

OPERATIONAL DESCRIPTION

Requestor:

Submitted: 04/03/2020
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Sponsor:

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This experimental request is in lieu of FCC STA WI9XPF (1721-EX-ST-2019)

Terminal #1, K-band PAA:

- Manufacturer: Boeing experimental
- Tuning Range: 21.4 – 22.0 GHz
- Maximum Transmitted RF Power: 20.5 W
- Antenna Type (XAT): directional, electronically steerable 256-element phased array
- Antenna Gain: 29.1 dBi
- Antenna Azimuth (XAZ): varies with test node locations
- 3dB Beam Width: 6.5 degrees

Terminal #2, Horn:

- Manufacturer: Boeing experimental
- Tuning Range: 21.4– 22.0 GHz
- Maximum Transmitted RF Power: 12.5 W
- Antenna Type: lens corrected horn, manual pointing (manufacturer is SAGE Millimeter Inc., part number SAL-2032232112-368-S1)
- Antenna Gain: 21.0 dBi
- Antenna Azimuth (XAZ): varies with test node locations
- 3dB Beam Width: 12 degrees

Requested Frequencies Emission Designator ERP

21.4 – 22.0 GHz 320MG2W 11481 W

Transmission Locations

Location 1:

Bounded by polygonal area in the southwest corner of CONUS

NW corner: 37-12 N; 118-35 W NAD83

NE corner: 37-12 N; 116-52W NAD83

SW corner: 32-24 N; 119-05 W NAD83

SE1 corner: 33-42 N; 109-44 W NAD83

SE2 corner: 33-00 N; 109-44 W NAD83

Altitude: Ground to 50,000 feet

Location 2:

Boeing Facility, Kent WA, within 248 km, centered around NL 47-25-08; WL 122-15-11

Altitude: Ground to 50,000 feet