



312 File Number: **SATPPL2021010800005**

Filing Description

| Question | Response |
|-------------|--|
| Description | The F1 satellite network will consist of a geostationary satellite at 109.2 WL and associated earth station facilities. It has one Ku-band beam covering the southeastern USA, the Caribbean, and Central America. |

Satellite Information

| Question | Response |
|--|----------|
| Select Orbit Type | GSO |
| Space Station or Satellite Network Name | Anik F1 |
| Estimated Lifetime of Satellite(s) From Date of Launch | 3 Years |
| Will the space station(s) operate on a Common Carrier basis? | No |

Operating Frequency Bands (2)

| Nature of service | Description | Frequency Band(s) | Mode Type |
|--------------------------------|-------------|--------------------------|-----------|
| Fixed-Satellite Service | | 11700.0 MHz -12200.0 MHz | Transmit |
| Fixed-Satellite Service | | 14000.0 MHz -14500.0 MHz | Receive |

Orbital Information For Geostationary Satellites

| Section | Question | Response |
|--|---|---------------|
| Orbital Longitude Information | Orbital Longitude | 109.0 degrees |
| | Hemisphere of Orbital Longitude | W |
| Longitudinal Tolerance or East /West Station-Keeping | Toward West | 0.1 degrees |
| | Toward East | 0.1 degrees |
| Inclination Excursion or North /South Station-Keeping Tolerance | Inclination Excursion or North /South Station-Keeping Tolerance | 2.7 degrees |
| Antenna Axis Attitude Accuracy | Roll | 0.1 degrees |
| | Pitch | 0.1 degrees |
| | Yaw | 0.1 degrees |

Receiving Beams 1:

| Question | Response |
|---|--|
| Beam ID | K18S |
| Receive Beam Frequency | 14044.75 MHz -14071.75 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.8 dB/K |
| Min. Saturation Flux Density | -99.5 dBW/m ² |
| Max. Saturation Flux Density | -66.8 dBW/m ² |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 2:

| Question | Response |
|--------------------------|----------------------------|
| Beam ID | K19S |
| Receive Beam Frequency | 14075.25 MHz -14102.25 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |

| | |
|---|--|
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.7 dB/K |
| Min. Saturation Flux Density | -100.0 dBW/m2 |
| Max. Saturation Flux Density | -67.3 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 3:

| Question | Response |
|---|--|
| Beam ID | K20S |
| Receive Beam Frequency | 14105.75 MHz -14132.75 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.9 dB/K |
| Min. Saturation Flux Density | -101.8 dBW/m2 |
| Max. Saturation Flux Density | -68.8 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 4:

| Question | Response |
|---|--|
| Beam ID | K21S |
| Receive Beam Frequency | 14136.25 MHz -14163.25 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.8 dB/K |
| Min. Saturation Flux Density | -100.0 dBW/m ² |
| Max. Saturation Flux Density | -66.2 dBW/m ² |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 5:

| Question | Response |
|--------------------------|----------------------------|
| Beam ID | K22S |
| Receive Beam Frequency | 14166.75 MHz -14193.75 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |

| | |
|---|--|
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.8 dB/K |
| Min. Saturation Flux Density | -100.7 dBW/m2 |
| Max. Saturation Flux Density | -67.3 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 6:

| Question | Response |
|---|--|
| Beam ID | K23S |
| Receive Beam Frequency | 14197.25 MHz -14224.25 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.8 dB/K |
| Min. Saturation Flux Density | -100.4 dBW/m2 |
| Max. Saturation Flux Density | -66.4 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 7:

| Question | Response |
|----------|----------|
|----------|----------|

| | |
|---|--|
| Beam ID | K24S |
| Receive Beam Frequency | 14227.75 MHz -14254.75 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.6 dB/K |
| Min. Saturation Flux Density | -100.9 dBW/m2 |
| Max. Saturation Flux Density | -67.3 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 8:

| Question | Response |
|---|----------------------------|
| Beam ID | K25S |
| Receive Beam Frequency | 14258.25 MHz -14285.25 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |

| | |
|------------------------------|--|
| G/T at Max. Gain Point | 3.8 dB/K |
| Min. Saturation Flux Density | -101.8 dBW/m2 |
| Max. Saturation Flux Density | -68.4 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 9:

| Question | Response |
|---|--|
| Beam ID | K26S |
| Receive Beam Frequency | 14288.75 MHz -14315.75 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.7 dB/K |
| Min. Saturation Flux Density | -101.6 dBW/m2 |
| Max. Saturation Flux Density | -68.0 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 10:

| Question | Response |
|----------|----------|
| Beam ID | K27S |

| | |
|---|--|
| Receive Beam Frequency | 14319.25 MHz -14346.25 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.7 dB/K |
| Min. Saturation Flux Density | -99.8 dBW/m2 |
| Max. Saturation Flux Density | -66.6 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 11:

| Question | Response |
|---|----------------------------|
| Beam ID | K28S |
| Receive Beam Frequency | 14349.75 MHz -14376.75 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.6 dB/K |

| | |
|------------------------------|--|
| Min. Saturation Flux Density | -101.1 dBW/m ² |
| Max. Saturation Flux Density | -67.6 dBW/m ² |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 12:

| Question | Response |
|---|--|
| Beam ID | K29S |
| Receive Beam Frequency | 14380.25 MHz -14407.25 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.8 dB/K |
| Min. Saturation Flux Density | -99.0 dBW/m ² |
| Max. Saturation Flux Density | -66.4 dBW/m ² |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 13:

| Question | Response |
|------------------------|----------------------------|
| Beam ID | K30S |
| Receive Beam Frequency | 14410.75 MHz -14437.75 MHz |

| | |
|---|--|
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.7 dB/K |
| Min. Saturation Flux Density | -98.6 dBW/m ² |
| Max. Saturation Flux Density | -65.7 dBW/m ² |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 14:

| Question | Response |
|---|----------------------------|
| Beam ID | K31S |
| Receive Beam Frequency | 14441.25 MHz -14468.25 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.6 dB/K |
| Min. Saturation Flux Density | -100.0 dBW/m ² |

| | |
|------------------------------|--|
| Max. Saturation Flux Density | -66.8 dBW/m ² |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 15:

| Question | Response |
|---|--|
| Beam ID | K32S |
| Receive Beam Frequency | 14471.75 MHz -14498.75 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.6 dB/K |
| Min. Saturation Flux Density | -100.9 dBW/m ² |
| Max. Saturation Flux Density | -67.3 dBW/m ² |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 16:

| Question | Response |
|------------------------|----------------------------|
| Beam ID | CMD |
| Receive Beam Frequency | 14498.75 MHz -14499.75 MHz |
| Beam Type | Fixed |

| | |
|---|---|
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | -32.5 dB/K |
| Min. Saturation Flux Density | -0.01 dBW/m2 |
| Max. Saturation Flux Density | 0.0 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | In attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam CM. Note: This is an uplink-only CMD carrier, so max/min SFD is N/A. Please disregard above values (entered to pass form error check) |

Receiving Beams 17:

| Question | Response |
|------------------------|----------------------------|
| Beam ID | K01S |
| Receive Beam Frequency | 14001.25 MHz -14028.25 MHz |
| Beam Type | Fixed |
| Polarization | V |

| | |
|---|--|
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.8 dB/K |
| Min. Saturation Flux Density | -98.5 dBW/m2 |
| Max. Saturation Flux Density | -66.4 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 18:

| Question | Response |
|---|----------------------------|
| Beam ID | K02S |
| Receive Beam Frequency | 14031.75 MHz -14058.75 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.8 dB/K |
| Min. Saturation Flux Density | -99.5 dBW/m2 |
| Max. Saturation Flux Density | -66.8 dBW/m2 |
| Co- or Cross Polar Mode | C |

| | |
|--------------------------|--|
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |
|--------------------------|--|

Receiving Beams 19:

| Question | Response |
|---|--|
| Beam ID | K03S |
| Receive Beam Frequency | 14062.25 MHz -14089.25 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.7 dB/K |
| Min. Saturation Flux Density | -100.0 dBW/m2 |
| Max. Saturation Flux Density | -67.3 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 20:

| Question | Response |
|------------------------|----------------------------|
| Beam ID | K04S |
| Receive Beam Frequency | 14092.75 MHz -14119.75 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |

| | |
|---|--|
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.9 dB/K |
| Min. Saturation Flux Density | -101.8 dBW/m2 |
| Max. Saturation Flux Density | -68.8 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 21:

| Question | Response |
|---|----------------------------|
| Beam ID | K05S |
| Receive Beam Frequency | 14123.25 MHz -14150.25 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.8 dB/K |
| Min. Saturation Flux Density | -100.0 dBW/m2 |
| Max. Saturation Flux Density | -66.2 dBW/m2 |
| Co- or Cross Polar Mode | C |

| | |
|--------------------------|--|
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |
|--------------------------|--|

