

SATELLITE EARTH STATION AUTHORIZATIONS
FCC Form 312 - Schedule B:(Technical and Operational Description)
FOR OFFICIAL USE ONLY

Location of Earth Station Site

E1: Site Identifier:	Skylo Blanket ANT-4	E5: Call Sign:	
E2: Contact Name:	Mindel De La Torre	E6: Phone Number:	650 459 0164
E3: Street:		E7: City:	
E4: State:		E8: County:	
		E9: Zip Code:	
E10: Area of Operation:	Continental United States, Alaska, Hawaii, Puerto Rico, US Virgin Islands, all US territories and possessions, and all US territorial waters.		
E11: Latitude:	0° 0' 0"		
E12: Longitude:	0° 0' 0"		
E13: Lat/Lon Coordinates are:			
E14: Site Elevation (AMSL):	0		

If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement? If NO, provide a technical analysis showing compliance with two-degree spacing policy.	N/A
If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS) or if they operate in the Fixed Satellite Service (FSS) with non-geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement?	N/A
Is Frequency Coordination required?	No
Is coordination with another country required?	No
Is FAA notification required?	No

Is facility operated by remote control?

No

POINTS OF COMMUNICATION**ANTENNA**

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size (meters)	E41/42. Antenna Gain Transmit and/or Recieve (dBi at GHz)
Skylo Blanket ANT-4	ANT 4	250000000	Various	Various	0.0762	undefined at 0

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level (meters)	E36. Above Sea Level (meters)	E37. Building Height Above Ground Level (meters)	E38. Total Input Power at Antenna Flange (Watts)	E39. Maximum Antenna Height Above Rooftop (meters)	E40. Total EIRP for all carriers (dBW)
ANT 4	0/0	0	0	0	1	0	2

FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
ANT 4	1610 1618.725	T	null	200KG1D	2	-15

E50. Modulation and Services

Emergency, safety, short-messaging data

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
ANT 4	2483.5 2500	R	null	1M08G1D	0	0

E50. Modulation and Services

Emergency, safety, short-messaging data

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc E/W Limit	E56. Earth Station Azimuth Angle Eastern/Western Limit	E57. Antenna Elevation Angle Eastern/Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
ANT 4	Non-Geostationary	1610 1618.725	0 / 0	0 / 360	0 / 90	-15

ANT 4Non-Geostationary2483.5
25000 / 00 / 3600 / 900

REMOTE CONTROL POINT LOCATION

E61. Call Sign: undefined		E65. Phone Number: undefined	
E62. Street Address: undefined			
E63. City: undefined	E67. County: undefined	E64/68. State/Country: undefined / undefined	E66. Zip Code: undefined

Location of Earth Station Site

E1: Site Identifier:	SKYLO BLANKET CPE-1	E5: Call Sign:	
E2: Contact Name:	ANDREW NUTTALL	E6: Phone Number:	(517) 574-0100
E3: Street:		E7: City:	
E4: State:		E8: County:	
		E9: Zip Code:	
E10: Area of Operation:	United States, its territories and possessions		

E11: Latitude:	0° 0' 0"
E12: Longitude:	0° 0' 0"
E13: Lat/Lon Coordinates are:	
E14: Site Elevation (AMSL):	0

If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement? If NO, provide a technical analysis showing compliance with two-degree spacing policy.	N/A
If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS) or if they operate in the Fixed Satellite Service (FSS) with non-geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement?	N/A
Is Frequency Coordination required?	No
Is coordination with another country required?	No
Is FAA notification required?	No
Is facility operated by remote control?	Yes

POINTS OF COMMUNICATION

Satellite Name: SKYTERRA 1	
E21. Common Name: SKYTERRA-1	E22. ITU Name: SKYTERRA 1
E23. Orbit Location: 101.3 W.L.	E24. Country:

Satellite Name: ICO-G	
E21. Common Name: DBSD G-1	E22. ITU Name: ICO-G
E23. Orbit Location: 92.85 W.L.	E24. Country:

Satellite Name: CANSAT 24	
E21. Common Name: TERRESTAR 1	E22. ITU Name: CANSAT 24

E23. Orbit Location: 111.0 W.L.

E24. Country:

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size (meters)	E41/42. Antenna Gain Transmit and/or Recieve (dBi at GHz)
SKYLO BLANKET CPE-1	2	10000000	VARIOUS	VARIOUS	0.1	undefined at 0

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level (meters)	E36. Above Sea Level (meters)	E37. Building Height Above Ground Level (meters)	E38. Total Input Power at Antenna Flange (Watts)	E39. Maximum Antenna Height Above Rooftop (meters)	E40. Total EIRP for all carriers (dBW)
2	0.1/0.1	0	0	0	0.25	0	-7

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size (meters)	E41/42. Antenna Gain Transmit and/or Recieve (dBi at GHz)
SKYLO BLANKET CPE-1	3	50000000	VARIOUS	VARIOUS	0.05	undefined at 0

