Approved by OMB 3060-0678
Estimated Burden: up to 80 hours
April 2016

Federal Communications Commission

312 File Number: **SATMOD2016111000105**

## Filing Description

| Question | Response |
|---|---|
| Description | Intelsat 9 move to 29.5WL |

## Satellite Information

| Question | Response |
| --- | --- |
| Select Orbit Type | GSO |
| Space Station or Satellite Network Name | Intelsat 9 |
| Estimated Lifetime of Satellite(s) From Date of Launch | 20 Years |
| Will the space station(s) operate on a Common Carrier basis? | No |

## Operating Frequency Bands (5)

| Nature of service | Description | Frequency Band(s) | Mode Type |
|---|---|---|---|
| **Fixed-Satellite Service** | | 5925.0 MHz -6425.0 MHz | Receive |
| **Fixed-Satellite Service** | | 3700.0 MHz -4200.0 MHz | Transmit |
| **Fixed-Satellite Service** | | 14000.0 MHz -14500.0 MHz | Receive |
| **Fixed-Satellite Service** | | 11450.0 MHz -11700.0 MHz | Transmit |
| **Fixed-Satellite Service** | | 11700.0 MHz -12200.0 MHz | Transmit |

## Orbital Information For Geostationary Satellites

| Section | Question | Response |
|---|---|---|
| **Orbital Longitude Information** | Orbital Longitude | 30.0 degrees |
| | Hemisphere of Orbital Longitude | W |
| **Longitudinal Tolerance or East /West Station-Keeping** | Toward West | 0.05 degrees |
| | Toward East | 0.05 degrees |
| **Inclination Excursion or North /South Station-Keeping Tolerance** | Inclination Excursion or North /South Station-Keeping Tolerance | 3.0 degrees |
| **Antenna Axis Attitude Accuracy** | Roll | 0.1 degrees |
| | Pitch | 0.1 degrees |
| | Yaw | 0.1 degrees |

## Receiving Beams 1:

| Question | Response |
|---|---|
| Beam ID | AEVU |
| Receive Beam Frequency | 14000.0 MHz -14250.0 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |
| Antenna Rotational Error | 0.34 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 0.0 dB/K |
| Min. Saturation Flux Density | -93.1 dBW/m2 |
| Max. Saturation Flux Density | -77.1 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | Americas and Europe |

## Receiving Beams 2:

| Question | Response |
|---|---|
| Beam ID | AMHU |
| Receive Beam Frequency | 5925.0 MHz -6425.0 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |
| Antenna Rotational Error | 0.34 degrees |

| | |
|---|---|
| Polarization Switchable | No |
| Polarization Alignment Relative to the Equatorial Plane | 0.0 degrees |
| G/T at Max. Gain Point | -0.2 dB/K |
| Min. Saturation Flux Density | -94.8 dBW/m2 |
| Max. Saturation Flux Density | -78.8 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | Americas and Europe |

## Receiving Beams 3:

| Question | Response |
|---|---|
| Beam ID | AMVU |
| Receive Beam Frequency | 5925.0 MHz -6425.0 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |
| Antenna Rotational Error | 0.34 degrees |
| Polarization Switchable | No |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | -0.8 dB/K |
| Min. Saturation Flux Density | -93.3 dBW/m2 |
| Max. Saturation Flux Density | -77.3 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | Americas and Europe |

## Receiving

## Beams 4:

| Question | Response |
|---|---|
| Beam ID | BRHU |
| Receive Beam Frequency | 14000.0 MHz -14260.0 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |
| Antenna Rotational Error | 0.34 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 0.0 degrees |
| G/T at Max. Gain Point | 3.3 dB/K |
| Min. Saturation Flux Density | -96.8 dBW/m2 |
| Max. Saturation Flux Density | -80.8 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | Brazil |

## Receiving Beams 5:

| Question | Response |
|---|---|
| Beam ID | MXVU |
| Receive Beam Frequency | 14250.0 MHz -14500.0 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |
| Antenna Rotational Error | 0.34 degrees |
| Polarization Switchable | |

| | |
|---|---|
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | 8.6 dB/K |
| Min. Saturation Flux Density | -102.2 dBW/m2 |
| Max. Saturation Flux Density | -86.2 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | Mexico, Central America, and the Caribbean |

## Receiving Beams 6:

| Question | Response |
|---|---|
| Beam ID | MXHU |
| Receive Beam Frequency | 14240.0 MHz -14500.0 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |
| Antenna Rotational Error | 0.34 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 0.0 degrees |
| G/T at Max. Gain Point | 8.4 dB/K |
| Min. Saturation Flux Density | -101.6 dBW/m2 |
| Max. Saturation Flux Density | -85.6 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | Mexico, Central America, and the Caribbean |

## Receiving Beams 7:

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

| | |
|---|---|
| Beam ID | CMD |
| Receive Beam Frequency | 14494.0 MHz -14495.0 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |
| Antenna Rotational Error | 0.34 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | -99.0 dB/K |
| Min. Saturation Flux Density | -103.0 dBW/m2 |
| Max. Saturation Flux Density | -102.9 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | Global Gain contour attachment not provided pursuant to Section 25.114(c)(4)(vi)(A) of the FCC rules |

## Receiving Beams 8:

| Question | Response |
|---|---|
| Beam ID | CMDP |
| Receive Beam Frequency | 14000.0 MHz -14001.0 MHz |
| Beam Type | Fixed |
| Polarization | RHCP |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |
| Antenna Rotational Error | 0.34 degrees |

| | |
|---|---|
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 45.0 degrees |
| G/T at Max. Gain Point | -99.0 dB/K |
| Min. Saturation Flux Density | -102.2 dBW/m2 |
| Max. Saturation Flux Density | -102.1 dBW/m2 |
| Co- or Cross Polar Mode | C |
| Service Area Description | Global Gain contour attachment not provided pursuant to Section 25.114(c)(4)(vi)(A) of the FCC rules |

## Receiving Beams 9:

| Question | Response |
|---|---|
| Beam ID | CMDB |
| Receive Beam Frequency | 14494.0 MHz -14495.0 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |
| Antenna Rotational Error | 0.34 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| G/T at Max. Gain Point | -99.0 dB/K |
| Min. Saturation Flux Density | -90.0 dBW/m2 |
| Max. Saturation Flux Density | -89.9 dBW/m2 |

| | |
|---|---|
| Co- or Cross Polar Mode | C |
| Service Area Description | Global Gain contour attachment not provided pursuant to Section 25.114(c)(4)(vi)(A) of the FCC rules |

## Receiving Channels (50)

| Channel ID | Channel Bandwidth (MHz) | Center Frequency s (MHz) | Feeder Link, Service Link or TT&C |
|---|---|---|---|
| **CU08** | 36.0 | 6065.0 | Service Link |
| **CU09** | 36.0 | 6105.0 | Service Link |
| **CU14** | 36.0 | 6185.0 | Service Link |
| **KU16** | 36.0 | 14320.0 | Service Link |
| **KU18** | 36.0 | 14360.0 | Service Link |
| **CMD1** | 1.0 | 14494.5 | TT&C |
| **KU24** | 36.0 | 14480.0 | Service Link |
| **KU05** | 36.0 | 14100.0 | Service Link |
| **CU01** | 36.0 | 5945.0 | Service Link |
| **CU03** | 36.0 | 5985.0 | Service Link |
| **CU05** | 36.0 | 6025.0 | Service Link |
| **CU07** | 36.0 | 6065.0 | Service Link |
| **CU11** | 36.0 | 6145.0 | Service Link |
| **CU04** | 36.0 | 5985.0 | Service Link |
| **CU06** | 36.0 | 6025.0 | Service Link |
| **CMD3** | 1.0 | 14494.5 | TT&C |
| **CMD2** | 1.0 | 14000.5 | TT&C |
| **KU23** | 36.0 | 14460.0 | Service Link |
| **KU04** | 36.0 | 14080.0 | Service Link |
| **CU18** | 36.0 | 6265.0 | Service Link |
| **KU10** | 36.0 | 14200.0 | Service Link |
| **KU11** | 36.0 | 14220.0 | Service Link |
| **KU12** | 36.0 | 14240.0 | Service Link |
| **KU13** | 36.0 | 14260.0 | Service Link |

