3 July-2016

**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.

**Demonstration to be Performed:**

An Experimental Special Temporary Authority is requested for an indoor demonstration of wireless devices. The proposed experiment will be in rooms inside Moscone West from 7 August through 20 August 2016.

**Location:**

Moscone West
800 Howard St,
San Francisco, CA 94107, USA

37°46'59"N
122°24'15"W
10 meters AMSL

**Transmitter & Antenna Parameters:**

In addition to the proposed equipment listed on the original filing, 0801-EX-ST-2016 the additional proposed transmitter characteristics are as follows:

Indoor rack: Altera Arria 10 Developer's Kit, a quantity of 16 kits, each kit containing 4 antennas per kit, a total of 64 antennas. Each antenna tuned at a center frequency of 3.5 GHz, will have a gain of -2.5dBi, consisting of a maximum gain of 15dBi with beam forming, utilizing vertical polarization.

## Additional Transmitter and Antenna Parameters:

| Site Details | | | | | Antenna | | | | | Transmitter Emission | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Location | Station Type | Latitude (dd mm ss.ss) | Longitude (dd mm ss.ss) | AGL (m) | Type | 3dB Beam Width | H-Gain (dBi) | V-Gain (dBi) | ERP (mW) | Frequency (GHz) | Bandwidth (MHz) | Emission Designator |
| Indoors Moscone West, within a 100 meter radius of center coordinates | MO – to – MO | 37°46'59"N | 122°24'15"W | 2.5 - 26 | Patch | n/a | n/a | -2.5-15dBi maximum, with beam-forming tuned at 3.5 GHz | 200mW | 3.4-3.7 | 100 200 | 100W7W 200W7W |

## Original Transmitter & Antenna Parameters:

| Site Details | | | | | Antenna | | | | | Transmitter Emission | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Location | Station Type | Latitude (dd mm ss.ss) | Longitude (dd mm ss.ss) | AGL (m) | Type | 3dB Beam Width | H-Gain (dBi) | V-Gain (dBi) | ERP (mW) | Frequency (GHz) | Bandwidth (MHz) | Emission Designator |
| Indoors Moscone West, within a 100 meter radius of center coordinates | MO – to – MO | 37°46'59"N | 122°24'15"W | 2.5 - 25 | Omni | n/a | 5 | 5 | 193 | 3.4-3.7 | 20 | 20M0W7W |
| | MO – to – MO | 37°46'59"N | 122°24'15"W | 2.5 - 25 | Omni | n/a | 3.5 to 14 dB maximum with beam-forming | 3.5 to 14 dB maximum with beam-forming | 2512 | 27.5 - 28.5 | 200 | 200MW7W |