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level (meters)	E36. Above Sea Level (meters)	E37. Building Height Above Ground Level (meters)	E38. Total Input Power at Antenna Flange (Watts)	E39. Maximum Antenna Height Above Rooftop (meters)	E40. Total EIRP for all carriers (dBW)
3	0.05/0.05	0	0	0	0.25	0	-14

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size (meters)	E41/42. Antenna Gain Transmit and/or Recieve (dBi at GHz)
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SKYLO BLANKET CPE-1	1	10000000	VARIOUS	VARIOUS	0.2	undefined at 0
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E28. Antenna Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level (meters)	E36. Above Sea Level (meters)	E37. Building Height Above Ground Level (meters)	E38. Total Input Power at Antenna Flange (Watts)	E39. Maximum Antenna Height Above Rooftop (meters)	E40. Total EIRP for all carriers (dBW)
1	0.2/0.2	0	0	0	0.25	0	0

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size (meters)	E41/42. Antenna Gain Transmit and/or Recieve (dBi at GHz)
SKYLO BLANKET CPE-1	CPE-1	1000000	SKYLO	n/a	0.2	undefined at 0

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level (meters)	E36. Above Sea Level (meters)	E37. Building Height Above Ground Level (meters)	E38. Total Input Power at Antenna Flange (Watts)	E39. Maximum Antenna Height Above Rooftop (meters)	E40. Total EIRP for all carriers (dBW)
CPE-1	0.2/0.2	0	0	0	1.6	0	10

FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
2	1525 1559	R	null	230KG1D	0	0

E50. Modulation and Services

NB-IoT M2M Data Traffic Single Carrier B

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
2	2180 2200	R	null	230KG1D	0	0

E50. Modulation and Services

NB-IoT M2M Data Traffic Single Carrier B

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
1	1626.5 1660.5	T	null	280KG7D	0	-18.5

E50. Modulation and Services

NB-IoT M2M Data Traffic Single Carrier B

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
1	1525 1559	R	null	230KG1D	0	0

E50. Modulation and Services

NB-IoT M2M Data Traffic Single Carrier B

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
3	1626.5 1660.5	T	null	230KG1D	-14	-31.6

E50. Modulation and Services

NB-IoT M2M Data Traffic Single Carrier B

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
2	2000 2020	T	null	230KG1D	-7	-24.6

E50. Modulation and Services

NB-IoT M2M Data Traffic Single Carrier B

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
3	2000 2020	T	null	230KG1D	-14	-31.6

E50. Modulation and Services

NB-IoT M2M Data Traffic Single Carrier B

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
1	2180 2200	R	null	230KG1D	0	0

E50. Modulation and Services

NB-IoT M2M Data Traffic Single Carrier B

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
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1	2000 2020	T	null	280KG7D	0	-18.5
E50. Modulation and Services						
NB-IoT M2M Data Traffic Single Carrier B						

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
CPE-1	1626.5 1660.5	T	null	15K0GXD	10	4.25
E50. Modulation and Services						
NB-IoT M2M Data Traffic Single Carrier Q						

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
2	1626.5 1660.5	T	null	280KG7D	-7	-25.5
E50. Modulation and Services						
NB-IoT M2M Data Traffic Single Carrier B						

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
3	2180 2200	R	null	230KG1D	0	0
E50. Modulation and Services						
NB-IoT M2M Data Traffic Single Carrier B						

E28.	E43/44.	E45.	E46. Antenna	E47.	E48.	E49. Maximum
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Antenna Id	Frequency Bands (MHz)	T/R Mode	Polarization (H,V,L,R)	Emission Designator	Maximum EIRP per Carrier (dBW)	ERIP Density per Carrier (dBW/4kHz)
3	1525 1559	R	null	280KG7D	0	0
E50. Modulation and Services						
NB-IoT M2M Data Traffic Single Carrier B						

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc E/W Limit	E56. Earth Station Azimuth Angle Eastern/Western Limit	E57. Antenna Elevation Angle Eastern/Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
1	Geostationary	2180 2200	60 / 170	0 / 360	5 / 5	0

1Geostationary2000
 202060 / 1700 / 3605 / 5-17.6CPE-1Geostationary1626.5
 1660.560 / 160242.5 / 101.848.8 / 19.3-5.93Geostationary2000
 202060 / 1700 / 3605 / 5-31.61Geostationary1626.5
 1660.560 / 1700 / 3605 / 5-17.62Geostationary1626.5
 1660.560 / 1700 / 3605 / 5-24.63Geostationary1626.5
 1660.560 / 1700 / 3605 / 5-31.61Geostationary1525
 155960 / 1700 / 3605 / 502Geostationary2000
 202060 / 1700 / 3605 / 5-24.62Geostationary1525
 155960 / 1700 / 3605 / 503Geostationary2180
 220060 / 1700 / 3605 / 502Geostationary2180
 220060 / 1700 / 3605 / 503Geostationary1525
 155960 / 1700 / 3605 / 50

REMOTE CONTROL POINT LOCATION

E61. Call Sign:		E65. Phone Number: 5175740200	
E62. Street Address: 2301 LEGHORN STREET			
E63. City:	E67. County:	E64/68. State/Country:	E66. Zip Code:

MOUNTAIN VIEW	Santa Clara	undefined / undefined	94043
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