

Application to Modify Experimental License

Northrop Grumman Systems Corporation (“NGSC”) submits the attached application to request authorization of one additional location at which to perform the described tests. In addition, an increase from 5 kW ERP to 25 kW ERP is requested for the fixed antennas at the two existing locations as well as at the new one. All other technical parameters will be identical to those authorized by the current license.

Two antennas are used in the testing. One antenna will be mounted at the fixed station to receive data from the projectile. The fixed antenna has a peak gain of 34 dB and the pattern shown in figures 1 and 2. The other antenna will be mounted on the projectile (mobile station). The mobile antenna has a peak gain of 5.4 dB and the pattern shown in figures 3 and 4.

Figure 1 - Fixed Antenna Horizontal Pattern

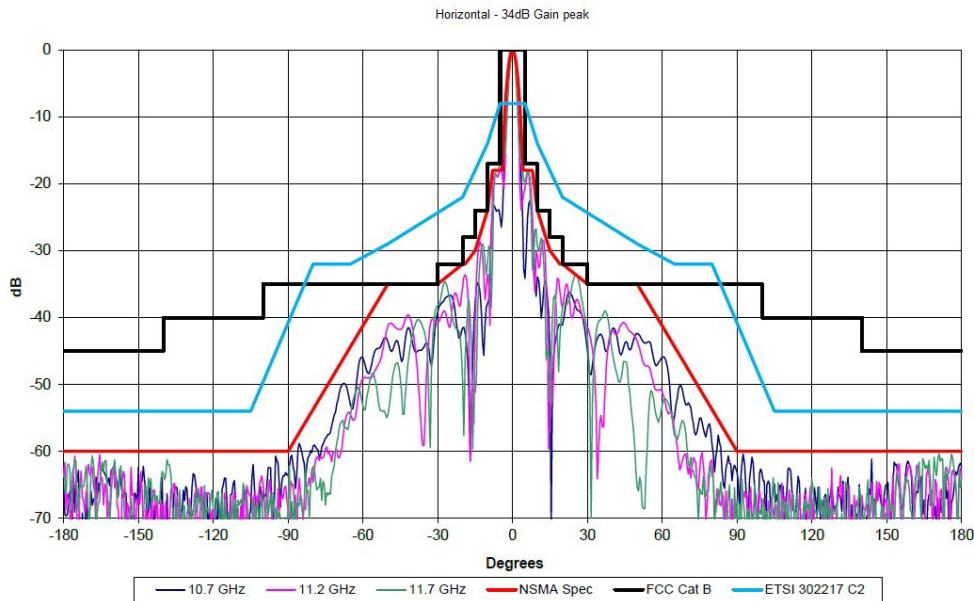


Figure 2 - Fixed Antenna Vertical Pattern

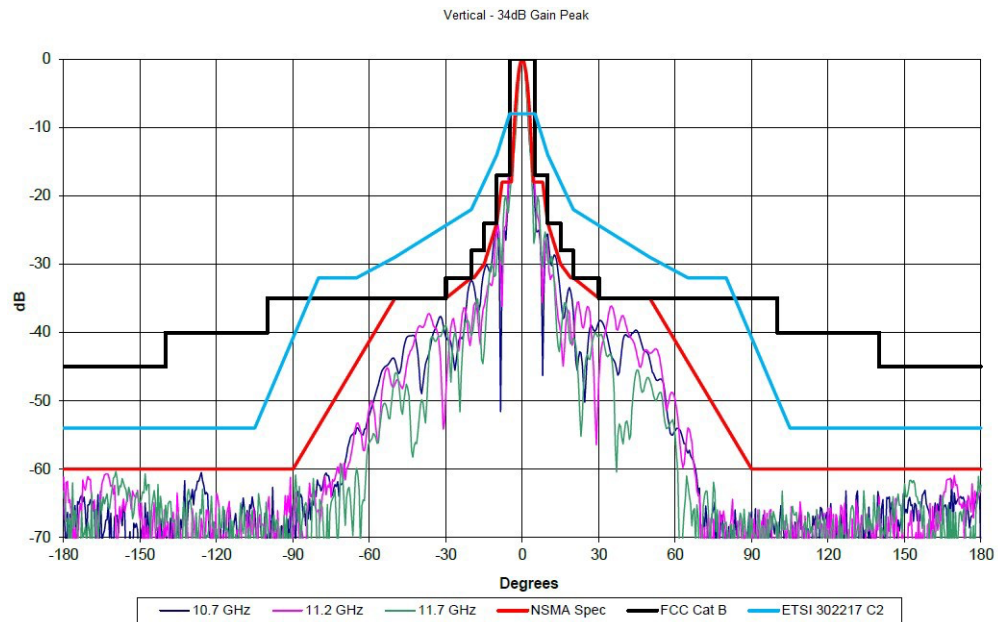


Figure 3 - Mobile Antenna (E Plane)

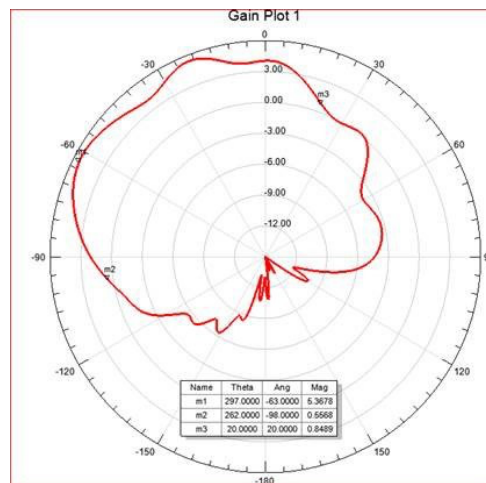
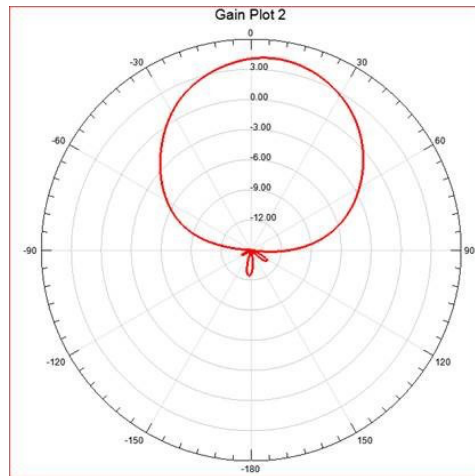


Figure 4 - Mobile Antenna (H Plane)



Transmissions are active only during the flight of the projectile (under 1 second) during each test. The target area and firing position are at similar elevations. The antenna will be pointed directly at the target position with zero incline from horizontal.