



Antenna Characteristics
SDT 5000
050-002-0024R01

SDT 5000 Antenna Characteristics

The SDT5000 uses an integral Dual Patch, medium gain, right-hand circularly polarized antenna with a maximum gain of 11.7dBi, over the entire transmit band including cable loss. Over the receive band the gain is 10dBi. The antenna noise temperature is typically 85K @ 35° elevation. The beam -3dB bandwidth in elevation is approximately 40°, ($\pm$ - 20° from the boresight of the antenna). The azimuth -3dB bandwidth is 62°, ($\pm$ -31° from the boresight of the antenna). The antenna pattern plots are attached for reference, see **Figure 1** to **Figure 4**.

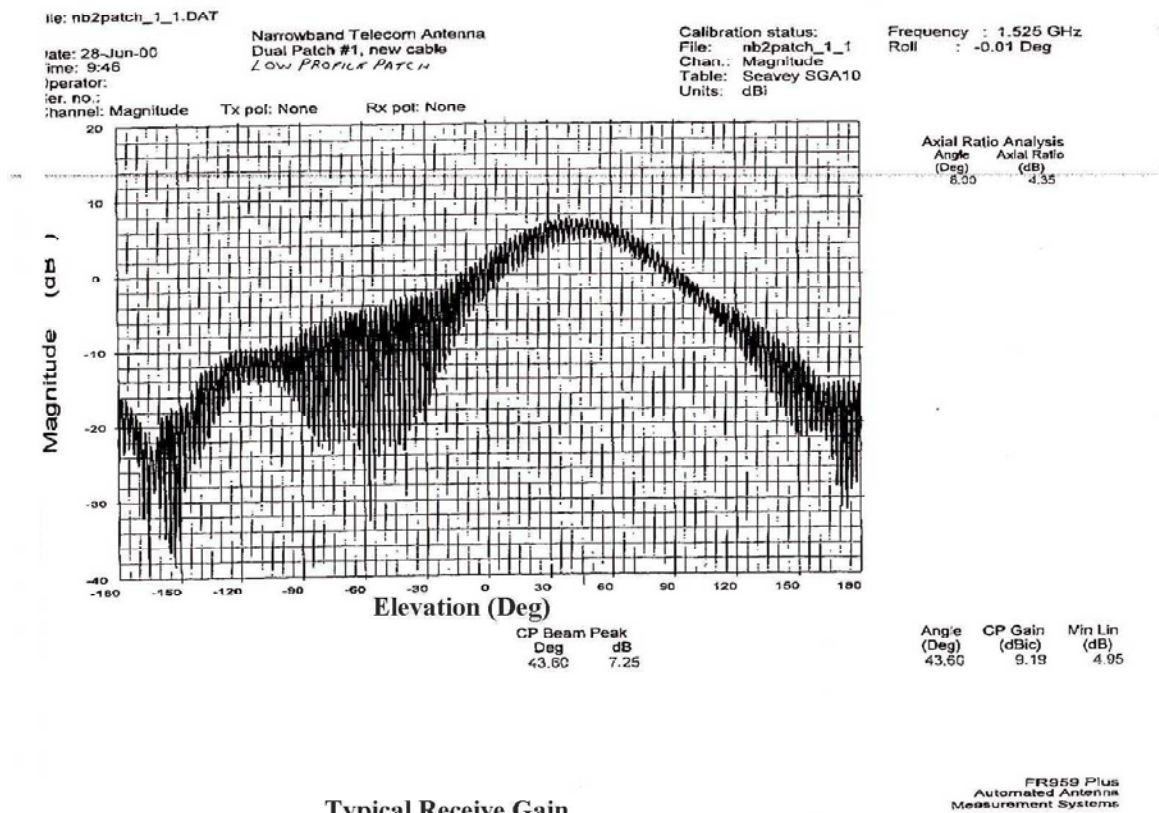


Figure 1 Dual Patch Antenna - Receive Gain

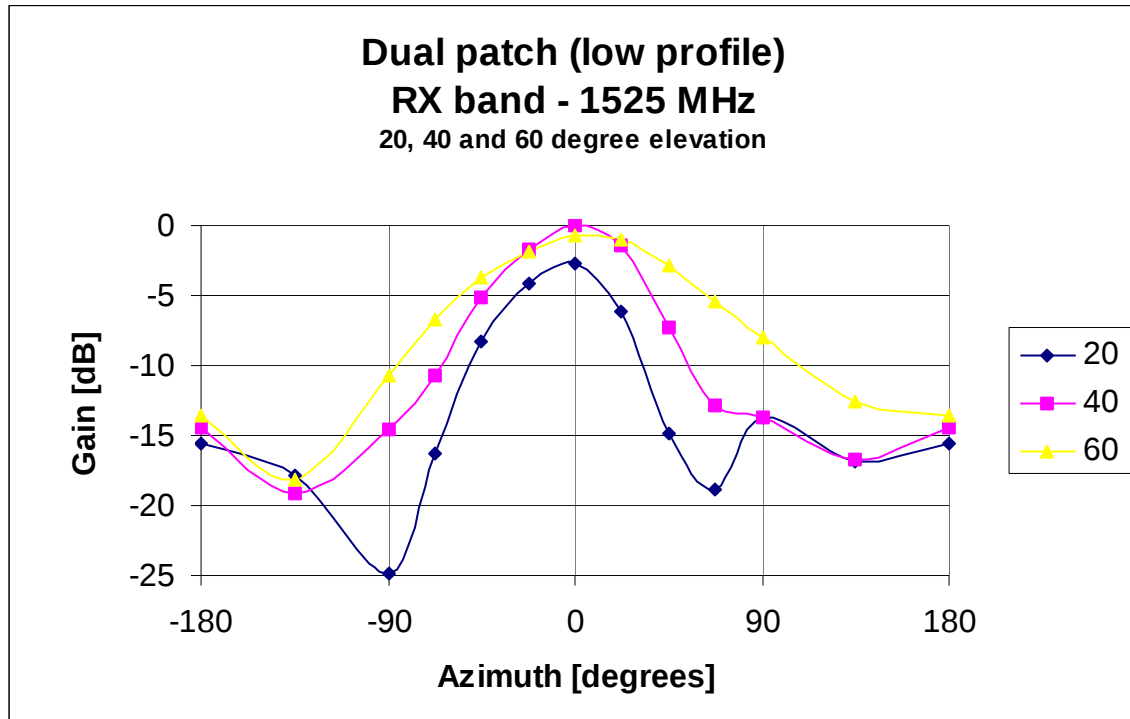


Figure 2 Typical Dual Patch Antenna Receive Azimuth Plot relative to boresight gain for various elevation angles

