TYRE DATA BOOKLET 2017 - PCA Club Racing
Cayman GT4 Clubsport Trophy East

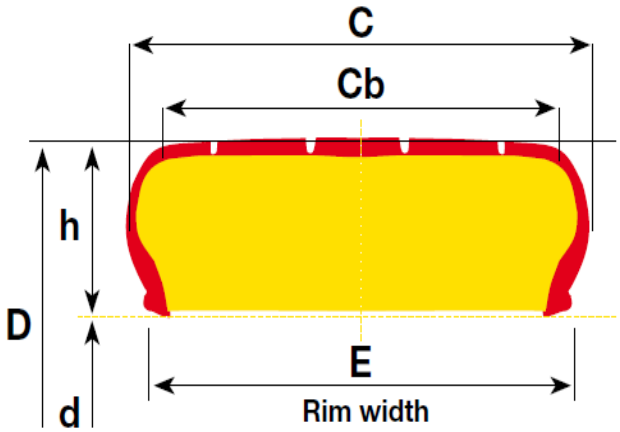
CONTENTS

GENERAL INFORMATION

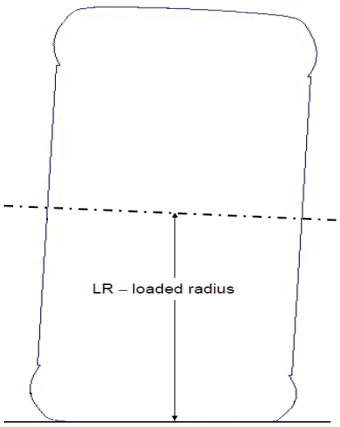
Static measurements

The static measurements within this book are provided for each combination of tyre-rim size.
Geometric measurements are taken with the tyre fitted on a rim, inflated to 2.0bar/29.0 Psi

Circumference **πD** [mm]	*length along the middle tread line of the tyre;*
Max width **C** [mm]	*maximum width of the tyre;*
Tread width **Cb** [mm]	*width of the tread.*



A full characterisation of deflection vs. vertical load at different pressures is given; measurements are taken at two different camber levels (0° and -3.0°) for slick tyres.



GENERAL INFORMATION

Dynamic measurements

Tyre dynamic characterisation describes changes in dimensions due to speed and vertical load. All measurements are made without any applied camber (0°) with the tyre inflated to 2.0bar/ 29.0 Psi

Loaded radius **L.R.** [mm]	*distance between the wheel center and the ground;*
Rolling radius **R.R.** [mm]	*the length travelled by the tyre for each wheel's revolution divided by 2 π.*

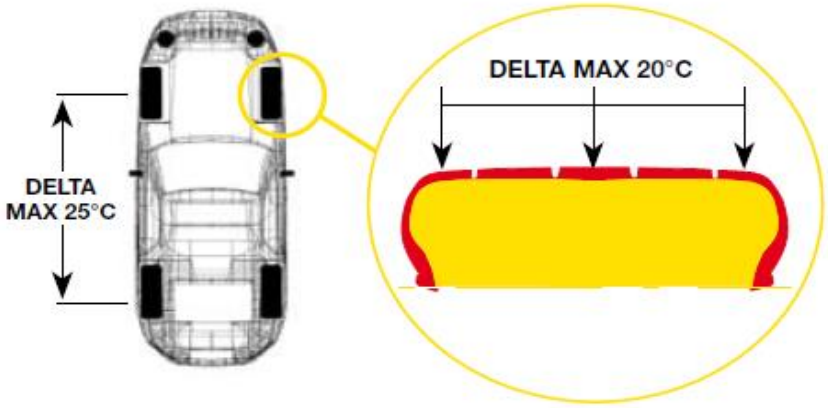
Operating instructions

Before each run

Pressures	*The tyre pressure must always be over the declared minimum running pressure defined within this book.*

After each run

Temperatures	*- the offset in measured garage bulk temperature between the inside and outside of the tyre should not exceed 20°C for optimum tyre performance* *- the offset in measured garage bulk temperatures between front and rear axle should not exceed 25°C for optimum tyre performance*



Pressures	*- the measured garage pressure should be as close as possible to the hot target value stated within this book* *- Dry air is recommended to inflate tyres to avoid sudden changes in pressure due to humidity.* *- **all pressure limitations (cold and hot) stated in this book will be monitored during each event, and modified if deemed necessary.***

PCA CLUB RACING
CAYMAN GT4 CLUBSPORT
TROPHY EAST

Porsche Cayman GT4 Clubsport & MR — *CIRCUIT TECHNICAL BULLETIN # 1*

SLICK		RIM WIDTH	TIRE SIZE	P. TARGET (PSI)	P. MIN (PSI)	CAMBER MAX
	FRONT	18x9"	265/645-18 DH	30	23	-4.50
	REAR	18x10.5"	305/680-18 DH	30	23	-4.00
RAIN						
	FRONT	18x9"	265/645-18 WH	32	26	-4.30
	REAR	18x10.5"	305/680-18 WH	32	26	-3.75

P. TARGET :

Target optimum hot pressure value for the tire. The pressure should be measured immediately after the use of the tire on the track. Never set the pressure at lower values than recommended. Dry air or nitrogen is recommended to inflate tires to avoid excessive pressure build up.

