

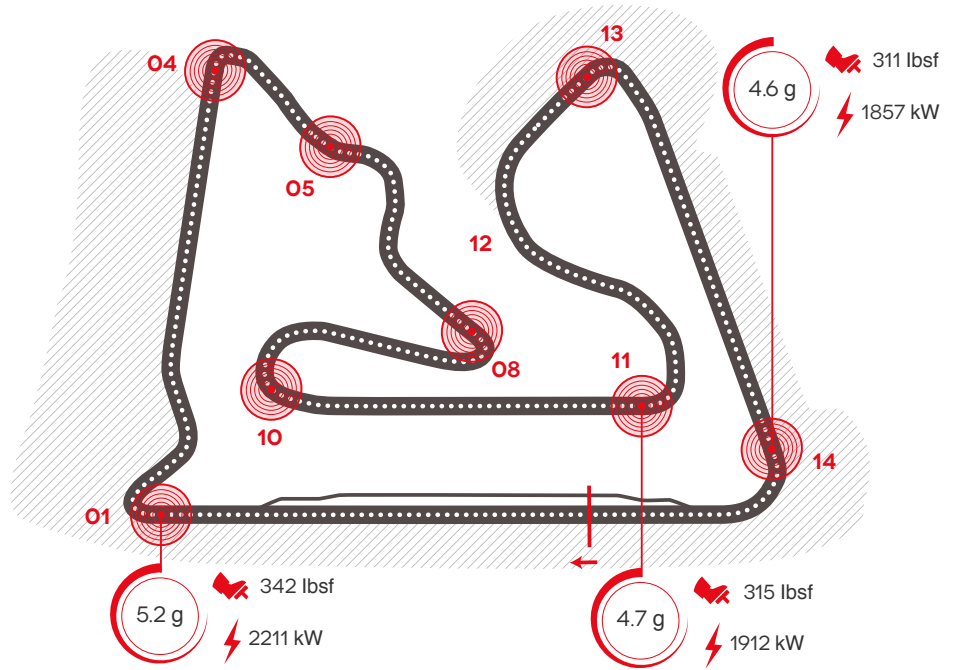
F1 BRAKE FACTS

2015 FORMULA 1 GULF AIR SAHRAH GRAND PRIX

17-19 APR 2015

BAHRAIN INTERNAT. CIRCUIT (SAKHIR)

TYPE OF CIRCUIT	HARD
TIME SPENT BRAKING	20%
AVERAGE DECELERATION	4.1 g
BRAKING ENERGY PRODUCED	130 kWh
TOTAL PEDAL LOAD DURING THE GP	124156 lbsf



HARDER BRAKING

	STOPPING DISTANCE		MAXIMUM PEDAL LOAD
01	520 ft		342 lbsf
11	359 ft		315 lbsf
14	399 ft		311 lbsf

CIRCUIT DATA

Length: 3,363 miles
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.

* Turn 01 is considered the most demanding for the braking system.

01*

Entry speed	203	(Mph)
Exit speed	38	(Mph)
Braking distance	520	(ft)
Braking time	1.77	(sec)
Maximum deceleration	5.2	(g)
Maximum pedal load	342	(lbsf)
Braking power	2211	(Kw)

04

Entry speed	187	(Mph)
Exit speed	63	(Mph)
Braking distance	406	(ft)
Braking time	1.36	(sec)
Maximum deceleration	4.5	(g)
Maximum pedal load	302	(lbsf)
Braking power	1785	(Kw)

05

Entry speed	157	(Mph)
Exit speed	102	(Mph)
Braking distance	204	(ft)
Braking time	0.86	(sec)
Maximum deceleration	3.4	(g)
Maximum pedal load	229	(lbsf)
Braking power	1102	(Kw)

08

Entry speed	151	(Mph)
Exit speed	43	(Mph)
Braking distance	363	(ft)
Braking time	1.39	(sec)
Maximum deceleration	3.2	(g)
Maximum pedal load	219	(lbsf)
Braking power	995	(Kw)

10

Entry speed	145	(Mph)
Exit speed	41	(Mph)
Braking distance	385	(ft)
Braking time	1.57	(sec)
Maximum deceleration	3.1	(g)
Maximum pedal load	201	(lbsf)
Braking power	895	(Kw)

11

Entry speed	192	(Mph)
Exit speed	79	(Mph)
Braking distance	359	(ft)
Braking time	1.19	(sec)
Maximum deceleration	4.7	(g)
Maximum pedal load	315	(lbsf)
Braking power	1912	(Kw)

13

Entry speed	168	(Mph)
Exit speed	76	(Mph)
Braking distance	333	(ft)
Braking time	1.19	(sec)
Maximum deceleration	3.8	(g)
Maximum pedal load	259	(lbsf)
Braking power	1348	(Kw)

14

Entry speed	190	(Mph)
Exit speed	67	(Mph)
Braking distance	399	(ft)
Braking time	1.32	(sec)
Maximum deceleration	4.6	(g)
Maximum pedal load	311	(lbsf)
Braking power	1857	(Kw)