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

Federal Communications Commission

312 File Number: **SATPPL2018012900012**

Filing Description

Question	Response
Description	EUTELSAT 133WB

Satellite Information

Question	Response
Select Orbit Type	GSO
Space Station or Satellite Network Name	E133WB
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 (15)

Nature of service	Description	Frequency Band(s)	Mode Type
Fixed-Satellite Service		10700.0 MHz -10950.0 MHz	Transmit
Fixed-Satellite Service		10950.0 MHz -11200.0 MHz	Transmit
Fixed-Satellite Service		11200.0 MHz -11450.0 MHz	Transmit
Fixed-Satellite Service		11450.0 MHz -11700.0 MHz	Transmit
Fixed-Satellite Service		11700.0 MHz -12200.0 MHz	Transmit
Fixed-Satellite Service		14000.0 MHz -14500.0 MHz	Receive
Fixed-Satellite Service		17800.0 MHz -18300.0 MHz	Transmit
Fixed-Satellite Service		18300.0 MHz -18800.0 MHz	Transmit
Fixed-Satellite Service		18800.0 MHz -19300.0 MHz	Transmit
Fixed-Satellite Service		19300.0 MHz -19400.0 MHz	Transmit
Fixed-Satellite Service		19600.0 MHz -19700.0 MHz	Transmit
Fixed-Satellite Service		19700.0 MHz -20200.0 MHz	Transmit
Fixed-Satellite Service		27500.0 MHz -29100.0 MHz	Receive
Fixed-Satellite Service		29300.0 MHz -30000.0 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	133.0 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	0.1 degrees
	Pitch	0.1 degrees
	Yaw	0.1 degrees

Receiving Beams 1:

Question	Response
Beam ID	CUH1
Receive Beam Frequency	13997.0 MHz -14000.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	24.0 dBi
Antenna Pointing Error	0.16 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	-7.5 dB/K
Min. Saturation Flux Density	-100.0 dBW/m2
Max. Saturation Flux Density	-80.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	Earth Coverage from 132.85 W.L.

Receiving Beams 2:

Question	Response
Beam ID	UUH1
Receive Beam Frequency	13750.0 MHz -14000.0 MHz
Beam Type	Spot
Polarization	H
Peak Gain	48.0 dBi
Antenna Pointing Error	0.1 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	20.0 dB/K
Min. Saturation Flux Density	-85.0 dBW/m2
Max. Saturation Flux Density	-60.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

Receiving Beams 3:

Question	Response
Beam ID	UUV1
Receive Beam Frequency	13750.0 MHz -14000.0 MHz
Beam Type	Spot
Polarization	V
Peak Gain	48.0 dBi
Antenna Pointing Error	0.1 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	20.0 dB/K
Min. Saturation Flux Density	-85.0 dBW/m2
Max. Saturation Flux Density	-60.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

Receiving

Beams 4:

Question	Response
Beam ID	UUH2
Receive Beam Frequency	14000.0 MHz -14500.0 MHz
Beam Type	Spot
Polarization	H
Peak Gain	48.0 dBi
Antenna Pointing Error	0.1 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	20.0 dB/K
Min. Saturation Flux Density	-85.0 dBW/m2
Max. Saturation Flux Density	-60.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

Receiving Beams 5:

Question	Response
Beam ID	UUV2
Receive Beam Frequency	14000.0 MHz -14500.0 MHz
Beam Type	Spot
Polarization	V
Peak Gain	48.0 dBi
Antenna Pointing Error	0.1 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	20.0 dB/K
Min. Saturation Flux Density	-85.0 dBW/m2
Max. Saturation Flux Density	-60.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

Receiving Beams 6:

Question	Response
Beam ID	UAL1
Receive Beam Frequency	27500.0 MHz -29100.0 MHz
Beam Type	Spot
Polarization	LHCP
Peak Gain	49.0 dBi
Antenna Pointing Error	0.1 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	21.0 dB/K
Min. Saturation Flux Density	-80.0 dBW/m2
Max. Saturation Flux Density	-55.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

Receiving Beams 7:

Question	Response

Beam ID	UAL2
Receive Beam Frequency	29300.0 MHz -30000.0 MHz
Beam Type	Spot
Polarization	LHCP
Peak Gain	49.0 dBi
Antenna Pointing Error	0.1 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	21.0 dB/K
Min. Saturation Flux Density	-80.0 dBW/m2
Max. Saturation Flux Density	-55.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