P. MIN :

Minimum cold starting pressure for the tire. The minimum pressure needs to be checked before the car is run on the track. Never use the tire below the minimum pressure otherwise you will compromise the integrity of the tire.

Pressure below the minimum value will cause excessive deflection of the sidewall, risk of air loss between the bead and rim, and risk of bead unseating.

During the first lap out from the pit and the warm up lap we strongly recommend to avoid curbs or any other kind of hard impact to prevent air loss. Corner speeds should be reduced while the tire is below target hot inflation pressure as damage may occur due to overloading.

P. COLD :

This value needs to be determined with respect of the P. MIN value so you can achieve the P TARGET during the use of the tyre on the track.
This value needs to be checked and adjusted to the calculated value at the same time every day until the end of the event.

CAMBER :

This is the maximum negative camber suggested.
This value is supplied by the tire manufacturer and is calculated based on the track characteristic.

TREAD PATTERN TEMPERATURE :

SLICK tires – optimum tread temperature is between 160°F and 220°F. The temperature should never be higher than 250°F.
The temperature difference between the inside shoulder and outside shoulder of the tires should not be greater than 40°F.

Pirelli strongly recommends the use of metal valves and caps.

STATIC MEASUREMENTS

Slick Tyres				
Size & Fitment	Nominal Weight (kilograms)	Max Width **(C)** (mm)	Circumference **(πD)** (mm)	Tread Width **(Cb)** (mm)
265/645-18 ***18" x 9.5J***	10.3	266	2045	260
305/680-18 ***18" x 11J***	11.8	305	2148	280

