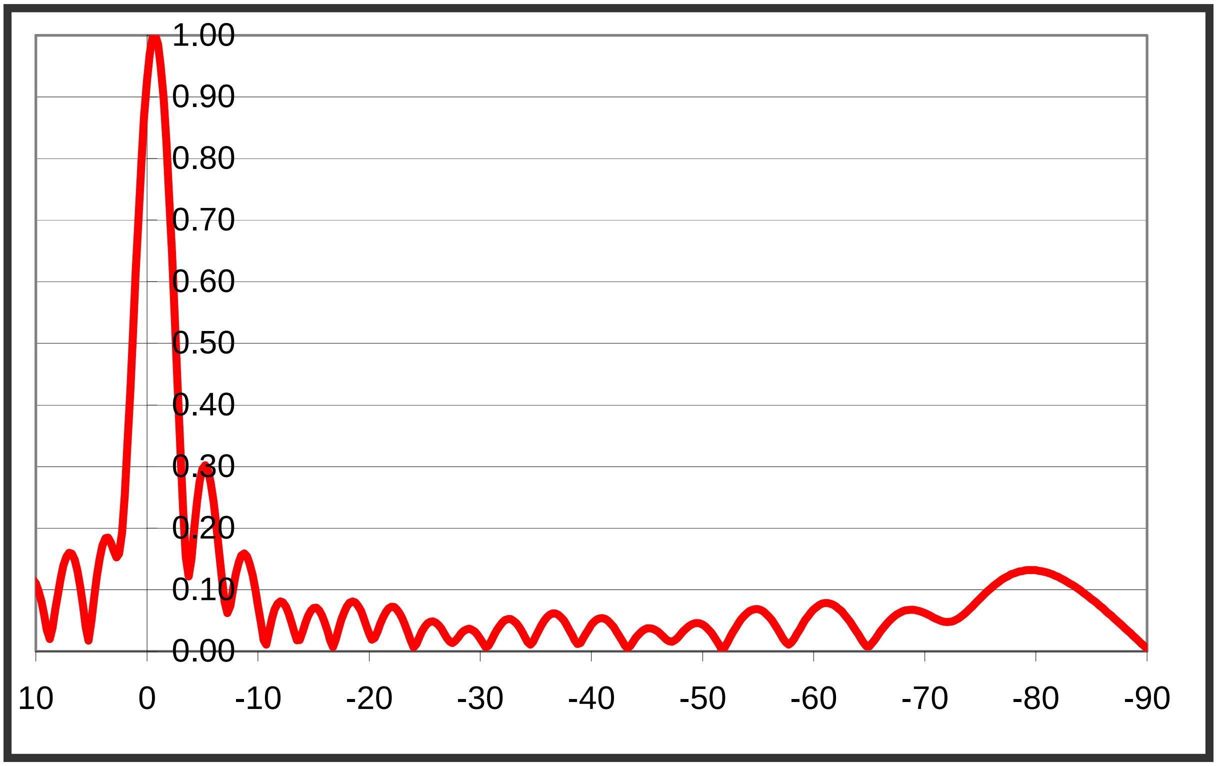
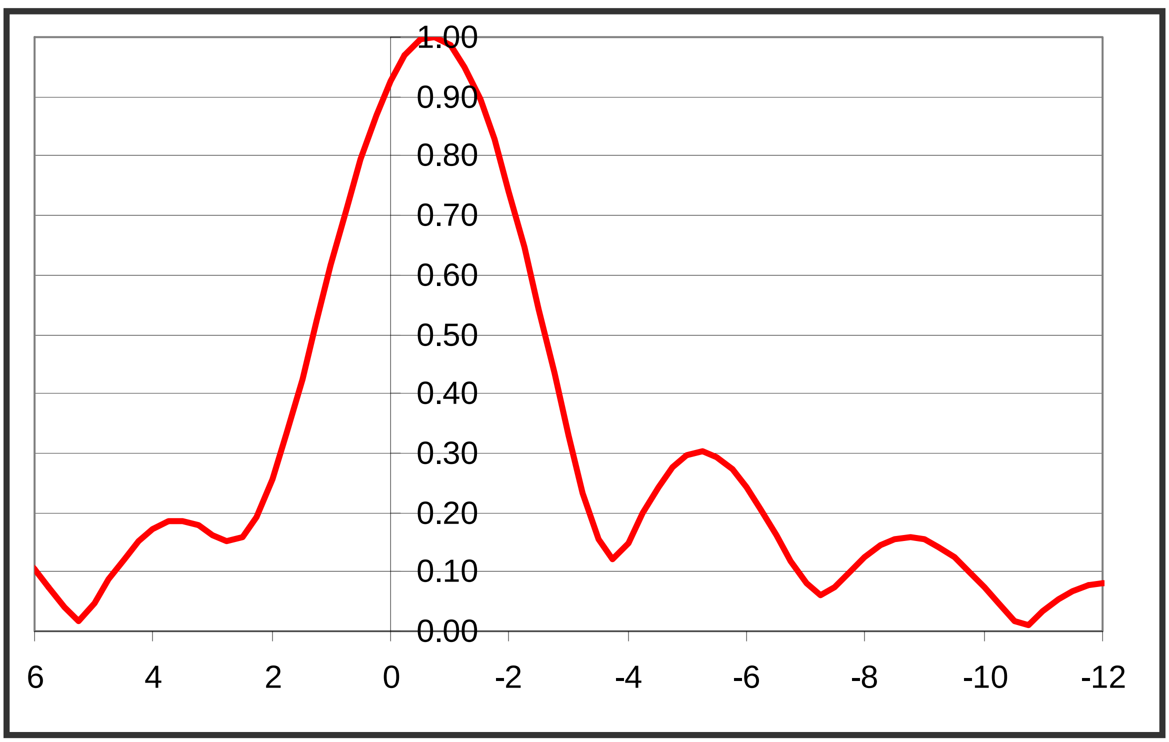
Technical Description

