



312 File Number: **SESSTA2017022800209**

Filing Description

Question	Response
Description	Appendix 30B C-Band characteristics of EUTELSAT 65 WEST A to be used for United Teleports Inc. transmit Earth Stations in the US

**Satellite
Information**

Question	Response
Select Orbit Type	GSO
Space Station or Satellite Network Name	EUTELSAT 65 WEST A
Estimated Lifetime of Satellite(s) From Date of Launch	15 Years
Will the space station(s) operate on a Common Carrier basis?	No

Operating
Frequency
Bands (2)

Nature of service	Description	Frequency Band(s)	Mode Type
Fixed-Satellite Service		6725.0 MHz -7025.0 MHz	Receive
Fixed-Satellite Service		4500.0 MHz -4800.0 MHz	Transmit

**Orbital
Information For
Geostationary
Satellites**

Section	Question	Response
Orbital Longitude Information	Orbital Longitude	65.0 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	0.05 degrees
Antenna Axis Attitude Accuracy	Roll	0.06 degrees
	Pitch	0.1 degrees
	Yaw	0.09 degrees

Receiving Beams 1:

Question	Response
Beam ID	CRXH
Receive Beam Frequency	6725.0 MHz -7025.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	24.7 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	1.3 dB/K
Min. Saturation Flux Density	-97.3 dBW/m2
Max. Saturation Flux Density	-77.3 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	ITU Region 2

Receiving Beams 2:

Question	Response
Beam ID	CRXV
Receive Beam Frequency	6725.0 MHz -7025.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	24.7 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.0 degrees

Polarization Switchable	No
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	1.3 dB/K
Min. Saturation Flux Density	-97.3 dBW/m2
Max. Saturation Flux Density	-77.3 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	ITU Region 2

Receiving
Channels (10)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
UL05	54.0	6875.0	Service Link
UL04	54.0	6815.0	Service Link
UL03	54.0	6815.0	Service Link
UL09	54.0	6995.0	Service Link
UL08	54.0	6935.0	Service Link
UL07	54.0	6935.0	Service Link
UL02	54.0	6755.0	Service Link
UL01	54.0	6755.0	Service Link
UL06	54.0	6875.0	Service Link
UL10	54.0	6995.0	Service Link

**Transmitting
Beams 1:**

Question	Response
Beam ID	CTXH
Transmit Beam Frequency	4500.0 MHz -4800.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	25.1 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-33.5 dBW/Hz
Max. Transmit EIRP	43.1 dBW
Co- or Cross Polar Mode	C
Service Area Description	ITU Region 2

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	-162.8	-162.7	-162.5	-162.4	-162.3	-159.7

**Transmitting
Beams 2:**

Question	Response
Beam ID	CTXV
Transmit Beam Frequency	4500.0 MHz -4800.0 MHz

Beam Type	Fixed
Polarization	V
Peak Gain	25.1 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.0 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-33.5 dBW/Hz
Max. Transmit EIRP	43.1 dBW
Co- or Cross Polar Mode	C
Service Area Description	ITU Region 2

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	-162.8	-162.7	-162.5	-162.4	-162.3	-159.7

Transmitting
Channels (10)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
DL02	54.0	4530.0	Service Link
DL01	54.0	4530.0	Service Link
DL09	54.0	4770.0	Service Link
DL10	54.0	4770.0	Service Link
DL08	54.0	4710.0	Service Link
DL07	54.0	4710.0	Service Link
DL06	54.0	4650.0	Service Link
DL05	54.0	4650.0	Service Link
DL04	54.0	4590.0	Service Link
DL03	54.0	4590.0	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?	
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
E65W2 CRXH GXT.gxt	CRXH	GSO Antenna Gain Contour Data	GXT file (*.gxt)	
E65W2 CRXV GXT.gxt	CRXV	GSO Antenna Gain Contour Data	GXT file (*.gxt)	
E65W2 CTXH GXT.gxt	CTXH	GSO Antenna Gain Contour Data	GXT file (*.gxt)	
E65W2 CTXV GXT.gxt	CTXV	GSO Antenna Gain Contour Data	GXT file (*.gxt)	