

CCO Fiberlink, LLC, Application File No. 0381-EX-CN-2020

Please see below for additional information on Charter's 3.5 GHz testing in the Denver area. We have provided more details about the purpose of our testing. In addition, we have limited the number of devices for which we seek approval for testing.

In the Denver area, we are conducting both fixed wireless and mobility testing in the 3550-3700 MHz band.

For the fixed wireless testing, we have up to 40 employees who are evaluating the CBRS fixed wireless access service. Charter is testing the coverage and capacity of a range of base station solutions by multiple RAN vendors. As part of the testing, Charter actively monitors the uplink Receive Signal Strength Indicator (UL RSSI) in the channels we are both considering, and actively using, to ensure these channels are not conflicting with any operations.

For the mobility testing, we are testing to characterize performance of different configurations and vendors to validate technical design and implementation as well as product performance and user experience, to make efficient use of CBRS small cells. For this mobility trial, we are testing with less than 50 total base stations. The majority of these operations will occur within Charter's buildings, using CAT A type devices and power levels, with less than ten CBSDs located outside, and as such, emit limited power external to our solely-occupied structures. The purpose of this size trial is to obtain enough samples to have a statistically relevant dataset for our analysis.

Charter confirmed no FSS operators would be impacted by Charter's testing in the Denver area. Charter is aware of the grandfathered Wireless Broadband Licensees (GWBLs) operating in the testing area. For both fixed wireless and mobile testing, Charter will employ uplink Receive Signal Strength Indicator (UL RSSI) in the channels we are both considering, and actively using, to ensure these channels are not conflicting with any operations. Charter also will contact licensees to confirm testing operations will not cause harmful interference to the commercial operations of these licensees, and if contact is not successful, will test only in frequencies not used by the GWBLs. Charter will work with SAS providers to ensure all testing does not cause interference to any operations by 3.5 GHz commercial operators. As noted above, testing is monitored constantly, and we have published our 24x7 contact list and can shut the network immediately if there are any interference concerns.