



312 File Number: **SATMOD2025032700083**

Filing Description

Question	Response
Description	Galaxy 28 drift from 89 W.L. to 88.7 W.L. and license term extension.

**Satellite
Information**

Question	Response
Select Orbit Type	GSO
Space Station or Satellite Network Name	Galaxy 28
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 (4)

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

**Orbital
Information For
Geostationary
Satellites**

Section	Question	Response
Orbital Longitude Information	Orbital Longitude	88.0 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	2.11 degrees
Antenna Axis Attitude Accuracy	Roll	0.1 degrees
	Pitch	0.1 degrees
	Yaw	0.1 degrees

Receiving Beams 1:

Question	Response
Beam ID	NKVU
Receive Beam Frequency	14000.0 MHz -14500.0 MHz
Beam Type	Steerable
Polarization	V
Peak Gain	33.1 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	6.2 dB/K
Min. Saturation Flux Density	-102.9 dBW/m2
Max. Saturation Flux Density	-81.2 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	North America, Hawaii, Mexico, and the Caribbean. This reflector has a RPM of plus minus 1.0 degree east-west and plus minus 1.0 degree north-south.

Receiving Beams 2:

Question	Response
Beam ID	NKHU

Receive Beam Frequency	14000.0 MHz -14500.0 MHz
Beam Type	Steerable
Polarization	H
Peak Gain	33.1 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	5.6 dB/K
Min. Saturation Flux Density	-102.0 dBW/m2
Max. Saturation Flux Density	-81.3 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	North America, Hawaii, Mexico, and the Caribbean. This reflector has a RPM of plus minus 1.0 degree east-west and plus minus 1.0 degree north-south.

Receiving Beams 3:

Question	Response
Beam ID	NCVU
Receive Beam Frequency	5925.0 MHz -6425.0 MHz
Beam Type	Steerable
Polarization	V

Peak Gain	31.5 dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Polarization Switchable	Yes
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	3.5 dB/K
Min. Saturation Flux Density	-98.9 dBW/m2
Max. Saturation Flux Density	-77.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	North America, Hawaii, Mexico, Central America, and the Caribbean. This reflector has a RPM of plus minus 1.0 degree east-west and plus minus 1.0 degree north-south.

Receiving Beams 4:

Question	Response
Beam ID	NCHU
Receive Beam Frequency	5925.0 MHz -6425.0 MHz
Beam Type	Steerable
Polarization	H
Peak Gain	31.5 dBi
Antenna Pointing Error	0.19 degrees

Antenna Rotational Error	0.34 degrees
Polarization Switchable	Yes
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	3.3 dB/K
Min. Saturation Flux Density	-99.3 dBW/m2
Max. Saturation Flux Density	-78.3 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	North America, Hawaii, Mexico, Central America, and the Caribbean. This reflector has a RPM of plus minus 1.0 degree east-west and plus minus 1.0 degree north-south.

Receiving Beams 5:

Question	Response
Beam ID	SKVU
Receive Beam Frequency	14000.0 MHz -14500.0 MHz
Beam Type	Steerable
Polarization	V
Peak Gain	33.4 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	4.0 dB/K
Min. Saturation Flux Density	-104.0 dBW/m2
Max. Saturation Flux Density	-83.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	South America. This reflector has a RPM of plus minus 1.0 degree east-west and plus minus 1.0 degree north-south.

Receiving Beams 6:

Question	Response
Beam ID	SCVU
Receive Beam Frequency	5925.0 MHz -6425.0 MHz
Beam Type	Steerable
Polarization	V
Peak Gain	31.4 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	3.6 dB/K
Min. Saturation Flux Density	-102.7 dBW/m2
Max. Saturation Flux Density	-86.7 dBW/m2

Co- or Cross Polar Mode	C
Service Area Description	South America, and Central America. This reflector has a RPM of plus minus 1.0 degree east-west and plus minus 1.0 degree north-south.

