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

Federal Communications Commission

312 File Number: **SATMOD2017102300142**

Filing Description

Question	Response
Description	License Term Extension for IS-907 at 27.5WL

Satellite Information

Question	Response
Select Orbit Type	GSO
Space Station or Satellite Network Name	Intelsat 907
Estimated Lifetime of Satellite(s) From Date of Launch	20 Years
Will the space station(s) operate on a Common Carrier basis?	No

Operating Frequency Bands (5)

Nature of service	Description	Frequency Band(s)	Mode Type
Fixed-Satellite Service		5850.0 MHz -6425.0 MHz	Receive
Fixed-Satellite Service		14000.0 MHz -14500.0 MHz	Receive
Fixed-Satellite Service		3625.0 MHz -4200.0 MHz	Transmit
Fixed-Satellite Service		10950.0 MHz -11200.0 MHz	Transmit
Fixed-Satellite Service		11450.0 MHz -11700.0 MHz	Transmit

Orbital Information For Geostationary Satellites

Section	Question	Response
Orbital Longitude Information	Orbital Longitude	28.0 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	CGLU
Receive Beam Frequency	6300.0 MHz -6425.0 MHz
Beam Type	Fixed
Polarization	LHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	-6.6 dB/K
Min. Saturation Flux Density	-92.2 dBW/m2
Max. Saturation Flux Density	-70.2 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Global

Receiving Beams 2:

Question	Response
Beam ID	CGRU
Receive Beam Frequency	6300.0 MHz -6425.0 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees

Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	-6.5 dB/K
Min. Saturation Flux Density	-92.8 dBW/m2
Max. Saturation Flux Density	-70.8 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Global

Receiving Beams 3:

Question	Response
Beam ID	CMDB
Receive Beam Frequency	6175.82 MHz -6176.78 MHz
Beam Type	Fixed
Polarization	LHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 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	-90.0 dBW/m2
Max. Saturation Flux Density	-89.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Global

Receiving

Beams 4:

Question	Response
Beam ID	CMDG
Receive Beam Frequency	6173.22 MHz -6174.18 MHz
Beam Type	Fixed
Polarization	LHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 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	-90.0 dBW/m2
Max. Saturation Flux Density	-89.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Global

Receiving Beams 5:

Question	Response
Beam ID	CWRU
Receive Beam Frequency	5850.0 MHz -6300.0 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No

Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	-2.45 dB/K
Min. Saturation Flux Density	-89.5 dBW/m2
Max. Saturation Flux Density	-67.5 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	South America

Receiving Beams 6:

Question	Response
Beam ID	EHLU
Receive Beam Frequency	5850.0 MHz -6300.0 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	-2.9 dB/K
Min. Saturation Flux Density	-90.2 dBW/m2
Max. Saturation Flux Density	-68.2 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Africa and Europe

Receiving Beams 7:

Question	Response

Beam ID	MWRU
Receive Beam Frequency	5850.0 MHz -6300.0 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	2.2 dB/K
Min. Saturation Flux Density	-91.1 dBW/m2
Max. Saturation Flux Density	-69.1 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Central America and Caribbean

Receiving Beams 8:

Question	Response
Beam ID	NERU
Receive Beam Frequency	5850.0 MHz -6300.0 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No

Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	3.8 dB/K
Min. Saturation Flux Density	-92.2 dBW/m2
Max. Saturation Flux Density	-70.2 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Europe and Greenland

Receiving Beams 9:

Question	Response
Beam ID	NWRU
Receive Beam Frequency	5850.0 MHz -6300.0 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	5.1 dB/K
Min. Saturation Flux Density	-90.25 dBW/m2
Max. Saturation Flux Density	-68.25 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Northern United States

Receiving Beams 10:

Question	Response

Beam ID	S1HU
Receive Beam Frequency	14000.0 MHz -14500.0 MHz
Beam Type	Steerable
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	8.85 dB/K
Min. Saturation Flux Density	-91.75 dBW/m2
Max. Saturation Flux Density	-73.75 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Steerable Spot beam. May be pointed toward any visible location on the Earth, currently serving Europe

Receiving Beams 11:

Question	Response
Beam ID	S2VU
Receive Beam Frequency	14000.0 MHz -14500.0 MHz
Beam Type	Steerable
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees

Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	9.2 dB/K
Min. Saturation Flux Density	-91.15 dBW/m2
Max. Saturation Flux Density	-73.15 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Steerable Spot beam. May be pointed toward any visible location on the Earth, currently serving Caribbean

Receiving Beams 12:

Question	Response
Beam ID	SERU
Receive Beam Frequency	5850.0 MHz -6300.0 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	-1.15 dB/K
Min. Saturation Flux Density	-91.0 dBW/m2
Max. Saturation Flux Density	-69.0 dBW/m2
Co- or Cross Polar Mode	C

Service Area Description	Malaysia, Australia, Indonesia, and Thailand

Receiving Beams 13:

Question	Response
Beam ID	SWRU
Receive Beam Frequency	5850.0 MHz -6300.0 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	1.4 dB/K
Min. Saturation Flux Density	-90.1 dBW/m2
Max. Saturation Flux Density	-68.1 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Southern South America

Receiving Beams 14:

Question	Response
Beam ID	WHLU
Receive Beam Frequency	5850.0 MHz -6300.0 MHz
Beam Type	Fixed
Polarization	LHCP
Peak Gain	dBi

Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	-2.0 dB/K
Min. Saturation Flux Density	-89.9 dBW/m2
Max. Saturation Flux Density	-67.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	North and South America

Receiving Channels (19)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
SKU2	72.0	14125.0	Service Link
CU2	72.0	5970.0	Service Link
CU1	72.0	5890.0	Service Link
SKU1	77.0	14042.5	Service Link
CMG1	0.96	6173.7	TT&C
SKU7	36.0	14435.0	Service Link
SKU3	72.0	14205.0	Service Link
SKU4	72.0	14295.0	Service Link
CU4	72.0	6130.0	Service Link
CU5	72.0	6220.0	Service Link
CMB1	0.96	6176.3	TT&C
SKU6	36.0	14395.0	Service Link
SKU8	36.0	14475.0	Service Link
CGU1	36.0	6320.0	Service Link
CGU2	36.0	6360.0	Service Link
CGU3	41.0	6402.5	Service Link
CU3	72.0	6050.0	Service Link
CU6	36.0	6280.0	Service Link
SKU5	36.0	14355.0	Service Link

Transmitting Beams 1:

Question	Response
Beam ID	CGLD
Transmit Beam Frequency	4075.0 MHz -4200.0 MHz
Beam Type	Fixed
Polarization	LHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-40.1 dBW/Hz
Max. Transmit EIRP	35.5 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	-160.3	-160.1	-160.0	-159.9	-159.8	-159.0

Transmitting Beams 2:

Question	Response
Beam ID	CGRD
Transmit Beam Frequency	4075.0 MHz -4200.0 MHz

Beam Type	Fixed
Polarization	RHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-40.1 dBW/Hz
Max. Transmit EIRP	35.5 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	-160.3	-160.1	-160.0	-159.9	-159.8	-159.0

Transmitting Beams 3:

Question	Response
Beam ID	CWLD
Transmit Beam Frequency	3625.0 MHz -4075.0 MHz
Beam Type	Fixed
Polarization	LHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees

Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-33.0 dBW/Hz
Max. Transmit EIRP	42.6 dBW
Co- or Cross Polar Mode	C
Service Area Description	South America

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	-160.3	-160.1	-160.0	-159.9	-159.8	-159.0

Transmitting Beams 4:

Question	Response
Beam ID	EHRD
Transmit Beam Frequency	3625.0 MHz -4075.0 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-34.3 dBW/Hz

Max. Transmit EIRP	41.3 dBW
Co- or Cross Polar Mode	C
Service Area Description	Africa and Europe

