

## **PURPOSE**

This will be a proof of concept deployment of 100GHz millimeter wave communications in an urban environment. The proposed study includes validation of two bidirectional links operating at 5 Gbps at distances up to 2 km employing both vertical and horizontal antenna polarization. We plan to operate two separate paths in close proximity on the same frequencies between each pair of sites; validating these capabilities is part of the experiment. Please note, the vertical plane polarization for the Union City site is -2.8 and the value is listed as a negative number on the attached path data sheet.