

SSA-SSA TV/FM

Edge of coverage SSA (dB)	6.0
Edge of coverage SSA (dB)	4.0

Carrier parameters

Dispersal Bandwidth (MHz)	2
Dispersal Bandwidth (dB-Hz)	63.01
(C/N+I) - Total Required (dB)	12.0

Uplink parameters

Uplink Frequency (MHz)	14250
Tx antenna Input power (dBW)	50.0
Input power density (dBW/Hz)	-46.0
Tx Antenna Diameter (Metres)	4.50
Tx Antenna Efficiency	0.65
Tx Antenna Gain (dB)	54.7
Mispointing loss (dB)	0.5
Atmospheric loss (dB)	0.3
Uplink Path loss (dB)	207.9
Uplink Rain Attenuation (dB)	0.0
Max. Satellite antenna G/T (dB/K)	8.0
(C/I) _{Up-Intrasystem} (dB)	30.0
(C/I) _{Up-ASI} (dB)	34.1
Boltzmanns constant	-228.6
(C/N) _{Uplink Thermal} (dB)	30.5
$C/(N_{\text{thermal}}+N_{\text{ASI}}+N_{\text{intrasystem}})$ (dB)	26.4

Downlink parameters

Downlink Frequency (MHz)	11500
Beam peak EIRP density (dBW/Hz)	-18.3
Downlink EIRP/Carrier (dBW)	44.7
Downlink EIRP/Carrier at EOC (dBW)	40.7
Rx E/S Antenna Diameter (Metres)	4.50
Rx Antenna Efficiency	0.65
Rx Antenna Gain (dB)	52.8

Rx System Noise temp (K)	110.0
Rx E/S G/T (dB/K)	32.4
Antenna mispointing error (dB)	0.5
Atmospheric loss (dB)	0.3
Downlink Path loss (dB)	206.1
Downlink Rain Attenuation (dB)	0.0
(C/I)_{Dn Intra-system} (dB)	30.0
(C/I)_{Down-ASI} (dB)	32.7
(C/N)_{Downlink Thermal} (dB)	19.3
C/(N_{thermal}+N_{ASI}+N_{intrasystem}) (dB)	18.8

End-to-End

(C/N+I) - Total Actual (dB)	18.1
(C/N+I) - Total Required(dB)	12.0
Margin (dB)	6.1