DYNAMIC MEASUREMENTS @ 2.0bar (29psi), CA 0.0°

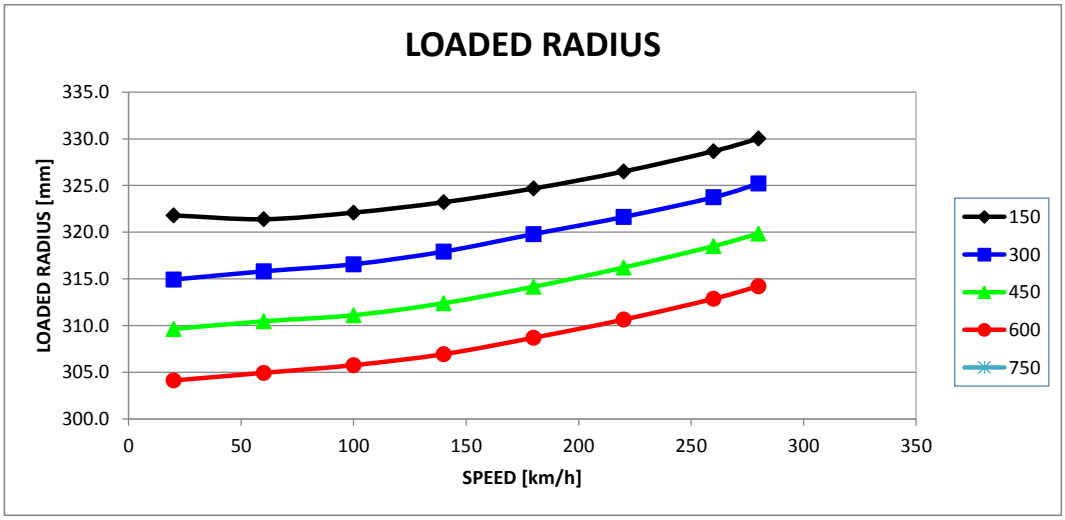
265/645-18x9.5J DH

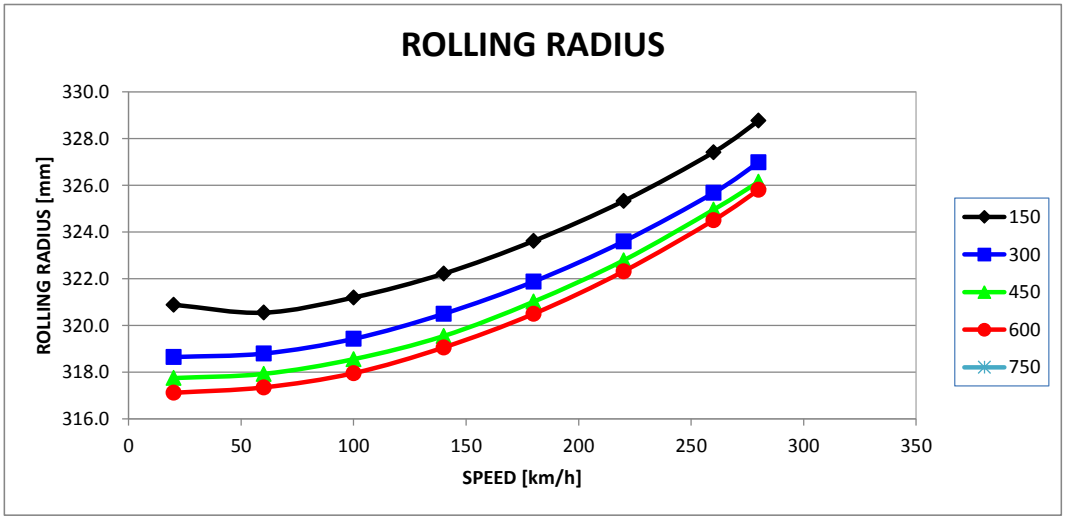
LOADED RADIUS

SPEED [km/h] \ LOAD [kg]	150	300	450	600	750
20	321.8	314.9	309.6	304.1	
60	321.4	315.8	310.5	304.9	
100	322.1	316.6	311.1	305.8	
140	323.2	317.9	312.4	306.9	
180	324.7	319.8	314.2	308.7	
220	326.5	321.6	316.2	310.6	
260	328.7	323.7	318.5	312.9	
280	330.0	325.2	319.9	314.2	
300					

ROLLING RADIUS

SPEED [km/h] \ LOAD [kg]	150	300	450	600	750
20	320.9	318.6	317.8	317.1	
60	320.5	318.8	317.9	317.4	
100	321.2	319.4	318.6	318.0	
140	322.2	320.5	319.5	319.1	
180	323.6	321.9	321.0	320.5	
220	325.3	323.6	322.8	322.3	
260	327.4	325.7	325.0	324.5	
280	328.8	327.0	326.1	325.8	
300					