| | | | |
|---|---|---|---|
| **KU14** | 36.0 | 14280.0 | Service Link |
| **KU15** | 36.0 | 14300.0 | Service Link |
| **CU13** | 36.0 | 6185.0 | Service Link |
| **CU15** | 36.0 | 6225.0 | Service Link |
| **KU20** | 36.0 | 14440.0 | Service Link |
| **KU19** | 36.0 | 14380.0 | Service Link |
| **CU20** | 36.0 | 6305.0 | Service Link |
| **KU22** | 36.0 | 14440.0 | Service Link |
| **KU21** | 36.0 | 14420.0 | Service Link |
| **CU12** | 36.0 | 6145.0 | Service Link |
| **CU16** | 36.0 | 6225.0 | Service Link |
| **CO10** | 36.0 | 6105.0 | Service Link |
| **CU22** | 36.0 | 6345.0 | Service Link |
| **KU06** | 36.0 | 14120.0 | Service Link |
| **CU24** | 36.0 | 6385.0 | Service Link |
| **KU02** | 36.0 | 14040.0 | Service Link |
| **KU07** | 36.0 | 14140.0 | Service Link |
| **CU17** | 36.0 | 6265.0 | Service Link |
| **CU23** | 36.0 | 6385.0 | Service Link |
| **KU08** | 36.0 | 14160.0 | Service Link |
| **KU09** | 36.0 | 14180.0 | Service Link |
| **CU19** | 36.0 | 6305.0 | Service Link |
| **CU02** | 36.0 | 5945.0 | Service Link |
| **CU21** | 36.0 | 6345.0 | Service Link |
| **KU01** | 36.0 | 14020.0 | Service Link |
| **KU03** | 36.0 | 14060.0 | Service Link |

## Transmitting Beams 1:

| Question | Response |
|---|---|
| Beam ID | AMHD |
| Transmit Beam Frequency | 3700.0 MHz -4200.0 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |
| Antenna Rotational Error | 0.34 degrees |
| Polarization Switchable | No |
| Polarization Alignment Relative to the Equatorial Plane | 0.0 degrees |
| Max. Transmit EIRP Density | -31.6 dBW/Hz |
| Max. Transmit EIRP | 42.7 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | Americas and Europe |

### Max. Power Flux Density

| * BW: | * 0° - 5° (dbW/$m^2$ /BW): | * 5° - 10° (dbW/$m^2$ /BW): | * 10° - 15° (dbW/$m^2$ /BW): | * 15° - 20° (dbW/$m^2$ /BW): | * 20° - 25° (dbW/$m^2$ /BW): | * 25° - 90° (dbW/$m^2$ /BW): |
|---|---|---|---|---|---|---|
| **4.0 kHz** | -158.8 | -158.7 | -158.6 | -158.5 | -158.4 | -157.6 |

## Transmitting Beams 2:

| Question | Response |
|---|---|
| Beam ID | AMVD |
| Transmit Beam Frequency | 3700.0 MHz -4200.0 MHz |

| | |
|---|---|
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |
| Antenna Rotational Error | 0.34 degrees |
| Polarization Switchable | No |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -31.5 dBW/Hz |
| Max. Transmit EIRP | 42.8 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | Americas and Europe |

### Max. Power Flux Density

| * BW: | * 0° - 5° (dbW/$m^2$ /BW): | * 5° - 10° (dbW/$m^2$ /BW): | * 10° - 15° (dbW/$m^2$ /BW): | * 15° - 20° (dbW/$m^2$ /BW): | * 20° - 25° (dbW/$m^2$ /BW): | * 25° - 90° (dbW/$m^2$ /BW): |
|---|---|---|---|---|---|---|
| **4.0 kHz** | -158.7 | -158.6 | -158.5 | -158.4 | -158.3 | -157.5 |

## Transmitting Beams 3:

| Question | Response |
|---|---|
| Beam ID | BRVD |
| Transmit Beam Frequency | 11700.0 MHz -11960.0 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |

| | |
|---|---|
| Antenna Rotational Error | 0.34 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -26.2 dBW/Hz |
| Max. Transmit EIRP | 48.1 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | Brazil |

### Max. Power Flux Density

Information not provided.

## Transmitting Beams 4:

| Question | Response |
|---|---|
| Beam ID | AEHD |
| Transmit Beam Frequency | 11450.0 MHz -11700.0 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |
| Antenna Rotational Error | 0.34 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 0.0 degrees |
| Max. Transmit EIRP Density | -24.7 dBW/Hz |
| Max. Transmit EIRP | 49.6 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | Americas and Europe |

### Max. Power Flux Density

| * BW: | * 0° - 5° (dbW/m$^2$ /BW): | * 5° - 10° (dbW/m$^2$ /BW): | * 10° - 15° (dbW/m$^2$ /BW): | * 15° - 20° (dbW/m$^2$ /BW): | * 20° - 25° (dbW/m$^2$ /BW): | * 25° - 90° (dbW/m$^2$ /BW): |
|---|---|---|---|---|---|---|
| **4.0 kHz** | -151.9 | -151.8 | -151.7 | -151.6 | -151.5 | -150.7 |

## Transmitting Beams 5:

| Question | Response |
|---|---|
| Beam ID | MXVD |
| Transmit Beam Frequency | 11700.0 MHz -12200.0 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |
| Antenna Rotational Error | 0.34 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -20.1 dBW/Hz |
| Max. Transmit EIRP | 54.2 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | Mexico, Central America, and the Caribbean |

### Max. Power Flux Density

Information not provided.

