

F1 | BRAKE CIRCUIT IDENTITY CARDS

2015 FORMULA 1
UNITED STATES GRAND PRIX

23-25 OCT 2015

CIRCUIT OF THE AMERICAS (AUSTIN)

TYPE OF CIRCUIT	MEDIUM
TIME SPENT BRAKING	18%
AVERAGE DECELERATION	4.0 g
BRAKING ENERGY PRODUCED BY A CAR DURING THE GP	132 kWh
TOTAL PEDAL LOAD DURING THE GP	77896 Kg

HARDER BRAKING

	STOPPING DISTANCE	MAXIMUM PEDAL LOAD
12	128 m	187 Kg
01	126 m	176 Kg
11	132 m	158 Kg

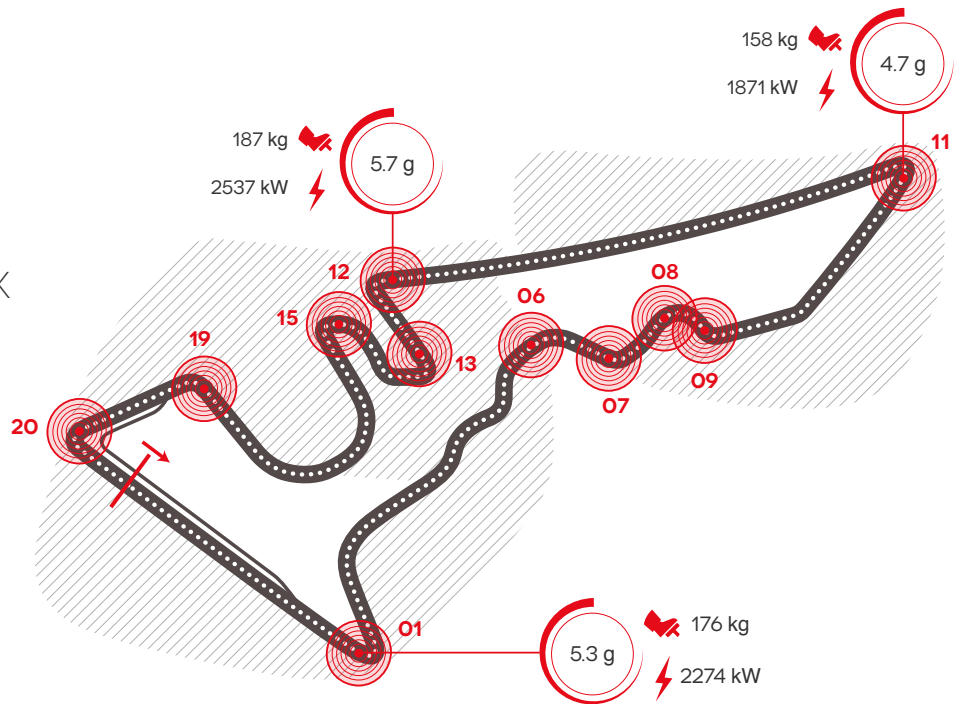
CIRCUIT DATA

Length: 5,513 m
Number of laps: 56
Number of brake zones/lap: 11

COMMENT

The Austin track can be considered to have a medium demand on the braking system with the drivers using the brakes for about 18% of the time on each lap, but it is characterised by two very sudden braking sections. The T12 turn is worth a mention. It is one of the most demanding of the season in terms of dissipated energy and one of the most sudden for the driver with a G force of -5.7 Gs.

*** Turn 12 is considered the most demanding for the braking system.**



01

Initial speed	318	(Km/h)
Final speed	73	(Km/h)
Stopping distance	126	(m)
Braking time	1.37	(sec)
Maximum deceleration	5.3	(g)
Maximum pedal load	176	(Kg)
Braking power	2274	(Kw)

06

Initial speed	285	(Km/h)
Final speed	223	(Km/h)
Stopping distance	19	(m)
Braking time	0.68	(sec)
Maximum deceleration	4.5	(g)
Maximum pedal load	99	(Kg)
Braking power	1249	(Kw)

07

Initial speed	265	(Km/h)
Final speed	192	(Km/h)
Stopping distance	24	(m)
Braking time	0.75	(sec)
Maximum deceleration	4.0	(g)
Maximum pedal load	135	(Kg)
Braking power	1430	(Kw)

