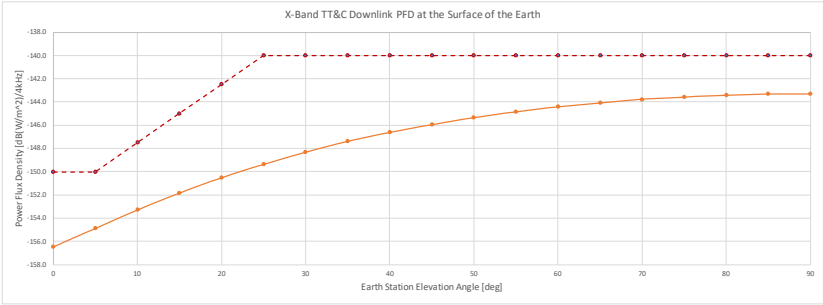


GROUND POWER FLUX DENSITY						
Altitude:	642	km				
Radius of Earth:	6371	km				
Speed of Light:	3.00E+08	m/s				
Radius of Orbit:	7013	km				
Elevation Angle:	5	deg				
Slant Range:	2428.2	km				
Transmit Power:	3	Watts				
Antenna Gain:	4.8	dBW				
Antenna Tx Losses:	9.6	dB				
Antenna Beam Width:	-0.5	deg				
Antenna Misalignment:	20	deg				
Alignment Loss:	0.5	deg				
	-0.01	dB				
Transmit Frequency:	8.025	GHz				
Lambda:	0.04	m				
Occupied Bandwidth:	4.0	MHz				
EIRP:	13.86	dBW				
EIRP density:	-52.16	dBW/Hz				
EIRP in 4 kHz:	-16.14	dBW				
Free Space Loss:	-178.24	dB				
Spreading Loss:	-138.70	dB				
Power Flux Density:	-154.83	dB(W/m^2)/4kHz				
Power Spectral Density:	-124.83	dB(W/m^2)				
Angle (deg)	Slant Range (km)	Spreading Loss (dB)	Power Flux Density (dBW/m^2)/4kHz	ITU Limit (dB(W/m^2)/4kHz)	Compliant	
0	2991.3	-140.3	-156.47	-150.0	TRUE	
5	2428.2	-138.7	-154.83	-150.0	TRUE	
10	2026.8	-137.1	-153.26	-147.5	TRUE	
15	1714.3	-135.7	-151.81	-145.0	TRUE	
20	1473.5	-134.4	-150.50	-142.5	TRUE	
25	1287.7	-133.2	-149.32	-140.0	TRUE	
30	1143.5	-132.2	-148.29	-140.0	TRUE	
35	1030.4	-131.3	-147.39	-140.0	TRUE	
40	941.0	-130.5	-146.60	-140.0	TRUE	
45	869.7	-129.8	-145.92	-140.0	TRUE	
50	812.6	-129.2	-145.33	-140.0	TRUE	
55	766.9	-128.7	-144.82	-140.0	TRUE	
60	730.3	-128.3	-144.40	-140.0	TRUE	
65	701.5	-127.9	-144.05	-140.0	TRUE	
70	679.1	-127.6	-143.77	-140.0	TRUE	
75	662.5	-127.4	-143.55	-140.0	TRUE	
80	651.0	-127.3	-143.40	-140.0	TRUE	
85	644.2	-127.2	-143.31	-140.0	TRUE	
90	642.0	-127.1	-143.28	-140.0	TRUE	



GEO POWER FLUX DENSITY	
Altitude:	35786
Radius of Earth:	6371
Speed of Light:	3.00E+08
Radius of Orbit:	42157
Elevation Angle:	90
Dist to Geo Arch:	35786.0
Transmit Power:	3
Antenna Gain:	4.8
Antenna Tx Losses:	9.6
Antenna Beam Width:	-0.5
Antenna Misalignment:	20
Alignment Loss:	0.5
	-0.01
Transmit Frequency:	8.025
Lambda:	0.04
Occupied Bandwidth:	200.0
EIRP:	13.86
EIRP density:	-69.15
EIRP in 4 kHz:	-33.13
Free Space Loss:	-201.60
Spreading Loss:	-162.07
Power Flux Density:	-195.19
ITU LIMIT:	-174

f 8.03E+09 Hz
c 3.00E+08 m/s
BW 2.9 MHz
EIRP 15.01 dBW
EIRP Density -49.61398 dBW/Hz
4000 Hz
EIRP in 4kHz -13.5933801 dBW
d 35161 km
lambda 0.03738318 m
Free Space: -201.451897 dB
Spreading: -161.913323 dB
-175.506703 dBW/m^2