## Transmitting Beams 6:

| Question | Response |
|---|---|
| Beam ID | MXHD |

| | |
|---|---|
| Transmit Beam Frequency | 11700.0 MHz -12200.0 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |
| Antenna Rotational Error | 0.34 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 0.0 degrees |
| Max. Transmit EIRP Density | -20.1 dBW/Hz |
| Max. Transmit EIRP | 54.2 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | Mexico, Central America, and the Caribbean |

### Max. Power Flux Density

Information not provided.

## Transmitting Beams 7:

| Question | Response |
|---|---|
| Beam ID | TLM |
| Transmit Beam Frequency | 11700.0 MHz -11703.0 MHz |
| Beam Type | Fixed |
| Polarization | V |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |
| Antenna Rotational Error | 0.34 degrees |
| Polarization Switchable | |

| | |
|---|---|
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -47.8 dBW/Hz |
| Max. Transmit EIRP | 9.2 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | Global Gain contour attachment not provided pursuant to Section 25.114(c)(4)(vi)(A) of the FCC rules |

### Max. Power Flux Density

Information not provided.

## Transmitting Beams 8:

| Question | Response |
|---|---|
| Beam ID | TLMP |
| Transmit Beam Frequency | 11700.0 MHz -11703.0 MHz |
| Beam Type | Fixed |
| Polarization | RHCP |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |
| Antenna Rotational Error | 0.34 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 45.0 degrees |
| Max. Transmit EIRP Density | -42.7 dBW/Hz |
| Max. Transmit EIRP | 14.8 dBW |
| Co- or Cross Polar Mode | C |

| | |
|---|---|
| Service Area Description | Global Gain contour attachment not provided pursuant to Section 25.114(c)(4)(vi)(A) of the FCC rules |

### Max. Power Flux Density

Information not provided.

## Transmitting Beams 9:

| Question | Response |
|---|---|
| Beam ID | TLMB |
| Transmit Beam Frequency | 11700.0 MHz -11703.0 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |
| Antenna Rotational Error | 0.34 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 0.0 degrees |
| Max. Transmit EIRP Density | -46.3 dBW/Hz |
| Max. Transmit EIRP | 10.7 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | Global Gain contour attachment not provided pursuant to Section 25.114(c)(4)(vi)(A) of the FCC rules |

### Max. Power Flux Density

Information not provided.

## Transmitting Beams 10:

| Question | Response |
|---|---|
| Beam ID | UPCH |

| | |
|---|---|
| Transmit Beam Frequency | 11698.987 MHz -11699.013 MHz |
| Beam Type | Fixed |
| Polarization | H |
| Peak Gain | dBi |
| Antenna Pointing Error | 0.9 degrees |
| Antenna Rotational Error | 0.34 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 0.0 degrees |
| Max. Transmit EIRP Density | -30.8 dBW/Hz |
| Max. Transmit EIRP | 13.2 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | Global Gain contour attachment not provided pursuant to Section 25.114(c)(4)(vi)(A) of the FCC rules |

### Max. Power Flux Density

| * BW: | * 0° - 5° (dbW/$m^2$ /BW): | * 5° - 10° (dbW/$m^2$ /BW): | * 10° - 15° (dbW/$m^2$ /BW): | * 15° - 20° (dbW/$m^2$ /BW): | * 20° - 25° (dbW/$m^2$ /BW): | * 25° - 90° (dbW/$m^2$ /BW): |
|---|---|---|---|---|---|---|
| **4.0 kHz** | -158.0 | -157.9 | -157.8 | -157.7 | -157.6 | -156.8 |

## Transmitting Beams 11:

| Question | Response |
|---|---|
| Beam ID | UPCV |
| Transmit Beam Frequency | 11702.987 MHz -11703.013 MHz |
| Beam Type | Fixed |
| Polarization | V |

| | |
|---|---|
| Peak Gain | dBi |
| Antenna Pointing Error | 0.19 degrees |
| Antenna Rotational Error | 0.34 degrees |
| Polarization Switchable | |
| Polarization Alignment Relative to the Equatorial Plane | 90.0 degrees |
| Max. Transmit EIRP Density | -31.7 dBW/Hz |
| Max. Transmit EIRP | 12.3 dBW |
| Co- or Cross Polar Mode | C |
| Service Area Description | Global Gain contour attachment not provided pursuant to Section 25.114(c)(4)(vi)(A) of the FCC rules |

## Max. Power Flux Density

Information not provided.

