



TÜV SÜD Premium Tire Mark 2024

GOODYEAR
VECTOR ALL SEASON 4

205/55 R16 94V XL

Test Period: November - December 2024

**Add value.
Inspire trust.**

Report No. 713349044-PM

TÜV SÜD PS – PREMIUM TIRE MARK 2024

TIRE DETAILS



CANDIDATE



**GOODYEAR
VECTOR
ALL SEASON 4**

205/55 R16 94V XL
1A50F YE1R 3724

COMPETITOR TIRES (in testing order)



**BRIDGESTONE
TURANZA
ALL SEASON 6**

205/55 R16 94V XL
16C 100LP2 1824-2524



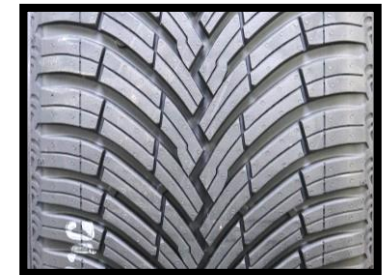
**CONTINENTAL
ALLSEASON-
CONTACT 2**

205/55 R16 94V XL
1AF 03F7TD 0724



**MICHELIN
CROSSCLIMATE 2**

205/55 R16 94V XL
1FT WC 0MRX 3224



**PIRELLI
CINTURATO
ALL SEASON SF3**

205/55 R16 94V XL
193 BK538P 1424

- All Goodyear Vector All Season 4 test samples were provided for the tests by the customer.
- All other test samples were purchased in the normal market by TÜV SÜD.
- TÜV SÜD randomly selected the tires for the individual tests.

TÜV SÜD PS – PREMIUM TIRE MARK 2024

TEST DETAILS



TEST LOCATIONS



- Wet, dry & rolling noise: GPG Mireval (F)
- WGI Annex 5 & 9: UniBW Neubiberg (D)
- Snow: Arctic Center Saariselkä (FIN)
- Rolling resistance & highspeed test advanced: TÜV SÜD Product Service Garching (D)

TEST VEHICLES



- VW Golf VIII 1.5TSI, Skoda Superb 1.5TSI (PBN)

PROCEDURE & EVALUATION



- In most tests, the reference/control tire is tested repeatedly in the progress of the test to detect and consider changes of the ambient test parameters and correct its performance by linear interpolation.
- Generally, all tires in a test are primarily evaluated in relation to the reference/control tire.
- The performance is expressed as a percentage value, calculated on the basis of the measured and corrected test data.
- In this present evaluation, the performance of each tire is assessed relative to Goodyear Vector All Season 4 (\cong 100%).
- In all evaluations, a percentage >100% means better and <100% means worse.

TÜV SÜD PS – PREMIUM TIRE MARK 2024

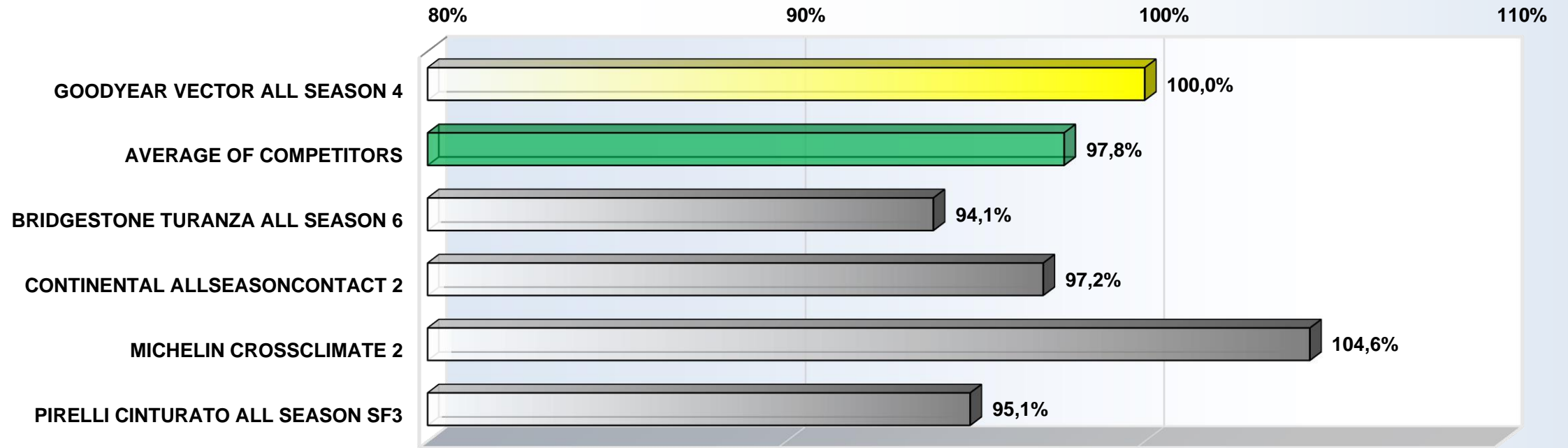
TEST RESULTS



ACCELERATION ON SNOW

- Acceleration on compressed snow with activated ETC (double execution)
- Result: Ø Acceleration time [s] from 10 to 35 km/h → Mean acceleration [m/s²]

ACCELERATION ON SNOW PERFORMANCE * [%]



*) The calculation of the percentage performance is based on the mean acceleration values resulting from the measured acceleration times.