Receiving Beams 22:

| Question | Response |
|---|--|
| Beam ID | K06S |
| Receive Beam Frequency | 14153.75 MHz -14180.75 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.8 dB/K |
| Min. Saturation Flux Density | -100.7 dBW/m2 |
| Max. Saturation Flux Density | -67.3 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 23:

| Question | Response |
|------------------------|----------------------------|
| Beam ID | K07S |
| Receive Beam Frequency | 14184.25 MHz -14211.25 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |

| | |
|---|--|
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.8 dB/K |
| Min. Saturation Flux Density | -100.4 dBW/m2 |
| Max. Saturation Flux Density | -66.4 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 24:

| Question | Response |
|---|----------------------------|
| Beam ID | K08S |
| Receive Beam Frequency | 14214.75 MHz -14241.75 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.6 dB/K |
| Min. Saturation Flux Density | -100.9 dBW/m2 |
| Max. Saturation Flux Density | -67.3 dBW/m2 |
| Co- or Cross Polar Mode | C |

| | |
|--------------------------|--|
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |
|--------------------------|--|

Receiving Beams 25:

| Question | Response |
|---|--|
| Beam ID | K09S |
| Receive Beam Frequency | 14245.25 MHz -14272.25 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.8 dB/K |
| Min. Saturation Flux Density | -101.8 dBW/m ² |
| Max. Saturation Flux Density | -68.4 dBW/m ² |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 26:

| Question | Response |
|------------------------|----------------------------|
| Beam ID | K10S |
| Receive Beam Frequency | 14275.25 MHz -14302.75 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |

| | |
|---|--|
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.7 dB/K |
| Min. Saturation Flux Density | -101.6 dBW/m2 |
| Max. Saturation Flux Density | -68.0 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 27:

| Question | Response |
|---|----------------------------|
| Beam ID | K11S |
| Receive Beam Frequency | 14306.25 MHz -14333.25 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.7 dB/K |
| Min. Saturation Flux Density | -99.8 dBW/m2 |
| Max. Saturation Flux Density | -66.6 dBW/m2 |
| Co- or Cross Polar Mode | C |

| | |
|--------------------------|--|
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |
|--------------------------|--|

**Receiving
Beams 28:**

| Question | Response |
|---|--|
| Beam ID | K12S |
| Receive Beam Frequency | 14336.75 MHz -14363.75 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.6 dB/K |
| Min. Saturation Flux Density | -101.1 dBW/m ² |
| Max. Saturation Flux Density | -67.6 dBW/m ² |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

**Receiving
Beams 29:**

| Question | Response |
|------------------------|----------------------------|
| Beam ID | K13S |
| Receive Beam Frequency | 14367.25 MHz -14394.25 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |

| | |
|---|--|
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.8 dB/K |
| Min. Saturation Flux Density | -99.0 dBW/m2 |
| Max. Saturation Flux Density | -66.4 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

**Receiving
Beams 30:**

| Question | Response |
|---|----------------------------|
| Beam ID | K14S |
| Receive Beam Frequency | 14397.75 MHz -14424.75 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.7 dB/K |
| Min. Saturation Flux Density | -98.6 dBW/m2 |
| Max. Saturation Flux Density | -65.7 dBW/m2 |
| Co- or Cross Polar Mode | C |

| | |
|--------------------------|--|
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |
|--------------------------|--|

Receiving Beams 31:

| Question | Response |
|---|--|
| Beam ID | K15S |
| Receive Beam Frequency | 14428.25 MHz -14455.25 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.6 dB/K |
| Min. Saturation Flux Density | -100.0 dBW/m ² |
| Max. Saturation Flux Density | -66.8 dBW/m ² |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 32:

| Question | Response |
|------------------------|----------------------------|
| Beam ID | K16S |
| Receive Beam Frequency | 14458.75 MHz -14485.75 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |

| | |
|---|--|
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.6 dB/K |
| Min. Saturation Flux Density | -100.9 dBW/m2 |
| Max. Saturation Flux Density | -67.3 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUR. |

