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

Federal Communications Commission

312 File Number: **SATLOI2020041300034**

Filing Description

Question	Response
Description	Technical characteristics of the SpaceMobile non-GEO satellite constellation.

Satellite Information

Question	Response
Select Orbit Type	NGSO
Space Station or Satellite Network Name	SpaceMobile
Estimated Lifetime of Satellite(s) From Date of Launch	10 Years
Will the space station(s) operate on a Common Carrier basis?	No

Operating Frequency Bands (6)

Nature of service	Description	Frequency Band(s)	Mode Type
Mobile-Satellite Service		1710.0 MHz -2010.0 MHz	Receive
Mobile-Satellite Service		1805.0 MHz -2200.0 MHz	Transmit
Mobile-Satellite Service		617.0 MHz -960.0 MHz	Transmit
Fixed-Satellite Service		45500.0 MHz -51400.0 MHz	Receive
Mobile-Satellite Service		663.0 MHz -915.0 MHz	Receive
Fixed-Satellite Service		37500.0 MHz -42500.0 MHz	Transmit

Orbital Information For Non-Geostationary Satellites

Question	Response
Total Number of Satellites in the active constellation	243
Orbit Epoch Date	07/01/2020
Celestrial Reference Body	Earth

Orbital Plane 1:

Question	Response
Number of Satellites in Plane	15
Inclination Angle	40.0 degrees
Right Ascension of Ascending Node	180.0 degrees
Argument of Perigee	0.0 degrees
Orbital Period	5970.0 seconds
Apogee	735.0 km
Perigee	730.0 km
Active Service Arc Begin Angle with respect to Ascending Node	-40.0 degrees
Active Service Arc End Angle with respect to Ascending Node	40.0 degrees

Mean Anomaly For Each Satellite

Satellite Number	Mean Anomaly (degrees) at the Orbit Epoch Date
1	0.0
2	24.0
3	48.0
4	72.0
5	96.0
6	120.0
7	144.0
8	168.0
9	192.0
10	216.0
11	240.0
12	264.0
13	288.0

14	312.0
15	336.0

Orbital Plane 2:

Question	Response
Number of Satellites in Plane	15
Inclination Angle	40.0 degrees
Right Ascension of Ascending Node	216.0 degrees
Argument of Perigee	0.0 degrees
Orbital Period	5970.0 seconds
Apogee	735.0 km
Perigee	730.0 km
Active Service Arc Begin Angle with respect to Ascending Node	-40.0 degrees
Active Service Arc End Angle with respect to Ascending Node	40.0 degrees

Mean Anomaly For Each Satellite

Satellite Number	Mean Anomaly (degrees) at the Orbit Epoch Date
1	0.0
2	24.0
3	48.0
4	72.0
5	96.0
6	120.0
7	144.0
8	168.0
9	336.0
10	312.0

11	288.0
12	264.0
13	240.0
14	216.0
15	192.0

Orbital Plane 3:

Question	Response
Number of Satellites in Plane	18
Inclination Angle	0.0 degrees
Right Ascension of Ascending Node	0.0 degrees
Argument of Perigee	0.0 degrees
Orbital Period	5964.0 seconds
Apogee	730.0 km
Perigee	725.0 km
Active Service Arc Begin Angle with respect to Ascending Node	0.0 degrees
Active Service Arc End Angle with respect to Ascending Node	0.0 degrees

Mean Anomaly For Each Satellite

Satellite Number	Mean Anomaly (degrees) at the Orbit Epoch Date
1	340.0
2	320.0
3	300.0
4	280.0
5	260.0
6	240.0
7	220.0

8	200.0
9	180.0
10	160.0
11	140.0
12	120.0
13	100.0
14	80.0
15	60.0
16	40.0
17	20.0
18	0.0

Orbital Plane 4:

Question	Response
Number of Satellites in Plane	15
Inclination Angle	40.0 degrees
Right Ascension of Ascending Node	0.0 degrees
Argument of Perigee	0.0 degrees
Orbital Period	5970.0 seconds
Apogee	735.0 km
Perigee	730.0 km
Active Service Arc Begin Angle with respect to Ascending Node	-40.0 degrees
Active Service Arc End Angle with respect to Ascending Node	40.0 degrees