08

Initial speed	221	(Km/h)
Final speed	175	(Km/h)
Stopping distance	19	(m)
Braking time	0.70	(sec)
Maximum deceleration	3.1	(g)
Maximum pedal load	92	(Kg)
Braking power	829	(Kw)

09

Initial speed	202	(Km/h)
Final speed	128	(Km/h)
Stopping distance	62	(m)
Braking time	0.91	(sec)
Maximum deceleration	2.7	(g)
Maximum pedal load	92	(Kg)
Braking power	677	(Kw)

11

Initial speed	293	(Km/h)
Final speed	77	(Km/h)
Stopping distance	132	(m)
Braking time	1.55	(sec)
Maximum deceleration	4.7	(g)
Maximum pedal load	158	(Kg)
Braking power	1871	(Kw)

12*

Initial speed	332	(Km/h)
Final speed	77	(Km/h)
Stopping distance	128	(m)
Braking time	1.36	(sec)
Maximum deceleration	5.7	(g)
Maximum pedal load	187	(Kg)
Braking power	2537	(Kw)

13

Initial speed	199	(Km/h)
Final speed	94	(Km/h)
Stopping distance	72	(m)
Braking time	1.03	(sec)
Maximum deceleration	2.7	(g)
Maximum pedal load	89	(Kg)
Braking power	648	(Kw)

15

Initial speed	211	(Km/h)
Final speed	76	(Km/h)
Stopping distance	62	(m)
Braking time	0.90	(sec)
Maximum deceleration	2.9	(g)
Maximum pedal load	95	(Kg)
Braking power	758	(Kw)

19

Initial speed	283	(Km/h)
Final speed	169	(Km/h)
Stopping distance	70	(m)
Braking time	0.89	(sec)
Maximum deceleration	4.4	(g)
Maximum pedal load	145	(Kg)
Braking power	1686	(Kw)

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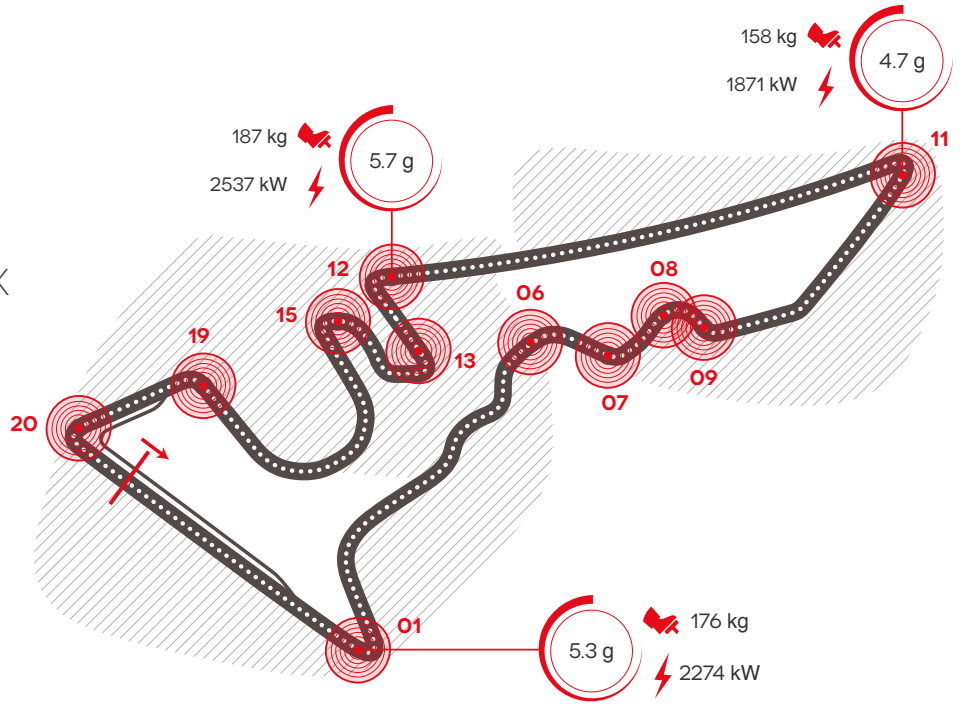
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20

Initial speed	249	(Km/h)
Final speed	95	(Km/h)
Stopping distance	104	(m)
Braking time	1.31	(sec)
Maximum deceleration	3.7	(g)
Maximum pedal load	124	(Kg)
Braking power	1197	(Kw)

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