Approved by OMB 3060-0678
Estimated Burden: up to 80 hours
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Federal Communications Commission

312 File Number: **SATLOA2017102700145**

Filing Description

Question	Response
Description	Intelsat 15R Replacement at 85 E.L.

Satellite Information

Question	Response
Select Orbit Type	GSO
Space Station or Satellite Network Name	Intelsat 15R
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 (7)

Nature of service	Description	Frequency Band(s)	Mode Type
Fixed-Satellite Service		12500.0 MHz -12750.0 MHz	Transmit
Fixed-Satellite Service		17300.0 MHz -17800.0 MHz	Receive
Fixed-Satellite Service		13750.0 MHz -14500.0 MHz	Receive
Fixed-Satellite Service		27500.0 MHz -30000.0 MHz	Receive
Fixed-Satellite Service		10950.0 MHz -11200.0 MHz	Transmit
Fixed-Satellite Service		17800.0 MHz -20200.0 MHz	Transmit
Fixed-Satellite Service		11450.0 MHz -12200.0 MHz	Transmit

Orbital Information For Geostationary Satellites

Section	Question	Response
Orbital Longitude Information	Orbital Longitude	85.0 degrees
	Hemisphere of Orbital Longitude	E
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	0.05 degrees
Eccentricity	Max. Eccentricity	0.1
Antenna Axis Attitude Accuracy	Roll	0.1 degrees
	Pitch	0.1 degrees
	Yaw	0.1 degrees

Receiving Beams 1:

Question	Response
Beam ID	SKHU
Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Steerable
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Min. Cross-Polar Isolation within Service Area	27.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	12.0 dB/K
Min. Saturation Flux Density	-124.0 dBW/m2
Max. Saturation Flux Density	-88.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Steerable Spot Beam

Receiving Beams 2:

Question	Response
Beam ID	SKVU
Receive Beam Frequency	13750.0 MHz -14000.0 MHz
Beam Type	Steerable
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees

Antenna Rotational Error	0.34 degrees
Min. Cross-Polar Isolation within Service Area	27.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	12.0 dB/K
Min. Saturation Flux Density	-124.0 dBW/m2
Max. Saturation Flux Density	-88.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Steerable Spot Beam

Receiving Beams 3:

Question	Response
Beam ID	EIVU
Receive Beam Frequency	14000.0 MHz -14250.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Min. Cross-Polar Isolation within Service Area	27.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	2.5 dB/K
Min. Saturation Flux Density	-124.2 dBW/m2
Max. Saturation Flux Density	-88.2 dBW/m2
Co- or Cross Polar Mode	C

Service Area Description	East Indian Ocean Region

Receiving Beams 4:

Question	Response
Beam ID	WIVU
Receive Beam Frequency	14000.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Min. Cross-Polar Isolation within Service Area	27.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	3.7 dB/K
Min. Saturation Flux Density	-124.4 dBW/m2
Max. Saturation Flux Density	-88.4 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	West Indian Ocean Region

Receiving Beams 5:

Question	Response
Beam ID	JSLU
Receive Beam Frequency	27504.0 MHz -29970.0 MHz
Beam Type	Fixed
Polarization	LHCP

Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Min. Cross-Polar Isolation within Service Area	27.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	15.8 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	Japan

Receiving Beams 6:

Question	Response
Beam ID	KSLU
Receive Beam Frequency	27504.0 MHz -29970.0 MHz
Beam Type	Fixed
Polarization	LHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Min. Cross-Polar Isolation within Service Area	27.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	15.8 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	Korea

Receiving Beams 7:

Question	Response
Beam ID	JSRU
Receive Beam Frequency	27504.0 MHz -29970.0 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Min. Cross-Polar Isolation within Service Area	27.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	15.8 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	Japan

Receiving Beams 8:

Question	Response
Beam ID	RUHV
Receive Beam Frequency	17300.0 MHz -17800.0 MHz

Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Min. Cross-Polar Isolation within Service Area	27.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	3.0 dB/K
Min. Saturation Flux Density	-120.1 dBW/m2
Max. Saturation Flux Density	-84.1 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Russia

Receiving Beams 9:

Question	Response
Beam ID	RUVV
Receive Beam Frequency	17300.0 MHz -17800.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Min. Cross-Polar Isolation within Service Area	27.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees

