Raytheon requires a Special Temporary Authority in-order-to Perform LTE/4G/5G transmission up to 15 feet in the E04 lab to Measure and compare performance using a precision clock. The collected data will include spectrums, eye diagrams, constellations, EVM (Error Vector Magnitude) of the received waveform with clock and without the clock. Using a Keysight w/SystemVue processor, we plan to download predefined LTE waveforms to the Arbitrary Waveform Generator (AWG) that will then transmit the specific waveform. Following the transmission, the scope will act as a digitizer and capture the waveform. We will use the Keysight processor to compare the captured waveform to derive the performance metrics (EVM, eyes, constellation, etc...).

All radiations will be performed in a lab environment at the El Segundo Plant site.