Receiving Beams 7:

Question	Response
Beam ID	CMD2
Receive Beam Frequency	6423.0 MHz -6424.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	2.0 dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Polarization Switchable	Yes
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	-10.0 dB/K
Min. Saturation Flux Density	-112.0 dBW/m2
Max. Saturation Flux Density	-60.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	CMD2 Horizontal Global Coverage

Receiving Beams 8:

Question	Response
Beam ID	CMD1
Receive Beam Frequency	5926.0 MHz -5927.0 MHz
Beam Type	Fixed

Polarization	V
Peak Gain	2.0 dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Polarization Switchable	Yes
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	-10.0 dB/K
Min. Saturation Flux Density	-112.0 dBW/m2
Max. Saturation Flux Density	-60.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	CMD 1 Global coverage

Receiving Channels (54)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
C28U	72.0	6365.0	Service Link
K14U	36.0	14080.0	Service Link
K05U	36.0	14180.0	Service Link
K04U	36.0	14140.0	Service Link
K03U	36.0	14100.0	Service Link
K02U	36.0	14060.0	Service Link
C27U	72.0	6285.0	Service Link
C26U	72.0	6205.0	Service Link
C20U	36.0	6325.0	Service Link
C19U	36.0	6285.0	Service Link
C10U	36.0	6385.0	Service Link
K21U	36.0	14360.0	Service Link
K01U	36.0	14020.0	Service Link
K19U	36.0	14280.0	Service Link
K18U	36.0	14240.0	Service Link
K17U	36.0	14200.0	Service Link
K16U	36.0	14160.0	Service Link
K10U	36.0	14380.0	Service Link
C08U	36.0	6305.0	Service Link
C07U	36.0	6265.0	Service Link
C06U	36.0	6225.0	Service Link
C05U	36.0	6185.0	Service Link
C21U	36.0	6365.0	Service Link
C22U	36.0	6405.0	Service Link

C23U	72.0	5965.0	Service Link
C24U	72.0	6045.0	Service Link
C25U	72.0	6125.0	Service Link
K24U	36.0	14480.0	Service Link
K23U	36.0	14440.0	Service Link
K22U	36.0	14400.0	Service Link
C01U	72.0	5965.0	Service Link
K20U	36.0	14342.0	Service Link
C04U	36.0	6145.0	Service Link
C14U	36.0	6085.0	Service Link
CMD1	1.0	5926.5	TT&C
CMD2	1.0	6423.5	TT&C
C17U	36.0	6205.0	Service Link
K09U	36.0	14340.0	Service Link
C18U	36.0	6245.0	Service Link
K06U	36.0	14220.0	Service Link
K07U	36.0	14260.0	Service Link
K08U	36.0	14300.0	Service Link
K13U	36.0	14040.0	Service Link
K11U	36.0	14420.0	Service Link
K12U	36.0	14460.0	Service Link
C16U	36.0	6165.0	Service Link
C15U	36.0	6125.0	Service Link
C13U	36.0	6045.0	Service Link
C12U	36.0	6005.0	Service Link
C11U	36.0	5965.0	Service Link

C02U	72.0	6045.0	Service Link
C09U	36.0	6345.0	Service Link
C03U	36.0	6105.0	Service Link
K15U	36.0	14120.0	Service Link

Transmitting Beams 1:

Question	Response
Beam ID	UPC2
Transmit Beam Frequency	12197.987 MHz -12198.012 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	28.9 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	-24.4 dBW/Hz
Max. Transmit EIRP	19.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	ULPC2 Com South America

Max. Power Flux Density

Information not provided.

Transmitting Beams 2:

Question	Response
Beam ID	TLMH
Transmit Beam Frequency	4199.25 MHz -4199.75 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	28.9 dBi
Antenna Pointing Error	0.19 degrees

Antenna Rotational Error	0.34 degrees
Polarization Switchable	Yes
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-43.2 dBW/Hz
Max. Transmit EIRP	13.8 dBW
Co- or Cross Polar Mode	X
Service Area Description	TM2 Omni South America .

Max. Power Flux Density

	* 0° - 5°	* 5° - 10°	* 10° - 15°	* 15° - 20°	* 20° - 25°	* 25° - 90°
	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²
* BW:	/BW):	/BW):	/BW):	/BW):	/BW):	/BW):
4.0 kHz	-170.4	-170.3	-170.2	-170.1	-170.0	-169.2

Transmitting Beams 3:

Question	Response
Beam ID	TLMG
Transmit Beam Frequency	4199.25 MHz -4199.75 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	28.9 dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Polarization Switchable	Yes
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-43.2 dBW/Hz

Max. Transmit EIRP	13.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	TM2 Dish South America

