2.1.13 Form of wing tip
truncation parallel to wing root and addition of a half body of revolution

2.2 Body data (detail description of body geometry)
no body

2.3 Fabrication tolerances/waviness
0.15 mm

2.4 Additional remarks
see also figure B1-1

3. Wind tunnel

3.1 Designation
S2MA (ONERA - Modane Center)

3.2 Type of tunnel
continuous

3.2.1 Continuous or blowdown. Indicate minimum run time if applicable

3.2.2 Stagnation pressure
from 0.3 bar to a limit stagnation pressure depending slightly on the Mach number: $P_{\text{max}} \leq 2.5$ bar

3.2.3 Stagnation temperature
from 287°K to 320°K

3.3 Test section

3.3.1 Shape of test section
square

3.3.2 Size of test section (width, height, length)
height : 1.770 m  width : 1.750 m
perforated length : 5.4 m

3.3.3 Type of test section walls:
closed, open, slotted, perforated
Open area ratio (give range if variable)
Slot/hole geometry (e.g., 30-degree slanted holes)
Treatment of side wall boundary layer:
Full span models
no treatment
Half-model testing
B.L. diverter

3.4 Flow field (empty test section)
on the vertical wall, 2.685 m upstream of the balance axis
unknown

3.4.1 Reference static pressure

3.4.2 Flow angularity

3.4.3 Mach Number distribution
$\Delta M/\text{meter, in } x\text{-direction}=\pm 3\times 10^{-3}/\text{m for } 0.7 < M < 0.92$
according to 3.4.3

3.4.4 Pressure gradient

3.4.5 Turbulence/noise level
velocity turbulence : 0.2 % - ref. 1

3.4.6 Side wall boundary layer
displacement thickness : $d_i = 12$ to 18 mm
boundary layer thickness : $\delta = 90$ to 170 mm

3.5 Freestream Mach number (or velocity)
from $M_o = 0.1$ to 1.35

3.5.1 Range
settling chamber total pressure and static pressure on the vertical wall

3.5.2 Pressures used to determine Mach number (e.g. settling chamber total pressure and plenum chamber pressure)

3.5.3 Accuracy of Mach number determination ($\Delta M$)
$\Delta M = \pm 0.001$

3.5.4 Maximum Mach number variation in $x, y, z$-direction (empty tunnel; specify at what Mach number)
see 3.4.3

Maximum variation of flow direction
upwash $\sim 0.3$ degree
(function of the model size)