



**Date:** 13-Feb-19

**Subject:** Intel Experimental License: 0093-EX-CN-2019

## **Introduction**

Intel is a world leader in computing innovation. The company designs and builds the essential technologies that serve as the foundation for the world's computing devices. Intel also offers a portfolio of wireless communications solutions to connect a broad range of devices. Hardware and software products by Intel and its subsidiaries power a majority of the world's data centers, connect hundreds of millions of cellular handsets and help secure and protect computers, mobile devices and corporate and government IT systems. Intel technologies are also inside intelligent systems, such as in automobiles, automated factories and medical devices.

## **Testing to be performed**

Intel's research and development teams are designing new radio technologies for high speed communications. Over the air testing is required to validate the designs, characterize usage models and verify overall performance.



## Locations:

Intel Jones Farm (JF) Campus  
 2111 NE 25<sup>th</sup> Avenue  
 Hillsboro, OR 97124

JF3: Lat 45.54 / Long -122.96; 45°32'35" N / 122°57'41" W, radius of 0.25 km. The closest distance to an airport runway (HIO (Portland-Hillsboro Airport)) is approximately 540 meters.

## Transmitter & Antenna Parameters:

Site Details					Antenna				Transmitter Emission			
Location	Station Type	Latitude (dd mm ss.ss)	Longitude (dd mm ss.ss)	AGL (m)	Type	ERP (W)	ERP (dBm)	EIRP (W)	EIRP (dBm)	Frequency (GHz)	Bandwidth	Designator
Within 0.25 km radius of Jones Farm campus Hillsboro, OR 97124	FX & MO	45°32'35" N	122°57'41" W	<6m	64 element	12.2	40.85	20	42	71 - 76	2 GHz	2G0W7D

## Geographical Area of Jones Farm, Hillsboro, Oregon Site





## Equipment List:

Manufacturer	Keysight
Model #	M8190A
What is it	Arbitrary Waveform Generator
Quantity	1
Manufacturer	Keysight
Model #	E4432B
What is it	Signal Generator
Quantity	2
Manufacturer	Xilinx
Model #	VC707
What is it	FPGA
Quantity	2
Manufacturer	Intel
Model #	SPARTA 64 Elements
What is it	Phased array, dual polarizatio RF PCB
Quantity	2
Manufacturer	Lenovo
Model #	Thinkpad
What is it	Laptop
Quantity	2