

F1 | BRAKE CIRCUIT IDENTITY CARDS

2015 FORMULA 1 GULF AIR BAHRAIN GRAND PRIX

17-19 APR 2015

BAHRAIN INTERNAT. CIRCUIT (SAKHIR)

TYPE OF CIRCUIT		HARD
TIME SPENT BRAKING		20%
AVERAGE DECELERATION	C	4.1 g
BRAKING ENERGY PRODUCED BY A CAR DURING THE GP	4	130 kWh
TOTAL PEDAL LOAD DURING THE GP	•	56,316 Kg

HARDER BRAKING

	STOPPING DISTANCE		MAXIMUM PEDAL LOAD	
01	•••••	158 m		155 Kg
11		110 m		143 Kg
14	•••••	122 m		141 Kg

CIRCUIT DATA

Length: 5,412 m Number of laps: 57 Number of brake zones/lap: 8

COMMENT

Definitely one of the most demanding circuits for brakes. The races on the Sakhir track, surrounded by the desert, are characterised by high temperatures that increase mechanical grip and make it difficult to dissipate the heat generated during braking. This aspect, combined with the presence of numerous high energy braking sections which are quite close together, makes Sakhir a hard test bench for all the braking system components which are continuously stressed by the high energy forces and the hellishly hot temperatures. If the drivers want to finish the race, the high wear of the friction material is the biggest danger that must be avoided.



01*

Initial speed	328	(Km/h)
Final speed	61	(Km/h)
Stopping distance	158	(m)
Braking time	1.77	(sec)
Maximum deceleration	5.2	(g)
Maximum pedal load	155	(Kg)
Braking power	2211	(Kw)

05

Initial speed	252	(Km/h)
Final speed	164	(Km/h)
Stopping distance	62	(m)
Braking time	0.86	(sec)
Maximum deceleration	3.4	(g)
Maximum pedal load	104	(Kg)
Braking power	1102	(Kw)

10

Initial speed	233	(Km/h)
Final speed	65	(Km/h)
Stopping distance	117	(m)
Braking time	1.57	(sec)
Maximum deceleration	3.1	(g)
Maximum pedal load	91	(Kg)
Braking power	895	(Kw)

13

271	(Km/h)
122	(Km/h)
101	(m)
1.19	(sec)
3.8	(g)
118	(Kg)
1348	(Kw)
	271 122 101 1.19 3.8 118 1348

04

Initial speed	301	(Km/h)
Final speed	101	(Km/h)
Stopping distance	124	(m)
Braking time	1.36	(sec)
Maximum deceleration	4.5	(g)
Maximum pedal load	137	(Kg)
Braking power	1785	(Kw)

08

Initial speed	243	(Km/h)
Final speed	70	(Km/h)
Stopping distance	111	(m)
Braking time	1.39	(sec)
Maximum deceleration	3.2	(g)
Maximum pedal load	99	(Kg)
Braking power	995	(Kw)

11

Initial speed	309	(Km/h)
Final speed	127	(Km/h)
Stopping distance	110	(m)
Braking time	1.19	(sec)
Maximum deceleration	4.7	(g)
Maximum pedal load	143	(Kg)
Braking power	1912	(Kw)

14

306	(Km/h)
107	(Km/h)
122	(m)
1.32	(sec)
4.6	(g)
141	(Kg)
1857	(Kw)
	306 107 122 1.32 4.6 141 1857