

Processed Payload Downlink Link Budget to Type A Receivers

Item	Value	Unit
Symbol Rate	1.836	Msp/s
Bits/Symbol Rate	2	
Coding Rate	0.25	
Aggregate Carrier Information Rate	918	kbit/s
Occupied bandwidth	2.57	MHz
E_b/N_0 Required	0.2	dB
Total implementation loss	1.5	dB
$C/(N_0+I_0)$ Required	61.3	dB(Hz)
Downlink peak eirp per carrier	40.0	dBW
Downlink beam contour	0	dB
Elevation angle	90	°
Downlink path loss	187.0	dB
Atmospheric absorption	0.1	dB
Earth Station antenna gain	5.0	dBi
Earth Station noise temperature	280.0	K
Earth Station antenna receive G/T	-19.5	dB/K
Downlink receiver power	-142.1	dBW
Downlink C/N_0	62.0	dB(Hz)
Downlink C/I_0	69.9	dB(Hz)
Downlink $C/(N_0+I_0)$	61.4	dB(Hz)
Downlink Margin	0.0	dB