Frequency	28000	MHz
Lambda	0.01071	m
Meter square area gain	50.393	dB/(m^2)

	Satellite Receiver Protection Values			
Satellite	VS 1st Gen	VS 2nd Gen	VS 3rd Gen	Jupiter-97W
Total receiving noise temperature	1349.0	1050.0	650.0	1259.0
Noise floor (No) at receiver input	-197.301	-198.389	-200.472	-197.601
Delta T/T protection criteria	6	6	6	6
Equivalent I/N	-12.218	-12.218	-12.218	-12.218
Max interference (Io) at input to meet prot criteria	-209.520	-210.608	-212.691	-209.819
Satellite antenna gain	53	61	61	56.9
Interference (Io) level at antenna input	-262.520	-271.608	-273.691	-266.719
Meter square area gain	50.393	50.393	50.393	50.393
Equivalent power flux density at GSO	-152.127	-161.215	-163.298	-156.327
Spreading loss to mid CONUS	162.636	162.636	162.636	162.636
Equivalent EIRP density at ground level	10.509	1.421	-0.662	6.309

	5G UE Impact To Satellite Receiver (BS not inc			
UEs transmitting per km^2	1	1	1	1
Beam area	123816	31000	31000	35640
UEs transmitting co-frequency in beam	123816	31000	31000	35640
Individual 5G UE on-axis EIRP density	23	23	23	23
Individual 5G UE on-axis EIRP density	-87	-87	-87	-87
Off-axis gain reduction toward GSO	6	6	6	6
Aggregate 5G EIRP density to GSO in beam area	-42.072	-48.086	-48.086	-47.481
Spreading loss from mid CONUS	162.636	162.636	162.636	162.636
Equivalent power flux density at GSO	-204.708	-210.722	-210.722	-210.116
Interference density (Io) at antenna input	-255.101	-261.115	-261.115	-260.509
Linear to circular polarization loss	3	3	3	3
Interference (Io) at receiver input	-205.101	-203.115	-203.115	-206.609
I/N	-7.800	-4.726	-2.643	-9.008
Delta T/T	16.596	33.684	54.413	12.565
Noise floor impact	0.667	1.261	1.887	0.514

	5G UE Impact To Satellite Receiver (BS not inc			
UEs transmitting per km^2	1	1	1	1
Beam area	123816	31000	31000	35640
UEs transmitting co-frequency in beam	123816	31000	31000	35640
Individual 5G UE on-axis EIRP density	43	43	43	43
Individual 5G UE on-axis EIRP density	-67	-67	-67	-67
Off-axis gain reduction toward GSO	6	6	6	6
Aggregate 5G EIRP density to GSO in beam area	-22.072	-28.086	-28.086	-27.481
Spreading loss from mid CONUS	162.636	162.636	162.636	162.636
Equivalent power flux density at GSO	-184.708	-190.722	-190.722	-190.116
Interference density (Io) at antenna input	-235.101	-241.115	-241.115	-240.509
Linear to circular polarization loss	3	3	3	3
Interference (Io) at receiver input	-185.101	-183.115	-183.115	-186.609
I/N	12.200	15.274	17.357	10.992
Delta T/T	1659.647	3368.397	5441.256	1256.501
Noise floor impact	12.454	15.401	17.436	11.324

Inmarsat-5-F3

1047.0	K
-198.402	dBW/Hz
6	%
-12.218	dB
-210.620	dBW/Hz
44.2	dBi
-254.820	dBW/Hz
50.393	dB/(m^2)
-144.427	dBW/(m^2*MHz)
162.636	dB(m^2)
18.208	dBW/MHz

cluded)

1	
412442	km^2
412442	
23	dBm/100 MHz
-87	dBW/Hz
6	dB
-36.846	dBW/Hz
162.636	dB(m^2)
-199.482	dBW/(m^2*Hz)
-249.875	dBW/Hz
3	dB
-208.675	dBW/Hz
-10.273	dB
9.390	%
0.390	dB

cluded)

1	
412442	km^2
412442	
43	dBm/100 MHz
-67	dBW/Hz
6	dB
-16.846	dBW/Hz
162.636	dB(m^2)
-179.482	dBW/(m^2*Hz)
-229.875	dBW/Hz
3	dB
-188.675	dBW/Hz
9.727	dB
939.003	%
10.166	dB