DUAL PATCH ANTENNA

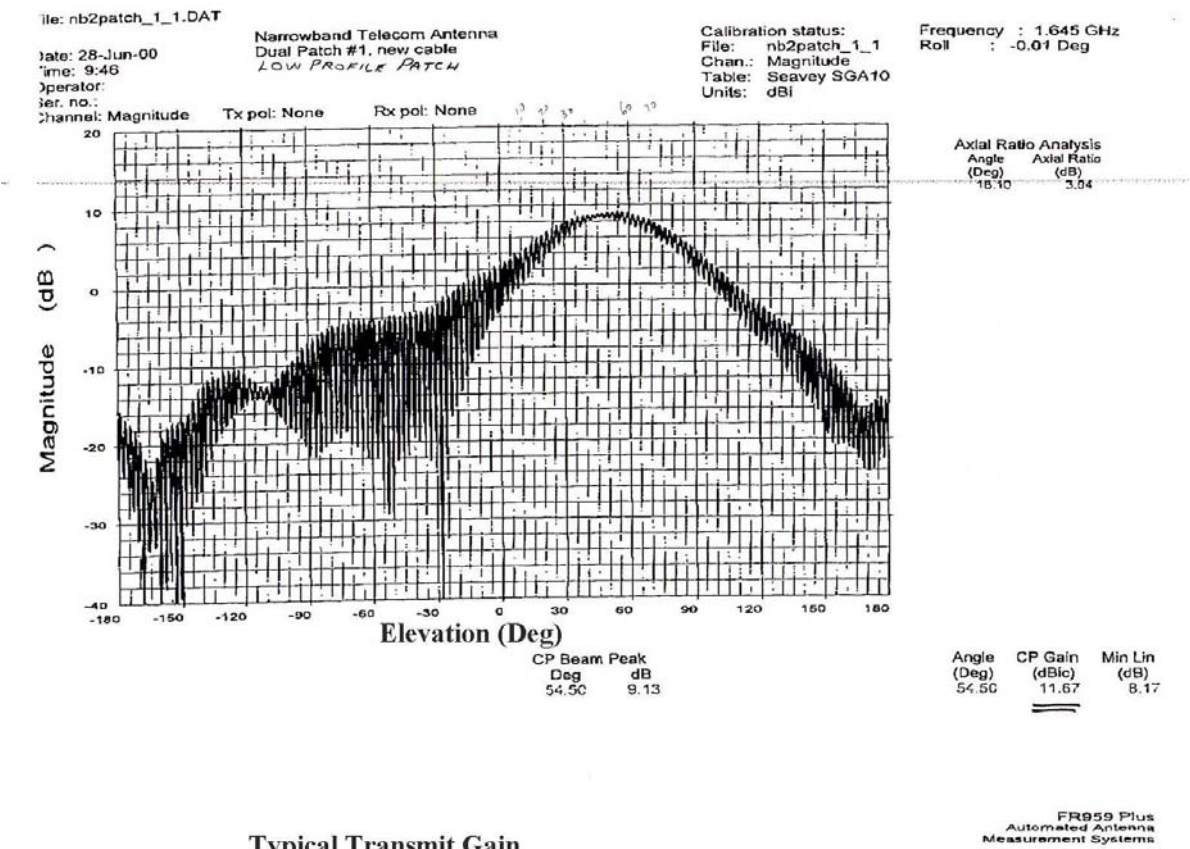


Figure 3 Dual Patch Antenna Transmit Gain

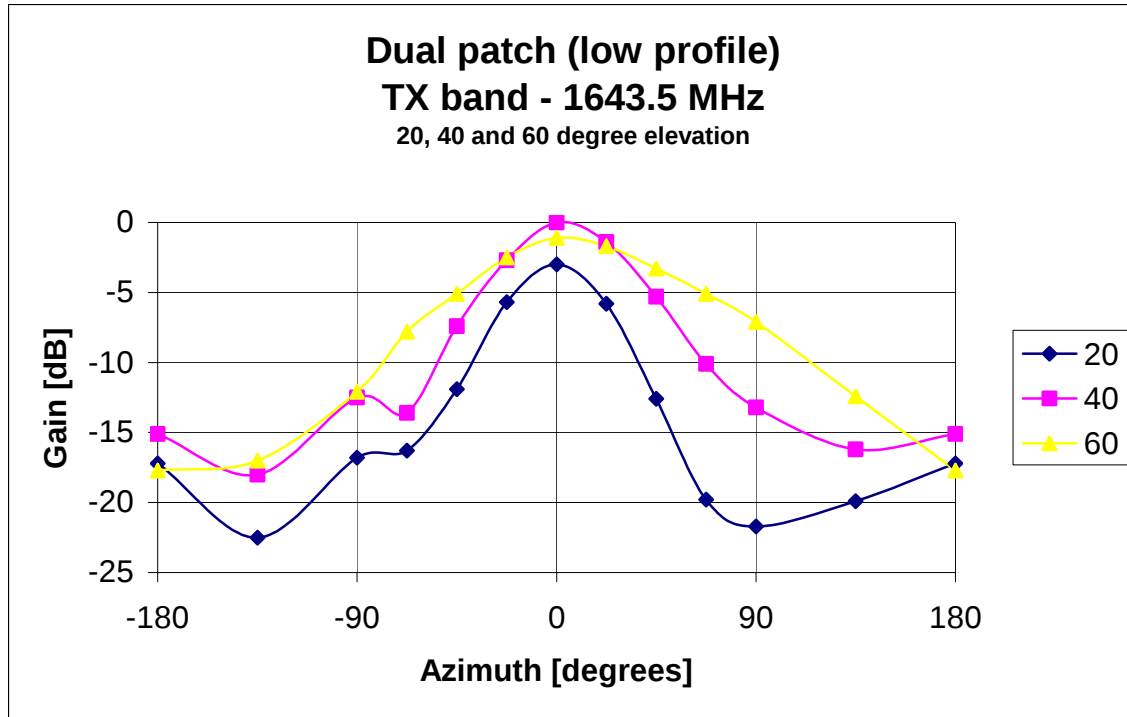


Figure 4 Typical Dual Patch Antenna Transmit Azimuth Plot relative to boresight gain for various elevation angles