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

Federal Communications Commission

312 File Number: **SATAMD2018041000026**

Filing Description

Question	Response
Description	Galaxy 30 at 125 W.L.

Satellite Information

Question	Response
Select Orbit Type	GSO
Space Station or Satellite Network Name	Galaxy 30
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 (11)

Nature of service	Description	Frequency Band(s)	Mode Type
Fixed-Satellite Service		13750.0 MHz -14500.0 MHz	Receive
Fixed-Satellite Service		27500.0 MHz -28600.0 MHz	Receive
Fixed-Satellite Service		29000.0 MHz -30000.0 MHz	Receive
Fixed-Satellite Service		3700.0 MHz -4200.0 MHz	Transmit
Fixed-Satellite Service		5925.0 MHz -6725.0 MHz	Receive
Fixed-Satellite Service		19200.0 MHz -20200.0 MHz	Transmit
Fixed-Satellite Service		17800.0 MHz -18800.0 MHz	Transmit
Fixed-Satellite Service		12750.0 MHz -13250.0 MHz	Receive
Fixed-Satellite Service		10700.0 MHz -11700.0 MHz	Transmit
Radionavigation-Satellite Service		1165.45 MHz -1187.45 MHz	Transmit
Radionavigation-Satellite Service		1564.42 MHz -1586.42 MHz	Transmit

Orbital Information For Geostationary Satellites

Section	Question	Response
Orbital Longitude Information	Orbital Longitude	125.0 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	0.1 degrees
Antenna Axis Attitude Accuracy	Roll	0.1 degrees
	Pitch	0.1 degrees
	Yaw	0.1 degrees

Receiving Beams 1:

Question	Response
Beam ID	CMD
Receive Beam Frequency	6421.25 MHz -6424.75 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	-99.0 dB/K
Min. Saturation Flux Density	-97.0 dBW/m2
Max. Saturation Flux Density	-96.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	GLOBAL

Receiving Beams 2:

Question	Response
Beam ID	CPRU
Receive Beam Frequency	6421.25 MHz -6424.75 MHz
Beam Type	Fixed
Polarization	RHCP
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	45.0 degrees
G/T at Max. Gain Point	-99.0 dB/K
Min. Saturation Flux Density	-89.0 dBW/m2
Max. Saturation Flux Density	-88.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	GLOBAL

Receiving Beams 3:

Question	Response
Beam ID	KSHU
Receive Beam Frequency	12770.0 MHz -13230.0 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	18.1 dB/K
Min. Saturation Flux Density	-100.9 dBW/m2
Max. Saturation Flux Density	-75.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	The United States including Alaska and Hawaii

Receiving

Beams 4:

Question	Response
Beam ID	KSVU
Receive Beam Frequency	12770.0 MHz -13230.0 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	18.1 dB/K
Min. Saturation Flux Density	-100.9 dBW/m2
Max. Saturation Flux Density	-75.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	The United States including Alaska and Hawaii

Receiving Beams 5:

Question	Response
Beam ID	ASLU
Receive Beam Frequency	27620.0 MHz -28575.0 MHz
Beam Type	Fixed
Polarization	LHCP
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	19.0 dB/K
Min. Saturation Flux Density	-101.9 dBW/m2
Max. Saturation Flux Density	-76.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	United States

Receiving Beams 6:

Question	Response
Beam ID	ASLV
Receive Beam Frequency	29025.0 MHz -29975.0 MHz
Beam Type	Fixed
Polarization	LHCP
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	19.0 dB/K
Min. Saturation Flux Density	-101.9 dBW/m2
Max. Saturation Flux Density	-76.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	United States

Receiving Beams 7:

Question	Response

Beam ID	ASRU
Receive Beam Frequency	27620.0 MHz -28575.0 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	19.0 dB/K
Min. Saturation Flux Density	-101.9 dBW/m2
Max. Saturation Flux Density	-76.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	United States

Receiving Beams 8:

Question	Response
Beam ID	ASRV
Receive Beam Frequency	29025.0 MHz -29975.0 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	19.0 dB/K
Min. Saturation Flux Density	-101.9 dBW/m2
Max. Saturation Flux Density	-76.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	United States

Receiving Beams 9:

Question	Response
Beam ID	CAHU
Receive Beam Frequency	5927.0 MHz -6703.0 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	4.8 dB/K
Min. Saturation Flux Density	-106.1 dBW/m2
Max. Saturation Flux Density	-78.1 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	The United States including Alaska and Hawaii

Receiving Beams 10:

Question	Response

Beam ID	CAVU
Receive Beam Frequency	5927.0 MHz -6703.0 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	4.8 dB/K
Min. Saturation Flux Density	-106.1 dBW/m2
Max. Saturation Flux Density	-78.1 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	The United States including Alaska and Hawaii

Receiving Beams 11:

Question	Response
Beam ID	CHRU
Receive Beam Frequency	6421.25 MHz -6424.75 MHz
Beam Type	Fixed
Polarization	RHCP
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	45.0 degrees
G/T at Max. Gain Point	-99.0 dB/K
Min. Saturation Flux Density	-89.0 dBW/m2
Max. Saturation Flux Density	-88.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	GLOBAL

Receiving Beams 12:

Question	Response
Beam ID	KSHV
Receive Beam Frequency	13770.0 MHz -14480.0 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	18.1 dB/K
Min. Saturation Flux Density	-100.9 dBW/m2
Max. Saturation Flux Density	-75.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	The United States including Alaska and Hawaii

Receiving Beams 13:

Question	Response

Beam ID	KSVV
Receive Beam Frequency	13770.0 MHz -14480.0 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	18.1 dB/K
Min. Saturation Flux Density	-100.9 dBW/m2
Max. Saturation Flux Density	-75.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	The United States including Alaska and Hawaii

Receiving Beams 14:

Question	Response
Beam ID	WALU
Receive Beam Frequency	6597.58 MHz -6619.58 MHz
Beam Type	Fixed
Polarization	LHCP
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	45.0 degrees
G/T at Max. Gain Point	4.8 dB/K
Min. Saturation Flux Density	-106.1 dBW/m2
Max. Saturation Flux Density	-78.1 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	WAAS

Receiving Beams 15:

Question	Response
Beam ID	WALV
Receive Beam Frequency	6648.73 MHz -6670.73 MHz
Beam Type	Fixed
Polarization	LHCP
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	45.0 degrees
G/T at Max. Gain Point	4.8 dB/K
Min. Saturation Flux Density	-106.1 dBW/m2
Max. Saturation Flux Density	-78.1 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	WAAS

Receiving Beams 16:

Question	Response

Beam ID	ASLW
Receive Beam Frequency	28125.0 MHz -28575.0 MHz
Beam Type	Fixed
Polarization	LHCP
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	19.0 dB/K
Min. Saturation Flux Density	-101.9 dBW/m2
Max. Saturation Flux Density	-76.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	United States

Receiving Beams 17:

Question	Response
Beam ID	ASRW
Receive Beam Frequency	28125.0 MHz -28575.0 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	19.0 dB/K
Min. Saturation Flux Density	-101.9 dBW/m2
Max. Saturation Flux Density	-76.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	United States

Receiving Beams 18:

Question	Response
Beam ID	ASLX
Receive Beam Frequency	29525.0 MHz -29975.0 MHz
Beam Type	Fixed
Polarization	LHCP
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	19.0 dB/K
Min. Saturation Flux Density	-101.9 dBW/m2
Max. Saturation Flux Density	-76.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	United States

Receiving Beams 19:

Question	Response

Beam ID	ASRX
Receive Beam Frequency	29525.0 MHz -29975.0 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	19.0 dB/K
Min. Saturation Flux Density	-101.9 dBW/m2
Max. Saturation Flux Density	-76.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	United States

Receiving Channels (45)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
KU04	210.0	14125.0	Service Link
KU03	210.0	13875.0	Service Link
KU02	210.0	13125.0	Service Link
KU01	210.0	12875.0	Service Link
AU05	450.0	29750.0	Service Link
AU04	450.0	29250.0	Service Link
AU03	450.0	28350.0	Service Link
AU02	210.0	27975.0	Service Link
AU01	210.0	27725.0	Service Link
CU07	36.0	6065.0	Service Link
WU02	22.0	6659.73	Service Link
WU01	22.0	6608.58	Service Link
CU26	36.0	6485.0	Service Link
CU25	36.0	6445.0	Service Link
CU11	36.0	6145.0	Service Link
CU10	36.0	6125.0	Service Link
CU09	36.0	6105.0	Service Link
CU08	36.0	6085.0	Service Link
CU06	36.0	6045.0	Service Link
CU12	36.0	6165.0	Service Link
CU28	36.0	6565.0	Service Link
CU29	36.0	6605.0	Service Link
CU30	36.0	6645.0	Service Link
CU31	36.0	6685.0	Service Link

