

University of Bristol Boundary Layer Wind Tunnel

Location:

Hele-Shaw lab, Queen's building, University of

Owner(s):

University of Bristol United Kingdom

Test Section Size:

2m x 1m x 20m

Operational Status: Operational

Number and Type of Staff:

Scientific: 7

Technical Support: 4

Test support:

Designation: Boundary Layer Wind Tunnel

Performance:

Maximum Flow Speed: 32m/s

Reynolds No: 3.6x10⁷
Total Pressure: 1atm
Dynamic Pressure: NA

Total Temperature: room temperature **Turbulence intensity**: 0.1-0.2%

Run Time: -

Typical Recharge Time: -

Testing Capabilities:

Acoustic: beamforming, kulites, free-field microphones, wavenumber-frequency plate

Flow visualisation: Time-resolved PIV, hotwire,

FID

Aerodynamic loads: load cells, drag plate

Urban airflow: Tracer gas system, FID

Equipment:

Drag plate, force plate, load cell, Beamforming, High-speed PIV, hotwire, Tracer gas injection system, gas mixing system, FID.

Specialist Rigs: