

**Kymeta Corporation**  
**Application for Experimental License for**  
**Testing with O3b from Bristow, VA and Redmond, WA**

**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 experimental license is needed.**

Kymeta is developing a microwave antenna technology that could significantly improve performance and lower costs in commercial deployments. Grant of the experimental license will allow Kymeta to test its technology with the O3b non-geostationary satellite system.

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

Kymeta will test its antenna technology from (1) a teleport in Bristow, Virginia and (2) its headquarters in Redmond, Washington. The purpose of the tests is to demonstrate that the Kymeta beam steering technology and antenna can track satellites within the O3b non-geostationary satellite system.

**(4) Time and dates of proposed operation.**

Kymeta requested a three-year experimental authorization. Kymeta will notify ViaSat, Inc., Hughes/EchoStar, Inmarsat, and SES, the other U.S. authorized Ka-band satellite operators, at least one week prior to any transmit testing, and provide emergency contact information. In the event that interference is reported, Kymeta will immediately cease transmissions.

**(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.**

This information is set forth in Form 442.

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

Kymeta mTenna (experimental)  
Kymeta mTX.o3b (experimental)

**(8) Frequency(ies) desired.**

Transmit:  
28.050 – 28.128 GHz  
28.172 – 28.250 GHz

Receive:  
18.250 - 18.328 GHz  
18.372 – 18.45 GHz

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

The maximum ERP will be 40 kW.

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

5M0M1D  
8M0M1D

**(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 overall height of the antenna above ground level (or roof top level) will not exceed 6 meters.