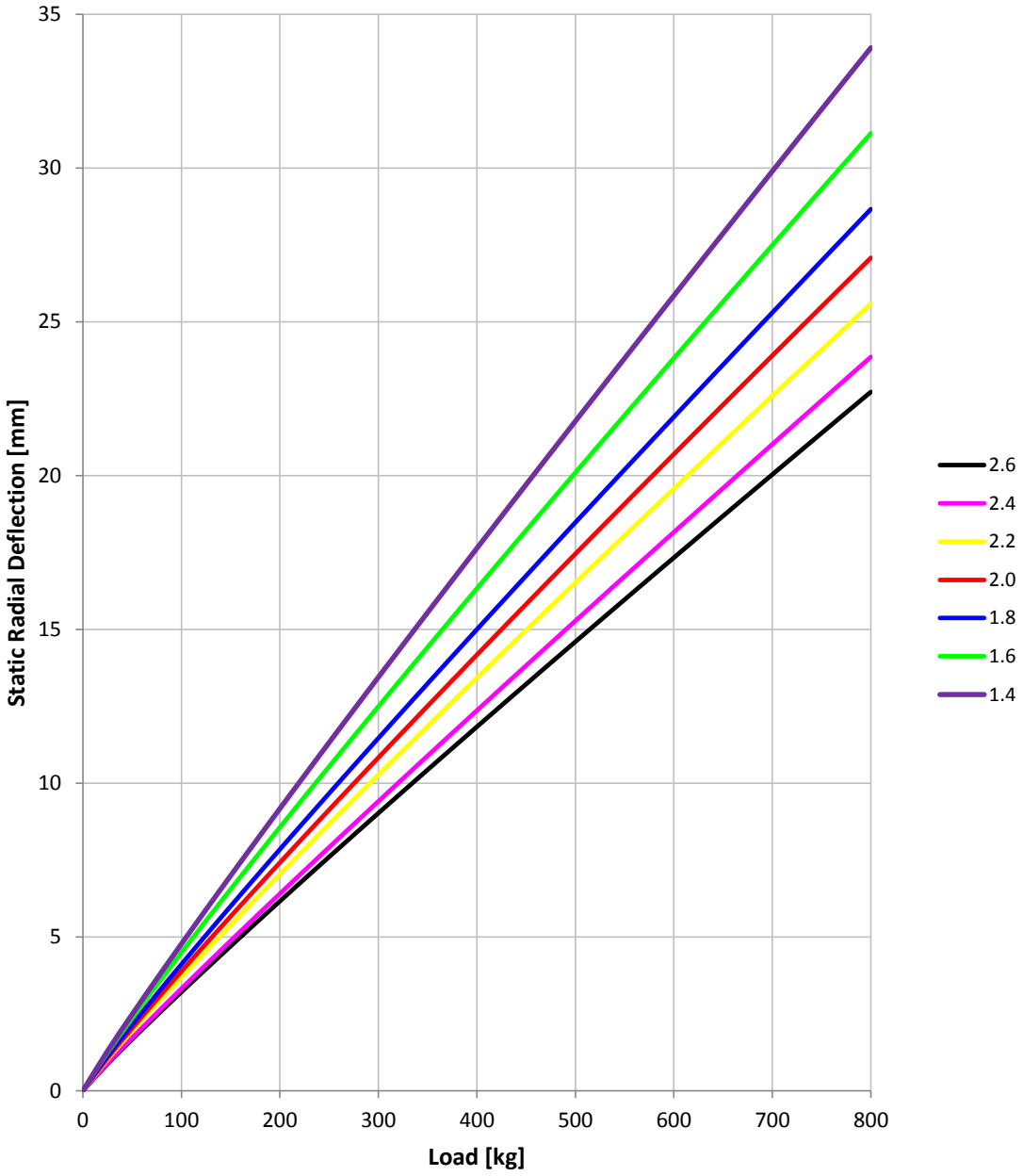




STATIC RADIAL DEFLECTION – 265/645-18x9.5J @ CA 0.0 ° DH

Load [kg]	Inflation Pressure [bar]						
	2.6	2.4	2.2	2.0	1.8	1.6	1.4
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.9	0.9	1.0	1.1	1.1	1.2	1.3
50	1.7	1.7	1.9	2.0	2.1	2.4	2.5
75	2.4	2.5	2.8	3.0	3.1	3.4	3.6
100	3.2	3.3	3.7	3.9	4.1	4.5	4.8
125	4.0	4.1	4.5	4.8	5.1	5.5	5.9
150	4.7	4.9	5.4	5.7	6.0	6.6	7.0
175	5.4	5.6	6.2	6.5	6.9	7.6	8.1
200	6.2	6.4	7.0	7.4	7.8	8.6	9.2
225	6.9	7.2	7.9	8.3	8.8	9.6	10.2
250	7.6	7.9	8.7	9.1	9.7	10.5	11.3
275	8.3	8.7	9.5	10.0	10.6	11.5	12.4
300	9.0	9.4	10.3	10.8	11.5	12.5	13.4
325	9.7	10.2	11.1	11.7	12.4	13.5	14.5
350	10.4	10.9	11.9	12.5	13.2	14.4	15.5
375	11.1	11.6	12.6	13.3	14.1	15.4	16.6
400	11.8	12.4	13.4	14.2	15.0	16.3	17.6
425	12.5	13.1	14.2	15.0	15.9	17.3	18.7
450	13.2	13.8	15.0	15.8	16.7	18.2	19.7
475	13.9	14.5	15.7	16.6	17.6	19.2	20.7
500	14.6	15.3	16.5	17.5	18.5	20.1	21.8
525	15.3	16.0	17.3	18.3	19.3	21.0	22.8
550	16.0	16.7	18.1	19.1	20.2	22.0	23.8
575	16.6	17.4	18.8	19.9	21.1	22.9	24.8
600	17.3	18.2	19.6	20.7	21.9	23.8	25.8
625	18.0	18.9	20.3	21.5	22.8	24.7	26.9
650	18.7	19.6	21.1	22.3	23.6	25.7	27.9
675	19.4	20.3	21.8	23.1	24.5	26.6	28.9
700	20.0	21.0	22.6	23.9	25.3	27.5	29.9
725	20.7	21.7	23.3	24.7	26.1	28.4	30.9
750	21.4	22.4	24.1	25.5	27.0	29.3	31.9
775	22.0	23.1	24.8	26.3	27.8	30.2	32.9
800	22.7	23.9	25.6	27.1	28.7	31.1	33.9