Max. Power Flux Density

	* 0° - 5°	* 5° - 10°	* 10° - 15°	* 15° - 20°	* 20° - 25°	* 25° - 90°
	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²
* BW:	/BW):	/BW):	/BW):	/BW):	/BW):	/BW):
4.0 kHz	-170.4	-170.3	-170.2	-170.1	-170.0	-169.2

Transmitting Beams 4:

Question	Response
Beam ID	TLMF
Transmit Beam Frequency	4199.25 MHz -4199.75 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	28.9 dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Polarization Switchable	Yes
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-43.2 dBW/Hz
Max. Transmit EIRP	13.8 dBW
Co- or Cross Polar Mode	X
Service Area Description	TM2 Omni North America

Max. Power Flux Density

Transmitting
Beams 5:

	* 0° - 5°	* 5° - 10°	* 10° - 15°	* 15° - 20°	* 20° - 25°	* 25° - 90°
	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²
* BW:	/BW):	/BW):	/BW):	/BW):	/BW):	/BW):
4.0 kHz	-170.4	-170.3	-170.2	-170.1	-170.0	-169.2

Question	Response
Beam ID	TLME
Transmit Beam Frequency	4199.25 MHz -4199.75 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	28.9 dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Polarization Switchable	Yes
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-43.2 dBW/Hz
Max. Transmit EIRP	13.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	TLME TM2 Dish North America

Max. Power Flux Density

	* 0° - 5°	* 5° - 10°	* 10° - 15°	* 15° - 20°	* 20° - 25°	* 25° - 90°
	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²
* BW:	/BW):	/BW):	/BW):	/BW):	/BW):	/BW):
4.0 kHz	-170.4	-170.3	-170.2	-170.1	-170.0	-169.2

Transmitting
Beams 6:

Question	Response
Beam ID	TLMA
Transmit Beam Frequency	4194.75 MHz -4195.25 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	28.9 dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Polarization Switchable	Yes
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-44.9 dBW/Hz
Max. Transmit EIRP	12.1 dBW
Co- or Cross Polar Mode	C
Service Area Description	TM1 Dish North America

Max. Power Flux Density

	* 0° - 5°	* 5° - 10°	* 10° - 15°	* 15° - 20°	* 20° - 25°	* 25° - 90°
	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²
* BW:	/BW):	/BW):	/BW):	/BW):	/BW):	/BW):
4.0 kHz	-172.1	-172.0	-171.9	-171.8	-171.7	-170.9

Transmitting
Beams 7:

Question	Response
Beam ID	UPC3
Transmit Beam Frequency	12197.987 MHz -12198.012 MHz

Beam Type	Fixed
Polarization	V
Peak Gain	28.9 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	-24.3 dBW/Hz
Max. Transmit EIRP	19.6 dBW
Co- or Cross Polar Mode	X
Service Area Description	ULPC3 North America Com

Max. Power Flux Density

Information not provided.

Transmitting Beams 8:

Question	Response
Beam ID	TLMD
Transmit Beam Frequency	4194.75 MHz -4195.25 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	28.9 dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Polarization Switchable	Yes
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-44.9 dBW/Hz

Max. Transmit EIRP	12.1 dBW
Co- or Cross Polar Mode	C
Service Area Description	TM 1b TLMD Omni South America

Max. Power Flux Density

	* 0° - 5°	* 5° - 10°	* 10° - 15°	* 15° - 20°	* 20° - 25°	* 25° - 90°
	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²
* BW:	/BW):	/BW):	/BW):	/BW):	/BW):	/BW):
4.0 kHz	-172.1	-172.0	-171.9	-171.8	-171.7	-170.9

Transmitting Beams 9:

Question	Response
Beam ID	TLMC
Transmit Beam Frequency	4194.75 MHz -4195.25 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	28.9 dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Polarization Switchable	Yes
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-44.9 dBW/Hz
Max. Transmit EIRP	12.1 dBW
Co- or Cross Polar Mode	C
Service Area Description	TM1b TLMC: dish South America beam

Max. Power Flux Density

	* 0° - 5°	* 5° - 10°	* 10° - 15°	* 15° - 20°	* 20° - 25°	* 25° - 90°
	(dbW/m ²	(dbW/m ²	(dbW/m ²	(dbW/m ²	(dbW/m ²	(dbW/m ²
* BW:	/BW):	/BW):	/BW):	/BW):	/BW):	/BW):
4.0 kHz	-172.1	-172.0	-171.9	-171.8	-171.7	-170.9

