

Typical Ku-band analysis

Emission designator	36M0G7W	6M95G1W	36M0G7W	36M0G7W	100KG1W	1M35G1W
No.of phases	4	4	8	16	4	4
Carriers/xpndr	1	5	1	1	360	26
Carrier spacing(KHz)		6950			100	1350
Bandwidth(allocated), MHz	36	6.95	36	36	0.1	1.35
Throughput(Mbps)	40	8	60	110	0.056	1.544
FEC rate	0.691	0.691	0.614	0.806	0.691	0.691
TxES pwr(W)	1000	50	1000	1000	10	50
TxES pwr(dBW)	30.0	17.0	30.0	30.0	10.0	17.0
Antenna feed loss(dB)	-1	-1	-1	-1	-1	-1
TxES antenna dia (m)	6.1	3.7	6.1	6.1	1.8	3.7
Antenna gain(dBi)	57.2	52.8	57.2	57.2	46.6	52.8
TxES EIRP(dBW)	87.2	69.8	87.2	87.2	56.6	69.8
Uplink rain loss(dB)	-2	-2	-2	-2	-2	-2
UL free space loss(dB)	-207.5	-207.5	-207.5	-207.5	-207.5	-207.5
Satellite G/T(dB/K)	-2	-2	-2	-2	-2	-2
C/N(UL, thermal), dB	27.7	17.5	27.7	27.7	22.7	24.6
C/I, UL(dB)	20	20	20	20	20	20
C/(N+I), UL(dB)	19.3	15.5	19.3	19.3	18.1	18.7
Satellite EIRP, peak(dBW)	41	43	43	43	43	43
Carrier EIRP(dBW)	41.0	32.0	43.0	43.0	13.4	24.9
DL free space loss(dB)	-206.3	-206.3	-206.3	-206.3	-206.3	-206.3
DL rainloss(dB)	-3	-3	-3	-3	-3	-3
RxES dia(m)	2.4	2.4	2.4	7.6	2.4	2.4
RxES gain(dBi)	47.5	47.5	47.5	57.5	47.5	47.5
RxES G/T(dB/K)	25.6	25.6	25.6	35.6	25.6	25.6
C/N(DL, thermal), dB	10.3	8.5	12.3	22.3	8.3	8.4
C/I, DL(dB)	18	18	18	28	18	18
C/(N+I), DL(dB)	9.7	8.0	11.3	21.3	7.9	8.0
C/(N+I), total(dB)	9.2	7.3	10.7	17.2	7.5	7.6
C/N required(dB)	6.8	6.8	9.9	16.2	6.8	6.8
Margin (dB)	2.4	0.5	0.8	1.0	0.7	0.8

T:150

36M0F3F

1

36

450

26.5

-1

7.6

59.1

85.6

-2

-207.5

-2

26.1

25

22.5

38

38.0

-206.3

-3

5.5

54.7

32.8

14.5

20

13.5

12.9

12

0.9