$V_2 = V + \Delta V$km/h to $V_1 = V - \Delta V$km/h

where $\Delta V \leq 5$km/h.

5.1.1.2.4. Perform the same test in the opposite direction: t_2.

5.1.1.2.5. Take the average T of the two times t_1 and t_2.

5.1.1.2.6. Repeat these tests several times such that the statistical accuracy (p) of the average

$T = \frac{1}{n} \cdot \sum_{i=1}^{n} Ti$ is equal to or less than 2% ($p \leq 2\%$)

The statistical accuracy (p) is defined by:

$$p = \frac{ts}{\sqrt{n}} \cdot \frac{100}{T}$$

where:

t = coefficient given by the table below,

s = standard deviation,

n = number of tests.

$$s = \sqrt{\sum_{i=1}^{n} \frac{(Ti - T)^2}{n-1}}$$

n	4	5	6	7	8	9	10	11	12	13	14	15
t	3.2	2.8	2.6	2.5	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.2
$\frac{t}{\sqrt{n}}$	1.6	1.25	1.06	0.94	0.85	0.77	0.73	0.66	0.64	0.61	0.59	0.57

5.1.1.2.7. Calculate the power by the formula:

$$P = \frac{M \cdot V \cdot \Delta V}{500T}$$

where:

P is expressed in kW,

V = speed of the test in m/s,

ΔV = speed deviation from speed V, in m/s,

M = reference mass in kg,

T = time in seconds.

5.1.1.2.8. The power (P) determined on the track shall be corrected to the reference ambient conditions as follows:

$$P_{corrected} = K \bullet P_{Measured}$$

$$K = \frac{R_R}{R_T} \bullet [1 - K_R (t - t_o)] + \frac{R_{AERO}}{R_T} \bullet \frac{\rho 0}{\rho}$$

where:

R_R = rolling resistance at speed V
R_{AERO} = aerodynamic drag at speed V
R_T = total driving resistance = $R_R + R_{AERO}$
K_R = temperature correction factor of rolling resistance, taken to be equal to $3.6 \bullet 10^{-3}$/°C
t = road test ambient temperature
t_0 = reference ambient temperature = 20°C
ρ = air density at the test conditions
ρ_0 = air density at the reference conditions (20°C, 100kPa)

The ratios R_R/R_T and R_{AERO}/R_T shall be specified by the vehicle manufacturer on the basis of the data normally available to the company.

If these values are not available, subject to the agreement of the manufacturer and the technical service concerned, the figures for the rolling/total resistance given by the following formula may be used:

$$\frac{R_R}{R_T} = a.M + b$$

where:

M = vehicle mass in kg

and for each speed the coefficients and a and b are shown inthe following table:

V (km/h)	a	b
20	$7.24 . 10^{-5}$	0.82
30	$1.25 . 10^{-4}$	0.67
40	$1.59 . 10^{-4}$	0.54
50	$1.86 . 10^{-4}$	0.42
90	$1.71 . 10^{-4}$	0.21
120	$1.57 . 10^{-4}$	0.14

a = 5E-

2E-08 v3
- 2E-06 v2
+ 4E-05 v