F1 | BRAKE CIRCUIT IDENTITY CARDS

2015 FORMULA 1 ETIHAD AIRWAYS ABU DHABI GRAND PRIX

27–29 NOV 2015

YAS MARINA CIRCUIT (YAS ISLAND)

TYPE OF CIRCUIT	HARD
TIME SPENT BRAKING	22%
AVERAGE DECELERATION	2.9 g
BRAKING ENERGY PRODUCED BY A CAR DURING THE GP	120 kWh
TOTAL PEDAL LOAD DURING THE GP	68860 Kg

HARDER BRAKING

	STOPPING DISTANCE	MAXIMUM PEDAL LOAD
08	155 m	169 Kg
11	149 m	160 Kg
05	110 m	141 Kg

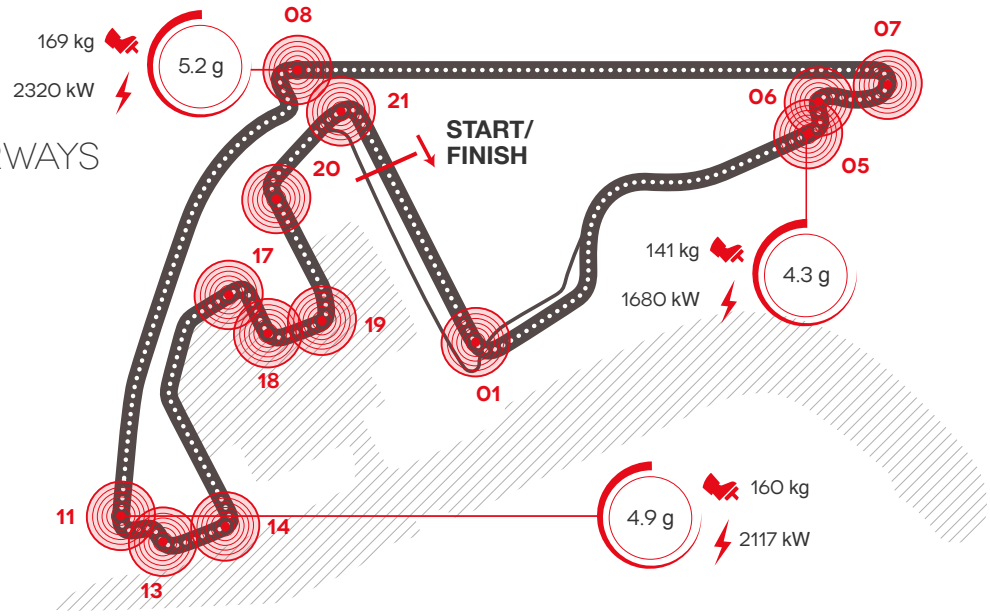
CIRCUIT DATA

Length: 5,554 m
Number of laps: 55
Number of brake zones/lap: 13

COMMENT

The same considerations which were made for the Bahrain circuit are also valid here, although the make up of the track leads to lower speeds and therefore less stress on the brakes. On this track the stress the braking system is subjected to is in any case quite significant and above average: here the drivers spend more than 22% of each lap with a foot on the brake. The 13 braking sections are rather demanding and the heated pace and torrid climate, with their correlated effects of increased grip and stress, can create thermal dissipation problems as well as problems with friction material wear.

*** Turn 08 is considered the most demanding for the braking system.**



01

Initial speed	290	(Km/h)
Final speed	128	(Km/h)
Stopping distance	107	(m)
Braking time	1.20	(sec)
Maximum deceleration	4.1	(g)
Maximum pedal load	137	(Kg)
Braking power	1586	(Kw)

05

Initial speed	296	(Km/h)
Final speed	104	(Km/h)
Stopping distance	110	(m)
Braking time	1.22	(sec)
Maximum deceleration	4.3	(g)
Maximum pedal load	141	(Kg)
Braking power	1680	(Kw)

06

Initial speed	116	(Km/h)
Final speed	83	(Km/h)
Stopping distance	49	(m)
Braking time	0.89	(sec)
Maximum deceleration	1.3	(g)
Maximum pedal load	53	(Kg)
Braking power	95	(Kw)

07

Initial speed	146	(Km/h)
Final speed	63	(Km/h)
Stopping distance	68	(m)
Braking time	1.13	(sec)
Maximum deceleration	1.7	(g)
Maximum pedal load	54	(Kg)
Braking power	187	(Kw)