Mean Anomaly For Each Satellite

Satellite Number	Mean Anomaly (degrees) at the Orbit Epoch Date
1	216.0

2	240.0
3	264.0
4	288.0
5	312.0
6	192.0
7	168.0
8	144.0
9	24.0
10	48.0
11	72.0
12	96.0
13	120.0
14	0.0
15	336.0

Orbital Plane 5:

Question	Response
Number of Satellites in Plane	15
Inclination Angle	40.0 degrees
Right Ascension of Ascending Node	36.0 degrees
Argument of Perigee	0.0 degrees
Orbital Period	5970.0 seconds
Apogee	735.0 km
Perigee	730.0 km
Active Service Arc Begin Angle with respect to Ascending Node	-40.0 degrees
Active Service Arc End Angle with respect to Ascending Node	40.0 degrees

Mean Anomaly For Each Satellite

Satellite Number	Mean Anomaly (degrees) at the Orbit Epoch Date
1	0.0
2	24.0
3	48.0
4	72.0
5	96.0
6	120.0
7	144.0
8	168.0
9	192.0
10	216.0
11	240.0
12	264.0
13	288.0
14	312.0
15	336.0

Orbital Plane 6:

Question	Response
Number of Satellites in Plane	15
Inclination Angle	40.0 degrees
Right Ascension of Ascending Node	72.0 degrees
Argument of Perigee	0.0 degrees
Orbital Period	5970.0 seconds
Apogee	735.0 km
Perigee	730.0 km
Active Service Arc Begin Angle with respect to Ascending Node	-40.0 degrees

Active Service Arc End Angle with respect to Ascending Node	40.0 degrees

Mean Anomaly For Each Satellite

Satellite Number	Mean Anomaly (degrees) at the Orbit Epoch Date
1	0.0
2	24.0
3	48.0
4	72.0
5	96.0
6	120.0
7	144.0
8	168.0
9	192.0
10	216.0
11	240.0
12	264.0
13	288.0
14	312.0
15	336.0

Orbital Plane 7:

Question	Response
Number of Satellites in Plane	15
Inclination Angle	40.0 degrees
Right Ascension of Ascending Node	108.0 degrees
Argument of Perigee	0.0 degrees
Orbital Period	5970.0 seconds

Apogee	735.0 km
Perigee	730.0 km
Active Service Arc Begin Angle with respect to Ascending Node	-40.0 degrees
Active Service Arc End Angle with respect to Ascending Node	40.0 degrees

Mean Anomaly For Each Satellite

Satellite Number	Mean Anomaly (degrees) at the Orbit Epoch Date
1	0.0
2	24.0
3	48.0
4	72.0
5	96.0
6	120.0
7	144.0
8	168.0
9	192.0
10	216.0
11	240.0
12	264.0
13	288.0
14	312.0
15	336.0

Orbital Plane 8:

Question	Response
Number of Satellites in Plane	15
Inclination Angle	40.0 degrees

Right Ascension of Ascending Node	144.0 degrees
Argument of Perigee	0.0 degrees
Orbital Period	5970.0 seconds
Apogee	735.0 km
Perigee	730.0 km
Active Service Arc Begin Angle with respect to Ascending Node	-40.0 degrees
Active Service Arc End Angle with respect to Ascending Node	40.0 degrees

Mean Anomaly For Each Satellite

Satellite Number	Mean Anomaly (degrees) at the Orbit Epoch Date
1	0.0
2	24.0
3	48.0
4	72.0
5	96.0
6	120.0
7	144.0
8	168.0
9	192.0
10	216.0
11	240.0
12	264.0
13	288.0
14	312.0
15	336.0

Orbital Plane 9:

Question	Response
Number of Satellites in Plane	15
Inclination Angle	40.0 degrees
Right Ascension of Ascending Node	252.0 degrees
Argument of Perigee	0.0 degrees
Orbital Period	5970.0 seconds
Apogee	735.0 km
Perigee	730.0 km
Active Service Arc Begin Angle with respect to Ascending Node	-40.0 degrees
Active Service Arc End Angle with respect to Ascending Node	40.0 degrees

Mean Anomaly For Each Satellite

Satellite Number	Mean Anomaly (degrees) at the Orbit Epoch Date
1	0.0
2	24.0
3	48.0
4	72.0
5	96.0
6	120.0
7	144.0
8	168.0
9	192.0
10	216.0
11	240.0
12	264.0
13	288.0
14	312.0

15	336.0

Orbital Plane 10:

Question	Response
Number of Satellites in Plane	15
Inclination Angle	40.0 degrees
Right Ascension of Ascending Node	288.0 degrees
Argument of Perigee	0.0 degrees
Orbital Period	5970.0 seconds
Apogee	735.0 km
Perigee	730.0 km
Active Service Arc Begin Angle with respect to Ascending Node	-40.0 degrees
Active Service Arc End Angle with respect to Ascending Node	40.0 degrees

Mean Anomaly For Each Satellite

Satellite Number	Mean Anomaly (degrees) at the Orbit Epoch Date
1	0.0
2	24.0
3	48.0
4	72.0
5	96.0
6	120.0
7	144.0
8	168.0
9	192.0
10	216.0
11	240.0

12	264.0
13	288.0
14	312.0
15	336.0

Orbital Plane 11:

Question	Response
Number of Satellites in Plane	15
Inclination Angle	40.0 degrees
Right Ascension of Ascending Node	324.0 degrees
Argument of Perigee	0.0 degrees
Orbital Period	5970.0 seconds
Apogee	735.0 km
Perigee	730.0 km
Active Service Arc Begin Angle with respect to Ascending Node	-40.0 degrees
Active Service Arc End Angle with respect to Ascending Node	40.0 degrees

Mean Anomaly For Each Satellite

Satellite Number	Mean Anomaly (degrees) at the Orbit Epoch Date
1	0.0
2	24.0
3	48.0
4	72.0
5	96.0
6	120.0
7	144.0
8	168.0

9	192.0
10	216.0
11	240.0
12	264.0
13	288.0
14	312.0
15	336.0

Orbital Plane 12:

Question	Response
Number of Satellites in Plane	15
Inclination Angle	55.0 degrees
Right Ascension of Ascending Node	0.0 degrees
Argument of Perigee	0.0 degrees
Orbital Period	5976.0 seconds
Apogee	740.0 km
Perigee	735.0 km
Active Service Arc Begin Angle with respect to Ascending Node	-55.0 degrees
Active Service Arc End Angle with respect to Ascending Node	55.0 degrees

Mean Anomaly For Each Satellite

Satellite Number	Mean Anomaly (degrees) at the Orbit Epoch Date
1	48.0
2	72.0
3	96.0
4	120.0
5	144.0

6	168.0
7	192.0
8	216.0
9	240.0
10	264.0
11	288.0
12	312.0
13	336.0
14	0.0
15	24.0

Orbital Plane 13:

Question	Response
Number of Satellites in Plane	15
Inclination Angle	55.0 degrees
Right Ascension of Ascending Node	72.0 degrees
Argument of Perigee	0.0 degrees
Orbital Period	5976.0 seconds
Apogee	740.0 km
Perigee	735.0 km
Active Service Arc Begin Angle with respect to Ascending Node	-55.0 degrees
Active Service Arc End Angle with respect to Ascending Node	55.0 degrees

Mean Anomaly For Each Satellite

Satellite Number	Mean Anomaly (degrees) at the Orbit Epoch Date
1	0.0
2	24.0

3	48.0
4	72.0
5	96.0
6	120.0
7	144.0
8	168.0
9	192.0
10	216.0
11	240.0
12	264.0
13	288.0
14	312.0
15	336.0

Orbital Plane 14:

Question	Response
Number of Satellites in Plane	15
Inclination Angle	55.0 degrees
Right Ascension of Ascending Node	144.0 degrees
Argument of Perigee	0.0 degrees
Orbital Period	5976.0 seconds
Apogee	740.0 km
Perigee	735.0 km
Active Service Arc Begin Angle with respect to Ascending Node	-55.0 degrees
Active Service Arc End Angle with respect to Ascending Node	55.0 degrees

Mean Anomaly For Each Satellite

Satellite Number	Mean Anomaly (degrees) at the Orbit Epoch Date
1	0.0
2	24.0
3	48.0
4	72.0
5	96.0
6	120.0
7	144.0
8	168.0
9	192.0
10	216.0
11	240.0
12	264.0
13	288.0
14	312.0
15	336.0

Orbital Plane 15:

Question	Response
Number of Satellites in Plane	15
Inclination Angle	55.0 degrees
Right Ascension of Ascending Node	216.0 degrees
Argument of Perigee	0.0 degrees
Orbital Period	5976.0 seconds
Apogee	740.0 km
Perigee	735.0 km
Active Service Arc Begin Angle with respect to Ascending Node	-55.0 degrees

Active Service Arc End Angle with respect to Ascending Node	55.0 degrees

Mean Anomaly For Each Satellite

Satellite Number	Mean Anomaly (degrees) at the Orbit Epoch Date
1	336.0
2	312.0
3	288.0
4	264.0
5	240.0
6	216.0
7	192.0
8	168.0
9	144.0
10	120.0
11	96.0
12	72.0
13	48.0
14	24.0
15	0.0

Orbital Plane 16:

Question	Response
Number of Satellites in Plane	15
Inclination Angle	55.0 degrees
Right Ascension of Ascending Node	288.0 degrees
Argument of Perigee	0.0 degrees
Orbital Period	5976.0 seconds

Apogee	740.0 km
Perigee	735.0 km
Active Service Arc Begin Angle with respect to Ascending Node	-55.0 degrees
Active Service Arc End Angle with respect to Ascending Node	55.0 degrees

Mean Anomaly For Each Satellite

Satellite Number	Mean Anomaly (degrees) at the Orbit Epoch Date
1	192.0
2	216.0
3	240.0
4	264.0
5	288.0
6	312.0
7	336.0
8	168.0
9	144.0
10	120.0
11	96.0
12	72.0
13	48.0
14	24.0
15	0.0

Receiving Beams 1:

Question	Response
Beam ID	SUPL
Receive Beam Frequency	1710.0 MHz -2010.0 MHz
Beam Type	Steerable
Polarization	LHCP
Peak Gain	47.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	20.0 dB/K
Min. Saturation Flux Density	-118.9 dBW/m2
Max. Saturation Flux Density	-108.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

Receiving Beams 2:

Question	Response
Beam ID	SUPR
Receive Beam Frequency	1710.0 MHz -2010.0 MHz
Beam Type	Steerable
Polarization	RHCP
Peak Gain	47.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees

Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	20.0 dB/K
Min. Saturation Flux Density	-118.9 dBW/m2
Max. Saturation Flux Density	-108.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

Receiving Beams 3:

Question	Response
Beam ID	GUPH
Receive Beam Frequency	663.0 MHz -915.0 MHz
Beam Type	Steerable
Polarization	H
Peak Gain	41.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	20.0 degrees
G/T at Max. Gain Point	14.0 dB/K
Min. Saturation Flux Density	-118.9 dBW/m2
Max. Saturation Flux Density	-108.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

Receiving Beams 4:

Question	Response

Beam ID	GUPV
Receive Beam Frequency	663.0 MHz -915.0 MHz
Beam Type	Steerable
Polarization	V
Peak Gain	41.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	-70.0 degrees
G/T at Max. Gain Point	14.0 dB/K
Min. Saturation Flux Density	-118.9 dBW/m2
Max. Saturation Flux Density	-108.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

Receiving Beams 5:

Question	Response
Beam ID	QUPL
Receive Beam Frequency	45500.0 MHz -51400.0 MHz
Beam Type	Steerable
Polarization	LHCP
Peak Gain	48.4 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees

G/T at Max. Gain Point	19.8 dB/K
Min. Saturation Flux Density	-100.5 dBW/m2
Max. Saturation Flux Density	-73.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

Receiving Beams 6:

Question	Response
Beam ID	QUPR
Receive Beam Frequency	45500.0 MHz -51400.0 MHz
Beam Type	Steerable
Polarization	RHCP
Peak Gain	48.4 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	19.8 dB/K
Min. Saturation Flux Density	-100.5 dBW/m2
Max. Saturation Flux Density	-73.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

Receiving Channels (25)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
L06U	10.0	835.0	Service Link
L08U	35.0	897.5	Service Link
QUP1	1500.0	46250.0	Feeder Link
MSSU	30.0	1995.0	Service Link
L71U	35.0	680.5	Service Link
L66U	70.0	1745.0	Service Link
L28U	45.0	725.5	Service Link
L27U	17.0	815.5	Service Link
L26U	35.0	831.5	Service Link
L20U	30.0	847.0	Service Link
L19U	15.0	837.5	Service Link
L85U	18.0	707.0	Service Link
G75U	15.0	784.7	Service Link
L17U	12.0	710.0	Service Link
L14U	10.0	793.0	Service Link
L13U	10.0	782.0	Service Link
L12U	17.0	707.5	Service Link
QUP3	1000.0	50900.0	Feeder Link
QUP2	3000.0	48700.0	Feeder Link
L03U	75.0	1747.5	Service Link
L04U	45.0	1732.5	Service Link
L18U	15.0	822.5	Service Link
L05U	25.0	836.5	Service Link
L02U	60.0	1880.0	Service Link

L68U	30.0	713.0	Service Link

Transmitting Beams 1:

Question	Response
Beam ID	QDNL
Transmit Beam Frequency	37500.0 MHz -42500.0 MHz
Beam Type	Steerable
Polarization	LHCP
Peak Gain	47.5 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-36.8 dBW/Hz
Max. Transmit EIRP	60.2 dBW
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

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):
1.0 MHz	-116.2	-114.7	-113.3	-112.1	-110.9	-105.0

Transmitting Beams 2:

Question	Response
Beam ID	QDNR
Transmit Beam Frequency	37500.0 MHz -42500.0 MHz

Beam Type	Steerable
Polarization	RHCP
Peak Gain	47.5 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-36.8 dBW/Hz
Max. Transmit EIRP	60.2 dBW
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

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):
1.0 MHz	-116.2	-114.7	-113.3	-112.1	-110.9	-105.0

Transmitting Beams 3:

Question	Response
Beam ID	GDNH
Transmit Beam Frequency	617.0 MHz -960.0 MHz
Beam Type	Steerable
Polarization	H
Peak Gain	41.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees

Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	20.0 degrees
Max. Transmit EIRP Density	-7.7 dBW/Hz
Max. Transmit EIRP	75.4 dBW
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

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	-111.1	-109.6	-108.3	-107.0	-105.9	-100.0

Transmitting Beams 4:

Question	Response
Beam ID	GDNV
Transmit Beam Frequency	617.0 MHz -960.0 MHz
Beam Type	Steerable
Polarization	V
Peak Gain	41.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	-70.0 degrees
Max. Transmit EIRP Density	-7.7 dBW/Hz
Max. Transmit EIRP	75.4 dBW
Co- or Cross Polar Mode	C

Service Area Description	Visible Earth

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	-111.1	-109.6	-108.3	-107.0	-105.9	-100.0

Transmitting Beams 5:

Question	Response
Beam ID	SDNL
Transmit Beam Frequency	1805.0 MHz -2200.0 MHz
Beam Type	Steerable
Polarization	LHCP
Peak Gain	47.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-4.3 dBW/Hz
Max. Transmit EIRP	79.2 dBW
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

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	-107.7	-106.2	-104.8	-103.6	-102.5	-96.6

Transmitting Beams 6:

Question	Response
Beam ID	SDNR
Transmit Beam Frequency	1805.0 MHz -2200.0 MHz
Beam Type	Steerable
Polarization	RHCP
Peak Gain	47.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-4.3 dBW/Hz
Max. Transmit EIRP	79.2 dBW
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