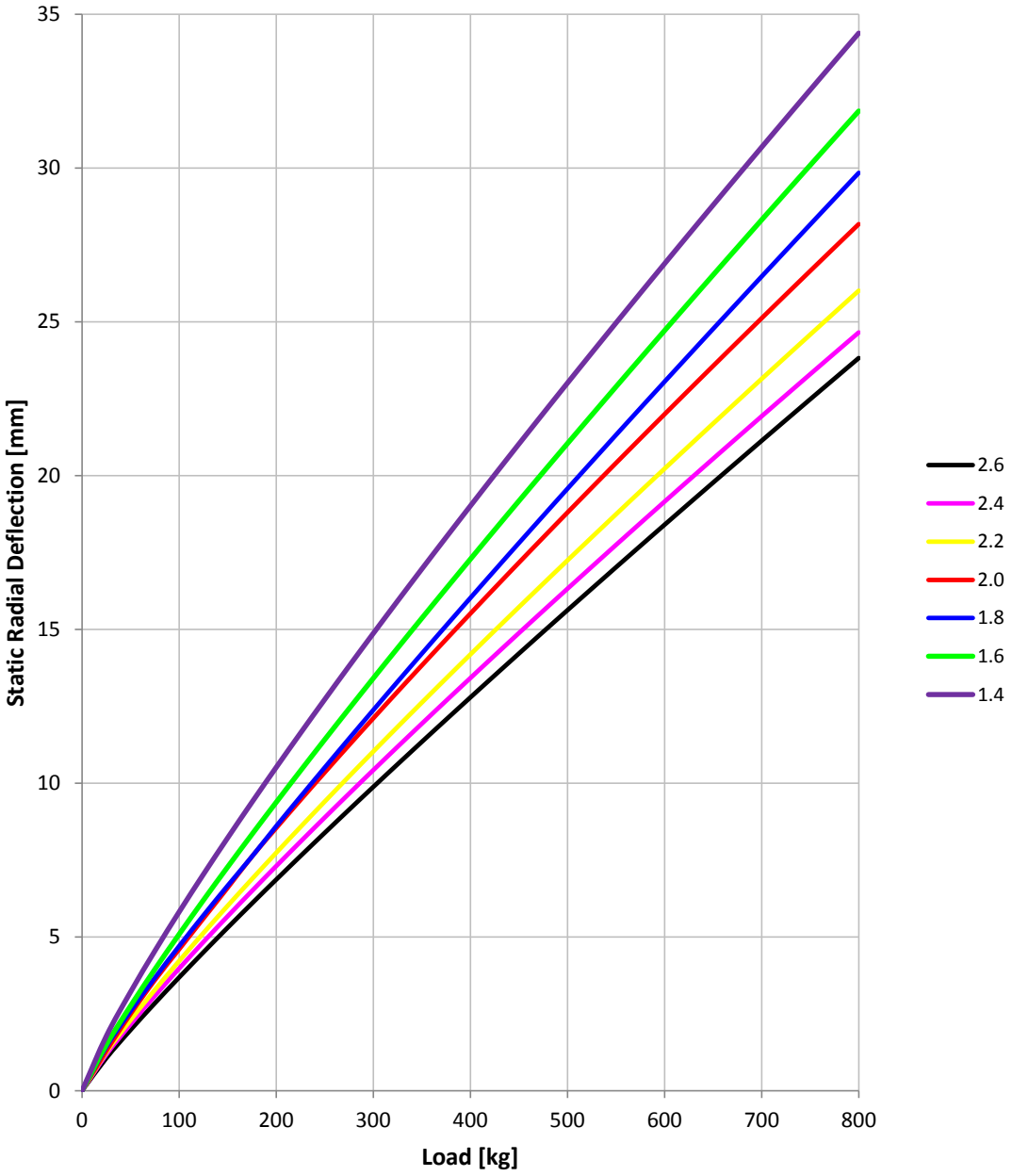
STATIC RADIAL DEFLECTION – 265/645-18x9.5J @ CA 0.0° DH



STATIC RADIAL DEFLECTION – 265/645-18x9.5J @ CA -3.0 ° DH

Load [kg]	Inflation Pressure [bar]						
	2.6	2.4	2.2	2.0	1.8	1.6	1.4
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	1.1	1.2	1.3	1.3	1.4	1.5	1.8
50	2.0	2.2	2.3	2.5	2.6	2.8	3.2
75	2.8	3.1	3.3	3.6	3.7	3.9	4.5
100	3.7	4.0	4.2	4.6	4.7	5.1	5.8
125	4.5	4.8	5.1	5.6	5.7	6.2	7.0
150	5.3	5.7	6.0	6.6	6.7	7.3	8.2
175	6.1	6.5	6.9	7.6	7.6	8.3	9.4
200	6.9	7.3	7.7	8.5	8.6	9.4	10.5
225	7.6	8.1	8.6	9.5	9.6	10.4	11.6
250	8.4	8.9	9.4	10.4	10.5	11.4	12.7
275	9.1	9.7	10.2	11.2	11.4	12.4	13.8
300	9.9	10.4	11.0	12.1	12.4	13.4	14.9
325	10.6	11.2	11.8	13.0	13.3	14.4	15.9
350	11.3	11.9	12.6	13.8	14.2	15.4	17.0
375	12.1	12.7	13.4	14.7	15.1	16.3	18.0
400	12.8	13.4	14.2	15.5	16.0	17.3	19.0
425	13.5	14.2	15.0	16.3	16.9	18.2	20.0
450	14.2	14.9	15.7	17.2	17.8	19.2	21.0
475	14.9	15.6	16.5	18.0	18.7	20.1	22.0
500	15.6	16.3	17.2	18.8	19.6	21.0	23.0
525	16.3	17.0	18.0	19.6	20.4	22.0	24.0
550	17.0	17.7	18.7	20.4	21.3	22.9	25.0
575	17.7	18.4	19.5	21.2	22.2	23.8	25.9
600	18.4	19.2	20.2	22.0	23.1	24.7	26.9
625	19.1	19.9	21.0	22.8	23.9	25.6	27.8
650	19.8	20.5	21.7	23.6	24.8	26.5	28.8
675	20.5	21.2	22.4	24.3	25.6	27.4	29.7
700	21.1	21.9	23.1	25.1	26.5	28.3	30.7
725	21.8	22.6	23.9	25.9	27.3	29.2	31.6
750	22.5	23.3	24.6	26.6	28.2	30.1	32.5
775	23.1	24.0	25.3	27.4	29.0	31.0	33.5
800	23.8	24.7	26.0	28.2	29.8	31.8	34.4

