	0.359	A	0.866	0.703	48
P195/55R16 8E	2009	0.51	0.85	0.376	0.708	0.515	0.738	0.372	0.612	0.493	0.354	A	0.865	0.696	47
P195/55R16 8E	2009	0.47	0.79	0.364	0.654	0.513	0.730	0.374	0.638	0.458	0.340	B	0.810	0.616	40
P195/55R16 8E	2009	0.47	0.78	0.356	0.647	0.513	0.730	0.374	0.638	0.454	0.332	B	0.798	0.609	39
P195/55R16 8E	2009	0.46	0.77	0.356	0.610	0.502	0.726	0.368	0.600	0.459	0.339	B	0.798	0.610	39
P195/55R16 8E	2009	0.47	0.78	0.361	0.631	0.502	0.726	0.368	0.600	0.463	0.343	B	0.808	0.632	41
P265/65R18 11	2009	0.47	0.77	0.355	0.631	0.526	0.763	0.376	0.642	0.446	0.329	B	0.753	0.589	36
P265/65R18 11	2009	0.48	0.77	0.355	0.623	0.526	0.763	0.376	0.642	0.450	0.330	B	0.756	0.581	36
P265/65R18 11	2009	0.48	0.77	0.360	0.651	0.523	0.768	0.376	0.643	0.455	0.334	B	0.757	0.608	37
P265/65R18 11	2009	0.48	0.77	0.354	0.636	0.523	0.768	0.376	0.643	0.455	0.328	B	0.749	0.593	36
P265/65R18 11	2009	0.46	0.76	0.348	0.601	0.520	0.757	0.374	0.624	0.441	0.324	B	0.751	0.577	35
P265/65R18 11	2009	0.46	0.74	0.347	0.596	0.520	0.757	0.374	0.624	0.438	0.323	B	0.737	0.572	34
P265/65R18 11	2009	0.46	0.73	0.347	0.589	0.518	0.745	0.374	0.611	0.438	0.323	B	0.737	0.578	35
P265/65R18 11	2009	0.45	0.72	0.345	0.578	0.518	0.745	0.374	0.611	0.436	0.321	B	0.729	0.567	34
195/55R15 85V	2008	0.55	0.89	0.448	0.841	0.489	0.775	0.404	0.692	0.560	0.394	AA	0.862	0.749	50
195/55R15 85V	2008	0.54	0.87	0.437	0.844	0.489	0.775	0.404	0.692	0.553	0.383	AA	0.848	0.752	50
195/55R15 85V	2008	0.54	0.88	0.434	0.850	0.485	0.741	0.403	0.657	0.552	0.380	AA	0.889	0.793	54
195/55R15 85V	2008	0.54	0.88	0.444	0.832	0.485	0.741	0.403	0.657	0.552	0.391	AA	0.892	0.775	53
195/55R15 85V	2008	0.55	0.86	0.446	0.827	0.486	0.772	0.407	0.680	0.564	0.389	AA	0.839	0.747	49
195/55R15 85V	2008	0.55	0.88	0.446	0.825	0.486	0.772	0.407	0.680	0.564	0.389	AA	0.856	0.746	50
195/55R15 85V	2008	0.55	0.88	0.446	0.824	0.480	0.813	0.401	0.743	0.566	0.395	AA	0.820	0.680	44
195/55R15 85V	2008	0.54	0.88	0.447	0.829	0.480	0.813	0.401	0.743	0.565	0.396	AA	0.821	0.686	45
195/55R15 85V	2008	0.55	0.94	0.454	0.918	0.479	0.764	0.404	0.729	0.569	0.400	AA	0.922	0.789	55
195/55R15 85V	2008	0.55	0.96	0.454	0.912	0.479	0.764	0.404	0.729	0.568	0.400	AA	0.947	0.783	56
195/55R15 85V	2008	0.55	0.97	0.449	0.908	0.478	0.799	0.399	0.744	0.572	0.400	AA	0.918	0.763	53
195/55R15 85V	2008	0.53	0.94	0.446	0.917	0.478	0.799	0.399	0.744	0.555	0.397	AA	0.893	0.773	53
P265/70R17 11	2009	0.61	0.96	0.399	0.770	0.522	0.847	0.395	0.663	0.586	0.354	A	0.864	0.707	48
P265/70R17 11	2009	0.59	0.95	0.407	0.753	0.522	0.847	0.395	0.663	0.566	0.362	A	0.853	0.690	46
P265/70R17 11	2009	0.58	0.94	0.403	0.745	0.498	0.828	0.394	0.653	0.584	0.359	A	0.866	0.692	47
P265/70R17 11	2009	0.57	0.94	0.407	0.746	0.498	0.828	0.394	0.653	0.572	0.363	A	0.865	0.693	47
P265/60R18 1C	2009	0.56	0.94	0.405	0.789	0.500	0.850	0.400	0.682	0.564	0.355	A	0.841	0.706	47
P265/60R18 1C	2009	0.58	0.94	0.418	0.775	0.500	0.850	0.400	0.682	0.577	0.368	A	0.840	0.693	46
P235/60R17 1C	2008	0.52	0.93	0.421	0.753	0.482	0.774	0.401	0.674	0.535	0.370	A	0.904	0.679	48
P235/60R17 1C	2008	0.52	0.92	0.427	0.728	0.482	0.774	0.401	0.674	0.533	0.376	A	0.891	0.654	45
P235/60R17 1C	2008	0.52	0.93	0.423	0.784	0.475	0.773	0.400	0.674	0.544	0.373	A	0.908	0.710	50
P235/60R17 1C	2008	0.52	0.94	0.435	0.782	0.475	0.773	0.400	0.674	0.547	0.385	AA	0.919	0.708	50
P265/70R17 11	2009	0.61	0.96	0.399	0.770	0.522	0.847	0.395	0.663	0.586	0.354	A	0.864	0.707	48
P265/70R17 11	2009	0.59	0.95	0.407	0.753	0.522	0.847	0.395	0.663	0.566	0.362	A	0.853	0.690	46
P265/70R17 11	2009	0.58	0.94	0.403	0.745	0.498	0.828	0.394	0.653	0.584	0.359	A	0.866	0.692	47
P265/70R17 11	2009	0.57	0.94	0.407	0.746	0.498	0.828	0.394	0.653	0.572	0.363	A	0.865	0.693	47
P235/50R19 9E	2008	0.59	0.93	0.457	0.825	0.525	0.798	0.406	0.719	0.565	0.401	AA	0.880	0.706	48

P235/50R19 9C	2008	0.60	0.92	0.464	0.814	0.525	0.798	0.406	0.719	0.575	0.408	AA	0.877	0.695	48
P235/50R19 9C	2008	0.57	0.89	0.464	0.792	0.510	0.762	0.398	0.682	0.563	0.416	AA	0.878	0.710	49
P235/50R19 9C	2008	0.58	0.93	0.462	0.806	0.510	0.762	0.398	0.682	0.572	0.414	AA	0.919	0.724	51
195/55R15 85V	2008	0.55	0.93	0.457	0.800	0.457	0.765	0.406	0.672	0.592	0.401	AA	0.917	0.728	51
195/55R15 85V	2008	0.55	0.89	0.435	0.773	0.457	0.765	0.406	0.672	0.593	0.379	A	0.870	0.701	48
195/55R15 85V	2008	0.55	0.87	0.454	0.769	0.455	0.761	0.401	0.648	0.596	0.403	AA	0.855	0.721	48
195/55R15 85V	2008	0.55	0.92	0.457	0.805	0.455	0.761	0.401	0.648	0.599	0.406	AA	0.905	0.757	52
195/55R15 85V	2008	0.56	0.88	0.464	0.780	0.454	0.757	0.402	0.665	0.611	0.411	AA	0.873	0.715	49
185/70R14 88T	2008	0.55	0.90	0.424	0.718	0.454	0.757	0.402	0.665	0.598	0.372	A	0.897	0.653	46
185/70R14 88T	2008	0.55	0.90	0.419	0.699	0.451	0.746	0.395	0.644	0.596	0.374	A	0.907	0.655	46
195/55R15 85V	2008	0.58	0.85	0.464	0.756	0.451	0.746	0.395	0.644	0.628	0.420	AA	0.853	0.711	48
185/70R14 88T	2008	0.58	0.94	0.432	0.793	0.448	0.718	0.396	0.656	0.633	0.386	AA	0.968	0.736	54
185/70R14 88T	2008	0.59	0.94	0.432	0.771	0.448	0.718	0.396	0.656	0.640	0.387	AA	0.977	0.715	53
185/70R14 88T	2008	0.57	0.92	0.421	0.748	0.460	0.720	0.397	0.647	0.613	0.374	A	0.948	0.701	51
185/70R14 88T	2008	0.58	0.94	0.430	0.757	0.460	0.720	0.397	0.647	0.620	0.383	AA	0.971	0.709	52
