Cambium ePMP 6 GHz Persistent Inquiry Approval (PIA) Geolocation General Description

Geolocation General Description

1. Cambium ePMP 6 GHz Devices are outdoor fixed wireless devices which are Standard power Access point or a Fixed client. The geolocation data for Cambium ePMP 6 GHz devices shall be obtained from an internal GPS SOC. This designated internal GPS SOC is on each Cambium ePMP 6GHz Device unit using the Sierra solution. The internal SOC will be connected to an external GPS antenna. The internal GPS SOC picks up GPS satellite radio frequencies, and calculates its location based on at least 4 satellites. Cambium ePMP 6 GHz devices will use GPS 3D-Fix mode to retrieve the geolocation information. This geolocation includes longitude, latitude, and height. Cambium ePMP 6GHz device uses Sierra XA1110 which incorporates a complete set of components, including MTK3333 GPS chip, TCXO, RTC Crystal, SMPS, SAW Filter, and an additional LNA with external Unictron H2M3A386180100 GPS antenna to obtain geo-location data.
2. Cambium ePMP 6 GHz GPS SOC and external GPS antenna will provide geolocation accuracy with a 95% confidence level. This statistical test data to justify the accuracy is provided in the test report F2140145-04 tested by Sporton Lab, Taiwan.
3. Cambium ePMP 6 GHz provides daily confirmation and updates to the AFC every 24 hours and repeats AFC requests after each power cycle. This will be performed through AFC re-authorization. AFC authorization/re-authorization will only be performed after the GPS geolocation 3D-Fix mode is obtained for every Cambium ePMP 6 GHz outdoor device's power cycle procedure or AFC 24-hour daily confirmation re-authorization. Radio Frequency will Not be transmitted without AFC authorization and geolocation obtained from the Cambium ePMP 6 GHz outdoor device's Internal GPS parameters.