Transmitting Beams 10:

Question	Response
Beam ID	SKHD
Transmit Beam Frequency	11700.0 MHz -12200.0 MHz
Beam Type	Steerable
Polarization	H
Peak Gain	32.8 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	-24.4 dBW/Hz
Max. Transmit EIRP	51.2 dBW
Co- or Cross Polar Mode	C
Service Area Description	South America. This reflector has a RPM of plus minus 1.0 degree east-west and plus minus 1.0 degree north-south.

Max. Power Flux Density

Information not provided.

Transmitting

Beams 11:

Question	Response
Beam ID	SCHD
Transmit Beam Frequency	3700.0 MHz -4200.0 MHz
Beam Type	Steerable
Polarization	H
Peak Gain	30.3 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	-30.3 dBW/Hz
Max. Transmit EIRP	48.3 dBW
Co- or Cross Polar Mode	C
Service Area Description	South America, and Central America. This reflector has a RPM of plus minus 1.0 degree east-west and plus minus 1.0 degree north-south.

Max. Power Flux Density

	* 0° - 5°	* 5° - 10°	* 10° - 15°	* 15° - 20°	* 20° - 25°	* 25° - 90°
	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²
* BW:	/BW):	/BW):	/BW):	/BW):	/BW):	/BW):
4.0 kHz	-157.5	-157.4	-157.3	-157.2	-157.1	-156.3

Transmitting Beams 12:

Question	Response
Beam ID	NKHD
Transmit Beam Frequency	11700.0 MHz -12200.0 MHz
Beam Type	Steerable
Polarization	H
Peak Gain	29.89 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	-26.2 dBW/Hz
Max. Transmit EIRP	49.4 dBW
Co- or Cross Polar Mode	C
Service Area Description	North America, Hawaii, Mexico, and the Caribbean. This reflector has a RPM of plus minus 1.0 degree east-west and plus minus 1.0 degree north-south.

Max. Power Flux Density

Information not provided.

Transmitting Beams 13:

Question	Response
Beam ID	NKVD
Transmit Beam Frequency	11700.0 MHz -12200.0 MHz

Beam Type	Steerable
Polarization	V
Peak Gain	29.96 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	-26.1 dBW/Hz
Max. Transmit EIRP	49.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	North America, Hawaii, Mexico, and the Caribbean. This reflector has a RPM of plus minus 1.0 degree east-west and plus minus 1.0 degree north-south.

Max. Power Flux Density

Information not provided.

Transmitting Beams 14:

Question	Response
Beam ID	NCVD
Transmit Beam Frequency	3700.0 MHz -4200.0 MHz
Beam Type	Steerable
Polarization	V
Peak Gain	29.6 dBi

Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Polarization Switchable	Yes
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-27.5 dBW/Hz
Max. Transmit EIRP	48.1 dBW
Co- or Cross Polar Mode	X
Service Area Description	North America, Hawaii, Mexico, Central America, and the Caribbean. This reflector has a RPM of plus minus 1.0 degree east-west and plus minus 1.0 degree north-south.

Max. Power Flux Density

	* 0° - 5°	* 5° - 10°	* 10° - 15°	* 15° - 20°	* 20° - 25°	* 25° - 90°
	(dBW/m ² /BW):	(dBW/m ² /BW):	(dBW/m ² /BW):	(dBW/m ² /BW):	(dBW/m ² /BW):	(dBW/m ² /BW):
4.0 kHz	-154.7	-154.6	-154.5	-154.4	-154.3	-153.5

Transmitting Beams 15:

Question	Response
Beam ID	NCHD
Transmit Beam Frequency	3700.0 MHz -4200.0 MHz
Beam Type	Steerable
Polarization	H

Peak Gain	29.7 dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Polarization Switchable	Yes
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-32.3 dBW/Hz
Max. Transmit EIRP	43.3 dBW
Co- or Cross Polar Mode	C
Service Area Description	North America, Hawaii, Mexico, Central America, and the Caribbean. This reflector has a RPM of plus minus 1.0 degree east-west and plus minus 1.0 degree north-south.