205/40R17 84V	2008	0.54	0.81	0.424	0.759	0.460	0.683	0.389	0.624	0.581	0.385	AA	0.874	0.736	50
215/45R17 91V	2008	0.54	0.80	0.425	0.760	0.460	0.683	0.389	0.624	0.579	0.387	AA	0.867	0.737	50
215/45R17 91V	2008	0.54	0.80	0.420	0.749	0.441	0.653	0.383	0.592	0.595	0.387	AA	0.896	0.757	52
205/40R17 84V	2008	0.52	0.80	0.420	0.731	0.441	0.653	0.383	0.592	0.579	0.386	AA	0.894	0.739	51
215/45R17 91V	2008	0.68	0.82	0.450	0.736	0.575	0.751	0.414	0.620	0.603	0.387	AA	0.822	0.716	47
205/40R17 84V	2008	0.65	0.82	0.433	0.683	0.575	0.751	0.414	0.620	0.574	0.370	A	0.819	0.663	43
205/40R17 84V	2008	0.65	0.85	0.419	0.719	0.563	0.745	0.405	0.607	0.583	0.364	A	0.853	0.712	48
215/45R17 91V	2008	0.65	0.81	0.424	0.732	0.563	0.745	0.405	0.607	0.589	0.369	A	0.814	0.726	47
G78-15	2007	0.52	0.81	0.397	0.693	0.528	0.815	0.399	0.689	0.496	0.348	B	0.744	0.605	37
G78-15	2007	0.52	0.81	0.395	0.668	0.528	0.815	0.399	0.689	0.493	0.347	B	0.741	0.580	35
G78-15	2007	0.51	0.78	0.396	0.653	0.516	0.799	0.391	0.667	0.499	0.355	B	0.729	0.586	35
G78-15	2007	0.52	0.78	0.388	0.675	0.516	0.799	0.391	0.667	0.501	0.347	B	0.731	0.608	36
215/55R17 94V	2007	0.57	0.88	0.386	0.729	0.489	0.767	0.367	0.608	0.578	0.370	A	0.860	0.722	48
215/55R17 94V	2007	0.57	0.88	0.396	0.720	0.489	0.767	0.367	0.608	0.582	0.379	A	0.868	0.713	48
215/55R17 94V	2007	0.56	0.94	0.396	0.724	0.481	0.746	0.365	0.593	0.577	0.381	AA	0.941	0.730	52
215/55R17 94V	2007	0.57	0.92	0.399	0.723	0.481	0.746	0.365	0.593	0.586	0.384	AA	0.925	0.730	52
195/60R14 85F	2007	0.52	0.85	0.394	0.717	0.466	0.737	0.360	0.601	0.552	0.384	AA	0.865	0.716	48
195/60R14 85F	2007	0.52	0.85	0.381	0.706	0.466	0.737	0.360	0.601	0.555	0.372	A	0.858	0.705	47
195/60R14 85F	2007	0.51	0.85	0.370	0.710	0.457	0.758	0.353	0.591	0.554	0.367	A	0.844	0.719	48
195/60R14 85F	2007	0.51	0.85	0.374	0.691	0.457	0.758	0.353	0.591	0.556	0.371	A	0.838	0.699	46
225/55R17 97V	2007	0.58	0.93	0.436	0.798	0.538	0.763	0.411	0.676	0.538	0.375	A	0.920	0.722	51
225/55R17 97V	2007	0.58	0.98	0.434	0.816	0.538	0.763	0.411	0.676	0.546	0.373	A	0.969	0.740	54
225/55R17 97V	2007	0.59	0.97	0.428	0.799	0.529	0.757	0.408	0.663	0.565	0.370	A	0.960	0.736	53
225/55R17 97V	2007	0.60	0.95	0.438	0.797	0.529	0.757	0.408	0.663	0.572	0.380	AA	0.947	0.733	53
225/55R17 97V	2007	0.59	0.93	0.431	0.789	0.522	0.751	0.399	0.644	0.567	0.381	AA	0.933	0.744	53
225/55R17 97V	2007	0.61	0.94	0.435	0.787	0.522	0.751	0.399	0.644	0.584	0.386	AA	0.941	0.742	53
245/45R20 99V	2007	0.62	0.99	0.456	0.895	0.535	0.706	0.411	0.635	0.587	0.395	AA	1.030	0.860	64
245/45R20 99V	2007	0.65	0.98	0.456	0.859	0.535	0.706	0.411	0.635	0.615	0.395	AA	1.023	0.824	61
245/45R20 99V	2007	0.61	0.98	0.443	0.852	0.530	0.688	0.398	0.605	0.582	0.395	AA	1.039	0.847	63
245/45R20 99V	2007	0.65	1.00	0.448	0.870	0.530	0.688	0.398	0.605	0.616	0.401	AA	1.060	0.864	65
245/45R20 99V	2007	0.59	0.93	0.426	0.767	0.527	0.698	0.396	0.585	0.566	0.380	AA	0.986	0.782	57
245/45R20 99V	2007	0.59	0.93	0.433	0.753	0.527	0.698	0.396	0.585	0.564	0.387	AA	0.984	0.768	56
245/45R20 99V	2007	0.58	0.90	0.425	0.738	0.515	0.687	0.390	0.577	0.567	0.385	AA	0.966	0.761	55
245/45R20 99V	2007	0.58	0.91	0.430	0.748	0.515	0.687	0.390	0.577	0.570	0.389	AA	0.971	0.771	56
P265/70R16 11	2007	0.58	0.92	0.383	0.739	0.527	0.781	0.364	0.612	0.555	0.369	A	0.887	0.727	50
P265/70R16 11	2007	0.58	0.92	0.384	0.732	0.527	0.781	0.364	0.612	0.551	0.370	A	0.885	0.719	49
P265/75R16 11	2007	0.58	0.93	0.378	0.735	0.525	0.778	0.364	0.601	0.551	0.363	A	0.906	0.734	51
P265/75R16 11	2007	0.58	0.95	0.382	0.752	0.525	0.778	0.364	0.601	0.554	0.367	A	0.924	0.750	53
P265/75R16 11	2007	0.55	0.88	0.391	0.729	0.519	0.771	0.368	0.586	0.535	0.373	A	0.863	0.743	50
P265/75R16 11	2007	0.55	0.89	0.389	0.729	0.519	0.771	0.368	0.586	0.533	0.371	A	0.866	0.742	50
P265/75R16 11	2007	0.55	0.88	0.393	0.709	0.516	0.779	0.372	0.608	0.537	0.371	A	0.855	0.701	47
P265/75R16 11	2007	0.56	0.89	0.392	0.714	0.516	0.779	0.372	0.608	0.542	0.370	A	0.863	0.706	48

P265/75R16 11	2007	0.54	0.82	0.388	0.713	0.503	0.786	0.366	0.590	0.533	0.372	A	0.789	0.722	45
P265/75R16 11	2007	0.53	0.84	0.374	0.711	0.503	0.786	0.366	0.590	0.528	0.358	A	0.802	0.721	46
P265/75R16 11	2007	0.52	0.83	0.379	0.720	0.496	0.760	0.365	0.592	0.528	0.364	A	0.818	0.728	47
P265/75R16 11	2007	0.54	0.84	0.381	0.738	0.496	0.760	0.365	0.592	0.542	0.367	A	0.833	0.746	49
G78-15	2007	0.50	0.70	0.362	0.593	0.505	0.670	0.352	0.583	0.499	0.360	A	0.782	0.610	39
G78-15	2007	0.49	0.66	0.357	0.583	0.505	0.670	0.352	0.583	0.490	0.355	A	0.743	0.600	36
G78-15	2007	0.48	0.66	0.344	0.570	0.495	0.657	0.342	0.555	0.485	0.352	A	0.751	0.615	38
G78-15	2007	0.49	0.66	0.343	0.588	0.495	0.657	0.342	0.555	0.491	0.352	A	0.756	0.633	39
195/55R15 85v	2007	0.54	0.79	0.398	0.696	0.473	0.619	0.374	0.596	0.565	0.374	A	0.921	0.701	50
195/55R15 85v	2007	0.54	0.79	0.397	0.671	0.473	0.619	0.374	0.596	0.562	0.373	A	0.919	0.676	48
195/55R15 85v	2007	0.53	0.78	0.392	0.686	0.470	0.609	0.371	0.585	0.560	0.371	A	0.923	0.701	50
195/55R15 85v	2007	0.53	0.80	0.387	0.679	0.470	0.609	0.371	0.585	0.562	0.365	A	0.944	0.694	50
P255/55R20 1C	2006	0.54	0.89	0.386	0.750	0.500	0.781	0.380	0.663	0.543	0.356	A	0.856	0.687	46
