



312 File Number: **SATPPL2019040300022**

Filing Description

Question	Response
Description	This Schedule S is submitted in support of the request for U.S market access for the Ku-band operations of the NSS-6 satellite at 169.5 W.L.

Satellite Information

Question	Response
Select Orbit Type	GSO
Space Station or Satellite Network Name	NSS-6
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		13750.0 MHz -14500.0 MHz	Receive
Fixed-Satellite Service		12500.0 MHz -12750.0 MHz	Transmit
Fixed-Satellite Service		11450.0 MHz -11700.0 MHz	Transmit
Fixed-Satellite Service		10950.0 MHz -11200.0 MHz	Transmit

Orbital Information For Geostationary Satellites

Section	Question	Response
Orbital Longitude Information	Orbital Longitude	169.0 degrees
	Hemisphere of Orbital Longitude	W
Longitudinal Tolerance or East /West Station-Keeping	Toward West	0.1 degrees
	Toward East	0.1 degrees
Inclination Excursion or North /South Station-Keeping Tolerance	Inclination Excursion or North /South Station-Keeping Tolerance	0.1 degrees
Antenna Axis Attitude Accuracy	Roll	0.15 degrees
	Pitch	0.15 degrees
	Yaw	0.35 degrees

Receiving Beams 1:

Question	Response
Beam ID	RCH
Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	9.31 dB/K
Min. Saturation Flux Density	-95.92 dBW/m ²
Max. Saturation Flux Density	-72.5 dBW/m ²
Co- or Cross Polar Mode	C
Service Area Description	Canada West Coast, Alaska, Pacific

Receiving Beams 2:

Question	Response
Beam ID	RCV
Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees

Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	9.36 dB/K
Min. Saturation Flux Density	-96.14 dBW/m ²
Max. Saturation Flux Density	-72.5 dBW/m ²
Co- or Cross Polar Mode	C
Service Area Description	Canada West Coast, Alaska, Pacific

Receiving Beams 3:

Question	Response
Beam ID	RNH
Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	8.51 dB/K
Min. Saturation Flux Density	-97.01 dBW/m ²
Max. Saturation Flux Density	-72.57 dBW/m ²
Co- or Cross Polar Mode	C
Service Area Description	Pacific, USA West Coast

Receiving Beams 4:

Question	Response
Beam ID	RNV
Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	8.9 dB/K
Min. Saturation Flux Density	-97.01 dBW/m2
Max. Saturation Flux Density	-72.5 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Pacific, USA West Coast

Receiving Beams 5:

Question	Response
Beam ID	RSH
Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	

Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	7.59 dB/K
Min. Saturation Flux Density	-96.14 dBW/m2
Max. Saturation Flux Density	-72.5 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Pacific, Hawaii

Receiving Beams 6:

Question	Response
Beam ID	RSV
Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dB
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	7.67 dB/K
Min. Saturation Flux Density	-96.14 dBW/m2
Max. Saturation Flux Density	-72.57 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Pacific, Hawaii

Receiving Beams 7:

Question	Response
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Beam ID	RAH
Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	8.49 dB/K
Min. Saturation Flux Density	-97.01 dBW/m2
Max. Saturation Flux Density	-72.57 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	South Pacific

Receiving Beams 8:

Question	Response
Beam ID	RAV
Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	

Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	8.05 dB/K
Min. Saturation Flux Density	-97.01 dBW/m2
Max. Saturation Flux Density	-72.5 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	South Pacific

Receiving Beams 9:

Question	Response
Beam ID	RHV
Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	-24.7 dB/K
Min. Saturation Flux Density	-85.01 dBW/m2
Max. Saturation Flux Density	-85.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	TC Horn. Visible earth, contour at 8 dB below the peak falls entirely beyond the edge of the visible earth.

Receiving Beams 10:

Question	Response
Beam ID	RMH
Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	7.9 dB/K
Min. Saturation Flux Density	-96.14 dBW/m ²
Max. Saturation Flux Density	-72.5 dBW/m ²
Co- or Cross Polar Mode	C
Service Area Description	Pacific, Japan

Receiving Beams 11:

Question	Response
Beam ID	RMV
Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees

Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	7.58 dB/K
Min. Saturation Flux Density	-97.01 dBW/m2
Max. Saturation Flux Density	-72.57 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Pacific, Japan

Receiving Beams 12:

Question	Response
Beam ID	RIH
Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	10.73 dB/K
Min. Saturation Flux Density	-97.01 dBW/m2
Max. Saturation Flux Density	-73.23 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Pacific

Receiving

Beams 13:

Question	Response
Beam ID	RIV
Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	10.72 dB/K
Min. Saturation Flux Density	-97.01 dBW/m2
Max. Saturation Flux Density	-72.5 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Pacific

Receiving Beams 14:

Question	Response
Beam ID	ROH
Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	

Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	-33.6 dB/K
Min. Saturation Flux Density	-80.01 dBW/m2
Max. Saturation Flux Density	-80.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	TC Omni. Visible earth, contour at 8 dB below the peak falls entirely beyond the edge of the visible earth.

