



ETI System Trial
Sydney, Australia
Conducted: February 2010
For
InfiNet Wireless
On Behalf of Clever Communications

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ISO Certified. Certificate No: C2012-00326

In February 2010, ETI was invited by InfiNet Wireless of Russia to participate in a trial InfiNet was conducting on behalf of Clever Communications.

Clever Communications' network was based on an unlicensed band, therefore, ETI provided its 5.3 to 5.85 GHz Multibeam DuoPol (6 horizontal and 6 vertical beams) Antenna System (26dBi gain) with two 8x8 Beamformers covering 90°. ETI's system was integrated with InfiNet's 5GHz Point to Multipoint, 40MHz channel, with MIMO Spatial Multiplexing.

ETI's system was installed on the roof top of an office building located at 43 Bridge Street, Hurstville (Lat: 33° 57' 51.96"S / Lon: 151° 05' 40.45"E). Alignment was made using ETI Antenna Alignment tool and InfiNet alignment software with CPE 20 km away to the South.

Proper Antenna operation was demonstrated. The antenna provided 26 dBi gain and sectorization according to specifications. The ETI antenna provided an improvement of 10 dB on the received and transmitted signal levels as well as reduction in interference, when compared to a conventional 16dBi antenna.

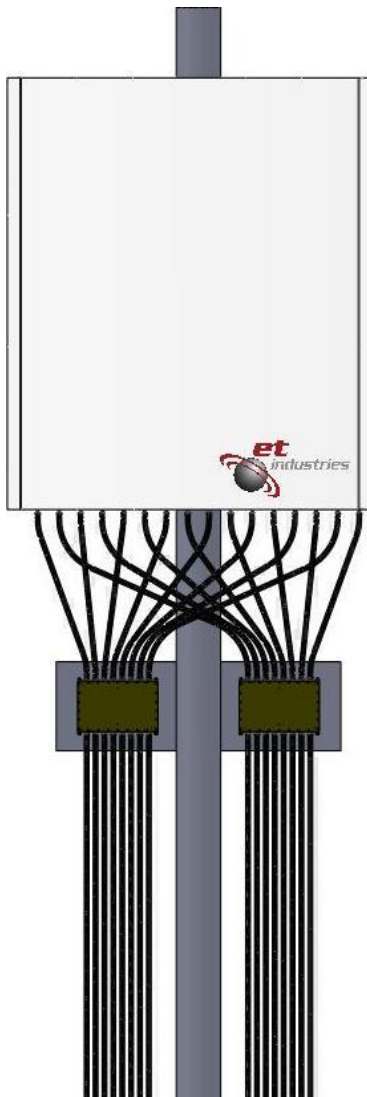


Figure 1: Rendering of ETI's Antenna System used in the Trial

ETI Antenna with beamshaping technology



Phase Matched Cables

ETI Beamformers



ETI's system facing south toward location of CPE

Antenna Demonstration Report

Tuesday, February 9, 2010

Antenna System: ETI 5.3 to 5.85 GHz Duo-pol 26dBi gain mult-beam antenna system with 6 horizontal and 6 vertical beams. 8x8 BFN quantity 2.

Location: 43 Bridge Street, Hurstville

Lat: 33° 57' 51.96"S

Lon: 151° 05' 40.45"E

Position accuracy +/- 47.94ft.

Altitude 449.48ft. +/-57.41ft.

Building height: 100ft.

Radio Equipment: Infinet 5GHz Point to Multipoint, 40MHz channel, with MIMO Spatial Multiplexing

Basestation location: 43 Bridge Street

CPE location:

Link Distance: 20km

Link type: nLOS

ETI Antenna System was installed on the roof of 43 Bridge Street with Infinet 5 GHz radio. Alignment was made using ETI Antenna Alignment tool and Infinet alignment software with CPE 20 km away to the South.

Proper Antenna operation was demonstrated. The antenna provided 26 dBi gain and sectorization according to specifications. The ETI antenna provided an improvement of 10 dB on the received and transmitted signal levels as well as reduction in interference, when compared to a conventional 16dBi antenna.

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