P255/55R20 1C	2006	0.55	0.91	0.410	0.744	0.500	0.781	0.380	0.663	0.552	0.380	AA	0.877	0.681	47
P255/55R20 1C	2006	0.53	0.86	0.394	0.724	0.491	0.780	0.377	0.648	0.543	0.367	A	0.831	0.676	45
P255/55R20 1C	2006	0.54	0.90	0.403	0.735	0.491	0.780	0.377	0.648	0.552	0.376	A	0.865	0.687	47
205/55R16 91H	2006	0.58	0.78	0.456	0.700	0.508	0.668	0.397	0.563	0.569	0.409	AA	0.863	0.737	49
205/55R16 91H	2006	0.58	0.77	0.442	0.673	0.508	0.668	0.397	0.563	0.571	0.396	AA	0.855	0.710	48
205/55R16 91H	2006	0.56	0.78	0.435	0.698	0.501	0.667	0.400	0.559	0.556	0.385	AA	0.864	0.740	50
205/55R16 91H	2006	0.57	0.79	0.455	0.683	0.501	0.667	0.400	0.559	0.566	0.406	AA	0.870	0.724	49
205/55R16 91H	2006	0.59	0.83	0.391	0.617	0.515	0.684	0.366	0.503	0.572	0.375	A	0.894	0.714	49
205/55R16 91H	2006	0.68	0.93	0.459	0.707	0.515	0.684	0.366	0.503	0.661	0.442	AA	0.996	0.804	59
205/55R16 91H	2006	0.59	0.81	0.391	0.598	0.516	0.677	0.366	0.501	0.570	0.375	A	0.881	0.697	48
205/55R16 91H	2006	0.61	0.83	0.406	0.653	0.516	0.677	0.366	0.501	0.592	0.389	AA	0.907	0.752	52
205/55R15 91H	2006	0.59	0.93	0.456	0.855	0.524	0.788	0.389	0.678	0.570	0.418	AA	0.887	0.776	53
205/55R15 91H	2006	0.59	0.91	0.442	0.806	0.524	0.788	0.389	0.678	0.562	0.404	AA	0.868	0.728	49
P205/55R16 8E	2006	0.57	0.91	0.405	0.715	0.518	0.818	0.363	0.620	0.557	0.392	AA	0.844	0.694	46
P205/55R16 8E	2006	0.56	0.89	0.391	0.688	0.518	0.818	0.363	0.620	0.540	0.378	A	0.819	0.668	44
P205/55R16 8E	2006	0.55	0.86	0.355	0.648	0.528	0.807	0.352	0.594	0.519	0.353	A	0.803	0.654	42
P205/55R16 8E	2006	0.54	0.87	0.375	0.662	0.528	0.807	0.352	0.594	0.510	0.373	A	0.815	0.668	43
205/55R16 91H	2006	0.48	0.89	0.410	0.743	0.440	0.764	0.383	0.645	0.542	0.377	A	0.876	0.698	48
205/55R16 91H	2006	0.48	0.87	0.405	0.729	0.440	0.764	0.383	0.645	0.540	0.372	A	0.852	0.684	46
205/55R16 91H	2006	0.51	0.87	0.426	0.716	0.430	0.739	0.381	0.612	0.577	0.395	AA	0.882	0.704	48
205/55R16 91H	2006	0.51	0.86	0.429	0.728	0.430	0.739	0.381	0.612	0.579	0.397	AA	0.871	0.715	49
205/55R15 91H	2006	0.59	0.93	0.456	0.855	0.524	0.788	0.389	0.678	0.570	0.418	AA	0.887	0.776	53
205/55R15 91H	2006	0.59	0.91	0.442	0.806	0.524	0.788	0.389	0.678	0.562	0.404	AA	0.868	0.728	49
P205/55R16 8E	2006	0.57	0.91	0.405	0.715	0.518	0.818	0.363	0.620	0.557	0.392	AA	0.844	0.694	46
P205/55R16 8E	2006	0.56	0.89	0.391	0.688	0.518	0.818	0.363	0.620	0.540	0.378	A	0.819	0.668	44
P205/55R16 8E	2006	0.55	0.86	0.355	0.648	0.528	0.807	0.352	0.594	0.519	0.353	A	0.803	0.654	42
P205/55R16 8E	2006	0.54	0.87	0.375	0.662	0.528	0.807	0.352	0.594	0.510	0.373	A	0.815	0.668	43
205/55R16 91H	2006	0.48	0.89	0.410	0.743	0.440	0.764	0.383	0.645	0.542	0.377	A	0.876	0.698	48
205/55R16 91H	2006	0.48	0.87	0.405	0.729	0.440	0.764	0.383	0.645	0.540	0.372	A	0.852	0.684	46
205/55R16 91H	2006	0.51	0.87	0.426	0.716	0.430	0.739	0.381	0.612	0.577	0.395	AA	0.882	0.704	48
205/55R16 91H	2006	0.51	0.86	0.429	0.728	0.430	0.739	0.381	0.612	0.579	0.397	AA	0.871	0.715	49
P265/70R17 11	2009	0.61	0.96	0.399	0.770	0.522	0.847	0.395	0.663	0.586	0.354	A	0.864	0.707	48
P265/70R17 11	2009	0.59	0.95	0.407	0.753	0.522	0.847	0.395	0.663	0.566	0.362	A	0.853	0.690	46
P265/70R17 11	2009	0.58	0.94	0.403	0.745	0.498	0.828	0.394	0.653	0.584	0.359	A	0.866	0.692	47
P265/70R17 11	2009	0.57	0.94	0.407	0.746	0.498	0.828	0.394	0.653	0.572	0.363	A	0.865	0.693	47
P265/60R18 1C	2009	0.56	0.94	0.405	0.789	0.500	0.850	0.400	0.682	0.564	0.355	A	0.841	0.706	47
P265/60R18 1C	2009	0.58	0.94	0.418	0.775	0.500	0.850	0.400	0.682	0.577	0.368	A	0.840	0.693	46
P265/60R18 1C	2009	0.56	0.91	0.409	0.746	0.492	0.817	0.397	0.651	0.571	0.362	A	0.840	0.695	46
P265/60R18 1C	2009	0.56	0.90	0.413	0.746	0.492	0.817	0.397	0.651	0.573	0.366	A	0.834	0.694	46
P205/55R16 8E	2005	0.55	0.94	0.402	0.803	0.469	0.795	0.382	0.709	0.582	0.370	A	0.891	0.695	48
P205/55R16 8E	2005	0.56	0.95	0.390	0.811	0.469	0.795	0.382	0.709	0.590	0.358	A	0.904	0.702	49
P205/55R16 8E	2005	0.53	0.95	0.395	0.769	0.464	0.775	0.380	0.680	0.566	0.365	A	0.923	0.689	49
P205/55R16 8E	2005	0.55	0.96	0.401	0.785	0.464	0.775	0.380	0.680	0.587	0.372	A	0.935	0.705	50
P205/55R16 8E	2005	0.56	0.93	0.392	0.734	0.506	0.836	0.368	0.612	0.553	0.374	A	0.841	0.722	48

P205/55R16 8E	2005	0.57	0.94	0.403	0.781	0.506	0.836	0.368	0.612	0.564	0.385	AA	0.850	0.769	51
P205/55R16 8E	2005	0.54	0.90	0.400	0.733	0.498	0.831	0.362	0.606	0.546	0.388	AA	0.823	0.726	47
P205/55R16 8E	2005	0.56	0.91	0.396	0.744	0.498	0.831	0.362	0.606	0.562	0.384	AA	0.830	0.738	48
P175/65R14 81	2005	0.53	0.78	0.383	0.664	0.448	0.743	0.382	0.592	0.581	0.350	A	0.782	0.672	42
P175/65R14 81	2005	0.52	0.71	0.383	0.650	0.448	0.743	0.382	0.592	0.568	0.350	A	0.720	0.658	39
P175/65R14 81	2005	0.51	0.70	0.377	0.630	0.449	0.723	0.377	0.571	0.559	0.350	A	0.727	0.659	39
P175/65R14 81	2005	0.52	0.74	0.375	0.704	0.449	0.723	0.377	0.571	0.569	0.348	B	0.768	0.733	45
P185/65R15 8E	2005	0.53	0.83	0.379	0.697	0.475	0.731	0.362	0.572	0.560	0.367	A	0.848	0.725	48
P185/65R15 8E	2005	0.51	0.76	0.367	0.600	0.475	0.731	0.362	0.572	0.535	0.355	A	0.778	0.628	39
P185/65R15 8E	2005	0.51	0.79	0.370	0.629	0.466	0.718	0.356	0.554	0.543	0.364	A	0.819	0.675	44
P185/65R15 8E	2005	0.52	0.84	0.363	0.648	0.466	0.718	0.356	0.554	0.556	0.356	A	0.873	0.695	47
P205/55R16 8E	2005	0.57	0.86	0.405	0.680	0.469	0.683	0.378	0.619	0.598	0.377	A	0.927	0.662	47
P205/55R16 8E	2005	0.54	0.80	0.393	0.635	0.469	0.683	0.378	0.619	0.568	0.366	A	0.865	0.617	42
P205/55R16 8E	2005	0.53	0.84	0.385	0.693	0.468	0.727	0.372	0.643	0.563	0.362	A	0.860	0.649	44
P205/55R16 8E	2005	0.55	0.91	0.395	0.730	0.468	0.727	0.372	0.643	0.586	0.372	A	0.929	0.687	49
P245/65R17 1C	2005	0.50	0.84	0.363	0.624	0.462	0.792	0.353	0.596	0.535	0.360	A	0.794	0.628	40
P245/65R17 1C	2005	0.50	0.82	0.360	0.663	0.462	0.792	0.353	0.596	0.534	0.357	A	0.781	0.667	42
P245/65R17 1C	2005	0.48	0.83	0.360	0.637	0.460	0.781	0.349	0.594	0.525	0.360	A	0.802	0.643	41
P245/65R17 1C	2005	0.48	0.83	0.362	0.653	0.460	0.781	0.349	0.594	0.525	0.362	A	0.801	0.659	42
P245/65R17 1C	2005	0.50	0.84	0.363	0.624	0.462	0.792	0.353	0.596	0.535	0.360	A	0.794	0.628	40
P245/65R17 1C	2005	0.50	0.82	0.360	0.663	0.462	0.792	0.353	0.596	0.534	0.357	A	0.781	0.667	42
P245/65R17 1C	2005	0.48	0.83	0.360	0.637	0.460	0.781	0.349	0.594	0.525	0.360	A	0.802	0.643	41
P245/65R17 1C	2005	0.48	0.83	0.362	0.653	0.460	0.781	0.349	0.594	0.525	0.362	A	0.801	0.659	42
P205/55R16 8E	2005	0.54	0.85	0.420	0.562	0.470	0.747	0.377	0.476	0.565	0.393	AA	0.850	0.686	46
P205/55R16 8E	2005	0.53	0.79	0.404	0.650	0.470	0.747	0.377	0.476	0.560	0.377	A	0.798	0.774	49
205/55R16 89H	2005	0.51	0.83	0.400	0.568	0.458	0.721	0.373	0.475	0.554	0.377	A	0.855	0.693	47
205/55R16 89H	2005	0.53	0.81	0.396	0.580	0.458	0.721	0.373	0.475	0.571	0.373	A	0.835	0.705	46
P195/60R15 87	2005	0.56	0.81	0.414	0.585	0.490	0.759	0.373	0.515	0.575	0.392	AA	0.803	0.669	43
P195/60R15 87	2005	0.57	0.83	0.403	0.662	0.490	0.759	0.373	0.515	0.575	0.381	AA	0.821	0.747	48
P195/60R15 87	2005	0.55	0.85	0.408	0.632	0.484	0.750	0.368	0.498	0.568	0.390	AA	0.854	0.733	49
P195/60R15 87	2005	0.53	0.82	0.410	0.642	0.484	0.750	0.368	0.498	0.544	0.392	AA	0.822	0.744	48
P185/60R14 82	2005	0.54	0.76	0.407	0.566	0.477	0.695	0.381	0.490	0.564	0.376	A	0.818	0.676	44
P185/60R14 82	2005	0.55	0.74	0.416	0.543	0.477	0.695	0.381	0.490	0.568	0.385	AA	0.796	0.652	42
P185/60R14 82	2005	0.53	0.76	0.413	0.551	0.468	0.678	0.377	0.472	0.560	0.385	AA	0.836	0.679	45
P185/60R14 82	2005	0.53	0.77	0.409	0.562	0.468	0.678	0.377	0.472	0.562	0.382	AA	0.843	0.691	46
235/70R16 106	2004	0.55	0.88	0.392	0.708	0.504	0.744	0.356	0.582	0.545	0.386	AA	0.889	0.726	50
235/70R16 106	2004	0.56	0.91	0.397	0.730	0.504	0.744	0.356	0.582	0.555	0.392	AA	0.911	0.748	52
235/70R16 106	2004	0.55	0.84	0.391	0.699	0.503	0.737	0.358	0.581	0.549	0.383	AA	0.856	0.718	48
235/70R16 106	2004	0.56	0.90	0.402	0.707	0.503	0.737	0.358	0.581	0.553	0.394	AA	0.908	0.726	51
P255/75R17 11	2004	0.56	0.83	0.382	0.725	0.478	0.694	0.346	0.580	0.579	0.386	AA	0.886	0.745	51
P255/75R17 11	2004	0.56	0.82	0.388	0.715	0.478	0.694	0.346	0.580	0.583	0.392	AA	0.875	0.735	50
P255/75R17 11	2004	0.57	0.83	0.383	0.708	0.494	0.697	0.348	0.577	0.575	0.386	AA	0.885	0.730	50
P255/75R17 11	2004	0.57	0.84	0.389	0.699	0.494	0.697	0.348	0.577	0.581	0.392	AA	0.888	0.722	50
P265/70R15 11	2004	0.57	0.85	0.402	0.730	0.483	0.719	0.365	0.602	0.587	0.386	AA	0.882	0.729	50
P265/70R15 11	2004	0.57	0.86	0.407	0.723	0.483	0.719	0.365	0.602	0.591	0.392	AA	0.890	0.721	50
P265/70R15 11	2004	0.57	0.85	0.392	0.724	0.487	0.718	0.361	0.562	0.583	0.381	AA	0.877	0.762	52
P265/70R15 11	2004	0.58	0.85	0.398	0.723	0.487	0.718	0.361	0.562	0.593	0.387	AA	0.882	0.760	52
205/55R16	2004	0.54	0.88	0.415	0.683	0.509	0.806	0.395	0.569	0.531	0.371	A	0.820	0.714	46
205/55R16	2004	0.54	0.88	0.414	0.679	0.509	0.806	0.395	0.569	0.535	0.369	A	0.826	0.709	46
205/55R16	2004	0.53	0.86	0.410	0.651	0.489	0.805	0.393	0.568	0.541	0.367	A	0.800	0.683	44
205/55R16	2004	0.54	0.87	0.418	0.699	0.489	0.805	0.393	0.568	0.548	0.375	A	0.811	0.731	47
205/55R16	2004	0.54	0.89	0.418	0.687	0.484	0.779	0.389	0.570	0.551	0.379	A	0.858	0.717	48
205/55R16	2004	0.53	0.87	0.422	0.672	0.484	0.779	0.389	0.570	0.543	0.384	AA	0.846	0.703	47
205/55R16	2004	0.52	0.88	0.425	0.668	0.477	0.787	0.389	0.567	0.544	0.385	AA	0.846	0.701	47
205/55R16	2004	0.52	0.89	0.415	0.685	0.477	0.787	0.389	0.567	0.544	0.375	A	0.851	0.718	48
205/55R16	2004	0.53	0.83	0.426	0.666	0.480	0.786	0.388	0.571	0.548	0.387	AA	0.793	0.695	44
205/55R16	2004	0.53	0.86	0.422	0.659	0.480	0.786	0.388	0.571	0.548	0.384	AA	0.820	0.687	45

205/55R16	2004	0.52	0.85	0.423	0.661	0.478	0.773	0.387	0.559	0.542	0.386	AA	0.825	0.702	46
205/55R16	2004	0.53	0.84	0.419	0.667	0.478	0.773	0.387	0.559	0.548	0.382	AA	0.816	0.708	46
G78-15	2004	0.52	0.79	0.341	0.713	0.522	0.787	0.354	0.702	0.494	0.337	B	0.752	0.611	37
G78-15	2004	0.52	0.81	0.340	0.704	0.522	0.787	0.354	0.702	0.495	0.336	B	0.772	0.602	38
G78-15	2004	0.51	0.81	0.338	0.727	0.512	0.779	0.350	0.702	0.497	0.338	B	0.781	0.625	39
G78-15	2004	0.51	0.82	0.335	0.706	0.512	0.779	0.350	0.702	0.495	0.335	B	0.792	0.604	39
P205/55R16 8E	2004	0.56	0.94	0.404	0.786	0.516	0.810	0.354	0.629	0.542	0.399	AA	0.882	0.758	52
P205/55R16 8E	2004	0.57	0.92	0.404	0.826	0.516	0.810	0.354	0.629	0.556	0.399	AA	0.862	0.797	53
P205/55R16 8E	2004	0.56	0.88	0.388	0.771	0.508	0.812	0.353	0.643	0.555	0.385	AA	0.822	0.728	47
P205/55R16 8E	2004	0.56	0.89	0.395	0.786	0.508	0.812	0.353	0.643	0.555	0.392	AA	0.832	0.743	48
P155/80R13 7E	2004	0.55	0.86	0.401	0.690	0.496	0.849	0.372	0.676	0.551	0.379	A	0.758	0.615	38
P155/80R13 7E	2004	0.54	0.81	0.393	0.629	0.496	0.849	0.372	0.676	0.546	0.371	A	0.711	0.553	32
P155/80R13 7E	2004	0.55	0.83	0.393	0.679	0.504	0.863	0.376	0.695	0.550	0.367	A	0.717	0.584	34
P155/80R13 7E	2004	0.55	0.81	0.392	0.672	0.504	0.863	0.376	0.695	0.542	0.366	A	0.699	0.578	33
P155/80R13 7E	2004	0.57	0.82	0.407	0.753	0.523	0.820	0.393	0.771	0.547	0.365	A	0.749	0.582	35
P155/80R13 7E	2004	0.57	0.84	0.405	0.744	0.523	0.820	0.393	0.771	0.549	0.362	A	0.769	0.574	36
P155/80R13 7E	2004	0.56	0.83	0.398	0.721	0.520	0.804	0.388	0.722	0.536	0.360	A	0.771	0.599	37
P155/80R13 7E	2004	0.56	0.84	0.406	0.724	0.520	0.804	0.388	0.722	0.542	0.368	A	0.785	0.602	38
P215/60R16 94	2004	0.54	0.85	0.384	0.659	0.468	0.743	0.365	0.593	0.573	0.369	A	0.858	0.666	45
P215/60R16 94	2004	0.54	0.83	0.391	0.692	0.468	0.743	0.365	0.593	0.573	0.376	A	0.841	0.699	46
P215/60R16 94	2004	0.54	0.84	0.385	0.677	0.465	0.736	0.365	0.593	0.572	0.370	A	0.854	0.683	46
P215/60R16 94	2004	0.54	0.88	0.386	0.671	0.465	0.736	0.365	0.593	0.574	0.371	A	0.897	0.678	47
P215/60R16 94	2004	0.55	0.87	0.400	0.728	0.499	0.769	0.367	0.676	0.556	0.383	AA	0.853	0.651	44
P215/60R16 94	2004	0.54	0.88	0.392	0.766	0.499	0.769	0.367	0.676	0.542	0.375	A	0.862	0.690	47
P215/60R16 94	2004	0.53	0.88	0.390	0.759	0.501	0.812	0.363	0.696	0.530	0.377	A	0.815	0.663	43
P215/60R16 94	2004	0.53	0.84	0.380	0.749	0.501	0.812	0.363	0.696	0.526	0.366	A	0.781	0.653	41
P205/55R16 8E	2004	0.56	0.94	0.404	0.786	0.516	0.810	0.354	0.629	0.542	0.399	AA	0.882	0.758	52
P205/55R16 8E	2004	0.57	0.92	0.404	0.826	0.516	0.810	0.354	0.629	0.556	0.399	AA	0.862	0.797	53
P205/55R16 8E	2004	0.56	0.88	0.388	0.771	0.508	0.812	0.353	0.643	0.555	0.385	AA	0.822	0.728	47
P205/55R16 8E	2004	0.56	0.89	0.395	0.786	0.508	0.812	0.353	0.643	0.555	0.392	AA	0.832	0.743	48
G78-15	2004	0.52	0.79	0.341	0.713	0.522	0.787	0.354	0.702	0.494	0.337	B	0.752	0.611	37
G78-15	2004	0.52	0.81	0.340	0.704	0.522	0.787	0.354	0.702	0.495	0.336	B	0.772	0.602	38
G78-15	2004	0.51	0.81	0.338	0.727	0.512	0.779	0.350	0.702	0.497	0.338	B	0.781	0.625	39
G78-15	2004	0.51	0.82	0.335	0.706	0.512	0.779	0.350	0.702	0.495	0.335	B	0.792	0.604	39
P195/70R14 91	2004	0.54	0.89	0.381	0.672	0.494	0.806	0.361	0.621	0.543	0.370	A	0.836	0.651	43
P195/70R14 91	2004	0.54	0.90	0.385	0.664	0.494	0.806	0.361	0.621	0.545	0.374	A	0.846	0.643	43
P195/70R14 91	2004	0.53	0.86	0.380	0.666	0.492	0.798	0.355	0.599	0.536	0.375	A	0.808	0.667	43
P195/70R14 91	2004	0.53	0.87	0.375	0.645	0.492	0.798	0.355	0.599	0.536	0.371	A	0.822	0.646	42
P195/70R14 91	2004	0.56	0.86	0.395	0.702	0.488	0.805	0.350	0.597	0.573	0.395	AA	0.803	0.705	45
P195/70R14 91	2004	0.56	0.86	0.406	0.688	0.488	0.805	0.350	0.597	0.572	0.406	AA	0.805	0.691	44
P195/70R14 91	2004	0.53	0.86	0.390	0.710	0.489	0.784	0.347	0.612	0.544	0.393	AA	0.822	0.698	45
P195/70R14 91	2004	0.57	0.87	0.398	0.745	0.489	0.784	0.347	0.612	0.577	0.401	AA	0.838	0.733	48
P225/60R16 97	2004	0.54	0.84	0.381	0.681	0.472	0.727	0.354	0.593	0.566	0.377	A	0.860	0.689	46
P225/60R16 97	2004	0.53	0.84	0.388	0.679	0.472	0.727	0.354	0.593	0.560	0.384	AA	0.863	0.687	46
P225/60R16 97	2004	0.53	0.83	0.375	0.689	0.466	0.704	0.351	0.559	0.562	0.374	A	0.872	0.729	49
P225/60R16 97	2004	0.53	0.84	0.375	0.699	0.466	0.704	0.351	0.559	0.563	0.375	A	0.889	0.740	51
P225/60R16 97	2004	0.52	0.89	0.388	0.694	0.473	0.783	0.372	0.605	0.551	0.366	A	0.862	0.690	47
P225/60R16 97	2004	0.53	0.92	0.387	0.670	0.473	0.783	0.372	0.605	0.554	0.365	A	0.889	0.666	46
P225/60R16 97	2004	0.52	0.81	0.384	0.668	0.479	0.755	0.370	0.600	0.545	0.364	A	0.808	0.668	43
P225/60R16 97	2004	0.53	0.88	0.390	0.660	0.479	0.755	0.370	0.600	0.548	0.370	A	0.873	0.660	45
P185/65R14	2004	0.52	0.80	0.431	0.660	0.487	0.768	0.391	0.563	0.534	0.389	A	0.785	0.697	44
P185/65R14	2004	0.54	0.85	0.452	0.663	0.487	0.768	0.391	0.563	0.555	0.410	AA	0.831	0.699	46
P185/65R14	2004	0.54	0.86	0.383	0.690	0.526	0.746	0.350	0.653	0.515	0.383	A	0.861	0.637	43
P185/65R14	2004	0.55	0.88	0.382	0.672	0.526	0.746	0.350	0.653	0.526	0.382	A	0.887	0.619	43
P185/65R14	2004	0.51	0.77	0.369	0.591	0.523	0.731	0.342	0.585	0.488	0.378	A	0.790	0.606	39
P185/65R14	2004	0.52	0.79	0.362	0.611	0.523	0.731	0.342	0.585	0.494	0.370	A	0.808	0.626	41
P185/65R14	2004	0.53	0.83	0.407	0.634	0.520	0.762	0.352	0.558	0.510	0.405	A	0.820	0.677	44

P185/65R14	2004	0.53	0.82	0.402	0.622	0.520	0.762	0.352	0.558	0.507	0.401	A	0.806	0.665	43
P185/65R14	2004	0.57	0.88	0.420	0.692	0.471	0.797	0.367	0.573	0.599	0.403	AA	0.836	0.719	47
P185/65R14	2004	0.58	0.90	0.409	0.670	0.471	0.797	0.367	0.573	0.609	0.392	AA	0.848	0.697	47
P215/70R15	2004	0.48	0.78	0.387	0.644	0.453	0.782	0.372	0.666	0.529	0.365	A	0.750	0.578	35
P215/70R15	2004	0.50	0.80	0.385	0.666	0.453	0.782	0.372	0.666	0.550	0.362	A	0.772	0.600	38
P215/70R15	2004	0.49	0.81	0.384	0.647	0.461	0.809	0.370	0.638	0.526	0.364	A	0.751	0.609	37
P215/70R15	2004	0.49	0.72	0.386	0.569	0.461	0.809	0.370	0.638	0.527	0.366	A	0.657	0.532	29
P215/70R15	2004	0.53	0.90	0.388	0.706	0.505	0.817	0.357	0.610	0.522	0.381	A	0.830	0.695	46