TÜV SÜD PS – PREMIUM TIRE MARK 2024

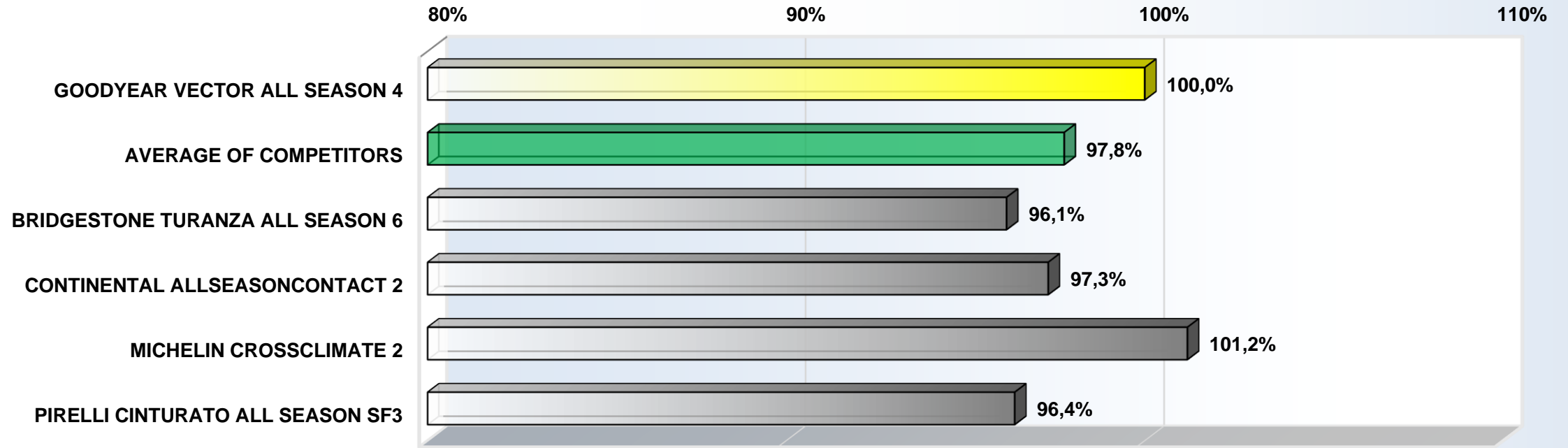
TEST RESULTS



BRAKING ON SNOW

- ABS-braking on compressed snow (double execution)
- Result: Ø Stopping distance [m] from 40 to 5 km/h → Mean deceleration [m/s²]

BRAKING ON SNOW PERFORMANCE * [%]



*) The calculation of the percentage performance is based on the mean deceleration values resulting from the measured braking distances.

TÜV SÜD PS – PREMIUM TIRE MARK 2024

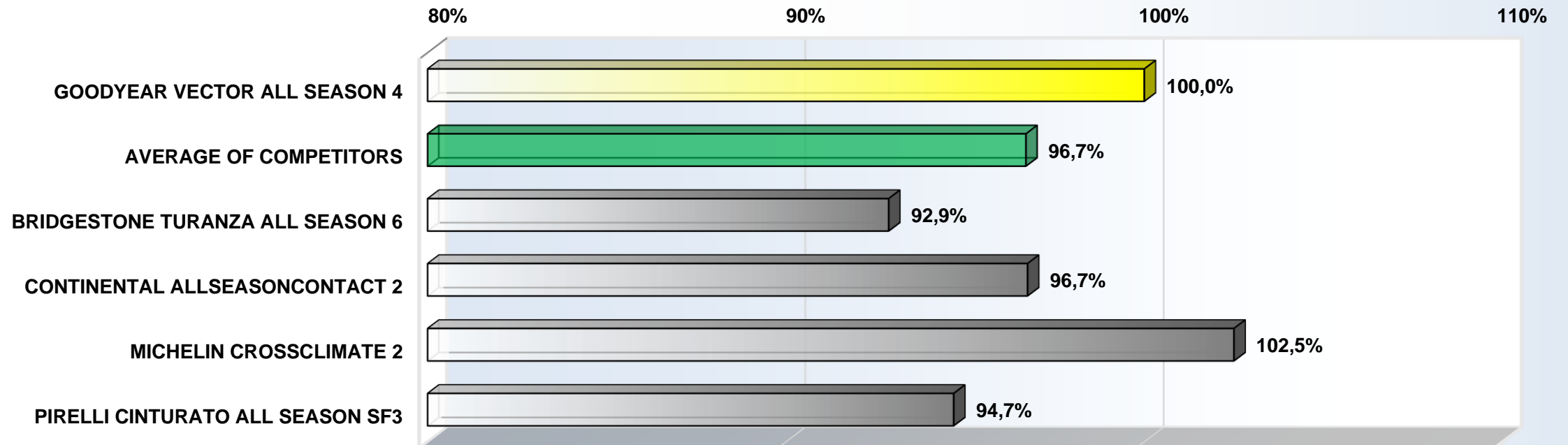
TEST RESULTS



HANDLING ON SNOW

- Subjective assessment and lap time on a snow handling circuit (track length: 930 m) (double execution)
- Result: Ø Rating (min. 1, max. 10) and Ø lap time [s] → average speed [km/h]; total result from speed and rating scores (2:1)

HANDLING ON SNOW PERFORMANCE * [%]



*) The calculation of the percentage performance is based on the speed and the rating scores (at the ratio 2:1).

