

Site 1 – Lillington Road



Lillington Road is a semidetached Victorian property. It is highly insulated and has low annual electricity demand.

An anemometer was installed approximately 70cm above the ridgeline at the gable end ahead of the trial starting in May 2006. A second anemometer was installed at hub height during May 2007.

Lillington Road is an urban site with limited wind resource which Ampair have fitted a turbine to in the spirit of this project as a trial and for the benefit of interested parties nationally, to demonstrate what performance potential customers can realistically expect on similar sites. As a contrast, we have also installed identical systems on elevated sites (flats) nearby.

NOABL wind speed estimate	5ms ⁻¹ at 10m
Planning permission	21 st September 2006
Turbine installation	30 th January 2007
Full data available from	29 th October 2007
Mounting type	Pole to gable end
Turbine	Ampair 600 230
Inverter	Sunny Boy SB700
Anemometer	Schiltknecht Meteo, Type: f.555.1.18
Data logger	Novus LogBox DA
Watt meter	Iskraemeco ME162

Warwick Wind Trials

Time Interval	Measured Average Wind Speed (ms⁻¹)	Total Energy Exported (kWh)	Average Energy Exported per Day (Wh)
29 th October 2007 to 8 th October 2008	2.22	53.67	156
November 2007	1.73	3.87	129
December 2007	2.31	9.89	319
January 2008	3.04	14.30	461
February 2008	2.21	0.78	27
March 2008	3.12	0	0
April 2008	2.32	0	0
May 2008	2.10	6.75	218
June 2008	1.93	4.51	150
July 2008	2.04	4.78	154
August 2008	1.98	3.24	105
September 2008	1.54	2.74	91

Turbine was switched off from 3rd February to 9th May 2008 due to a mechanical noise. New nose cone, blades and interconnect box with speed control fitted on 9th May 2008.