

Ericsson

Exhibit to STA Application, File No. 1023-EX-ST-2016

Date Filed: July 7, 2016

Ericsson submits this application for Special Temporary Authority to conduct a 5G demo at CTIA's SuperMobility Show, September 4-9, 2016 in Las Vegas, Nevada. The Commission has previously granted Ericsson Special Temporary Authority to conduct similar demos at the 2015 CTIA show,¹ at the 2015 Verizon 5G Forum,² and at the 2016 Consumer Electronics Show.³

The exhibition will use an experimental 5G base station and a piece of experimental 5G mobile user equipment. The equipment will be inside the Ericsson booth, located on the show floor inside the Sands Expo and Convention Center, Las Vegas, Nevada. (The demo will be entirely indoors, in the booth and have, at most, a 30-foot radius of operation.) The antenna will have a [REDACTED]. The transmissions will be at no more than 2 Watt EIRP. Because of the [REDACTED], the lower power, and the indoor location as part of the trade show, the experiment will not interfere with existing users. Out of an abundance of caution for the government systems in the requested band, we are nonetheless providing a 24 hour emergency contact to turn off any transmissions should interference be detected. The contact information is: Keith Shank, 214-679-4362.

Ericsson is requesting to operate on the government spectrum bands only because this phase of our 5G research was designed in Sweden to operate on these bands. We have no plans to request that this spectrum be repurposed for commercial use.

Directional Antenna Information

The base station, which has a directional antenna, will be located in the Ericsson booth inside the Las Vegas Convention Center. The antenna will be at 14 feet high and have a [REDACTED]

The antenna parameters will be:

- Polarization: [REDACTED]
- Horizontal HPBW: [REDACTED]
- Vertical HPBW: [REDACTED]
- Antenna gain: [REDACTED]
- EIRP: ≤ 2 Watts
- Electrical tilt: [REDACTED]
- Mechanical tilt: [REDACTED]

¹ See File No. 0808-EX-ST-2015.

² See File No. 0806-EX-ST-2015.

³ See File No. 1253-EX-ST-2015.

Diagram for the V-pol antenna elements: azimuth

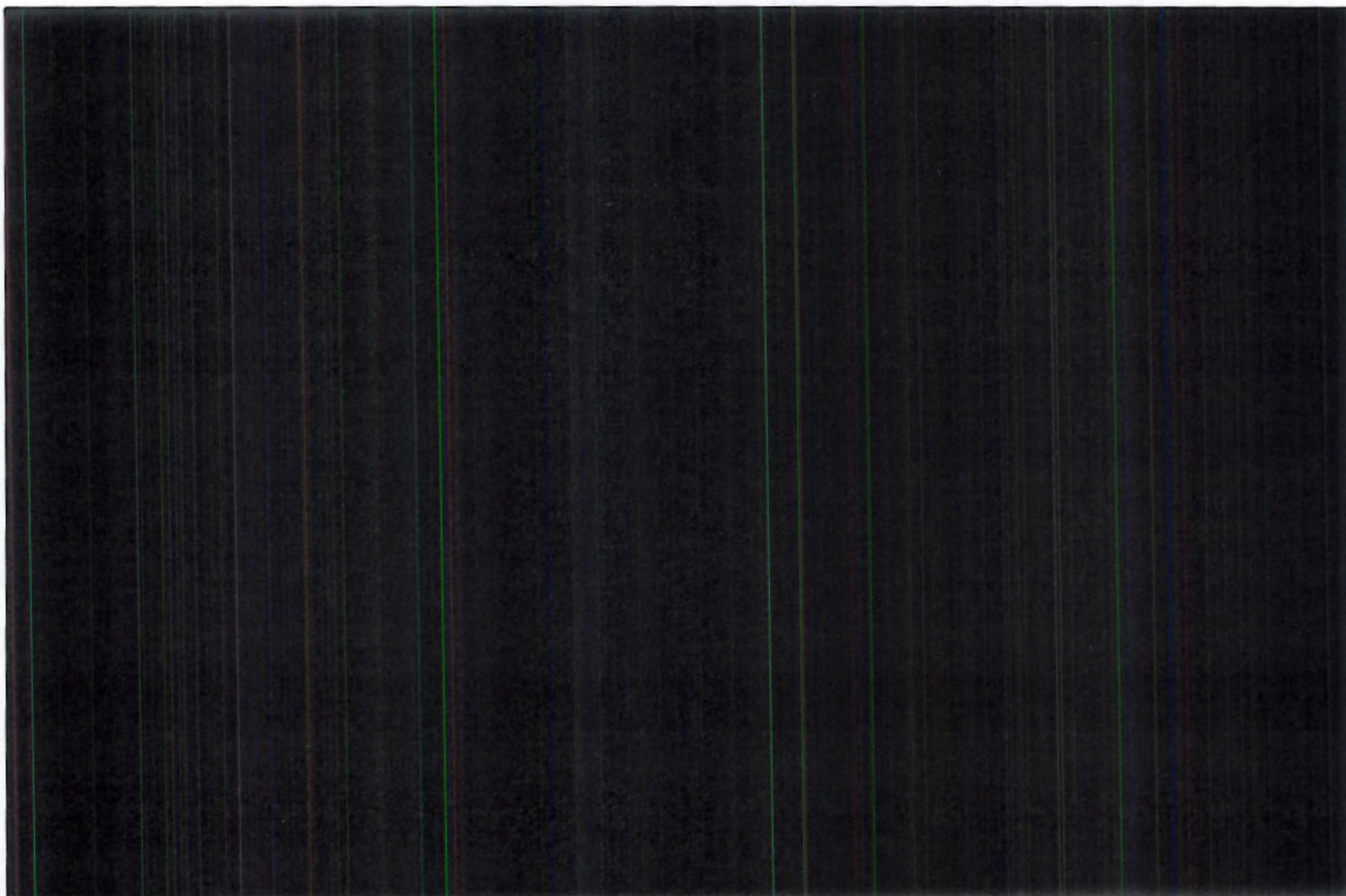


Diagram for the V-pol antenna elements: elevation.

