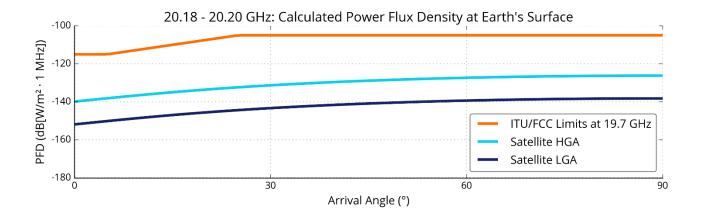


# AUDACY ZERO EXPERIMENTAL MISSION SUPPLEMENTAL INTERFERENCE ANALYSES

### 1. PFD Limit Compliance

Neither Article 21 of the ITU's Radio Regulations nor Part §25.208 of the Commission's rules list any power flux density ("PFD") limits for the 20.18-20.20 GHz downlink band proposed for use for the Audacy Zero mission. The plot below shows the boresight PFD incident on the earth's surface by both the low- and high-gain downlink antennas on Audacy's satellite, alongside the ITU and FCC PFD limits for the 19.7 GHz band for comparison. As the plot shows, even the high-gain downlink beams of Audacy's satellite are roughly 20 dB, or one hundred times, less than the nearest ITU and FCC limits.

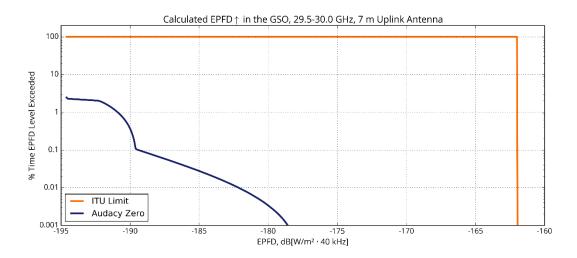


## 2. EPFD Limit Compliance

The following equivalent power flux-density ("EPFD") analyses were performed using ITU-provided EPFD-validation software, which includes a Graphical Interface for Batch Calculations ("GIBC"), Transfinite, and Agenium. Audacy generated space station PFD masks and an earth station EIRP mask to use as inputs to the software. Audacy is prepared to provide all necessary assistance to the Commission in running the ITU-provided EPFD-validation software program and can provide the masks and examination databases upon request.

#### **EPFD**↑

The following plot shows the EPFD↑ produced in the geostationary-satellite orbit by FSS emissions from Audacy's earth station throughout this mission. The ITU's EPFD↑ limits as listed in Table 22-2 of Article 22 for the 29.5-30.0 GHz band are also shown. It is clear that the use of Audacy's earth station for this mission will not be a source of harmful interference into existing or planned geostationary-satellite services in this band.



#### **EPFD**↓

The following plots show the EPFD\ produced in at the earth's surface by FSS emissions from Audacy Zero's high- and low-gain antennas throughout this mission. For each reference antenna listed by the ITU (70 cm, 90 cm, 2.5 m, and 5 m), the EPFD\ resulting from both downlink antennas is plotted alongside the corresponding ITU limits as listed in Article 22 for the 19.7-20.2 GHz band. It is clear that neither downlink antenna used for this mission will be a source of harmful interference into existing or planned geostationary-satellite services in this band.