P215/70R15	2004	0.50	0.87	0.378	0.649	0.505	0.817	0.357	0.610	0.491	0.371	A	0.801	0.639	41
P215/70R15	2004	0.54	0.90	0.380	0.719	0.498	0.808	0.352	0.602	0.539	0.379	A	0.842	0.717	47
P215/70R15	2004	0.51	0.90	0.382	0.674	0.498	0.808	0.352	0.602	0.513	0.381	A	0.843	0.672	45
P215/70R15	2004	0.62	0.88	0.397	0.782	0.490	0.711	0.355	0.610	0.625	0.391	AA	0.916	0.772	54
P215/70R15	2004	0.59	0.84	0.387	0.730	0.490	0.711	0.355	0.610	0.601	0.382	AA	0.874	0.720	49
P215/70R15	2004	0.51	0.84	0.403	0.725	0.489	0.745	0.387	0.635	0.524	0.366	A	0.844	0.690	46
P215/70R15	2004	0.51	0.84	0.402	0.730	0.489	0.745	0.387	0.635	0.523	0.365	A	0.844	0.695	46
235/55R18 100	8-Apr-09	0.558	0.894	0.406	0.782	0.547	0.827	0.386	0.692	0.511	0.370	A	0.817	0.691	45
235/55R18 100	8-Apr-09	0.568	0.894	0.413	0.789	0.547	0.827	0.386	0.692	0.521	0.377	A	0.817	0.698	45
205/60R15 91F	31-Jan-07	0.559	0.800	0.405	0.856	0.522	0.724	0.376	0.725	0.537	0.379	A	0.826	0.731	48
205/60R15 91F	31-Jan-07	0.571	0.812	0.398	0.865	0.522	0.724	0.376	0.725	0.549	0.373	A	0.838	0.740	49
205/60R15 91F	30-Jan-07	0.572	0.789	0.395	0.816	0.536	0.776	0.379	0.712	0.536	0.366	A	0.763	0.704	43
205/60R15 91F	30-Jan-07	0.591	0.768	0.393	0.811	0.536	0.776	0.379	0.712	0.556	0.364	A	0.742	0.699	42
205/60R15 91F	31-Jan-07	0.553	0.796	0.398	0.792	0.530	0.724	0.383	0.698	0.523	0.366	A	0.822	0.694	45
205/60R15 91F	31-Jan-07	0.560	0.848	0.379	0.857	0.530	0.724	0.383	0.698	0.530	0.361	A	0.874	0.759	51
225/45ZR17 91	29-Sep-06	0.568	0.911	0.399	0.739	0.486	0.705	0.363	0.560	0.582	0.386	A	0.956	0.779	56
225/45ZR17 91	29-Sep-06	0.574	0.942	0.402	0.741	0.486	0.705	0.363	0.560	0.589	0.390	A	0.987	0.781	57
255/35ZR19 9E	29-Sep-06	0.499	0.823	0.353	0.712	0.504	0.706	0.361	0.583	0.495	0.342	B	0.867	0.729	49
255/35ZR19 9E	29-Sep-06	0.490	0.798	0.366	0.678	0.504	0.706	0.361	0.583	0.486	0.355	A	0.842	0.695	46
205/40ZR17 84	30-Sep-06	0.565	0.838	0.421	0.755	0.483	0.662	0.378	0.596	0.582	0.385	AA	0.926	0.759	53
205/40ZR17 84	30-Sep-06	0.555	0.808	0.373	0.726	0.483	0.662	0.378	0.596	0.572	0.401	AA	0.896	0.730	50
215/60R16 95V	26-Sep-06	0.567	0.810	0.389	0.643	0.480	0.675	0.363	0.548	0.588	0.377	A	0.885	0.695	48
215/60R16 95V	26-Sep-06	0.575	0.833	0.392	0.668	0.480	0.675	0.363	0.548	0.596	0.380	A	0.908	0.720	50
215/60R16 95V	22-Sep-06	0.578	0.868	0.406	0.672	0.492	0.729	0.367	0.556	0.586	0.390	AA	0.889	0.716	49
215/60R16 95V	22-Sep-06	0.578	0.861	0.399	0.646	0.492	0.729	0.367	0.556	0.587	0.382	AA	0.882	0.690	47
215/60R16 95V	30-Sep-06	0.570	0.848	0.396	0.685	0.476	0.657	0.373	0.575	0.594	0.374	A	0.941	0.710	51
215/60R16 95V	30-Sep-06	0.564	0.843	0.386	0.659	0.476	0.657	0.373	0.575	0.588	0.364	A	0.936	0.684	49
215/60R17 96F	27-Sep-06	0.596	0.834	0.389	0.601	0.528	0.738	0.364	0.513	0.568	0.375	A	0.846	0.688	46
215/60R17 96F	27-Sep-06	0.599	0.864	0.387	0.622	0.528	0.738	0.364	0.513	0.571	0.373	A	0.876	0.709	48
215/60R17 96F	27-Sep-06	0.619	0.886	0.396	0.644	0.528	0.757	0.370	0.539	0.591	0.376	A	0.879	0.705	48
215/60R17 96F	27-Sep-06	0.622	0.848	0.395	0.618	0.528	0.757	0.370	0.539	0.594	0.375	A	0.841	0.679	45
215/60R16 95T	30-Jun-06	0.561	0.750	0.380	0.605	0.520	0.725	0.377	0.585	0.541	0.353	A	0.775	0.620	39
215/60R16 95T	30-Jun-06	0.559	0.737	0.379	0.576	0.520	0.725	0.377	0.585	0.539	0.353	A	0.762	0.591	37
P225/70R16 1C	9-Mar-04	0.524	0.795	0.380	0.587	0.493	0.769	0.372	0.508	0.631	0.358	A	0.776	0.679	42
P225/70R16 1C	9-Mar-04	0.512	0.782	0.374	0.584	0.493	0.769	0.372	0.508	0.520	0.352	A	0.763	0.676	42
305/40R22 114	20-Nov-07	0.550	0.886	0.376	0.729	0.546	0.774	0.395	0.618	0.504	0.332	B	0.862	0.711	48
305/40R22 114	20-Nov-07	0.558	0.893	0.394	0.712	0.546	0.774	0.395	0.618	0.513	0.350	A	0.869	0.694	47
165R14	23-Dec-05	0.494	0.732	0.327	0.630	0.565	0.739	0.380	0.649	0.429	0.397	B	0.743	0.581	35
165R14	23-Dec-05	0.501	0.832	0.333	0.653	0.565	0.739	0.380	0.649	0.436	0.303	B	0.843	0.604	40
165R14	23-Dec-05	0.486	0.750	0.321	0.572	0.544	0.737	0.369	0.614	0.441	0.302	B	0.763	0.558	34
165R14	23-Dec-05	0.464	0.721	0.301	0.566	0.544	0.737	0.369	0.614	0.419	0.282	B	0.734	0.552	33
165R14	23-Dec-05	0.461	0.661	0.306	0.564	0.535	0.746	0.371	0.606	0.426	0.285	B	0.665	0.558	31
165R14	23-Dec-05	0.471	0.714	0.316	0.595	0.535	0.746	0.371	0.606	0.436	0.295	B	0.718	0.589	35
215/60R17 96F	10-Aug-06	0.605	0.853	0.384	0.652	0.537	0.685	0.367	0.533	0.568	0.367	A	0.918	0.719	51
215/60R17 96F	10-Aug-06	0.605	0.857	0.387	0.656	0.537	0.685	0.367	0.533	0.568	0.370	A	0.922	0.723	51
215/60R16 95V	22-Aug-06	0.582	0.838	0.415	0.626	0.507	0.682	0.366	0.521	0.574	0.398	AA	0.906	0.705	49
215/60R16 95V	22-Aug-06	0.578	0.814	0.406	0.603	0.507	0.682	0.366	0.521	0.571	0.389	AA	0.882	0.682	47
215/60R16 95V	17-Aug-06	0.559	0.804	0.415	0.623	0.473	0.644	0.390	0.513	0.586	0.376	A	0.910	0.710	50
215/60R16 95V	17-Aug-06	0.555	0.753	0.411	0.662	0.473	0.644	0.390	0.513	0.581	0.372	A	0.859	0.749	50

215/60R16 95V	18-Aug-06	0.581	0.796	0.408	0.648	0.531	0.653	0.368	0.516	0.550	0.390	AA	0.893	0.732	50
215/60R16 95V	18-Aug-06	0.579	0.818	0.411	0.645	0.531	0.653	0.368	0.516	0.548	0.393	AA	0.915	0.729	51
215/60R16 95V	18-Aug-06	0.591	0.812	0.420	0.698	0.536	0.666	0.378	0.556	0.555	0.392	AA	0.896	0.742	51
215/60R16 95V	18-Aug-06	0.597	0.825	0.416	0.666	0.536	0.666	0.378	0.556	0.561	0.388	AA	0.909	0.710	50