TÜV SÜD PS – PREMIUM TIRE MARK 2024

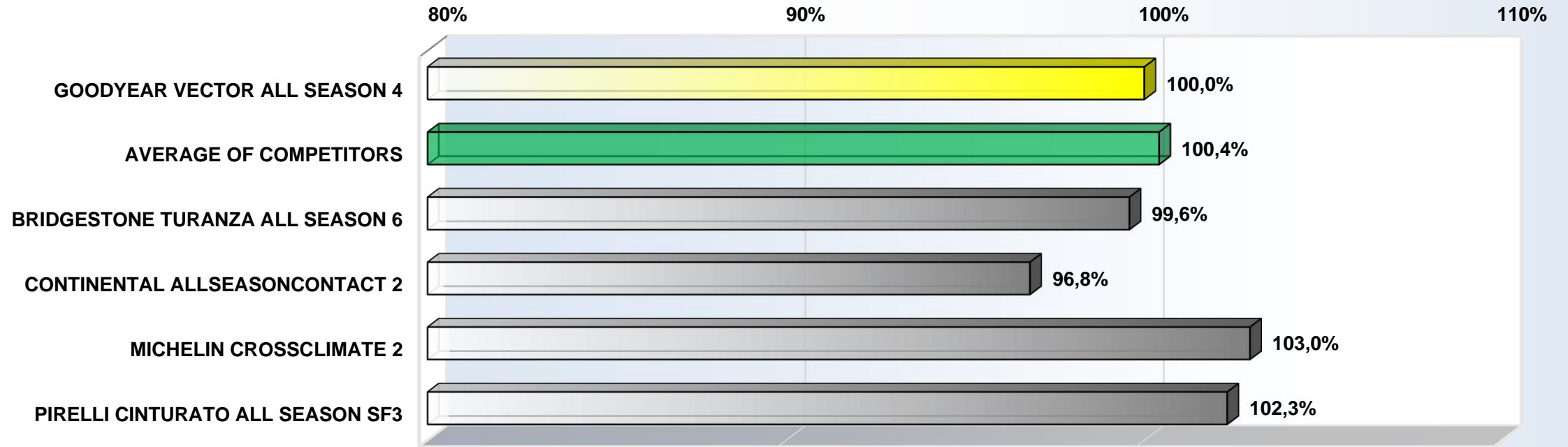
TEST RESULTS



AQUAPLANING STRAIGHT-LINE

- Objective measurement of longitudinal aquaplaning performance; water depth ~ 7 mm
- Result: Aquaplaning speed [km/h] at 15% slip

AQUAPLANING PERFORMANCE * [%]



*) The calculation of the percentage performance is based on the measured aquaplaning speed.

TÜV SÜD PS – PREMIUM TIRE MARK 2024

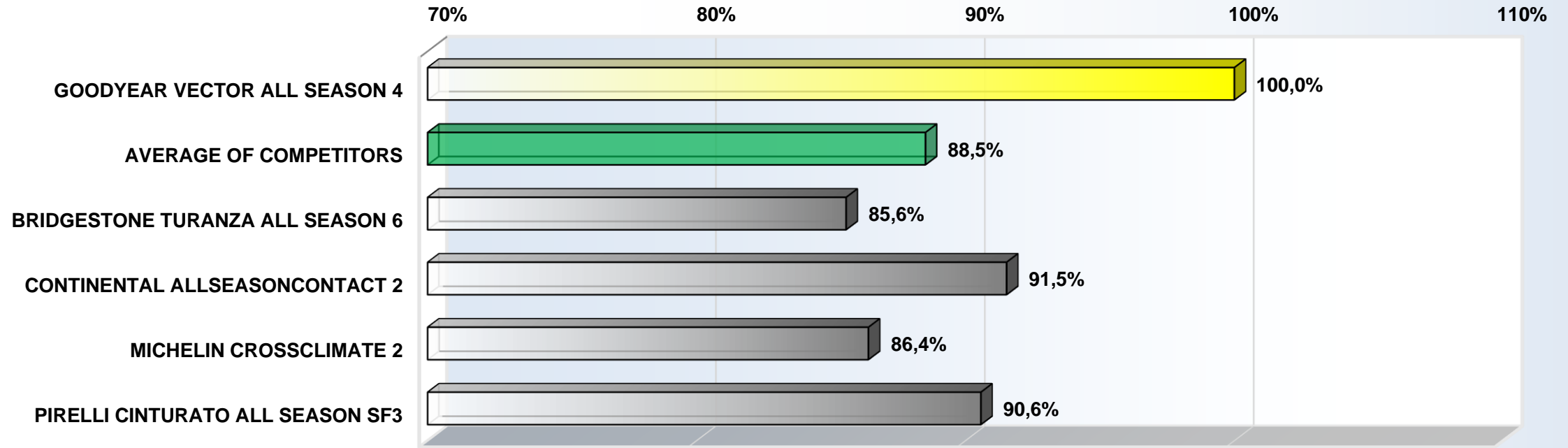
TEST RESULTS



WET BRAKING low μ

- ABS-braking on low μ wet asphalt surface
- Result: Ø Stopping distance [m] from 80 to 20 km/h → Mean deceleration [m/s²]

WET BRAKING PERFORMANCE * [%]



*) The calculation of the percentage performance is based on the mean deceleration values resulting from the measured braking distances.