## Transmitting Channels (51)

| Channel ID | Channel Bandwidth (MHz) | Center Frequency s (MHz) | Feeder Link, Service Link or TT&C |
|---|---|---|---|
| **CD16** | 36.0 | 4000.0 | Service Link |
| **KD05** | 36.0 | 11557.0 | Service Link |
| **KD16** | 36.0 | 12020.0 | Service Link |
| **CD15** | 36.0 | 4000.0 | Service Link |
| **KD24** | 36.0 | 12180.0 | Service Link |
| **KD23** | 36.0 | 12160.0 | Service Link |
| **KD22** | 36.0 | 12140.0 | Service Link |
| **KD21** | 36.0 | 12120.0 | Service Link |
| **KD20** | 36.0 | 12100.0 | Service Link |
| **KD19** | 36.0 | 12080.0 | Service Link |
| **KD18** | 36.0 | 12060.0 | Service Link |
| **KD17** | 36.0 | 12040.0 | Service Link |
| **KD04** | 36.0 | 11780.0 | Service Link |
| **CD07** | 36.0 | 3840.0 | Service Link |
| **CD05** | 36.0 | 3800.0 | Service Link |
| **CD06** | 36.0 | 3800.0 | Service Link |
| **CD03** | 36.0 | 3760.0 | Service Link |
| **CD04** | 36.0 | 3760.0 | Service Link |
| **CD01** | 36.0 | 3720.0 | Service Link |
| **CD02** | 36.0 | 3720.0 | Service Link |
| **CD23** | 36.0 | 4160.0 | Service Link |
| **CD12** | 36.0 | 3920.0 | Service Link |
| **CD22** | 36.0 | 4120.0 | Service Link |
| **ULP2** | 0.025 | 11703.0 | TT&C |

| | | | |
|---|---|---|---|
| **ULP1** | 0.025 | 11699.0 | TT&C |
| **TLM2** | 0.5 | 11702.5 | TT&C |
| **TLM1** | 0.5 | 11700.5 | TT&C |
| **KD15** | 36.0 | 12000.0 | Service Link |
| **KD14** | 36.0 | 11980.0 | Service Link |
| **KD10** | 36.0 | 11900.0 | Service Link |
| **KD09** | 36.0 | 11637.0 | Service Link |
| **KD08** | 36.0 | 11860.0 | Service Link |
| **KD06** | 36.0 | 11820.0 | Service Link |
| **CD13** | 36.0 | 3960.0 | Service Link |
| **CD14** | 36.0 | 3960.0 | Service Link |
| **KD13** | 36.0 | 11960.0 | Service Link |
| **KD12** | 36.0 | 11940.0 | Service Link |
| **KD11** | 36.0 | 11677.0 | Service Link |
| **CD24** | 36.0 | 4160.0 | Service Link |
| **KD01** | 36.0 | 11477.0 | Service Link |
| **KD02** | 36.0 | 11740.0 | Service Link |
| **CD17** | 36.0 | 4040.0 | Service Link |
| **CD18** | 36.0 | 4040.0 | Service Link |
| **CD19** | 36.0 | 4080.0 | Service Link |
| **CD20** | 36.0 | 4080.0 | Service Link |
| **CD21** | 36.0 | 4120.0 | Service Link |
| **KD03** | 36.0 | 11517.0 | Service Link |
| **CD08** | 36.0 | 3840.0 | Service Link |
| **CD09** | 36.0 | 3880.0 | Service Link |
| **CD10** | 36.0 | 3880.0 | Service Link |

| | | | |
|---|---|---|---|
| **CD11** | 36.0 | 3920.0 | Service Link |

## Certification Questions

| Question | Response |
| --- | --- |
| 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? | N/A |
| Are the applicable frequency tolerances of 25.202(e) and out-of-band emission limits of 25.202(f)(1),(2), and (3) met? | Yes |
| Are the cessation of emissions requirements of 25.207 met? | Yes |
| Are the applicable power-flux-density limits of 25.208 met, and is the appropriate technical showing provided within the application? | Yes |
| 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? | N/A |
| Are the applicable full-frequency-reuse requirements of 25.210 met? | Yes |
| 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)? | |

## Attachments

| File Name | Beam | Field | Attachment Type | Description |
|---|---|---|---|---|
| IS-9 Beam Contours at 29.5 WL.mdb | | GSO Antenna Gain Contour Data | GIMS file (*.mdb) | GIMS Container file with gain contours for all beam |