215/60R16 95V	15-Aug-06	0.580	0.792	0.417	0.670	0.505	0.630	0.404	0.570	0.576	0.363	A	0.912	0.700	49
215/60R16 95V	15-Aug-06	0.589	0.786	0.411	0.669	0.505	0.630	0.404	0.570	0.584	0.357	A	0.906	0.699	49
195/65R15 91F	10-Aug-06	0.575	0.801	0.376	0.619	0.520	0.637	0.365	0.508	0.556	0.361	A	0.914	0.711	50
195/65R15 91F	10-Aug-06	0.567	0.787	0.374	0.592	0.520	0.637	0.365	0.508	0.548	0.359	A	0.900	0.684	48
215/60R16 95V	9-Aug-06	0.549	0.739	0.378	0.611	0.474	0.570	0.353	0.520	0.575	0.375	A	0.919	0.691	49
215/60R16 95V	9-Aug-06	0.556	0.746	0.379	0.637	0.474	0.570	0.353	0.520	0.582	0.376	A	0.926	0.717	51
195/60R15 88V	10-Aug-06	0.578	0.774	0.376	0.601	0.529	0.644	0.362	0.513	0.549	0.364	A	0.880	0.688	47
195/60R15 88V	10-Aug-06	0.578	0.775	0.367	0.596	0.529	0.644	0.362	0.513	0.549	0.354	A	0.881	0.683	47
205/60R15 91F	18-Sep-06	0.591	0.869	0.381	0.766	0.538	0.840	0.364	0.687	0.553	0.367	A	0.779	0.679	43
205/60R15 91F	18-Sep-06	0.597	0.900	0.384	0.749	0.538	0.840	0.364	0.687	0.559	0.370	A	0.810	0.662	43
225/45R17 94V	Aug. 11, 2006		0.834		0.63		0.639		0.493			B	0.945	0.737	53
225/45R17 94V	Aug. 11, 2006		0.803		0.644		0.639		0.493			B	0.914	0.751	52
235/40R18 88V	Sept. 14, 2006		0.855		0.803		0.837		0.571			B	0.768	0.832	50
235/40R18 88V	Sept. 14, 2006		0.875		0.817		0.837		0.571			B	0.788	0.846	52
235/40R18 88V	Sept. 14, 2006		0.866		0.726		0.811		0.566			B	0.805	0.76	48
255/70R16 109	Oct. 10, 2006		0.905		0.743		0.818		0.718			B	0.837	0.625	42
255/70R16 109	Oct. 24, 2006		0.846		0.729		0.757		0.63			B	0.839	0.699	46
265/75R16 114	Nov. 16, 2006		0.846		0.674		0.761		0.644			B	0.835	0.63	42
265/70R16 111	Feb. 27, 2007		0.76		0.604		0.677		0.592			B	0.833	0.612	41
265/70R16 111	Dec. 20, 2007		0.94		0.737		0.785		0.692			B	0.905	0.645	45
215/55R17 93T	Jan. 16, 2009		0.956		0.844		0.822		0.72			B	0.884	0.724	50
205/65R16 109	May 18, 2006		0.887		0.734		0.767		0.587			AA	0.87	0.747	50
255/70R16 109	Jan. 10, 2007		0.883		0.755		0.764		0.668			AA	0.869	0.687	47
255/70R16 109	Jan. 10, 2007		0.886		0.757		0.764		0.668			AA	0.872	0.689	47
205/50R16 87V	Feb. 21, 2007		0.899		0.837		0.682		0.652			AA	0.967	0.785	57
205/50R16 97V	Feb. 21, 2007		0.875		0.866		0.684		0.626			AA	0.941	0.84	59
235/50R18 97V	Mar. 13, 2008		0.959		0.944		0.733		0.657			AA	0.976	0.887	63
205/55R16 91V	Mar. 14, 2008		0.9		0.823		0.791		0.694			AA	0.859	0.729	49
225/55R17 97V	Apr. 22, 2008		0.963		0.782		0.749		0.603			AA	0.964	0.779	56
235/50R18 97V	Apr. 22, 2008		0.969		0.797		0.749		0.603			AA	0.97	0.794	57
225/45R17 94F	Jun. 2, 2008		0.833		0.724		0.717		0.609			AA	0.866	0.715	48
225/45R17 94F	Jun. 2, 2008		0.865		0.759		0.717		0.609			AA	0.898	0.75	52
225/45R17 94F	Jun. 2, 2008		0.892		0.749		0.683		0.566			AA	0.959	0.783	56
225/45R17 94F	Jun. 2, 2008		0.874		0.737		0.683		0.566			AA	0.941	0.771	55
235/75R16 109	Aug. 27, 2008		0.837		0.728		0.781		0.75			AA	0.806	0.578	37
225/45R17 91F	Nov. 25, 2008		0.938		0.858		0.762		0.695			AA	0.926	0.763	54
225/40R18 88V	Jan. 9, 2009		0.95		0.971		0.828		0.722			AA	0.872	0.849	56
225/40R18 88V	Jan. 9, 2009		0.939		0.965		0.828		0.722			AA	0.861	0.843	55
195/65R15 91F	Mar. 10, 2009		0.893		0.824		0.733		0.63			AA	0.91	0.794	55
225/45R17 94F	Jul. 2, 2009		0.97		0.863		0.751		0.633			AA	0.969	0.83	59
225/45R17 94F	Jul. 2, 2009		0.984		0.876		0.739		0.621			AA	0.995	0.855	62
225/45R17 94F	Jul. 2, 2009		0.978		0.903		0.739		0.621			AA	0.989	0.882	63
225/45R17 94F	Jul. 2, 2009		0.967		0.816		0.751		0.633			AA	0.966	0.783	56
225/45R17 94F	Jul. 6, 2009		1		0.932		0.797		0.696			AA	0.953	0.836	59
225/45R17 94F	Jul. 6, 2009		1.072		0.979		0.797		0.696			AA	1.025	0.883	65
225/45R17 94F	Jul. 6, 2009		0.986		0.879		0.799		0.663			AA	0.937	0.816	57
225/45R17 94F	Jul. 6, 2009		1.032		0.962		0.799		0.663			AA	0.983	0.899	64
225/45R17 94F	Jul. 6, 2009		1.063		0.94		0.799		0.663			AA	1.014	0.877	64
224/45R17 94V	Mar. 14, 2006		0.86		0.649		0.741		0.513			A	0.869	0.736	50
224/45R17 94V	Mar. 14, 2006		0.916		0.673		0.741		0.513			A	0.925	0.76	53
224/45R17 94V	Mar. 14, 2006		0.921		0.731		0.741		0.513			A	0.93	0.818	57
205/60R16 92V	Mar. 14, 2006		0.892		0.733		0.772		0.583			A	0.87	0.75	51
205/65R15 94F	May 18, 2006		0.833		0.659		0.767		0.587			A	0.816	0.672	44

205/65R15 94H	May 18, 2006	0.849	0.66	0.767	0.587	A	0.832	0.673	44
235/45R17 94V	Aug. 1, 2006	0.84	0.693	0.637	0.518	A	0.953	0.775	55
235/45R17 94V	Aug. 1, 2006	0.839	0.713	0.637	0.518	A	0.952	0.795	57
235/45R17 94V	Aug. 1, 2006	0.834	0.662	0.648	0.52	A	0.936	0.742	53
235/45R17 94V	Aug. 1, 2006	0.835	0.699	0.648	0.52	A	0.937	0.779	55
235/40R18 88V	Sept. 14, 2006	0.848	0.774	0.811	0.566	A	0.787	0.808	50
235/40R18 88V	Sept. 14, 2006	0.931	0.886	0.816	0.65	A	0.865	0.836	55
235/40R18 88V	Sept. 14, 2006	0.894	0.877	0.816	0.65	A	0.828	0.827	53
235/40R18 88V	Sept. 14, 2006	0.902	0.827	0.816	0.65	A	0.836	0.777	51
235/45R17 94V	Sept. 22, 2006	0.951	0.741	0.75	0.572	A	0.951	0.769	55
235/45R17 94V	Sept. 22, 2006	0.972	0.75	0.75	0.572	A	0.972	0.778	56
235/45R17 94V	Sept. 22, 2006	0.836	0.696	0.75	0.572	A	0.836	0.724	48
245/40R18 93Y	Oct. 11, 2006	1.017	0.947	0.818	0.706	A	0.949	0.841	59
245/40R18 93Y	Oct. 11, 2006	0.991	0.936	0.818	0.706	A	0.923	0.83	57