G/T at Max. Gain Point	3.0 dB/K
Min. Saturation Flux Density	-120.1 dBW/m2
Max. Saturation Flux Density	-84.1 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Russia

Receiving Beams 10:

Question	Response
Beam ID	RUHU
Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Min. Cross-Polar Isolation within Service Area	27.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	3.0 dB/K
Min. Saturation Flux Density	-120.1 dBW/m2
Max. Saturation Flux Density	-84.1 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Russia

Receiving Beams 11:

Question	Response
Beam ID	MEHU

Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Min. Cross-Polar Isolation within Service Area	27.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	8.5 dB/K
Min. Saturation Flux Density	-123.3 dBW/m2
Max. Saturation Flux Density	-87.3 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Middle East

Receiving Beams 12:

Question	Response
Beam ID	RUVU
Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Min. Cross-Polar Isolation within Service Area	27.0 dB
Polarization Switchable	

Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	3.0 dB/K
Min. Saturation Flux Density	-120.1 dBW/m2
Max. Saturation Flux Density	-84.1 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Russia

Receiving Beams 13:

Question	Response
Beam ID	MEVU
Receive Beam Frequency	13750.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Min. Cross-Polar Isolation within Service Area	27.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	8.5 dB/K
Min. Saturation Flux Density	-123.3 dBW/m2
Max. Saturation Flux Density	-87.3 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Middle East

Receiving

Beams 14:

Question	Response
Beam ID	KSRU
Receive Beam Frequency	27504.0 MHz -29970.0 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Min. Cross-Polar Isolation within Service Area	27.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	15.8 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	Korea

Receiving Beams 15:

Question	Response
Beam ID	SSLU
Receive Beam Frequency	27504.0 MHz -29970.0 MHz
Beam Type	Steerable
Polarization	LHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees

Min. Cross-Polar Isolation within Service Area	27.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	15.8 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	Visible Earth

Receiving Beams 16:

Question	Response
Beam ID	SSRU
Receive Beam Frequency	27504.0 MHz -29970.0 MHz
Beam Type	Steerable
Polarization	RHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Min. Cross-Polar Isolation within Service Area	27.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	15.8 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	Visible Earth

Receiving Beams 17:

Question	Response
Beam ID	CMDL
Receive Beam Frequency	14001.5 MHz -14005.0 MHz
Beam Type	Fixed
Polarization	LHCP
Peak Gain	dBi
Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Min. Cross-Polar Isolation within Service Area	27.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	-99.0 dB/K
Min. Saturation Flux Density	-88.6 dBW/m2
Max. Saturation Flux Density	-88.5 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Command

Receiving Beams 18:

Question	Response
Beam ID	CMDH
Receive Beam Frequency	14001.5 MHz -14005.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi

Antenna Pointing Error	0.19 degrees
Antenna Rotational Error	0.34 degrees
Min. Cross-Polar Isolation within Service Area	27.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	-99.0 dB/K
Min. Saturation Flux Density	-104.0 dBW/m2
Max. Saturation Flux Density	-103.9 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Command

Receiving Channels (34)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
KU02	72.0	13866.0	Service Link
CMD2	1.0	14004.5	TT&C
AU01	500.0	27754.0	Service Link
KU03	72.0	13942.0	Service Link
CMD1	1.0	14002.0	TT&C
KU26	36.0	17740.0	Service Link
KU08	36.0	14182.0	Service Link
KU09	36.0	14222.0	Service Link
KU10	36.0	14272.0	Service Link
KU11	36.0	14312.0	Service Link
KU12	36.0	14352.0	Service Link
KU13	36.0	14392.0	Service Link
KU14	36.0	14432.0	Service Link
KU15	36.0	14472.0	Service Link
KU27	36.0	17780.0	Service Link
KU06	36.0	14102.0	Service Link
KU07	36.0	14142.0	Service Link
AU02	500.0	28258.0	Service Link
AU03	500.0	28762.0	Service Link
AU04	500.0	29266.0	Service Link
KU25	36.0	17700.0	Service Link
KU24	36.0	17660.0	Service Link
KU23	36.0	17620.0	Service Link
KU01	72.0	13790.0	Service Link

KU20	36.0	17500.0	Service Link
KU19	36.0	17460.0	Service Link
KU18	36.0	17420.0	Service Link
KU17	36.0	17380.0	Service Link
KU16	54.0	17331.0	Service Link
KU04	36.0	14022.0	Service Link
KU05	36.0	14062.0	Service Link
AU05	450.0	29745.0	Service Link
KU22	36.0	17580.0	Service Link
KU21	36.0	17540.0	Service Link