Receiving Beams 8:

Question	Response
Beam ID	UAR1
Receive Beam Frequency	27500.0 MHz -29100.0 MHz
Beam Type	Spot
Polarization	RHCP
Peak Gain	49.0 dBi
Antenna Pointing Error	0.1 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	21.0 dB/K
Min. Saturation Flux Density	-80.0 dBW/m2
Max. Saturation Flux Density	-55.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

Receiving Beams 9:

Question	Response
Beam ID	UAR2
Receive Beam Frequency	29300.0 MHz -30000.0 MHz
Beam Type	Spot
Polarization	RHCP
Peak Gain	49.0 dBi
Antenna Pointing Error	0.1 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	21.0 dB/K
Min. Saturation Flux Density	-80.0 dBW/m2
Max. Saturation Flux Density	-55.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

Receiving Channels (26)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
TC2	0.6	13998.5	TT&C
UU4	119.0	14187.5	Service Link
UU5	119.0	14312.5	Service Link
UU6	119.0	14437.5	Service Link
AU1	119.0	27562.5	Service Link
AU2	119.0	27687.5	Service Link
AU3	119.0	27812.5	Service Link
AU4	119.0	27937.5	Service Link
AU5	119.0	28062.5	Service Link
AU6	119.0	28187.5	Service Link
AU7	119.0	28312.5	Service Link
AU8	119.0	28437.5	Service Link
AU9	119.0	28562.5	Service Link
AU10	119.0	28687.5	Service Link
AU11	119.0	28812.5	Service Link
AU12	119.0	28937.5	Service Link
AU13	94.0	29050.0	Service Link
AU18	194.0	29900.0	Service Link
AU17	119.0	29737.5	Service Link
AU16	119.0	29612.5	Service Link
AU15	119.0	29487.5	Service Link
AU14	119.0	29362.5	Service Link
UU1	119.0	13812.5	Service Link
UU2	119.0	13937.5	Service Link

TC1	0.6	13997.5	TT&C
UU3	119.0	14062.5	Service Link

Transmitting Beams 1:

Question	Response
Beam ID	DAR2
Transmit Beam Frequency	18300.0 MHz -18800.0 MHz
Beam Type	Spot
Polarization	RHCP
Peak Gain	49.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-16.0 dBW/Hz
Max. Transmit EIRP	64.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-118.4

Transmitting Beams 2:

Question	Response
Beam ID	DAR3
Transmit Beam Frequency	18800.0 MHz -19300.0 MHz

Beam Type	Spot
Polarization	RHCP
Peak Gain	49.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-16.0 dBW/Hz
Max. Transmit EIRP	64.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-118.4

Transmitting Beams 3:

Question	Response
Beam ID	DAR4
Transmit Beam Frequency	19300.0 MHz -19400.0 MHz
Beam Type	Spot
Polarization	RHCP
Peak Gain	49.0 dBi
Antenna Pointing Error	0.1 degrees

Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-16.0 dBW/Hz
Max. Transmit EIRP	64.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-118.4

Transmitting Beams 4:

Question	Response
Beam ID	DAR5
Transmit Beam Frequency	19600.0 MHz -19700.0 MHz
Beam Type	Spot
Polarization	RHCP
Peak Gain	49.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-16.0 dBW/Hz

Max. Transmit EIRP	64.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-118.4

Transmitting Beams 5:

Question	Response
Beam ID	DAR6
Transmit Beam Frequency	19700.0 MHz -20200.0 MHz
Beam Type	Spot
Polarization	RHCP
Peak Gain	49.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-16.0 dBW/Hz
Max. Transmit EIRP	64.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-118.4

Transmitting Beams 6:

Question	Response
Beam ID	TUH1
Transmit Beam Frequency	11450.0 MHz -11451.5 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	22.6 dBi
Antenna Pointing Error	0.16 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-35.5 dBW/Hz
Max. Transmit EIRP	19.3 dBW
Co- or Cross Polar Mode	C
Service Area Description	Earth Coverage from 132.85 W.L.

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	-165.8	-165.7	-165.5	-165.4	-165.3	-161.9

Transmitting Beams 7:

Question	Response
Beam ID	TAH1
Transmit Beam Frequency	19699.8 MHz -19700.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	23.0 dBi
Antenna Pointing Error	0.16 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	0.0 dBW/Hz
Max. Transmit EIRP	20.0 dBW
Co- or Cross Polar Mode	C
Service Area Description	Earth Coverage from 132.85 W.L.

