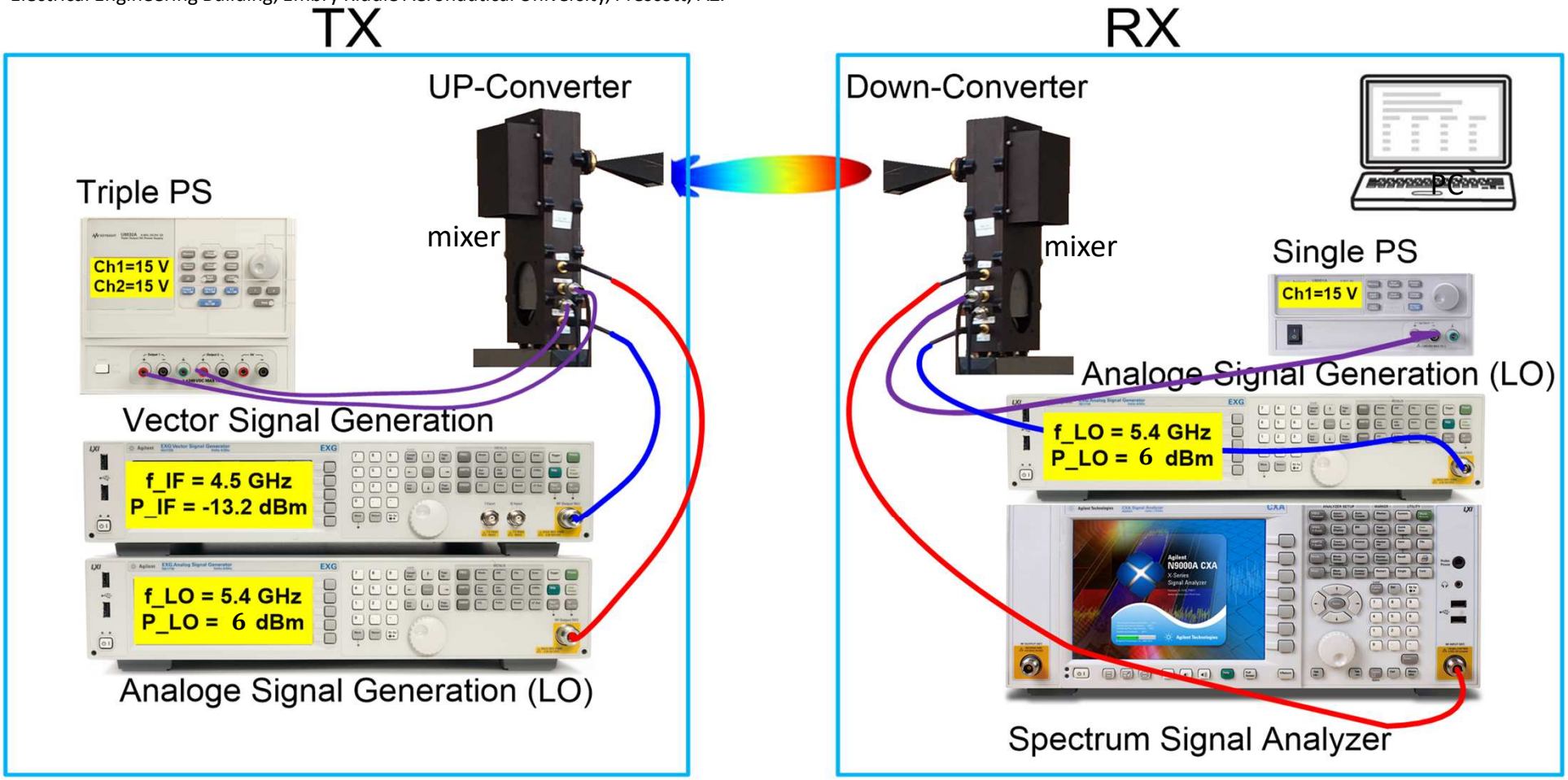
Exhibit: Description of Research Project

This project will develop 38 GHz Millimeter-wave path loss in the university campus area, in sunny weather conditions. Path loss data obtained indoors will be compared with the corresponding path loss data obtained outdoors and the results will be used to develop publishable materials that will help guide 5G operators on the potential impacts of solar radio noise on mmWave signals, similar to the works published in [1]. The experiment setup to be used is as shown below, and the work will be conducted at the Department of Electrical Engineering Building, Embry Riddle Aeronautical University, Prescott, AZ.



Reference:

[1] A. I. Sulyman, A. Alwarafy, G. R. MacCartney, M. K. Samimi, T. S. Rappaport, and A. Alsanie, "Directional Radio Propagation Path Loss Models for Millimeter-Wave Wireless Networks in the 28, 60, and 73 GHz Bands," IEEE Trans. Wireless Commun., vol.15, no. 10, Oct. 2016.