TÜV SÜD PS – PREMIUM TIRE MARK 2024

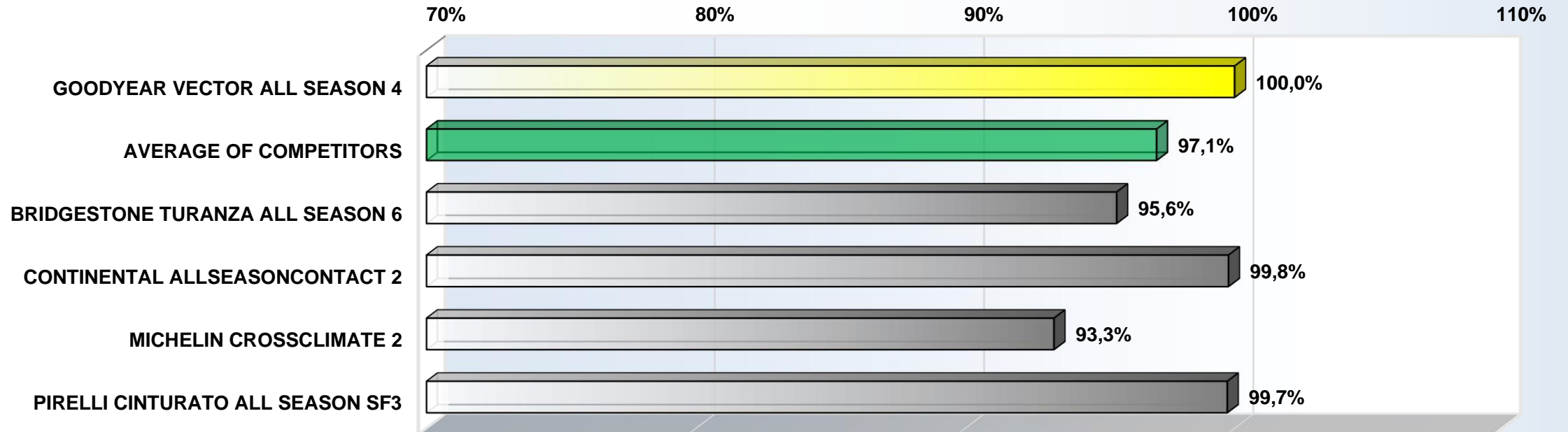
TEST RESULTS



WET BRAKING high μ *

- ABS-braking on high μ wet asphalt surface
- Result: Ø Stopping distance [m] from 80 to 20 km/h → Mean deceleration [m/s²]

WET BRAKING PERFORMANCE ** [%]



*) Voluntary test. Not part of the mandatory scope of the TÜV SÜD Premium Tire Mark.

**) The calculation of the percentage performance is based on the mean deceleration values resulting from the measured braking distances.

TÜV SÜD PS – PREMIUM TIRE MARK 2024

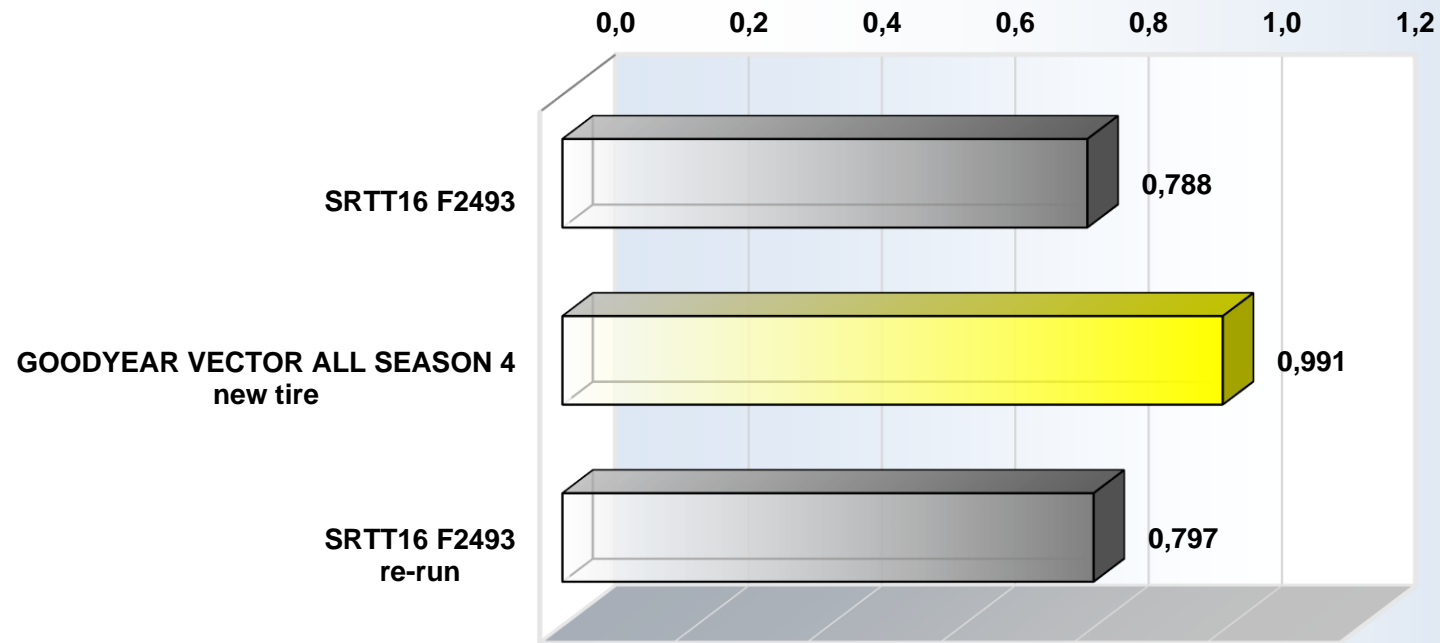
TEST RESULTS



WET GRIP INDEX (ECE R117 Annex 5) – new tire

- Wet grip measurement acc. to ECE R117 Annex 5 – trailer method
- Result: Ø Peak braking force coefficient μ_{peak} [-] → Wet Grip Index

PEAK BRAKING FORCE COEFFICIENT μ_{PEAK} [-]