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	-107.7	-106.2	-104.8	-103.6	-102.5	-96.6

Transmitting Channels (24)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
L14D	10.0	763.0	Service Link
L13D	10.0	751.0	Service Link
L68D	30.0	768.0	Service Link
L04D	45.0	2132.5	Service Link
L03D	75.0	1842.5	Service Link
L17D	12.0	740.0	Service Link
L18D	15.0	867.5	Service Link
L19D	15.0	882.5	Service Link
L26D	35.0	876.5	Service Link
L27D	16.0	861.0	Service Link
L28D	45.0	780.5	Service Link
L66D	90.0	2155.0	Service Link
QDN2	500.0	42250.0	Feeder Link
QDN1	4500.0	39750.0	Feeder Link
MSSD	30.0	2185.0	Service Link
L85D	18.0	737.0	Service Link
L71D	35.0	634.5	Service Link
L20D	30.0	806.0	Service Link
L06D	10.0	880.0	Service Link
L05D	25.0	881.5	Service Link
L08D	35.0	942.5	Service Link
L12D	17.0	737.5	Service Link
G75D	15.0	754.7	Service Link
L02D	60.0	1960.0	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?	
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
User Tx_Isolines 1900.gxt	SDNR	NGSO Antenna Gain Data	GXT file (*.gxt)	User beam isolines
User Tx_Isolines 1900.gxt	SDNL	NGSO Antenna Gain Data	GXT file (*.gxt)	User beam isolines
User Rx_Isolines 1900.gxt	SUPR	NGSO Antenna Gain Data	GXT file (*.gxt)	User beam isolines
User Rx_Isolines 1900.gxt	SUPL	NGSO Antenna Gain Data	GXT file (*.gxt)	User beam isolines
User_Tx_1900.gxt	SDNR	NGSO Antenna Gain Data	GXT file (*.gxt)	User beam - shapeable and steerable.
User_Tx_1900.gxt	SDNL	NGSO Antenna Gain Data	GXT file (*.gxt)	User beam - shapeable and steerable.
User_Rx_1900.gxt	SUPR	NGSO Antenna Gain Data	GXT file (*.gxt)	User beam - shapeable and steerable.
User_Rx_1900.gxt	SUPL	NGSO Antenna Gain Data	GXT file (*.gxt)	User beam - shapeable and steerable.
Gateway_Tx.gxt	QDNR	NGSO Antenna Gain Data	GXT file (*.gxt)	Gateway steerable
Gateway_Tx.gxt	QDNL	NGSO Antenna Gain Data	GXT file (*.gxt)	Gateway steerable
Gateway_Rx.gxt	QUPR	NGSO Antenna Gain Data	GXT file (*.gxt)	Gateway steerable
Gateway_Rx.gxt	QUPL	NGSO Antenna Gain Data	GXT file (*.gxt)	Gateway steerable

User Tx_Isolines.gxt	GDNV	NGSO Antenna Gain Data	GXT file (*.gxt)	User beam isolines
User Tx_Isolines.gxt	GDNH	NGSO Antenna Gain Data	GXT file (*.gxt)	User beam isolines
User Rx_Isolines.gxt	GUPV	NGSO Antenna Gain Data	GXT file (*.gxt)	User beam isolines
User Rx_Isolines.gxt	GUPH	NGSO Antenna Gain Data	GXT file (*.gxt)	User beam isolines
User_Tx.gxt	GDNV	NGSO Antenna Gain Data	GXT file (*.gxt)	User beam - shapeable and steerable.
User_Tx.gxt	GDNH	NGSO Antenna Gain Data	GXT file (*.gxt)	User beam - shapeable and steerable.
User_Rx.gxt	GUPV	NGSO Antenna Gain Data	GXT file (*.gxt)	User beam - shapeable and steerable.
User_Rx.gxt	GUPH	NGSO Antenna Gain Data	GXT file (*.gxt)	User beam - shapeable and steerable.