## F1 | BRAKE CIRCUIT IDENTITY CARDS

## 2015 FORMULA 1 SHELL <br> BELGIAN GRAND PRIX

## 21-23 AUG 2015

CIRCUIT DE SPA-FRANCORCHAMPS
(SPA-FRANCORCHAMPS)

| TYPE OF CIRCUIT |  |  |  |  | LIGH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TIME SPENT BRAKING |  |  |  |  | 13\% |
| AVERAGE DECELERATION |  |  |  |  | g |
| BRAKING ENERGY PRODUCED BY A CAR DURING THE GP |  |  |  |  |  |
| TOTAL PEDAL LOAD DURING THE GP |  |  |  |  | 50, |
| HARDER BRAKING |  |  |  |  |  |
|  | STOPPING DISTANCE |  | MAX |  |  |
| 05 | ............. | 119 m |  |  | 17 |
| 18 | ................ | 139 m |  |  | 15 |
| 12 | $\ldots$ | 99 m |  |  | 15 |

## CIRCUIT DATA

Length: 7,004 m
Number of laps: 44
Number of brake zones/lap: 9

## COMMENT

At just under seven kilometres, this is the longest track of the season. Despite the presence of two braking sections (the "Les Combes" at the end of the Kemmel straight lines and the "Bus stop" chicane right before the finish line) which are characterised by extremely high energy forces, the rest of the track is rather light on the braking system because it is characterised by fast turns that translate into not-so-demanding braking and ensure excellent cooling of the system itself. Especially in adverse weather conditions, a situation which is quite common in this region, problems connected to excessive cooling can occur.

* Turn 05 is considered the most demanding for the braking system.

| 01 |  |  |
| :--- | :--- | :--- |
| Initial speed | 293 | $(\mathrm{Km} / \mathrm{h})$ |
| Final speed | 132 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 1.52 | $(\mathrm{sec})$ |
| Braking time | 4.5 | $(\mathrm{~g})$ |
| Maximum deceleration | 139 | $(\mathrm{Kg})$ |
| Maximum pedal load | 1808 | $(\mathrm{Kw})$ |
| Braking power |  |  |


| $\mathbf{0 8}$ |  |  |
| :--- | :--- | :--- |
| Initial speed | 277 | $(\mathrm{Km} / \mathrm{h})$ |
| Final speed | 109 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 89 | $(\mathrm{~m})$ |
| Braking time | 1.06 | $(\mathrm{sec})$ |
| Maximum deceleration | 4.1 | $(\mathrm{~g})$ |
| Maximum pedal load | 131 | $(\mathrm{Kg})$ |
| Braking power | 1542 | $(\mathrm{Kw})$ |


| 10 |  |  |
| :--- | :--- | :--- |
| Initial speed | 305 | $(\mathrm{Km} / \mathrm{h})$ |
| Final speed | 213 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 0.76 | $(\mathrm{~m})$ |
| Braking time | 4.8 | $(\mathrm{sec})$ |
| Maximum deceleration | 149 | $(\mathrm{Kg})$ |
| Maximum pedal load | 2000 | $(\mathrm{Kw})$ |
| Braking power |  |  |

## 14

| Initial speed | 255 | $(\mathrm{Km} / \mathrm{h})$ |
| :--- | :--- | :--- |
| Final speed | 136 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 83 | $(\mathrm{~m})$ |
| Braking time | 1.03 | $(\mathrm{sec})$ |
| Maximum deceleration | 3.6 | $(\mathrm{~g})$ |
| Maximum pedal load | 114 | $(\mathrm{Kg})$ |
| Braking power | 1237 | $(\mathrm{Kw})$ |


| 19 | 90 | $(\mathrm{Km} / \mathrm{h})$ |
| :--- | :--- | :--- |
| Initial speed | 72 | $(\mathrm{Km} / \mathrm{h})$ |
| Final speed | 43 | $(\mathrm{~m})$ |
| Stopping distance | 0.84 | $(\mathrm{sec})$ |
| Braking time | 1.1 | $(\mathrm{~g})$ |
| Maximum deceleration | 38 | $(\mathrm{Kg})$ |
| Maximum pedal load | 140 | $(\mathrm{Kw})$ |
| Braking power |  |  |

05*

| Initial speed | 336 | $(\mathrm{Km} / \mathrm{h})$ |
| :--- | :--- | :--- |
| Final speed | 134 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 119 | $(\mathrm{~m})$ |
| Braking time | 1.24 | $(\mathrm{sec})$ |
| Maximum deceleration | 5.6 | $(\mathrm{~g})$ |
| Maximum pedal load | 172 | $(\mathrm{Kg})$ |
| Braking power | 2549 | $(\mathrm{Kw})$ |

## 09

| Initial speed | 209 | $(\mathrm{Km} / \mathrm{h})$ |
| :--- | :--- | :--- |
| Final speed | 146 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 53 | $(\mathrm{~m})$ |
| Braking time | 0.82 | $(\mathrm{sec})$ |
| Maximum deceleration | 2.7 | $(\mathrm{~g})$ |
| Maximum pedal load | 84 | $(\mathrm{Kg})$ |
| Braking power | 686 | $(\mathrm{Kw})$ |


| 12 |  |  |
| :--- | :--- | :--- |
| Initial speed | 314 | $(\mathrm{Km} / \mathrm{h})$ |
| Final speed | 150 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 99 | $(\mathrm{~m})$ |
| Braking time | 1.09 | $(\mathrm{sec})$ |
| Maximum deceleration | 5.0 | $(\mathrm{~g})$ |
| Maximum pedal load | 153 | $(\mathrm{Kg})$ |
| Braking power | 2140 | $(\mathrm{Kw})$ |


| 18 |  |  |
| :--- | :--- | :--- |
| Initial speed | 321 | $(\mathrm{Km} / \mathrm{h})$ |
| Final speed | 139 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 1.51 | $(\mathrm{sec})$ |
| Braking time | 5.2 | $(\mathrm{~g})$ |
| Maximum deceleration | 159 | $(\mathrm{Kg})$ |
| Maximum pedal load | 2266 | $(\mathrm{Kw})$ |
| Braking power |  |  |