TIRE BRAND	T _{Air} / T _{Surface} [°C]		WET GRIP INDEX
	T _{Air}	T _{Surface}	
SRTT16 F2493	15,4	12,5	-
GOODYEAR VECTOR ALL SEASON 4 new tire	16,2	12,4	1,54
SRTT16 F2493 re-run	14,8	11,3	-

TÜV SÜD PS – PREMIUM TIRE MARK 2024

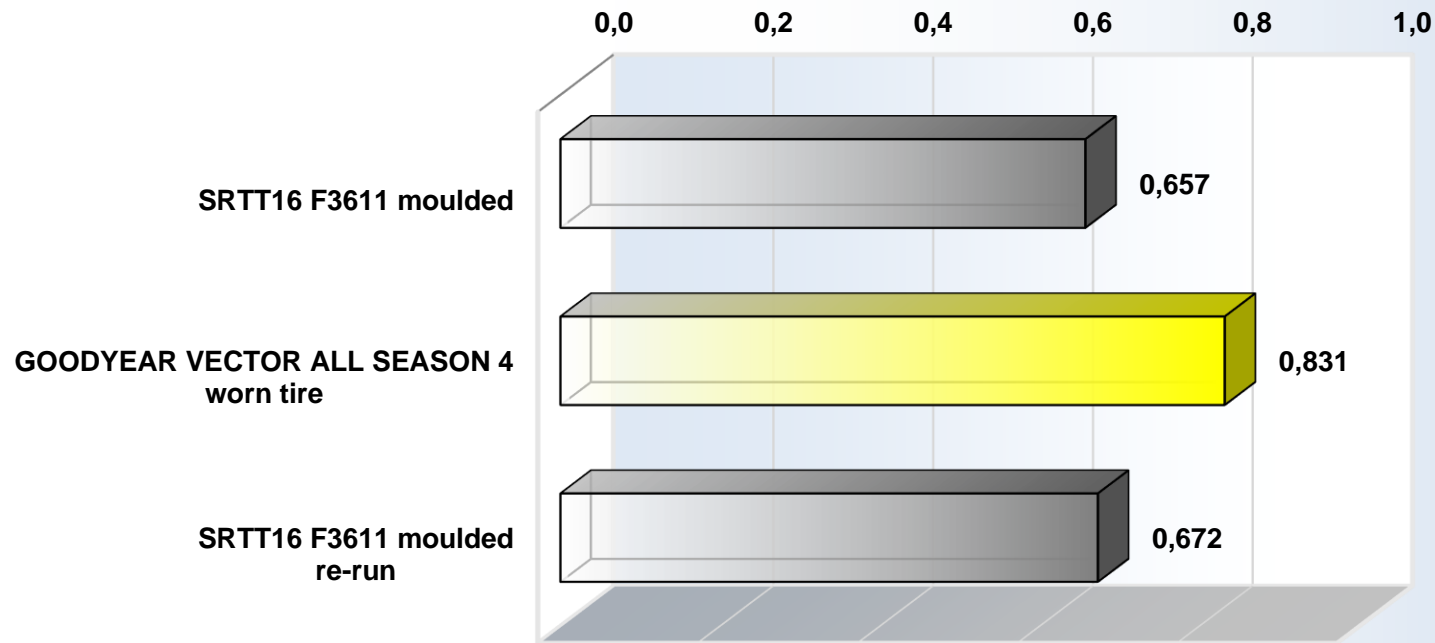
TEST RESULTS



WET GRIP INDEX (ECE R117 Annex 9) – worn tire

- Wet grip measurement acc. to ECE R117 Annex 9 – trailer method
- Result: Ø Peak braking force coefficient μ_{peak} [-] → Wet Grip Index

PEAK BRAKING FORCE COEFFICIENT μ_{PEAK} [-]



TIRE BRAND	$T_{\text{Air}} / T_{\text{Surface}} [^{\circ}\text{C}]$		WET GRIP INDEX
	T_{Air}	T_{Surface}	
SRTT16 F3611 moulded	14,5	10,3	-
GOODYEAR VECTOR ALL SEASON 4 worn tire	15,8	11,4	1,29
SRTT16 F3611 moulded re-run	15,8	11,8	-