Transmitting Beams 1:

Question	Response
Beam ID	WIHD
Transmit Beam Frequency	11970.0 MHz -12200.0 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	-24.8 dBW/Hz
Max. Transmit EIRP	50.3 dBW
Co- or Cross Polar Mode	C
Service Area Description	West Indian Ocean Region

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 2:

Question	Response
Beam ID	WIHE
Transmit Beam Frequency	12500.0 MHz -12750.0 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	-24.8 dBW/Hz
Max. Transmit EIRP	50.3 dBW
Co- or Cross Polar Mode	C
Service Area Description	West Indian Ocean Region

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	-151.9	-151.8	-151.7	-151.6	-150.8

Transmitting Beams 3:

Question	Response
Beam ID	SKHD
Transmit Beam Frequency	10950.0 MHz -11200.0 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	-18.1 dBW/Hz
Max. Transmit EIRP	57.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Steerable Spot Beam

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	-145.4	-145.2	-145.1	-145.0	-144.9	-144.1

Transmitting Beams 4:

Question	Response
Beam ID	SKVD
Transmit Beam Frequency	11450.0 MHz -12200.0 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	-18.1 dBW/Hz

Max. Transmit EIRP	57.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Steerable Spot Beam

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	-145.4	-145.2	-145.1	-145.0	-144.9	-144.1

Transmitting Beams 5:

Question	Response
Beam ID	JSLD
Transmit Beam Frequency	17804.0 MHz -20170.0 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	60.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	Japan

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	-119.3	-119.2	-119.0	-118.9	-118.8	-118.1

Transmitting Beams 6:

Question	Response
Beam ID	MEVE
Transmit Beam Frequency	12500.0 MHz -12750.0 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	-20.1 dBW/Hz
Max. Transmit EIRP	55.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Middle East

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	-147.4	-147.2	-147.1	-147.0	-146.9	-146.1

Transmitting Beams 7:

Question	Response
Beam ID	RUHD
Transmit Beam Frequency	11700.0 MHz -12200.0 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	-23.1 dBW/Hz
Max. Transmit EIRP	52.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Russia

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 8:

Question	Response
Beam ID	RUVD
Transmit Beam Frequency	12500.0 MHz -12750.0 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	-23.1 dBW/Hz
Max. Transmit EIRP	52.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Russia

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	-150.4	-150.2	-150.1	-150.0	-149.9	-149.1

Transmitting Beams 9:

Question	Response
Beam ID	EIHD
Transmit Beam Frequency	12500.0 MHz -12750.0 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	-28.2 dBW/Hz
Max. Transmit EIRP	46.9 dBW
Co- or Cross Polar Mode	C
Service Area Description	East Indian Ocean Region

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	-155.5	-155.3	-155.2	-155.1	-155.0	-154.2

Transmitting Beams 10:

Question	Response
Beam ID	MEHE
Transmit Beam Frequency	11970.0 MHz -12200.0 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	-20.1 dBW/Hz

Max. Transmit EIRP	55.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Middle East

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 11:

Question	Response
Beam ID	JSRD
Transmit Beam Frequency	17804.0 MHz -20170.0 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	60.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	Japan

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	-119.3	-119.2	-119.0	-118.9	-118.8	-118.1

Transmitting Beams 12:

Question	Response
Beam ID	KSLD
Transmit Beam Frequency	17804.0 MHz -20170.0 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	60.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	Korea

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	-119.3	-119.2	-119.0	-118.9	-118.8	-118.1

Transmitting Beams 13:

Question	Response
Beam ID	KSRD
Transmit Beam Frequency	17804.0 MHz -20170.0 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	60.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	Korea

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	-119.3	-119.2	-119.0	-118.9	-118.8	-118.1

Transmitting Beams 14:

Question	Response
Beam ID	SSLD
Transmit Beam Frequency	17804.0 MHz -20170.0 MHz

Beam Type	Steerable
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	60.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

Max. Power Flux Density

* BW:	* 0° - 5° (dbW/m^2 /BW):	* 5° - 10° (dbW/m^2 /BW):	* 10° - 15° (dbW/m^2 /BW):	* 15° - 20° (dbW/m^2 /BW):	* 20° - 25° (dbW/m^2 /BW):	* 25° - 90° (dbW/m^2 /BW):
1.0 MHz	-119.3	-119.2	-119.0	-118.9	-118.8	-118.1

