



312 File Number: **SATMPL2019101700117**

Filing Description

Question	Response
Description	Eutelsat 12 West B

Satellite Information

Question	Response
Select Orbit Type	GSO
Space Station or Satellite Network Name	EUTELSAT 12WEST B
Estimated Lifetime of Satellite(s) From Date of Launch	19 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		11700.0 MHz -11710.0 MHz	Transmit
Fixed-Satellite Service		13750.0 MHz -14005.0 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
Fixed-Satellite Service		14000.0 MHz -14500.0 MHz	Receive
Fixed-Satellite Service		13750.0 MHz -14000.0 MHz	Receive

Orbital Information For Geostationary Satellites

Section	Question	Response
Orbital Longitude Information	Orbital Longitude	13.0 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	0.5 degrees
Antenna Axis Attitude Accuracy	Roll	0.1 degrees
	Pitch	0.1 degrees
	Yaw	0.1 degrees

Receiving Beams 1:

Question	Response
Beam ID	F1H1
Receive Beam Frequency	13750.0 MHz -14000.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	29.7 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	4.6 dB/K
Min. Saturation Flux Density	-103.0 dBW/m2
Max. Saturation Flux Density	-60.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	America Beam Uplink Service Area

Receiving Beams 2:

Question	Response
Beam ID	F1H2
Receive Beam Frequency	14250.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	29.7 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees

Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	4.6 dB/K
Min. Saturation Flux Density	-103.0 dBW/m2
Max. Saturation Flux Density	-60.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	America Beam Uplink Service Area

Receiving Beams 3:

Question	Response
Beam ID	F1V1
Receive Beam Frequency	13750.0 MHz -14000.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	29.7 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	4.6 dB/K
Min. Saturation Flux Density	-103.0 dBW/m2
Max. Saturation Flux Density	-60.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	America Beam Uplink Service Area

Receiving Beams 4:

Question	Response
Beam ID	F1V2
Receive Beam Frequency	14250.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	29.7 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	4.6 dB/K
Min. Saturation Flux Density	-103.0 dBW/m2
Max. Saturation Flux Density	-60.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	America Beam Service Area

Receiving Beams 5:

Question	Response
Beam ID	F2H1
Receive Beam Frequency	13750.0 MHz -14000.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	37.0 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	

Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	10.5 dB/K
Min. Saturation Flux Density	-103.0 dBW/m2
Max. Saturation Flux Density	-60.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Europe Beam Uplink Service Area

Receiving Beams 6:

Question	Response
Beam ID	F2V1
Receive Beam Frequency	13750.0 MHz -14000.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	37.0 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	10.5 dB/K
Min. Saturation Flux Density	-103.0 dBW/m2
Max. Saturation Flux Density	-60.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Europe Beam Uplink Service Area

Receiving Beams 7:

Question	Response
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Beam ID	S1H1
Receive Beam Frequency	14250.0 MHz -14500.0 MHz
Beam Type	Steerable
Polarization	H
Peak Gain	36.0 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	10.9 dB/K
Min. Saturation Flux Density	-103.0 dBW/m2
Max. Saturation Flux Density	-60.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

Receiving Beams 8:

Question	Response
Beam ID	S1V1
Receive Beam Frequency	14250.0 MHz -14500.0 MHz
Beam Type	Steerable
Polarization	V
Peak Gain	36.0 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	

Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	10.9 dB/K
Min. Saturation Flux Density	-103.0 dBW/m2
Max. Saturation Flux Density	-60.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

Receiving Beams 9:

Question	Response
Beam ID	F2H2
Receive Beam Frequency	14000.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	37.0 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	10.5 dB/K
Min. Saturation Flux Density	-103.0 dBW/m2
Max. Saturation Flux Density	-60.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Europe Beam Uplink Service Area

Receiving Beams 10:

Question	Response
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Beam ID	F2V2
Receive Beam Frequency	14000.0 MHz -14500.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	37.0 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	10.5 dB/K
Min. Saturation Flux Density	-103.0 dBW/m2
Max. Saturation Flux Density	-60.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Europe Beam Uplink Service Area

Receiving Beams 11:

Question	Response
Beam ID	TCL1
Receive Beam Frequency	13750.0 MHz -14005.0 MHz
Beam Type	Fixed
Polarization	LHCP
Peak Gain	6.0 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	

Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	-20.0 dB/K
Min. Saturation Flux Density	-85.0 dBW/m2
Max. Saturation Flux Density	-77.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

Receiving Beams 12:

Question	Response
Beam ID	TCR1
Receive Beam Frequency	13750.0 MHz -14005.0 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	6.0 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	-20.0 dB/K
Min. Saturation Flux Density	-85.0 dBW/m2
Max. Saturation Flux Density	-77.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

Receiving Channels (31)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
F10	54.0	14223.0	Service Link
F09	36.0	14190.5	Service Link
F08	36.0	14169.75	Service Link
F07	36.0	14149.0	Service Link
F06	36.0	14128.25	Service Link
F05	36.0	14107.5	Service Link
F04	36.0	14086.75	Service Link
F03	36.0	14066.0	Service Link
F02	54.0	14033.5	Service Link
F01	36.0	14024.5	Service Link
D12	36.0	14478.253	Service Link
D11	36.0	14478.253	Service Link
D10	36.0	14436.753	Service Link
D09	36.0	14436.753	Service Link
D08	36.0	14395.253	Service Link
D07	36.0	14395.253	Service Link
D06	36.0	14353.753	Service Link
D05	36.0	14353.753	Service Link
D04	36.0	14312.253	Service Link
D03	36.0	14312.253	Service Link
D02	36.0	14270.753	Service Link
B3	72.0	13875.0	Service Link
B2	72.0	13791.67	Service Link
B1	72.0	13791.67	Service Link

F11	36.0	14232.0	Service Link
B4	72.0	13875.0	Service Link
B5	72.0	13958.33	Service Link
B6	72.0	13958.33	Service Link
D01	36.0	14270.753	Service Link
TC1	1.0	13752.5	TT&C
TC2	1.0	14001.5	TT&C

Transmitting Beams 1:

Question	Response
Beam ID	F1H4
Transmit Beam Frequency	10950.0 MHz -11200.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	30.4 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-26.8 dBW/Hz
Max. Transmit EIRP	48.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	America Beam Downlink Service Area

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	-156.1	-155.9	-155.7	-155.3	-154.9	-153.2

Transmitting Beams 2:

Question	Response
Beam ID	F1H5
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz

Beam Type	Fixed
Polarization	H
Peak Gain	30.4 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-26.8 dBW/Hz
Max. Transmit EIRP	48.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	America Beam Downlink Service Area

Max. Power Flux Density

	* 0° - 5°	* 5° - 10°	* 10° - 15°	* 15° - 20°	* 20° - 25°	* 25° - 90°
* (dBW/m ² /BW):	(dBW/m ² /BW):	(dBW/m ² /BW):	(dBW/m ² /BW):	(dBW/m ² /BW):	(dBW/m ² /BW):	(dBW/m ² /BW):
4.0 kHz	-156.1	-155.9	-155.7	-155.3	-154.9	-153.2

Transmitting Beams 3:

Question	Response
Beam ID	F1V4
Transmit Beam Frequency	10950.0 MHz -11200.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	30.4 dBi
Antenna Pointing Error	0.15 degrees

Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-26.8 dBW/Hz
Max. Transmit EIRP	48.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	America Beam Downlink Service Area

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	-156.1	-155.9	-155.7	-155.3	-154.9	-153.2

Transmitting Beams 4:

Question	Response
Beam ID	F1V5
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	30.4 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-26.8 dBW/Hz

Max. Transmit EIRP	48.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	America Beam Downlink Service Area

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	-156.1	-155.9	-155.7	-155.3	-154.9	-153.2

Transmitting Beams 5:

Question	Response
Beam ID	F2H4
Transmit Beam Frequency	10950.0 MHz -11200.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	36.6 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-20.6 dBW/Hz
Max. Transmit EIRP	55.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Europe Beam Downlink Service Area

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	-151.0	-150.5	-149.9	-149.2	-148.6	-147.0

Transmitting Beams 6:

Question	Response
Beam ID	F2H5
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	36.6 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-20.6 dBW/Hz
Max. Transmit EIRP	55.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Europe Beam Downlink Service Area

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	-151.0	-150.5	-149.9	-149.2	-148.6	-147.0
kHz						

Transmitting Beams 7:

Question	Response
Beam ID	F2H6
Transmit Beam Frequency	12500.0 MHz -12750.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	36.6 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-20.6 dBW/Hz
Max. Transmit EIRP	55.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Europe Beam Downlink Service Area

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	-151.0	-150.5	-149.9	-149.2	-148.6	-147.0
kHz						

Transmitting Beams 8:

Question	Response
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Beam ID	F2V4
Transmit Beam Frequency	10950.0 MHz -11200.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	36.6 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-20.6 dBW/Hz
Max. Transmit EIRP	55.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Europe Beam Downlink Service Area