Max. Power Flux Density

	* 0° - 5°	* 5° - 10°	* 10° - 15°	* 15° - 20°	* 20° - 25°	* 25° - 90°
	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²	(dBW/m ²
	/BW):	/BW):	/BW):	/BW):	/BW):	/BW):
4.0 kHz	-159.5	-159.4	-159.3	-159.2	-159.1	-158.3

Transmitting Beams 16:

Question	Response
Beam ID	TLMB
Transmit Beam Frequency	4194.75 MHz -4195.25 MHz
Beam Type	Fixed

Polarization	V
Peak Gain	28.9 dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Polarization Switchable	Yes
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-44.9 dBW/Hz
Max. Transmit EIRP	12.1 dBW
Co- or Cross Polar Mode	C
Service Area Description	TM 1 Omni North America

Max. Power Flux Density

	* 0° - 5°	* 5° - 10°	* 10° - 15°	* 15° - 20°	* 20° - 25°	* 25° - 90°
* BW:	(dBW/m ² /BW):	(dBW/m ² /BW):	(dBW/m ² /BW):	(dBW/m ² /BW):	(dBW/m ² /BW):	(dBW/m ² /BW):
4.0 kHz	-172.1	-172.0	-171.9	-171.8	-171.7	-170.9

Transmitting
Beams 17:

Question	Response
Beam ID	UPC1
Transmit Beam Frequency	11701.988 MHz -11702.013 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	28.9 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	-23.7 dBW/Hz
Max. Transmit EIRP	20.2 dBW
Co- or Cross Polar Mode	C
Service Area Description	ULPC1 COM North America

Max. Power Flux Density

Information not provided.

**Transmitting
Channels (56)**

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
C08D	36.0	4080.0	Service Link
C22D	36.0	4180.0	Service Link
C20D	36.0	4100.0	Service Link
K11D	36.0	12120.0	Service Link
K16D	36.0	11860.0	Service Link
UPC2	0.025	12198.0	TT&C
C21D	36.0	4140.0	Service Link
K19D	36.0	11980.0	Service Link
K18D	36.0	11940.0	Service Link
C19D	36.0	4060.0	Service Link
C02D	72.0	3820.0	Service Link
C01D	72.0	3740.0	Service Link
C24D	72.0	3820.0	Service Link
C14D	36.0	3860.0	Service Link
C18D	36.0	4020.0	Service Link
C17D	36.0	3980.0	Service Link
C16D	36.0	3940.0	Service Link
TLMA	0.5	4195.0	TT&C
C04D	36.0	3920.0	Service Link
C09D	36.0	4120.0	Service Link
C07D	36.0	4040.0	Service Link
K04D	36.0	11840.0	Service Link
C15D	36.0	3900.0	Service Link
TLME	0.5	4199.5	TT&C

K12D	36.0	12160.0	Service Link
K13D	36.0	11740.0	Service Link
K14D	36.0	11780.0	Service Link
K03D	36.0	11800.0	Service Link
K09D	36.0	12040.0	Service Link
UPC1	0.025	11702.0	TT&C
C06D	36.0	4000.0	Service Link
K24D	36.0	12180.0	Service Link
K23D	36.0	12140.0	Service Link
K22D	36.0	12100.0	Service Link
K21D	36.0	12060.0	Service Link
K20D	36.0	12020.0	Service Link
C05D	36.0	3960.0	Service Link
K15D	36.0	11820.0	Service Link
K02D	36.0	11760.0	Service Link
K01D	36.0	11720.0	Service Link
C11D	36.0	3740.0	Service Link
C10D	36.0	4160.0	Service Link
K17D	36.0	11900.0	Service Link
C12D	36.0	3780.0	Service Link
C03D	36.0	3880.0	Service Link
K10D	36.0	12080.0	Service Link
C25D	72.0	3900.0	Service Link
C26D	72.0	3980.0	Service Link
C27D	72.0	4060.0	Service Link
C28D	72.0	4140.0	Service Link

K05D	36.0	11880.0	Service Link
K06D	36.0	11920.0	Service Link
K07D	36.0	11960.0	Service Link
K08D	36.0	12000.0	Service Link
C13D	36.0	3820.0	Service Link
C23D	72.0	3740.0	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
G-28CKu.mdb		GSO Antenna Gain Contour Data	GIMS file (*.mdb)	