STATIC RADIAL DEFLECTION – 265/645-18x9.5J @ CA -3.0° DH



DYNAMIC MEASUREMENTS @ 2.0bar (29psi), CA 0.0°

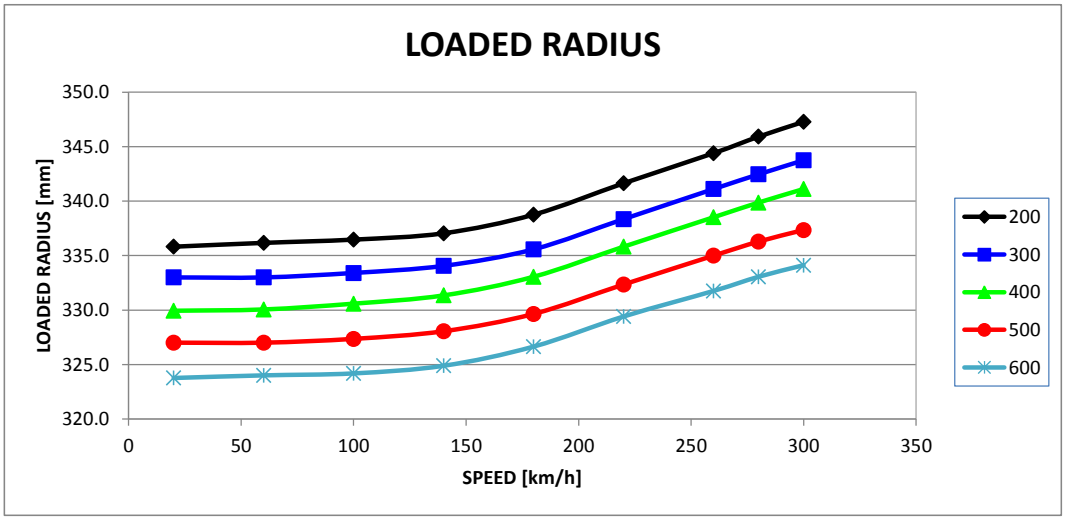
305/680-18x11.0J DH

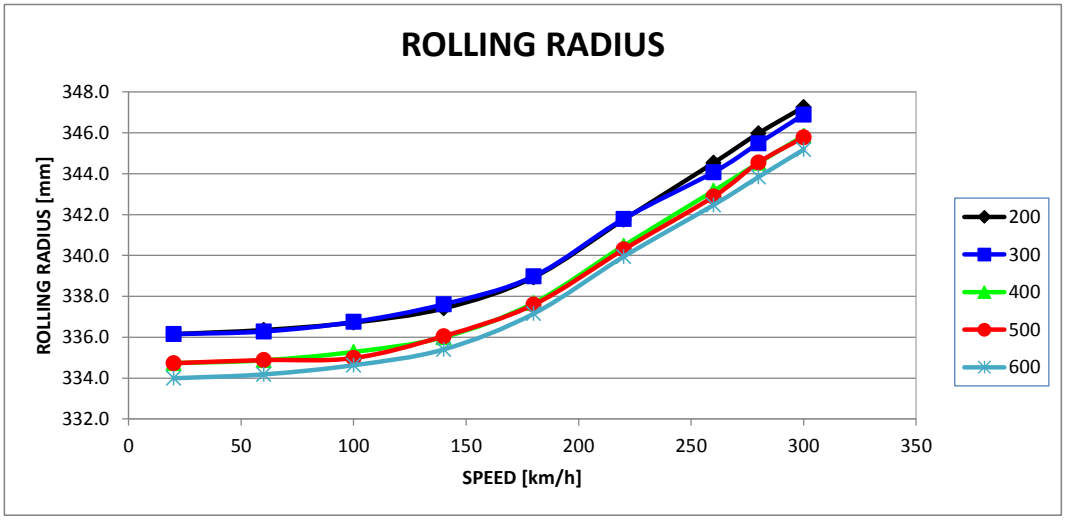
LOADED RADIUS

SPEED [km/h] \ LOAD [kg]	200	300	400	500	600
20	335.8	333.0	329.9	327.0	323.8
60	336.2	333.0	330.1	327.0	324.0
100	336.5	333.4	330.6	327.4	324.2
140	337.0	334.1	331.3	328.1	324.9
180	338.8	335.6	333.1	329.6	326.6
220	341.6	338.3	335.8	332.3	329.4
260	344.4	341.1	338.5	335.0	331.8
280	345.9	342.5	339.9	336.3	333.1
300	347.3	343.7	341.1	337.3	334.1