Receiving Channels (17)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
CMD2	0.8	14499.0	TT&C
B5	36.0	14472.0	Service Link
C1	54.0	13778.0	Service Link
C2	54.0	13839.0	Service Link
C3	36.0	13891.0	Service Link
C4	36.0	13932.0	Service Link
C5	36.0	13973.0	Service Link
CMD1	0.8	14496.0	TT&C
B4	36.0	14431.0	Service Link
B1	54.0	14277.0	Service Link
B2	54.0	14338.0	Service Link
B3	36.0	14390.0	Service Link
A5	36.0	14224.0	Service Link
A1	54.0	14029.0	Service Link
A2	54.0	14090.0	Service Link
A3	36.0	14142.0	Service Link
A4	36.0	14183.0	Service Link

Transmitting Beams 1:

Question	Response
Beam ID	TAV
Transmit Beam Frequency	12500.0 MHz -12750.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-18.0 dBW/Hz
Max. Transmit EIRP	55.03 dBW
Co- or Cross Polar Mode	C
Service Area Description	South Pacific

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	-157.3	-156.5	-153.4	-149.6	-146.7	-144.0

Transmitting Beams 2:

Question	Response
Beam ID	TCHI
Transmit Beam Frequency	10950.0 MHz -11200.0 MHz

Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-18.4 dBW/Hz
Max. Transmit EIRP	54.61 dBW
Co- or Cross Polar Mode	C
Service Area Description	Canada West Coast, Alaska, Pacific

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	-150.0	-149.2	-148.4	-147.8	-146.9	-144.4

Transmitting Beams 3:

Question	Response
Beam ID	TCHm
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees

Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-18.4 dBW/Hz
Max. Transmit EIRP	54.61 dBW
Co- or Cross Polar Mode	C
Service Area Description	Canada West Coast, Alaska, Pacific

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	-150.0	-149.2	-148.4	-147.8	-146.9	-144.4

Transmitting Beams 4:

Question	Response
Beam ID	TCV
Transmit Beam Frequency	10950.0 MHz -11200.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-18.4 dBW/Hz

Max. Transmit EIRP	54.39 dBW
Co- or Cross Polar Mode	C
Service Area Description	Canada West Coast, Alaska, Pacific

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	-150.0	-149.2	-148.4	-147.8	-146.9	-144.4

Transmitting Beams 5:

Question	Response
Beam ID	TIHI
Transmit Beam Frequency	10950.0 MHz -11200.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-18.0 dBW/Hz
Max. Transmit EIRP	56.7 dBW
Co- or Cross Polar Mode	C
Service Area Description	Pacific

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	-167.3	-166.8	-166.0	-164.3	-162.5	-144.0

Transmitting Beams 6:

Question	Response
Beam ID	TIHh
Transmit Beam Frequency	12500.0 MHz -12750.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-18.0 dBW/Hz
Max. Transmit EIRP	56.7 dBW
Co- or Cross Polar Mode	C
Service Area Description	Pacific

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	-167.3	-166.8	-166.0	-164.3	-162.5	-144.0
kHz						

Transmitting Beams 7:

Question	Response
Beam ID	TIV
Transmit Beam Frequency	12500.0 MHz -12750.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-18.0 dBW/Hz
Max. Transmit EIRP	56.75 dBW
Co- or Cross Polar Mode	C
Service Area Description	Pacific

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	-167.3	-166.8	-166.0	-164.3	-162.5	-144.0
kHz						

Transmitting Beams 8:

Question	Response
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Beam ID	TMH
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-22.5 dBW/Hz
Max. Transmit EIRP	52.72 dBW
Co- or Cross Polar Mode	C
Service Area Description	Pacific, Japan

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	-150.0	-149.8	-149.9	-150.1	-150.1	-148.6

Transmitting Beams 9:

Question	Response
Beam ID	TMVI
Transmit Beam Frequency	10950.0 MHz -11200.0 MHz
Beam Type	Fixed
Polarization	V

Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-22.5 dBW/Hz
Max. Transmit EIRP	52.32 dBW
Co- or Cross Polar Mode	C
Service Area Description	Pacific, Japan

Max. Power Flux Density

	* 0° - 5° (dBW/m ²)	* 5° - 10° (dBW/m ²)	* 10° - 15° (dBW/m ²)	* 15° - 20° (dBW/m ²)	* 20° - 25° (dBW/m ²)	* 25° - 90° (dBW/m ²)
* BW:	/BW):	/BW):	/BW):	/BW):	/BW):	/BW):
4.0 kHz	-150.0	-149.8	-149.9	-150.1	-150.1	-148.6