Transmitting Beams 15:

Question	Response
Beam ID	SSRD
Transmit Beam Frequency	17804.0 MHz -20170.0 MHz
Beam Type	Steerable
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	60.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

Max. Power Flux Density

* BW:	* 0° - 5° (dbW/m^2 /BW):	* 5° - 10° (dbW/m^2 /BW):	* 10° - 15° (dbW/m^2 /BW):	* 15° - 20° (dbW/m^2 /BW):	* 20° - 25° (dbW/m^2 /BW):	* 25° - 90° (dbW/m^2 /BW):
1.0 MHz	-119.3	-119.2	-119.0	-118.9	-118.8	-118.1

Transmitting Beams 16:

Question	Response
Beam ID	MEHD
Transmit Beam Frequency	10950.0 MHz -11200.0 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	-20.1 dBW/Hz

Max. Transmit EIRP	55.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Middle East

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	-147.4	-147.2	-147.1	-147.0	-146.9	-146.1

Transmitting Beams 17:

Question	Response
Beam ID	MEVD
Transmit Beam Frequency	10950.0 MHz -11200.0 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	-20.1 dBW/Hz
Max. Transmit EIRP	55.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Middle East

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	-147.4	-147.2	-147.1	-147.0	-146.9	-146.1

Transmitting Beams 18:

Question	Response
Beam ID	TLMR
Transmit Beam Frequency	11189.7 MHz -11192.3 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	-42.3 dBW/Hz
Max. Transmit EIRP	12.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	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	-171.7	-171.6	-171.5	-171.4	-171.3	-170.5

Transmitting Beams 19:

Question	Response
Beam ID	TLMV
Transmit Beam Frequency	11189.7 MHz -11192.3 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	-34.3 dBW/Hz
Max. Transmit EIRP	20.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	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	-163.7	-163.6	-163.5	-163.4	-163.3	-162.5

Transmitting Beams 20:

Question	Response
Beam ID	KLRD
Transmit Beam Frequency	11187.9 MHz -11188.1 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	-33.0 dBW/Hz
Max. Transmit EIRP	11.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	ULPC

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 21:

Question	Response
Beam ID	ALVD
Transmit Beam Frequency	20179.9 MHz -20180.1 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	-32.0 dBW/Hz
Max. Transmit EIRP	12.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	ULPC

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	-159.2	-159.1	-159.0	-158.9	-158.8	-158.0

Transmitting Channels (36)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
KD26	36.0	12682.0	Service Link
KD18	36.0	12050.0	Service Link
KD22	36.0	12522.0	Service Link
KD12	36.0	11810.0	Service Link
KD27	36.0	12722.0	Service Link
KD25	36.0	12642.0	Service Link
KD24	36.0	12602.0	Service Link
KD17	36.0	12010.0	Service Link
KD16	36.0	11970.0	Service Link
KD15	36.0	11930.0	Service Link
KD14	36.0	11890.0	Service Link
KD13	36.0	11850.0	Service Link
KD11	36.0	11770.0	Service Link
KD07	36.0	11610.0	Service Link
KD01	72.0	10990.0	Service Link
AD05	450.0	19945.0	Service Link
AD04	450.0	19491.0	Service Link
AD03	450.0	19037.0	Service Link
AD01	500.0	18054.0	Service Link
KD23	36.0	12562.0	Service Link
KD19	36.0	12090.0	Service Link
KD03	72.0	11142.0	Service Link
TLM2	0.5	11192.0	TT&C
TLM1	0.5	11190.0	TT&C

KD02	72.0	11066.0	Service Link
KD20	36.0	12130.0	Service Link
ULPA	0.025	20180.0	TT&C
ULPK	0.025	11188.0	TT&C
KD10	36.0	11730.0	Service Link
AD02	500.0	18558.0	Service Link
KD08	36.0	11650.0	Service Link
KD09	36.0	11690.0	Service Link
KD04	54.0	11481.0	Service Link
KD05	36.0	11530.0	Service Link
KD06	36.0	11570.0	Service Link
KD21	36.0	12170.0	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
Intelsat 15R Beam Files.mdb		GSO Antenna Gain Contour Data	GIMS file (*.mdb)	GIMS database file containing IS15R beam files