ROLLING RADIUS

SPEED [km/h] \ LOAD [kg]	200	300	400	500	600
20	336.1	336.1	334.7	334.7	334.0
60	336.4	336.3	334.9	334.9	334.2
100	336.7	336.8	335.3	335.0	334.6
140	337.4	337.6	336.0	336.0	335.4
180	338.9	339.0	337.7	337.6	337.1
220	341.8	341.8	340.5	340.3	339.9
260	344.5	344.1	343.2	342.9	342.5
280	346.0	345.5	344.5	344.5	343.8
300	347.3	346.9	345.9	345.8	345.2

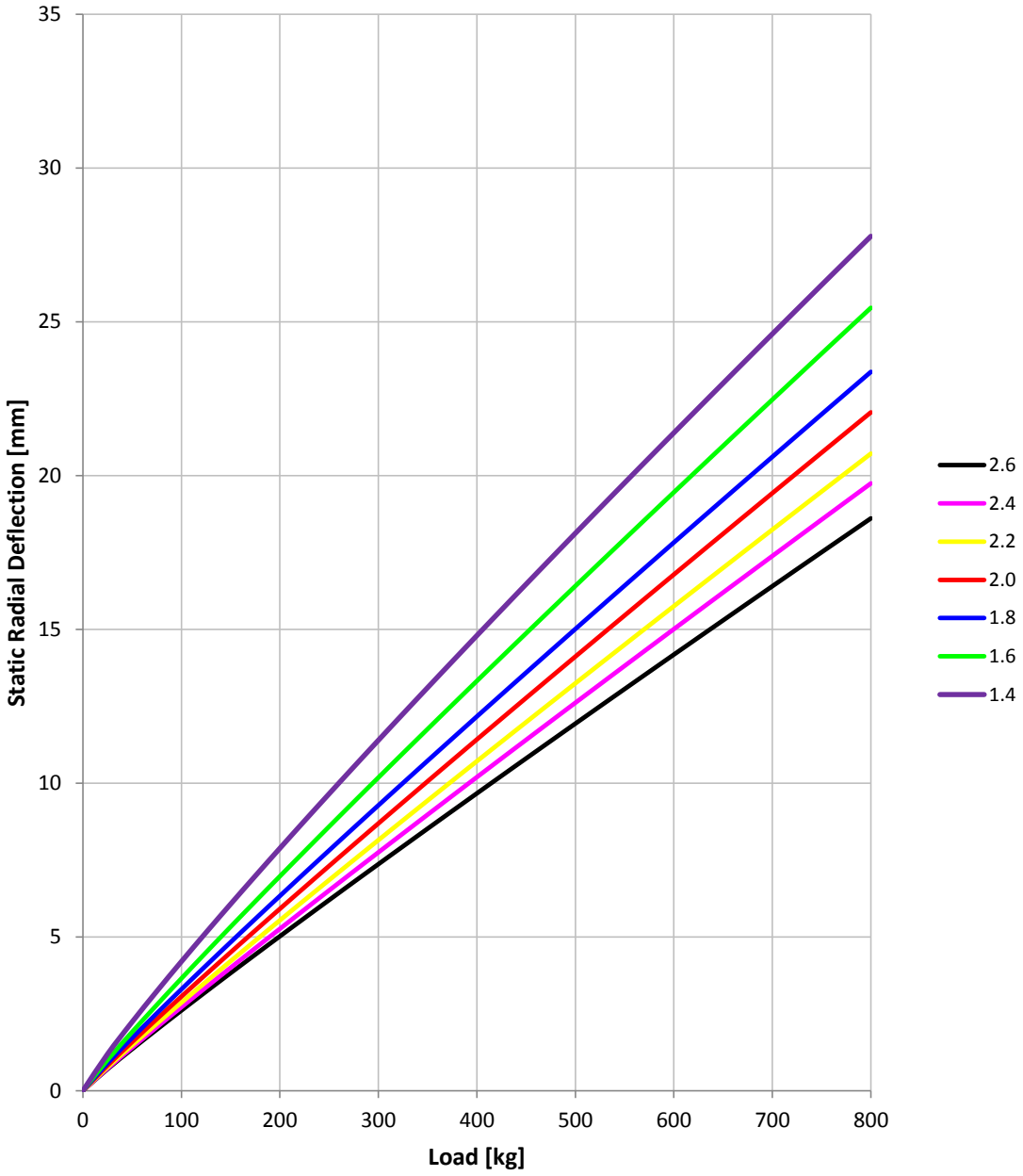




STATIC RADIAL DEFLECTION – 305/680-18x11.0J @ CA 0.0 ° DH

Load [kg]	Inflation Pressure [bar]						
	2.6	2.4	2.2	2.0	1.8	1.6	1.4
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.7	0.7	0.8	0.8	0.9	1.0	1.2
50	1.4	1.4	1.5	1.6	1.7	1.9	2.2
75	2.0	2.1	2.2	2.3	2.5	2.8	3.2
100	2.6	2.7	2.9	3.1	3.3	3.6	4.2
125	3.2	3.4	3.5	3.8	4.1	4.5	5.1
150	3.8	4.0	4.2	4.5	4.8	5.3	6.1
175	4.4	4.6	4.9	5.2	5.6	6.2	7.0
200	5.0	5.3	5.5	5.9	6.3	7.0	7.9
225	5.6	5.9	6.2	6.6	7.1	7.8	8.8
250	6.2	6.5	6.8	7.3	7.8	8.6	9.7
275	6.8	7.1	7.5	8.0	8.5	9.4	10.5
300	7.4	7.7	8.1	8.7	9.3	10.2	11.4
325	7.9	8.4	8.8	9.4	10.0	11.0	12.3
350	8.5	9.0	9.4	10.1	10.7	11.8	13.1
375	9.1	9.6	10.1	10.7	11.4	12.5	14.0
400	9.7	10.2	10.7	11.4	12.2	13.3	14.8
425	10.2	10.8	11.3	12.1	12.9	14.1	15.6
450	10.8	11.4	12.0	12.8	13.6	14.9	16.5
475	11.4	12.0	12.6	13.4	14.3	15.6	17.3
500	11.9	12.6	13.2	14.1	15.0	16.4	18.1
525	12.5	13.2	13.9	14.8	15.7	17.2	18.9
550	13.1	13.8	14.5	15.5	16.4	17.9	19.8
575	13.6	14.4	15.1	16.1	17.1	18.7	20.6
600	14.2	15.0	15.8	16.8	17.8	19.5	21.4
625	14.7	15.6	16.4	17.4	18.5	20.2	22.2
650	15.3	16.2	17.0	18.1	19.2	21.0	23.0
675	15.8	16.8	17.6	18.8	19.9	21.7	23.8
700	16.4	17.4	18.2	19.4	20.6	22.5	24.6
