From: Daryl Hunter
To: Leann Nguyen
Date: December 06, 2011

Subject: FCC File\# 0191-EX-RR-2011
Message:

1) Antenna Gain: $31.27 \mathrm{dBi}(29.12 \mathrm{dBD})$
2) Beamwidth: 4.71 degrees
3) Varies by site location and satellite being communicated with. At the 5 degree elevation angle lower limits, the azimuths range between 102 degrees to the east and 256 degrees to the west.
4) Elevation (site): Varies with location of mobile terminal between sea level and highest geographic location in CONUS ~ 4500 m .
5) Antenna height (above terrain): 15445 m . This is a mobile application and includes aeronautical. Certain business jets may fly up to $51,000 \mathrm{ft}$
