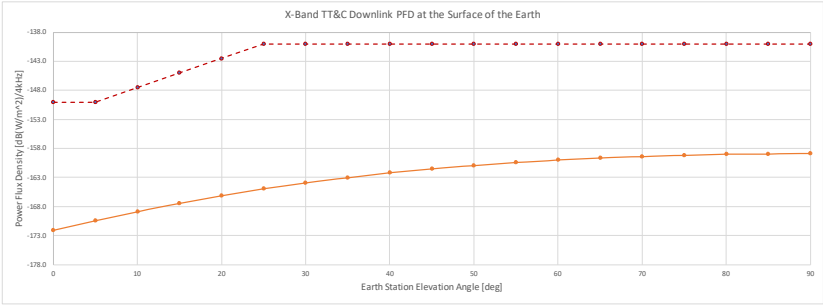


GROUND POWER FLUX DENSITY

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						
	4.8	dBW						
Antenna Gain:	10.52	dB	Angle (deg)	Slant Range (km)	Spreading Loss (dB)	Power Flux Density (dBW/m^2)/4kHz	ITU Limit (dB(W/m^2)/4kHz)	Compliant
Antenna Tx Losses:	-0.01	dB	0	2991.3	-140.3	-172.05	-150.0	TRUE
Antenna Beam Width:	20	deg	5	2428.2	-138.7	-170.41	-150.0	TRUE
Antenna Misalignment:	0.5	deg	10	2026.8	-137.1	-168.84	-147.5	TRUE
Alignment Loss:	-0.01	dB	15	1714.3	-135.7	-167.39	-145.0	TRUE
			20	1473.5	-134.4	-166.07	-142.5	TRUE
			25	1287.7	-133.2	-164.90	-140.0	TRUE
Transmit Frequency:	8.125	GHz	30	1143.5	-132.2	-163.87	-140.0	TRUE
Lambda:	0.04	m	35	1030.4	-131.3	-162.97	-140.0	TRUE
Occupied Bandwidth:	200.0	MHz	40	941.0	-130.5	-162.18	-140.0	TRUE
			45	869.7	-129.8	-161.50	-140.0	TRUE
EIRP:	15.27	dBW	50	812.6	-129.2	-160.91	-140.0	TRUE
EIRP density:	-67.74	dBW/Hz	55	766.9	-128.7	-160.40	-140.0	TRUE
EIRP in 4 kHz:	-31.72	dBW	60	730.3	-128.3	-159.98	-140.0	TRUE
			65	701.5	-127.9	-159.63	-140.0	TRUE
Free Space Loss:	-178.34	dB	70	679.1	-127.6	-159.35	-140.0	TRUE
Spreading Loss:	-138.70	dB	75	662.5	-127.4	-159.13	-140.0	TRUE
			80	651.0	-127.3	-158.98	-140.0	TRUE
Power Flux Density:	-170.41	dB(W/m^2)/4kHz	85	644.2	-127.2	-158.89	-140.0	TRUE
Power Spectral Density:	-123.42	dB(W/m^2)	90	642.0	-127.1	-158.86	-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
	4.8
Antenna Gain:	10.52
Antenna Tx Losses:	-0.01
Antenna Beam Width:	20
Antenna Misalignment:	0.5
Alignment Loss:	-0.01
Transmit Frequency:	8.125
Lambda:	0.04
Occupied Bandwidth:	200.0
EIRP:	15.27
EIRP density:	-67.74
EIRP in 4 kHz:	-31.72
Free Space Loss:	-201.71
Spreading Loss:	-162.07
Power Flux Density:	-193.78
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