Kymeta Corporation
Application for STA for Experimental License
Demo for Satellite 2014 Trade Show

Narrative Statement

(1) Name, address, phone number (also e-mail address and facsimile number, if available) of the applicant.

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(2) Description of why an STA is needed.

Kymeta is developing a microwave antenna technology that could significantly improve performance and lower costs in commercial deployments. Grant of the STA will allow Kymeta to demonstrate its technology at the Satellite 2014 trade show in Washington, D.C.

(3) Description of the operation to be conducted and its purpose.

Kymeta will create a point-to-point link. The transmitting portion of the link (using a commercial horn antenna) will be positioned 1 meter above the receiving portion of the link (using a flat panel Kymeta antenna). Kymeta will demonstrate the ability of its antenna to self-acquire the far-end transmitting signal. All transmissions will be toward the ground. There will not be a return (transmit) link from the Kymeta antenna.

(4) Time and dates of proposed operation.

March 7, 2014 – March 14, 2014.

(5) Class(es) of station (fixed, mobile, fixed and mobile) and call sign of station (if applicable).

The transmitting station will operate in fixed mode.

(6) Description of the location(s) and, if applicable, geographical coordinates of the proposed operation.

Inside the Walter E. Washington Convention Center in Washington D.C.
38º 54' 23 N, 77º 01' 22 W

(7) Equipment to be used, including name of manufacturer, model and number of units.

Transmit:

- Penn Engineering 9034-1B10-NN -- 10 dBi Standard Gain Horn
- Kymeta 20 GHz up converter

Receive:

- Kymeta mTenna experimental antenna

(8) Frequency(ies) desired.

20,050 MHz

(9) Maximum effective radiated power (ERP) or equivalent isotropically radiated power (EIRP).

The maximum transmitted EIRP will be -50 dBm (-80dBW).

(10) Emission designator (see §2.201 of this chapter) or describe emission (bandwidth, modulation, etc.)

10M0W1F -- 10 MHz, QAM, modulated with IP generated video signal.

(11) Overall height of antenna structure above the ground (if greater than 6 meters above the ground or an existing structure, see part 17 of this Chapter concerning notification to the FAA).

The antenna and transmitting equipment will be inside a building. The ground level of the building is 26 meters ASL.