08*

Initial speed	335	(Km/h)
Final speed	63	(Km/h)
Stopping distance	155	(m)
Braking time	1.65	(sec)
Maximum deceleration	5.2	(g)
Maximum pedal load	169	(Kg)
Braking power	2320	(Kw)

11

Initial speed	324	(Km/h)
Final speed	80	(Km/h)
Stopping distance	149	(m)
Braking time	1.60	(sec)
Maximum deceleration	4.9	(g)
Maximum pedal load	160	(Kg)
Braking power	2117	(Kw)

13

Initial speed	120	(Km/h)
Final speed	103	(Km/h)
Stopping distance	19	(m)
Braking time	0.73	(sec)
Maximum deceleration	1.4	(g)
Maximum pedal load	46	(Kg)
Braking power	84	(Kw)

14

Initial speed	169	(Km/h)
Final speed	94	(Km/h)
Stopping distance	70	(m)
Braking time	1.07	(sec)
Maximum deceleration	2.0	(g)
Maximum pedal load	68	(Kg)
Braking power	344	(Kw)

17

Initial speed	257	(Km/h)
Final speed	85	(Km/h)
Stopping distance	112	(m)
Braking time	1.35	(sec)
Maximum deceleration	3.4	(g)
Maximum pedal load	113	(Kg)
Braking power	1163	(Kw)

18

Initial speed	138	(Km/h)
Final speed	99	(Km/h)
Stopping distance	48	(m)
Braking time	0.83	(sec)
Maximum deceleration	1.6	(g)
Maximum pedal load	51	(Kg)
Braking power	152	(Kw)

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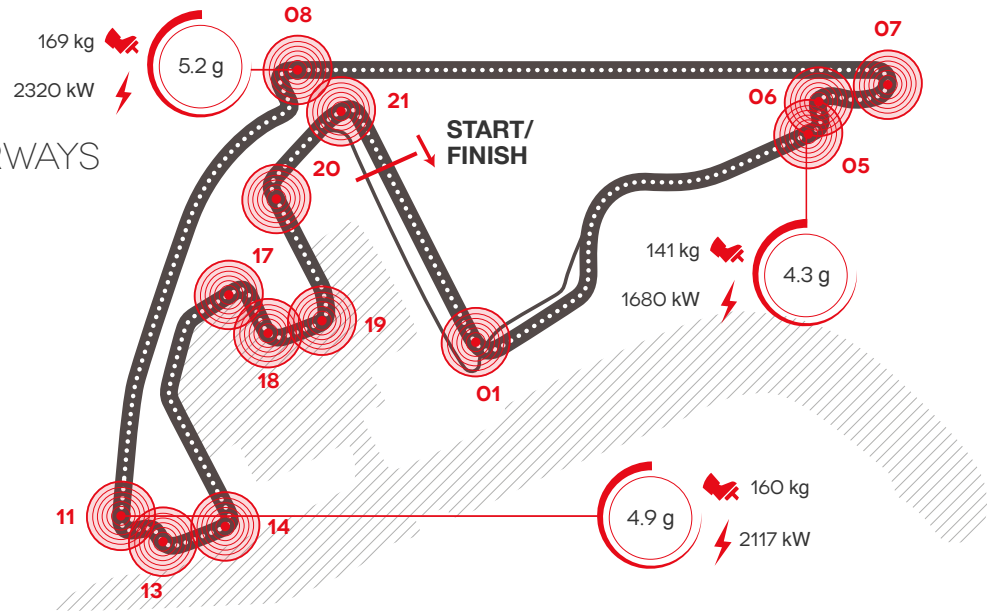

19

Initial speed	155	(Km/h)
Final speed	105	(Km/h)
Stopping distance	55	(m)
Braking time	0.91	(sec)
Maximum deceleration	1.8	(g)
Maximum pedal load	59	(Kg)
Braking power	228	(Kw)

20

Initial speed	243	(Km/h)
Final speed	143	(Km/h)
Stopping distance	73	(m)
Braking time	0.96	(sec)
Maximum deceleration	3.1	(g)
Maximum pedal load	105	(Kg)
Braking power	984	(Kw)

21

Initial speed	227	(Km/h)
Final speed	109	(Km/h)
Stopping distance	90	(m)
Braking time	1.17	(sec)
Maximum deceleration	2.9	(g)
Maximum pedal load	97	(Kg)
Braking power	834	(Kw)