CU24	36.0	6405.0	Service Link
CU23	36.0	6385.0	Service Link
CU22	36.0	6365.0	Service Link
CU21	36.0	6345.0	Service Link
CU20	36.0	6325.0	Service Link
CU19	36.0	6305.0	Service Link
CU18	36.0	6285.0	Service Link
CU17	36.0	6265.0	Service Link
CU16	36.0	6245.0	Service Link
CU15	36.0	6225.0	Service Link
CU14	36.0	6205.0	Service Link
CU13	36.0	6185.0	Service Link
KU05	210.0	14375.0	Service Link
CU27	36.0	6525.0	Service Link
CU05	36.0	6025.0	Service Link
CU04	36.0	6005.0	Service Link
CU03	36.0	5985.0	Service Link
CU02	36.0	5965.0	Service Link
CU01	36.0	5945.0	Service Link
CMD2	1.0	6424.25	TT&C
CMD1	1.0	6421.75	TT&C

Transmitting Beams 1:

Question	Response
Beam ID	ALVD
Transmit Beam Frequency	19700.987 MHz -19701.013 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	-30.98 dBW/Hz
Max. Transmit EIRP	13.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	GLOBAL

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	-118.0	-118.0	-118.0	-118.0	-118.0	-118.0

Transmitting Beams 2:

Question	Response
Beam ID	ASLD
Transmit Beam Frequency	17820.0 MHz -18775.0 MHz

Beam Type	Fixed
Polarization	LHCP
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	-16.0 dBW/Hz
Max. Transmit EIRP	64.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	UNITED STATES

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	-118.0	-118.0	-118.0	-118.0	-118.0	-118.0

Transmitting Beams 3:

Question	Response
Beam ID	ASLE
Transmit Beam Frequency	19225.0 MHz -20175.0 MHz
Beam Type	Fixed
Polarization	LHCP
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	-16.0 dBW/Hz
Max. Transmit EIRP	64.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	United States

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	-118.0	-118.0	-118.0	-118.0	-118.0	-118.0

Transmitting Beams 4:

Question	Response
Beam ID	ASRD
Transmit Beam Frequency	17820.0 MHz -18775.0 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	-16.0 dBW/Hz

Max. Transmit EIRP	64.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	UNITED STATES

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	-118.0	-118.0	-118.0	-118.0	-118.0	-118.0

Transmitting Beams 5:

Question	Response
Beam ID	ASRE
Transmit Beam Frequency	19225.0 MHz -20175.0 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	-16.0 dBW/Hz
Max. Transmit EIRP	64.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	UNITED STATES

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	-118.0	-118.0	-118.0	-118.0	-118.0	-118.0

Transmitting Beams 6:

Question	Response
Beam ID	CAHD
Transmit Beam Frequency	3702.0 MHz -4198.0 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	-30.0 dBW/Hz
Max. Transmit EIRP	45.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	UNITED STATES

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	-157.3	-157.1	-157.0	-156.9	-156.8	-156.0

Transmitting Beams 7:

Question	Response
Beam ID	CAVD
Transmit Beam Frequency	3702.0 MHz -4198.0 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	-30.0 dBW/Hz
Max. Transmit EIRP	45.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	UNITED STATES

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	-157.3	-157.1	-157.0	-156.9	-156.8	-156.0

Transmitting Beams 8:

Question	Response
Beam ID	CLVD
Transmit Beam Frequency	3700.237 MHz -3700.263 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	-37.8 dBW/Hz
Max. Transmit EIRP	6.2 dBW
Co- or Cross Polar Mode	C
Service Area Description	GLOBAL

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	-152.1	-149.5	-147.0	-144.5	-142.0	-142.0

Transmitting Beams 9:

Question	Response
Beam ID	KLLD
Transmit Beam Frequency	11199.487 MHz -11199.513 MHz
Beam Type	Fixed
Polarization	LHCP
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	-22.98 dBW/Hz
Max. Transmit EIRP	21.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	GLOBAL

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	-150.2	-150.1	-150.0	-149.9	-149.8	-149.0