TÜV SÜD PS – PREMIUM TIRE MARK 2024

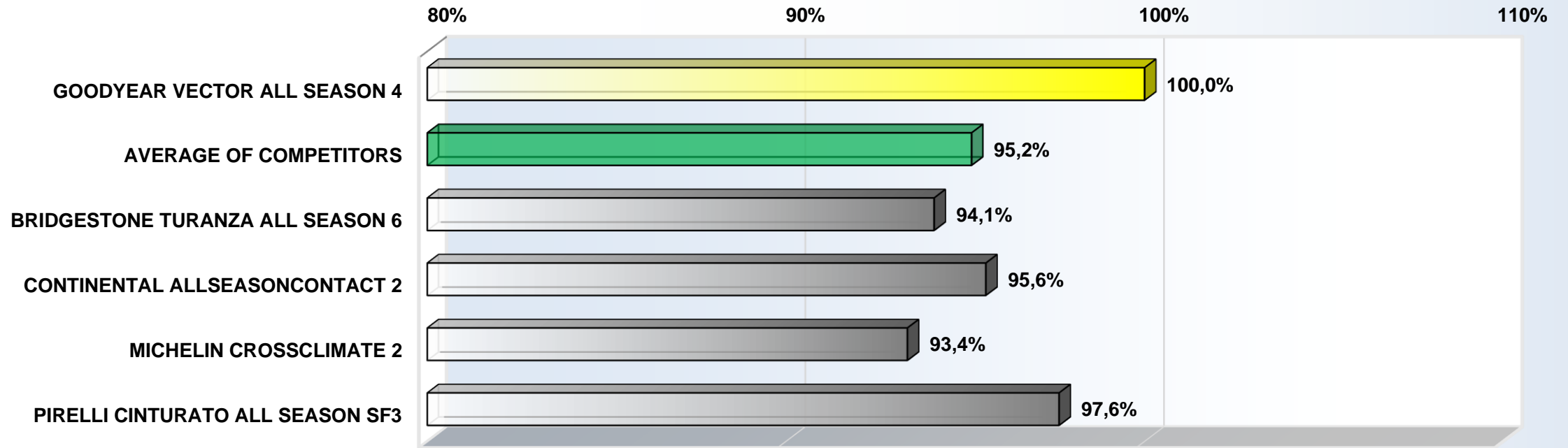
TEST RESULTS



WET HANDLING

- Subjective assessment and lap time on a wet handling circuit (track length: 1660 m)
- Result: Ø Rating (min. 1, max. 10) and Ø lap time [s] → average speed [km/h]; total result from speed and rating scores (2:1)

WET HANDLING PERFORMANCE * [%]



*) The calculation of the percentage performance is based on the speed and the rating scores (at the ratio 2:1).

TÜV SÜD PS – PREMIUM TIRE MARK 2024

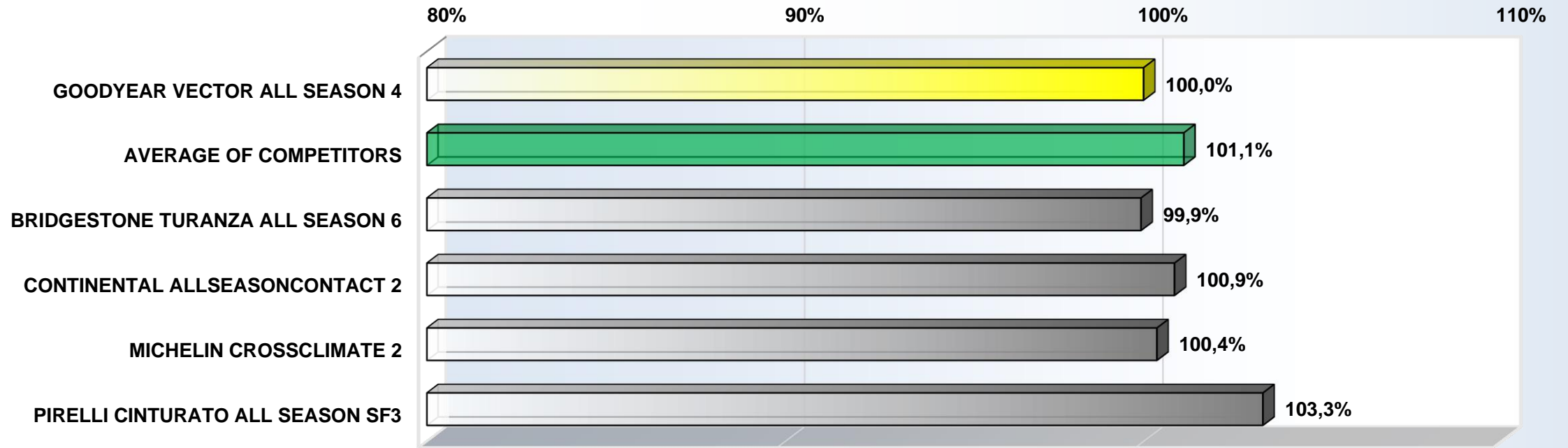
TEST RESULTS



DRY BRAKING

- ABS-braking on dry asphalt surface
- Result: Ø Stopping distance [m] from 100 to 0 km/h → Mean deceleration [m/s²]

DRY BRAKING PERFORMANCE * [%]



*) The calculation of the percentage performance is based on the mean deceleration values resulting from the measured braking distances.

