9 May 2018

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 the 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 automobiles, automated factories and medical devices.

Testing to be Performed
Intel's research and development teams have been designing new radio technologies for the next generation broad band wireless devices. Over the air testing that is required to validate the designs, characterize propagation impact, and verify overall performances.

Units:
40 units	28 GHz
40 units	3.5 GHz

Location:
3 kilometers from the center point: 37° 24' 12" N, 121° 58' 11" W

"Stop Buzzer" Contact	stopbuzzer@intel.com
During experiment:	John Hammond
	503-264-8726

Proposed Transmitter & Antenna Parameters:

Details					Transmitter Emission					
Location	Station Type	Latitude	Longitude	AGL meters	Antenna Type:	Antenna Gain dB	Maximum ERP dBm	Frequency GHz	Bandwidth MHz	Emission Designator MW7W
3 km radius from center point:	MO – to – MO	37°24'12" N	121°58'11" W	NTE 56	Patch	23dB beam-forming	59.85	26.5 -29.5	100 200 300 400 500 600 700 800	100MW7W 200MW7W 300MW7W 400MW7W 500MW7W 600MW7W 700MW7W 800MW7W
3 km radius from center point:	MO – to – MO	37°24'12" N	121°58'11" W	NTE 56	Omni, beam-forming	3.5 to 14 dB maximum with beam-forming	34	3.4 – 3.7	20 40 60 80 100	20MW7W 40MW7W 60MW7W 80MW7W 100MW7W

28 GHz Transmitter Details

Number of Combined Antenna Arrays	Power to Array dB	Gain Per Array dB	Combined Arrays Pout dBm EIRP	Combined Arrays Pout dBm ERP
1	30	23	53	50.85
2	30	23	56	53.85
3	30	23	59	56.85
4	30	23	62	59.85

28 GHz Transmitter Details:

Number of Antenna Elements	Power in at Antenna dB	Ant Gain per element: dBi	Beamforming Antenna Gain: dB --includes power combining	Pout dBm EIRP	Pout dBm ERP
8	12	5	18	30	27.85
16	12	5	24	36	33.85
32	12	5	30	42	39.85
64	12	5	36	48	45.85
128	12	5	42	54	51.85
256	12	5	48	60	57.85

Geographical Area of Proposed Experiment: