

From: Walter Honcharenko

To: Hung Le

Date: July 06, 2021

Subject: Request for Info - File # 0445-EX-CN-2021

Message:

A PDF attachment has been uploaded with further information with respect to the antenna patterns and gain profile. Direct replies to the questions from Reference Number 62932 are below:

1. Please provide the size(meter), antenna gain (dBi), input power at antenna flange (watts), and EIRP (dBW) of the proposed antenna(s) operating in the 11-13.5 GHz band.

- a. Size – 640mm diameter dish
- b. Antenna gain: 28-28.5 dBi over 11 – 13.5 GHz
- c. Input power at flange: 26dBm, 0.4W
- d. EIRP: 24-24.5 dBW into 2.5GHz, or 20dBW/GHz, or -10dBW/MHz, -40 dBW/KHz (using 25.218 BW is -34 dBW/4KHz)
- e. For reference, TX antenna:
<https://www.steatite-antennas.co.uk/wp-content/uploads/2019/01/QSR-600-A-228-QWF-SL-2-18-S-R.pdf>

2. Please provide the antenna patterns with 25.209 envelop superimposed on it. Please certify that the proposed antenna will meet the Section 25.209, 25.218, or 25.202 of the Commission's rule.

- a. Section 25.209, 25.218, and 25.202 are applicable to FSS Earth Stations. Our application is strictly limited to terrestrial links. Transmitter elevation angles will be below the horizon given the terrain, sites and antenna heights.

3. Please provide Point of communication (satellite): name, call sign and file no. of GSO Ku-band and/or NGSO Ku-band satellites operating in the 11-13.5 GHz frequency band.

- a. We are not communicating with any satellites. Research is limited to terrestrial wideband channels with 2.5GHz modulation bandwidth on the order of 5 – 12 km.