Transmitting Beams 10:

Question	Response
Beam ID	TMVm
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	

Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-22.5 dBW/Hz
Max. Transmit EIRP	52.32 dBW
Co- or Cross Polar Mode	C
Service Area Description	Pacific, Japan

Max. Power Flux Density

	* 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	-149.8	-149.9	-150.1	-150.1	-148.6

Transmitting Beams 11:

Question	Response
Beam ID	TNH
Transmit Beam Frequency	12500.0 MHz -12750.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-18.9 dBW/Hz
Max. Transmit EIRP	54.86 dBW
Co- or Cross Polar Mode	C

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	-148.3	-147.6	-147.0	-146.2	-146.6	-145.0

Transmitting Beams 12:

Question	Response
Beam ID	TNVm
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dB
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-20.8 dBW/Hz
Max. Transmit EIRP	54.81 dBW
Co- or Cross Polar Mode	C
Service Area Description	Pacific, US West Coast

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	-150.1	-149.4	-148.8	-148.1	-148.5	-146.8

Transmitting Beams 13:

Question	Response
Beam ID	TNVh
Transmit Beam Frequency	12500.0 MHz -12750.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-19.0 dBW/Hz
Max. Transmit EIRP	54.81 dBW
Co- or Cross Polar Mode	C
Service Area Description	Pacific, US West Coast

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	-148.3	-147.6	-147.0	-146.3	-146.7	-145.0

Transmitting Beams 14:

Question	Response
Beam ID	TSH
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-18.0 dBW/Hz
Max. Transmit EIRP	54.53 dBW
Co- or Cross Polar Mode	C
Service Area Description	Pacific, Hawaii

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	-165.4	-165.0	-164.3	-163.3	-162.2	-144.0

Transmitting Beams 15:

Question	Response
Beam ID	TSVI
Transmit Beam Frequency	10950.0 MHz -11200.0 MHz

Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-18.0 dBW/Hz
Max. Transmit EIRP	54.66 dBW
Co- or Cross Polar Mode	C
Service Area Description	Pacific, Hawaii

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	-165.4	-165.0	-164.3	-163.3	-162.2	-144.0

Transmitting Beams 16:

Question	Response
Beam ID	TSVm
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees

Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-18.0 dBW/Hz
Max. Transmit EIRP	54.66 dBW
Co- or Cross Polar Mode	C
Service Area Description	Pacific, Hawaii

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	-165.4	-165.0	-164.3	-163.3	-162.2	-144.0

Transmitting Beams 17:

Question	Response
Beam ID	THH
Transmit Beam Frequency	10950.0 MHz -11200.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees

Max. Transmit EIRP Density	-41.5 dBW/Hz
Max. Transmit EIRP	11.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	TM Horn. Visible earth, contour at 8 dB below the peak falls entirely beyond the edge of the visible earth.

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	-168.8	-168.6	-168.5	-168.4	-168.3	-167.5

Transmitting Beams 18:

Question	Response
Beam ID	TOV
Transmit Beam Frequency	10950.0 MHz -11200.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-41.5 dBW/Hz
Max. Transmit EIRP	11.5 dBW

Co- or Cross Polar Mode C

Service Area Description TM Omni. Visible earth, contour at 8 dB below the peak falls entirely beyond the edge of the visible earth.

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	-168.8	-168.6	-168.5	-168.4	-168.3	-167.5

Transmitting Beams 19:

Question	Response
Beam ID	TAHI
Transmit Beam Frequency	10950.0 MHz -11200.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-18.0 dBW/Hz
Max. Transmit EIRP	54.25 dBW
Co- or Cross Polar Mode	C
Service Area Description	South Pacific

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	-157.3	-156.5	-153.4	-149.6	-146.7	-144.0

Transmitting Beams 20:

Question	Response
Beam ID	TAHh
Transmit Beam Frequency	12500.0 MHz -12750.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-18.0 dBW/Hz
Max. Transmit EIRP	54.25 dBW
Co- or Cross Polar Mode	C
Service Area Description	South Pacific

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	-157.3	-156.5	-153.4	-149.6	-146.7	-144.0

Transmitting Channels (17)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
BK2	0.2	11199.5	TT&C
A1	54.0	10977.0	Service Link
A2	54.0	11038.0	Service Link
A3	36.0	11090.0	Service Link
A4	36.0	11131.0	Service Link
A5	36.0	11172.0	Service Link
B1	54.0	11481.0	Service Link
B2	54.0	11542.0	Service Link
B3	36.0	11594.0	Service Link
B4	36.0	11635.0	Service Link
B5	36.0	11676.0	Service Link
BK1	0.2	11198.0	TT&C
C1	54.0	12534.0	Service Link
C2	54.0	12595.0	Service Link
C3	36.0	12647.0	Service Link
C4	36.0	12688.0	Service Link
C5	36.0	12729.0	Service Link