Transmitting Beams 10:

Question	Response
Beam ID	KSHD
Transmit Beam Frequency	10720.0 MHz -11180.0 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	-15.6 dBW/Hz

Max. Transmit EIRP	62.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	UNITED STATES

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	-150.0	-147.5	-145.0	-142.5	-140.0	-140.0

Transmitting Beams 11:

Question	Response
Beam ID	KSVD
Transmit Beam Frequency	10720.0 MHz -11180.0 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	-15.6 dBW/Hz
Max. Transmit EIRP	62.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	UNITED STATES

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	-150.0	-147.5	-145.0	-142.5	-140.0	-140.0

Transmitting Beams 12:

Question	Response
Beam ID	TGHD
Transmit Beam Frequency	4196.5 MHz -4199.5 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	-43.3 dBW/Hz
Max. Transmit EIRP	13.7 dBW
Co- or Cross Polar Mode	C
Service Area Description	GLOBAL

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	-162.0	-159.0	-157.0	-154.5	-152.0	-152.0

Transmitting Beams 13:

Question	Response
Beam ID	THLD
Transmit Beam Frequency	4197.25 MHz -4198.75 MHz
Beam Type	Fixed
Polarization	LHCP
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	45.0 degrees
Max. Transmit EIRP Density	-45.1 dBW/Hz
Max. Transmit EIRP	11.9 dBW
Co- or Cross Polar Mode	C
Service Area Description	GLOBAL

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	-162.0	-159.0	-157.0	-154.5	-152.0	-152.0

Transmitting Beams 14:

Question	Response
Beam ID	TPLD
Transmit Beam Frequency	4197.25 MHz -4198.75 MHz

Beam Type	Fixed
Polarization	LHCP
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	45.0 degrees
Max. Transmit EIRP Density	-41.6 dBW/Hz
Max. Transmit EIRP	15.4 dBW
Co- or Cross Polar Mode	C
Service Area Description	GLOBAL

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	-162.0	-159.5	-157.0	-154.5	-152.0	-152.0

Transmitting Beams 15:

Question	Response
Beam ID	KSHE
Transmit Beam Frequency	11220.0 MHz -11680.0 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	-15.6 dBW/Hz
Max. Transmit EIRP	62.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	UNITED STATES

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	-150.0	-147.5	-145.0	-142.5	-140.0	-140.0

Transmitting Beams 16:

Question	Response
Beam ID	KSVE
Transmit Beam Frequency	11220.0 MHz -11680.0 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	-15.6 dBW/Hz

Max. Transmit EIRP	62.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	UNITED STATES

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	-150.0	-147.5	-145.0	-142.5	-140.0	-140.0

Transmitting Beams 17:

Question	Response
Beam ID	ASLF
Transmit Beam Frequency	18325.0 MHz -18775.0 MHz
Beam Type	Fixed
Polarization	LHCP
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	-16.0 dBW/Hz
Max. Transmit EIRP	64.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	UNITED STATES

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	-118.0	-118.0	-118.0	-118.0	-118.0	-118.0

Transmitting Beams 18:

Question	Response
Beam ID	ASRF
Transmit Beam Frequency	18325.0 MHz -18775.0 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	-16.0 dBW/Hz
Max. Transmit EIRP	64.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	UNITED STATES

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	-118.0	-118.0	-118.0	-118.0	-118.0	-118.0

Transmitting Beams 19:

Question	Response
Beam ID	ASLG
Transmit Beam Frequency	19725.0 MHz -20175.0 MHz
Beam Type	Fixed
Polarization	LHCP
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	-16.0 dBW/Hz
Max. Transmit EIRP	64.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	UNITED STATES

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	-118.0	-118.0	-118.0	-118.0	-118.0	-118.0

Transmitting Beams 20:

Question	Response
Beam ID	ASRG
Transmit Beam Frequency	19725.0 MHz -20175.0 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	-16.0 dBW/Hz
Max. Transmit EIRP	64.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	UNITED STATES

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	-118.0	-118.0	-118.0	-118.0	-118.0	-118.0

Transmitting Beams 21:

Question	Response
Beam ID	ASLH
Transmit Beam Frequency	17820.0 MHz -18775.0 MHz
Beam Type	Fixed
Polarization	LHCP
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	-16.0 dBW/Hz
Max. Transmit EIRP	64.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	UNITED STATES