245/40R18 93Y	Oct. 11, 2006	1.012	0.914	0.802	0.69	A	0.96	0.824	59
245/40R18 93Y	Oct. 11, 2006	1.02	0.896	0.802	0.69	A	0.968	0.806	58
255/70R16 109	Oct. 24, 2006	0.863	0.771	0.795	0.72	A	0.818	0.651	43
255/70R16 109	Oct. 24, 2006	0.885	0.791	0.795	0.72	A	0.84	0.671	45
255/70R16 109	Oct. 24, 2006	0.864	0.736	0.757	0.63	A	0.857	0.706	47
255/70R16 109	Oct. 24, 2006	0.871	0.72	0.757	0.63	A	0.864	0.69	47
255/70R16 109	Oct. 25, 2006	0.895	0.796	0.783	0.746	A	0.862	0.65	44
255/70R16 109	Oct. 25, 2006	0.895	0.8	0.783	0.746	A	0.862	0.654	44
255/70R16 109	Oct. 25, 2006	0.885	0.788	0.801	0.731	A	0.834	0.657	43
255/70R16 109	Oct. 25, 2006	0.878	0.755	0.801	0.731	A	0.827	0.624	41
255/70R16 109	Oct. 25, 2006	0.886	0.761	0.801	0.731	A	0.835	0.63	42
235/45R17 94V	Nov. 7, 2006	0.91	0.862	0.719	0.698	A	0.941	0.764	54
205/50R16 87V	Feb. 21, 2007	0.889	0.826	0.684	0.626	A	0.955	0.8	57
205/50R16 87V	Feb. 21, 2007	0.915	0.82	0.682	0.652	A	0.983	0.768	56
205/50R16 87V	Feb. 21, 2007	0.928	0.816	0.756	0.648	A	0.922	0.768	54
205/50R16 87V	Feb. 21, 2007	0.903	0.802	0.756	0.648	A	0.897	0.754	52
205/50R16 87V	Feb. 21, 2007	0.904	0.816	0.682	0.652	A	0.972	0.764	56
205/50R16 91V	Feb. 26, 2007	0.882	0.796	0.63	0.58	A	1.002	0.816	60
205/50R16 91V	Feb. 26, 2007	0.884	0.773	0.63	0.58	A	1.004	0.793	59
265/75R16 114	Feb. 27, 2007	0.907	0.728	0.69	0.645	A	0.967	0.683	50
265/75R16 114	Feb. 27, 2007	0.893	0.711	0.69	0.645	A	0.953	0.666	48
255/70R16 109	Feb. 27, 2007	0.816	0.681	0.677	0.592	A	0.889	0.689	48
255/65R16 109	Feb. 27, 2007	0.822	0.721	0.677	0.592	A	0.895	0.729	50
205/55R16 91V	Dec. 17, 2007	0.946	0.869	0.79	0.699	A	0.906	0.77	53
265/70R16 111	Dec. 20, 2007	0.937	0.776	0.816	0.718	A	0.871	0.658	45
265/70R16 111	Dec. 20, 2007	0.969	0.752	0.816	0.718	A	0.903	0.634	44
265/70R16 111	Dec. 20, 2007	0.96	0.748	0.785	0.692	A	0.925	0.656	47
265/70R16 111	Dec. 20, 2007	0.97	0.752	0.785	0.692	A	0.935	0.66	47
215/60R16 95V	Jan. 9, 2008	0.831	0.707	0.683	0.62	A	0.898	0.687	48
225/60R16 98H	Feb. 4, 2008	0.876	0.741	0.767	0.678	A	0.859	0.663	45
205/55R16 91V	Feb. 29, 2008	0.92	0.748	0.776	0.641	A	0.894	0.707	49
205/55R16 91V	Feb. 28, 2008	0.929	0.819	0.776	0.641	A	0.903	0.778	54
225/55R17 97V	Mar. 13, 2008	0.871	0.816	0.753	0.699	A	0.868	0.717	49
235/50R18 97V	Mar. 13, 2008	0.91	0.881	0.753	0.699	A	0.907	0.782	54
205/55R16 91V	Mar. 13, 2008	0.888	0.807	0.733	0.657	A	0.905	0.75	52
285/60R18 120	Jun. 6, 2008	0.96	0.758	0.815	0.587	A	0.895	0.771	53
285/60R18 120	Jun. 6, 2008	0.989	0.809	0.815	0.587	A	0.924	0.822	57
285/60R18 120	Jun. 6, 2008	0.952	0.725	0.845	0.596	A	0.857	0.729	49
285/60R18 120	Jun. 6, 2008	0.97	0.759	0.845	0.596	A	0.875	0.763	52
295/45R20 114	Jun. 16, 2008	0.994	0.755	0.853	0.622	A	0.891	0.733	50
285/60R18 120	Jun. 25, 2008	0.94	0.808	0.783	0.63	A	0.907	0.778	54
285/60R18 120	Jun. 25, 2008	0.92	0.776	0.783	0.63	A	0.887	0.746	51
235/75R16 109	Aug. 27, 2008	0.93	0.798	0.781	0.75	A	0.899	0.648	45

235/75R16 109	Aug. 27, 2008	0.886	0.771	0.781	0.75	A	0.855	0.621	42
245/45R17 99H	Nov. 25, 2008	0.908	0.788	0.762	0.695	A	0.896	0.693	48
235/60R16 100	Nov. 28, 2008	0.907	0.873	0.744	0.711	A	0.913	0.762	53
235/60R16 100	Nov. 28, 2008	0.92	0.813	0.744	0.711	A	0.926	0.702	50
215/60R16 94H	Feb. 23, 2009	0.929	0.847	0.767	0.693	A	0.912	0.754	53
215/60R16 65H	Feb. 23, 2009	0.886	0.783	0.765	0.725	A	0.871	0.658	45
195/65R15 91H	Feb. 23, 2009	0.857	0.888	0.765	0.725	A	0.842	0.763	50
215/60R16 95H	Feb. 23, 2009	0.898	0.776	0.767	0.693	A	0.881	0.683	47
185/65R15 86T	Mar. 18, 2009	0.924	0.829	0.853	0.737	A	0.821	0.692	45
185/65R15 86T	Mar. 18, 2009	0.918	0.825	0.853	0.737	A	0.815	0.688	45
185/65R15 86T	Mar. 18, 2009	0.94	0.865	0.871	0.73	A	0.819	0.735	47
185/65R15 86T	Mar. 18, 2009	0.927	0.836	0.871	0.73	A	0.806	0.706	45
185/65R15 86T	Mar. 18, 2009	0.903	0.795	0.799	0.73	A	0.854	0.665	45
185/65R15 86T	Mar. 18, 2009	0.899	0.778	0.799	0.73	A	0.85	0.648	44
185/65R15 86T	Mar. 19, 2009	0.912	0.812	0.792	0.721	A	0.87	0.691	47
185/65R15 86T	Mar. 19, 2009	0.918	0.817	0.792	0.721	A	0.876	0.696	48
185/65R15 86T	Mar. 19, 2009	0.889	0.809	0.754	0.732	A	0.885	0.677	47
185/65R15 86T	Mar. 19, 2009	0.882	0.79	0.754	0.732	A	0.878	0.658	45
185/65R15 86T	Mar. 19, 2009	0.835	0.772	0.771	0.694	A	0.814	0.678	44
185/65R15 86T	Mar. 19, 2009	0.848	0.764	0.771	0.694	A	0.827	0.67	44
225/60R16 97T	Apr. 30, 2009	0.941	0.819	0.858	0.703	A	0.833	0.716	47
225/60R16 97T	Apr. 30, 2009	0.936	0.788	0.858	0.703	A	0.828	0.685	45
225/60R16 97T	Apr. 30, 2009	0.914	0.756	0.864	0.66	A	0.8	0.696	44
225/60R16 97T	Apr. 30, 2009	0.944	0.768	0.864	0.66	A	0.83	0.708	46
225/60R16 97T	May 6, 2009	0.839	0.785	0.785	0.722	A	0.804	0.663	43
225/60R16 97T	May 6, 2009	0.854	0.792	0.785	0.722	A	0.819	0.67	44
225/60R16 97T	May 6, 2009	0.815	0.746	0.804	0.706	A	0.761	0.64	40
225/60R16 97T	May 6, 2009	0.809	0.765	0.804	0.706	A	0.755	0.659	40
225/60R17 99Y	May 13, 2009	0.832	0.71	0.784	0.627	A	0.798	0.683	44
225/60R16 97T	May 13, 2009	0.857	0.686	0.784	0.627	A	0.823	0.659	43
235/60R16 100	May 13, 2009	0.938	0.799	0.799	0.674	A	0.889	0.725	50
245/75R16 109	Jun. 25, 2008	0.828	0.692	0.809	0.662	A	0.769	0.63	39
225/45R17 94H	Jul. 2, 2009	0.933	0.828	0.751	0.633	A	0.932	0.795	56