

### **Description of Experimental Program**

In its 6 GHz Report & Order, the Commission designated additional spectrum for unlicensed operations, envisioning its use for “new innovative technologies and services that will advance the Commission's goal of making broadband connectivity available to all Americans, especially those in rural and underserved areas.” Unlicensed Use of the 6 GHz Band, 35 FCC Rcd 3852, 3853 (2020). Through its current Special Temporary Authorization under Call Sign WU9XAA, Bolt Internet (“Bolt”) has been advancing these goals through testing of available equipment across the UNII-5 band to collect additional data on the delivery of enhanced fixed wireless broadband services on a shared basis with incumbent users. The trial has proven to be quite promising to date, but Bolt requires further evaluation to assess performance under a variety of conditions. Accordingly, Bolt requests a new experimental license to provide it additional time to fully evaluate the Cambium equipment.

The experimental operations will involve field deployment and testing of Cambium Networks 6 GHz radio technology on a single tower and deployment of customer premises equipment (“CPE”) at locations located within a 10-mile radius of the tower in rural Paulden, Arizona. Over the course of the trial Bolt will deploy three CPE units at various existing customer locations within the test area. By placing the trial equipment side-by-side with existing 5 GHz equipment and at various distances from the base station, the trial will let Bolt evaluate the greater throughput capabilities available in these bands using 80 MHz channels and evaluate the performance of the equipment as distances increase. New customers may be added to the trial as needed to maintain a consistent level of CPE deployment, in the event of customer cancellations, but in no case will use of the 6 GHz band be marketed to customers as a new or augmented service offering. Except for the need to install new equipment at customer sites, the use of the test equipment will be seamless and transparent to customers. All equipment deployed to customer sites will be retrieved at the conclusion of the experimental testing program.

Bolt’s data collection program will operate without causing harmful interference to incumbent users and will work with any nearby licensed incumbents that it identifies, based on information provided in the FCC’s databases, to ensure that its operations will avoid any harmful impact on such existing users.

The Cambium ePMP4600 (Access Point), sector antenna will provide 18 dBi gain, which when connected to 63 mW output power will result in 2.43 W (36 dBm) ERP.

The Cambium ePMP Force 4600C CPE antennas will provide 24 dBi gain, which when connected to 15.8 mW output power will result in 2.43 W (36 dBm) ERP.