Certification Questions

Question	Response
<p>Are the applicable service area coverage requirements of 25.143(b)(2) (ii) and (iii), or 25.144(a)(3)(i), or 25.145 (c)(1) and (2), or 25.146(i)(1) and (2), or 25.148(c), or 25.225 met?</p>	<p>N/A</p>
<p>Are the applicable frequency tolerances of 25.202(e) and out-of-band emission limits of 25.202(f)(1),(2), and (3) met?</p>	<p>Yes</p>
<p>Are the cessation of emissions requirements of 25.207 met?</p>	<p>Yes</p>
<p>Are the applicable power-flux-density limits of 25.208 met, and is the appropriate technical showing provided within the application?</p>	<p>Yes</p>
<p>For NGSO applications, are the applicable equivalent-power-flux-density limits of 25.208 met, and is the appropriate technical showing provided within the application?</p>	<p>N/A</p>
<p>Are the applicable full-frequency-reuse requirements of 25.210 met?</p>	<p>Yes</p>
<p>If the application is for a 17/24 GHz BSS space station, will it be operated at an offset location with full power and interference protection in accordance with 25.262(b)?</p>	

Attachments

File Name	Beam	Field	Attachment Type	Description
T-SV.gxt	TSVm	GSO Antenna Gain Contour Data	GXT file (*.gxt)	
T-SV.gxt	TSVI	GSO Antenna Gain Contour Data	GXT file (*.gxt)	
T-SH.gxt	TSH	GSO Antenna Gain Contour Data	GXT file (*.gxt)	
T-NV.gxt	TNVm	GSO Antenna Gain Contour Data	GXT file (*.gxt)	
T-NV.gxt	TNVh	GSO Antenna Gain Contour Data	GXT file (*.gxt)	
T-NH.gxt	TNH	GSO Antenna Gain Contour Data	GXT file (*.gxt)	
T-MV.gxt	TMVm	GSO Antenna Gain Contour Data	GXT file (*.gxt)	
T-MV.gxt	TMVI	GSO Antenna Gain Contour Data	GXT file (*.gxt)	
T-MH.gxt	TMH	GSO Antenna Gain Contour Data	GXT file (*.gxt)	
T-IV.gxt	TIV	GSO Antenna Gain Contour Data	GXT file (*.gxt)	
T-IH.gxt	TIHI	GSO Antenna Gain Contour Data	GXT file (*.gxt)	
T-IH.gxt	TIHh	GSO Antenna Gain Contour Data	GXT file (*.gxt)	
T-CV.gxt	TCV	GSO Antenna Gain Contour Data	GXT file (*.gxt)	
T-CH.gxt	TCHm	GSO Antenna Gain Contour Data	GXT file (*.gxt)	
T-CH.gxt	TCHI	GSO Antenna Gain Contour Data	GXT file (*.gxt)	
T-AV.gxt	TAV	GSO Antenna Gain Contour Data	GXT file (*.gxt)	

<u>T-AH.gxt</u>	TAHI	GSO Antenna Gain Contour Data	GXT file (*.gxt)
<u>T-AH.gxt</u>	TAHh	GSO Antenna Gain Contour Data	GXT file (*.gxt)
<u>R-SV.gxt</u>	RSV	GSO Antenna Gain Contour Data	GXT file (*.gxt)
<u>R-SH.gxt</u>	RSH	GSO Antenna Gain Contour Data	GXT file (*.gxt)
<u>R-NV.gxt</u>	RNV	GSO Antenna Gain Contour Data	GXT file (*.gxt)
<u>R-NH.gxt</u>	RNH	GSO Antenna Gain Contour Data	GXT file (*.gxt)
<u>R-MV.gxt</u>	RMV	GSO Antenna Gain Contour Data	GXT file (*.gxt)
<u>R-MH.gxt</u>	RMH	GSO Antenna Gain Contour Data	GXT file (*.gxt)
<u>R-IV.gxt</u>	RIV	GSO Antenna Gain Contour Data	GXT file (*.gxt)
<u>R-IH.gxt</u>	RIH	GSO Antenna Gain Contour Data	GXT file (*.gxt)
<u>R-CV.gxt</u>	RCV	GSO Antenna Gain Contour Data	GXT file (*.gxt)
<u>R-CH.gxt</u>	RCH	GSO Antenna Gain Contour Data	GXT file (*.gxt)
<u>R-AV.gxt</u>	RAV	GSO Antenna Gain Contour Data	GXT file (*.gxt)
<u>R-AH.gxt</u>	RAH	GSO Antenna Gain Contour Data	GXT file (*.gxt)