TÜV SÜD PS – PREMIUM TIRE MARK 2024

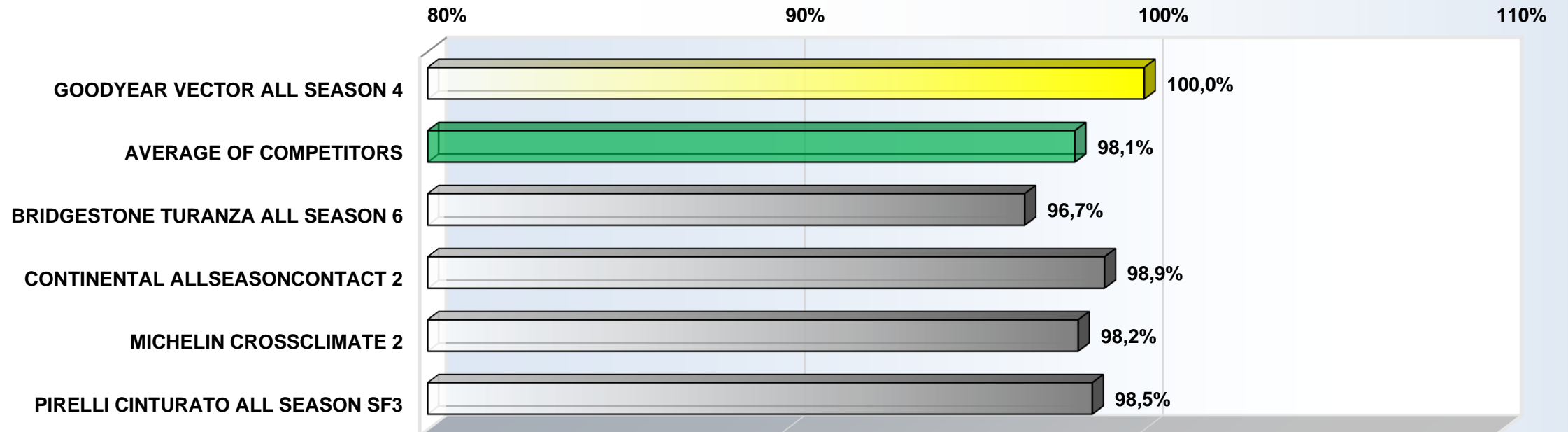
TEST RESULTS



DRY HANDLING *

- Subjective assessment and lap time on a dry handling circuit (track length: 3080 m)
- Result: Ø Rating (min. 1, max. 10) and Ø lap time [s] → average speed [km/h]; total result from speed and rating scores (2:1)

DRY HANDLING PERFORMANCE ** [%]



*) Voluntary test. Not part of the mandatory scope of the TÜV SÜD Premium Tire Mark.

**) The calculation of the percentage performance is based on the speed and the rating scores (at the ratio 2:1).

TÜV SÜD PS – PREMIUM TIRE MARK 2024

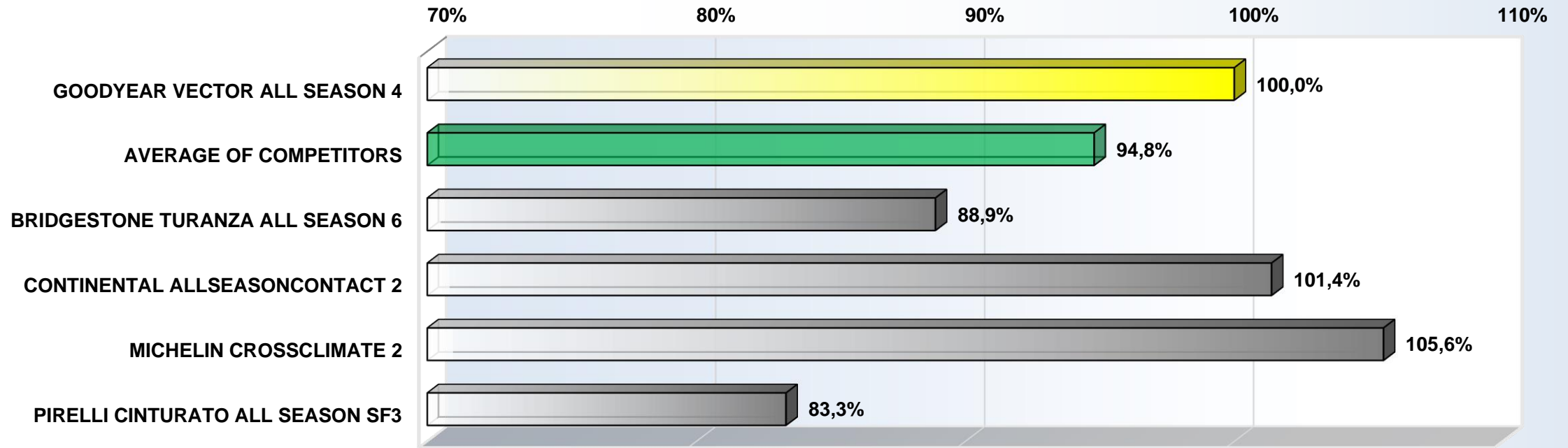
TEST RESULTS



ROLLING RESISTANCE (ECE R117 Annex 6)

- Acc. to ECE R117 Annex 6
- Result: Rolling resistance coefficient (c_R) EU label value [kg/t]

ROLLING RESISTANCE PERFORMANCE * [%]



*) The calculation of the percentage performance is based on the reciprocal values of the measured rolling resistance forces.