Max. Power Flux Density

* BW:	* 0° - 5° (dbW/m^2 /BW):	* 5° - 10° (dbW/m^2 /BW):	* 10° - 15° (dbW/m^2 /BW):	* 15° - 20° (dbW/m^2 /BW):	* 20° - 25° (dbW/m^2 /BW):	* 25° - 90° (dbW/m^2 /BW):
4.0 kHz	-160.3	-160.1	-160.0	-159.9	-159.8	-159.0

Transmitting Beams 5:

Question	Response
Beam ID	MWLD
Transmit Beam Frequency	3625.0 MHz -4075.0 MHz
Beam Type	Fixed
Polarization	LHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-28.3 dBW/Hz
Max. Transmit EIRP	47.3 dBW
Co- or Cross Polar Mode	C
Service Area Description	Central America and Caribbean

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	-160.3	-160.1	-160.0	-159.9	-159.8	-159.0

Transmitting Beams 6:

Question	Response
Beam ID	NELD
Transmit Beam Frequency	3625.0 MHz -4075.0 MHz
Beam Type	Fixed
Polarization	LHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-29.8 dBW/Hz
Max. Transmit EIRP	45.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	Europe and Greenland

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	-160.3	-160.1	-160.0	-159.9	-159.8	-159.0

Transmitting Beams 7:

Question	Response
Beam ID	NWLD
Transmit Beam Frequency	3625.0 MHz -4075.0 MHz
Beam Type	Fixed
Polarization	LHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-32.9 dBW/Hz
Max. Transmit EIRP	42.7 dBW
Co- or Cross Polar Mode	C
Service Area Description	Northern 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	-160.3	-160.1	-160.0	-159.9	-159.8	-159.0

Transmitting Beams 8:

Question	Response
Beam ID	S1VD
Transmit Beam Frequency	10950.0 MHz -11200.0 MHz

Beam Type	Steerable
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-22.1 dBW/Hz
Max. Transmit EIRP	53.45 dBW
Co- or Cross Polar Mode	C
Service Area Description	Steerable Spot beam. May be pointed toward any visible location on the Earth, currently serving Europe

Max. Power Flux Density

* BW:	* 0° - 5° (dbW/m^2 /BW):	* 5° - 10° (dbW/m^2 /BW):	* 10° - 15° (dbW/m^2 /BW):	* 15° - 20° (dbW/m^2 /BW):	* 20° - 25° (dbW/m^2 /BW):	* 25° - 90° (dbW/m^2 /BW):
4.0 kHz	-149.7	-149.5	-149.4	-149.3	-149.2	-148.4

Transmitting Beams 9:

Question	Response
Beam ID	S1VE
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz
Beam Type	Steerable
Polarization	V
Peak Gain	dBi

Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-22.1 dBW/Hz
Max. Transmit EIRP	53.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	Steerable Spot beam. May be pointed toward any visible location on the Earth, currently serving Europe

Max. Power Flux Density

* BW:	* 0° - 5° (dbW/m^2 /BW):	* 5° - 10° (dbW/m^2 /BW):	* 10° - 15° (dbW/m^2 /BW):	* 15° - 20° (dbW/m^2 /BW):	* 20° - 25° (dbW/m^2 /BW):	* 25° - 90° (dbW/m^2 /BW):
4.0 kHz	-149.7	-149.5	-149.4	-149.3	-149.2	-148.4

Transmitting Beams 10:

Question	Response
Beam ID	S2HD
Transmit Beam Frequency	10950.0 MHz -11200.0 MHz
Beam Type	Steerable
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	

Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-22.1 dBW/Hz
Max. Transmit EIRP	53.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	Steerable Spot beam. May be pointed toward any visible location on the Earth, currently serving Caribbean

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	-149.7	-149.5	-149.4	-149.3	-149.2	-148.4

Transmitting Beams 11:

Question	Response
Beam ID	S2HE
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz
Beam Type	Steerable
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees

Max. Transmit EIRP Density	-22.1 dBW/Hz
Max. Transmit EIRP	53.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	Steerable Spot beam. May be pointed toward any visible location on the Earth, currently serving Caribbean

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	-149.7	-149.5	-149.4	-149.3	-149.2	-148.4

Transmitting Beams 12:

Question	Response
Beam ID	SELD
Transmit Beam Frequency	3625.0 MHz -4075.0 MHz
Beam Type	Fixed
Polarization	LHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-34.4 dBW/Hz
Max. Transmit EIRP	41.2 dBW
Co- or Cross Polar Mode	C

Service Area Description	Sub-Saharan Africa

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	-160.3	-160.1	-160.0	-159.9	-159.8	-159.0

Transmitting Beams 13:

Question	Response
Beam ID	SWLD
Transmit Beam Frequency	3625.0 MHz -4075.0 MHz
Beam Type	Fixed
Polarization	LHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-31.7 dBW/Hz
Max. Transmit EIRP	43.9 dBW
Co- or Cross Polar Mode	C
Service Area Description	Southern South America

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	-160.3	-160.1	-160.0	-159.9	-159.8	-159.0

Transmitting Beams 14:

Question	Response
Beam ID	TLMB
Transmit Beam Frequency	3947.365 MHz -3952.635 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-42.0 dBW/Hz
Max. Transmit EIRP	8.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Global-Telemetry

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	-167.3	-167.1	-167.0	-166.9	-166.8	-166.0

Transmitting Beams 15:

Question	Response
Beam ID	TLMG
Transmit Beam Frequency	3947.365 MHz -3952.635 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-42.0 dBW/Hz
Max. Transmit EIRP	8.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Global-Telemetry

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	-167.3	-167.1	-167.0	-166.9	-166.8	-166.0

Transmitting Beams 16:

Question	Response
Beam ID	UPCV
Transmit Beam Frequency	3949.9 MHz -3950.1 MHz

Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-36.0 dBW/Hz
Max. Transmit EIRP	8.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Global-Beacon

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	-163.2	-163.1	-163.0	-162.9	-162.8	-162.0

Transmitting Beams 17:

Question	Response
Beam ID	UPKC
Transmit Beam Frequency	11197.9 MHz -11198.015 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees

Antenna Rotational Error	0.3 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-39.0 dBW/Hz
Max. Transmit EIRP	11.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Global-Beacon

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	-160.2	-160.1	-160.0	-159.9	-159.8	-159.0

Transmitting Beams 18:

Question	Response
Beam ID	UPKD
Transmit Beam Frequency	11451.98 MHz -11452.15 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-39.0 dBW/Hz

Max. Transmit EIRP	11.0 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	-160.2	-160.1	-160.0	-159.9	-159.8	-159.0

Transmitting Beams 19:

Question	Response
Beam ID	WHRD
Transmit Beam Frequency	3625.0 MHz -4075.0 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.3 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-35.5 dBW/Hz
Max. Transmit EIRP	40.1 dBW
Co- or Cross Polar Mode	C
Service Area Description	North and South America

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	-160.3	-160.1	-160.0	-159.9	-159.8	-159.0

Transmitting Channels (24)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
BCK2	0.025	11452.0	TT&C
TLM4	0.27	3952.5	TT&C
TLM3	0.27	3948.0	TT&C
TLM2	0.27	3952.0	TT&C
TLM1	0.27	3947.5	TT&C
SKD1	77.0	10992.5	Service Link
CGD1	36.0	4095.0	Service Link
CD6	36.0	4055.0	Service Link
CD5	72.0	3995.0	Service Link
CD4	72.0	3905.0	Service Link
CD3	72.0	3825.0	Service Link
SKD8	36.0	11675.0	Service Link
SKD7	36.0	11635.0	Service Link
SKD6	36.0	11595.0	Service Link
SKD5	36.0	11555.0	Service Link
SKD4	72.0	11495.0	Service Link
SKD3	72.0	11155.0	Service Link
CGD3	41.0	4177.5	Service Link
CGD2	36.0	4135.0	Service Link
SKD2	72.0	11075.0	Service Link
BNCC	0.025	3950.0	TT&C
BCK1	0.025	11198.0	TT&C
CD1	72.0	3665.0	Service Link
CD2	72.0	3745.0	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
is907 beam patterns.mdb		GSO Antenna Gain Contour Data	GIMS file (*.mdb)	IS-907 Beams