## F1 | BRAKE CIRCUIT IDENTITY CARDS

2015 FORMULA 1 GULF AIR BAHRAIN GRAND PRIX

## 17-19 APR 2015

## BAHRAIN INTERNAT. CIRCUIT <br> (SAKHIR)



## CIRCUIT DATA

Length: $5,412 \mathrm{~m}$
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.

[^0]

01*

| Initial speed | 328 | $(\mathrm{Km} / \mathrm{h})$ |
| :--- | :--- | :--- |
| Final speed | 61 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 158 | $(\mathrm{~m})$ |
| Braking time | 1.77 | $(\mathrm{sec})$ |
| Maximum deceleration | 5.2 | $(\mathrm{~g})$ |
| Maximum pedal load | 155 | $(\mathrm{Kg})$ |
| Braking power | 2211 | $(\mathrm{Kw})$ |

## 05

| Initial speed | 252 | $(\mathrm{Km} / \mathrm{h})$ |
| :--- | :--- | :--- |
| Final speed | 164 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 62 | $(\mathrm{~m})$ |
| Braking time | 0.86 | $(\mathrm{sec})$ |
| Maximum deceleration | 3.4 | $(\mathrm{~g})$ |
| Maximum pedal load | 104 | $(\mathrm{Kg})$ |
| Braking power | 1102 | $(\mathrm{Kw})$ |

10

| Initial speed | 233 | $(\mathrm{Km} / \mathrm{h})$ |
| :--- | :--- | :--- |
| Final speed | 65 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 117 | $(\mathrm{~m})$ |
| Braking time | 1.57 | $(\mathrm{sec})$ |
| Maximum deceleration | 3.1 | $(\mathrm{~g})$ |
| Maximum pedal load | 91 | $(\mathrm{Kg})$ |
| Braking power | 895 | $(\mathrm{Kw})$ |

13

| Initial speed | 271 | $(\mathrm{Km} / \mathrm{h})$ |
| :--- | :--- | :--- |
| Final speed | 122 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 101 | $(\mathrm{~m})$ |
| Braking time | 1.19 | $(\mathrm{sec})$ |
| Maximum deceleration | 3.8 | $(\mathrm{~g})$ |
| Maximum pedal load | 118 | $(\mathrm{Kg})$ |
| Braking power | 1348 | $(\mathrm{Kw})$ |


| O4 |  |  |
| :--- | :--- | :--- |
| Initial speed | 301 | $(\mathrm{Km} / \mathrm{h})$ |
| Final speed | 101 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 124 | $(\mathrm{~m})$ |
| Braking time | 1.36 | $(\mathrm{sec})$ |
| Maximum deceleration | 4.5 | $(\mathrm{~g})$ |
| Maximum pedal load | 137 | $(\mathrm{Kg})$ |
| Braking power | 1785 | $(\mathrm{Kw})$ |

08

| Initial speed | 243 | $(\mathrm{Km} / \mathrm{h})$ |
| :--- | :--- | :--- |
| Final speed | 70 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 111 | $(\mathrm{~m})$ |
| Braking time | 1.39 | $(\mathrm{sec})$ |
| Maximum deceleration | 3.2 | $(\mathrm{~g})$ |
| Maximum pedal load | 99 | $(\mathrm{Kg})$ |
| Braking power | 995 | $(\mathrm{Kw})$ |


| 11 | 309 | $(\mathrm{Km} / \mathrm{h})$ |
| :--- | :--- | :--- |
| Initial speed | 127 | $(\mathrm{Km} / \mathrm{h})$ |
| Final speed | 110 | $(\mathrm{~m})$ |
| Stopping distance | 1.19 | $(\mathrm{sec})$ |
| Braking time | 4.7 | $(\mathrm{~g})$ |
| Maximum deceleration | 143 | $(\mathrm{Kg})$ |
| Maximum pedal load | 1912 | $(\mathrm{Kw})$ |
| Braking power |  |  |


| $\mathbf{1 4}$ |  |  |
| :--- | :--- | :--- |
| Initial speed | 306 | $(\mathrm{Km} / \mathrm{h})$ |
| Final speed | 107 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 122 | $(\mathrm{~m})$ |
| Braking time | 1.32 | $(\mathrm{sec})$ |
| Maximum deceleration | 4.6 | $(\mathrm{~g})$ |
| Maximum pedal load | 141 | $(\mathrm{Kg})$ |
| Braking power | 1857 | $(\mathrm{Kw})$ |


[^0]:    * Turn 01 is considered the most demanding for the braking system.