TÜV SÜD PS – PREMIUM TIRE MARK 2024

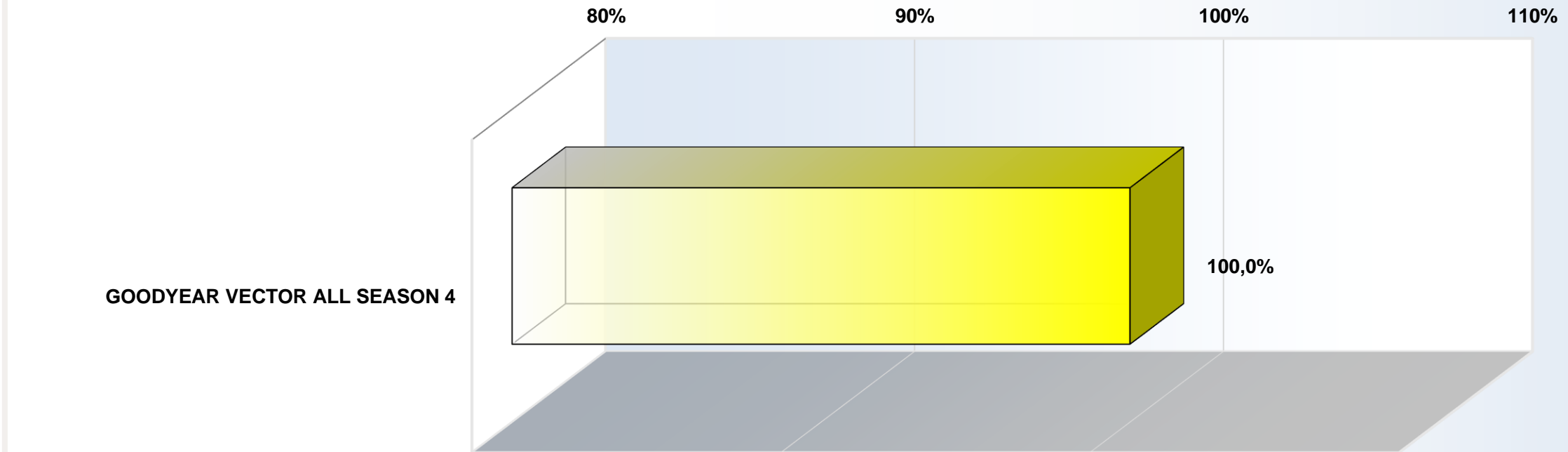
TEST RESULTS



HIGHSPEED TEST ADVANCED

- Acc. to ECE R30 + extension at 2° camber at v_{max} for max. 60 min
- Result: Total running time without visible defect (max. 120 min \cong 100%)

HIGHSPEED PERFORMANCE * [%]



*) The calculation of the percentage performance is based on the total running time without defect.

TÜV SÜD PS – PREMIUM TIRE MARK 2024

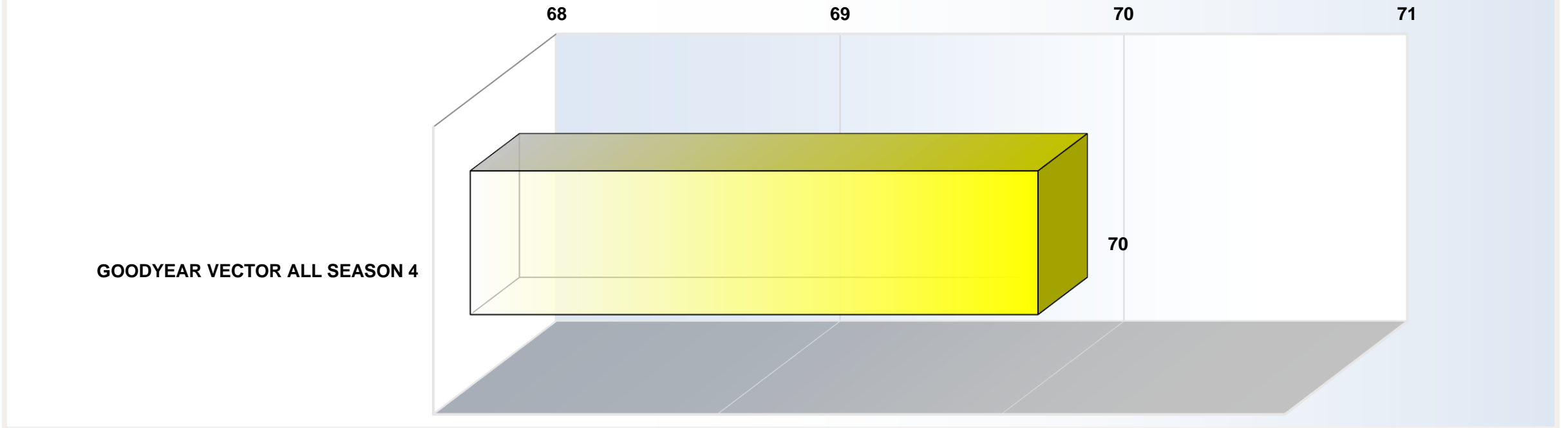
TEST RESULTS



ROLLING NOISE (ECE R117 Annex 3)

- Acc. to ECE R117 Annex 3
- Result: Rolling noise level (EU label value) [dB(A)]

ROLLING NOISE (EU label value) [dB(A)]



TÜV SÜD PS – PREMIUM TIRE MARK 2024

SUMMARY OF RESULTS



Percentage > 100% means better, percentage < 100% means worse.	GOODYEAR VECTOR ALL SEASON 4	BRIDGESTONE TURANZA ALL SEASON 6	CONTINENTAL ALLSEASON- CONTACT 2	MICHELIN CROSSCLIMATE 2	PIRELLI CINTURATO ALL SEASON SF3
ACCELERATION ON SNOW	100,0%	94,1%	97,2%	104,6%	95,1%
BRAKING ON SNOW	100,0%	96,1%	97,3%	101,2%	96,4%
HANDLING ON SNOW	100,0%	92,9%	96,7%	102,5%	94,7%
AQUAPLANING STRAIGHT-LINE	100,0%	99,6%	96,8%	103,0%	102,3%
WET BRAKING lowμ	100,0%	85,6%	91,5%	86,4%	90,6%
WET BRAKING highμ *	100,0%	95,6%	99,8%	93,3%	99,7%
WET GRIP INDEX (ECE R117 Annex 5) - new tire	1,54	-	-	-	-
WET GRIP INDEX (ECE R117 Annex 9) - worn tire	1,29	-	-	-	-
WET HANDLING	100,0%	94,1%	95,6%	93,4%	97,6%
DRY BRAKING	100,0%	99,9%	100,9%	100,4%	103,3%
DRY HANDLING *	100,0%	96,7%	98,9%	98,2%	98,5%
ROLLING RESISTANCE (ECE R117 Annex 6)	100,0%	88,9%	101,4%	105,6%	83,3%
HIGHSPEED TEST ADVANCED	100,0%	-	-	-	-
ROLLING NOISE (ECE R117 Annex 3)	70 dB(A)	-	-	-	-

*) Voluntary test. Not part of the mandatory scope of the TÜV SÜD Premium Tire Mark.