

F1 | BRAKE CIRCUIT IDENTITY CARDS

2015 FORMULA 1 UBS
CHINESE GRAND PRIX

10-12 APR 2015

SHANGHAI INTERNATIONAL CIRCUIT (SHANGHAI)

TYPE OF CIRCUIT	LIGHT
TIME SPENT BRAKING	18%
AVERAGE DECELERATION	3.4 g
BRAKING ENERGY PRODUCED BY A CAR DURING THE GP	97 kWh
TOTAL PEDAL LOAD DURING THE GP	51,353 Kg

HARDER BRAKING

	STOPPING DISTANCE	MAXIMUM PEDAL LOAD
14	161 m	183 Kg
01	84 m	147 Kg
06	133 m	132 Kg

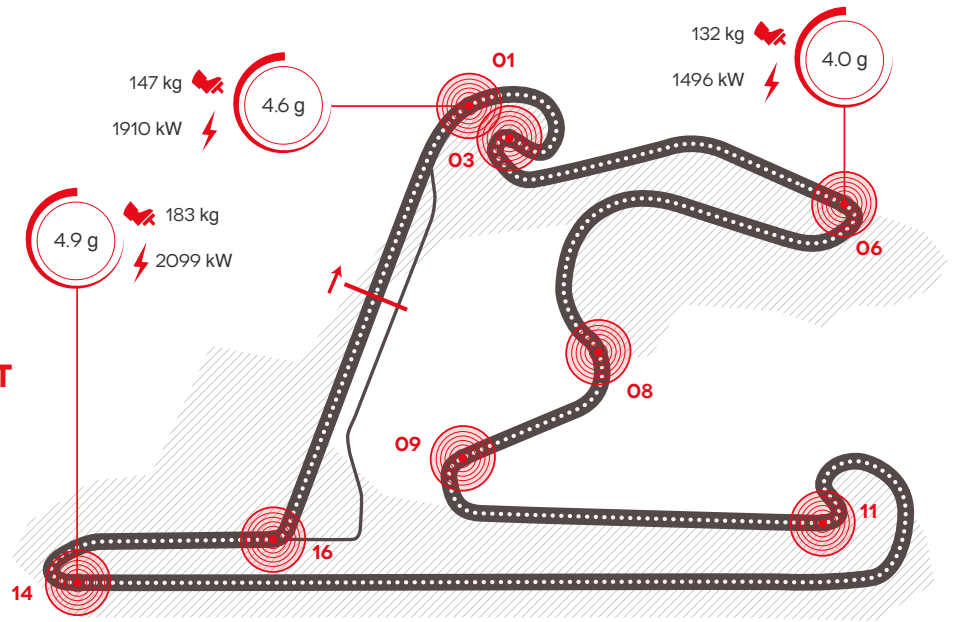
CIRCUIT DATA

Length: 5,451 m
Number of laps: 56
Number of brake zones/lap: 8

COMMENT

Despite the 14 turns, at the end of the straight stretch, both the one that subjects the drivers and cars to a violent deceleration of more than 4 Gs, the circuit is not very critical for brakes on the whole since the cars are normally quite aerodynamically charged. In fact, aerodynamic resistance contributes to the deceleration of the single-seaters, helping the braking action. However, the remaining braking sections are relatively light and free of any particular difficulties for braking systems.

*** Turn 14 is considered the most demanding for the braking system.**



01

Initial speed	316	(Km/h)
Final speed	156	(Km/h)
Stopping distance	84	(m)
Braking time	0.96	(sec)
Maximum deceleration	4.6	(g)
Maximum pedal load	147	(Kg)
Braking power	1910	(Kw)

03

Initial speed	120	(Km/h)
Final speed	77	(Km/h)
Stopping distance	20	(m)
Braking time	0.76	(sec)
Maximum deceleration	1.3	(g)
Maximum pedal load	44	(Kg)
Braking power	68	(Kw)

06

Initial speed	288	(Km/h)
Final speed	69	(Km/h)
Stopping distance	133	(m)
Braking time	1.51	(sec)
Maximum deceleration	4.0	(g)
Maximum pedal load	132	(Kg)
Braking power	1496	(Kw)

08

Initial speed	247	(Km/h)
Final speed	152	(Km/h)
Stopping distance	70	(m)
Braking time	0.92	(sec)
Maximum deceleration	3.1	(g)
Maximum pedal load	104	(Kg)
Braking power	986	(Kw)

09

Initial speed	187	(Km/h)
Final speed	97	(Km/h)
Stopping distance	72	(m)
Braking time	1.05	(sec)
Maximum deceleration	2.1	(g)
Maximum pedal load	72	(Kg)
Braking power	420	(Kw)

11

Initial speed	281	(Km/h)
Final speed	76	(Km/h)
Stopping distance	133	(m)
Braking time	1.54	(sec)
Maximum deceleration	3.8	(g)
Maximum pedal load	128	(Kg)
Braking power	1405	(Kw)

14*

Initial speed	328	(Km/h)
Final speed	60	(Km/h)
Stopping distance	161	(m)
Braking time	1.75	(sec)
Maximum deceleration	4.9	(g)
Maximum pedal load	183	(Kg)
Braking power	2099	(Kw)

16

Initial speed	251	(Km/h)
Final speed	128	(Km/h)
Stopping distance	90	(m)
Braking time	1.10	(sec)
Maximum deceleration	3.2	(g)
Maximum pedal load	106	(Kg)
Braking power	1025	(Kw)