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	-145.3	-145.2	-145.0	-144.9	-144.8	-142.4

Transmitting Beams 8:

Question	Response
Beam ID	TUV1
Transmit Beam Frequency	11699.0 MHz -11700.0 MHz

Beam Type	Fixed
Polarization	V
Peak Gain	22.6 dBi
Antenna Pointing Error	0.16 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-35.5 dBW/Hz
Max. Transmit EIRP	19.3 dBW
Co- or Cross Polar Mode	C
Service Area Description	Earth Coverage from 132.85 W.L.

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	-165.8	-165.7	-165.5	-165.4	-165.3	-161.9

Transmitting Beams 9:

Question	Response
Beam ID	DUH1
Transmit Beam Frequency	10700.0 MHz -10950.0 MHz
Beam Type	Spot
Polarization	H
Peak Gain	48.0 dBi
Antenna Pointing Error	0.1 degrees

Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-22.0 dBW/Hz
Max. Transmit EIRP	58.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-150.3	-149.2	-149.0	-148.9	-148.8	-148.4

Transmitting Beams 10:

Question	Response
Beam ID	DUH2
Transmit Beam Frequency	10950.0 MHz -11200.0 MHz
Beam Type	Spot
Polarization	H
Peak Gain	48.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-22.0 dBW/Hz

Max. Transmit EIRP	58.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-150.3	-149.2	-149.0	-148.9	-148.8	-148.4

Transmitting Beams 11:

Question	Response
Beam ID	DUH3
Transmit Beam Frequency	11200.0 MHz -11450.0 MHz
Beam Type	Spot
Polarization	H
Peak Gain	48.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-22.0 dBW/Hz
Max. Transmit EIRP	58.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-150.3	-149.2	-149.0	-148.9	-148.8	-148.4

Transmitting Beams 12:

Question	Response
Beam ID	DUH4
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz
Beam Type	Spot
Polarization	H
Peak Gain	48.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-22.0 dBW/Hz
Max. Transmit EIRP	58.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-150.3	-149.2	-149.0	-148.9	-148.8	-148.4

Transmitting Beams 13:

Question	Response
Beam ID	DUH5
Transmit Beam Frequency	11700.0 MHz -12200.0 MHz
Beam Type	Spot
Polarization	H
Peak Gain	48.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-22.0 dBW/Hz
Max. Transmit EIRP	58.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

Max. Power Flux Density

Information not provided.

Transmitting Beams 14:

Question	Response
Beam ID	DUV1
Transmit Beam Frequency	10700.0 MHz -10950.0 MHz
Beam Type	Spot
Polarization	V
Peak Gain	48.0 dBi
Antenna Pointing Error	0.1 degrees

Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-22.0 dBW/Hz
Max. Transmit EIRP	58.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-150.3	-149.2	-149.0	-148.9	-148.8	-148.4

Transmitting Beams 15:

Question	Response
Beam ID	DUV2
Transmit Beam Frequency	10950.0 MHz -11200.0 MHz
Beam Type	Spot
Polarization	V
Peak Gain	48.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-22.0 dBW/Hz

Max. Transmit EIRP	58.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-150.3	-149.2	-149.0	-148.9	-148.8	-148.4

Transmitting Beams 16:

Question	Response
Beam ID	DUV3
Transmit Beam Frequency	11200.0 MHz -11450.0 MHz
Beam Type	Spot
Polarization	V
Peak Gain	48.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-22.0 dBW/Hz
Max. Transmit EIRP	58.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-150.3	-149.2	-149.0	-148.9	-148.8	-148.4

Transmitting Beams 17:

Question	Response
Beam ID	DUV4
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz
Beam Type	Spot
Polarization	V
Peak Gain	48.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-22.0 dBW/Hz
Max. Transmit EIRP	58.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-150.3	-149.2	-149.0	-148.9	-148.8	-148.4

Transmitting Beams 18:

Question	Response
Beam ID	DUV5
Transmit Beam Frequency	11700.0 MHz -12200.0 MHz
Beam Type	Spot
Polarization	V
Peak Gain	48.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-22.0 dBW/Hz
Max. Transmit EIRP	58.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

Max. Power Flux Density

Information not provided.