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	-151.0	-150.5	-149.9	-149.2	-148.6	-147.0

Transmitting Beams 9:

Question	Response
Beam ID	F2V5
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz
Beam Type	Fixed
Polarization	V

Peak Gain	36.6 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-20.6 dBW/Hz
Max. Transmit EIRP	55.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Europe Beam Downlink Service Area

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	-151.0	-150.5	-149.9	-149.2	-148.6	-147.0

Transmitting Beams 10:

Question	Response
Beam ID	F2V6
Transmit Beam Frequency	12500.0 MHz -12750.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	36.6 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	

Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-20.6 dBW/Hz
Max. Transmit EIRP	55.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Europe Beam Downlink Service Area

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	-151.0	-150.5	-149.9	-149.2	-148.6	-147.0

Transmitting Beams 11:

Question	Response
Beam ID	S1H4
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz
Beam Type	Steerable
Polarization	H
Peak Gain	36.4 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-20.8 dBW/Hz
Max. Transmit EIRP	54.8 dBW

Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

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	-150.1	-147.9	-147.8	-147.7	-147.6	-147.2

Transmitting Beams 12:

Question	Response
Beam ID	S1V4
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz
Beam Type	Steerable
Polarization	V
Peak Gain	36.4 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-20.8 dBW/Hz
Max. Transmit EIRP	54.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	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	-150.1	-147.9	-147.8	-147.7	-147.6	-147.2

Transmitting Beams 13:

Question	Response
Beam ID	T1H1
Transmit Beam Frequency	12500.0 MHz -12505.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	21.0 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-40.7 dBW/Hz
Max. Transmit EIRP	15.3 dBW
Co- or Cross Polar Mode	C
Service Area Description	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	-168.0	-167.8	-167.7	-167.6	-167.5	-167.1

Transmitting Beams 14:

Question	Response
Beam ID	T1H2
Transmit Beam Frequency	11700.0 MHz -11710.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	21.0 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-40.7 dBW/Hz
Max. Transmit EIRP	15.3 dBW
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

Max. Power Flux Density

Information not provided.

Transmitting Beams 15:

Question	Response
Beam ID	T2R1
Transmit Beam Frequency	12500.0 MHz -12505.0 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	6.0 dBi
Antenna Pointing Error	0.15 degrees

Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-34.5 dBW/Hz
Max. Transmit EIRP	21.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	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):
4.0 kHz	-161.8	-161.6	-161.5	-161.4	-161.3	-160.9

Transmitting Beams 16:

Question	Response
Beam ID	T2R2
Transmit Beam Frequency	11700.0 MHz -11710.0 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	6.0 dBi
Antenna Pointing Error	0.15 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-34.5 dBW/Hz

Max. Transmit EIRP	21.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	Visible Earth

Max. Power Flux Density

Information not provided.

Transmitting Channels (32)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
D05	36.0	11553.753	Service Link
F03	36.0	12566.0	Service Link
F04	36.0	12586.75	Service Link
F02	54.0	12533.5	Service Link
F01	36.0	12524.5	Service Link
D12	36.0	11678.253	Service Link
D11	36.0	11678.253	Service Link
D10	36.0	11636.753	Service Link
D07	36.0	11595.253	Service Link
D06	36.0	11553.753	Service Link
TT1	0.4	12500.5	TT&C
TT2	0.4	11704.0	TT&C
B1	72.0	10991.67	Service Link
B2	72.0	10991.67	Service Link
B3	72.0	11075.0	Service Link
B4	72.0	11075.0	Service Link
B5	72.0	11158.33	Service Link
B6	72.0	11158.33	Service Link
TT3	0.4	11705.2	TT&C
D04	36.0	11512.253	Service Link
D03	36.0	11512.253	Service Link
D02	36.0	11470.753	Service Link
D01	36.0	11470.753	Service Link
D08	36.0	11595.253	Service Link

D09	36.0	11636.753	Service Link
F11	36.0	12732.0	Service Link
F10	54.0	12723.0	Service Link
F09	36.0	12690.5	Service Link
F08	36.0	12669.75	Service Link
F07	36.0	12649.0	Service Link
F06	36.0	12628.25	Service Link
F05	36.0	12607.5	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
<u>Service Area Descriptions (E12WB).pdf</u>		Service Area Diagram	PDF file (*.pdf)	Service Area Diagrams for All beams
<u>E12WB.mdb</u>		GSO Antenna Gain Contour Data	GIMS file (*.mdb)	GIMS Container of GXT files for all beams