Results for the 327 MHz Crossed-Dipole Disk Optimized Feed

Jim Breakall

February 12, 2019

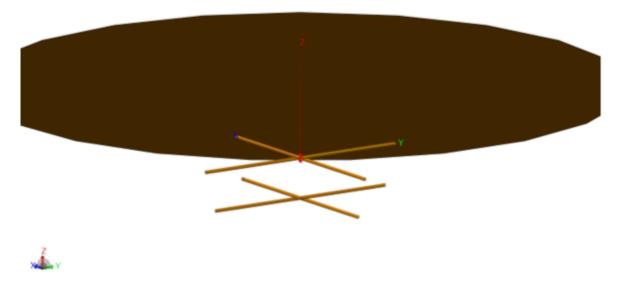
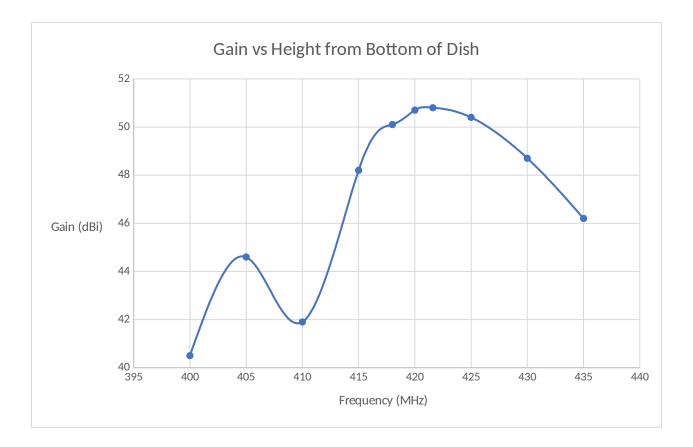
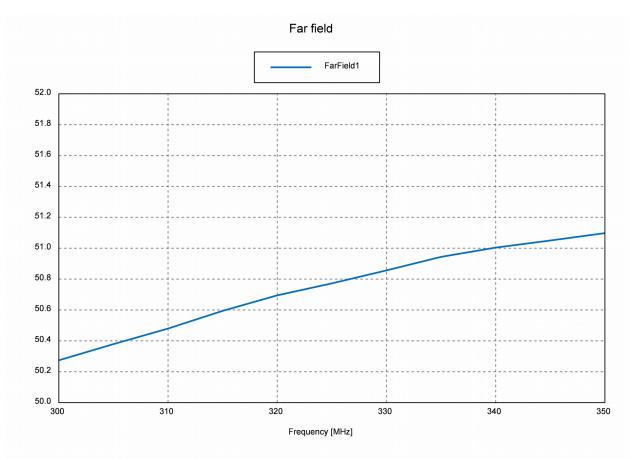


Figure 1: 3D View



Maximum Gain is 50.8 dBi at a Height of 421.6 feet.



Total Gain [dBi] (Theta = 22 deg; Phi = 90 deg) - Crossed Dip Feed Ref 4ft Dia .5 in El Dish 22 Deg Ht Opt 421.6ft

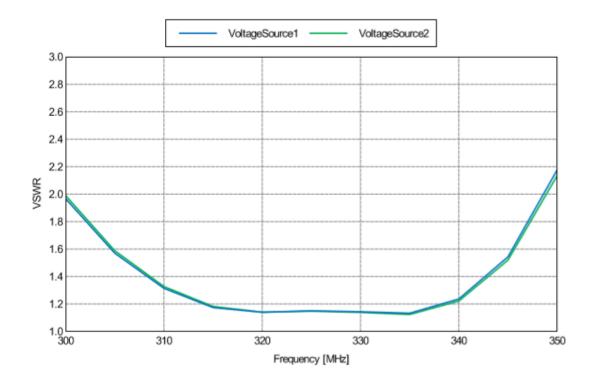
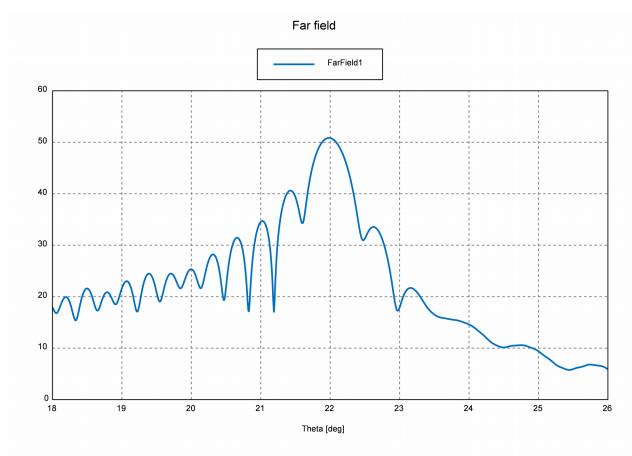
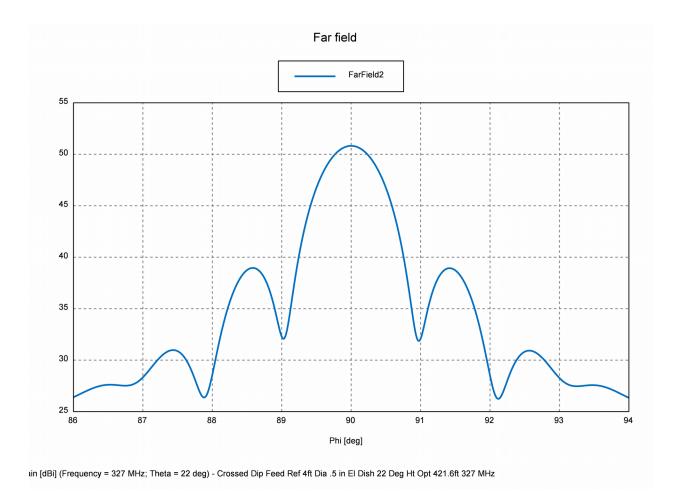


Figure 2: VSWR - Crossed Dipole Feed Ref 4ft Dia .25 in Cyl Elements Opt2_optimum



Gain [dBi] (Frequency = 327 MHz; Phi = 90 deg) - Crossed Dip Feed Ref 4ft Dia .5 in El Dish 22 Deg Ht Opt 421.6ft 327 MHz



All Dipole elements are .25 inches in diameter.

Driven feed element = 16 and 10/16 inches tip to tip length

Parasitic dipole element = 14 and 13/16 inches tip to tip length

Spacing of feed element to 4 foot diameter reflector = 5 and 5/16 inches

Spacing between feed dipole and parasitic dipole = 3 inches