Receiving Beams 33:

| Question | Response |
|---|----------------------------|
| Beam ID | K17S |
| Receive Beam Frequency | 14014.25 MHz -14041.25 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 3.8 dB/K |
| Min. Saturation Flux Density | -98.5 dBW/m2 |
| Max. Saturation Flux Density | -66.4 dBW/m2 |
| Co- or Cross Polar Mode | C |

Service Area Description

In the attached GIMS file GIMS_DB_F1.mdb,
please see the Receive Beam KUR.

Receiving Channels (33)

| Channel ID | Channel Bandwidth (MHz) | Center Frequency s (MHz) | Feeder Link, Service Link or TT&C |
|-------------|-------------------------|--------------------------|-----------------------------------|
| K23S | 27.0 | 14210.75 | Feeder Link |
| K13S | 27.0 | 14380.75 | Feeder Link |
| K12S | 27.0 | 14350.25 | Feeder Link |
| K11S | 27.0 | 14319.75 | Feeder Link |
| K10S | 27.0 | 14289.25 | Feeder Link |
| K09S | 27.0 | 14258.75 | Feeder Link |
| K08S | 27.0 | 14228.25 | Feeder Link |
| K07S | 27.0 | 14197.75 | Feeder Link |
| K06S | 27.0 | 14167.25 | Feeder Link |
| K05S | 27.0 | 14136.75 | Feeder Link |
| K04S | 27.0 | 14106.25 | Feeder Link |
| K03S | 27.0 | 14075.75 | Feeder Link |
| K02S | 27.0 | 14045.25 | Feeder Link |
| K01S | 27.0 | 14014.75 | Feeder Link |
| K19S | 27.0 | 14088.75 | Feeder Link |
| K29S | 27.0 | 14393.75 | Feeder Link |
| K28S | 27.0 | 14363.25 | Feeder Link |
| K16S | 27.0 | 14472.25 | Feeder Link |
| K15S | 27.0 | 14441.75 | Feeder Link |
| K14S | 27.0 | 14411.25 | Feeder Link |
| K30S | 27.0 | 14424.25 | Feeder Link |
| CMD | 1.0 | 14499.25 | TT&C |
| K24S | 27.0 | 14241.25 | Feeder Link |
| K25S | 27.0 | 14271.75 | Feeder Link |

| | | | |
|-------------|------|----------|-------------|
| K26S | 27.0 | 14302.25 | Feeder Link |
| K27S | 27.0 | 14332.75 | Feeder Link |
| K31S | 27.0 | 14454.75 | Feeder Link |
| K32S | 27.0 | 14485.25 | Feeder Link |
| K18S | 27.0 | 14058.25 | Feeder Link |
| K20S | 27.0 | 14119.25 | Feeder Link |
| K21S | 27.0 | 14149.75 | Feeder Link |
| K22S | 27.0 | 14180.25 | Feeder Link |
| K17S | 27.0 | 14027.75 | Feeder Link |

Transmitting Beams 1:

| Question | Response |
|---|--|
| Beam ID | T17S |
| Transmit Beam Frequency | 11714.25 MHz -11741.25 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 0.1 degrees |
| Max. Transmit EIRP Density | -22.7 dBW/Hz |
| Max. Transmit EIRP | 50.1 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 2:

| Question | Response |
|--------------------------|----------------------------|
| Beam ID | T18S |
| Transmit Beam Frequency | 11744.75 MHz -11771.75 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |

| | |
|---|--|
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.8 dBW/Hz |
| Max. Transmit EIRP | 50.0 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 3:

| Question | Response |
|---|--|
| Beam ID | T19S |
| Transmit Beam Frequency | 11775.25 MHz -11802.25 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.5 dBW/Hz |
| Max. Transmit EIRP | 50.4 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 4:

| Question | Response |
|---|--|
| Beam ID | T20S |
| Transmit Beam Frequency | 11805.75 MHz -11832.75 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.4 dBW/Hz |
| Max. Transmit EIRP | 50.5 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 5:

| Question | Response |
|-------------------------|----------------------------|
| Beam ID | T21S |
| Transmit Beam Frequency | 11836.25 MHz -11863.25 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |

| | |
|---|--|
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.9 dBW/Hz |
| Max. Transmit EIRP | 49.9 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 6:

| Question | Response |
|---|--|
| Beam ID | T22S |
| Transmit Beam Frequency | 11866.75 MHz -11893.75 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.1 dBW/Hz |
| Max. Transmit EIRP | 50.8 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 7:

| Question | Response |
|---|--|
| Beam ID | T23S |
| Transmit Beam Frequency | 11897.25 MHz -11924.25 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.9 dBW/Hz |
| Max. Transmit EIRP | 50.0 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 8:

| Question | Response |
|-------------------------|----------------------------|
| Beam ID | T24S |
| Transmit Beam Frequency | 11927.75 MHz -11954.75 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |

| | |
|---|--|
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.0 dBW/Hz |
| Max. Transmit EIRP | 50.9 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 9:

| Question | Response |
|---|----------------------------|
| Beam ID | T25S |
| Transmit Beam Frequency | 11958.25 MHz -11985.25 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.1 dBW/Hz |
| Max. Transmit EIRP | 50.8 dBW |
| Co- or Cross Polar Mode | C |

| | |
|--------------------------|--|
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUD. |
|--------------------------|--|

Max. Power Flux Density

Information not provided.

Transmitting Beams 10:

| Question | Response |
|---|--|
| Beam ID | T26S |
| Transmit Beam Frequency | 11988.75 MHz -12015.75 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -21.8 dBW/Hz |
| Max. Transmit EIRP | 51.1 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 11:

| Question | Response |
|-------------------------|----------------------------|
| Beam ID | T27S |
| Transmit Beam Frequency | 12019.25 MHz -12046.25 MHz |
| Beam Type | Fixed |

| | |
|---|--|
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.1 dBW/Hz |
| Max. Transmit EIRP | 50.8 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 12:

| Question | Response |
|---|----------------------------|
| Beam ID | T28S |
| Transmit Beam Frequency | 12049.75 MHz -12076.75 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -21.6 dBW/Hz |
| Max. Transmit EIRP | 51.3 dBW |

| | |
|--------------------------|--|
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 13:

| Question | Response |
|---|--|
| Beam ID | T29S |
| Transmit Beam Frequency | 12080.25 MHz -12107.25 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -23.1 dBW/Hz |
| Max. Transmit EIRP | 49.8 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 14:

| Question | Response |
|-------------------------|----------------------------|
| Beam ID | T30S |
| Transmit Beam Frequency | 12110.75 MHz -12137.75 MHz |

| | |
|---|--|
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -23.6 dBW/Hz |
| Max. Transmit EIRP | 49.2 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 15:

| Question | Response |
|---|----------------------------|
| Beam ID | T31S |
| Transmit Beam Frequency | 12141.25 MHz -12168.25 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.6 dBW/Hz |

| | |
|--------------------------|--|
| Max. Transmit EIRP | 50.2 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 16:

| Question | Response |
|---|--|
| Beam ID | T32S |
| Transmit Beam Frequency | 12171.75 MHz -12198.75 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.2 dBW/Hz |
| Max. Transmit EIRP | 50.7 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Receive Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 17:

| Question | Response |
|----------|----------|
| Beam ID | TM1 |

| | |
|---|--|
| Transmit Beam Frequency | 11700.1 MHz -11700.4 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 0.1 degrees |
| Max. Transmit EIRP Density | -39.7 dBW/Hz |
| Max. Transmit EIRP | 15.0 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Transmit beam TM. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 18:

| Question | Response |
|---|--------------------------|
| Beam ID | TM2 |
| Transmit Beam Frequency | 11700.6 MHz -11700.9 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |

| | |
|----------------------------|--|
| Max. Transmit EIRP Density | -39.7 dBW/Hz |
| Max. Transmit EIRP | 15.0 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Transmit beam TM. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 19:

| Question | Response |
|---|---|
| Beam ID | T01S |
| Transmit Beam Frequency | 11701.25 MHz -11728.25 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.7 dBW/Hz |
| Max. Transmit EIRP | 50.1 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Transmit Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 20:

| Question | Response |
|----------|----------|
|----------|----------|

| | |
|--|--|
| Beam ID | T02S |
| Transmit Beam Frequency | 11731.75 MHz -11758.75 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.8 dBW/Hz |
| Max. Transmit EIRP | 50.0 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Transmit Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 21:

| Question | Response |
|--------------------------|----------------------------|
| Beam ID | T03S |
| Transmit Beam Frequency | 11762.25 MHz -11789.25 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |

| | |
|--|--|
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.5 dBW/Hz |
| Max. Transmit EIRP | 50.4 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Transmit Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 22:

| Question | Response |
|--|--|
| Beam ID | T04S |
| Transmit Beam Frequency | 11792.75 MHz -11819.75 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.4 dBW/Hz |
| Max. Transmit EIRP | 50.5 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Transmit Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 23:

| Question | Response |
|---|---|
| Beam ID | T05S |
| Transmit Beam Frequency | 11823.25 MHz -11850.25 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.9 dBW/Hz |
| Max. Transmit EIRP | 49.9 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Transmit Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 24:

| Question | Response |
|--------------------------|----------------------------|
| Beam ID | T06S |
| Transmit Beam Frequency | 11853.75 MHz -11880.75 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |

| | |
|--|--|
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.1 dBW/Hz |
| Max. Transmit EIRP | 50.8 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Transmit Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 25:

| Question | Response |
|--|--|
| Beam ID | T07S |
| Transmit Beam Frequency | 11884.25 MHz -11911.25 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.9 dBW/Hz |
| Max. Transmit EIRP | 50.0 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Transmit Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 26:

| Question | Response |
|--|--|
| Beam ID | T08S |
| Transmit Beam Frequency | 11914.75 MHz -11941.75 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.0 dBW/Hz |
| Max. Transmit EIRP | 50.9 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Transmit Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 27:

| Question | Response |
|-------------------------|----------------------------|
| Beam ID | T09S |
| Transmit Beam Frequency | 11945.25 MHz -11972.25 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |

| | |
|--|--|
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.1 dBW/Hz |
| Max. Transmit EIRP | 50.8 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Transmit Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 28:

| Question | Response |
|--|--|
| Beam ID | T10S |
| Transmit Beam Frequency | 11975.75 MHz -12002.75 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -21.8 dBW/Hz |
| Max. Transmit EIRP | 51.1 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Transmit Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 29:

| Question | Response |
|--|--|
| Beam ID | T11S |
| Transmit Beam Frequency | 12006.25 MHz -12033.25 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.1 dBW/Hz |
| Max. Transmit EIRP | 50.8 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Transmit Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 30:

| Question | Response |
|-------------------------|----------------------------|
| Beam ID | T12S |
| Transmit Beam Frequency | 12036.75 MHz -12063.75 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |

| | |
|--|--|
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -21.6 dBW/Hz |
| Max. Transmit EIRP | 51.3 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Transmit Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 31:

| Question | Response |
|--|----------------------------|
| Beam ID | T13S |
| Transmit Beam Frequency | 12067.25 MHz -12094.25 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -23.1 dBW/Hz |
| Max. Transmit EIRP | 49.8 dBW |
| Co- or Cross Polar Mode | C |

| | |
|--------------------------|---|
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Transmit Beam KUD. |
|--------------------------|---|

Max. Power Flux Density

Information not provided.

Transmitting Beams 32:

| Question | Response |
|---|---|
| Beam ID | T14S |
| Transmit Beam Frequency | 12097.75 MHz -12124.75 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -23.6 dBW/Hz |
| Max. Transmit EIRP | 49.2 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Transmit Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 33:

| Question | Response |
|-------------------------|----------------------------|
| Beam ID | T15S |
| Transmit Beam Frequency | 12128.25 MHz -12155.25 MHz |
| Beam Type | Fixed |

| | |
|--|--|
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -22.6 dBW/Hz |
| Max. Transmit EIRP | 50.2 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | In the attached GIMS file GIMS_DB_F1.mdb, please see the Transmit Beam KUD. |

Max. Power Flux Density

Information not provided.

Transmitting Beams 34:

| Question | Response |
|--|----------------------------|
| Beam ID | T16S |
| Transmit Beam Frequency | 12158.75 MHz -12185.75 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.1 degrees |
| Antenna Rotational Error | 0.1 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 9.0 degrees |
| Max. Transmit EIRP Density | -22.2 dBW/Hz |
| Max. Transmit EIRP | 50.7 dBW |

Co- or Cross Polar Mode

C

Service Area Description

In the attached GIMS file GIMS_DB_F1.mdb,
please see the Transmit Beam KUD.