725	17.0	18.0	18.9	20.1	21.3	23.2	25.4
750	17.5	18.6	19.5	20.7	22.0	24.0	26.2
775	18.1	19.2	20.1	21.4	22.7	24.7	27.0
800	18.6	19.7	20.7	22.1	23.4	25.5	27.8

STATIC RADIAL DEFLECTION – 305/680-18x11.0J @ CA 0.0° DH



STATIC RADIAL DEFLECTION – 305/680-18x11.0J @ CA -3.0 ° DH

Load [kg]	Inflation Pressure [bar]						
	2.6	2.4	2.2	2.0	1.8	1.6	1.4
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	1.1	1.2	1.3	1.2	1.4	1.4	1.4
50	1.9	2.1	2.3	2.3	2.5	2.5	2.6
75	2.8	2.9	3.2	3.2	3.5	3.6	3.8
100	3.5	3.8	4.0	4.1	4.5	4.6	4.9
125	4.3	4.5	4.9	5.0	5.5	5.6	5.9
150	5.0	5.3	5.7	5.8	6.4	6.6	6.9
175	5.7	6.0	6.5	6.6	7.3	7.5	7.9
200	6.4	6.8	7.2	7.4	8.1	8.4	8.9
225	7.1	7.5	8.0	8.2	9.0	9.3	9.9
250	7.7	8.2	8.7	9.0	9.8	10.2	10.9
275	8.4	8.9	9.4	9.8	10.6	11.1	11.8
300	9.1	9.6	10.2	10.5	11.4	12.0	12.7
325	9.7	10.2	10.9	11.3	12.2	12.8	13.7
350	10.3	10.9	11.6	12.0	13.0	13.7	14.6
375	11.0	11.6	12.3	12.8	13.8	14.5	15.5
400	11.6	12.2	12.9	13.5	14.6	15.4	16.4
425	12.2	12.9	13.6	14.2	15.4	16.2	17.3
450	12.8	13.5	14.3	14.9	16.1	17.0	18.2
475	13.4	14.2	15.0	15.6	16.9	17.8	19.1
500	14.0	14.8	15.6	16.3	17.6	18.6	20.0
525	14.6	15.4	16.3	17.0	18.4	19.4	20.8
550	15.2	16.0	16.9	17.7	19.1	20.2	21.7
575	15.8	16.7	17.6	18.4	19.9	21.0	22.6
600	16.4	17.3	18.2	19.1	20.6	21.8	23.4
625	17.0	17.9	18.8	19.8	21.3	22.6	24.3
650	17.6	18.5	19.5	20.5	22.0	23.4	25.1
675	18.1	19.1	20.1	21.1	22.7	24.2	26.0
700	18.7	19.7	20.7	21.8	23.5	24.9	26.8
725	19.3	20.3	21.3	22.5	24.2	25.7	27.7
750	19.9	20.9	21.9	23.1	24.9	26.5	28.5
775	20.4	21.5	22.6	23.8	25.6	27.2	29.3
800	21.0	22.1	23.2	24.4	26.3	28.0	30.2

STATIC RADIAL DEFLECTION – 305/680-18x11.0J @ CA -3.0° DH