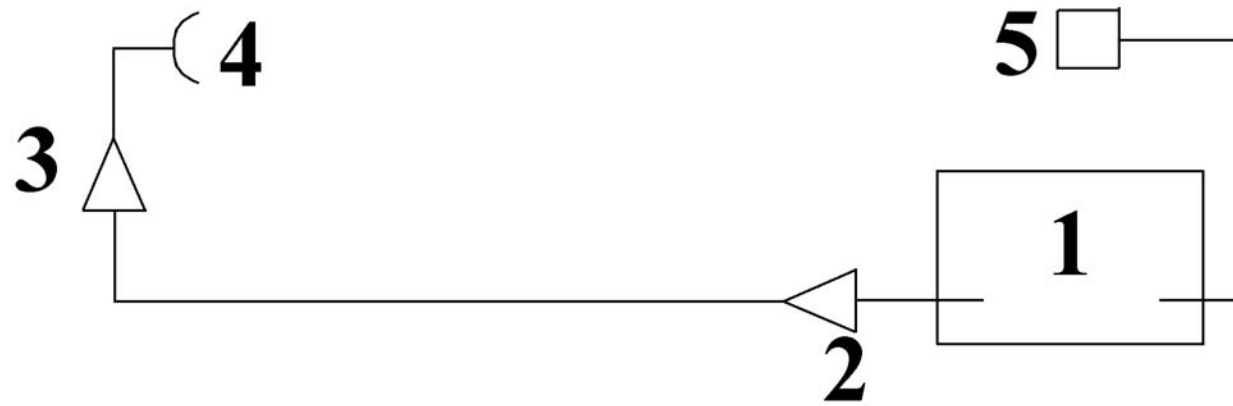
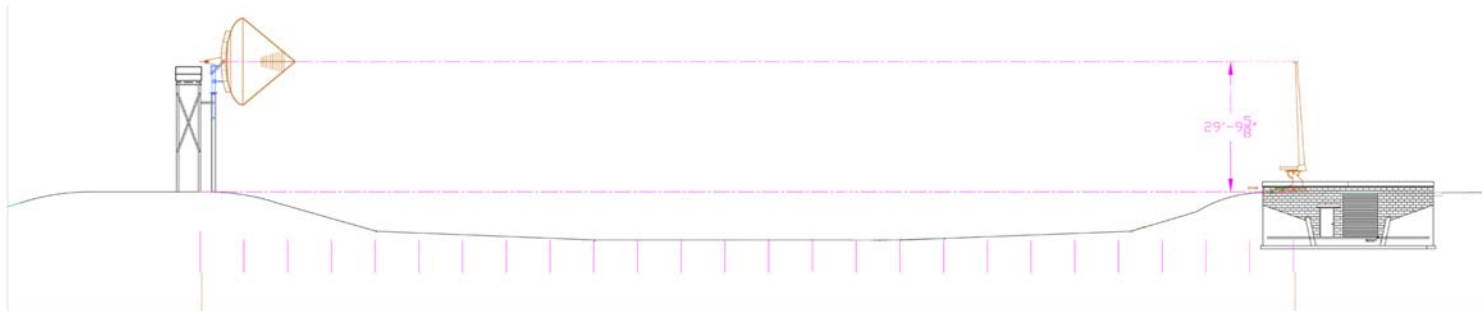


Exhibit Question 7

The facility for which the FCC license is being sought is an antenna test facility. It is used to measure the gain and radiation patterns of antennas. The accompanying figure shows an elevation sketch of the facility along with a block diagram of the instrumentation.

The network analyzer (1) produces a CW signal that is boosted in power by an amplifier (2). The signal propagates through underground coaxial cable to the antenna tower. At the base of the tower the signal is boosted again by another amplifier (3). The signal is then transmitted through the transmit antenna (4). The antenna under test (5, receive antenna) is mounted on a movable antenna mount so that its radiation pattern can be measured. The signal received by the antenna under test is brought back to the network analyzer. The network analyzer is performing an S-parameter measurement, S_{21} , for all practical purposes.



1. Agilent 8722 ES network analyzer
2. Avantek AWT-8033 amplifier, 2 GHz - 8 GHz
3. HP 8349B amplifier, 2 GHz - 20 GHz
4. AEL APX1108 transmit antenna
5. Antenna under test (receive antenna)