Transmitting Beams 19:

Question	Response
Beam ID	DAL1
Transmit Beam Frequency	17800.0 MHz -18300.0 MHz
Beam Type	Spot
Polarization	LHCP
Peak Gain	49.0 dBi
Antenna Pointing Error	0.1 degrees

Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-16.0 dBW/Hz
Max. Transmit EIRP	64.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-118.4

Transmitting Beams 20:

Question	Response
Beam ID	DAL2
Transmit Beam Frequency	18300.0 MHz -18800.0 MHz
Beam Type	Spot
Polarization	LHCP
Peak Gain	49.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-16.0 dBW/Hz

Max. Transmit EIRP	64.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-118.4

Transmitting Beams 21:

Question	Response
Beam ID	DAL3
Transmit Beam Frequency	18800.0 MHz -19300.0 MHz
Beam Type	Spot
Polarization	LHCP
Peak Gain	49.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-16.0 dBW/Hz
Max. Transmit EIRP	64.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-118.4

Transmitting Beams 22:

Question	Response
Beam ID	DAL4
Transmit Beam Frequency	19300.0 MHz -19400.0 MHz
Beam Type	Spot
Polarization	LHCP
Peak Gain	49.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-16.0 dBW/Hz
Max. Transmit EIRP	64.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-118.4

Transmitting Beams 23:

Question	Response
Beam ID	DAL5
Transmit Beam Frequency	19600.0 MHz -19700.0 MHz
Beam Type	Spot
Polarization	LHCP
Peak Gain	49.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-16.0 dBW/Hz
Max. Transmit EIRP	64.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-118.4

Transmitting Beams 24:

Question	Response
Beam ID	DAL6
Transmit Beam Frequency	19700.0 MHz -20200.0 MHz

Beam Type	Spot
Polarization	LHCP
Peak Gain	49.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-16.0 dBW/Hz
Max. Transmit EIRP	64.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-118.4

Transmitting Beams 25:

Question	Response
Beam ID	DAR1
Transmit Beam Frequency	17800.0 MHz -18300.0 MHz
Beam Type	Spot
Polarization	RHCP
Peak Gain	49.0 dBi
Antenna Pointing Error	0.1 degrees

Antenna Rotational Error	0.4 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-16.0 dBW/Hz
Max. Transmit EIRP	64.8 dBW
Co- or Cross Polar Mode	C
Service Area Description	E133WB Service Area

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	-118.4

Transmitting Channels (34)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
AD10	119.0	18987.5	Service Link
UD9	119.0	11762.5	Service Link
UD8	119.0	11637.5	Service Link
UD7	119.0	11512.5	Service Link
UD6	119.0	11387.5	Service Link
UD5	119.0	11262.5	Service Link
UD3	119.0	11012.5	Service Link
UD4	119.0	11137.5	Service Link
AD9	119.0	18862.5	Service Link
AD8	119.0	18737.5	Service Link
AD7	119.0	18612.5	Service Link
AD6	119.0	18487.5	Service Link
AD5	119.0	18362.5	Service Link
AD4	119.0	18237.5	Service Link
AD3	119.0	18112.5	Service Link
AD2	119.0	17987.5	Service Link
AD1	119.0	17862.5	Service Link
UD12	119.0	12137.5	Service Link
UD11	119.0	12012.5	Service Link
UD10	119.0	11887.5	Service Link
BA	0.0	19699.9	TT&C
AD13	94.0	19350.0	Service Link
AD12	119.0	19237.5	Service Link
AD11	119.0	19112.5	Service Link

UD1	119.0	10762.5	Service Link
UD2	119.0	10887.5	Service Link
AD14	94.0	19650.0	Service Link
AD15	119.0	19762.5	Service Link
AD16	119.0	19887.5	Service Link
AD17	119.0	20012.5	Service Link
AD18	119.0	20137.5	Service Link
TM1	0.3	11450.5	TT&C
TM2	0.3	11451.1	TT&C
TM3	0.3	11699.4	TT&C

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
E133WB.mdb		GSO Antenna Gain Contour Data	GIMS file (*.mdb)	GIMS Database with GTX files for all applicable beams
E133WB - Beam pointing Locations and Aggregate Coverage.pdf		GSO Antenna Gain Contour Data	PDF file (*.pdf)	Beam Pointing Locations and Aggregate Beam Coverage Pattern for Spot Beams
E133WB - Service Areas - RevA.pdf		Service Area Diagram	PDF file (*.pdf)	Service Area Diagram for all applicable beams