Max. Power Flux Density

Information not provided.

Transmitting Channels (34)

| Channel ID | Channel Bandwidth (MHz) | Center Frequency s (MHz) | Feeder Link, Service Link or TT&C |
|------------|-------------------------|--------------------------|-----------------------------------|
| T16S | 27.0 | 12172.25 | Service Link |
| T15S | 27.0 | 12141.75 | Service Link |
| T14S | 27.0 | 12111.25 | Service Link |
| T13S | 27.0 | 12080.75 | Service Link |
| T12S | 27.0 | 12050.25 | Service Link |
| T11S | 27.0 | 12019.75 | Service Link |
| T10S | 27.0 | 11989.25 | Service Link |
| T09S | 27.0 | 11958.75 | Service Link |
| T08S | 27.0 | 11928.25 | Service Link |
| T07S | 27.0 | 11897.75 | Service Link |
| T06S | 27.0 | 11867.25 | Service Link |
| T05S | 27.0 | 11836.75 | Service Link |
| T04S | 27.0 | 11806.25 | Service Link |
| T03S | 27.0 | 11775.75 | Service Link |
| T02S | 27.0 | 11745.25 | Service Link |
| T01S | 27.0 | 11714.75 | Service Link |
| T19S | 27.0 | 11788.75 | Service Link |
| T22S | 27.0 | 11880.25 | Service Link |
| T18S | 27.0 | 11758.25 | Service Link |
| T30S | 27.0 | 12124.25 | Service Link |
| T29S | 27.0 | 12093.75 | Service Link |
| T28S | 27.0 | 12063.25 | Service Link |
| T27S | 27.0 | 12032.75 | Service Link |
| T26S | 27.0 | 12002.25 | Service Link |

| | | | |
|-------------|------|----------|--------------|
| T25S | 27.0 | 11971.75 | Service Link |
| T24S | 27.0 | 11941.25 | Service Link |
| T23S | 27.0 | 11910.75 | Service Link |
| T21S | 27.0 | 11849.75 | Service Link |
| T20S | 27.0 | 11819.25 | Service Link |
| TM1 | 0.3 | 11700.25 | TT&C |
| TM2 | 0.3 | 11700.75 | TT&C |
| T31S | 27.0 | 12154.75 | Service Link |
| T32S | 27.0 | 12185.25 | Service Link |
| T17S | 27.0 | 11727.75 | Service Link |

Certification Questions

| Question | Response |
|--|------------|
| <p>Are the applicable service area coverage requirements of 25.143(b)(2) (ii) and (iii), or 25.144(a)(3)(i), or 25.145 (c)(1) and (2), or 25.146(i)(1) and (2), or 25.148(c), or 25.225 met?</p> | <p>N/A</p> |
| <p>Are the applicable frequency tolerances of 25.202(e) and out-of-band emission limits of 25.202(f)(1),(2), and (3) met?</p> | <p>Yes</p> |
| <p>Are the cessation of emissions requirements of 25.207 met?</p> | <p>Yes</p> |
| <p>Are the applicable power-flux-density limits of 25.208 met, and is the appropriate technical showing provided within the application?</p> | |
| <p>For NGSO applications, are the applicable equivalent-power-flux-density limits of 25.208 met, and is the appropriate technical showing provided within the application?</p> | <p>N/A</p> |
| <p>Are the applicable full-frequency-reuse requirements of 25.210 met?</p> | <p>No</p> |
| <p>If the application is for a 17/24 GHz BSS space station, will it be operated at an offset location with full power and interference protection in accordance with 25.262(b)?</p> | |

Attachments

| File Name | Beam | Field | Attachment Type | Description |
|-----------------------|------|---|-------------------|--|
| <u>GIMS_DB_F1.mdb</u> | | GSO Antenna Gain Contour Data | GIMS file (*.mdb) | GIMS file containing F1 GXT files: - CM: Command receive pattern - KUR: Receive pattern for Ku transponders - TM: Telemetry transmit pattern - KUD: Transmit pattern for Ku transponders |
