



City University Low Turbulence Wind Tunnel

LS1

Location: London

Designation: Low Speed
Closed Return

Owner(s):

City University London
Northampton Square
London EC1V 0HB
United Kingdom

Performance:

Mach Number: 0.13 (max)
Maximum Flow Speed: 45 m/s
Reynolds No: $0.034 \times 10^6 / \text{m}$ - $3.1 \times 10^6 / \text{m}$ (max)
Total Pressure: Ambient
Dynamic Pressure: up to 1.24 kN/m^2
Total Temperature: Ambient
Turbulence intensity: $< 0.01\%$ (up to 20m/s)
Run Time: Continuous
Typical Recharge Time: n/a.

Test Section Size: 0.91 m x 0.91 m x 3m
6.75:1 contraction ratio.

Testing Capabilities:

Model Support: Floor mounted.
Data Acquisition: 64 channel simultaneous data acquisition.
Outputs: Pressure & velocity. Hot-wire anemometry.
Flow visualisation: Video, tuft, surface fluorescent oilflow.

Operational Status: Active

Number and Type of Staff:

Scientific: 3+
Technical Support: 2

Test support:

Workshop for wind tunnel model design, manufacture and modification capability.

Specialist Rigs:

- Air blowing / suction capability for flow control.