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	-118.0	-118.0	-118.0	-118.0	-118.0	-118.0

Transmitting Beams 22:

Question	Response
Beam ID	ASRH
Transmit Beam Frequency	17820.0 MHz -18775.0 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	-16.0 dBW/Hz

Max. Transmit EIRP	64.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	UNITED STATES

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	-118.0	-118.0	-118.0	-118.0	-118.0	-118.0

Transmitting Beams 23:

Question	Response
Beam ID	KSHF
Transmit Beam Frequency	10720.0 MHz -11680.0 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	-15.6 dBW/Hz
Max. Transmit EIRP	62.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	UNITED STATES

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	-150.0	-147.5	-145.0	-142.5	-140.0	-140.0

Transmitting Beams 24:

Question	Response
Beam ID	KSVF
Transmit Beam Frequency	10720.0 MHz -11680.0 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	-15.6 dBW/Hz
Max. Transmit EIRP	62.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	UNITED STATES

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	-150.0	-147.5	-145.0	-142.5	-140.0	-140.0

Transmitting Beams 25:

Question	Response
Beam ID	WARD
Transmit Beam Frequency	1165.45 MHz -1187.45 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	-38.7 dBW/Hz
Max. Transmit EIRP	34.7 dBW
Co- or Cross Polar Mode	C
Service Area Description	WAAS

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	-166.0	-165.8	-165.7	-165.6	-165.5	-164.7

Transmitting Beams 26:

Question	Response
Beam ID	WARE
Transmit Beam Frequency	1564.42 MHz -1586.42 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	-39.4 dBW/Hz
Max. Transmit EIRP	34.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	WAAS

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	-166.7	-166.5	-166.4	-166.3	-166.2	-165.4

Transmitting Beams 27:

Question	Response
Beam ID	WAVB
Transmit Beam Frequency	3700.0 MHz -3700.5 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	-38.7 dBW/Hz
Max. Transmit EIRP	20.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	WAAS

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	-166.0	-165.8	-165.7	-165.6	-165.5	-164.7

Transmitting Channels (46)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
AD06	955.0	18297.5	Service Link
AD05	450.0	19950.0	Service Link
AD04	450.0	19450.0	Service Link
WB01	0.5	3700.25	Service Link
WD02	22.0	1575.42	Service Link
WD01	22.0	1176.45	Service Link
AD03	450.0	18550.0	Service Link
AD02	210.0	18175.0	Service Link
AD01	210.0	17925.0	Service Link
KD06	460.0	11450.0	Service Link
KD05	460.0	10950.0	Service Link
KD04	210.0	11575.0	Service Link
KD03	210.0	11325.0	Service Link
KD02	210.0	11075.0	Service Link
KD01	210.0	10825.0	Service Link
CD24	36.0	4180.0	Service Link
CD23	36.0	4160.0	Service Link
CD22	36.0	4140.0	Service Link
CD21	36.0	4120.0	Service Link
CD20	36.0	4100.0	Service Link
CD19	36.0	4080.0	Service Link
ULPK	0.025	11199.5	TT&C
ULPC	0.025	3700.25	TT&C
ULPA	0.025	19701.0	TT&C

TLM4	0.5	4199.25	TT&C
TLM3	0.5	4196.75	TT&C
TLM2	0.5	4198.5	TT&C
TLM1	0.5	4197.5	TT&C
CD12	36.0	3940.0	Service Link
CD11	36.0	3920.0	Service Link
CD10	36.0	3900.0	Service Link
CD09	36.0	3880.0	Service Link
CD08	36.0	3860.0	Service Link
CD07	36.0	3840.0	Service Link
CD06	36.0	3820.0	Service Link
CD05	36.0	3800.0	Service Link
CD04	36.0	3780.0	Service Link
CD03	36.0	3760.0	Service Link
CD02	36.0	3740.0	Service Link
CD01	36.0	3720.0	Service Link
CD18	36.0	4060.0	Service Link
CD17	36.0	4040.0	Service Link
CD16	36.0	4020.0	Service Link
CD15	36.0	4000.0	Service Link
CD14	36.0	3980.0	Service Link
CD13	36.0	3960.0	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
g30 gxt for loading.mdb		GSO Antenna Gain Contour Data	GIMS file (*.mdb)	G30 Beams