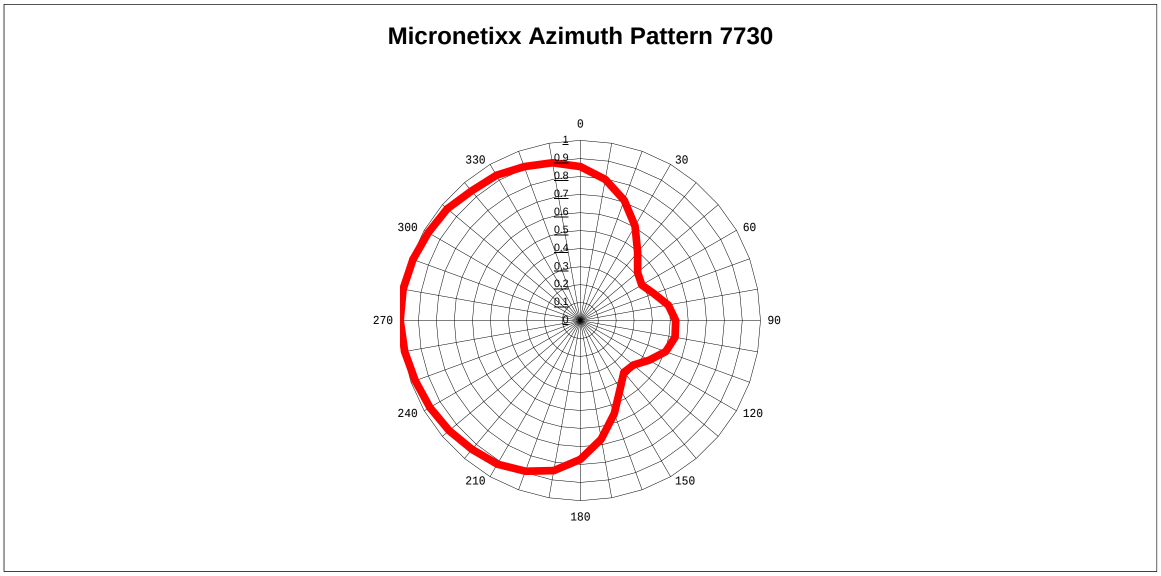
Antenna Model:	CS-2050-7730-18
Number of Bays:	18
Channel:	US – Channel 18
Azimuth Pattern:	7730 - Cardioid
Azimuth Gain:	1.69 (2.28 dB)
Elevation Gain:	18.75 (12.73 dB)
Total Gain:	31.69 (15.01 dB)
Polarization:	Horizontal
First Null At:	-3.75 degrees
First Null Fill:	12.1%
Minimum of 10% of field to:	-6.75 degrees
Beam Tilt:	-0.75 degree electrical
Input Power Rating:	25 kW Average
V.S.W. R:	less than 1.10:1 over channel
Differential group delay:	Less than 7 ns over channel
Feed Point:	Center Fed - Horizontal
RF Input Connection:	6-1/8” EIA Flange
Antenna Length:	41-1/2 Feet
Weight:	375 lbs.
Wind Zone Rating:	100 M.P.H. Basic
Wind Load Area:	47 Square Feet
Brackets:	Included stainless steel custom designed to tower leg mount
Radomes:	Included – White



18 Bay Elevation pattern – Beam Tilt 0.75 Degree 10 to -90 Degree Plot



18 Bay Elevation pattern – Beam Tilt 2.00 Degree 6 to -12 Degree Plot



7730 Azimuth Pattern Plot – Gain 1.69 (2.28 dB)

Estimated System Calculations

ERP	**350 kW (25.44 dBk)**
Antenna Gain:	**31.69 (15.01 dB)**
Antenna Input:	**11.04 kW (10.43 dBk)**
Line:	**4” Air flex**
Est. length;	**700 feet (213.4 meters)**
Eff (%):	**63.37%**
TPO:	**17.43 kW (12.41 dBk)**